SITE INVESTIGATION REPORT/ REMEDIAL INVESTIGATION REPORT/ REMEDIAL ACTION WORKPLAN

Old Orchard Country Club
54 Monmouth Road
Block 2701, Lots 2, 53, 60, 66 & 69
Borough of Eatontown, Monmouth County, New Jersey
Block 68, Lot 6
Borough of West Long Branch, Monmouth County, New Jersey
NJDEP PI No.: 021606

Prepared for:
Surrey Equities, LLC
38 Corbett Way
Eatontown, New Jersey 07724

Prepared by:

1904 Main Street
Lake Como, New Jersey 07719

Spencer Spurlock, LSRP
Senior Principal

Omar Mahmoud
Environmental Scientist

Dynamic Earth Project No. 3272-98-005EC
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EXECUTIVE SUMMARY

Dynamic Earth, LLC (Dynamic Earth) was retained by Surrey Equities, LLC to prepare a Site Investigation Report/Remedial Investigation Report/Remedial Action Workplan (SIR/RIR/RAW) for the Old Orchard Country Club property located at 54 Monmouth Road in the Boroughs of Eatontown and West Long Branch, Monmouth County, New Jersey. The Site is further identified as Block 2701 Lots 2, 53, 60, 66, and 69 and Block 68, Lot 6 and is hereinafter referred to as the "Site".

The Site consists of an irregularly-shaped parcel of approximately 133.42 acres and is currently developed with the Old Orchard Country Club including an 18-hole golf course, two-story club house, one-story equipment rental building, one-story equipment/storage building, and associated sheds. The Turtle Mill Brook bisects the Site from west to east. The remaining portions of the Site include asphalt and gravel driveway/parking areas, and landscaped areas. The Site has historically operated as a golf course from circa 1929 to present. Prior to golf course operations, the Site was utilized as an apple orchard.

The following areas of concern (AOCs) requiring further investigation were identified during due diligence activities prior to cessation of golf course operations:

- AOC-1 through AOC-6: Golf Course Operations;
- AOC-7 through AOC-10: Historic Apple Orchard;
- AOC-11 and AOC-12: Equipment Wash and Trench Areas.

In the August 23, 2021 *Environmental Conditions Memorandum* prepared by Geo-Technology Associates, Inc (GTA), contamination associated with historically applied pesticides (HAP) was identified at concentrations exceeding the most stringent New Jersey Department of Environmental Protection (NJDEP) Soil Remediation Standards (SRS) throughout the Site.

In December 2022, Dynamic Earth conducted a supplemental HAP investigation including horizontal and vertical delineation of HAP contaminants identified by others at the Site and an initial groundwater investigation. Based on the supplemental HAP investigation conducted by Dynamic Earth, horizontal soil delineation within the fairway and green areas had been achieved and no further investigation for groundwater was required as no exceedances of NJDEP Groundwater Quality Standards (GWQS) were identified. Further delineation of pesticides in the trench and tee areas and an Ecological Evaluation (EE) was required.

In May 2023, Dynamic Earth completed an EE in accordance with the NJDEP *Ecological Evaluation Technical Guidance* (Version 2.1, May 2023) and delineation of HAP in accordance with Section 6.1 of the NJDEP *Historically Applied Pesticide Technical Guidance* (February 2022). Based on the site investigation (SI) and remedial investigation (RI) activities conducted by Dynamic Earth and others, conversations with the golf course managers regarding pesticide application, and review of historical aerial photographs to confirm the historic configuration of the golf course, no further investigation is

required for AOC-1 through AOC-12.

Proposed redevelopment of the Site includes subdividing the Site into Lots 69.01 through 69.06. Dynamic Earth recommends remedial actions to address AOC-1 through AOC-3 located at proposed Lots 69.01 through 69.04 in the form of soil excavation, off-Site disposal, and backfill to remediate AOC-1 through AOC-3. Proposed remedial actions to address AOC-5, AOC-6, AOC-11, and AOC-12 located at proposed Lots 69.05 and 69.06 will include consolidation of HAP impacted soils with associated engineering and institutional controls.

1.0 INTRODUCTION

Dynamic Earth, LLC (Dynamic Earth) was retained by Surrey Equities, LLC to prepare a Site Investigation Report/Remedial Investigation Report/Remedial Action Workplan (SIR/RIR/RAW) for the Old Orchard Country Club property located at 54 Monmouth Road in the Boroughs of Eatontown and West Long Branch, Monmouth County, New Jersey. The Site is further identified as Block 2701 Lots 2, 53, 60, 66, and 69 and Block 68, Lot 6 and is hereinafter referred to as the "Site". A *Site Location Map* and *Existing Conditions and AOC Location Plan* are included as Figures 1 and 2, respectively.

1.1 Purpose and Scope of Work

This report documents the due diligence activities conducted at the Site prior to the cessations of golf course operations.

All environmental work was conducted in general accordance with the New Jersey Department of Environmental Protection (NJDEP) Technical Requirements for Site Remediation (N.J.A.C. 7:26E), the NJDEP *Historically Applied Pesticide Technical Guidance* (February 2022), and the NJDEP *Ecological Evaluation Technical Guidance* (Version 2.1, May 2023). The Site is being investigated and remediated by a New Jersey Licensed Site Remediation Professional (LSRP) pursuant to the requirements of the Site Remediation Reform Act (SRRA, N.J.S.A. 58:10C-1 et seq.) and the Administrative Requirements for the Remediation of Contaminated Sites (ARRCS) Rules (N.J.A.C. 7:26C). The LSRP of Record for the Site is Spencer Spurlock (LSRP License #585413).

1.2 Limitations and Exceptions of Assessment

This report does not represent or imply future Site conditions or events. Situations or activities that occur subsequent to this report that result in adverse environmental impacts are not relevant to this assessment. This assessment is not intended for reuse by third parties or execution of alternate projects.

2.0 PROJECT BACKGROUND & TECHNICAL OVERVIEW

2.1 Project Background

Prior to golf course operations, the Site operated as an apple orchard. From 1929 to present, the Site has operated as the Old Orchard Country Club. The Country Club includes an 18-hole golf course, two-story club house, one-story equipment rental building, one-story equipment/storage building, and associated sheds. Based on a review of historical aerial photographs, a suspected practice hole consisting of a fairway and green was observed in the northeastern portion of the Site and was designated as Hole 19. Although Hole 19 is no longer maintained/used, golf course configuration has remained relatively unchanged since 1929.

In the August 23, 2021 *Environmental Conditions Memorandum* prepared by Geo-Technology Associates, Inc (GTA), contamination associated with HAP was identified at concentrations exceeding the most stringent NJDEP SRS throughout the Site during due diligence activities.

In December 2022, Dynamic Earth conducted a supplemental HAP investigation including horizontal and vertical delineation of HAP contaminants identified by others at the Site and an initial groundwater investigation. Based on the supplemental HAP investigation conducted by Dynamic Earth, horizontal soil delineation within the fairway and green areas had been achieved and no further investigation for groundwater was required as no exceedances of NJDEP GWQS were identified. Horizontal and vertical delineation of pesticides in the trench and tee areas and an EE was required.

In May 2023, Dynamic Earth completed an EE in accordance with the NJDEP *Ecological Evaluation Technical Guidance* (Version 2.1, May 2023) and delineation of HAP in accordance with Section 6.1 of the NJDEP *Historically Applied Pesticide Technical Guidance* (February 2022).

2.2 NJDEP Remediation Standards

Contaminant concentrations exhibited within the soil samples were compared to the most stringent NJDEP Residential Soil Remediation Standards (RSRS) including NJDEP Residential Ingestion-Dermal Soil Remediation Standard (RIDSRS) and Residential Inhalation Soil Remediation Standard (RISRS).

Contaminant concentrations exhibited within the groundwater samples were compared to the NJDEP GWQS.

Contaminant concentrations exhibited within sediment and surface water samples were compared to the NJDEP Ecological Fresh Water Effects Lowest Effects Level (LEL) and Severe Effects Level (SEL).

2.3 NJDEP Remedial Timeframes

The date remediation was required to be initiated will be the date golf course operations cease. The Receptor Evaluation regulatory timeframe will be one year following cessation of golf course operations. The Remedial Investigation regulatory timeframe will be three years following cessation of golf course operations.

2.4 Laboratory Certifications and Reliability of Analytical Data

Samples collected as a component of the SI/RI were transported under proper chain-of-custody to Aqua ProTech Laboratories (APL) (NJ Lab Certification No. 07010). Analytical results and Quality Assurance/Quality Control (QA/QC) data establishing proper holding times, handling, analytical methodology, and detection limits in accordance with NJDEP protocol are included with this submission.

2.5 Treatability/Bench Scale/Pilot Studies

No treatability, bench scale, or pilot studies have been conducted.

2.6 Perimeter Air Monitoring and Action Plan

A Perimeter Air Monitoring and Action Plan was not required for the SI/RI activities.

2.7 Interim Remedial Measures

No interim remedial measures were necessary to remove, contain, or stabilize a source of contamination in association with this SI/RI.

2.8 Immediate Environmental Concerns

No immediate environmental concerns (IECs) were identified during remedial activities.

2.9 Health and Safety Plan

The Site-Specific *Health and Safety Plan* is provided in Appendix F.

2.10 Quality Assurance Project Plan

The *Quality Assurance Project Plan* is provided in Appendix G.

2.11 NJDEP Public Notification

Per N.J.A.C. 7:26C-1.7, the person responsible for conducting remediation and/or the responsible party must notify the public that a discharge has occurred and that remediation is pending. Prior to remedial action activities, a public notification sign will be posted at the Site.

2.12 Licensed Site Remediation Professional Retention

An LSRP Notification of Retention will be submitted via NJDEP Online to serve as notification that Spencer S. Spurlock (LSRP License No. 585413) will be retained as the LSRP of Record to address the contaminated AOCs.

2.13 NJDEP Annual Remediation Fee and Form

An NJDEP Annual Remediation Fee Form will be submitted via NJDEP Online. The Annual Remediation Fee is anticipated to include Category 2 consisting of two to ten contaminated AOCs.

3.0 PHYSICAL SETTING

3.1 Physical Description

The Site consists of an irregularly-shaped parcel of approximately 133.42 acres and is currently developed with the Old Orchard Country Club including an 18-hole golf course, two-story club house, one-story equipment rental building, one-story equipment/storage building, and associated sheds. The Turtle Mill Brook bisects the Site from west to east. The remaining portions of the Site include asphalt and gravel driveway/parking areas, and landscaped areas.

Each hole includes one tee box area, fairway areas, and green area with the exception of Hole 5 which includes an additional green area. Based on a review of historical aerial photographs, a suspected practice hole consisting of a fairway and green was observed in the northeastern portion of the Site and was designated as Hole 19.

The Site is bound by residential properties to the north, commercial properties to the south beyond Route 36, commercial properties to the east and residential and commercial properties to the west.

3.2 Topography

Topography at the Site slopes to the south-southeast from a maximum elevation of approximately 46 feet above mean sea level (msl) in the northeastern portion of the Site to a minimum elevation of approximately 23 feet above msl in the southeastern portion of the Site.

3.3 Geology

Based on information obtained from NJDEP's geographic information system (GIS) database (GeoWeb), the Site is located within the Coastal Plan Physiographic Unit of New Jersey. Bedrock geology at the Site was identified as the Vincentown Formation (Tvtt) consisting of glauconitic, near base medium-grained quartz sand, clayey; locally a calcarenite or coquina. Surficial geology at the Site consists of the Unit 2 Cape May Formation including very pale brown, yellow, reddish-yellow, white, olive-yellow, and gray sand, pebble gravel, minor silt, clay, peat, and cobble gravel with a general thickness of less than 50 feet.

Soils encountered at the Site consisted of six inches of topsoil at the surface. Underlying the surface cover, natural coastal plain deposits were encountered generally consisting of sand with variable amount of silt, clay, and gravel.

3.4 Hydrogeology

Based on information obtained from NJDEP GeoWeb, the bedrock aquifer underlying the Site is the Composite confining unit aquifer. Based on recharge potential, this aquifer has a "C-B" ranking indicating

the aquifer yield is between 100 to 500 gallons per minute. A review of the United States Fish and Wildlife Service (USFWS) Wetlands Interactive Map indicates that wetlands are located in the northeastern portion of the Site. The Turtle Mill Brook flows west to east and bisects the center of the Site. The Site is located within the Monmouth Watershed Management Area. The Site is not located within a Non-Community or Community Well Head Protection Area. The Federal Emergency Management Agency (FEMA), National Flood Insurance Program (NFIP), Flood Plains Map was reviewed by Environmental Data Resources, Inc. (EDR). The Site is not located within a Special Flood Hazard Area (1%) or 0.2% Annual Chance Flood Hazard Area as defined by FEMA.

Groundwater sampling was conducted during the SI and RI activities. Depth to groundwater ranged from approximately 5.5 feet to 24.5 feet bgs.

3.5 Site Soils

During due diligence activities, soil borings were installed throughout the Site to a maximum depth of 30.0 feet bgs. All soil borings encountered topsoil to a maximum depth of 0.5 feet bgs. Underlying the topsoil layer, all borings encountered brown, medium grained, silty sands extending to a maximum depth of 3.5 feet bgs. Natural coastal plain deposits were encountered from 6.0 to 30.0 feet bgs consisting of sand with variable amount of silt, clay, and gravel; and occasional layers of clay with variable amounts of silt and gravel. Refusal/bedrock was not encountered in any borings. Seasonal high groundwater was encountered in soil borings at depths ranging from 2.3 feet to 18.0 feet bgs. Groundwater was encountered in temporary well points at approximately 5.5 feet bgs in temporary wellpoint G-9-GW and 24.5 feet bgs in G-11-GW.

3.6 Surface Water/Wetlands

According to the United States Fish and Wildlife Service (USFWS) *National Wetlands Inventory Wetlands Database Map* indicates that wetlands are located in the northeastern portion of the Site and the Turtle Mill Brook bisects the center of the Site.

Based on the SI and RI conducted, HAP contaminated areas are located within wetland buffer areas of the Turtle Mill Brook. In accordance with N.J.A.C. 7:7A-7.4, Freshwater Wetlands Protection Act Rules, a Hazardous Site Investigation and Cleanup General Permit (GP-4), will be required prior to RA activities within the wetland buffer areas.

3.7 Significant Events/Season Variations

No seasonal variations or Site activities/events that may have influenced sampling procedures or analytical results were noted during the SI or subsequent RI.

4.0 SITE INVESTIGATION

Site Investigation (SI) activities were conducted at the Site during due diligence prior to sale of the Site and cessation of golf course operations by Dynamic Earth and others. The SI activities were conducted at the following AOCs:

- AOC-1: Golf Course Operations – Proposed Lot 69.01;
- AOC-2: Golf Course Operations – Proposed Lot 69.02;
- AOC-3: Golf Course Operations – Proposed Lot 69.03;
- AOC-4: Golf Course Operations – Proposed Lot 69.04;
- AOC-5: Golf Course Operations – Proposed Lot 69.05;
- AOC-6: Golf Course Operations – Proposed Lot 69.06;
- AOC-7: Historic Apple Orchard – Proposed Lot 69.01;
- AOC-8: Historic Apple Orchard – Proposed Lot 69.02;
- AOC-9: Historic Apple Orchard – Proposed Lot 69.05;
- AOC-10: Historic Apple Orchard – Proposed Lot 69.06;
- AOC-11: Equipment Wash and Trench Area – Proposed Lot 69.05; and
- AOC-12: Trench Area – Proposed Lot 69.06.

Soil borings were installed at the Site using decontaminated stainless-steel hand auger equipment. The SI was conducted in general accordance with the New Jersey *Technical Requirements for Site Remediation* (N.J.A.C. 7:26E), the NJDEP *Field Sampling Procedures Manual* (March 2024), and the NJDEP *Historically Applied Pesticide Technical Guidance* (Version 3.1, February 2022).

One soil sample was collected from each tee, fairway, and green to evaluate HAP contamination from golf course operations. Soil samples collected to evaluate the fairways were collected at low lying areas to account for overland flow. Soils encountered within the borings were field screened at 0.5-foot intervals using a calibrated RAE Systems, MiniRAE photoionization detector (PID). All soil samples were collected from 0.0 to 0.5 feet bgs and submitted to a NJDEP-certified laboratory. Tee (T-#) and green (G-#) samples were analyzed for target compound list (TCL) pesticides, arsenic, lead, and mercury analysis. Fairway (F-#) samples were analyzed for TCL pesticides, arsenic, and lead.

Three temporary wellpoints were installed near the areas of Green 9, Green 11, and Green 16, corresponding to the highest concentrations of HAP contamination. Temporary well points were installed direct-push drilling methods subcontracted from High Rock Environmental of Great Meadows, New Jersey. All temporary well points were installed using one-inch Polyvinyl Chloride (PVC) piping installed in soil borings. Temporary well points were gauged for depth to water measurements during the investigation and groundwater samples were collected using dedicated PVC bailers.

SI boring and sample locations are provided on Figure 3 through 15. Soil sample analytical results are provided in Appendix A. Soil boring logs are provided in Appendix B. Laboratory analytical results are provided in Appendix E.

4.1 AOC-1: Golf Course Operations – Proposed Lot 69.01

Golf course operations within the proposed Lot 69.01 subdivision includes Hole 3 consisting of a tee box area, fairway, and green. On May 19, 2021, soil samples T-3, F-3, and G-3 were collected from the tee, fairway, and green of Hole 3.

4.1.1 Hole 3

Dieldrin was detected at a concentration of 0.0805 milligrams per kilogram (mg/kg), exceeding NJDEP RSRS in soil sample T-3. No additional compounds were detected at concentrations exceeding NJDEP RSRS in soil samples T-3, F-3, or G-3. Further investigation for dieldrin is required at Tee 3.

4.2 AOC-2: Golf Course Operations – Proposed Lot 69.02

Golf course operations within the proposed Lot 69.02 subdivision includes portions of the Fairway 2 and Green 2; a portion of Fairway 5 and Green 5; and a portion of Tee 6. On May 19, 2021, soil samples F-2, G-2, F-5, G-5, and T-6 were collected to evaluate AOC-2.

4.2.1 Hole 2 – Fairway and Green

No compounds were detected at concentrations exceeding NJDEP RSRS in soil samples F-2 or G-2. No further investigation is required for Fairway 2 or Green 2.

4.2.2 Hole 5 – Fairway and Green

Dieldrin was detected at a concentration of 0.129 mg/kg, exceeding NJDEP RSRS in soil sample F-5. No additional compounds were detected at concentrations exceeding NJDEP RSRS in soil samples F-5 or G-5. Further investigation is required for dieldrin at Fairway 5.

4.2.3 Hole 6 – Tee Box

No compounds were detected at concentrations exceeding NJDEP RSRS in soil sample T-6. No further investigation is required at Tee 6.

4.3 AOC-3: Golf Course Operations – Proposed Lot 69.03

Golf course operations within the proposed Lot 69.03 subdivision includes a portion of Fairway 2; portions of Fairway 5 and Green 5; and portions of Hole 6. On May 19, 2021, soil samples F-2, F-5, G-5, T-6, F-6, and G-6 were collected to evaluate AOC-3.

4.3.1 Hole 2 – Fairway

No compounds were detected at concentrations exceeding NJDEP RSRS in soil sample F-2. No further investigation is required at Fairway 2.

4.3.2 Hole 5 – Fairway and Green

Dieldrin was detected at a concentration of 0.129 mg/kg, exceeding NJDEP RSRS in soil sample F-5. No additional compounds were detected at concentrations exceeding NJDEP RSRS in soil samples F-5 or G-5. Further investigation is required for dieldrin at Fairway 5.

4.3.3 Hole 6

Arsenic was detected at a concentration of 30.6 mg/kg, exceeding NJDEP RSRS in soil sample F-6. Arsenic, lead, and mercury were detected at concentrations exceeding NJDEP RSRS in soil sample G-6. No additional compounds were detected at concentrations exceeding NJDEP RSRS in soil samples T-6, F-6, or G-6. No further investigation is required for Tee 6. Further investigation is required for arsenic, lead, and/or mercury at Fairway 6 and Green 6.

4.4 AOC-4: Golf Course Operations – Proposed Lot 69.04

Golf course operations within the proposed Lot 69.04 subdivision includes portions of Fairway 1 and Green 1; portions of Tee 2 and Fairway 2; and Tee 7. On May 19, 2021, soil samples F-1, G-1, T-2, F-2, and T-7 were collected to evaluate AOC-4.

4.4.1 Hole 1 – Fairway and Green

No compounds were detected at concentrations exceeding NJDEP RSRS in soil samples F-1, or G-1. No further investigation is required at Fairway 1 or Green 1.

4.4.2 Hole 2 – Tee and Fairway

Dieldrin was detected at a concentration of 0.0456 mg/kg, exceeding NJDEP RSRS in soil sample T-2. No additional compounds were detected at concentrations exceeding NJDEP RSRS in soil samples T-2 or F-2. Further investigation is required for dieldrin at Tee 2.

4.4.3 Hole 7 – Tee

No compounds were detected at concentrations exceeding NJDEP RSRS in soil sample T-7. No further investigation is required at Tee 7.

4.5 AOC-5: Golf Course Operations – Proposed Lot 69.05

Golf course operations within the proposed Lot 69.05 subdivision includes portions of Fairway 1; portions of Tee 4 and Fairway 4; portions of Fairway 5; Fairway 7; Fairway 8 and Green 8; Tee 9 and Fairway 9; Green 12; a portion of Green 13; and Tee 14. On May 19, 2021, soil samples F-1, T-4, F-4, F-5, F-7, F-8, G-8, T-9, F-9, G-12, G-13, and T-14 were collected to evaluate AOC-5.

4.5.1 Hole 1 – Fairway

No compounds were detected at concentrations exceeding NJDEP RSRS in soil sample F-1. No further investigation is required at Fairway 1.

4.5.2 Hole 4 – Tee and Fairway

Dieldrin was detected at concentrations exceeding NJDEP RSRS in soil samples T-4 and F-4. No additional compounds were detected at concentrations exceeding NJDEP RSRS in soil samples T-4 or F-4. Further investigation is required for dieldrin at Tee 4 and Fairway 4.

4.5.3 Hole 5 – Fairway

Dieldrin was detected at a concentration of 0.129 mg/kg, exceeding NJDEP RSRS in soil sample F-5. No additional compounds were detected at concentrations exceeding NJDEP RSRS. Further investigation is required for dieldrin at Fairway 5.

4.5.4 Hole 7 – Fairway

No compounds were detected at concentrations exceeding NJDEP RSRS in soil sample F-7. No further investigation is required at Fairway 7.

4.5.5 Hole 8 – Fairway and Green

No compounds were detected at concentrations exceeding NJDEP RSRS in soil samples F-8 or G-8. No further investigation is required at Fairway 8 or Green 8.

4.5.6 Hole 12 – Green

Heptachlor epoxide and chlordane were detected at concentrations exceeding NJDEP RSRS in soil sample G-12. No additional compounds were detected at concentrations exceeding NJDEP RSRS in soil sample G-12. Further investigation is required for heptachlor epoxide and chlordane at Green 12.

4.5.7 Hole 13 – Green

Chlordane, arsenic, lead, and mercury were detected at concentrations exceeding NJDEP RSRS in soil sample G-13. No additional compounds were detected at concentrations exceeding NJDEP RSRS in soil sample G-13. Further investigation is required for chlordane, arsenic, lead, and mercury at Green 13.

4.5.8 Hole 14 – Tee

Dieldrin was detected at a concentration of 0.0874 mg/kg, exceeding NJDEP RSRS in soil sample T-14. No additional compounds were detected at concentrations exceeding NJDEP RSRS in soil sample T-14. Further investigation is required for dieldrin at Tee 14.

4.6 AOC-6: Golf Course Operations – Proposed Lot 69.06

Golf course operations within the proposed Lot 69.06 subdivision includes portions of Holes 1, 4, 5, and 7 through 19. On May 19, 2021, soil samples were collected to evaluate AOC-6 consisting of Tee 1; portions of Fairway 4 and Green 4; the Green 5; portions of the Fairway 7 and Green 7; Tee 8; portions of Fairway 9 and Green 9; all of Holes 10 through 13; Fairway 14 and Green 14; and all of Holes 15 through 18. On September 27, 2024, Dynamic Earth mobilized to the Site to evaluate the former Hole 19 located in the northeastern portion of the Site including Fairway 19 and Green 19.

4.6.1 Hole 1 – Tee

No compounds were detected at concentrations exceeding NJDEP RSRS in soil sample T-1. No further investigation is required at Tee 1.

4.6.2 Hole 4 – Fairway and Green

Dieldrin was detected at a concentration of 0.077 mg/kg, exceeding NJDEP RSRS in soil sample F-4. No additional compounds were detected at concentrations exceeding NJDEP RSRS in soil samples F-4 or G-4. Further investigation is required for dieldrin at Fairway 4.

4.6.3 Hole 5 – Tee

No compounds were detected at concentrations exceeding NJDEP RSRS in soil sample T-5. No further investigation is required at Tee 5.

4.6.4 Hole 7 – Fairway and Green

No compounds were detected at concentrations exceeding NJDEP RSRS in soil samples F-7 or G-7. No further investigation is required for Fairway 7 or Green 7.

4.6.5 Hole 8 – Tee

No compounds were detected at concentrations exceeding NJDEP RSRS in soil sample T-8. No further investigation is required for Tee 8.

4.6.6 Hole 9 – Fairway and Green

Dieldrin was detected at a concentration of 0.0354 mg/kg, exceeding NJDEP RSRS in soil sample F-9. Heptachlor epoxide, chlordane, arsenic, lead, and mercury were detected at concentrations exceeding NJDEP RSRS in soil sample G-9. No additional compounds were detected at concentrations exceeding NJDEP RSRS in soil samples F-9 or G-9. Further investigation is required for dieldrin, heptachlor epoxide, chlordane, arsenic, lead, and mercury at Fairway 9 and Green 9.

4.6.7 Hole 10

Dieldrin was detected at a concentration of 0.072 mg/kg, exceeding NJDEP RSRS in soil sample F-10. Chlordane, arsenic, and lead were detected at concentrations exceeding NJDEP RSRS in soil sample G-10. No additional compounds were detected at concentrations exceeding NJDEP RSRS in soil samples T-10, F-10, or G-10. Further investigation is required for dieldrin, chlordane, arsenic, and/or lead at Fairway 10 and Green 10.

4.6.8 Hole 11

Arsenic was detected at a concentration of 20.4 mg/kg, exceeding NJDEP RSRS in soil sample F-11. Arsenic, lead, and mercury were detected at concentrations exceeding NJDEP RSRS in soil sample G-11. No additional compounds were detected at concentrations exceeding NJDEP RSRS in soil samples T-11, F-11, or G-11. Further investigation is required for arsenic, lead, and/or mercury at Fairway 11 and Green 11.

4.6.9 Hole 12

Dieldrin was detected at a concentration of 0.0364 mg/kg, exceeding NJDEP RSRS in soil sample T-12. Heptachlor epoxide and chlordane were detected at concentrations exceeding NJDEP RSRS in soil sample G-12. No additional compounds were detected at concentrations exceeding NJDEP RSRS in soil samples T-12, F-12, or G-12. Further investigation is required for dieldrin, heptachlor epoxide, and/or chlordane at Tee 12 and Green 12.

4.6.10 Hole 13

Dieldrin was detected at a concentration of 0.503 mg/kg, exceeding NJDEP RSRS in soil sample F-13. Chlordane, arsenic, lead, and mercury were detected at concentrations exceeding NJDEP RSRS in soil sample G-13. No additional compounds were detected at concentrations exceeding NJDEP RSRS in soil samples T-13, F-13, or G-13. Further investigation is required for dieldrin, chlordane, arsenic, lead, and/or mercury at Fairway 13 and Green 13.

4.6.11 Hole 14 – Fairway and Green

No compounds were detected at concentrations exceeding NJDEP RSRS in soil samples F-14 or G-14. No further investigation is required for Fairway 14 or Green 14.

4.6.12 Hole 15

Dieldrin and arsenic were detected at concentrations exceeding NJDEP RSRS in soil sample F-15. Heptachlor epoxide, chlordane, and arsenic were detected at concentrations exceeding NJDEP RSRS in soil sample G-15. No additional compounds were detected at concentrations exceeding NJDEP RSRS in soil samples T-15, F-15, or G-15. Further investigation is required for dieldrin, chlordane, and/or arsenic at Fairway 15 and Green 15.

4.6.13 Hole 16

Heptachlor epoxide, chlordane, arsenic, lead, and mercury were detected at concentrations exceeding NJDEP RSRS in soil sample G-16. No additional compounds were detected at concentrations exceeding NJDEP RSRS in soil samples T-16, F-16, or G-16. Further investigation is required for heptachlor epoxide, chlordane, arsenic, lead, and mercury at Green 16.

4.6.14 Hole 17

Arsenic was detected at a concentration of 43.3 mg/kg, exceeding NJDEP RSRS in soil sample F-17. Chlordane, arsenic, lead, and mercury were detected at concentrations exceeding NJDEP RSRS in soil sample G-17. No additional compounds were detected at concentrations exceeding NJDEP RSRS in soil samples T-17, F-17, or G-17. Further investigation is required for chlordane, arsenic, lead, and/or mercury at Fairway 17 and Green 17.

4.6.15 Hole 18

Arsenic and lead were detected at concentrations exceeding NJDEP RSRS in soil sample G-18. No additional compounds were detected at concentrations exceeding NJDEP RSRS in soil samples T-18, F-18, or G-18. Further investigation is required for arsenic and lead at Green 18.

4.6.16 Hole 19 – Fairway and Green

Soil samples F-19-1 through F-19-3 and G19 were collected to evaluate the recently identified Hole designated as Hole 19.

Lead was detected at a concentration exceeding NJDEP RSRS in soil sample G19. No additional compounds were detected at concentrations exceeding NJDEP RSRS in soil samples F-19-1 through F-19-1 or G-19. Further investigation is required for lead at Green 19.

4.7 AOC-7: Historic Apple Orchard – Proposed Lot 69.01

Approximately 16 acres of historic orchard land is located at the Site. In accordance with the NJDEP *Historically Applied Pesticide Technical Guidance* (February 2022), a total of six samples (O-1 through O-6) were collected. Approximately 0.2 acres of historical orchard land is located at AOC-7. Soil sample O-5 was collected at AOC-8 to evaluate approximately 4.4 acres of the former historical orchard areas located at both AOCs. Soil sample O-5 was collected from 0.0 to 0.5 feet bgs and submitted to a NJDEP-certified laboratory for TCL pesticides, arsenic, and lead analysis.

No compounds were detected at concentrations exceeding NJDEP RSRS in soil sample O-5. No further investigation for AOC-7 is required.

4.8 AOC-8: Historic Apple Orchard – Proposed Lot 69.02

Approximately 1.8 acres of historical orchard land are located at AOC-8. Soil sample O-5 was collected from 0.0 to 0.5 feet bgs and submitted to a NJDEP-certified laboratory for TCL pesticides, arsenic, and lead analysis.

No compounds were detected at concentrations exceeding NJDEP RSRS in soil sample O-5. No further investigation for AOC-8 is required.

4.9 AOC-9: Historic Apple Orchard – Proposed Lot 69.05

Approximately 10.1 acres of historical orchard land are located at AOC-9. Soil samples O-1 through O-5 were collected from 0.0 to 0.5 feet bgs and submitted to a NJDEP-certified laboratory for TCL pesticides, arsenic, and lead analysis.

No compounds were detected at concentrations exceeding NJDEP RSRS in soil samples O-1 through O-5. No further investigation for AOC-9 is required.

4.10 AOC-10: Historic Apple Orchard – Proposed Lot 69.06

Approximately 4.1 acres of historical orchard land are located at AOC-10. Soil samples O-1 through O-4 and O-6 were collected at the former historical orchard areas. Soil samples O-1 through O-4 and

O-6 was collected from 0.0 to 0.5 feet bgs and submitted to a NJDEP-certified laboratory for TCL pesticides, arsenic, and lead analysis.

No compounds were detected at concentrations exceeding NJDEP RSRS in soil O-1 through O-4 and O-6. No further investigation for AOC-10 is required.

4.11 AOC-11: Equipment Wash and Trench Area – Proposed Lot 69.05/AOC-12: Trench Area – Proposed Lot 69.06

AOC-11 is located in the western portion of the Site and consists of a one-story equipment/storage building, associated sheds, and drainage trench. AOC-12 is located in the western portion of the Site, north of AOC-11, and consists of the drainage trench associated with the equipment wash area. Soil samples WA-1 through WA-3 were collected at the equipment wash areas and soil sample TRENCH -1 was collected along the drainage trench. All soil samples were collected from 0.0 to 0.5 feet bgs and submitted to a NJDEP-certified laboratory for TCL pesticides, arsenic, lead, and mercury analysis.

No compounds were detected at concentrations exceeding NJDEP RSRS in soil samples WA-1 through WA-3.

Heptachlor epoxide and dieldrin were detected at concentrations exceeding NJDEP RSRS in soil sample TRENCH-1. No additional compounds were detected at concentrations exceeding NJDEP RSRS in soil sample TRENCH-1. Further investigation is required for heptachlor epoxide and dieldrin and AOC-11 and AOC-12.

4.12 Groundwater Investigation

On December 21, 2022, Dynamic Earth mobilized to the Site to determine depth to groundwater and potential HAP groundwater contamination at the Site. Three temporary wellpoints were installed in the areas of Green 9, Green 11, and Green 16, corresponding to the highest concentrations of HAP contamination. All temporary wells were advanced to a maximum depth of 20 feet bgs.

Groundwater was encountered in temporary well point G-9-GW and G-11-GW at depths of 5.5 feet bgs and 24.5 feet bgs, respectively. No groundwater was encountered in temporary well point G-16-GW. Due to poor recharge only one groundwater sample was collected from the area of G-9-GW and was submitted for lead, mercury and pesticide analysis with contingent filtered metal and pesticide analysis.

No compounds were detected above NJDEP GWQS in groundwater sample G-9-GW. Based on the groundwater investigation conducted and remedial investigation presented in Section 6.0 below, HAP contaminants extend to a maximum depth of 2.0 feet bgs with the exception of Green 6 which extends to 3.0 feet. A minimum two foot buffer zone exists between soil contamination and the groundwater table throughout the Site and no potable well use is proposed for future Site use. No further investigation for groundwater is required.

4.13 Need For Remedial Investigation

Based on the SI conducted, no further investigation further investigation is required for AOC-7 through AOC-10.

Further investigation is required for HAP soil contamination at AOC-1 through AOC-6, AOC-11, and AOC-12 including Tee 2 through Tee 4, Tee 12, Tee 14, Fairway 4, Fairway 5, Fairway 9, Fairway 10, Fairway 13, Fairway 15, Green 6, Green 9, Green 10 through Green 13, Green 15 through Green 19, wash and trench areas.

5.0 ECOLOGICAL EVALUATION

Dynamic Earth conducted an Ecological Evaluation (EE) to evaluate if Environmentally Sensitive Natural Resource (ESNRs) at or adjacent to the Site are impacted by Contaminants of Potential Ecological Concern (COPECs) and if complete migration pathways exist. HAP contaminant concentrations were detected at concentrations exceeding NJDEP Ecological Screening Criteria throughout the Site. The Turtle Mill Brook was identified as a ESNR and contaminant migration pathway exists via overland flow. On May 30, 2023, Dynamic Earth evaluated the Turtle Mill Brook for potential HAP contamination in accordance with the NJDEP *Ecological Evaluation Technical Guidance* (Version 2.1, May 2023).

5.1 Sampling Procedures & Methodology

Surface water samples were collected via a designated laboratory cleaned sample bottle at each sample location. Surface water samples were collected at approximately 500 foot intervals beginning downstream and progressing upstream. A calibrated Horiba U-52 was utilized during sample collection to record surface water parameters. Subsequent to surface water sample collection, sediment samples were collected with decontaminated stainless-steel hand auger equipment. Two sediment samples were collected at each boring location at depths of 0.0 to 0.5 feet and 1.0 to 1.5 feet.

5.2 Surface Water Sampling

Dynamic Earth collected a total of seven surface water samples from the Turtle Mill Brook. Samples SW-1 through SW-7 were collected via a designated laboratory cleaned sample bottle at each sample location. Samples were submitted to a NJDEP-certified laboratory for filtered and unfiltered arsenic, lead, mercury, TCL pesticides, pH, and hardness analysis. Surface water parameters including salinity, temperature, oxidation reduction potential (ORP), dissolved oxygen (DO), and turbidity were measured with a calibrated Horiba U-52 during sample collection.

Sample ID	Salinity (ppt)	Temperature (C)	ORP (mV)	DO (mg/L)	Turbidity (NTU)
SW-1	0.27	18.47	361	4.6	6.4
SW-2	0.29	18.75	354	5.85	9.0
SW-3	0.29	19.05	348	6.28	7.5
SW-4	0.31	18.46	316	4.56	6.3
SW-5	0.33	19.87	331	5.75	5.8
SW-6	0.14	23.1	379	8.6	8.8
SW-7	0.43	17.59	152	3.53	5.3

No compounds were detected in surface water samples at concentrations exceeding the NJDEP Acute or Chronic Surface Water ESC for Fresh Water.

5.3 Sediment Sampling

Dynamic Earth collected a total of 14 sediment samples from the Turtle Mill Brook. Samples SED-1 through SED-7 were collected from 0.0 to 0.5 feet and samples SED-1A through SED-7A were collected from 0.5 to 1.0 feet subsequent to surface water sample collection. Sediment samples were submitted to a NJDEP-certified laboratory for arsenic, lead, mercury, TCL pesticides, Total Organic Carbon (TOC), ORP, and particle grain size analysis. The shallow samples were initially analyzed with the remaining samples placed on hold pending the initial laboratory results.

Arsenic, lead, mercury, 4,4'-DDD, and/or 4,4'-DDE were detected at concentrations exceeding NJDEP Sediment ESC LEL for Fresh Water Sediments in samples SED-1, SED-4, and SED-6.

Dynamic Earth activated samples SED-1A, SED-4A, and SED-6A based on the exceedances detected in the corresponding shallow samples. Arsenic, lead, and/or mercury were detected at concentrations exceeding the NJDEP Sediment ESC LEL for Fresh Water Sediments in samples SED-1A, SED-4A, and SED-6A.

Sample ID	TOC (%)	Fines (%)
SED-1	2.13	66
SED-2	2.30	5.9
SED-3	1.36	6
SED-4	3.70	1
SED-5	1.46	5.5
SED-6	5.43	19
SED-7	4.86	1
SED-1A	8.96	40
SED-4A	1.70	1
SED-6A	4.40	3

Exceedances of the NJDEP ESC are attributed to TOC concentrations and percentage fine grain sediments in samples SED-1, SED-1A, SED-6, and SED-6A. Although 4, 4'-DDE was detected in sediment sample SED-4 at a concentration of 0.00555 mg/kg, slightly exceeding the NJDEP ESC for Fresh Water Sediments of 0.005 mg/kg, sediment sample SED-4A did not identify any compounds above NJDEP ESC.

No further investigation is recommended based on the spatial distribution of the contaminants, slight exceedances of the NJDEP ESC, samples collected beneath the biologically active zone, high TOC and percentage of fine grains detected in samples SED-1, SED-4, SED-6, SED-1A, SED-4A, and SED-6A.

6.0 REMEDIAL INVESTIGATION

Remedial Investigation (RI) activities were conducted at the Site during due diligence prior to cessation of golf course operations by Dynamic Earth and others.

Soil borings were installed at the Site using decontaminated stainless-steel hand auger equipment. The SI was conducted in accordance with the New Jersey *Technical Requirements for Site Remediation* (N.J.A.C. 7:26E), the NJDEP *Field Sampling Procedures Manual* (March 2024), and the NJDEP *Historically Applied Pesticide Technical Guidance* (Version 3.1, February 2022).

To determine the horizontal and vertical extent of HAP soil impacts, samples were collected along the boundaries of the tees, fairways, and greens. Soils encountered within the borings were field screened at 0.5-foot intervals using a calibrated RAE Systems, MiniRAE PID.

RI boring and sample locations are provided on Figures 4 through 15. Soil sample analytical results are provided in Appendix A. Soil boring logs are provided in Appendix A. Compliance average calculations via arithmetic mean are provided in Appendix C. Laboratory analytical results are provided in Appendix E.

6.1 AOC-1: Golf Course Operations – Proposed Lot 69.01

6.1.1 Hole 3 – Tee

On December 20, 2022, soil borings T-3-1 through T-3-4 were advanced at Tee 3 to complete delineation of dieldrin. Two soil samples were collected at borings T-3-1 through T-3-4 at depths of 0.0 to 0.5 feet (T-3-#) and 1.0 to 1.5 feet (T-3-#A). No staining, petroleum odors, or elevated PID readings were encountered in any soil borings. Samples collected were submitted to a NJDEP-certified laboratory for dieldrin analysis. The shallow soil samples were initially analyzed with the remaining samples placed on hold pending the initial laboratory results.

Dieldrin was detected in soil samples T-3-1 through T-3-4 above the NJDEP RSRS. Soil samples T-3-1A through T-3-4A were analyzed due to dieldrin exceedances detected in the shallow samples. Subsequent soil analytical results identified dieldrin at concentrations exceeding NJDEP RSRS in soil samples T-3-1A through T-3-4A.

On May 30, 2023, Dynamic Earth advanced soil borings at the former T-3-1 through T-3-4 soil sample locations. Soil samples were collected at depths of 2.0 to 2.5 feet (T-3-#B), 3.0 to 3.5 feet (T-3-#C), and 4.0 to 4.5 feet (T-3-#D). Soil samples were submitted to an NJDEP-certified laboratory for dieldrin analysis. The shallow samples were analyzed first with the deeper samples held pending the shallow sample results.

Dieldrin was not detected in any soil samples at concentrations above applicable NJDEP SRS. Accordingly, no further investigation is required at T-3.

6.2 AOC-2: Golf Course Operations – Proposed Lot 69.02

6.2.1 Hole 5 – Fairway

On July 12, 2021, soil borings F-5 and F-5-1 through F-5-7 were advanced throughout Fairway 5 to horizontally and vertically delineate dieldrin. Soil samples F-5A through F-5C were collected from soil boring F-5 at depths of 1.0 to 1.5 feet, 2.0 to 2.5 feet, and 3.0 to 3.5 feet, respectively. Four soil samples were collected from soil borings F-5-1 through F-5-7 at depths at depths of 0.0 to 0.5 feet (F-5-#), 1.0 to 1.5 feet (F-5-#A), 2.0 to 2.5 feet (F-5-#B), and 3.0 to 3.5 (F-5-#C) feet. All soil samples were submitted to an NJDEP-certified laboratory for dieldrin analysis. The shallow soil samples were initially analyzed with the remaining samples placed on hold pending the initial laboratory results.

Dieldrin was detected at concentrations exceeding NJDEP RSRS in soil samples F-5-1 through F-5-4. Dieldrin was not detected at concentrations exceeding NJDEP RSRS in the remaining shallow samples. Soil samples F-5-1A through F-5-4A were activated for dieldrin analysis.

Dieldrin was detected at a concentration exceeding NJDEP RSRS in soil sample F-5-4A. Dieldrin was not detected at concentrations exceeding NJDEP RSRS in the remaining samples. Soil sample F-5-4B was activated for dieldrin analysis. Dieldrin was not detected at a concentration exceeding NJDEP RSRS in soil sample F-5-4B. No further investigation is required at Fairway 5.

6.3 AOC-3: Golf Course Operations – Proposed Lot 69.03

6.3.1 Hole 5 – Fairway

Based on the RI conducted at Hole 5 at AOC-2 (Section 6.2.1), no further investigation is required for dieldrin at AOC-3.

6.3.2 Hole 6 – Fairway

On December 20, 2022, soil borings F-6 and F-6-1 through F-6-4 were advanced at Fairway 6 to complete horizontal and vertical delineation of arsenic. Soil samples F-6A through F-6C were collected at boring F-6 at depths of 1.0 to 1.5 feet, 2.0 to 2.5 feet, and 3.0 to 3.5 feet, respectively. Soil samples were collected at depths of 0.0 to 0.5 feet (F-6-#A) and 1.0 to 1.5 feet (F-6-#B). No staining, petroleum odors, or elevated PID readings were encountered in any soil borings. Samples collected were submitted to a NJDEP-certified laboratory for arsenic analysis. The shallow soil samples were initially analyzed with the remaining samples placed on hold pending the initial laboratory results.

Arsenic was not detected in any soil samples collected from Fairway 6. Dynamic Earth utilized compliance averaging by calculating the arithmetic mean of soil samples F-6, F-6A, and F-6-1 through F-6-4 in accordance with the *NJDEP Technical Guidance for the Attainment of Remediation Standards and*

Site-Specific Criteria (August 2024). The arithmetic mean of the arsenic concentrations was calculated to be 8.18 mg/kg in F-6, which is below the most stringent NJDEP SRS of 19 mg/kg. No further investigation for Fairway 6 is required.

6.3.3 Hole 6 – Green

On July 12, 2021, soil borings G-6 and G-6-1 through G-6-4 were advanced throughout Green 6 to horizontally and vertically delineate arsenic, lead, and mercury. Soil samples G-6A through G-6C were collected from soil boring G-6 at depths of 1.0 to 1.5 feet, 2.0 to 2.5 feet, and 3.0 to 3.5 feet, respectively. Four soil samples were collected from soil borings G-6-1 through G-6-4 at depths at depths of 0.0 to 0.5 feet (G-6-#), 1.0 to 1.5 feet (G-6-#A), 2.0 to 2.5 feet (G-6-#B), and 3.0 to 3.5 (G-6-#C) feet. All soil samples were submitted to an NJDEP-certified laboratory for arsenic, lead, and mercury analysis. The shallow soil samples were initially analyzed with the remaining samples placed on hold pending the initial laboratory results.

Arsenic was detected at a concentration exceeding NJDEP RSRS in soil sample G-6A. Arsenic, lead, and mercury were not detected at concentrations exceeding NJDEP RSRS in the remaining shallow samples. Soil sample G-6B was activated for arsenic analysis.

Arsenic was detected at a concentration exceeding NJDEP RSRS in soil sample G-6B. Soil sample G-6C was activated for arsenic analysis. Arsenic was not detected at a concentration exceeding NJDEP RSRS in soil sample G-6C. No further investigation is required for Green 6.

6.4 AOC-4: Golf Course Operations – Proposed Lot 69.04

6.4.1 Hole 2 – Tee

On December 20, 2022, soil borings T-2A and T-2-1 through T-2-4 were advanced at Tee 2 to complete horizontal and vertical delineation of dieldrin. Soil samples T-2A through T-2C were collected from boring T-2 at depths of 1.0 to 1.5 feet, 2.0 to 2.5 feet, and 3.0 to 3.5 feet, respectively. Two soil samples were collected from borings at depths of 0.0 to 0.5 feet (T-2-#A) and 1.0 to 1.5 feet (T-2-#B). No staining, petroleum odors, or elevated PID readings were encountered in any soil borings. Samples collected were submitted to a NJDEP-certified laboratory for dieldrin analysis. The shallow soil samples were initially analyzed with the remaining samples placed on hold pending the initial laboratory results.

Dieldrin was detected in soil sample T-2A at a concentration exceeding the NJDEP RSRS. Dieldrin was not detected at concentrations exceeding NJDEP RSRS in the remaining shallow samples. Soil sample T-2B was analyzed due to dieldrin exceedances detected in the shallow samples.

Dieldrin was not detected at a concentration exceeding NJDEP RSRS in soil sample T-2B. Dynamic Earth utilized compliance averaging by calculating the arithmetic mean of soil samples T-2, T-2A, and T-2-1 through T-2-4 in accordance with the *NJDEP Technical Guidance for the Attainment of Remediation*

Standards and Site-Specific Criteria (August 2024). The arithmetic mean of the dieldrin concentrations was calculated to be 0.0271 mg/kg in T-2 which does not exceed the NJDEP RSRS of 0.034 mg/kg. No further investigation is required for Tee 2.

6.5 AOC-5: Golf Course Operations – Proposed Lot 69.05

6.5.1 Hole 4 – Tee

On December 20, 2022, soil borings T-4 and T-4-1 through T-4-4 were advanced at Tee 4 to complete horizontal and vertical delineation of dieldrin. Soil samples T-4A through T-4C were collected at boring T-4 at depths of 1.0 to 1.5 feet, 2.0 to 2.5 feet, and 3.0 to 3.5 feet, respectively. Two soil samples were collected at depths of 0.0 to 0.5 feet (T-4-#A) and 1.0 to 1.5 feet (T-4-#B). No staining, petroleum odors, or elevated PID readings were encountered in any soil borings. Samples collected were submitted to a NJDEP-certified laboratory for dieldrin analysis. The shallow soil samples were initially analyzed with the remaining samples placed on hold pending the initial laboratory results.

Dieldrin was not detected at concentrations exceeding NJDEP RSRS in any soil samples. Dynamic Earth utilized compliance averaging by calculating the arithmetic mean of soil samples T-4, T-4A, and T-4-1 through T-4-4 in accordance with the *NJDEP Technical Guidance for the Attainment of Remediation Standards and Site-Specific Criteria* (August 2024). The arithmetic mean of the dieldrin concentrations was calculated to be 0.0145 mg/kg in T-4 which does not exceed the NJDEP RSRS of 0.034 mg/kg. No further investigation is required for Tee 4.

6.5.2 Hole 4 – Fairway

On July 12, 2021, soil borings F-4 and F-4-1 through F-4-7 were advanced throughout Fairway 4 to horizontally and vertically delineate dieldrin. Soil samples F-4A through F-4C were collected from soil boring F-4 at depths of 1.0 to 1.5 feet, 2.0 to 2.5 feet, and 3.0 to 3.5 feet, respectively. Four soil samples were collected from soil borings F-4-1 through F-4-7 at depths at depths of 0.0 to 0.5 feet (F-4-#), 1.0 to 1.5 feet (F-4-#A), 2.0 to 2.5 feet (F-4-#B), and 3.0 to 3.5 (F-4-#C) feet. All soil samples were submitted to an NJDEP-certified laboratory for dieldrin analysis. The shallow soil samples were initially analyzed with the remaining samples placed on hold pending the initial laboratory results.

Dieldrin was detected at concentrations exceeding NJDEP RSRS in soil samples F-4A, F-4-1 through F-4-4, and F-4-6. Dieldrin was not detected at concentrations exceeding NJDEP RSRS in the remaining shallow samples. Soil samples F-4B, F-4-1A through F-4-6A were activated for dieldrin analysis. Dieldrin was not detected at concentrations exceeding NJDEP RSRS in any soil samples. No further investigation is required for Fairway 4.

6.5.3 Hole 5 – Fairway

Based on the RI conducted at Hole 5 at AOC-2 (Section 6.2.1), no further investigation is required for dieldrin at Fairway 5.

6.5.4 Hole 13 – Green

On July 12, 2021, soil borings G-13 and G-13-1 through G-13-4 were advanced throughout Green 13 to horizontally and vertically delineate arsenic, lead, and mercury. Soil samples G-13A through G-13 C were collected from soil boring G-13 at depths of 1.0 to 1.5 feet, 2.0 to 2.5 feet, and 3.0 to 3.5 feet, respectively. Four soil samples were collected from soil borings G-13-1 through G-13-4 at depths at depths of 0.0 to 0.5 feet (G-13-#), 1.0 to 1.5 feet (G-13-#A), 2.0 to 2.5 feet (G-13-#B), and 3.0 to 3.5 (G-13-#C) feet. All soil samples were submitted to an NJDEP-certified laboratory for arsenic, lead, and mercury analysis. The shallow soil samples were initially analyzed with the remaining samples placed on hold pending the initial laboratory results.

Arsenic was detected at a concentration exceeding NJDEP RSRS in soil sample G-13A. Arsenic, lead, and mercury were not detected at concentrations exceeding NJDEP RSRS in the remaining shallow samples. Soil sample G-13B was activated for arsenic analysis.

Arsenic was not detected at a concentration exceeding NJDEP RSRS in soil sample G-13B. No further investigation is required for Green 13.

6.5.5 Hole 14 – Tee

On December 20, 2022, soil borings T-14 and T-14-1 through T-14-4 were advanced at Tee 14 to complete horizontal and vertical delineation of dieldrin. Soil samples were T-14A through T-14C collected at depths of 1.0 to 1.5 feet, 2.0 to 2.5 feet, and 3.0 to 3.5 feet, respectively. Soil samples were collected at depths of 0.0 to 0.5 feet (T-14-#) and 1.0 to 1.5 feet (T-14-#A). No staining, petroleum odors, or elevated PID readings were encountered in any soil borings. Samples collected were submitted to a NJDEP-certified laboratory for dieldrin analysis. The shallow soil samples were initially analyzed with the remaining samples placed on hold pending the initial laboratory results.

Dieldrin was detected in soil sample T-14-4 above the NJDEP RSRS. Dieldrin was not detected at concentrations exceeding NJDEP RSRS in the remaining shallow samples. Soil sample T-14-4A was further analyzed due to dieldrin exceedances detected in the shallow sample.

Dieldrin was not detected at a concentration exceeding NJDEP RSRS in soil sample T-14-4A. Dynamic Earth utilized compliance averaging by calculating the arithmetic mean of samples T-14, T-14A, T-14-1 through T-14-4, and T-14-4A in accordance with the *NJDEP Technical Guidance for the Attainment of Remediation Standards and Site-Specific Criteria* (August 2024). The arithmetic mean of the dieldrin concentrations was calculated to be 0.0326 mg/kg in T-14 which does not exceed the NJDEP RSRS of 0.034 mg/kg. No further investigation is required for Tee 14.

6.6 AOC-6: Golf Course Operations – Proposed Lot 69.06

6.6.1 Hole 9 – Fairway

On July 12, 2021, soil borings F-9 and F-9-1 through F-9-7 were advanced throughout Fairway 9 to horizontally and vertically delineate dieldrin. Soil samples F-9A through F-9C were collected from soil boring F-9 at depths of 1.0 to 1.5 feet, 2.0 to 2.5 feet, and 3.0 to 3.5 feet, respectively. Four soil samples were collected from soil borings F-9-1 through F-9-7 at depths at depths of 0.0 to 0.5 feet (F-9-#), 1.0 to 1.5 feet (F-9-#A), 2.0 to 2.5 feet (F-9-#B), and 3.0 to 3.5 (F-9-#C) feet. Samples collected were submitted to a NJDEP-certified laboratory for dieldrin analysis. The shallow soil samples were initially analyzed with the remaining samples placed on hold pending the initial laboratory results.

Dieldrin was detected at concentrations exceeding NJDEP RSRS in soil samples F-9-1 and F-9-3 through F-9-6. Dieldrin was not detected at concentrations exceeding NJDEP RSRS in the remaining shallow samples. Soil samples F-9-1A and F-9-3A through F-9-6A were activated for dieldrin analysis.

Dieldrin was detected at a concentration exceeding NJDEP RSRS in soil sample F-9-6A. Dieldrin was not detected at concentrations exceeding NJDEP RSRS in the remaining soil samples. Soil sample F-9-6B was activated for dieldrin analysis. Dieldrin was not detected at a concentration exceeding NJDEP RSRS in soil sample F-9-6B. No further investigation is required for Fairway 9.

6.6.2 Hole 9 – Green

On July 12, 2021, soil borings G-9 and G-9-1 through G-9-4 were advanced throughout Green 9 to horizontally and vertically delineate arsenic, lead, mercury, and chlordane. Soil samples G-9A through G-9C were collected from soil boring G-9 at depths of 1.0 to 1.5 feet, 2.0 to 2.5 feet, and 3.0 to 3.5 feet, respectively. Four soil samples were collected from soil borings G-9-1 through G-9-4 at depths at depths of 0.0 to 0.5 feet (G-9-#), 1.0 to 1.5 feet (G-9-#A), 2.0 to 2.5 feet (G-9-#B), and 3.0 to 3.5 (G-9-#C) feet. Samples collected were submitted to a NJDEP-certified laboratory for arsenic, lead, mercury, and chlordane analysis. The shallow soil samples were initially analyzed with the remaining samples placed on hold pending the initial laboratory results.

Arsenic and mercury were detected at concentrations exceeding NJDEP RSRS in soil sample G-9A. No additional compounds were detected at concentrations exceeding NJDEP RSRS in the remaining samples. Soil sample G-9B was activated for arsenic and mercury analysis.

Arsenic and mercury were not detected at concentrations exceeding NJDEP RSRS in soil sample G-9B.

On December 20, 2022, Dynamic Earth remobilized to the Site to delineate heptachlor epoxide at Green 9. Soil borings G-9 and G-9-1 through G-9-4 were advanced at Green 9 to complete horizontal and vertical delineation of heptachlor epoxide. Soil samples G-9A-R through G-9C-R were collected at depths of 1.0 to 1.5 feet, 2.0 to 2.5 feet, and 3.0 to 3.5 feet, respectively. Two soil samples were

collected from borings G-9-1 through G-9-4 at depths of 0.0 to 0.5 feet (G-9-#A) and 1.0 to 1.5 feet (G-9-#B). No staining, petroleum odors, or elevated PID readings were encountered in any soil borings. Soil samples collected were submitted to a NJDEP-certified laboratory for heptachlor epoxide analysis. The shallow soil samples were initially analyzed with the remaining samples placed on hold pending the initial laboratory results.

Heptachlor epoxide was not detected at concentrations exceeding NJDEP RSRS in any soil samples. No further investigation is required for Green 9.

6.6.3 Hole 10 – Fairway

On July 12, 2021, soil borings F-10 and F-10-1 through F-10-7 were advanced throughout Fairway 10 to horizontally and vertically delineate dieldrin. Soil samples F-10A through F-10C were collected from soil boring F-10 at depths of 1.0 to 1.5 feet, 2.0 to 2.5 feet, and 3.0 to 3.5 feet, respectively. Four soil samples were collected from soil borings F-10-1 through F-10-7 at depths at depths of 0.0 to 0.5 feet (F-10-#), 1.0 to 1.5 feet (F-10-#A), 2.0 to 2.5 feet (F-10-#B), and 3.0 to 3.5 (F-10-#C) feet. Samples collected were submitted to a NJDEP-certified laboratory for dieldrin analysis. The shallow soil samples were initially analyzed with the remaining samples placed on hold pending the initial laboratory results.

Dieldrin was detected at concentrations exceeding NJDEP RSRS in soil samples F-10-1, F-10-2, F-10-4, F-10-5, and F-10-7. Dieldrin was not detected at concentrations exceeding NJDEP RSRS in the remaining shallow samples. Soil samples F-10-1A, F-10-2A, F-10-4A, F-10-5A, and F-10-7A were activated for dieldrin analysis.

Dieldrin was not detected at a concentration exceeding NJDEP RSRS in soil samples F-10-1A, F-10-2A, F-10-4A, F-10-5A, and F-10-7A. No further investigation is required for Fairway 10.

6.6.4 Hole 10 – Green

On July 12, 2021, soil borings G-10 and G-10-1 through G-10-4 were advanced throughout Green 10 to horizontally and vertically delineate arsenic, lead, and chlordane. Soil samples G-10A through G-10C were collected from soil boring G-10 at depths of 1.0 to 1.5 feet, 2.0 to 2.5 feet, and 3.0 to 3.5 feet, respectively. Four soil samples were collected from soil borings G-10-1 through G-10-4 at depths at depths of 0.0 to 0.5 feet (G-10-#), 1.0 to 1.5 feet (G-10-#A), 2.0 to 2.5 feet (G-10-#B), and 3.0 to 3.5 (G-10-#C) feet. Samples collected were submitted to a NJDEP-certified laboratory for arsenic, lead, and chlordane analysis. The shallow soil samples were initially analyzed with the remaining samples placed on hold pending the initial laboratory results.

Arsenic was detected at a concentration exceeding NJDEP RSRS in soil samples G-10A, G-10-3, and G-10-4. Arsenic, lead, and chlordane were not detected at concentrations exceeding NJDEP RSRS in the remaining shallow samples. Soil samples G-10B, G-10-3A, and G-10-4A were activated for arsenic analysis.

Arsenic was not detected at a concentration exceeding NJDEP RSRS in soil samples G-10B, G-10-3A, and G-10-4A. No further investigation is required for Green 10.

6.6.5 Hole 11 – Fairway

On December 20, 2022, soil borings F-11 and F-11-1 through F-11-4 were advanced at Fairway 11 to complete horizontal and vertical delineation of arsenic. Soil samples F-11A through F-11C were collected at boring F-11 at depths of 1.0 to 1.5 feet, 2.0 to 2.5 feet, and 3.0 to 3.5 feet, respectively. Two soil samples were collected at the borings F-11-1 through F-11-4 at depths of 0.0 to 0.5 feet (F-11-#) and 1.0 to 1.5 feet (F-11-#A). No staining, petroleum odors, or elevated PID readings were encountered in any soil borings. Samples collected were submitted to a NJDEP-certified laboratory for arsenic analysis. The shallow soil samples were initially analyzed with the remaining samples placed on hold pending the initial laboratory results.

Arsenic was not detected in any soil samples collected from Fairway 11. Based on the results, Dynamic Earth utilized compliance averaging by calculating the arithmetic mean of soil samples F-11, F-11A, and F-11-1 through F-11-4 in accordance with the *NJDEP Technical Guidance for the Attainment of Remediation Standards and Site-Specific Criteria* (August 2024). The arithmetic mean of the arsenic concentrations was calculated to be 5.08 mg/kg in F-11, which is below the most stringent NJDEP SRS of 19 mg/kg. No further investigation is required for Fairway 11.

6.6.6 Hole 11 – Green

On July 12, 2021, soil borings G-11 and G-11-1 through G-11-4 were advanced throughout Green 11 to horizontally and vertically delineate arsenic, lead, and mercury. Soil samples G-11A through G-11C were collected from soil boring G-11 at depths of 1.0 to 1.5 feet, 2.0 to 2.5 feet, and 3.0 to 3.5 feet, respectively. Four soil samples were collected from soil borings G-11-1 through G-11-4 at depths at depths of 0.0 to 0.5 feet (G-11-#), 1.0 to 1.5 feet (G-11-#A), 2.0 to 2.5 feet (G-11-#B), and 3.0 to 3.5 (G-11-#C) feet. Soil samples collected were submitted to a NJDEP-certified laboratory for arsenic, lead, and mercury analysis. The shallow soil samples were initially analyzed with the remaining samples placed on hold pending the initial laboratory results.

Arsenic was detected at a concentration exceeding NJDEP RSRS in soil samples G-11A and G-11-1. Arsenic, lead, and mercury were not detected at concentrations exceeding NJDEP RSRS in the remaining shallow samples. Soil samples G-11B and G-11-1A were activated for arsenic analysis.

Arsenic was not detected at a concentration exceeding NJDEP RSRS in soil samples G-11B and G-11-1A. No further investigation is required for Green 11.

6.6.7 Hole 12 – Green

On July 12, 2021, soil borings G-12 and G-12-1 through G-12-4 were advanced throughout Green 12 to horizontally and vertically delineate chlordane. Soil samples G-12A through G-12C were collected from soil boring G-12 at depths of 1.0 to 1.5 feet, 2.0 to 2.5 feet, and 3.0 to 3.5 feet, respectively. Four soil samples were collected from soil borings G-12-1 through G-12-4 at depths at depths of 0.0 to 0.5 feet (G-12-#), 1.0 to 1.5 feet (G-12-#A), 2.0 to 2.5 feet (G-12-#B), and 3.0 to 3.5 (G-12-#C) feet. Soil samples collected were submitted to a NJDEP-certified laboratory for chlordane analysis. The shallow soil samples were initially analyzed with the remaining samples placed on hold pending the initial laboratory results.

Chlordane was not detected at concentrations exceeding NJDEP RSRS in any shallow samples.

On December 20, 2022, Dynamic Earth remobilized to the Site to delineate heptachlor epoxide at Green 12. Soil borings G-12 and G-12-1 through G-12-4 were advanced at Green 12 to complete horizontal and vertical delineation of heptachlor epoxide. Soil samples G-12A through G-12C were collected at depths of 1.0 to 1.5 feet, 2.0 to 2.5 feet, and 3.0 to 3.5 feet, respectively. Two soil samples were collected from borings G-12-1 through G-12-4 at depths of 0.0 to 0.5 feet (G-12-#A) and 1.0 to 1.5 feet (G-12-#B). No staining, petroleum odors, or elevated PID readings were encountered in any soil borings. Soil samples collected were submitted to a NJDEP-certified laboratory for heptachlor epoxide analysis. The shallow soil samples were initially analyzed with the remaining samples placed on hold pending the initial laboratory results.

Heptachlor epoxide was detected in soil samples G-12-2 and G-12-3 at concentrations exceeding the NJDEP RSRS. Heptachlor epoxide was not detected at concentrations exceeding NJDEP RSRS in the remaining shallow samples. Soil samples G-12-2A and G-12-3A were analyzed due to heptachlor epoxide exceedances detected in the shallow samples.

Heptachlor epoxide was not detected at a concentration exceeding NJDEP RSRS in soil samples G-12-2A and G-12-3A. No further investigation is required for Green 12.

6.6.8 Hole 13 – Fairway

On July 12, 2021, soil borings F-13 and F-13-1 through F-13-7 were advanced throughout Fairway 13 to horizontally and vertically delineate dieldrin. Soil samples F-13A through F-13C were collected from soil boring F-13 at depths of 1.0 to 1.5 feet, 2.0 to 2.5 feet, and 3.0 to 3.5 feet, respectively. Four soil samples were collected from soil borings F-13-1 through F-13-7 at depths at depths of 0.0 to 0.5 feet (F-13-#), 1.0 to 1.5 feet (F-13-#A), 2.0 to 2.5 feet (F-13-#B), and 3.0 to 3.5 (F-13-#C) feet. Soil samples collected were submitted to a NJDEP-certified laboratory for dieldrin analysis. The shallow soil samples were initially analyzed with the remaining samples placed on hold pending the initial laboratory results.

Dieldrin was detected at concentrations exceeding NJDEP RSRS in soil samples F-13A and F-13-1, through F-13-5. Dieldrin was not detected at concentrations exceeding NJDEP RSRS in the remaining shallow samples. Soil samples F-13B and F-13-1A through F-13-5A were activated for dieldrin analysis.

Dieldrin was not detected at concentrations exceeding NJDEP RSRS in soil samples F-13B and F-13-1A through F-13-5A. No further investigation is required for Fairway 13.

6.6.9 Hole 13 – Green

On July 12, 2021, soil borings G-13 and G-13-1 through G-13-4 were advanced throughout Green 13 to horizontally and vertically delineate arsenic, lead, mercury, and chlordane. Soil samples G-13A through G-13C were collected from soil boring G-13 at depths of 1.0 to 1.5 feet, 2.0 to 2.5 feet, and 3.0 to 3.5 feet, respectively. Four soil samples were collected from soil borings G-13-1 through G-13-4 at depths at depths of 0.0 to 0.5 feet (G-13-#), 1.0 to 1.5 feet (G-13-#A), 2.0 to 2.5 feet (G-13-#B), and 3.0 to 3.5 (G-13-#C) feet. Soil samples collected were submitted to a NJDEP-certified laboratory for arsenic, lead, mercury, and chlordane analysis. The shallow soil samples were initially analyzed with the remaining samples placed on hold pending the initial laboratory results.

Arsenic was detected at a concentration exceeding NJDEP RSRS in soil sample G-13A. Chlordane, lead, and mercury were not detected at concentrations exceeding NJDEP RSRS in the remaining shallow samples. Soil sample G-13B was activated for arsenic analysis.

Arsenic was not detected at a concentration exceeding NJDEP RSRS in soil sample G-13B. No further investigation is required for Green 13.

6.6.10 Hole 15 – Fairway

On July 12, 2021, soil borings F-15 and F-15-1 through F-15-7 were advanced throughout Fairway 15 to horizontally and vertically delineate dieldrin. Soil samples F-15A through F-15C were collected from soil boring F-15 at depths of 1.0 to 1.5 feet, 2.0 to 2.5 feet, and 3.0 to 3.5 feet, respectively. Four soil samples were collected from soil borings F-1-1 through F-15-7 at depths at depths of 0.0 to 0.5 feet (F-15-#), 1.0 to 1.5 feet (F-15-#A), 2.0 to 2.5 feet (F-15-#B), and 3.0 to 3.5 (F-15-#C) feet. Soil samples collected were submitted to a NJDEP-certified laboratory for dieldrin analysis. The shallow soil samples were initially analyzed with the remaining samples placed on hold pending the initial laboratory results.

Dieldrin was detected at concentrations exceeding NJDEP RSRS in soil samples F-15-1 through F-15-7. Dieldrin was not detected at concentrations exceeding NJDEP RSRS in soil samples F-15A. Soil samples F-15-1A through F-15-7A were activated for dieldrin analysis.

Dieldrin was detected at a concentration exceeding NJDEP RSRS in soil sample F-15-1A. Dieldrin was not detected at a concentration exceeding NJDEP RSRS in the remaining soil samples. Soil

sample F-15-1B was activated for dieldrin analysis. Dieldrin was not detected at a concentration exceeding NJDEP RSRS in soil sample F-15-1B.

On December 20, 2022, soil borings F-15R and F-15-1R through F-15-7R were advanced at Fairway 15 to complete horizontal and vertical delineation of arsenic. Soil samples F-15A through F-15C were collected at boring F-15R at depths of 1.0 to 1.5 feet, 2.0 to 2.5 feet, and 3.0 to 3.5 feet, respectively. Two soil samples were collected at the borings F-15-1R through F-15-7R at depths of 0.0 to 0.5 feet (F-15-#R) and 1.0 to 1.5 feet (F-15-#R-A). No staining, petroleum odors, or elevated PID readings were encountered in any soil borings. Soil samples collected were submitted to a NJDEP-certified laboratory for arsenic analysis. The shallow soil samples were initially analyzed with the remaining samples placed on hold pending the initial laboratory results.

Arsenic was detected at a concentration exceeding NJDEP RSRS in soil sample F-15-6R. Arsenic was not detected at concentrations exceeding NJDEP RSRS in the remaining soil samples. Soil sample F-15-6A-R was activated for arsenic analysis. Arsenic was not detected at a concentration exceeding NJDEP RSRS in soil sample F-15-6A-R.

Arsenic was not detected in any soil samples collected from Fairway 15. Based on the results, Dynamic Earth utilized compliance averaging by calculating the arithmetic mean of soil samples F-15, F-15A, and F-15-1R through F-15-7R in accordance with the *NJDEP Technical Guidance for the Attainment of Remediation Standards and Site-Specific Criteria* (August 2024). The arithmetic mean of the arsenic concentrations was calculated to be 16.17 mg/kg in F-15, which is below the most stringent NJDEP SRS of 19 mg/kg. No further investigation is required for Fairway 15.

6.6.11 Hole 15 – Green

On July 12, 2021, soil borings G-15 and G-15-1 through G-15-4 were advanced throughout Green 15 to horizontally and vertically delineate arsenic and chlordane. Soil samples G-15A through G-15C were collected from soil boring G-15 at depths of 1.0 to 1.5 feet, 2.0 to 2.5 feet, and 3.0 to 3.5 feet, respectively. Four soil samples were collected from soil borings G-15-1 through G-15-4 at depths at depths of 0.0 to 0.5 feet (G-15-#), 1.0 to 1.5 feet (G-15-#A), 2.0 to 2.5 feet (G-15-#B), and 3.0 to 3.5 (G-15-#C) feet. Soil samples collected were submitted to a NJDEP-certified laboratory for arsenic and chlordane analysis. The shallow soil samples were initially analyzed with the remaining samples placed on hold pending the initial laboratory results.

Arsenic was detected at concentrations exceeding NJDEP RSRS in soil samples G-15A and G-15-1. Chlordane and arsenic were not detected at concentrations exceeding NJDEP RSRS in the remaining shallow samples. Soil samples G-15B and G-15-1A were activated for arsenic analysis.

Arsenic was not detected at concentrations exceeding NJDEP RSRS in soil samples G-15B or G-15-1A. No further investigation is required for Green 15.

6.6.12 Hole 16 – Green

On July 20, 2021, soil borings G-16 and G-16-1 through G-16-4 were advanced throughout Green 16 to horizontally and vertically delineate arsenic, lead, mercury, and chlordane. Soil samples G-16A through G-16C were collected from soil boring G-16 at depths of 1.0 to 1.5 feet, 2.0 to 2.5 feet, and 3.0 to 3.5 feet, respectively. Four soil samples were collected from soil borings G-16-1 through G-16-4 at depths at depths of 0.0 to 0.5 feet (G-16-#), 1.0 to 1.5 feet (G-16-#A), 2.0 to 2.5 feet (G-16-#B), and 3.0 to 3.5 (G-16-#C) feet. Soil samples collected were submitted to a NJDEP-certified laboratory for arsenic, lead, mercury, and chlordane analysis. The shallow soil samples were initially analyzed with the remaining samples placed on hold pending the initial laboratory results.

Arsenic was detected at a concentration exceeding NJDEP RSRS in soil sample G-16A. Chlordane, lead, and mercury were not detected at concentrations exceeding NJDEP RSRS in the remaining samples. Soil sample G-16B was activated for arsenic analysis.

Arsenic was not detected at a concentration exceeding NJDEP RSRS in soil sample G-16B. No further investigation is required for Green 16.

6.6.13 Hole 17 – Fairway

On December 20, 2022, soil borings F-17 and F-17-1 through F-17-4 were advanced at Fairway 17 to complete horizontal and vertical delineation of arsenic. Soil samples F-17A through F-17C were collected at boring F-17 at depths of 1.0 to 1.5 feet, 2.0 to 2.5 feet, and 3.0 to 3.5 feet, respectively. Two soil samples were collected at the borings F-17-1 through F-17-4 at depths of 0.0 to 0.5 feet (F-17-#A) and 1.0 to 1.5 feet (F-17-#B). No staining, petroleum odors, or elevated PID readings were encountered in any soil borings. Soil samples collected were submitted to a NJDEP-certified laboratory for arsenic analysis. The shallow soil samples were initially analyzed with the remaining samples placed on hold pending the initial laboratory results.

Arsenic was not detected in any soil samples collected from Fairway 17. Based on the results, Dynamic Earth utilized compliance averaging by calculating the arithmetic mean of soil samples F-17, F-17A, and F-17-1 through F-17-4 in accordance with the *NJDEP Technical Guidance for the Attainment of Remediation Standards and Site-Specific Criteria* (August 2024). The arithmetic mean of the arsenic concentrations was calculated to be 13.99 mg/kg at Fairway 17, which is below the most stringent NJDEP RSRS of 19 mg/kg. No further investigation is required for Fairway 17.

6.6.14 Hole 17 – Green

On July 20, 2021, soil borings G-17 and G-17-1 through G-17-4 were advanced throughout Green 17 to horizontally and vertically delineate arsenic, lead, mercury, and chlordane. Soil samples G-17A through G-17C were collected from soil boring G-17 at depths of 1.0 to 1.5 feet, 2.0 to 2.5 feet, and 3.0 to 3.5 feet, respectively. Four soil samples were collected from soil borings G-17-1 through G-17-4 at depths at depths of 0.0 to 0.5 feet (G-17-#), 1.0 to 1.5 feet (G-17-#A), 2.0 to 2.5 feet (G-17-#B),

and 3.0 to 3.5 (G-17-#C) feet. Soil samples collected were submitted to a NJDEP-certified laboratory for arsenic, lead, mercury, and chlordane analysis. The shallow soil samples were initially analyzed with the remaining samples placed on hold pending the initial laboratory results.

Arsenic was detected at concentrations exceeding NJDEP RSRS in soil samples G-17A and G-17-1. Chlordane, lead, and mercury were not detected at concentrations exceeding NJDEP RSRS in any shallow samples. Soil samples G-17B and G-17-1A were activated for arsenic analysis. Arsenic was not detected at concentrations exceeding NJDEP RSRS in soil samples G-17B or G-17-1A. No further investigation is required for Green 17.

6.6.15 Hole 18 – Green

On July 20, 2021, soil borings G-18 and G-18-1 through G-18-4 were advanced throughout Green 18 to horizontally and vertically delineate arsenic and lead. Soil samples G-18A through G-18C were collected from soil boring G-18 at depths of 1.0 to 1.5 feet, 2.0 to 2.5 feet, and 3.0 to 3.5 feet, respectively. Four soil samples were collected from soil borings G-18-1 through G-18-4 at depths at depths of 0.0 to 0.5 feet (G-18-#), 1.0 to 1.5 feet (G-18-#A), 2.0 to 2.5 feet (G-18-#B), and 3.0 to 3.5 (G-18-#C) feet. Soil samples collected were submitted to a NJDEP-certified laboratory for arsenic and lead analysis. The shallow soil samples were initially analyzed with the remaining samples placed on hold pending the initial laboratory results.

Arsenic and lead were detected at concentrations exceeding NJDEP RSRS in soil sample G-18A. Arsenic and lead were not detected at concentrations exceeding NJDEP RSRS in the remaining shallow samples. Soil sample G-18B was activated for arsenic analysis. Arsenic and lead were not detected at concentrations exceeding NJDEP RSRS in soil sample G-18B. No further investigation is required for Green 18.

6.6.16 Hole 19 – Green

On September 27, 2024, soil borings G-19 and G-19-1 through G-19-4 were advanced throughout Green 19 to horizontally and vertically delineate lead. Soil samples G19A through G19C were collected from soil boring G-19 at depths of 1.0 to 1.5 feet, 2.0 to 2.5 feet, and 3.0 to 3.5 feet, respectively. Four soil samples were collected from soil borings G-19-1 through G-19-4 at depths at depths of 0.0 to 0.5 feet (G19-#), 1.0 to 1.5 feet (G19-#A), 2.0 to 2.5 feet (G19-#B), and 3.0 to 3.5 (G19-#C) feet. Soil samples collected were submitted to a NJDEP-certified laboratory for lead analysis. The shallow soil samples were initially analyzed with the remaining samples placed on hold pending the initial laboratory results.

Lead was detected at concentrations exceeding NJDEP RSRS in soil samples G19A and G19-4. Lead was not detected at concentrations exceeding NJDEP RSRS in the remaining shallow samples. Soil samples G19B and G19-4A was activated for lead analysis. Lead was not detected at concentrations exceeding NJDEP RSRS in soil samples G-19B and G-19-4A. No further investigation is required for Green 19.

6.7 AOC-11: Equipment Wash and Trench Area/AOC-12: Trench Area

On July 21, 2021, soil borings TRENCH-1 through TRENCH-5 were advanced to horizontally and vertically delineate chlordane and heptachlor epoxide at AOC-11 and AOC-12. Soil samples TRENCH-1A through TRENCH-1C were collected from soil boring TRENCH-1 at depths of 1.0 to 1.5 feet, 2.0 to 2.5 feet, and 3.0 to 3.0, respectively. Four soil samples were collected from soil borings TRENCH-2 through TRENCH-5 at depths at depths of 0.0 to 0.5 feet (TRENCH-#), 1.0 to 1.5 feet (TRENCH-#A), 2.0 to 2.5 feet (TRENCH-#B), and 3.0 to 3.5 (TRENCH-#C) feet. Soil samples collected were submitted to a NJDEP-certified laboratory for chlordane and heptachlor epoxide analysis. The shallow soil samples were initially analyzed with the remaining samples placed on hold pending the initial laboratory results.

Chlordane was detected at concentrations exceeding NJDEP RSRS in soil samples TRENCH-1A, TRENCH-3, and TRENCH-5. Chlordane and heptachlor epoxide were not detected at concentrations exceeding NJDEP RSRS in the remaining shallow soil samples. Soil samples TRENCH-1B, TRENCH-3A, and TRENCH-5A were activated for chlordane analysis.

Chlordane was detected at a concentration exceeding NJDEP RSRS in soil sample TRENCH-1B. Chlordane was not detected at concentrations exceeding NJDEP RSRS in the remaining soil samples. Soil sample TRENCH-1C was activated for chlordane analysis. Chlordane was not detected at a concentration exceeding NJDEP RSRS in soil sample TRENCH-1C.

On May 31, 2023, Dynamic Earth advanced soil borings TRENCH-7 through TRENCH-9 and collected two soil samples at each location at depths of 0.0 to 0.5 feet (TRENCH-#A) and 1.0 to 1.5 feet bgs (TRENCH-#B). Soil samples were submitted to an NJDEP-certified laboratory for chlordane analysis. The shallow samples were analyzed first with the deeper samples held pending the shallow sample results.

Chlordane was detected at a concentration exceeding NJDEP RSRS in soil sample TRENCH-7. Chlordane was not detected at a concentration exceeding NJDEP SRS in soil sample TRENCH-6. Dynamic Earth analyzed TRENCH-7A and TRENCH-9 for chlordane analysis. Chlordane was not detected at concentrations exceeding NJDEP SRS in soil samples TRENCH-7A or TRENCH-9. No further investigation is required for AOC-11 or AOC-12.

6.8 SPLP Calculations

In December 2022 and May 2023, Dynamic Earth analyzed soil samples T-11R, F-18R, G-6-R, G-6-2R, G-11R, G-16R, G-16A, F-5-2R, F-13R, F-15-3R, WA-2R, and WA-3R for Synthetic Precipitation Leaching Procedure (SPLP) analysis to calculate Site-specific MGWSRS to account for low-lying areas where groundwater was within two feet of the ground surface.

Based on the SPLP results, Site-specific Migration to Groundwater Soil Remediation Standards (MGWSRS) were calculated for beta-BHC (0.0123 mg/kg), 4,4'-DDE (0.713 mg/kg), mercury (4.1

mg/kg), 4,4'-DDE (0.713 mg/kg), dieldrin (0.503 mg/kg), and lead (144 mg/kg). Accordingly, no vertical delineation samples exceed the NJDEP RSRS or Site-specific MGWSRS. SPLP calculators are provided in Appendix C.

6.9 RI Conclusions and Recommendations

Based on the RI conducted HAP and in accordance with Section 6.1 of the NJDEP *Historically Applied Pesticide Technical Guidance* (February 2022), Dynamic Earth had completed vertical and horizontal delineation of HAP to the limits of the tees, greens, and fairways. Conversations with the golf course managers regarding pesticide application, and review of historical aerial photographs to confirm the horizontal extent of the former orchard use and golf course operations. The vertical extent of HAP contamination detected throughout the Site was a maximum depth of 2.0 feet bgs with the exception of the Green 6 area which extended to a maximum depth of 3.0 feet bgs. Samples collected to evaluate the fairways were collected at low lying areas to account for overland flow and the vertical extents of contamination are considered worst case. Golf course operations do not include the cultivation of soils which could increase the vertical extent of contamination. As such, pesticides that have been applied to the surface of the greens, tees, and fairways have been undisturbed. No further investigation is recommended for AOC-1 through AOC-6, AOC-11, and AOC-12. Based on the findings of the SI and RI, approximately 20,208 cubic yards of HAP impacted soil will be remediated.

7.0 RECEPTOR EVALUATION

7.1 Land Use

Dynamic Earth evaluated land use within 200 feet of the Site. Residential properties are located within 200 feet of the Site property boundary. No other sensitive population uses were currently identified. Dynamic Earth knows of no proposed changes in which the municipality has approved to land use for the properties located within 200 feet of the Site. A receptor evaluation land use plan is provided as Figure 14.

7.2 Groundwater

One groundwater sample was collected in the vicinity of Green 9 and was submitted for total arsenic, total lead, total mercury and TCL pesticide analysis with contingent dissolved metal and pesticide analysis. No compounds were detected above NJDEP GWQS in the unfiltered groundwater sample. In accordance with the NJDEP *Historically Applied Pesticide Technical Guidance* (February 2022), no further investigation for groundwater is required.

7.3 Vapor Intrusion

No volatile organic groundwater contamination has been identified at the Site. Accordingly, further evaluation of potential vapor intrusion receptors is not required at this time.

7.4 Ecological

The purpose of the Baseline Ecological Evaluation (BEE) is to determine if any environmentally sensitive natural resources (ESNR), other than groundwater, are present on or adjacent to the Site and to determine if said resources are impacted by contamination from the Site at concentrations exceeding the NJDEP ecological screening criteria. The Turtle Mill Brook bisects the central portion of the Site. Dynamic Earth conducted an EE including collecting surface water and sediment samples along the Brook. The EE did not identify any impacts to ESNR and no further investigation is recommended.

Based on the SI and RI conducted, HAP contaminated areas are located within wetland buffer areas of the Turtle Mill Brook. In accordance with N.J.A.C. 7:7A-7.4, Freshwater Wetlands Protection Act Rules, a Hazardous Site Investigation and Cleanup GP-4, will be required prior to RA activities within the wetland buffer areas. Excavated soils within the wetland buffer areas will be backfilled with quarry sourced and/or clean fill material.

8.0 REMEDIAL ACTION WORKPLAN

The proposed remedial actions for AOC-1 through AOC-3, AOC-5, AOC-6, AOC-11, and AOC-12 are included in the sections below.

8.1 Interim Remedial Measures

No interim remedial measures are necessary at this time.

8.2 Proposed Remedial Action Activities

8.2.1 AOC-1, AOC-2, & AOC-3: Proposed Commercial Lots

A total of 2,005 cubic yards of HAP contaminated soil is proposed for off-Site disposal. Following soil excavation activities, excavations will be backfilled with quarry sourced and/or clean fill material approved by the LSRP of Record for the Site. Current and proposed Site elevations, depth of contaminated soil, and proposed excavation areas are depicted on Figures 16 and Figure 20.

8.2.2 AOC-5, AOC-6, AOC-11, & AOC-12: Proposed Residential and Open Space Lots

In accordance with the NJDEP *Historically Applied Pesticide Technical Guidance (February 2022, Section 8.2.1)*, HAP contaminated soil at AOC-5, AOC-6, AOC-11, and AOC-12 will be consolidated into three soil berms located within the existing footprints of contaminated areas of Fairway 4, Fairway 5, and Fairway 9 at AOC-5. A total of 7,174 cubic yards, 9,673 cubic yards, and 1,356 cubic yards of HAP contaminated soil is proposed for consolidation at Fairway 4, Fairway 5, and Fairway 9. Institutional controls including a Deed Notice and Remedial Action Permit for Soil and an engineering control (cap) will be established to prevent direct contact with the impacted soils. The cap will consist of one foot of certified clean fill material overlying a geotextile fabric. The geotextile fabric will provide a clear separation between the cap and the underlying impacted material. The proposed excavation areas are depicted on Figure 16. Current and proposed Site elevations, depth of contaminated soil, and dimensions of the engineering controls are depicted on Figures 16 through 19.

8.3 Sampling Proposal & Monitoring Requirements

To determine the horizontal extent of soil HAP impacts, Dynamic Earth reviewed SI/RI soil data, historic aerial photographs to confirm the historic and current horizontal limits of the greens, tees, and fairways and interviewed the golf course manager regarding pesticide application. A review of historical aerials confirmed the golf course configuration has been consistent since golf course operations began in 1929. According to interviews conducted, pesticide application was limited to the greens, tees, and fairways. Additionally, samples collected to evaluate the historic orchard areas (AOC-2) collected outside of the greens, tees, and fairways and did not exhibit HAP contaminants

above applicable NJDEP SRS.

To determine the vertical extent of soil HAP impacts, Dynamic Earth evaluated Site operations and reviewed SI/RI soil data. Based on the findings of the RI, the vertical extent of HAP contamination detected throughout the Site was a maximum depth of 2.0 feet bgs with the exception of the Green 6 area which extended to a maximum depth of 3.0 feet bgs. Samples collected to evaluate the fairways were collected at low lying areas to account for overland flow and the vertical extents of contamination are considered worst case. Golf course operations do not include the cultivation of soils which could increase the vertical extent of contamination. As such, pesticides that have been applied to the surface of the greens, tees, and fairways have been undisturbed.

The proposed excavation limits are defined by the SI/RI sampling and/or limits of the tees, fairways, and greens. In accordance with Section 8.5 of the NJDEP *Historically Applied Pesticide Technical Guidance* (February 2022), Dynamic Earth will collect post-excavation soil samples for remediation verification. Post-excavation samples will include a minimum of four base samples per acre and one post-excavation sample approximately every 200 linear feet of sidewall with a minimum of four total sidewall samples. Soil samples will be analyzed for select metals and/or pesticides based on the SI/RI sampling previously conducted. The proposed post-excavation sample locations are depicted on Figure 21.

8.4 Public Notification

Local municipal agencies including the Borough of Eatontown, West Long Branch, and Monmouth County Clerk's offices, Monmouth County Health Department, and the Monmouth County Planning Board will be notified of the proposed engineering controls. Public notification of Remedial Action activities will be completed through the posting of an *Environmental Remediation in Progress Sign* and/or notification letters per NJDEP requirements.

8.5 Applicable Remediation Standards

The applicable remediation standards for this RA are the NJDEP Soil Remediation Standards (SRS).

8.6 Effectiveness Evaluation Plan

The effectiveness evaluation for soil impacts will include post-excavation soil sample collection to ensure all contaminated soils have been removed from the Site. The proposed post-excavation sample locations are depicted on Figure 21.

8.7 Perimeter Air Monitoring & Action Plan

A Perimeter Air Monitoring & Action Plan is not anticipated as the proposed RA activities will not exceed 20 working days within a 30-day period. If proposed RA activities are anticipated to extend beyond 20 working days within a 30-day period, a Perimeter Air Monitoring & Action Plan will be implemented in accordance with Perimeter Air Monitoring Technical Guidance (December 2023).

8.8 Bench Scale/Pilot Studies

No bench scale or pilot studies have been conducted in support of the proposed RA activities.

8.9 Required Permits

The following NJDEP permits may be required prior to implementation of the remedial action and Site redevelopment:

- FHA Individual Permit
- Wetlands Letter of Interpretation
- Wetlands Transition Area Waiver
- FWW General Permit #11 – Outfalls and Intake Structures
- FWW General Permit #4 – Hazardous Site Investigation and Cleanup
- Treatment Works Approval
- Bureau of Water System Engineering Approval
- NJPDES 5G3 – Construction Activity Stormwater (GP)

8.10 Fill Use Plan

A Fill Use Plan has been prepared in accordance with N.J.A.C. 7:26E-5.2(h) and N.J.A.C. 7:26E-5.5(b) for AOC-5, AOC-6, AOC-11, and AOC-12. The Fill Use Plan is provided as Appendix D.

8.11 Remedial Action Reporting & Project Management

The results of the remediation will be presented in the form of a Remedial Action Report (RAR) for HAP soil contamination which will detail activities conducted to achieve compliance with the N.J.A.C. 7:26E-5. The RAR will present in detail the results of the remediation activities and other pertinent items as specified in the RAR submission requirements of the NJDEP N.J.A.C. 7:26E.

8.12 Proposed Site Restoration

Once the proposed RA is completed and prior to Site redevelopment, all excavations will be sloped prior to Site redevelopment and/or backfilled with fill material obtained from a New Jersey licensed quarry and/or clean fill material approved by the LSRP of Record for the Site in accordance with the NJDEP *Fill Material Guidance for SRP Sites* (October 2021).

8.13 Proposed Remedial Action Schedule

8.13.3 AOC-1, AOC-2, & AOC-3: Proposed Commercial Lots

Tasks	Anticipated Schedule
Cessation of Golf Course Operations	Year 1
Implementation of Remedial Actions	Year 1
Remedial Action Report and Issuance of RAO	Upon Completion of RA

8.13.4 AOC-5, AOC-6, AOC-11, & AOC-12: Proposed Residential and Open Space Lots

Tasks	Anticipated Schedule
Cessation of Golf Course Operations	Year 1
Implementation of Remedial Actions in conjunction with redevelopment activities	Year 1
Completion of Remedial Action Report and Issuance of RAO	Upon Completion of RA
Compliance Monitoring Program for Engineering Controls	Annual Inspections and Biennial Reports following approved Remedial Action Permit and issuance of RAO

9.0 DATA QUALITY ASSESSMENT & DATA USABILITY EVALUATION

All samples were collected into pre-preserved (as applicable) laboratory-supplied sample containers, labeled, sealed, packaged on ice, and delivered under proper chain-of-custody procedures to laboratory for analysis. Sampling was conducted in accordance with the Site-specific QAPP (included as Appendix F) and the NJDEP Field Sampling Plan Manual. Samples were submitted to Aqua Pro-Tech Laboratories (NJDEP No. 07010).

Laboratory data packages 2120937, 2120938, 23E1424, 23E1425, L2333497, and 243001were reviewed by Dynamic Earth following completion of the sample analyses. Based on the review, the data packages meet the applicable requirements for the laboratory deliverable including completeness and laboratory performance. Samples were analyzed as requested on the chain of custody, and a majority samples were analyzed within the specified holding times established for each analytical method. However, samples T-2B, T-3-1A through T-3-4A, T-12-1A, T-12-3A, T-14-4A, F-15-6A-R, G-12-2A, and G-12-3A were analyzed for dieldrin, heptachlor epoxide, or arsenic outside of hold time. As these contaminants are persistent and do not break down readily, Dynamic Earth analyzed the samples outside of hold times in order to further the HAP investigation. Laboratory analytical data reports are provided as Appendix H. The laboratory performed instrument tuning and system performance checks including calibration, analysis of matrix spike/matrix spike duplicates (MS/MSD), and analysis of laboratory control samples as required, and reported the calibration and quality control results in the data reports. Conformance summary forms were provided as part of the laboratory report packages. Minor non-conformances were identified by the laboratory. However, these non-conformances are not expected to impact data quality.

10.0 VARIANCES AND DEVIATIONS

10.1 Variances from N.J.A.C. 7:26E

No variances from the requirements of N.J.A.C. 7:26E were proposed for this project.

10.2 Deviations from Technical Guidance

No deviations from NJDEP guidance were proposed for this project.

11.0 CONCLUSIONS AND RECOMMENDATIONS

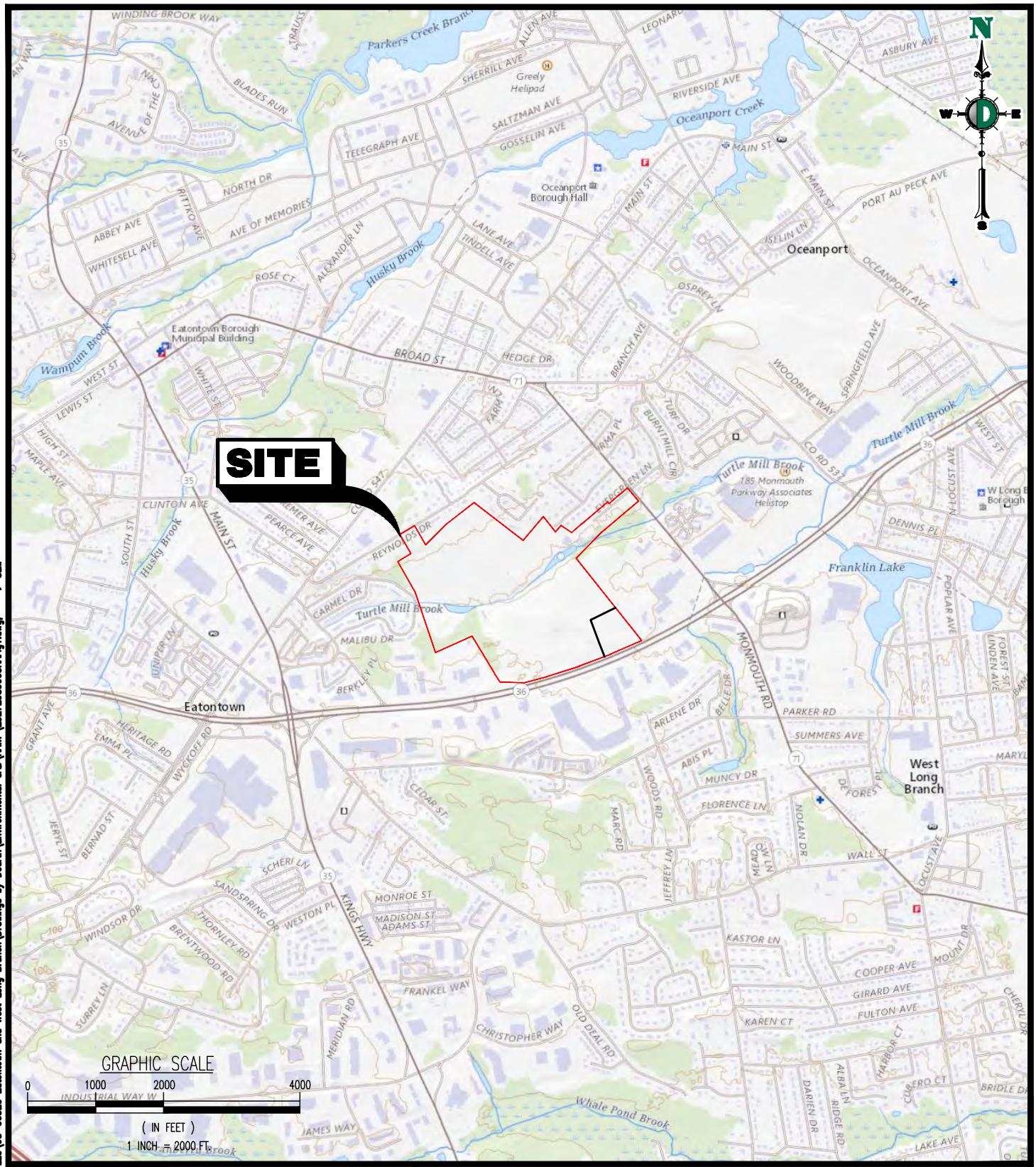
In 2021, HAP were identified at the Site during due diligence activities conducted prior to cessation of golf course operations. In 2022 through 2024, additional SI and RI for HAP was conducted at the Site to characterize HAP at the Site. In May 2023, Dynamic Earth completed an EE in accordance with the NJDEP *Ecological Evaluation Technical Guidance* (Version 2.1, May 2023). The EE did not identify any impacts to ESNR and no further investigation was recommended.

In accordance with Section 6.1 of the NJDEP *Historically Applied Pesticide Technical Guidance* (February 2022), Dynamic Earth had completed vertical and horizontal delineation of HAP. Conversations with the golf course managers regarding pesticide application, and review of historical aerial photographs to confirm the extent of the former orchard use and golf course operations, no further investigation is recommended for AOC-1 through AOC-12.

Proposed redevelopment of the Site includes subdividing the Site into Lots 69.01 through 69.06. Dynamic Earth recommends remedial actions to address AOC-1 through AOC-3 located at proposed Lots 69.01 through 69.04 in the form of soil excavation, off-Site disposal, and backfill to remediate AOC-1 through AOC-3. Proposed remedial actions to address AOC-5, AOC-6, AOC-11, and AOC-12 located at proposed Lots 69.05 and 69.06 will include consolidation of HAP impacted soils with associated engineering and institutional controls.

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Figures



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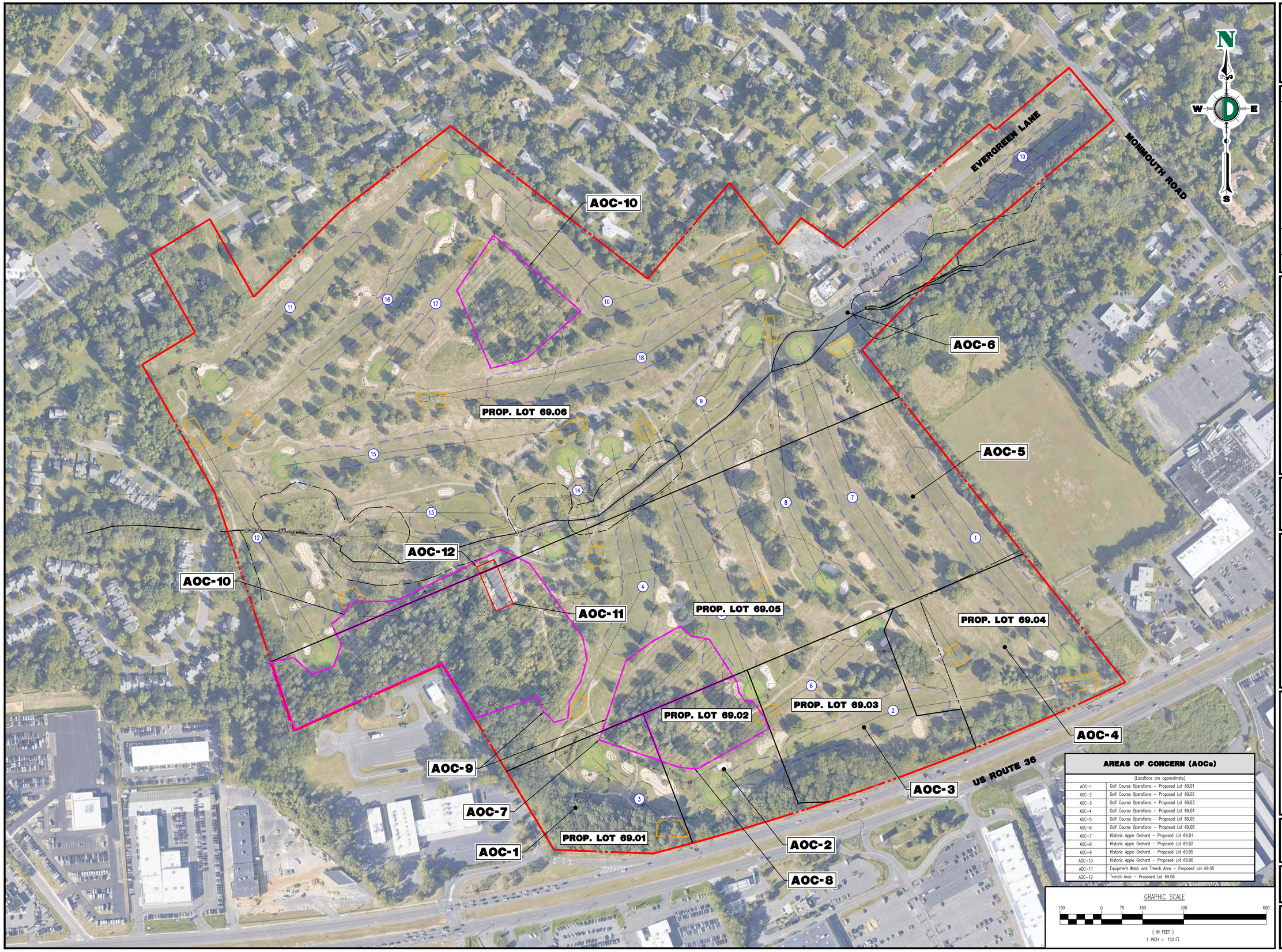
TITLE: **FIGURE 1: SITE LOCATION MAP**

PROJECT: **SURREY EQUITIES**
OLD ORCHARD COUNTRY CLUB
BLOCK 2701, LOT 2, 53, 60, 66, 69; BLOCK 68, LOT 6
54 MONMOUTH ROAD
TOWNSHIP OF EATONTOWN, MONMOUTH COUNTY, NEW JERSEY

SCALE: (H) 1"=2000'
(V)

JOB No:
3272-98-005EC

Plotted: 09/11/23 - 11:40 AM, By: jdefisher, - Product Ver: 24.2a (LMS Tech)
File: C:\EARTH Projects\3272 Surrey Equities LLC\98-005EC Eatontown and West Long Branch\Drawings by Dearth\Environmental CAD\RAMP\E3272989005RAFig1.dwg, ---> SLM



AREAS OF CONCERN (AOCs)	
(Locations are approximate)	
AOC-1	Golf Course Operations – Proposed Lot 69.01
AOC-2	Golf Course Operations – Proposed Lot 69.02
AOC-3	Golf Course Operations – Proposed Lot 69.03
AOC-4	Golf Course Operations – Proposed Lot 69.04
AOC-5	Golf Course Operations – Proposed Lot 69.05
AOC-6	Golf Course Operations – Proposed Lot 69.06
AOC-7	Historic Apple Orchard – Proposed Lot 69.01
AOC-8	Historic Apple Orchard – Proposed Lot 69.02
AOC-9	Historic Apple Orchard – Proposed Lot 69.05
AOC-10	Historic Apple Orchard – Proposed Lot 69.06
AOC-11	Equipment Wash and Trench Area – Proposed Lot 69.05
AOC-12	Trench Area – Proposed Lot 69.06

GRAPHIC SCALE

-150 0 75 150 300 600

(IN FEET)
1 INCH = 150 FT.

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DESIGNED BY: O.M.
CHECKED BY: SSS
CHECKED BY: _

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LEGEND:
- SITE BOUNDARY (APPROXIMATE)
- 18 GOLF COURSE HOLE DESIGNATION
- GREEN BOUNDARY (APPROXIMATE)
- FAIRWAY BOUNDARY (APPROXIMATE)
- TEES BOUNDARY (APPROXIMATE)
- ORCHARD BOUNDARY (APPROXIMATE)
- AOC BOUNDARY (APPROXIMATE)

TITLE:
EXISTING CONDITIONS & AOC LOCATION PLAN

SCALE: (H) 1"=150' (V)
DATE: 10/17/2024
PROJECT No: 3272-98-005EC

FIGURE: 2
Rev. #: 0

Plotted: 10/17/24 – 4:36 PM, By: jdefisher
File: O:\EARTH Projects\3272 Surrey Equities LLC\98-005EC Eatontown and West Long Branch\Drawings by Dearth\Environmental CAD\RMP\E32729890059RMPFIG2.DWG, ----> 02 SI-RI-RAW

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GRAPHIC SCALE

−150 0 75 150 300 600

(IN FEET)

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LEGEND:

- SITE BOUNDARY (APPROXIMATE)
- 18 — GOLF COURSE HOLE DESIGNATION
- SOIL BORING LOCATIONS (APPROXIMATE)

TITLE:
SI BORING LOCATION PLAN

SCALE: (H) 1"=150'
(V)
DATE: 10/17/2024
PROJECT No: 3272-98-005EC

FIGURE: 3
Rev. #: 0

Plotted: 10/17/24 – 5:30 PM, By: jdefisher
File: O:\EARTH Projects\3272 Surrey Equities LLC\98-005EC Eatontown and West Long Branch\Drawings by Dearth\Environmental CAD\SI-RI-RAW\[3272989005SIRIRAP#3.dwg, ----> 03 SI BORING LOCATION PLAN

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File: O:\EARTH Projects\3272 Survey Equities LLC\98-005EC Eatontown and West Long Branch\Drawings by Dearth\Environmental CAD\SI-RI-RAW\E3272989005SIRIMPG4.DWG, ----> 04 SI-RI BORING LOCATION PLAN

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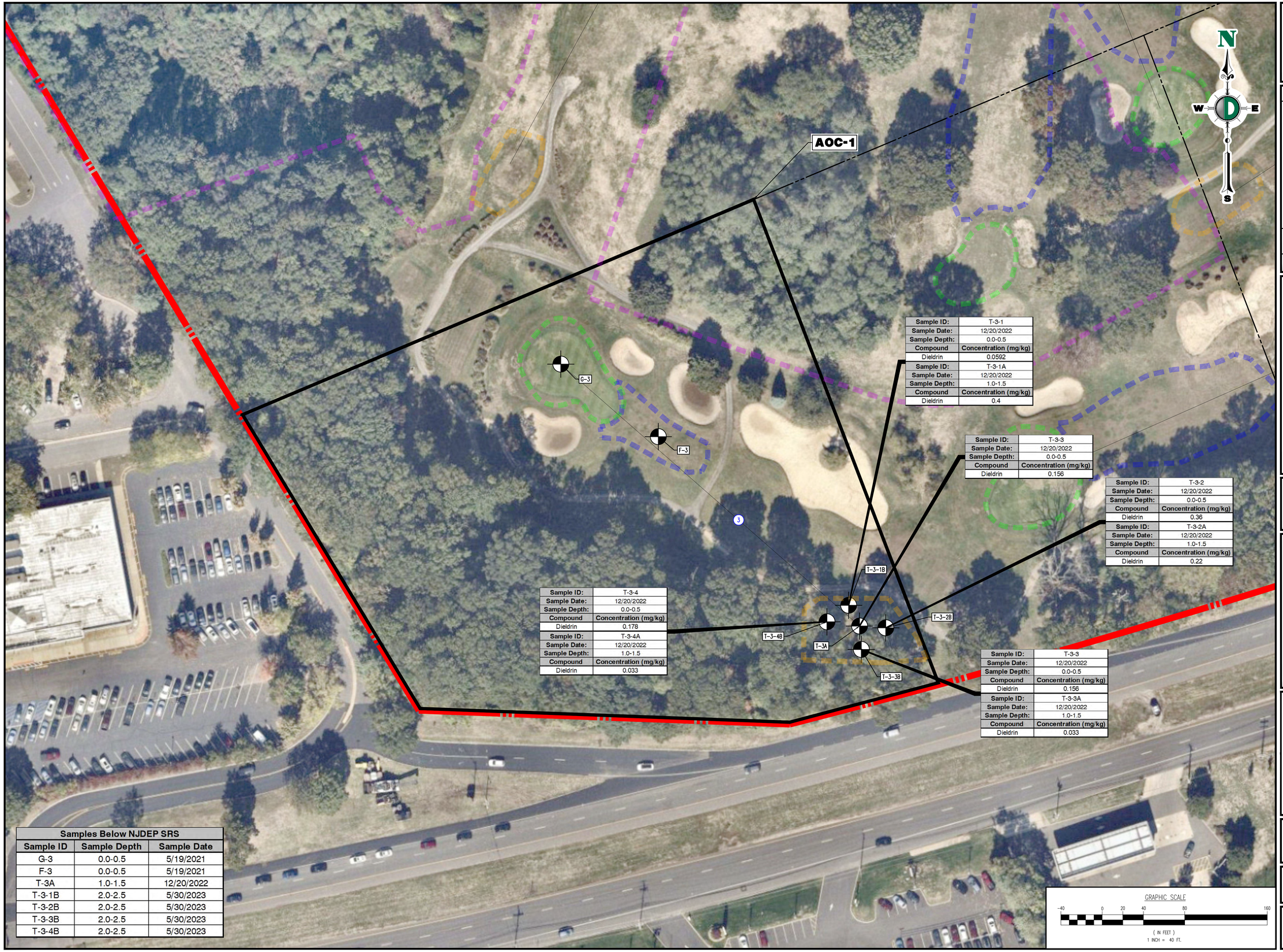
LEGEND:
- SITE BOUNDARY (APPROXIMATE)
- 18 GOLF COURSE HOLE DESIGNATION
- SI SOIL BORING LOCATIONS (APPROXIMATE)
- RI SOIL BORING LOCATIONS (APPROXIMATE)

GRAPHIC SCALE
−150 0 75 150 300 600
(IN FEET)
1 INCH = 150 FT.

TITLE:
SI-RI BORING LOCATION PLAN

SCALE: (H) 1"=150'
(V)
DATE: 10/17/2024
PROJECT No: 3272-98-005EC

FIGURE: 4
Rev. #: 0



Sample ID:	T-3-1
Sample Date:	12/20/2022
Sample Depth:	0.0-0.5
Compound	Concentration (mg/kg)
Dieldrin	0.0592
Sample ID:	T-3-1A
Sample Date:	12/20/2022
Sample Depth:	1.0-1.5
Compound	Concentration (mg/kg)
Dieldrin	0.4

Sample ID:	T-3-3
Sample Date:	12/20/2022
Sample Depth:	0.0-0.5
Compound	Concentration (mg/kg)
Dieldrin	0.156

Sample ID:	T-3-2
Sample Date:	12/20/2022
Sample Depth:	0.0-0.5
Compound	Concentration (mg/kg)
Dieldrin	0.36
Sample ID:	T-3-2A
Sample Date:	12/20/2022
Sample Depth:	1.0-1.5
Compound	Concentration (mg/kg)
Dieldrin	0.22

Sample ID:	T-3-4
Sample Date:	12/20/2022
Sample Depth:	0.0-0.5
Compound	Concentration (mg/kg)
Dieldrin	0.178
Sample ID:	T-3-4A
Sample Date:	12/20/2022
Sample Depth:	1.0-1.5
Compound	Concentration (mg/kg)
Dieldrin	0.033

Sample ID:	T-3-3
Sample Date:	12/20/2022
Sample Depth:	0.0-0.5
Compound	Concentration (mg/kg)
Dieldrin	0.156
Sample ID:	T-3-3A
Sample Date:	12/20/2022
Sample Depth:	1.0-1.5
Compound	Concentration (mg/kg)
Dieldrin	0.033

Samples Below NJDEP SRS		
Sample ID	Sample Depth	Sample Date
G-3	0.0-0.5	5/19/2021
F-3	0.0-0.5	5/19/2021
T-3A	1.0-1.5	12/20/2022
T-3-1B	2.0-2.5	5/30/2023
T-3-2B	2.0-2.5	5/30/2023
T-3-3B	2.0-2.5	5/30/2023
T-3-4B	2.0-2.5	5/30/2023

GRAPHIC SCALE

-40 0 20 40 80 160

(IN FEET)

1 INCH = 40 FT.

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TITLE: **SAMPLE LOCATION & CONTAMINANT CONCENTRATION PLAN (AOC-1)**

SCALE: (H) 1"=40' (V)
DATE: 10/17/2024
PROJECT No: 3272-98-005EC

FIGURE: 5
Rev. #: 0

Plotted: 10/17/24 – 4:41 PM, By: jleffaher
File: O:\EARTH Projects\3272 Surrey Equities LLC\98-005EC Eatontown and West Long Branch\Drawings by Dearth\Environmental CAD\S1-R1-RAW\E3272989005SRIRAP1C5.DWG, ----> 05 SAMPLE LOCATION & CONTAMINANT CONCENTRATION PLAN (AOC-1)

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Plotted: 10/17/24 – 4:42 PM, By: jdefisher
File: G:\DATA Projects\3272 Surrey Equities LLC\98-005EC Eatontown and West Long Branch\Drawings by Dearth\Environmental CAD\SI-R1-RAW\E32729890058SRIRAFIG6.DWG, ----> 06 SAMPLE LOCATION & CONTAMINANT CONCENTRATION PLAN (AOC-2)



Samples Below NJDEP SRS		
Sample ID	Sample Depth	Sample Date
F-2	0.0-0.5	5/19/2021
T-6	0.0-0.5	5/19/2021
G-2	0.0-0.5	5/19/2021
G-19	0.0-0.5	5/19/2021
G-5	0.0-0.5	5/19/2021

GRAPHIC SCALE
−50 0 25 50 100 200
(IN FEET)
1 INCH = 50 FT.

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TITLE: **SAMPLE LOCATION & CONTAMINANT CONCENTRATION PLAN (AOC-2)**

SCALE: (H) 1"=50' (V)
DATE: 10/17/2024
PROJECT No: 3272-98-005EC

FIGURE: 6
Rev. #: 0

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Sample ID:	G-6
Sample Date:	5/19/2021
Sample Depth:	0.0-0.5
Compound	Concentration (mg/kg)
Arsenic	60.9
Lead	527
Mercury	25
Sample ID:	**G-6A**
Sample Date:	**7/12/2021**
Sample Depth:	**1.0-1.5**
Compound	**Concentration (mg/kg)**
Arsenic	110
Sample ID:	**G-6B**
Sample Date:	**7/12/2021**
Sample Depth:	**2.0-2.5**
Compound	**Concentration (mg/kg)**
Arsenic	54

Sample ID:	F-6
Sample Date:	5/19/2021
Sample Depth:	0.0-0.5
Compound	Concentration (mg/kg)
Arsenic	30.6

Samples Below NJDEP SRS		
Sample ID	Sample Depth	Sample Date
F-2	0.0-0.5	5/19/2021
T-6	0.0-0.5	5/19/2021
F-6A	1.0-1.5	12/20/2022
F-6-1	0.0-0.5	12/20/2022
F-6-2	0.0-0.5	12/20/2022
F-6-3	0.0-0.5	12/20/2022
F-6-4	0.0-0.5	12/20/2022
G-5	0.0-0.5	5/19/2021
G-6C	3.0-3.5	7/12/2021
G-6-1	0.0-0.5	7/12/2021
G-6-2	0.0-0.5	7/12/2021
G-6-3	0.0-0.5	7/12/2021
G-6-4	0.0-0.5	7/12/2021

F-5-3A, F-5A, F-5-4B, F-5-5, F-5-6, F-5-7, G-5, T-6, F-2, F-6A, F-6-1, F-6-2, F-6-3, F-6-4, G-6-2, G-6-2R, G-6-1, G-6, G-6R, G-6C, G-6-3, G-6-4, AOC-3, US ROUTE 36, 1, 2, 4, 5, 6

GRAPHIC SCALE

-50 0 25 50 100 200

(IN FEET)
1 INCH = 50 FT.

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TITLE: **SAMPLE LOCATION & CONTAMINANT CONCENTRATION PLAN (AOC-3)**

SCALE: (H) 1"=50' (V) | DATE: 10/17/2024
PROJECT No: 3272-98-005EC

FIGURE: 7 | Rev. #: 0

Plotted: 10/17/24 – 4:46 PM, By: jdefalher
File: O:\DATA Projects\3272 Surrey Equities LLC\98-005EC Eatontown and West Long Branch\Drawings by Dearth\Environmental CAD\SI-RI-RAW\E3272989005SIRIRAP07.DWG, ----> 07 SAMPLE LOCATION & CONTAMINANT CONCENTRATION PLAN (AOC-3)

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Sample ID:	T-2
Date:	5/19/2021
Sample Depth:	0.0-0.5
Compound	Concentration (mg/kg)
Dieldrin	0.0456

Sample ID:	T-2A
Sample Date:	12/20/2022
Sample Depth:	1.0-1.5
Compound	Concentration (mg/kg)
Dieldrin	0.0898

Samples Below NJDEP SRS

Sample ID	Sample Depth	Sample Date
G-1	0.0-0.5	5/19/2021
F-1	0.0-0.5	5/19/2021
F-2	0.0-0.5	5/19/2021
T-2	0.0-0.5	12/20/2022
T-2-1	0.0-0.5	12/20/2022
T-2-2	0.0-0.5	12/20/2022
T-2-3	0.0-0.5	12/20/2022
T-2-4	0.0-0.5	12/20/2022
T-2B	2.0-2.5	12/20/2022
T-7	0.0-0.5	5/19/2021

GRAPHIC SCALE
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(IN FEET)
1 INCH = 50 FT.

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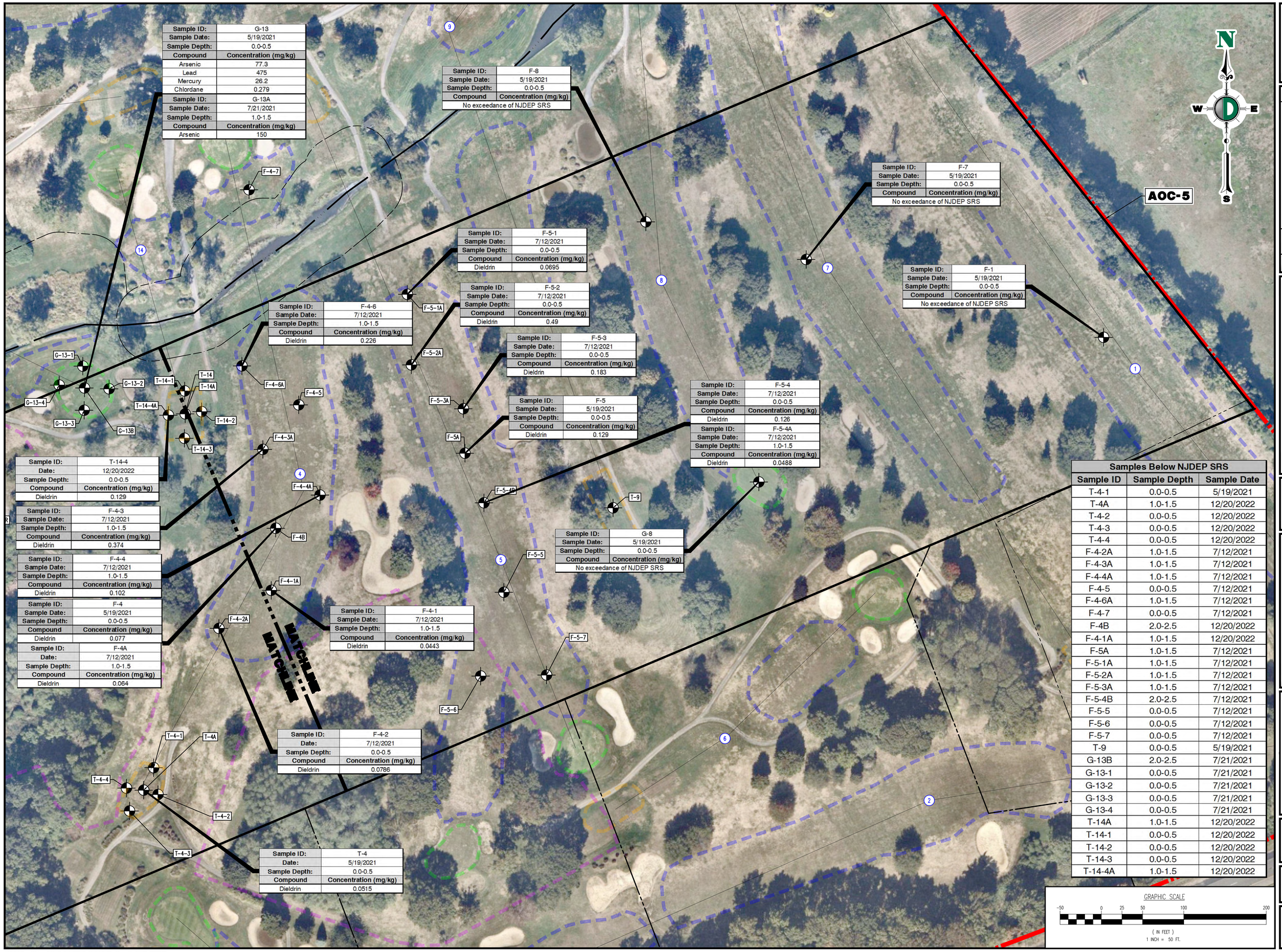
TITLE: **SAMPLE LOCATION & CONTAMINANT CONCENTRATION PLAN (AOC-4)**

SCALE: (H) 1"=50' (V)
DATE: 10/17/2024
PROJECT No: 3272-98-005EC

FIGURE: 8
Rev. #: 0

Plotted: 10/17/24 – 4:46 PM, By: jdeFisher
File: G:\DATA Projects\3272 Surrey Equities LLC\98-005EC Eatontown and West Long Branch\Drawings by Dearth\Environmental CAD\SI-RI-RAW\E3272989005SIRIRAWFIG8.DWG,

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Sample ID:	G-13
Sample Date:	5/19/2021
Sample Depth:	0.0-0.5
Compound	Concentration (mg/kg)
Arsenic	77.3
Lead	475
Mercury	26.2
Chlordane	0.279
Sample ID:	G-13A
Sample Date:	7/21/2021
Sample Depth:	1.0-1.5
Compound	Concentration (mg/kg)
Arsenic	150

Sample ID:	F-8
Sample Date:	5/19/2021
Sample Depth:	0.0-0.5
Compound	Concentration (mg/kg)
No exceedance of NJDEP SRS	

Sample ID:	F-7
Sample Date:	5/19/2021
Sample Depth:	0.0-0.5
Compound	Concentration (mg/kg)
No exceedance of NJDEP SRS	

Sample ID:	F-1
Sample Date:	5/19/2021
Sample Depth:	0.0-0.5
Compound	Concentration (mg/kg)
No exceedance of NJDEP SRS	

Sample ID:	F-5-1
Sample Date:	7/12/2021
Sample Depth:	0.0-0.5
Compound	Concentration (mg/kg)
Dieldrin	0.0695

Sample ID:	F-5-2
Sample Date:	7/12/2021
Sample Depth:	0.0-0.5
Compound	Concentration (mg/kg)
Dieldrin	0.49

Sample ID:	F-4-6
Sample Date:	7/12/2021
Sample Depth:	1.0-1.5
Compound	Concentration (mg/kg)
Dieldrin	0.226

Sample ID:	F-5-3
Sample Date:	7/12/2021
Sample Depth:	0.0-0.5
Compound	Concentration (mg/kg)
Dieldrin	0.183

Sample ID:	F-5
Sample Date:	5/19/2021
Sample Depth:	0.0-0.5
Compound	Concentration (mg/kg)
Dieldrin	0.129

Sample ID:	F-5-4
Sample Date:	7/12/2021
Sample Depth:	0.0-0.5
Compound	Concentration (mg/kg)
Dieldrin	0.126
Sample ID:	F-5-4A
Sample Date:	7/12/2021
Sample Depth:	1.0-1.5
Compound	Concentration (mg/kg)
Dieldrin	0.0488

Sample ID:	T-14-4
Date:	12/20/2022
Sample Depth:	0.0-0.5
Compound	Concentration (mg/kg)
Dieldrin	0.129

Sample ID:	F-4-3
Sample Date:	7/12/2021
Sample Depth:	1.0-1.5
Compound	Concentration (mg/kg)
Dieldrin	0.374

Sample ID:	F-4-4
Sample Date:	7/12/2021
Sample Depth:	1.0-1.5
Compound	Concentration (mg/kg)
Dieldrin	0.102

Sample ID:	F-4
Sample Date:	5/19/2021
Sample Depth:	0.0-0.5
Compound	Concentration (mg/kg)
Dieldrin	0.077

Sample ID:	F-4A
Date:	7/12/2021
Sample Depth:	1.0-1.5
Compound	Concentration (mg/kg)
Dieldrin	0.064

Sample ID:	F-4-1
Sample Date:	7/12/2021
Sample Depth:	1.0-1.5
Compound	Concentration (mg/kg)
Dieldrin	0.0443

Sample ID:	G-8
Sample Date:	5/19/2021
Sample Depth:	0.0-0.5
Compound	Concentration (mg/kg)
No exceedance of NJDEP SRS	

Sample ID:	F-4-2
Date:	7/12/2021
Sample Depth:	0.0-0.5
Compound	Concentration (mg/kg)
Dieldrin	0.0786

Sample ID:	T-4
Date:	5/19/2021
Sample Depth:	0.0-0.5
Compound	Concentration (mg/kg)
Dieldrin	0.0515

Samples Below NJDEP SRS		
Sample ID	Sample Depth	Sample Date
T-4-1	0.0-0.5	5/19/2021
T-4A	1.0-1.5	12/20/2022
T-4-2	0.0-0.5	12/20/2022
T-4-3	0.0-0.5	12/20/2022
T-4-4	0.0-0.5	12/20/2022
F-4-2A	1.0-1.5	7/12/2021
F-4-3A	1.0-1.5	7/12/2021
F-4-4A	1.0-1.5	7/12/2021
F-4-5	0.0-0.5	7/12/2021
F-4-6A	1.0-1.5	7/12/2021
F-4-7	0.0-0.5	7/12/2021
F-4B	2.0-2.5	12/20/2022
F-4-1A	1.0-1.5	12/20/2022
F-5A	1.0-1.5	7/12/2021
F-5-1A	1.0-1.5	7/12/2021
F-5-2A	1.0-1.5	7/12/2021
F-5-3A	1.0-1.5	7/12/2021
F-5-4B	2.0-2.5	7/12/2021
F-5-5	0.0-0.5	7/12/2021
F-5-6	0.0-0.5	7/12/2021
F-5-7	0.0-0.5	7/12/2021
T-9	0.0-0.5	5/19/2021
G-13B	2.0-2.5	7/21/2021
G-13-1	0.0-0.5	7/21/2021
G-13-2	0.0-0.5	7/21/2021
G-13-3	0.0-0.5	7/21/2021
G-13-4	0.0-0.5	7/21/2021
T-14A	1.0-1.5	12/20/2022
T-14-1	0.0-0.5	12/20/2022
T-14-2	0.0-0.5	12/20/2022
T-14-3	0.0-0.5	12/20/2022
T-14-4A	1.0-1.5	12/20/2022

GRAPHIC SCALE
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(IN FEET)
1 INCH = 50 FT.

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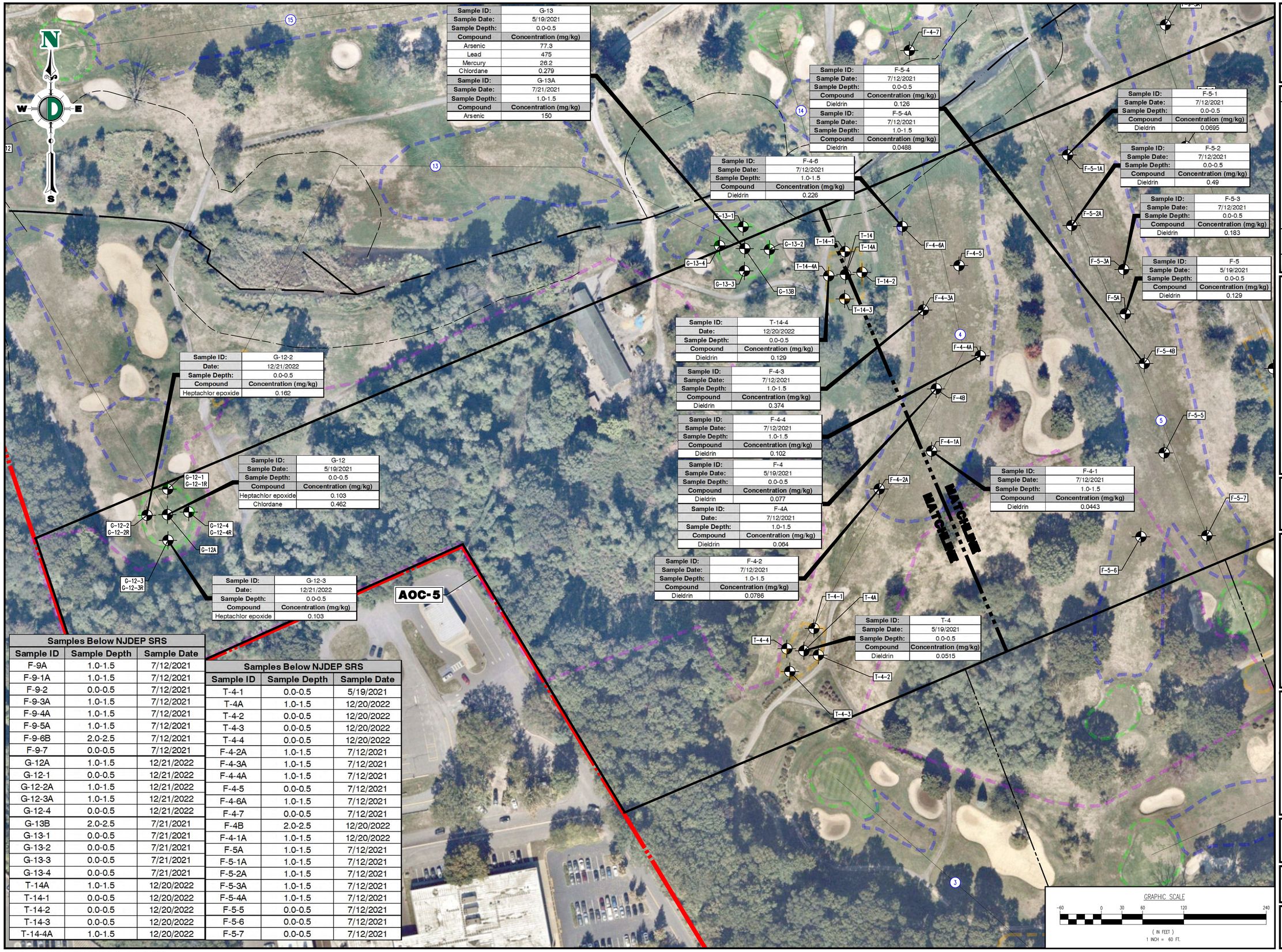
TITLE: SAMPLE LOCATION & CONTAMINANT CONCENTRATION PLAN (AOC-5)

SCALE: (H) 1"=60' (V) | DATE: 10/17/2024
PROJECT No: 3272-98-005EC

FIGURE: 9A | Rev. #: 0

Plotted: 10/17/24 - 4:47 PM, By: jdefisher
File: O:\EARTH Projects\3272 Surrey Equities LLC\98-005EC Eatontown and West Long Branch\Drawings by Dearth\Environmental CAD\S-R-R4M\E32729890055R4P09.DWG, ----> 9A SAMPLE LOCATION & CONTAMINANT CONCENTRATION PLAN (AOC-5)

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Sample ID:	G-13
Sample Date:	5/19/2021
Sample Depth:	0.0-0.5
Compound	Concentration (mg/kg)
Arsenic	77.3
Lead	475
Mercury	26.2
Chlordane	0.279
Sample ID:	G-13A
Sample Date:	7/21/2021
Sample Depth:	1.0-1.5
Compound	Concentration (mg/kg)
Arsenic	150

Sample ID:	F-5-4
Sample Date:	7/12/2021
Sample Depth:	0.0-0.5
Compound	Concentration (mg/kg)
Dieldrin	0.126
Sample ID:	F-5-4A
Sample Date:	7/12/2021
Sample Depth:	1.0-1.5
Compound	Concentration (mg/kg)
Dieldrin	0.0488

Sample ID:	F-4-6
Sample Date:	7/12/2021
Sample Depth:	1.0-1.5
Compound	Concentration (mg/kg)
Dieldrin	0.226

Sample ID:	F-5-1
Sample Date:	7/12/2021
Sample Depth:	0.0-0.5
Compound	Concentration (mg/kg)
Dieldrin	0.0695

Sample ID:	F-5-2
Sample Date:	7/12/2021
Sample Depth:	0.0-0.5
Compound	Concentration (mg/kg)
Dieldrin	0.49

Sample ID:	F-5-3
Sample Date:	7/12/2021
Sample Depth:	0.0-0.5
Compound	Concentration (mg/kg)
Dieldrin	0.183

Sample ID:	F-5
Sample Date:	5/19/2021
Sample Depth:	0.0-0.5
Compound	Concentration (mg/kg)
Dieldrin	0.129

Sample ID:	T-14-4
Date:	12/20/2022
Sample Depth:	0.0-0.5
Compound	Concentration (mg/kg)
Dieldrin	0.129

Sample ID:	F-4-3
Sample Date:	7/12/2021
Sample Depth:	1.0-1.5
Compound	Concentration (mg/kg)
Dieldrin	0.374

Sample ID:	F-4-4
Sample Date:	7/12/2021
Sample Depth:	1.0-1.5
Compound	Concentration (mg/kg)
Dieldrin	0.102

Sample ID:	F-4
Sample Date:	5/19/2021
Sample Depth:	0.0-0.5
Compound	Concentration (mg/kg)
Dieldrin	0.077
Sample ID:	F-4A
Date:	7/12/2021
Sample Depth:	1.0-1.5
Compound	Concentration (mg/kg)
Dieldrin	0.064

Sample ID:	F-4-1
Sample Date:	7/12/2021
Sample Depth:	1.0-1.5
Compound	Concentration (mg/kg)
Dieldrin	0.0443

Sample ID:	F-4-2
Sample Date:	7/12/2021
Sample Depth:	1.0-1.5
Compound	Concentration (mg/kg)
Dieldrin	0.0786

Sample ID:	T-4
Sample Date:	5/19/2021
Sample Depth:	0.0-0.5
Compound	Concentration (mg/kg)
Dieldrin	0.0515

Sample ID:	G-12-2
Date:	12/21/2022
Sample Depth:	0.0-0.5
Compound	Concentration (mg/kg)
Heptachlor epoxide	0.162

Sample ID:	G-12
Sample Date:	5/19/2021
Sample Depth:	0.0-0.5
Compound	Concentration (mg/kg)
Heptachlor epoxide	0.103
Chlordane	0.462

Sample ID:	G-12-3
Date:	12/21/2022
Sample Depth:	0.0-0.5
Compound	Concentration (mg/kg)
Heptachlor epoxide	0.103

Samples Below NJDEP SRS

Sample ID	Sample Depth	Sample Date
F-9A	1.0-1.5	7/12/2021
F-9-1A	1.0-1.5	7/12/2021
F-9-2	0.0-0.5	7/12/2021
F-9-3A	1.0-1.5	7/12/2021
F-9-4A	1.0-1.5	7/12/2021
F-9-5A	1.0-1.5	7/12/2021
F-9-6B	2.0-2.5	7/12/2021
F-9-7	0.0-0.5	7/12/2021
G-12A	1.0-1.5	12/21/2022
G-12-1	0.0-0.5	12/21/2022
G-12-2A	1.0-1.5	12/21/2022
G-12-3A	1.0-1.5	12/21/2022
G-12-4	0.0-0.5	12/21/2022
G-13B	2.0-2.5	7/21/2021
G-13-1	0.0-0.5	7/21/2021
G-13-2	0.0-0.5	7/21/2021
G-13-3	0.0-0.5	7/21/2021
G-13-4	0.0-0.5	7/21/2021
T-14A	1.0-1.5	12/20/2022
T-14-1	0.0-0.5	12/20/2022
T-14-2	0.0-0.5	12/20/2022
T-14-3	0.0-0.5	12/20/2022
T-14-4A	1.0-1.5	12/20/2022

Samples Below NJDEP SRS

Sample ID	Sample Depth	Sample Date
T-4-1	0.0-0.5	5/19/2021
T-4A	1.0-1.5	12/20/2022
T-4-2	0.0-0.5	12/20/2022
T-4-3	0.0-0.5	12/20/2022
T-4-4	0.0-0.5	12/20/2022
F-4-2A	1.0-1.5	7/12/2021
F-4-3A	1.0-1.5	7/12/2021
F-4-4A	1.0-1.5	7/12/2021
F-4-5	0.0-0.5	7/12/2021
F-4-6A	1.0-1.5	7/12/2021
F-4-7	0.0-0.5	7/12/2021
F-4B	2.0-2.5	12/20/2022
F-4-1A	1.0-1.5	12/20/2022
F-5A	1.0-1.5	7/12/2021
F-5-1A	1.0-1.5	7/12/2021
F-5-2A	1.0-1.5	7/12/2021
F-5-3A	1.0-1.5	7/12/2021
F-5-4A	1.0-1.5	7/12/2021
F-5-5	0.0-0.5	7/12/2021
F-5-6	0.0-0.5	7/12/2021
F-5-7	0.0-0.5	7/12/2021

GRAPHIC SCALE

-60 0 30 60 120 240

(IN FEET)
1 INCH = 60 FT.

LEGEND:

- SITE BOUNDARY (APPROXIMATE)
- 18 GOLF COURSE HOLE DESIGNATION
- GREEN BOUNDARY (APPROXIMATE)
- FAIRWAY BOUNDARY (APPROXIMATE)
- TEES BOUNDARY (APPROXIMATE)
- ORCHARD BOUNDARY (APPROXIMATE)
- AOC BOUNDARY (APPROXIMATE)

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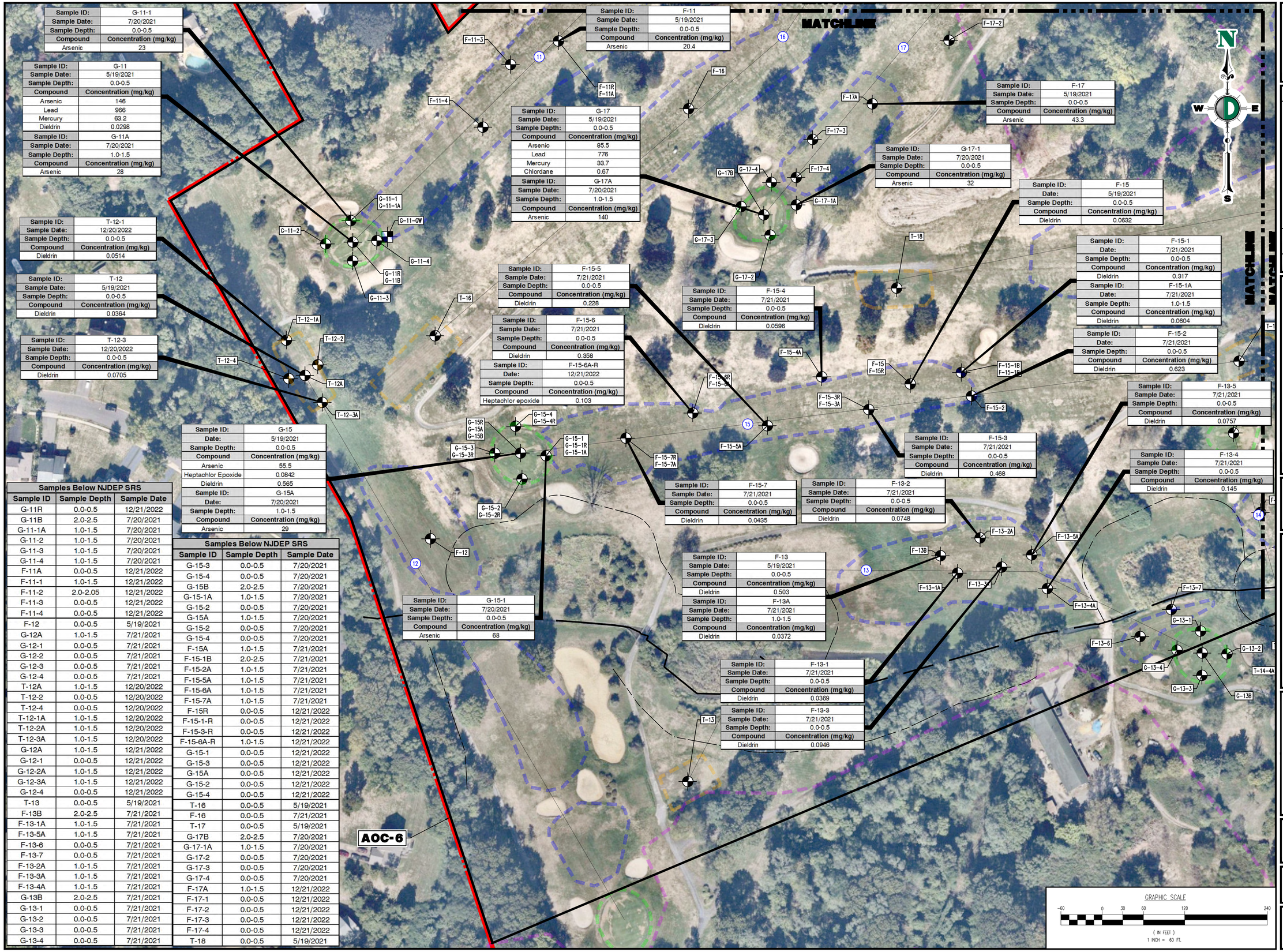
TITLE: SAMPLE LOCATION & CONTAMINANT CONCENTRATION PLAN (AOC-5)

SCALE: (H) 1"=60' (V)
DATE: 10/17/2024
PROJECT No: 3272-98-005EC

FIGURE: 9B
Rev. #: 0

Plotted: 10/17/24 – 5:34 PM By: jdefisher
File: O:\DATA\Projects\3272 Surrey Equities LLC\98-005EC Eatontown and West Long Branch\Drawings by Dearth\Environmental CAD\SI-RI-RAW\E3272989005SIRIAFIGB.DWG, ----> 9B SAMPLE LOCATION & CONTAMINANT CONCENTRATION PLAN (AOC-5)

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Samples Below NJDEP SRS

Sample ID	Sample Depth	Sample Date
G-11R	0.0-0.5	12/21/2022
G-11B	2.0-2.5	7/20/2021
G-11-1A	1.0-1.5	7/20/2021
G-11-2	1.0-1.5	7/20/2021
G-11-3	1.0-1.5	7/20/2021
G-11-4	1.0-1.5	7/20/2021
F-11A	0.0-0.5	12/21/2022
F-11-1	1.0-1.5	12/21/2022
F-11-2	2.0-2.05	12/21/2022
F-11-3	0.0-0.5	12/21/2022
F-11-4	0.0-0.5	12/21/2022
F-12	0.0-0.5	5/19/2021
G-12A	1.0-1.5	7/21/2021
G-12-1	0.0-0.5	7/21/2021
G-12-2	0.0-0.5	7/21/2021
G-12-3	0.0-0.5	7/21/2021
G-12-4	0.0-0.5	7/21/2021
T-12A	1.0-1.5	12/20/2022
T-12-2	0.0-0.5	12/20/2022
T-12-4	0.0-0.5	12/20/2022
T-12-1A	1.0-1.5	12/20/2022
T-12-2A	1.0-1.5	12/20/2022
T-12-3A	1.0-1.5	12/20/2022
G-12A	1.0-1.5	12/21/2022
G-12-1	0.0-0.5	12/21/2022
G-12-2A	1.0-1.5	12/21/2022
G-12-3A	1.0-1.5	12/21/2022
G-12-4	0.0-0.5	12/21/2022
T-13	0.0-0.5	5/19/2021
F-13B	2.0-2.5	7/21/2021
F-13-1A	1.0-1.5	7/21/2021
F-13-5A	1.0-1.5	7/21/2021
F-13-6	0.0-0.5	7/21/2021
F-13-7	0.0-0.5	7/21/2021
F-13-2A	1.0-1.5	7/21/2021
F-13-3A	1.0-1.5	7/21/2021
F-13-4A	1.0-1.5	7/21/2021
G-13B	2.0-2.5	7/21/2021
G-13-1	0.0-0.5	7/21/2021
G-13-2	0.0-0.5	7/21/2021
G-13-3	0.0-0.5	7/21/2021
G-13-4	0.0-0.5	7/21/2021

Samples Below NJDEP SRS

Sample ID	Sample Depth	Sample Date
G-15-3	0.0-0.5	7/20/2021
G-15-4	0.0-0.5	7/20/2021
G-15B	2.0-2.5	7/20/2021
G-15-1A	1.0-1.5	7/20/2021
G-15-2	0.0-0.5	7/20/2021
G-15A	1.0-1.5	7/20/2021
G-15-2	0.0-0.5	7/20/2021
G-15-4	0.0-0.5	7/20/2021
F-15A	1.0-1.5	7/21/2021
F-15-1B	2.0-2.5	7/21/2021
F-15-2A	1.0-1.5	7/21/2021
F-15-5A	1.0-1.5	7/21/2021
F-15-6A	1.0-1.5	7/21/2021
F-15-7A	1.0-1.5	7/21/2021
F-15R	0.0-0.5	12/21/2022
F-15-1-R	0.0-0.5	12/21/2022
F-15-3-R	0.0-0.5	12/21/2022
F-15-6A-R	1.0-1.5	12/21/2022
G-15-1	0.0-0.5	12/21/2022
G-15-3	0.0-0.5	12/21/2022
G-15A	0.0-0.5	12/21/2022
G-15-2	0.0-0.5	12/21/2022
G-15-4	0.0-0.5	12/21/2022
T-16	0.0-0.5	5/19/2021
F-16	0.0-0.5	7/21/2021
T-17	0.0-0.5	5/19/2021
G-17B	2.0-2.5	7/20/2021
G-17-1A	1.0-1.5	7/20/2021
G-17-2	0.0-0.5	7/20/2021
G-17-3	0.0-0.5	7/20/2021
G-17-4	0.0-0.5	7/20/2021
F-17A	1.0-1.5	12/21/2022
F-17-1	0.0-0.5	12/21/2022
F-17-2	0.0-0.5	12/21/2022
F-17-3	0.0-0.5	12/21/2022
F-17-4	0.0-0.5	12/21/2022
T-18	0.0-0.5	5/19/2021

AOC-6

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Plotted: 10/17/24 - 4:47 PM, By: jdefisher
File: O:\EARTH Projects\3272 Surrey Equities LLC\98-005EC Eatontown and West Long Branch\Drawings by Dearth\Environmental CAD\SI-RI-RAW\E3272989005SRIRAFIG10.DWG, ----> 10A SAMPLE LOCATION & CONTAMINANT CONCENTRATION PLAN (AOC-6)

DYNAMIC ENGINEERING CONSULTANTS, P.C.

REV.	DATE	COMMENTS	BY

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DRAWN BY: JED | DESIGNED BY: OM | CHECKED BY: SSS | CHECKED BY: _

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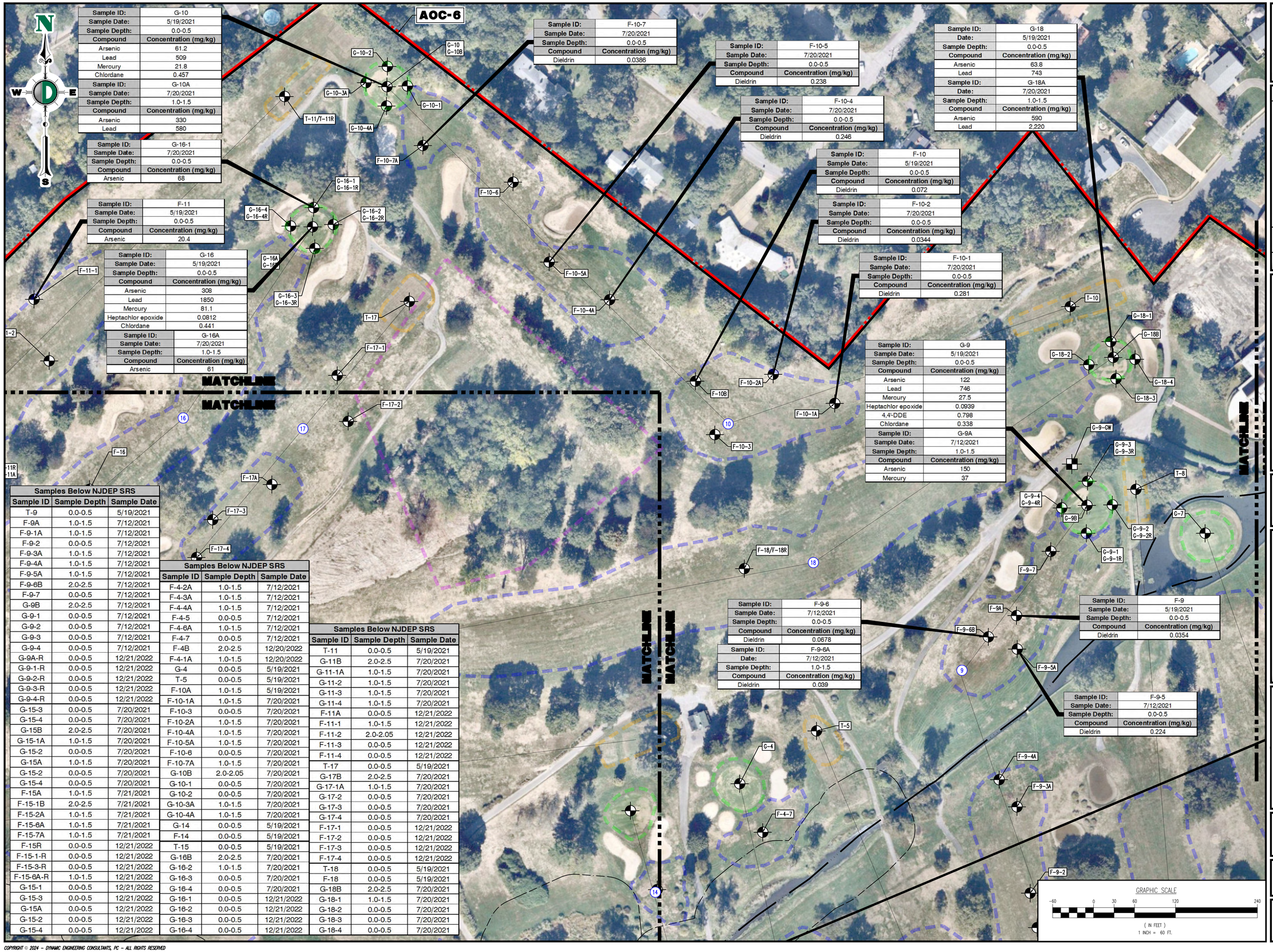
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- 18 GOLF COURSE HOLE DESIGNATION
- GREEN BOUNDARY (APPROXIMATE)
- FAIRWAY BOUNDARY (APPROXIMATE)
- TEES BOUNDARY (APPROXIMATE)
- ORCHARD BOUNDARY (APPROXIMATE)
- AOC BOUNDARY (APPROXIMATE)

TITLE: SAMPLE LOCATION & CONTAMINANT CONCENTRATION PLAN (AOC-6)

SCALE: (V) 1"=60' | DATE: 10/17/2024
PROJECT No: 3272-98-005EC

FIGURE: 10A | Rev. #: 0



Sample ID:	G-10
Sample Date:	5/19/2021
Sample Depth:	0.0-0.5
Compound	Concentration (mg/kg)
Arsenic	61.2
Lead	509
Mercury	21.8
Chlordane	0.457

Sample ID:	G-10A
Sample Date:	7/20/2021
Sample Depth:	1.0-1.5
Compound	Concentration (mg/kg)
Arsenic	330
Lead	580

Sample ID:	G-16-1
Sample Date:	7/20/2021
Sample Depth:	0.0-0.5
Compound	Concentration (mg/kg)
Arsenic	68

Sample ID:	F-11
Sample Date:	5/19/2021
Sample Depth:	0.0-0.5
Compound	Concentration (mg/kg)
Arsenic	20.4

Sample ID:	G-16
Sample Date:	5/19/2021
Sample Depth:	0.0-0.5
Compound	Concentration (mg/kg)
Arsenic	308
Lead	1850
Mercury	81.1
Heptachlor epoxide	0.0812
Chlordane	0.441

Sample ID:	G-16A
Sample Date:	7/20/2021
Sample Depth:	1.0-1.5
Compound	Concentration (mg/kg)
Arsenic	61

Sample ID:	F-10-7
Sample Date:	7/20/2021
Sample Depth:	0.0-0.5
Compound	Concentration (mg/kg)
Dieldrin	0.0386

Sample ID:	F-10-5
Sample Date:	7/20/2021
Sample Depth:	0.0-0.5
Compound	Concentration (mg/kg)
Dieldrin	0.238

Sample ID:	F-10-4
Sample Date:	7/20/2021
Sample Depth:	0.0-0.5
Compound	Concentration (mg/kg)
Dieldrin	0.246

Sample ID:	G-18
Date:	5/19/2021
Sample Depth:	0.0-0.5
Compound	Concentration (mg/kg)
Arsenic	63.8
Lead	743

Sample ID:	G-18A
Date:	7/20/2021
Sample Depth:	1.0-1.5
Compound	Concentration (mg/kg)
Arsenic	590
Lead	2,220

Sample ID:	F-10
Sample Date:	5/19/2021
Sample Depth:	0.0-0.5
Compound	Concentration (mg/kg)
Dieldrin	0.072

Sample ID:	F-10-2
Sample Date:	7/20/2021
Sample Depth:	0.0-0.5
Compound	Concentration (mg/kg)
Dieldrin	0.0344

Sample ID:	F-10-1
Sample Date:	7/20/2021
Sample Depth:	0.0-0.5
Compound	Concentration (mg/kg)
Dieldrin	0.281

Sample ID:	G-9
Sample Date:	5/19/2021
Sample Depth:	0.0-0.5
Compound	Concentration (mg/kg)
Arsenic	122
Lead	746
Mercury	27.5
Heptachlor epoxide	0.0939
4,4'-DDE	0.798
Chlordane	0.338

Sample ID:	G-9A
Sample Date:	7/12/2021
Sample Depth:	1.0-1.5
Compound	Concentration (mg/kg)
Arsenic	150
Mercury	37

Sample ID:	F-9-6
Sample Date:	7/12/2021
Sample Depth:	0.0-0.5
Compound	Concentration (mg/kg)
Dieldrin	0.0678

Sample ID:	F-9-6A
Date:	7/12/2021
Sample Depth:	1.0-1.5
Compound	Concentration (mg/kg)
Dieldrin	0.039

Sample ID:	F-9
Sample Date:	5/19/2021
Sample Depth:	0.0-0.5
Compound	Concentration (mg/kg)
Dieldrin	0.0354

Sample ID:	F-9-5
Sample Date:	7/12/2021
Sample Depth:	0.0-0.5
Compound	Concentration (mg/kg)
Dieldrin	0.224

Samples Below NJDEP SRS		
Sample ID	Sample Depth	Sample Date
T-9	0.0-0.5	5/19/2021
F-9A	1.0-1.5	7/12/2021
F-9-1A	1.0-1.5	7/12/2021
F-9-2	0.0-0.5	7/12/2021
F-9-3A	1.0-1.5	7/12/2021
F-9-4A	1.0-1.5	7/12/2021
F-9-5A	1.0-1.5	7/12/2021
F-9-6B	2.0-2.5	7/12/2021
F-9-7	0.0-0.5	7/12/2021
G-9B	2.0-2.5	7/12/2021
G-9-1	0.0-0.5	7/12/2021
G-9-2	0.0-0.5	7/12/2021
G-9-3	0.0-0.5	7/12/2021
G-9-4	0.0-0.5	7/12/2021
G-9A-R	0.0-0.5	12/21/2022
G-9-1-R	0.0-0.5	12/21/2022
G-9-2-R	0.0-0.5	12/21/2022
G-9-3-R	0.0-0.5	12/21/2022
G-9-4-R	0.0-0.5	12/21/2022
G-15-3	0.0-0.5	7/20/2021
G-15-4	0.0-0.5	7/20/2021
G-15B	2.0-2.5	7/20/2021
G-15-1A	1.0-1.5	7/20/2021
G-15-2	0.0-0.5	7/20/2021
G-15A	1.0-1.5	7/20/2021
G-15-2	0.0-0.5	7/20/2021
G-15-4	0.0-0.5	7/20/2021
F-15A	1.0-1.5	7/21/2021
F-15-1B	2.0-2.5	7/21/2021
F-15-2A	1.0-1.5	7/21/2021
F-15-6A	1.0-1.5	7/21/2021
F-15-7A	1.0-1.5	7/21/2021
F-15R	0.0-0.5	12/21/2022
F-15-1-R	0.0-0.5	12/21/2022
F-15-3-R	0.0-0.5	12/21/2022
F-15-6A-R	1.0-1.5	12/21/2022
G-15-1	0.0-0.5	12/21/2022
G-15-3	0.0-0.5	12/21/2022
G-15A	0.0-0.5	12/21/2022
G-15-2	0.0-0.5	12/21/2022
G-15-4	0.0-0.5	12/21/2022

Samples Below NJDEP SRS		
Sample ID	Sample Depth	Sample Date
F-4-2A	1.0-1.5	7/12/2021
F-4-3A	1.0-1.5	7/12/2021
F-4-4A	1.0-1.5	7/12/2021
F-4-5	0.0-0.5	7/12/2021
F-4-6A	1.0-1.5	7/12/2021
F-4-7	0.0-0.5	7/12/2021
F-4B	2.0-2.5	12/20/2022
F-4-1A	1.0-1.5	12/20/2022
G-4	0.0-0.5	5/19/2021
T-5	0.0-0.5	5/19/2021
F-10A	1.0-1.5	5/19/2021
F-10-1A	1.0-1.5	7/20/2021
F-10-3	0.0-0.5	7/20/2021
F-10-2A	1.0-1.5	7/20/2021
F-10-4A	1.0-1.5	7/20/2021
F-10-5A	1.0-1.5	7/20/2021
F-10-6	0.0-0.5	7/20/2021
F-10-7A	1.0-1.5	7/20/2021
G-10B	2.0-2.05	7/20/2021
G-10-1	0.0-0.5	7/20/2021
G-10-2	0.0-0.5	7/20/2021
G-10-3A	1.0-1.5	7/20/2021
G-10-4A	1.0-1.5	7/20/2021
G-14	0.0-0.5	5/19/2021
F-14	0.0-0.5	5/19/2021
T-15	0.0-0.5	5/19/2021
G-16B	2.0-2.5	7/20/2021
G-16-2	1.0-1.5	7/20/2021
G-16-3	0.0-0.5	7/20/2021
G-16-4	0.0-0.5	7/20/2021
G-16-1	0.0-0.5	12/21/2022
G-16-2	0.0-0.5	12/21/2022
G-16-3	0.0-0.5	12/21/2022
G-16-4	0.0-0.5	12/21/2022

Samples Below NJDEP SRS		
Sample ID	Sample Depth	Sample Date
T-11	0.0-0.5	5/19/2021
G-11B	2.0-2.5	7/20/2021
G-11-1A	1.0-1.5	7/20/2021
G-11-2	1.0-1.5	7/20/2021
G-11-3	1.0-1.5	7/20/2021
G-11-4	1.0-1.5	7/20/2021
F-11A	0.0-0.5	12/21/2022
F-11-1	1.0-1.5	12/21/2022
F-11-2	2.0-2.05	12/21/2022
F-11-3	0.0-0.5	12/21/2022
F-11-4	0.0-0.5	12/21/2022
T-17	0.0-0.5	5/19/2021
G-17B	2.0-2.5	7/20/2021
G-17-1A	1.0-1.5	7/20/2021
G-17-2	0.0-0.5	7/20/2021
G-17-3	0.0-0.5	7/20/2021
G-17-4	0.0-0.5	7/20/2021
F-17-1	0.0-0.5	12/21/2022
F-17-2	0.0-0.5	12/21/2022
F-17-3	0.0-0.5	12/21/2022
F-17-4	0.0-0.5	12/21/2022
T-18	0.0-0.5	5/19/2021
F-18	0.0-0.5	5/19/2021
G-18B	2.0-2.5	7/20/2021
G-18-1	1.0-1.5	7/20/2021
G-18-2	0.0-0.5	7/20/2021
G-18-3	0.0-0.5	7/20/2021
G-18-4	0.0-0.5	7/20/2021

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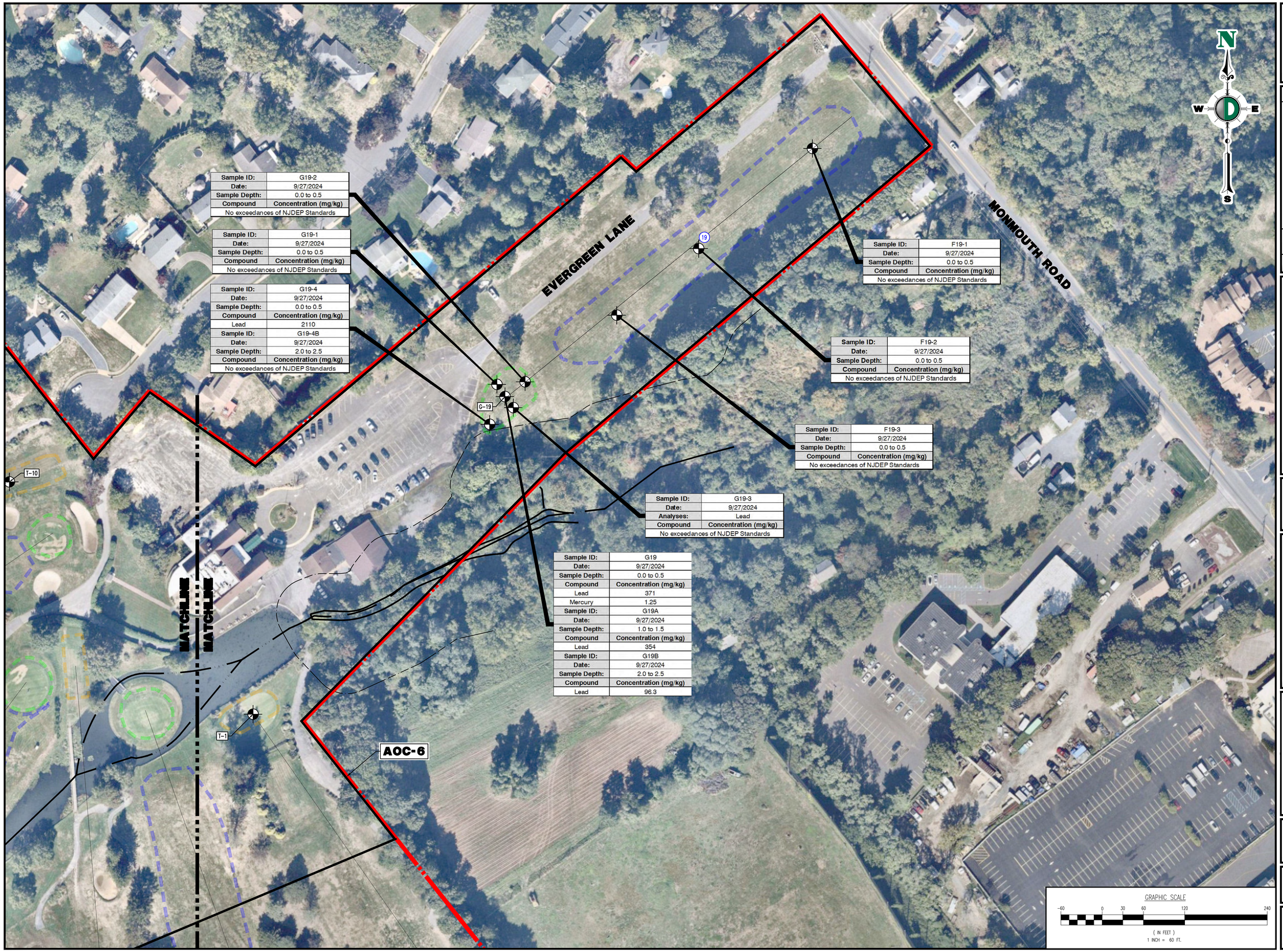
TITLE: SAMPLE LOCATION & CONTAMINANT CONCENTRATION PLAN (AOC-6)

SCALE: (H) 1"=60' (V)
DATE: 10/17/2024
PROJECT No: 3272-98-005EC

FIGURE: 10B
Rev. #: 0

Plotted: 10/17/24 – 5:50 PM, By: jdefisher
File: O:\EARTH Projects\3272 Surrey Equities LLC\98-005EC Eatontown and West Long Branch\Drawings by Dearth\Environmental CAD\SI-R-R4M\E32729890058IR4FIG10.DWG, ----> 10B SAMPLE LOCATION & CONTAMINANT CONCENTRATION PLAN (AOC-6)

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Sample ID:	G19-2
Date:	9/27/2024
Sample Depth:	0.0 to 0.5
Compound	Concentration (mg/kg)
No exceedances of NJDEP Standards	

Sample ID:	G19-1
Date:	9/27/2024
Sample Depth:	0.0 to 0.5
Compound	Concentration (mg/kg)
No exceedances of NJDEP Standards	

Sample ID:	G19-4
Date:	9/27/2024
Sample Depth:	0.0 to 0.5
Compound	Concentration (mg/kg)
Lead	2110
Sample ID:	G19-4B
Date:	9/27/2024
Sample Depth:	2.0 to 2.5
Compound	Concentration (mg/kg)
No exceedances of NJDEP Standards	

Sample ID:	F19-1
Date:	9/27/2024
Sample Depth:	0.0 to 0.5
Compound	Concentration (mg/kg)
No exceedances of NJDEP Standards	

Sample ID:	F19-2
Date:	9/27/2024
Sample Depth:	0.0 to 0.5
Compound	Concentration (mg/kg)
No exceedances of NJDEP Standards	

Sample ID:	F19-3
Date:	9/27/2024
Sample Depth:	0.0 to 0.5
Compound	Concentration (mg/kg)
No exceedances of NJDEP Standards	

Sample ID:	G19-3
Date:	9/27/2024
Analyses:	Lead
Compound	Concentration (mg/kg)
No exceedances of NJDEP Standards	

Sample ID:	G19
Date:	9/27/2024
Sample Depth:	0.0 to 0.5
Compound	Concentration (mg/kg)
Lead	371
Mercury	1.25
Sample ID:	G19A
Date:	9/27/2024
Sample Depth:	1.0 to 1.5
Compound	Concentration (mg/kg)
Lead	354
Sample ID:	G19B
Date:	9/27/2024
Sample Depth:	2.0 to 2.5
Compound	Concentration (mg/kg)
Lead	96.3

GRAPHIC SCALE

-60 0 30 60 120 240

(IN FEET)
1 INCH = 60 FT.

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- AOC BOUNDARY (APPROXIMATE)

TITLE: **SAMPLE LOCATION & CONTAMINANT CONCENTRATION PLAN (AOC-6)**

SCALE: (V) 1"=60' (H) | DATE: 10/17/2024
PROJECT No: 3272-98-005EC

FIGURE: 10C | Rev. #: 0

Plotted: 10/17/24 – 4:47 PM, By: jdefisher
File: O:\EARTH Projects\3272 Surrey Equities LLC\98-005EC Eatontown and West Long Branch\Drawings by Dearth\Environmental CAD\SI-RI-RAW\E3272989005SIRIMFIG10.DWG, ----> 10C SAMPLE LOCATION & CONTAMINANT CONCENTRATION PLAN (AOC-6)

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---> 11 SAMPLE LOCATION & CONTAMINANT CONCENTRATION PLAN (AOC-7 - 10)

Plotted: 10/17/24 - 4:51 PM, By: jdefalher
File: O:\EARTH Projects\3272 Survey Equities LLC\98-005EC Eatontown and West Long Branch\Drawings by Dearth\Environmental CAD\SI-RI-RAW\E3272989005SIRIAFIG11.DWG,

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TITLE: **SAMPLE LOCATION & CONTAMINANT CONCENTRATION PLAN (AOC-7 - 10)**

SCALE: (H) 1"=100' (V)
DATE: 10/17/2024
PROJECT No: 3272-98-005EC

FIGURE: **11**
Rev. #: 0

Sample ID:	Trench-7
Sample Date:	5/30/2023
Sample Depth:	0.0-0.5
Compound	Concentration (mg/kg)
Chlordane	3.16

Sample ID:	Trench-1
Sample Date:	5/19/2021
Sample Depth:	0.0-0.5
Compound	Concentration (mg/kg)
Heptachlor epoxide	0.126
Chlordane	2.79
Sample ID:	**Trench-1A**
Sample Date:	**7/21/2021**
Sample Depth:	**1.0-1.5**
Compound	**Concentration (mg/kg)**
Chlordane	0.697
Sample ID:	**Trench-1B**
Sample Date:	**7/21/2021**
Sample Depth:	**2.0-2.5**
Compound	**Concentration (mg/kg)**
Chlordane	0.486

Sample ID:	Trench-5
Sample Date:	7/21/2021
Sample Depth:	0.0-0.5
Compound	Concentration (mg/kg)
Chlordane	0.572

Sample ID:	Trench-3
Sample Date:	7/21/2021
Sample Depth:	0.0-0.5
Compound	Concentration (mg/kg)
Chlordane	0.277

Sample ID:	WA-3
Sample Date:	5/19/2021
Sample Depth:	0.0-0.5
Compound	Concentration (mg/kg)
No exceedance of NJDEP SRS	

Sample ID:	WA-1
Sample Date:	5/19/2021
Sample Depth:	0.0-0.5
Compound	Concentration (mg/kg)
No exceedance of NJDEP SRS	

Sample ID:	WA-2
Sample Date:	5/19/2021
Sample Depth:	0.0-0.5
Compound	Concentration (mg/kg)
No exceedance of NJDEP SRS	

AOC-11

AOC-12

TRENCH-9
TRENCH-5A
TRENCH-6
TRENCH-4
TRENCH-1C
TRENCH-2
TRENCH-3A
WA-3R
WA-2R

Samples Below NJDEP SRS		
Sample ID	**Sample Depth**	**Sample Date**
Trench-1C	3.0-3.5	7/21/2021
Trench-2	0.0-0.5	7/21/2021
Trench-3A	1.0-1.5	7/21/2021
Trench-4	0.0-0.5	7/21/2021
Trench-5A	1.0-1.5	7/21/2021
Trench-6	0.0-0.5	5/30/2023
Trench-7A	1.0-1.5	5/30/2023
Trench-9	0.0-0.5	5/30/2023

GRAPHIC SCALE
-50 0 25 50 100 200
(IN FEET)
1 INCH = 50 FT.

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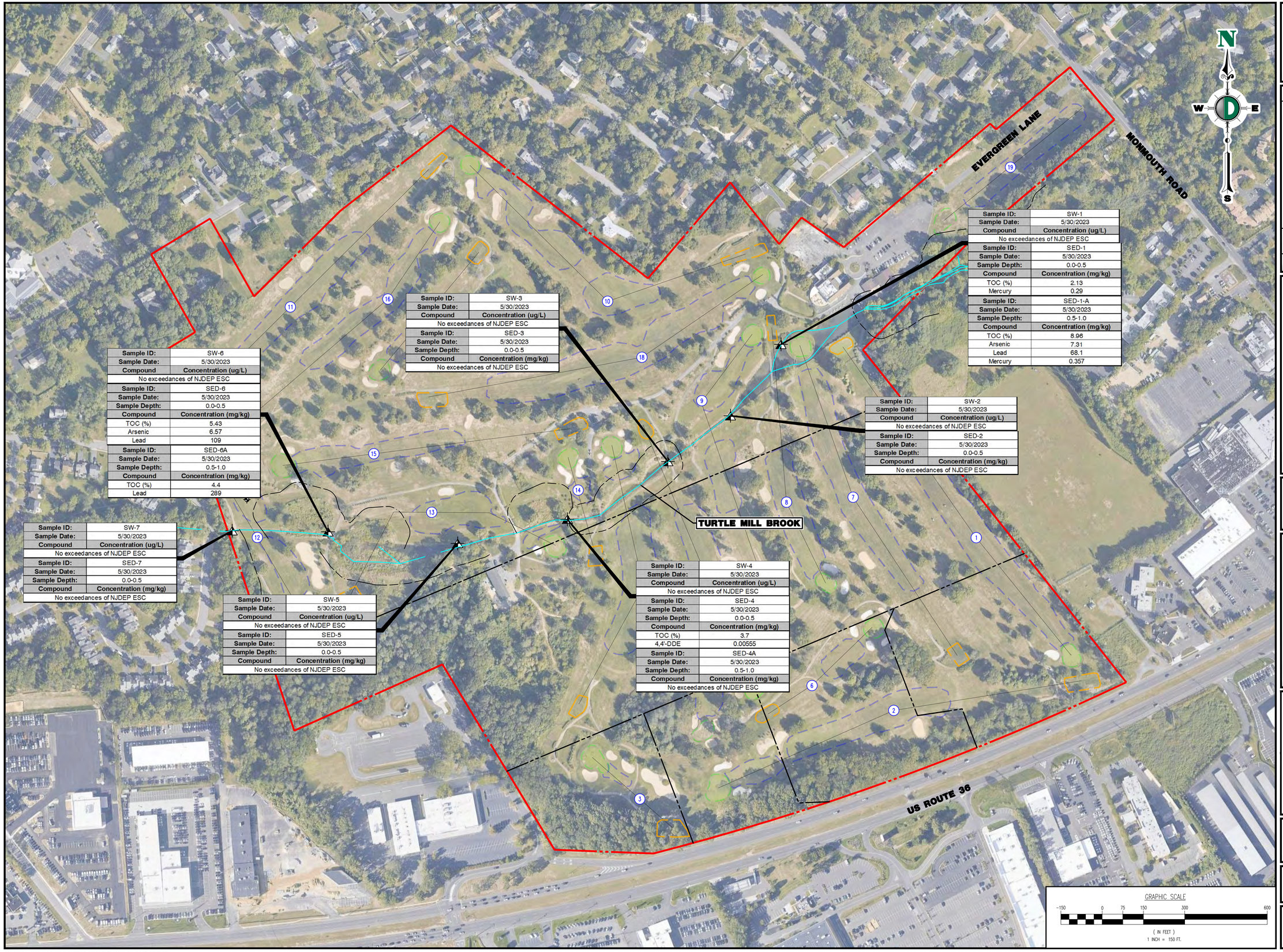
TITLE: **SAMPLE LOCATION & CONTAMINANT CONCENTRATION PLAN (AOC-11-12)**

SCALE: (V) 1"=50' (H) | DATE: 10/17/2024
PROJECT No: 3272-98-005EC

FIGURE: 12 | Rev. #: 0

Plotted: 10/17/24 – 5:50 PM, By: jdefisher
File: O:\EARTH Projects\3272 Surrey Equities LLC\98-005EC Eatontown and West Long Branch\Drawings by Dearth\Environmental CAD\SI-RI-RAW\E3272989005SIRIMFIG12.DWG, ----> 12 SAMPLE LOCATION & CONTAMINANT CONCENTRATION PLAN (AOC-11-12)

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Sample ID:	SW-1
Sample Date:	5/30/2023
Compound	Concentration (ug/L)
No exceedances of NJDEP ESC	

Sample ID:	SED-1
Sample Date:	5/30/2023
Sample Depth:	0.0-0.5
Compound	Concentration (mg/kg)
TOC (%)	2.13
Mercury	0.29

Sample ID:	SED-1-A
Sample Date:	5/30/2023
Sample Depth:	0.5-1.0
Compound	Concentration (mg/kg)
TOC (%)	8.96
Arsenic	7.31
Lead	68.1
Mercury	0.357

Sample ID:	SW-2
Sample Date:	5/30/2023
Compound	Concentration (ug/L)
No exceedances of NJDEP ESC	

Sample ID:	SED-2
Sample Date:	5/30/2023
Sample Depth:	0.0-0.5
Compound	Concentration (mg/kg)
No exceedances of NJDEP ESC	

Sample ID:	SW-3
Sample Date:	5/30/2023
Compound	Concentration (ug/L)
No exceedances of NJDEP ESC	

Sample ID:	SED-3
Sample Date:	5/30/2023
Sample Depth:	0.0-0.5
Compound	Concentration (mg/kg)
No exceedances of NJDEP ESC	

Sample ID:	SW-4
Sample Date:	5/30/2023
Compound	Concentration (ug/L)
No exceedances of NJDEP ESC	

Sample ID:	SED-4
Sample Date:	5/30/2023
Sample Depth:	0.0-0.5
Compound	Concentration (mg/kg)
TOC (%)	3.7
4,4'-DDE	0.00555

Sample ID:	SED-4A
Sample Date:	5/30/2023
Sample Depth:	0.5-1.0
Compound	Concentration (mg/kg)
No exceedances of NJDEP ESC	

Sample ID:	SW-5
Sample Date:	5/30/2023
Compound	Concentration (ug/L)
No exceedances of NJDEP ESC	

Sample ID:	SED-5
Sample Date:	5/30/2023
Sample Depth:	0.0-0.5
Compound	Concentration (mg/kg)
No exceedances of NJDEP ESC	

Sample ID:	SW-6
Sample Date:	5/30/2023
Compound	Concentration (ug/L)
No exceedances of NJDEP ESC	

Sample ID:	SED-6
Sample Date:	5/30/2023
Sample Depth:	0.0-0.5
Compound	Concentration (mg/kg)
TOC (%)	5.43
Arsenic	6.57
Lead	109

Sample ID:	SED-6A
Sample Date:	5/30/2023
Sample Depth:	0.5-1.0
Compound	Concentration (mg/kg)
TOC (%)	4.4
Lead	289

Sample ID:	SW-7
Sample Date:	5/30/2023
Compound	Concentration (ug/L)
No exceedances of NJDEP ESC	

Sample ID:	SED-7
Sample Date:	5/30/2023
Sample Depth:	0.0-0.5
Compound	Concentration (mg/kg)
No exceedances of NJDEP ESC	

GRAPHIC SCALE

-150 0 75 150 300 600

(IN FEET)

1 INCH = 150 FT.

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- FAIRWAY BOUNDARY (APPROXIMATE)
- TEE BOUNDARY (APPROXIMATE)
- SURFACE WATER/SEDIMENT SAMPLE LOCATION (APPROXIMATE)

TITLE:
SURFACE WATER & SEDIMENT SAMPLE LOCATION PLAN

SCALE: (H) 1"=150' (V) | DATE: 10/17/2024
PROJECT No: 3272-98-005EC

FIGURE: 13 | Rev. #: 0

Plotted: 10/17/24 - 4:53 PM, By: jdefisher
File: O:\EARTH Projects\3272 Surrey Equities LLC\98-005EC Eatontown and West Long Branch\Drawings by Dearth\Environmental CAD\RMP\E3272989005EC13.DWG, ----> 13 SURFACE WATER & SEDIMENT SAMPLE LOCATION PLAN (SI-RI-RAW)

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3	2701	71	MONMOUTH ROAD REAR	EATONTOWN	FARM (QUALIFIED)
4	68	6	MONMOUTH ROAD	WEST LONG BRANCH	VACANT LAND
5	68	5	101 MONMOUTH ROAD	WEST LONG BRANCH	FARM (QUALIFIED)
6	68	3	277 STATE HIGHWAY 36	WEST LONG BRANCH	FARM (QUALIFIED)
7	68	4	265 STATE HIGHWAY 36	WEST LONG BRANCH	COMMERCIAL
8	68	2	271 STATE HIGHWAY 36	WEST LONG BRANCH	COMMERCIAL
9	67	5	290 STATE HIGHWAY 36	WEST LONG BRANCH	VACANT LAND
10	67	6.02	294 STATE HIGHWAY 36	WEST LONG BRANCH	COMMERCIAL
11	67	7.01	300 STATE HIGHWAY 36	WEST LONG BRANCH	COMMERCIAL
12	67	8.01	310 STATE HWY 36	WEST LONG BRANCH	COMMERCIAL
13	67	8.02	312 STATE HWY 36	WEST LONG BRANCH	COMMERCIAL
14	2801	6	HIGHWAY 36	EATONTOWN	VACANT LAND
15	2801	5	800 HIGHWAY 36	EATONTOWN	COMMERCIAL
16	2801	4	750 HIGHWAY 36	EATONTOWN	COMMERCIAL
17	2801	3	HIGHWAY 36	EATONTOWN	COMMERCIAL
18	2701	70	HIGHWAY 36	EATONTOWN	PUBLIC PROPERTY
19	2401	56	105 HIGHWAY 36	EATONTOWN	COMMERCIAL
20	2401	14	100 MALIBU DR	EATONTOWN	RESIDENTIAL
21	2401	15	MALIBU DR	EATONTOWN	VACANT LAND
22	2401	17	90 MALIBU DR	EATONTOWN	RESIDENTIAL
23	2401	16	12 EMMA PLACE	EATONTOWN	RESIDENTIAL
24	2403	16	265 HIGHWAY 36, SUITE 209	EATONTOWN	RESIDENTIAL
25	2403	24	91 MALIBU DRIVE	EATONTOWN	RESIDENTIAL
26	2403	23	93 MALIBU DRIVE	EATONTOWN	RESIDENTIAL
27	2403	22	95 MALIBU DRIVE	EATONTOWN	RESIDENTIAL
28	2403	21	97 MALIBU DRIVE	EATONTOWN	RESIDENTIAL
29	2403	20	99 MALIBU DRIVE	EATONTOWN	RESIDENTIAL
30	2403	19	101 MALIBU DRIVE	EATONTOWN	RESIDENTIAL
31	2403	18	103 MALIBU DRIVE	EATONTOWN	RESIDENTIAL
32	2403	17	105 MALIBU DRIVE	EATONTOWN	RESIDENTIAL
33	2403	16	265 HIGHWAY 36, SUITE 209	EATONTOWN	RESIDENTIAL
34	2403	15	47 BROAD STREET	EATONTOWN	PUBLIC PROPERTY
35	2403	6	265 HIGHWAY 36, SUITE 209	EATONTOWN	RESIDENTIAL
36	2403	14	107 MALIBU DRIVE	EATONTOWN	RESIDENTIAL
37	2403	13	109 MALIBU DRIVE	EATONTOWN	RESIDENTIAL
38	2403	12	111 MALIBU DRIVE	EATONTOWN	RESIDENTIAL
39	2403	11	113 MALIBU DRIVE	EATONTOWN	RESIDENTIAL
40	2403	10	115 MALIBU DRIVE	EATONTOWN	RESIDENTIAL
41	2403	9	117 MALIBU DRIVE	EATONTOWN	RESIDENTIAL
42	2401	13	120 MALIBU DRIVE	EATONTOWN	RESIDENTIAL
43	2401	9	88 REYNOLDS DRIVE	EATONTOWN	RESIDENTIAL
44	2401	10	86 REYNOLDS DRIVE	EATONTOWN	RESIDENTIAL
45	2401	11	84 REYNOLDS DRIVE	EATONTOWN	RESIDENTIAL
46	2401	1	80 REYNOLDS DRIVE	EATONTOWN	RESIDENTIAL
47	2401	2	74 REYNOLDS DRIVE	EATONTOWN	RESIDENTIAL
48	2501	33	REYNOLDS DRIVE	EATONTOWN	EXEMPT – CHURCH
49	2501	32	79 REYNOLDS DRIVE	EATONTOWN	RESIDENTIAL
50	2501	31	77 REYNOLDS DRIVE	EATONTOWN	RESIDENTIAL
51	2501	30	73 REYNOLDS DRIVE	EATONTOWN	RESIDENTIAL
52	2501	29	71 REYNOLDS DRIVE	EATONTOWN	RESIDENTIAL
53	2401	3	70 REYNOLDS DRIVE	EATONTOWN	RESIDENTIAL
54	2401	4	68 REYNOLDS DRIVE	EATONTOWN	RESIDENTIAL
55	2401	5	66 REYNOLDS DRIVE	EATONTOWN	RESIDENTIAL
56	2401	6	64 REYNOLDS DRIVE	EATONTOWN	RESIDENTIAL
57	2401	7	62 REYNOLDS DRIVE	EATONTOWN	RESIDENTIAL
58	2401	8	60 REYNOLDS DRIVE	EATONTOWN	RESIDENTIAL
59	2401	9	58 REYNOLDS DRIVE	EATONTOWN	RESIDENTIAL
60	2401	10	54 REYNOLDS DRIVE	EATONTOWN	RESIDENTIAL
61	2401	11	NOT LISTED	EATONTOWN	RESIDENTIAL
62	2401	12	46 REYNOLD DRIVE	EATONTOWN	RESIDENTIAL
63	2401	13	2 STIRRUP LANE	EATONTOWN	RESIDENTIAL
64	2401	14	4 STIRRUP LANE	EATONTOWN	RESIDENTIAL
65	2601	34	59 REYNOLDS DRIVE	EATONTOWN	RESIDENTIAL
66	2601	33	51 REYNOLDS DRIVE	EATONTOWN	RESIDENTIAL
67	2601	32	45 REYNOLDS DRIVE	EATONTOWN	RESIDENTIAL
68	2701	15	6 STIRRUP LANE	EATONTOWN	RESIDENTIAL
69	2701	16	8 STIRRUP LANE	EATONTOWN	RESIDENTIAL
70	2701	17	10 STIRRUP LANE	EATONTOWN	RESIDENTIAL
71	2701	18	12 STIRRUP LANE	EATONTOWN	RESIDENTIAL
72	2701	19	14 STIRRUP LANE	EATONTOWN	RESIDENTIAL
73	2701	20	16 LARKSPUR DRIVE	EATONTOWN	RESIDENTIAL
74	2701	50	72 REDFERN ROAD	EATONTOWN	RESIDENTIAL
75	2701	51	80 REDFERN ROAD	EATONTOWN	RESIDENTIAL
76	2701	52	88 REDFERN ROAD	EATONTOWN	RESIDENTIAL
77	2701	54	79 REDFERN ROAD	EATONTOWN	RESIDENTIAL
78	2701	55	69 REDFERN ROAD	EATONTOWN	RESIDENTIAL
79	2701	56	61 REDFERN ROAD	EATONTOWN	RESIDENTIAL
80	2701	57	55 REDFERN ROAD	EATONTOWN	RESIDENTIAL
81	2701	58	45 REDFERN ROAD	EATONTOWN	RESIDENTIAL
82	2701	59	39 REDFERN ROAD	EATONTOWN	RESIDENTIAL
83	2701	61	31 REDFERN ROAD	EATONTOWN	RESIDENTIAL
84	2701	62	19 REDFERN ROAD	EATONTOWN	RESIDENTIAL
85	2701	63	5 REDFERN ROAD	EATONTOWN	RESIDENTIAL
86	2701	64	48 MONMOUTH ROAD	EATONTOWN	RESIDENTIAL
87	2701	65	46 MONMOUTH ROAD	EATONTOWN	RESIDENTIAL

P.I.Q.

BLOCK 2701, LOTS 53, 60, 66 & 69

GRAPHIC SCALE

–150 0 75 150 300 600

(IN FEET)

1 INCH = 150 FT.

LEGEND:

SITE BOUNDARY (APPROXIMATE)

200' BOUNDARY (APPROXIMATE)

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REV.	DATE	COMMENTS	BY

DRAWN BY: JED | DESIGNED BY: OM | CHECKED BY: SSS | CHECKED BY: –

PROJECT: SURVEY EQUITIES
OLD ORCHARD COUNTRY CLUB
BLOCK 2701, LOT 2, 53, 60, 66, 69; BLOCK 68, LOT 6
54 MONMOUTH ROAD
TOWNSHIP OF EATONTOWN, MONMOUTH COUNTY, NJ

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TITLE: RECEPTOR EVALUATION LAND USE PLAN

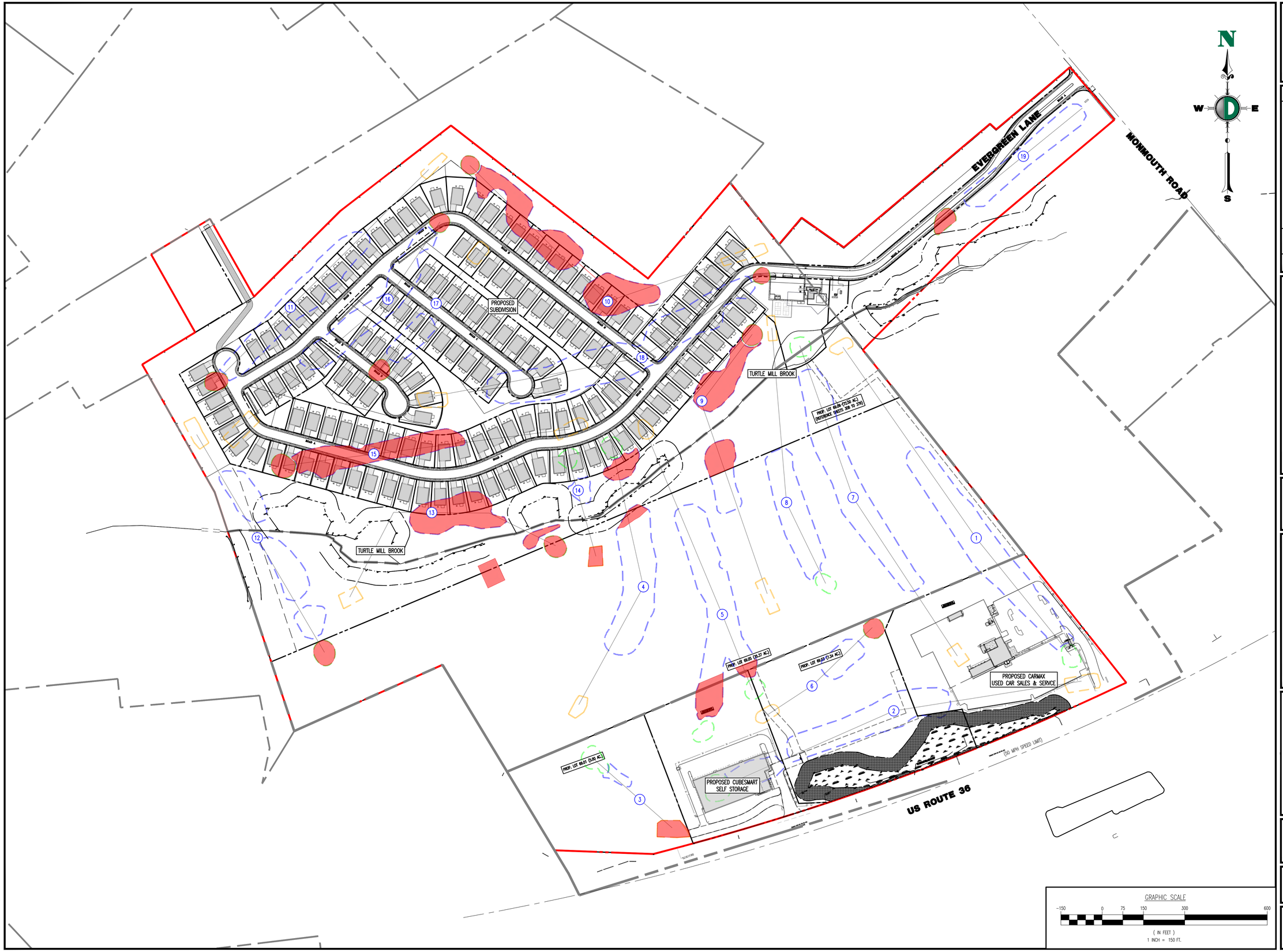
SCALE: (H) 1"=150' (V) | DATE: 10/17/2024

PROJECT No: 3272-98-005EC

FIGURE: 14 | Rev. #: 0

Plotted: 10/17/24 – 4:55 PM, By: jdefisher
File: G:\DATA Projects\3272 Survey Equities LLC\98-005EC Eatontown and West Long Branch\Drawings by Dearth\Environmental CAD\RAMPS\e3272989005cr6fig14.dwg, ----> 14 RECEPTOR EVALUATION LAND USE PLAN (SI-RI-RAW)

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File: O:\EARTH Projects\3272 Surrey Equities LLC\98-005EC Estontown and West Long Branch\Drawings by Dearth\Environmental CAD\PWP\E3272PB98005RAFIG15.DWG, ----> 15 PROPOSED REDEVELOPMENT PLAN (SI-RI-RAW)

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REV.	DATE	COMMENTS	BY

PROJECT: **SURREY EQUITIES**
OLD ORCHARD COUNTRY CLUB
BLOCK 2701, LOT 2, 53, 60, 66, 69; BLOCK 68, LOT 6
54 MONMOUTH ROAD
TOWNSHIP OF EATONTOWN, MONMOUTH COUNTY, NJ

DRAWN BY: JED
DESIGNED BY: OM
CHECKED BY: SSS
CHECKED BY: _

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LEGEND:
- SITE BOUNDARY (APPROXIMATE)
- 18 GOLF COURSE HOLE DESIGNATION
- GREEN BOUNDARY (APPROXIMATE)
- FAIRWAY BOUNDARY (APPROXIMATE)
- TEE BOUNDARY (APPROXIMATE)
- PROPOSED EXCAVATION AREAS (APPROXIMATE)

TITLE:
PROPOSED REDEVELOPMENT PLAN

SCALE: (H) 1"=150' (V)
DATE: 10/17/2024
PROJECT No: 3272-98-005EC

FIGURE: 15
Rev. #: 0

GRAPHIC SCALE
-150 0 75 150 300 600
(IN FEET)
1 INCH = 150 FT.

APPROXIMATE VOLUME (CUBIC YARDS)		
HOLE	FAIRWAY	GREEN
10	3,534	265

APPROXIMATE VOLUME (CUBIC YARDS)	
HOLE	GREEN
16	285

APPROXIMATE VOLUME (CUBIC YARDS)	
HOLE	GREEN
17	335

APPROXIMATE VOLUME (CUBIC YARDS)	
HOLE	GREEN
18	230

APPROXIMATE VOLUME (CUBIC YARDS)	
HOLE	GREEN
19	455

APPROXIMATE VOLUME (CUBIC YARDS)	
HOLE	GREEN
11	350

APPROXIMATE VOLUME (CUBIC YARDS)		
HOLE	FAIRWAY	GREEN
9	2,000	325

APPROXIMATE VOLUME (CUBIC YARDS)		
HOLE	FAIRWAY	GREEN
15	5,000	435

APPROXIMATE VOLUME (CUBIC YARDS)		
HOLE	FAIRWAY	GREEN
13	1,860	325

APPROXIMATE VOLUME (CUBIC YARDS)	
HOLE	GREEN
6	400

APPROXIMATE VOLUME (CUBIC YARDS)	
HOLE	GREEN
12	195

APPROXIMATE VOLUME (CUBIC YARDS)	
TRENCH AREA	510

APPROXIMATE VOLUME (CUBIC YARDS)	
HOLE	TEE
14	225

APPROXIMATE VOLUME (CUBIC YARDS)	
HOLE	FAIRWAY
4	1,120

APPROXIMATE VOLUME (CUBIC YARDS)	
HOLE	FAIRWAY
5	955

APPROXIMATE VOLUME (CUBIC YARDS)	
HOLE	TEE
3	650

PROP. ROW DEDICATION 1,249 SF

EVERGREEN LANE

MONMOUTH ROAD

US ROUTE 36

GRAPHIC SCALE

−150 0 75 150 300 600

(IN FEET)
1 INCH = 150 FT.

Plotted: 10/22/24 – 4:36 PM, By: jdefisher
File: O:\EARTH Projects\3272 Surrey Equities LLC\98-005EC Eatontown and West Long Branch\Drawings by Dearth\Environmental CAD\RMP\E32729890056RMPG16.DWG, ----> 16 PROPOSED SOIL EXCAVATION PLAN (SI-RI-RAW)

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REV.	DATE	COMMENTS	BY

PROJECT: SURREY EQUITIES
OLD ORCHARD COUNTRY CLUB
BLOCK 2701, LOT 2, 53, 60, 66, 69; BLOCK 68, LOT 6
54 MONMOUTH ROAD
TOWNSHIP OF EATONTOWN, MONMOUTH COUNTY, NJ

DRAWN BY: JED
DESIGNED BY: O.M.
CHECKED BY: SSS
CHECKED BY: –

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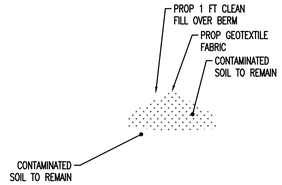
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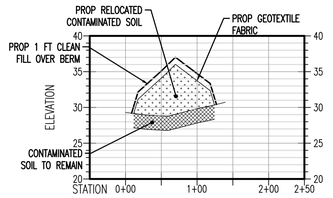
LEGEND:
- SITE BOUNDARY (APPROXIMATE)
- 18 GOLF COURSE HOLE DESIGNATION
- GREEN BOUNDARY (APPROXIMATE)
- FAIRWAY BOUNDARY (APPROXIMATE)
- TEE BOUNDARY (APPROXIMATE)
- PROPOSED EXCAVATION AREAS (APPROXIMATE)

TITLE:
PROPOSED SOIL EXCAVATION PLAN

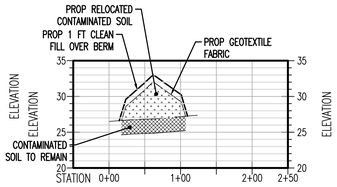
SCALE: (H) 1"=150'
(V)
DATE: 10/17/2024
PROJECT No: 3272-98-005EC

FIGURE: 16
Rev. #: 0





SECTION 5TH FAIRWAY
HORIZONTAL SCALE: 1"=100'
VERTICAL SCALE: 1"=10'



SECTION 9TH FAIRWAY
HORIZONTAL SCALE: 1"=100'
VERTICAL SCALE: 1"=10'



Proposed Engineering Cap Dimensions (Approx.)			
Area	Capped Area (SqFt)	Subsurface Contaminated Soil (CuYd)	Consolidated Soil (CuYd)
Fairway 4	66,127	4,270	7,174
Fairway 5	75,984	5,520	9,673
Fairway 9	42,357	852	1,356

GRAPHIC SCALE
-150 0 75 150 300 600
(IN FEET)
1 INCH = 150 FT.

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DRAWN BY: JED | DESIGNED BY: OM | CHECKED BY: SSS | CHECKED BY: _

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LEGEND:
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- 18 GOLF COURSE HOLE DESIGNATION
- GREEN BOUNDARY (APPROXIMATE)
- FAIRWAY BOUNDARY (APPROXIMATE)
- TEE BOUNDARY (APPROXIMATE)
- PROPOSED SOIL CONSOLIDATION AREAS

TITLE:
PROPOSED HAP IMPACTED CONSOLIDATION PLAN

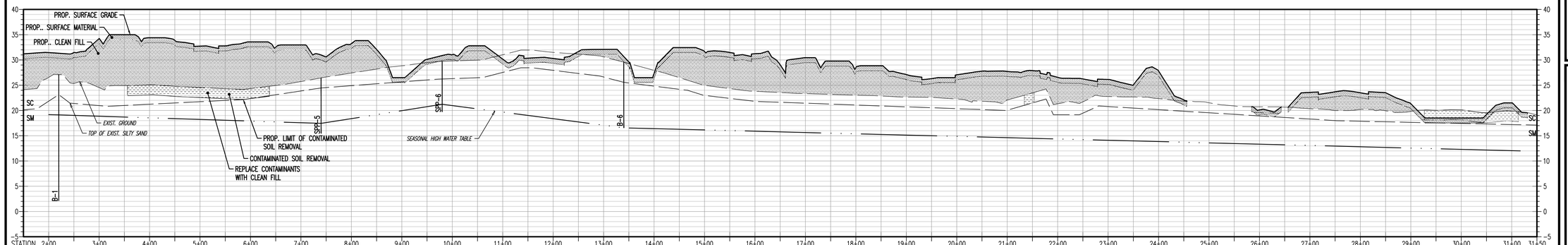
SCALE: (H) 1"=150' (V) | DATE: 10/17/2024
PROJECT No: 3272-98-005EC

FIGURE: 17 | Rev. #: 0

Plotted: 10/22/24 - 4:51 PM, By: jdefisher
File: O:\EARTH Projects\3272 Surrey Equities LLC\98-005EC Eatontown and West Long Branch\Drawings by Dearth\Environmental CAD\RMP\E3272989005EHAPFIG17.DWG, ----> 17 PROPOSED HAP IMPACTED CONSOLIDATION PLAN (SI-RI-RAW)

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SECTION A-A
HORIZONTAL SCALE: 1"=100'
VERTICAL SCALE: 1"=10'

LEGEND

= PROPOSED IMPORTED MATERIAL (PAVEMENT, CONCRETE, TOP SOIL, ETC.)

= PROPOSED FILL

= EXISTING CONTAMINATED SOILS TO REMAIN

= EXISTING CONTAMINATED SOILS TO BE REMOVED

= PROPOSED RELOCATED CONTAMINATED SOILS

GRAPHIC SCALE
-100 0 50 100 200 400
(IN FEET)
1 INCH = 100 FT.

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- (18) GOLF COURSE HOLE DESIGNATION
- GREENWAY BOUNDARY (APPROXIMATE)
- FAIRWAY BOUNDARY (APPROXIMATE)
- TEES BOUNDARY (APPROXIMATE)
- PROPOSED EXCAVATION AREAS (APPROXIMATE)

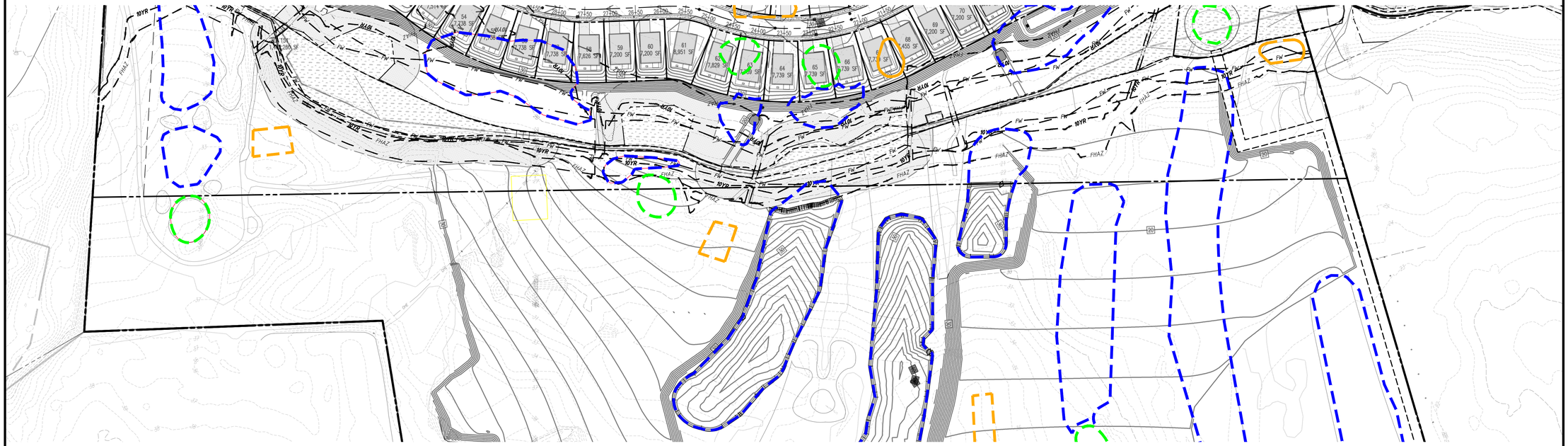
TITLE: PROPOSED SOIL CROSS SECTION (RESIDENTIAL AREA)

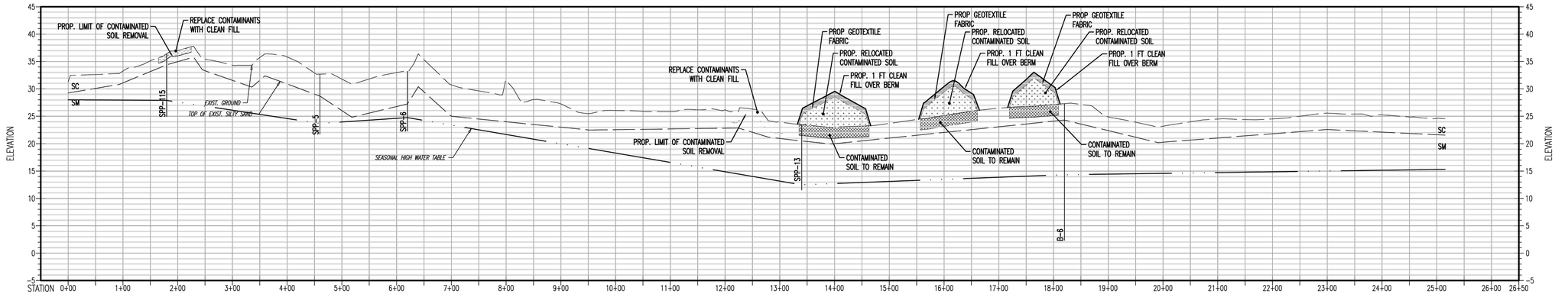
SCALE: (H) 1"=100' (V) | DATE: 10/17/2024
PROJECT No: 3272-98-005EC

FIGURE: 18 | Rev. #: 0

Plotted: 10/22/24 - 5:21 PM, By: jdelisher
File: C:\DATA Projects\3272 Surrey Equities LLC\98-005EC Eatontown and West Long Branch\Drawings by Dearth\Environmental CAD\RAWP\E32729890058A-XS.DWG, ----> 18 PROPOSED SOIL CROSS SECTION (RESIDENTIAL AREA) (SI-R-RAW)

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SECTION B–B
HORIZONTAL SCALE: 1"=100'
VERTICAL SCALE: 1"=10'

LEGEND

= PROPOSED IMPORTED MATERIAL (PAVEMENT, CONCRETE, TOP SOIL, ETC.)

= PROPOSED FILL

= EXISTING CONTAMINATED SOILS TO REMAIN

= EXISTING CONTAMINATED SOILS TO BE REMOVED

= PROPOSED RELOCATED CONTAMINATED SOILS

GRAPHIC SCALE
−100 0 50 100 200 400
(IN FEET)
1 INCH = 100 FT.

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REV.	DATE	COMMENTS	BY

DRAWN BY: JED
DESIGNED BY: O.M.
CHECKED BY: SSS
CHECKED BY: _

PROJECT: **SURREY EQUITIES**
OLD ORCHARD COUNTRY CLUB
BLOCK 2701, LOT 2, 53, 80, 66, 69; BLOCK 68, LOT 6
54 MONMOUTH ROAD
TOWNSHIP OF EATONTOWN, MONMOUTH COUNTY, NJ

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LEGEND:
- SITE BOUNDARY (APPROXIMATE)
- 18 GOLF COURSE HOLE DESIGNATION
- GREENWAY BOUNDARY (APPROXIMATE)
- FAIRWAY BOUNDARY (APPROXIMATE)
- TEES BOUNDARY (APPROXIMATE)

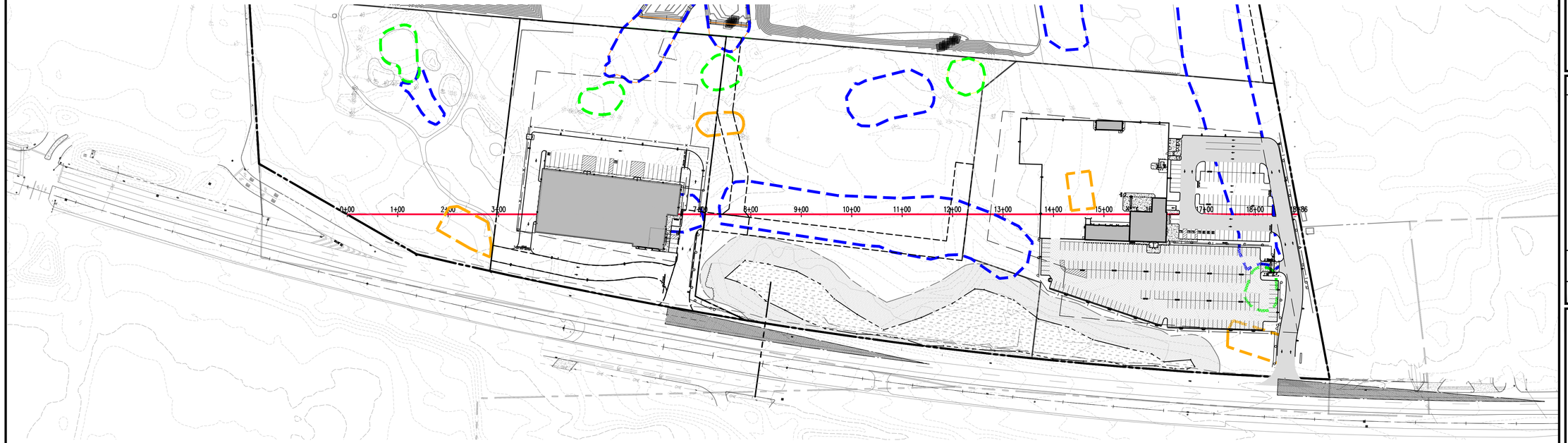
TITLE:
PROPOSED SOIL CROSS SECTION (HAP IMPACTED SOIL CONSOLIDATION)

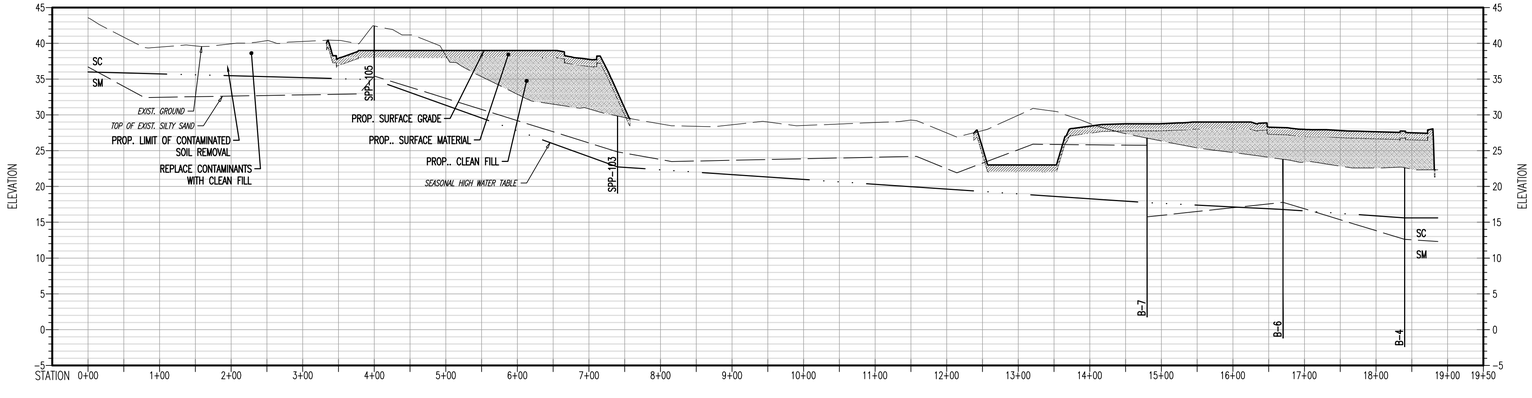
SCALE: (H) 1"=100' (V)
DATE: 10/17/2024
PROJECT No: 3272-98-005EC

FIGURE: 19
Rev. #: 0

Plotted: 10/22/24 – 6:19 PM, By: jdefisher
File: O:\EARTH Projects\3272 Surrey Equities LLC\98-005EC Eatontown and West Long Branch\Drawings by Dearth\Environmental CAD\RAMP\E32729890058A-XS.DWG, ---> 19 PROP. SOIL CROSS SECTION (HAP SOIL CONSOLID)(SI-FR-RAW)

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SECTION C-C
HORIZONTAL SCALE: 1"=100'
VERTICAL SCALE: 1"=10'

LEGEND

- = PROPOSED IMPORTED MATERIAL (PAVEMENT, CONCRETE, TOP SOIL, ETC.)
- = PROPOSED FILL
- = EXISTING CONTAMINATED SOILS TO REMAIN
- = EXISTING CONTAMINATED SOILS TO BE REMOVED
- = PROPOSED RELOCATED CONTAMINATED SOILS

GRAPHIC SCALE
−100 0 50 100 200 400
(IN FEET)
1 INCH = 100 FT.

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REV.	DATE	COMMENTS	BY

DRAWN BY: JED | DESIGNED BY: OM | CHECKED BY: SSS | CHECKED BY: _

PROJECT: **SURREY EQUITIES**
OLD ORCHARD COUNTRY CLUB
BLOCK 2701, LOT 2, 53, 60, 66, 69; BLOCK 68, LOT 6
54 MONMOUTH ROAD
TOWNSHIP OF EATONTOWN, MONMOUTH COUNTY, NJ

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Delray Beach, Florida • T: 561.972.8370
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LEGEND:

- SITE BOUNDARY (APPROXIMATE)
- (18) GOLF COURSE HOLE DESIGNATION
- GREENWAY BOUNDARY (APPROXIMATE)
- FAIRWAY BOUNDARY (APPROXIMATE)
- TEES BOUNDARY (APPROXIMATE)
- PROPOSED EXCAVATION AREAS (APPROXIMATE)

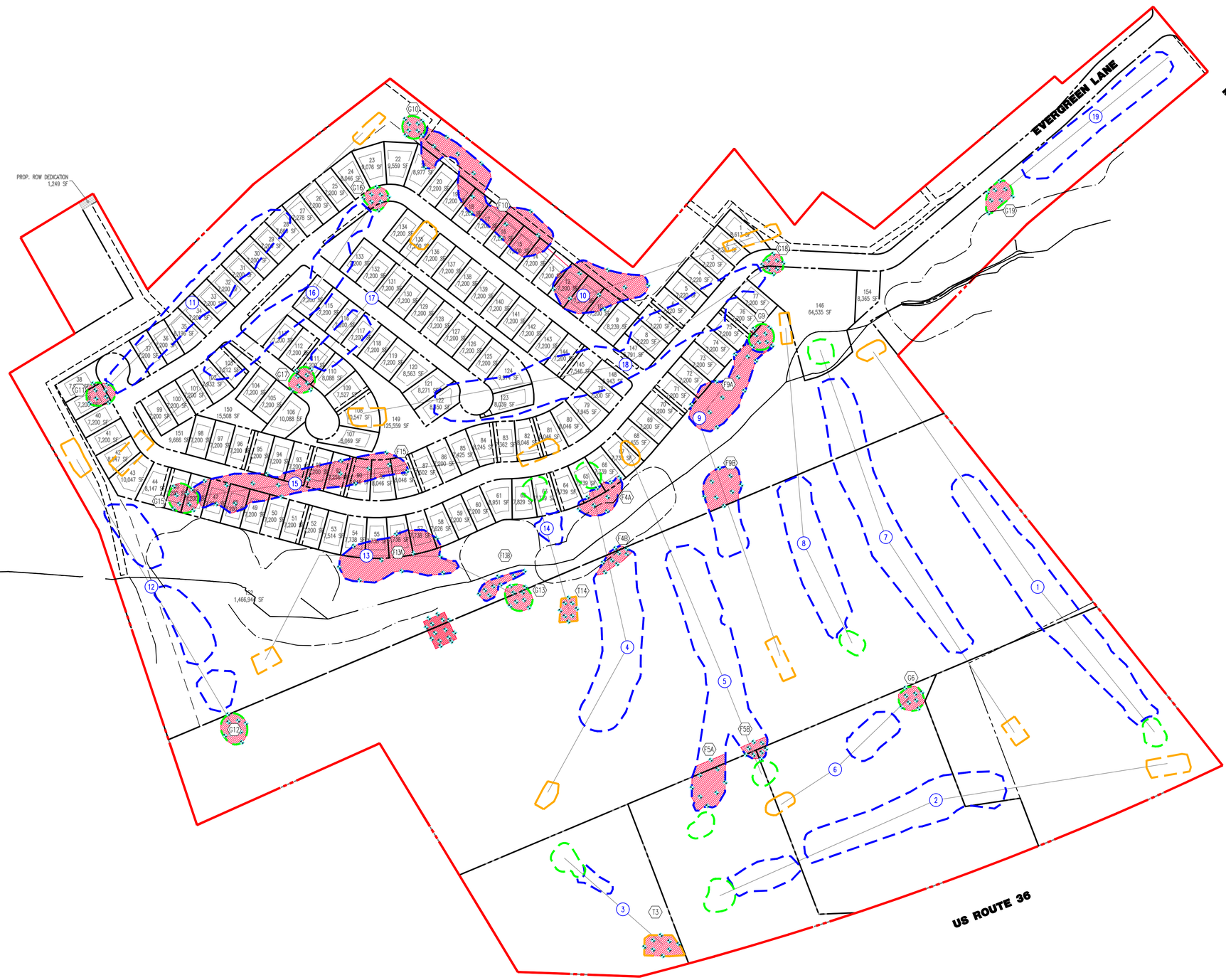
TITLE: **PROPOSED SOIL CROSS SECTION (COMMERCIAL AREA)**

SCALE: (H) 1"=100' (V) | DATE: 10/17/2024
PROJECT No: 3272-98-005EC

FIGURE: 20 | Rev. #: 0

Plotted: 10/22/24 – 5:22 PM, By: jdefisher
File: G:\DATA Projects\3272 Surrey Equities LLC\98-005EC Eatontown and West Long Branch\Drawings by Dearth\Environmental CAD\RAWP\E32729890056A-XS.DWG, ----> 20 PROPOSED SOIL CROSS SECTION (COMMERCIAL AREA) (SI-RI-RAW)

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PROPOSED EXCAVATION (TEES)

Location	Perimeter Length (LF)	# of Sidewall Samples	Area (Sq. Ft.)	# of Base Samples
T14	281.62	4	6,069.49	4
T3	283.81	4	5,846.30	4
TOTAL	565.43	8	11,915.79	8

PROPOSED EXCAVATION (FAIRWAYS)

Location	Perimeter Length (LF)	# of Sidewall Samples	Area (Sq. Ft.)	# of Base Samples
F9A	876.93	6	26,437.85	4
F15	1,491.81	8	67,438.49	8
F10	2,002.50	10	95,432.90	10
F5A	411.9	4	10,168.58	4
F5B	236.01	4	2,666.13	4
F4A	453.25	4	11,380.52	4
F4B	290.98	4	3,731.42	4
F9B	496.76	4	17,043.23	4
F13A	878.16	6	41,667.51	4
F13B	403.65	4	8,421.08	4
TOTAL	7,541.95	54	284,387.72	50

PROPOSED EXCAVATION (GREENS)

Location	Perimeter Length (LF)	# of Sidewall Samples	Area (Sq. Ft.)	# of Base Samples
G9	235.04	4	4,356.47	4
G18	199.85	4	3,091.51	4
G6	222.22	4	3,571.50	4
G15	273.52	4	5,856.30	4
G13	253.39	4	5,006.20	4
G11	246.47	4	4,683.90	4
G12	266.66	4	5,571.55	4
G17	241.34	4	4,500.70	4
G10	211.87	4	3,559.02	4
G16	220.47	4	3,791.29	4
G19	272.40	4	4,907.57	4
TOTAL	2,643.23	44	48,896.01	44

PROPOSED EXCAVATION (TRENCH)

Location	Perimeter Length (LF)	# of Sidewall Samples	Area (Sq. Ft.)	# of Base Samples
TRENCH	403.65	8	8,421.08	6

GRAPHIC SCALE

−150 0 75 150 300 600

(IN FEET)

1 INCH = 150 FT.

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REV.	DATE	COMMENTS	BY

PROJECT: **SURREY EQUITIES**
OLD ORCHARD COUNTRY CLUB
BLOCK 2701, LOT 2, 53, 60, 66, 69; BLOCK 68, LOT 6
54 MONMOUTH ROAD
TOWNSHIP OF EATONTOWN, MONMOUTH COUNTY, NJ

DRAWN BY: JED | DESIGNED BY: OM | CHECKED BY: SSS | CHECKED BY: _

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LEGEND:

- SITE BOUNDARY (APPROXIMATE)
- 18 — GOLF COURSE HOLE DESIGNATION
- GREEN BOUNDARY (APPROXIMATE)
- FAIRWAY BOUNDARY (APPROXIMATE)
- TEE BOUNDARY (APPROXIMATE)
- PROPOSED EXCAVATION AREAS (APPROXIMATE)
- PROPOSED BORING/SAMPLE LOCATION (APPROXIMATE)

TITLE:
PROPOSED POST-EXCAVATION SAMPLE LOCATION PLAN

SCALE: (H) 1"=150' (V) | DATE: 10/17/2024
PROJECT No: 3272-98-005EC

FIGURE: 21 | Rev. #: 0

Plotted: 10/22/24 – 5:22 PM, By: jdefisher
File: O:\EARTH Projects\3272 Surrey Equities LLC\98-005EC Eatontown and West Long Branch\Drawings by Dearth\Environmental CAD\#WP\E3272988005RAP021.dwg, ----> 21 PROPOSED POST-EXCAVATION SAMPLE LOCATION PLAN (SI-RI-RW)

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Appendix A
Tables

Table 1: Site Sampling Summary
Old Orchard Country Club
54 Monmouth Road
Borough of Eatontown, Monmouth County, New Jersey
Dynamic Earth Project No. 3272-98-005EC

	SAMPLE #	SAMPLE DATE	SAMPLE DEPTH (ft)*	ANALYTICAL PARAMETERS
Soil - SI				
	T-1	5/19/2021	0.0-0.5	As, Hg, Pb, TCL Pesticides
	T-2	5/19/2021	0.0-0.5	As, Hg, Pb, TCL Pesticides
	T-3	5/19/2021	0.0-0.5	As, Hg, Pb, TCL Pesticides
	T-4	5/19/2021	0.0-0.5	As, Hg, Pb, TCL Pesticides
	T-5	5/19/2021	0.0-0.5	As, Hg, Pb, TCL Pesticides
	T-6	5/19/2021	0.0-0.5	As, Hg, Pb, TCL Pesticides
	T-7	5/19/2021	0.0-0.5	As, Hg, Pb, TCL Pesticides
	T-8	5/19/2021	0.0-0.5	As, Hg, Pb, TCL Pesticides
	T-9	5/19/2021	0.0-0.5	As, Hg, Pb, TCL Pesticides
	T-10	5/19/2021	0.0-0.5	As, Hg, Pb, TCL Pesticides
	T-11	5/19/2021	0.0-0.5	As, Hg, Pb, TCL Pesticides
	T-12	5/19/2021	0.0-0.5	As, Hg, Pb, TCL Pesticides
	T-13	5/19/2021	0.0-0.5	As, Hg, Pb, TCL Pesticides
	T-14	5/19/2021	0.0-0.5	As, Hg, Pb, TCL Pesticides
	T-15	5/19/2021	0.0-0.5	As, Hg, Pb, TCL Pesticides
	T-16	5/19/2021	0.0-0.5	As, Hg, Pb, TCL Pesticides
	T-17	5/19/2021	0.0-0.5	As, Hg, Pb, TCL Pesticides
	T-18	5/19/2021	0.0-0.5	As, Hg, Pb, TCL Pesticides
	F-1	5/19/2021	0.0-0.5	As, Pb, TCL Pesticides
	F-2	5/19/2021	0.0-0.5	As, Pb, TCL Pesticides
	F-3	5/19/2021	0.0-0.5	As, Pb, TCL Pesticides
	F-4	5/19/2021	0.0-0.5	As, Pb, TCL Pesticides
	F-5	5/19/2021	0.0-0.5	As, Pb, TCL Pesticides
	F-6	5/19/2021	0.0-0.5	As, Pb, TCL Pesticides
	F-7	5/19/2021	0.0-0.5	As, Pb, TCL Pesticides
	F-8	5/19/2021	0.0-0.5	As, Pb, TCL Pesticides
	F-9	5/19/2021	0.0-0.5	As, Pb, TCL Pesticides
	F-10	5/19/2021	0.0-0.5	As, Pb, TCL Pesticides
	F-11	5/19/2021	0.0-0.5	As, Pb, TCL Pesticides
	F-12	5/19/2021	0.0-0.5	As, Pb, TCL Pesticides
	F-13	5/19/2021	0.0-0.5	As, Pb, TCL Pesticides
	F-14	5/19/2021	0.0-0.5	As, Pb, TCL Pesticides
	F-15	5/19/2021	0.0-0.5	As, Pb, TCL Pesticides
	F-16	5/19/2021	0.0-0.5	As, Pb, TCL Pesticides
	F-17	5/19/2021	0.0-0.5	As, Pb, TCL Pesticides
	F-18	5/19/2021	0.0-0.5	As, Pb, TCL Pesticides
	F-19	9/27/2024	0.0-0.5	As, Pb, TCL Pesticides
	G-1	5/19/2021	0.0-0.5	As, Hg, Pb, TCL Pesticides
	G-2	5/19/2021	0.0-0.5	As, Hg, Pb, TCL Pesticides
	G-3	5/19/2021	0.0-0.5	As, Hg, Pb, TCL Pesticides
	G-4	5/19/2021	0.0-0.5	As, Hg, Pb, TCL Pesticides
	G-5	5/19/2021	0.0-0.5	As, Hg, Pb, TCL Pesticides
	G-6	5/19/2021	0.0-0.5	As, Hg, Pb, TCL Pesticides
	G-7	5/19/2021	0.0-0.5	As, Hg, Pb, TCL Pesticides
	G-8	5/19/2021	0.0-0.5	As, Hg, Pb, TCL Pesticides
	G-9	5/19/2021	0.0-0.5	As, Hg, Pb, TCL Pesticides
	G-10	5/19/2021	0.0-0.5	As, Hg, Pb, TCL Pesticides
	G-11	5/19/2021	0.0-0.5	As, Hg, Pb, TCL Pesticides
	G-12	5/19/2021	0.0-0.5	As, Hg, Pb, TCL Pesticides
	G-13	5/19/2021	0.0-0.5	As, Hg, Pb, TCL Pesticides
	G-14	5/19/2021	0.0-0.5	As, Hg, Pb, TCL Pesticides
	G-15	5/19/2021	0.0-0.5	As, Hg, Pb, TCL Pesticides
	G-16	5/19/2021	0.0-0.5	As, Hg, Pb, TCL Pesticides
	G-17	5/19/2021	0.0-0.5	As, Hg, Pb, TCL Pesticides
	G-18	5/19/2021	0.0-0.5	As, Hg, Pb, TCL Pesticides
	G-19	5/19/2021	0.0-0.5	As, Hg, Pb, TCL Pesticides
	G-19	9/27/2024	0.0-0.5	As, Hg, Pb, TCL Pesticides

SPLP - Synthetic Precipitation Leaching Procedure
As - Arsenic
Hg - Mercury
Pb - Lead
TCL - Target Compound List
ORP - Oxidation Reduction Potential
TOC - Total Organic Carbon

Table 1: Site Sampling Summary
Old Orchard Country Club
54 Monmouth Road
Borough of Eatontown, Monmouth County, New Jersey
Dynamic Earth Project No. 3272-98-005EC

	SAMPLE #	SAMPLE DATE	SAMPLE DEPTH (ft)*	ANALYTICAL PARAMETERS
Soil - RI				
	F-4A	7/12/2021	1.0-1.5	Dieldrin
	F-4B	7/12/2021	2.0-2.5	Dieldrin
	F-4-1	7/12/2021	0.0-0.5	Dieldrin
	F-4-1A	7/12/2021	1.0-1.5	Dieldrin
	F-4-2	7/12/2021	0.0-0.5	Dieldrin
	F-4-2A	7/12/2021	1.0-1.5	Dieldrin
	F-4-3	7/12/2021	0.0-0.5	Dieldrin
	F-4-3A	7/12/2021	1.0-1.5	Dieldrin
	F-4-4	7/12/2021	0.0-0.5	Dieldrin
	F-4-5	7/12/2021	0.0-0.5	Dieldrin
	F-4-6	7/12/2021	0.0-0.5	Dieldrin
	F-4-6A	7/12/2021	1.0-1.5	Dieldrin
	F-4-7	7/12/2021	0.0-0.5	Dieldrin
	F-5A	7/12/2021	1.0-1.5	Dieldrin
	F-5-1	7/12/2021	0.0-0.5	Dieldrin
	F-5-1A	7/12/2021	1.0-1.5	Dieldrin
	F-5-2	7/12/2021	0.0-0.5	Dieldrin
	F-5-2A	7/12/2021	1.0-1.5	Dieldrin
	F-5-3	7/12/2021	0.0-0.5	Dieldrin
	F-5-3A	7/12/2021	1.0-1.5	Dieldrin
	F-5-4	7/12/2021	0.0-0.5	Dieldrin
	F-5-4A	7/12/2021	1.0-1.5	Dieldrin
	F-5-4B	7/12/2021	2.0-2.5	Dieldrin
	F-5-5	7/12/2021	0.0-0.5	Dieldrin
	F-5-6	7/12/2021	0.0-0.5	Dieldrin
	F-5-7	7/12/2021	0.0-0.5	Dieldrin
	F-9A	7/12/2021	1.0-1.5	Dieldrin
	F-9-1	7/12/2021	0.0-0.5	Dieldrin
	F-9-1A	7/12/2021	1.0-1.5	Dieldrin
	F-9-2	7/12/2021	0.0-0.5	Dieldrin
	F-9-3	7/12/2021	0.0-0.5	Dieldrin
	F-9-3A	7/12/2021	1.0-1.5	Dieldrin
	F-9-4	7/12/2021	0.0-0.5	Dieldrin
	F-9-4A	7/12/2021	1.0-1.5	Dieldrin
	F-9-5	7/12/2021	0.0-0.5	Dieldrin
	F-9-5A	7/12/2021	1.0-1.5	Dieldrin
	F-9-6	7/12/2021	0.0-0.5	Dieldrin
	F-9-6A	7/12/2021	1.0-1.5	Dieldrin
	F-9-6B	7/12/2021	2.0-2.5	Dieldrin
	F-9-7	7/12/2021	0.0-0.5	Dieldrin
	F-10A	7/20/2021	1.0-1.5	Dieldrin
	F-10-1	7/20/2021	0.0-0.5	Dieldrin
	F-10-1A	7/20/2021	1.0-1.5	Dieldrin
	F-10-2	7/20/2021	0.0-0.5	Dieldrin
	F-10-2A	7/20/2021	1.0-1.5	Dieldrin
	F-10-3	7/20/2021	0.0-0.5	Dieldrin
	F-10-4	7/20/2021	0.0-0.5	Dieldrin
	F-10-4A	7/20/2021	1.0-1.5	Dieldrin
	F-10-5	7/20/2021	0.0-0.5	Dieldrin
	F-10-5A	7/20/2021	1.0-1.5	Dieldrin
	F-10-6	7/20/2021	0.0-0.5	Dieldrin
	F-10-7	7/20/2021	0.0-0.5	Dieldrin
	F-10-7A	7/20/2021	1.0-1.5	Dieldrin
	F-13	7/20/2021	0.0-0.5	Dieldrin
	F-13A	7/20/2021	1.0-1.5	Dieldrin
	F-13B	7/20/2021	2.0-2.5	Dieldrin
	F-13-1	7/20/2021	0.0-0.5	Dieldrin
	F-13-1A	7/20/2021	1.0-1.5	Dieldrin
	F-13-2	7/20/2021	0.0-0.5	Dieldrin
	F-13-2A	7/20/2021	1.0-1.5	Dieldrin
	F-13-3	7/20/2021	0.0-0.5	Dieldrin
	F-13-3A	7/20/2021	1.0-1.5	Dieldrin
	F-13-4	7/20/2021	0.0-0.5	Dieldrin
	F-13-4A	7/20/2021	1.0-1.5	Dieldrin
	F-13-5	7/20/2021	0.0-0.5	Dieldrin
	F-13-5A	7/20/2021	1.0-1.5	Dieldrin
	F-13-6	7/20/2021	0.0-0.5	Dieldrin
	F-13-7	7/20/2021	0.0-0.5	Dieldrin
	F-15-A	7/20/2021	1.0-1.5	Dieldrin
	F-15-1	7/20/2021	0.0-0.5	Dieldrin
	F-15-1A	7/20/2021	1.0-1.5	Dieldrin
	F-15-1B	7/20/2021	2.0-2.5	Dieldrin
	F-15-2	7/20/2021	0.0-0.5	Dieldrin
	F-15-2A	7/20/2021	1.0-1.5	Dieldrin
	F-15-3	7/20/2021	0.0-0.5	Dieldrin
	F-15-3A	7/20/2021	1.0-1.5	Dieldrin
	F-15-4	7/20/2021	0.0-0.5	Dieldrin
	F-15-4A	7/20/2021	1.0-1.5	Dieldrin
	F-15-5	7/20/2021	0.0-0.5	Dieldrin
	F-15-5A	7/20/2021	1.0-1.5	Dieldrin
	F-15-6	7/20/2021	0.0-0.5	Dieldrin
	F-15-6A	7/20/2021	1.0-1.5	Dieldrin
	F-15-7	7/20/2021	0.0-0.5	Dieldrin
	F-15-7A	7/20/2021	1.0-1.5	Dieldrin
	G-6A	7/20/2021	1.0-1.5	As, Pb, Hg
	G-6B	7/20/2021	2.0-2.5	As, Pb, Hg
	G-6C	7/20/2021	3.0-3.5	As, Pb, Hg
	G-6-1	7/20/2021	0.0-0.5	As, Pb, Hg
	G-6-2	7/20/2021	0.0-0.5	As, Pb, Hg
	G-6-3	7/20/2021	0.0-0.5	As, Pb, Hg
	G-6-4	7/20/2021	0.0-0.5	As, Pb, Hg

SPLP - Synthetic Precipitation Leaching Procedure
As - Arsenic
Hg - Mercury
Pb - Lead
TCL - Target Compound List
ORP - Oxidation Reduction Potential
TOC - Total Organic Carbon

Table 1: Site Sampling Summary
Old Orchard Country Club
54 Monmouth Road
Borough of Eatontown, Monmouth County, New Jersey
Dynamic Earth Project No. 3272-98-005EC

	SAMPLE #	SAMPLE DATE	SAMPLE DEPTH (ft)*	ANALYTICAL PARAMETERS
Soil - RI				
	G-9A	7/20/2021	1.0-1.5	As, Pb, Hg, Chlordane
	G-9B	7/20/2021	2.0-2.5	As, Pb, Hg, Chlordane
	G-9-1	7/20/2021	0.0-0.5	As, Pb, Hg, Chlordane
	G-9-2	7/20/2021	0.0-0.5	As, Pb, Hg, Chlordane
	G-9-3	7/20/2021	0.0-0.5	As, Pb, Hg, Chlordane
	G-9-4	7/20/2021	0.0-0.5	As, Pb, Hg, Chlordane
	G-10A	7/20/2021	1.0-1.5	As, Pb, Chlordane
	G-10B	7/20/2021	2.0-2.5	As, Pb, Chlordane
	G-10-1	7/20/2021	0.0-0.5	As, Pb, Chlordane
	G-10-2	7/20/2021	0.0-0.5	As, Pb, Chlordane
	G-10-3	7/20/2021	0.0-0.5	As, Pb, Chlordane
	G-10-3A	7/20/2021	1.0-1.5	As, Pb, Chlordane
	G-10-4	7/20/2021	0.0-0.5	As, Pb, Chlordane
	G-10-4A	7/20/2021	1.0-1.5	As, Pb, Chlordane
	G-11A	7/20/2021	1.0-1.5	As, Pb, Hg
	G-11B	7/20/2021	2.0-2.5	As, Pb, Hg
	G-11-1	7/20/2021	0.0-0.5	As, Pb, Hg
	G-11-1A	7/20/2021	1.0-1.5	As, Pb, Hg
	G-11-2	7/20/2021	0.0-0.5	As, Pb, Hg
	G-11-3	7/20/2021	0.0-0.5	As, Pb, Hg
	G-11-4	7/20/2021	0.0-0.5	As, Pb, Hg
	G-12A	7/20/2021	1.0-1.5	Chlordane
	G-12-1	7/20/2021	0.0-0.5	Chlordane
	G-12-2	7/20/2021	0.0-0.5	Chlordane
	G-12-3	7/20/2021	0.0-0.5	Chlordane
	G-12-4	7/20/2021	0.0-0.5	Chlordane
	G-13A	7/20/2021	1.0-1.5	As, Pb, Hg, Chlordane
	G-13B	7/20/2021	2.0-2.5	As, Pb, Hg, Chlordane
	G-13-1	7/20/2021	0.0-0.5	As, Pb, Hg, Chlordane
	G-13-2	7/20/2021	0.0-0.5	As, Pb, Hg, Chlordane
	G-13-3	7/20/2021	0.0-0.5	As, Pb, Hg, Chlordane
	G-13-4	7/20/2021	0.0-0.5	As, Pb, Hg, Chlordane
	G-15A	7/21/2021	1.0-1.5	As, Chlordane
	G-15B	7/21/2021	2.0-2.5	As, Chlordane
	G-15-1	7/21/2021	0.0-0.5	As, Chlordane
	G-15-1A	7/21/2021	1.0-1.5	As, Chlordane
	G-15-2	7/21/2021	0.0-0.5	As, Chlordane
	G-15-3	7/21/2021	0.0-0.5	As, Chlordane
	G-15-4	7/21/2021	0.0-0.5	As, Chlordane
	G-16A	7/21/2021	1.0-1.5	As, Pb, Hg, Chlordane
	G-16B	7/21/2021	2.0-2.5	As, Pb, Hg, Chlordane
	G-16-1	7/21/2021	0.0-0.5	As, Pb, Hg, Chlordane
	G-16-2	7/21/2021	0.0-0.5	As, Pb, Hg, Chlordane
	G-16-3	7/21/2021	0.0-0.5	As, Pb, Hg, Chlordane
	G-16-4	7/21/2021	0.0-0.5	As, Pb, Hg, Chlordane
	G-17A	7/21/2021	1.0-1.5	As, Pb, Hg, Chlordane
	G-17B	7/21/2021	2.0-2.5	As, Pb, Hg, Chlordane
	G-17-1	7/21/2021	0.0-0.5	As, Pb, Hg, Chlordane
	G-17-1A	7/21/2021	1.0-1.5	As, Pb, Hg, Chlordane
	G-17-2	7/21/2021	0.0-0.5	As, Pb, Hg, Chlordane
	G-17-3	7/21/2021	0.0-0.5	As, Pb, Hg, Chlordane
	G-17-4	7/21/2021	0.0-0.5	As, Pb, Hg, Chlordane
	G-18A	7/21/2021	1.0-1.5	As, Pb
	G-18B	7/21/2021	2.0-2.5	As, Pb
	G-18-1	7/21/2021	0.0-0.5	As, Pb
	G-18-2	7/21/2021	0.0-0.5	As, Pb
	G-18-3	7/21/2021	0.0-0.5	As, Pb
	G-18-4	7/21/2021	0.0-0.5	As, Pb
	TRENCH-1A	7/21/2021	1.0-1.5	Chlordane, Heptachlor epoxide
	TRENCH-1B	7/21/2021	2.0-2.5	Chlordane, Heptachlor epoxide
	TRENCH-1C	7/21/2021	3.0-3.5	Chlordane, Heptachlor epoxide
	TRENCH-2	7/21/2021	0.0-0.5	Chlordane, Heptachlor epoxide
	TRENCH-3	7/21/2021	0.0-0.5	Chlordane, Heptachlor epoxide
	TRENCH-3A	7/21/2021	1.0-1.5	Chlordane, Heptachlor epoxide
	TRENCH-4	7/21/2021	0.0-0.5	Chlordane, Heptachlor epoxide
	TRENCH-5	7/21/2021	0.0-0.5	Chlordane, Heptachlor epoxide
	TRENCH-5A	7/21/2021	1.0-1.5	Chlordane, Heptachlor epoxide
	T-2A	12/20/2022	1.0-1.5	Dieldrin
	T-2-1	12/20/2022	0.0-0.5	Dieldrin
	T-2-2	12/20/2022	0.0-0.5	Dieldrin
	T-2-3	12/20/2022	0.0-0.5	Dieldrin
	T-2-4	12/20/2022	0.0-0.5	Dieldrin
	T-3A	12/20/2022	1.0-1.5	Dieldrin
	T-3-1	12/20/2022	0.0-0.5	Dieldrin
	T-3-1A	12/20/2022	1.0-1.5	Dieldrin
	T-3-2	12/20/2022	0.0-0.5	Dieldrin
	T-3-2A	12/20/2022	1.0-1.5	Dieldrin
	T-3-3	12/20/2022	0.0-0.5	Dieldrin
	T-3-3A	12/20/2022	1.0-1.5	Dieldrin
	T-3-4	12/20/2022	0.0-0.5	Dieldrin
	T-3-4A	12/20/2022	1.0-1.5	Dieldrin

SPLP - Synthetic Precipitation Leaching Procedure
As - Arsenic
Hg - Mercury
Pb - Lead
TCL - Target Compound List
ORP - Oxidation Reduction Potential
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Table 1: Site Sampling Summary
Old Orchard Country Club
54 Monmouth Road
Borough of Eatontown, Monmouth County, New Jersey
Dynamic Earth Project No. 3272-98-005EC

	SAMPLE #	SAMPLE DATE	SAMPLE DEPTH (ft)*	ANALYTICAL PARAMETERS
Soil - RI				
	T-4A	12/20/2022	1.0-1.5	Dieldrin
	T-4-1	12/20/2022	0.0-0.5	Dieldrin
	T-4-2	12/20/2022	0.0-0.5	Dieldrin
	T-4-3	12/20/2022	0.0-0.5	Dieldrin
	T-4-4	12/20/2022	0.0-0.5	Dieldrin
	T-11R	12/20/2022	0.0-0.5	SPLP dieldrin
	T-12A	12/20/2022	1.0-1.5	Dieldrin
	T-12-1	12/20/2022	0.0-0.5	Dieldrin
	T-12-1A	12/20/2022	1.0-1.5	Dieldrin
	T-12-2	12/20/2022	0.0-0.5	Dieldrin
	T-12-3	12/20/2022	0.0-0.5	Dieldrin
	T-12-3A	12/20/2022	1.0-1.5	Dieldrin
	T-12-4	12/20/2022	0.0-0.5	Dieldrin
	T-14A	12/20/2022	1.0-1.5	Dieldrin
	T-14-1	12/20/2022	0.0-0.5	Dieldrin
	T-14-2	12/20/2022	0.0-0.5	Dieldrin
	T-14-3	12/20/2022	0.0-0.5	Dieldrin
	T-14-4	12/20/2022	0.0-0.5	Dieldrin
	T-14-4A	12/20/2022	1.0-1.5	Dieldrin
	F-6A	12/20/2022	1.0-1.5	Arsenic
	F-6-1	12/20/2022	0.0-0.5	Arsenic
	F-6-2	12/20/2022	0.0-0.5	Arsenic
	F-6-3	12/20/2022	0.5-1.0	Arsenic
	F-6-4	12/20/2022	0.5-1.0	Arsenic
	F-11A	12/21/2022	1.0-1.5	Arsenic
	F-11-1	12/21/2022	0.0-0.5	Arsenic
	F-11-2	12/21/2022	0.0-0.5	Arsenic
	F-11-3	12/21/2022	0.0-0.5	Arsenic
	F-11-4	12/21/2022	0.0-0.5	Arsenic
	F-15R	12/21/2022	0.0-0.5	Arsenic
	F-15A	12/21/2022	1.0-1.5	Arsenic
	F-15-1-R	12/21/2022	0.0-0.5	Arsenic
	F-15-3-R	12/21/2022	0.0-0.5	Arsenic
	F-15-6-R	12/21/2022	0.0-0.5	Arsenic
	F-15-6A-R	12/21/2022	1.0-1.5	Arsenic
	F-15-7-R	12/21/2022	0.0-0.5	Arsenic
	F-17A	12/21/2022	1.0-1.5	Arsenic
	F-17-1	12/21/2022	0.0-0.5	Arsenic
	F-17-2	12/21/2022	0.0-0.5	Arsenic
	F-17-3	12/21/2022	0.0-0.5	Arsenic
	F-17-4	12/21/2022	0.0-0.5	Arsenic
	F-18R	12/21/2022	0.0-0.5	SPLP dieldrin
	G-6-2R	12/21/2022	0.0-0.5	SPLP mercury
	G-6-R	12/21/2022	0.0-0.5	SPLP 4,4'-DDE
	G-9A-R	12/21/2022	1.0-1.5	Heptachlor Epoxide, SPLP mercury
	G-9-1-R	12/21/2022	0.0-0.5	Heptachlor Epoxide
	G-9-2-R	12/21/2022	0.0-0.5	Heptachlor Epoxide
	G-9-3-R	12/21/2022	0.0-0.5	Heptachlor Epoxide
	G-9-4-R	12/21/2022	0.0-0.5	Heptachlor Epoxide
	G-11R	12/21/2022	0.0-0.5	SPLP mercury
	G-12A	12/21/2022	1.0-1.5	Heptachlor Epoxide
	G-12-1	12/21/2022	0.0-0.5	Heptachlor Epoxide
	G-12-2	12/21/2022	0.0-0.5	Heptachlor Epoxide
	G-12-2A	12/21/2022	1.0-1.5	Heptachlor Epoxide
	G-12-3	12/21/2022	0.0-0.5	Heptachlor Epoxide
	G-12-3A	12/21/2022	1.0-1.5	Heptachlor Epoxide
	G-12-4	12/21/2022	0.0-0.5	Heptachlor Epoxide
	G-15R	12/21/2022	0.0-0.5	SPLP lead
	G-15A	12/21/2022	1.0-1.5	Heptachlor Epoxide
	G-15-1	12/21/2022	0.0-0.5	Heptachlor Epoxide
	G-15-2	12/21/2022	0.0-0.5	Heptachlor Epoxide
	G-15-3	12/21/2022	0.0-0.5	Heptachlor Epoxide
	G-15-4	12/21/2022	0.0-0.5	Heptachlor Epoxide
	G-16R	12/21/2022	0.0-0.5	SPLP 4,4'-DDE, SPLP mercury
	G-16A	12/21/2022	1.0-1.5	SPLP lead
	G-16-1	12/21/2022	0.0-0.5	Heptachlor Epoxide
	G-16-2	12/21/2022	0.0-0.5	Heptachlor Epoxide
	G-16-3	12/21/2022	0.0-0.5	Heptachlor Epoxide
	G-16-4	12/21/2022	0.0-0.5	Heptachlor Epoxide
	G19B	9/27/2024	2.0-2.5	Lead
	G-19-1	9/27/2024	0.0-0.5	Lead
	G-19-2	9/27/2024	0.0-0.5	Lead
	G-19-3	9/27/2024	0.0-0.5	Lead
	G-19-4	9/27/2024	0.0-0.5	Lead
	G-19-4B	9/27/2024	2.0-2.5	Lead
	WA-2R	12/20/2022	0.0-0.5	SPLP lead
	WA-3R	12/20/2022	0.0-0.5	SPLP lead, SPLP beta-BHC
	T-3-1B	5/30/2023	2.0-2.5	Dieldrin
	T-3-2B	5/30/2023	2.0-2.5	Dieldrin
	T-3-3B	5/30/2023	2.0-2.5	Dieldrin
	T-3-4B	5/30/2023	2.0-2.5	Dieldrin
	F-13R	5/30/2023	0.0-0.5	SPLP Dieldrin
	F-15-3R	5/30/2023	0.0-0.5	SPLP Dieldrin
	F-5-2R	5/30/2023	0.0-0.5	SPLP Dieldrin
	TRENCH-6	5/30/2023	0.0-0.5	Chlordane
	TRENCH-7	5/30/2023	0.0-0.5	Chlordane
	TRENCH-7A	5/30/2023	1.0-1.5	Chlordane
	TRENCH-9	5/30/2023	0.0-0.5	Chlordane

SPLP - Synthetic Precipitation Leaching Procedure
As - Arsenic
Hg - Mercury
Pb - Lead
TCL - Target Compound List
ORP - Oxidation Reduction Potential
TOC - Total Organic Carbon

Table 1: Site Sampling Summary
Old Orchard Country Club
54 Monmouth Road
Borough of Eatontown, Monmouth County, New Jersey
Dynamic Earth Project No. 3272-98-005EC

	SAMPLE #	SAMPLE DATE	SAMPLE DEPTH (ft)*	ANALYTICAL PARAMETERS
Sediment				
	SED-1	5/30/2023	0.0-0.5	As, Hg, Pb, TCL Pesticides, TOC, pH, ORP, Particle Grain Size
	SED-1A	5/30/2023	0.5-1.0	As, Hg, Pb, TCL Pesticides, TOC, pH, ORP, Particle Grain Size
	SED-2	5/30/2023	0.0-0.5	As, Hg, Pb, TCL Pesticides, TOC, pH, ORP, Particle Grain Size
	SED-3	5/30/2023	0.0-0.5	As, Hg, Pb, TCL Pesticides, TOC, pH, ORP, Particle Grain Size
	SED-4	5/30/2023	0.0-0.5	As, Hg, Pb, TCL Pesticides, TOC, pH, ORP, Particle Grain Size
	SED-4A	5/30/2023	0.5-1.0	As, Hg, Pb, TCL Pesticides, TOC, pH, ORP, Particle Grain Size
	SED-5	5/30/2023	0.0-0.5	As, Hg, Pb, TCL Pesticides, TOC, pH, ORP, Particle Grain Size
	SED-6	5/30/2023	0.0-0.5	As, Hg, Pb, TCL Pesticides, TOC, pH, ORP, Particle Grain Size
	SED-6A	5/30/2023	0.5-1.0	As, Hg, Pb, TCL Pesticides, TOC, pH, ORP, Particle Grain Size
	SED-7	5/30/2023	0.0-0.5	As, Hg, Pb, TCL Pesticides, TOC, pH, ORP, Particle Grain Size
Surface Water				
	SW-1	5/30/2023	--	Filtered and Unfiltered As, Hg, Pb, TCL Pesticides, Hardness, pH
	SW-2	5/30/2023	--	Filtered and Unfiltered As, Hg, Pb, TCL Pesticides, Hardness, pH
	SW-3	5/30/2023	--	Filtered and Unfiltered As, Hg, Pb, TCL Pesticides, Hardness, pH
	SW-4	5/30/2023	--	Filtered and Unfiltered As, Hg, Pb, TCL Pesticides, Hardness, pH
	SW-5	5/30/2023	--	Filtered and Unfiltered As, Hg, Pb, TCL Pesticides, Hardness, pH
	SW-6	5/30/2023	--	Filtered and Unfiltered As, Hg, Pb, TCL Pesticides, Hardness, pH
	SW-7	5/30/2023	--	Filtered and Unfiltered As, Hg, Pb, TCL Pesticides, Hardness, pH

SPLP - Synthetic Precipitation Leaching Procedure
As - Arsenic
Hg - Mercury
Pb - Lead
TCL - Target Compound List
ORP - Oxidation Reduction Potential
TOC - Total Organic Carbon

TABLE 1: SOIL ANALYTICAL RESULTS
OLD ORCHARD COUNTRY CLUB
54 MONMOUTH ROAD
MONMOUTH COUNTY, NEW JERSEY

SAMPLE ID:	NJDEP Residential Soil Remediation Standards	G-1			G-2			G-3			G-4			G-5		
LAB ID:		L2126518-10			L2126518-13			L2126518-16			L2126518-20			L2126518-23		
COLLECTION DATE:		5/19/2021			5/19/2021			5/19/2021			5/19/2021			5/19/2021		
SAMPLE DEPTH:		(0-0.5')			(0-0.5')			(0-0.5')			(0-0.5')			(0-0.5')		
SAMPLE MATRIX:		SOIL			SOIL			SOIL			SOIL			SOIL		
ANALYTE	**(mg/kg)**	**Conc**	**Q**	**RL**	**Conc**	**Q**	**RL**	**Conc**	**Q**	**RL**	**Conc**	**Q**	**RL**	**Conc**	**Q**	**RL**
PESTICIDES																
Delta-BHC	NC	ND		0.00222	ND		0.00226	ND		0.00223	ND		0.00235	ND		0.00192
Lindane	0.57	ND		0.00092	ND		0.00094	ND		0.00092	ND		0.00098	ND		0.0008
Alpha-BHC	0.086	ND		0.00092	ND		0.00094	ND		0.00092	ND		0.00098	ND		0.0008
Beta-BHC	0.3	ND		0.00222	ND		0.00226	ND		0.00223	ND		0.00235	ND		0.00192
Heptachlor	0.15	ND		0.00111	ND		0.00113	ND		0.00111	ND		0.00118	ND		0.00096
Aldrin	0.041	ND		0.00222	ND		0.00226	ND		0.00223	ND		0.00235	ND		0.00192
Heptachlor epoxide	0.076	0.0218		0.00417	ND		0.00423	0.00569		0.00418	ND		0.00441	0.0203		0.0036
Endrin	19	ND		0.00092	ND		0.00094	ND		0.00092	ND		0.00098	ND		0.0008
Endrin aldehyde	NC	ND		0.00278	ND		0.00282	ND		0.00278	ND		0.00294	ND		0.0024
Endrin ketone	NC	ND		0.00222	ND		0.00226	ND		0.00223	ND		0.00235	ND		0.00192
Dieldrin	0.034	0.00408		0.00139	ND		0.00141	0.0194		0.00139	ND		0.00147	ND		0.0012
4,4'-DDE	2	0.0319		0.00222	0.00917	P	0.00226	0.0149		0.00223	0.00452		0.00235	0.0135		0.00192
4,4'-DDD	2.3	0.00434		0.00222	ND		0.00226	0.00381		0.00223	ND		0.00235	ND		0.00192
4,4'-DDT	1.9	0.0037	J	0.00417	ND		0.00423	ND		0.00418	ND		0.00441	0.00869		0.0036
Endosulfan I	NC	ND		0.00222	ND		0.00226	ND		0.00223	ND		0.00235	ND		0.00192
Endosulfan II	NC	ND		0.00222	ND		0.00226	ND		0.00223	ND		0.00235	ND		0.00192
Endosulfan (I and II)	470	ND		0.00222	ND		0.00226	ND		0.00223	ND		0.00235	ND		0.00192
Endosulfan sulfate	470	ND		0.00092	ND		0.00094	ND		0.00092	ND		0.00098	ND		0.0008
Methoxychlor	320	ND		0.00417	ND		0.00423	ND		0.00418	ND		0.00441	ND		0.0036
Toxaphene	0.49	ND		0.0417	ND		0.0423	ND		0.0418	ND		0.0441	ND		0.036
Chlordane (cis and trans)	0.27	0.1045		0.0185	ND		0.0188	0.032		0.0186	ND		0.0196	0.1117		0.016
cis-Chlordane	NC	0.0608	IP	0.00278	ND		0.00282	0.0178	IP	0.00278	ND		0.00294	0.066	IP	0.0024
trans-Chlordane	NC	0.0437		0.00278	ND		0.00282	0.0142		0.00278	ND		0.00294	0.0457		0.0024
TOTAL METALS																
Arsenic, Total	19	12.7		0.576	2.36		0.562	4.88		0.584	1.14		0.566	1.42		0.47
Lead, Total	400	14.1		2.88	7.92		2.81	8.67		2.92	3.97		2.83	11.4		2.35
Mercury, Total	23	1.82		0.092	0.648		0.093	0.917		0.094	0.118		0.093	0.987		0.079

Notes:
Results reported in milligrams per kilogram (mg/kg) or parts per million
Exceedances (if any) are highlighted
ND = Not detected above laboratory's reporting limit (RL)
NA = Not analyzed
NC = No criteria
J = Estimated value, Concentration is below the RL but above the Method Detection Limit (MDL)
P = The relative percent difference (RPD) between the two columns exceeds the method-specified criteria
I = The lower value for the two columns has been reported due to obvious interference

TABLE 1: SOIL ANALYTICAL RESULTS
OLD ORCHARD COUNTRY CLUB
54 MONMOUTH ROAD
MONMOUTH COUNTY, NEW JERSEY

SAMPLE ID:	NJDEP Residential Soil Remediation Standards	G-6			G-7			G-8			G-9			G-10		
LAB ID:		L2126518-27			L2126518-30			L2126518-33			L2126518-36			L2126518-39		
COLLECTION DATE:		5/19/2021			5/19/2021			5/19/2021			5/19/2021			5/19/2021		
SAMPLE DEPTH:		(0-0.5')			(0-0.5')			(0-0.5')			(0-0.5')			(0-0.5')		
SAMPLE MATRIX:		SOIL			SOIL			SOIL			SOIL			SOIL		
ANALYTE	**(mg/kg)**	**Conc**	**Q**	**RL**	**Conc**	**Q**	**RL**	**Conc**	**Q**	**RL**	**Conc**	**Q**	**RL**	**Conc**	**Q**	**RL**
PESTICIDES																
Delta-BHC	NC	ND		0.0023	ND		0.00165	ND		0.00242	ND		0.00202	ND		0.0022
Lindane	0.57	ND		0.00095	ND		0.00068	ND		0.00101	ND		0.00084	ND		0.00091
Alpha-BHC	0.086	ND		0.00095	ND		0.00068	ND		0.00101	ND		0.00084	ND		0.00091
Beta-BHC	0.3	ND		0.0023	ND		0.00165	ND		0.00242	ND		0.00202	ND		0.0022
Heptachlor	0.15	ND		0.00115	ND		0.00082	ND		0.00121	ND		0.00101	ND		0.0011
Aldrin	0.041	ND		0.0023	ND		0.00165	ND		0.00242	ND		0.00202	ND		0.0022
Heptachlor epoxide	0.076	0.0277		0.00431	ND		0.0031	0.0173		0.00454	0.0939	P	0.00379	0.0564		0.00412
Endrin	19	ND		0.00095	ND		0.00068	ND		0.00101	ND		0.00084	ND		0.00091
Endrin aldehyde	NC	ND		0.00287	ND		0.00206	ND		0.00303	ND		0.00253	ND		0.00274
Endrin ketone	NC	ND		0.0023	ND		0.00165	ND		0.00242	ND		0.00202	ND		0.0022
Dieldrin	0.034	ND		0.00144	ND		0.00103	ND		0.00152	ND		0.00126	ND		0.00137
4,4'-DDE	2	0.438	P	0.0115	0.015		0.00165	0.0329		0.00242	0.798	P	0.0202	0.391		0.011
4,4'-DDD	2.3	0.0443	P	0.0023	0.00212		0.00165	0.00477		0.00242	0.0996	P	0.00202	0.0299		0.0022
4,4'-DDT	1.9	0.149	P	0.00431	0.00303	J	0.0031	ND		0.00454	0.459	P	0.0379	0.116	P	0.00412
Endosulfan I	NC	ND		0.0023	ND		0.00165	ND		0.00242	ND		0.00202	ND		0.0022
Endosulfan II	NC	ND		0.0023	ND		0.00165	ND		0.00242	ND		0.00202	ND		0.0022
Endosulfan (I and II)	470	ND		0.0023	ND		0.00165	ND		0.00242	ND		0.00202	ND		0.0022
Endosulfan sulfate	470	ND		0.00095	ND		0.00068	ND		0.00101	ND		0.00084	ND		0.00091
Methoxychlor	320	ND		0.00431	ND		0.0031	ND		0.00454	ND		0.00379	ND		0.00412
Toxaphene	0.49	ND		0.0431	ND		0.031	ND		0.0454	ND		0.0379	ND		0.0412
Chlordane (cis and trans)	0.27	0.1284		0.0192	ND		0.0138	0.1831		0.0202	0.338	P	0.168	0.457		0.0183
cis-Chlordane	NC	0.0698		0.00287	ND		0.00206	0.0977	IP	0.00303	0.187	IP	0.0253	0.338	P	0.0137
trans-Chlordane	NC	0.0586	P	0.00287	ND		0.00206	0.0854		0.00303	0.151	P	0.0253	0.119		0.00274
TOTAL METALS																
Arsenic, Total	19	60.9		0.607	4.98		0.414	9.61		0.631	122		0.507	61.2		0.566
Lead, Total	400	527		3.03	22		2.07	91.2		3.16	746		2.53	509		2.83
Mercury, Total	23	25		1.9	0.254		0.079	5.27		2.14	27.5		1.83	21.8		1.86

Notes:
Results reported in milligrams per kilogram (mg/kg) or parts per million
Exceedances (if any) are highlighted
ND = Not detected above laboratory's reporting limit (RL)
NA = Not analyzed
NC = No criteria
J = Estimated value, Concentration is below the RL but above the Method Detection Limit (MDL)
P = The relative percent difference (RPD) between the two columns exceeds the method-specified criteria
I = The lower value for the two columns has been reported due to obvious interference

TABLE 1: SOIL ANALYTICAL RESULTS
OLD ORCHARD COUNTRY CLUB
54 MONMOUTH ROAD
MONMOUTH COUNTY, NEW JERSEY

SAMPLE ID:	NJDEP Residential Soil Remediation Standards	G-11			G-12			G-13			G-14			G-15		
LAB ID:		L2126518-42			L2126518-45			L2126518-49			L2126518-52			L2126518-55		
COLLECTION DATE:		5/19/2021			5/19/2021			5/19/2021			5/19/2021			5/19/2021		
SAMPLE DEPTH:		(0-0.5')			(0-0.5')			(0-0.5')			(0-0.5')			(0-0.5')		
SAMPLE MATRIX:		SOIL			SOIL			SOIL			SOIL			SOIL		
ANALYTE	**(mg/kg)**	**Conc**	**Q**	**RL**	**Conc**	**Q**	**RL**	**Conc**	**Q**	**RL**	**Conc**	**Q**	**RL**	**Conc**	**Q**	**RL**
PESTICIDES																
Delta-BHC	NC	ND		0.00233	ND		0.00232	ND		0.00234	ND		0.00184	ND		0.00242
Lindane	0.57	ND		0.00097	ND		0.00096	ND		0.00097	ND		0.00076	ND		0.00101
Alpha-BHC	0.086	ND		0.00097	ND		0.00096	ND		0.00097	ND		0.00076	ND		0.00101
Beta-BHC	0.3	ND		0.00233	ND		0.00232	ND		0.00234	ND		0.00184	ND		0.00242
Heptachlor	0.15	ND		0.00116	ND		0.00116	ND		0.00117	ND		0.00092	ND		0.00121
Aldrin	0.041	ND		0.00233	ND		0.00232	ND		0.00234	ND		0.00184	ND		0.00242
Heptachlor epoxide	0.076	0.0635		0.00437	0.103		0.00434	0.0498		0.0044	0.00236	J	0.00345	0.0842	P	0.00453
Endrin	19	ND		0.00097	ND		0.00096	ND		0.00097	ND		0.00076	ND		0.00101
Endrin aldehyde	NC	ND		0.00291	ND		0.00289	ND		0.00293	ND		0.0023	ND		0.00302
Endrin ketone	NC	ND		0.00233	ND		0.00232	ND		0.00234	ND		0.00184	ND		0.00242
Dieldrin	0.034	0.0298		0.00146	ND		0.00145	ND		0.00146	ND		0.00115	ND		0.00151
4,4'-DDE	2	0.315		0.0116	0.0696		0.00232	0.188		0.0117	0.0115		0.00184	0.11		0.0121
4,4'-DDD	2.3	0.0282		0.00233	0.0249		0.00232	0.0176	P	0.00234	0.00111	J	0.00184	0.0154		0.00242
4,4'-DDT	1.9	0.0612		0.00437	0.0262		0.00434	0.0409	P	0.0044	0.00866		0.00345	0.0368	P	0.00453
Endosulfan I	NC	ND		0.00233	ND		0.00232	ND		0.00234	ND		0.00184	ND		0.00242
Endosulfan II	NC	ND		0.00233	ND		0.00232	ND		0.00234	ND		0.00184	ND		0.00242
Endosulfan (I and II)	470	ND		0.00233	ND		0.00232	ND		0.00234	ND		0.00184	ND		0.00242
Endosulfan sulfate	470	ND		0.00097	ND		0.00096	ND		0.00097	ND		0.00076	ND		0.00101
Methoxychlor	320	ND		0.00437	ND		0.00434	ND		0.0044	ND		0.00345	ND		0.00453
Toxaphene	0.49	ND		0.0437	ND		0.0434	ND		0.044	ND		0.0345	ND		0.0453
Chlordane (cis and trans)	0.27	0.1938		0.0194	0.462		0.0965	0.279		0.0195	ND		0.0153	0.565		0.101
cis-Chlordane	NC	0.11	IP	0.00291	0.274	IP	0.0145	0.131		0.0146	ND		0.0023	0.283	IP	0.0151
trans-Chlordane	NC	0.0838		0.00291	0.188		0.0145	0.148		0.00293	ND		0.0023	0.282		0.0151
TOTAL METALS																
Arsenic, Total	19	146		0.595	13.8		0.594	77.3		0.577	1.82		0.448	55.5		0.603
Lead, Total	400	966		2.97	44.9		2.97	475		2.88	10.4		2.24	250		3.01
Mercury, Total	23	63.2		1.99	3.61		0.1	26.2		1.03	1.04		0.083	18.2		1.1

Notes:
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OLD ORCHARD COUNTRY CLUB
54 MONMOUTH ROAD
MONMOUTH COUNTY, NEW JERSEY

SAMPLE ID:	NJDEP Residential Soil Remediation Standards	G-16			G-17			G-18			G-19			T-1		
LAB ID:		L2126518-58			L2126518-65			L2126518-63			L2126518-24			L2126518-08		
COLLECTION DATE:		5/19/2021			5/19/2021			5/19/2021			5/19/2021			5/19/2021		
SAMPLE DEPTH:		(0-0.5')			(0-0.5')			(0-0.5')			(0-0.5')			(0-0.5')		
SAMPLE MATRIX:		SOIL			SOIL			SOIL			SOIL			SOIL		
ANALYTE	**(mg/kg)**	**Conc**	**Q**	**RL**	**Conc**	**Q**	**RL**	**Conc**	**Q**	**RL**	**Conc**	**Q**	**RL**	**Conc**	**Q**	**RL**
PESTICIDES																
Delta-BHC	NC	ND		0.00227	ND		0.00236	ND		0.00237	ND		0.00195	ND		0.00177
Lindane	0.57	ND		0.00094	ND		0.00098	ND		0.00098	ND		0.00081	ND		0.00073
Alpha-BHC	0.086	ND		0.00094	ND		0.00098	ND		0.00098	ND		0.00081	ND		0.00073
Beta-BHC	0.3	ND		0.00227	ND		0.00236	ND		0.00237	ND		0.00195	ND		0.00177
Heptachlor	0.15	ND		0.00114	ND		0.00118	ND		0.00119	ND		0.00097	ND		0.00088
Aldrin	0.041	ND		0.00227	ND		0.00236	ND		0.00237	ND		0.00195	ND		0.00177
Heptachlor epoxide	0.076	0.0812		0.00426	0.0697	P	0.00443	ND		0.00445	ND		0.00366	0.013		0.00331
Endrin	19	ND		0.00094	ND		0.00098	ND		0.00098	ND		0.00081	ND		0.00073
Endrin aldehyde	NC	ND		0.00284	ND		0.00295	ND		0.00297	ND		0.00244	ND		0.00221
Endrin ketone	NC	ND		0.00227	ND		0.00236	ND		0.00237	ND		0.00195	ND		0.00177
Dieldrin	0.034	ND		0.00142	ND		0.00148	ND		0.00148	ND		0.00122	0.00273		0.0011
4,4'-DDE	2	0.713	P	0.0227	0.406	P	0.00236	0.0546		0.00237	0.00878		0.00195	0.0565		0.00177
4,4'-DDD	2.3	0.076	P	0.00227	0.0659	P	0.00236	0.0164		0.00237	0.00257		0.00195	0.00332		0.00177
4,4'-DDT	1.9	0.365	P	0.0426	0.0487	P	0.00443	0.0107		0.00445	ND		0.00366	0.00607		0.00331
Endosulfan I	NC	ND		0.00227	ND		0.00236	ND		0.00237	ND		0.00195	ND		0.00177
Endosulfan II	NC	ND		0.00227	ND		0.00236	ND		0.00237	ND		0.00195	ND		0.00177
Endosulfan (I and II)	470	ND		0.00227	ND		0.00236	ND		0.00237	ND		0.00195	ND		0.00177
Endosulfan sulfate	470	ND		0.00094	ND		0.00098	ND		0.00098	ND		0.00081	ND		0.00073
Methoxychlor	320	ND		0.00426	ND		0.00443	ND		0.00445	ND		0.00366	ND		0.00331
Toxaphene	0.49	ND		0.0426	ND		0.0443	ND		0.0445	ND		0.0366	ND		0.0331
Chlordane (cis and trans)	0.27	0.441		0.189	0.67	P	0.0197	0.0509		0.0198	ND		0.0163	0.043		0.0147
cis-Chlordane	NC	0.243	IP	0.0284	0.356	IP	0.00295	0.0361	P	0.00297	ND		0.00244	0.0232	IP	0.00221
trans-Chlordane	NC	0.198	P	0.0284	0.314	P	0.00295	0.0148		0.00297	ND		0.00244	0.0198		0.00221
TOTAL METALS																
Arsenic, Total	19	308		0.593	85.5		0.584	63.8		0.62	1.18		0.49	15.2		0.448
Lead, Total	400	1850		2.96	776		2.92	743		3.1	14.8		2.45	80.6		2.24
Mercury, Total	23	81.1		2.08	33.7		2.08	11.4		1.94	0.279		0.087	3.48		0.728

Notes:
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OLD ORCHARD COUNTRY CLUB
54 MONMOUTH ROAD
MONMOUTH COUNTY, NEW JERSEY

SAMPLE ID:	NJDEP Residential Soil Remediation Standards	T-2			T-3			T-4			T-5			T-6		
LAB ID:		L2126518-11			L2126518-14			L2126518-18			L2126518-21			L2126518-25		
COLLECTION DATE:		5/19/2021			5/19/2021			5/19/2021			5/19/2021			5/19/2021		
SAMPLE DEPTH:		(0-0.5')			(0-0.5')			(0-0.5')			(0-0.5')			(0-0.5')		
SAMPLE MATRIX:		SOIL			SOIL			SOIL			SOIL			SOIL		
ANALYTE	**(mg/kg)**	**Conc**	**Q**	**RL**	**Conc**	**Q**	**RL**	**Conc**	**Q**	**RL**	**Conc**	**Q**	**RL**	**Conc**	**Q**	**RL**
PESTICIDES																
Delta-BHC	NC	ND		0.00197	ND		0.0019	ND		0.00189	ND		0.00271	ND		0.00251
Lindane	0.57	ND		0.00082	ND		0.00079	ND		0.00078	ND		0.00113	ND		0.00105
Alpha-BHC	0.086	ND		0.00082	ND		0.00079	ND		0.00078	ND		0.00113	ND		0.00105
Beta-BHC	0.3	ND		0.00197	ND		0.0019	ND		0.00189	ND		0.00271	ND		0.00251
Heptachlor	0.15	ND		0.00098	ND		0.00095	ND		0.00094	ND		0.00136	ND		0.00126
Aldrin	0.041	ND		0.00197	ND		0.0019	ND		0.00189	ND		0.00271	ND		0.00251
Heptachlor epoxide	0.076	0.0065		0.0037	0.00977	P	0.00357	ND		0.00354	ND		0.00508	ND		0.00471
Endrin	19	ND		0.00082	ND		0.00079	ND		0.00078	ND		0.00113	ND		0.00105
Endrin aldehyde	NC	ND		0.00247	ND		0.00238	ND		0.00236	ND		0.00339	ND		0.00314
Endrin ketone	NC	ND		0.00197	ND		0.0019	ND		0.00189	ND		0.00271	ND		0.00251
Dieldrin	0.034	0.0456		0.00123	0.0805		0.00119	0.0515		0.00118	0.0198		0.00169	ND		0.00157
4,4'-DDE	2	0.398		0.00987	0.38		0.00952	0.0421		0.00189	0.303		0.0136	0.00592		0.00251
4,4'-DDD	2.3	0.00832		0.00197	0.00954		0.0019	0.00221		0.00189	ND		0.00271	ND		0.00251
4,4'-DDT	1.9	0.148		0.0037	0.109		0.00357	0.0255		0.00354	0.08		0.00508	0.00355	J	0.00471
Endosulfan I	NC	ND		0.00197	ND		0.0019	ND		0.00189	ND		0.00271	ND		0.00251
Endosulfan II	NC	ND		0.00197	ND		0.0019	ND		0.00189	ND		0.00271	ND		0.00251
Endosulfan (I and II)	470	ND		0.00197	ND		0.0019	ND		0.00189	ND		0.00271	ND		0.00251
Endosulfan sulfate	470	ND		0.00082	ND		0.00079	ND		0.00078	ND		0.00113	ND		0.00105
Methoxychlor	320	ND		0.0037	ND		0.00357	ND		0.00354	ND		0.00508	ND		0.00471
Toxaphene	0.49	ND		0.037	ND		0.0357	ND		0.0354	ND		0.0508	ND		0.0471
Chlordane (cis and trans)	0.27	0.00375		0.0164	0.01028		0.0158	0.00596		0.0158	ND		0.0226	ND		0.0209
cis-Chlordane	NC	0.00114	JIP	0.00247	0.00421	IP	0.00238	0.00344	P	0.00236	ND		0.00339	ND		0.00314
trans-Chlordane	NC	0.00261		0.00247	0.00607		0.00238	0.00252	P	0.00236	ND		0.00339	ND		0.00314
TOTAL METALS																
Arsenic, Total	19	12.2		0.486	6.29		0.47	3.97		0.468	17.4		0.688	5.76		0.611
Lead, Total	400	29.4		2.43	16.7		2.35	12.7		2.34	48.8		3.44	17.2		3.06
Mercury, Total	23	0.293		0.08	0.283		0.078	0.165		0.077	0.636		0.124	ND		0.118

Notes:
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P = The relative percent difference (RPD) between the two columns exceeds the method-specified criteria
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OLD ORCHARD COUNTRY CLUB
54 MONMOUTH ROAD
MONMOUTH COUNTY, NEW JERSEY

SAMPLE ID:	NJDEP Residential Soil Remediation Standards	T-7			T-8			T-9			T-10			T-11		
LAB ID:		L2126518-28			L2126518-31			L2126518-34			L2126518-37			L2126518-40		
COLLECTION DATE:		5/19/2021			5/19/2021			5/19/2021			5/19/2021			5/19/2021		
SAMPLE DEPTH:		(0-0.5')			(0-0.5')			(0-0.5')			(0-0.5')			(0-0.5')		
SAMPLE MATRIX:		SOIL			SOIL			SOIL			SOIL			SOIL		
ANALYTE	**(mg/kg)**	**Conc**	**Q**	**RL**	**Conc**	**Q**	**RL**	**Conc**	**Q**	**RL**	**Conc**	**Q**	**RL**	**Conc**	**Q**	**RL**
PESTICIDES																
Delta-BHC	NC	ND		0.00235	ND		0.00263	ND		0.00191	ND		0.00251	ND		0.00197
Lindane	0.57	ND		0.00097	ND		0.0011	ND		0.00079	ND		0.00104	ND		0.00082
Alpha-BHC	0.086	ND		0.00097	ND		0.0011	ND		0.00079	ND		0.00104	ND		0.00082
Beta-BHC	0.3	ND		0.00235	ND		0.00263	ND		0.00191	ND		0.00251	ND		0.00197
Heptachlor	0.15	ND		0.00118	ND		0.00132	ND		0.00095	ND		0.00125	ND		0.00098
Aldrin	0.041	ND		0.00235	ND		0.00263	ND		0.00191	ND		0.00251	ND		0.00197
Heptachlor epoxide	0.076	ND		0.00441	ND		0.00494	ND		0.00358	ND		0.0047	ND		0.0037
Endrin	19	ND		0.00097	ND		0.0011	ND		0.00079	ND		0.00104	ND		0.00082
Endrin aldehyde	NC	ND		0.00294	ND		0.00329	ND		0.00239	ND		0.00314	ND		0.00247
Endrin ketone	NC	ND		0.00235	ND		0.00263	ND		0.00191	ND		0.00251	ND		0.00197
Dieldrin	0.034	0.00831		0.00147	0.00212		0.00164	0.0232		0.00119	0.0274		0.00157	0.00091	J	0.00123
4,4'-DDE	2	0.0801		0.00235	0.00222	J	0.00263	0.178		0.00955	0.00576		0.00251	0.00314		0.00197
4,4'-DDD	2.3	0.00119	J	0.00235	ND		0.00263	0.00114	J	0.00191	ND		0.00251	ND		0.00197
4,4'-DDT	1.9	0.0221		0.00441	ND		0.00494	0.0672		0.00358	0.00672	P	0.0047	0.00377		0.0037
Endosulfan I	NC	ND		0.00235	ND		0.00263	ND		0.00191	ND		0.00251	ND		0.00197
Endosulfan II	NC	ND		0.00235	ND		0.00263	ND		0.00191	ND		0.00251	ND		0.00197
Endosulfan (I and II)	470	ND		0.00235	ND		0.00263	ND		0.00191	ND		0.00251	ND		0.00197
Endosulfan sulfate	470	ND		0.00097	ND		0.0011	ND		0.00079	ND		0.00104	ND		0.00082
Methoxychlor	320	ND		0.00441	ND		0.00494	ND		0.00358	ND		0.0047	ND		0.0037
Toxaphene	0.49	ND		0.0441	ND		0.0494	ND		0.0358	ND		0.047	ND		0.037
Chlordane (cis and trans)	0.27	ND		0.0196	ND		0.0219	ND		0.0159	ND		0.0209	ND		0.0164
cis-Chlordane	NC	ND		0.00294	ND		0.00329	ND		0.00239	ND		0.00314	ND		0.00247
trans-Chlordane	NC	ND		0.00294	ND		0.00329	ND		0.00239	ND		0.00314	ND		0.00247
TOTAL METALS																
Arsenic, Total	19	13.3		0.584	11.9		0.658	9.39		0.48	6.22		0.614	12.1		0.48
Lead, Total	400	39.6		2.92	30.6		3.29	21		2.4	13.1		3.07	26.4		2.4
Mercury, Total	23	0.111		0.106	0.384		0.138	0.091		0.088	ND		0.126	0.133		0.088

Notes:
Results reported in milligrams per kilogram (mg/kg) or parts per million
Exceedances (if any) are highlighted
ND = Not detected above laboratory's reporting limit (RL)
NA = Not analyzed
NC = No criteria
J = Estimated value, Concentration is below the RL but above the Method Detection Limit (MDL)
P = The relative percent difference (RPD) between the two columns exceeds the method-specified criteria
I = The lower value for the two columns has been reported due to obvious interference

TABLE 1: SOIL ANALYTICAL RESULTS
OLD ORCHARD COUNTRY CLUB
54 MONMOUTH ROAD
MONMOUTH COUNTY, NEW JERSEY

SAMPLE ID:	NJDEP Residential Soil Remediation Standards	T-12			T-13			T-14			T-15			T-16		
LAB ID:		L2126518-43			L2126518-47			L2126518-50			L2126518-53			L2126518-56		
COLLECTION DATE:		5/19/2021			5/19/2021			5/19/2021			5/19/2021			5/19/2021		
SAMPLE DEPTH:		(0-0.5')			(0-0.5')			(0-0.5')			(0-0.5')			(0-0.5')		
SAMPLE MATRIX:		SOIL			SOIL			SOIL			SOIL			SOIL		
ANALYTE	**(mg/kg)**	**Conc**	**Q**	**RL**	**Conc**	**Q**	**RL**	**Conc**	**Q**	**RL**	**Conc**	**Q**	**RL**	**Conc**	**Q**	**RL**
PESTICIDES																
Delta-BHC	NC	ND		0.00181	ND		0.00178	ND		0.00248	ND		0.00192	ND		0.0018
Lindane	0.57	ND		0.00075	ND		0.00074	ND		0.00103	ND		0.0008	ND		0.00075
Alpha-BHC	0.086	ND		0.00075	ND		0.00074	ND		0.00103	ND		0.0008	ND		0.00075
Beta-BHC	0.3	ND		0.00181	ND		0.00178	ND		0.00248	ND		0.00192	ND		0.0018
Heptachlor	0.15	ND		0.0009	ND		0.00089	ND		0.00124	ND		0.00096	ND		0.0009
Aldrin	0.041	ND		0.00181	ND		0.00178	ND		0.00248	ND		0.00192	ND		0.0018
Heptachlor epoxide	0.076	0.00334	J	0.0034	ND		0.00334	0.0284		0.00464	ND		0.0036	ND		0.00338
Endrin	19	ND		0.00075	ND		0.00074	ND		0.00103	ND		0.0008	ND		0.00075
Endrin aldehyde	NC	ND		0.00227	ND		0.00223	ND		0.0031	ND		0.0024	ND		0.00225
Endrin ketone	NC	ND		0.00181	ND		0.00178	ND		0.00248	ND		0.00192	ND		0.0018
Dieldrin	0.034	0.0364		0.00113	0.0175		0.00111	0.0874		0.00155	0.00861		0.0012	ND		0.00113
4,4'-DDE	2	0.438		0.0181	0.00991		0.00178	0.0892		0.00248	0.141		0.0096	0.264		0.00902
4,4'-DDD	2.3	0.00194		0.00181	0.00074	J	0.00178	ND		0.00248	ND		0.00192	ND		0.0018
4,4'-DDT	1.9	0.168		0.034	0.0118	P	0.00334	0.0337		0.00464	0.054		0.0036	0.0969		0.00338
Endosulfan I	NC	ND		0.00181	ND		0.00178	ND		0.00248	ND		0.00192	ND		0.0018
Endosulfan II	NC	ND		0.00181	ND		0.00178	ND		0.00248	ND		0.00192	ND		0.0018
Endosulfan (I and II)	470	ND		0.00181	ND		0.00178	ND		0.00248	ND		0.00192	ND		0.0018
Endosulfan sulfate	470	ND		0.00075	ND		0.00074	ND		0.00103	ND		0.0008	ND		0.00075
Methoxychlor	320	ND		0.0034	ND		0.00334	ND		0.00464	ND		0.0036	ND		0.00338
Toxaphene	0.49	ND		0.034	ND		0.0334	ND		0.0464	ND		0.036	ND		0.0338
Chlordane (cis and trans)	0.27	ND		0.0151	ND		0.0148	0.0265		0.0206	ND		0.016	ND		0.015
cis-Chlordane	NC	ND		0.00227	ND		0.00223	0.013	IP	0.0031	ND		0.0024	ND		0.00225
trans-Chlordane	NC	ND		0.00227	ND		0.00223	0.0135		0.0031	ND		0.0024	ND		0.00225
TOTAL METALS																
Arsenic, Total	19	12.3		0.463	6.88		0.437	12.2		0.607	12.4		0.493	9.11		0.469
Lead, Total	400	25.1		2.32	16		2.19	35.3		3.03	35.5		2.46	24.1		2.35
Mercury, Total	23	0.088		0.084	0.069	J	0.077	0.552		0.115	0.212		0.077	0.152		0.078

Notes:
Results reported in milligrams per kilogram (mg/kg) or parts per million
Exceedances (if any) are highlighted
ND = Not detected above laboratory's reporting limit (RL)
NA = Not analyzed
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J = Estimated value, Concentration is below the RL but above the Method Detection Limit (MDL)
P = The relative percent difference (RPD) between the two columns exceeds the method-specified criteria
I = The lower value for the two columns has been reported due to obvious interference

TABLE 1: SOIL ANALYTICAL RESULTS
OLD ORCHARD COUNTRY CLUB
54 MONMOUTH ROAD
MONMOUTH COUNTY, NEW JERSEY

SAMPLE ID:	NJDEP Residential Soil Remediation Standards	T-17			T-18			F-1			F-2			F-3		
LAB ID:		L2126518-59			L2126518-61			L2126518-09			L2126518-12			L2126518-15		
COLLECTION DATE:		5/19/2021			5/19/2021			5/19/2021			5/19/2021			5/19/2021		
SAMPLE DEPTH:		(0-0.5')			(0-0.5')			(0-0.5')			(0-0.5')			(0-0.5')		
SAMPLE MATRIX:		SOIL			SOIL			SOIL			SOIL			SOIL		
ANALYTE	**(mg/kg)**	**Conc**	**Q**	**RL**	**Conc**	**Q**	**RL**	**Conc**	**Q**	**RL**	**Conc**	**Q**	**RL**	**Conc**	**Q**	**RL**
PESTICIDES																
Delta-BHC	NC	ND		0.00191	ND		0.00206	ND		0.00248	ND		0.00239	ND		0.00229
Lindane	0.57	ND		0.00079	ND		0.00085	ND		0.00104	ND		0.00099	ND		0.00095
Alpha-BHC	0.086	ND		0.00079	ND		0.00085	ND		0.00104	ND		0.00099	ND		0.00095
Beta-BHC	0.3	ND		0.00191	ND		0.00206	ND		0.00248	ND		0.00239	ND		0.00229
Heptachlor	0.15	ND		0.00095	ND		0.00103	ND		0.00124	ND		0.0012	ND		0.00114
Aldrin	0.041	ND		0.00191	ND		0.00206	ND		0.00248	ND		0.00239	ND		0.00229
Heptachlor epoxide	0.076	ND		0.00358	ND		0.00385	ND		0.00466	ND		0.00448	0.00174	J	0.00429
Endrin	19	ND		0.00079	ND		0.00085	ND		0.00104	ND		0.00099	ND		0.00095
Endrin aldehyde	NC	ND		0.00239	ND		0.00257	ND		0.0031	ND		0.00299	ND		0.00286
Endrin ketone	NC	ND		0.00191	ND		0.00206	ND		0.00248	ND		0.00239	ND		0.00229
Dieldrin	0.034	ND		0.0012	ND		0.00128	0.00184		0.00155	0.014		0.00149	0.0133		0.00143
4,4'-DDE	2	0.0266		0.00191	0.00439		0.00206	0.0167		0.00248	0.0423		0.00239	0.0847		0.00229
4,4'-DDD	2.3	0.00173	J	0.00191	0.00122	J	0.00206	ND		0.00248	ND		0.00239	0.00172	J	0.00229
4,4'-DDT	1.9	0.0266		0.00358	0.00694		0.00385	0.0113		0.00466	0.0178		0.00448	0.0375		0.00429
Endosulfan I	NC	ND		0.00191	ND		0.00206	ND		0.00248	ND		0.00239	ND		0.00229
Endosulfan II	NC	ND		0.00191	ND		0.00206	ND		0.00248	ND		0.00239	ND		0.00229
Endosulfan (I and II)	470	ND		0.00191	ND		0.00206	ND		0.00248	ND		0.00239	ND		0.00229
Endosulfan sulfate	470	ND		0.00079	ND		0.00085	ND		0.00104	ND		0.00099	ND		0.00095
Methoxychlor	320	ND		0.00358	ND		0.00385	ND		0.00466	ND		0.00448	ND		0.00429
Toxaphene	0.49	ND		0.0358	ND		0.0385	ND		0.0466	ND		0.0448	ND		0.0429
Chlordane (cis and trans)	0.27	ND		0.0159	ND		0.0171	ND		0.0207	ND		0.0199	ND		0.0191
cis-Chlordane	NC	ND		0.00239	ND		0.00257	ND		0.0031	ND		0.00299	ND		0.00286
trans-Chlordane	NC	ND		0.00239	ND		0.00257	ND		0.0031	ND		0.00299	ND		0.00286
TOTAL METALS																
Arsenic, Total	19	7.37		0.483	9.72		0.53	11.2		0.636	9.63		0.602	11.6		0.547
Lead, Total	400	15.3		2.42	19.6		2.65	15.6		3.18	17.2		3.01	13.5		2.74
Mercury, Total	23	0.107		0.078	0.411		0.088	-		-	-		-	-		-

Notes:
Results reported in milligrams per kilogram (mg/kg) or parts per million
Exceedances (if any) are highlighted
ND = Not detected above laboratory's reporting limit (RL)
NA = Not analyzed
NC = No criteria
J = Estimated value, Concentration is below the RL but above the Method Detection Limit (MDL)
P = The relative percent difference (RPD) between the two columns exceeds the method-specified criteria
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TABLE 1: SOIL ANALYTICAL RESULTS
OLD ORCHARD COUNTRY CLUB
54 MONMOUTH ROAD
MONMOUTH COUNTY, NEW JERSEY

SAMPLE ID:	NJDEP Residential Soil Remediation Standards	F-4			F-5			F-6			F-7			F-8		
LAB ID:		L2126518-19			L2126518-22			L2126518-26			L2126518-29			L2126518-32		
COLLECTION DATE:		5/19/2021			5/19/2021			5/19/2021			5/19/2021			5/19/2021		
SAMPLE DEPTH:		(0-0.5')			(0-0.5')			(0-0.5')			(0-0.5')			(0-0.5')		
SAMPLE MATRIX:		SOIL			SOIL			SOIL			SOIL			SOIL		
ANALYTE	**(mg/kg)**	**Conc**	**Q**	**RL**	**Conc**	**Q**	**RL**	**Conc**	**Q**	**RL**	**Conc**	**Q**	**RL**	**Conc**	**Q**	**RL**
PESTICIDES																
Delta-BHC	NC	ND		0.00244	ND		0.00183	ND		0.00246	ND		0.00208	ND		0.00278
Lindane	0.57	ND		0.00102	ND		0.00076	ND		0.00102	ND		0.00086	ND		0.00116
Alpha-BHC	0.086	ND		0.00102	ND		0.00076	ND		0.00102	ND		0.00086	ND		0.00116
Beta-BHC	0.3	ND		0.00244	ND		0.00183	ND		0.00246	ND		0.00208	ND		0.00278
Heptachlor	0.15	ND		0.00122	ND		0.00091	ND		0.00123	ND		0.00104	ND		0.00139
Aldrin	0.041	ND		0.00244	ND		0.00183	ND		0.00246	ND		0.00208	ND		0.00278
Heptachlor epoxide	0.076	0.00572		0.00458	0.00362		0.00342	ND		0.00461	ND		0.0039	ND		0.00521
Endrin	19	ND		0.00102	ND		0.00076	ND		0.00102	ND		0.00086	ND		0.00116
Endrin aldehyde	NC	ND		0.00305	ND		0.00228	ND		0.00308	ND		0.0026	ND		0.00347
Endrin ketone	NC	ND		0.00244	ND		0.00183	ND		0.00246	ND		0.00208	ND		0.00278
Dieldrin	0.034	0.077		0.00152	0.129		0.00114	ND		0.00154	0.0135		0.0013	0.0186		0.00174
4,4'-DDE	2	0.138		0.00244	0.0829		0.00183	0.00664		0.00246	0.0292		0.00208	0.0736		0.00278
4,4'-DDD	2.3	0.00281		0.00244	ND		0.00183	ND		0.00246	ND		0.00208	ND		0.00278
4,4'-DDT	1.9	0.026		0.00458	0.0334		0.00342	0.00684	P	0.00461	0.0263		0.0039	0.0343		0.00521
Endosulfan I	NC	ND		0.00244	ND		0.00183	ND		0.00246	ND		0.00208	ND		0.00278
Endosulfan II	NC	ND		0.00244	ND		0.00183	ND		0.00246	ND		0.00208	ND		0.00278
Endosulfan (I and II)	470	ND		0.00244	ND		0.00183	ND		0.00246	ND		0.00208	ND		0.00278
Endosulfan sulfate	470	ND		0.00102	ND		0.00076	ND		0.00102	ND		0.00086	ND		0.00116
Methoxychlor	320	ND		0.00458	ND		0.00342	ND		0.00461	ND		0.0039	ND		0.00521
Toxaphene	0.49	ND		0.0458	ND		0.0342	ND		0.0461	ND		0.039	ND		0.0521
Chlordane (cis and trans)	0.27	0.00131		0.0203	ND		0.0152	ND		0.0205	ND		0.0174	ND		0.0231
cis-Chlordane	NC	ND		0.00305	ND		0.00228	ND		0.00308	ND		0.0026	ND		0.00347
trans-Chlordane	NC	0.00131	J	0.00305	ND		0.00228	ND		0.00308	ND		0.0026	ND		0.00347
TOTAL METALS																
Arsenic, Total	19	6.1		0.606	3.92		0.451	30.6		0.62	8.34		0.521	9.15		0.707
Lead, Total	400	15		3.03	11.1		2.25	18.3		3.1	14.6		2.61	17		3.54
Mercury, Total	23	-		-	-		-	-		-	-		-	-		-

Notes:
Results reported in milligrams per kilogram (mg/kg) or parts per million
Exceedances (if any) are highlighted
ND = Not detected above laboratory's reporting limit (RL)
NA = Not analyzed
NC = No criteria
J = Estimated value, Concentration is below the RL but above the Method Detection Limit (MDL)
P = The relative percent difference (RPD) between the two columns exceeds the method-specified criteria
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TABLE 1: SOIL ANALYTICAL RESULTS
OLD ORCHARD COUNTRY CLUB
54 MONMOUTH ROAD
MONMOUTH COUNTY, NEW JERSEY

SAMPLE ID:	NJDEP Residential Soil Remediation Standards	F-9			F-10			F-11			F-12			F-13		
LAB ID:		L2126518-35			L2126518-38			L2126518-41			L2126518-44			L2126518-48		
COLLECTION DATE:		5/19/2021			5/19/2021			5/19/2021			5/19/2021			5/19/2021		
SAMPLE DEPTH:		(0-0.5')			(0-0.5')			(0-0.5')			(0-0.5')			(0-0.5')		
SAMPLE MATRIX:		SOIL			SOIL			SOIL			SOIL			SOIL		
ANALYTE	**(mg/kg)**	**Conc**	**Q**	**RL**	**Conc**	**Q**	**RL**	**Conc**	**Q**	**RL**	**Conc**	**Q**	**RL**	**Conc**	**Q**	**RL**
PESTICIDES																
Delta-BHC	NC	ND		0.00203	ND		0.00222	ND		0.00188	ND		0.002	ND		0.00234
Lindane	0.57	ND		0.00084	ND		0.00092	ND		0.00078	ND		0.00083	ND		0.00097
Alpha-BHC	0.086	ND		0.00084	ND		0.00092	ND		0.00078	ND		0.00083	ND		0.00097
Beta-BHC	0.3	ND		0.00203	ND		0.00222	ND		0.00188	ND		0.002	ND		0.00234
Heptachlor	0.15	ND		0.00102	ND		0.00111	ND		0.00094	ND		0.001	ND		0.00117
Aldrin	0.041	ND		0.00203	ND		0.00222	ND		0.00188	ND		0.002	ND		0.00234
Heptachlor epoxide	0.076	ND		0.00381	ND		0.00416	0.00214	J	0.00352	0.0027	J	0.00375	ND		0.00438
Endrin	19	ND		0.00084	ND		0.00092	ND		0.00078	ND		0.00083	ND		0.00097
Endrin aldehyde	NC	ND		0.00254	ND		0.00277	ND		0.00235	ND		0.0025	ND		0.00292
Endrin ketone	NC	ND		0.00203	ND		0.00222	ND		0.00188	ND		0.002	ND		0.00234
Dieldrin	0.034	0.0354		0.00127	0.072		0.00139	0.0143		0.00117	0.0194		0.00125	0.503		0.00731
4,4'-DDE	2	0.0467		0.00203	0.0917		0.00222	0.0764		0.00188	0.242		0.01	0.218		0.0117
4,4'-DDD	2.3	0.00162	J	0.00203	0.0008	J	0.00222	ND		0.00188	ND		0.002	0.0178		0.00234
4,4'-DDT	1.9	0.0194	P	0.00381	0.0343		0.00416	0.0564		0.00352	0.0768		0.00375	0.0721		0.00438
Endosulfan I	NC	ND		0.00203	ND		0.00222	ND		0.00188	ND		0.002	ND		0.00234
Endosulfan II	NC	ND		0.00203	ND		0.00222	ND		0.00188	ND		0.002	ND		0.00234
Endosulfan (I and II)	470	ND		0.00203	ND		0.00222	ND		0.00188	ND		0.002	ND		0.00234
Endosulfan sulfate	470	ND		0.00084	ND		0.00092	ND		0.00078	ND		0.00083	ND		0.00097
Methoxychlor	320	ND		0.00381	ND		0.00416	ND		0.00352	ND		0.00375	ND		0.00438
Toxaphene	0.49	ND		0.0381	ND		0.0416	ND		0.0352	ND		0.0375	ND		0.0438
Chlordane (cis and trans)	0.27	ND		0.0169	ND		0.0185	ND		0.0157	ND		0.0167	ND		0.0195
cis-Chlordane	NC	ND		0.00254	ND		0.00277	ND		0.00235	ND		0.0025	ND		0.00292
trans-Chlordane	NC	ND		0.00254	ND		0.00277	ND		0.00235	ND		0.0025	ND		0.00292
TOTAL METALS																
Arsenic, Total	19	5.57		0.5	9.2		0.547	20.4		0.473	6.25		0.491	4.69		0.59
Lead, Total	400	16.5		2.5	16.9		2.74	12.7		2.36	19		2.45	15.9		2.95
Mercury, Total	23	-		-	-		-	-		-	-		-	-		-

Notes:
Results reported in milligrams per kilogram (mg/kg) or parts per million
Exceedances (if any) are highlighted
ND = Not detected above laboratory's reporting limit (RL)
NA = Not analyzed
NC = No criteria
J = Estimated value, Concentration is below the RL but above the Method Detection Limit (MDL)
P = The relative percent difference (RPD) between the two columns exceeds the method-specified criteria
I = The lower value for the two columns has been reported due to obvious interference

TABLE 1: SOIL ANALYTICAL RESULTS
OLD ORCHARD COUNTRY CLUB
54 MONMOUTH ROAD
MONMOUTH COUNTY, NEW JERSEY

SAMPLE ID:	NJDEP Residential Soil Remediation Standards	F-14			F-15			F-16			F-17			F-18		
LAB ID:		L2126518-51			L2126518-54			L2126518-57			L2126518-64			L2126518-62		
COLLECTION DATE:		5/19/2021			5/19/2021			5/19/2021			5/19/2021			5/19/2021		
SAMPLE DEPTH:		(0-0.5')			(0-0.5')			(0-0.5')			(0-0.5')			(0-0.5')		
SAMPLE MATRIX:		SOIL			SOIL			SOIL			SOIL			SOIL		
ANALYTE	**(mg/kg)**	**Conc**	**Q**	**RL**	**Conc**	**Q**	**RL**	**Conc**	**Q**	**RL**	**Conc**	**Q**	**RL**	**Conc**	**Q**	**RL**
PESTICIDES																
Delta-BHC	NC	ND		0.0022	ND		0.00184	ND		0.00254	ND		0.0024	ND		0.00252
Lindane	0.57	ND		0.00091	ND		0.00076	ND		0.00106	ND		0.001	ND		0.00105
Alpha-BHC	0.086	ND		0.00091	ND		0.00076	ND		0.00106	ND		0.001	ND		0.00105
Beta-BHC	0.3	ND		0.0022	ND		0.00184	ND		0.00254	ND		0.0024	ND		0.00252
Heptachlor	0.15	ND		0.0011	ND		0.00092	ND		0.00127	ND		0.0012	ND		0.00126
Aldrin	0.041	ND		0.0022	ND		0.00184	ND		0.00254	ND		0.0024	ND		0.00252
Heptachlor epoxide	0.076	0.00296	J	0.00412	0.00396		0.00346	ND		0.00477	ND		0.0045	0.00182	J	0.00474
Endrin	19	ND		0.00091	ND		0.00076	ND		0.00106	ND		0.001	ND		0.00105
Endrin aldehyde	NC	ND		0.00275	ND		0.0023	ND		0.00318	ND		0.003	ND		0.00316
Endrin ketone	NC	ND		0.0022	ND		0.00184	ND		0.00254	ND		0.0024	ND		0.00252
Dieldrin	0.034	0.0118		0.00137	0.0632		0.00115	0.00969		0.00159	ND		0.0015	0.0317		0.00158
4,4'-DDE	2	0.0345		0.0022	0.566		0.0184	0.0225		0.00254	0.0666		0.0024	0.0312		0.00252
4,4'-DDD	2.3	ND		0.0022	0.00344		0.00184	ND		0.00254	0.00316		0.0024	0.0046		0.00252
4,4'-DDT	1.9	0.00764		0.00412	0.278		0.0346	0.0112		0.00477	0.0386		0.0045	0.0278		0.00474
Endosulfan I	NC	ND		0.0022	ND		0.00184	ND		0.00254	ND		0.0024	ND		0.00252
Endosulfan II	NC	ND		0.0022	ND		0.00184	ND		0.00254	ND		0.0024	ND		0.00252
Endosulfan (I and II)	470	ND		0.0022	ND		0.00184	ND		0.00254	ND		0.0024	ND		0.00252
Endosulfan sulfate	470	ND		0.00091	ND		0.00076	ND		0.00106	ND		0.001	ND		0.00105
Methoxychlor	320	ND		0.00412	ND		0.00346	ND		0.00477	ND		0.0045	ND		0.00474
Toxaphene	0.49	ND		0.0412	ND		0.0346	ND		0.0477	ND		0.045	ND		0.0474
Chlordane (cis and trans)	0.27	0.01418		0.0183	ND		0.0154	ND		0.0212	ND		0.02	ND		0.021
cis-Chlordane	NC	0.00777	IP	0.00275	ND		0.0023	ND		0.00318	ND		0.003	ND		0.00316
trans-Chlordane	NC	0.00641		0.00275	ND		0.0023	ND		0.00318	ND		0.003	ND		0.00316
TOTAL METALS																
Arsenic, Total	19	7.83		0.564	28.4		0.472	7.97		0.631	43.3		0.589	11		0.633
Lead, Total	400	44.2		2.82	12.5		2.36	15		3.16	15.1		2.94	23		3.16
Mercury, Total	23	-		-	-		-	-		-	-		-	-		-

Notes:
Results reported in milligrams per kilogram (mg/kg) or parts per million
Exceedances (if any) are highlighted
ND = Not detected above laboratory's reporting limit (RL)
NA = Not analyzed
NC = No criteria
J = Estimated value, Concentration is below the RL but above the Method Detection Limit (MDL)
P = The relative percent difference (RPD) between the two columns exceeds the method-specified criteria
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TABLE 1: SOIL ANALYTICAL RESULTS
OLD ORCHARD COUNTRY CLUB
54 MONMOUTH ROAD
MONMOUTH COUNTY, NEW JERSEY

SAMPLE ID:	NJDEP Residential Soil Remediation Standards	O-1			O-2			O-3			O-4			O-5		
LAB ID:		L2126518-05			L2126518-06			L2126518-07			L2126518-46			L2126518-17		
COLLECTION DATE:		5/19/2021			5/19/2021			5/19/2021			5/19/2021			5/19/2021		
SAMPLE DEPTH:		(0-0.5')			(0-0.5')			(0-0.5')			(0-0.5')			(0-0.5')		
SAMPLE MATRIX:		SOIL			SOIL			SOIL			SOIL			SOIL		
ANALYTE	**(mg/kg)**	**Conc**	**Q**	**RL**	**Conc**	**Q**	**RL**	**Conc**	**Q**	**RL**	**Conc**	**Q**	**RL**	**Conc**	**Q**	**RL**
PESTICIDES																
Delta-BHC	NC	ND		0.00467	ND		0.00525	ND		0.00195	ND		0.00232	ND		0.00246
Lindane	0.57	ND		0.00194	ND		0.00219	ND		0.00081	ND		0.00096	ND		0.00102
Alpha-BHC	0.086	ND		0.00194	ND		0.00219	ND		0.00081	ND		0.00096	ND		0.00102
Beta-BHC	0.3	ND		0.00467	ND		0.00525	ND		0.00195	ND		0.00232	ND		0.00246
Heptachlor	0.15	ND		0.00233	ND		0.00262	ND		0.00097	ND		0.00116	ND		0.00123
Aldrin	0.041	0.00378	JP	0.00467	0.00689		0.00525	ND		0.00195	ND		0.00232	ND		0.00246
Heptachlor epoxide	0.076	0.0244		0.00876	ND		0.00984	ND		0.00366	ND		0.00434	ND		0.00461
Endrin	19	ND		0.00194	ND		0.00219	ND		0.00081	ND		0.00096	ND		0.00102
Endrin aldehyde	NC	ND		0.00584	ND		0.00656	ND		0.00244	ND		0.00289	ND		0.00308
Endrin ketone	NC	ND		0.00467	ND		0.00525	ND		0.00195	ND		0.00232	ND		0.00246
Dieldrin	0.034	ND		0.00292	0.00964	P	0.00328	0.00313		0.00122	ND		0.00145	ND		0.00154
4,4'-DDE	2	0.00728	P	0.00467	0.0145	P	0.00525	0.0195		0.00195	ND		0.00232	ND		0.00246
4,4'-DDD	2.3	ND		0.00467	ND		0.00525	0.00502		0.00195	ND		0.00232	ND		0.00246
4,4'-DDT	1.9	ND		0.00876	ND		0.00984	0.047		0.00366	ND		0.00434	ND		0.00461
Endosulfan I	NC	ND		0.00467	ND		0.00525	ND		0.00195	ND		0.00232	ND		0.00246
Endosulfan II	NC	ND		0.00467	ND		0.00525	ND		0.00195	ND		0.00232	ND		0.00246
Endosulfan (I and II)	470	ND		0.00467	ND		0.00525	ND		0.00195	ND		0.00232	ND		0.00246
Endosulfan sulfate	470	ND		0.00194	ND		0.00219	ND		0.00081	ND		0.00096	ND		0.00102
Methoxychlor	320	ND		0.00876	ND		0.00984	ND		0.00366	ND		0.00434	ND		0.00461
Toxaphene	0.49	ND		0.0876	ND		0.0984	ND		0.0366	ND		0.0434	ND		0.0461
Chlordane (cis and trans)	0.27	0.206	P	0.0389	0.00977		0.0437	0.00988		0.0163	ND		0.0193	ND		0.0205
cis-Chlordane	NC	0.103	IP	0.00584	0.00304	JIP	0.00656	0.00669	P	0.00244	ND		0.00289	ND		0.00308
trans-Chlordane	NC	0.103		0.00584	0.00673		0.00656	0.00319		0.00244	ND		0.00289	ND		0.00308
TOTAL METALS																
Arsenic, Total	19	3.82		1.16	10.4		1.27	8.47		0.488	5.71		0.594	3.43		0.596
Lead, Total	400	77.1		5.79	19.8		6.34	58.1		2.44	22.6		2.97	13.5		2.98
Mercury, Total	23	-		-	-		-	-		-	-		-	-		-

Notes:
Results reported in milligrams per kilogram (mg/kg) or parts per million
Exceedances (if any) are highlighted
ND = Not detected above laboratory's reporting limit (RL)
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J = Estimated value, Concentration is below the RL but above the Method Detection Limit (MDL)
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TABLE 1: SOIL ANALYTICAL RESULTS
OLD ORCHARD COUNTRY CLUB
54 MONMOUTH ROAD
MONMOUTH COUNTY, NEW JERSEY

SAMPLE ID:	NJDEP Residential Soil Remediation Standards	O-6			WA-1			WA-2			WA-3			TRENCH-1		
LAB ID:		L2126518-60			L2126518-01			L2126518-02			L2126518-03			L2126518-04		
COLLECTION DATE:		5/19/2021			5/19/2021			5/19/2021			5/19/2021			5/19/2021		
SAMPLE DEPTH:		(0-0.5')			(0-0.5')			(0-0.5')			(0-0.5')			(0-0.5')		
SAMPLE MATRIX:		SOIL			SOIL			SOIL			SOIL			SOIL		
ANALYTE	**(mg/kg)**	**Conc**	**Q**	**RL**	**Conc**	**Q**	**RL**	**Conc**	**Q**	**RL**	**Conc**	**Q**	**RL**	**Conc**	**Q**	**RL**
PESTICIDES																
Delta-BHC	NC	ND		0.00212	ND		0.00168	ND		0.00172	ND		0.00216	ND		0.00278
Lindane	0.57	ND		0.00088	ND		0.00069	ND		0.00071	ND		0.0009	ND		0.00116
Alpha-BHC	0.086	ND		0.00088	ND		0.00069	ND		0.00071	ND		0.0009	ND		0.00116
Beta-BHC	0.3	ND		0.00212	ND		0.00168	ND		0.00172	0.0123	P	0.00216	ND		0.00278
Heptachlor	0.15	ND		0.00106	ND		0.00083	ND		0.00086	ND		0.00108	0.038		0.00139
Aldrin	0.041	ND		0.00212	ND		0.00168	ND		0.00172	ND		0.00216	ND		0.00278
Heptachlor epoxide	0.076	ND		0.00397	ND		0.00314	ND		0.00323	ND		0.00405	0.126	P	0.0052
Endrin	19	ND		0.00088	ND		0.00069	ND		0.00071	ND		0.0009	ND		0.00116
Endrin aldehyde	NC	ND		0.00265	ND		0.0021	ND		0.00216	ND		0.0027	ND		0.00347
Endrin ketone	NC	ND		0.00212	ND		0.00168	ND		0.00172	ND		0.00216	ND		0.00278
Dieldrin	0.034	ND		0.00132	ND		0.00105	ND		0.00108	0.00232		0.00135	ND		0.00173
4,4'-DDE	2	0.00177	J	0.00212	0.0183		0.00168	0.00506		0.00172	0.0678		0.00216	0.0245		0.00278
4,4'-DDD	2.3	ND		0.00212	ND		0.00168	0.00343		0.00172	ND		0.00216	ND		0.00278
4,4'-DDT	1.9	ND		0.00397	0.0306		0.00314	0.0137		0.00323	0.324		0.0202	0.117		0.0052
Endosulfan I	NC	ND		0.00212	ND		0.00168	ND		0.00172	ND		0.00216	ND		0.00278
Endosulfan II	NC	ND		0.00212	ND		0.00168	ND		0.00172	ND		0.00216	ND		0.00278
Endosulfan (I and II)	470	ND		0.00212	ND		0.00168	ND		0.00172	ND		0.00216	ND		0.00278
Endosulfan sulfate	470	ND		0.00088	ND		0.00069	ND		0.00071	ND		0.0009	ND		0.00116
Methoxychlor	320	ND		0.00397	ND		0.00314	ND		0.00323	ND		0.00405	ND		0.0052
Toxaphene	0.49	ND		0.0397	ND		0.0314	ND		0.0323	ND		0.0405	ND		0.052
Chlordane (cis and trans)	0.27	ND		0.0176	ND		0.014	0.02702		0.0144	0.0525		0.018	2.79	P	0.462
cis-Chlordane	NC	ND		0.00265	ND		0.0021	0.00842	IP	0.00216	0.0327	P	0.0027	1.27	IP	0.0694
trans-Chlordane	NC	ND		0.00265	ND		0.0021	0.0186	P	0.00216	0.0198		0.0027	1.52		0.0694
TOTAL METALS																
Arsenic, Total	19	7.3		0.525	3.31		0.411	8.4		0.421	9.21		0.525	6.74		0.653
Lead, Total	400	16.4		2.63	11.8		2.05	96.6		2.11	144		2.63	47.2		3.26
Mercury, Total	23	-		-	0.18		0.068	0.45		0.069	0.566		0.087	0.298		0.109

Notes:
Results reported in milligrams per kilogram (mg/kg) or parts per million
Exceedances (if any) are highlighted
ND = Not detected above laboratory's reporting limit (RL)
NA = Not analyzed
NC = No criteria
J = Estimated value, Concentration is below the RL but above the Method Detection Limit (MDL)
P = The relative percent difference (RPD) between the two columns exceeds the method-specified criteria
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FAIRWAY 4: SOIL ANALYTICAL RESULTS
OLD ORCHARD COUNTRY CLUB
54 MONMOUTH ROAD
EATONTOWN, NJ

SAMPLE ID:	NJDEP 2021 Residential Soil Remediation Standards	F-4			F-4A			F-4B			F-4-1			F-4-1A		
ALPHA LAB ID:		L2126518-19			L2137339-01			L2137339-02			L2137339-04			L2137339-05		
COLLECTION DATE:		5/19/2021			7/12/2021			7/12/2021			7/12/2021			7/12/2021		
SAMPLE DEPTH:		0-0.5'			1'-1.5'			2'-2.5'			0-0.5'			1'-1.5'		
SAMPLE MATRIX:		SOIL			SOIL			SOIL			SOIL			SOIL		
ANALYTE	(mg/kg)	Conc	Q	RL	Conc	Q	RL	Conc	Q	RL	Conc	Q	RL	Conc	Q	RL
PESTICIDES																
Dieldrin	0.034	0.077		0.00152	0.064		0.00109	0.00586		0.00109	0.0443		0.00116	0.00851		0.00109

Notes:
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ND = Not detected above laboratory's reporting limit (RL)
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J = Estimated value, Concentration is below the RL but above the Method Detection Limit (MDL)
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FAIRWAY 4: SOIL ANALYTICAL RESULTS
OLD ORCHARD COUNTRY CLUB
54 MONMOUTH ROAD
EATONTOWN, NJ

SAMPLE ID:	NJDEP 2021 Residential Soil Remediation Standards	F-4-2			F-4-2A			F-4-3			F-4-3A			F-4-4		
ALPHA LAB ID:		L2137339-08			L2137339-09			L2137339-12			L2137339-13			L2137339-16		
COLLECTION DATE:		7/12/2021			7/12/2021			7/12/2021			7/12/2021			7/12/2021		
SAMPLE DEPTH:		0-0.5'			1'-1.5'			0-0.5'			1'-1.5'			0-0.5'		
SAMPLE MATRIX:		SOIL			SOIL			SOIL			SOIL			SOIL		
ANALYTE	(mg/kg)	Conc	Q	RL	Conc	Q	RL	Conc	Q	RL	Conc	Q	RL	Conc	Q	RL
PESTICIDES																
Dieldrin	0.034	0.0786		0.0011	ND		0.00113	0.374		0.0116	0.0019		0.00114	0.102		0.00113

Notes:
Results reported in milligrams per kilogram (mg/kg) or parts per million
Exceedances (if any) are highlighted
ND = Not detected above laboratory's reporting limit (RL)
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FAIRWAY 4: SOIL ANALYTICAL RESULTS
OLD ORCHARD COUNTRY CLUB
54 MONMOUTH ROAD
EATONTOWN, NJ

SAMPLE ID:	NJDEP 2021 Residential Soil Remediation Standards	F-4-4A			F-4-5			F-4-6			F-4-6A			F-4-7		
ALPHA LAB ID:		L2137339-17			L2137339-58			L2137339-62			L2137339-63			L2137339-66		
COLLECTION DATE:		7/12/2021			7/12/2021			7/12/2021			7/12/2021			7/12/2021		
SAMPLE DEPTH:		1'-1.5'			0-0.5'			0-0.5'			1'-1.5'			0-0.5'		
SAMPLE MATRIX:		SOIL			SOIL			SOIL			SOIL			SOIL		
ANALYTE	(mg/kg)	Conc	Q	RL	Conc	Q	RL	Conc	Q	RL	Conc	Q	RL	Conc	Q	RL
PESTICIDES																
Dieldrin	0.034	0.00444		0.00109	0.0206		0.00116	0.226		0.00576	0.00596		0.00127	0.0238		0.00117

Notes:
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FAIRWAY 5: SOIL ANALYTICAL RESULTS
OLD ORCHARD COUNTRY CLUB
54 MONMOUTH ROAD
EATONTOWN, NJ

SAMPLE ID:	NJDEP 2021 Residential Soil Remediation Standards	F-5			F-5A			F-5-1			F-5-1A			F-5-2		
ALPHA LAB ID:		L2126518-22			L2137339-20			L2137339-23			L2137339-24			L2137339-27		
COLLECTION DATE:		5/19/2021			7/12/2021			7/12/2021			7/12/2021			7/12/2021		
SAMPLE DEPTH:		0-0.5'			1'-1.5'			0-0.5'			1'-1.5'			0-0.5'		
SAMPLE MATRIX:		SOIL			SOIL			SOIL			SOIL			SOIL		
ANALYTE	(mg/kg)	Conc	Q	RL	Conc	Q	RL	Conc	Q	RL	Conc	Q	RL	Conc	Q	RL
PESTICIDES																
Dieldrin	0.034	0.129		0.00114	0.00177		0.00117	0.0695		0.00119	0.016		0.00112	0.49		0.0113

Notes:
Results reported in milligrams per kilogram (mg/kg) or parts per million
Exceedances (if any) are highlighted
ND = Not detected above laboratory's reporting limit (RL)
NA = Not analyzed
NC = No criteria
J = Estimated value, Concentration is below the RL but above the Method Detection Limit (MDL)
P = The relative percent difference (RPD) between the two columns exceeds the method-specified criteria
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FAIRWAY 5: SOIL ANALYTICAL RESULTS
OLD ORCHARD COUNTRY CLUB
54 MONMOUTH ROAD
EATONTOWN, NJ

SAMPLE ID:	NJDEP 2021 Residential Soil Remediation Standards	F-5-2A			F-5-3			F-5-3A			F-5-4			F-5-4A		
ALPHA LAB ID:		L2137339-28			L2137339-31			L2137339-32			L2137339-35			L2137339-36		
COLLECTION DATE:		7/12/2021			7/12/2021			7/12/2021			7/12/2021			7/12/2021		
SAMPLE DEPTH:		1'-1.5'			0-0.5'			1'-1.5'			0-0.5'			1'-1.5'		
SAMPLE MATRIX:		SOIL			SOIL			SOIL			SOIL			SOIL		
ANALYTE	(mg/kg)	Conc	Q	RL	Conc	Q	RL	Conc	Q	RL	Conc	Q	RL	Conc	Q	RL
PESTICIDES																
Dieldrin	0.034	0.00452		0.00114	0.183		0.00539	0.00562		0.0011	0.126		0.00108	0.0488		0.00113

Notes:
Results reported in milligrams per kilogram (mg/kg) or parts per million
Exceedances (if any) are highlighted
ND = Not detected above laboratory's reporting limit (RL)
NA = Not analyzed
NC = No criteria
J = Estimated value, Concentration is below the RL but above the Method Detection Limit (MDL)
P = The relative percent difference (RPD) between the two columns exceeds the method-specified criteria
I = The lower value for the two columns has been reported due to obvious interference

FAIRWAY 5: SOIL ANALYTICAL RESULTS
OLD ORCHARD COUNTRY CLUB
54 MONMOUTH ROAD
EATONTOWN, NJ

SAMPLE ID:	NJDEP 2021 Residential Soil Remediation Standards	F-5-4B			F-5-5			F-5-6			F-5-7		
ALPHA LAB ID:		L2137339-37			L2137339-70			L2137339-74			L2137339-78		
COLLECTION DATE:		7/12/2021			7/12/2021			7/12/2021			7/12/2021		
SAMPLE DEPTH:		2'-2.5'			0-0.5'			0-0.5'			0-0.5'		
SAMPLE MATRIX:		SOIL			SOIL			SOIL			SOIL		
ANALYTE	(mg/kg)	Conc	Q	RL	Conc	Q	RL	Conc	Q	RL	Conc	Q	RL
PESTICIDES													
Dieldrin	0.034	ND		0.00108	0.00314		0.00112	ND		0.00109	0.0187		0.00117

Notes:
Results reported in milligrams per kilogram (mg/kg) or parts per million
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ND = Not detected above laboratory's reporting limit (RL)
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NC = No criteria
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P = The relative percent difference (RPD) between the two columns exceeds the method-specified criteria
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FAIRWAY 9: SOIL ANALYTICAL RESULTS
OLD ORCHARD COUNTRY CLUB
54 MONMOUTH ROAD
EATONTOWN, NJ

SAMPLE ID:	NJDEP 2021 Residential Soil Remediation Standards	F-9			F-9A			F-9-1			F-9-1A			F-9-2		
ALPHA LAB ID:		L2126518-35			L2137339-39			L2137339-42			L2137339-43			L2137339-46		
COLLECTION DATE:		5/19/2021			7/12/2021			7/12/2021			7/12/2021			7/12/2021		
SAMPLE DEPTH:		0-0.5'			1'-1.5'			0-0.5'			1'-1.5'			0-0.5'		
SAMPLE MATRIX:		SOIL			SOIL			SOIL			SOIL			SOIL		
ANALYTE	(mg/kg)	Conc	Q	RL	Conc	Q	RL	Conc	Q	RL	Conc	Q	RL	Conc	Q	RL
PESTICIDES																
Dieldrin	0.034	0.0354		0.00127	0.011		0.00111	0.245		0.00563	0.00245		0.00111	0.0196		0.00112

Notes:
Results reported in milligrams per kilogram (mg/kg) or parts per million
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ND = Not detected above laboratory's reporting limit (RL)
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FAIRWAY 9: SOIL ANALYTICAL RESULTS
OLD ORCHARD COUNTRY CLUB
54 MONMOUTH ROAD
EATONTOWN, NJ

SAMPLE ID:	NJDEP 2021 Residential Soil Remediation Standards	F-9-3			F-9-3A			F-9-4			F-9-4A			F-9-5		
ALPHA LAB ID:		L2137339-50			L2137339-51			L2137339-54			L2137339-55			L2137339-82		
COLLECTION DATE:		7/12/2021			7/12/2021			7/12/2021			7/12/2021			7/12/2021		
SAMPLE DEPTH:		0-0.5'			1'-1.5'			0-0.5'			1'-1.5'			0-0.5'		
SAMPLE MATRIX:		SOIL			SOIL			SOIL			SOIL			SOIL		
ANALYTE	(mg/kg)	Conc	Q	RL	Conc	Q	RL	Conc	Q	RL	Conc	Q	RL	Conc	Q	RL
PESTICIDES																
Dieldrin	0.034	0.077		0.00108	0.00753		0.0011	0.114		0.00109	0.00718		0.0011	0.224		0.00614

Notes:
Results reported in milligrams per kilogram (mg/kg) or parts per million
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FAIRWAY 9: SOIL ANALYTICAL RESULTS
OLD ORCHARD COUNTRY CLUB
54 MONMOUTH ROAD
EATONTOWN, NJ

SAMPLE ID:	NJDEP 2021 Residential Soil Remediation Standards	F-9-5A			F-9-6			F-9-6A			F-9-6B			F-9-7		
ALPHA LAB ID:		L2137339-83			L2137339-86			L2137339-87			L2137339-88			L2137339-90		
COLLECTION DATE:		7/12/2021			7/12/2021			7/12/2021			7/12/2021			7/12/2021		
SAMPLE DEPTH:		1'-1.5'			0-0.5'			1'-1.5'			2'-2.5'			0-0.5'		
SAMPLE MATRIX:		SOIL			SOIL			SOIL			SOIL			SOIL		
ANALYTE	(mg/kg)	Conc	Q	RL	Conc	Q	RL	Conc	Q	RL	Conc	Q	RL	Conc	Q	RL
PESTICIDES																
Dieldrin	0.034	0.0132		0.00118	0.0678		0.00124	0.039		0.00125	ND		0.00119	0.00563		0.00115

Notes:
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FAIRWAY 10: SOIL ANALYTICAL RESULTS
OLD ORCHARD COUNTRY CLUB
54 MONMOUTH ROAD
EATONTOWN, NJ

SAMPLE ID:	NJDEP 2021 Residential Soil Remediation Standards	F-10			F-10A			F-10-1			F-10-1A			F-10-2		
ALPHA LAB ID:		L2126518-38			L2138869-01			L2138869-04			L2138869-05			L2138869-08		
COLLECTION DATE:		5/19/2021			7/20/2021			7/20/2021			7/20/2021			7/20/2021		
SAMPLE DEPTH:		0-0.5'			1'-1.5'			0-0.5'			1'-1.5'			0-0.5'		
SAMPLE MATRIX:		SOIL			SOIL			SOIL			SOIL			SOIL		
ANALYTE	(mg/kg)	Conc	Q	RL	Conc	Q	RL	Conc	Q	RL	Conc	Q	RL	Conc	Q	RL
PESTICIDES																
Dieldrin	0.034	0.072		0.00139	0.00405		0.00114	0.281		0.00593	0.0114		0.00118	0.0344		0.00116

Notes:
Results reported in milligrams per kilogram (mg/kg) or parts per million
Exceedances (if any) are highlighted
ND = Not detected above laboratory's reporting limit (RL)
NA = Not analyzed
NC = No criteria
J = Estimated value, Concentration is below the RL but above the Method Detection Limit (MDL)
P = The relative percent difference (RPD) between the two columns exceeds the method-specified criteria
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FAIRWAY 10: SOIL ANALYTICAL RESULTS
OLD ORCHARD COUNTRY CLUB
54 MONMOUTH ROAD
EATONTOWN, NJ

SAMPLE ID:	NJDEP 2021 Residential Soil Remediation Standards	F-10-2A			F-10-3			F-10-4			F-10-4A			F-10-5		
ALPHA LAB ID:		L2138869-09			L2138869-12			L2138869-16			L2138869-17			L2138869-20		
COLLECTION DATE:		7/20/2021			7/20/2021			7/20/2021			7/20/2021			7/20/2021		
SAMPLE DEPTH:		1'-1.5'			0-0.5'			0-0.5'			1'-1.5'			0-0.5'		
SAMPLE MATRIX:		SOIL			SOIL			SOIL			SOIL			SOIL		
ANALYTE	(mg/kg)	Conc	Q	RL	Conc	Q	RL	Conc	Q	RL	Conc	Q	RL	Conc	Q	RL
PESTICIDES																
Dieldrin	0.034	0.0102		0.00118	0.00852		0.00115	0.246		0.00603	0.00741		0.00117	0.238		0.00592

Notes:
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FAIRWAY 10: SOIL ANALYTICAL RESULTS
OLD ORCHARD COUNTRY CLUB
54 MONMOUTH ROAD
EATONTOWN, NJ

SAMPLE ID:	NJDEP 2021 Residential Soil Remediation Standards	F-10-5A			F-10-6			F-10-7			F-10-7A		
ALPHA LAB ID:		L2138869-21			L2138869-24			L2138869-28			L2138869-29		
COLLECTION DATE:		7/20/2021			7/20/2021			7/20/2021			7/20/2021		
SAMPLE DEPTH:		1'-1.5'			0-0.5'			0-0.5'			1'-1.5'		
SAMPLE MATRIX:		SOIL			SOIL			SOIL			SOIL		
ANALYTE	(mg/kg)	Conc	Q	RL	Conc	Q	RL	Conc	Q	RL	Conc	Q	RL
PESTICIDES													
Dieldrin	0.034	0.0129		0.00117	0.0194		0.00117	0.0386		0.00112	ND		0.00112

Notes:
Results reported in milligrams per kilogram (mg/kg) or parts per million
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J = Estimated value, Concentration is below the RL but above the Method Detection Limit (MDL)
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FAIRWAY 13: SOIL ANALYTICAL RESULTS
OLD ORCHARD COUNTRY CLUB
54 MONMOUTH ROAD
EATONTOWN, NJ

SAMPLE ID:	NJDEP 2021 Residential Soil Remediation Standards	F-13			F-13A			F-13B			F-13-1			F-13-1A		
ALPHA LAB ID:		L2126518-48			L2139174-39			L2139174-40			L2139174-42			L2139174-43		
COLLECTION DATE:		5/19/2021			7/21/2021			7/21/2021			7/21/2021			7/21/2021		
SAMPLE DEPTH:		0-0.5'			1'-1.5'			2'-2.5'			0-0.5'			1'-1.5'		
SAMPLE MATRIX:		SOIL			SOIL			SOIL			SOIL			SOIL		
ANALYTE	(mg/kg)	Conc	Q	RL	Conc	Q	RL	Conc	Q	RL	Conc	Q	RL	Conc	Q	RL
PESTICIDES																
Dieldrin	0.034	0.503		0.00731	0.0372		0.00112	0.00158		0.0012	0.0369		0.00113	ND		0.00122

Notes:
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FAIRWAY 13: SOIL ANALYTICAL RESULTS
OLD ORCHARD COUNTRY CLUB
54 MONMOUTH ROAD
EATONTOWN, NJ

SAMPLE ID:	NJDEP 2021 Residential Soil Remediation Standards	F-13-2			F-13-2A			F-13-3			F-13-3A			F-13-4		
ALPHA LAB ID:		L2139174-46			L2139174-47			L2139174-50			L2139174-51			L2139174-54		
COLLECTION DATE:		7/21/2021			7/21/2021			7/21/2021			7/21/2021			7/21/2021		
SAMPLE DEPTH:		0-0.5'			1'-1.5'			0-0.5'			1'-1.5'			0-0.5'		
SAMPLE MATRIX:		SOIL			SOIL			SOIL			SOIL			SOIL		
ANALYTE	(mg/kg)	Conc	Q	RL	Conc	Q	RL	Conc	Q	RL	Conc	Q	RL	Conc	Q	RL
PESTICIDES																
Dieldrin	0.034	0.0748		0.00134	ND		0.00123	0.0946		0.00113	0.00101	JP	0.00167	0.145		0.00111

Notes:
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FAIRWAY 13: SOIL ANALYTICAL RESULTS
OLD ORCHARD COUNTRY CLUB
54 MONMOUTH ROAD
EATONTOWN, NJ

SAMPLE ID:	NJDEP 2021 Residential Soil Remediation Standards	F-13-4A			F-13-5			F-13-5A			F-13-6			F-13-7		
ALPHA LAB ID:		L2139174-55			L2139174-58			L2139174-59			L2139174-62			L2139174-66		
COLLECTION DATE:		7/21/2021			7/21/2021			7/21/2021			7/21/2021			7/21/2021		
SAMPLE DEPTH:		1'-1.5'			0-0.5'			1'-1.5'			0-0.5'			0-0.5'		
SAMPLE MATRIX:		SOIL			SOIL			SOIL			SOIL			SOIL		
ANALYTE	(mg/kg)	Conc	Q	RL	Conc	Q	RL	Conc	Q	RL	Conc	Q	RL	Conc	Q	RL
PESTICIDES																
Dieldrin	0.034	0.00071	JP	0.00138	0.0757		0.0012	0.00208		0.00121	ND		0.00118	ND		0.00128

Notes:
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FAIRWAY 15: SOIL ANALYTICAL RESULTS
OLD ORCHARD COUNTRY CLUB
54 MONMOUTH ROAD
EATONTOWN, NJ

SAMPLE ID:	NJDEP 2021 Residential Soil Remediation Standards	F-15			F-15A			F-15-1			F-15-1A			F-15-1B		
ALPHA LAB ID:		L2126518-54			L2139174-70			L2139174-73			L2139174-74			L2145224-01		
COLLECTION DATE:		5/19/2021			7/21/2021			7/21/2021			7/21/2021			7/21/2021		
SAMPLE DEPTH:		0-0.5'			1'-1.5'			0-0.5'			1'-1.5'			2'-2.5'		
SAMPLE MATRIX:		SOIL			SOIL			SOIL			SOIL			SOIL		
ANALYTE	(mg/kg)	Conc	Q	RL	Conc	Q	RL	Conc	Q	RL	Conc	Q	RL	Conc	Q	RL
PESTICIDES																
Dieldrin	0.034	0.0632		0.00115	0.00866		0.00116	0.317		0.00581	0.0604		0.00109	0.00134		0.00114

Notes:
Results reported in milligrams per kilogram (mg/kg) or parts per million
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FAIRWAY 15: SOIL ANALYTICAL RESULTS
OLD ORCHARD COUNTRY CLUB
54 MONMOUTH ROAD
EATONTOWN, NJ

SAMPLE ID:	NJDEP 2021 Residential Soil Remediation Standards	F-15-2			F-15-2A			F-15-3			F-15-3A			F-15-4			F-15-4A		
ALPHA LAB ID:		L2139174-77			L2139174-78			L2139174-81			L2139174-82			L2139174-85			L2139174-86		
COLLECTION DATE:		7/21/2021			7/21/2021			7/21/2021			7/21/2021			7/21/2021			7/21/2021		
SAMPLE DEPTH:		0-0.5'			1'-1.5'			0-0.5'			1'-1.5'			0-0.5'			1'-1.5'		
SAMPLE MATRIX:		SOIL			SOIL			SOIL			SOIL			SOIL			SOIL		
ANALYTE	(mg/kg)	Conc	Q	RL	Conc	Q	RL	Conc	Q	RL	Conc	Q	RL	Conc	Q	RL	Conc	Q	RL
PESTICIDES																			
Dieldrin	0.034	0.623		0.00585	0.0206		0.00113	0.468		0.0115	0.00898		0.00113	0.0596		0.00115	ND		0.00115

Notes:
Results reported in milligrams per kilogram (mg/kg) or parts per million
Exceedances (if any) are highlighted
ND = Not detected above laboratory's reporting limit (RL)
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FAIRWAY 15: SOIL ANALYTICAL RESULTS
OLD ORCHARD COUNTRY CLUB
54 MONMOUTH ROAD
EATONTOWN, NJ

SAMPLE ID:	NJDEP 2021 Residential Soil Remediation Standards	F-15-5			F-15-5A			F-15-6			F-15-6A			F-15-7			F-15-7A		
ALPHA LAB ID:		L2139174-89			L2139174-90			L2139174-93			L2139174-94			L2139174-97			L2139174-98		
COLLECTION DATE:		7/21/2021			7/21/2021			7/21/2021			7/21/2021			7/21/2021			7/21/2021		
SAMPLE DEPTH:		0-0.5'			1'-1.5'			0-0.5'			1'-1.5'			0-0.5'			1'-1.5'		
SAMPLE MATRIX:		SOIL			SOIL			SOIL			SOIL			SOIL			SOIL		
ANALYTE	(mg/kg)	Conc	Q	RL	Conc	Q	RL	Conc	Q	RL	Conc	Q	RL	Conc	Q	RL	Conc	Q	RL
PESTICIDES																			
Dieldrin	0.034	0.228		0.00233	0.0218		0.0011	0.358		0.00598	0.0164		0.00116	0.0435		0.00112	0.00785	IP	0.00113

Notes:
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J = Estimated value, Concentration is below the RL but above the Method Detection Limit (MDL)
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GREEN 6: SOIL ANALYTICAL RESULTS
OLD ORCHARD COUNTRY CLUB
54 MONMOUTH ROAD
EATONTOWN, NJ

SAMPLE ID:	NJDEP 2021 Residential Soil Remediation Standards	G-6			G-6A			G-6B			G-6C			G-6-1			G-6-2		
ALPHA LAB ID:		L2126518-27			-			-			-			-			-		
HAMPTON-CLARKE LAB ID:		-			AD24655-001			AD25463-001			AD25463-003			AD24655-004			AD24655-008		
COLLECTION DATE:		5/19/2021			7/12/2021			7/12/2021			7/12/2021			7/12/2021			7/12/2021		
SAMPLE DEPTH:		0-0.5'			1'-1.5'			2'-2.5'			3'-3.5'			0-0.5'			0-0.5'		
SAMPLE MATRIX:		SOIL			SOIL			SOIL			Soil			SOIL			SOIL		
ANALYTE	(mg/kg)	Conc	Q	RL	Conc	Q	RL	Conc	Q	RL	Conc	Q	RL	Conc	Q	RL	Conc	Q	RL
TOTAL METALS																			
Arsenic, Total	19	60.9		0.607	110		0.23	54		0.22	6.6		0.23	1.6		0.23	9.0		0.24
Lead, Total	400	527		3.03	190		1.4	4.6		0.45	3.6		0.46	4.2		0.46	26		0.48
Mercury, Total	23	25		1.9	15		0.48	-		-	-		-	0.52		0.096	2.5		0.099

Notes:
Results reported in milligrams per kilogram (mg/kg) or parts per million
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GREEN 6: SOIL ANALYTICAL RESULTS
OLD ORCHARD COUNTRY CLUB
54 MONMOUTH ROAD
EATONTOWN, NJ

SAMPLE ID:	NJDEP 2021 Residential Soil Remediation Standards	G-6-3			G-6-4		
ALPHA LAB ID:		-			-		
HAMPTON-CLARKE LAB ID:		AD24655-012			AD24655-016		
COLLECTION DATE:		7/12/2021			7/12/2021		
SAMPLE DEPTH:		0-0.5'			0-0.5'		
SAMPLE MATRIX:		SOIL			SOIL		
ANALYTE	**(mg/kg)**	**Conc**	**Q**	**RL**	**Conc**	**Q**	**RL**
TOTAL METALS							
Arsenic, Total	19	7.2		0.23	2.1		0.23
Lead, Total	400	7.2		0.46	4.2		0.45
Mercury, Total	23	0.75		0.096	0.64		0.095

Notes:
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GREEN 9: SOIL ANALYTICAL RESULTS
OLD ORCHARD COUNTRY CLUB
54 MONMOUTH ROAD
EATONTOWN, NJ

SAMPLE ID:	NJDEP 2021 Residential Soil Remediation Standards	G-9			G-9A			G-9B			G-9-1			G-9-2		
ALPHA LAB ID:		L2126518-36			L2137339-94			-			L2137339-97			L2137339-101		
HAMPTON-CLARKE LAB ID:		-			AD24655-020			AD25463-002			AD24655-023			AD24655-027		
COLLECTION DATE:		5/19/2021			7/12/2021			44389			7/12/2021			7/12/2021		
SAMPLE DEPTH:		0-0.5'			1'-1.5'			2'-2.5'			0-0.5'			0-0.5'		
SAMPLE MATRIX:		SOIL			SOIL			SOIL			SOIL			SOIL		
ANALYTE	**(mg/kg)**	**Conc**	**Q**	**RL**	**Conc**	**Q**	**RL**	**Conc**	**Q**	**RL**	**Conc**	**Q**	**RL**	**Conc**	**Q**	**RL**
PESTICIDES																
Chlordane (cis and trans)	0.27	0.338	P	0.168	0.00539		0.0166	-		-	0.00869	P	0.0162	ND		0.0181
cis-Chlordane	NC	0.187	IP	0.0253	0.00384	IP	0.00249	-		-	0.00183	J	0.00242	ND		0.00272
trans-Chlordane	NC	0.151	P	0.0253	0.00155	JIP	0.00249	-		-	0.00686	P	0.00242	ND		0.00272
TOTAL METALS																
Arsenic, Total	19	122		0.507	150		1.2	8.1		0.24	2.2		0.25	2.2		0.27
Lead, Total	400	746		2.53	380		2.4	-		-	5.0		0.49	8.9		0.54
Mercury, Total	23	27.5		1.83	37		0.99	ND		0.098	0.23		0.10	4.1		0.11

Notes:
Results reported in milligrams per kilogram (mg/kg) or parts per million
Exceedances (if any) are highlighted
ND = Not detected above laboratory's reporting limit (RL)
NA = Not analyzed
NC = No criteria
J = Estimated value, Concentration is below the RL but above the Method Detection Limit (MDL)
P = The relative percent difference (RPD) between the two columns exceeds the method-specified criteria
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GREEN 9: SOIL ANALYTICAL RESULTS
OLD ORCHARD COUNTRY CLUB
54 MONMOUTH ROAD
EATONTOWN, NJ

SAMPLE ID:	NJDEP 2021 Residential Soil Remediation Standards	G-9-3			G-9-4		
ALPHA LAB ID:		L2137339-105			L2137339-109		
HAMPTON-CLARKE LAB ID:		AD24655-031			AD24655-035		
COLLECTION DATE:		7/12/2021			7/12/2021		
SAMPLE DEPTH:		0-0.5'			0-0.5'		
SAMPLE MATRIX:		SOIL			SOIL		
ANALYTE	**(mg/kg)**	**Conc**	**Q**	**RL**	**Conc**	**Q**	**RL**
PESTICIDES							
Chlordane (cis and trans)	0.27	0.00132		0.017	ND		0.0151
cis-Chlordane	NC	ND		0.00255	ND		0.00227
trans-Chlordane	NC	0.00132	JP	0.00255	ND		0.00227
TOTAL METALS							
Arsenic, Total	19	6.0		0.25	0.79		0.23
Lead, Total	400	22		0.49	3.3		0.45
Mercury, Total	23	2.5		0.10	0.17		0.095

Notes:
Results reported in milligrams per kilogram (mg/kg) or parts per million
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ND = Not detected above laboratory's reporting limit (RL)
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J = Estimated value, Concentration is below the RL but above the Method Detection Limit (MDL)
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GREEN 10: SOIL ANALYTICAL RESULTS
OLD ORCHARD COUNTRY CLUB
54 MONMOUTH ROAD
EATONTOWN, NJ

SAMPLE ID:	NJDEP 2021 Residential Soil Remediation Standards	G-10			G-10A			G-10B			G-10-1			G-10-2		
ALPHA LAB ID:		L2126518-39			L2138869-32			-			L2138869-35			L2138869-39		
HAMPTON-CLARKE LAB ID:		-			AD24855-113			AD25611-011			AD24855-002			AD24855-006		
COLLECTION DATE:		5/19/2021			7/20/2021			7/20/2021			7/20/2021			7/20/2021		
SAMPLE DEPTH:		0-0.5'			1'-1.5'			2-2.5'			0-0.5'			0-0.5'		
SAMPLE MATRIX:		SOIL			SOIL			SOIL			SOIL			SOIL		
ANALYTE	(mg/kg)	Conc	Q	RL	Conc	Q	RL	Conc	Q	RL	Conc	Q	RL	Conc	Q	RL
PESTICIDES																
Chlordane (cis and trans)	0.27	0.457		0.0183	0.00258		0.0148	-	-	-	0.00105		0.015	0.00571		0.0163
cis-Chlordane	NC	0.338	P	0.0137	0.00168	JIP	0.00221	-	-	-	ND		0.00225	0.00212	JIP	0.00244
trans-Chlordane	NC	0.119		0.00274	0.0009	JIP	0.00221	-	-	-	0.00105	J	0.00225	0.00359		0.00244
TOTAL METALS																
Arsenic, Total	19	61.2		0.566	330		2.3	7.5		0.23	12		0.25	14		0.24
Lead, Total	400	509		2.83	580		4.6	4.0		0.46	28		0.50	48		0.48

Notes:
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GREEN 10: SOIL ANALYTICAL RESULTS
OLD ORCHARD COUNTRY CLUB
54 MONMOUTH ROAD
EATONTOWN, NJ

SAMPLE ID:	NJDEP 2021 Residential Soil Remediation Standards	G-10-3			G-10-3A			G-10-4			G-10-4A		
ALPHA LAB ID:		L2138869-43			-			L2138869-47			-		
HAMPTON-CLARKE LAB ID:		AD24855-010			AD25611-001			AD24855-014			AD25611-002		
COLLECTION DATE:		7/20/2021			7/20/2021			7/20/2021			7/20/2021		
SAMPLE DEPTH:		0-0.5'			1-1.5'			0-0.5'			1-1.5'		
SAMPLE MATRIX:		SOIL			SOIL			SOIL			SOIL		
ANALYTE	**(mg/kg)**	**Conc**	**Q**	**RL**	**Conc**	**Q**	**RL**	**Conc**	**Q**	**RL**	**Conc**		**RL**
PESTICIDES													
Chlordane (cis and trans)	0.27	ND		0.016	-	-	-	0.00076		0.0158	-	-	-
cis-Chlordane	NC	ND		0.0024	-	-	-	ND		0.00237	-	-	-
trans-Chlordane	NC	ND		0.0024	-	-	-	0.00076	JP	0.00237	-	-	-
TOTAL METALS													
Arsenic, Total	19	35		0.26	9.5		0.24	20		0.26	12		0.24
Lead, Total	400	110		0.52	16		0.47	58		0.52	20		0.49

Notes:
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GREEN 11: SOIL ANALYTICAL RESULTS
OLD ORCHARD COUNTRY CLUB
54 MONMOUTH ROAD
EATONTOWN, NJ

SAMPLE ID:	NJDEP 2021 Residential Soil Remediation Standards	G-11			G-11A			G-11B			G-11-1			G-11-1A		
ALPHA LAB ID:		L2126518-42			-			-			-			-		
HAMPTON-CLARKE LAB ID:		-			AD24855-018			AD25611-003			AD24855-021			AD25611-004		
COLLECTION DATE:		5/19/2021			7/20/2021			7/20/2021			7/20/2021			7/20/2021		
SAMPLE DEPTH:		0-0.5'			1'-1.5'			2-2.5'			0-0.5'			1-1.5'		
SAMPLE MATRIX:		SOIL			SOIL			SOIL			SOIL			SOIL		
ANALYTE	(mg/kg)	Conc	Q	RL	Conc		RL	Conc		RL	Conc		RL	Conc		RL
TOTAL METALS																
Arsenic, Total	19	146		0.595	28		0.23	9.5		0.23	23		0.25	14		0.23
Lead, Total	400	966		2.97	33		0.47	5.1		0.46	40		0.51	22		0.47
Mercury	23	63.2		1.99	1.0		0.097	-	-	-	2.0		0.11	-	-	-

Notes:

Results reported in milligrams per kilogram (mg/kg) or parts per million

Exceedances (if any) are highlighted

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GREEN 11: SOIL ANALYTICAL RESULTS
OLD ORCHARD COUNTRY CLUB
54 MONMOUTH ROAD
EATONTOWN, NJ

SAMPLE ID:	NJDEP 2021 Residential Soil Remediation Standards	G-11-2		G-11-3		G-11-4	
ALPHA LAB ID:		-		-		-	
HAMPTON-CLARKE LAB ID:		AD24855-025		AD24855-029		AD24855-033	
COLLECTION DATE:		7/20/2021		7/20/2021		7/20/2021	
SAMPLE DEPTH:		0-0.5'		0-0.5'		0-0.5'	
SAMPLE MATRIX:		SOIL		SOIL		SOIL	
ANALYTE	**(mg/kg)**	**Conc**	**RL**	**Conc**	**RL**	**Conc**	**RL**
TOTAL METALS							
Arsenic, Total	19	9.3	0.24	15	0.23	9.0	0.23
Lead, Total	400	10	0.48	26	0.46	10	0.47
Mercury	23	0.14	0.10	1.1	0.096	ND	0.097

Notes:

Results reported in milligrams per kilogram (mg/kg) or parts per million

Exceedances (if any) are highlighted

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GREEN 12: SOIL ANALYTICAL RESULTS
OLD ORCHARD COUNTRY CLUB
54 MONMOUTH ROAD
EATONTOWN, NJ

SAMPLE ID:	NJDEP 2021 Residential Soil Remediation Standards	G-12			G-12A			G-12-1			G-12-2			G-12-3			G-12-4		
LAB ID:		L2126518-45			L2139174-01			L2139174-04			L2139174-08			L2139174-12			L2139174-16		
COLLECTION DATE:		5/19/2021			7/21/2021			7/21/2021			7/21/2021			7/21/2021			7/21/2021		
SAMPLE DEPTH:		0-0.5'			1'-1.5'			0-0.5'			0-0.5'			0-0.5'			0-0.5'		
SAMPLE MATRIX:		SOIL			SOIL			SOIL			SOIL			SOIL			SOIL		
ANALYTE	**(mg/kg)**	**Conc**	**Q**	**RL**	**Conc**	**Q**	**RL**	**Conc**	**Q**	**RL**	**Conc**	**Q**	**RL**	**Conc**	**Q**	**RL**	**Conc**	**Q**	**RL**
PESTICIDES																			
Chlordane (cis and trans)	0.27	0.462		0.0965	0.0228	P	0.0147	0.0121		0.0151	0.00099		0.0143	0.01121		0.0146	0.00811		0.0145
cis-Chlordane	NC	0.274	IP	0.0145	0.0102	IP	0.0022	0.00808	IP	0.00227	ND		0.00215	0.00451	IP	0.00219	0.00412	IP	0.00217
trans-Chlordane	NC	0.188		0.0145	0.0126		0.0022	0.00402		0.00227	0.00099	J	0.00215	0.0067		0.00219	0.00399		0.00217

Notes:
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GREEN 13: SOIL ANALYTICAL RESULTS
OLD ORCHARD COUNTRY CLUB
54 MONMOUTH ROAD
EATONTOWN, NJ

SAMPLE ID:	NJDEP 2021 Residential Soil Remediation Standards	G-13			G-13A			G-13B			G-13-1			G-13-2		
ALPHA LAB ID:		L2126518-49			L2139174-20			L2139429			L2139174-23			L2139174-27		
HAMPTON-CLARKE LAB ID:		-			AD24880-001			AD25655-002			AD24880-004			AD24880-008		
COLLECTION DATE:		5/19/2021			7/21/2021			7/21/2021			7/21/2021			7/21/2021		
SAMPLE DEPTH:		0-0.5'			1'-1.5'			2'-2.5'			0-0.5'			0-0.5'		
SAMPLE MATRIX:		SOIL			SOIL			Soil			SOIL			SOIL		
ANALYTE	**(mg/kg)**	**Conc**	**Q**	**RL**	**Conc**	**Q**	**RL**	**Conc**	**Q**	**RL**	**Conc**	**Q**	**RL**	**Conc**	**Q**	**RL**
PESTICIDES																
Chlordane (cis and trans)	0.27	0.279		0.0195	0.00553		0.0152	-		-	ND		0.015	0.00388		0.0155
cis-Chlordane	NC	0.131		0.0146	0.00331		0.00227	-		-	ND		0.00225	0.00288	IP	0.00233
trans-Chlordane	NC	0.148		0.00293	0.00222	J	0.00227	-		-	ND		0.00225	0.001	JIP	0.00233
TOTAL METALS																
Arsenic, Total	19	77.3		0.577	150		0.70	5.2		0.24	12		0.23	16		0.22
Lead, Total	400	475		2.88	9.8		0.47	1.9		0.48	40		0.45	34		0.45
Mercury, Total	23	26.2		1.03	2.3		0.097				1.6		0.095	1.3		0.094

Notes:
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GREEN 13: SOIL ANALYTICAL RESULTS
OLD ORCHARD COUNTRY CLUB
54 MONMOUTH ROAD
EATONTOWN, NJ

SAMPLE ID:	NJDEP 2021 Residential Soil Remediation Standards	G-13-3			G-13-4		
ALPHA LAB ID:		L2139174-31			L2139174-35		
HAMPTON-CLARKE LAB ID:		AD24881-002			AD24881-006		
COLLECTION DATE:		7/21/2021			7/21/2021		
SAMPLE DEPTH:		0-0.5'			0-0.5'		
SAMPLE MATRIX:		SOIL			SOIL		
ANALYTE	**(mg/kg)**	**Conc**	**Q**	**RL**	**Conc**	**Q**	**RL**
PESTICIDES							
Chlordane (cis and trans)	0.27	0.0476		0.0141	0.00193		0.0167
cis-Chlordane	NC	0.0365	IP	0.00212	0.00076	JIP	0.0025
trans-Chlordane	NC	0.0111	IP	0.00212	0.00117	J	0.0025
TOTAL METALS							
Arsenic, Total	19	8.6		0.22	7.6		0.22
Lead, Total	400	32		0.44	19		0.45
Mercury, Total	23	0.88		0.093	0.73		0.094

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GREEN 15: SOIL ANALYTICAL RESULTS
OLD ORCHARD COUNTRY CLUB
54 MONMOUTH ROAD
EATONTOWN, NJ

SAMPLE ID:	NJDEP 2021 Residential Soil Remediation Standards	G-15			G-15A			G-15B			G-15-1			G-15-1A		
ALPHA LAB ID:		L2126518-55			L2138869-51			-			L2138869-54			-		
HAMPTON-CLARKE LAB ID:		-			AD24855-037			AD25611-005			AD24855-040			AD25611-010		
COLLECTION DATE:		5/19/2021			7/20/2021			7/20/2021			7/20/2021			7/20/2021		
SAMPLE DEPTH:		0-0.5'			1'-1.5'			2-2.5'			0-0.5'			1-1.5'		
SAMPLE MATRIX:		SOIL			SOIL			SOIL			SOIL			SOIL		
ANALYTE	**(mg/kg)**	**Conc**	**Q**	**RL**	**Conc**	**Q**	**RL**	**Conc**	**Q**	**RL**	**Conc**	**Q**	**RL**	**Conc**	**Q**	**RL**
PESTICIDES																
Chlordane (cis and trans)	0.27	0.565		0.101	0.038	P	0.0148	-	-	-	0.01516		0.015	-	-	-
cis-Chlordane	NC	0.283	IP	0.0151	0.0206	IP	0.00223	-	-	-	0.0071	IP	0.00226	-	-	-
trans-Chlordane	NC	0.282		0.0151	0.0174		0.00223	-	-	-	0.00806		0.00226	-	-	-
TOTAL METALS																
Arsenic, Total	19	55.5		0.603	29		0.23	6.9		0.23	68		0.25	19		0.24

Notes:
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GREEN 15: SOIL ANALYTICAL RESULTS
OLD ORCHARD COUNTRY CLUB
54 MONMOUTH ROAD
EATONTOWN, NJ

SAMPLE ID:	NJDEP 2021 Residential Soil Remediation Standards	G-15-2			G-15-3			G-15-4		
ALPHA LAB ID:		L2138869-58			L2138869-62			L2138869-66		
HAMPTON-CLARKE LAB ID:		AD24855-043			AD24855-047			AD24855-051		
COLLECTION DATE:		7/20/2021			7/20/2021			7/20/2021		
SAMPLE DEPTH:		0-0.5'			0-0.5'			0-0.5'		
SAMPLE MATRIX:		SOIL			SOIL			SOIL		
ANALYTE	**(mg/kg)**	**Conc**	**Q**	**RL**	**Conc**	**Q**	**RL**	**Conc**	**Q**	**RL**
PESTICIDES										
Chlordane (cis and trans)	0.27	ND		0.0161	ND		0.015	0.00334		0.0147
cis-Chlordane	NC	ND		0.00241	ND		0.00226	0.0019	JIP	0.00221
trans-Chlordane	NC	ND		0.00241	ND		0.00226	0.00144	J	0.00221
TOTAL METALS										
Arsenic, Total	19	13		0.24	7.3		0.24	7.1		0.24

Notes:
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GREEN 16: SOIL ANALYTICAL RESULTS
OLD ORCHARD COUNTRY CLUB
54 MONMOUTH ROAD
EATONTOWN, NJ

SAMPLE ID:	NJDEP 2021 Residential Soil Remediation Standards	G-16			G-16A			G-16B			G-16-1			G-16-2		
ALPHA LAB ID:		L2126518-58			L2138869-70			-			L2138869-73			L2138869-77		
HAMPTON-CLARKE LABE ID:		-			AD24855-055			AD25611-006			AD24855-058			AD24855-062		
COLLECTION DATE:		5/19/2021			7/20/2021			7/20/2021			7/20/2021			7/20/2021		
SAMPLE DEPTH:		0-0.5'			1'-1.5'			2-2.5'			0-0.5'			0-0.5'		
SAMPLE MATRIX:		SOIL			SOIL			SOIL			SOIL			SOIL		
ANALYTE	**(mg/kg)**	**Conc**	**Q**	**RL**	**Conc**	**Q**	**RL**	**Conc**	**Q**	**RL**	**Conc**	**Q**	**RL**	**Conc**	**Q**	**RL**
PESTICIDES																
Chlordane (cis and trans)	0.27	0.441		0.189	0.0687		0.0147	-	-	-	ND		0.0156	ND		0.0154
cis-Chlordane	NC	0.243	IP	0.0284	0.0367	IP	0.00221	-	-	-	ND		0.00235	ND		0.0023
trans-Chlordane	NC	0.198	P	0.0284	0.032		0.00221	-	-	-	ND		0.00235	ND		0.0023
TOTAL METALS																
Arsenic, Total	19	308		0.593	61		0.24	8.9		0.24	16		0.25	8.4		0.24
Lead, Total	400	1850		2.96	41		0.47	12		0.48	35		0.50	14		0.47
Mercury, Total	23	81.1		2.08	2.5		0.098	-	-	-	3.7		0.10	0.14		0.098

Notes:
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GREEN 16: SOIL ANALYTICAL RESULTS
OLD ORCHARD COUNTRY CLUB
54 MONMOUTH ROAD
EATONTOWN, NJ

SAMPLE ID:	NJDEP 2021 Residential Soil Remediation Standards	G-16-3			G-16-4		
ALPHA LAB ID:		L2138869-81			L2138869-85		
HAMPTON-CLARKE LABE ID:		AD24855-066			AD24855-070		
COLLECTION DATE:		7/20/2021			7/20/2021		
SAMPLE DEPTH:		0-0.5'			0-0.5'		
SAMPLE MATRIX:		SOIL			SOIL		
ANALYTE	**(mg/kg)**	**Conc**	**Q**	**RL**	**Conc**	**Q**	**RL**
PESTICIDES							
Chlordane (cis and trans)	0.27	0.0052		0.0153	ND		0.0146
cis-Chlordane	NC	0.00188	JIP	0.00229	ND		0.00219
trans-Chlordane	NC	0.00332		0.00229	ND		0.00219
TOTAL METALS							
Arsenic, Total	19	9.4		0.24	9.2		0.23
Lead, Total	400	15		0.48	41		0.47
Mercury, Total	23	0.40		0.099	1.4		0.097

Notes:
Results reported in milligrams per kilogram (mg/kg) or parts per million
Exceedances (if any) are highlighted
ND = Not detected above laboratory's reporting limit (RL)
NA = Not analyzed
NC = No criteria
J = Estimated value, Concentration is below the RL but above the Method Detection Limit (MDL)
P = The relative percent difference (RPD) between the two columns exceeds the method-specified criteria
I = The lower value for the two columns has been reported due to obvious interference

GREEN 17: SOIL ANALYTICAL RESULTS
OLD ORCHARD COUNTRY CLUB
54 MONMOUTH ROAD
EATONTOWN, NJ

SAMPLE ID:	NJDEP 2021 Residential Soil Remediation Standards	G-17			G-17A			G-17B			G-17-1			G-17-1A		
ALPHA LAB ID:		L2126518-65			L2138869-89			-			L2138869-92			-		
HAMPTON-CLARKE LAB ID:		-			AD24855-074			AD25611-007			AD24855-077			AD25611-008		
COLLECTION DATE:		5/19/2021			7/20/2021			7/20/2021			7/20/2021			7/20/2021		
SAMPLE DEPTH:		0-0.5'			1'-1.5'			2-2.5'			0-0.5'			1-1.5		
SAMPLE MATRIX:		SOIL			SOIL			SOIL			SOIL			SOIL		
ANALYTE	(mg/kg)	Conc	Q	RL	Conc	Q	RL	Conc	Q	RL	Conc	Q	RL	Conc	Q	RL
PESTICIDES																
Chlordane (cis and trans)	0.27	0.67	P	0.0197	0.0238		0.0155	-	-	-	ND		0.0153	-	-	-
cis-Chlordane	NC	0.356	IP	0.00295	0.013	IP	0.00233	-	-	-	ND		0.00229	-	-	-
trans-Chlordane	NC	0.314	P	0.00295	0.0108		0.00233	-	-	-	ND		0.00229	-	-	-
TOTAL METALS																
Arsenic, Total	19	85.5		0.584	140		0.72	8.8		0.25	32		0.24	14		0.24
Lead, Total	400	776		2.92	37		0.48	5.5		0.49	28		0.48	6.1		0.48
Mercury, Total	23	33.7		2.08	0.97		0.10	-	-	-	1.4		0.10	-	-	-

Notes:
Results reported in milligrams per kilogram (mg/kg) or parts per million
Exceedances (if any) are highlighted
ND = Not detected above laboratory's reporting limit (RL)
NA = Not analyzed
NC = No criteria
J = Estimated value, Concentration is below the RL but above the Method Detection Limit (MDL)
P = The relative percent difference (RPD) between the two columns exceeds the method-specified criteria
I = The lower value for the two columns has been reported due to obvious interference

GREEN 17: SOIL ANALYTICAL RESULTS
OLD ORCHARD COUNTRY CLUB
54 MONMOUTH ROAD
EATONTOWN, NJ

SAMPLE ID:	NJDEP 2021 Residential Soil Remediation Standards	G-17-2			G-17-3			G-17-4		
ALPHA LAB ID:		L2138869-96			L2138869-100			L2138869-104		
HAMPTON-CLARKE LAB ID:		AD24855-081			AD24855-085			AD24855-089		
COLLECTION DATE:		7/20/2021			7/20/2021			7/20/2021		
SAMPLE DEPTH:		0-0.5'			0-0.5'			0-0.5'		
SAMPLE MATRIX:		SOIL			SOIL			SOIL		
ANALYTE	**(mg/kg)**	**Conc**	**Q**	**RL**	**Conc**	**Q**	**RL**	**Conc**	**Q**	**RL**
PESTICIDES										
Chlordane (cis and trans)	0.27	0.00129		0.0158	ND		0.0157	ND		0.0138
cis-Chlordane	NC	ND		0.00237	ND		0.00235	ND		0.00208
trans-Chlordane	NC	0.00129	JP	0.00237	ND		0.00235	ND		0.00208
TOTAL METALS										
Arsenic, Total	19	14		0.25	11		0.24	6.2		0.22
Lead, Total	400	31		0.49	17		0.48	15		0.45
Mercury, Total	23	1.2		0.10	0.49		0.099	0.48		0.094

Notes:
Results reported in milligrams per kilogram (mg/kg) or parts per million
Exceedances (if any) are highlighted
ND = Not detected above laboratory's reporting limit (RL)
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NC = No criteria
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GREEN 18: SOIL ANALYTICAL RESULTS
OLD ORCHARD COUNTRY CLUB
54 MONMOUTH ROAD
EATONTOWN, NJ

SAMPLE ID:	NJDEP 2021 Residential Soil Remediation Standards	G-18			G-18A			G-18B			G-18-1			G-18-2			G-18-3			G-18-4		
ALPHA LAB ID:		L2126518-63			-						-			-			-			-		
HAMPTON-CLARKE LAB ID:		-			AD24855-093			AD25611-009			AD24855-096			AD24855-100			AD24855-104			AD24855-108		
COLLECTION DATE:		5/19/2021			7/20/2021			7/20/2021			7/20/2021			7/20/2021			7/20/2021			7/20/2021		
SAMPLE DEPTH:		0-0.5'			1'-1.5'			2-2.5			0-0.5'			0-0.5'			0-0.5'			0-0.5'		
SAMPLE MATRIX:		SOIL			SOIL			SOIL			SOIL			SOIL			SOIL			SOIL		
ANALYTE	(mg/kg)	Conc	Q	RL	Conc	Q	RL	Conc	Q	RL	Conc	Q	RL	Conc	Q	RL	Conc	Q	RL	Conc	Q	RL
TOTAL METALS																						
Arsenic, Total	19	63.8		0.62	590		5.8	10		0.24	9.5		0.24	9.3		0.25	12		0.23	17		0.22
Lead, Total	400	743		3.1	2,200		12	72		0.48	18		0.48	18		0.49	33		0.45	38		0.44

Notes:

Results reported in milligrams per kilogram (mg/kg) or parts per million

Exceedances (if any) are highlighted

ND = Not detected above laboratory's reporting limit (RL)

NA = Not analyzed

NC = No criteria

J = Estimated value, Concentration is below the RL but above the Method Detection Limit (MDL)

P = The relative percent difference (RPD) between the two columns exceeds the method-specified criteria

I = The lower value for the two columns has been reported due to obvious interference

TRENCH: SOIL ANALYTICAL RESULTS
OLD ORCHARD COUNTRY CLUB
54 MONMOUTH ROAD
EATONTOWN, NJ

SAMPLE ID:	NJDEP 2021 Residential Soil Remediation Standards	TRENCH-1			TRENCH-1A			TRENCH-1B			TRENCH-1C			TRENCH-2		
ALPHA LAB ID:		L2126518-04			L2139174-101			L2139174-102			L2145224-02			L2139174-104		
COLLECTION DATE:		5/19/2021			7/21/2021			7/21/2021			7/21/2021			7/21/2021		
SAMPLE DEPTH:		0-0.5'			1'-1.5'			2'-2.5'			3'-3.5'			0-0.5'		
SAMPLE MATRIX:		SOIL			SOIL			SOIL			SOIL			SOIL		
ANALYTE	(mg/kg)	Conc	Q	RL	Conc	Q	RL	Conc	Q	RL	Conc	Q	RL	Conc	Q	RL
PESTICIDES																
Heptachlor epoxide	0.076	0.126	P	0.0052	0.00326	IP	0.00321	-		-	-	-	-	ND		0.0153
Chlordane (cis and trans)	0.27	2.79	P	0.462	0.697	P	0.0285	0.486		0.0773	ND		0.0159	0.0592		0.0679
cis-Chlordane	NC	1.27	IP	0.0694	0.405	P	0.0214	0.33		0.0116	0.00207	JIP	0.00238	0.0199	IP	0.0102
trans-Chlordane	NC	1.52		0.0694	0.292		0.0214	0.156		0.0116	0.00252	P	0.00238	0.0393	P	0.0102

Notes:
Results reported in milligrams per kilogram (mg/kg) or parts per million
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ND = Not detected above laboratory's reporting limit (RL)
NA = Not analyzed
NC = No criteria
J = Estimated value, Concentration is below the RL but above the Method Detection Limit (MDL)
P = The relative percent difference (RPD) between the two columns exceeds the method-specified criteria
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TRENCH: SOIL ANALYTICAL RESULTS
OLD ORCHARD COUNTRY CLUB
54 MONMOUTH ROAD
EATONTOWN, NJ

SAMPLE ID:	NJDEP 2021 Residential Soil Remediation Standards	TRENCH-3			TRENCH-3A			TRENCH-4			TRENCH-5			TRENCH-5A		
ALPHA LAB ID:		L2139174-108			L2139174-109			L2139174-112			L2139174-116			L2139174-117		
COLLECTION DATE:		7/21/2021			7/21/2021			7/21/2021			7/21/2021			7/21/2021		
SAMPLE DEPTH:		0-0.5'			1'-1.5'			0-0.5'			0-0.5'			1'-1.5'		
SAMPLE MATRIX:		SOIL			SOIL			SOIL			SOIL			SOIL		
ANALYTE	(mg/kg)	Conc	Q	RL	Conc	Q	RL	Conc	Q	RL	Conc	Q	RL	Conc	Q	RL
PESTICIDES																
Heptachlor epoxide	0.076	0.0119	J	0.0161	-		-	0.0138	JP	0.0184	0.00498	IP	0.00339	-		-
Chlordane (cis and trans)	0.27	0.277		0.0715	0.01321	P	0.0151	0.1874		0.0816	0.572	P	0.0301	0.1162	IP	0.0156
cis-Chlordane	NC	0.115	IP	0.0107	0.00706		0.00227	0.0794	IP	0.0122	0.364	P	0.0226	0.0657		0.00234
trans-Chlordane	NC	0.162		0.0107	0.00615		0.00227	0.108		0.0122	0.208		0.0226	0.0505	P	0.00234

Notes:
Results reported in milligrams per kilogram (mg/kg) or parts per million
Exceedances (if any) are highlighted
ND = Not detected above laboratory's reporting limit (RL)
NA = Not analyzed
NC = No criteria
J = Estimated value, Concentration is below the RL but above the Method Detection Limit (MDL)
P = The relative percent difference (RPD) between the two columns exceeds the method-specified criteria
I = The lower value for the two columns has been reported due to obvious interference

Table 2: T-2 Soil Sample Analysis and Data Summary
Old Orchard Country Club
54 Monmouth Road
Borough of Eatontown, Monmouth County, New Jersey
Dynamic Earth Project No. 3272-98-005EC

							Sample ID:	2120937-01				2120937-41				2120937-02				2120937-03				2120937-04				2120937-05			
							Lab ID:	T-2A				T-2B				T-2-1				T-2-2				T-2-3				T-2-4			
							Sample Depth (feet):	1.0-1.5				2.0-2.5				0.0-0.5				0.0-0.5				0.0-0.5				0.0-0.5			
							Sample Date:	12/20/2022				12/20/2022				12/20/2022				12/20/2022				12/20/2022				12/20/2022			
CAS#	Compound	RIDSRS	RISRS	NRIDSRS	NRISRS	MGWSRS	Result	Qualifier	MDL	RL	Result	Qualifier	MDL	RL	Result	Qualifier	MDL	RL	Result	Qualifier	MDL	RL	Result	Qualifier	MDL	RL	Result	Qualifier	MDL	RL
General Chemistry (%)																															
PERSOL	Percent Solids						**86.6**				**81.8**				**77.7**				**83.2**				**84.4**				**82.8**			
Pesticides (mg/kg)																															
60-57-1	Dieldrin	0.034	NA	0.16	NA	0.024	**0.0898**		0.000785	0.0015	**0.0079**		0.000831	0.00159	**0.00447**		0.000875	0.00167	**0.0158**		0.000818	0.00156	**0.00487**		0.000806	0.00154	**0.0214**		0.000821	0.00157

Notes:
D - Indicates result is based on a dilution
U - Indicates compound analyzed for but not detected
RL - Laboratory Reporting Limit
MDL - Method Detection Limit
RIDSRS - NJDEP Residential Ingestion-Dermal Soil Remediation Standard (May 2021)
RISRS - NJDEP Residential Inhalation Soil Remediation Standard (May 2021)
NRIDSRS - NJDEP Non-Residential Ingestion-Dermal Soil Remediation Standard (May 2021)
NRISRS - NJDEP Non-Residential Inhalation Soil Remediation Standard (May 2021)
MGWSRS = NJDEP Migration to Groundwater SRS (May 2021)
- Exceeds one or more NJDEP Standard
- Detected in Sample
NA - No applicable NJDEP SRS
All results reported in milligrams per kilogram (mg/kg) or parts per million (ppm)

Table 3: T-3 Soil Sample Analysis and Data Summary
Old Orchard Country Club
54 Monmouth Road
Borough of Eatontown, Monmouth County, New Jersey
Dynamic Earth Project No. 3272-98-005EC

						Sample ID:	2120937-06				2120937-07				2120937-42			
DYNAMIC EARTH						Lab ID:	T-3A				T-3-1				T-3-1A			
						Sample Depth (feet):	1.0-1.5				0.0-0.5				1.0-1.5			
						Sample Date:	12/20/2022				12/20/2022				12/20/2022			
CAS#	Compound	RIDSRS	RISRS	NRIDSRS	NRISRS	MGWSRS	Result	Qualifier	MDL	RL	Result	Qualifier	MDL	RL	Result	Qualifier	MDL	RL
General Chemistry (%)																		
PERSOL	Percent Solids						89.7				87.2				88.7			
Pesticides (mg/kg)																		
60-57-1	Dieldrin	0.034	NA	0.16	NA	0.024	0.00104	J	0.000758	0.00145	0.0592		0.00078	0.00149	0.398	D	0.00766	0.0147

	Sample ID:	2120937-08				2120937-43				2120937-09			
	Lab ID:	T-3-2				T-3-2A				T-3-3			
	Sample Depth (feet):	0.0-0.5				1.0-1.5				0.0-0.5			
	Sample Date:	12/20/2022				12/20/2022				12/20/2022			
CAS#	Compound	Result	Qualifier	MDL	RL	Result	Qualifier	MDL	RL	Result	Qualifier	MDL	RL
General Chemistry (%)													
PERSOL	Percent Solids	86.7				87.4				85.4			
Pesticides (mg/kg)													
60-57-1	Dieldrin	0.360	D		0.00785	0.222		0.000778	0.00149	0.156		0.000796	0.00152

	Sample ID:	2120937-44				2120937-10				2120937-45			
	Lab ID:	T-3-3A				T-3-4				T-3-4A			
	Sample Depth (feet):	1.0-1.5				0.0-0.5				1.0-1.5			
	Sample Date:	12/20/2022				12/20/2022				12/20/2022			
CAS#	Compound	Result	Qualifier	MDL	RL	Result	Qualifier	MDL	RL	Result	Qualifier	MDL	RL
General Chemistry (%)													
PERSOL	Percent Solids	88.8				84.4				89.1			
Pesticides (mg/kg)													
60-57-1	Dieldrin	0.0329		0.000765	0.00146	0.178		0.000805	0.00154	0.0331		0.00763	0.00146

Notes:
D - Indicates result is based on a dilution
U - Indicates compound analyzed for but not detected
RL - Laboratory Reporting Limit
MDL - Method Detection Limit
RIDSRS - NJDEP Residential Ingestion-Dermal Soil Remediation Standard (May 2021)
RISRS - NJDEP Residential Inhalation Soil Remediation Standard (May 2021)
NRIDSRS - NJDEP Non-Residential Ingestion-Dermal Soil Remediation Standard (May 2021)
NRISRS - NJDEP Non-Residential Inhalation Soil Remediation Standard (May 2021)
MGWSRS = NJDEP Migration to Groundwater SRS (May 2021)
- Exceeds one or more NJDEP Standard
- Detected in Sample
NA - No applicable NJDEP SRS
All results reported in milligrams per kilogram (mg/kg) or parts per million (ppm)

Table 4: T-4 Soil Sample Analysis and Data Summary
Old Orchard Country Club
54 Monmouth Road
Borough of Eatontown, Monmouth County, New Jersey
Dynamic Earth Project No. 3272-98-005EC

DYNAMIC EARTH						Sample ID:	2120937-11				2120937-12				2120937-13				2120937-14				2120937-15			
						Lab ID:	T-4A				T-4-1				T-4-2				T-4-3				T-4-4			
						Sample Depth (feet):	1.0-1.5				0.0-0.5				0.0-0.5				0.0-0.5				0.0-0.5			
						Sample Date:	12/20/2022				12/20/2022				12/20/2022				12/20/2022				12/20/2022			
CAS#	**Compound**	**RIDSRS**	**RISRS**	**NRIDSRS**	**NRISRS**	**MGWSRS**	Result	Qualifier	MDL	RL	Result	Qualifier	MDL	RL	Result	Qualifier	MDL	RL	Result	Qualifier	MDL	RL	Result	Qualifier	MDL	RL
General Chemistry (%)																										
PERSOL	Percent Solids						**88.8**				**86.0**				**85.3**				**82.9**				**88.2**			
Pesticides (m	Result																									
60-57-1	Dieldrin	0.034	NA	0.16	NA	0.024	**0.0126**		0.000766	0.00146	**0.0220**		0.000791	0.00151	**0.000899**	J	0.000797	0.00152	0.000821	U	0.000821	0.00157	0.000771	U	0.000771	0.00147

Notes:
D - Indicates result is based on a dilution
U - Indicates compound analyzed for but not detected
RL - Laboratory Reporting Limit
MDL - Method Detection Limit
RIDSRS - NJDEP Residential Ingestion-Dermal Soil Remediation Standard (May 2021)
RISRS - NJDEP Residential Inhalation Soil Remediation Standard (May 2021)
NRIDSRS - NJDEP Non-Residential Ingestion-Dermal Soil Remediation Standard (May 2021)
NRISRS - NJDEP Non-Residential Inhalation Soil Remediation Standard (May 2021)
MGWSRS = NJDEP Migration to Groundwater SRS (May 2021)
- Exceeds one or more NJDEP Standard
- Detected in Sample
NA - No applicable NJDEP SRS
All results reported in milligrams per kilogram (mg/kg) or parts per million (ppm)

Table 5: T-11 Soil Sample Analysis and Data Summary
Old Orchard Country Club
54 Monmouth Road
Borough of Eatontown, Monmouth County, New Jersey
Dynamic Earth Project No. 3272-98-005EC

						Sample ID:	2120938-31			
DYNAMIC EARTH						Lab ID:	T-11R			
						Sample Depth (feet):	0.0-0.5			
						Sample Date:	12/20/2022			
CAS#	**Compound**	**RIDSRS**	**RISRS**	**NRIDSRS**	**NRISRS**	**MGWSRS**	Result	Qualifier	MDL	RL
General Chemistry (%)										
PERSOL	Percent Solids						**86.3**			
General Chemistry (g)										
	SPLP Soil Weight						**86.3**			
General Chemistry (mL)										
	SPLP Leachate Volume						**2000**			
General Chemistry (pH Units)										
	SPLP Leachate pH						**4.07**			0.0100
SPLP Pesticides (ug/L)										
60-57-1	Dieldrin					0.04	0.000282	U	0.000282	0.0208

Notes:
D - Indicates result is based on a dilution
U - Indicates compound analyzed for but not detected
RL - Laboratory Reporting Limit
MDL - Method Detection Limit
RIDSRS - NJDEP Residential Ingestion-Dermal Soil Remediation Standard (May 2021)
RISRS - NJDEP Residential Inhalation Soil Remediation Standard (May 2021)
NRIDSRS - NJDEP Non-Residential Ingestion-Dermal Soil Remediation Standard (May 2021)
NRISRS - NJDEP Non-Residential Inhalation Soil Remediation Standard (May 2021)
MGWSRS = NJDEP Migration to Groundwater SRS (May 2021)
- Exceeds one or more NJDEP Standard
- Detected in Sample
NA - No applicable NJDEP SRS
All results reported in milligrams per kilogram (mg/kg) or parts per million (ppm)

Table 6: T-12 Soil Sample Analysis and Data Summary
Old Orchard Country Club
54 Monmouth Road
Borough of Eatontown, Monmouth County, New Jersey
Dynamic Earth Project No. 3272-98-005EC

DYNAMIC EARTH																																	
						Sample ID:	2120937-16				2120937-17				2120937-46				2120937-18				2120937-19				2120937-47				2120937-20			
						Lab ID:	T-12A				T-12-1				T-12-1A				T-12-2				T-12-3				T-12-3A				T-12-4			
						Sample Depth (feet):	1.0-1.5				0.0-0.5				1.0-1.5				0.0-0.5				0.0-0.5				1.0-1.5				0.0-0.5			
						Sample Date:	12/20/2022				12/20/2022				12/20/2022				12/20/2022				12/20/2022				12/20/2022				12/20/2022			
CAS#	Compound	RIDSRS	RISRS	NRIDSRS	NRISRS	MGWSRS	Result	Qualifier	MDL	RL	Result	Qualifier	MDL	RL	Result	Qualifier	MDL	RL	Result	Qualifier	MDL	RL	Result	Qualifier	MDL	RL	Result	Qualifier	MDL	RL	Result	Qualifier	MDL	RL
General Chemistry (%)																																		
PERSOL	Percent Solids						**85.3**				**85.9**				**86.4**				**86.1**				**86.3**				**86.1**				**86.2**			
Pesticides (mg/kg)																																		
60-57-1	Dieldrin	0.034	NA	0.16	NA	0.024	**0.00162**		0.000798	0.00152	**0.0514**		0.000792	0.00151	ND	U	0.000787	0.00151	**0.00159**		0.000789	0.00151	**0.0705**		0.000788	0.00151	ND	U	0.00079	0.00151	**0.000858**	J	0.000789	0.00151

Notes:
D - Indicates result is based on a dilution
U - Indicates compound analyzed for but not detected
RL - Laboratory Reporting Limit
MDL - Method Detection Limit
RIDSRS - NJDEP Residential Ingestion-Dermal Soil Remediation Standard (May 2021)
RISRS - NJDEP Residential Inhalation Soil Remediation Standard (May 2021)
NRIDSRS - NJDEP Non-Residential Ingestion-Dermal Soil Remediation Standard (May 2021)
NRISRS - NJDEP Non-Residential Inhalation Soil Remediation Standard (May 2021)
MGWSRS = NJDEP Migration to Groundwater SRS (May 2021)
- Exceeds one or more NJDEP Standard
- Detected in Sample
NA - No applicable NJDEP SRS
All results reported in milligrams per kilogram (mg/kg) or parts per million (ppm)

Table 7: T-14 Soil Sample Analysis and Data Summary
Old Orchard Country Club
54 Monmouth Road
Borough of Eatontown, Monmouth County, New Jersey
Dynamic Earth Project No. 3272-98-005EC

DYNAMIC EARTH						Sample ID:	2120937-21				2120937-22				2120937-23				2120937-24				2120937-25				2120937-48			
						Lab ID:	T-14A				T-14-1				T-14-2				T-14-3				T-14-4				T-14-4A			
						Sample Depth (feet):	1.0-1.5				0.0-0.5				0.0-0.5				0.0-0.5				0.0-0.5				1.0-1.5			
						Sample Date:	12/20/2022				12/20/2022				12/20/2022				12/20/2022				12/20/2022				12/20/2022			
CAS#	Compound	RIDSRS	RISRS	NRIDSRS	NRISRS	MGWSRS	Result	Qualifier	MDL	RL	Result	Qualifier	MDL	RL	Result	Qualifier	MDL	RL	Result	Qualifier	MDL	RL	Result	Qualifier	MDL	RL	Result	Qualifier	MDL	RL
General Chemistry (%)																														
PERSOL	Percent Solids						**86.6**				**88.7**				**86.6**				**88.3**				**89.9**				**90.3**			
Pesticides (mg/kg)																														
60-57-1	Dieldrin	0.034	NA	0.16	NA	0.024	**0.00419**		0.000785	0.0015	**0.00361**		0.000767	0.00147	0.000785	U	0.000785	0.0015	**0.0107**		0.00077	0.00147	**0.129**		0.000757	0.00145	**0.00328**		0.000753	0.00144

Notes:
D - Indicates result is based on a dilution
U - Indicates compound analyzed for but not detected
RL - Laboratory Reporting Limit
MDL - Method Detection Limit
RIDSRS - NJDEP Residential Ingestion-Dermal Soil Remediation Standard (May 2021)
RISRS - NJDEP Residential Inhalation Soil Remediation Standard (May 2021)
NRIDSRS - NJDEP Non-Residential Ingestion-Dermal Soil Remediation Standard (May 2021)
NRISRS - NJDEP Non-Residential Inhalation Soil Remediation Standard (May 2021)
MGWSRS = NJDEP Migration to Groundwater SRS (May 2021)
- Exceeds one or more NJDEP Standard
- Detected in Sample
NA - No applicable NJDEP SRS
All results reported in milligrams per kilogram (mg/kg) or parts per million (ppm)

Table 8: F-6 Soil Sample Analysis and Data Summary
Old Orchard Country Club
54 Monmouth Road
Borough of Eatontown, Monmouth County, New Jersey
Dynamic Earth Project No. 3272-98-005EC

							Sample ID:	2120938-11				2120938-12				2120938-13				2120938-14				2120938-15			
							Lab ID:	F-6A				F-6-1				F-6-2				F-6-3				F-6-4			
							Sample Depth (feet):	1.0-1.5				0.0-0.5				0.0-0.5				0.0-0.5				0.0-0.5			
							Sample Date:	12/20/2022				12/20/2022				12/20/2022				12/20/2022				12/20/2022			
CAS#	Compound	RIDSRS	RISRS	NRIDSRS	NRISRS	MGWSRS	Result	Qualifier	MDL	RL	Result	Qualifier	MDL	RL	Result	Qualifier	MDL	RL	Result	Qualifier	MDL	RL	Result	Qualifier	MDL	RL
General Chemistry (%)																											
PERSOL	Percent Solids						**86.1**				**83.5**				**86.5**				**86.3**				**86.1**			
Total Metals (mg/kg)																											
7440-38-2	Arsenic	19	1100	19	5200	19	**2.93**			1.47	**2.65**			1.48	**6.70**			1.44	**1.43**			1.43	**4.79**			1.45

Notes:
D - Indicates result is based on a dilution
U - Indicates compound analyzed for but not detected
RL - Laboratory Reporting Limit
MDL - Method Detection Limit
RIDSRS - NJDEP Residential Ingestion-Dermal Soil Remediation Standard (May 2021)
RISRS - NJDEP Residential Inhalation Soil Remediation Standard (May 2021)
NRIDSRS - NJDEP Non-Residential Ingestion-Dermal Soil Remediation Standard (May 2021)
NRISRS - NJDEP Non-Residential Inhalation Soil Remediation Standard (May 2021)
MGWSRS = NJDEP Migration to Groundwater SRS (May 2021)
- Exceeds one or more NJDEP Standard
- Detected in Sample
NA - No applicable NJDEP SRS
All results reported in milligrams per kilogram (mg/kg) or parts per million (ppm)

Table 9: F-11 Soil Sample Analysis and Data Summary
Old Orchard Country Club
54 Monmouth Road
Borough of Eatontown, Monmouth County, New Jersey
Dynamic Earth Project No. 3272-98-005EC

DYNAMIC EARTH							Sample ID:	2120938-16				2120938-17				2120938-18				2120938-19				2120938-20			
							Lab ID:	F-11A				F-11-1				F-11-2				F-11-3				F-11-4			
							Sample Depth (feet):	1.0-1.5				0.0-0.5				0.0-0.5				0.0-0.5				0.0-0.5			
							Sample Date:	12/21/2022				12/21/2022				12/21/2022				12/21/2022				12/21/2022			
CAS#	**Compound**	**RIDSRS**	**RISRS**	**NRIDSRS**	**NRISRS**	**MGWSRS**	Result	Qualifier	MDL	RL	Result	Qualifier	MDL	RL	Result	Qualifier	MDL	RL	Result	Qualifier	MDL	RL	Result	Qualifier	MDL	RL
General Chemistry (%)																										
PERSOL	Percent Solids						**86.8**				**85.0**				**86.7**				**82.0**				**86.9**			
Total Metals (mg/kg)																										
7440-38-2	Arsenic	19	1100	19	5200	19	**3.33**			1.41	1.44	U		1.44	1.42	U		1.42	1.47	U		1.47	**2.46**			1.40

Notes:
D - Indicates result is based on a dilution
U - Indicates compound analyzed for but not detected
RL - Laboratory Reporting Limit
MDL - Method Detection Limit
RIDSRS - NJDEP Residential Ingestion-Dermal Soil Remediation Standard (May 2021)
RISRS - NJDEP Residential Inhalation Soil Remediation Standard (May 2021)
NRIDSRS - NJDEP Non-Residential Ingestion-Dermal Soil Remediation Standard (May 2021)
NRISRS - NJDEP Non-Residential Inhalation Soil Remediation Standard (May 2021)
MGWSRS = NJDEP Migration to Groundwater SRS (May 2021)
- Exceeds one or more NJDEP Standard
- Detected in Sample
NA - No applicable NJDEP SRS
All results reported in milligrams per kilogram (mg/kg) or parts per million (ppm)

Table 10: F-15 Soil Sample Analysis and Data Summary
Old Orchard Country Club
54 Monmouth Road
Borough of Eatontown, Monmouth County, New Jersey
Dynamic Earth Project No. 3272-98-005EC

DYNAMIC EARTH																																	
						Sample ID:	2120938-34				2120938-21				2120938-22				2120938-23				2120938-24				2120938-39				2120938-25			
						Lab ID:	F-15R				F-15A				F-15-1-R				F-15-3-R				F-15-6-R				F-15-6A-R				F-15-7-R			
						Sample Depth (feet):	0.0-0.5				1.0-1.5				0.0-0.5				0.0-0.5				0.0-0.5				1.0-1.5				0.0-0.5			
						Sample Date:	12/21/2022				12/21/2022				12/21/2022				12/21/2022				12/21/2022				12/21/2022				12/21/2022			
CAS#	Compound	RIDSRS	RISRS	NRIDSRS	NRISRS	MGWSRS	Result	Qualifier	MDL	RL	Result	Qualifier	MDL	RL	Result	Qualifier	MDL	RL	Result	Qualifier	MDL	RL	Result	Qualifier	MDL	RL	Result	Qualifier	MDL	RL	Result	Qualifier	MDL	RL
General Chemistry (%)																																		
PERSOL	Percent Solids						**85.2**				**86.0**				**86.4**				**88.1**				**87.7**				**87**				**86.1**			
General Chemistry (g)																																		
	SPLP Soil Weight						**85.2**																											
General Chemistry (mL)																																		
	SPLP Leachate Volume						**2000**																											
General Chemistry (pH Units)																																		
	SPLP Leachate pH						**5.01**			0.0100																									
SPLP Pesticides (ug/L)																																		
72-55-9	4,4'-DDE					2	**0.166**		0.00025	0.0217																									
Total Metals (mg/kg)																																		
7440-38-2	Arsenic	19	1100	19	5200	19					**9.22**			1.45	**5.36**			1.43	**6.64**			1.37	**47.4**			1.36	ND			1.45	**14.7**			1.44

Notes:
D - Indicates result is based on a dilution
U - Indicates compound analyzed for but not detected
RL - Laboratory Reporting Limit
MDL - Method Detection Limit
RIDSRS - NJDEP Residential Ingestion-Dermal Soil Remediation Standard (May 2021)
RISRS - NJDEP Residential Inhalation Soil Remediation Standard (May 2021)
NRIDSRS - NJDEP Non-Residential Ingestion-Dermal Soil Remediation Standard (May 2021)
NRISRS - NJDEP Non-Residential Inhalation Soil Remediation Standard (May 2021)
MGWSRS = NJDEP Migration to Groundwater SRS (May 2021)
- Exceeds one or more NJDEP Standard
- Detected in Sample
NA - No applicable NJDEP SRS
All results reported in milligrams per kilogram (mg/kg) or parts per million (ppm)

Table 11: F-17 Soil Sample Analysis and Data Summary
Old Orchard Country Club
54 Monmouth Road
Borough of Eatontown, Monmouth County, New Jersey
Dynamic Earth Project No. 3272-98-005EC

DYNAMIC EARTH							Sample ID:	2120938-26				2120938-27				2120938-28				2120938-29				2120938-30			
							Lab ID:	F-17A				F-17-1				F-17-2				F-17-3				F-17-4			
							Sample Depth (feet):	1.0-1.5				0.0-0.5				0.0-0.5				0.0-0.5				0.0-0.5			
							Sample Date:	1221/2022				1221/2022				1221/2022				1221/2022				12/21/2022			
CAS#	Compound	RIDSRS	RISRS	NRIDSRS	NRISRS	MGWSRS	Result	Qualifier	MDL	RL	Result	Qualifier	MDL	RL	Result	Qualifier	MDL	RL	Result	Qualifier	MDL	RL	Result	Qualifier	MDL	RL
General Chemistry (%)																										
PERSOL	Percent Solids						**88.0**				**84.8**				**85.5**				**82.4**				**82.9**			
Total Metals (mg/kg)																										
7440-38-2	Arsenic	19	1100	19	5200	19	**5.71**			1.42	**13.4**			1.44	**8.37**			1.45	**7.38**			1.52	**5.79**			1.53

Notes:
D - Indicates result is based on a dilution
U - Indicates compound analyzed for but not detected
RL - Laboratory Reporting Limit
MDL - Method Detection Limit
RIDSRS - NJDEP Residential Ingestion-Dermal Soil Remediation Standard (May 2021)
RISRS - NJDEP Residential Inhalation Soil Remediation Standard (May 2021)
NRIDSRS - NJDEP Non-Residential Ingestion-Dermal Soil Remediation Standard (May 2021)
NRISRS - NJDEP Non-Residential Inhalation Soil Remediation Standard (May 2021)
MGWSRS = NJDEP Migration to Groundwater SRS (May 2021)
- Exceeds one or more NJDEP Standard
- Detected in Sample
NA - No applicable NJDEP SRS
All results reported in milligrams per kilogram (mg/kg) or parts per million (ppm)

Table 12: F-18 Soil Sample Analysis and Data Summary
Old Orchard Country Club
54 Monmouth Road
Borough of Eatontown, Monmouth County, New Jersey
Dynamic Earth Project No. 3272-98-005EC

						Sample ID:	2120938-33			
						Lab ID:	F-18R			
						Sample Depth (feet):	0.0-0.5			
						Sample Date:	12/21/2022			
CAS#	**Compound**	**RIDSRS**	**RISRS**	**NRIDSRS**	**NRISRS**	**MGWSRS**	Result	Qualifier	MDL	RL
General Chemistry (%)										
PERSOL	Percent Solids						**86.5**			
General Chemistry (g)										
	SPLP Soil Weight						**86.5**			
General Chemistry (mL)										
	SPLP Leachate Volume						**2000**			
General Chemistry (pH Units)										
	SPLP Leachate pH						**5.05**			0.0100
SPLP Pesticides (ug/L)										
60-57-1	Dieldrin					0.04	**0.00388**	J	0.000277	0.0204

Notes:
D - Indicates result is based on a dilution
U - Indicates compound analyzed for but not detected
RL - Laboratory Reporting Limit
MDL - Method Detection Limit
RIDSRS - NJDEP Residential Ingestion-Dermal Soil Remediation Standard (May 2021)
RISRS - NJDEP Residential Inhalation Soil Remediation Standard (May 2021)
NRIDSRS - NJDEP Non-Residential Ingestion-Dermal Soil Remediation Standard (May 2021)
NRISRS - NJDEP Non-Residential Inhalation Soil Remediation Standard (May 2021)
MGWSRS = NJDEP Migration to Groundwater SRS (May 2021)
- Exceeds one or more NJDEP Standard
- Detected in Sample
NA - No applicable NJDEP SRS
All results reported in milligrams per kilogram (mg/kg) or parts per million (ppm)

Table 13: G-6 Soil Sample Analysis and Data Summary
Old Orchard Country Club
54 Monmouth Road
Borough of Eatontown, Monmouth County, New Jersey
Dynamic Earth Project No. 3272-98-005EC

DYNAMIC EARTH						Sample ID:	2120937-28				2120937-34			
						Lab ID:	G-6-2R				G-6-R			
						Sample Depth (feet):	0.0-0.5				0.0-0.5			
						Sample Date:	12/21/2022				12/21/2022			
CAS#	**Compound**	**RIDSRS**	**RISRS**	**NRIDSRS**	**NRISRS**	**MGWSRS**	Result	Qualifier	MDL	RL	Result	Qualifier	MDL	RL
General Chemistry (%)														
PERSOL	Percent Solids						**84.8**				**88.9**			
General Chemistry (g)														
	SPLP Soil Weight						**84.783**				**44.4395**			
General Chemistry (mL)														
	SPLP Leachate Volume						**2000**				**1000**			
General Chemistry (pH Units)														
	SPLP Leachate pH						**8.3**			0.01	**5.02**			0.01
SPLP Metals (mg/L)														
7439-97-6	Mercury					0.04	0.001	U		0.00100				
SPLP Pesticides (ug/L)														
72-55-9	4,4'-DDE					2					**0.146**		0.000468	0.04

Notes:
D - Indicates result is based on a dilution
U - Indicates compound analyzed for but not detected
RL - Laboratory Reporting Limit
MDL - Method Detection Limit
RIDSRS - NJDEP Residential Ingestion-Dermal Soil Remediation Standard (May 2021)
RISRS - NJDEP Residential Inhalation Soil Remediation Standard (May 2021)
NRIDSRS - NJDEP Non-Residential Ingestion-Dermal Soil Remediation Standard (May 2021)
NRISRS - NJDEP Non-Residential Inhalation Soil Remediation Standard (May 2021)
MGWSRS = NJDEP Migration to Groundwater SRS (May 2021)
- Exceeds one or more NJDEP Standard
- Detected in Sample
NA - No applicable NJDEP SRS
All results reported in milligrams per kilogram (mg/kg) or parts per million (ppm)

Table 14: G-9 Soil Sample Analysis and Data Summary
Old Orchard Country Club
54 Monmouth Road
Borough of Eatontown, Monmouth County, New Jersey
Dynamic Earth Project No. 3272-98-005EC

							Sample ID:	2120937-29				2120937-30				2120937-31				2120937-32				2120937-33			
							Lab ID:	G-9A-R				G-9-1-R				G-9-2-R				G-9-3-R				G-9-4-R			
							Sample Depth (feet):	1.0-1.5				0.0-0.5				0.0-0.5				0.0-0.5				0.0-0.5			
							Sample Date:	12/21/2022				12/21/2022				12/21/2022				12/21/2022				12/21/2022			
CAS#	Compound	RIDSRS	RISRS	NRIDSRS	NRISRS	MGWSRS	Result	Qualifier	MDL	RL	Result	Qualifier	MDL	RL	Result	Qualifier	MDL	RL	Result	Qualifier	MDL	RL	Result	Qualifier	MDL	RL
General Chemistry (%)																											
PERSOL	Percent Solids						**82.3**				**79.6**				**82.7**				**84.6**				**82.9**			
General Chemistry (g)																											
	SPLP Soil Weight						**82.3**								**82.665**											
General Chemistry (mL)																											
	SPLP Leachate Volume						**2000**								**2000**											
General Chemistry (pH Units)																											
	SPLP Leachate pH						**8.2**			0.01					**8.1**			0.01									
Pesticides (mg/kg)																											
1024-57-3	Heptachlor Epoxide	0.076	NA	0.4	NA	0.081	0.000797	U	0.0008	0.00158	**0.0708**		0.00082	0.00163	**0.0258**		0.00079	0.00157	**0.0147**		0.00078	0.00154	**0.00976**		0.00079	0.00157
SPLP Metals (mg/L)																											
7439-97-6	Mercury					0.04	0.001	U		0.00100					0.001	U		0.00100									

Notes:
D - Indicates result is based on a dilution
U - Indicates compound analyzed for but not detected
RL - Laboratory Reporting Limit
MDL - Method Detection Limit
RIDSRS - NJDEP Residential Ingestion-Dermal Soil Remediation Standard (May 2021)
RISRS - NJDEP Residential Inhalation Soil Remediation Standard (May 2021)
NRIDSRS - NJDEP Non-Residential Ingestion-Dermal Soil Remediation Standard (May 2021)
NRISRS - NJDEP Non-Residential Inhalation Soil Remediation Standard (May 2021)
MGWSRS = NJDEP Migration to Groundwater SRS (May 2021)
- Exceeds one or more NJDEP Standard
- Detected in Sample
NA - No applicable NJDEP SRS
All results reported in milligrams per kilogram (mg/kg) or parts per million (ppm)

Table 15: G-11 Soil Sample Analysis and Data Summary
Old Orchard Country Club
54 Monmouth Road
Borough of Eatontown, Monmouth County, New Jersey
Dynamic Earth Project No. 3272-98-005EC

						Sample ID:	2120938-37			
						Lab ID:	G-11R			
						Sample Depth (feet):	0.0-0.5			
						Sample Date:	12/21/2022			
CAS#	**Compound**	**RIDSRS**	**RISRS**	**NRIDSRS**	**NRISRS**	**MGWSRS**	Result	Qualifier	MDL	RL
General Chemistry (%)										
PERSOL	Percent Solids									
General Chemistry (g)										
	SPLP Soil Weight						**78.9**			
General Chemistry (mL)										
	SPLP Leachate Volume						**2000**			
General Chemistry (pH Units)										
	SPLP Leachate pH						**8.1**			
SPLP Metals (mg/L)										
7439-97-6	Mercury					0.04	0.001	U		0.00100

Notes:
D - Indicates result is based on a dilution
U - Indicates compound analyzed for but not detected
RL - Laboratory Reporting Limit
MDL - Method Detection Limit
RIDSRS - NJDEP Residential Ingestion-Dermal Soil Remediation Standard (May 2021)
RISRS - NJDEP Residential Inhalation Soil Remediation Standard (May 2021)
NRIDSRS - NJDEP Non-Residential Ingestion-Dermal Soil Remediation Standard (May 2021)
NRISRS - NJDEP Non-Residential Inhalation Soil Remediation Standard (May 2021)
MGWSRS = NJDEP Migration to Groundwater SRS (May 2021)
- Exceeds one or more NJDEP Standard
- Detected in Sample
NA - No applicable NJDEP SRS
All results reported in milligrams per kilogram (mg/kg) or parts per million (ppm)

Table 16: G-12 Soil Sample Analysis and Data Summary
Old Orchard Country Club
54 Monmouth Road
Borough of Eatontown, Monmouth County, New Jersey
Dynamic Earth Project No. 3272-98-005EC

DYNAMIC EARTH							Sample ID:	2120937-35				2120937-36				2120937-37				2120937-49				2120937-38				2120937-50				2120937-39			
							Lab ID:	G-12A				G-12-1				G-12-2				G-12-2A				G-12-3				G-12-3A				G-12-4			
							Sample Depth (feet):	1.0-1.5				0.0-0.5				0.0-0.5				1.0-1.5				0.0-0.5				1.0-1.5				0.0-0.5			
							Sample Date:	12/21/2022				12/21/2022				12/21/2022				12/21/2022				12/21/2022				12/21/2022				12/21/2022			
CAS#	Compound	RIDSRS	RISRS	NRIDSRS	NRISRS	MGWSRS	Result	Qualifier	MDL	RL	Result	Qualifier	MDL	RL	Result	Qualifier	MDL	RL	Result	Qualifier	MDL	RL	Result	Qualifier	MDL	RL	Result	Qualifier	MDL	RL	Result	Qualifier	MDL	RL
General Chemistry (%)																																			
PERSOL	Percent Solids						**83.3**				**86.5**				**85.1**				**91.7**				**83.2**				**91**				**88.3**			
Pesticides (mg/kg)																																			
1024-57-3	Heptachlor Epoxide	0.076	NA	0.4	NA	0.081	**0.0767**		0.000788	0.00156	**0.0467**		0.000758	0.0015	**0.162**		0.000771	0.00153	**0.000814**	J	0.000715	0.00142	**0.103**		0.000789	0.00156	**0.00382**		0.000721	0.00143	**0.0344**		0.000743	0.00147

Notes:
D - Indicates result is based on a dilution
U - Indicates compound analyzed for but not detected
RL - Laboratory Reporting Limit
MDL - Method Detection Limit
RIDSRS - NJDEP Residential Ingestion-Dermal Soil Remediation Standard (May 2021)
RISRS - NJDEP Residential Inhalation Soil Remediation Standard (May 2021)
NRIDSRS - NJDEP Non-Residential Ingestion-Dermal Soil Remediation Standard (May 2021)
NRISRS - NJDEP Non-Residential Inhalation Soil Remediation Standard (May 2021)
MGWSRS = NJDEP Migration to Groundwater SRS (May 2021)
- Exceeds one or more NJDEP Standard
- Detected in Sample
NA - No applicable NJDEP SRS
All results reported in milligrams per kilogram (mg/kg) or parts per million (ppm)

Table 17: G-15 Soil Sample Analysis and Data Summary
Old Orchard Country Club
54 Monmouth Road
Borough of Eatontown, Monmouth County, New Jersey
Dynamic Earth Project No. 3272-98-005EC

							Sample ID:	2120938-36				2120938-01				2120938-02				2120938-03				2120938-04				2120938-05			
							Lab ID:	G-15R				G-15A				G-15-1				G-15-2				G-15-3				G-15-4			
							Sample Depth (feet):	0.0-0.5				1.0-1.5				0.0-0.5				0.0-0.5				0.0-0.5				0.0-0.5			
							Sample Date:	12/21/2022				12/21/2022				12/21/2022				12/21/2022				12/21/2022				12/21/2022			
CAS#	Compound	RIDSRS	RISRS	NRIDSRS	NRISRS	MGWSRS	Result	Qualifier	MDL	RL	Result	Qualifier	MDL	RL	Result	Qualifier	MDL	RL	Result	Qualifier	MDL	RL	Result	Qualifier	MDL	RL	Result	Qualifier	MDL	RL
General Chemistry (%)																															
PERSOL	Percent Solids						**85.7**				**84.8**				**86.8**				**82.9**				**86.5**				**87.7**			
General Chemistry (g)																															
	SPLP Soil Weight						**85.7**																								
General Chemistry (mL)																															
	SPLP Leachate Volume						**2000**																								
General Chemistry (pH Units)																															
	SPLP Leachate pH						**8.20**			0.0100																						
SPLP Metals (mg/L)																															
7439-92-1	Lead					0.1	**0.0172**			0.00200																						
Pesticides (mg/kg)																															
1024-57-3	Heptachlor Epoxide	0.076	NA	0.4	NA	0.081					0.000774	U	0.000774	0.00153	**0.0165**		0.000756	0.0015	**0.0184**		0.000791	0.00157	**0.0160**		0.000759	0.0015	**0.00768**		0.000748	0.00148

Notes:
D - Indicates result is based on a dilution
U - Indicates compound analyzed for but not detected
RL - Laboratory Reporting Limit
MDL - Method Detection Limit
RIDSRS - NJDEP Residential Ingestion-Dermal Soil Remediation Standard (May 2021)
RISRS - NJDEP Residential Inhalation Soil Remediation Standard (May 2021)
NRIDSRS - NJDEP Non-Residential Ingestion-Dermal Soil Remediation Standard (May 2021)
NRISRS - NJDEP Non-Residential Inhalation Soil Remediation Standard (May 2021)
MGWSRS = NJDEP Migration to Groundwater SRS (May 2021)
- Exceeds one or more NJDEP Standard
- Detected in Sample
NA - No applicable NJDEP SRS
All results reported in milligrams per kilogram (mg/kg) or parts per million (ppm)

Table 18: G-16 Soil Sample Analysis and Data Summary
Old Orchard Country Club
54 Monmouth Road
Borough of Eatontown, Monmouth County, New Jersey
Dynamic Earth Project No. 3272-98-005EC

DYNAMIC EARTH																															
						Sample ID:	2120938-35				2120938-06				2120938-07				2120938-08				2120938-09				2120938-10			
						Lab ID:	G-16R				G-16A				G-16-1				G-16-2				G-16-3				G-16-4			
						Sample Depth (feet):	0.0-0.5				1.0-1.5				0.0-0.5				0.0-0.5				0.0-0.5				0.0-0.5			
						Sample Date:	12/21/2022				12/21/2022				12/21/2022				12/21/2022				12/21/2022				12/21/2022			
CAS#	Compound	RIDSRS	RISRS	NRIDSRS	NRISRS	MGWSRS	Result	Qualifier	MDL	RL	Result	Qualifier	MDL	RL	Result	Qualifier	MDL	RL	Result	Qualifier	MDL	RL	Result	Qualifier	MDL	RL	Result	Qualifier	MDL	RL
General Chemistry (%)																														
PERSOL	Percent Solids						**84.6**				**83.9**				**84.9**				**85.7**				**86.6**				**85.4**			
General Chemistry (g)																														
	SPLP Soil Weight						**84.6**				**83.9**																			
General Chemistry (mL)																														
	SPLP Leachate Volume						**2000**				**2000**																			
General Chemistry (pH Units)																														
	SPLP Leachate pH						**10.0**			0.0100	**8.30**			0.0100																	
Pesticides (mg/kg)																														
1024-57-3	Heptachlor Epoxide	0.076	NA	0.4	NA	0.081					0.000782	U	0.000782	0.00155	**0.0498**		0.000773	0.00153	**0.0248**		0.000765	0.00152	**0.0100**		0.000758	0.0015	**0.0195**		0.000768	0.00152
SPLP Metals (mg/L)																														
7439-92-1	Lead					0.1																								
7439-97-6	Mercury					0.04	0.001	U		0.00100	0.001	U		0.00100																
SPLP Pesticides (ug/L)																														
72-55-9	4,4'-DDE					2	0.000241	U	0.000241	0.0206																				

Notes:
D - Indicates result is based on a dilution
U - Indicates compound analyzed for but not detected
RL - Laboratory Reporting Limit
MDL - Method Detection Limit
RIDSRS - NJDEP Residential Ingestion-Dermal Soil Remediation Standard (May 2021)
RISRS - NJDEP Residential Inhalation Soil Remediation Standard (May 2021)
NRIDSRS - NJDEP Non-Residential Ingestion-Dermal Soil Remediation Standard (May 2021)
NRISRS - NJDEP Non-Residential Inhalation Soil Remediation Standard (May 2021)
MGWSRS = NJDEP Migration to Groundwater SRS (May 2021)
- Exceeds one or more NJDEP Standard
- Detected in Sample
NA - No applicable NJDEP SRS
All results reported in milligrams per kilogram (mg/kg) or parts per million (ppm)

Table 19: Wash Area Soil Sample Analysis and Data Summary
Old Orchard Country Club
54 Monmouth Road
Borough of Eatontown, Monmouth County, New Jersey
Dynamic Earth Project No. 3272-98-005EC

DYNAMIC EARTH						Sample ID:	2120937-26				2120937-27			
						Lab ID:	WA-2R				WA-3R			
						Sample Depth (feet):	0.0-0.5				0.0-0.5			
						Sample Date:	12/20/2022				12/20/2022			
CAS#	**Compound**	**RIDSRS**	**RISRS**	**NRIDSRS**	**NRISRS**	**MGWSRS**	Result	Qualifier	MDL	RL	Result	Qualifier	MDL	RL
General Chemistry (%)														
PERSOL	Percent Solids						**93.2**				**92.5**			
General Chemistry (g)														
	SPLP Soil Weight						**93.2**				**92.457**			
General Chemistry (mL)														
	SPLP Leachate Volume						**2000**				**2000**			
General Chemistry (pH Units)														
	SPLP Leachate pH						**8.4**				**8.5**			0.01
SPLP Metals (mg/L)														
7439-92-1	Lead					0.1	**0.0585**			0.00200	**0.121**			0.00200
SPLP Pesticides (ug/L)														
319-85-7	beta-BHC					0.4					0.000412	U	0.000412	0.0222

Notes:
D - Indicates result is based on a dilution
U - Indicates compound analyzed for but not detected
RL - Laboratory Reporting Limit
MDL - Method Detection Limit
RIDSRS - NJDEP Residential Ingestion-Dermal Soil Remediation Standard (May 2021)
RISRS - NJDEP Residential Inhalation Soil Remediation Standard (May 2021)
NRIDSRS - NJDEP Non-Residential Ingestion-Dermal Soil Remediation Standard (May 2021)
NRISRS - NJDEP Non-Residential Inhalation Soil Remediation Standard (May 2021)
MGWSRS = NJDEP Migration to Groundwater SRS (May 2021)
- Exceeds one or more NJDEP Standard
- Detected in Sample
NA - No applicable NJDEP SRS
All results reported in milligrams per kilogram (mg/kg) or parts per million (ppm)

Table 20: G-9 Groundwater Sample Analysis and Data Summary
Old Orchard Country Club
54 Monmouth Road
Borough of Eatontown, Monmouth County, New Jersey
Dynamic Earth Project No. 3272-98-005EC

		Lab ID:	2120938-32			
		Client ID:	G-9-GW			
		Date Sampled:	12/21/2022			
		Matrix:	Ground Water			
CAS#	**Compound**	**NJDP GWQS**	**Result**	**Qualifier**	**MDL**	**RL**
Pesticides (ug/L)						
72-54-8	4,4'-DDD	0.1	0.000378	U	0.000378	0.02
72-55-9	4,4'-DDE [2C]	0.1	**0.00300**	J	0.000234	0.02
50-29-3	4,4'-DDT	0.1	0.000319	U	0.000319	0.02
309-00-2	Aldrin	0.04	0.000527	U	0.000527	0.02
319-84-6	alpha-BHC	0.02	0.000255	U	0.000255	0.02
319-85-7	beta-BHC	0.04	0.000371	U	0.000371	0.02
57-74-9	Chlordane [2C]	0.5	**0.0159**	J	0.000327	0.05
319-86-8	delta-BHC	NA	0.00032	U	0.00032	0.02
60-57-1	Dieldrin	0.03	0.000271	U	0.000271	0.02
959-98-8	Endosulfan I	40	0.00038	U	0.00038	0.02
33213-65-9	Endosulfan II	40	0.000254	U	0.000254	0.02
1031-07-8	Endosulfan sulfate	40	0.000138	U	0.000138	0.02
72-20-8	Endrin	2	0.000229	U	0.000229	0.02
7421-93-4	Endrin aldehyde	NA	0.000318	U	0.000318	0.02
53494-70-5	Endrin ketone	NA	0.000203	U	0.000203	0.02
58-89-9	gamma-BHC (Lindane)	0.03	0.000241	U	0.000241	0.02
76-44-8	Heptachlor	0.05	0.000563	U	0.000563	0.02
1024-57-3	Heptachlor Epoxide [2C]	0.2	**0.130**		0.000302	0.02
72-43-5	Methoxychlor	40	0.000343	U	0.000343	0.02
8001-35-2	Toxaphene	2	0.0237	U	0.0237	0.2
Total Metals (ug/L)-ADJ						
7440-38-2	Arsenic	3	2	U		2
7439-97-6	Mercury	2	0.5	U		0.5

NOTES:

U - Indicates compound analyzed for but not detected

J - Indicates estimated value for TICs and all results when detected below the RL

NA - No Applicable NJDEP GWQS

NJDEP GWQS - New Jersey Department of Environmental Protection Groundwater Quality Standards

Reporting Limit exceeds Reg Standard

Value Exceeded One or More of the Criteria

Detected in Sample

Table 2: Surface Water Sample Analyses and Data Summary
Old Orchard Country Club
54 Monmouth Road
Borough of Eatontown, Monmouth County, New Jersey
Dynamic Earth Project No.: 3272-98-005EC

					Lab ID:	23E1424-01				23E1424-03				23E1424-05				23E1424-07				23E1424-09				23E1424-11				23E1424-13			
					Client ID:	SW-1				SW-2				SW-3				SW-4				SW-5				SW-6				SW-7			
					Date Sampled:	05/30/2023				05/30/2023				05/30/2023				05/30/2023				05/30/2023				05/30/2023				05/30/2023			
					Matrix:	Surface Water				Surface Water				Surface Water				Surface Water				Surface Water				Surface Water				Surface Water			
					Sample Units:	(ug/L)				(ug/L)				(ug/L)				(ug/L)				(ug/L)				(ug/L)				(ug/L)			
		Surface Water (ug/L)																															
		Fresh Water (FW2) Criteria																															
		Aquatic			Result	Qualifier	MDL	RL	Result	Qualifer	MDL	RL	Result	Qualifer	MDL	RL	Result	Qualifer	MDL	RL	Result	Qualifer	MDL	RL	Result	Qualifer	MDL	RL	Result	Qualifer	MDL	RL
CAS#	Compound	Acute	Chronic	Human Health																												
Dissolved Metals (ug/L)-ADJ																																	
7440-38-2	Arsenic	340(d)(s)	150(d)(s)	0.017(hc)(T)	2	U		2	2	U		2	2	U		2	2	U		2	2	U		2	2	U		2	2	U		2	2	U		2
7439-92-1	Lead	38(d)(s)	5.4(d)(s)	5.0(h)(T)	2	U		2	2	U		2	2	U		2	2	U		2	2	U		2	2	U		2	2	U		2	2	U		2
General Chemistry (°C)																																	
	Temp at time of pH, °C				**15.9**			1.00	**15.1**			1.00	**15.7**			1.00	**15.7**			1.00	**15.7**			1.00	**15.9**			1.00	**16.8**			1.00
General Chemistry (pH Units)																																	
	pH				**7.06**	H		0.0100	**7.11**	H		0.0100	**7.19**	H		0.0100	**7.19**	H		0.0100	**7.15**	H		0.0100	**8.83**	H		0.0100	**7.12**	H		0.0100
Pesticides (ug/L)																																	
72-54-8	4,4'-DDD	NA	NA	0.00031(hc)	0.000378	U	0.000378	0.02	0.000378	U	0.000378	0.02	0.000378	U	0.000378	0.02	0.000378	U	0.000378	0.02	0.000378	U	0.000378	0.02	0.000378	U	0.000378	0.02	0.000378	U	0.000378	0.02
72-55-9	4,4'-DDE	NA	.00000000451	0.00022(hc)	0.000234	U	0.000234	0.02	0.000234	U	0.000234	0.02	0.000234	U	0.000234	0.02	0.000234	U	0.000234	0.02	0.000234	U	0.000234	0.02	0.000234	U	0.000234	0.02	0.000234	U	0.000234	0.02
50-29-3	4,4'-DDT	1.1	0.001	0.00022(hc)	0.000319	U	0.000319	0.02	0.000319	U	0.000319	0.02	0.000319	U	0.000319	0.02	0.000319	U	0.000319	0.02	0.000319	U	0.000319	0.02	0.000319	U	0.000319	0.02	0.000319	U	0.000319	0.02
309-00-2	Aldrin	3	0.017[a]	0.000049(hc)	0.000527	U	0.000527	0.02	0.000527	U	0.000527	0.02	0.000527	U	0.000527	0.02	0.000527	U	0.000527	0.02	0.000527	U	0.000527	0.02	0.000527	U	0.000527	0.02	0.000527	U	0.000527	0.02
319-84-6	alpha-BHC	NA	12.4[a]	0.0026(hc)	0.000255	U	0.000255	0.02	0.000255	U	0.000255	0.02	0.000255	U	0.000255	0.02	0.000255	U	0.000255	0.02	0.000255	U	0.000255	0.02	0.000255	U	0.000255	0.02	0.000255	U	0.000255	0.02
319-85-7	beta-BHC	NA	0.495[a]	0.0091(hc)	0.000371	U	0.000371	0.02	0.000371	U	0.000371	0.02	0.000371	U	0.000371	0.02	0.000371	U	0.000371	0.02	0.000371	U	0.000371	0.02	0.000371	U	0.000371	0.02	0.000371	U	0.000371	0.02
57-74-9	Chlordane	2.4	0.0043	0.00010(hc)	0.000327	U	0.000327	0.05	0.000327	U	0.000327	0.05	0.000327	U	0.000327	0.05	0.000327	U	0.000327	0.05	0.000327	U	0.000327	0.05	0.000327	U	0.000327	0.05	0.000327	U	0.000327	0.05
319-86-8	delta-BHC	NA	NA	NA	0.00032	U	0.00032	0.02	0.00032	U	0.00032	0.02	0.00032	U	0.00032	0.02	0.00032	U	0.00032	0.02	0.00032	U	0.00032	0.02	0.00032	U	0.00032	0.02	0.00032	U	0.00032	0.02
60-57-1	Dieldrin	0.24	0.056	0.000052(hc)	0.000271	U	0.000271	0.02	0.000271	U	0.000271	0.02	0.000271	U	0.000271	0.02	0.000271	U	0.000271	0.02	0.000271	U	0.000271	0.02	0.000271	U	0.000271	0.02	0.000271	U	0.000271	0.02
959-98-8	Endosulfan I	NA	NA	NA	0.00038	U	0.00038	0.02	0.00038	U	0.00038	0.02	0.00038	U	0.00038	0.02	0.00038	U	0.00038	0.02	0.00038	U	0.00038	0.02	0.00038	U	0.00038	0.02	0.00038	U	0.00038	0.02
33213-65-9	Endosulfan II	NA	NA	NA	0.000254	U	0.000254	0.02	0.000254	U	0.000254	0.02	0.000254	U	0.000254	0.02	0.000254	U	0.000254	0.02	0.000254	U	0.000254	0.02	0.000254	U	0.000254	0.02	0.000254	U	0.000254	0.02
1031-07-8	Endosulfan sulfate	NA	2.22[a]	62(h)	0.000138	U	0.000138	0.02	0.000138	U	0.000138	0.02	0.000138	U	0.000138	0.02	0.000138	U	0.000138	0.02	0.000138	U	0.000138	0.02	0.000138	U	0.000138	0.02	0.000138	U	0.000138	0.02
72-20-8	Endrin	0.086	0.036	0.059(h)	0.000229	U	0.000229	0.02	0.000229	U	0.000229	0.02	0.000229	U	0.000229	0.02	0.000229	U	0.000229	0.02	0.000229	U	0.000229	0.02	0.000229	U	0.000229	0.02	0.000229	U	0.000229	0.02
7421-93-4	Endrin aldehyde	NA	0.15[a]	0.059(h)	0.000318	U	0.000318	0.02	0.000318	U	0.000318	0.02	0.000318	U	0.000318	0.02	0.000318	U	0.000318	0.02	0.000318	U	0.000318	0.02	0.000318	U	0.000318	0.02	0.000318	U	0.000318	0.02
53494-70-5	Endrin ketone	NA	NA	NA	0.000203	U	0.000203	0.02	0.000203	U	0.000203	0.02	0.000203	U	0.000203	0.02	0.000203	U	0.000203	0.02	0.000203	U	0.000203	0.02	0.000203	U	0.000203	0.02	0.000203	U	0.000203	0.02
58-89-9	gamma-BHC (Lindane)	0.95	0.026[c]	0.98(h)	0.000241	U	0.000241	0.02	0.000241	U	0.000241	0.02	0.000241	U	0.000241	0.02	0.000241	U	0.000241	0.02	0.000241	U	0.000241	0.02	0.000241	U	0.000241	0.02	0.000241	U	0.000241	0.02
76-44-8	Heptachlor	0.52	0.0038	0.000079(hc)	0.000563	U	0.000563	0.02	0.000563	U	0.000563	0.02	0.000563	U	0.000563	0.02	0.000563	U	0.000563	0.02	0.000563	U	0.000563	0.02	0.000563	U	0.000563	0.02	0.000563	U	0.000563	0.02
1024-57-3	Heptachlor Epoxide	0.52	0.0038	0.000039(hc)	0.000302	U	0.000302	0.02	0.000302	U	0.000302	0.02	0.000302	U	0.000302	0.02	0.000302	U	0.000302	0.02	0.000302	U	0.000302	0.02	0.000302	U	0.000302	0.02	0.000302	U	0.000302	0.02
72-43-5	Methoxychlor	NA	0.03	40(h)	0.000343	U	0.000343	0.02	0.000343	U	0.000343	0.02	0.000343	U	0.000343	0.02	0.000343	U	0.000343	0.02	0.000343	U	0.000343	0.02	0.000343	U	0.000343	0.02	0.000343	U	0.000343	0.02
8001-35-2	Toxaphene	0.73	0.0002	0.00028(hc)	0.0237	U	0.0237	0.2	0.0237	U	0.0237	0.2	0.0237	U	0.0237	0.2	0.0237	U	0.0237	0.2	0.0237	U	0.0237	0.2	0.0237	U	0.0237	0.2	0.0237	U	0.0237	0.2
Total Metals (ug/L)-ADJ																																	
7440-38-2	Arsenic	340(d)(s)	150(d)(s)	0.017(hc)(T)	2	U		2	10	U		10	2	U		2	2	U		2	2	U		2	2	U		2	2	U		2	2	U		2
7440-70-2	Calcium	NA	NA	NA	**66400**			1000	**64600**			1000	**72000**			1000	**96500**			1000	**81300**			1000	**35500**			1000	**93900**			1000
	Hardness	NA	NA	NA	**182000**			2500	**177000**			2500	**196000**			2500	**259000**			2500	**220000**			2500	**88800**			2500	**256000**			2500
7439-92-1	Lead	38(d)(s)	5.4(d)(s)	5.0(h)(T)	2	U		2	10	U		10	2	U		2	2	U		2	2	U		2	2	U		2	2	U		2	2	U		2
7439-95-4	Magnesium	NA	NA	NA	**3890**			2000	**3820**			2000	**3880**			2000	**4240**			2000	**4130**			2000	2000	U		2000	**5280**			2000
7439-97-6	Mercury	1.4(d)(s)	0.77(d)(s)	0.050(h)(T)	0.2	U		0.2	0.2	U		0.2	0.2	U		0.2	0.2	U		0.2	0.2	U		0.2	0.2	U		0.2	0.2	U		0.2

NOTES:
U - Indicates compound analyzed for but not detected
H - Indicates a Hold Time violation
MDL - Method Detection Limt
RL - Laboratory Reporting Limit
NJDEP - New Jersey Department of Envrionmental Protection
BOLD - Exceeds Laboratory Reporting Limit
- Exceeds one or more NJDEP Standard
- Detected in Sample
NA - No applicable NJDEP standard
All results reported in milligrams per kilogram (mg/kg) or parts per million (ppm)

(a) Criteria as listed at (f)3 below as formula
(b) Criteria as listed at (f)4 below as formula
(d) Criterion is expressed as a function of the Water Effect Ratio (WER). For criterion in the table, WER equates to the default value of 1.0. (fc) Criteria expressed as free cyanide (as CN)/L
(h) Human health noncarcinogen (hc) Human health carcinogen
(s) Dissolved criterion
(T) Total recoverable criterion
1. Lowest Effects Levels (LELs) indicate concentrations at which adverse benthic impact may begin to occur (level tolerated by most benthic organisms). Water column species and wildlife are at potential risk via bio-magnification (food chain toxicity) if site-related sediment concentrations of PCBs, organochlorine pesticides, or mercury are at or above the LEL. Other known biomagnifiers without ESC warrant case-by-case evaluation.
2. Severe Effects Levels (SELs) are also provided, but the SEL is not a BEE screening value. Contamination at this level indicates severe impacts to the benthic community in most cases studied. For non-polar organics (PAHs, organochlorine pesticides, PCBs), the SEL is calculated from a site-specific TOC level. Since the table SEL is based on 100% organic carbon, the calculated site-specific number is lower.
3. Refer to Estuarine/Marine Screening Criteria when a freshwater parameter has no corresponding value. Since the biological activity of non-polar organics is not expected to differ greatly in the estuarine/marine environment, these screens can be used as surrogates. While uncertainty associated with the use of estuarine/marine metal screens as freshwater surrogates is greater than with non-polar organics, one surrogate metal (silver) is provided.
4. Effects Range-Low (ER-L) represents a concentration at which adverse benthic impacts are found in approximately 10% of studies. Water column species and wildlife are at potential risk via biomagnification (food chain toxicity) if site-related sediment concentrations of PCBs, organochlorine pesticides, or mercury are at or above the ER-L. Other known biomagnifiers without NOAA screening numbers (dioxins, furans, other chlorinated organics, and selenium) warrant case-by-case evaluation.
5. The Effects Range-Median (ER-M) is also provided. The ER-M is not a BEE screening value. Contamination greater than the ER-M value indicates adverse benthic impacts in more than 50% of cases studies
6. Refer to Freshwater Sediment Screening Criteria when a Estuarine/Marine parameter has no corresponding value and for individual Aroclor values. Since the biological activity of non-polar organics is not expected to differ greatly in the fresh water environment, freshwater screens can be used as surrogates.
7. Screening values were developed for the protection of marine receptors; however, for the purpose of this document they are considered surrogates for freshwater systems.
8. USEPA Region 5, RCRA Ecological Screening Levels (ESLs) represent a protective benchmark (e.g., water quality criteria, sediment quality guidelines/ criteria, and chronic no adverse effect levels) for 223 contaminants and are not intended to serve as cleanup levels, but are intended to function as screeni levels. http://www.epa.gov/reg5rcra/ca/ESL.pdf
9. Wildlife Preliminary Remediation Goal based on plant study.
10. Wildlife Preliminary Remediation Goal based on shrew study.
11. Wildlife Preliminary Remediation Goal based on woodcock study.
12. Wildlife Preliminary Remediation Goal based on earthworm study.
13. Wildlife Preliminary Remediation Goal based on mouse study.
14. Wildlife Preliminary Remediation Goal based on hawk study.
15. Sediment value from NOAA Screening Quick Reference Tables (SQuiRTs).
16. Westhollow Technical Center Levels were developed by Shell Oil for surface water and were approved for use by NJDEP with the following conditions: 1) the source area is removed, 2) these levels are on the fringe of the contamination area, and 3) active remediation is occurring. These levels are applicable to surface water and wetland areas.
17. USEPA Ambient Water Quality Criteria Update for Methyl Tertiary-Butyl Ether (MTBE) http://www.epa.gov/waterscience/criteria/mtbe-fs.html
18. Low Molecular Weight PAHs are defined as compounds composed of fewer than four rings.
19. High Molecular Weight PAHs are defined as compounds composed of four or more rings.
20. Guidance for Developing Ecological Soil Screening Levels, OSWER Directive 9285.7-55, U.S. Environmental Protection Agency, Office of Solid Waste and Emergency Response, 1200 Pennsylvania Avenue, N.W., Washington, DC 20460, November 2003, Revised February 2005, http://www.epa.gov/ecotox/ecossl/pdf/ecossl_guidance_chapters.pdf
21. Value applies to DDT and metabolites.

Table 3: Sediment Sample Analyses and Data Summary
Old Orchard Country Club
54 Monmouth Road
Borough of Eatontown, Monmouth County, New Jersey
Dynamic Earth Project No.: 3272-98-005EC

		Lab ID:		23E1424-02				23E1424-04				23E1424-06				23E1424-08				23E1424-10				23E1424-12				23E1424-14				23E1424-16				23E1424-17				23E1424-18			
		Client ID:		SED-1				SED-2				SED-3				SED-4				SED-5				SED-6				SED-7				SED-1A				SED-4A				SED-6A			
		Date Sampled:		05/30/2023				05/30/2023				05/30/2023				05/30/2023				05/30/2023				05/30/2023				05/30/2023				05/30/2023				05/30/2023				05/30/2023			
		Sample Depth (feet):		0.0-0.5				0.0-0.5				0.0-0.5				0.0-0.5				0.0-0.5				0.0-0.5				0.0-0.5				0.5-1.0				0.5-1.0				0.5-1.0			
		Matrix:		Sediment				Sediment				Sediment				Sediment				Sediment				Sediment				Sediment				Sediment				Sediment				Sediment			
		Sample Units:		(MG/KG)				(MG/KG)				(MG/KG)				(MG/KG)				(MG/KG)				(MG/KG)				(MG/KG)				(MG/KG)				(MG/KG)				(MG/KG)			
		NJDEP Sediment																																										
CAS#	Compound	Ecological Fresh Water Criteria LEL	Ecological Fresh Water Criteria SEL	Result	Qualifier	MDL	RL	Result	Qualifier	MDL	RL	Result	Qualifier	MDL	RL	Result	Qualifier	MDL	RL	Result	Qualifier	MDL	RL	Result	Qualifier	MDL	RL	Result	Qualifier	MDL	RL	Result	Qualifier	MDL	RL	Result	Qualifier	MDL	RL	Result	Qualifier	MDL	RL
General Chemistry (%)																																											
PERSOL	Percent Solids			**59.6**				**69.6**				**79.3**				**85.4**				**73.0**				**58.8**				**76.9**				**54.5**				**77.3**				**53.2**			
General Chemistry (°C)																																											
	Temp at time of pH, °C			**19.4**			1.00	**19.4**			1.00	**19.7**			1.00	**19.5**			1.00	**19.6**			1.00	**19.6**			1.00	**19.7**			1.00	**20.4**			1.00	**20.6**			1.00	**20.5**			1.00
General Chemistry (mV)																																											
	Redox Potential			**191**			-1000	**189**			-1000	**142**			-1000	**149**			-1000	**153**			-1000	**142**			-1000	**147**			-1000	**190**			-1000	**209**			-1000	**212**			-1000
General Chemistry (pH Units)																																											
	pH			**5.56**			0.0100	**5.42**			0.0100	**7.92**			0.0100	**7.34**			0.0100	**7.29**			0.0100	**5.70**			0.0100	**6.80**			0.0100	**7.4**			0.0100	**7.44**			0.0100	**7.2**			0.0100
Pesticides (mg/kg)																																											
72-54-8	4,4'-DDD	0.008, 0.00488[8]	6	**0.00848**		0.000998	0.00218	0.000855	U	0.000855	0.00187	0.000751	U	0.000751	0.00164	**0.00448**		0.000697	0.00152	0.000815	U	0.000815	0.00178	**0.00742**		0.00101	0.00221	0.000774	U	0.000774	0.00169	**0.00521**		0.00082	0.00178	**0.0122**		0.00082	0.00178	**0.00305**		0.00082	0.00178
72-55-9	4,4'-DDE	0.005, 0.00316[8]	19	**0.00382**		0.00119	0.00218	0.00102	U	0.00102	0.00187	0.000897	U	0.000897	0.00164	**0.00555**		0.000833	0.00152	0.000973	U	0.000973	0.00178	0.00121	U	0.00121	0.00221	0.000924	U	0.000924	0.00169	**0.00274**		0.00097	0.00178	**0.0128**		0.00097	0.00178	**0.00297**		0.00097	0.00178
50-29-3	4,4'-DDT	0.008, 0.00416[8]	71	0.00154	U	0.00154	0.00218	0.00132	U	0.00132	0.00187	0.00116	U	0.00116	0.00164	0.00108	U	0.00108	0.00152	0.00126	U	0.00126	0.00178	**0.00475**		0.00156	0.00221	0.00119	U	0.00119	0.00169	**0.00204**		0.00126	0.00178	0.00126	U	0.00126	0.00178	0.00126	U	0.00126	0.00178
309-00-2	Aldrin	0.002	8	0.00103	U	0.00103	0.00218	0.000885	U	0.000885	0.00187	0.000777	U	0.000777	0.00164	0.000722	U	0.000722	0.00152	0.000843	U	0.000843	0.00178	0.00105	U	0.00105	0.00221	0.000801	U	0.000801	0.00169	0.000843	U	0.00084	0.00178	0.000843	U	0.00084	0.00178	0.000843	U	0.00084	0.00178
319-84-6	alpha-BHC	0.006	10	0.000649	U	0.000649	0.00218	0.000556	U	0.000556	0.00187	0.000488	U	0.000488	0.00164	0.000453	U	0.000453	0.00152	0.00053	U	0.00053	0.00178	0.000658	U	0.000658	0.00221	0.000503	U	0.000503	0.00169	0.00053	U	0.00053	0.00178	0.00053	U	0.00053	0.00178	0.00053	U	0.00053	0.00178
319-85-7	beta-BHC	0.005	21	0.00104	U	0.00104	0.00218	0.000892	U	0.000892	0.00187	0.000784	U	0.000784	0.00164	0.000728	U	0.000728	0.00152	0.00085	U	0.00085	0.00178	0.00106	U	0.00106	0.00221	0.000807	U	0.000807	0.00169	0.00085	U	0.00085	0.00178	0.00085	U	0.00085	0.00178	0.00085	U	0.00085	0.00178
57-74-9	Chlordane	0.007, 0.00324[8]	6	0.000969	U	0.000969	0.00218	0.00083	U	0.00083	0.00187	0.000729	U	0.000729	0.00164	0.000677	U	0.000677	0.00152	0.000791	U	0.000791	0.00178	0.000983	U	0.000983	0.00221	0.000751	U	0.000751	0.00169	0.000791	U	0.00079	0.00178	0.000791	U	0.00079	0.00178	0.000791	U	0.00079	0.00178
319-86-8	delta-BHC	NS	NS	0.00101	U	0.00101	0.00218	0.000868	U	0.000868	0.00187	0.000762	U	0.000762	0.00164	0.000708	U	0.000708	0.00152	0.000827	U	0.000827	0.00178	0.00103	U	0.00103	0.00221	0.000785	U	0.000785	0.00169	0.000827	U	0.00083	0.00178	0.000827	U	0.00083	0.00178	0.000827	U	0.00083	0.00178
60-57-1	Dieldrin	0.002, 0.0019[8]	91	0.00114	U	0.00114	0.00218	0.000977	U	0.000977	0.00187	0.000858	U	0.000858	0.00164	0.000797	U	0.000797	0.00152	0.000931	U	0.000931	0.00178	0.00116	U	0.00116	0.00221	0.000884	U	0.000884	0.00169	0.000931	U	0.00093	0.00178	0.000931	U	0.00093	0.00178	0.000931	U	0.00093	0.00178
959-98-8	Endosulfan I	NS	NS	0.00103	U	0.00103	0.00218	0.000882	U	0.000882	0.00187	0.000775	U	0.000775	0.00164	0.000719	U	0.000719	0.00152	0.000841	U	0.000841	0.00178	0.00104	U	0.00104	0.00221	0.000798	U	0.000798	0.00169	0.000841	U	0.00084	0.00178	0.000841	U	0.00084	0.00178	0.000841	U	0.00084	0.00178
33213-65-9	Endosulfan II	NS	NS	0.000991	U	0.000991	0.00218	0.000849	U	0.000849	0.00187	0.000746	U	0.000746	0.00164	0.000692	U	0.000692	0.00152	0.000809	U	0.000809	0.00178	0.001	U	0.001	0.00221	0.000768	U	0.000768	0.00169	0.000809	U	0.00081	0.00178	0.000809	U	0.00081	0.00178	0.000809	U	0.00081	0.00178
1031-07-8	Endosulfan sulfate	0.0346[8]	NS	0.00082	U	0.00082	0.00218	0.000703	U	0.000703	0.00187	0.000617	U	0.000617	0.00164	0.000573	U	0.000573	0.00152	0.00067	U	0.00067	0.00178	0.000831	U	0.000831	0.00221	0.000636	U	0.000636	0.00169	0.00067	U	0.00067	0.00178	0.00067	U	0.00067	0.00178	0.00067	U	0.00067	0.00178
115-29-7	Endosulfans, Total (alpha and beta)	NS	NS	0.000991	U	0.000991	0.00218	0.000849	U	0.000849	0.00187	0.000746	U	0.000746	0.00164	0.000692	U	0.000692	0.00152	0.000809	U	0.000809	0.00178	0.001	U	0.001	0.00221	0.000768	U	0.000768	0.00169	0.000809	U	0.00081	0.00178	0.000809	U	0.00081	0.00178	0.000809	U	0.00081	0.00178
72-20-8	Endrin	0.003, 0.00222[8]	130	0.000753	U	0.000753	0.00218	0.000645	U	0.000645	0.00187	0.000567	U	0.000567	0.00164	0.000526	U	0.000526	0.00152	0.000615	U	0.000615	0.00178	0.000763	U	0.000763	0.00221	0.000584	U	0.000584	0.00169	0.000615	U	0.00062	0.00178	0.000615	U	0.00062	0.00178	0.000615	U	0.00062	0.00178
7421-93-4	Endrin aldehyde	0.480[9]	NS	0.000868	U	0.000868	0.00218	0.000744	U	0.000744	0.00187	0.000654	U	0.000654	0.00164	0.000607	U	0.000607	0.00152	0.000709	U	0.000709	0.00178	0.000881	U	0.000881	0.00221	0.000673	U	0.000673	0.00169	0.000709	U	0.00071	0.00178	0.000709	U	0.00071	0.00178	0.000709	U	0.00071	0.00178
53494-70-5	Endrin ketone	NS	NS	0.000768	U	0.000768	0.00218	0.000658	U	0.000658	0.00187	0.000578	U	0.000578	0.00164	0.000537	U	0.000537	0.00152	0.000627	U	0.000627	0.00178	0.000779	U	0.000779	0.00221	0.000595	U	0.000595	0.00169	0.000627	U	0.00063	0.00178	0.000627	U	0.00063	0.00178	0.000627	U	0.00063	0.00178
58-89-9	gamma-BHC (Lindane)	0.003	1	0.000691	U	0.000691	0.00218	0.000592	U	0.000592	0.00187	0.00052	U	0.00052	0.00164	0.000483	U	0.000483	0.00152	0.000564	U	0.000564	0.00178	0.0007	U	0.0007	0.00221	0.000536	U	0.000536	0.00169	0.000564	U	0.00056	0.00178	0.000564	U	0.00056	0.00178	0.000564	U	0.00056	0.00178
76-44-8	Heptachlor	0.0006[9]	0.010[15]	0.000583	U	0.000583	0.00218	0.0005	U	0.0005	0.00187	0.000439	U	0.000439	0.00164	0.000408	U	0.000408	0.00152	0.000476	U	0.000476	0.00178	0.000592	U	0.000592	0.00221	0.000452	U	0.000452	0.00169	0.000476	U	0.00048	0.00178	0.000476	U	0.00048	0.00178	0.000476	U	0.00048	0.00178
1024-57-3	Heptachlor Epoxide	0.005, 0.00247[8]	5	0.0011	U	0.0011	0.00218	0.000942	U	0.000942	0.00187	0.000828	U	0.000828	0.00164	0.000769	U	0.000769	0.00152	0.000898	U	0.000898	0.00178	0.00112	U	0.00112	0.00221	0.000853	U	0.000853	0.00169	0.000898	U	0.0009	0.00178	0.000898	U	0.0009	0.00178	0.000898	U	0.0009	0.00178
72-43-5	Methoxychlor	0.0136[9]	NS	0.000639	U	0.000639	0.00218	0.000547	U	0.000547	0.00187	0.000481	U	0.000481	0.00164	0.000446	U	0.000446	0.00152	0.000522	U	0.000522	0.00178	0.000648	U	0.000648	0.00221	0.000495	U	0.000495	0.00169	0.000522	U	0.00052	0.00178	0.000522	U	0.00052	0.00178	0.000522	U	0.00052	0.00178
8001-35-2	Toxaphene	0.000077[9]	NS	0.105	U	0.105	0.111	0.09	U	0.09	0.0948	0.079	U	0.079	0.0833	0.0734	U	0.0734	0.0773	0.0857	U	0.0857	0.0904	0.106	U	0.106	0.112	0.0814	U	0.0814	0.0858	0.0857	U	0.0857	0.0904	0.0857	U	0.0857	0.0904	0.0857	U	0.0857	0.0904
Total Metals (mg/kg)																																											
7440-38-2	Arsenic	6, 9.790[8]	33	2	U		2.00	**3.41**			1.77	1.55	U		1.55	**4.03**			1.45	**3.10**			1.64	**6.57**			2.15	1.56	U		1.56	**7.31**			2.00	**4.2**			2.00	**6.22**			2.00
7439-92-1	Lead	31, 35.8[8]	250	**13.2**			2.00	**20.8**			1.77	**6.33**			1.55	**4.79**			1.45	**11.3**			1.64	**109**			2.15	**14.8**			1.56	**68.1**			2.00	**13**			2.00	**283**			2.00
7439-97-6	Mercury	0.2, 0.174[8]	2	**0.290**			0.0335	**0.0580**			0.0287	**0.0266**			0.0252	**0.0426**			0.0234	**0.0603**			0.0274	**0.136**			0.0340	0.026	U		0.0260	**0.357**			0.0335	**0.159**			0.0335	**0.0821**			0.0335
Total Organic Carbon (ug/kg)																																											
7440-44-0	Total Organic Carbon (Rep1)			19600000		500000	500000	21800000		500000	500000	13300000		500000	500000	3600000		500000	500000	14500000		500000	500000	50600000		500000	500000	5780000		500000	500000	8130000		500000	500000	2010000		500000	500000	45600000		500000	500000
7440-44-0	Total Organic Carbon (Rep2)			23000000		500000	500000	24200000		500000	500000	14000000		500000	500000	3800000		500000	500000	14600000		500000	500000	58000000		500000	500000	3930000		500000	500000	9780000		500000	500000	1380000		500000	500000	42500000		500000	500000
7440-44-0	Total Organic Carbon (Average)			21300000		500000	500000	23000000		500000	500000	13600000		500000	500000	3700000		500000	500000	14600000		500000	500000	54300000		500000	500000	4860000		500000	500000	8960000		500000	500000	1700000		500000	500000	44000000		500000	500000
7440-44-0	Total Organic Carbon (Percentage)			2.13%				2.30%				1.36%				3.70%				1.46%				5.43%				4.86%				8.96%				1.70%				4.40%			

NOTES:
U - Indicates compound analyzed for but not detected
MDL - Method Detection Limit
RL - Reporting Limit
NJDEP - New Jersey Department of Environmental Protection
LEL - Lowest Effects Level
SEL - Severe Effects Level
ERL - Effects Range Low
ERM - Effects Range Medium
BOLD - Exceeds Laboratory Reporting Limit
Value Exceeded One or More of the Criteria
Detected in Sample
NS - No applicable NJDEP Screening Level
All results reported in milligrams per kilogram (mg/kg) or parts per million (ppm)

1. Lowest Effects Levels (LELs) indicate concentrations at which adverse benthic impact may begin to occur (level tolerated by most benthic organisms). Water column species and wildlife are at potential risk via bio-magnification (food chain toxicity) if site-related sediment concentrations of PCBs, organochlorine pesticides, or mercury are at or above the LEL. Other known biomagnifiers without ESC warrant case-by-case evaluation.
2. Severe Effects Levels (SELs) are also provided, but the SEL is not a BEE screening value. Contamination at this level indicates severe impacts to the benthic community in most cases studied. For non-polar organics (PAHs, organochlorine pesticides, PCBs), the SEL is calculated from a site-specific TOC level. Since the table SEL is based on 100% organic carbon, the calculated site-specific number is lower.
3. Refer to Estuarine/Marine Screening Criteria when a freshwater parameter has no corresponding value. Since the biological activity of non-polar organics is not expected to differ greatly in the estuarine/marine environment, these screens can be used as surrogates. While uncertainty associated with the use of estuarine/marine metal screens as freshwater surrogates is greater than with non-polar organics, one surrogate metal (silver) is provided.
4. Effects Range-Low (ER-L) represents a concentration at which adverse benthic impacts are found in approximately 10% of studies. Water column species and wildlife are at potential risk via biomagnification (food chain toxicity) if site-related sediment concentrations of PCBs, organochlorine pesticides, or mercury are at or above the ER-L. Other known biomagnifiers without NOAA screening numbers (dioxins, furans, other chlorinated organics, and selenium) warrant case-by-case evaluation.
5. The Effects Range-Median (ER-M) is also provided. The ER-M is not a BEE screening value. Contamination greater than the ER-M value indicates adverse benthic impacts in more than 50% of cases studies
6. Refer to Freshwater Sediment Screening Criteria when a Estuarine/Marine parameter has no corresponding value and for individual Aroclor values. Since the biological activity of non-polar organics is not expected to differ greatly in the fresh water environment, freshwater screens can be used as surrogates.
7. Screening values were developed for the protection of marine receptors; however, for the purpose of this document they are considered surrogates for freshwater systems.
8. USEPA Region 5, RCRA Ecological Screening Levels (ESLs) represent a protective benchmark (e.g., water quality criteria, sediment quality guidelines/ criteria, and chronic no adverse effect levels) for 223 contaminants and are not intended to serve as cleanup levels, but are intended to function as screeni levels. http://www.epa.gov/reg5rcra/ca/ESL.pdf
9. Wildlife Preliminary Remediation Goal based on plant study.
10. Wildlife Preliminary Remediation Goal based on shrew study.
11. Wildlife Preliminary Remediation Goal based on woodcock study.
12. Wildlife Preliminary Remediation Goal based on earthworm study.
13. Wildlife Preliminary Remediation Goal based on mouse study.
14. Wildlife Preliminary Remediation Goal based on hawk study.
15. Sediment value from NOAA Screening Quick Reference Tables (SQuiRTs).
16. Westhollow Technical Center Levels were developed by Shell Oil for surface water and were approved for use by NJDEP with the following conditions: 1) the source area is removed, 2) these levels are on the fringe of the contamination area, and 3) active remediation is occurring. These levels are applicable to surface water and wetland areas.
17. USEPA Ambient Water Quality Criteria Update for Methyl Tertiary-Butyl Ether (MTBE) http://www.epa.gov/waterscience/criteria/mtbe-fs.html
18. Low Molecular Weight PAHs are defined as compounds composed of fewer than four rings.
19. High Molecular Weight PAHs are defined as compounds composed of four or more rings.
20. Guidance for Developing Ecological Soil Screening Levels, OSWER Directive 9285.7-55, U.S. Environmental Protection Agency, Office of Solid Waste and Emergency Response, 1200 Pennsylvania Avenue, N.W., Washington, DC 20460, November 2003, Revised February 2005, http://www.epa.gov/ecotox/ecossl/pdf/ecossl_guidance_chapters.pdf
21. Value applies to DDT and metabolites.

Table 4: T-3 Soil Sample Analysis and Data Summary
Old Orchard Country Club
54 Monmouth Road
Borough of Eatontown, Monmouth County, New Jersey
Dynamic Earth Project No. 3272-98-005EC

DYNAMIC EARTH						Sample ID:	23E1425-01				23E1425-02				23E1425-03				23E1425-04			
						Lab ID:	T-3-1B				T-3-2B				T-3-3B				T-3-4B			
						Sample Depth (feet):	2.0-2.5				2.0-2.5				2.0-2.5				2.0-2.5			
						Sample Date:	05/30/2023				05/30/2023				05/30/2023				05/30/2023			
CAS#	**Compound**	**RIDSRS**	**RISRS**	**NRIDSRS**	**NRISRS**	**MGWSRS**	Result	Qualifier	MDL	RL	Result	Qualifier	MDL	RL	Result	Qualifier	MDL	RL	Result	Qualifier	MDL	RL
General Chemistry (%)																						
PERSOL	Percent Solids						**81.6**				**78.4**				**91.5**				**91.4**			
Pesticides (mg/kg)																						
60-57-1	Dieldrin	0.034	NA	0.16	NA	0.024	0.000834	U	0.000834	0.00159	0.000867	U	0.000867	0.00166	0.000743	U	0.000743	0.00142	**0.000977**	J	0.000744	0.00142

Notes:
D - Indicates result is based on a dilution
U - Indicates compound analyzed for but not detected
RL - Laboratory Reporting Limit
MDL - Method Detection Limit
RIDSRS - NJDEP Residential Ingestion-Dermal Soil Remediation Standard (May 2021)
RISRS - NJDEP Residential Inhalation Soil Remediation Standard (May 2021)
NRIDSRS - NJDEP Non-Residential Ingestion-Dermal Soil Remediation Standard (May 2021)
NRISRS - NJDEP Non-Residential Inhalation Soil Remediation Standard (May 2021)
MGWSRS = NJDEP Migration to Groundwater SRS (May 2021)
- Exceeds one or more NJDEP Standard
- Detected in Sample
NA - No applicable NJDEP SRS
All results reported in milligrams per kilogram (mg/kg) or parts per million (ppm)

Table 5: Trench Area Soil Sample Analysis and Data Summary
Old Orchard Country Club
54 Monmouth Road
Borough of Eatontown, Monmouth County, New Jersey
Dynamic Earth Project No. 3272-98-005EC

							Sample ID:	23E1425-08				23E1425-09				23E1425-19				23E1425-22			
							Lab ID:	TRENCH-6				TRENCH-7				TRENCH-7A				TRENCH-9			
							Sample Depth (feet):	0.0-0.5				0.0-0.5				1.0-1.5				0.0-0.5			
							Sample Date:	05/30/2023				05/30/2023				05/30/2023				05/30/2023			
CAS#	**Compound**	**RIDSRS**	**RISRS**	**NRIDSRS**	**NRISRS**	**MGWSRS**	Result	Qualifier	MDL	RL	Result	Qualifier	MDL	RL	Result	Qualifier	MDL	RL	Result	Qualifier	MDL	RL
General Chemistry (%)																							
PERSOL	Percent Solids						**92.9**				**88.1**				**91.9**				**77.5**			
Pesticides (mg/kg)																							
57-74-9	Chlordane	0.27	NA	1.4	NA	1.4	**0.00729**		0.000622	0.0014	**3.16**	D		0.0131	**0.000987**	J	0.000629	0.00141	**0.0287**		0.000746	0.00168

Notes:
D - Indicates result is based on a dilution
U - Indicates compound analyzed for but not detected
RL - Laboratory Reporting Limit
MDL - Method Detection Limit
RIDSRS - NJDEP Residential Ingestion-Dermal Soil Remediation Standard (May 2021)
RISRS - NJDEP Residential Inhalation Soil Remediation Standard (May 2021)
NRIDSRS - NJDEP Non-Residential Ingestion-Dermal Soil Remediation Standard (May 2021)
NRISRS - NJDEP Non-Residential Inhalation Soil Remediation Standard (May 2021)
MGWSRS = NJDEP Migration to Groundwater SRS (May 2021)
- Exceeds one or more NJDEP Standard
- Detected in Sample
NA - No applicable NJDEP SRS
All results reported in milligrams per kilogram (mg/kg) or parts per million (ppm)

Table 6: SPLP Soil Sample Analysis and Data Summary
Old Orchard Country Club
54 Monmouth Road
Borough of Eatontown, Monmouth County, New Jersey
Dynamic Earth Project No. 3272-98-005EC

DYNAMIC EARTH							Sample ID:	23E1425-05				23E1425-06				23E1425-07		
							Lab ID:	F-13R				F-15-3R				F-5-2R		
							Sample Depth (feet):	0.0-0.5				0.0-0.5				0.0-0.5		
							Sample Date:	05/30/2023				05/30/2023				05/30/2023		
CAS#	**Compound**	**RIDSRS**	**RISRS**	**NRIDSRS**	**NRISRS**	**MGWSRS**	Result	Qualifier	MDL	RL	Result	Qualifier	MDL	RL	Result	Qualifier	MDL	RL
General Chemistry (%)																		
PERSOL	Percent Solids						**82.9**				**84.1**				**93.5**			
General Chemistry (g)																		
	SPLP Soil Weight						**82.9**				**84.1**				**93.5**			
General Chemistry (mL)																		
	SPLP Leachate Volume						**2000**				**2000**				**2000**			
General Chemistry (pH Units)																		
	SPLP Leachate pH						**5.05**			0.0100	**5.07**			0.0100	**5.06**			0.0100

Notes:
D - Indicates result is based on a dilution
U - Indicates compound analyzed for but not detected
RL - Laboratory Reporting Limit
MDL - Method Detection Limit
RIDSRS - NJDEP Residential Ingestion-Dermal Soil Remediation Standard (May 2021)
RISRS - NJDEP Residential Inhalation Soil Remediation Standard (May 2021)
NRIDSRS - NJDEP Non-Residential Ingestion-Dermal Soil Remediation Standard (May 2021)
NRISRS - NJDEP Non-Residential Inhalation Soil Remediation Standard (May 2021)
MGWSRS = NJDEP Migration to Groundwater SRS (May 2021)
- Exceeds one or more NJDEP Standard
- Detected in Sample
NA - No applicable NJDEP SRS
All results reported in milligrams per kilogram (mg/kg) or parts per million (ppm)

Green 19 Soil Sample Analyses and Data Results
Old Orchard Country Club
54 Monmouth Road
Boroughs of Eatontown and West Long Branch, Monmouth County, New Jersey
Dynamic Earth Project No. 3272-98-005EC

							Lab ID:	24I3001-26				24I3001-27				24I3001-28				24I3001-29				24I3001-30				24I3001-31				24I3001-32				24I3001-41			
							Sample ID:	G19				G19-1				G19-2				G19-3				G19-4				G19A				G19B				G19-4B			
							Date Sampled:	09/27/2024				09/27/2024				09/27/2024				09/27/2024				09/27/2024				09/27/2024				09/27/2024				09/27/2024			
							Sample Depth (Feet):	0.0-0.5				0.0-0.5				0.0-0.5				0.0-0.5				0.0-0.5				1.0-1.5				2.0-2.5				2.0-2.5			
							Matrix:	Soil				Soil				Soil				Soil				Soil				Soil				Soil				Soil			
CAS#	Compound	NJDEP RIDSRS	NJDEP RISRS	NJDEP NRIDSRS	NJDEP NRISRS	NJDEP MGW	Result	Qualifier	MDL	RL	Result	Qualifier	MDL	RL	Result	Qualifier	MDL	RL	Result	Qualifier	MDL	RL	Result	Qualifier	MDL	RL	Result	Qualifier	MDL	RL	Result	Qualifier	MDL	RL	Result	Qualifier	MDL	RL
General Chemistry (%)																																							
PERSOL	Percent Solids						95.4				93.9				92.5				93.8				95.3				92.0				90.6				91.3			
Pesticides (mg/kg)																																							
72-54-8	4,4'-DDD	2.3	NA	11	NA	0.47	0.00062	U	0.00062	0.00136	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
72-55-9	4,4'-DDE	2	NA	11	NA	0.47	0.00075	U	0.00075	0.00136	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
50-29-3	4,4'-DDT	1.9	NA	9.5	NA	0.67	0.00096	U	0.00096	0.00136	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
309-00-2	Aldrin	0.041	NA	0.21	NA	0.13	0.00065	U	0.00065	0.00136	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
319-84-6	alpha-BHC	0.086	NA	0.41	NA	0.0023	0.00041	U	0.00041	0.00136	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
319-85-7	beta-BHC	0.3	NA	1.4	NA	0.0046	0.00065	U	0.00065	0.00136	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
57-74-9	Chlordane	0.27	NA	1.4	NA	1.4	0.0275		0.00061	0.00136	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
319-86-8	delta-BHC	NA	NA	NA	NA	NA	0.00063	U	0.00063	0.00136	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
60-57-1	Dieldrin	0.034	NA	0.16	NA	0.024	0.00071	U	0.00071	0.00136	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
959-98-8	Endosulfan I	470	NA	7800	NA	NA	0.00064	U	0.00064	0.00136	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
33213-65-9	Endosulfan II	470	NA	7800	NA	NA	0.00062	U	0.00062	0.00136	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
1031-07-8	Endosulfan sulfate	NA	NA	NA	NA	NA	0.00051	U	0.00051	0.00136	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
115-29-7	Endosulfans, Total (alpha and beta)	470	NA	7800	NA	NA	0.00062	U	0.00062	0.00136	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
72-20-8	Endrin	19	NA	270	NA	1.6	0.00047	U	0.00047	0.00136	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
7421-93-4	Endrin aldehyde	NA	NA	NA	NA	NA	0.00054	U	0.00054	0.00136	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
53494-70-5	Endrin ketone	NA	NA	NA	NA	NA	0.00048	U	0.00048	0.00136	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
58-89-9	gamma-BHC (Lindane)	0.57	NA	2.8	NA	0.0035	0.00043	U	0.00043	0.00136	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
76-44-8	Heptachlor	0.15	NA	0.81	NA	0.083	0.00037	U	0.00037	0.00136	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
1024-57-3	Heptachlor Epoxide	0.076	NA	0.4	NA	0.081	0.00069	U	0.00069	0.00136	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
72-43-5	Methoxychlor	320	NA	4600	NA	NA	0.0004	U	0.0004	0.00136	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
8001-35-2	Toxaphene	0.49	NA	2.3	NA	6.2	0.0656	U	0.0656	0.0692	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Total Metals (mg/kg)																																							
7440-38-2	Arsenic	19	1100	19	5200	19	11.3			1.33	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
7439-92-1	Lead	200	NA	800	NA	90	371			1.33	48.9			1.32	12.1			1.40	14.8			1.37	2110	D		6.63	354			1.29	96.3			1.41	11.9			1.34
7439-97-6	Mercury	23	520000	390	NA	0.1	1.25			0.0210	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---

Notes:
J - Indicates estimated value for TICs and all results when detected below
U - Indicates compound analyzed for but not detected
D - Indicates result is based on a dilution
B - Indicates compound found in associated blank
MDL - Method Detection Limt
RL - Laboratory Reporting Limit
RIDSRS - NJDEP Residential Ingestion-Dermal Soil Remediation Standa
RISRS - NJDEP Residential Inhalation Soil Remediation Standard (May 2
NRIDSRS - NJDEP Non-Residential Ingestion-Dermal Soil Remediation Standard (May 202
NRISRS - NJDEP Non-Residential Inhalation Soil Remediation Standard
MGWSRS = NJDEP Migration to Groundwater SRS (May 2021)
- Exceeds NJDEP Residential Standard
- Detected in Sample
NA - No applicable NJDEP SRS
All results reported in milligrams per kilogram (mg/kg) or parts per million (

DYNAMIC EARTH

Appendix B
Soil Borings Logs

DYNAMIC EARTH

BORING LOG
(Environmental Sampling)

Boring No.: T-3-1

Project: Old Orchard Country Club					**Proj. No.:**	**3272-98-005EC**		
Location: 54 Monouth Road, Eatontown, New Jersey 07724					**Client:**	**Surrey Equities**		
Surface Elevation:	**Not Surveyed (NS)**	**Date Started: 5/30/2023**	**Groundwater Data**	**Depth (ft)**	**El. (mse)**	**Additional Groundwater Data**	**Depth (ft)**	**El. (mse)**
Termination Depth:	**3.5 feet**	**Date Completed: 5/30/2023**						
Location:	**T-3**	**Logged by: O. Mahmoud**	**While Drilling: ▽**	**NE**	**NA**			
Drill/Test Method:	**Hand Auger**	**Contractor: Dynamic Earth, LLC**	**At Completion: ▼**	**NA**	**NA**			
		Rig Type: Not Applicable						

Sample Information				Depth (ft)	DESCRIPTION OF MATERIALS (Classification)	Remarks
Depth Interval (Feet)	Recovery (Inches)	PID	Sample ID & Depth			
0-4.5	-	0.0	T-3-1B		Topsoil	
		0.0				
		0.0			Brown, medium grained, silty sand, medium dense, dry.	
		0.0				
		0.0				
		0.0				
		0.0	T-3-1C			
		0.0				
		0.0	T-3-1D			

Boring T-3-1 terminated at 4.5 feet bgs.

DYNAMIC EARTH

BORING LOG
(Environmental Sampling)

Boring No.: T-3-2

Project: Old Orchard Country Club		**Proj. No.:**	**3272-98-005EC**
Location: 54 Monouth Road, Eatontown, New Jersey 07724		**Client:**	**Surrey Equities**
Surface Elevation:	**Not Surveyed (NS)**	**Date Started: 5/30/2023**	
Termination Depth:	**3.5 feet**	**Date Completed: 5/30/2023**	
Location:	**T-3**	**Logged by: O. Mahmoud**	
Drill/Test Method:	**Hand Auger**	**Contractor: Dynamic Earth, LLC**	
		Rig Type: Not Applicable	

Groundwater Data	**Depth (ft)**	**El. (mse)**	**Additional Groundwater Data**	**Depth (ft)**	**El. (mse)**
While Drilling: ▽	**NE**	**NA**			
At Completion: ▼	**NA**	**NA**			

Sample Information				Depth (ft)	DESCRIPTION OF MATERIALS (Classification)	Remarks
Depth Interval (Feet)	Recovery (Inches)	PID	Sample ID & Depth			
0-4.5	-	0.0			Topsoil	
		0.0				
		0.0			Brown, medium grained, silty sand, medium dense, dry.	
		0.0				
		0.0	T-3-2B			
		0.0				
		0.0	T-3-2C			
		0.0				
		0.0	T-3-2D			

Boring T-3-2 terminated at 4.5 feet bgs.

DYNAMIC EARTH

BORING LOG
(Environmental Sampling)

Boring No.: T-3-3

Project: Old Orchard Country Club					**Proj. No.:**	**3272-98-005EC**		
Location: 54 Monouth Road, Eatontown, New Jersey 07724					**Client:**	**Surrey Equities**		
Surface Elevation:	**Not Surveyed (NS)**	**Date Started: 5/30/2023**	**Groundwater Data**	**Depth (ft)**	**El. (mse)**	**Additional Groundwater Data**	**Depth (ft)**	**El. (mse)**
Termination Depth:	**3.5 feet**	**Date Completed: 5/30/2023**						
Location:	**T-3**	**Logged by: O. Mahmoud**	**While Drilling: ▽**	**NE**	**NA**			
Drill/Test Method:	**Hand Auger**	**Contractor: Dynamic Earth, LLC**	**At Completion: ▼**	**NA**	**NA**			
		Rig Type: Not Applicable						

Sample Information				Depth (ft)	DESCRIPTION OF MATERIALS (Classification)	Remarks
Depth Interval (Feet)	Recovery (Inches)	PID	Sample ID & Depth			
0-4.5	-	0.0	T-3-3B		Topsoil	
		0.0				
		0.0			Brown, medium grained, silty sand, medium dense, dry.	
		0.0				
		0.0				
		0.0				
		0.0	T-3-3C			
		0.0				
		0.0	T-3-3D			

Boring T-3-3 terminated at 4.5 feet bgs.

DYNAMIC EARTH

BORING LOG
(Environmental Sampling)

Boring No.: T-3-1

Project: Old Orchard Country Club					**Proj. No.:**	**3272-98-005EC**		
Location: 54 Monouth Road, Eatontown, New Jersey 07724					**Client:**	**Surrey Equities**		
Surface Elevation:	**Not Surveyed (NS)**	**Date Started: 5/30/2023**	**Groundwater Data**	**Depth (ft)**	**El. (mse)**	**Additional Groundwater Data**	**Depth (ft)**	**El. (mse)**
Termination Depth:	**3.5 feet**	**Date Completed: 5/30/2023**						
Location:	**T-3**	**Logged by: O. Mahmoud**	**While Drilling: ▽**	**NE**	**NA**			
Drill/Test Method:	**Hand Auger**	**Contractor: Dynamic Earth, LLC**	**At Completion: ▼**	**NA**	**NA**			
		Rig Type: Not Applicable						

Sample Information				Depth (ft)	DESCRIPTION OF MATERIALS (Classification)	Remarks
Depth Interval (Feet)	Recovery (Inches)	PID	Sample ID & Depth			
0-4.5	-	0.0			Topsoil	
		0.0				
		0.0			Brown, medium grained, silty sand, medium dense, dry.	
		0.0				
		0.0	T-3-1B			
		0.0				
		0.0	T-3-1C			
		0.0				
		0.0	T-3-1-D			

Boring T-3-1 terminated at 4.5 feet bgs.

DYNAMIC EARTH

BORING LOG
(Environmental Sampling)

Boring No.: TRENCH-6

Project: Old Orchard Country Club					**Proj. No.:**	**3272-98-005EC**		
Location: 54 Monouth Road, Eatontown, New Jersey 07724					**Client:**	**Surrey Equities**		
Surface Elevation:	**Not Surveyed (NS)**	**Date Started: 5/30/2023**	**Groundwater Data**	**Depth (ft)**	**El. (mse)**	**Additional Groundwater Data**	**Depth (ft)**	**El. (mse)**
Termination Depth:	**1.5 feet**	**Date Completed: 5/30/2023**						
Location:	**Trench**	**Logged by: O. Mahmoud**	**While Drilling: ▽**	**NE**	**NA**			
Drill/Test Method:	**Hand Auger**	**Contractor: Dynamic Earth, LLC**	**At Completion: ▼**	**NA**	**NA**			
		Rig Type: Not Applicable						

Sample Information				Depth (ft)	DESCRIPTION OF MATERIALS (Classification)	Remarks
Depth Interval (Feet)	Recovery (Inches)	PID	Sample ID & Depth			
0-1.5	-	0.0	TRENCH-6		Dark brown, gravel with medium grained, sand, dry.	
		0.0			Brown, medium grained, silty sand, medium dense, dry.	
		0.0	TRENCH-6A			

Boring TRENCH-6 terminated at 1.5 feet bgs.

DYNAMIC EARTH

BORING LOG
(Environmental Sampling)

Boring No.: TRENCH-7

Project: Old Orchard Country Club					**Proj. No.:**	**3272-98-005EC**		
Location: 54 Monouth Road, Eatontown, New Jersey 07724					**Client:**	**Surrey Equities**		
Surface Elevation:	**Not Surveyed (NS)**	**Date Started: 5/30/2023**	**Groundwater Data**	**Depth (ft)**	**El. (mse)**	**Additional Groundwater Data**	**Depth (ft)**	**El. (mse)**
Termination Depth:	**1.5 feet**	**Date Completed: 5/30/2023**						
Location:	**Trench**	**Logged by: O. Mahmoud**	**While Drilling: ▽**	**NE**	**NA**			
Drill/Test Method:	**Hand Auger**	**Contractor: Dynamic Earth, LLC**	**At Completion: ▼**	**NA**	**NA**			
		Rig Type: Not Applicable						

Sample Information				Depth (ft)	DESCRIPTION OF MATERIALS (Classification)	Remarks
Depth Interval (Feet)	Recovery (Inches)	PID	Sample ID & Depth			
0-1.5	-	0.0	TRENCH-7		Topsoil	
		0.0			Brown, medium grained, silty sand, medium dense, dry.	
		0.0	TRENCH-7A			

Boring TRENCH-7 terminated at 1.5 feet bgs.

DYNAMIC EARTH

BORING LOG
(Environmental Sampling)

Boring No.: TRENCH-8

Project: Old Orchard Country Club					**Proj. No.:**	**3272-98-005EC**		
Location: 54 Monouth Road, Eatontown, New Jersey 07724					**Client:**	**Surrey Equities**		
Surface Elevation:	**Not Surveyed (NS)**	**Date Started: 5/30/2023**	**Groundwater Data**	**Depth (ft)**	**El. (mse)**	**Additional Groundwater Data**	**Depth (ft)**	**El. (mse)**
Termination Depth:	**1.5 feet**	**Date Completed: 5/30/2023**						
Location:	**Trench**	**Logged by: O. Mahmoud**	**While Drilling: ▽**	**NE**	**NA**			
Drill/Test Method:	**Hand Auger**	**Contractor: Dynamic Earth, LLC**	**At Completion: ▼**	**NA**	**NA**			
		Rig Type: Not Applicable						

Sample Information				Depth (ft)	DESCRIPTION OF MATERIALS (Classification)	Remarks
Depth Interval (Feet)	Recovery (Inches)	PID	Sample ID & Depth			
0-1.5	-	0.0	TRENCH-8A		Dark brown, gravel with medium grained, sand, dry.	
		0.0			Brown, medium grained, silty sand, medium dense, dry.	
		0.0	TRENCH-8A			

Boring TRENCH-8 terminated at 1.5 feet bgs.

DYNAMIC EARTH

BORING LOG
(Environmental Sampling)

Boring No.: TRENCH-9

Project: Old Orchard Country Club					**Proj. No.:**	**3272-98-005EC**		
Location: 54 Monouth Road, Eatontown, New Jersey 07724					**Client:**	**Surrey Equities**		
Surface Elevation:	**Not Surveyed (NS)**	**Date Started: 5/30/2023**	**Groundwater Data**	**Depth (ft)**	**El. (mse)**	**Additional Groundwater Data**	**Depth (ft)**	**El. (mse)**
Termination Depth:	**1.5 feet**	**Date Completed: 5/30/2023**						
Location:	**Trench**	**Logged by: O. Mahmoud**	**While Drilling: ▽**	**NE**	**NA**			
Drill/Test Method:	**Hand Auger**	**Contractor: Dynamic Earth, LLC**	**At Completion: ▼**	**NA**	**NA**			
		Rig Type: Not Applicable						

Sample Information				Depth (ft)	DESCRIPTION OF MATERIALS (Classification)	Remarks
Depth Interval (Feet)	Recovery (Inches)	PID	Sample ID & Depth			
0-1.5	-	0.0	TRENCH-9A		Topsoil	
		0.0			Brown, medium grained, silty sand, medium dense, dry.	
		0.0	TRENCH-9A			

Boring TRENCH-9 terminated at 1.5 feet bgs.

BORING LOG
(Environmental Sampling)

Boring No.: F-18R

Project: Old Orchard Country Club					**Proj. No.:**	**3272-98-005EC**		
Location: 54 Monouth Road, Eatontown, New Jersey 07724					**Client:**	**Surrey Equities**		
Surface Elevation:	**Not Surveyed (NS)**	**Date Started: 12/21/2022**	**Groundwater Data**	**Depth (ft)**	**El. (mse)**	**Additional Groundwater Data**	**Depth (ft)**	**El. (mse)**
Termination Depth:	**1.5 feet**	**Date Completed: 12/21/2022**						
Location:	**F-18**	**Logged by: O. Mahmoud**	**While Drilling:** ▽	**NE**				
Drill/Test Method:	**Hand Auger**	**Contractor: Dynamic Earth, LLC**	**At Completion:** ▼	**NE**				
		Rig Type: Not Applicable						

Sample Information				Depth (ft)	DESCRIPTION OF MATERIALS (Classification)	Remarks
Depth Interval (Feet)	Recovery (Inches)	PID	Sample ID & Depth			
0-1.5	-	0.0 0.0 0.0	F-18R		Topsoil Brown, coarse grained, silty sand, medium dense, dry.	
				1.5	Boring F-18R terminated at 1.5 feet below ground surface (bgs).	

DYNAMIC EARTH

BORING LOG
(Environmental Sampling)

Boring No.: T-11R

Project: Old Orchard Country Club					**Proj. No.:**	**3272-98-005EC**		
Location: 54 Monouth Road, Eatontown, New Jersey 07724					**Client:**	**Surrey Equities**		
Surface Elevation:	**NS**	**Date Started: 12/21/2022**	**Groundwater Data**	**Depth (ft)**	**El. (mse)**	**Additional Groundwater Data**	**Depth (ft)**	**El. (mse)**
Termination Depth:	**1.5 feet**	**Date Completed: 12/21/2022**						
Location:	**T-11**	**Logged by: O. Mahmoud**	**While Drilling:** ▽	**NE**				
Drill/Test Method:	**Hand Auger**	**Contractor: Dynamic Earth, LLC**	**At Completion:** ▼	**NE**				
		Rig Type: Not Applicable						

Sample Information				Depth (ft)	DESCRIPTION OF MATERIALS (Classification)	Remarks
Depth Interval (Feet)	Recovery (Inches)	PID	Sample ID & Depth			
0-1.5	-	0.0 0.0 0.0	T-11R		Topsoil Brown, coarse grained, silty sand, medium dense, dry.	
				1.5	Boring T-11R terminated at 1.5 feet bgs.	

DYNAMIC EARTH

BORING LOG
(Environmental Sampling)

Boring No.: G-6R

Project: Old Orchard Country Club					**Proj. No.:**	**3272-98-005EC**		
Location: 54 Monouth Road, Eatontown, New Jersey 07724					**Client:**	**Surrey Equities**		
Surface Elevation:	**NS**	**Date Started: 12/21/2022**	**Groundwater Data**	**Depth (ft)**	**El. (mse)**	**Additional Groundwater Data**	**Depth (ft)**	**El. (mse)**
Termination Depth:	**1.5 feet**	**Date Completed: 12/21/2022**						
Location:	**G-6**	**Logged by: O. Mahmoud**	**While Drilling:** ▽	**NE**				
Drill/Test Method:	**Hand Auger**	**Contractor: Dynamic Earth, LLC**	**At Completion:** ▼	**NE**				
		Rig Type: Not Applicable						

Sample Information				Depth (ft)	DESCRIPTION OF MATERIALS (Classification)	Remarks
Depth Interval (Feet)	Recovery (Inches)	PID	Sample ID & Depth			
0-1.5	-	0.0 0.0 0.0	G-6R		Topsoil Brown, coarse grained, silty sand, medium dense, dry.	
				1.5	BoringG-6RR terminated at 1.5 feet bgs.	

DYNAMIC EARTH

BORING LOG
(Environmental Sampling)

Boring No.: G-6-2R

Project: Old Orchard Country Club					**Proj. No.:**	**3272-98-005EC**		
Location: 54 Monouth Road, Eatontown, New Jersey 07724					**Client:**	**Surrey Equities**		
Surface Elevation:	**NS**	**Date Started: 12/21/2022**	**Groundwater Data**	**Depth (ft)**	**El. (mse)**	**Additional Groundwater Data**	**Depth (ft)**	**El. (mse)**
Termination Depth:	**1.5 feet**	**Date Completed: 12/21/2022**						
Location:	**G-6**	**Logged by: O. Mahmoud**	**While Drilling:** ▽	**NE**				
Drill/Test Method:	**Hand Auger**	**Contractor: Dynamic Earth, LLC**	**At Completion:** ▼	**NE**				
		Rig Type: Not Applicable						

Sample Information				Depth (ft)	DESCRIPTION OF MATERIALS (Classification)	Remarks
Depth Interval (Feet)	Recovery (Inches)	PID	Sample ID & Depth			
0-1.5	-	0.0 0.0 0.0	G-6-2R		Topsoil	
				1.5	Brown, coarse grained, silty sand, medium dense, dry.	

Boring G-6-2R terminated at 1.5 feet bgs.

DYNAMIC EARTH

BORING LOG
(Environmental Sampling)

Boring No.: WA-2R

Project: Old Orchard Country Club					**Proj. No.:**	**3272-98-005EC**		
Location: 54 Monouth Road, Eatontown, New Jersey 07724					**Client:**	**Surrey Equities**		
Surface Elevation:	**NS**	**Date Started: 12/20/2022**	**Groundwater Data**	**Depth (ft)**	**El. (mse)**	**Additional Groundwater Data**	**Depth (ft)**	**El. (mse)**
Termination Depth:	**1.5 feet**	**Date Completed: 12/20/2022**						
Location:	**Wash Area**	**Logged by: O. Mahmoud**	**While Drilling:** ▽	**NE**				
Drill/Test Method:	**Hand Auger**	**Contractor: Dynamic Earth, LLC**	**At Completion:** ▼	**NE**				
		Rig Type: Not Applicable						

Sample Information				Depth (ft)	DESCRIPTION OF MATERIALS (Classification)	Remarks
Depth Interval (Feet)	Recovery (Inches)	PID	Sample ID & Depth			
0-1.5	-	0.0 0.0 0.0	WA-2R		Gravel Brown, coarse grained, silty sand, medium dense, dry.	
				1.5	Boring WA-2R terminated at 1.5 feet bgs.	

DYNAMIC EARTH

BORING LOG
(Environmental Sampling)

Boring No.: WA-3R

Project: Old Orchard Country Club					**Proj. No.:**	**3272-98-005EC**		
Location: 54 Monouth Road, Eatontown, New Jersey 07724					**Client:**	**Surrey Equities**		
Surface Elevation:	**NS**	**Date Started: 12/20/2022**	**Groundwater Data**	**Depth (ft)**	**El. (mse)**	**Additional Groundwater Data**	**Depth (ft)**	**El. (mse)**
Termination Depth:	**1.5 feet**	**Date Completed: 12/20/2022**						
Location:	**Wash Area**	**Logged by: O. Mahmoud**	**While Drilling:** ▽	**NE**				
Drill/Test Method:	**Hand Auger**	**Contractor: Dynamic Earth, LLC**	**At Completion:** ▼	**NE**				
		Rig Type: Not Applicable						

Sample Information				Depth (ft)	DESCRIPTION OF MATERIALS (Classification)	Remarks
Depth Interval (Feet)	Recovery (Inches)	PID	Sample ID & Depth			
0-1.5	-	0.0 0.0 0.0	WA-3R		Gravel Brown, coarse grained, silty sand, medium dense, dry.	
				1.5	Boring WA-3R terminated at 1.5 feet bgs.	

DYNAMIC EARTH

BORING LOG
(Environmental Sampling)

Boring No.: T-2A

Project: Old Orchard Country Club					**Proj. No.:**	**3272-98-005EC**		
Location: 54 Monouth Road, Eatontown, New Jersey 07724					**Client:**	**Surrey Equities**		
Surface Elevation:	**NS**	**Date Started: 12/20/2022**	**Groundwater Data**	**Depth (ft)**	**El. (mse)**	**Additional Groundwater Data**	**Depth (ft)**	**El. (mse)**
Termination Depth:	**3.5 feet**	**Date Completed: 12/20/2022**						
Location:	**T-2**	**Logged by: O. Mahmoud**	**While Drilling:** ▽	**NE**				
Drill/Test Method:	**Hand Auger**	**Contractor: Dynamic Earth, LLC**	**At Completion:** ▼	**NE**				
		Rig Type: Not Applicable						

Sample Information				Depth (ft)	DESCRIPTION OF MATERIALS (Classification)	Remarks
Depth Interval (Feet)	Recovery (Inches)	PID	Sample ID & Depth			
0-3.5	-	0.0			Topsoil	
		0.0				
		0.0	T-2A			
		0.0				
		0.0	T-2B		Brown, medium grained, silty sand, medium dense, dry.	
		0.0				
		0.0	T-2C	3.5		

Boring T-2A terminated at 3.5 feet bgs.

DYNAMIC EARTH

BORING LOG
(Environmental Sampling)

Boring No.: T-2-1

Project: Old Orchard Country Club					**Proj. No.:**	**3272-98-005EC**		
Location: 54 Monouth Road, Eatontown, New Jersey 07724					**Client:**	**Surrey Equities**		
Surface Elevation:	**NS**	**Date Started: 12/20/2022**	**Groundwater Data**	**Depth (ft)**	**El. (mse)**	**Additional Groundwater Data**	**Depth (ft)**	**El. (mse)**
Termination Depth:	**1.5 feet**	**Date Completed: 12/20/2022**						
Location:	**T-2**	**Logged by: O. Mahmoud**	**While Drilling:** ▽	**NE**				
Drill/Test Method:	**Hand Auger**	**Contractor: Dynamic Earth, LLC**	**At Completion:** ▼	**NE**				
		Rig Type: Not Applicable						

Sample Information				Depth (ft)	DESCRIPTION OF MATERIALS (Classification)	Remarks
Depth Interval (Feet)	Recovery (Inches)	PID	Sample ID & Depth			
0-1.5	-	0.0	T-2-1		Topsoil	
		0.0			Brown, medium grained, silty sand, medium dense, dry.	
		0.0	T-2-1A	1.5		

Boring T-2-1 terminated at 1.5 feet bgs.

BORING LOG
(Environmental Sampling)

Boring No.: T-2-2

Project: Old Orchard Country Club					**Proj. No.:**	**3272-98-005EC**		
Location: 54 Monouth Road, Eatontown, New Jersey 07724					**Client:**	**Surrey Equities**		
Surface Elevation:	**NS**	**Date Started: 12/20/2022**	**Groundwater Data**	**Depth (ft)**	**El. (mse)**	**Additional Groundwater Data**	**Depth (ft)**	**El. (mse)**
Termination Depth:	**2.0 feet**	**Date Completed: 12/20/2022**						
Location:	**T-2**	**Logged by: O. Mahmoud**	**While Drilling:** ▽	**NE**				
Drill/Test Method:	**Hand Auger**	**Contractor: Dynamic Earth, LLC**	**At Completion:** ▼	**NE**				
		Rig Type: Not Applicable						

Sample Information				Depth (ft)	DESCRIPTION OF MATERIALS (Classification)	Remarks
Depth Interval (Feet)	Recovery (Inches)	PID	Sample ID & Depth			
0-1.5	-	0.0	T-2-2		Topsoil	
		0.0			Brown, medium grained, silty sand, medium dense, dry.	
		0.0	T-2-2A	1.5		

Boring T-2-2 terminated at 1.5 feet bgs.

DYNAMIC EARTH

BORING LOG
(Environmental Sampling)

Boring No.: T-2-3

Project: Old Orchard Country Club					**Proj. No.:**	**3272-98-005EC**		
Location: 54 Monouth Road, Eatontown, New Jersey 07724					**Client:**	**Surrey Equities**		
Surface Elevation:	**NS**	**Date Started: 12/20/2022**	**Groundwater Data**	**Depth (ft)**	**El. (mse)**	**Additional Groundwater Data**	**Depth (ft)**	**El. (mse)**
Termination Depth:	**1.5 feet**	**Date Completed: 12/20/2022**						
Location:	**T-2**	**Logged by: O. Mahmoud**	**While Drilling:** ▽	**NE**				
Drill/Test Method:	**Hand Auger**	**Contractor: Dynamic Earth, LLC**	**At Completion:** ▼	**NE**				
		Rig Type: Not Applicable						

Sample Information				Depth (ft)	DESCRIPTION OF MATERIALS (Classification)	Remarks
Depth Interval (Feet)	Recovery (Inches)	PID	Sample ID & Depth			
0-1.5	-	0.0	T-2-3		Topsoil	
		0.0			Brown, medium grained, silty sand, medium dense, dry.	
		0.0	T-2-3A	1.5		

Boring T-2-3 terminated at 1.5 feet bgs.

DYNAMIC EARTH

BORING LOG
(Environmental Sampling)

Boring No.: T-2-4

Project: Old Orchard Country Club					**Proj. No.:**	**3272-98-005EC**		
Location: 54 Monouth Road, Eatontown, New Jersey 07724					**Client:**	**Surrey Equities**		
Surface Elevation:	**NS**	**Date Started: 12/20/2022**	**Groundwater Data**	**Depth (ft)**	**El. (mse)**	**Additional Groundwater Data**	**Depth (ft)**	**El. (mse)**
Termination Depth:	**1.5 feet**	**Date Completed: 12/20/2022**						
Location:	**T-2**	**Logged by: O. Mahmoud**	**While Drilling:** ▽	**NE**				
Drill/Test Method:	**Hand Auger**	**Contractor: Dynamic Earth, LLC**	**At Completion:** ▼	**NE**				
		Rig Type: Not Applicable						

Sample Information				Depth (ft)	DESCRIPTION OF MATERIALS (Classification)	Remarks
Depth Interval (Feet)	Recovery (Inches)	PID	Sample ID & Depth			
0-1.5	-	0.0	T-2-4		Topsoil	
		0.0			Brown, medium grained, silty sand, medium dense, dry.	
		0.0	T-2-4A	1.5		

Boring T-2-4 terminated at 1.5 feet bgs.

BORING LOG
(Environmental Sampling)

Boring No.: T-3A

Project: Old Orchard Country Club					**Proj. No.:**	**3272-98-005EC**		
Location: 54 Monouth Road, Eatontown, New Jersey 07724					**Client:**	**Surrey Equities**		
Surface Elevation:	**NS**	**Date Started: 12/20/2022**	**Groundwater Data**	**Depth (ft)**	**El. (mse)**	**Additional Groundwater Data**	**Depth (ft)**	**El. (mse)**
Termination Depth:	**3.5 feet**	**Date Completed: 12/20/2022**						
Location:	**T-3**	**Logged by: O. Mahmoud**	**While Drilling:** ▽	**NE**				
Drill/Test Method:	**Hand Auger**	**Contractor: Dynamic Earth, LLC**	**At Completion:** ▼	**NE**				
		Rig Type: Not Applicable						

Sample Information				Depth (ft)	DESCRIPTION OF MATERIALS (Classification)	Remarks
Depth Interval (Feet)	Recovery (Inches)	PID	Sample ID & Depth			
0-3.5	-	0.0			Topsoil	
		0.0				
		0.0	T-3A			
		0.0				
		0.0	T-3B		Brown, medium grained, silty sand, medium dense, dry.	
		0.0				
		0.0	T-3C	3.5		

Boring T-3A terminated at 3.5 feet bgs.

DYNAMIC EARTH

BORING LOG
(Environmental Sampling)

Boring No.: T-3-1

Project: Old Orchard Country Club					**Proj. No.:**	**3272-98-005EC**		
Location: 54 Monouth Road, Eatontown, New Jersey 07724					**Client:**	**Surrey Equities**		
Surface Elevation:	**NS**	**Date Started: 12/20/2022**	**Groundwater Data**	**Depth (ft)**	**El. (mse)**	**Additional Groundwater Data**	**Depth (ft)**	**El. (mse)**
Termination Depth:	**1.5 feet**	**Date Completed: 12/20/2022**						
Location:	**T-3**	**Logged by: O. Mahmoud**	**While Drilling:** ▽	**NE**				
Drill/Test Method:	**Hand Auger**	**Contractor: Dynamic Earth, LLC**	**At Completion:** ▼	**NE**				
		Rig Type: Not Applicable						

Sample Information				Depth (ft)	DESCRIPTION OF MATERIALS (Classification)	Remarks
Depth Interval (Feet)	Recovery (Inches)	PID	Sample ID & Depth			
0-1.5	-	0.0	T-3-1		Topsoil	
		0.0			Brown, medium grained, silty sand, medium dense, dry.	
		0.0	T-3-1A	1.5		

Boring T-3-1 terminated at 1.5 feet bgs.

BORING LOG
(Environmental Sampling)

Boring No.: T-3-2

Project: Old Orchard Country Club					**Proj. No.:**	**3272-98-005EC**		
Location: 54 Monouth Road, Eatontown, New Jersey 07724					**Client:**	**Surrey Equities**		
Surface Elevation:	**NS**	**Date Started: 12/20/2022**	**Groundwater Data**	**Depth (ft)**	**El. (mse)**	**Additional Groundwater Data**	**Depth (ft)**	**El. (mse)**
Termination Depth:	**1.5 feet**	**Date Completed: 12/20/2022**						
Location:	**T-3**	**Logged by: O. Mahmoud**	**While Drilling:** ▽	**NE**				
Drill/Test Method:	**Hand Auger**	**Contractor: Dynamic Earth, LLC**	**At Completion:** ▼	**NE**				
		Rig Type: Not Applicable						

Sample Information				Depth (ft)	DESCRIPTION OF MATERIALS (Classification)	Remarks
Depth Interval (Feet)	Recovery (Inches)	PID	Sample ID & Depth			
0-1.5	-	0.0	T-3-2		Topsoil	
		0.0			Brown, medium grained, silty sand, medium dense, dry.	
		0.0	T-3-2A	1.5		

Boring T-3-2 terminated at 1.5 feet bgs.

DYNAMIC EARTH

BORING LOG
(Environmental Sampling)

Boring No.: T-3-3

Project: Old Orchard Country Club					**Proj. No.:**	**3272-98-005EC**		
Location: 54 Monouth Road, Eatontown, New Jersey 07724					**Client:**	**Surrey Equities**		
Surface Elevation:	**NS**	**Date Started: 12/20/2022**	**Groundwater Data**	**Depth (ft)**	**El. (mse)**	**Additional Groundwater Data**	**Depth (ft)**	**El. (mse)**
Termination Depth:	**1.5 feet**	**Date Completed: 12/20/2022**						
Location:	**T-3**	**Logged by: O. Mahmoud**	**While Drilling:** ▽	**NE**				
Drill/Test Method:	**Hand Auger**	**Contractor: Dynamic Earth, LLC**	**At Completion:** ▼	**NE**				
		Rig Type: Not Applicable						

Sample Information				Depth (ft)	DESCRIPTION OF MATERIALS (Classification)	Remarks
Depth Interval (Feet)	Recovery (Inches)	PID	Sample ID & Depth			
0-1.5	-	0.0	T-3-3		Topsoil	
		0.0			Brown, medium grained, silty sand, medium dense, dry.	
		0.0	T-3-3A	1.5		

Boring T-3-3 terminated at 1.5 feet bgs.

DYNAMIC EARTH

BORING LOG
(Environmental Sampling)

Boring No.: T-3-4

Project: Old Orchard Country Club					**Proj. No.:**	**3272-98-005EC**		
Location: 54 Monouth Road, Eatontown, New Jersey 07724					**Client:**	**Surrey Equities**		
Surface Elevation:	**NS**	**Date Started: 12/20/2022**	**Groundwater Data**	**Depth (ft)**	**El. (mse)**	**Additional Groundwater Data**	**Depth (ft)**	**El. (mse)**
Termination Depth:	**1.5 feet**	**Date Completed: 12/20/2022**						
Location:	**T-3**	**Logged by: O. Mahmoud**	**While Drilling:** ▽	**NE**				
Drill/Test Method:	**Hand Auger**	**Contractor: Dynamic Earth, LLC**	**At Completion:** ▼	**NE**				
		Rig Type: Not Applicable						

Sample Information				Depth (ft)	DESCRIPTION OF MATERIALS (Classification)	Remarks
Depth Interval (Feet)	Recovery (Inches)	PID	Sample ID & Depth			
0-1.5	-	0.0	T-3-4		Topsoil	
		0.0			Brown, medium grained, silty sand, medium dense, dry.	
		0.0	T-3-4A	1.5		

Boring T-3-4 terminated at 1.5 feet bgs.

DYNAMIC EARTH

BORING LOG
(Environmental Sampling)

Boring No.: T-4A

Project: Old Orchard Country Club					**Proj. No.:**	**3272-98-005EC**		
Location: 54 Monouth Road, Eatontown, New Jersey 07724					**Client:**	**Surrey Equities**		
Surface Elevation:	**NS**	**Date Started: 12/20/2022**	**Groundwater Data**	**Depth (ft)**	**El. (mse)**	**Additional Groundwater Data**	**Depth (ft)**	**El. (mse)**
Termination Depth:	**3.5 feet**	**Date Completed: 12/20/2022**						
Location:	**T-4**	**Logged by: O. Mahmoud**	**While Drilling:** ▽	**NE**				
Drill/Test Method:	**Hand Auger**	**Contractor: Dynamic Earth, LLC**	**At Completion:** ▼	**NE**				
		Rig Type: Not Applicable						

Sample Information				Depth (ft)	DESCRIPTION OF MATERIALS (Classification)	Remarks
Depth Interval (Feet)	Recovery (Inches)	PID	Sample ID & Depth			
0-3.5	-	0.0			Topsoil	
		0.0				
		0.0	T-4A			
		0.0				
		0.0	T-4B		Brown, medium grained, silty sand, medium dense, dry.	
		0.0				
		0.0	T-4C	3.5		

Boring T-4A terminated at 3.5 feet bgs.

DYNAMIC EARTH

BORING LOG
(Environmental Sampling)

Boring No.: T-4-1

Project: Old Orchard Country Club					**Proj. No.:**	**3272-98-005EC**		
Location: 54 Monouth Road, Eatontown, New Jersey 07724					**Client:**	**Surrey Equities**		
Surface Elevation:	**NS**	**Date Started: 12/20/2022**	**Groundwater Data**	**Depth (ft)**	**El. (mse)**	**Additional Groundwater Data**	**Depth (ft)**	**El. (mse)**
Termination Depth:	**1.5 feet**	**Date Completed: 12/20/2022**						
Location:	**T-4**	**Logged by: O. Mahmoud**	**While Drilling:** ▽	**NE**				
Drill/Test Method:	**Hand Auger**	**Contractor: Dynamic Earth, LLC**	**At Completion:** ▼	**NE**				
		Rig Type: Not Applicable						

Sample Information				Depth (ft)	DESCRIPTION OF MATERIALS (Classification)	Remarks
Depth Interval (Feet)	Recovery (Inches)	PID	Sample ID & Depth			
0-1.5	-	0.0	T-4-1		Topsoil	
		0.0			Brown, medium grained, silty sand, medium dense, dry.	
		0.0	T-4-1A	1.5		

Boring T-4-1 terminated at 1.5 feet bgs.

DYNAMIC EARTH

BORING LOG
(Environmental Sampling)

Boring No.: T-4-2

Project: Old Orchard Country Club					**Proj. No.:**	**3272-98-005EC**		
Location: 54 Monouth Road, Eatontown, New Jersey 07724					**Client:**	**Surrey Equities**		
Surface Elevation:	**NS**	**Date Started: 12/20/2022**	**Groundwater Data**	**Depth (ft)**	**El. (mse)**	**Additional Groundwater Data**	**Depth (ft)**	**El. (mse)**
Termination Depth:	**1.5 feet**	**Date Completed: 12/20/2022**						
Location:	**T-4**	**Logged by: O. Mahmoud**	**While Drilling:** ▽	**NE**				
Drill/Test Method:	**Hand Auger**	**Contractor: Dynamic Earth, LLC**	**At Completion:** ▼	**NE**				
		Rig Type: Not Applicable						

Sample Information				Depth (ft)	DESCRIPTION OF MATERIALS (Classification)	Remarks
Depth Interval (Feet)	Recovery (Inches)	PID	Sample ID & Depth			
0-1.5	-	0.0	T-4-2		Topsoil	
		0.0			Brown, medium grained, silty sand, medium dense, dry.	
		0.0	T-4-2A	1.5		

Boring T-4-2 terminated at 1.5 feet bgs.

DYNAMIC EARTH

BORING LOG
(Environmental Sampling)

Boring No.: T-4-3

Project: Old Orchard Country Club					**Proj. No.:**	**3272-98-005EC**		
Location: 54 Monouth Road, Eatontown, New Jersey 07724					**Client:**	**Surrey Equities**		
Surface Elevation:	**NS**	**Date Started: 12/20/2022**	**Groundwater Data**	**Depth (ft)**	**El. (mse)**	**Additional Groundwater Data**	**Depth (ft)**	**El. (mse)**
Termination Depth:	**1.5 feet**	**Date Completed: 12/20/2022**						
Location:	**T-4**	**Logged by: O. Mahmoud**	**While Drilling:** ▽	**NE**				
Drill/Test Method:	**Hand Auger**	**Contractor: Dynamic Earth, LLC**	**At Completion:** ▼	**NE**				
		Rig Type: Not Applicable						

Sample Information				Depth (ft)	DESCRIPTION OF MATERIALS (Classification)	Remarks
Depth Interval (Feet)	Recovery (Inches)	PID	Sample ID & Depth			
0-1.5	-	0.0	T-4-3		Topsoil	
		0.0			Brown, medium grained, silty sand, medium dense, dry.	
		0.0	T-4-3A	1.5		

Boring T-4-3 terminated at 1.5 feet bgs.

DYNAMIC EARTH

BORING LOG
(Environmental Sampling)

Boring No.: T-4-4

Project: Old Orchard Country Club					**Proj. No.:**	**3272-98-005EC**		
Location: 54 Monouth Road, Eatontown, New Jersey 07724					**Client:**	**Surrey Equities**		
Surface Elevation:	**NS**	**Date Started: 12/20/2022**	**Groundwater Data**	**Depth (ft)**	**El. (mse)**	**Additional Groundwater Data**	**Depth (ft)**	**El. (mse)**
Termination Depth:	**1.5 feet**	**Date Completed: 12/20/2022**						
Location:	**T-4**	**Logged by: O. Mahmoud**	**While Drilling:** ▽	**NE**				
Drill/Test Method:	**Hand Auger**	**Contractor: Dynamic Earth, LLC**	**At Completion:** ▼	**NE**				
		Rig Type: Not Applicable						

Sample Information				Depth (ft)	DESCRIPTION OF MATERIALS (Classification)	Remarks
Depth Interval (Feet)	Recovery (Inches)	PID	Sample ID & Depth			
0-1.5	-	0.0	T-4-4		Topsoil	
		0.0			Brown, medium grained, silty sand, medium dense, dry.	
		0.0	T-4-4A	1.5		

Boring T-4-4 terminated at 1.5 feet bgs.

BORING LOG
(Environmental Sampling)

Boring No.: F-6A

Project: Old Orchard Country Club					**Proj. No.:**	**3272-98-005EC**		
Location: 54 Monouth Road, Eatontown, New Jersey 07724					**Client:**	**Surrey Equities**		
Surface Elevation:	**NS**	**Date Started: 12/20/2022**	**Groundwater Data**	**Depth (ft)**	**El. (mse)**	**Additional Groundwater Data**	**Depth (ft)**	**El. (mse)**
Termination Depth:	**3.5 feet**	**Date Completed: 12/20/2022**						
Location:	**F-6**	**Logged by: O. Mahmoud**	**While Drilling:** ▽	**NE**				
Drill/Test Method:	**Hand Auger**	**Contractor: Dynamic Earth, LLC**	**At Completion:** ▼	**NE**				
		Rig Type: Not Applicable						

Sample Information				Depth (ft)	DESCRIPTION OF MATERIALS (Classification)	Remarks
Depth Interval (Feet)	Recovery (Inches)	PID	Sample ID & Depth			
0-3.5	-	0.0			Topsoil	
		0.0				
		0.0	F-6A			
		0.0			Brown, medium grained, silty sand, medium dense, dry.	
		0.0	F-6B			
		0.0				
		0.0	F-6C	3.5		

Boring F-6A terminated at 3.5 feet bgs.

DYNAMIC EARTH

BORING LOG
(Environmental Sampling)

Boring No.: F-6-1

Project: Old Orchard Country Club					**Proj. No.:**	**3272-98-005EC**		
Location: 54 Monouth Road, Eatontown, New Jersey 07724					**Client:**	**Surrey Equities**		
Surface Elevation:	**NS**	**Date Started: 12/21/2022**	**Groundwater Data**	**Depth (ft)**	**El. (mse)**	**Additional Groundwater Data**	**Depth (ft)**	**El. (mse)**
Termination Depth:	**1.5 feet**	**Date Completed: 12/21/2022**						
Location:	**F-6**	**Logged by: O. Mahmoud**	**While Drilling:** ▽	**NE**				
Drill/Test Method:	**Hand Auger**	**Contractor: Dynamic Earth, LLC**	**At Completion:** ▼	**NE**				
		Rig Type: Not Applicable						

Sample Information				Depth (ft)	DESCRIPTION OF MATERIALS (Classification)	Remarks
Depth Interval (Feet)	Recovery (Inches)	PID	Sample ID & Depth			
0-1.5	-	0.0	F-6-1		Topsoil	
		0.0			Brown, medium grained, silty sand, medium dense, dry.	
		0.0	F-6-1A	1.5		

Boring F-6-1 terminated at 1.5 feet bgs.

DYNAMIC EARTH

BORING LOG
(Environmental Sampling)

Boring No.: F-6-2

Project: Old Orchard Country Club					**Proj. No.:**	**3272-98-005EC**		
Location: 54 Monouth Road, Eatontown, New Jersey 07724					**Client:**	**Surrey Equities**		
Surface Elevation:	**NS**	**Date Started: 12/21/2022**	**Groundwater Data**	**Depth (ft)**	**El. (mse)**	**Additional Groundwater Data**	**Depth (ft)**	**El. (mse)**
Termination Depth:	**1.5 feet**	**Date Completed: 12/21/2022**						
Location:	**F-6**	**Logged by: O. Mahmoud**	**While Drilling:** ▽	**NE**				
Drill/Test Method:	**Hand Auger**	**Contractor: Dynamic Earth, LLC**	**At Completion:** ▼	**NE**				
		Rig Type: Not Applicable						

Sample Information				Depth (ft)	DESCRIPTION OF MATERIALS (Classification)	Remarks
Depth Interval (Feet)	Recovery (Inches)	PID	Sample ID & Depth			
0-1.5	-	0.0	F-6-2		Topsoil	
		0.0			Brown, medium grained, silty sand, medium dense, dry.	
		0.0	F-6-2A	1.5		

Boring F-6-2 terminated at 1.5 feet bgs.

DYNAMIC EARTH

BORING LOG
(Environmental Sampling)

Boring No.: F-6-3

Project: Old Orchard Country Club					**Proj. No.:**	**3272-98-005EC**		
Location: 54 Monouth Road, Eatontown, New Jersey 07724					**Client:**	**Surrey Equities**		
Surface Elevation:	**NS**	**Date Started: 12/21/2022**	**Groundwater Data**	**Depth (ft)**	**El. (mse)**	**Additional Groundwater Data**	**Depth (ft)**	**El. (mse)**
Termination Depth:	**1.5 feet**	**Date Completed: 12/21/2022**						
Location:	**F-6**	**Logged by: O. Mahmoud**	**While Drilling:** ▽	**NE**				
Drill/Test Method:	**Hand Auger**	**Contractor: Dynamic Earth, LLC**	**At Completion:** ▼	**NE**				
		Rig Type: Not Applicable						

Sample Information				Depth (ft)	DESCRIPTION OF MATERIALS (Classification)	Remarks
Depth Interval (Feet)	Recovery (Inches)	PID	Sample ID & Depth			
0-1.5	-	0.0	F-6-3		Topsoil	
		0.0			Brown, medium grained, silty sand, medium dense, dry.	
		0.0	F-6-3A	1.5		

Boring F-6-3 terminated at 1.5 feet bgs.

DYNAMIC EARTH

BORING LOG
(Environmental Sampling)

Boring No.: F-6-4

Project: Old Orchard Country Club					**Proj. No.:**	**3272-98-005EC**		
Location: 54 Monouth Road, Eatontown, New Jersey 07724					**Client:**	**Surrey Equities**		
Surface Elevation:	**NS**	**Date Started: 12/21/2022**	**Groundwater Data**	**Depth (ft)**	**El. (mse)**	**Additional Groundwater Data**	**Depth (ft)**	**El. (mse)**
Termination Depth:	**1.5 feet**	**Date Completed: 12/21/2022**						
Location:	**F-6**	**Logged by: O. Mahmoud**	**While Drilling:** ▽	**NE**				
Drill/Test Method:	**Hand Auger**	**Contractor: Dynamic Earth, LLC**	**At Completion:** ▼	**NE**				
		Rig Type: Not Applicable						

Sample Information				Depth (ft)	DESCRIPTION OF MATERIALS (Classification)	Remarks
Depth Interval (Feet)	Recovery (Inches)	PID	Sample ID & Depth			
0-1.5	-	0.0	F-6-4		Topsoil	
		0.0			Brown, medium grained, silty sand, medium dense, dry.	
		0.0	F-6-4A	1.5		

Boring F-6-4 terminated at 1.5 feet bgs.

DYNAMIC EARTH

BORING LOG
(Environmental Sampling)

Boring No.: T-14A

Project: Old Orchard Country Club					**Proj. No.:**	**3272-98-005EC**		
Location: 54 Monouth Road, Eatontown, New Jersey 07724					**Client:**	**Surrey Equities**		
Surface Elevation:	**NS**	**Date Started: 12/20/2022**	**Groundwater Data**	**Depth (ft)**	**El. (mse)**	**Additional Groundwater Data**	**Depth (ft)**	**El. (mse)**
Termination Depth:	**3.5 feet**	**Date Completed: 12/20/2022**						
Location:	**T-14**	**Logged by: O. Mahmoud**	**While Drilling:** ▽	**NE**				
Drill/Test Method:	**Hand Auger**	**Contractor: Dynamic Earth, LLC**	**At Completion:** ▼	**NE**				
		Rig Type: Not Applicable						

Sample Information				Depth (ft)	DESCRIPTION OF MATERIALS (Classification)	Remarks
Depth Interval (Feet)	Recovery (Inches)	PID	Sample ID & Depth			
0-3.5	-	0.0			Topsoil	
		0.0				
		0.0	T-14A			
		0.0				
		0.0	T-14B		Brown, medium grained, silty sand, medium dense, dry.	
		0.0				
		0.0	T-14C	3.5		

Boring T-14A terminated at 3.5 feet bgs.

BORING LOG
(Environmental Sampling)

Boring No.: T-14-1

Project: Old Orchard Country Club					**Proj. No.:**	**3272-98-005EC**		
Location: 54 Monouth Road, Eatontown, New Jersey 07724					**Client:**	**Surrey Equities**		
Surface Elevation:	**NS**	**Date Started: 12/20/2022**	**Groundwater Data**	**Depth (ft)**	**El. (mse)**	**Additional Groundwater Data**	**Depth (ft)**	**El. (mse)**
Termination Depth:	**1.5 feet**	**Date Completed: 12/20/2022**						
Location:	**T-14**	**Logged by: O. Mahmoud**	**While Drilling:** ▽	**NE**				
Drill/Test Method:	**Hand Auger**	**Contractor: Dynamic Earth, LLC**	**At Completion:** ▼	**NE**				
		Rig Type: Not Applicable						

Sample Information				Depth (ft)	DESCRIPTION OF MATERIALS (Classification)	Remarks
Depth Interval (Feet)	Recovery (Inches)	PID	Sample ID & Depth			
0-1.5	-	0.0	T-14-1		Topsoil	
		0.0			Brown, medium grained, silty sand, medium dense, dry.	
		0.0	T-14-1A	1.5		

Boring T-14-1 terminated at 1.5 feet bgs.

DYNAMIC EARTH

BORING LOG
(Environmental Sampling)

Boring No.: T-14-2

Project: Old Orchard Country Club					**Proj. No.:**	**3272-98-005EC**		
Location: 54 Monouth Road, Eatontown, New Jersey 07724					**Client:**	**Surrey Equities**		
Surface Elevation:	**NS**	**Date Started: 12/20/2022**	**Groundwater Data**	**Depth (ft)**	**El. (mse)**	**Additional Groundwater Data**	**Depth (ft)**	**El. (mse)**
Termination Depth:	**1.5 feet**	**Date Completed: 12/20/2022**						
Location:	**T-14**	**Logged by: O. Mahmoud**	**While Drilling:** ▽	**NE**				
Drill/Test Method:	**Hand Auger**	**Contractor: Dynamic Earth, LLC**	**At Completion:** ▼	**NE**				
		Rig Type: Not Applicable						

Sample Information				Depth (ft)	DESCRIPTION OF MATERIALS (Classification)	Remarks
Depth Interval (Feet)	Recovery (Inches)	PID	Sample ID & Depth			
0-1.5	-	0.0	T-14-2		Topsoil	
		0.0			Brown, medium grained, silty sand, medium dense, dry.	
		0.0	T-14-2A	1.5		

Boring T-14-2 terminated at 1.5 feet bgs.

DYNAMIC EARTH

BORING LOG
(Environmental Sampling)

Boring No.: T-14-3

Project: Old Orchard Country Club					**Proj. No.:**	**3272-98-005EC**		
Location: 54 Monouth Road, Eatontown, New Jersey 07724					**Client:**	**Surrey Equities**		
Surface Elevation:	**NS**	**Date Started: 12/20/2022**	**Groundwater Data**	**Depth (ft)**	**El. (mse)**	**Additional Groundwater Data**	**Depth (ft)**	**El. (mse)**
Termination Depth:	**1.5 feet**	**Date Completed: 12/20/2022**						
Location:	**T-14**	**Logged by: O. Mahmoud**	**While Drilling:** ▽	**NE**				
Drill/Test Method:	**Hand Auger**	**Contractor: Dynamic Earth, LLC**	**At Completion:** ▼	**NE**				
		Rig Type: Not Applicable						

Sample Information				Depth (ft)	DESCRIPTION OF MATERIALS (Classification)	Remarks
Depth Interval (Feet)	Recovery (Inches)	PID	Sample ID & Depth			
0-1.5	-	0.0	T-14-3		Topsoil	
		0.0			Brown, medium grained, silty sand, medium dense, dry.	
		0.0	T-14-3A	1.5		

Boring T-14-3 terminated at 1.5 feet bgs.

DYNAMIC EARTH

BORING LOG
(Environmental Sampling)

Boring No.: T-14-4

Project: Old Orchard Country Club					**Proj. No.:**	**3272-98-005EC**		
Location: 54 Monouth Road, Eatontown, New Jersey 07724					**Client:**	**Surrey Equities**		
Surface Elevation:	**NS**	**Date Started: 12/20/2022**	**Groundwater Data**	**Depth (ft)**	**El. (mse)**	**Additional Groundwater Data**	**Depth (ft)**	**El. (mse)**
Termination Depth:	**1.5 feet**	**Date Completed: 12/20/2022**						
Location:	**T-14**	**Logged by: O. Mahmoud**	**While Drilling:** ▽	**NE**				
Drill/Test Method:	**Hand Auger**	**Contractor: Dynamic Earth, LLC**	**At Completion:** ▼	**NE**				
		Rig Type: Not Applicable						

Sample Information				Depth (ft)	DESCRIPTION OF MATERIALS (Classification)	Remarks
Depth Interval (Feet)	Recovery (Inches)	PID	Sample ID & Depth			
0-1.5	-	0.0	T-14-4		Topsoil	
		0.0			Brown, medium grained, silty sand, medium dense, dry.	
		0.0	T-14-4A	1.5		

Boring T-14-4 terminated at 1.5 feet bgs.

DYNAMIC EARTH

BORING LOG
(Environmental Sampling)

Boring No.: G-12

Project: Old Orchard Country Club					**Proj. No.:**	**3272-98-005EC**		
Location: 54 Monouth Road, Eatontown, New Jersey 07724					**Client:**	**Surrey Equities**		
Surface Elevation:	**NS**	**Date Started: 12/21/2022**	**Groundwater Data**	**Depth (ft)**	**El. (mse)**	**Additional Groundwater Data**	**Depth (ft)**	**El. (mse)**
Termination Depth:	**3.5 feet**	**Date Completed: 12/21/2022**						
Location:	**G-12**	**Logged by: O. Mahmoud**	**While Drilling:** ▽	**NE**				
Drill/Test Method:	**Hand Auger**	**Contractor: Dynamic Earth, LLC**	**At Completion:** ▼	**NE**				
		Rig Type: Not Applicable						

Sample Information				Depth (ft)	DESCRIPTION OF MATERIALS (Classification)	Remarks
Depth Interval (Feet)	Recovery (Inches)	PID	Sample ID & Depth			
0-3.5	-	0.0			Topsoil	
		0.0				
		0.0	G-12A			
		0.0				
		0.0	G-12B		Brown, medium grained, silty sand, medium dense, dry.	
		0.0				
		0.0	G-12C	3.5		

Boring G-12 terminated at 3.5 feet bgs.

DYNAMIC EARTH

BORING LOG
(Environmental Sampling)

Boring No.: G-12-1

Project: Old Orchard Country Club					**Proj. No.:**	**3272-98-005EC**		
Location: 54 Monouth Road, Eatontown, New Jersey 07724					**Client:**	**Surrey Equities**		
Surface Elevation:	**NS**	**Date Started: 12/21/2022**	**Groundwater Data**	**Depth (ft)**	**El. (mse)**	**Additional Groundwater Data**	**Depth (ft)**	**El. (mse)**
Termination Depth:	**1.5 feet**	**Date Completed: 12/21/2022**						
Location:	**G-12**	**Logged by: O. Mahmoud**	**While Drilling:** ▽	**NE**				
Drill/Test Method:	**Hand Auger**	**Contractor: Dynamic Earth, LLC**	**At Completion:** ▼	**NE**				
		Rig Type: Not Applicable						

Sample Information				Depth (ft)	DESCRIPTION OF MATERIALS (Classification)	Remarks
Depth Interval (Feet)	Recovery (Inches)	PID	Sample ID & Depth			
0-1.5	-	0.0	G-12-1		Topsoil	
		0.0			Brown, medium grained, silty sand, medium dense, dry.	
		0.0	G-12-1A	1.5		

Boring G-12-1 terminated at 1.5 feet bgs.

DYNAMIC EARTH

BORING LOG
(Environmental Sampling)

Boring No.: G-12-2

Project: Old Orchard Country Club					**Proj. No.:**	**3272-98-005EC**		
Location: 54 Monouth Road, Eatontown, New Jersey 07724					**Client:**	**Surrey Equities**		
Surface Elevation:	**NS**	**Date Started: 12/21/2022**	**Groundwater Data**	**Depth (ft)**	**El. (mse)**	**Additional Groundwater Data**	**Depth (ft)**	**El. (mse)**
Termination Depth:	**1.5 feet**	**Date Completed: 12/21/2022**						
Location:	**G-12**	**Logged by: O. Mahmoud**	**While Drilling:** ▽	**NE**				
Drill/Test Method:	**Hand Auger**	**Contractor: Dynamic Earth, LLC**	**At Completion:** ▼	**NE**				
		Rig Type: Not Applicable						

Sample Information				Depth (ft)	DESCRIPTION OF MATERIALS (Classification)	Remarks
Depth Interval (Feet)	Recovery (Inches)	PID	Sample ID & Depth			
0-1.5	-	0.0	G-12-2		Topsoil	
		0.0			Brown, medium grained, silty sand, medium dense, dry.	
		0.0	G-12-2A	1.5		

Boring G-12-2 terminated at 1.5 feet bgs.

DYNAMIC EARTH

BORING LOG
(Environmental Sampling)

Boring No.: G-12-3

Project: Old Orchard Country Club					**Proj. No.:**	**3272-98-005EC**		
Location: 54 Monouth Road, Eatontown, New Jersey 07724					**Client:**	**Surrey Equities**		
Surface Elevation:	**NS**	**Date Started: 12/21/2022**	**Groundwater Data**	**Depth (ft)**	**El. (mse)**	**Additional Groundwater Data**	**Depth (ft)**	**El. (mse)**
Termination Depth:	**1.5 feet**	**Date Completed: 12/21/2022**						
Location:	**G-12**	**Logged by: O. Mahmoud**	**While Drilling:** ▽	**NE**				
Drill/Test Method:	**Hand Auger**	**Contractor: Dynamic Earth, LLC**	**At Completion:** ▼	**NE**				
		Rig Type: Not Applicable						

Sample Information				Depth (ft)	DESCRIPTION OF MATERIALS (Classification)	Remarks
Depth Interval (Feet)	Recovery (Inches)	PID	Sample ID & Depth			
0-1.5	-	0.0	G-12-3		Topsoil	
		0.0			Brown, medium grained, silty sand, medium dense, dry.	
		0.0	G-12-3A	1.5		

Boring G-12-3 terminated at 1.5 feet bgs.

DYNAMIC EARTH

BORING LOG
(Environmental Sampling)

Boring No.: G-12-4

Project: Old Orchard Country Club					**Proj. No.:**	**3272-98-005EC**		
Location: 54 Monouth Road, Eatontown, New Jersey 07724					**Client:**	**Surrey Equities**		
Surface Elevation:	**NS**	**Date Started: 12/21/2022**	**Groundwater Data**	**Depth (ft)**	**El. (mse)**	**Additional Groundwater Data**	**Depth (ft)**	**El. (mse)**
Termination Depth:	**1.5 feet**	**Date Completed: 12/21/2022**						
Location:	**G-12**	**Logged by: O. Mahmoud**	**While Drilling:** ▽	**NE**				
Drill/Test Method:	**Hand Auger**	**Contractor: Dynamic Earth, LLC**	**At Completion:** ▼	**NE**				
		Rig Type: Not Applicable						

Sample Information				Depth (ft)	DESCRIPTION OF MATERIALS (Classification)	Remarks
Depth Interval (Feet)	Recovery (Inches)	PID	Sample ID & Depth			
0-1.5	-	0.0	G-12-4		Topsoil	
		0.0			Brown, medium grained, silty sand, medium dense, dry.	
		0.0	G-12-4A	1.5		

Boring G-12-4 terminated at 1.5 feet bgs.

DYNAMIC EARTH

BORING LOG
(Environmental Sampling)

Boring No.: G-9

Project: Old Orchard Country Club					**Proj. No.:**	**3272-98-005EC**		
Location: 54 Monouth Road, Eatontown, New Jersey 07724					**Client:**	**Surrey Equities**		
Surface Elevation:	**NS**	**Date Started: 12/21/2022**	**Groundwater Data**	**Depth (ft)**	**El. (mse)**	**Additional Groundwater Data**	**Depth (ft)**	**El. (mse)**
Termination Depth:	**3.5 feet**	**Date Completed: 12/21/2022**						
Location:	**G-9**	**Logged by: O. Mahmoud**	**While Drilling:** ▽	**NE**				
Drill/Test Method:	**Hand Auger**	**Contractor: Dynamic Earth, LLC**	**At Completion:** ▼	**NE**				
		Rig Type: Not Applicable						

Sample Information				Depth (ft)	DESCRIPTION OF MATERIALS (Classification)	Remarks
Depth Interval (Feet)	Recovery (Inches)	PID	Sample ID & Depth			
0-3.5	-	0.0			Topsoil	
		0.0				
		0.0	G-9A			
		0.0				
		0.0	G-9B		Brown, medium grained, silty sand, medium dense, dry.	
		0.0				
		0.0	G-9C	3.5		

Boring G-9 terminated at 3.5 feet bgs.

DYNAMIC EARTH

BORING LOG
(Environmental Sampling)

Boring No.: G-9-1

Project: Old Orchard Country Club					**Proj. No.:**	**3272-98-005EC**		
Location: 54 Monouth Road, Eatontown, New Jersey 07724					**Client:**	**Surrey Equities**		
Surface Elevation:	**NS**	**Date Started: 12/21/2022**	**Groundwater Data**	**Depth (ft)**	**El. (mse)**	**Additional Groundwater Data**	**Depth (ft)**	**El. (mse)**
Termination Depth:	**1.5 feet**	**Date Completed: 12/21/2022**						
Location:	**G-9**	**Logged by: O. Mahmoud**	**While Drilling:** ▽	**NE**				
Drill/Test Method:	**Hand Auger**	**Contractor: Dynamic Earth, LLC**	**At Completion:** ▼	**NE**				
		Rig Type: Not Applicable						

Sample Information				Depth (ft)	DESCRIPTION OF MATERIALS (Classification)	Remarks
Depth Interval (Feet)	Recovery (Inches)	PID	Sample ID & Depth			
0-1.5	-	0.0	G-9-1		Topsoil	
		0.0			Brown, medium grained, silty sand, medium dense, dry.	
		0.0	G-9-1A	1.5		

Boring G-9-1 terminated at 1.5 feet bgs.

DYNAMIC EARTH

BORING LOG
(Environmental Sampling)

Boring No.: G-9-2

Project: Old Orchard Country Club					**Proj. No.:**	**3272-98-005EC**		
Location: 54 Monouth Road, Eatontown, New Jersey 07724					**Client:**	**Surrey Equities**		
Surface Elevation:	**NS**	**Date Started: 12/21/2022**	**Groundwater Data**	**Depth (ft)**	**El. (mse)**	**Additional Groundwater Data**	**Depth (ft)**	**El. (mse)**
Termination Depth:	**1.5 feet**	**Date Completed: 12/21/2022**						
Location:	**G-9**	**Logged by: O. Mahmoud**	**While Drilling:** ▽	**NE**				
Drill/Test Method:	**Hand Auger**	**Contractor: Dynamic Earth, LLC**	**At Completion:** ▼	**NE**				
		Rig Type: Not Applicable						

Sample Information				Depth (ft)	DESCRIPTION OF MATERIALS (Classification)	Remarks
Depth Interval (Feet)	Recovery (Inches)	PID	Sample ID & Depth			
0-1.5	-	0.0	G-9-2		Topsoil	
		0.0			Brown, medium grained, silty sand, medium dense, dry.	
		0.0	G-9-2A	1.5		

Boring G-9-2 terminated at 1.5 feet bgs.

DYNAMIC EARTH

BORING LOG
(Environmental Sampling)

Boring No.: G-9-3

Project: Old Orchard Country Club					**Proj. No.:**	**3272-98-005EC**		
Location: 54 Monouth Road, Eatontown, New Jersey 07724					**Client:**	**Surrey Equities**		
Surface Elevation:	**NS**	**Date Started: 12/21/2022**	**Groundwater Data**	**Depth (ft)**	**El. (mse)**	**Additional Groundwater Data**	**Depth (ft)**	**El. (mse)**
Termination Depth:	**1.5 feet**	**Date Completed: 12/21/2022**						
Location:	**G-9**	**Logged by: O. Mahmoud**	**While Drilling:** ▽	**NE**				
Drill/Test Method:	**Hand Auger**	**Contractor: Dynamic Earth, LLC**	**At Completion:** ▼	**NE**				
		Rig Type: Not Applicable						

Sample Information				Depth (ft)	DESCRIPTION OF MATERIALS (Classification)	Remarks
Depth Interval (Feet)	Recovery (Inches)	PID	Sample ID & Depth			
0-1.5	-	0.0	G-9-3		Topsoil	
		0.0			Brown, medium grained, silty sand, medium dense, dry.	
		0.0	G-9-3A	1.5		

Boring G-9-3 terminated at 1.5 feet bgs.

DYNAMIC EARTH

BORING LOG
(Environmental Sampling)

Boring No.: G-9-4

Project: Old Orchard Country Club					**Proj. No.:**	**3272-98-005EC**		
Location: 54 Monouth Road, Eatontown, New Jersey 07724					**Client:**	**Surrey Equities**		
Surface Elevation:	**NS**	**Date Started: 12/21/2022**	**Groundwater Data**	**Depth (ft)**	**El. (mse)**	**Additional Groundwater Data**	**Depth (ft)**	**El. (mse)**
Termination Depth:	**1.5 feet**	**Date Completed: 12/21/2022**						
Location:	**G-9**	**Logged by: O. Mahmoud**	**While Drilling:** ▽	**NE**				
Drill/Test Method:	**Hand Auger**	**Contractor: Dynamic Earth, LLC**	**At Completion:** ▼	**NE**				
		Rig Type: Not Applicable						

Sample Information				Depth (ft)	DESCRIPTION OF MATERIALS (Classification)	Remarks
Depth Interval (Feet)	Recovery (Inches)	PID	Sample ID & Depth			
0-1.5	-	0.0	G-9-4		Topsoil	
		0.0			Brown, medium grained, silty sand, medium dense, dry.	
		0.0	G-9-4A	1.5		

Boring G-9-4 terminated at 1.5 feet bgs.

DYNAMIC EARTH

BORING LOG
(Environmental Sampling)

Boring No.: F-15

Project: Old Orchard Country Club					**Proj. No.:**	**3272-98-005EC**		
Location: 54 Monouth Road, Eatontown, New Jersey 07724					**Client:**	**Surrey Equities**		
Surface Elevation:	**NS**	**Date Started: 12/21/2022**	**Groundwater Data**	**Depth (ft)**	**El. (mse)**	**Additional Groundwater Data**	**Depth (ft)**	**El. (mse)**
Termination Depth:	**3.5 feet**	**Date Completed: 12/21/2022**						
Location:	**F-15**	**Logged by: O. Mahmoud**	**While Drilling:** ▽	**NE**				
Drill/Test Method:	**Hand Auger**	**Contractor: Dynamic Earth, LLC**	**At Completion:** ▼	**NE**				
		Rig Type: Not Applicable						

Sample Information				Depth (ft)	DESCRIPTION OF MATERIALS (Classification)	Remarks
Depth Interval (Feet)	Recovery (Inches)	PID	Sample ID & Depth			
0-3.5	-	0.0			Topsoil	
		0.0				
		0.0	F-15A			
		0.0				
		0.0	F-15B		Brown, medium grained, silty sand, medium dense, dry.	
		0.0				
		0.0	F-15C	3.5		

Boring F-15 terminated at 3.5 feet bgs.

DYNAMIC EARTH

BORING LOG
(Environmental Sampling)

Boring No.: F-15-1

Project: Old Orchard Country Club					**Proj. No.:**	**3272-98-005EC**		
Location: 54 Monouth Road, Eatontown, New Jersey 07724					**Client:**	**Surrey Equities**		
Surface Elevation:	**NS**	**Date Started: 12/21/2022**	**Groundwater Data**	**Depth (ft)**	**El. (mse)**	**Additional Groundwater Data**	**Depth (ft)**	**El. (mse)**
Termination Depth:	**1.5 feet**	**Date Completed: 12/21/2022**						
Location:	**F-15**	**Logged by: O. Mahmoud**	**While Drilling:** ▽	**NE**				
Drill/Test Method:	**Hand Auger**	**Contractor: Dynamic Earth, LLC**	**At Completion:** ▼	**NE**				
		Rig Type: Not Applicable						

Sample Information				Depth (ft)	DESCRIPTION OF MATERIALS (Classification)	Remarks
Depth Interval (Feet)	Recovery (Inches)	PID	Sample ID & Depth			
0-1.5	-	0.0	F-15-1		Topsoil	
		0.0			Brown, medium grained, silty sand, medium dense, dry.	
		0.0	F-15-1A	1.5		

Boring F-15-1 terminated at 1.5 feet bgs.

DYNAMIC EARTH

BORING LOG
(Environmental Sampling)

Boring No.: F-15-3

Project: Old Orchard Country Club					**Proj. No.:**	**3272-98-005EC**		
Location: 54 Monouth Road, Eatontown, New Jersey 07724					**Client:**	**Surrey Equities**		
Surface Elevation:	**NS**	**Date Started: 12/21/2022**	**Groundwater Data**	**Depth (ft)**	**El. (mse)**	**Additional Groundwater Data**	**Depth (ft)**	**El. (mse)**
Termination Depth:	**1.5 feet**	**Date Completed: 12/21/2022**						
Location:	**F-15**	**Logged by: O. Mahmoud**	**While Drilling:** ▽	**NE**				
Drill/Test Method:	**Hand Auger**	**Contractor: Dynamic Earth, LLC**	**At Completion:** ▼	**NE**				
		Rig Type: Not Applicable						

Sample Information				Depth (ft)	DESCRIPTION OF MATERIALS (Classification)	Remarks
Depth Interval (Feet)	Recovery (Inches)	PID	Sample ID & Depth			
0-1.5	-	0.0	F-15-3		Topsoil	
		0.0			Brown, medium grained, silty sand, medium dense, dry.	
		0.0	F-15-3A	1.5		

Boring F-15-3 terminated at 1.5 feet bgs.

BORING LOG
(Environmental Sampling)

Boring No.: F-15-6

Project: Old Orchard Country Club					**Proj. No.:**	**3272-98-005EC**		
Location: 54 Monouth Road, Eatontown, New Jersey 07724					**Client:**	**Surrey Equities**		
Surface Elevation:	**NS**	**Date Started: 12/21/2022**	**Groundwater Data**	**Depth (ft)**	**El. (mse)**	**Additional Groundwater Data**	**Depth (ft)**	**El. (mse)**
Termination Depth:	**1.5 feet**	**Date Completed: 12/21/2022**						
Location:	**F-15**	**Logged by: O. Mahmoud**	**While Drilling:** ▽	**NE**				
Drill/Test Method:	**Hand Auger**	**Contractor: Dynamic Earth, LLC**	**At Completion:** ▼	**NE**				
		Rig Type: Not Applicable						

Sample Information				Depth (ft)	DESCRIPTION OF MATERIALS (Classification)	Remarks
Depth Interval (Feet)	Recovery (Inches)	PID	Sample ID & Depth			
0-1.5	-	0.0	F-15-6		Topsoil	
		0.0			Brown, medium grained, silty sand, medium dense, dry.	
		0.0	F-15-6A	1.5		

Boring F-15-6 terminated at 1.5 feet bgs.

DYNAMIC EARTH

BORING LOG
(Environmental Sampling)

Boring No.: F-15-7

Project: Old Orchard Country Club					**Proj. No.:**	**3272-98-005EC**		
Location: 54 Monouth Road, Eatontown, New Jersey 07724					**Client:**	**Surrey Equities**		
Surface Elevation:	**NS**	**Date Started: 12/21/2022**	**Groundwater Data**	**Depth (ft)**	**El. (mse)**	**Additional Groundwater Data**	**Depth (ft)**	**El. (mse)**
Termination Depth:	**1.5 feet**	**Date Completed: 12/21/2022**						
Location:	**F-15**	**Logged by: O. Mahmoud**	**While Drilling:** ▽	**NE**				
Drill/Test Method:	**Hand Auger**	**Contractor: Dynamic Earth, LLC**	**At Completion:** ▼	**NE**				
		Rig Type: Not Applicable						

Sample Information				Depth (ft)	DESCRIPTION OF MATERIALS (Classification)	Remarks
Depth Interval (Feet)	Recovery (Inches)	PID	Sample ID & Depth			
0-1.5	-	0.0	F-15-7		Topsoil	
		0.0			Brown, medium grained, silty sand, medium dense, dry.	
		0.0	F-15-7A	1.5		

Boring F-15-7 terminated at 1.5 feet bgs.

DYNAMIC EARTH

BORING LOG
(Environmental Sampling)

Boring No.: G-15

Project: Old Orchard Country Club					**Proj. No.:**	**3272-98-005EC**		
Location: 54 Monouth Road, Eatontown, New Jersey 07724					**Client:**	**Surrey Equities**		
Surface Elevation:	**NS**	**Date Started: 12/21/2022**	**Groundwater Data**	**Depth (ft)**	**El. (mse)**	**Additional Groundwater Data**	**Depth (ft)**	**El. (mse)**
Termination Depth:	**3.5 feet**	**Date Completed: 12/21/2022**						
Location:	**G-15**	**Logged by: O. Mahmoud**	**While Drilling:** ▽	**NE**				
Drill/Test Method:	**Hand Auger**	**Contractor: Dynamic Earth, LLC**	**At Completion:** ▼	**NE**				
		Rig Type: Not Applicable						

Sample Information				Depth (ft)	DESCRIPTION OF MATERIALS (Classification)	Remarks
Depth Interval (Feet)	Recovery (Inches)	PID	Sample ID & Depth			
0-3.5	-	0.0			Topsoil	
		0.0				
		0.0	G-15A			
		0.0				
		0.0	G-15B		Brown, medium grained, silty sand, medium dense, dry.	
		0.0				
		0.0	G-15C	3.5		

Boring G-15 terminated at 3.5 feet bgs.

DYNAMIC EARTH

BORING LOG
(Environmental Sampling)

Boring No.: G-15-1

Project: Old Orchard Country Club					**Proj. No.:**	**3272-98-005EC**		
Location: 54 Monouth Road, Eatontown, New Jersey 07724					**Client:**	**Surrey Equities**		
Surface Elevation:	**NS**	**Date Started: 12/21/2022**	**Groundwater Data**	**Depth (ft)**	**El. (mse)**	**Additional Groundwater Data**	**Depth (ft)**	**El. (mse)**
Termination Depth:	**1.5 feet**	**Date Completed: 12/21/2022**						
Location:	**G-15**	**Logged by: O. Mahmoud**	**While Drilling:** ▽	**NE**				
Drill/Test Method:	**Hand Auger**	**Contractor: Dynamic Earth, LLC**	**At Completion:** ▼	**NE**				
		Rig Type: Not Applicable						

Sample Information				Depth (ft)	DESCRIPTION OF MATERIALS (Classification)	Remarks
Depth Interval (Feet)	Recovery (Inches)	PID	Sample ID & Depth			
0-1.5	-	0.0	G-15-1		Topsoil	
		0.0			Brown, medium grained, silty sand, medium dense, dry.	
		0.0	G-15-1A	1.5		

Boring G-15-1 terminated at 1.5 feet bgs.

DYNAMIC EARTH

BORING LOG
(Environmental Sampling)

Boring No.: G-15-2

Project: Old Orchard Country Club					**Proj. No.:**	**3272-98-005EC**		
Location: 54 Monouth Road, Eatontown, New Jersey 07724					**Client:**	**Surrey Equities**		
Surface Elevation:	**NS**	**Date Started: 12/21/2022**	**Groundwater Data**	**Depth (ft)**	**El. (mse)**	**Additional Groundwater Data**	**Depth (ft)**	**El. (mse)**
Termination Depth:	**1.5 feet**	**Date Completed: 12/21/2022**						
Location:	**G-15**	**Logged by: O. Mahmoud**	**While Drilling:** ▽	**NE**				
Drill/Test Method:	**Hand Auger**	**Contractor: Dynamic Earth, LLC**	**At Completion:** ▼	**NE**				
		Rig Type: Not Applicable						

Sample Information				Depth (ft)	DESCRIPTION OF MATERIALS (Classification)	Remarks
Depth Interval (Feet)	Recovery (Inches)	PID	Sample ID & Depth			
0-1.5	-	0.0	G-15-2		Topsoil	
		0.0			Brown, medium grained, silty sand, medium dense, dry.	
		0.0	G-15-2A	1.5		

Boring G-15-2 terminated at 1.5 feet bgs.

BORING LOG
(Environmental Sampling)

Boring No.: G-15-3

Project: Old Orchard Country Club					**Proj. No.:**	**3272-98-005EC**		
Location: 54 Monouth Road, Eatontown, New Jersey 07724					**Client:**	**Surrey Equities**		
Surface Elevation:	**NS**	**Date Started: 12/21/2022**	**Groundwater Data**	**Depth (ft)**	**El. (mse)**	**Additional Groundwater Data**	**Depth (ft)**	**El. (mse)**
Termination Depth:	**1.5 feet**	**Date Completed: 12/21/2022**						
Location:	**G-15**	**Logged by: O. Mahmoud**	**While Drilling:** ▽	**NE**				
Drill/Test Method:	**Hand Auger**	**Contractor: Dynamic Earth, LLC**	**At Completion:** ▼	**NE**				
		Rig Type: Not Applicable						

Sample Information				Depth (ft)	DESCRIPTION OF MATERIALS (Classification)	Remarks
Depth Interval (Feet)	Recovery (Inches)	PID	Sample ID & Depth			
0-1.5	-	0.0	G-15-3		Topsoil	
		0.0			Brown, medium grained, silty sand, medium dense, dry.	
		0.0	G-15-3A	1.5		

Boring G-15-3 terminated at 1.5 feet bgs.

DYNAMIC EARTH

BORING LOG
(Environmental Sampling)

Boring No.: G-15-4

Project: Old Orchard Country Club					**Proj. No.:**	**3272-98-005EC**		
Location: 54 Monouth Road, Eatontown, New Jersey 07724					**Client:**	**Surrey Equities**		
Surface Elevation:	**NS**	**Date Started: 12/21/2022**	**Groundwater Data**	**Depth (ft)**	**El. (mse)**	**Additional Groundwater Data**	**Depth (ft)**	**El. (mse)**
Termination Depth:	**1.5 feet**	**Date Completed: 12/21/2022**						
Location:	**G-15**	**Logged by: O. Mahmoud**	**While Drilling:** ▽	**NE**				
Drill/Test Method:	**Hand Auger**	**Contractor: Dynamic Earth, LLC**	**At Completion:** ▼	**NE**				
		Rig Type: Not Applicable						

Sample Information				Depth (ft)	DESCRIPTION OF MATERIALS (Classification)	Remarks
Depth Interval (Feet)	Recovery (Inches)	PID	Sample ID & Depth			
0-1.5	-	0.0	G-15-4		Topsoil	
		0.0			Brown, medium grained, silty sand, medium dense, dry.	
		0.0	G-15-4A	1.5		

Boring G-15-4 terminated at 1.5 feet bgs.

DYNAMIC EARTH

BORING LOG
(Environmental Sampling)

Boring No.: T-12A

Project: Old Orchard Country Club					**Proj. No.:**	**3272-98-005EC**		
Location: 54 Monouth Road, Eatontown, New Jersey 07724					**Client:**	**Surrey Equities**		
Surface Elevation:	**NS**	**Date Started: 12/20/2022**	**Groundwater Data**	**Depth (ft)**	**El. (mse)**	**Additional Groundwater Data**	**Depth (ft)**	**El. (mse)**
Termination Depth:	**3.5 feet**	**Date Completed: 12/20/2022**						
Location:	**T-12**	**Logged by: O. Mahmoud**	**While Drilling:** ▽	**NE**				
Drill/Test Method:	**Hand Auger**	**Contractor: Dynamic Earth, LLC**	**At Completion:** ▼	**NE**				
		Rig Type: Not Applicable						

Sample Information				Depth (ft)	DESCRIPTION OF MATERIALS (Classification)	Remarks
Depth Interval (Feet)	Recovery (Inches)	PID	Sample ID & Depth			
0-3.5	-	0.0			Topsoil	
		0.0				
		0.0	T-12A			
		0.0				
		0.0	T-12B		Brown, medium grained, silty sand, medium dense, dry.	
		0.0				
		0.0	T-12C	3.5		

Boring T-12A terminated at 3.5 feet bgs.

DYNAMIC EARTH

BORING LOG
(Environmental Sampling)

Boring No.: T-12-1

Project: Old Orchard Country Club					**Proj. No.:**	**3272-98-005EC**		
Location: 54 Monouth Road, Eatontown, New Jersey 07724					**Client:**	**Surrey Equities**		
Surface Elevation:	**NS**	**Date Started: 12/20/2022**	**Groundwater Data**	**Depth (ft)**	**El. (mse)**	**Additional Groundwater Data**	**Depth (ft)**	**El. (mse)**
Termination Depth:	**1.5 feet**	**Date Completed: 12/20/2022**						
Location:	**T-12**	**Logged by: O. Mahmoud**	**While Drilling:** ▽	**NE**				
Drill/Test Method:	**Hand Auger**	**Contractor: Dynamic Earth, LLC**	**At Completion:** ▼	**NE**				
		Rig Type: Not Applicable						

Sample Information				Depth (ft)	DESCRIPTION OF MATERIALS (Classification)	Remarks
Depth Interval (Feet)	Recovery (Inches)	PID	Sample ID & Depth			
0-1.5	-	0.0	T-12-1		Topsoil	
		0.0			Brown, medium grained, silty sand, medium dense, dry.	
		0.0	T-12-1A	1.5		

Boring T-12-1 terminated at 1.5 feet bgs.

DYNAMIC EARTH

BORING LOG
(Environmental Sampling)

Boring No.: T-12-2

Project: Old Orchard Country Club					**Proj. No.:**	**3272-98-005EC**		
Location: 54 Monouth Road, Eatontown, New Jersey 07724					**Client:**	**Surrey Equities**		
Surface Elevation:	**NS**	**Date Started: 12/20/2022**	**Groundwater Data**	**Depth (ft)**	**El. (mse)**	**Additional Groundwater Data**	**Depth (ft)**	**El. (mse)**
Termination Depth:	**1.5 feet**	**Date Completed: 12/20/2022**						
Location:	**T-12**	**Logged by: O. Mahmoud**	**While Drilling:** ▽	**NE**				
Drill/Test Method:	**Hand Auger**	**Contractor: Dynamic Earth, LLC**	**At Completion:** ▼	**NE**				
		Rig Type: Not Applicable						

Sample Information				Depth (ft)	DESCRIPTION OF MATERIALS (Classification)	Remarks
Depth Interval (Feet)	Recovery (Inches)	PID	Sample ID & Depth			
0-1.5	-	0.0	T-12-2		Topsoil	
		0.0			Brown, medium grained, silty sand, medium dense, dry.	
		0.0	T-12-2A	1.5		

Boring T-12-2 terminated at 1.5 feet bgs.

DYNAMIC EARTH

BORING LOG
(Environmental Sampling)

Boring No.: T-12-3

Project: Old Orchard Country Club					**Proj. No.:**	**3272-98-005EC**		
Location: 54 Monouth Road, Eatontown, New Jersey 07724					**Client:**	**Surrey Equities**		
Surface Elevation:	**NS**	**Date Started: 12/20/2022**	**Groundwater Data**	**Depth (ft)**	**El. (mse)**	**Additional Groundwater Data**	**Depth (ft)**	**El. (mse)**
Termination Depth:	**1.5 feet**	**Date Completed: 12/20/2022**						
Location:	**T-12**	**Logged by: O. Mahmoud**	**While Drilling:** ▽	**NE**				
Drill/Test Method:	**Hand Auger**	**Contractor: Dynamic Earth, LLC**	**At Completion:** ▼	**NE**				
		Rig Type: Not Applicable						

Sample Information				Depth (ft)	DESCRIPTION OF MATERIALS (Classification)	Remarks
Depth Interval (Feet)	Recovery (Inches)	PID	Sample ID & Depth			
0-1.5	-	0.0	T-12-3		Topsoil	
		0.0			Brown, medium grained, silty sand, medium dense, dry.	
		0.0	T-12-3A	1.5		

Boring T-12-3 terminated at 1.5 feet bgs.

DYNAMIC EARTH

BORING LOG
(Environmental Sampling)

Boring No.: T-12-4

Project: Old Orchard Country Club					**Proj. No.:**	**3272-98-005EC**		
Location: 54 Monouth Road, Eatontown, New Jersey 07724					**Client:**	**Surrey Equities**		
Surface Elevation:	**NS**	**Date Started: 12/20/2022**	**Groundwater Data**	**Depth (ft)**	**El. (mse)**	**Additional Groundwater Data**	**Depth (ft)**	**El. (mse)**
Termination Depth:	**1.5 feet**	**Date Completed: 12/20/2022**						
Location:	**T-12**	**Logged by: O. Mahmoud**	**While Drilling:** ▽	**NE**				
Drill/Test Method:	**Hand Auger**	**Contractor: Dynamic Earth, LLC**	**At Completion:** ▼	**NE**				
		Rig Type: Not Applicable						

Sample Information				Depth (ft)	DESCRIPTION OF MATERIALS (Classification)	Remarks
Depth Interval (Feet)	Recovery (Inches)	PID	Sample ID & Depth			
0-1.5	-	0.0	T-12-4		Topsoil	
		0.0			Brown, medium grained, silty sand, medium dense, dry.	
		0.0	T-12-4A	1.5		

Boring T-12-4 terminated at 1.5 feet bgs.

BORING LOG
(Environmental Sampling)

Boring No.: G-11

Project: Old Orchard Country Club					**Proj. No.:**	**3272-98-005EC**		
Location: 54 Monouth Road, Eatontown, New Jersey 07724					**Client:**	**Surrey Equities**		
Surface Elevation:	**NS**	**Date Started: 12/21/2022**	**Groundwater Data**	**Depth (ft)**	**El. (mse)**	**Additional Groundwater Data**	**Depth (ft)**	**El. (mse)**
Termination Depth:	**3.5 feet**	**Date Completed: 12/21/2022**						
Location:	**G-11**	**Logged by: O. Mahmoud**	**While Drilling:** ▽	**NE**				
Drill/Test Method:	**Hand Auger**	**Contractor: Dynamic Earth, LLC**	**At Completion:** ▼	**NE**				
		Rig Type: Not Applicable						

Sample Information				Depth (ft)	DESCRIPTION OF MATERIALS (Classification)	Remarks
Depth Interval (Feet)	Recovery (Inches)	PID	Sample ID & Depth			
0-3.5	-	0.0			Topsoil	
		0.0				
		0.0	G-11A			
		0.0				
		0.0	G-11B		Brown, medium grained, silty sand, medium dense, dry.	
		0.0				
		0.0	G-11C	3.5		

Boring G-11 terminated at 3.5 feet bgs.

DYNAMIC EARTH

BORING LOG
(Environmental Sampling)

Boring No.: F-11

Project: Old Orchard Country Club					**Proj. No.:**	**3272-98-005EC**		
Location: 54 Monouth Road, Eatontown, New Jersey 07724					**Client:**	**Surrey Equities**		
Surface Elevation:	**NS**	**Date Started: 12/21/2022**	**Groundwater Data**	**Depth (ft)**	**El. (mse)**	**Additional Groundwater Data**	**Depth (ft)**	**El. (mse)**
Termination Depth:	**3.5 feet**	**Date Completed: 12/21/2022**						
Location:	**F-11**	**Logged by: O. Mahmoud**	**While Drilling:** ▽	**NE**				
Drill/Test Method:	**Hand Auger**	**Contractor: Dynamic Earth, LLC**	**At Completion:** ▼	**NE**				
		Rig Type: Not Applicable						

Sample Information				Depth (ft)	DESCRIPTION OF MATERIALS (Classification)	Remarks
Depth Interval (Feet)	Recovery (Inches)	PID	Sample ID & Depth			
0-3.5	-	0.0			Topsoil	
		0.0				
		0.0	F-11A			
		0.0				
		0.0	F-11B		Brown, medium grained, silty sand, medium dense, dry.	
		0.0				
		0.0	F-11C	3.5		

Boring F-11 terminated at 3.5 feet bgs.

DYNAMIC EARTH

BORING LOG
(Environmental Sampling)

Boring No.: F-11-1

Project: Old Orchard Country Club					**Proj. No.:**	**3272-98-005EC**		
Location: 54 Monouth Road, Eatontown, New Jersey 07724					**Client:**	**Surrey Equities**		
Surface Elevation:	**NS**	**Date Started: 12/21/2022**	**Groundwater Data**	**Depth (ft)**	**El. (mse)**	**Additional Groundwater Data**	**Depth (ft)**	**El. (mse)**
Termination Depth:	**1.5 feet**	**Date Completed: 12/21/2022**						
Location:	**F-11**	**Logged by: O. Mahmoud**	**While Drilling:** ▽	**NE**				
Drill/Test Method:	**Hand Auger**	**Contractor: Dynamic Earth, LLC**	**At Completion:** ▼	**NE**				
		Rig Type: Not Applicable						

Sample Information				Depth (ft)	DESCRIPTION OF MATERIALS (Classification)	Remarks
Depth Interval (Feet)	Recovery (Inches)	PID	Sample ID & Depth			
0-1.5	-	0.0	F-11-1		Topsoil	
		0.0			Brown, medium grained, silty sand, medium dense, dry.	
		0.0	F-11-1A	1.5		

Boring F-11-1 terminated at 1.5 feet bgs.

DYNAMIC EARTH

BORING LOG
(Environmental Sampling)

Boring No.: F-11-2

Project: Old Orchard Country Club					**Proj. No.:**	**3272-98-005EC**		
Location: 54 Monouth Road, Eatontown, New Jersey 07724					**Client:**	**Surrey Equities**		
Surface Elevation:	**NS**	**Date Started: 12/21/2022**	**Groundwater Data**	**Depth (ft)**	**El. (mse)**	**Additional Groundwater Data**	**Depth (ft)**	**El. (mse)**
Termination Depth:	**1.5 feet**	**Date Completed: 12/21/2022**						
Location:	**F-11**	**Logged by: O. Mahmoud**	**While Drilling:** ▽	**NE**				
Drill/Test Method:	**Hand Auger**	**Contractor: Dynamic Earth, LLC**	**At Completion:** ▼	**NE**				
		Rig Type: Not Applicable						

Sample Information				Depth (ft)	DESCRIPTION OF MATERIALS (Classification)	Remarks
Depth Interval (Feet)	Recovery (Inches)	PID	Sample ID & Depth			
0-1.5	-	0.0	F-11-2		Topsoil	
		0.0			Brown, medium grained, silty sand, medium dense, dry.	
		0.0	F-11-2A	1.5		

Boring F-11-2 terminated at 1.5 feet bgs.

DYNAMIC EARTH

BORING LOG
(Environmental Sampling)

Boring No.: F-11-3

Project: Old Orchard Country Club					**Proj. No.:**	**3272-98-005EC**		
Location: 54 Monouth Road, Eatontown, New Jersey 07724					**Client:**	**Surrey Equities**		
Surface Elevation:	**NS**	**Date Started: 12/21/2022**	**Groundwater Data**	**Depth (ft)**	**El. (mse)**	**Additional Groundwater Data**	**Depth (ft)**	**El. (mse)**
Termination Depth:	**1.5 feet**	**Date Completed: 12/21/2022**						
Location:	**F-11**	**Logged by: O. Mahmoud**	**While Drilling:** ▽	**NE**				
Drill/Test Method:	**Hand Auger**	**Contractor: Dynamic Earth, LLC**	**At Completion:** ▼	**NE**				
		Rig Type: Not Applicable						

Sample Information				Depth (ft)	DESCRIPTION OF MATERIALS (Classification)	Remarks
Depth Interval (Feet)	Recovery (Inches)	PID	Sample ID & Depth			
0-1.5	-	0.0	F-11-3		Topsoil	
		0.0			Brown, medium grained, silty sand, medium dense, dry.	
		0.0	F-11-3A	1.5		

Boring F-11-3 terminated at 1.5 feet bgs.

DYNAMIC EARTH

BORING LOG
(Environmental Sampling)

Boring No.: F-11-4

Project: Old Orchard Country Club					**Proj. No.:**	**3272-98-005EC**		
Location: 54 Monouth Road, Eatontown, New Jersey 07724					**Client:**	**Surrey Equities**		
Surface Elevation:	**NS**	**Date Started: 12/21/2022**	**Groundwater Data**	**Depth (ft)**	**El. (mse)**	**Additional Groundwater Data**	**Depth (ft)**	**El. (mse)**
Termination Depth:	**1.5 feet**	**Date Completed: 12/21/2022**						
Location:	**F-11**	**Logged by: O. Mahmoud**	**While Drilling:** ▽	**NE**				
Drill/Test Method:	**Hand Auger**	**Contractor: Dynamic Earth, LLC**	**At Completion:** ▼	**NE**				
		Rig Type: Not Applicable						

Sample Information				Depth (ft)	DESCRIPTION OF MATERIALS (Classification)	Remarks
Depth Interval (Feet)	Recovery (Inches)	PID	Sample ID & Depth			
0-1.5	-	0.0	F-11-4		Topsoil	
		0.0			Brown, medium grained, silty sand, medium dense, dry.	
		0.0	F-11-4A	1.5		

Boring F-11-4 terminated at 1.5 feet bgs.

DYNAMIC EARTH

BORING LOG
(Environmental Sampling)

Boring No.: F-17

Project: Old Orchard Country Club					**Proj. No.:**	**3272-98-005EC**		
Location: 54 Monouth Road, Eatontown, New Jersey 07724					**Client:**	**Surrey Equities**		
Surface Elevation:	**NS**	**Date Started: 12/21/2022**	**Groundwater Data**	**Depth (ft)**	**El. (mse)**	**Additional Groundwater Data**	**Depth (ft)**	**El. (mse)**
Termination Depth:	**3.5 feet**	**Date Completed: 12/21/2022**						
Location:	**F-17**	**Logged by: O. Mahmoud**	**While Drilling:** ▽	**NE**				
Drill/Test Method:	**Hand Auger**	**Contractor: Dynamic Earth, LLC**	**At Completion:** ▼	**NE**				
		Rig Type: Not Applicable						

Sample Information				Depth (ft)	DESCRIPTION OF MATERIALS (Classification)	Remarks
Depth Interval (Feet)	Recovery (Inches)	PID	Sample ID & Depth			
0-3.5	-	0.0			Topsoil	
		0.0				
		0.0	F-17A			
		0.0			Brown, medium grained, silty sand, medium dense, dry.	
		0.0	F-17B			
		0.0				
		0.0	F-17C	3.5		

Boring F-17 terminated at 3.5 feet bgs.

DYNAMIC EARTH

BORING LOG
(Environmental Sampling)

Boring No.: F-17-1

Project: Old Orchard Country Club					**Proj. No.:**	**3272-98-005EC**		
Location: 54 Monouth Road, Eatontown, New Jersey 07724					**Client:**	**Surrey Equities**		
Surface Elevation:	**NS**	**Date Started: 12/21/2022**	**Groundwater Data**	**Depth (ft)**	**El. (mse)**	**Additional Groundwater Data**	**Depth (ft)**	**El. (mse)**
Termination Depth:	**1.5 feet**	**Date Completed: 12/21/2022**						
Location:	**F-17**	**Logged by: O. Mahmoud**	**While Drilling:** ▽	**NE**				
Drill/Test Method:	**Hand Auger**	**Contractor: Dynamic Earth, LLC**	**At Completion:** ▼	**NE**				
		Rig Type: Not Applicable						

Sample Information				Depth (ft)	DESCRIPTION OF MATERIALS (Classification)	Remarks
Depth Interval (Feet)	Recovery (Inches)	PID	Sample ID & Depth			
0-1.5	-	0.0	F-17-1		Topsoil	
		0.0			Brown, medium grained, silty sand, medium dense, dry.	
		0.0	F-17-1A	1.5		

Boring F-17-1 terminated at 1.5 feet bgs.

DYNAMIC EARTH

BORING LOG
(Environmental Sampling)

Boring No.: F-17-2

Project: Old Orchard Country Club					**Proj. No.:**	**3272-98-005EC**		
Location: 54 Monouth Road, Eatontown, New Jersey 07724					**Client:**	**Surrey Equities**		
Surface Elevation:	**NS**	**Date Started: 12/21/2022**	**Groundwater Data**	**Depth (ft)**	**El. (mse)**	**Additional Groundwater Data**	**Depth (ft)**	**El. (mse)**
Termination Depth:	**1.5 feet**	**Date Completed: 12/21/2022**						
Location:	**F-17**	**Logged by: O. Mahmoud**	**While Drilling:** ▽	**NE**				
Drill/Test Method:	**Hand Auger**	**Contractor: Dynamic Earth, LLC**	**At Completion:** ▼	**NE**				
		Rig Type: Not Applicable						

Sample Information				Depth (ft)	DESCRIPTION OF MATERIALS (Classification)	Remarks
Depth Interval (Feet)	Recovery (Inches)	PID	Sample ID & Depth			
0-1.5	-	0.0	F-17-2		Topsoil	
		0.0			Brown, medium grained, silty sand, medium dense, dry.	
		0.0	F-17-2A	1.5		

Boring F-17-2 terminated at 1.5 feet bgs.

DYNAMIC EARTH

BORING LOG
(Environmental Sampling)

Boring No.: F-17-3

Project: Old Orchard Country Club					**Proj. No.:**	**3272-98-005EC**		
Location: 54 Monouth Road, Eatontown, New Jersey 07724					**Client:**	**Surrey Equities**		
Surface Elevation:	**NS**	**Date Started: 12/21/2022**	**Groundwater Data**	**Depth (ft)**	**El. (mse)**	**Additional Groundwater Data**	**Depth (ft)**	**El. (mse)**
Termination Depth:	**1.5 feet**	**Date Completed: 12/21/2022**						
Location:	**F-17**	**Logged by: O. Mahmoud**	**While Drilling:** ▽	**NE**				
Drill/Test Method:	**Hand Auger**	**Contractor: Dynamic Earth, LLC**	**At Completion:** ▼	**NE**				
		Rig Type: Not Applicable						

Sample Information				Depth (ft)	DESCRIPTION OF MATERIALS (Classification)	Remarks
Depth Interval (Feet)	Recovery (Inches)	PID	Sample ID & Depth			
0-1.5	-	0.0	F-17-3		Topsoil	
		0.0			Brown, medium grained, silty sand, medium dense, dry.	
		0.0	F-17-3A	1.5		

Boring F-17-3 terminated at 1.5 feet bgs.

DYNAMIC EARTH

BORING LOG
(Environmental Sampling)

Boring No.: F-17-4

Project: Old Orchard Country Club					**Proj. No.:**	**3272-98-005EC**		
Location: 54 Monouth Road, Eatontown, New Jersey 07724					**Client:**	**Surrey Equities**		
Surface Elevation:	**NS**	**Date Started: 12/21/2022**	**Groundwater Data**	**Depth (ft)**	**El. (mse)**	**Additional Groundwater Data**	**Depth (ft)**	**El. (mse)**
Termination Depth:	**1.5 feet**	**Date Completed: 12/21/2022**						
Location:	**F-17**	**Logged by: O. Mahmoud**	**While Drilling:** ▽	**NE**				
Drill/Test Method:	**Hand Auger**	**Contractor: Dynamic Earth, LLC**	**At Completion:** ▼	**NE**				
		Rig Type: Not Applicable						

Sample Information				Depth (ft)	DESCRIPTION OF MATERIALS (Classification)	Remarks
Depth Interval (Feet)	Recovery (Inches)	PID	Sample ID & Depth			
0-1.5	-	0.0	F-17-4		Topsoil	
		0.0			Brown, medium grained, silty sand, medium dense, dry.	
		0.0	F-17-4A	1.5		

Boring F-17-4 terminated at 1.5 feet bgs.

DYNAMIC EARTH

BORING LOG
(Environmental Sampling)

Boring No.: G-16

Project: Old Orchard Country Club					**Proj. No.:**	**3272-98-005EC**		
Location: 54 Monouth Road, Eatontown, New Jersey 07724					**Client:**	**Surrey Equities**		
Surface Elevation:	**NS**	**Date Started: 12/21/2022**	**Groundwater Data**	**Depth (ft)**	**El. (mse)**	**Additional Groundwater Data**	**Depth (ft)**	**El. (mse)**
Termination Depth:	**3.5 feet**	**Date Completed: 12/21/2022**						
Location:	**G-16**	**Logged by: O. Mahmoud**	**While Drilling:** ▽	**NE**				
Drill/Test Method:	**Hand Auger**	**Contractor: Dynamic Earth, LLC**	**At Completion:** ▼	**NE**				
		Rig Type: Not Applicable						

Sample Information				Depth (ft)	DESCRIPTION OF MATERIALS (Classification)	Remarks
Depth Interval (Feet)	Recovery (Inches)	PID	Sample ID & Depth			
0-3.5	-	0.0			Topsoil	
		0.0				
		0.0	G-16A			
		0.0				
		0.0	G-16B		Brown, medium grained, silty sand, medium dense, dry.	
		0.0				
		0.0	G-16C	3.5		

Boring G-16 terminated at 3.5 feet bgs.

BORING LOG
(Environmental Sampling)

Boring No.: G-16-1

Project: Old Orchard Country Club					**Proj. No.:**	**3272-98-005EC**		
Location: 54 Monouth Road, Eatontown, New Jersey 07724					**Client:**	**Surrey Equities**		
Surface Elevation:	**NS**	**Date Started: 12/21/2022**	**Groundwater Data**	**Depth (ft)**	**El. (mse)**	**Additional Groundwater Data**	**Depth (ft)**	**El. (mse)**
Termination Depth:	**1.5 feet**	**Date Completed: 12/21/2022**						
Location:	**G-16**	**Logged by: O. Mahmoud**	**While Drilling:** ▽	**NE**				
Drill/Test Method:	**Hand Auger**	**Contractor: Dynamic Earth, LLC**	**At Completion:** ▼	**NE**				
		Rig Type: Not Applicable						

Sample Information				Depth (ft)	DESCRIPTION OF MATERIALS (Classification)	Remarks
Depth Interval (Feet)	Recovery (Inches)	PID	Sample ID & Depth			
0-1.5	-	0.0	G-16-1		Topsoil	
		0.0			Brown, medium grained, silty sand, medium dense, dry.	
		0.0	G-16-1A	1.5		

Boring G-16-1 terminated at 1.5 feet bgs.

DYNAMIC EARTH

BORING LOG
(Environmental Sampling)

Boring No.: G-16-2

Project: Old Orchard Country Club					**Proj. No.:**	**3272-98-005EC**		
Location: 54 Monouth Road, Eatontown, New Jersey 07724					**Client:**	**Surrey Equities**		
Surface Elevation:	**NS**	**Date Started: 12/21/2022**	**Groundwater Data**	**Depth (ft)**	**El. (mse)**	**Additional Groundwater Data**	**Depth (ft)**	**El. (mse)**
Termination Depth:	**1.5 feet**	**Date Completed: 12/21/2022**						
Location:	**G-16**	**Logged by: O. Mahmoud**	**While Drilling:** ▽	**NE**				
Drill/Test Method:	**Hand Auger**	**Contractor: Dynamic Earth, LLC**	**At Completion:** ▼	**NE**				
		Rig Type: Not Applicable						

Sample Information				Depth (ft)	DESCRIPTION OF MATERIALS (Classification)	Remarks
Depth Interval (Feet)	Recovery (Inches)	PID	Sample ID & Depth			
0-1.5	-	0.0	G-16-2		Topsoil	
		0.0			Brown, medium grained, silty sand, medium dense, dry.	
		0.0	G-16-2A	1.5		

Boring G-16-2 terminated at 1.5 feet bgs.

DYNAMIC EARTH

BORING LOG
(Environmental Sampling)

Boring No.: G-16-3

Project: Old Orchard Country Club					**Proj. No.:**	**3272-98-005EC**		
Location: 54 Monouth Road, Eatontown, New Jersey 07724					**Client:**	**Surrey Equities**		
Surface Elevation:	**NS**	**Date Started: 12/21/2022**	**Groundwater Data**	**Depth (ft)**	**El. (mse)**	**Additional Groundwater Data**	**Depth (ft)**	**El. (mse)**
Termination Depth:	**1.5 feet**	**Date Completed: 12/21/2022**						
Location:	**G-16**	**Logged by: O. Mahmoud**	**While Drilling:** ▽	**NE**				
Drill/Test Method:	**Hand Auger**	**Contractor: Dynamic Earth, LLC**	**At Completion:** ▼	**NE**				
		Rig Type: Not Applicable						

Sample Information				Depth (ft)	DESCRIPTION OF MATERIALS (Classification)	Remarks
Depth Interval (Feet)	Recovery (Inches)	PID	Sample ID & Depth			
0-1.5	-	0.0	G-16-3		Topsoil	
		0.0			Brown, medium grained, silty sand, medium dense, dry.	
		0.0	G-16-3A	1.5		

Boring G-16-3 terminated at 1.5 feet bgs.

DYNAMIC EARTH

BORING LOG
(Environmental Sampling)

Boring No.: G-16-4

Project: Old Orchard Country Club					**Proj. No.:**	**3272-98-005EC**		
Location: 54 Monouth Road, Eatontown, New Jersey 07724					**Client:**	**Surrey Equities**		
Surface Elevation:	**NS**	**Date Started: 12/21/2022**	**Groundwater Data**	**Depth (ft)**	**El. (mse)**	**Additional Groundwater Data**	**Depth (ft)**	**El. (mse)**
Termination Depth:	**1.5 feet**	**Date Completed: 12/21/2022**						
Location:	**G-16**	**Logged by: O. Mahmoud**	**While Drilling:** ▽	**NE**				
Drill/Test Method:	**Hand Auger**	**Contractor: Dynamic Earth, LLC**	**At Completion:** ▼	**NE**				
		Rig Type: Not Applicable						

Sample Information				Depth (ft)	DESCRIPTION OF MATERIALS (Classification)	Remarks
Depth Interval (Feet)	Recovery (Inches)	PID	Sample ID & Depth			
0-1.5	-	0.0	G-16-4		Topsoil	
		0.0			Brown, medium grained, silty sand, medium dense, dry.	
		0.0	G-16-4A	1.5		

Boring G-16-4 terminated at 1.5 feet bgs.

Appendix C
Compliance Average Calculations and SPLP Calculators

NJDEP 2022 SPLP Spreadsheet

Case name/area of concern:
Case number:
Sampling date: 12/21/2022

CALCULATE SITE SPECIFIC MGW

Reset Spreadsheet

Instructions

Back to MGW Site-Specific Menu

Exit

CLICK HERE if chemical is not on drop-down list, or to enter alternate GWRS

Contaminant: 4,4'-DDE (p,p'-DDX)

CAS No:	72-55-9
Water solubility (mg/L)	4.00E-02
Aqueous reporting limit (µg/L):	1.00E-02
Soil reporting limit (mg/kg):	3.30E-03
Ground Water Remediation Std (µg/L)	1.00E-01
DAF (20, or site-specific if approved):	20
Leachate Standard (µg/L):	2.00E+00
Henry's law constant (dimensionless):	1.70E-03

NOTE:
USE ONE PAGE PER CONTAMINANT, do not leave empty rows between samples
Do not enter samples with soil concentrations at or below the soil reporting limit
SPLP leachate concentrations may be entered down to the detection limit, but see guidance
Enter site-specific dilution-attenuation factor (DAF) if desired

Data entry cells (do not skip rows)
Optional data entry
Calculated or locked cells
Indicates that Alternative Remediation Standard needs to be recalculated

Sample ID	Soil sample weight (kg)	Leachate Volume (L)	Total Soil Concentration (mg/kg)	SPLP Leachate Concentration (µg/L)	Final pH of Leachate (except VOCs)	Optional data				Kd (L/kg)	% Contaminant in Leachate	Field leachate concentration (µg/L)	Pass or fail?
						Sampling Depth (ft)	Soil Type	Organic Carbon (mg/kg)	Organic Carbon (%)				
G-6-R	0.0444	2	0.438	0.146	5.02					2954.955	1.50	0.15	PASS
F-15R	0.0852	2	0.566	1.66	5.01					317.4897	6.88	1.78	PASS
G-16R	0.0846	2	0.713	0.00241	10					295827	0.01	0.00	PASS

SPLP RESULTS for

OPTION 1a: All adjusted leachate concentrations are below the leachate criterion

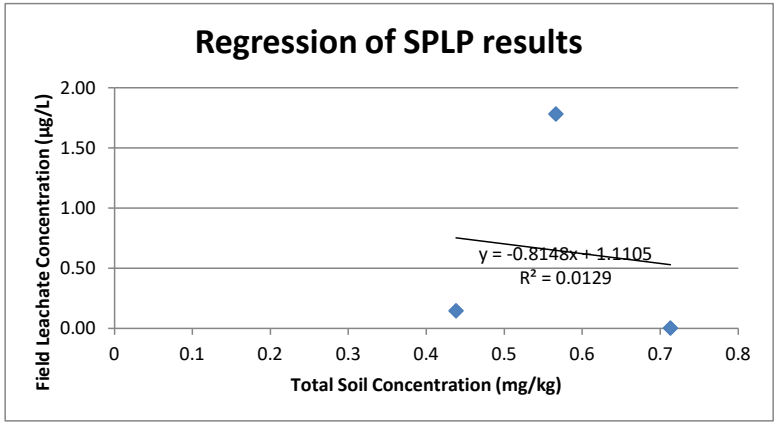
REMEDIATION STANDARD = 0.713 mg/kg

OPTION 1b: Simple inspection of tabulated results to find highest acceptable standard
EVERYTHING PASSED, OPTION 1b NOT VALID

OPTION 2: Remediation standard using site-specific Kd value
Kd ratio = 931.77, USE MINIMUM Kd
Kd USED FOR CALCULATING STANDARD = 317.4897 L/kg
result before rounding = 0.6353 mg/kg
REMEDIATION STANDARD = 0.64 mg/kg

OPTION 3: Remediation standard using linear regression

Soil concentration midrange = .58
Number of points above midrange = 1
Enough points above midrange? NO
R-Square high enough? NO
Leachate criterion within range of leachate concentrations? NO
OPTION 3 NOT VALID



NJDEP 2022 SPLP Spreadsheet

Case name/area of concern:	Wash Area
Case number:	
Sampling date:	12/20/2022

CALCULATE SITE SPECIFIC MGW | Reset Spreadsheet | Instructions | Back to MGW Site-Specific Menu | Exit

CLICK HERE if chemical is not on drop-down list, or to enter alternate GWRS

Contaminant: beta-HCH (beta-BHC)

CAS No:	319-85-7
Water solubility (mg/L)	2.40E-01
Aqueous reporting limit (µg/L):	4.00E-02
Soil reporting limit (mg/kg):	1.70E-03
Ground Water Remediation Std (µg/L)	4.00E-02
DAF (20, or site-specific if approved):	**20**
Leachate Standard (µg/L):	8.00E-01
Henry's law constant (dimensionless):	1.80E-05

NOTE:
USE ONE PAGE PER CONTAMINANT, do not leave empty rows between samples
Do not enter samples with soil concentrations at or below the soil reporting limit
SPLP leachate concentrations may be entered down to the detection limit, but see guidance
Enter site-specific dilution-attenuation factor (DAF) if desired

Data entry cells (do not skip rows)
Optional data entry
Calculated or locked cells
Indicates that Alternative Remediation Standard needs to be recalculated

Sample ID	Soil sample weight (kg)	Leachate Volume (L)	Total Soil Concentration (mg/kg)	SPLP Leachate Concentration (µg/L)	Final pH of Leachate (except VOCs)	Optional data				Kd (L/kg)	% Contaminant in Leachate	Field leachate concentration (µg/L)	Pass or fail?
						Sampling Depth (ft)	Soil Type	Organic Carbon (mg/kg)	Organic Carbon (%)				
WA-3R	0.92457	2	0.0123	0.00041	8.5					29997.84	0.01	0.00	PASS
WA-3R	0.92457	2	0.0123	0.00041	8.5					29997.84	0.01	0.00	PASS
WA-3R	0.92457	2	0.0123	0.00041	8.5					29997.84	0.01	0.00	PASS

SPLP RESULTS for

OPTION 1a: All adjusted leachate concentrations are below the leachate criterion

REMEDIATION STANDARD = 0.0123 mg/kg

OPTION 1b: Simple inspection of tabulated results to find highest acceptable standard
EVERYTHING PASSED, OPTION 1b NOT VALID

OPTION 2: Remediation standard using site-specific Kd value
Kd ratio = 1.00, AVERAGING Kds OK
Kd USED FOR CALCULATING STANDARD = 29997.8368 L/kg
result before rounding = 23.9984 mg/kg
REMEDIATION STANDARD = 0.012 mg/kg (controlled by maximum soil concentration)

OPTION 3: Remediation standard using linear regression

All soil concentrations are the same value. The slope cannot be calulated.

Appendix C
Compliance Average Calculation: Tee 2

Sample ID	T-2	T-2A	T-2B	T-2-1	T-2-2	T-2-3	T-2-4	Sum	Average
Dieldrin (mg/kg)	0.0456	0.0898	0.0079	0.00447	0.0158	0.00487	0.0214	0.18984	0.02712

Appendix C
Compliance Average Calculation: Tee 4

Sample ID	T-4	T-4A	T-4-1	T-4-2	T-4-3	T-4-4	Sum	Average
Dieldrin (mg/kg)	0.0515	0.0126	0.022	0.000899	0.00082	0.00077	0.08859	0.014765

Appendix C
Compliance Average Calculation: Tee 12

Sample ID	T-12	T-12A	T-12-1	T-12-1A	T-12-2	T-12-3	T-12-3A	T-12-4	Sum	Average
Dieldrin (mg/kg)	0.0364	0.00162	0.0514	0	0.00159	0.0705	0	0.000858	0.162368	0.020296

Appendix C
Compliance Average Calculation: Tee 14

Sample ID	T-14	T-14A	T-14-1	T-14-2	T-14-3	T-14-4	T-14-4A	Sum	Average
Dieldrin (mg/kg)	0.0874	0.00419	0.00361	0	0.0107	0.129	0.00328	0.23818	0.034

Appendix C
Compliance Average Calculation: Fairway 6

Sample ID	F-6	F-6A	F-6-1	F-6-2	F-6-3	F-6-4	Sum	Average
Arsenic (mg/kg)	30.6	2.93	2.65	6.7	1.43	4.79	49.1	8.183

Appendix C
Complaince Average Calculation: Fairway 11

Sample ID	F-11	F-11A	F-11-1	F-11-2	F-11-3	F-11-4	Sum	Average
Arsenic (mg/kg)	20.4	3.33	1.44	1.42	1.47	2.46	30.52	5.086

Appendix C
Complaince Average Calculation: Fairway 17

Sample ID	F-17	F-17A	F-17-1	F-17-2	F-17-3	F-17-4	Sum	Average
Arsenic (mg/kg)	43.3	5.71	13.4	8.37	7.38	5.79	83.95	13.99

NJDEP 2023 SPLP Spreadsheet

Case name/area of concern:
Case number:
Sampling date: 5/30/2023

CALCULATE SITE SPECIFIC MGW

Reset Spreadsheet

Instructions

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Exit

CLICK HERE if chemical is not on drop-down list, or to enter alternate GWRS

Contaminant: Dieldrin

CAS No:	60-57-1
Water solubility (mg/L)	1.95E-01
Aqueous reporting limit (µg/L):	3.00E-02
Soil reporting limit (mg/kg):	3.30E-03
Ground Water Remediation Std (µg/L)	3.00E-02
DAF (20, or site-specific if approved):	20
Leachate Standard (µg/L):	6.00E-01
Henry's law constant (dimensionless):	4.09E-04

NOTE:
USE ONE PAGE PER CONTAMINANT, do not leave empty rows between samples
Do not enter samples with soil concentrations at or below the soil reporting limit
SPLP leachate concentrations may be entered down to the detection limit, but see guidance
Enter site-specific dilution-attenuation factor (DAF) if desired

Data entry cells (do not skip rows)
Optional data entry
Calculated or locked cells
Indicates that Alternative Remediation Standard needs to be recalculated

Sample ID	Soil sample weight (kg)	Leachate Volume (L)	Total Soil Concentration (mg/kg)	SPLP Leachate Concentration (µg/L)	Final pH of Leachate (except VOCs)	Optional data				Kd (L/kg)	% Contaminant in Leachate	Field leachate concentration (µg/L)	Pass or fail?
						Sampling Depth (ft)	Soil Type	Organic Carbon (mg/kg)	Organic Carbon (%)				
F-13R	0.0829	2	0.468	0.238	5.05					1942.261	1.23	0.24	PASS
F-5-2R	0.0935	2	0.49	0.02	5.06					24478.61	0.09	0.02	PASS
F-15-3R	0.0841	2	0.503	0.185	5.07					2695.138	0.87	0.19	PASS

SPLP RESULTS for

OPTION 1a: All adjusted leachate concentrations are below the leachate criterion

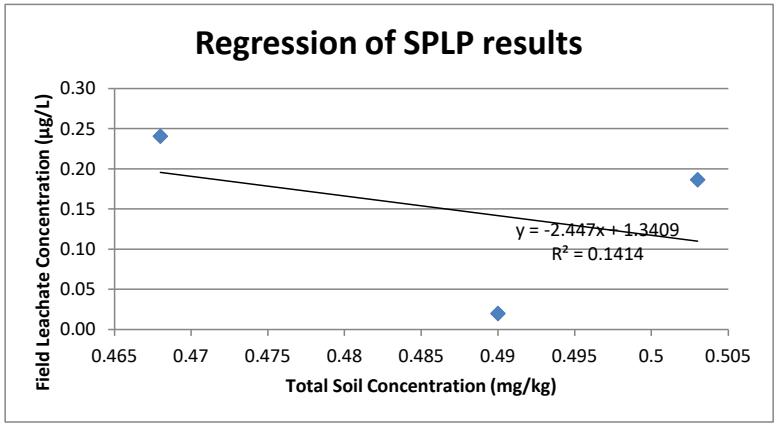
REMEDIATION STANDARD = 0.503 mg/kg

OPTION 1b: Simple inspection of tabulated results to find highest acceptable standard
EVERYTHING PASSED, OPTION 1b NOT VALID

OPTION 2: Remediation standard using site-specific Kd value
Kd ratio = 12.60, USE MINIMUM Kd
Kd USED FOR CALCULATING STANDARD = 1942.2611 L/kg
result before rounding = 1.1654 mg/kg
REMEDIATION STANDARD = 0.5 mg/kg (controlled by maximum soil concentration)

OPTION 3: Remediation standard using linear regression

Soil concentration midrange = .49
Number of points above midrange = 2
Enough points above midrange? YES
R-Square high enough? NO
Leachate criterion within range of leachate concentrations? NO
OPTION 3 NOT VALID



NJDEP 2022 SPLP Spreadsheet

Case name/area of concern:	Wash Area
Case number:	
Sampling date:	12/20/2022

CALCULATE SITE SPECIFIC MGW

Reset Spreadsheet

Instructions

Back to MGW Site-Specific Menu

Exit

CLICK HERE if chemical is not on drop-down list, or to enter alternate GWRS

Contaminant:	Lead (total)
CAS No:	7439-92-1
Water solubility (mg/L)	NA
Aqueous reporting limit (µg/L):	5.00E+00
Soil reporting limit (mg/kg):	5.00E-01
Ground Water Remediation Std (µg/L)	5.00E+00
DAF (20, or site-specific if approved):	20
Leachate Standard (µg/L):	1.00E+02
Henry's law constant (dimensionless):	0.00E+00

NOTE:
USE ONE PAGE PER CONTAMINANT, do not leave empty rows between samples
Do not enter samples with soil concentrations at or below the soil reporting limit
SPLP leachate concentrations may be entered down to the detection limit, but see guidance
Enter site-specific dilution-attenuation factor (DAF) if desired

Data entry cells (do not skip rows)
Optional data entry
Calculated or locked cells
Indicates that Alternative Remediation Standard needs to be recalculated

Sample ID	Soil sample weight (kg)	Leachate Volume (L)	Total Soil Concentration (mg/kg)	SPLP Leachate Concentration (µg/L)	Final pH of Leachate (except VOCs)	Optional data				Kd (L/kg)	% Contaminant in Leachate	Field leachate concentration (µg/L)	Pass or fail?
						Sampling Depth (ft)	Soil Type	Organic Carbon (mg/kg)	Organic Carbon (%)				
WA-2R	0.0932	2	96.6	0.0585	8.4					1651261	0.00	0.06	PASS
WA-3R	0.0925	2	144	0.121	8.5					1190061	0.00	0.12	PASS
WA-3R	0.0925	2	144	0.121	8.5					1190061	0.00	0.12	PASS

SPLP RESULTS for

OPTION 1a: All adjusted leachate concentrations are below the leachate criterion

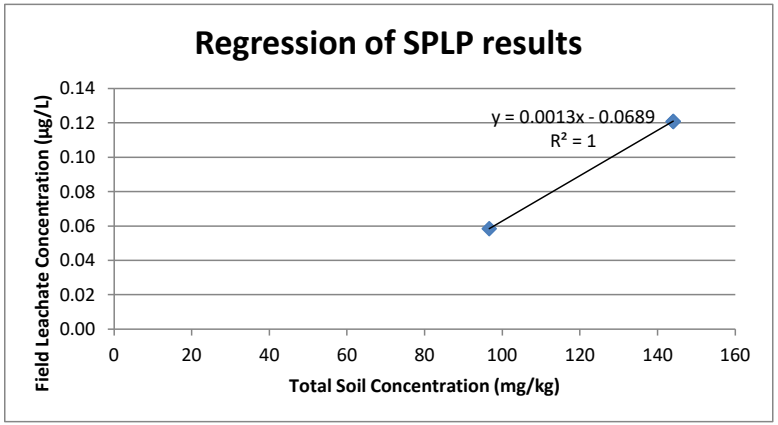
REMEDIATION STANDARD = 144 mg/kg

OPTION 1b: Simple inspection of tabulated results to find highest acceptable standard
EVERYTHING PASSED, OPTION 1b NOT VALID

OPTION 2: Remediation standard using site-specific Kd value
Kd ratio = 1.65, AVERAGING Kds OK
Kd USED FOR CALCULATING STANDARD = 1343794.2127 L/kg
result before rounding = 134379.4366 mg/kg
REMEDIATION STANDARD = 140 mg/kg (controlled by maximum soil concentration)

OPTION 3: Remediation standard using linear regression

Soil concentration midrange = 120.3
Number of points above midrange = 2
Enough points above midrange? YES
R-Square high enough? YES
Leachate criterion within range of leachate concentrations? NO
OPTION 3 NOT VALID



NJDEP 2022 SPLP Spreadsheet

Case name/area of concern:	Greens
Case number:	
Sampling date:	12/21/2022
Contaminant:	Mercury (total)
CAS No:	7439-97-6
Water solubility (mg/L)	NA
Aqueous reporting limit (µg/L):	5.00E-02
Soil reporting limit (mg/kg):	1.00E-01
Ground Water Remediation Std (µg/L)	2.00E+00
DAF (20, or site-specific if approved):	**20**
Leachate Standard (µg/L):	4.00E+01
Henry's law constant (dimensionless):	0.00E+00

CALCULATE SITE SPECIFIC MGW

Reset Spreadsheet

CLICK HERE if chemical is not on drop-down list, or to enter alternate GWRS

Instructions

Back to MGW Site-Specific Menu

Exit

NOTE:
USE ONE PAGE PER CONTAMINANT, do not leave empty rows between samples
Do not enter samples with soil concentrations at or below the soil reporting limit
SPLP leachate concentrations may be entered down to the detection limit, but see guidance
Enter site-specific dilution-attenuation factor (DAF) if desired

Data entry cells (do not skip rows)
Optional data entry
Calculated or locked cells
Indicates that Alternative Remediation Standard needs to be recalculated

Sample ID	Soil sample weight (kg)	Leachate Volume (L)	Total Soil Concentration (mg/kg)	SPLP Leachate Concentration (µg/L)	Final pH of Leachate (except VOCs)	Optional data				Kd (L/kg)	% Contaminant in Leachate	Field leachate concentration (µg/L)	Pass or fail?
						Sampling Depth (ft)	Soil Type	Organic Carbon (mg/kg)	Organic Carbon (%)				
G-16A	0.0839	2	2.5	0.001	8.3					2499976	0.00	0.00	PASS
G-9A-R	0.0823	2	3.7	0.001	8.2					3699976	0.00	0.00	PASS
G-9-2-R	0.0827	2	4.1	0.001	8.1					4099976	0.00	0.00	PASS

SPLP RESULTS for

OPTION 1a: All adjusted leachate concentrations are below the leachate criterion

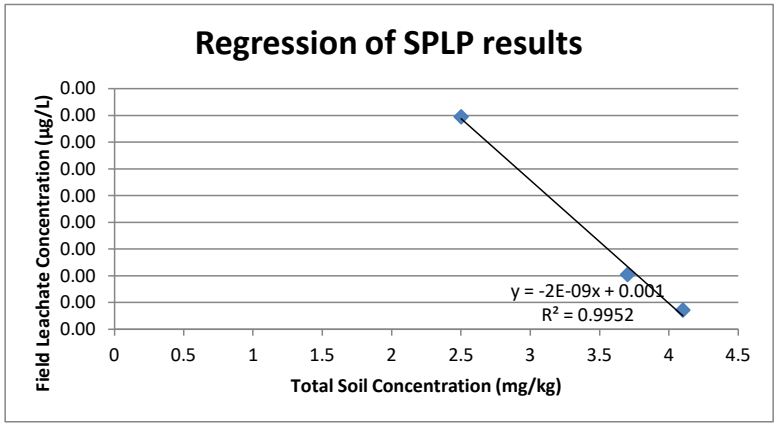
REMEDIATION STANDARD = 4.1 mg/kg

OPTION 1b: Simple inspection of tabulated results to find highest acceptable standard
EVERYTHING PASSED, OPTION 1b NOT VALID

OPTION 2: Remediation standard using site-specific Kd value
Kd ratio = 4.10, AVERAGING Kds OK
Kd USED FOR CALCULATING STANDARD = 3433309.2257 L/kg
result before rounding = 137332.3752 mg/kg
REMEDIATION STANDARD = 4.1 mg/kg (controlled by maximum soil concentration)

OPTION 3: Remediation standard using linear regression

Soil concentration midrange = 3.3
Number of points above midrange = 2
Enough points above midrange? YES
R-Square high enough? YES
Leachate criterion within range of leachate concentrations? NO
OPTION 3 NOT VALID



Appendix D
Fill Use Plan

Dynamic Earth, LLC
www.dynamic-earth.com
1904 Main Street,
Lake Como, NJ 07719
T. 732-280-0830

October 17, 2024

New Jersey Department of Environmental Protection
Site Remediation & Waste Management Program
Bureau of Case Assignment and Initial Notice
Mail Code 401-05H
PO Box 420
Trenton, New Jersey 08625

Regarding: **FILL USE PLAN**
Old Orchard Country Club
54 Monmouth Road
Block 2701, Lots 2, 53, 60, 66, and 69
Borough of Eatontown, Monmouth County, New Jersey
Block 68, Lot 6
Borough of West Long Branch, Monmouth County, New Jersey
NJDEP PI No. 021606
Dynamic Earth Project No. 3272-98-005EC

To Whom it May Concern,

Dynamic Earth, LLC (Dynamic Earth) has prepared this Fill Use Plan (FUP) pursuant to N.J.A.C. 7:26E-5.2(h) and 5.5(b)9 to manage fill related activities at the above-reference property (hereinafter referred to as the "Site"). A *Site Location Map* and *Existing Conditions and AOC Location Plan* are included as Figures 1 and 2, respectively.

1.0 Alternative and Clean Fill

1.1 Site Location, Use, and Donor Sites

Old Orchard Country Club is located at 54 Monmouth Road in the Boroughs of Eatontown and West Long Branch, Monmouth County, New Jersey further identified as Block 270 Lots 2, 53, 60, 66, and 69 and Block 68, Lot 6, (hereinafter referred to as the Site).

Remedial actions for the contaminated Areas of Concern (AOC)-6, AOC-11, and AOC-12 will require the on-Site consolidation of approximately 18,203 cubic yards of Historically Applied Pesticide (HAP) impacted soil at AOC-5. The excavation areas will be sloped prior to Site redevelopment or backfilled with licensed quarry/clean sourced fill material. Any backfill material that will be imported to the Site will:

- Meet the requirements of the New Jersey Department of Environmental Protection's (NJDEP's) Fill Material Guidance for SRP Sites dated October 2021; and
- Be approved by the Licensed Site Remediation Professional (LSRP) of Record.

Material proposed for consolidation will be excavated from defined on-Site impacted areas located within AOC-6, AOC-11, and AOC-12. Any imported backfill material will be sourced from an off-Site New Jersey licensed quarry and/or clean fill source approved by the LSRP of Record for the Site.

1.2 Contact Information

The names, contact information, and relationship of all persons involved with the source, preparation, and transport of the fill from the donor AOCs to the receiving AOCs is included as follows:

Donor Site (AOC-6, AOC-11, & AOC-12):

Responsible Party Old Orchard Country Club Assoc., LP	54 Monmouth Road, Eatontown, New Jersey 07724	
Person Responsible for Conducting the Remediation Surrey Equities, LLC	38 Corbett Way Eatontown, New Jersey 07724	Leon Silvera 212-619-3700
Licensed Site Remediation Professional Spencer S. Spurlock	1904 Main Street, Lake Como, NJ 07719	Spencer S. Spurlock, LSRP License No. 585413 732-280-0830
Environmental Consultant Dynamic Earth, LLC	1904 Main Street, Lake Como, NJ 07719	Spencer S. Spurlock, LSRP License No. 585413 732-280-0830

Receiving Site (AOC-5):

Responsible Party Old Orchard Country Club Assoc., LP	54 Monmouth Road, Eatontown, New Jersey 07724	
Person Responsible for Conducting the Remediation Surrey Equities, LLC	38 Corbett Way Eatontown, New Jersey 07724	Leon Silvera 212-619-3700
Licensed Site Remediation Professional Spencer S. Spurlock	1904 Main Street, Lake Como, NJ 07719	Spencer S. Spurlock, LSRP License No. 585413 732-280-0830
Environmental Consultant Dynamic Earth, LLC	1904 Main Street, Lake Como, NJ 07719	Spencer S. Spurlock, LSRP License No. 585413 732-280-0830

1.3 Description of Originating or Donor Site

During Site Investigation (SI) and Remedial Investigation (RI) activities, HAP contaminants were identified in soil within AOC-6, AOC-11, and AOC-12. The locations and extent of these areas are defined on Figures 16 through 17 of Dynamic Earth's Site Investigation Report/Remedial Investigation Report/Remedial Action Workplan (SIR/RIR/RAW). Dynamic Earth is proposing to consolidate a portion of impacted soils within AOC-6, AOC-11, and AOC-12 (proposed residential and open space Lots 69.05 and 69.06) to impacted areas within AOC-5 (proposed open space Lot 69.05) including portions of Fairway 4, Fairway 5, and Fairway 9.

1.4 Volumes

Approximately 18,203 cubic yards of HAP impacted material will be consolidated to AOC-5. Approximately 7,174 cubic yards, 9,673 cubic yards, and 1,356 cubic yards of HAP contaminated soil is proposed for

consolidation at Fairway 4, Fairway 5, and Fairway 9, respectively. No HAP impacted fill is proposed for consolidation outside these existing impacted areas or within sensitive ecological receptors.

The excavation areas will be sloped prior to redevelopment or backfilled with material sourced from an off-Site New Jersey licensed quarry and/or clean fill source approved by the LSRP of Record for the Site. No alternative fill is proposed for use within proposed Lot 69.06 at the Site.

1.5 Locations of Fill Use

By way of this Fill Use Plan, Dynamic Earth requests prior written approval from NJDEP to consolidate impacted HAP soils from donor AOC-6, AOC-11, and AOC-12 to receiving AOC-5. Specifically, alternative fill from AOC-6, AOC-11, and AOC-12 will be consolidated in the portions of Fairway 4, Fairway 5, and Fairway 9 located within AOC-5.

1.6 Depth to Groundwater at Receiving Site

Seasonal high groundwater at the Site has been encountered from 2.3 feet in areas adjacent to the Turtle Mill Brook located in the central portion of the Site and low lying areas to 18.0 feet bgs in the northern portions of the Site. Regional groundwater flow direction is north toward Shrewsbury Bay.

1.7 Description of Geotechnical Properties

Based on a review of the United States Department of Agriculture (USDA) Natural Resources Conservation Service (NRCS) Web Soil Survey, the Site is mapped within the following areas:

- **Downer loamy sand, zero to five percent slopes, Northern Coastal Plain (DocB):** The Downer loamy sand is mapped underlying the northern and eastern portions of the Site. The parent material is reported as loamy fluviomarine deposits. The typical soil profile (as detailed in the survey) consists of loamy sand to a depth of 16 inches; sandy loam to a depth of 28 inches; loamy sand to a depth of 48 inches; underlain by sand to a depth of 80 inches below the natural ground surface (limit of report). The depth to the water table is reported to be more than 80 inches below the natural ground surface (limit of report).

- **Downer loamy sand, five to ten percent slopes, Northern Coastal Plain (DocC):** The Downer loamy sand is mapped underlying the northern and eastern portions of the Site and has a similar soil profile pit as DocB described above.

- **Evesboro sand, zero to five percent slopes (EveB):** The Evesboro sand is mapped underlying the western and central portions of the Site. The parent material is reported as sandy eolian deposits and/or sandy fluviomarine deposits. The typical soil profile (as detailed in the survey) consists of sand to a depth of 31 inches; underlain by stratified loamy sand to sand to a depth of 80 inches below the natural ground surface (limit of report). The depth to the water table is reported to be more than 80 inches below the natural ground surface (limit of report).

- **Evesboro sand, five to ten percent slopes (EveC):** The Evesboro sand is mapped underlying the western and central portions of the Site and has a similar soil profile pit as EveB described above.

- **Freehold sandy loam, two to five percent slopes (FrkB):** This soil series is mapped within the central portion of the Site and the parent material is described as glauconite bearing loamy eolian deposits and/or glauconite bearing loamy fluviomarine deposits. The typical soil profile (as detailed in the

survey) consists of sandy loam to a depth of 14 inches; sandy clay loam to a depth of 21 inches; sandy loam to a depth of 35 inches; underlain by loamy sand to a depth of 80 inches below the natural ground surface (limit of the report). The depth to the groundwater table is reported to be greater than 80 inches below the natural ground surface.

- **Freehold-Urban land complex sandy loam, zero to ten percent slopes (FrrC):** This soil series is mapped within the central portion of the Site and the parent material is described as glauconite bearing loamy eolian deposits and/or glauconite bearing loamy fluviomarine deposits. The soil profile pit of the Freehold is similar to the FrkB described above. The soil profile pit of the Urban (as detailed in the survey) consists of sandy loam to a depth of 14 inches; sandy clay loam to a depth of 21 inches; sandy loam to a depth of 35 inches; underlain by loamy sand to a depth of 80 inches below the natural ground surface (limit of the report). The depth to the groundwater table is reported to be greater than 80 inches below the natural ground surface.

- **Humaquepts, zero to three percent slopes, frequently flooded (HumAt):** This soil series is mapped within the northwestern and western portions of the Site and the parent material is described as loamy alluvium. The typical soil profile (as detailed in the survey) consists of loam to a depth of 18 inches; underlain by sand to a depth of 80 inches below the natural ground surface (limit of the report). The depth to the groundwater table is reported to be between zero inches (at the surface) and 12 inches below the natural ground surface.

The Site is located in a region of the Atlantic Ocean Coastal Plain Physiographic Province of New Jersey. Specifically, the Site is underlain by the upper Paleocene Aged, Vincentown Formation. The Vincentown Formation consists of dusky-yellow to pale-gray, medium grained, well to poorly sorted, quartz sand. This material generally weathers orange brown or red brown and typically is very glauconitic and clayey at the base.

The surficial geology mapped within the northern, central, and southeastern portions of the Site consists of the Cape May Formation (Qcm1 and Qcm2). The lithology consists of exposed sand and gravel of the Cape May peninsula. The surficial geology mapped along Turtle Mill Brook within the central portion of the overall site consists of Alluvium (Qal). The lithology consists of reddish brown, yellowish-brown, brown, and gray sand, gravel, and minor clay and peat. The surficial geology mapped within the southwestern portion of the overall site consists of the Lower Colluvium (Qcl). The lithology consists of yellow, yellowish brown, reddish yellow, and light gray sand and silt. Overburden material also includes existing fill material.

Soils encountered at the Site consisted of six inches of topsoil at the surface. Underlying surface cover, natural coastal plain deposits were encountered to a maximum depth explored of 25.0 feet below ground surface generally consisting of sand with variable amount of silt, clay, and gravel; and occasional layers of clay with variable amounts of silt and gravel.

1.8 Future Receiving and Donor Area Uses

The HAP consolidation areas at AOC-5 will be capped with a geotechnical fabric acting as a visual demarcation layer and clean fill as an engineering control. These areas will consist of undeveloped vegetated land. HAP excavation areas at AOC-6, AOC-11, and AOC-12 will be sloped prior to residential Site redevelopment or returned to grade with quarry or certified clean sourced fill material.

1.9 Performance, Effectiveness, and Reliability of Proposed Fill Use

Pursuant to the requirements of N.J.A.C. 7:26E-5.1(d), Section 1.9 provides a discussion of the performance, effectiveness, and reliability of the proposed fill use and any potential negative impacts to human health, safety or the environment as the result of the use.

All HAP impacted soils at that will remain on-Site will be placed beneath an engineering control consisting of a geotextile fabric underlying one foot of clean fill. The geotextile fabric will provide a clear separation between the cap and the underlying impacted material. The engineering controls will prevent contact with the HAP impacted soils.

Based on the ecological evaluation and SI/RI conducted at the Site, no impacts to groundwater, surface water, or sediment were identified. Accordingly, no potential negative impacts to the environment are anticipated once HAP contaminated soils are consolidated and capped.

1.10 Tracking and QC Requirements

Dynamic Earth will ensure that the excavation, transport, and consolidation of HAP impacted material at the Site are completed in accordance with the approved RAW and FUP. Dynamic Earth personnel will complete on-Site management and oversight including confirming all impacted soils are excavated, recording load counts, visual observation of the materials being delivered to the designated consolidation areas or transported off-Site, and verifying engineering controls.

Prior to any import of backfill material to the Site, the LSRP of Record for the Site will review the quarry certification and any analytical data associated with the imported material.

All documentation associated with quarry sourced or clean fill, and remedial action permitting will be compiled and included within the Remedial Action Report to demonstrate compliance with N.J.A.C. 7:26E-5.2, the NJDEP *Fill Material Guidance for SRP Sites* (October 2021), and the NJDEP *Historically Applied Pesticide Technical Guidance* (February 2022) documents. Shipping manifests/logs will be retained for each load and included in the Remedial Action Report.

1.11 Quality Assurance Project Plan

Dynamic Earth's Quality Assurance Project Plan (QAPP) will be included in the Remedial Action Report for the Site.

1.12 Additional Documentation

No additional documentation is anticipated to demonstrate compliance with NJDEP's October 2021 *Fill Material Guidance for SRP Sites*. In accordance with the *Fill Material Guidance for SRP Sites*, public notification will be sent documenting the type and concentration of contaminants in the proposed alternative fill, the proposed use and volume of fill material and the controls designed to reduce or eliminate exposure. Copies of the transmittal documents are provided as Attachment 1.

2.0 Alternative Fill Specific Requirements

2.1 Demonstration of Like on Like and 75th Percentile Criterion

In accordance with N.J.A.C. 7:26E-5.2(f), Dynamic Earth has conducted a Like-on-Like and 75th percentile evaluation of soils at the proposed consolidation areas.

Dynamic Earth has reviewed all soil data associated with the HAP soil contamination applicable to this Fill Use Plan. Alternative fill proposed for consolidation in the Fairway 4, Fairway 5, and Fairway 9 areas do not meet Like-on-Like, 75th Percentile, or 95% Upper Confidence Level (UCL) requirements. As requested by the NJDEP, Dynamic Earth has provided alternative fill statistical calculations for review of this Fill Use Plan. The Site-Specific Like-on-Like calculations for the Site are described in *Table 1 – Alternative Fill Evaluation*. The highest concentration of an identified compound is included in the Like-on-Like Alternative Fill Requirement column, the 75th percentile column includes a calculated 75th Percentile for all samples collected within the fill stratum (inclusive of non-detect values), and the 95% UCL column includes the calculated 95% upper confidence level of the mean of the sample distribution for contaminants in the receiving AOC using the USEPA's ProUCL software. Additionally, the highest concentration of an identified compounds in the proposed donor material is included.

In accordance with the NJDEP N.J.A.C 7:26E – Technical Requirements for Site Remediation, Section 7:26E-1.7, and Sections 5.2 and 5.3 of the Fill Material Guidance for SRP Sites (October 2021, Version 4.0), prior written approval must be received from NJDEP when the on-Site movement of alternative fill does not meet the Like-on-Like and 75th percentile requirements. Dynamic Earth is requesting approval based on the following:

- Proposed consolidation will not result in or increase contamination of ground water at the receiving AOC, as per N.J.A.C. 7:26E-5.1(d)3. A groundwater sample collected at the Site did not identify any contaminant concentrations above NJDEP Groundwater Quality Standards (GWQS). Dynamic Earth has identified a greater than five-foot clean soil buffer between the proposed consolidation areas and the seasonal high-water table. Contaminants of concern are also considered immobile/less mobile compounds. All the Site conditions that effect the ability of immobile contaminants to migrate to groundwater as stated in the NJDEP *Guidance for the Evaluation of Immobile Chemicals for the Impact to Ground Water Pathway (June 2, 2008)* are not present at the Site.

- Proposed consolidation will not result in the mixing of incompatible contaminants or creation of a vapor intrusion pathway at the receiving AOC, as per N.J.A.C. 7:26E-5.1(d)3. Contaminants of concern throughout receiving and donor locations are limited to HAP. No incompatible contaminants are present that would result in the restriction of the proposed consolidation efforts

- Alternative fill being moved shall not contain any hazardous waste, as per N.J.A.C. 7:26E-5.2(f). The impacts present at the Site include non-hazardous concentrations of HAP. No consolidation or handling of hazardous materials are contemplated in this FUP.

- Alternative fill being moved does not contain any free liquid waste, as per N.J.A.C. 7:26E-5.2(g). The contaminants of concern at the Site include HAP. No free liquid waste is present

- A clean area will be created. Specifically, impacted soils will be removed entirely from AOC-6, AOC-11, and AOC-12 in the proposed redevelopment areas resulting in a net increase in non-contaminated area of approximately 7.53 acres.

- The total area of contamination will be reduced at the donor AOCs. As described above, the total area of contamination will be reduced through consolidation of impacted material. The net reduction of contamination would be approximately 7.53 acres.

Dynamic Earth finds that each of the NJDEP *Historically Applied Pesticide Technical Guidance (February 2022, Section 8.2.1)* stipulations for the consolidation of impacted material that does not meet the Like-on-Like/75th percentile evaluation are met. Accordingly, Dynamic Earth requests the Department's prior written approval for remediation via consolidation as proposed.

2.2 Documentation of Waste Classification

No off-Site disposal of contaminated soils is anticipated for AOC-5, AOC-6, AOC-11, or AOC-12. Therefore, no waste classification sampling will be conducted. HAP impacted soils located within AOC-1 through AOC-3 will be transported for off-Site disposal.

2.3 Cut/Fill Calculations

Approximately 18,203 cubic yards of alternative fill material from donor AOC-6, AOC-11, and AOC-12 are proposed for consolidation. Approximately 7,174 cubic yards of alternative fill will be consolidated in an approximately five foot tall soil berm within the 66,127 square footprint of Fairway 4. Approximately 9,673 cubic yards of alternative fill will be consolidated in an approximately five foot tall soil berm within the 75,984 square footprint of Fairway 5. Approximately 1,356 cubic yards of alternative fill will be consolidated in an approximately five foot tall soil berm within the 42,357 square footprint of Fairway 9. No alternative fill is proposed outside of existing HAP impacted areas.

The excavation areas will be sloped prior to redevelopment or backfilled with material sourced from an off-Site New Jersey licensed quarry and/or clean fill source approved by the LSRP of Record for the Site. No alternative fill is proposed for use within AOC-6, AOC-11, or AOC-12.

2.4 Documentation of the Intended Use of Alternative Fill

Alternative fill material concentrations proposed herein include immobile/less mobile compounds. Additionally, based on the ecological evaluation conducted by Dynamic Earth, no impacts to Environmentally Sensitive Natural Resources (ESNR) were identified. The proposed capping plan and type of contaminants present in the alternative fill will not increase contamination of groundwater, surface water, sediment, or result in increased ecological risks.

3.0 Clean Fill Requirements

3.1 Clean Fill Documentation

Dynamic Earth will review available laboratory analytical data reports for any material proposed for import to the Site. All clean fill material will be imported from a licensed New Jersey quarry or clean fill source approved by the LSRP of Record for the Site.

3.2 Additional Documentation

No additional documentation is anticipated to demonstrate compliance with NJDEP's October 2021 *Fill Material Guidance for SRP Sites*.

4.0 Quarry Material Requirements

4.1 Virgin Quarry Documentation

Dynamic Earth will review the certification from the New Jersey Department of Labor for all imported quarry material. The certification and all documentation will be provided in the RAR.

Please feel free to contact us at your convenience if you would like to discuss this fill use plan in greater detail.

Sincerely,

DYNAMIC EARTH, LLC



Spencer S. Spurlock, LSRP
Senior Principal



Omar Mahmoud
Environmental Scientist

DYNAMIC EARTH

Tables

Tabel 1 - Alternative Fill Evaluation - Fairway 4
Borough of Eatontown and West Long Branch, Monmouth County, New Jersey
Dynamic Earth Project No.: 3272-98-005EC

Compound	CAS#	NJDEP Soil Remediation Standards					Like-on-Like Alternative Fill Requirement	75th Percentile	95% UCL	Maxmimum Concentration in Proposed Alternative Fill
		RID SRS	RI SRS	NRID SRS	NRI SRS	MGW SRS				
Pesticides (mg/kg)										
4,4'-DDD	72-54-8	2.3	NA	11	NA	0.47	NE			NE
4,4'-DDE	72-55-9	2	NA	11	NA	0.47	NE			NE
4,4'-DDT	50-29-3	1.9	NA	9.5	NA	0.67	NE			NE
Aldrin	309-00-2	0.041	NA	0.21	NA	0.13	NE			NE
alpha-BHC	319-84-6	0.086	NA	0.41	NA	0.0023	NE			NE
beta-BHC	319-85-7	0.3	NA	1.4	NA	0.0046	NE			NE
Chlordane	57-74-9	0.27	NA	1.4	NA	1.4	0.00131			3.16
delta-BHC	319-86-8	NA	NA	NA	NA	NA	NE			NE
Dieldrin	60-57-1	0.034	NA	0.16	NA	0.024	0.077	0.078	0.116	0.503
Endosulfan I	959-98-8	470	NA	7800	NA	NA	NE			NE
Endosulfan II	33213-65-9	470	NA	7800	NA	NA	NE			NE
Endosulfan sulfate	1031-07-8	NA	NA	NA	NA	NA	NE			NE
Endrin	72-20-8	19	NA	270	NA	1.6	NE			NE
Endrin aldehyde	7421-93-4	NA	NA	NA	NA	NA	NE			NE
Endrin ketone	53494-70-5	NA	NA	NA	NA	NA	NE			NE
gamma-BHC (Lindane)	58-89-9	0.57	NA	2.8	NA	0.0035	NE			NE
Heptachlor	76-44-8	0.15	NA	0.81	NA	0.083	NE			NE
Heptachlor Epoxide	1024-57-3	0.076	NA	0.4	NA	0.081	0.00572			0.67
Methoxychlor	72-43-5	320	NA	4600	NA	NA	NE			NE
Toxaphene	8001-35-2	0.49	NA	2.3	NA	6.2	NE			NE
Total Metals (mg/kg)										
Arsenic	7440-38-2	19	1100	19	5200	19	6.1			330
Lead	7439-92-1	400	NA	800	NA	90	15			2,110
Mercury	7439-97-6	23	520000	390	NA	0.1	NE			81.1

Notes:
All concentrations in milligrams per kilogram (mg/kg)
RID/NRID SRS - Resdiential/Non-Residential Ingestion-Dermal Soil Remediation Standard
RI/NRI SRS - Residential/Non-Residential Inhalation Soil Remediation Standard
MGW SRS - Migration to Groundwater Soil Remediation Standard
NA - No Applicable NJDEP Standard
NE - No Exceedances

Tabel 1 - Alternative Fill Evaluation - Fairway 5
Borough of Eatontown and West Long Branch, Monmouth County, New Jersey
Dynamic Earth Project No.: 3272-98-005EC

Compound	CAS#	NJDEP Soil Remediation Standards					Like-on-Like Alternative Fill Requirement	75th Percentile	95% UCL	Maxmimum Concentration in Proposed Alternative Fill
		RID SRS	RI SRS	NRID SRS	NRI SRS	MGW SRS				
Pesticides (mg/kg)										
4,4'-DDD	72-54-8	2.3	NA	11	NA	0.47	NE			NE
4,4'-DDE	72-55-9	2	NA	11	NA	0.47	NE			NE
4,4'-DDT	50-29-3	1.9	NA	9.5	NA	0.67	NE			NE
Aldrin	309-00-2	0.041	NA	0.21	NA	0.13	NE			NE
alpha-BHC	319-84-6	0.086	NA	0.41	NA	0.0023	NE			NE
beta-BHC	319-85-7	0.3	NA	1.4	NA	0.0046	NE			NE
Chlordane	57-74-9	0.27	NA	1.4	NA	1.4	NE			3.16
delta-BHC	319-86-8	NA	NA	NA	NA	NA	NE			NE
Dieldrin	60-57-1	0.034	NA	0.16	NA	0.024	0.129	0.112	0.141	0.503
Endosulfan I	959-98-8	470	NA	7800	NA	NA	NE			NE
Endosulfan II	33213-65-9	470	NA	7800	NA	NA	NE			NE
Endosulfan sulfate	1031-07-8	NA	NA	NA	NA	NA	NE			NE
Endrin	72-20-8	19	NA	270	NA	1.6	NE			NE
Endrin aldehyde	7421-93-4	NA	NA	NA	NA	NA	NE			NE
Endrin ketone	53494-70-5	NA	NA	NA	NA	NA	NE			NE
gamma-BHC (Lindane)	58-89-9	0.57	NA	2.8	NA	0.0035	NE			NE
Heptachlor	76-44-8	0.15	NA	0.81	NA	0.083	NE			NE
Heptachlor Epoxide	1024-57-3	0.076	NA	0.4	NA	0.081	0.00362			0.67
Methoxychlor	72-43-5	320	NA	4600	NA	NA	NE			NE
Toxaphene	8001-35-2	0.49	NA	2.3	NA	6.2	NE			NE
Total Metals (mg/kg)										
Arsenic	7440-38-2	19	1100	19	5200	19	3.92			330
Lead	7439-92-1	400	NA	800	NA	90	11.1			2,110
Mercury	7439-97-6	23	520000	390	NA	0.1	NE			81.1

Notes:
All concentrations in milligrams per kilogram (mg/kg)
RID/NRID SRS - Resdiential/Non-Residential Ingestion-Dermal Soil Remediation Standard
RI/NRI SRS - Residential/Non-Residential Inhalation Soil Remediation Standard
MGW SRS - Migration to Groundwater Soil Remediation Standard
NA - No Applicable NJDEP Standard
NE - No Exceedances

Tabel 1 - Alternative Fill Evaluation - Fairway 9
Borough of Eatontown and West Long Branch, Monmouth County, New Jersey
Dynamic Earth Project No.: 3272-98-005EC

Compound	CAS#	NJDEP Soil Remediation Standards					Like-on-Like Alternative Fill Requirement	75th Percentile	95% UCL	Maxmimum Concentration in Proposed Alternative Fill
		RID SRS	RI SRS	NRID SRS	NRI SRS	MGW SRS				
Pesticides (mg/kg)										
4,4'-DDD	72-54-8	2.3	NA	11	NA	0.47	NE			NE
4,4'-DDE	72-55-9	2	NA	11	NA	0.47	NE			NE
4,4'-DDT	50-29-3	1.9	NA	9.5	NA	0.67	NE			NE
Aldrin	309-00-2	0.041	NA	0.21	NA	0.13	NE			NE
alpha-BHC	319-84-6	0.086	NA	0.41	NA	0.0023	NE			NE
beta-BHC	319-85-7	0.3	NA	1.4	NA	0.0046	NE			NE
Chlordane	57-74-9	0.27	NA	1.4	NA	1.4	NE			3.16
delta-BHC	319-86-8	NA	NA	NA	NA	NA	NE			NE
Dieldrin	60-57-1	0.034	NA	0.16	NA	0.024	0.245	0.072	0.126	0.503
Endosulfan I	959-98-8	470	NA	7800	NA	NA	NE			NE
Endosulfan II	33213-65-9	470	NA	7800	NA	NA	NE			NE
Endosulfan sulfate	1031-07-8	NA	NA	NA	NA	NA	NE			NE
Endrin	72-20-8	19	NA	270	NA	1.6	NE			NE
Endrin aldehyde	7421-93-4	NA	NA	NA	NA	NA	NE			NE
Endrin ketone	53494-70-5	NA	NA	NA	NA	NA	NE			NE
gamma-BHC (Lindane)	58-89-9	0.57	NA	2.8	NA	0.0035	NE			NE
Heptachlor	76-44-8	0.15	NA	0.81	NA	0.083	NE			NE
Heptachlor Epoxide	1024-57-3	0.076	NA	0.4	NA	0.081	NE			0.67
Methoxychlor	72-43-5	320	NA	4600	NA	NA	NE			NE
Toxaphene	8001-35-2	0.49	NA	2.3	NA	6.2	NE			NE
Total Metals (mg/kg)										
Arsenic	7440-38-2	19	1100	19	5200	19	5.57			330
Lead	7439-92-1	400	NA	800	NA	90	16.5			2,110
Mercury	7439-97-6	23	520000	390	NA	0.1	NE			81.1

Notes:
All concentrations in milligrams per kilogram (mg/kg)
RID/NRID SRS - Resdiential/Non-Residential Ingestion-Dermal Soil Remediation Standard
RI/NRI SRS - Residential/Non-Residential Inhalation Soil Remediation Standard
MGW SRS - Migration to Groundwater Soil Remediation Standard
NA - No Applicable NJDEP Standard
NE - No Exceedances

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Attachment 1
Public Notification Transmittal Receipts

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Sent To: Joseph A + Josephine Silva
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Postage	$0.73
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Sent To: Francine C Widrich
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Postage	$0.73
Total Postage and Fees	$9.68

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Sent To: Pillar Associates
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City, State, ZIP+4®: West Long Branch, NJ 07764

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☐ Adult Signature Required	$0.00
☐ Adult Signature Restricted Delivery	$
Postage	$0.73
Total Postage and Fees	$9.68

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Sent To: Alan C Cuerino
Street and Apt. No., or PO Box No.: 117 Malibu Drive
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☐ Adult Signature Required	$0.00
☐ Adult Signature Restricted Delivery	$
Postage	$0.73
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Street and Apt. No., or PO Box No.: 25 Second St

City, State, ZIP+4®: Rumson NJ 07760

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☐ Return Receipt (hardcopy)	$4.10 $0.00
☐ Return Receipt (electronic)	$0.00
☐ Certified Mail Restricted Delivery	$0.00
☐ Adult Signature Required	$0.00
☐ Adult Signature Restricted Delivery	$
Postage	$0.73
Total Postage and Fees	$9.68

0436 10

Postmark Here

11/18/2024

32729800526

Sent To: Janto Sgarlato & Rose Brenner

Street and Apt. No., or PO Box No.: 113 Malibu Drive

City, State, ZIP+4®: Eatontown NJ 07724

9589 0710 5270 1057 6156 95

PS Form 3800, January 2023 PSN 7530-02-000-9047 See Reverse for Instructions

U.S. Postal Service™ CERTIFIED MAIL® RECEIPT

Domestic Mail Only

For delivery information, visit our website at *www.usps.com®*.

Eatontown, NJ 07724

OFFICIAL USE

Certified Mail Fee	$4.85
Extra Services & Fees (check box, add fee as appropriate)	
☐ Return Receipt (hardcopy)	$4.10 $0.00
☐ Return Receipt (electronic)	$0.00
☐ Certified Mail Restricted Delivery	$0.00
☐ Adult Signature Required	$0.00
☐ Adult Signature Restricted Delivery	$
Postage	$0.73
Total Postage and Fees	$9.68

0436 10

Postmark Here

11/18/2024

32729800526

Sent To: Rosemarie Perone

Street and Apt. No., or PO Box No.: 115 Malibu Drive

City, State, ZIP+4®: Eatontown NJ 07724

9589 0710 5270 1057 6157 01

PS Form 3800, January 2023 PSN 7530-02-000-9047 See Reverse for Instructions

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Eatontown, NJ 07724

Certified Mail Fee	$4.85
Extra Services & Fees (check box, add fee as appropriate)	
☐ Return Receipt (hardcopy)	$4.10 $0.00
☐ Return Receipt (electronic)	$4.10
☐ Certified Mail Restricted Delivery	$0.00
☐ Adult Signature Required	$0.00
☐ Adult Signature Restricted Delivery	$0.00
Postage	$0.00
Total Postage and Fees	$0.73

0436 10

Postmark Here

11/18/2024

32729800526

Sent To: Marie P Dooley

Street and Apt. No., or PO Box No.: 103 Malibu Drive

City, State, ZIP+4®: Eatontown NJ 07724

9589 0710 5270 1057 6156 40

PS Form 3800, January 2023 PSN 7530-02-000-9047 See Reverse for Instructions

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Eatontown, NJ 07724

OFFICIAL USE

Certified Mail Fee	$4.85
Extra Services & Fees (check box, add fee as appropriate)	
☐ Return Receipt (hardcopy)	$4.10 $0.00
☐ Return Receipt (electronic)	$0.00
☐ Certified Mail Restricted Delivery	$0.00
☐ Adult Signature Required	$0.00
☐ Adult Signature Restricted Delivery	$
Postage	$0.73
Total Postage and Fees	$9.68

0436 10

Postmark Here

11/18/2024

32729800526

Sent To: Joseph Signorelli

Street and Apt. No., or PO Box No.: 107 Malibu Drive

City, State, ZIP+4®: Eatontown NJ 07724

9589 0710 5270 1057 6156 64

PS Form 3800, January 2023 PSN 7530-02-000-9047 See Reverse for Instructions

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Eatontown, NJ 07724

OFFICIAL USE

Certified Mail Fee	$4.85
Extra Services & Fees (check box, add fee as appropriate)	
☐ Return Receipt (hardcopy)	$4.10 $0.00
☐ Return Receipt (electronic)	$0.00
☐ Certified Mail Restricted Delivery	$0.00
☐ Adult Signature Required	$0.00
☐ Adult Signature Restricted Delivery	$
Postage	$0.73
Total Postage and Fees	$9.68

0436 10

Postmark Here

11/18/2024

32729800526

Sent To: Courtneran K Purea

Street and Apt. No., or PO Box No.: PO Box 1169

City, State, ZIP+4®: Eatontown NJ 07724

9589 0710 5270 1057 6156 71

PS Form 3800, January 2023 PSN 7530-02-000-9047 See Reverse for Instructions

9589 0710 5270 1057 6155 03

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Eatontown, NJ 07724

OFFICIAL USE

Certified Mail Fee $4.85	0436
$ $4.10	10
Extra Services & Fees (check box, add fee as appropriate)	
☐ Return Receipt (hardcopy) $ $0.00	
☐ Return Receipt (electronic) $ $0.00	Postmark Here
☐ Certified Mail Restricted Delivery $ $0.00	
☐ Adult Signature Required $ $0.00	
☐ Adult Signature Restricted Delivery $	
Postage $0.73	11/18/2024
$	
Total Postage and Fees $9.68	327298005EC
$	

Sent To: Monmouth Toyota
Street and Apt. No., or PO Box No.: 150 Route 36
City, State, ZIP+4®: Eatontown NJ 07724

PS Form 3800, January 2023 PSN 7530-02-000-9047 See Reverse for Instructions

9589 0710 5270 1057 6155 10

U.S. Postal Service™
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For delivery information, visit our website at *www.usps.com®*.
Lawrence Township, NJ 08648

OFFICIAL USE

Certified Mail Fee $4.85	0436
$ $4.10	10
Extra Services & Fees (check box, add fee as appropriate)	
☐ Return Receipt (hardcopy) $ $0.00	
☐ Return Receipt (electronic) $ $0.00	Postmark Here
☐ Certified Mail Restricted Delivery $ $0.00	
☐ Adult Signature Required $ $0.00	
☐ Adult Signature Restricted Delivery $	
Postage $0.73	11/18/2024
$	
Total Postage and Fees $9.68	327298005EC
$	

Sent To: State of NJ / Parsons
Street and Apt. No., or PO Box No.: 3100 Princeton Pike Bldg 2
City, State, ZIP+4®: Lawrenceville NJ 08648

PS Form 3800, January 2023 PSN 7530-02-000-9047 See Reverse for Instructions

9589 0710 5270 1057 6155 27

U.S. Postal Service™
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For delivery information, visit our website at *www.usps.com®*.
Hazlet, NJ 07730

OFFICIAL USE

Certified Mail Fee $4.85	0436
$ $4.10	10
Extra Services & Fees (check box, add fee as appropriate)	
☐ Return Receipt (hardcopy) $ $0.00	
☐ Return Receipt (electronic) $ $0.00	Postmark Here
☐ Certified Mail Restricted Delivery $ $0.00	
☐ Adult Signature Required $ $0.00	
☐ Adult Signature Restricted Delivery $	
Postage $0.73	11/18/2024
$	
Total Postage and Fees $9.68	327298005EC
$	

Sent To: Bunker Realty LLC
Street and Apt. No., or PO Box No.: 3290 State Rt. 35
City, State, ZIP+4®: Hazlet NJ 07730

PS Form 3800, January 2023 PSN 7530-02-000-9047 See Reverse for Instructions

9589 0710 5270 1057 6154 73

U.S. Postal Service™
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For delivery information, visit our website at *www.usps.com®*.
Eatontown, NJ 07724

OFFICIAL USE

Certified Mail Fee $4.85	0436
$ $4.10	10
Extra Services & Fees (check box, add fee as appropriate)	
☐ Return Receipt (hardcopy) $ $0.00	
☐ Return Receipt (electronic) $ $0.00	Postmark Here
☐ Certified Mail Restricted Delivery $ $0.00	
☐ Adult Signature Required $ $0.00	
☐ Adult Signature Restricted Delivery $	
Postage $0.73	11/18/2024
$	
Total Postage and Fees $9.68	
$	

Sent To: Stavola Realty Co
Street and Apt. No., or PO Box No.: 640 Tinton Ave. Suite 200B
City, State, ZIP+4®: Tinton Falls, NJ 07724

PS Form 3800, January 2023 PSN 7530-02-000-9047 See Reverse for Instructions

9589 0710 5270 1057 6154 80

U.S. Postal Service™
CERTIFIED MAIL® RECEIPT
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For delivery information, visit our website at *www.usps.com®*.
Beachwood, OH 44122

OFFICIAL USE

Certified Mail Fee $4.85	0436
$ $4.10	10
Extra Services & Fees (check box, add fee as appropriate)	
☐ Return Receipt (hardcopy) $ $0.00	
☐ Return Receipt (electronic) $ $0.00	Postmark Here
☐ Certified Mail Restricted Delivery $ $0.00	
☐ Adult Signature Required $ $0.00	
☐ Adult Signature Restricted Delivery $	
Postage $0.73	11/18/2024
$	
Total Postage and Fees $9.68	
$	

Sent To: BLC Monmouth LLC
Street and Apt. No., or PO Box No.: 3300 Enterprise Pkwy
City, State, ZIP+4®: Beachwood OH 44122

PS Form 3800, January 2023 PSN 7530-02-000-9047 See Reverse for Instructions

9589 0710 5270 1057 6154 97

U.S. Postal Service™
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For delivery information, visit our website at *www.usps.com®*.
Findlay, OH 45840

OFFICIAL USE

Certified Mail Fee $4.85	0436
$ $4.10	10
Extra Services & Fees (check box, add fee as appropriate)	
☐ Return Receipt (hardcopy) $ $0.00	
☐ Return Receipt (electronic) $ $0.00	Postmark Here
☐ Certified Mail Restricted Delivery $ $0.00	
☐ Adult Signature Required $ $0.00	
☐ Adult Signature Restricted Delivery $	
Postage $0.73	11/18/2024
$	
Total Postage and Fees $9.68	327298005EC
$	

Sent To: Stavola Leasing / Hess Corp
Street and Apt. No., or PO Box No.: 539 S Main St
City, State, ZIP+4®: Findlay OH 45840

PS Form 3800, January 2023 PSN 7530-02-000-9047 See Reverse for Instructions

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OFFICIAL USE

9589 0710 5270 1057 6154 59

West Long Branch, NJ 07764

Certified Mail Fee	$4.85
Extra Services & Fees (check box, add fee as appropriate)	$4.10
☐ Return Receipt (hardcopy)	$0.00
☐ Return Receipt (electronic)	$0.00
☐ Certified Mail Restricted Delivery	$0.00
☐ Adult Signature Required	$0.00
☐ Adult Signature Restricted Delivery	$
Postage	$0.73
Total Postage and Fees	$9.68

0436 10

Postmark Here

11/18/2024

32729800SEC

Sent To: JAT Associates LLP

Street and Apt. No., or PO Box No.: 300 State Hwy 36

City, State, ZIP+4®: West Long Branch NJ 07764

PS Form 3800, January 2023 PSN 7530-02-000-9047 See Reverse for Instructions

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OFFICIAL USE

9589 0710 5270 1057 6154 66

Lakewood, NJ 08701

Certified Mail Fee	$4.85
Extra Services & Fees (check box, add fee as appropriate)	$4.10
☐ Return Receipt (hardcopy)	$0.00
☐ Return Receipt (electronic)	$0.00
☐ Certified Mail Restricted Delivery	$0.00
☐ Adult Signature Required	$0.00
☐ Adult Signature Restricted Delivery	$
Postage	$0.73
Total Postage and Fees	$9.68

0436 10

Postmark Here

11/18/2024

32729800SEC

Sent To: Consumer Cent. Paramount I LLC

Street and Apt. No., or PO Box No.: 1195 Rt. 70 Suite 2000

City, State, ZIP+4®: Lakewood NJ 08701

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OFFICIAL USE

9589 0710 5270 1057 6154 42

Hightstown, NJ 08520

Certified Mail Fee	$4.85
Extra Services & Fees (check box, add fee as appropriate)	$4.10
☐ Return Receipt (hardcopy)	$0.00
☐ Return Receipt (electronic)	$0.00
☐ Certified Mail Restricted Delivery	$0.00
☐ Adult Signature Required	$0.00
☐ Adult Signature Restricted Delivery	$
Postage	$0.73
Total Postage and Fees	$9.68

0436 10

Postmark Here

11/18/2024

32729800SEC

Sent To: West Long Branch Lodging Realty

Street and Apt. No., or PO Box No.: 399 Monmouth St.

City, State, ZIP+4®: East Windsor NJ 08520

PS Form 3800, January 2023 PSN 7530-02-000-9047 See Reverse for Instructions

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9589 0710 5270 1057 6154 04

Eatontown, NJ 07724

Certified Mail Fee	$4.85
Extra Services & Fees (check box, add fee as appropriate)	$4.10
☐ Return Receipt (hardcopy)	$0.00
☐ Return Receipt (electronic)	$0.00
☐ Certified Mail Restricted Delivery	$0.00
☐ Adult Signature Required	$0.00
☐ Adult Signature Restricted Delivery	$
Postage	$0.73
Total Postage and Fees	$9.68

0436 10

Postmark Here

11/18/2024

32729800SEC

Sent To: Bd. ofFreeholders CWP/OD Calafano

Street and Apt. No., or PO Box No.: 54 Monmouth Rd

City, State, ZIP+4®: Eatontown NJ 07724

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9589 0710 5270 1057 6154 28

Neptune, NJ 07753

Certified Mail Fee	$4.85
Extra Services & Fees (check box, add fee as appropriate)	$4.10
☐ Return Receipt (hardcopy)	$0.00
☐ Return Receipt (electronic)	$0.00
☐ Certified Mail Restricted Delivery	$0.00
☐ Adult Signature Required	$0.00
☐ Adult Signature Restricted Delivery	$
Postage	$0.73
Total Postage and Fees	$9.68

0436 10

Postmark Here

11/18/2024

32729800SEC

Sent To: 101 WLB LLC

Street and Apt. No., or PO Box No.: 115 Shark River Rd

City, State, ZIP+4®: Tinton Falls NJ 07753

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9589 0710 5270 1057 6154 35

Dunellen, NJ 08812

Certified Mail Fee	$4.85
Extra Services & Fees (check box, add fee as appropriate)	$4.10
☐ Return Receipt (hardcopy)	$0.00
☐ Return Receipt (electronic)	$0.00
☐ Certified Mail Restricted Delivery	$0.00
☐ Adult Signature Required	$0.00
☐ Adult Signature Restricted Delivery	$
Postage	$0.73
Total Postage and Fees	$9.68

0436 10

Postmark Here

11/18/2024

32729800SEC

Sent To: CP Management Group Inc

Street and Apt. No., or PO Box No.: 192 Route 22 West

City, State, ZIP+4®: Greenbrook NJ 08812

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Certified Mail Fee $

Extra Services & Fees *(check box, add fee as appropriate)*
- ☐ Return Receipt (hardcopy) $
- ☐ Return Receipt (electronic) $
- ☐ Certified Mail Restricted Delivery $
- ☐ Adult Signature Required $
- ☐ Adult Signature Restricted Delivery $

Postage $

Total Postage and Fees $

Postmark Here

NOV 21 2024

CHESTER POST OFFICE SENTRY LN CHESTER NJ 07930

Sent To: Eatontown Borough Clerk

Street and Apt. No., or PO Box No.: 47 Broad St, First Floor

City, State, ZIP+4®: Eatontown NJ 07724

9589 0710 5270 1286 1107 63

PS Form 3800, January 2023 PSN 7530-02-000-9047 See Reverse for Instructions

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OFFICIAL USE

Certified Mail Fee $

Extra Services & Fees *(check box, add fee as appropriate)*
- ☐ Return Receipt (hardcopy) $
- ☐ Return Receipt (electronic) $
- ☐ Certified Mail Restricted Delivery $
- ☐ Adult Signature Required $
- ☐ Adult Signature Restricted Delivery $

Postage $

Total Postage and Fees $

Postmark Here

NOV 21 2024

CHESTER POST OFFICE SENTRY LN CHESTER NJ 07930

Sent To: West Long Branch Borough Clerk

Street and Apt. No., or PO Box No.: 965 Broadway

City, State, ZIP+4®: West Long Branch NJ 07764

9589 0710 5270 1286 1107 01

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Certified Mail Fee $

Extra Services & Fees *(check box, add fee as appropriate)*
- ☐ Return Receipt (hardcopy) $
- ☐ Return Receipt (electronic) $
- ☐ Certified Mail Restricted Delivery $
- ☐ Adult Signature Required $
- ☐ Adult Signature Restricted Delivery $

Postage $

Total Postage and Fees $

Postmark Here

NOV 21 2024

CHESTER POST OFFICE SENTRY LN CHESTER NJ 07930

Sent To: Monmouth County Health Dept

Street and Apt. No., or PO Box No.: 50 E Main St

City, State, ZIP+4®: Freehold NJ 07728

9589 0710 5270 1286 1107 18

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Certified Mail Fee $

Extra Services & Fees *(check box, add fee as appropriate)*
- ☐ Return Receipt (hardcopy) $
- ☐ Return Receipt (electronic) $
- ☐ Certified Mail Restricted Delivery $
- ☐ Adult Signature Required $
- ☐ Adult Signature Restricted Delivery $

Postage $

Total Postage and Fees $

Postmark Here

NOV 21 2024

CHESTER POST OFFICE SENTRY LN CHESTER NJ 07930

Sent To: Monmouth County Clerk

Street and Apt. No., or PO Box No.: 33 Mechanic St

City, State, ZIP+4®: Freehold NJ 07728

9589 0710 5270 1286 1107 25

PS Form 3800, January 2023 PSN 7530-02-000-9047 See Reverse for Instructions

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Certified Mail Fee $

Extra Services & Fees *(check box, add fee as appropriate)*
- ☐ Return Receipt (hardcopy) $
- ☐ Return Receipt (electronic) $
- ☐ Certified Mail Restricted Delivery $
- ☐ Adult Signature Required $
- ☐ Adult Signature Restricted Delivery $

Postage $

Total Postage and Fees $

Postmark Here

NOV 21 2024

CHESTER POST OFFICE SENTRY LN CHESTER NJ 07930

Sent To: Dept Public Works - Engineering

Street and Apt. No., or PO Box No.: 4000 Asbury Ave

City, State, ZIP+4®: Tinton Falls NJ 07753

9589 0710 5270 1286 1107 32

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OFFICIAL USE

Certified Mail Fee $

Extra Services & Fees *(check box, add fee as appropriate)*
- ☐ Return Receipt (hardcopy) $
- ☐ Return Receipt (electronic) $
- ☐ Certified Mail Restricted Delivery $
- ☐ Adult Signature Required $
- ☐ Adult Signature Restricted Delivery $

Postage $

Total Postage and Fees $

Postmark Here

NOV 21 2024

CHESTER POST OFFICE SENTRY LN CHESTER NJ 07930

Sent To: Office of the Mayor

Street and Apt. No., or PO Box No.: 47 Broad St

City, State, ZIP+4®: Eatontown NJ 07724

9589 0710 5270 1286 1107 49

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OFFICIAL USE

Certified Mail Fee $

Extra Services & Fees *(check box, add fee as appropriate)*
- ☐ Return Receipt (hardcopy) $
- ☐ Return Receipt (electronic) $
- ☐ Certified Mail Restricted Delivery $
- ☐ Adult Signature Required $
- ☐ Adult Signature Restricted Delivery $

Postage $

Total Postage and Fees $

Postmark Here

NOV 21 2024

CHESTER POST OFFICE SENTRY LN CHESTER NJ 07930

Sent To: West Long Branch Health Dept

Street and Apt. No., or PO Box No.: 50 East Main St

City, State, ZIP+4®: Freehold NJ 07728

9589 0710 5270 1286 1107 56

PS Form 3800, January 2023 PSN 7530-02-000-9047 See Reverse for Instructions

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OFFICIAL USE

Certified Mail Fee $

Extra Services & Fees *(check box, add fee as appropriate)*
- ☐ Return Receipt (hardcopy) $
- ☐ Return Receipt (electronic) $
- ☐ Certified Mail Restricted Delivery $
- ☐ Adult Signature Required $
- ☐ Adult Signature Restricted Delivery $

Postage $

Total Postage and Fees $

Postmark Here

NOV 21 2024

CHESTER POST OFFICE SENTRY LN CHESTER NJ 07930

Sent To: Mayor + Borough Council

Street and Apt. No., or PO Box No.: 965 Broadway

City, State, ZIP+4®: West Long Branch NJ 07764

9589 0710 5270 1286 1107 70

PS Form 3800, January 2023 PSN 7530-02-000-9047 See Reverse for Instructions

DYNAMIC EARTH

Appendix E
Laboratory Analytical Reports and Electronic Data Deliverable Receipts

Arielle T. Caracciolo

From: DEP SRPEDD [DEP] <SRPEDD@dep.nj.gov>
Sent: Friday, November 15, 2024 7:51 PM
To: Arielle T. Caracciolo
Subject: 021606, LSR240001, 24-11-08-1542-18, HB315810, (Directory: 23E1424) - Passed
Attachments: DTST.TXT; EDSA_Error_Log.html; erdtst-7-2-0.txt; erresult-7-2-0.txt; ersample-7-2-0.txt; HZRESULT.TXT; HZSAMPLE.TXT; rstp-7-2-0.txt; SampleLoc-7-2-0.KML

The EDD submission via email from (atcaracciolo@dynamic-earth.com) on (11/15/2024 12:13:00 PM) with the subjectline "[EXTERNAL] 021606, 24-11-08-1542-18"

The following identifiers were in the DTST file:

- Directory: 23E1424
- DESC: Old Orchard Country Club
- SRPID: 021606
- Submit Date: 10/8/2024

This submission has been issued an SRP Catalog ID: HB315810

Submission status: Passed.

Please do **not** resubmit.

EDD data deliverable must be submitted only once.
- To fulfill Key Document requirements attach only a copy of this email as an appendix to the document.
- Do **not** resubmit any approved EDD deliverable as part of a portal submission.

Email ID: OEM_117915
Sub ID:SUB_880801

Arielle T. Caracciolo

From: DEP SRPEDD [DEP] <SRPEDD@dep.nj.gov>
Sent: Friday, November 15, 2024 7:53 PM
To: Arielle T. Caracciolo
Subject: 021606, LSR240001, 24-11-08-1542-18, HB315811, (Directory: 23E1425) - Passed
Attachments: DTST.TXT; EDSA_Error_Log.html; erdtst-7-2-0.txt; erresult-7-2-0.txt; ersample-7-2-0.txt; HZRESULT.TXT; HZSAMPLE.TXT; rstp-7-2-0.txt; SampleLoc-7-2-0.KML

The EDD submission via email from (atcaracciolo@dynamic-earth.com) on (11/15/2024 12:13:02 PM) with the subjectline "[EXTERNAL] 021606, 24-11-08-1542-18"

The following identifiers were in the DTST file:

- Directory: 23E1425
- DESC: Old Orchard Country Club
- SRPID: 021606
- Submit Date: 10/8/2024

This submission has been issued an SRP Catalog ID: HB315811

Submission status: Passed.

Please do **not** resubmit.

EDD data deliverable must be submitted only once.
- To fulfill Key Document requirements attach only a copy of this email as an appendix to the document.
- Do **not** resubmit any approved EDD deliverable as part of a portal submission.

Email ID: OEM_117916
Sub ID:SUB_880795

Arielle T. Caracciolo

From: DEP SRPEDD [DEP] <SRPEDD@dep.nj.gov>
Sent: Friday, November 15, 2024 7:46 PM
To: Arielle T. Caracciolo
Subject: 021606, LSR240001, 24-11-08-1542-18, HB315809, (Directory: 24I3001) - Passed
Attachments: DTST.TXT; EDSA_Error_Log.html; erdtst-7-2-0.txt; erresult-7-2-0.txt; ersample-7-2-0.txt; HZRESULT.TXT; HZSAMPLE.TXT; rstp-7-2-0.txt; SampleLoc-7-2-0.KML

The EDD submission via email from (atcaracciolo@dynamic-earth.com) on (11/15/2024 12:13:05 PM) with the subjectline "[EXTERNAL] 021606, 24-11-08-1542-18"

The following identifiers were in the DTST file:

- Directory: 24I3001
- DESC: Old Orchard Country Club
- SRPID: 021606
- Submit Date: 10/15/2024

This submission has been issued an SRP Catalog ID: HB315809

Submission status: Passed.

Please do **not** resubmit.

EDD data deliverable must be submitted only once.
- To fulfill Key Document requirements attach only a copy of this email as an appendix to the document.
- Do **not** resubmit any approved EDD deliverable as part of a portal submission.

Email ID: OEM_117914
Sub ID:SUB_880807

Arielle T. Caracciolo

From: DEP SRPEDD [DEP] <SRPEDD@dep.nj.gov>
Sent: Friday, November 15, 2024 8:01 PM
To: Arielle T. Caracciolo
Subject: 021606, LSR240001, 24-11-08-1542-18, HB315813, (Directory: 2120937) - Passed
Attachments: DTST.TXT; EDSA_Error_Log.html; erdtst-7-2-0.txt; erresult-7-2-0.txt; ersample-7-2-0.txt; HZRESULT.TXT; HZSAMPLE.TXT; rstp-7-2-0.txt; SampleLoc-7-2-0.KML

The EDD submission via email from (atcaracciolo@dynamic-earth.com) on (11/15/2024 12:13:08 PM) with the subjectline "[EXTERNAL] 021606, 24-11-08-1542-18"

The following identifiers were in the DTST file:

- Directory: 2120937
- DESC: Old Orchard Country CLub
- SRPID: 021606
- Submit Date: 10/8/2024

This submission has been issued an SRP Catalog ID: HB315813

Submission status: Passed.

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- Do **not** resubmit any approved EDD deliverable as part of a portal submission.

Email ID: OEM_117918
Sub ID:SUB_880813

Arielle T. Caracciolo

From: DEP SRPEDD [DEP] <SRPEDD@dep.nj.gov>
Sent: Friday, November 15, 2024 7:57 PM
To: Arielle T. Caracciolo
Subject: 021606, LSR240001, 24-11-08-1542-18, HB315812, (Directory: 2120938) - Passed
Attachments: DTST.TXT; EDSA_Error_Log.html; erdtst-7-2-0.txt; erresult-7-2-0.txt; ersample-7-2-0.txt; HZRESULT.TXT; HZSAMPLE.TXT; rstp-7-2-0.txt; SampleLoc-7-2-0.KML

The EDD submission via email from (atcaracciolo@dynamic-earth.com) on (11/15/2024 12:13:09 PM) with the subjectline "[EXTERNAL] 021606, 24-11-08-1542-18"

The following identifiers were in the DTST file:

- Directory: 2120938
- DESC: Old Orchard Country Club
- SRPID: 021606
- Submit Date: 10/8/2024

This submission has been issued an SRP Catalog ID: HB315812

Submission status: Passed.

Please do **not** resubmit.

EDD data deliverable must be submitted only once.
- To fulfill Key Document requirements attach only a copy of this email as an appendix to the document.
- Do **not** resubmit any approved EDD deliverable as part of a portal submission.

Email ID: OEM_117917
Sub ID:SUB_880819

AQUA PRO-TECH LABORATORIES
A Pace® Analytical Laboratory
1275 Bloomfield Avenue, Fairfield, NJ 07004 (973) 227-0422

ANALYTICAL RESULTS

REDUCED DELIVERABLES FORMAT

APL Work Order Number: 23E1424

Dynamic Earth LLC

Project: Turtle Mill Brook-Eco. Evaluation



Sudip Pradhan
Laboratory Director

All Results meet the requirements of the National Environmental Laboratory Accreditation Conference and/or State specific certifications as applicable.

Report Date: Jul 18, 2023

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APL
AQUA PRO-TECH LABORATORIES
Certified Environmental Testing

Sample Summary

Work Order: 23E1424

Client: Dynamic Earth LLC

Project: Turtle Mill Brook-Eco. Evaluation

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
SW-1	23E1424-01	Surface Water	05/30/2023 11:20	05/31/2023 16:30
SED-1	23E1424-02	Soil	05/30/2023 11:30	05/31/2023 16:30
SW-2	23E1424-03	Surface Water	05/30/2023 11:45	05/31/2023 16:30
SED-2	23E1424-04	Soil	05/30/2023 11:50	05/31/2023 16:30
SW-3	23E1424-05	Surface Water	05/30/2023 12:00	05/31/2023 16:30
SED-3	23E1424-06	Soil	05/30/2023 12:05	05/31/2023 16:30
SW-4	23E1424-07	Surface Water	05/30/2023 12:25	05/31/2023 16:30
SED-4	23E1424-08	Soil	05/30/2023 12:30	05/31/2023 16:30
SW-5	23E1424-09	Surface Water	05/30/2023 12:40	05/31/2023 16:30
SED-5	23E1424-10	Soil	05/30/2023 12:45	05/31/2023 16:30
SW-6	23E1424-11	Surface Water	05/30/2023 13:00	05/31/2023 16:30
SED-6	23E1424-12	Soil	05/30/2023 13:05	05/31/2023 16:30
SW-7	23E1424-13	Surface Water	05/30/2023 13:15	05/31/2023 16:30
SED-7	23E1424-14	Soil	05/30/2023 13:20	05/31/2023 16:30
SED-1A	23E1424-16	Soil	05/30/2023 11:35	05/31/2023 16:30
SED-4A	23E1424-17	Soil	05/30/2023 12:35	05/31/2023 16:30
SED-6A	23E1424-18	Soil	05/30/2023 13:05	05/31/2023 16:30

PN: 23E1424

APL 23E1424

AQUA PRO-TECH LABORATORIES

www.aquaprotechlabs.com

Fairfield, NJ 07004
TEL: 973-227-0422
FAX: 973-227-2813

CHAIN OF CUSTODY

Client:	Dynamic Earth LLC	Send Report To:	O. Mahmoud
Address:	1904 Main Street	Address:	
	Lake Como, NJ, 07719		
Phone:	732-280-0830	Phone:	
E-Mail:	omahmoud@dynamic-earth.com	Send Invoice To:	
Project Name:	Turtle Mill Brook - Eco. Evaluation	Address:	
Project Manager:	Omar Mahmoud	Sampling Location:	Eatontown, NJ
Project or PO #:	3272-98-005EC	Sampled By:	Omar Mahmoud

Contamination Level: [ ] Low [ ] Medium [ ] High

Turn-Around Time: [ ] APL Standard 2 Weeks; [ ] Rush (Choose One Below); [ ] 1 Day [ ] 2 Days [ ] 3 Days; [✓] 1 Week [ ] Other (Specify Below)

Date and Time Required: _____
**May Need Lab Approval

Report / Electronic Format: [ ] Results Only / NY ASP-A; [✓] Reduced: NJ DEP; [ ] Full: NJ DEP / NY ASP-B; [ ] State Forms/E2 Reporting; [✓] Excel Summary; [ ] EqUIS; [ ] EnviroData; [ ] Hazsite EDD

PWSID # _____ SRP# _____

Comments/Special Instructions:
* Hold Sample

Cooler Temp: 4

APL Order # (APL Will Provide): 23E1424

Matrix Abbreviations: DW - Drinking Water; GW - Groundwater; WW - Wastewater; SW - Surface Water; L - Lake; Pool; SPA; S - Soil; SD - Solid; SL - Sludge; C - Concrete; W - Wipes; O - Oil; PC - Paint Chips

Sample #	Sample Source: Field ID	Collect Date	Collect Time	Matrix	Sample Type: Grab	Sample Type: Comp	No. of Bottles	Preservative	ANALYSIS REQUESTED: As, Pb, Hg	TCL Pesticides	TOC, pH, ORP	Particle Gran Size	Lab Filtered As, Pb, Hg	Hardness, pH					
-01	SW-1	5/30/2023	1120	SW	X				X	X			X	X					
-02	SED-1	5/30/23	1130	S	X				X	X	X	X							
-16	SED-1A *	5/30/23	1135	↓	X				X	X	X	X							
-03	SW-2	5/30/23	1145	SW	X				X	X			X	X					
-04	SED-2	5/30/23	1150	S	X				X	X	X	X							
	SED-2A *	5/30/23	1155	↓	X				X	X	X	X							
-05	SW-3	5/30/23	1200	SW	X				X	X			X	X					
-06	SED-3	5/30/23	1205	S	X				X	X	X	X							
	SED-3A *	5/30/23	1210	↓	X				X	X	X	X							
-07	SW-4	5/30/23	1225	SW	X				X	X			X	X					

RELINQUISHED BY:	Print: Omar Mahmoud	RECEIVED BY:	Print:
	Sign:		Sign:
			Date: 5/31/23 Time:
RELINQUISHED BY:	Print:	RECEIVED BY:	Print: WC
	Sign		Sign:
			Date: 5/31/23 Time: 1500
RELINQUISHED BY:	Print: WC	RECEIVED BY:	Print: Rick Nay
	Sign:		Sign:
			Date: 5/31/23 Time: 1630

CERTIFICATIONS: NELAP (National Environmental Accreditation Program) NJDEP #07010 PADEP #68-02903 NYDOH #11634

By signing this Chain of Custody Agreement, customer expressly agrees to pay APL for all charges, reasonably incurred in connection with analysis and reporting for these samples.

PN: 23E1424

APL

AQUA PRO-TECH LABORATORIES

www.aquaprotechlabs.com

1275 Bloomfield Avenue Building 6
Fairfield, NJ 07004

TEL: 973-227-0422
FAX: 973-227-2813

CHAIN OF CUSTODY

Client:	Dynamic Earth LLC	Send Report To:	O. Mahmoud
Address:	1904 Main Street	Address:	
	Lake Como, NJ 07719		
Phone:	732-280-0830	Phone:	
E-Mail:	omahmoud@dynamic-earth.com	Send Invoice To:	
Project Name:	Ecological Evaluation	Address	
Project Manager:	Omar Mahmoud	Sampling Location:	Eatontown, NJ
Project or PO #:	3272-98-005EC	Sampled By:	Omar Mahmoud

Turn-Around Time
- [ ] APL Standard 2 Weeks
- [ ] Rush (Choose One Below)
- [ ] 1 Day [ ] 2 Days [ ] 3 Days
- [x] 1 Week [ ] Other (Specify Below)

Date and Time Required: _____
**May Need Lab Approval

Report / Electronic Format
- [ ] Results Only / NY ASP-A
- [x] Reduced: NJ DEP
- [ ] Full: NJ DEP / NY ASP-B
- [ ] State Forms/E2 Reporting
- [x] Excel Summary
- [ ] EqUIS
- [ ] EnviroData
- [ ] Hazsite EDD

PWSID # _____ SRP# _____

Contamination Level
- [ ] Low
- [ ] Medium
- [ ] High

Comments/Special Instructions:
* Hold Sample

Cooler Temp: 4

APL Order # (APL Will Provide): 23E1424

Matrix Abbreviations: DW - Drinking Water; GW - Groundwater; WW - Wastewater; SW - Surface Water; L - Lake; Pool; SPA; S - Soil; SD - Solid; SL - Sludge; C - Concrete; W - Wipes; O - Oil; PC - Paint Chips

Sample #	Sample Source: Field ID	Collect Date	Collect Time	Matrix	Sample Type: Grab	Sample Type: Comp	No. of Bottles	Preservative	ANALYSIS REQUESTED: As, Pb, Hg	TCL features	TOC, pH, ORP	Particle Grain Size	Lab Filtered As, Pb, Hg	Hardness, pH						
-08	SED-4	5/30/23	1230	S	X				X	X	X	X								
-17	SED-4A *	5/30/23	1235	↓	X				X	X	X	X								
-09	SW-5	5/30/23	1240	SW	X				X	X			X	X						
-10	SED-5	5/30/23	1245	S	X				X	X	X	X								
	SED-5A *	5/30/23	1250	↓	X				X	X	X	X								
-11	SW-6	5/30/23	1300	SW	X				X	X			X	X						
-12	SED-6	5/30/23	1305	S	X				X	X	X	X								
-18	SED-6A *	5/30/23	1305	↓	X				X	X	X	X								
-13	SW-7	5/30/23	1315	SW	X				X	X			X	X						
	SED-7A *	5/30/23	1320	S	X				X	X	X	X								

RELINQUISHED BY:	Print: Omar Mahmoud	RECEIVED BY:	Print: _____ Date: 5/31/23
	Sign: _____		Sign: _____ Time:
RELINQUISHED BY:	Print: _____	RECEIVED BY:	Print: _____ Date: 5/31/23
	Sign _____		Sign: _____ Time: 1510
RELINQUISHED BY:	Print: _____	RECEIVED BY:	Print: Ross Nap Date: 5/31/23
	Sign: _____		Sign: _____ Time: 1630

CERTIFICATIONS: NELAP (National Environmental Accreditation Program) NJDEP #07010 PADEP #68-02903 NYDOH #11634

By signing this Chain of Custody Agreement, customer expressly agrees to pay APL for all charges, reasonably incurred in connection with analysis and reporting for these samples.

PN: 23E1424

APL

AQUA PRO-TECH LABORATORIES

www.aquaprotechlabs.com

1275 Bloomfield Avenue Building 6
Fairfield, NJ 07004

TEL: 973-227-0422
FAX: 973-227-2813

CHAIN OF CUSTODY

Client:	Dynamic Earth LLC	Send Report To:	O. Mahmoud
Address:	1904 Main Street	Address:	
	Lake Como, NJ. 07719		
Phone:	732-280-0830	Phone:	
E-Mail:	omahmoud@dynamic-earth.com	Send Invoice To:	
Project Name:	Turtle Mill Brook - Eco. Evaluation	Address:	
Project Manager:	Omar Mahmoud	Sampling Location:	Eatontown, NJ
Project or PO #:	3272-98-00SEC	Sampled By:	Omar Mahmoud

Turn-Around Time
- [ ] APL Standard 2 Weeks
- [ ] Rush (Choose One Below)
- [ ] 1 Day [ ] 2 Days [ ] 3 Days
- [x] 1 Week [ ] Other (Specify Below)

Date and Time Required: _____
**May Need Lab Approval

Report / Electronic Format
- [ ] Results Only / NY ASP-A
- [x] Reduced: NJ DEP
- [ ] Full: NJ DEP / NY ASP-B
- [ ] State Forms/E2 Reporting
- [x] Excel Summary
- [ ] EqUIS
- [ ] EnviroData
- [ ] Hazsite EDD

PWSID # _____ SRP# _____

Contamination Level
- [ ] Low
- [ ] Medium
- [ ] High

Comments/Special Instructions:
* Hold Sample

Cooler Temp: 4

Matrix Abbreviations: DW - Drinking Water; GW - Groundwater; WW - Wastewater; SW - Surface Water; L - Lake, Pool, SPA; S - Soil, SD - Solid, SL - Sludge, C - Concrete; W - Wipes, O - Oil, PC - Paint Chips

APL Order # (APL Will Provide)	Sample #	Sample Source: Field ID	Collect Date	Collect Time	Matrix	Sample Type: Grab	Sample Type: Comp	No. of Bottles	Preservative	ANALYSIS REQUESTED: As, Pb, Hg	TCL Pesticides	TOC, pH, ORP	Particle Grain Size
23E1424	-14	SED-7	5/30/23	1320	S	X				X	X	X	X
			5/										

RELINQUISHED BY:	Print: Omar Mahmoud	RECEIVED BY:	Print:	Date:	5/31/23
	Sign:		Sign:	Time:	
RELINQUISHED BY:	Print:	RECEIVED BY:	Print: WL	Date:	5/3/23
	Sign		Sign:	Time:	1500
RELINQUISHED BY:	Print: WL	RECEIVED BY:	Print: Rose Nap	Date:	5/3/23
	Sign:		Sign:	Time:	1630

CERTIFICATIONS: NELAP (National Environmental Accreditation Program) NJDEP #07010 PADEP #68-02903 NYDOH #11634

By signing this Chain of Custody Agreement, customer expressly agrees to pay APL for all charges, reasonably incurred in connection with analysis and reporting for these samples.

Extractable Petroleum Hydrocarbons:

Gas Chromatography/Flame Ionization Detector

New Jersey Department of Environmental Protection Site Remediation Program Extractable Petroleum Hydrocarbons Methodology (Version 3.0).
USEPA SW-846 Test Methods for Evaluating Solid Waste Physical/Chemical Methods Update III, Method 8015B or NJDEP Office of Quality Assurance Quantitation of Semi-Volatile Petroleum Products in Water, Soil and Sediment OQA-QAM-025, Revision 6.

Metals:

Inductively-Coupled Plasma Atomic Emission Spectrometry or Inductively-Coupled Plasma Mass Spectroscopy

Wastewater and Groundwater Samples: USEPA Methods for the Analysis of Water and Wastes, Method 200.7, Method 200.8.
Soil Samples: USEPA Methods for Evaluating Solid Waste Physical/Chemical Methods Update III, Method 6010D.

Mercury:

Cold Vapor Atomic Absorption Spectrometry

Wastewater and Groundwater Samples: USEPA Methods for the Analysis of Water and Wastes, Method 245.1.
Soil Samples: USEPA SW-846 Test Methods for Evaluating Solid Waste Physical/Chemical Methods Update III, Method 7471B.

Volatile Organic Compounds:

Purge and Trap Gas Chromatography/Mass Spectroscopy

Drinking Water Samples: USEPA Methods for the Determination of Organic Compounds in Drinking Water, Method 524.2.
Wastewater Samples: USEPA Methods for the Analysis of Water and Wastes, Method 624.1, Method 8260C.
Soil and Groundwater Samples: USEPA SW-846 Test Methods for Evaluating Solid Waste Physical/Chemical Methods Update III, Method 8260C.

Semi-Volatile Organic Compounds:

Gas Chromatography/Mass Spectroscopy

Wastewater Samples: USEPA Methods for the Analysis of Water and Wastes, Method 625.1, Method 8270D.
Soil and Groundwater Samples: USEPA SW-846 Test Methods for Evaluating Solid Waste Physical/Chemical Methods Update III, Method 8270D.

PFAS Compounds:

Liquid Chromatography/Tandem Mass Spectroscopy

Drinking Water Samples: USEPA Methods for the Determination of Selected Perfluorinated Alkyl Acids in Drinking Water by Solid Phase Extraction and Liquid Chromatography/Tandem Mass Spectrometry (LC/MS/MS), Method 537.

Pesticides:

Gas Chromatography/Electron Capture Detector

Wastewater Samples: USEPA Methods for the Analysis of Water and Wastes, Method 608.3, Method 8081B.
Soil and Groundwater Samples: USEPA SW-846 Test Methods for Evaluating Solid Waste Physical/Chemical Methods Update III, Method 8081B.

Polychlorinated Biphenyls (PCBs):

Gas Chromatography/Electron Capture Detector

Wastewater Samples: USEPA Methods for the Analysis of Water and Wastes, Method 608.3, Method 8082A.
Soil and Groundwater Samples: USEPA SW-846 Test Methods for Evaluating Solid Waste Physical/Chemical Methods Update III, Method 8082A.

General Chemistry Methods:

Various general chemistry methods are taken from "Standard Methods for the Examination of Water and Wastewater, 19th Edition".

Specific method citations can be found on the Analytical Results Summary page of this report listed under 'Method'.

** A complete list of APL's certified Methods are accessible on the Standards And Docs page of the Results Retrieval System

MDL:

Method Detection Limit. The minimum reportable concentration of a substance that can be measured and reported with 99% confidence that the analyte concentration is greater than zero. The value is calculated from the analysis of seven replicates of a spike sample. On analytical reports this value is corrected for percent moisture and any concentration or dilution factors.

RL:

Reporting Limit. The Concentration of the lowest calibration standard that was included in the initial calibration of the instrument. On analytical reports this value is corrected for percent moisture and any concentration or dilution factors.

Concentration (Conc) / Result:

If the compound is detected, the measured concentration is reported. If this column is left blank, or contains a 'less than' (<) symbol, the compound was not detected.

Tentatively Identified Compound (TIC):

A TIC is a non-targeted compound, not included in the calibration, identified by a mass spectral library search.

Qualifiers:

- **U:** Indicates the compound was analyzed for but was not detected.
- **J:** Indicates an estimated value. All tentatively identified compounds (TICs) and results below the RL receive this qualifier.
- **B:** Indicates the analyte was found in the method blank as well as the sample.
- **N:** Used when reporting a specific tentatively identified compound.
- **E:** Indicates that the concentration of the compound exceeds the calibration range of the instrument. The results of a diluted analysis will also be reported. The results of the dilution should be used for those compounds exceeding the calibration range in the undiluted analysis.

DATA OF KNOWN QUALITY CONFORMANCE/NON-CONFORMANCE SUMMARY QUESTIONNAIRE

Laboratory Name: Aqua Pro-Tech Laboratories

Client: Dynamic Earth LLC

Project Location: Turtle Mill Brook-Eco. Evaluation

Project Number: 23E1424

Laboratory Sample ID(s): 01-18

Sampling Date(s): May 30,2023

List DKQP Methods Used: EPA 245.1;EPA 200.7;EPA 200.8;SW 846 8081B;SM 2550 B-10;SM 4500-H B-11;SM 2340 B-11;SW 846 7473;SW 846 6010D;Gravimetric;SW 846 9045D;SM 2580 (mod)

1	For each analytical method referenced in this laboratory report package, were all specified QA/QC performance criteria followed, including the requirement to explain any criteria falling outside of acceptable guidelines, as specified in the NJDEP Data of Known Quality performance standards?	☑ Yes ☐ No
1A	Were the method specified handling, preservation, and holding time requirements met?	☑ Yes ☐ No
1B	EPH Method: Was the EPH method conducted without significant modifications (see Section 11.3 of respective DKQ methods)	☐ Yes ☐ No ☑ N/A
2	Were all samples received by the laboratory in a condition consistent with that described on the associated chain-of-custody document(s)?	☑ Yes ☐ No
3	Were samples received at an appropriate temperature (4±2° C)?	☑ Yes ☐ No ☐ N/A
4	Were all QA/QC performance criteria specified in the NJDEP DKQP standards achieved?	☐ Yes ☑ No
5	Were reporting limits specified or referenced on the chain-of-custody or communicated to the laboratory prior to sample receipt? Were these reporting limits met?	☑ Yes ☐ No ☐ Yes ☑ No ☐ N/A
6	For each analytical method referenced in this laboratory report package, were results reported for all constituents identified in the method-specific analyte lists presented in the DKQP documents and/or site-specific QAPP?	☑ Yes ☐ No
7	Are project-specific matrix spikes and/or laboratory duplicates included in this data set?	☑ Yes ☐ No

Notes: For all questions to which the response was "No° (with the exception of question #7), additional information should be provided in an attached narrative. If the answer to question #1, #1A, or #1B is "No", the data package does not meet the requirements for Data of Known Quality.°

QUALITY CONTROL
Conformance/Non-Conformance Summary

ANALYSIS: INORGANICS [7473/245.1/200.7/6010D/200.8]

COMMENTS:
Method 7473:
Batch BAF0123:
The matrix spike duplicate recovery for Mercury was outside QC limits (low).

Method 245.1 and 200.7:
All samples met QC criteria.

Method 6010D:
Batch BAF0108:
The matrix spike recovery for Arsenic was outside QC limits (low).
The matrix spike duplicate recovery for Lead was outside QC limits (high).
Batch BAF0577:
The matrix spike recovery for Arsenic and Lead was outside QC limits (low).
The matrix spike duplicate recovery for Lead was outside QC limits (high).
The matrix spike duplicate recovery for Arsenic was outside QC limits (low).

Method 200.8:
Batch BAF0256:
The matrix spike and matrix spike duplicate recovery for Arsenic and Lead was outside QC limits (low).
Batch BAF0187:
The blank spike duplicate recovery for Lead was outside QC limits (high).

ANALYSIS: PESTICIDES [8081B]

COMMENTS:
Batch BAE1181:
The blank spike recovery for Endrin was outside QC limits (low).
The matrix spike and matrix spike duplicate recovery for 4,4'-DDE was outside QC limits (high).
Batch BAF0218:
The blank spike and matrix spike recovery for 4,4'-DDE was outside QC limits (low).
The blank spike recovery for Endosulfan II was outside QC limits (low).
The matrix spike duplicate recovery for Endosulfan sulfate was outside QC limits (low).
Batch BAF0463:
The blank spike, matrix spike and matrix spike duplicate recovery for beta-BHC was outside QC limits (low).
The matrix spike and matrix spike duplicate recovery for some analytes were outside QC limits (low).

The surrogate (Decachlorobiphenyl) recovery for samples 23E1424-16, 17 and 18 were outside QC limits (low).
The surrogate (Decachlorobiphenyl [2C]) recovery for samples 23E1424-04 and 12 were outside QC limits (high).

Reviewed By: _____ (IK) 7/18/2023
Sudip Pradhan - Laboratory Director — Date

For any questions about your Quality Control, please call us at 973-227-0422

Positive Results Only Summary

23E1424-01 (Surface Water) Sample Name: SW-1

EPA 200.7 - Total Metals

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed
Calcium	66.4		0.256	1.00	mg/L	1	6/7/23 14:54
Magnesium	3.89		0.681	2.00	mg/L	1	6/7/23 14:54

SM 2550 B-10 - General Chemistry

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed
Temp at time of pH, °C	15.9		1.00	1.00	°C	1	5/31/23 18:43

SM 4500-H B-11 - General Chemistry

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed
pH	7.06	H	0.0100	0.0100	pH Units	1	5/31/23 18:42

SM 2340 B-11 - Total Metals

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed
Hardness	182		0.640	2.50	mg/L	1	6/7/23 14:54

23E1424-02 (Soil) Sample Name: SED-1

SW 846 7473 - Total Metals

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed
Mercury	0.290		0.00838	0.0335	mg/kg dry	1	6/6/23 14:54

SW 846 6010D - Total Metals

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed
Lead	13.2		0.167	2.00	mg/kg dry	1	6/7/23 12:16

SW 846 8081B - Pesticides

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed
4,4'-DDD	0.00848		0.000998	0.00218	mg/kg dry	1	6/8/23 22:48
4,4'-DDE	0.00382		0.00119	0.00218	mg/kg dry	1	6/8/23 22:48

SM 2550 B-10 - General Chemistry

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed
Temp at time of pH, °C	19.4		1.00	1.00	°C	1	6/1/23 12:56

SM 2580 (mod) - General Chemistry

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed
Redox Potential	191		-1000	-1000	mV	1	6/1/23 12:54

SW 846 9045D - General Chemistry

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed
pH	5.56		0.0100	0.0100	pH Units	1	6/1/23 12:55

ND - Indicates compound analyzed for but not detected
J - Indicates estimated value
B - Indicates compound found in associated blank
E - Concentration exceeds highest calibration standard
D - Indicates result is based on a dilution
H - Indicates a Hold Time violation
P - Greater than 25% diff. between 2 GC columns.
MDL - Minimum detection limit, **RL** - Reporting limit
D1 - Sample was Decanted (Dissolved)

Positive Results Only Summary

23E1424-03 (Surface Water) Sample Name: SW-2

EPA 200.7 - Total Metals

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed
Calcium	64.6		0.256	1.00	mg/L	1	6/7/23 14:56
Magnesium	3.82		0.681	2.00	mg/L	1	6/7/23 14:56

SM 2550 B-10 - General Chemistry

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed
Temp at time of pH, °C	15.1		1.00	1.00	°C	1	5/31/23 18:43

SM 4500-H B-11 - General Chemistry

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed
pH	7.11	H	0.0100	0.0100	pH Units	1	5/31/23 18:42

SM 2340 B-11 - Total Metals

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed
Hardness	177		0.640	2.50	mg/L	1	6/7/23 14:56

23E1424-04 (Soil) Sample Name: SED-2

SW 846 7473 - Total Metals

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed
Mercury	0.0580		0.00718	0.0287	mg/kg dry	1	6/6/23 14:55

SW 846 6010D - Total Metals

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed
Arsenic	3.41		0.126	1.77	mg/kg dry	1	6/7/23 12:18
Lead	20.8		0.148	1.77	mg/kg dry	1	6/7/23 12:18

SM 2550 B-10 - General Chemistry

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed
Temp at time of pH, °C	19.4		1.00	1.00	°C	1	6/1/23 12:56

SM 2580 (mod) - General Chemistry

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed
Redox Potential	189		-1000	-1000	mV	1	6/1/23 12:54

SW 846 9045D - General Chemistry

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed
pH	5.42		0.0100	0.0100	pH Units	1	6/1/23 12:55

23E1424-05 (Surface Water) Sample Name: SW-3

ND - Indicates compound analyzed for but not detected
J - Indicates estimated value
B - Indicates compound found in associated blank
E - Concentration exceeds highest calibration standard
D - Indicates result is based on a dilution
H - Indicates a Hold Time violation
P - Greater than 25% diff. between 2 GC columns.
MDL - Minimum detection limit, **RL** - Reporting limit
D1 - Sample was Decanted (Dissolved)

Positive Results Only Summary

23E1424-05 (Surface Water) Sample Name: SW-3

EPA 200.7 - Total Metals

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed
Calcium	72.0		0.256	1.00	mg/L	1	6/7/23 14:59
Magnesium	3.88		0.681	2.00	mg/L	1	6/7/23 14:59

SM 2550 B-10 - General Chemistry

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed
Temp at time of pH, °C	15.7		1.00	1.00	°C	1	5/31/23 18:43

SM 4500-H B-11 - General Chemistry

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed
pH	7.19	H	0.0100	0.0100	pH Units	1	5/31/23 18:42

SM 2340 B-11 - Total Metals

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed
Hardness	196		0.640	2.50	mg/L	1	6/7/23 14:59

23E1424-06 (Soil) Sample Name: SED-3

SW 846 7473 - Total Metals

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed
Mercury	0.0266		0.00631	0.0252	mg/kg dry	1	6/6/23 14:55

SW 846 6010D - Total Metals

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed
Lead	6.33		0.130	1.55	mg/kg dry	1	6/7/23 12:20

SM 2550 B-10 - General Chemistry

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed
Temp at time of pH, °C	19.7		1.00	1.00	°C	1	6/1/23 12:56

SM 2580 (mod) - General Chemistry

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed
Redox Potential	142		-1000	-1000	mV	1	6/1/23 12:54

SW 846 9045D - General Chemistry

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed
pH	7.92		0.0100	0.0100	pH Units	1	6/1/23 12:55

23E1424-07 (Surface Water) Sample Name: SW-4

EPA 200.7 - Total Metals

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed

ND - Indicates compound analyzed for but not detected
J - Indicates estimated value
B - Indicates compound found in associated blank
E - Concentration exceeds highest calibration standard
D - Indicates result is based on a dilution
H - Indicates a Hold Time violation
P - Greater than 25% diff. between 2 GC columns.
MDL - Minimum detection limit, **RL** - Reporting limit
D1 - Sample was Decanted (Dissolved)

Positive Results Only Summary

23E1424-07 (Surface Water) Sample Name: SW-4

EPA 200.7 - Total Metals (con't)

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed
Calcium	96.5		0.256	1.00	mg/L	1	6/7/23 15:01
Magnesium	4.24		0.681	2.00	mg/L	1	6/7/23 15:01

SM 2550 B-10 - General Chemistry

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed
Temp at time of pH, °C	15.7		1.00	1.00	°C	1	5/31/23 18:43

SM 4500-H B-11 - General Chemistry

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed
pH	7.19	H	0.0100	0.0100	pH Units	1	5/31/23 18:42

SM 2340 B-11 - Total Metals

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed
Hardness	259		0.640	2.50	mg/L	1	6/7/23 15:01

23E1424-08 (Soil) Sample Name: SED-4

SW 846 7473 - Total Metals

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed
Mercury	0.0426		0.00586	0.0234	mg/kg dry	1	6/6/23 14:55

SW 846 6010D - Total Metals

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed
Arsenic	4.03		0.103	1.45	mg/kg dry	1	6/7/23 12:23
Lead	4.79		0.121	1.45	mg/kg dry	1	6/7/23 12:23

SW 846 8081B - Pesticides

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed
4,4'-DDD	0.00448		0.000697	0.00152	mg/kg dry	1	6/8/23 23:42
4,4'-DDE	0.00555		0.000833	0.00152	mg/kg dry	1	6/8/23 23:42

SM 2550 B-10 - General Chemistry

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed
Temp at time of pH, °C	19.5		1.00	1.00	°C	1	6/1/23 12:56

SM 2580 (mod) - General Chemistry

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed
Redox Potential	149		-1000	-1000	mV	1	6/1/23 12:54

SW 846 9045D - General Chemistry

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed

ND - Indicates compound analyzed for but not detected
J - Indicates estimated value
B - Indicates compound found in associated blank
E - Concentration exceeds highest calibration standard
D - Indicates result is based on a dilution
H - Indicates a Hold Time violation
P - Greater than 25% diff. between 2 GC columns.
MDL - Minimum detection limit, **RL** - Reporting limit
D1 - Sample was Decanted (Dissolved)

Positive Results Only Summary

23E1424-08 (Soil) Sample Name: SED-4

SW 846 9045D - General Chemistry (con't)

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed
pH	7.34		0.0100	0.0100	pH Units	1	6/1/23 12:55

23E1424-09 (Surface Water) Sample Name: SW-5

EPA 200.7 - Total Metals

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed
Calcium	81.3		0.256	1.00	mg/L	1	6/7/23 15:03
Magnesium	4.13		0.681	2.00	mg/L	1	6/7/23 15:03

SM 2550 B-10 - General Chemistry

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed
Temp at time of pH, °C	15.7		1.00	1.00	°C	1	5/31/23 18:43

SM 4500-H B-11 - General Chemistry

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed
pH	7.15	H	0.0100	0.0100	pH Units	1	5/31/23 18:42

SM 2340 B-11 - Total Metals

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed
Hardness	220		0.640	2.50	mg/L	1	6/7/23 15:03

23E1424-10 (Soil) Sample Name: SED-5

SW 846 7473 - Total Metals

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed
Mercury	0.0603		0.00685	0.0274	mg/kg dry	1	6/6/23 14:55

SW 846 6010D - Total Metals

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed
Arsenic	3.10		0.117	1.64	mg/kg dry	1	6/7/23 12:25
Lead	11.3		0.137	1.64	mg/kg dry	1	6/7/23 12:25

SM 2550 B-10 - General Chemistry

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed
Temp at time of pH, °C	19.6		1.00	1.00	°C	1	6/1/23 12:56

SM 2580 (mod) - General Chemistry

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed
Redox Potential	153		-1000	-1000	mV	1	6/1/23 12:54

ND - Indicates compound analyzed for but not detected
J - Indicates estimated value
B - Indicates compound found in associated blank
E - Concentration exceeds highest calibration standard
D - Indicates result is based on a dilution
H - Indicates a Hold Time violation
P - Greater than 25% diff. between 2 GC columns.
MDL - Minimum detection limit, **RL** - Reporting limit
D1 - Sample was Decanted (Dissolved)

Positive Results Only Summary

23E1424-10 (Soil) Sample Name: SED-5

SW 846 9045D - General Chemistry

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed
pH	7.29		0.0100	0.0100	pH Units	1	6/1/23 12:55

23E1424-11 (Surface Water) Sample Name: SW-6

EPA 200.7 - Total Metals

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed
Calcium	35.5		0.256	1.00	mg/L	1	6/7/23 15:05

SM 2550 B-10 - General Chemistry

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed
Temp at time of pH, °C	15.9		1.00	1.00	°C	1	5/31/23 18:43

SM 4500-H B-11 - General Chemistry

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed
pH	8.83	H	0.0100	0.0100	pH Units	1	5/31/23 18:42

SM 2340 B-11 - Total Metals

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed
Hardness	88.8		0.640	2.50	mg/L	1	6/7/23 15:05

23E1424-12 (Soil) Sample Name: SED-6

SW 846 7473 - Total Metals

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed
Mercury	0.136		0.00850	0.0340	mg/kg dry	1	6/6/23 14:56

SW 846 6010D - Total Metals

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed
Arsenic	6.57		0.153	2.15	mg/kg dry	1	6/7/23 12:27
Lead	109		0.179	2.15	mg/kg dry	1	6/7/23 12:27

SW 846 8081B - Pesticides

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed
4,4'-DDD	0.00742		0.00101	0.00221	mg/kg dry	1	6/9/23 0:19
4,4'-DDT [2C]	0.00475		0.00156	0.00221	mg/kg dry	1	6/9/23 0:19

SM 2550 B-10 - General Chemistry

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed
Temp at time of pH, °C	19.6		1.00	1.00	°C	1	6/1/23 12:56

ND - Indicates compound analyzed for but not detected
J - Indicates estimated value
B - Indicates compound found in associated blank
E - Concentration exceeds highest calibration standard
D - Indicates result is based on a dilution
H - Indicates a Hold Time violation
P - Greater than 25% diff. between 2 GC columns.
MDL - Minimum detection limit, **RL** - Reporting limit
D1 - Sample was Decanted (Dissolved)

Positive Results Only Summary

23E1424-12 (Soil) Sample Name: SED-6

SM 2580 (mod) - General Chemistry

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed
Redox Potential	142		-1000	-1000	mV	1	6/1/23 12:54

SW 846 9045D - General Chemistry

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed
pH	5.70		0.0100	0.0100	pH Units	1	6/1/23 12:55

23E1424-13 (Surface Water) Sample Name: SW-7

EPA 200.7 - Total Metals

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed
Calcium	93.9		0.256	1.00	mg/L	1	6/7/23 15:07
Magnesium	5.28		0.681	2.00	mg/L	1	6/7/23 15:07

SM 2550 B-10 - General Chemistry

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed
Temp at time of pH, °C	16.8		1.00	1.00	°C	1	5/31/23 18:43

SM 4500-H B-11 - General Chemistry

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed
pH	7.12	H	0.0100	0.0100	pH Units	1	5/31/23 18:42

SM 2340 B-11 - Total Metals

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed
Hardness	256		0.640	2.50	mg/L	1	6/7/23 15:07

23E1424-14 (Soil) Sample Name: SED-7

SW 846 6010D - Total Metals

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed
Lead	14.8		0.130	1.56	mg/kg dry	1	6/7/23 12:32

SM 2550 B-10 - General Chemistry

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed
Temp at time of pH, °C	19.7		1.00	1.00	°C	1	6/1/23 12:56

SM 2580 (mod) - General Chemistry

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed
Redox Potential	147		-1000	-1000	mV	1	6/1/23 12:54

SW 846 9045D - General Chemistry

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed

ND - Indicates compound analyzed for but not detected
J - Indicates estimated value
B - Indicates compound found in associated blank
E - Concentration exceeds highest calibration standard
D - Indicates result is based on a dilution
H - Indicates a Hold Time violation
P - Greater than 25% diff. between 2 GC columns.
MDL - Minimum detection limit, **RL** - Reporting limit
D1 - Sample was Decanted (Dissolved)

Positive Results Only Summary

23E1424-14 (Soil) Sample Name: SED-7

SW 846 9045D - General Chemistry (con't)

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed
pH	6.80		0.0100	0.0100	pH Units	1	6/1/23 12:55

23E1424-16 (Soil) Sample Name: SED-1A

SW 846 7473 - Total Metals

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed
Mercury	0.357		0.00918	0.0367	mg/kg dry	1	6/15/23 10:38

SW 846 6010D - Total Metals

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed
Arsenic	7.31		0.160	2.25	mg/kg dry	1	6/18/23 9:58
Lead	68.1		0.188	2.25	mg/kg dry	1	6/18/23 9:58

SW 846 8081B - Pesticides

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed
4,4'-DDD [2C]	0.00521		0.00109	0.00239	mg/kg dry	1	6/13/23 21:39
4,4'-DDE	0.00274		0.00130	0.00239	mg/kg dry	1	6/13/23 21:39
4,4'-DDT	0.00204	J	0.00168	0.00239	mg/kg dry	1	6/13/23 21:39

SM 2550 B-10 - General Chemistry

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed
Temp at time of pH, °C	20.4		1.00	1.00	°C	1	6/15/23 16:14

SM 2580 (mod) - General Chemistry

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed
Redox Potential	190		-1000	-1000	mV	1	6/15/23 14:48

SW 846 9045D - General Chemistry

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed
pH	7.40		0.0100	0.0100	pH Units	1	6/15/23 14:47

23E1424-17 (Soil) Sample Name: SED-4A

SW 846 7473 - Total Metals

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed
Mercury	0.159		0.00647	0.0259	mg/kg dry	1	6/15/23 10:39

SW 846 6010D - Total Metals

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed
Arsenic	4.20		0.116	1.63	mg/kg dry	1	6/18/23 10:00
Lead	13.0		0.136	1.63	mg/kg dry	1	6/18/23 10:00

ND - Indicates compound analyzed for but not detected
J - Indicates estimated value
B - Indicates compound found in associated blank
E - Concentration exceeds highest calibration standard
D - Indicates result is based on a dilution
H - Indicates a Hold Time violation
P - Greater than 25% diff. between 2 GC columns.
MDL - Minimum detection limit, **RL** - Reporting limit
D1 - Sample was Decanted (Dissolved)

Positive Results Only Summary

23E1424-17 (Soil) Sample Name: SED-4A

SW 846 8081B - Pesticides

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed
4,4'-DDD	0.0122		0.000770	0.00168	mg/kg dry	1	6/13/23 22:01
4,4'-DDE	0.0128		0.000920	0.00168	mg/kg dry	1	6/13/23 22:01

SM 2550 B-10 - General Chemistry

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed
Temp at time of pH, °C	20.6		1.00	1.00	°C	1	6/15/23 16:14

SM 2580 (mod) - General Chemistry

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed
Redox Potential	209		-1000	-1000	mV	1	6/15/23 14:48

SW 846 9045D - General Chemistry

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed
pH	7.44		0.0100	0.0100	pH Units	1	6/15/23 14:47

23E1424-18 (Soil) Sample Name: SED-6A

SW 846 7473 - Total Metals

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed
Mercury	0.0821		0.00940	0.0376	mg/kg dry	1	6/15/23 10:40

SW 846 6010D - Total Metals

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed
Arsenic	6.22		0.166	2.33	mg/kg dry	1	6/18/23 10:02
Lead	289		0.194	2.33	mg/kg dry	1	6/18/23 10:02

SW 846 8081B - Pesticides

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed
4,4'-DDD [2C]	0.00305		0.00112	0.00244	mg/kg dry	1	6/13/23 22:23
4,4'-DDE	0.00297		0.00134	0.00244	mg/kg dry	1	6/13/23 22:23

SM 2550 B-10 - General Chemistry

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed
Temp at time of pH, °C	20.5		1.00	1.00	°C	1	6/15/23 16:14

SM 2580 (mod) - General Chemistry

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed
Redox Potential	212		-1000	-1000	mV	1	6/15/23 14:48

SW 846 9045D - General Chemistry

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed

ND - Indicates compound analyzed for but not detected
J - Indicates estimated value
B - Indicates compound found in associated blank
E - Concentration exceeds highest calibration standard
D - Indicates result is based on a dilution
H - Indicates a Hold Time violation
P - Greater than 25% diff. between 2 GC columns.
MDL - Minimum detection limit, **RL** - Reporting limit
D1 - Sample was Decanted (Dissolved)

Positive Results Only Summary

23E1424-18 (Soil) Sample Name: **SED-6A**

SW 846 9045D - General Chemistry (con't)

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed
pH	7.20		0.0100	0.0100	pH Units	1	6/15/23 14:47

ND - Indicates compound analyzed for but not detected
J - Indicates estimated value
B - Indicates compound found in associated blank
E - Concentration exceeds highest calibration standard

D - Indicates result is based on a dilution
H - Indicates a Hold Time violation
P - Greater than 25% diff. between 2 GC columns.
MDL - Minimum detection limit, **RL** - Reporting limit
D1 - Sample was Decanted (Dissolved)

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All Results Summary

Client: Dynamic Earth LLC
Project: Turtle Mill Brook-Eco. Evaluation
Work Order: 23E1424
Date to Lab: 5/31/2023 4:30:00PM

23E1424-01 (Surface Water) Sample Name: **SW-1** Collected: **5/30/2023 11:20:00AM**

EPA 245.1 - Total Metals

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed
Mercury	ND	U	0.000183	0.000200	mg/L	1	6/5/23 15:11

EPA 200.7 - Total Metals

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed
Calcium	**66.4**		**0.256**	**1.00**	**mg/L**	**1**	**6/7/23 14:54**
Magnesium	**3.89**		**0.681**	**2.00**	**mg/L**	**1**	**6/7/23 14:54**

EPA 200.8 - Total Metals

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed
Arsenic	ND	U	0.000272	0.00200	mg/L	1	6/9/23 20:05
Lead	ND	U	0.000338	0.00200	mg/L	1	6/9/23 20:05

EPA 200.8 - Dissolved Metals

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed
Arsenic	ND	U	0.000272	0.00200	mg/L	1	6/9/23 17:27
Lead	ND	U	0.000338	0.00200	mg/L	1	6/9/23 17:27

SW 846 8081B - Pesticides

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed
4,4'-DDD	ND	U	0.000378	0.0200	ug/L	1	6/7/23 0:56
4,4'-DDE	ND	U	0.000234	0.0200	ug/L	1	6/7/23 0:56
4,4'-DDT	ND	U	0.000319	0.0200	ug/L	1	6/7/23 0:56
Aldrin	ND	U	0.000527	0.0200	ug/L	1	6/7/23 0:56
alpha-BHC	ND	U	0.000255	0.0200	ug/L	1	6/7/23 0:56
beta-BHC	ND	U	0.000371	0.0200	ug/L	1	6/7/23 0:56
Chlordane	ND	U	0.000327	0.0500	ug/L	1	6/7/23 0:56
delta-BHC	ND	U	0.000320	0.0200	ug/L	1	6/7/23 0:56
Dieldrin	ND	U	0.000271	0.0200	ug/L	1	6/7/23 0:56
Endosulfan I	ND	U	0.000380	0.0200	ug/L	1	6/7/23 0:56
Endosulfan II	ND	U	0.000254	0.0200	ug/L	1	6/7/23 0:56
Endosulfan sulfate	ND	U	0.000138	0.0200	ug/L	1	6/7/23 0:56
Endrin	ND	U	0.000229	0.0200	ug/L	1	6/7/23 0:56
Endrin aldehyde	ND	U	0.000318	0.0200	ug/L	1	6/7/23 0:56
Endrin ketone	ND	U	0.000203	0.0200	ug/L	1	6/7/23 0:56
gamma-BHC (Lindane)	ND	U	0.000241	0.0200	ug/L	1	6/7/23 0:56
Heptachlor	ND	U	0.000563	0.0200	ug/L	1	6/7/23 0:56
Heptachlor Epoxide	ND	U	0.000302	0.0200	ug/L	1	6/7/23 0:56
Methoxychlor	ND	U	0.000343	0.0200	ug/L	1	6/7/23 0:56
Toxaphene	ND	U	0.0237	0.200	ug/L	1	6/7/23 0:56

ND, U - Indicates compound analyzed for but not detected
J - Indicates estimated value
B - Indicates compound found in associated blank
E - Concentration exceeds highest calibration standard
D - Indicates result is based on a dilution
H - Indicates a Hold Time violation
P - Greater than 25% diff. between 2 GC columns.
MDL - Minimum detection limit, **RL** - Reporting limit
D1 - Sample was Decanted (Dissolved)

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All Results Summary

Client: Dynamic Earth LLC **Work Order:** 23E1424
Project: Turtle Mill Brook-Eco. Evaluation **Date to Lab:** 5/31/2023 4:30:00PM

23E1424-01 (Surface Water) Sample Name: SW-1 Collected: 5/30/2023 11:20:00AM

SM 2550 B-10 - General Chemistry

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed
Temp at time of pH, °C	**15.9**		**1.00**	**1.00**	**°C**	**1**	**5/31/23 18:43**

SM 4500-H B-11 - General Chemistry

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed
pH	**7.06**	H	**0.0100**	**0.0100**	**pH Units**	**1**	**5/31/23 18:42**

SM 2340 B-11 - Total Metals

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed
Hardness	**182**		**0.640**	**2.50**	**mg/L**	**1**	**6/7/23 14:54**

23E1424-02 (Soil) Sample Name: SED-1 Collected: 5/30/2023 11:30:00AM

SW 846 7473 - Total Metals

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed
Mercury	**0.290**		**0.00838**	**0.0335**	**mg/kg**	**1**	**6/6/23 14:54**

SW 846 6010D - Total Metals

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed
Arsenic	ND	U	0.142	2.00	mg/kg	1	6/7/23 12:16
Lead	**13.2**		**0.167**	**2.00**	**mg/kg**	**1**	**6/7/23 12:16**

SW 846 8081B - Pesticides

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed
4,4'-DDD	**0.00848**		**0.000998**	**0.00218**	**mg/kg**	**1**	**6/8/23 22:48**
4,4'-DDE	**0.00382**		**0.00119**	**0.00218**	**mg/kg**	**1**	**6/8/23 22:48**
4,4'-DDT	ND	U	0.00154	0.00218	mg/kg	1	6/8/23 22:48
Aldrin	ND	U	0.00103	0.00218	mg/kg	1	6/8/23 22:48
alpha-BHC	ND	U	0.000649	0.00218	mg/kg	1	6/8/23 22:48
beta-BHC	ND	U	0.00104	0.00218	mg/kg	1	6/8/23 22:48
Chlordane	ND	U	0.000969	0.00218	mg/kg	1	6/8/23 22:48
delta-BHC	ND	U	0.00101	0.00218	mg/kg	1	6/8/23 22:48
Dieldrin	ND	U	0.00114	0.00218	mg/kg	1	6/8/23 22:48
Endosulfan I	ND	U	0.00103	0.00218	mg/kg	1	6/8/23 22:48
Endosulfan II	ND	U	0.000991	0.00218	mg/kg	1	6/8/23 22:48
Endosulfan sulfate	ND	U	0.000820	0.00218	mg/kg	1	6/8/23 22:48
Endosulfans, Total (alpha and beta)	ND	U	0.000991	0.00218	mg/kg	1	6/8/23 22:48
Endrin	ND	U	0.000753	0.00218	mg/kg	1	6/8/23 22:48

ND, U - Indicates compound analyzed for but not detected
J - Indicates estimated value
B - Indicates compound found in associated blank
E - Concentration exceeds highest calibration standard
D - Indicates result is based on a dilution
H - Indicates a Hold Time violation
P - Greater than 25% diff. between 2 GC columns.
MDL - Minimum detection limit, **RL** - Reporting limit
D1 - Sample was Decanted (Dissolved)

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All Results Summary

Client: Dynamic Earth LLC **Work Order:** 23E1424
Project: Turtle Mill Brook-Eco. Evaluation **Date to Lab:** 5/31/2023 4:30:00PM

23E1424-02 (Soil) Sample Name: **SED-1** Collected: **5/30/2023 11:30:00AM**

SW 846 8081B - Pesticides (con't)

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed
Endrin aldehyde	ND	U	0.000868	0.00218	mg/kg	1	6/8/23 22:48
Endrin ketone	ND	U	0.000768	0.00218	mg/kg	1	6/8/23 22:48
gamma-BHC (Lindane)	ND	U	0.000691	0.00218	mg/kg	1	6/8/23 22:48
Heptachlor	ND	U	0.000583	0.00218	mg/kg	1	6/8/23 22:48
Heptachlor Epoxide	ND	U	0.00110	0.00218	mg/kg	1	6/8/23 22:48
Methoxychlor	ND	U	0.000639	0.00218	mg/kg	1	6/8/23 22:48
Toxaphene	ND	U	0.105	0.111	mg/kg	1	6/8/23 22:48

Gravimetric - General Chemistry

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed
Percent Solids	**59.6**				**%**	**1**	**6/1/23 10:54**

SM 2550 B-10 - General Chemistry

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed
Temp at time of pH, °C	**19.4**		**1.00**	**1.00**	**°C**	**1**	**6/1/23 12:56**

SM 2580 (mod) - General Chemistry

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed
Redox Potential	**191**		**-1000**	**-1000**	**mV**	**1**	**6/1/23 12:54**

SW 846 9045D - General Chemistry

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed
pH	**5.56**		**0.0100**	**0.0100**	**pH Units**	**1**	**6/1/23 12:55**

23E1424-03 (Surface Water) Sample Name: **SW-2** Collected: **5/30/2023 11:45:00AM**

EPA 245.1 - Total Metals

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed
Mercury	ND	U	0.000183	0.000200	mg/L	1	6/5/23 14:36

EPA 200.7 - Total Metals

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed
Calcium	**64.6**		**0.256**	**1.00**	**mg/L**	**1**	**6/7/23 14:56**
Magnesium	**3.82**		**0.681**	**2.00**	**mg/L**	**1**	**6/7/23 14:56**

ND, U - Indicates compound analyzed for but not detected
J - Indicates estimated value
B - Indicates compound found in associated blank
E - Concentration exceeds highest calibration standard
D - Indicates result is based on a dilution
H - Indicates a Hold Time violation
P - Greater than 25% diff. between 2 GC columns.
MDL - Minimum detection limit, **RL** - Reporting limit
D1 - Sample was Decanted (Dissolved)

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All Results Summary

Client: Dynamic Earth LLC
Project: Turtle Mill Brook-Eco. Evaluation
Work Order: 23E1424
Date to Lab: 5/31/2023 4:30:00PM

23E1424-03 (Surface Water) Sample Name: **SW-2** Collected: **5/30/2023 11:45:00AM**

EPA 200.8 - Total Metals

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed
Arsenic	ND	U	0.00136	0.0100	mg/L	5	6/9/23 11:20
Lead	ND	U	0.00169	0.0100	mg/L	5	6/9/23 11:20

EPA 200.8 - Dissolved Metals

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed
Arsenic	ND	U	0.000272	0.00200	mg/L	1	6/9/23 17:34
Lead	ND	U	0.000338	0.00200	mg/L	1	6/9/23 17:34

SW 846 8081B - Pesticides

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed
4,4'-DDD	ND	U	0.000378	0.0200	ug/L	1	6/8/23 20:12
4,4'-DDE	ND	U	0.000234	0.0200	ug/L	1	6/8/23 20:12
4,4'-DDT	ND	U	0.000319	0.0200	ug/L	1	6/8/23 20:12
Aldrin	ND	U	0.000527	0.0200	ug/L	1	6/8/23 20:12
alpha-BHC	ND	U	0.000255	0.0200	ug/L	1	6/8/23 20:12
beta-BHC	ND	U	0.000371	0.0200	ug/L	1	6/8/23 20:12
Chlordane	ND	U	0.000327	0.0500	ug/L	1	6/8/23 20:12
delta-BHC	ND	U	0.000320	0.0200	ug/L	1	6/8/23 20:12
Dieldrin	ND	U	0.000271	0.0200	ug/L	1	6/8/23 20:12
Endosulfan I	ND	U	0.000380	0.0200	ug/L	1	6/8/23 20:12
Endosulfan II	ND	U	0.000254	0.0200	ug/L	1	6/8/23 20:12
Endosulfan sulfate	ND	U	0.000138	0.0200	ug/L	1	6/8/23 20:12
Endrin	ND	U	0.000229	0.0200	ug/L	1	6/8/23 20:12
Endrin aldehyde	ND	U	0.000318	0.0200	ug/L	1	6/8/23 20:12
Endrin ketone	ND	U	0.000203	0.0200	ug/L	1	6/8/23 20:12
gamma-BHC (Lindane)	ND	U	0.000241	0.0200	ug/L	1	6/8/23 20:12
Heptachlor	ND	U	0.000563	0.0200	ug/L	1	6/8/23 20:12
Heptachlor Epoxide	ND	U	0.000302	0.0200	ug/L	1	6/8/23 20:12
Methoxychlor	ND	U	0.000343	0.0200	ug/L	1	6/8/23 20:12
Toxaphene	ND	U	0.0237	0.200	ug/L	1	6/8/23 20:12

SM 2550 B-10 - General Chemistry

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed
Temp at time of pH, °C	**15.1**		**1.00**	**1.00**	**°C**	**1**	**5/31/23 18:43**

ND, U - Indicates compound analyzed for but not detected
J - Indicates estimated value
B - Indicates compound found in associated blank
E - Concentration exceeds highest calibration standard
D - Indicates result is based on a dilution
H - Indicates a Hold Time violation
P - Greater than 25% diff. between 2 GC columns.
MDL - Minimum detection limit, **RL** - Reporting limit
D1 - Sample was Decanted (Dissolved)

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All Results Summary

Client: Dynamic Earth LLC
Project: Turtle Mill Brook-Eco. Evaluation
Work Order: 23E1424
Date to Lab: 5/31/2023 4:30:00PM

23E1424-03 (Surface Water) Sample Name: **SW-2** Collected: **5/30/2023 11:45:00AM**

SM 4500-H B-11 - General Chemistry

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed
pH	**7.11**	H	**0.0100**	**0.0100**	**pH Units**	**1**	**5/31/23 18:42**

SM 2340 B-11 - Total Metals

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed
Hardness	**177**		**0.640**	**2.50**	**mg/L**	**1**	**6/7/23 14:56**

23E1424-04 (Soil) Sample Name: **SED-2** Collected: **5/30/2023 11:50:00AM**

SW 846 7473 - Total Metals

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed
Mercury	**0.0580**		**0.00718**	**0.0287**	**mg/kg**	**1**	**6/6/23 14:55**

SW 846 6010D - Total Metals

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed
Arsenic	**3.41**		**0.126**	**1.77**	**mg/kg**	**1**	**6/7/23 12:18**
Lead	**20.8**		**0.148**	**1.77**	**mg/kg**	**1**	**6/7/23 12:18**

SW 846 8081B - Pesticides

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed
4,4'-DDD	ND	U	0.000855	0.00187	mg/kg	1	6/8/23 23:06
4,4'-DDE	ND	U	0.00102	0.00187	mg/kg	1	6/8/23 23:06
4,4'-DDT	ND	U	0.00132	0.00187	mg/kg	1	6/8/23 23:06
Aldrin	ND	U	0.000885	0.00187	mg/kg	1	6/8/23 23:06
alpha-BHC	ND	U	0.000556	0.00187	mg/kg	1	6/8/23 23:06
beta-BHC	ND	U	0.000892	0.00187	mg/kg	1	6/8/23 23:06
Chlordane	ND	U	0.000830	0.00187	mg/kg	1	6/8/23 23:06
delta-BHC	ND	U	0.000868	0.00187	mg/kg	1	6/8/23 23:06
Dieldrin	ND	U	0.000977	0.00187	mg/kg	1	6/8/23 23:06
Endosulfan I	ND	U	0.000882	0.00187	mg/kg	1	6/8/23 23:06
Endosulfan II	ND	U	0.000849	0.00187	mg/kg	1	6/8/23 23:06
Endosulfan sulfate	ND	U	0.000703	0.00187	mg/kg	1	6/8/23 23:06
Endosulfans, Total (alpha and beta)	ND	U	0.000849	0.00187	mg/kg	1	6/8/23 23:06
Endrin	ND	U	0.000645	0.00187	mg/kg	1	6/8/23 23:06
Endrin aldehyde	ND	U	0.000744	0.00187	mg/kg	1	6/8/23 23:06
Endrin ketone	ND	U	0.000658	0.00187	mg/kg	1	6/8/23 23:06
gamma-BHC (Lindane)	ND	U	0.000592	0.00187	mg/kg	1	6/8/23 23:06
Heptachlor	ND	U	0.000500	0.00187	mg/kg	1	6/8/23 23:06

ND, U - Indicates compound analyzed for but not detected
J - Indicates estimated value
B - Indicates compound found in associated blank
E - Concentration exceeds highest calibration standard
D - Indicates result is based on a dilution
H - Indicates a Hold Time violation
P - Greater than 25% diff. between 2 GC columns.
MDL - Minimum detection limit, **RL** - Reporting limit
D1 - Sample was Decanted (Dissolved)

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All Results Summary

Client: Dynamic Earth LLC **Work Order:** 23E1424
Project: Turtle Mill Brook-Eco. Evaluation **Date to Lab:** 5/31/2023 4:30:00PM

23E1424-04 (Soil) Sample Name: **SED-2** Collected: **5/30/2023 11:50:00AM**

SW 846 8081B - Pesticides (con't)

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed
Heptachlor Epoxide	ND	U	0.000942	0.00187	mg/kg	1	6/8/23 23:06
Methoxychlor	ND	U	0.000547	0.00187	mg/kg	1	6/8/23 23:06
Toxaphene	ND	U	0.0900	0.0948	mg/kg	1	6/8/23 23:06

Gravimetric - General Chemistry

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed
Percent Solids	**69.6**				**%**	**1**	**6/1/23 10:54**

SM 2550 B-10 - General Chemistry

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed
Temp at time of pH, °C	**19.4**		**1.00**	**1.00**	**°C**	**1**	**6/1/23 12:56**

SM 2580 (mod) - General Chemistry

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed
Redox Potential	**189**		**-1000**	**-1000**	**mV**	**1**	**6/1/23 12:54**

SW 846 9045D - General Chemistry

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed
pH	**5.42**		**0.0100**	**0.0100**	**pH Units**	**1**	**6/1/23 12:55**

23E1424-05 (Surface Water) Sample Name: **SW-3** Collected: **5/30/2023 12:00:00PM**

EPA 245.1 - Total Metals

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed
Mercury	ND	U	0.000183	0.000200	mg/L	1	6/5/23 15:13

EPA 200.7 - Total Metals

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed
Calcium	**72.0**		**0.256**	**1.00**	**mg/L**	**1**	**6/7/23 14:59**
Magnesium	**3.88**		**0.681**	**2.00**	**mg/L**	**1**	**6/7/23 14:59**

EPA 200.8 - Total Metals

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed
Arsenic	ND	U	0.000272	0.00200	mg/L	1	6/9/23 10:32
Lead	ND	U	0.000338	0.00200	mg/L	1	6/9/23 10:32

ND, U - Indicates compound analyzed for but not detected
J - Indicates estimated value
B - Indicates compound found in associated blank
E - Concentration exceeds highest calibration standard
D - Indicates result is based on a dilution
H - Indicates a Hold Time violation
P - Greater than 25% diff. between 2 GC columns.
MDL - Minimum detection limit, **RL** - Reporting limit
D1 - Sample was Decanted (Dissolved)

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All Results Summary

Client: Dynamic Earth LLC **Work Order:** 23E1424
Project: Turtle Mill Brook-Eco. Evaluation **Date to Lab:** 5/31/2023 4:30:00PM

23E1424-05 (Surface Water) Sample Name: **SW-3** Collected: **5/30/2023 12:00:00PM**

EPA 200.8 - Dissolved Metals

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed
Arsenic	ND	U	0.000272	0.00200	mg/L	1	6/9/23 17:37
Lead	ND	U	0.000338	0.00200	mg/L	1	6/9/23 17:37

SW 846 8081B - Pesticides

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed
4,4'-DDD	ND	U	0.000378	0.0200	ug/L	1	6/8/23 20:35
4,4'-DDE	ND	U	0.000234	0.0200	ug/L	1	6/8/23 20:35
4,4'-DDT	ND	U	0.000319	0.0200	ug/L	1	6/8/23 20:35
Aldrin	ND	U	0.000527	0.0200	ug/L	1	6/8/23 20:35
alpha-BHC	ND	U	0.000255	0.0200	ug/L	1	6/8/23 20:35
beta-BHC	ND	U	0.000371	0.0200	ug/L	1	6/8/23 20:35
Chlordane	ND	U	0.000327	0.0500	ug/L	1	6/8/23 20:35
delta-BHC	ND	U	0.000320	0.0200	ug/L	1	6/8/23 20:35
Dieldrin	ND	U	0.000271	0.0200	ug/L	1	6/8/23 20:35
Endosulfan I	ND	U	0.000380	0.0200	ug/L	1	6/8/23 20:35
Endosulfan II	ND	U	0.000254	0.0200	ug/L	1	6/8/23 20:35
Endosulfan sulfate	ND	U	0.000138	0.0200	ug/L	1	6/8/23 20:35
Endrin	ND	U	0.000229	0.0200	ug/L	1	6/8/23 20:35
Endrin aldehyde	ND	U	0.000318	0.0200	ug/L	1	6/8/23 20:35
Endrin ketone	ND	U	0.000203	0.0200	ug/L	1	6/8/23 20:35
gamma-BHC (Lindane)	ND	U	0.000241	0.0200	ug/L	1	6/8/23 20:35
Heptachlor	ND	U	0.000563	0.0200	ug/L	1	6/8/23 20:35
Heptachlor Epoxide	ND	U	0.000302	0.0200	ug/L	1	6/8/23 20:35
Methoxychlor	ND	U	0.000343	0.0200	ug/L	1	6/8/23 20:35
Toxaphene	ND	U	0.0237	0.200	ug/L	1	6/8/23 20:35

SM 2550 B-10 - General Chemistry

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed
Temp at time of pH, °C	**15.7**		**1.00**	**1.00**	**°C**	**1**	**5/31/23 18:43**

SM 4500-H B-11 - General Chemistry

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed
pH	**7.19**	H	**0.0100**	**0.0100**	**pH Units**	**1**	**5/31/23 18:42**

ND, U - Indicates compound analyzed for but not detected
J - Indicates estimated value
B - Indicates compound found in associated blank
E - Concentration exceeds highest calibration standard
D - Indicates result is based on a dilution
H - Indicates a Hold Time violation
P - Greater than 25% diff. between 2 GC columns.
MDL - Minimum detection limit, **RL** - Reporting limit
D1 - Sample was Decanted (Dissolved)

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Certified Environmental Testing

All Results Summary

Client: Dynamic Earth LLC **Work Order:** 23E1424
Project: Turtle Mill Brook-Eco. Evaluation **Date to Lab:** 5/31/2023 4:30:00PM

23E1424-05 (Surface Water) Sample Name: **SW-3** Collected: **5/30/2023 12:00:00PM**

SM 2340 B-11 - Total Metals

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed
Hardness	**196**		**0.640**	**2.50**	**mg/L**	**1**	**6/7/23 14:59**

23E1424-06 (Soil) Sample Name: **SED-3** Collected: **5/30/2023 12:05:00PM**

SW 846 7473 - Total Metals

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed
Mercury	**0.0266**		**0.00631**	**0.0252**	**mg/kg**	**1**	**6/6/23 14:55**

SW 846 6010D - Total Metals

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed
Arsenic	ND	U	0.111	1.55	mg/kg	1	6/7/23 12:20
Lead	**6.33**		**0.130**	**1.55**	**mg/kg**	**1**	**6/7/23 12:20**

SW 846 8081B - Pesticides

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed
4,4'-DDD	ND	U	0.000751	0.00164	mg/kg	1	6/8/23 23:24
4,4'-DDE	ND	U	0.000897	0.00164	mg/kg	1	6/8/23 23:24
4,4'-DDT	ND	U	0.00116	0.00164	mg/kg	1	6/8/23 23:24
Aldrin	ND	U	0.000777	0.00164	mg/kg	1	6/8/23 23:24
alpha-BHC	ND	U	0.000488	0.00164	mg/kg	1	6/8/23 23:24
beta-BHC	ND	U	0.000784	0.00164	mg/kg	1	6/8/23 23:24
Chlordane	ND	U	0.000729	0.00164	mg/kg	1	6/8/23 23:24
delta-BHC	ND	U	0.000762	0.00164	mg/kg	1	6/8/23 23:24
Dieldrin	ND	U	0.000858	0.00164	mg/kg	1	6/8/23 23:24
Endosulfan I	ND	U	0.000775	0.00164	mg/kg	1	6/8/23 23:24
Endosulfan II	ND	U	0.000746	0.00164	mg/kg	1	6/8/23 23:24
Endosulfan sulfate	ND	U	0.000617	0.00164	mg/kg	1	6/8/23 23:24
Endosulfans, Total (alpha and beta)	ND	U	0.000746	0.00164	mg/kg	1	6/8/23 23:24
Endrin	ND	U	0.000567	0.00164	mg/kg	1	6/8/23 23:24
Endrin aldehyde	ND	U	0.000654	0.00164	mg/kg	1	6/8/23 23:24
Endrin ketone	ND	U	0.000578	0.00164	mg/kg	1	6/8/23 23:24
gamma-BHC (Lindane)	ND	U	0.000520	0.00164	mg/kg	1	6/8/23 23:24
Heptachlor	ND	U	0.000439	0.00164	mg/kg	1	6/8/23 23:24
Heptachlor Epoxide	ND	U	0.000828	0.00164	mg/kg	1	6/8/23 23:24
Methoxychlor	ND	U	0.000481	0.00164	mg/kg	1	6/8/23 23:24
Toxaphene	ND	U	0.0790	0.0833	mg/kg	1	6/8/23 23:24

ND, U - Indicates compound analyzed for but not detected
J - Indicates estimated value
B - Indicates compound found in associated blank
E - Concentration exceeds highest calibration standard
D - Indicates result is based on a dilution
H - Indicates a Hold Time violation
P - Greater than 25% diff. between 2 GC columns.
MDL - Minimum detection limit, **RL** - Reporting limit
D1 - Sample was Decanted (Dissolved)

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Certified Environmental Testing

All Results Summary

Client: Dynamic Earth LLC **Work Order:** 23E1424
Project: Turtle Mill Brook-Eco. Evaluation **Date to Lab:** 5/31/2023 4:30:00PM

23E1424-06 (Soil) Sample Name: **SED-3** Collected: **5/30/2023 12:05:00PM**

Gravimetric - General Chemistry

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed
Percent Solids	**79.3**				**%**	**1**	**6/1/23 10:54**

SM 2550 B-10 - General Chemistry

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed
Temp at time of pH, °C	**19.7**		**1.00**	**1.00**	**°C**	**1**	**6/1/23 12:56**

SM 2580 (mod) - General Chemistry

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed
Redox Potential	**142**		**-1000**	**-1000**	**mV**	**1**	**6/1/23 12:54**

SW 846 9045D - General Chemistry

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed
pH	**7.92**		**0.0100**	**0.0100**	**pH Units**	**1**	**6/1/23 12:55**

23E1424-07 (Surface Water) Sample Name: **SW-4** Collected: **5/30/2023 12:25:00PM**

EPA 245.1 - Total Metals

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed
Mercury	ND	U	0.000183	0.000200	mg/L	1	6/5/23 15:16

EPA 200.7 - Total Metals

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed
Calcium	**96.5**		**0.256**	**1.00**	**mg/L**	**1**	**6/7/23 15:01**
Magnesium	**4.24**		**0.681**	**2.00**	**mg/L**	**1**	**6/7/23 15:01**

EPA 200.8 - Total Metals

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed
Arsenic	ND	U	0.000272	0.00200	mg/L	1	6/9/23 10:35
Lead	ND	U	0.000338	0.00200	mg/L	1	6/9/23 10:35

EPA 200.8 - Dissolved Metals

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed
Arsenic	ND	U	0.000272	0.00200	mg/L	1	6/9/23 17:40
Lead	ND	U	0.000338	0.00200	mg/L	1	6/9/23 17:40

ND, U - Indicates compound analyzed for but not detected
J - Indicates estimated value
B - Indicates compound found in associated blank
E - Concentration exceeds highest calibration standard
D - Indicates result is based on a dilution
H - Indicates a Hold Time violation
P - Greater than 25% diff. between 2 GC columns.
MDL - Minimum detection limit, **RL** - Reporting limit
D1 - Sample was Decanted (Dissolved)

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All Results Summary

Client: Dynamic Earth LLC **Work Order:** 23E1424
Project: Turtle Mill Brook-Eco. Evaluation **Date to Lab:** 5/31/2023 4:30:00PM

23E1424-07 (Surface Water) Sample Name: **SW-4** Collected: **5/30/2023 12:25:00PM**

SW 846 8081B - Pesticides

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed
4,4'-DDD	ND	U	0.000378	0.0200	ug/L	1	6/8/23 20:57
4,4'-DDE	ND	U	0.000234	0.0200	ug/L	1	6/8/23 20:57
4,4'-DDT	ND	U	0.000319	0.0200	ug/L	1	6/8/23 20:57
Aldrin	ND	U	0.000527	0.0200	ug/L	1	6/8/23 20:57
alpha-BHC	ND	U	0.000255	0.0200	ug/L	1	6/8/23 20:57
beta-BHC	ND	U	0.000371	0.0200	ug/L	1	6/8/23 20:57
Chlordane	ND	U	0.000327	0.0500	ug/L	1	6/8/23 20:57
delta-BHC	ND	U	0.000320	0.0200	ug/L	1	6/8/23 20:57
Dieldrin	ND	U	0.000271	0.0200	ug/L	1	6/8/23 20:57
Endosulfan I	ND	U	0.000380	0.0200	ug/L	1	6/8/23 20:57
Endosulfan II	ND	U	0.000254	0.0200	ug/L	1	6/8/23 20:57
Endosulfan sulfate	ND	U	0.000138	0.0200	ug/L	1	6/8/23 20:57
Endrin	ND	U	0.000229	0.0200	ug/L	1	6/8/23 20:57
Endrin aldehyde	ND	U	0.000318	0.0200	ug/L	1	6/8/23 20:57
Endrin ketone	ND	U	0.000203	0.0200	ug/L	1	6/8/23 20:57
gamma-BHC (Lindane)	ND	U	0.000241	0.0200	ug/L	1	6/8/23 20:57
Heptachlor	ND	U	0.000563	0.0200	ug/L	1	6/8/23 20:57
Heptachlor Epoxide	ND	U	0.000302	0.0200	ug/L	1	6/8/23 20:57
Methoxychlor	ND	U	0.000343	0.0200	ug/L	1	6/8/23 20:57
Toxaphene	ND	U	0.0237	0.200	ug/L	1	6/8/23 20:57

SM 2550 B-10 - General Chemistry

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed
Temp at time of pH, °C	**15.7**		**1.00**	**1.00**	**°C**	**1**	**5/31/23 18:43**

SM 4500-H B-11 - General Chemistry

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed
pH	**7.19**	H	**0.0100**	**0.0100**	**pH Units**	**1**	**5/31/23 18:42**

SM 2340 B-11 - Total Metals

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed
Hardness	**259**		**0.640**	**2.50**	**mg/L**	**1**	**6/7/23 15:01**

ND, U - Indicates compound analyzed for but not detected
J - Indicates estimated value
B - Indicates compound found in associated blank
E - Concentration exceeds highest calibration standard
D - Indicates result is based on a dilution
H - Indicates a Hold Time violation
P - Greater than 25% diff. between 2 GC columns.
MDL - Minimum detection limit, **RL** - Reporting limit
D1 - Sample was Decanted (Dissolved)

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Certified Environmental Testing

All Results Summary

Client: Dynamic Earth LLC **Work Order:** 23E1424
Project: Turtle Mill Brook-Eco. Evaluation **Date to Lab:** 5/31/2023 4:30:00PM

23E1424-08 (Soil) Sample Name: **SED-4** Collected: **5/30/2023 12:30:00PM**

SW 846 7473 - Total Metals

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed
Mercury	**0.0426**		**0.00586**	**0.0234**	**mg/kg**	**1**	**6/6/23 14:55**

SW 846 6010D - Total Metals

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed
Arsenic	**4.03**		**0.103**	**1.45**	**mg/kg**	**1**	**6/7/23 12:23**
Lead	**4.79**		**0.121**	**1.45**	**mg/kg**	**1**	**6/7/23 12:23**

SW 846 8081B - Pesticides

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed
4,4'-DDD	**0.00448**		**0.000697**	**0.00152**	**mg/kg**	**1**	**6/8/23 23:42**
4,4'-DDE	**0.00555**		**0.000833**	**0.00152**	**mg/kg**	**1**	**6/8/23 23:42**
4,4'-DDT	ND	U	0.00108	0.00152	mg/kg	1	6/8/23 23:42
Aldrin	ND	U	0.000722	0.00152	mg/kg	1	6/8/23 23:42
alpha-BHC	ND	U	0.000453	0.00152	mg/kg	1	6/8/23 23:42
beta-BHC	ND	U	0.000728	0.00152	mg/kg	1	6/8/23 23:42
Chlordane	ND	U	0.000677	0.00152	mg/kg	1	6/8/23 23:42
delta-BHC	ND	U	0.000708	0.00152	mg/kg	1	6/8/23 23:42
Dieldrin	ND	U	0.000797	0.00152	mg/kg	1	6/8/23 23:42
Endosulfan I	ND	U	0.000719	0.00152	mg/kg	1	6/8/23 23:42
Endosulfan II	ND	U	0.000692	0.00152	mg/kg	1	6/8/23 23:42
Endosulfan sulfate	ND	U	0.000573	0.00152	mg/kg	1	6/8/23 23:42
Endosulfans, Total (alpha and beta)	ND	U	0.000692	0.00152	mg/kg	1	6/8/23 23:42
Endrin	ND	U	0.000526	0.00152	mg/kg	1	6/8/23 23:42
Endrin aldehyde	ND	U	0.000607	0.00152	mg/kg	1	6/8/23 23:42
Endrin ketone	ND	U	0.000537	0.00152	mg/kg	1	6/8/23 23:42
gamma-BHC (Lindane)	ND	U	0.000483	0.00152	mg/kg	1	6/8/23 23:42
Heptachlor	ND	U	0.000408	0.00152	mg/kg	1	6/8/23 23:42
Heptachlor Epoxide	ND	U	0.000769	0.00152	mg/kg	1	6/8/23 23:42
Methoxychlor	ND	U	0.000446	0.00152	mg/kg	1	6/8/23 23:42
Toxaphene	ND	U	0.0734	0.0773	mg/kg	1	6/8/23 23:42

Gravimetric - General Chemistry

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed
Percent Solids	**85.4**				**%**	**1**	**6/1/23 10:54**

ND, U - Indicates compound analyzed for but not detected
J - Indicates estimated value
B - Indicates compound found in associated blank
E - Concentration exceeds highest calibration standard
D - Indicates result is based on a dilution
H - Indicates a Hold Time violation
P - Greater than 25% diff. between 2 GC columns.
MDL - Minimum detection limit, **RL** - Reporting limit
D1 - Sample was Decanted (Dissolved)

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Certified Environmental Testing

All Results Summary

Client: Dynamic Earth LLC **Work Order:** 23E1424
Project: Turtle Mill Brook-Eco. Evaluation **Date to Lab:** 5/31/2023 4:30:00PM

23E1424-08 (Soil) Sample Name: SED-4 Collected: 5/30/2023 12:30:00PM

SM 2550 B-10 - General Chemistry

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed
Temp at time of pH, °C	**19.5**		**1.00**	**1.00**	**°C**	**1**	**6/1/23 12:56**

SM 2580 (mod) - General Chemistry

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed
Redox Potential	**149**		**-1000**	**-1000**	**mV**	**1**	**6/1/23 12:54**

SW 846 9045D - General Chemistry

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed
pH	**7.34**		**0.0100**	**0.0100**	**pH Units**	**1**	**6/1/23 12:55**

23E1424-09 (Surface Water) Sample Name: SW-5 Collected: 5/30/2023 12:40:00PM

EPA 245.1 - Total Metals

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed
Mercury	ND	U	0.000183	0.000200	mg/L	1	6/5/23 15:18

EPA 200.7 - Total Metals

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed
Calcium	**81.3**		**0.256**	**1.00**	**mg/L**	**1**	**6/7/23 15:03**
Magnesium	**4.13**		**0.681**	**2.00**	**mg/L**	**1**	**6/7/23 15:03**

EPA 200.8 - Total Metals

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed
Arsenic	ND	U	0.000272	0.00200	mg/L	1	6/9/23 10:37
Lead	ND	U	0.000338	0.00200	mg/L	1	6/9/23 10:37

EPA 200.8 - Dissolved Metals

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed
Arsenic	ND	U	0.000272	0.00200	mg/L	1	6/9/23 17:42
Lead	ND	U	0.000338	0.00200	mg/L	1	6/9/23 17:42

SW 846 8081B - Pesticides

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed
4,4'-DDD	ND	U	0.000378	0.0200	ug/L	1	6/8/23 21:19
4,4'-DDE	ND	U	0.000234	0.0200	ug/L	1	6/8/23 21:19
4,4'-DDT	ND	U	0.000319	0.0200	ug/L	1	6/8/23 21:19
Aldrin	ND	U	0.000527	0.0200	ug/L	1	6/8/23 21:19
alpha-BHC	ND	U	0.000255	0.0200	ug/L	1	6/8/23 21:19

ND, U - Indicates compound analyzed for but not detected
J - Indicates estimated value
B - Indicates compound found in associated blank
E - Concentration exceeds highest calibration standard
D - Indicates result is based on a dilution
H - Indicates a Hold Time violation
P - Greater than 25% diff. between 2 GC columns.
MDL - Minimum detection limit, **RL** - Reporting limit
D1 - Sample was Decanted (Dissolved)

All Results Summary

Client: Dynamic Earth LLC
Project: Turtle Mill Brook-Eco. Evaluation
Work Order: 23E1424
Date to Lab: 5/31/2023 4:30:00PM

23E1424-09 (Surface Water) Sample Name: **SW-5** Collected: **5/30/2023 12:40:00PM**

SW 846 8081B - Pesticides (con't)

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed
beta-BHC	ND	U	0.000371	0.0200	ug/L	1	6/8/23 21:19
Chlordane	ND	U	0.000327	0.0500	ug/L	1	6/8/23 21:19
delta-BHC	ND	U	0.000320	0.0200	ug/L	1	6/8/23 21:19
Dieldrin	ND	U	0.000271	0.0200	ug/L	1	6/8/23 21:19
Endosulfan I	ND	U	0.000380	0.0200	ug/L	1	6/8/23 21:19
Endosulfan II	ND	U	0.000254	0.0200	ug/L	1	6/8/23 21:19
Endosulfan sulfate	ND	U	0.000138	0.0200	ug/L	1	6/8/23 21:19
Endrin	ND	U	0.000229	0.0200	ug/L	1	6/8/23 21:19
Endrin aldehyde	ND	U	0.000318	0.0200	ug/L	1	6/8/23 21:19
Endrin ketone	ND	U	0.000203	0.0200	ug/L	1	6/8/23 21:19
gamma-BHC (Lindane)	ND	U	0.000241	0.0200	ug/L	1	6/8/23 21:19
Heptachlor	ND	U	0.000563	0.0200	ug/L	1	6/8/23 21:19
Heptachlor Epoxide	ND	U	0.000302	0.0200	ug/L	1	6/8/23 21:19
Methoxychlor	ND	U	0.000343	0.0200	ug/L	1	6/8/23 21:19
Toxaphene	ND	U	0.0237	0.200	ug/L	1	6/8/23 21:19

SM 2550 B-10 - General Chemistry

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed
Temp at time of pH, °C	**15.7**		**1.00**	**1.00**	**°C**	**1**	**5/31/23 18:43**

SM 4500-H B-11 - General Chemistry

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed
pH	**7.15**	H	**0.0100**	**0.0100**	**pH Units**	**1**	**5/31/23 18:42**

SM 2340 B-11 - Total Metals

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed
Hardness	**220**		**0.640**	**2.50**	**mg/L**	**1**	**6/7/23 15:03**

ND, U - Indicates compound analyzed for but not detected
J - Indicates estimated value
B - Indicates compound found in associated blank
E - Concentration exceeds highest calibration standard
D - Indicates result is based on a dilution
H - Indicates a Hold Time violation
P - Greater than 25% diff. between 2 GC columns.
MDL - Minimum detection limit, **RL** - Reporting limit
D1 - Sample was Decanted (Dissolved)

APL
AQUA PRO-TECH LABORATORIES
Certified Environmental Testing

All Results Summary

Client: Dynamic Earth LLC
Project: Turtle Mill Brook-Eco. Evaluation
Work Order: 23E1424
Date to Lab: 5/31/2023 4:30:00PM

23E1424-10 (Soil) Sample Name: **SED-5** Collected: **5/30/2023 12:45:00PM**

SW 846 7473 - Total Metals

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed
Mercury	**0.0603**		**0.00685**	**0.0274**	**mg/kg**	**1**	**6/6/23 14:55**

SW 846 6010D - Total Metals

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed
Arsenic	**3.10**		**0.117**	**1.64**	**mg/kg**	**1**	**6/7/23 12:25**
Lead	**11.3**		**0.137**	**1.64**	**mg/kg**	**1**	**6/7/23 12:25**

SW 846 8081B - Pesticides

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed
4,4'-DDD	ND	U	0.000815	0.00178	mg/kg	1	6/9/23 0:01
4,4'-DDE	ND	U	0.000973	0.00178	mg/kg	1	6/9/23 0:01
4,4'-DDT	ND	U	0.00126	0.00178	mg/kg	1	6/9/23 0:01
Aldrin	ND	U	0.000843	0.00178	mg/kg	1	6/9/23 0:01
alpha-BHC	ND	U	0.000530	0.00178	mg/kg	1	6/9/23 0:01
beta-BHC	ND	U	0.000850	0.00178	mg/kg	1	6/9/23 0:01
Chlordane	ND	U	0.000791	0.00178	mg/kg	1	6/9/23 0:01
delta-BHC	ND	U	0.000827	0.00178	mg/kg	1	6/9/23 0:01
Dieldrin	ND	U	0.000931	0.00178	mg/kg	1	6/9/23 0:01
Endosulfan I	ND	U	0.000841	0.00178	mg/kg	1	6/9/23 0:01
Endosulfan II	ND	U	0.000809	0.00178	mg/kg	1	6/9/23 0:01
Endosulfan sulfate	ND	U	0.000670	0.00178	mg/kg	1	6/9/23 0:01
Endosulfans, Total (alpha and beta)	ND	U	0.000809	0.00178	mg/kg	1	6/9/23 0:01
Endrin	ND	U	0.000615	0.00178	mg/kg	1	6/9/23 0:01
Endrin aldehyde	ND	U	0.000709	0.00178	mg/kg	1	6/9/23 0:01
Endrin ketone	ND	U	0.000627	0.00178	mg/kg	1	6/9/23 0:01
gamma-BHC (Lindane)	ND	U	0.000564	0.00178	mg/kg	1	6/9/23 0:01
Heptachlor	ND	U	0.000476	0.00178	mg/kg	1	6/9/23 0:01
Heptachlor Epoxide	ND	U	0.000898	0.00178	mg/kg	1	6/9/23 0:01
Methoxychlor	ND	U	0.000522	0.00178	mg/kg	1	6/9/23 0:01
Toxaphene	ND	U	0.0857	0.0904	mg/kg	1	6/9/23 0:01

Gravimetric - General Chemistry

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed
Percent Solids	**73.0**				**%**	**1**	**6/1/23 10:54**

ND, U - Indicates compound analyzed for but not detected
J - Indicates estimated value
B - Indicates compound found in associated blank
E - Concentration exceeds highest calibration standard
D - Indicates result is based on a dilution
H - Indicates a Hold Time violation
P - Greater than 25% diff. between 2 GC columns.
MDL - Minimum detection limit, **RL** - Reporting limit
D1 - Sample was Decanted (Dissolved)

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All Results Summary

Client: Dynamic Earth LLC **Work Order:** 23E1424
Project: Turtle Mill Brook-Eco. Evaluation **Date to Lab:** 5/31/2023 4:30:00PM

23E1424-10 (Soil) Sample Name: SED-5 Collected: 5/30/2023 12:45:00PM

SM 2550 B-10 - General Chemistry

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed
Temp at time of pH, °C	**19.6**		**1.00**	**1.00**	**°C**	**1**	**6/1/23 12:56**

SM 2580 (mod) - General Chemistry

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed
Redox Potential	**153**		**-1000**	**-1000**	**mV**	**1**	**6/1/23 12:54**

SW 846 9045D - General Chemistry

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed
pH	**7.29**		**0.0100**	**0.0100**	**pH Units**	**1**	**6/1/23 12:55**

23E1424-11 (Surface Water) Sample Name: SW-6 Collected: 5/30/2023 1:00:00PM

EPA 245.1 - Total Metals

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed
Mercury	ND	U	0.000183	0.000200	mg/L	1	6/5/23 15:21

EPA 200.7 - Total Metals

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed
Calcium	**35.5**		**0.256**	**1.00**	**mg/L**	**1**	**6/7/23 15:05**
Magnesium	ND	U	0.681	2.00	mg/L	1	6/7/23 15:05

EPA 200.8 - Total Metals

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed
Arsenic	ND	U	0.000272	0.00200	mg/L	1	6/9/23 10:40
Lead	ND	U	0.000338	0.00200	mg/L	1	6/9/23 10:40

EPA 200.8 - Dissolved Metals

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed
Arsenic	ND	U	0.000272	0.00200	mg/L	1	6/9/23 17:45
Lead	ND	U	0.000338	0.00200	mg/L	1	6/9/23 17:45

SW 846 8081B - Pesticides

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed
4,4'-DDD	ND	U	0.000378	0.0200	ug/L	1	6/8/23 21:41
4,4'-DDE	ND	U	0.000234	0.0200	ug/L	1	6/8/23 21:41
4,4'-DDT	ND	U	0.000319	0.0200	ug/L	1	6/8/23 21:41
Aldrin	ND	U	0.000527	0.0200	ug/L	1	6/8/23 21:41
alpha-BHC	ND	U	0.000255	0.0200	ug/L	1	6/8/23 21:41

ND, U - Indicates compound analyzed for but not detected
J - Indicates estimated value
B - Indicates compound found in associated blank
E - Concentration exceeds highest calibration standard
D - Indicates result is based on a dilution
H - Indicates a Hold Time violation
P - Greater than 25% diff. between 2 GC columns.
MDL - Minimum detection limit, **RL** - Reporting limit
D1 - Sample was Decanted (Dissolved)

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All Results Summary

Client: Dynamic Earth LLC **Work Order:** 23E1424
Project: Turtle Mill Brook-Eco. Evaluation **Date to Lab:** 5/31/2023 4:30:00PM

23E1424-11 (Surface Water) Sample Name: **SW-6** Collected: **5/30/2023 1:00:00PM**

SW 846 8081B - Pesticides (con't)

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed
beta-BHC	ND	U	0.000371	0.0200	ug/L	1	6/8/23 21:41
Chlordane	ND	U	0.000327	0.0500	ug/L	1	6/8/23 21:41
delta-BHC	ND	U	0.000320	0.0200	ug/L	1	6/8/23 21:41
Dieldrin	ND	U	0.000271	0.0200	ug/L	1	6/8/23 21:41
Endosulfan I	ND	U	0.000380	0.0200	ug/L	1	6/8/23 21:41
Endosulfan II	ND	U	0.000254	0.0200	ug/L	1	6/8/23 21:41
Endosulfan sulfate	ND	U	0.000138	0.0200	ug/L	1	6/8/23 21:41
Endrin	ND	U	0.000229	0.0200	ug/L	1	6/8/23 21:41
Endrin aldehyde	ND	U	0.000318	0.0200	ug/L	1	6/8/23 21:41
Endrin ketone	ND	U	0.000203	0.0200	ug/L	1	6/8/23 21:41
gamma-BHC (Lindane)	ND	U	0.000241	0.0200	ug/L	1	6/8/23 21:41
Heptachlor	ND	U	0.000563	0.0200	ug/L	1	6/8/23 21:41
Heptachlor Epoxide	ND	U	0.000302	0.0200	ug/L	1	6/8/23 21:41
Methoxychlor	ND	U	0.000343	0.0200	ug/L	1	6/8/23 21:41
Toxaphene	ND	U	0.0237	0.200	ug/L	1	6/8/23 21:41

SM 2550 B-10 - General Chemistry

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed
Temp at time of pH, °C	**15.9**		**1.00**	**1.00**	**°C**	**1**	**5/31/23 18:43**

SM 4500-H B-11 - General Chemistry

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed
pH	**8.83**	H	**0.0100**	**0.0100**	**pH Units**	**1**	**5/31/23 18:42**

SM 2340 B-11 - Total Metals

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed
Hardness	**88.8**		**0.640**	**2.50**	**mg/L**	**1**	**6/7/23 15:05**

ND, U - Indicates compound analyzed for but not detected
J - Indicates estimated value
B - Indicates compound found in associated blank
E - Concentration exceeds highest calibration standard
D - Indicates result is based on a dilution
H - Indicates a Hold Time violation
P - Greater than 25% diff. between 2 GC columns.
MDL - Minimum detection limit, **RL** - Reporting limit
D1 - Sample was Decanted (Dissolved)

All Results Summary

Client: Dynamic Earth LLC
Project: Turtle Mill Brook-Eco. Evaluation
Work Order: 23E1424
Date to Lab: 5/31/2023 4:30:00PM

23E1424-12 (Soil) Sample Name: **SED-6** Collected: **5/30/2023 1:05:00PM**

SW 846 7473 - Total Metals

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed
Mercury	**0.136**		**0.00850**	**0.0340**	**mg/kg**	**1**	**6/6/23 14:56**

SW 846 6010D - Total Metals

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed
Arsenic	**6.57**		**0.153**	**2.15**	**mg/kg**	**1**	**6/7/23 12:27**
Lead	**109**		**0.179**	**2.15**	**mg/kg**	**1**	**6/7/23 12:27**

SW 846 8081B - Pesticides

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed
4,4'-DDD	**0.00742**		**0.00101**	**0.00221**	**mg/kg**	**1**	**6/9/23 0:19**
4,4'-DDE	ND	U	0.00121	0.00221	mg/kg	1	6/9/23 0:19
4,4'-DDT [2C]	**0.00475**		**0.00156**	**0.00221**	**mg/kg**	**1**	**6/9/23 0:19**
Aldrin	ND	U	0.00105	0.00221	mg/kg	1	6/9/23 0:19
alpha-BHC	ND	U	0.000658	0.00221	mg/kg	1	6/9/23 0:19
beta-BHC	ND	U	0.00106	0.00221	mg/kg	1	6/9/23 0:19
Chlordane	ND	U	0.000983	0.00221	mg/kg	1	6/9/23 0:19
delta-BHC	ND	U	0.00103	0.00221	mg/kg	1	6/9/23 0:19
Dieldrin	ND	U	0.00116	0.00221	mg/kg	1	6/9/23 0:19
Endosulfan I	ND	U	0.00104	0.00221	mg/kg	1	6/9/23 0:19
Endosulfan II	ND	U	0.00100	0.00221	mg/kg	1	6/9/23 0:19
Endosulfan sulfate	ND	U	0.000831	0.00221	mg/kg	1	6/9/23 0:19
Endosulfans, Total (alpha and beta)	ND	U	0.00100	0.00221	mg/kg	1	6/9/23 0:19
Endrin	ND	U	0.000763	0.00221	mg/kg	1	6/9/23 0:19
Endrin aldehyde	ND	U	0.000881	0.00221	mg/kg	1	6/9/23 0:19
Endrin ketone	ND	U	0.000779	0.00221	mg/kg	1	6/9/23 0:19
gamma-BHC (Lindane)	ND	U	0.000700	0.00221	mg/kg	1	6/9/23 0:19
Heptachlor	ND	U	0.000592	0.00221	mg/kg	1	6/9/23 0:19
Heptachlor Epoxide	ND	U	0.00112	0.00221	mg/kg	1	6/9/23 0:19
Methoxychlor	ND	U	0.000648	0.00221	mg/kg	1	6/9/23 0:19
Toxaphene	ND	U	0.106	0.112	mg/kg	1	6/9/23 0:19

Gravimetric - General Chemistry

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed
Percent Solids	**58.8**				**%**	**1**	**6/1/23 10:54**

ND, U - Indicates compound analyzed for but not detected
J - Indicates estimated value
B - Indicates compound found in associated blank
E - Concentration exceeds highest calibration standard
D - Indicates result is based on a dilution
H - Indicates a Hold Time violation
P - Greater than 25% diff. between 2 GC columns.
MDL - Minimum detection limit, **RL** - Reporting limit
D1 - Sample was Decanted (Dissolved)

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All Results Summary

Client: Dynamic Earth LLC **Work Order:** 23E1424
Project: Turtle Mill Brook-Eco. Evaluation **Date to Lab:** 5/31/2023 4:30:00PM

23E1424-12 (Soil) Sample Name: SED-6 Collected: 5/30/2023 1:05:00PM

SM 2550 B-10 - General Chemistry

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed
Temp at time of pH, °C	**19.6**		**1.00**	**1.00**	**°C**	**1**	**6/1/23 12:56**

SM 2580 (mod) - General Chemistry

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed
Redox Potential	**142**		**-1000**	**-1000**	**mV**	**1**	**6/1/23 12:54**

SW 846 9045D - General Chemistry

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed
pH	**5.70**		**0.0100**	**0.0100**	**pH Units**	**1**	**6/1/23 12:55**

23E1424-13 (Surface Water) Sample Name: SW-7 Collected: 5/30/2023 1:15:00PM

EPA 245.1 - Total Metals

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed
Mercury	ND	U	0.000183	0.000200	mg/L	1	6/5/23 15:24

EPA 200.7 - Total Metals

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed
Calcium	**93.9**		**0.256**	**1.00**	**mg/L**	**1**	**6/7/23 15:07**
Magnesium	**5.28**		**0.681**	**2.00**	**mg/L**	**1**	**6/7/23 15:07**

EPA 200.8 - Total Metals

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed
Arsenic	ND	U	0.000272	0.00200	mg/L	1	6/9/23 9:22
Lead	ND	U	0.000338	0.00200	mg/L	1	6/9/23 9:22

EPA 200.8 - Dissolved Metals

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed
Arsenic	ND	U	0.000272	0.00200	mg/L	1	6/9/23 17:47
Lead	ND	U	0.000338	0.00200	mg/L	1	6/9/23 17:47

SW 846 8081B - Pesticides

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed
4,4'-DDD	ND	U	0.000378	0.0200	ug/L	1	6/8/23 22:03
4,4'-DDE	ND	U	0.000234	0.0200	ug/L	1	6/8/23 22:03
4,4'-DDT	ND	U	0.000319	0.0200	ug/L	1	6/8/23 22:03
Aldrin	ND	U	0.000527	0.0200	ug/L	1	6/8/23 22:03
alpha-BHC	ND	U	0.000255	0.0200	ug/L	1	6/8/23 22:03

ND, U - Indicates compound analyzed for but not detected
J - Indicates estimated value
B - Indicates compound found in associated blank
E - Concentration exceeds highest calibration standard
D - Indicates result is based on a dilution
H - Indicates a Hold Time violation
P - Greater than 25% diff. between 2 GC columns.
MDL - Minimum detection limit, **RL** - Reporting limit
D1 - Sample was Decanted (Dissolved)

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All Results Summary

Client: Dynamic Earth LLC **Work Order:** 23E1424
Project: Turtle Mill Brook-Eco. Evaluation **Date to Lab:** 5/31/2023 4:30:00PM

23E1424-13 (Surface Water) Sample Name: **SW-7** Collected: **5/30/2023 1:15:00PM**

SW 846 8081B - Pesticides (con't)

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed
beta-BHC	ND	U	0.000371	0.0200	ug/L	1	6/8/23 22:03
Chlordane	ND	U	0.000327	0.0500	ug/L	1	6/8/23 22:03
delta-BHC	ND	U	0.000320	0.0200	ug/L	1	6/8/23 22:03
Dieldrin	ND	U	0.000271	0.0200	ug/L	1	6/8/23 22:03
Endosulfan I	ND	U	0.000380	0.0200	ug/L	1	6/8/23 22:03
Endosulfan II	ND	U	0.000254	0.0200	ug/L	1	6/8/23 22:03
Endosulfan sulfate	ND	U	0.000138	0.0200	ug/L	1	6/8/23 22:03
Endrin	ND	U	0.000229	0.0200	ug/L	1	6/8/23 22:03
Endrin aldehyde	ND	U	0.000318	0.0200	ug/L	1	6/8/23 22:03
Endrin ketone	ND	U	0.000203	0.0200	ug/L	1	6/8/23 22:03
gamma-BHC (Lindane)	ND	U	0.000241	0.0200	ug/L	1	6/8/23 22:03
Heptachlor	ND	U	0.000563	0.0200	ug/L	1	6/8/23 22:03
Heptachlor Epoxide	ND	U	0.000302	0.0200	ug/L	1	6/8/23 22:03
Methoxychlor	ND	U	0.000343	0.0200	ug/L	1	6/8/23 22:03
Toxaphene	ND	U	0.0237	0.200	ug/L	1	6/8/23 22:03

SM 2550 B-10 - General Chemistry

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed
Temp at time of pH, °C	**16.8**		**1.00**	**1.00**	**°C**	**1**	**5/31/23 18:43**

SM 4500-H B-11 - General Chemistry

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed
pH	**7.12**	H	**0.0100**	**0.0100**	**pH Units**	**1**	**5/31/23 18:42**

SM 2340 B-11 - Total Metals

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed
Hardness	**256**		**0.640**	**2.50**	**mg/L**	**1**	**6/7/23 15:07**

ND, U - Indicates compound analyzed for but not detected
J - Indicates estimated value
B - Indicates compound found in associated blank
E - Concentration exceeds highest calibration standard
D - Indicates result is based on a dilution
H - Indicates a Hold Time violation
P - Greater than 25% diff. between 2 GC columns.
MDL - Minimum detection limit, **RL** - Reporting limit
D1 - Sample was Decanted (Dissolved)

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All Results Summary

Client: Dynamic Earth LLC
Project: Turtle Mill Brook-Eco. Evaluation
Work Order: 23E1424
Date to Lab: 5/31/2023 4:30:00PM

23E1424-14 (Soil) Sample Name: **SED-7** Collected: **5/30/2023 1:20:00PM**

SW 846 7473 - Total Metals

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed
Mercury	ND	U	0.00650	0.0260	mg/kg	1	6/6/23 14:56

SW 846 6010D - Total Metals

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed
Arsenic	ND	U	0.111	1.56	mg/kg	1	6/7/23 12:32
Lead	**14.8**		**0.130**	**1.56**	**mg/kg**	**1**	**6/7/23 12:32**

SW 846 8081B - Pesticides

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed
4,4'-DDD	ND	U	0.000774	0.00169	mg/kg	1	6/9/23 0:37
4,4'-DDE	ND	U	0.000924	0.00169	mg/kg	1	6/9/23 0:37
4,4'-DDT	ND	U	0.00119	0.00169	mg/kg	1	6/9/23 0:37
Aldrin	ND	U	0.000801	0.00169	mg/kg	1	6/9/23 0:37
alpha-BHC	ND	U	0.000503	0.00169	mg/kg	1	6/9/23 0:37
beta-BHC	ND	U	0.000807	0.00169	mg/kg	1	6/9/23 0:37
Chlordane	ND	U	0.000751	0.00169	mg/kg	1	6/9/23 0:37
delta-BHC	ND	U	0.000785	0.00169	mg/kg	1	6/9/23 0:37
Dieldrin	ND	U	0.000884	0.00169	mg/kg	1	6/9/23 0:37
Endosulfan I	ND	U	0.000798	0.00169	mg/kg	1	6/9/23 0:37
Endosulfan II	ND	U	0.000768	0.00169	mg/kg	1	6/9/23 0:37
Endosulfan sulfate	ND	U	0.000636	0.00169	mg/kg	1	6/9/23 0:37
Endosulfans, Total (alpha and beta)	ND	U	0.000768	0.00169	mg/kg	1	6/9/23 0:37
Endrin	ND	U	0.000584	0.00169	mg/kg	1	6/9/23 0:37
Endrin aldehyde	ND	U	0.000673	0.00169	mg/kg	1	6/9/23 0:37
Endrin ketone	ND	U	0.000595	0.00169	mg/kg	1	6/9/23 0:37
gamma-BHC (Lindane)	ND	U	0.000536	0.00169	mg/kg	1	6/9/23 0:37
Heptachlor	ND	U	0.000452	0.00169	mg/kg	1	6/9/23 0:37
Heptachlor Epoxide	ND	U	0.000853	0.00169	mg/kg	1	6/9/23 0:37
Methoxychlor	ND	U	0.000495	0.00169	mg/kg	1	6/9/23 0:37
Toxaphene	ND	U	0.0814	0.0858	mg/kg	1	6/9/23 0:37

Gravimetric - General Chemistry

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed
Percent Solids	**76.9**				**%**	**1**	**6/1/23 10:54**

ND, U - Indicates compound analyzed for but not detected
J - Indicates estimated value
B - Indicates compound found in associated blank
E - Concentration exceeds highest calibration standard
D - Indicates result is based on a dilution
H - Indicates a Hold Time violation
P - Greater than 25% diff. between 2 GC columns.
MDL - Minimum detection limit, **RL** - Reporting limit
D1 - Sample was Decanted (Dissolved)

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All Results Summary

Client: Dynamic Earth LLC **Work Order:** 23E1424
Project: Turtle Mill Brook-Eco. Evaluation **Date to Lab:** 5/31/2023 4:30:00PM

23E1424-14 (Soil) Sample Name: **SED-7** Collected: **5/30/2023 1:20:00PM**

SM 2550 B-10 - General Chemistry

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed
Temp at time of pH, °C	**19.7**		**1.00**	**1.00**	**°C**	**1**	**6/1/23 12:56**

SM 2580 (mod) - General Chemistry

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed
Redox Potential	**147**		**-1000**	**-1000**	**mV**	**1**	**6/1/23 12:54**

SW 846 9045D - General Chemistry

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed
pH	**6.80**		**0.0100**	**0.0100**	**pH Units**	**1**	**6/1/23 12:55**

23E1424-16 (Soil) Sample Name: **SED-1A** Collected: **5/30/2023 11:35:00AM**

SW 846 7473 - Total Metals

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed
Mercury	**0.357**		**0.00918**	**0.0367**	**mg/kg**	**1**	**6/15/23 10:38**

SW 846 6010D - Total Metals

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed
Arsenic	**7.31**		**0.160**	**2.25**	**mg/kg**	**1**	**6/18/23 9:58**
Lead	**68.1**		**0.188**	**2.25**	**mg/kg**	**1**	**6/18/23 9:58**

SW 846 8081B - Pesticides

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed
4,4'-DDD [2C]	**0.00521**		**0.00109**	**0.00239**	**mg/kg**	**1**	**6/13/23 21:39**
4,4'-DDE	**0.00274**		**0.00130**	**0.00239**	**mg/kg**	**1**	**6/13/23 21:39**
4,4'-DDT	**0.00204**	J	**0.00168**	**0.00239**	**mg/kg**	**1**	**6/13/23 21:39**
Aldrin	ND	U	0.00113	0.00239	mg/kg	1	6/13/23 21:39
alpha-BHC	ND	U	0.000710	0.00239	mg/kg	1	6/13/23 21:39
beta-BHC	ND	U	0.00114	0.00239	mg/kg	1	6/13/23 21:39
Chlordane	ND	U	0.00106	0.00239	mg/kg	1	6/13/23 21:39
delta-BHC	ND	U	0.00111	0.00239	mg/kg	1	6/13/23 21:39
Dieldrin	ND	U	0.00125	0.00239	mg/kg	1	6/13/23 21:39
Endosulfan I	ND	U	0.00113	0.00239	mg/kg	1	6/13/23 21:39
Endosulfan II	ND	U	0.00108	0.00239	mg/kg	1	6/13/23 21:39
Endosulfan sulfate	ND	U	0.000898	0.00239	mg/kg	1	6/13/23 21:39
Endosulfans, Total (alpha and beta)	ND	U	0.00108	0.00239	mg/kg	1	6/13/23 21:39
Endrin	ND	U	0.000824	0.00239	mg/kg	1	6/13/23 21:39

ND, U - Indicates compound analyzed for but not detected
J - Indicates estimated value
B - Indicates compound found in associated blank
E - Concentration exceeds highest calibration standard
D - Indicates result is based on a dilution
H - Indicates a Hold Time violation
P - Greater than 25% diff. between 2 GC columns.
MDL - Minimum detection limit, **RL** - Reporting limit
D1 - Sample was Decanted (Dissolved)

All Results Summary

Client: Dynamic Earth LLC
Project: Turtle Mill Brook-Eco. Evaluation
Work Order: 23E1424
Date to Lab: 5/31/2023 4:30:00PM

23E1424-16 (Soil) Sample Name: SED-1A Collected: 5/30/2023 11:35:00AM

SW 846 8081B - Pesticides (con't)

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed
Endrin aldehyde	ND	U	0.000951	0.00239	mg/kg	1	6/13/23 21:39
Endrin ketone	ND	U	0.000841	0.00239	mg/kg	1	6/13/23 21:39
gamma-BHC (Lindane)	ND	U	0.000756	0.00239	mg/kg	1	6/13/23 21:39
Heptachlor	ND	U	0.000639	0.00239	mg/kg	1	6/13/23 21:39
Heptachlor Epoxide	ND	U	0.00120	0.00239	mg/kg	1	6/13/23 21:39
Methoxychlor	ND	U	0.000699	0.00239	mg/kg	1	6/13/23 21:39
Toxaphene	ND	U	0.115	0.121	mg/kg	1	6/13/23 21:39

Gravimetric - General Chemistry

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed
Percent Solids	**54.5**				**%**	**1**	**6/13/23 11:18**

SM 2550 B-10 - General Chemistry

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed
Temp at time of pH, °C	**20.4**		**1.00**	**1.00**	**°C**	**1**	**6/15/23 16:14**

SM 2580 (mod) - General Chemistry

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed
Redox Potential	**190**		**-1000**	**-1000**	**mV**	**1**	**6/15/23 14:48**

SW 846 9045D - General Chemistry

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed
pH	**7.40**		**0.0100**	**0.0100**	**pH Units**	**1**	**6/15/23 14:47**

23E1424-17 (Soil) Sample Name: SED-4A Collected: 5/30/2023 12:35:00PM

SW 846 7473 - Total Metals

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed
Mercury	**0.159**		**0.00647**	**0.0259**	**mg/kg**	**1**	**6/15/23 10:39**

SW 846 6010D - Total Metals

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed
Arsenic	**4.20**		**0.116**	**1.63**	**mg/kg**	**1**	**6/18/23 10:00**
Lead	**13.0**		**0.136**	**1.63**	**mg/kg**	**1**	**6/18/23 10:00**

ND, U - Indicates compound analyzed for but not detected
J - Indicates estimated value
B - Indicates compound found in associated blank
E - Concentration exceeds highest calibration standard
D - Indicates result is based on a dilution
H - Indicates a Hold Time violation
P - Greater than 25% diff. between 2 GC columns.
MDL - Minimum detection limit, **RL** - Reporting limit
D1 - Sample was Decanted (Dissolved)

APL
AQUA PRO-TECH LABORATORIES
Certified Environmental Testing

All Results Summary

Client: Dynamic Earth LLC **Work Order:** 23E1424
Project: Turtle Mill Brook-Eco. Evaluation **Date to Lab:** 5/31/2023 4:30:00PM

23E1424-17 (Soil) Sample Name: **SED-4A** Collected: **5/30/2023 12:35:00PM**

SW 846 8081B - Pesticides

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed
4,4'-DDD	**0.0122**		**0.000770**	**0.00168**	**mg/kg**	**1**	**6/13/23 22:01**
4,4'-DDE	**0.0128**		**0.000920**	**0.00168**	**mg/kg**	**1**	**6/13/23 22:01**
4,4'-DDT	ND	U	0.00119	0.00168	mg/kg	1	6/13/23 22:01
Aldrin	ND	U	0.000797	0.00168	mg/kg	1	6/13/23 22:01
alpha-BHC	ND	U	0.000501	0.00168	mg/kg	1	6/13/23 22:01
beta-BHC	ND	U	0.000804	0.00168	mg/kg	1	6/13/23 22:01
Chlordane	ND	U	0.000748	0.00168	mg/kg	1	6/13/23 22:01
delta-BHC	ND	U	0.000782	0.00168	mg/kg	1	6/13/23 22:01
Dieldrin	ND	U	0.000880	0.00168	mg/kg	1	6/13/23 22:01
Endosulfan I	ND	U	0.000795	0.00168	mg/kg	1	6/13/23 22:01
Endosulfan II	ND	U	0.000765	0.00168	mg/kg	1	6/13/23 22:01
Endosulfan sulfate	ND	U	0.000633	0.00168	mg/kg	1	6/13/23 22:01
Endosulfans, Total (alpha and beta)	ND	U	0.000765	0.00168	mg/kg	1	6/13/23 22:01
Endrin	ND	U	0.000581	0.00168	mg/kg	1	6/13/23 22:01
Endrin aldehyde	ND	U	0.000670	0.00168	mg/kg	1	6/13/23 22:01
Endrin ketone	ND	U	0.000593	0.00168	mg/kg	1	6/13/23 22:01
gamma-BHC (Lindane)	ND	U	0.000533	0.00168	mg/kg	1	6/13/23 22:01
Heptachlor	ND	U	0.000450	0.00168	mg/kg	1	6/13/23 22:01
Heptachlor Epoxide	ND	U	0.000849	0.00168	mg/kg	1	6/13/23 22:01
Methoxychlor	ND	U	0.000493	0.00168	mg/kg	1	6/13/23 22:01
Toxaphene	ND	U	0.0811	0.0854	mg/kg	1	6/13/23 22:01

Gravimetric - General Chemistry

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed
Percent Solids	**77.3**				**%**	**1**	**6/13/23 11:18**

SM 2550 B-10 - General Chemistry

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed
Temp at time of pH, °C	**20.6**		**1.00**	**1.00**	**°C**	**1**	**6/15/23 16:14**

SM 2580 (mod) - General Chemistry

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed
Redox Potential	**209**		**-1000**	**-1000**	**mV**	**1**	**6/15/23 14:48**

ND, U - Indicates compound analyzed for but not detected
J - Indicates estimated value
B - Indicates compound found in associated blank
E - Concentration exceeds highest calibration standard
D - Indicates result is based on a dilution
H - Indicates a Hold Time violation
P - Greater than 25% diff. between 2 GC columns.
MDL - Minimum detection limit, **RL** - Reporting limit
D1 - Sample was Decanted (Dissolved)

APL
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All Results Summary

Client: Dynamic Earth LLC **Work Order:** 23E1424
Project: Turtle Mill Brook-Eco. Evaluation **Date to Lab:** 5/31/2023 4:30:00PM

23E1424-17 (Soil) Sample Name: SED-4A Collected: 5/30/2023 12:35:00PM

SW 846 9045D - General Chemistry

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed
pH	**7.44**		**0.0100**	**0.0100**	**pH Units**	**1**	**6/15/23 14:47**

23E1424-18 (Soil) Sample Name: SED-6A Collected: 5/30/2023 1:05:00PM

SW 846 7473 - Total Metals

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed
Mercury	**0.0821**		**0.00940**	**0.0376**	**mg/kg**	**1**	**6/15/23 10:40**

SW 846 6010D - Total Metals

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed
Arsenic	**6.22**		**0.166**	**2.33**	**mg/kg**	**1**	**6/18/23 10:02**
Lead	**289**		**0.194**	**2.33**	**mg/kg**	**1**	**6/18/23 10:02**

SW 846 8081B - Pesticides

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed
4,4'-DDD [2C]	**0.00305**		**0.00112**	**0.00244**	**mg/kg**	**1**	**6/13/23 22:23**
4,4'-DDE	**0.00297**		**0.00134**	**0.00244**	**mg/kg**	**1**	**6/13/23 22:23**
4,4'-DDT	ND	U	0.00173	0.00244	mg/kg	1	6/13/23 22:23
Aldrin	ND	U	0.00116	0.00244	mg/kg	1	6/13/23 22:23
alpha-BHC	ND	U	0.000728	0.00244	mg/kg	1	6/13/23 22:23
beta-BHC	ND	U	0.00117	0.00244	mg/kg	1	6/13/23 22:23
Chlordane	ND	U	0.00109	0.00244	mg/kg	1	6/13/23 22:23
delta-BHC	ND	U	0.00114	0.00244	mg/kg	1	6/13/23 22:23
Dieldrin	ND	U	0.00128	0.00244	mg/kg	1	6/13/23 22:23
Endosulfan I	ND	U	0.00115	0.00244	mg/kg	1	6/13/23 22:23
Endosulfan II	ND	U	0.00111	0.00244	mg/kg	1	6/13/23 22:23
Endosulfan sulfate	ND	U	0.000920	0.00244	mg/kg	1	6/13/23 22:23
Endosulfans, Total (alpha and beta)	ND	U	0.00111	0.00244	mg/kg	1	6/13/23 22:23
Endrin	ND	U	0.000844	0.00244	mg/kg	1	6/13/23 22:23
Endrin aldehyde	ND	U	0.000974	0.00244	mg/kg	1	6/13/23 22:23
Endrin ketone	ND	U	0.000861	0.00244	mg/kg	1	6/13/23 22:23
gamma-BHC (Lindane)	ND	U	0.000775	0.00244	mg/kg	1	6/13/23 22:23
Heptachlor	ND	U	0.000654	0.00244	mg/kg	1	6/13/23 22:23
Heptachlor Epoxide	ND	U	0.00123	0.00244	mg/kg	1	6/13/23 22:23
Methoxychlor	ND	U	0.000716	0.00244	mg/kg	1	6/13/23 22:23
Toxaphene	ND	U	0.118	0.124	mg/kg	1	6/13/23 22:23

ND, U - Indicates compound analyzed for but not detected
J - Indicates estimated value
B - Indicates compound found in associated blank
E - Concentration exceeds highest calibration standard
D - Indicates result is based on a dilution
H - Indicates a Hold Time violation
P - Greater than 25% diff. between 2 GC columns.
MDL - Minimum detection limit, **RL** - Reporting limit
D1 - Sample was Decanted (Dissolved)

APL
AQUA PRO-TECH LABORATORIES
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All Results Summary

Client: Dynamic Earth LLC
Project: Turtle Mill Brook-Eco. Evaluation
Work Order: 23E1424
Date to Lab: 5/31/2023 4:30:00PM

23E1424-18 (Soil) Sample Name: **SED-6A** Collected: **5/30/2023 1:05:00PM**

Gravimetric - General Chemistry

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed
Percent Solids	53.2				%	1	6/13/23 11:18

SM 2550 B-10 - General Chemistry

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed
Temp at time of pH, °C	20.5		1.00	1.00	°C	1	6/15/23 16:14

SM 2580 (mod) - General Chemistry

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed
Redox Potential	212		-1000	-1000	mV	1	6/15/23 14:48

SW 846 9045D - General Chemistry

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed
pH	7.20		0.0100	0.0100	pH Units	1	6/15/23 14:47

ND, U - Indicates compound analyzed for but not detected
J - Indicates estimated value
B - Indicates compound found in associated blank
E - Concentration exceeds highest calibration standard
D - Indicates result is based on a dilution
H - Indicates a Hold Time violation
P - Greater than 25% diff. between 2 GC columns.
MDL - Minimum detection limit, **RL** - Reporting limit
D1 - Sample was Decanted (Dissolved)

MERCURY

Dynamic Earth LLC

Work Order: 23E1424

Project: Turtle Mill Brook-Eco. Evaluation

ANALYSIS DATA SHEET

Mercury

Client: Dynamic Earth LLC
Project: Turtle Mill Brook-Eco. Evaluation
Work Order: 23E1424

Total Metals - Aqueous (EPA 245.1)

Lab Number	Analyte	Extract	Concentration	Units	RL	DF	Analyst	Analyzed
BAF0127-BLK1	Mercury	40 mL / 40 mL	ND	mg/L	0.000200	1	SG	06/05/2023 14:30
SAF0076-CCB1	Mercury	N/A	ND	ug/L	0.200	1	SG	06/05/2023 14:57
SAF0076-CCB2	Mercury	N/A	ND	ug/L	0.200	1	SG	06/05/2023 15:29
SAF0076-ICB1	Mercury	N/A	ND	ug/L	0.200	1	SG	06/05/2023 14:25

Total Metals - Soil (SW 846 7473)

Lab Number	Analyte	Extract	Concentration	Units	RL	DF	Analyst	Analyzed
BAF0123-BLK1	Mercury	1 g / 1 g	ND	mg/kg wet	0.0200	1	RS	06/06/2023 11:17
BAF0580-BLK1	Mercury	1 g / 1 g	ND	mg/kg wet	0.0200	1	DM1	06/15/2023 10:31
SAF0114-CCB1	Mercury	N/A	ND	ug/kg	20.0	1	RS	06/06/2023 14:54
SAF0114-CCB2	Mercury	N/A	ND	ug/kg	20.0	1	RS	06/06/2023 16:20
SAF0325-CCB1	Mercury	N/A	ND	ug/kg	20.0	1	DM1	06/15/2023 12:55
SAF0325-ICB1	Mercury	N/A	ND	ug/kg	20.0	1	DM1	06/15/2023 10:31

ND - Indicates compound analyzed for but not detected

RL - Reporting limit
DF - Dilution Factor

F-I

ANALYSIS DATA SHEET

Mercury

Client: Dynamic Earth LLC
Project: Turtle Mill Brook-Eco. Evaluation
Work Order: 23E1424

Total Metals - Aqueous (EPA 245.1)

Lab Number	Analyte	Extract	Conc.	Units	RL	DF	Qual	Analyst	Analyzed
23E1424-01	Mercury	40 / 40	ND	mg/L	0.000200	1	U	SG	06/05/23 15:11
23E1424-03	Mercury	40 / 40	ND	mg/L	0.000200	1	U	SG	06/05/23 14:36
23E1424-05	Mercury	40 / 40	ND	mg/L	0.000200	1	U	SG	06/05/23 15:13
23E1424-07	Mercury	40 / 40	ND	mg/L	0.000200	1	U	SG	06/05/23 15:16
23E1424-09	Mercury	40 / 40	ND	mg/L	0.000200	1	U	SG	06/05/23 15:18
23E1424-11	Mercury	40 / 40	ND	mg/L	0.000200	1	U	SG	06/05/23 15:21
23E1424-13	Mercury	40 / 40	ND	mg/L	0.000200	1	U	SG	06/05/23 15:24

Total Metals - Soil (SW 846 7473)

Lab Number	Analyte	Extract	Conc.	Units	RL	DF	Qual	Analyst	Analyzed
23E1424-02	Mercury	1 / 1	0.290	mg/kg dry	0.0335	1		RS	06/06/23 14:54
23E1424-04	Mercury	1 / 1	0.0580	mg/kg dry	0.0287	1		RS	06/06/23 14:55
23E1424-06	Mercury	1 / 1	0.0266	mg/kg dry	0.0252	1		RS	06/06/23 14:55
23E1424-08	Mercury	1 / 1	0.0426	mg/kg dry	0.0234	1		RS	06/06/23 14:55
23E1424-10	Mercury	1 / 1	0.0603	mg/kg dry	0.0274	1		RS	06/06/23 14:55
23E1424-12	Mercury	1 / 1	0.136	mg/kg dry	0.0340	1		RS	06/06/23 14:56
23E1424-14	Mercury	1 / 1	ND	mg/kg dry	0.0260	1	U	RS	06/06/23 14:56
23E1424-16	Mercury	1 / 1	0.357	mg/kg dry	0.0367	1		DM1	06/15/23 10:38
23E1424-17	Mercury	1 / 1	0.159	mg/kg dry	0.0259	1		DM1	06/15/23 10:39
23E1424-18	Mercury	1 / 1	0.0821	mg/kg dry	0.0376	1		DM1	06/15/23 10:40

ND, U - Indicates compound analyzed for but not detected
D - Indicates result is based on a dilution
E - Concentration exceeds highest calibration standard
H - Indicates a Hold Time violation

RL - Reporting limit
DF - Dilution Factor

B - Indicates compound found in associated blank

F-I

Batch BAF0123 **Method: SW 846 7473** **Prepared: 06/06/2023**

BAF0123-BS1 **Source:**

Analyte	Result	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Mercury	1.80	mg/kg wet	2.00		89.8	80-120		

Batch BAF0123 (cont.) **Method: SW 846 7473** **Prepared: 06/06/2023**

BAF0123-DUP1 **Source:** 23E1202-01

Analyte	Result	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Mercury	0.197	mg/kg dry		0.0380			136*	20

Batch BAF0123 (cont.) **Method: SW 846 7473** **Prepared: 06/06/2023**

BAF0123-MS1 **Source:** 23E1202-01

Analyte	Result	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Mercury	2.13	mg/kg dry	2.32	0.0380	90.1	80-120		

Batch BAF0123 (cont.) **Method: SW 846 7473** **Prepared: 06/06/2023**

BAF0123-MSD1 **Source:** 23E1202-01

Analyte	Result	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Mercury	1.87	mg/kg dry	2.32	0.0380	78.9*	80-120	13.1	20

Batch BAF0127 **Method: EPA 245.1** **Prepared: 06/05/2023**

BAF0127-BS1 **Source:**

Analyte	Result	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Mercury	0.00506	mg/L	0.00500		101	85-115		

Batch BAF0127 (cont.) **Method: EPA 245.1** **Prepared: 06/05/2023**

BAF0127-DUP1 **Source:** 23E1424-03

Analyte	Result	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Mercury	ND	mg/L		ND				20

Batch BAF0127 (cont.) **Method: EPA 245.1** **Prepared: 06/05/2023**

BAF0127-MS1 **Source:** 23E1424-03

Analyte	Result	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Mercury	0.00469	mg/L	0.00500	ND	93.8	70-130		

* - Outside of QC Limits J - Result is between the MDL and RL for an Analysis reported to an RL

F-III NC - Outside the recovery criteria but Spike Amount <1/4 amount found in Source Sample

Batch BAF0127 (cont.) **Method: EPA 245.1** **Prepared: 06/05/2023**

BAF0127-MSD1 **Source:** 23E1424-03

Analyte	Result	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Mercury	0.00471	mg/L	0.00500	ND	94.2	70-130	0.426	20

Batch BAF0580 **Method: SW 846 7473** **Prepared: 06/15/2023**

BAF0580-BS1 **Source:**

Analyte	Result	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Mercury	2.16	mg/kg wet	2.00		108	80-120		

Batch BAF0580 (cont.) **Method: SW 846 7473** **Prepared: 06/15/2023**

BAF0580-DUP1 **Source:** 23F0550-01

Analyte	Result	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Mercury	0.0682	mg/kg dry		0.0625			8.77	20

Batch BAF0580 (cont.) **Method: SW 846 7473** **Prepared: 06/15/2023**

BAF0580-MS1 **Source:** 23F0550-01

Analyte	Result	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Mercury	2.41	mg/kg dry	2.20	0.0625	107	80-120		

Batch BAF0580 (cont.) **Method: SW 846 7473** **Prepared: 06/15/2023**

BAF0580-MSD1 **Source:** 23F0550-01

Analyte	Result	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Mercury	2.40	mg/kg dry	2.20	0.0625	106	80-120	0.527	20

* - Outside of QC Limits J - Result is between the MDL and RL for an Analysis reported to an RL

NC - Outside the recovery criteria but Spike Amount <1/4 amount found in Source Sample

METHOD BLANK SUMMARY

Batch ID: **BAF0123**

Lab Number	Sample Id	Extraction Date	Analysis Date
BAF0123-BLK1	BLK1	06/06/2023	06/06/2023 11:17
BAF0123-BS1	BS1	06/06/2023	06/06/2023 11:17
BAF0123-DUP1	DUP1	06/06/2023	06/06/2023 13:27
BAF0123-MS1	MS1	06/06/2023	06/06/2023 13:31
BAF0123-MSD1	MSD1	06/06/2023	06/06/2023 13:31
23E1424-02	SED-1	06/06/2023	06/06/2023 14:54
23E1424-04	SED-2	06/06/2023	06/06/2023 14:55
23E1424-06	SED-3	06/06/2023	06/06/2023 14:55
23E1424-08	SED-4	06/06/2023	06/06/2023 14:55
23E1424-10	SED-5	06/06/2023	06/06/2023 14:55
23E1424-12	SED-6	06/06/2023	06/06/2023 14:56
23E1424-14	SED-7	06/06/2023	06/06/2023 14:56

Batch ID: **BAF0127**

Lab Number	Sample Id	Extraction Date	Analysis Date
BAF0127-BLK1	BLK1	06/05/2023	06/05/2023 14:30
BAF0127-BS1	BS1	06/05/2023	06/05/2023 14:33
BAF0127-DUP1	DUP1	06/05/2023	06/05/2023 14:38
BAF0127-MS1	MS1	06/05/2023	06/05/2023 14:41
BAF0127-MSD1	MSD1	06/05/2023	06/05/2023 14:43
23E1424-01	SW-1	06/05/2023	06/05/2023 15:11
23E1424-03	SW-2	06/05/2023	06/05/2023 14:36
23E1424-05	SW-3	06/05/2023	06/05/2023 15:13
23E1424-07	SW-4	06/05/2023	06/05/2023 15:16
23E1424-09	SW-5	06/05/2023	06/05/2023 15:18
23E1424-11	SW-6	06/05/2023	06/05/2023 15:21
23E1424-13	SW-7	06/05/2023	06/05/2023 15:24

METHOD BLANK SUMMARY

Batch ID: **BAF0580**

Lab Number	Sample Id	Extraction Date	Analysis Date
BAF0580-BLK1	BLK1	06/15/2023	06/15/2023 10:31
BAF0580-BS1	BS1	06/15/2023	06/15/2023 10:32
BAF0580-DUP1	DUP1	06/15/2023	06/15/2023 10:32
BAF0580-MS1	MS1	06/15/2023	06/15/2023 10:32
BAF0580-MSD1	MSD1	06/15/2023	06/15/2023 10:32
23E1424-16	SED-1A	06/15/2023	06/15/2023 10:38
23E1424-17	SED-4A	06/15/2023	06/15/2023 10:39
23E1424-18	SED-6A	06/15/2023	06/15/2023 10:40

ANALYSIS SEQUENCE SUMMARY

Laboratory:	Aqua Pro-Tech Laboratories	Work Order:	23E1424
Client:	Dynamic Earth LLC	Project:	Turtle Mill Brook-Eco. Evaluatior
Sequence:	SAF0076	Instrument:	Leeman m7600-1

Sample Name	Lab Sample ID	FileID	Analysis Date/Time
Initial Cal Check	SAF0076-ICV1	2023-06-05-b-(EPA 245.1)-007	06/05/23 14:22
Initial Cal Blank	SAF0076-ICB1	2023-06-05-b-(EPA 245.1)-008	06/05/23 14:25
Instrument RL Check	SAF0076-CRL1	2023-06-05-b-(EPA 245.1)-009	06/05/23 14:28
Blank	BAF0127-BLK1	2023-06-05-b-(EPA 245.1)-010	06/05/23 14:30
LCS	BAF0127-BS1	2023-06-05-b-(EPA 245.1)-011	06/05/23 14:33
SW-2	23E1424-03	2023-06-05-b-(EPA 245.1)-012	06/05/23 14:36
Duplicate	BAF0127-DUP1	2023-06-05-b-(EPA 245.1)-013	06/05/23 14:38
Matrix Spike	BAF0127-MS1	2023-06-05-b-(EPA 245.1)-014	06/05/23 14:41
Matrix Spike Dup	BAF0127-MSD1	2023-06-05-b-(EPA 245.1)-015	06/05/23 14:43
Calibration Check	SAF0076-CCV1	2023-06-05-b-(EPA 245.1)-019	06/05/23 14:54
Calibration Blank	SAF0076-CCB1	2023-06-05-b-(EPA 245.1)-020	06/05/23 14:57
SW-1	23E1424-01	2023-06-05-b-(EPA 245.1)-025	06/05/23 15:11
SW-3	23E1424-05	2023-06-05-b-(EPA 245.1)-026	06/05/23 15:13
SW-4	23E1424-07	2023-06-05-b-(EPA 245.1)-027	06/05/23 15:16
SW-5	23E1424-09	2023-06-05-b-(EPA 245.1)-028	06/05/23 15:18
SW-6	23E1424-11	2023-06-05-b-(EPA 245.1)-029	06/05/23 15:21
SW-7	23E1424-13	2023-06-05-b-(EPA 245.1)-030	06/05/23 15:24
Calibration Check	SAF0076-CCV2	2023-06-05-b-(EPA 245.1)-031	06/05/23 15:26
Calibration Blank	SAF0076-CCB2	2023-06-05-b-(EPA 245.1)-032	06/05/23 15:29

ANALYSIS SEQUENCE SUMMARY

Laboratory:	Aqua Pro-Tech Laboratories	Work Order:	23E1424
Client:	Dynamic Earth LLC	Project:	Turtle Mill Brook-Eco. Evaluatior
Sequence:	SAF0114	Instrument:	ICP OES-1

Sample Name	Lab Sample ID	FileID	Analysis Date/Time
Instrument RL Check	SAF0114-CRL1	20230605-b-BAF0057-001	06/06/23 10:47
Initial Cal Check	SAF0114-ICV1	20230605-b-BAF0057-002	06/06/23 10:48
Initial Cal Check	SAF0114-ICV2	20230605-b-BAF0057-004	06/06/23 10:48
Blank	BAF0123-BLK1	20230605-b-BAF0057-007	06/06/23 11:17
LCS	BAF0123-BS1	20230605-b-BAF0057-008	06/06/23 11:17
Duplicate	BAF0123-DUP1	20230605-b-BAF0057-023	06/06/23 13:27

F-V

ANALYSIS SEQUENCE SUMMARY

Laboratory:	Aqua Pro-Tech Laboratories	Work Order:	23E1424
Client:	Dynamic Earth LLC	Project:	Turtle Mill Brook-Eco. Evaluatior
Sequence:	SAF0114	Instrument:	ICP OES-1

Sample Name	Lab Sample ID	FileID	Analysis Date/Time
Matrix Spike	BAF0123-MS1	20230605-b-BAF0057-024	06/06/23 13:31
Matrix Spike Dup	BAF0123-MSD1	20230605-b-BAF0057-026	06/06/23 13:31
Calibration Check	SAF0114-CCV1	20230605-b-BAF0057-032	06/06/23 13:37
SED-1	23E1424-02	20230605-b-BAF0057-035	06/06/23 14:54
Calibration Blank	SAF0114-CCB1	20230605-b-BAF0057-034	06/06/23 14:54
SED-4	23E1424-08	20230605-b-BAF0057-038	06/06/23 14:55
SED-5	23E1424-10	20230605-b-BAF0057-039	06/06/23 14:55
SED-3	23E1424-06	20230605-b-BAF0057-037	06/06/23 14:55
SED-2	23E1424-04	20230605-b-BAF0057-036	06/06/23 14:55
SED-6	23E1424-12	20230605-b-BAF0057-040	06/06/23 14:56
SED-7	23E1424-14	20230605-b-BAF0057-041	06/06/23 14:56
Calibration Check	SAF0114-CCV2		06/06/23 16:01
Calibration Blank	SAF0114-CCB2		06/06/23 16:20

ANALYSIS SEQUENCE SUMMARY

Laboratory:	Aqua Pro-Tech Laboratories	Work Order:	23E1424
Client:	Dynamic Earth LLC	Project:	Turtle Mill Brook-Eco. Evaluatior
Sequence:	SAF0325	Instrument:	Milestone DMA80-1

Sample Name	Lab Sample ID	FileID	Analysis Date/Time
Instrument RL Check	SAF0325-CRL1	20230615-BAF0534-001	06/15/23 10:31
Blank	BAF0580-BLK1	20230615-BAF0534-008	06/15/23 10:31
Initial Cal Blank	SAF0325-ICB1	20230615-BAF0534-007	06/15/23 10:31
Initial Cal Check	SAF0325-ICV2	20230615-BAF0534-004	06/15/23 10:31
Initial Cal Check	SAF0325-ICV1	20230615-BAF0534-002	06/15/23 10:31
Duplicate	BAF0580-DUP1	20230615-BAF0534-012	06/15/23 10:32
LCS	BAF0580-BS1	20230615-BAF0534-009	06/15/23 10:32
Matrix Spike Dup	BAF0580-MSD1	20230615-BAF0534-016	06/15/23 10:32
Matrix Spike	BAF0580-MS1	20230615-BAF0534-013	06/15/23 10:32
SED-1A	23E1424-16	20230615-BAF0534-019	06/15/23 10:38
SED-4A	23E1424-17	20230615-BAF0534-020	06/15/23 10:39
SED-6A	23E1424-18	20230615-BAF0534-021	06/15/23 10:40

F-V

ANALYSIS SEQUENCE SUMMARY

Laboratory:	Aqua Pro-Tech Laboratories	Work Order:	23E1424
Client:	Dynamic Earth LLC	Project:	Turtle Mill Brook-Eco. Evaluatior
Sequence:	SAF0325	Instrument:	Milestone DMA80-1

Sample Name	Lab Sample ID	FileID	Analysis Date/Time
Calibration Check	SAF0325-CCV1	20230615-BAF0534-022	06/15/23 12:55
Calibration Blank	SAF0325-CCB1	20230615-BAF0534-024	06/15/23 12:55

F-V

SEQUENCE CALIBRATION CHECKS

EPA 245.1

Client: **Dynamic Earth LLC**
Project: **Turtle Mill Brook-Eco. Evaluation** **Sequence:** SAF0076
Work Order: **23E1424** **Instrument:** Leeman m7600-1

Lab Sample ID	Analyte	True	Found	%R	Units	Control Limit
SAF0076-ICV1	Mercury	5.00	5.10	102	ug/L	95-105
SAF0076-CCV1	**Mercury**	**5.00**	**5.70**	**114 ***	**ug/L**	**90-110**
SAF0076-CCV2	**Mercury**	**5.00**	**5.68**	**114 ***	**ug/L**	**90-110**

ICV = Initial Cal Verification CCV = Continuing Cal Verification IFB = Interference Check Standard B
SCV = Second Source Cal Verification LCV = Low Cal Check

SEQUENCE CALIBRATION CHECKS

SW 846 7473

Client: **Dynamic Earth LLC**
Project: **Turtle Mill Brook-Eco. Evaluation** **Sequence:** SAF0114
Work Order: **23E1424** **Instrument:** ICP OES-1

Lab Sample ID	Analyte	True	Found	%R	Units	Control Limit
SAF0114-CCV2	Mercury	2000	2000	100	ug/kg	90-110
SAF0114-ICV1	Mercury	500	532	106	ug/kg	90-110
SAF0114-ICV2	Mercury	2000	2120	106	ug/kg	90-110
SAF0114-CCV1	Mercury	2000	1830	91.4	ug/kg	90-110

ICV = Initial Cal Verification CCV = Continuing Cal Verification IFB = Interference Check Standard B
SCV = Second Source Cal Verification LCV = Low Cal Check

SEQUENCE CALIBRATION CHECKS

SW 846 7473

Client: **Dynamic Earth LLC**
Project: **Turtle Mill Brook-Eco. Evaluation** **Sequence:** SAF0325
Work Order: **23E1424** **Instrument:** Milestone DMA80-1

Lab Sample ID	Analyte	True	Found	%R	Units	Control Limit
SAF0325-ICV1	Mercury	500	535	107	ug/kg	90-110
SAF0325-ICV2	Mercury	2000	2140	107	ug/kg	90-110
SAF0325-CCV1	Mercury	2000	2120	106	ug/kg	90-110

ICV = Initial Cal Verification CCV = Continuing Cal Verification IFB = Interference Check Standard B
SCV = Second Source Cal Verification LCV = Low Cal Check

METALS

Dynamic Earth LLC

Work Order: 23E1424

Project: Turtle Mill Brook-Eco. Evaluation

ANALYSIS DATA SHEET

Client: **Dynamic Earth LLC**
Client Sample ID: **Blank**
Lab Sample ID: **BAF0027-BLK1**
Project: **Turtle Mill Brook-Eco. Evaluation**
Work Order: **23E1424**

Init/Final Vol:	50 mL / 50 mL	Prep Date:	6/1/2023 12:26:00PM
Matrix:	Water	Prep Method:	Hot Block ICP Aqueous

Total Metals - Aqueous (EPA 200.7)

CAS NO.	Analyte	Analyzed	Concentration	Units	RL	DF	Analyst	Sequence/Batch
7440-70-2	Calcium	06/06/2023 15:43	ND	mg/L	1.00	1	MS	SAF0115/BAF0027
7439-95-4	Magnesium	06/06/2023 15:43	ND	mg/L	2.00	1	MS	SAF0115/BAF0027

ND - Indicates compound analyzed for but not detected

RL - Reporting limit
DF - Dilution Factor

F-I

ANALYSIS DATA SHEET

Client: **Dynamic Earth LLC**
Client Sample ID: **Blank**
Lab Sample ID: **BAF0108-BLK1**
Project: **Turtle Mill Brook-Eco. Evaluation**
Work Order: **23E1424**

Init/Final Vol:	2 g / 50 mL	Prep Date:	6/5/2023 9:53:00AM
Matrix:	Soil	Prep Method:	Hot Block ICP Soil

Total Metals - Soil (SW 846 6010D)

CAS NO.	Analyte	Analyzed	Concentration	Units	RL	DF	Analyst	Sequence/Batch
7440-38-2	Arsenic	06/06/2023 11:48	ND	mg/kg wet	1.25	1	MS	SAF0101/BAF0108
7439-92-1	Lead	06/06/2023 11:48	ND	mg/kg wet	1.25	1	MS	SAF0101/BAF0108

ND - Indicates compound analyzed for but not detected

RL - Reporting limit
DF - Dilution Factor

F-I

ANALYSIS DATA SHEET

Client: **Dynamic Earth LLC**
Client Sample ID: **Blank**
Lab Sample ID: **BAF0187-BLK1**
Project: **Turtle Mill Brook-Eco. Evaluation**
Work Order: **23E1424**

Init/Final Vol:	50 mL / 50 mL	Prep Date:	6/6/2023 11:16:00AM
Matrix:	Water	Prep Method:	Hot Block ICPMS

Dissolved Metals - Aqueous (EPA 200.8)

CAS NO.	Analyte	Analyzed	Concentration	Units	RL	DF	Analyst	Sequence/Batch
7440-38-2	Arsenic	06/09/2023 16:50	ND	mg/L	0.00200	1	BB	SAF0190/BAF0187
7439-92-1	Lead	06/09/2023 16:50	ND	mg/L	0.00200	1	BB	SAF0190/BAF0187

ND - Indicates compound analyzed for but not detected

RL - Reporting limit
DF - Dilution Factor

F-I

ANALYSIS DATA SHEET

Client: **Dynamic Earth LLC**
Client Sample ID: **Blank**
Lab Sample ID: **BAF0256-BLK1**
Project: **Turtle Mill Brook-Eco. Evaluation**
Work Order: **23E1424**

Init/Final Vol:	50 mL / 50 mL	Prep Date:	6/7/2023 2:07:00PM
Matrix:	Water	Prep Method:	Hot Block ICPMS

Total Metals - Aqueous (EPA 200.8)

CAS NO.	Analyte	Analyzed	Concentration	Units	RL	DF	Analyst	Sequence/Batch
7440-38-2	Arsenic	06/09/2023 09:10	ND	mg/L	0.00200	1	RS	SAF0300/BAF0256
7439-92-1	Lead	06/09/2023 09:10	ND	mg/L	0.00200	1	RS	SAF0300/BAF0256

ND - Indicates compound analyzed for but not detected

RL - Reporting limit
DF - Dilution Factor

F-I

ANALYSIS DATA SHEET

Client: **Dynamic Earth LLC**
Client Sample ID: **Blank**
Lab Sample ID: **BAF0577-BLK1**
Project: **Turtle Mill Brook-Eco. Evaluation**
Work Order: **23E1424**

Init/Final Vol:	2 g / 50 mL	Prep Date:	6/15/2023 9:42:00AM
Matrix:	Soil	Prep Method:	Hot Block ICP Soil

Total Metals - Soil (SW 846 6010D)

CAS NO.	Analyte	Analyzed	Concentration	Units	RL	DF	Analyst	Sequence/Batch
7440-38-2	Arsenic	06/18/2023 09:44	ND	mg/kg wet	1.25	1	MS	SAF0335/BAF0577
7439-92-1	Lead	06/18/2023 09:44	ND	mg/kg wet	1.25	1	MS	SAF0335/BAF0577

ND - Indicates compound analyzed for but not detected

RL - Reporting limit
DF - Dilution Factor

F-I

ANALYSIS DATA SHEET

Client: Dynamic Earth LLC
Client Sample ID: Calibration Blank
Lab Sample ID: SAF0101-CCB1
Project: Turtle Mill Brook-Eco. Evaluation
Work Order: 23E1424

Init/Final Vol:	N/A	Prep Date:	6/6/2023 7:01:31AM
Matrix:	Soil	Prep Method:	

Total Metals - Aqueous (SW 846 6010D)

CAS NO.	Analyte	Analyzed	Concentration	Units	RL	DF	Analyst	Sequence/Batch
7440-38-2	Arsenic	06/06/2023 11:23	ND	mg/L	0.0500	1	MS	SAF0101/SAF0101
7439-92-1	Lead	06/06/2023 11:23	ND	mg/L	0.0500	1	MS	SAF0101/SAF0101

ND - Indicates compound analyzed for but not detected

RL - Reporting limit
DF - Dilution Factor

F-I

ANALYSIS DATA SHEET

Client: Dynamic Earth LLC
Client Sample ID: Calibration Blank
Lab Sample ID: SAF0101-CCB2
Project: Turtle Mill Brook-Eco. Evaluation
Work Order: 23E1424

Init/Final Vol:	N/A	Prep Date:	6/6/2023 7:01:31AM
Matrix:	Soil	Prep Method:	

Total Metals - Aqueous (SW 846 6010D)

CAS NO.	Analyte	Analyzed	Concentration	Units	RL	DF	Analyst	Sequence/Batch
7440-38-2	Arsenic	06/06/2023 12:50	ND	mg/L	0.0500	1	MS	SAF0101/SAF0101
7439-92-1	Lead	06/06/2023 12:50	ND	mg/L	0.0500	1	MS	SAF0101/SAF0101

ND - Indicates compound analyzed for but not detected

RL - Reporting limit
DF - Dilution Factor

F-I

ANALYSIS DATA SHEET

Client: Dynamic Earth LLC
Client Sample ID: Calibration Blank
Lab Sample ID: SAF0101-CCB3
Project: Turtle Mill Brook-Eco. Evaluation
Work Order: 23E1424

Init/Final Vol:	N/A	Prep Date:	6/6/2023 7:01:31AM
Matrix:	Soil	Prep Method:	

Total Metals - Aqueous (SW 846 6010D)

CAS NO.	Analyte	Analyzed	Concentration	Units	RL	DF	Analyst	Sequence/Batch
7440-38-2	Arsenic	06/06/2023 13:21	ND	mg/L	0.0500	1	MS	SAF0101/SAF0101
7439-92-1	Lead	06/06/2023 13:21	ND	mg/L	0.0500	1	MS	SAF0101/SAF0101

ND - Indicates compound analyzed for but not detected

RL - Reporting limit
DF - Dilution Factor

F-I

ANALYSIS DATA SHEET

Client: Dynamic Earth LLC
Client Sample ID: Calibration Blank
Lab Sample ID: SAF0101-CCB4
Project: Turtle Mill Brook-Eco. Evaluation
Work Order: 23E1424

Init/Final Vol:	N/A	Prep Date:	6/6/2023 7:01:31AM
Matrix:	Soil	Prep Method:	

Total Metals - Aqueous (SW 846 6010D)

CAS NO.	Analyte	Analyzed	Concentration	Units	RL	DF	Analyst	Sequence/Batch
7440-38-2	Arsenic	06/06/2023 13:50	ND	mg/L	0.0500	1	MS	SAF0101/SAF0101
7439-92-1	Lead	06/06/2023 13:50	ND	mg/L	0.0500	1	MS	SAF0101/SAF0101

ND - Indicates compound analyzed for but not detected

RL - Reporting limit
DF - Dilution Factor

F-I

ANALYSIS DATA SHEET

Client: Dynamic Earth LLC
Client Sample ID: Initial Cal Blank
Lab Sample ID: SAF0101-ICB1
Project: Turtle Mill Brook-Eco. Evaluation
Work Order: 23E1424

Init/Final Vol:	N/A	Prep Date:	6/6/2023 7:01:31AM
Matrix:	Soil	Prep Method:	

Total Metals - Aqueous (SW 846 6010D)

CAS NO.	Analyte	Analyzed	Concentration	Units	RL	DF	Analyst	Sequence/Batch
7440-38-2	Arsenic	06/06/2023 09:14	ND	mg/L	0.0500	1	MS	SAF0101/SAF0101
7439-92-1	Lead	06/06/2023 09:14	ND	mg/L	0.0500	1	MS	SAF0101/SAF0101

ND - Indicates compound analyzed for but not detected

RL - Reporting limit
DF - Dilution Factor

F-I

ANALYSIS DATA SHEET

Client: Dynamic Earth LLC
Client Sample ID: Calibration Blank
Lab Sample ID: SAF0115-CCB1
Project: Turtle Mill Brook-Eco. Evaluation
Work Order: 23E1424

Init/Final Vol:	N/A	Prep Date:	6/6/2023 7:25:48AM
Matrix:	Water	Prep Method:	

Total Metals - Aqueous (EPA 200.7)

CAS NO.	Analyte	Analyzed	Concentration	Units	RL	DF	Analyst	Sequence/Batch
7440-70-2	Calcium	06/06/2023 16:03	ND	mg/L	1.00	1	MS	SAF0115/SAF0115
7439-95-4	Magnesium	06/06/2023 16:03	ND	mg/L	2.00	1	MS	SAF0115/SAF0115

ND - Indicates compound analyzed for but not detected

RL - Reporting limit
DF - Dilution Factor

F-I

ANALYSIS DATA SHEET

Client: **Dynamic Earth LLC**
Client Sample ID: **Initial Cal Blank**
Lab Sample ID: **SAF0115-ICB1**
Project: **Turtle Mill Brook-Eco. Evaluation**
Work Order: **23E1424**

Init/Final Vol:	N/A	Prep Date:	6/6/2023 7:25:48AM
Matrix:	Water	Prep Method:	

Total Metals - Aqueous (EPA 200.7)

CAS NO.	Analyte	Analyzed	Concentration	Units	RL	DF	Analyst	Sequence/Batch
7440-70-2	Calcium	06/06/2023 09:14	ND	mg/L	1.00	1	MS	SAF0115/SAF0115
7439-95-4	Magnesium	06/06/2023 09:14	ND	mg/L	2.00	1	MS	SAF0115/SAF0115

ND - Indicates compound analyzed for but not detected

RL - Reporting limit
DF - Dilution Factor

F-I

ANALYSIS DATA SHEET

Client: Dynamic Earth LLC
Client Sample ID: Calibration Blank
Lab Sample ID: SAF0123-CCB1
Project: Turtle Mill Brook-Eco. Evaluation
Work Order: 23E1424

Init/Final Vol:	N/A	Prep Date:	6/7/2023 7:39:29AM
Matrix:	Soil	Prep Method:	

Total Metals - Aqueous (SW 846 6010D)

CAS NO.	Analyte	Analyzed	Concentration	Units	RL	DF	Analyst	Sequence/Batch
7440-38-2	Arsenic	06/07/2023 10:46	ND	mg/L	0.0500	1	MS	SAF0123/SAF0123
7439-92-1	Lead	06/07/2023 10:46	ND	mg/L	0.0500	1	MS	SAF0123/SAF0123

ND - Indicates compound analyzed for but not detected

RL - Reporting limit
DF - Dilution Factor

F-I

ANALYSIS DATA SHEET

Client: Dynamic Earth LLC
Client Sample ID: Calibration Blank
Lab Sample ID: SAF0123-CCB2
Project: Turtle Mill Brook-Eco. Evaluation
Work Order: 23E1424

Init/Final Vol:	N/A	Prep Date:	6/7/2023 7:39:29AM
Matrix:	Soil	Prep Method:	

Total Metals - Aqueous (SW 846 6010D)

CAS NO.	Analyte	Analyzed	Concentration	Units	RL	DF	Analyst	Sequence/Batch
7440-38-2	Arsenic	06/07/2023 11:33	ND	mg/L	0.0500	1	MS	SAF0123/SAF0123
7439-92-1	Lead	06/07/2023 11:33	ND	mg/L	0.0500	1	MS	SAF0123/SAF0123

ND - Indicates compound analyzed for but not detected

RL - Reporting limit
DF - Dilution Factor

F-I

ANALYSIS DATA SHEET

Client: Dynamic Earth LLC
Client Sample ID: Calibration Blank
Lab Sample ID: SAF0123-CCB3
Project: Turtle Mill Brook-Eco. Evaluation
Work Order: 23E1424

Init/Final Vol:	N/A	Prep Date:	6/7/2023 7:39:29AM
Matrix:	Soil	Prep Method:	

Total Metals - Aqueous (SW 846 6010D)

CAS NO.	Analyte	Analyzed	Concentration	Units	RL	DF	Analyst	Sequence/Batch
7440-38-2	Arsenic	06/07/2023 12:06	ND	mg/L	0.0500	1	MS	SAF0123/SAF0123
7439-92-1	Lead	06/07/2023 12:06	ND	mg/L	0.0500	1	MS	SAF0123/SAF0123

ND - Indicates compound analyzed for but not detected

RL - Reporting limit
DF - Dilution Factor

F-I

ANALYSIS DATA SHEET

Client: Dynamic Earth LLC
Client Sample ID: Calibration Blank
Lab Sample ID: SAF0123-CCB4
Project: Turtle Mill Brook-Eco. Evaluation
Work Order: 23E1424

Init/Final Vol:	N/A	Prep Date:	6/7/2023 7:39:29AM
Matrix:	Soil	Prep Method:	

Total Metals - Aqueous (SW 846 6010D)

CAS NO.	Analyte	Analyzed	Concentration	Units	RL	DF	Analyst	Sequence/Batch
7440-38-2	Arsenic	06/07/2023 12:38	ND	mg/L	0.0500	1	MS	SAF0123/SAF0123
7439-92-1	Lead	06/07/2023 12:38	ND	mg/L	0.0500	1	MS	SAF0123/SAF0123

ND - Indicates compound analyzed for but not detected

RL - Reporting limit
DF - Dilution Factor

F-I

ANALYSIS DATA SHEET

Client: Dynamic Earth LLC
Client Sample ID: Initial Cal Blank
Lab Sample ID: SAF0123-ICB1
Project: Turtle Mill Brook-Eco. Evaluation
Work Order: 23E1424

Init/Final Vol:	N/A	Prep Date:	6/7/2023 7:39:29AM
Matrix:	Soil	Prep Method:	

Total Metals - Aqueous (SW 846 6010D)

CAS NO.	Analyte	Analyzed	Concentration	Units	RL	DF	Analyst	Sequence/Batch
7440-38-2	Arsenic	06/07/2023 09:19	ND	mg/L	0.0500	1	MS	SAF0123/SAF0123
7439-92-1	Lead	06/07/2023 09:19	ND	mg/L	0.0500	1	MS	SAF0123/SAF0123

ND - Indicates compound analyzed for but not detected

RL - Reporting limit
DF - Dilution Factor

F-I

ANALYSIS DATA SHEET

Client: Dynamic Earth LLC
Client Sample ID: Calibration Blank
Lab Sample ID: SAF0136-CCB1
Project: Turtle Mill Brook-Eco. Evaluation
Work Order: 23E1424

Init/Final Vol:	N/A	Prep Date:	6/7/2023 7:15:54AM
Matrix:	Water	Prep Method:	

Total Metals - Aqueous (EPA 200.7)

CAS NO.	Analyte	Analyzed	Concentration	Units	RL	DF	Analyst	Sequence/Batch
7440-70-2	Calcium	06/07/2023 15:14	ND	mg/L	1.00	1	MS	SAF0136/SAF0136
7439-95-4	Magnesium	06/07/2023 15:14	ND	mg/L	2.00	1	MS	SAF0136/SAF0136

ND - Indicates compound analyzed for but not detected

RL - Reporting limit
DF - Dilution Factor

F-I

ANALYSIS DATA SHEET

Client: Dynamic Earth LLC
Client Sample ID: Initial Cal Blank
Lab Sample ID: SAF0136-ICB1
Project: Turtle Mill Brook-Eco. Evaluation
Work Order: 23E1424

Init/Final Vol:	N/A	Prep Date:	6/7/2023 7:15:54AM
Matrix:	Water	Prep Method:	

Total Metals - Aqueous (EPA 200.7)

CAS NO.	Analyte	Analyzed	Concentration	Units	RL	DF	Analyst	Sequence/Batch
7440-70-2	Calcium	06/07/2023 09:19	ND	mg/L	1.00	1	MS	SAF0136/SAF0136
7439-95-4	Magnesium	06/07/2023 09:19	ND	mg/L	2.00	1	MS	SAF0136/SAF0136

ND - Indicates compound analyzed for but not detected

RL - Reporting limit
DF - Dilution Factor

F-I

ANALYSIS DATA SHEET

Client: Dynamic Earth LLC
Client Sample ID: Calibration Blank
Lab Sample ID: SAF0149-CCB1
Project: Turtle Mill Brook-Eco. Evaluation
Work Order: 23E1424

Init/Final Vol:	N/A	Prep Date:	6/8/2023 7:13:49AM
Matrix:	Soil	Prep Method:	

Total Metals - Aqueous (SW 846 6010D)

CAS NO.	Analyte	Analyzed	Concentration	Units	RL	DF	Analyst	Sequence/Batch
7440-38-2	Arsenic	06/08/2023 10:13	ND	mg/L	0.0500	1	MS	SAF0149/SAF0149
7439-92-1	Lead	06/08/2023 10:13	ND	mg/L	0.0500	1	MS	SAF0149/SAF0149

ND - Indicates compound analyzed for but not detected

RL - Reporting limit
DF - Dilution Factor

F-I

ANALYSIS DATA SHEET

Client: Dynamic Earth LLC
Client Sample ID: Calibration Blank
Lab Sample ID: SAF0149-CCB2
Project: Turtle Mill Brook-Eco. Evaluation
Work Order: 23E1424

Init/Final Vol:	N/A	Prep Date:	6/8/2023 7:13:49AM
Matrix:	Soil	Prep Method:	

Total Metals - Aqueous (SW 846 6010D)

CAS NO.	Analyte	Analyzed	Concentration	Units	RL	DF	Analyst	Sequence/Batch
7440-38-2	Arsenic	06/08/2023 10:38	ND	mg/L	0.0500	1	MS	SAF0149/SAF0149
7439-92-1	Lead	06/08/2023 10:38	ND	mg/L	0.0500	1	MS	SAF0149/SAF0149

ND - Indicates compound analyzed for but not detected

RL - Reporting limit
DF - Dilution Factor

F-I

ANALYSIS DATA SHEET

Client: Dynamic Earth LLC
Client Sample ID: Initial Cal Blank
Lab Sample ID: SAF0149-ICB1
Project: Turtle Mill Brook-Eco. Evaluation
Work Order: 23E1424

Init/Final Vol:	N/A	Prep Date:	6/8/2023 7:13:49AM
Matrix:	Soil	Prep Method:	

Total Metals - Aqueous (SW 846 6010D)

CAS NO.	Analyte	Analyzed	Concentration	Units	RL	DF	Analyst	Sequence/Batch
7440-38-2	Arsenic	06/08/2023 09:24	ND	mg/L	0.0500	1	MS	SAF0149/SAF0149
7439-92-1	Lead	06/08/2023 09:24	ND	mg/L	0.0500	1	MS	SAF0149/SAF0149

ND - Indicates compound analyzed for but not detected

RL - Reporting limit
DF - Dilution Factor

F-I

ANALYSIS DATA SHEET

Client: Dynamic Earth LLC
Client Sample ID: Calibration Blank
Lab Sample ID: SAF0190-CCB3
Project: Turtle Mill Brook-Eco. Evaluation
Work Order: 23E1424

Init/Final Vol:	N/A	Prep Date:	6/9/2023 10:00:13AM
Matrix:	Water	Prep Method:	

Dissolved Metals - Aqueous (EPA 200.8)

CAS NO.	Analyte	Analyzed	Concentration	Units	RL	DF	Analyst	Sequence/Batch
7440-38-2	Arsenic	06/09/2023 17:02	ND	ug/L	2.00	1	BB	SAF0190/SAF0190
7439-92-1	Lead	06/09/2023 17:02	ND	ug/L	2.00	1	BB	SAF0190/SAF0190

ND - Indicates compound analyzed for but not detected

RL - Reporting limit
DF - Dilution Factor

F-I

ANALYSIS DATA SHEET

Client: Dynamic Earth LLC
Client Sample ID: Calibration Blank
Lab Sample ID: SAF0190-CCB4
Project: Turtle Mill Brook-Eco. Evaluation
Work Order: 23E1424

Init/Final Vol:	N/A	Prep Date:	6/9/2023 10:00:13AM
Matrix:	Water	Prep Method:	

Dissolved Metals - Aqueous (EPA 200.8)

CAS NO.	Analyte	Analyzed	Concentration	Units	RL	DF	Analyst	Sequence/Batch
7440-38-2	Arsenic	06/09/2023 17:32	ND	ug/L	2.00	1	BB	SAF0190/SAF0190
7439-92-1	Lead	06/09/2023 17:32	ND	ug/L	2.00	1	BB	SAF0190/SAF0190

ND - Indicates compound analyzed for but not detected

RL - Reporting limit
DF - Dilution Factor

F-I

ANALYSIS DATA SHEET

Client: Dynamic Earth LLC
Client Sample ID: Calibration Blank
Lab Sample ID: SAF0190-CCB5
Project: Turtle Mill Brook-Eco. Evaluation
Work Order: 23E1424

Init/Final Vol:	N/A	Prep Date:	6/9/2023 10:00:13AM
Matrix:	Water	Prep Method:	

Dissolved Metals - Aqueous (EPA 200.8)

CAS NO.	Analyte	Analyzed	Concentration	Units	RL	DF	Analyst	Sequence/Batch
7440-38-2	Arsenic	06/09/2023 18:02	ND	ug/L	2.00	1	BB	SAF0190/SAF0190
7439-92-1	Lead	06/09/2023 18:02	ND	ug/L	2.00	1	BB	SAF0190/SAF0190

ND - Indicates compound analyzed for but not detected

RL - Reporting limit
DF - Dilution Factor

F-I

ANALYSIS DATA SHEET

Client: **Dynamic Earth LLC**
Client Sample ID: **Initial Cal Blank**
Lab Sample ID: **SAF0190-ICB1**
Project: **Turtle Mill Brook-Eco. Evaluation**
Work Order: **23E1424**

Init/Final Vol:	N/A	Prep Date:	6/9/2023 10:00:13AM
Matrix:	Water	Prep Method:	

Dissolved Metals - Aqueous (EPA 200.8)

CAS NO.	Analyte	Analyzed	Concentration	Units	RL	DF	Analyst	Sequence/Batch
7440-38-2	Arsenic	06/09/2023 16:22	ND	ug/L	2.00	1	BB	SAF0190/SAF0190
7439-92-1	Lead	06/09/2023 16:22	ND	ug/L	2.00	1	BB	SAF0190/SAF0190

ND - Indicates compound analyzed for but not detected

RL - Reporting limit
DF - Dilution Factor

F-I

ANALYSIS DATA SHEET

Client: Dynamic Earth LLC
Client Sample ID: Calibration Blank
Lab Sample ID: SAF0300-CCB1
Project: Turtle Mill Brook-Eco. Evaluation
Work Order: 23E1424

Init/Final Vol:	N/A	Prep Date:	6/9/2023 8:00:26AM
Matrix:	Drinking Water	Prep Method:	

Total Metals - Aqueous (EPA 200.8)

CAS NO.	Analyte	Analyzed	Concentration	Units	RL	DF	Analyst	Sequence/Batch
7440-38-2	Arsenic	06/09/2023 09:59	ND	ug/L	0.500	1	RS	SAF0300/SAF0300
7439-92-1	Lead	06/09/2023 09:59	ND	ug/L	2.00	1	RS	SAF0300/SAF0300

ND - Indicates compound analyzed for but not detected

RL - Reporting limit
DF - Dilution Factor

F-I

ANALYSIS DATA SHEET

Client: Dynamic Earth LLC
Client Sample ID: Calibration Blank
Lab Sample ID: SAF0300-CCB2
Project: Turtle Mill Brook-Eco. Evaluation
Work Order: 23E1424

Init/Final Vol:	N/A	Prep Date:	6/9/2023 8:00:26AM
Matrix:	Drinking Water	Prep Method:	

Total Metals - Aqueous (EPA 200.8)

CAS NO.	Analyte	Analyzed	Concentration	Units	RL	DF	Analyst	Sequence/Batch
7440-38-2	Arsenic	06/09/2023 11:04	ND	ug/L	0.500	1	RS	SAF0300/SAF0300
7439-92-1	Lead	06/09/2023 11:04	ND	ug/L	2.00	1	RS	SAF0300/SAF0300

ND - Indicates compound analyzed for but not detected

RL - Reporting limit
DF - Dilution Factor

F-I

ANALYSIS DATA SHEET

Client: Dynamic Earth LLC
Client Sample ID: Calibration Blank
Lab Sample ID: SAF0300-CCBA
Project: Turtle Mill Brook-Eco. Evaluation
Work Order: 23E1424

Init/Final Vol:	N/A	Prep Date:	6/9/2023 8:00:26AM
Matrix:	Drinking Water	Prep Method:	

Total Metals - Aqueous (EPA 200.8)

CAS NO.	Analyte	Analyzed	Concentration	Units	RL	DF	Analyst	Sequence/Batch
7440-38-2	Arsenic	06/09/2023 11:25	ND	ug/L	0.500	1	RS	SAF0300/SAF0300
7439-92-1	Lead	06/09/2023 11:25	ND	ug/L	2.00	1	RS	SAF0300/SAF0300

ND - Indicates compound analyzed for but not detected

RL - Reporting limit
DF - Dilution Factor

F-I

ANALYSIS DATA SHEET

Client: **Dynamic Earth LLC**
Client Sample ID: **Initial Cal Blank**
Lab Sample ID: **SAF0300-ICB1**
Project: **Turtle Mill Brook-Eco. Evaluation**
Work Order: **23E1424**

Init/Final Vol:	N/A	Prep Date:	6/9/2023 8:00:26AM
Matrix:	Drinking Water	Prep Method:	

Total Metals - Aqueous (EPA 200.8)

CAS NO.	Analyte	Analyzed	Concentration	Units	RL	DF	Analyst	Sequence/Batch
7440-38-2	Arsenic	06/09/2023 08:57	ND	ug/L	0.500	1	RS	SAF0300/SAF0300
7439-92-1	Lead	06/09/2023 08:57	ND	ug/L	2.00	1	RS	SAF0300/SAF0300

ND - Indicates compound analyzed for but not detected

RL - Reporting limit
DF - Dilution Factor

F-I

ANALYSIS DATA SHEET

Client: Dynamic Earth LLC
Client Sample ID: Calibration Blank
Lab Sample ID: SAF0335-CCB1
Project: Turtle Mill Brook-Eco. Evaluation
Work Order: 23E1424

Init/Final Vol:	N/A	Prep Date:	6/18/2023 7:12:19AM
Matrix:	Soil	Prep Method:	

Total Metals - Aqueous (SW 846 6010D)

CAS NO.	Analyte	Analyzed	Concentration	Units	RL	DF	Analyst	Sequence/Batch
7440-38-2	Arsenic	06/18/2023 10:09	ND	mg/L	0.0500	1	MS	SAF0335/SAF0335
7439-92-1	Lead	06/18/2023 10:09	ND	mg/L	0.0500	1	MS	SAF0335/SAF0335

10 10.1.

ND - Indicates compound analyzed for but not detected

RL - Reporting limit
DF - Dilution Factor

F-I

ANALYSIS DATA SHEET

Client: Dynamic Earth LLC
Client Sample ID: Calibration Blank
Lab Sample ID: SAF0335-CCB2
Project: Turtle Mill Brook-Eco. Evaluation
Work Order: 23E1424

Init/Final Vol:	N/A	Prep Date:	6/18/2023 7:12:19AM
Matrix:	Soil	Prep Method:	

Total Metals - Aqueous (SW 846 6010D)

CAS NO.	Analyte	Analyzed	Concentration	Units	RL	DF	Analyst	Sequence/Batch
7440-38-2	Arsenic	06/18/2023 10:43	ND	mg/L	0.0500	1	MS	SAF0335/SAF0335
7439-92-1	Lead	06/18/2023 10:43	ND	mg/L	0.0500	1	MS	SAF0335/SAF0335

10
10.1.

ND - Indicates compound analyzed for but not detected

RL - Reporting limit
DF - Dilution Factor

F-I

ANALYSIS DATA SHEET

Client: Dynamic Earth LLC
Client Sample ID: Calibration Blank
Lab Sample ID: SAF0335-CCB3
Project: Turtle Mill Brook-Eco. Evaluation
Work Order: 23E1424

Init/Final Vol:	N/A	Prep Date:	6/18/2023 7:12:19AM
Matrix:	Soil	Prep Method:	

Total Metals - Aqueous (SW 846 6010D)

CAS NO.	Analyte	Analyzed	Concentration	Units	RL	DF	Analyst	Sequence/Batch
7440-38-2	Arsenic	06/19/2023 11:51	ND	mg/L	0.0500	1	MS	SAF0335/SAF0335
7439-92-1	Lead	06/19/2023 11:51	ND	mg/L	0.0500	1	MS	SAF0335/SAF0335

ND - Indicates compound analyzed for but not detected

RL - Reporting limit
DF - Dilution Factor

F-I

ANALYSIS DATA SHEET

Client: Dynamic Earth LLC
Client Sample ID: Initial Cal Blank
Lab Sample ID: SAF0335-ICB1
Project: Turtle Mill Brook-Eco. Evaluation
Work Order: 23E1424

Init/Final Vol:	N/A	Prep Date:	6/18/2023 7:12:19AM
Matrix:	Soil	Prep Method:	

Total Metals - Aqueous (SW 846 6010D)

CAS NO.	Analyte	Analyzed	Concentration	Units	RL	DF	Analyst	Sequence/Batch
7440-38-2	Arsenic	06/18/2023 09:19	ND	mg/L	0.0500	1	MS	SAF0335/SAF0335
7439-92-1	Lead	06/18/2023 09:19	ND	mg/L	0.0500	1	MS	SAF0335/SAF0335

ND - Indicates compound analyzed for but not detected

RL - Reporting limit
DF - Dilution Factor

F-I

ANALYSIS DATA SHEET

Client: Dynamic Earth LLC
Client Sample ID: Calibration Blank
Lab Sample ID: SAF0372-CCB1
Project: Turtle Mill Brook-Eco. Evaluation
Work Order: 23E1424

Init/Final Vol:	N/A	Prep Date:	6/20/2023 7:00:13AM
Matrix:	Soil	Prep Method:	

Total Metals - Aqueous (SW 846 6010D)

CAS NO.	Analyte	Analyzed	Concentration	Units	RL	DF	Analyst	Sequence/Batch
7440-38-2	Arsenic	06/20/2023 11:37	ND	mg/L	0.0500	1	MS	SAF0372/SAF0372
7439-92-1	Lead	06/20/2023 11:37	ND	mg/L	0.0500	1	MS	SAF0372/SAF0372

ND - Indicates compound analyzed for but not detected

RL - Reporting limit
DF - Dilution Factor

F-I

ANALYSIS DATA SHEET

Client: Dynamic Earth LLC
Client Sample ID: Calibration Blank
Lab Sample ID: SAF0372-CCB2
Project: Turtle Mill Brook-Eco. Evaluation
Work Order: 23E1424

Init/Final Vol:	N/A	Prep Date:	6/20/2023 7:00:13AM
Matrix:	Soil	Prep Method:	

Total Metals - Aqueous (SW 846 6010D)

CAS NO.	Analyte	Analyzed	Concentration	Units	RL	DF	Analyst	Sequence/Batch
7440-38-2	Arsenic	06/20/2023 12:01	ND	mg/L	0.0500	1	MS	SAF0372/SAF0372
7439-92-1	Lead	06/20/2023 12:01	ND	mg/L	0.0500	1	MS	SAF0372/SAF0372

ND - Indicates compound analyzed for but not detected

RL - Reporting limit
DF - Dilution Factor

F-I

ANALYSIS DATA SHEET

Client: Dynamic Earth LLC
Client Sample ID: Calibration Blank
Lab Sample ID: SAF0372-CCB3
Project: Turtle Mill Brook-Eco. Evaluation
Work Order: 23E1424

Init/Final Vol:	N/A	Prep Date:	6/20/2023 7:00:13AM
Matrix:	Soil	Prep Method:	

Total Metals - Aqueous (SW 846 6010D)

CAS NO.	Analyte	Analyzed	Concentration	Units	RL	DF	Analyst	Sequence/Batch
7440-38-2	Arsenic	06/20/2023 13:14	ND	mg/L	0.0500	1	MS	SAF0372/SAF0372
7439-92-1	Lead	06/20/2023 13:14	ND	mg/L	0.0500	1	MS	SAF0372/SAF0372

ND - Indicates compound analyzed for but not detected

RL - Reporting limit
DF - Dilution Factor

F-I

ANALYSIS DATA SHEET

Client: Dynamic Earth LLC
Client Sample ID: Calibration Blank
Lab Sample ID: SAF0372-CCB4
Project: Turtle Mill Brook-Eco. Evaluation
Work Order: 23E1424

Init/Final Vol:	N/A	Prep Date:	6/20/2023 7:00:13AM
Matrix:	Soil	Prep Method:	

Total Metals - Aqueous (SW 846 6010D)

CAS NO.	Analyte	Analyzed	Concentration	Units	RL	DF	Analyst	Sequence/Batch
7440-38-2	Arsenic	06/20/2023 13:45	ND	mg/L	0.0500	1	MS	SAF0372/SAF0372
7439-92-1	Lead	06/20/2023 13:45	ND	mg/L	0.0500	1	MS	SAF0372/SAF0372

ND - Indicates compound analyzed for but not detected

RL - Reporting limit
DF - Dilution Factor

F-I

ANALYSIS DATA SHEET

Client: Dynamic Earth LLC
Client Sample ID: Calibration Blank
Lab Sample ID: SAF0372-CCB5
Project: Turtle Mill Brook-Eco. Evaluation
Work Order: 23E1424

Init/Final Vol:	N/A	Prep Date:	6/20/2023 7:00:13AM
Matrix:	Soil	Prep Method:	

Total Metals - Aqueous (SW 846 6010D)

CAS NO.	Analyte	Analyzed	Concentration	Units	RL	DF	Analyst	Sequence/Batch
7440-38-2	Arsenic	06/20/2023 15:38	ND	mg/L	0.0500	1	MS	SAF0372/SAF0372
7439-92-1	Lead	06/20/2023 15:38	ND	mg/L	0.0500	1	MS	SAF0372/SAF0372

ND - Indicates compound analyzed for but not detected

RL - Reporting limit
DF - Dilution Factor

F-I

ANALYSIS DATA SHEET

Client: Dynamic Earth LLC
Client Sample ID: Calibration Blank
Lab Sample ID: SAF0372-CCB6
Project: Turtle Mill Brook-Eco. Evaluation
Work Order: 23E1424

Init/Final Vol:	N/A	Prep Date:	6/20/2023 7:00:13AM
Matrix:	Soil	Prep Method:	

Total Metals - Aqueous (SW 846 6010D)

CAS NO.	Analyte	Analyzed	Concentration	Units	RL	DF	Analyst	Sequence/Batch
7440-38-2	Arsenic	06/20/2023 15:38	ND	mg/L	0.0500	1	MS	SAF0372/SAF0372
7439-92-1	Lead	06/20/2023 15:38	ND	mg/L	0.0500	1	MS	SAF0372/SAF0372

ND - Indicates compound analyzed for but not detected

RL - Reporting limit
DF - Dilution Factor

F-I

ANALYSIS DATA SHEET

Client: Dynamic Earth LLC
Client Sample ID: Initial Cal Blank
Lab Sample ID: SAF0372-ICB1
Project: Turtle Mill Brook-Eco. Evaluation
Work Order: 23E1424

Init/Final Vol:	N/A	Prep Date:	6/20/2023 7:00:13AM
Matrix:	Soil	Prep Method:	

Total Metals - Aqueous (SW 846 6010D)

CAS NO.	Analyte	Analyzed	Concentration	Units	RL	DF	Analyst	Sequence/Batch
7440-38-2	Arsenic	06/20/2023 08:59	ND	mg/L	0.0500	1	MS	SAF0372/SAF0372
7439-92-1	Lead	06/20/2023 08:59	ND	mg/L	0.0500	1	MS	SAF0372/SAF0372

ND - Indicates compound analyzed for but not detected

RL - Reporting limit
DF - Dilution Factor

F-I

ANALYSIS DATA SHEET

Client: **Dynamic Earth LLC**
Client Sample ID: **SW-1**
Lab Sample ID: **23E1424-01**
Project: **Turtle Mill Brook-Eco. Evaluation**
Work Order: **23E1424**

Date Sampled:	05/30/23 11:20	Prep Date:	06/06/23 11:16
Init/Final Vol:	50 mL / 50 mL	Prep Method:	Hot Block ICPMS
Matrix:	Surface Water		

Dissolved Metals - Aqueous (EPA 200.8)

CAS NO.	Analyte	Analyzed	Conc.	Units	RL	DF	Qual	Analyst	Sequence/Batch
7440-38-2	Arsenic	06/09/23 17:27	ND	mg/L	0.00200	1	U	BB	SAF0190/BAF0187
7439-92-1	Lead	06/09/23 17:27	ND	mg/L	0.00200	1	U	BB	SAF0190/BAF0187

10 10.2.

ND, U - Indicates compound analyzed for but not detected
D - Indicates result is based on a dilution
E - Concentration exceeds highest calibration standard
H - Indicates a Hold Time violation

RL - Reporting limit
DF - Dilution Factor

B - Indicates compound found in associated blank

F-I

ANALYSIS DATA SHEET

Client: **Dynamic Earth LLC**
Client Sample ID: **SW-1**
Lab Sample ID: **23E1424-01**
Project: **Turtle Mill Brook-Eco. Evaluation**
Work Order: **23E1424**

Date Sampled:	05/30/23 11:20	Prep Date:	06/01/23 12:26
Init/Final Vol:	50 mL / 50 mL	Prep Method:	Hot Block ICP Aqueous
Matrix:	Surface Water		

Total Metals - Aqueous (EPA 200.7)

CAS NO.	Analyte	Analyzed	Conc.	Units	RL	DF	Qual	Analyst	Sequence/Batch
7440-70-2	Calcium	06/07/23 14:54	66.4	mg/L	1.00	1		MS	SAF0136/BAF0027
7439-95-4	Magnesium	06/07/23 14:54	3.89	mg/L	2.00	1		MS	SAF0136/BAF0027

ND, U - Indicates compound analyzed for but not detected
D - Indicates result is based on a dilution
E - Concentration exceeds highest calibration standard
H - Indicates a Hold Time violation

RL - Reporting limit
DF - Dilution Factor

B - Indicates compound found in associated blank

F-I

ANALYSIS DATA SHEET

Client: **Dynamic Earth LLC**
Client Sample ID: **SW-1**
Lab Sample ID: **23E1424-01**
Project: **Turtle Mill Brook-Eco. Evaluation**
Work Order: **23E1424**

Date Sampled:	05/30/23 11:20	Prep Date:	06/07/23 14:07
Init/Final Vol:	50 mL / 50 mL	Prep Method:	Hot Block ICPMS
Matrix:	Surface Water		

Total Metals - Aqueous (EPA 200.8)

CAS NO.	Analyte	Analyzed	Conc.	Units	RL	DF	Qual	Analyst	Sequence/Batch
7440-38-2	Arsenic	06/09/23 20:05	ND	mg/L	0.00200	1	U	RS	SAF0190/BAF0256
7439-92-1	Lead	06/09/23 20:05	ND	mg/L	0.00200	1	U	RS	SAF0190/BAF0256

10 10.2.

ND, U - Indicates compound analyzed for but not detected
D - Indicates result is based on a dilution
E - Concentration exceeds highest calibration standard
H - Indicates a Hold Time violation

RL - Reporting limit
DF - Dilution Factor

B - Indicates compound found in associated blank

F-I

ANALYSIS DATA SHEET

Client: **Dynamic Earth LLC**
Client Sample ID: **SED-1**
Lab Sample ID: **23E1424-02**
Project: **Turtle Mill Brook-Eco. Evaluation**
Work Order: **23E1424**

Date Sampled:	05/30/23 11:30	Prep Date:	06/05/23 09:53
Init/Final Vol:	2.1 g / 50 mL	Prep Method:	Hot Block ICP Soil
Matrix:	Soil		
Percent Solids:	59.65		

Total Metals - Soil (SW 846 6010D)

CAS NO.	Analyte	Analyzed	Conc.	Units	RL	DF	Qual	Analyst	Sequence/Batch
7440-38-2	Arsenic	06/07/23 12:16	ND	mg/kg dry	2.00	1	U	MS	SAF0123/BAF0108
7439-92-1	Lead	06/07/23 12:16	13.2	mg/kg dry	2.00	1		MS	SAF0123/BAF0108

10 10.2.

ND, U - Indicates compound analyzed for but not detected
D - Indicates result is based on a dilution
E - Concentration exceeds highest calibration standard
H - Indicates a Hold Time violation

RL - Reporting limit
DF - Dilution Factor

B - Indicates compound found in associated blank

F-I

ANALYSIS DATA SHEET

Client: **Dynamic Earth LLC**
Client Sample ID: **SW-2**
Lab Sample ID: **23E1424-03**
Project: **Turtle Mill Brook-Eco. Evaluation**
Work Order: **23E1424**

Date Sampled:	05/30/23 11:45	Prep Date:	06/06/23 11:16
Init/Final Vol:	50 mL / 50 mL	Prep Method:	Hot Block ICPMS
Matrix:	Surface Water		

Dissolved Metals - Aqueous (EPA 200.8)

CAS NO.	Analyte	Analyzed	Conc.	Units	RL	DF	Qual	Analyst	Sequence/Batch
7440-38-2	Arsenic	06/09/23 17:34	ND	mg/L	0.00200	1	U	BB	SAF0190/BAF0187
7439-92-1	Lead	06/09/23 17:34	ND	mg/L	0.00200	1	U	BB	SAF0190/BAF0187

10 10.2.

ND, U - Indicates compound analyzed for but not detected
D - Indicates result is based on a dilution
E - Concentration exceeds highest calibration standard
H - Indicates a Hold Time violation

RL - Reporting limit
DF - Dilution Factor

B - Indicates compound found in associated blank

F-I

ANALYSIS DATA SHEET

Client: **Dynamic Earth LLC**
Client Sample ID: **SW-2**
Lab Sample ID: **23E1424-03**
Project: **Turtle Mill Brook-Eco. Evaluation**
Work Order: **23E1424**

Date Sampled:	05/30/23 11:45	Prep Date:	06/01/23 12:26
Init/Final Vol:	50 mL / 50 mL	Prep Method:	Hot Block ICP Aqueous
Matrix:	Surface Water		

Total Metals - Aqueous (EPA 200.7)

CAS NO.	Analyte	Analyzed	Conc.	Units	RL	DF	Qual	Analyst	Sequence/Batch
7440-70-2	Calcium	06/07/23 14:56	64.6	mg/L	1.00	1		MS	SAF0136/BAF0027
7439-95-4	Magnesium	06/07/23 14:56	3.82	mg/L	2.00	1		MS	SAF0136/BAF0027

ND, U - Indicates compound analyzed for but not detected
D - Indicates result is based on a dilution
E - Concentration exceeds highest calibration standard
H - Indicates a Hold Time violation

RL - Reporting limit
DF - Dilution Factor

B - Indicates compound found in associated blank

F-I

ANALYSIS DATA SHEET

Client: **Dynamic Earth LLC**
Client Sample ID: **SW-2**
Lab Sample ID: **23E1424-03**
Project: **Turtle Mill Brook-Eco. Evaluation**
Work Order: **23E1424**

Date Sampled:	05/30/23 11:45	Prep Date:	06/07/23 14:07
Init/Final Vol:	50 mL / 50 mL	Prep Method:	Hot Block ICPMS
Matrix:	Surface Water		

Total Metals - Aqueous (EPA 200.8)

CAS NO.	Analyte	Analyzed	Conc.	Units	RL	DF	Qual	Analyst	Sequence/Batch
7440-38-2	Arsenic	06/09/23 11:20	ND	mg/L	0.0100	5	U	RS	SAF0190/BAF0256
7439-92-1	Lead	06/09/23 11:20	ND	mg/L	0.0100	5	U	RS	SAF0190/BAF0256

ND, U - Indicates compound analyzed for but not detected
D - Indicates result is based on a dilution
E - Concentration exceeds highest calibration standard
H - Indicates a Hold Time violation

RL - Reporting limit
DF - Dilution Factor

B - Indicates compound found in associated blank

F-I

ANALYSIS DATA SHEET

Client: **Dynamic Earth LLC**
Client Sample ID: **SED-2**
Lab Sample ID: **23E1424-04**
Project: **Turtle Mill Brook-Eco. Evaluation**
Work Order: **23E1424**

Date Sampled:	05/30/23 11:50	Prep Date:	06/05/23 09:53
Init/Final Vol:	2.03 g / 50 mL	Prep Method:	Hot Block ICP Soil
Matrix:	Soil		
Percent Solids:	69.61		

Total Metals - Soil (SW 846 6010D)

CAS NO.	Analyte	Analyzed	Conc.	Units	RL	DF	Qual	Analyst	Sequence/Batch
7440-38-2	Arsenic	06/07/23 12:18	3.41	mg/kg dry	1.77	1		MS	SAF0123/BAF0108
7439-92-1	Lead	06/07/23 12:18	20.8	mg/kg dry	1.77	1		MS	SAF0123/BAF0108

ND, U - Indicates compound analyzed for but not detected
D - Indicates result is based on a dilution
E - Concentration exceeds highest calibration standard
H - Indicates a Hold Time violation

RL - Reporting limit
DF - Dilution Factor

B - Indicates compound found in associated blank

F-I

ANALYSIS DATA SHEET

Client: **Dynamic Earth LLC**
Client Sample ID: **SW-3**
Lab Sample ID: **23E1424-05**
Project: **Turtle Mill Brook-Eco. Evaluation**
Work Order: **23E1424**

Date Sampled:	05/30/23 12:00	Prep Date:	06/06/23 11:16
Init/Final Vol:	50 mL / 50 mL	Prep Method:	Hot Block ICPMS
Matrix:	Surface Water		

Dissolved Metals - Aqueous (EPA 200.8)

CAS NO.	Analyte	Analyzed	Conc.	Units	RL	DF	Qual	Analyst	Sequence/Batch
7440-38-2	Arsenic	06/09/23 17:37	ND	mg/L	0.00200	1	U	BB	SAF0190/BAF0187
7439-92-1	Lead	06/09/23 17:37	ND	mg/L	0.00200	1	U	BB	SAF0190/BAF0187

10 10.2.

ND, U - Indicates compound analyzed for but not detected
D - Indicates result is based on a dilution
E - Concentration exceeds highest calibration standard
H - Indicates a Hold Time violation

RL - Reporting limit
DF - Dilution Factor

B - Indicates compound found in associated blank

F-I

ANALYSIS DATA SHEET

Client: **Dynamic Earth LLC**
Client Sample ID: **SW-3**
Lab Sample ID: **23E1424-05**
Project: **Turtle Mill Brook-Eco. Evaluation**
Work Order: **23E1424**

Date Sampled:	05/30/23 12:00	Prep Date:	06/01/23 12:26
Init/Final Vol:	50 mL / 50 mL	Prep Method:	Hot Block ICP Aqueous
Matrix:	Surface Water		

Total Metals - Aqueous (EPA 200.7)

CAS NO.	Analyte	Analyzed	Conc.	Units	RL	DF	Qual	Analyst	Sequence/Batch
7440-70-2	Calcium	06/07/23 14:59	72.0	mg/L	1.00	1		MS	SAF0136/BAF0027
7439-95-4	Magnesium	06/07/23 14:59	3.88	mg/L	2.00	1		MS	SAF0136/BAF0027

ND, U - Indicates compound analyzed for but not detected
D - Indicates result is based on a dilution
E - Concentration exceeds highest calibration standard
H - Indicates a Hold Time violation

RL - Reporting limit
DF - Dilution Factor

B - Indicates compound found in associated blank

F-I

ANALYSIS DATA SHEET

Client: **Dynamic Earth LLC**
Client Sample ID: **SW-3**
Lab Sample ID: **23E1424-05**
Project: **Turtle Mill Brook-Eco. Evaluation**
Work Order: **23E1424**

Date Sampled:	05/30/23 12:00	Prep Date:	06/07/23 14:07
Init/Final Vol:	50 mL / 50 mL	Prep Method:	Hot Block ICPMS
Matrix:	Surface Water		

Total Metals - Aqueous (EPA 200.8)

CAS NO.	Analyte	Analyzed	Conc.	Units	RL	DF	Qual	Analyst	Sequence/Batch
7440-38-2	Arsenic	06/09/23 10:32	ND	mg/L	0.00200	1	U	RS	SAF0300/BAF0256
7439-92-1	Lead	06/09/23 10:32	ND	mg/L	0.00200	1	U	RS	SAF0300/BAF0256

10 10.2.

ND, U - Indicates compound analyzed for but not detected
D - Indicates result is based on a dilution
E - Concentration exceeds highest calibration standard
H - Indicates a Hold Time violation

RL - Reporting limit
DF - Dilution Factor

B - Indicates compound found in associated blank

F-I

ANALYSIS DATA SHEET

Client: **Dynamic Earth LLC**
Client Sample ID: **SED-3**
Lab Sample ID: **23E1424-06**
Project: **Turtle Mill Brook-Eco. Evaluation**
Work Order: **23E1424**

Date Sampled:	05/30/23 12:05	Prep Date:	06/05/23 09:53
Init/Final Vol:	2.03 g / 50 mL	Prep Method:	Hot Block ICP Soil
Matrix:	Soil		
Percent Solids:	79.25		

Total Metals - Soil (SW 846 6010D)

CAS NO.	Analyte	Analyzed	Conc.	Units	RL	DF	Qual	Analyst	Sequence/Batch
7440-38-2	Arsenic	06/07/23 12:20	ND	mg/kg dry	1.55	1	U	MS	SAF0123/BAF0108
7439-92-1	Lead	06/07/23 12:20	6.33	mg/kg dry	1.55	1		MS	SAF0123/BAF0108

10 10.2.

ND, U - Indicates compound analyzed for but not detected
D - Indicates result is based on a dilution
E - Concentration exceeds highest calibration standard
H - Indicates a Hold Time violation

RL - Reporting limit
DF - Dilution Factor

B - Indicates compound found in associated blank

F-I

ANALYSIS DATA SHEET

Client: **Dynamic Earth LLC**
Client Sample ID: **SW-4**
Lab Sample ID: **23E1424-07**
Project: **Turtle Mill Brook-Eco. Evaluation**
Work Order: **23E1424**

Date Sampled:	05/30/23 12:25	Prep Date:	06/06/23 11:16
Init/Final Vol:	50 mL / 50 mL	Prep Method:	Hot Block ICPMS
Matrix:	Surface Water		

Dissolved Metals - Aqueous (EPA 200.8)

CAS NO.	Analyte	Analyzed	Conc.	Units	RL	DF	Qual	Analyst	Sequence/Batch
7440-38-2	Arsenic	06/09/23 17:40	ND	mg/L	0.00200	1	U	BB	SAF0190/BAF0187
7439-92-1	Lead	06/09/23 17:40	ND	mg/L	0.00200	1	U	BB	SAF0190/BAF0187

10 10.2.

ND, U - Indicates compound analyzed for but not detected
D - Indicates result is based on a dilution
E - Concentration exceeds highest calibration standard
H - Indicates a Hold Time violation

RL - Reporting limit
DF - Dilution Factor

B - Indicates compound found in associated blank

F-I

ANALYSIS DATA SHEET

Client: **Dynamic Earth LLC**
Client Sample ID: **SW-4**
Lab Sample ID: **23E1424-07**
Project: **Turtle Mill Brook-Eco. Evaluation**
Work Order: **23E1424**

Date Sampled:	05/30/23 12:25	Prep Date:	06/01/23 12:26
Init/Final Vol:	50 mL / 50 mL	Prep Method:	Hot Block ICP Aqueous
Matrix:	Surface Water		

Total Metals - Aqueous (EPA 200.7)

CAS NO.	Analyte	Analyzed	Conc.	Units	RL	DF	Qual	Analyst	Sequence/Batch
7440-70-2	Calcium	06/07/23 15:01	96.5	mg/L	1.00	1		MS	SAF0136/BAF0027
7439-95-4	Magnesium	06/07/23 15:01	4.24	mg/L	2.00	1		MS	SAF0136/BAF0027

ND, U - Indicates compound analyzed for but not detected
D - Indicates result is based on a dilution
E - Concentration exceeds highest calibration standard
H - Indicates a Hold Time violation

RL - Reporting limit
DF - Dilution Factor

B - Indicates compound found in associated blank

F-I

ANALYSIS DATA SHEET

Client: **Dynamic Earth LLC**
Client Sample ID: **SW-4**
Lab Sample ID: **23E1424-07**
Project: **Turtle Mill Brook-Eco. Evaluation**
Work Order: **23E1424**

Date Sampled:	05/30/23 12:25	Prep Date:	06/07/23 14:07
Init/Final Vol:	50 mL / 50 mL	Prep Method:	Hot Block ICPMS
Matrix:	Surface Water		

Total Metals - Aqueous (EPA 200.8)

CAS NO.	Analyte	Analyzed	Conc.	Units	RL	DF	Qual	Analyst	Sequence/Batch
7440-38-2	Arsenic	06/09/23 10:35	ND	mg/L	0.00200	1	U	RS	SAF0300/BAF0256
7439-92-1	Lead	06/09/23 10:35	ND	mg/L	0.00200	1	U	RS	SAF0300/BAF0256

ND, U - Indicates compound analyzed for but not detected
D - Indicates result is based on a dilution
E - Concentration exceeds highest calibration standard
H - Indicates a Hold Time violation

RL - Reporting limit
DF - Dilution Factor

B - Indicates compound found in associated blank

F-I

ANALYSIS DATA SHEET

Client: **Dynamic Earth LLC**
Client Sample ID: **SED-4**
Lab Sample ID: **23E1424-08**
Project: **Turtle Mill Brook-Eco. Evaluation**
Work Order: **23E1424**

Date Sampled:	05/30/23 12:30	Prep Date:	06/05/23 09:53
Init/Final Vol:	2.02 g / 50 mL	Prep Method:	Hot Block ICP Soil
Matrix:	Soil		
Percent Solids:	85.35		

Total Metals - Soil (SW 846 6010D)

CAS NO.	Analyte	Analyzed	Conc.	Units	RL	DF	Qual	Analyst	Sequence/Batch
7440-38-2	Arsenic	06/07/23 12:23	4.03	mg/kg dry	1.45	1		MS	SAF0123/BAF0108
7439-92-1	Lead	06/07/23 12:23	4.79	mg/kg dry	1.45	1		MS	SAF0123/BAF0108

ND, U - Indicates compound analyzed for but not detected
D - Indicates result is based on a dilution
E - Concentration exceeds highest calibration standard
H - Indicates a Hold Time violation

RL - Reporting limit
DF - Dilution Factor

B - Indicates compound found in associated blank

F-I

ANALYSIS DATA SHEET

Client: **Dynamic Earth LLC**
Client Sample ID: **SW-5**
Lab Sample ID: **23E1424-09**
Project: **Turtle Mill Brook-Eco. Evaluation**
Work Order: **23E1424**

Date Sampled:	05/30/23 12:40	Prep Date:	06/06/23 11:16
Init/Final Vol:	50 mL / 50 mL	Prep Method:	Hot Block ICPMS
Matrix:	Surface Water		

Dissolved Metals - Aqueous (EPA 200.8)

CAS NO.	Analyte	Analyzed	Conc.	Units	RL	DF	Qual	Analyst	Sequence/Batch
7440-38-2	Arsenic	06/09/23 17:42	ND	mg/L	0.00200	1	U	BB	SAF0190/BAF0187
7439-92-1	Lead	06/09/23 17:42	ND	mg/L	0.00200	1	U	BB	SAF0190/BAF0187

ND, U - Indicates compound analyzed for but not detected
D - Indicates result is based on a dilution
E - Concentration exceeds highest calibration standard
H - Indicates a Hold Time violation

RL - Reporting limit
DF - Dilution Factor

B - Indicates compound found in associated blank

F-I

ANALYSIS DATA SHEET

Client: **Dynamic Earth LLC**
Client Sample ID: **SW-5**
Lab Sample ID: **23E1424-09**
Project: **Turtle Mill Brook-Eco. Evaluation**
Work Order: **23E1424**

Date Sampled:	05/30/23 12:40	Prep Date:	06/01/23 12:26
Init/Final Vol:	50 mL / 50 mL	Prep Method:	Hot Block ICP Aqueous
Matrix:	Surface Water		

Total Metals - Aqueous (EPA 200.7)

CAS NO.	Analyte	Analyzed	Conc.	Units	RL	DF	Qual	Analyst	Sequence/Batch
7440-70-2	Calcium	06/07/23 15:03	81.3	mg/L	1.00	1		MS	SAF0136/BAF0027
7439-95-4	Magnesium	06/07/23 15:03	4.13	mg/L	2.00	1		MS	SAF0136/BAF0027

ND, U - Indicates compound analyzed for but not detected
D - Indicates result is based on a dilution
E - Concentration exceeds highest calibration standard
H - Indicates a Hold Time violation

RL - Reporting limit
DF - Dilution Factor

B - Indicates compound found in associated blank

F-I

ANALYSIS DATA SHEET

Client: **Dynamic Earth LLC**
Client Sample ID: **SW-5**
Lab Sample ID: **23E1424-09**
Project: **Turtle Mill Brook-Eco. Evaluation**
Work Order: **23E1424**

Date Sampled:	05/30/23 12:40	Prep Date:	06/07/23 14:07
Init/Final Vol:	50 mL / 50 mL	Prep Method:	Hot Block ICPMS
Matrix:	Surface Water		

Total Metals - Aqueous (EPA 200.8)

CAS NO.	Analyte	Analyzed	Conc.	Units	RL	DF	Qual	Analyst	Sequence/Batch
7440-38-2	Arsenic	06/09/23 10:37	ND	mg/L	0.00200	1	U	RS	SAF0300/BAF0256
7439-92-1	Lead	06/09/23 10:37	ND	mg/L	0.00200	1	U	RS	SAF0300/BAF0256

10 10.2.

ND, U - Indicates compound analyzed for but not detected
D - Indicates result is based on a dilution
E - Concentration exceeds highest calibration standard
H - Indicates a Hold Time violation

RL - Reporting limit
DF - Dilution Factor

B - Indicates compound found in associated blank

F-I

ANALYSIS DATA SHEET

Client: **Dynamic Earth LLC**
Client Sample ID: **SED-5**
Lab Sample ID: **23E1424-10**
Project: **Turtle Mill Brook-Eco. Evaluation**
Work Order: **23E1424**

Date Sampled:	05/30/23 12:45	Prep Date:	06/05/23 09:53
Init/Final Vol:	2.09 g / 50 mL	Prep Method:	Hot Block ICP Soil
Matrix:	Soil		
Percent Solids:	73.04		

Total Metals - Soil (SW 846 6010D)

CAS NO.	Analyte	Analyzed	Conc.	Units	RL	DF	Qual	Analyst	Sequence/Batch
7440-38-2	Arsenic	06/07/23 12:25	3.10	mg/kg dry	1.64	1		MS	SAF0123/BAF0108
7439-92-1	Lead	06/07/23 12:25	11.3	mg/kg dry	1.64	1		MS	SAF0123/BAF0108

ND, U - Indicates compound analyzed for but not detected
D - Indicates result is based on a dilution
E - Concentration exceeds highest calibration standard
H - Indicates a Hold Time violation

RL - Reporting limit
DF - Dilution Factor

B - Indicates compound found in associated blank

F-I

ANALYSIS DATA SHEET

Client: **Dynamic Earth LLC**
Client Sample ID: **SW-6**
Lab Sample ID: **23E1424-11**
Project: **Turtle Mill Brook-Eco. Evaluation**
Work Order: **23E1424**

Date Sampled:	05/30/23 13:00	Prep Date:	06/06/23 11:16
Init/Final Vol:	50 mL / 50 mL	Prep Method:	Hot Block ICPMS
Matrix:	Surface Water		

Dissolved Metals - Aqueous (EPA 200.8)

CAS NO.	Analyte	Analyzed	Conc.	Units	RL	DF	Qual	Analyst	Sequence/Batch
7440-38-2	Arsenic	06/09/23 17:45	ND	mg/L	0.00200	1	U	BB	SAF0190/BAF0187
7439-92-1	Lead	06/09/23 17:45	ND	mg/L	0.00200	1	U	BB	SAF0190/BAF0187

ND, U - Indicates compound analyzed for but not detected
D - Indicates result is based on a dilution
E - Concentration exceeds highest calibration standard
H - Indicates a Hold Time violation

RL - Reporting limit
DF - Dilution Factor

B - Indicates compound found in associated blank

F-I

ANALYSIS DATA SHEET

Client: **Dynamic Earth LLC**
Client Sample ID: **SW-6**
Lab Sample ID: **23E1424-11**
Project: **Turtle Mill Brook-Eco. Evaluation**
Work Order: **23E1424**

Date Sampled:	05/30/23 13:00	Prep Date:	06/01/23 12:26
Init/Final Vol:	50 mL / 50 mL	Prep Method:	Hot Block ICP Aqueous
Matrix:	Surface Water		

Total Metals - Aqueous (EPA 200.7)

CAS NO.	Analyte	Analyzed	Conc.	Units	RL	DF	Qual	Analyst	Sequence/Batch
7440-70-2	Calcium	06/07/23 15:05	35.5	mg/L	1.00	1		MS	SAF0136/BAF0027
7439-95-4	Magnesium	06/07/23 15:05	ND	mg/L	2.00	1	U	MS	SAF0136/BAF0027

ND, U - Indicates compound analyzed for but not detected
D - Indicates result is based on a dilution
E - Concentration exceeds highest calibration standard
H - Indicates a Hold Time violation

RL - Reporting limit
DF - Dilution Factor

B - Indicates compound found in associated blank

F-I

ANALYSIS DATA SHEET

Client: **Dynamic Earth LLC**
Client Sample ID: **SW-6**
Lab Sample ID: **23E1424-11**
Project: **Turtle Mill Brook-Eco. Evaluation**
Work Order: **23E1424**

Date Sampled:	05/30/23 13:00	Prep Date:	06/07/23 14:07
Init/Final Vol:	50 mL / 50 mL	Prep Method:	Hot Block ICPMS
Matrix:	Surface Water		

Total Metals - Aqueous (EPA 200.8)

CAS NO.	Analyte	Analyzed	Conc.	Units	RL	DF	Qual	Analyst	Sequence/Batch
7440-38-2	Arsenic	06/09/23 10:40	ND	mg/L	0.00200	1	U	RS	SAF0300/BAF0256
7439-92-1	Lead	06/09/23 10:40	ND	mg/L	0.00200	1	U	RS	SAF0300/BAF0256

10 10.2.

ND, U - Indicates compound analyzed for but not detected
D - Indicates result is based on a dilution
E - Concentration exceeds highest calibration standard
H - Indicates a Hold Time violation

RL - Reporting limit
DF - Dilution Factor

B - Indicates compound found in associated blank

F-I

ANALYSIS DATA SHEET

Client: **Dynamic Earth LLC**
Client Sample ID: **SED-6**
Lab Sample ID: **23E1424-12**
Project: **Turtle Mill Brook-Eco. Evaluation**
Work Order: **23E1424**

Date Sampled:	05/30/23 13:05	Prep Date:	06/05/23 09:53
Init/Final Vol:	1.98 g / 50 mL	Prep Method:	Hot Block ICP Soil
Matrix:	Soil		
Percent Solids:	58.82		

Total Metals - Soil (SW 846 6010D)

CAS NO.	Analyte	Analyzed	Conc.	Units	RL	DF	Qual	Analyst	Sequence/Batch
7440-38-2	Arsenic	06/07/23 12:27	6.57	mg/kg dry	2.15	1		MS	SAF0123/BAF0108
7439-92-1	Lead	06/07/23 12:27	109	mg/kg dry	2.15	1		MS	SAF0123/BAF0108

ND, U - Indicates compound analyzed for but not detected
D - Indicates result is based on a dilution
E - Concentration exceeds highest calibration standard
H - Indicates a Hold Time violation

RL - Reporting limit
DF - Dilution Factor

B - Indicates compound found in associated blank

F-I

ANALYSIS DATA SHEET

Client: **Dynamic Earth LLC**
Client Sample ID: **SW-7**
Lab Sample ID: **23E1424-13**
Project: **Turtle Mill Brook-Eco. Evaluation**
Work Order: **23E1424**

Date Sampled:	05/30/23 13:15	Prep Date:	06/06/23 11:16
Init/Final Vol:	50 mL / 50 mL	Prep Method:	Hot Block ICPMS
Matrix:	Surface Water		

Dissolved Metals - Aqueous (EPA 200.8)

CAS NO.	Analyte	Analyzed	Conc.	Units	RL	DF	Qual	Analyst	Sequence/Batch
7440-38-2	Arsenic	06/09/23 17:47	ND	mg/L	0.00200	1	U	BB	SAF0190/BAF0187
7439-92-1	Lead	06/09/23 17:47	ND	mg/L	0.00200	1	U	BB	SAF0190/BAF0187

ND, U - Indicates compound analyzed for but not detected
D - Indicates result is based on a dilution
E - Concentration exceeds highest calibration standard
H - Indicates a Hold Time violation

RL - Reporting limit
DF - Dilution Factor

B - Indicates compound found in associated blank

F-I

ANALYSIS DATA SHEET

Client: **Dynamic Earth LLC**
Client Sample ID: **SW-7**
Lab Sample ID: **23E1424-13**
Project: **Turtle Mill Brook-Eco. Evaluation**
Work Order: **23E1424**

Date Sampled:	05/30/23 13:15	Prep Date:	06/01/23 12:26
Init/Final Vol:	50 mL / 50 mL	Prep Method:	Hot Block ICP Aqueous
Matrix:	Surface Water		

Total Metals - Aqueous (EPA 200.7)

CAS NO.	Analyte	Analyzed	Conc.	Units	RL	DF	Qual	Analyst	Sequence/Batch
7440-70-2	Calcium	06/07/23 15:07	93.9	mg/L	1.00	1		MS	SAF0136/BAF0027
7439-95-4	Magnesium	06/07/23 15:07	5.28	mg/L	2.00	1		MS	SAF0136/BAF0027

ND, U - Indicates compound analyzed for but not detected
D - Indicates result is based on a dilution
E - Concentration exceeds highest calibration standard
H - Indicates a Hold Time violation

RL - Reporting limit
DF - Dilution Factor

B - Indicates compound found in associated blank

F-I

ANALYSIS DATA SHEET

Client: **Dynamic Earth LLC**
Client Sample ID: **SW-7**
Lab Sample ID: **23E1424-13**
Project: **Turtle Mill Brook-Eco. Evaluation**
Work Order: **23E1424**

Date Sampled:	05/30/23 13:15	Prep Date:	06/07/23 14:07
Init/Final Vol:	50 mL / 50 mL	Prep Method:	Hot Block ICPMS
Matrix:	Surface Water		

Total Metals - Aqueous (EPA 200.8)

CAS NO.	Analyte	Analyzed	Conc.	Units	RL	DF	Qual	Analyst	Sequence/Batch
7440-38-2	Arsenic	06/09/23 09:22	ND	mg/L	0.00200	1	U	RS	SAF0300/BAF0256
7439-92-1	Lead	06/09/23 09:22	ND	mg/L	0.00200	1	U	RS	SAF0300/BAF0256

ND, U - Indicates compound analyzed for but not detected
D - Indicates result is based on a dilution
E - Concentration exceeds highest calibration standard
H - Indicates a Hold Time violation

RL - Reporting limit
DF - Dilution Factor

B - Indicates compound found in associated blank

F-I

ANALYSIS DATA SHEET

Client: **Dynamic Earth LLC**
Client Sample ID: **SED-7**
Lab Sample ID: **23E1424-14**
Project: **Turtle Mill Brook-Eco. Evaluation**
Work Order: **23E1424**

Date Sampled:	05/30/23 13:20	Prep Date:	06/05/23 09:53
Init/Final Vol:	2.08 g / 50 mL	Prep Method:	Hot Block ICP Soil
Matrix:	Soil		
Percent Solids:	76.92		

Total Metals - Soil (SW 846 6010D)

CAS NO.	Analyte	Analyzed	Conc.	Units	RL	DF	Qual	Analyst	Sequence/Batch
7440-38-2	Arsenic	06/07/23 12:32	ND	mg/kg dry	1.56	1	U	MS	SAF0123/BAF0108
7439-92-1	Lead	06/07/23 12:32	14.8	mg/kg dry	1.56	1		MS	SAF0123/BAF0108

10 10.2.

ND, U - Indicates compound analyzed for but not detected
D - Indicates result is based on a dilution
E - Concentration exceeds highest calibration standard
H - Indicates a Hold Time violation

RL - Reporting limit
DF - Dilution Factor

B - Indicates compound found in associated blank

F-I

ANALYSIS DATA SHEET

Client: **Dynamic Earth LLC**
Client Sample ID: **SED-1A**
Lab Sample ID: **23E1424-16**
Project: **Turtle Mill Brook-Eco. Evaluation**
Work Order: **23E1424**

Date Sampled:	05/30/23 11:35	Prep Date:	06/15/23 09:42
Init/Final Vol:	2.04 g / 50 mL	Prep Method:	Hot Block ICP Soil
Matrix:	Soil		
Percent Solids:	54.48		

Total Metals - Soil (SW 846 6010D)

CAS NO.	Analyte	Analyzed	Conc.	Units	RL	DF	Qual	Analyst	Sequence/Batch
7440-38-2	Arsenic	06/18/23 09:58	7.31	mg/kg dry	2.25	1		MS	SAF0335/BAF0577
7439-92-1	Lead	06/18/23 09:58	68.1	mg/kg dry	2.25	1		MS	SAF0335/BAF0577

ND, U - Indicates compound analyzed for but not detected
D - Indicates result is based on a dilution
E - Concentration exceeds highest calibration standard
H - Indicates a Hold Time violation

RL - Reporting limit
DF - Dilution Factor

B - Indicates compound found in associated blank

F-I

ANALYSIS DATA SHEET

Client: **Dynamic Earth LLC**
Client Sample ID: **SED-4A**
Lab Sample ID: **23E1424-17**
Project: **Turtle Mill Brook-Eco. Evaluation**
Work Order: **23E1424**

Date Sampled:	05/30/23 12:35	Prep Date:	06/15/23 09:42
Init/Final Vol:	1.99 g / 50 mL	Prep Method:	Hot Block ICP Soil
Matrix:	Soil		
Percent Solids:	77.27		

Total Metals - Soil (SW 846 6010D)

CAS NO.	Analyte	Analyzed	Conc.	Units	RL	DF	Qual	Analyst	Sequence/Batch
7440-38-2	Arsenic	06/18/23 10:00	4.20	mg/kg dry	1.63	1		MS	SAF0335/BAF0577
7439-92-1	Lead	06/18/23 10:00	13.0	mg/kg dry	1.63	1		MS	SAF0335/BAF0577

ND, U - Indicates compound analyzed for but not detected
D - Indicates result is based on a dilution
E - Concentration exceeds highest calibration standard
H - Indicates a Hold Time violation

RL - Reporting limit
DF - Dilution Factor

B - Indicates compound found in associated blank

F-I

ANALYSIS DATA SHEET

Client: **Dynamic Earth LLC**
Client Sample ID: **SED-6A**
Lab Sample ID: **23E1424-18**
Project: **Turtle Mill Brook-Eco. Evaluation**
Work Order: **23E1424**

Date Sampled:	05/30/23 13:05	Prep Date:	06/15/23 09:42
Init/Final Vol:	2.02 g / 50 mL	Prep Method:	Hot Block ICP Soil
Matrix:	Soil		
Percent Solids:	53.18		

Total Metals - Soil (SW 846 6010D)

CAS NO.	Analyte	Analyzed	Conc.	Units	RL	DF	Qual	Analyst	Sequence/Batch
7440-38-2	Arsenic	06/18/23 10:02	6.22	mg/kg dry	2.33	1		MS	SAF0335/BAF0577
7439-92-1	Lead	06/18/23 10:02	289	mg/kg dry	2.33	1		MS	SAF0335/BAF0577

10 10.2.

ND, U - Indicates compound analyzed for but not detected
D - Indicates result is based on a dilution
E - Concentration exceeds highest calibration standard
H - Indicates a Hold Time violation

RL - Reporting limit
DF - Dilution Factor

B - Indicates compound found in associated blank

F-I

Batch BAF0027 **Method: EPA 200.7** **Prepared: 06/01/2023**

BAF0027-BS1 **Source:**

Analyte	Result	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Calcium	25.3	mg/L	25.0		101	85-115		
Magnesium	23.9	mg/L	25.1		95.3	85-115		

Batch BAF0027 (cont.) **Method: EPA 200.7** **Prepared: 06/01/2023**

BAF0027-DUP1 **Source:** 23E1417-01

Analyte	Result	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Calcium	1.27	mg/L		1.19			6.50	20
Magnesium	ND	mg/L		ND				20

Batch BAF0027 (cont.) **Method: EPA 200.7** **Prepared: 06/01/2023**

BAF0027-MS1 **Source:** 23E1417-01

Analyte	Result	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Calcium	28.8	mg/L	25.0	1.19	110	70-130		
Magnesium	28.6	mg/L	25.1	ND	114	70-130		

Batch BAF0027 (cont.) **Method: EPA 200.7** **Prepared: 06/01/2023**

BAF0027-MSD1 **Source:** 23E1417-01

Analyte	Result	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Calcium	29.0	mg/L	25.0	1.19	111	70-130	0.762	20
Magnesium	28.5	mg/L	25.1	ND	114	70-130	0.420	20

Batch BAF0027 (cont.) **Method: EPA 200.7** **Prepared: 06/01/2023**

BAF0027-PS1 **Source:** 23E1417-01

Analyte	Result	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Calcium	29.1	mg/L	25.0	1.19	112	75-125		
Magnesium	28.5	mg/L	25.1	ND	112	75-125		

Batch BAF0108 **Method: SW 846 6010D** **Prepared: 06/05/2023**

BAF0108-BS1 **Source:**

Analyte	Result	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Arsenic	10.9	mg/kg wet	12.4		87.4	80-120		
Lead	10.8	mg/kg wet	12.5		86.7	80-120		

* - Outside of QC Limits J - Result is between the MDL and RL for an Analysis reported to an RL

F-III NC - Outside the recovery criteria but Spike Amount <1/4 amount found in Source Sample

Batch BAF0108 (cont.) **Method: SW 846 6010D** **Prepared: 06/05/2023**

BAF0108-DUP1 **Source:** 23E1038-05

Analyte	Result	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Arsenic	5.39	mg/kg dry		3.84			33.4*	20
Lead	32.5	mg/kg dry		40.0			20.9*	20

Batch BAF0108 (cont.) **Method: SW 846 6010D** **Prepared: 06/05/2023**

BAF0108-MS1 **Source:** 23E1038-05

Analyte	Result	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Arsenic	15.4	mg/kg dry	15.5	3.84	74.8*	75-125		
Lead	55.6	mg/kg dry	15.6	40.0	99.7	75-125		

Batch BAF0108 (cont.) **Method: SW 846 6010D** **Prepared: 06/05/2023**

BAF0108-MSD1 **Source:** 23E1038-05

Analyte	Result	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Arsenic	17.1	mg/kg dry	15.1	3.84	87.7	75-125	10.2	20
Lead	67.1	mg/kg dry	15.2	40.0	179*	75-125	18.9	20

Batch BAF0256 **Method: EPA 200.8** **Prepared: 06/07/2023**

BAF0256-BS1 **Source:**

Analyte	Result	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Arsenic	0.0993	mg/L	0.100		99.3	85-115		
Lead	0.103	mg/L	0.100		103	85-115		

Batch BAF0256 (cont.) **Method: EPA 200.8** **Prepared: 06/07/2023**

BAF0256-DUP1 **Source:** 23E1424-13

Analyte	Result	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Arsenic	ND	mg/L		ND				20
Lead	ND	mg/L		ND				20

Batch BAF0256 (cont.) **Method: EPA 200.8** **Prepared: 06/07/2023**

BAF0256-MS1 **Source:** 23E1424-13

Analyte	Result	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Arsenic	0.0130	mg/L	0.100	0.000475 J	12.5*	70-130		
Lead	0.0190	mg/L	0.100	ND	19.0*	70-130		

* - Outside of QC Limits J - Result is between the MDL and RL for an Analysis reported to an RL

NC - Outside the recovery criteria but Spike Amount <1/4 amount found in Source Sample

F-III

Batch BAF0256 (cont.) **Method: EPA 200.8** **Prepared: 06/07/2023**

BAF0256-MSD1 **Source:** 23E1424-13

Analyte	Result	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Arsenic	0.0138	mg/L	0.100	0.000475 J	13.3*	70-130	6.21	20
Lead	0.0197	mg/L	0.100	ND	19.7*	70-130	4.01	20

Batch BAF0577 **Method: SW 846 6010D** **Prepared: 06/15/2023**

BAF0577-BS1 **Source:**

Analyte	Result	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Arsenic	10.9	mg/kg wet	12.4		88.0	80-120		
Lead	10.8	mg/kg wet	12.5		86.2	80-120		

Batch BAF0577 (cont.) **Method: SW 846 6010D** **Prepared: 06/15/2023**

BAF0577-DUP1 **Source:** 23F0617-18

Analyte	Result	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Arsenic	1.55	mg/kg dry		2.40			43.2*	20
Lead	28.2	mg/kg dry		28.6			1.25	20

Batch BAF0577 (cont.) **Method: SW 846 6010D** **Prepared: 06/15/2023**

BAF0577-MS1 **Source:** 23F0617-18

Analyte	Result	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Arsenic	10.5	mg/kg dry	13.2	2.40	61.4*	75-125		
Lead	37.6	mg/kg dry	13.3	28.6	67.3*	75-125		

Batch BAF0577 (cont.) **Method: SW 846 6010D** **Prepared: 06/15/2023**

BAF0577-MSD1 **Source:** 23F0617-18

Analyte	Result	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Arsenic	12.0	mg/kg dry	13.0	2.40	74.1*	75-125	13.2	20
Lead	45.0	mg/kg dry	13.0	28.6	126*	75-125	18.0	20

* - Outside of QC Limits J - Result is between the MDL and RL for an Analysis reported to an RL

NC - Outside the recovery criteria but Spike Amount <1/4 amount found in Source Sample

F-III

Batch BAF0577 (cont.) **Method: SW 846 6010D** **Prepared: 06/15/2023**

BAF0577-PS1 **Source:** 23F0617-18

Analyte	Result	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Arsenic	0.400	mg/L	0.497	ND	62.2*	75-125		
Lead	1.31	mg/L	0.500	1.09 J	45.1*	75-125		

Sequence SAF0101 **Method: SW 846 6010D** **Prepared: 06/05/2023**

SAF0101-SRD1 **Source:** 23E1038-05

Analyte	Result	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Arsenic	ND	mg/kg dry		3.84				20
Lead	42.2	mg/kg dry		40.0			5.36	20

Sequence SAF0115 **Method: EPA 200.7** **Prepared: 06/01/2023**

SAF0115-SRD1 **Source:** 23E1417-01

Analyte	Result	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Calcium	ND	mg/L		1.19				10
Magnesium	ND	mg/L		ND				10

Sequence SAF0123 **Method: SW 846 6010D** **Prepared: 06/05/2023**

SAF0123-SRD1 **Source:** 23E1424-14

Analyte	Result	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Arsenic	ND	mg/kg dry		1.32 J				20
Lead	19.2	mg/kg dry		14.8			25.7*	20

Sequence SAF0372 **Method: SW 846 6010D** **Prepared: 06/15/2023**

SAF0372-SRD1 **Source:** 23F0617-18

Analyte	Result	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Arsenic	ND	mg/kg dry		2.40				20
Lead	35.5	mg/kg dry		28.6			21.5*	20

* - Outside of QC Limits J - Result is between the MDL and RL for an Analysis reported to an RL

NC - Outside the recovery criteria but Spike Amount <1/4 amount found in Source Sample

Batch BAF0187 **Method: EPA 200.8** **Prepared: 06/06/2023**

BAF0187-BS1 **Source:**

Analyte	Result	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Arsenic	0.106	mg/L	0.100		106	85-115		
Lead	0.116	mg/L	0.100		116*	85-115		

Batch BAF0187 (cont.) **Method: EPA 200.8** **Prepared: 06/06/2023**

BAF0187-DUP1 **Source:** 23E1417-05

Analyte	Result	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Arsenic	ND	mg/L		ND				20
Lead	ND	mg/L		ND				20

Batch BAF0187 (cont.) **Method: EPA 200.8** **Prepared: 06/06/2023**

BAF0187-MS1 **Source:** 23E1417-05

Analyte	Result	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Arsenic	0.0955	mg/L	0.100	0.00141 J	94.0	70-130		
Lead	0.0950	mg/L	0.100	ND	95.0	70-130		

Batch BAF0187 (cont.) **Method: EPA 200.8** **Prepared: 06/06/2023**

BAF0187-MSD1 **Source:** 23E1417-05

Analyte	Result	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Arsenic	0.0756	mg/L	0.100	0.00141 J	74.2	70-130	23.2*	20
Lead	0.0772	mg/L	0.100	ND	77.2	70-130	20.6*	20

Sequence SAF0190 **Method: EPA 200.8** **Prepared: 06/06/2023**

SAF0190-SRD1 **Source:** 23E1417-05

Analyte	Result	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Arsenic	ND	mg/L		0.00141 J				10
Lead	ND	mg/L		ND				10

* - Outside of QC Limits J - Result is between the MDL and RL for an Analysis reported to an RL

F-III NC - Outside the recovery criteria but Spike Amount <1/4 amount found in Source Sample

METHOD BLANK SUMMARY

Batch ID: **BAF0027**

Lab Number	Sample Id	Extraction Date	Analysis Date
BAF0027-BLK1	BLK1	06/01/2023	06/06/2023 15:43
BAF0027-BS1	BS1	06/01/2023	06/06/2023 15:45
BAF0027-DUP1	DUP1	06/01/2023	06/07/2023 09:56
BAF0027-MS1	MS1	06/01/2023	06/07/2023 10:51
BAF0027-MSD1	MSD1	06/01/2023	06/07/2023 10:53
BAF0027-PS1	PS1	06/01/2023	06/07/2023 10:55
23E1424-01	SW-1	06/01/2023	06/07/2023 14:54
23E1424-03	SW-2	06/01/2023	06/07/2023 14:56
23E1424-05	SW-3	06/01/2023	06/07/2023 14:59
23E1424-07	SW-4	06/01/2023	06/07/2023 15:01
23E1424-09	SW-5	06/01/2023	06/07/2023 15:03
23E1424-11	SW-6	06/01/2023	06/07/2023 15:05
23E1424-13	SW-7	06/01/2023	06/07/2023 15:07

Batch ID: **BAF0108**

Lab Number	Sample Id	Extraction Date	Analysis Date
BAF0108-BLK1	BLK1	06/05/2023	06/06/2023 11:48
BAF0108-BS1	BS1	06/05/2023	06/06/2023 11:53
BAF0108-DUP1	DUP1	06/05/2023	06/08/2023 09:49
BAF0108-MS1	MS1	06/05/2023	06/08/2023 09:51
BAF0108-MSD1	MSD1	06/05/2023	06/08/2023 09:53
23E1424-02	SED-1	06/05/2023	06/07/2023 12:16
23E1424-04	SED-2	06/05/2023	06/07/2023 12:18
23E1424-06	SED-3	06/05/2023	06/07/2023 12:20
23E1424-08	SED-4	06/05/2023	06/07/2023 12:23
23E1424-10	SED-5	06/05/2023	06/07/2023 12:25
23E1424-12	SED-6	06/05/2023	06/07/2023 12:27
23E1424-14	SED-7	06/05/2023	06/07/2023 12:32

METHOD BLANK SUMMARY

Batch ID: **BAF0187**

Lab Number		Sample Id	Extraction Date	Analysis Date
BAF0187-BLK1		BLK1	06/06/2023	06/09/2023 16:50
BAF0187-BS1		BS1	06/06/2023	06/09/2023 16:52
BAF0187-DUP1		DUP1	06/06/2023	06/09/2023 16:57
BAF0187-MS1		MS1	06/06/2023	06/09/2023 17:05
BAF0187-MSD1		MSD1	06/06/2023	06/09/2023 17:07
23E1424-01	Dissolved	SW-1	06/06/2023	06/09/2023 17:27
23E1424-03	Dissolved	SW-2	06/06/2023	06/09/2023 17:34
23E1424-05	Dissolved	SW-3	06/06/2023	06/09/2023 17:37
23E1424-07	Dissolved	SW-4	06/06/2023	06/09/2023 17:40
23E1424-09	Dissolved	SW-5	06/06/2023	06/09/2023 17:42
23E1424-11	Dissolved	SW-6	06/06/2023	06/09/2023 17:45
23E1424-13	Dissolved	SW-7	06/06/2023	06/09/2023 17:47

Batch ID: **BAF0256**

Lab Number	Sample Id	Extraction Date	Analysis Date
BAF0256-BLK1	BLK1	06/07/2023	06/09/2023 09:10
BAF0256-BS1	BS1	06/07/2023	06/09/2023 09:12
BAF0256-DUP1	DUP1	06/07/2023	06/09/2023 09:25
BAF0256-MS1	MS1	06/07/2023	06/09/2023 09:29
BAF0256-MSD1	MSD1	06/07/2023	06/09/2023 09:32
23E1424-01	SW-1	06/07/2023	06/09/2023 20:05
23E1424-03	SW-2	06/07/2023	06/09/2023 11:20
23E1424-05	SW-3	06/07/2023	06/09/2023 10:32
23E1424-07	SW-4	06/07/2023	06/09/2023 10:35
23E1424-09	SW-5	06/07/2023	06/09/2023 10:37
23E1424-11	SW-6	06/07/2023	06/09/2023 10:40
23E1424-13	SW-7	06/07/2023	06/09/2023 09:22

METHOD BLANK SUMMARY

Batch ID: **BAF0577**

Lab Number	Sample Id	Extraction Date	Analysis Date
BAF0577-BLK1	BLK1	06/15/2023	06/18/2023 09:44
BAF0577-BS1	BS1	06/15/2023	06/18/2023 09:47
BAF0577-DUP1	DUP1	06/15/2023	06/20/2023 15:23
BAF0577-MS1	MS1	06/15/2023	06/20/2023 15:25
BAF0577-MSD1	MSD1	06/15/2023	06/20/2023 15:27
BAF0577-PS1	PS1	06/15/2023	06/20/2023 15:29
23E1424-16	SED-1A	06/15/2023	06/18/2023 09:58
23E1424-17	SED-4A	06/15/2023	06/18/2023 10:00
23E1424-18	SED-6A	06/15/2023	06/18/2023 10:02

ANALYSIS SEQUENCE SUMMARY

Laboratory:	Aqua Pro-Tech Laboratories	Work Order:	23E1424
Client:	Dynamic Earth LLC	Project:	Turtle Mill Brook-Eco. Evaluatior
Sequence:	SAF0101	Instrument:	ICP OES-1

Sample Name	Lab Sample ID	FileID	Analysis Date/Time
Secondary Cal Check	SAF0101-SCV1	APL-METHOD_IEC-2023-06-06	06/06/23 09:06
Initial Cal Blank	SAF0101-ICB1	APL-METHOD_IEC-2023-06-06	06/06/23 09:14
Interference Check A	SAF0101-IFA1	APL-METHOD_IEC-2023-06-06	06/06/23 09:19
Interference Check B	SAF0101-IFB1	APL-METHOD_IEC-2023-06-06	06/06/23 09:40
Calibration Check	SAF0101-CCV1	APL-METHOD_IEC-2023-06-06	06/06/23 11:18
Calibration Blank	SAF0101-CCB1	APL-METHOD_IEC-2023-06-06	06/06/23 11:23
Blank	BAF0108-BLK1	APL-METHOD_IEC-2023-06-06	06/06/23 11:48
LCS	BAF0108-BS1	APL-METHOD_IEC-2023-06-06	06/06/23 11:53
Serial Dilution	SAF0101-SRD1	APL-METHOD_IEC-2023-06-06	06/06/23 11:55
Calibration Check	SAF0101-CCV3	APL-METHOD_IEC-2023-06-06	06/06/23 12:37
Calibration Blank	SAF0101-CCB2	APL-METHOD_IEC-2023-06-06	06/06/23 12:50
Calibration Check	SAF0101-CCV5	APL-METHOD_IEC-2023-06-06	06/06/23 13:16
Calibration Blank	SAF0101-CCB3	APL-METHOD_IEC-2023-06-06	06/06/23 13:21
Calibration Check	SAF0101-CCV7	APL-METHOD_IEC-2023-06-06	06/06/23 13:46
Calibration Blank	SAF0101-CCB4	APL-METHOD_IEC-2023-06-06	06/06/23 13:50

ANALYSIS SEQUENCE SUMMARY

Laboratory:	Aqua Pro-Tech Laboratories	Work Order:	23E1424
Client:	Dynamic Earth LLC	Project:	Turtle Mill Brook-Eco. Evaluatior
Sequence:	SAF0115	Instrument:	ICP OES-1

Sample Name	Lab Sample ID	FileID	Analysis Date/Time
Secondary Cal Check	SAF0115-SCV2	APL-METHOD_IEC-2023-06-06	06/06/23 09:12
Initial Cal Blank	SAF0115-ICB1	APL-METHOD_IEC-2023-06-06	06/06/23 09:14
Interference Check A	SAF0115-IFA1	APL-METHOD_IEC-2023-06-06	06/06/23 09:19
Interference Check B	SAF0115-IFB1	APL-METHOD_IEC-2023-06-06	06/06/23 09:40
Blank	BAF0027-BLK1	APL-METHOD_IEC-2023-06-06	06/06/23 15:43
LCS	BAF0027-BS1	APL-METHOD_IEC-2023-06-06	06/06/23 15:45
Serial Dilution	SAF0115-SRD1	APL-METHOD_IEC-2023-06-06	06/06/23 15:54
Calibration Check	SAF0115-CCV2	APL-METHOD_IEC-2023-06-06	06/06/23 16:01
Calibration Blank	SAF0115-CCB1	APL-METHOD_IEC-2023-06-06	06/06/23 16:03

F-V

ANALYSIS SEQUENCE SUMMARY

Laboratory:	Aqua Pro-Tech Laboratories	Work Order:	23E1424
Client:	Dynamic Earth LLC	Project:	Turtle Mill Brook-Eco. Evaluatior
Sequence:	SAF0118	Instrument:	ICP OES-1

Sample Name	Lab Sample ID	FileID	Analysis Date/Time
Duplicate	BAF0027-DUP1	APL-METHOD_IEC-2023-06-07	06/07/23 09:56
Matrix Spike	BAF0027-MS1	APL-METHOD_IEC-2023-06-07	06/07/23 10:51
Matrix Spike Dup	BAF0027-MSD1	APL-METHOD_IEC-2023-06-07	06/07/23 10:53
Post Spike	BAF0027-PS1	APL-METHOD_IEC-2023-06-07	06/07/23 10:55

ANALYSIS SEQUENCE SUMMARY

Laboratory:	Aqua Pro-Tech Laboratories	Work Order:	23E1424
Client:	Dynamic Earth LLC	Project:	Turtle Mill Brook-Eco. Evaluatior
Sequence:	SAF0123	Instrument:	ICP OES-1

Sample Name	Lab Sample ID	FileID	Analysis Date/Time
Secondary Cal Check	SAF0123-SCV1	APL-METHOD_IEC-2023-06-07	06/07/23 09:10
Initial Cal Blank	SAF0123-ICB1	APL-METHOD_IEC-2023-06-07	06/07/23 09:19
Interference Check A	SAF0123-IFA1	APL-METHOD_IEC-2023-06-07	06/07/23 09:23
Interference Check B	SAF0123-IFB1	APL-METHOD_IEC-2023-06-07	06/07/23 09:33
Calibration Check	SAF0123-CCV1	APL-METHOD_IEC-2023-06-07	06/07/23 10:41
Calibration Blank	SAF0123-CCB1	APL-METHOD_IEC-2023-06-07	06/07/23 10:46
Calibration Check	SAF0123-CCV3	APL-METHOD_IEC-2023-06-07	06/07/23 11:28
Calibration Blank	SAF0123-CCB2	APL-METHOD_IEC-2023-06-07	06/07/23 11:33
Calibration Check	SAF0123-CCV5	APL-METHOD_IEC-2023-06-07	06/07/23 12:02
Calibration Blank	SAF0123-CCB3	APL-METHOD_IEC-2023-06-07	06/07/23 12:06
SED-1	23E1424-02	APL-METHOD_IEC-2023-06-07	06/07/23 12:16
SED-2	23E1424-04	APL-METHOD_IEC-2023-06-07	06/07/23 12:18
SED-3	23E1424-06	APL-METHOD_IEC-2023-06-07	06/07/23 12:20
SED-4	23E1424-08	APL-METHOD_IEC-2023-06-07	06/07/23 12:23
SED-5	23E1424-10	APL-METHOD_IEC-2023-06-07	06/07/23 12:25
SED-6	23E1424-12	APL-METHOD_IEC-2023-06-07	06/07/23 12:27
Serial Dilution	SAF0123-SRD1	APL-METHOD_IEC-2023-06-07	06/07/23 12:29
SED-7	23E1424-14	APL-METHOD_IEC-2023-06-07	06/07/23 12:32
Calibration Check	SAF0123-CCV7	APL-METHOD_IEC-2023-06-07	06/07/23 12:34
Calibration Blank	SAF0123-CCB4	APL-METHOD_IEC-2023-06-07	06/07/23 12:38

F-V

ANALYSIS SEQUENCE SUMMARY

Laboratory:	Aqua Pro-Tech Laboratories	Work Order:	23E1424
Client:	Dynamic Earth LLC	Project:	Turtle Mill Brook-Eco. Evaluatior
Sequence:	SAF0136	Instrument:	ICP OES-1

Sample Name	Lab Sample ID	FileID	Analysis Date/Time
Secondary Cal Check	SAF0136-SCV2	APL-METHOD_IEC-2023-06-07	06/07/23 09:17
Initial Cal Blank	SAF0136-ICB1	APL-METHOD_IEC-2023-06-07	06/07/23 09:19
Interference Check A	SAF0136-IFA1	APL-METHOD_IEC-2023-06-07	06/07/23 09:23
Interference Check B	SAF0136-IFB1	APL-METHOD_IEC-2023-06-07	06/07/23 09:33
SW-1	23E1424-01	APL-METHOD_IEC-2023-06-07	06/07/23 14:54
SW-2	23E1424-03	APL-METHOD_IEC-2023-06-07	06/07/23 14:56
SW-3	23E1424-05	APL-METHOD_IEC-2023-06-07	06/07/23 14:59
SW-4	23E1424-07	APL-METHOD_IEC-2023-06-07	06/07/23 15:01
SW-5	23E1424-09	APL-METHOD_IEC-2023-06-07	06/07/23 15:03
SW-6	23E1424-11	APL-METHOD_IEC-2023-06-07	06/07/23 15:05
SW-7	23E1424-13	APL-METHOD_IEC-2023-06-07	06/07/23 15:07
Calibration Check	SAF0136-CCV2	APL-METHOD_IEC-2023-06-07	06/07/23 15:12
Calibration Blank	SAF0136-CCB1	APL-METHOD_IEC-2023-06-07	06/07/23 15:14

ANALYSIS SEQUENCE SUMMARY

Laboratory:	Aqua Pro-Tech Laboratories	Work Order:	23E1424
Client:	Dynamic Earth LLC	Project:	Turtle Mill Brook-Eco. Evaluatior
Sequence:	SAF0149	Instrument:	ICP OES-1

Sample Name	Lab Sample ID	FileID	Analysis Date/Time
Secondary Cal Check	SAF0149-SCV1	APL-METHOD_IEC-2023-06-08	06/08/23 09:08
Initial Cal Blank	SAF0149-ICB1	APL-METHOD_IEC-2023-06-08	06/08/23 09:24
Interference Check A	SAF0149-IFA1	APL-METHOD_IEC-2023-06-08	06/08/23 09:26
Interference Check A	SAF0149-IFA1	APL-METHOD_IEC-2023-06-08	06/08/23 09:35
Interference Check B	SAF0149-IFB1	APL-METHOD_IEC-2023-06-08	06/08/23 09:37
Duplicate	BAF0108-DUP1	APL-METHOD_IEC-2023-06-08	06/08/23 09:49
Matrix Spike	BAF0108-MS1	APL-METHOD_IEC-2023-06-08	06/08/23 09:51
Matrix Spike Dup	BAF0108-MSD1	APL-METHOD_IEC-2023-06-08	06/08/23 09:53
Calibration Check	SAF0149-CCV1	APL-METHOD_IEC-2023-06-08	06/08/23 10:07
Calibration Blank	SAF0149-CCB1	APL-METHOD_IEC-2023-06-08	06/08/23 10:13
Calibration Check	SAF0149-CCV3	APL-METHOD_IEC-2023-06-08	06/08/23 10:33
Calibration Blank	SAF0149-CCB2	APL-METHOD_IEC-2023-06-08	06/08/23 10:38

F-V

ANALYSIS SEQUENCE SUMMARY

Laboratory:	Aqua Pro-Tech Laboratories	Work Order:	23E1424
Client:	Dynamic Earth LLC	Project:	Turtle Mill Brook-Eco. Evaluatior
Sequence:	SAF0190	Instrument:	ICP/MS-3

Sample Name	Lab Sample ID	FileID	Analysis Date/Time
SW-2	23E1424-03	042SMPL.d-030	06/09/23 11:20
Initial Cal Check	SAF0190-ICV1	2023-06-09-a.b.F-007	06/09/23 16:20
Initial Cal Blank	SAF0190-ICB1	2023-06-09-a.b.F-008	06/09/23 16:22
Instrument RL Check	SAF0190-CRL1	2023-06-09-a.b.F-009	06/09/23 16:24
Instrument RL Check	SAF0190-CRL2	2023-06-09-a.b.F-010	06/09/23 16:27
Instrument RL Check	SAF0190-CRL3	2023-06-09-a.b.F-011	06/09/23 16:30
Instrument RL Check	SAF0190-CRL4	2023-06-09-a.b.F-012	06/09/23 16:32
Blank	BAF0187-BLK1	2023-06-09-a.b.F-013	06/09/23 16:50
LCS	BAF0187-BS1	2023-06-09-a.b.F-014	06/09/23 16:52
Duplicate	BAF0187-DUP1	2023-06-09-a.b.F-016	06/09/23 16:57
Calibration Check	SAF0190-CCV3	2023-06-09-a.b.F-017	06/09/23 17:00
Calibration Blank	SAF0190-CCB3	2023-06-09-a.b.F-018	06/09/23 17:02
Matrix Spike	BAF0187-MS1	2023-06-09-a.b.F-019	06/09/23 17:05
Matrix Spike Dup	BAF0187-MSD1	2023-06-09-a.b.F-020	06/09/23 17:07
Serial Dilution	SAF0190-SRD1	2023-06-09-a.b.F-021	06/09/23 17:09
SW-1	23E1424-01	2023-06-09-a.b.F-028	06/09/23 17:27
Calibration Check	SAF0190-CCV4	2023-06-09-a.b.F-029	06/09/23 17:29
Calibration Blank	SAF0190-CCB4	2023-06-09-a.b.F-030	06/09/23 17:32
SW-2	23E1424-03	2023-06-09-a.b.F-031	06/09/23 17:34
SW-3	23E1424-05	2023-06-09-a.b.F-032	06/09/23 17:37
SW-4	23E1424-07	2023-06-09-a.b.F-033	06/09/23 17:40
SW-5	23E1424-09	2023-06-09-a.b.F-034	06/09/23 17:42
SW-6	23E1424-11	2023-06-09-a.b.F-035	06/09/23 17:45
SW-7	23E1424-13	2023-06-09-a.b.F-036	06/09/23 17:47
Calibration Check	SAF0190-CCV5	2023-06-09-a.b.F-037	06/09/23 18:00
Calibration Blank	SAF0190-CCB5	2023-06-09-a.b.F-038	06/09/23 18:02
SW-1	23E1424-01	100SMPL.d-040	06/09/23 20:05

ANALYSIS SEQUENCE SUMMARY

F-V

ANALYSIS SEQUENCE SUMMARY

Laboratory:	Aqua Pro-Tech Laboratories	Work Order:	23E1424
Client:	Dynamic Earth LLC	Project:	Turtle Mill Brook-Eco. Evaluatior
Sequence:	SAF0300	Instrument:	ICP/MS-3

Sample Name	Lab Sample ID	FileID	Analysis Date/Time
Initial Cal Check	SAF0300-ICV1	010SMPL.d-001	06/09/23 08:54
Initial Cal Blank	SAF0300-ICB1	011SMPL.d-002	06/09/23 08:57
Instrument RL Check	SAF0300-CRL1	012SMPL.d-003	06/09/23 09:00
Instrument RL Check	SAF0300-CRL2	013SMPL.d-004	06/09/23 09:02
Instrument RL Check	SAF0300-CRL3	014SMPL.d-005	06/09/23 09:05
Instrument RL Check	SAF0300-CRL4	015SMPL.d-006	06/09/23 09:07
Blank	BAF0256-BLK1	016SMPL.d-007	06/09/23 09:10
LCS	BAF0256-BS1	017SMPL.d-008	06/09/23 09:12
SW-7	23E1424-13	018SMPL.d-009	06/09/23 09:22
Duplicate	BAF0256-DUP1	019SMPL.d-010	06/09/23 09:25
Matrix Spike	BAF0256-MS1	020SMPL.d-011	06/09/23 09:29
Matrix Spike Dup	BAF0256-MSD1	021SMPL.d-012	06/09/23 09:32
Calibration Check	SAF0300-CCV1	026SMPL.d-015	06/09/23 09:57
Calibration Blank	SAF0300-CCB1	027SMPL.d-016	06/09/23 09:59
SW-3	23E1424-05	030SMPL.d-017	06/09/23 10:32
SW-4	23E1424-07	031SMPL.d-018	06/09/23 10:35
SW-5	23E1424-09	032SMPL.d-019	06/09/23 10:37
SW-6	23E1424-11	033SMPL.d-020	06/09/23 10:40
Calibration Check	SAF0300-CCV2	038SMPL.d-025	06/09/23 11:01
Calibration Blank	SAF0300-CCB2	039SMPL.d-026	06/09/23 11:04
Calibration Check	SAF0300-CCVA	043SMPL.d-028	06/09/23 11:22
Calibration Blank	SAF0300-CCBA	044SMPL.d-029	06/09/23 11:25

ANALYSIS SEQUENCE SUMMARY

Laboratory:	Aqua Pro-Tech Laboratories	Work Order:	23E1424
Client:	Dynamic Earth LLC	Project:	Turtle Mill Brook-Eco. Evaluatior
Sequence:	SAF0335	Instrument:	ICP OES-1

Sample Name	Lab Sample ID	FileID	Analysis Date/Time
Secondary Cal Check	SAF0335-SCV1	APL-METHOD_IEC-2023-06-18	06/18/23 08:54
Initial Cal Blank	SAF0335-ICB1	APL-METHOD_IEC-2023-06-18	06/18/23 09:19
Interference Check A	SAF0335-IFA1	APL-METHOD_IEC-2023-06-18	06/18/23 09:26

F-V

ANALYSIS SEQUENCE SUMMARY

Laboratory:	Aqua Pro-Tech Laboratories	Work Order:	23E1424
Client:	Dynamic Earth LLC	Project:	Turtle Mill Brook-Eco. Evaluatior
Sequence:	SAF0335	Instrument:	ICP OES-1

Sample Name	Lab Sample ID	FileID	Analysis Date/Time
Interference Check B	SAF0335-IFB1	APL-METHOD_IEC-2023-06-18	06/18/23 09:29
Blank	BAF0577-BLK1	APL-METHOD_IEC-2023-06-18	06/18/23 09:44
LCS	BAF0577-BS1	APL-METHOD_IEC-2023-06-18	06/18/23 09:47
SED-1A	23E1424-16	APL-METHOD_IEC-2023-06-18	06/18/23 09:58
SED-4A	23E1424-17	APL-METHOD_IEC-2023-06-18	06/18/23 10:00
SED-6A	23E1424-18	APL-METHOD_IEC-2023-06-18	06/18/23 10:02
Calibration Check	SAF0335-CCV1	APL-METHOD_IEC-2023-06-18	06/18/23 10:04
Calibration Blank	SAF0335-CCB1	APL-METHOD_IEC-2023-06-18	06/18/23 10:09
Calibration Check	SAF0335-CCV3	APL-METHOD_IEC-2023-06-18	06/18/23 10:38
Calibration Blank	SAF0335-CCB2	APL-METHOD_IEC-2023-06-18	06/18/23 10:43
Calibration Check	SAF0335-CCV5	APL-METHOD_IEC-2023-06-19	06/19/23 11:47
Calibration Blank	SAF0335-CCB3	APL-METHOD_IEC-2023-06-19	06/19/23 11:51

ANALYSIS SEQUENCE SUMMARY

Laboratory:	Aqua Pro-Tech Laboratories	Work Order:	23E1424
Client:	Dynamic Earth LLC	Project:	Turtle Mill Brook-Eco. Evaluatior
Sequence:	SAF0372	Instrument:	ICP OES-1

Sample Name	Lab Sample ID	FileID	Analysis Date/Time
Secondary Cal Check	SAF0372-SCV1	APL-METHOD_IEC-2023-06-20	06/20/23 08:49
Initial Cal Blank	SAF0372-ICB1	APL-METHOD_IEC-2023-06-20	06/20/23 08:59
Interference Check A	SAF0372-IFA1	APL-METHOD_IEC-2023-06-20	06/20/23 09:04
Interference Check B	SAF0372-IFB1	APL-METHOD_IEC-2023-06-20	06/20/23 09:06
High Cal Check	SAF0372-HCV1	APL-METHOD_IEC-2023-06-20	06/20/23 09:11
Serial Dilution	SAF0372-SRD1	APL-METHOD_IEC-2023-06-20	06/20/23 11:26
Calibration Check	SAF0372-CCV1	APL-METHOD_IEC-2023-06-20	06/20/23 11:30
Calibration Blank	SAF0372-CCB1	APL-METHOD_IEC-2023-06-20	06/20/23 11:37
Calibration Check	SAF0372-CCV3	APL-METHOD_IEC-2023-06-20	06/20/23 11:56
Calibration Blank	SAF0372-CCB2	APL-METHOD_IEC-2023-06-20	06/20/23 12:01
Calibration Check	SAF0372-CCV5	APL-METHOD_IEC-2023-06-20	06/20/23 13:09
Calibration Blank	SAF0372-CCB3	APL-METHOD_IEC-2023-06-20	06/20/23 13:14
Calibration Check	SAF0372-CCV7	APL-METHOD_IEC-2023-06-20	06/20/23 13:41

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ANALYSIS SEQUENCE SUMMARY

Laboratory:	Aqua Pro-Tech Laboratories	Work Order:	23E1424
Client:	Dynamic Earth LLC	Project:	Turtle Mill Brook-Eco. Evaluatior
Sequence:	SAF0372	Instrument:	ICP OES-1

Sample Name	Lab Sample ID	FileID	Analysis Date/Time
Calibration Blank	SAF0372-CCB4	APL-METHOD_IEC-2023-06-20.	06/20/23 13:45
Duplicate	BAF0577-DUP1	APL-METHOD_IEC-2023-06-20.	06/20/23 15:23
Matrix Spike	BAF0577-MS1	APL-METHOD_IEC-2023-06-20.	06/20/23 15:25
Matrix Spike Dup	BAF0577-MSD1	APL-METHOD_IEC-2023-06-20.	06/20/23 15:27
Post Spike	BAF0577-PS1	APL-METHOD_IEC-2023-06-20.	06/20/23 15:29
Calibration Check	SAF0372-CCVB	APL-METHOD_IEC-2023-06-20.	06/20/23 15:34
Calibration Check	SAF0372-CCV9	APL-METHOD_IEC-2023-06-20.	06/20/23 15:34
Calibration Blank	SAF0372-CCB5	APL-METHOD_IEC-2023-06-20.	06/20/23 15:38
Calibration Blank	SAF0372-CCB6	APL-METHOD_IEC-2023-06-20.	06/20/23 15:38

F-V

SEQUENCE CALIBRATION CHECKS

SW 846 6010D

Client: **Dynamic Earth LLC**
Project: **Turtle Mill Brook-Eco. Evaluation** **Sequence:** SAF0101
Work Order: **23E1424** **Instrument:** ICP OES-1

Lab Sample ID	Analyte	True	Found	%R	Units	Control Limit
SAF0101-SCV1	Arsenic	1.00	0.996	99.6	mg/L	90-110
	Lead	1.00	1.02	102	mg/L	90-110
SAF0101-IFB1	Arsenic	1.00	0.977	97.7	mg/L	80-120
	Lead	1.00	0.871	87.1	mg/L	80-120
SAF0101-CCV1	Arsenic	1.00	1.04	104	mg/L	90-110
	Lead	1.00	1.06	106	mg/L	90-110
SAF0101-CCV3	Arsenic	1.00	1.04	104	mg/L	90-110
	Lead	1.00	1.07	107	mg/L	90-110
SAF0101-CCV5	Arsenic	1.00	1.04	104	mg/L	90-110
	Lead	1.00	1.07	107	mg/L	90-110
SAF0101-CCV7	Arsenic	1.00	1.04	104	mg/L	90-110
	Lead	1.00	1.06	106	mg/L	90-110

ICV = Initial Cal Verification CCV = Continuing Cal Verification IFB = Interference Check Standard B
SCV = Second Source Cal Verification LCV = Low Cal Check

SEQUENCE CALIBRATION CHECKS

EPA 200.7

Client: **Dynamic Earth LLC**
Project: **Turtle Mill Brook-Eco. Evaluation** **Sequence:** SAF0115
Work Order: **23E1424** **Instrument:** ICP OES-1

Lab Sample ID	Analyte	True	Found	%R	Units	Control Limit
SAF0115-SCV2	Calcium	100	105	105	mg/L	95-105
	Magnesium	100	104	104	mg/L	95-105
SAF0115-IFB1	Calcium	501	495	98.7	mg/L	80-120
	Magnesium	501	515	103	mg/L	80-120
SAF0115-CCV2	Calcium	100	98.0	98.0	mg/L	90-110
	Magnesium	100	93.4	93.4	mg/L	90-110

ICV = Initial Cal Verification CCV = Continuing Cal Verification IFB = Interference Check Standard B
SCV = Second Source Cal Verification LCV = Low Cal Check

SEQUENCE CALIBRATION CHECKS

SW 846 6010D

Client: Dynamic Earth LLC
Project: Turtle Mill Brook-Eco. Evaluation
Work Order: 23E1424

Sequence: SAF0123
Instrument: ICP OES-1

Lab Sample ID	Analyte	True	Found	%R	Units	Control Limit
SAF0123-SCV1	Arsenic	1.00	0.994	99.4	mg/L	90-110
	Lead	1.00	1.01	101	mg/L	90-110
SAF0123-IFB1	Arsenic	1.00	0.936	93.6	mg/L	80-120
	Lead	1.00	0.864	86.4	mg/L	80-120
SAF0123-CCV1	Arsenic	1.00	1.03	103	mg/L	90-110
	Lead	1.00	1.06	106	mg/L	90-110
SAF0123-CCV3	Arsenic	1.00	1.03	103	mg/L	90-110
	Lead	1.00	1.06	106	mg/L	90-110
SAF0123-CCV5	Arsenic	1.00	1.03	103	mg/L	90-110
	Lead	1.00	1.06	106	mg/L	90-110
SAF0123-CCV7	Arsenic	1.00	1.02	102	mg/L	90-110
	Lead	1.00	1.05	105	mg/L	90-110

ICV = Initial Cal Verification CCV = Continuing Cal Verification IFB = Interference Check Standard B
SCV = Second Source Cal Verification LCV = Low Cal Check

SEQUENCE CALIBRATION CHECKS

EPA 200.7

Client: **Dynamic Earth LLC**
Project: **Turtle Mill Brook-Eco. Evaluation** **Sequence:** SAF0136
Work Order: **23E1424** **Instrument:** ICP OES-1

Lab Sample ID	Analyte	True	Found	%R	Units	Control Limit
SAF0136-SCV2	Calcium	100	104	104	mg/L	95-105
	Magnesium	100	105	105	mg/L	95-105
SAF0136-IFB1	Calcium	501	493	98.4	mg/L	80-120
	Magnesium	501	501	100	mg/L	80-120
SAF0136-CCV2	Calcium	100	100	100	mg/L	90-110
	Magnesium	100	102	102	mg/L	90-110

ICV = Initial Cal Verification CCV = Continuing Cal Verification IFB = Interference Check Standard B
SCV = Second Source Cal Verification LCV = Low Cal Check

SEQUENCE CALIBRATION CHECKS

SW 846 6010D

Client: **Dynamic Earth LLC**
Project: **Turtle Mill Brook-Eco. Evaluation** **Sequence:** SAF0149
Work Order: **23E1424** **Instrument:** ICP OES-1

Lab Sample ID	Analyte	True	Found	%R	Units	Control Limit
SAF0149-SCV1	Arsenic	1.00	1.01	101	mg/L	90-110
	Lead	1.00	1.02	102	mg/L	90-110
SAF0149-IFB1	Arsenic	1.00	0.982	98.2	mg/L	80-120
	Lead	1.00	0.874	87.4	mg/L	80-120
SAF0149-CCV1	Arsenic	1.00	1.04	104	mg/L	90-110
	Lead	1.00	1.05	105	mg/L	90-110
SAF0149-CCV3	Arsenic	1.00	1.03	103	mg/L	90-110
	Lead	1.00	1.05	105	mg/L	90-110

ICV = Initial Cal Verification CCV = Continuing Cal Verification IFB = Interference Check Standard B
SCV = Second Source Cal Verification LCV = Low Cal Check

SEQUENCE CALIBRATION CHECKS

EPA 200.8

Client: **Dynamic Earth LLC**
Project: **Turtle Mill Brook-Eco. Evaluation** **Sequence:** SAF0190
Work Order: **23E1424** **Instrument:** ICP/MS-3

Lab Sample ID	Analyte	True	Found	%R	Units	Control Limit
SAF0190-ICV1	Arsenic (dissolved)	100	105	105	ug/L	90-110
	Lead (dissolved)	100	107	107	ug/L	90-110
SAF0190-CCV3	Arsenic (dissolved)	100	103	103	ug/L	85-115
	Lead (dissolved)	100	110	110	ug/L	85-115
SAF0190-CCV4	Arsenic (dissolved)	100	107	107	ug/L	85-115
	Lead (dissolved)	100	113	113	ug/L	85-115
SAF0190-CCV5	Arsenic (dissolved)	100	106	106	ug/L	85-115
	Lead (dissolved)	100	111	111	ug/L	85-115

ICV = Initial Cal Verification CCV = Continuing Cal Verification IFB = Interference Check Standard B
SCV = Second Source Cal Verification LCV = Low Cal Check

SEQUENCE CALIBRATION CHECKS

EPA 200.8

Client: **Dynamic Earth LLC**
Project: **Turtle Mill Brook-Eco. Evaluation** **Sequence:** SAF0300
Work Order: **23E1424** **Instrument:** ICP/MS-3

Lab Sample ID	Analyte	True	Found	%R	Units	Control Limit
SAF0300-ICV1	Arsenic	100	99.7	99.7	ug/L	90-110
	Lead	100	103	103	ug/L	90-110
SAF0300-CCV1	Arsenic	100	98.0	98.0	ug/L	85-115
	Lead	100	102	102	ug/L	85-115
SAF0300-CCV2	Arsenic	100	97.2	97.2	ug/L	85-115
	Lead	100	104	104	ug/L	85-115
SAF0300-CCVA	Arsenic	100	98.0	98.0	ug/L	85-115
	Lead	100	103	103	ug/L	85-115

ICV = Initial Cal Verification CCV = Continuing Cal Verification IFB = Interference Check Standard B
SCV = Second Source Cal Verification LCV = Low Cal Check

SEQUENCE CALIBRATION CHECKS

SW 846 6010D

Client: **Dynamic Earth LLC**
Project: **Turtle Mill Brook-Eco. Evaluation** **Sequence:** SAF0335
Work Order: **23E1424** **Instrument:** ICP OES-1

Lab Sample ID	Analyte	True	Found	%R	Units	Control Limit
SAF0335-SCV1	Arsenic	1.00	1.02	102	mg/L	90-110
	Lead	1.00	1.02	102	mg/L	90-110
SAF0335-IFB1	Arsenic	1.00	1.00	100	mg/L	80-120
	Lead	1.00	0.904	90.4	mg/L	80-120
SAF0335-CCV1	Arsenic	1.00	1.08	108	mg/L	90-110
	Lead	1.00	1.09	109	mg/L	90-110
SAF0335-CCV3	Arsenic	1.00	1.07	107	mg/L	90-110
	Lead	1.00	1.07	107	mg/L	90-110
SAF0335-CCV5	Arsenic	1.00	1.07	107	mg/L	90-110
	Lead	1.00	1.05	105	mg/L	90-110

ICV = Initial Cal Verification CCV = Continuing Cal Verification IFB = Interference Check Standard B
SCV = Second Source Cal Verification LCV = Low Cal Check

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SEQUENCE CALIBRATION CHECKS

SW 846 6010D

Client: Dynamic Earth LLC
Project: Turtle Mill Brook-Eco. Evaluation
Work Order: 23E1424

Sequence: SAF0372
Instrument: ICP OES-1

Lab Sample ID	Analyte	True	Found	%R	Units	Control Limit
SAF0372-SCV1	Arsenic	1.00	1.03	103	mg/L	90-110
	Lead	1.00	1.04	104	mg/L	90-110
SAF0372-IFB1	Arsenic	1.00	1.00	100	mg/L	80-120
	Lead	1.00	0.930	93.0	mg/L	80-120
SAF0372-CCV7	Arsenic	1.00	1.04	104	mg/L	90-110
	Lead	1.00	1.06	106	mg/L	90-110
SAF0372-CCV9	Arsenic	1.00	1.02	102	mg/L	90-110
	Lead	1.00	1.05	105	mg/L	90-110
SAF0372-CCVB	Arsenic	1.00	1.02	102	mg/L	90-110
	Lead	1.00	1.05	105	mg/L	90-110
SAF0372-CCV1	Arsenic	1.00	1.04	104	mg/L	90-110
	Lead	1.00	1.06	106	mg/L	90-110
SAF0372-CCV3	Arsenic	1.00	1.05	105	mg/L	90-110
	Lead	1.00	1.06	106	mg/L	90-110
SAF0372-CCV5	Arsenic	1.00	1.03	103	mg/L	90-110
	Lead	1.00	1.04	104	mg/L	90-110

ICV = Initial Cal Verification CCV = Continuing Cal Verification IFB = Interference Check Standard B
SCV = Second Source Cal Verification LCV = Low Cal Check

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PESTICIDES

Dynamic Earth LLC

Work Order: 23E1424

Project: Turtle Mill Brook-Eco. Evaluation

ANALYSIS DATA SHEET

Pesticides - SW 846 8081B

Client:	**Dynamic Earth LLC**	**Project:**	**Turtle Mill Brook-Eco. Evaluatic**
Client Sample ID:	**Blank**	**Work Order:**	**23E1424**
Lab Sample ID:	**BAE1181-BLK2**		

Init/Final Vol:	1000 mL / 10 mL	Prep Date:	06/05/2023 18:00	File ID:	9T01051.D
		Prep Batch:	BAE1181	Analyzed:	06/09/2023 18:58
		Matrix:	Ground Water	Sequence:	SAF0191
		Prep Method:	Sep Funnel GC 8000		

CAS NO.	COMPOUND	CONC. (ug/L)	MDL	RL	Qual
72-54-8	4,4'-DDD	ND	0.000378	0.0200	U
72-55-9	4,4'-DDE	ND	0.000234	0.0200	U
50-29-3	4,4'-DDT	ND	0.000319	0.0200	U
309-00-2	Aldrin	ND	0.000527	0.0200	U
319-84-6	alpha-BHC	ND	0.000255	0.0200	U
319-85-7	beta-BHC	ND	0.000371	0.0200	U
57-74-9	Chlordane	ND	0.000327	0.0500	U
319-86-8	delta-BHC	ND	0.000320	0.0200	U
60-57-1	Dieldrin	ND	0.000271	0.0200	U
959-98-8	Endosulfan I	ND	0.000380	0.0200	U
33213-65-9	Endosulfan II	ND	0.000254	0.0200	U
1031-07-8	Endosulfan sulfate	ND	0.000138	0.0200	U
72-20-8	Endrin	ND	0.000229	0.0200	U
7421-93-4	Endrin aldehyde	ND	0.000318	0.0200	U
53494-70-5	Endrin ketone	ND	0.000203	0.0200	U
58-89-9	gamma-BHC (Lindane)	ND	0.000241	0.0200	U
76-44-8	Heptachlor	ND	0.000563	0.0200	U
1024-57-3	Heptachlor Epoxide	ND	0.000302	0.0200	U
72-43-5	Methoxychlor	ND	0.000343	0.0200	U
8001-35-2	Toxaphene	ND	0.0237	0.200	U

F-I

Quantitation Report (QT Reviewed)

Signal #1 : G:\HPCHEM\GCECD9\DATA\20230609\9T01051.D\ECD1A.CH Vial: 6
Signal #2 : G:\HPCHEM\GCECD9\DATA\20230609\9T01051.D\ECD2B.CH
Acq On : 9 Jun 2023 6:58 pm Operator: WD
Sample : BAE1181-BLK2 Inst : HP G1530A
Misc : Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Jun 10 12:33 2023 Quant Results File: 80810606.RES

Quant Method : G:\HPCHEM\G...\80810606.M (Chemstation Integrator)
Title : Pesticides by Method SW-846 8081B
Last Update : Tue Jun 06 16:57:33 2023
Response via : Initial Calibration
DataAcq Meth : RUNPEST.M

Volume Inj. : 2ul
Signal #1 Phase : RTx-50 Signal #2 Phase: RTx-CLPesticides II
Signal #1 Info : 30M x 0.53mm x 0. Signal #2 Info : 30M x 0.53mm x 0.42um

	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/kg	ug/kg
	Internal Standards						
1) I	1-Bromo-2-nitrob	3.06	3.25	4658.4E6	3323.8E6	400.000	400.000
25) I	1-Bromo-2-nitrob	3.06	3.25	4658.4E6	3323.8E6	400.000	400.000
	System Monitoring Compounds						
2) S	TCMX	3.77	4.20	417.1E6	270.7E6	39.853	42.960
	Spiked Amount 50.000	Range 43 - 129		Recovery =		79.71%	85.92%
22) S	Decachlorobiphen	13.22	16.35	514.4E6	378.2E6	42.918	53.906 #
	Spiked Amount 50.000	Range 42 - 136		Recovery =		85.84%	107.81%
	Target Compounds						
	Sum Chlordane (gamma)			0	0	N.D.	N.D.
	Average Chlordane (gamma)					0.000	0.000
	Sum Toxaphene (1)			0	0	N.D.	N.D.
	Average Toxaphene (1)					0.000	0.000

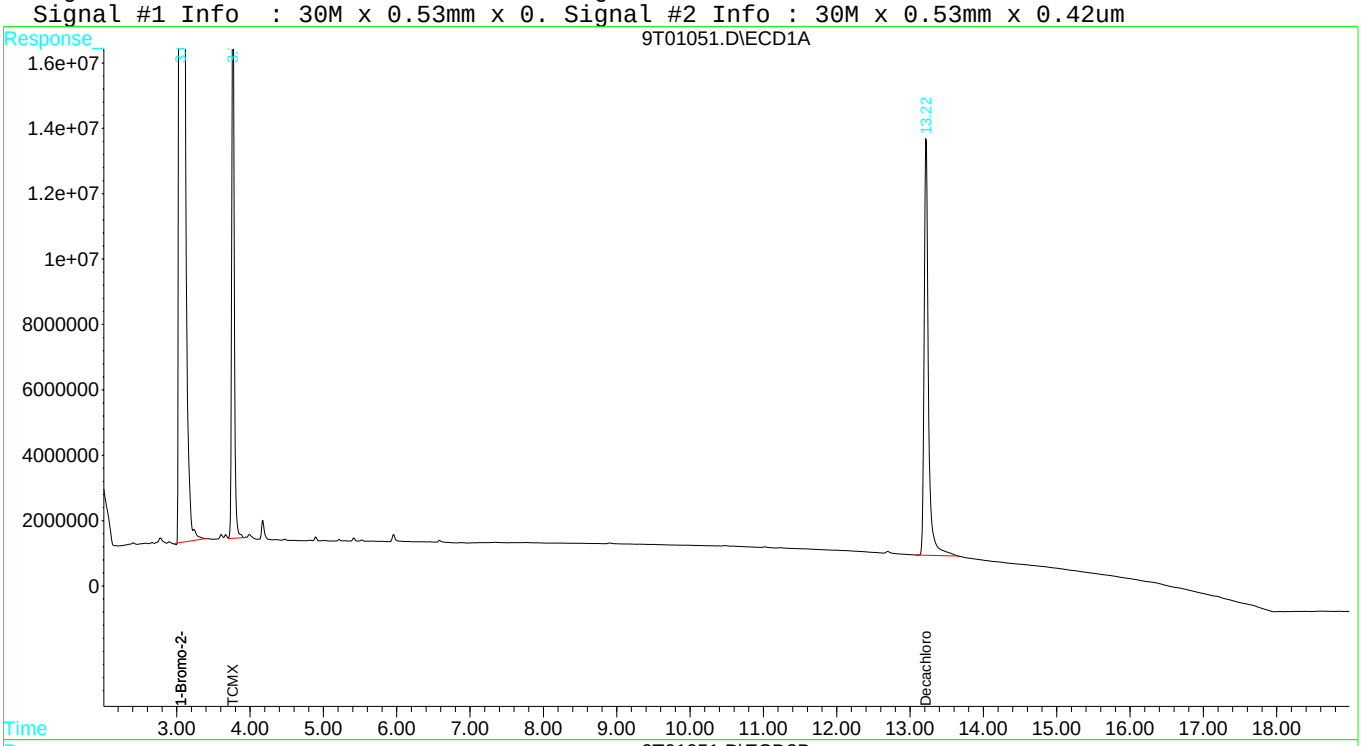
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.
9T01051.D 80810606.M Sat Jun 10 13:22:31 2023 SS Page 1

Quantitation Report (QT Reviewed)

Signal #1 : G:\HPCHEM\GCECD9\DATA\20230609\9T01051.D\ECD1A.CH Vial: 6
Signal #2 : G:\HPCHEM\GCECD9\DATA\20230609\9T01051.D\ECD2B.CH
Acq On : 9 Jun 2023 6:58 pm Operator: WD
Sample : BAE1181-BLK2 Inst : HP G1530A
Misc : Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Jun 10 12:33 2023 Quant Results File: 80810606.RES

Quant Method : G:\HPCHEM\G...\80810606.M (Chemstation Integrator)
Title : Pesticides by Method SW-846 8081B
Last Update : Tue Jun 06 16:57:33 2023
Response via : Multiple Level Calibration
DataAcq Meth : RUNPEST.M

Volume Inj. : 2ul
Signal #1 Phase : RTx-50 Signal #2 Phase: RTx-CLPesticides II
Signal #1 Info : 30M x 0.53mm x 0. Signal #2 Info : 30M x 0.53mm x 0.42um





ANALYSIS DATA SHEET

Pesticides - SW 846 8081B

Client:	**Dynamic Earth LLC**	**Project:**	**Turtle Mill Brook-Eco. Evaluatic**
Client Sample ID:	**Blank**	**Work Order:**	**23E1424**
Lab Sample ID:	**BAF0218-BLK1**		

Init/Final Vol:	15 g / 10 mL	Prep Date:	06/06/2023 15:37	File ID:	9T01026.D
		Prep Batch:	BAF0218	Analyzed:	06/08/2023 19:28
		Matrix:	Soil	Sequence:	SAF0176
		Prep Method:	Microwave Extraction		

CAS NO.	COMPOUND	CONC. (mg/kg wet)	MDL	RL	Qual
72-54-8	4,4'-DDD	ND	0.000595	0.00130	U
72-55-9	4,4'-DDE	ND	0.000711	0.00130	U
50-29-3	4,4'-DDT	ND	0.000918	0.00130	U
309-00-2	Aldrin	ND	0.000616	0.00130	U
319-84-6	alpha-BHC	ND	0.000387	0.00130	U
319-85-7	beta-BHC	ND	0.000621	0.00130	U
57-74-9	Chlordane	ND	0.000578	0.00130	U
319-86-8	delta-BHC	ND	0.000604	0.00130	U
60-57-1	Dieldrin	ND	0.000680	0.00130	U
959-98-8	Endosulfan I	ND	0.000614	0.00130	U
33213-65-9	Endosulfan II	ND	0.000591	0.00130	U
1031-07-8	Endosulfan sulfate	ND	0.000489	0.00130	U
115-29-7	Endosulfans, Total (alpha and beta)	ND	0.000591	0.00130	U
72-20-8	Endrin	ND	0.000449	0.00130	U
7421-93-4	Endrin aldehyde	ND	0.000518	0.00130	U
53494-70-5	Endrin ketone	ND	0.000458	0.00130	U
58-89-9	gamma-BHC (Lindane)	ND	0.000412	0.00130	U
76-44-8	Heptachlor	ND	0.000348	0.00130	U
1024-57-3	Heptachlor Epoxide	ND	0.000656	0.00130	U
72-43-5	Methoxychlor	ND	0.000381	0.00130	U
8001-35-2	Toxaphene	ND	0.0626	0.0660	U

F-I

Quantitation Report (QT Reviewed)

Signal #1 : G:\HPCHEM\GCECD9\DATA\20230608\9T01026.D\ECD1A.CH Vial: 1
Signal #2 : G:\HPCHEM\GCECD9\DATA\20230608\9T01026.D\ECD2B.CH
Acq On : 8 Jun 2023 7:28 pm Operator: WD
Sample : BAF0218-BLK1 Inst : HP G1530A
Misc : Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Jun 9 11:28 2023 Quant Results File: 80810606.RES

Quant Method : G:\HPCHEM\G...\80810606.M (Chemstation Integrator)
Title : Pesticides by Method SW-846 8081B
Last Update : Tue Jun 06 16:57:33 2023
Response via : Initial Calibration
DataAcq Meth : RUNPEST.M

Volume Inj. : 2ul
Signal #1 Phase : RTx-50 Signal #2 Phase: RTx-CLPesticides II
Signal #1 Info : 30M x 0.53mm x 0. Signal #2 Info : 30M x 0.53mm x 0.42um

	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/kg	ug/kg
	Internal Standards						
1) I	1-Bromo-2-nitrob	3.10	3.28	4371.2E6	3284.8E6	400.000	400.000
25) I	1-Bromo-2-nitrob	3.10	3.28	4371.2E6	3284.8E6	400.000	400.000
	System Monitoring Compounds						
2) S	TCMX	3.83f	4.24f	415.7E6	278.7E6	42.328m	44.752
	Spiked Amount	50.000	Range 43 - 129		Recovery =	84.66%	89.50%
22) S	Decachlorobiphen	13.27f	16.36	322.3E6	242.5E6	28.657m	34.974
	Spiked Amount	50.000	Range 42 - 136		Recovery =	57.31%	69.95%
	Target Compounds						
	Sum Chlordane (gamma)			0	0	N.D.	N.D.
	Average Chlordane (gamma)					0.000	0.000
	Sum Toxaphene (1)			0	0	N.D.	N.D.
	Average Toxaphene (1)					0.000	0.000

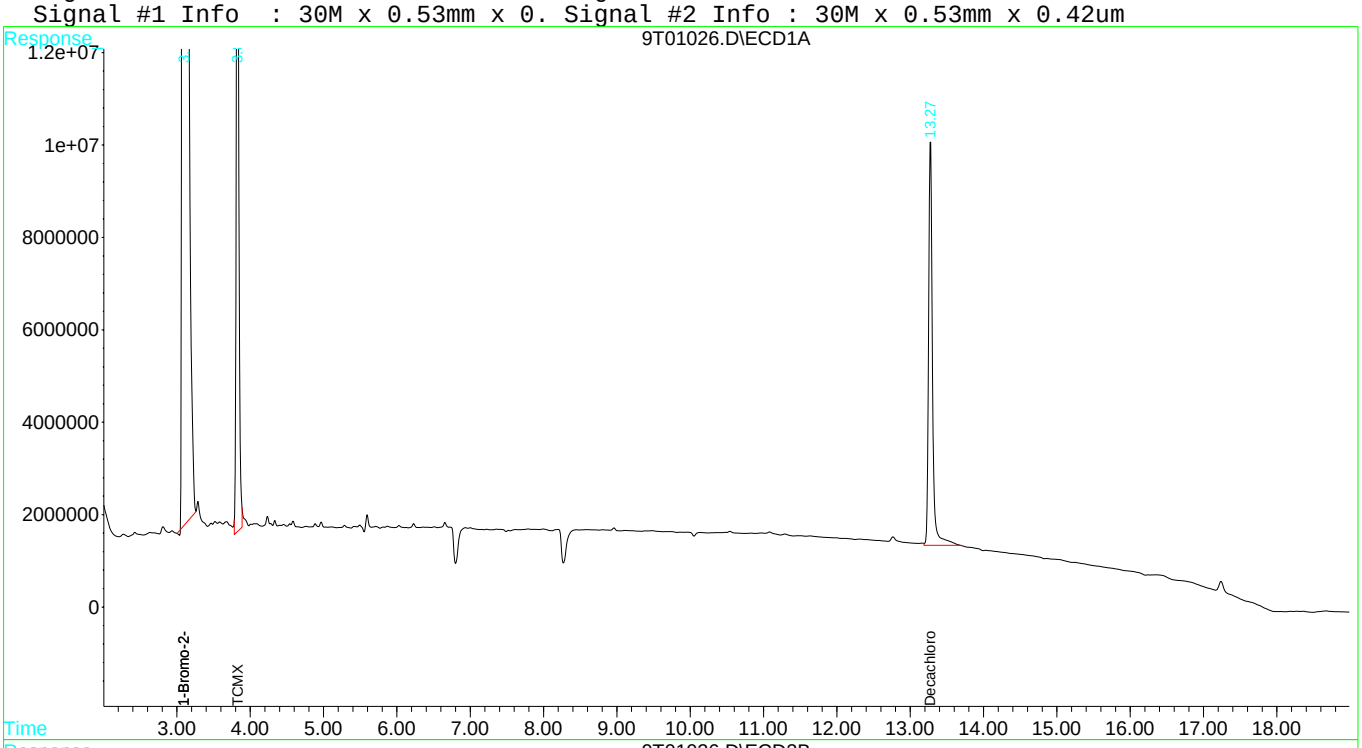
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9T01026.D 80810606.M Fri Jun 09 11:41:34 2023 SS Page 1

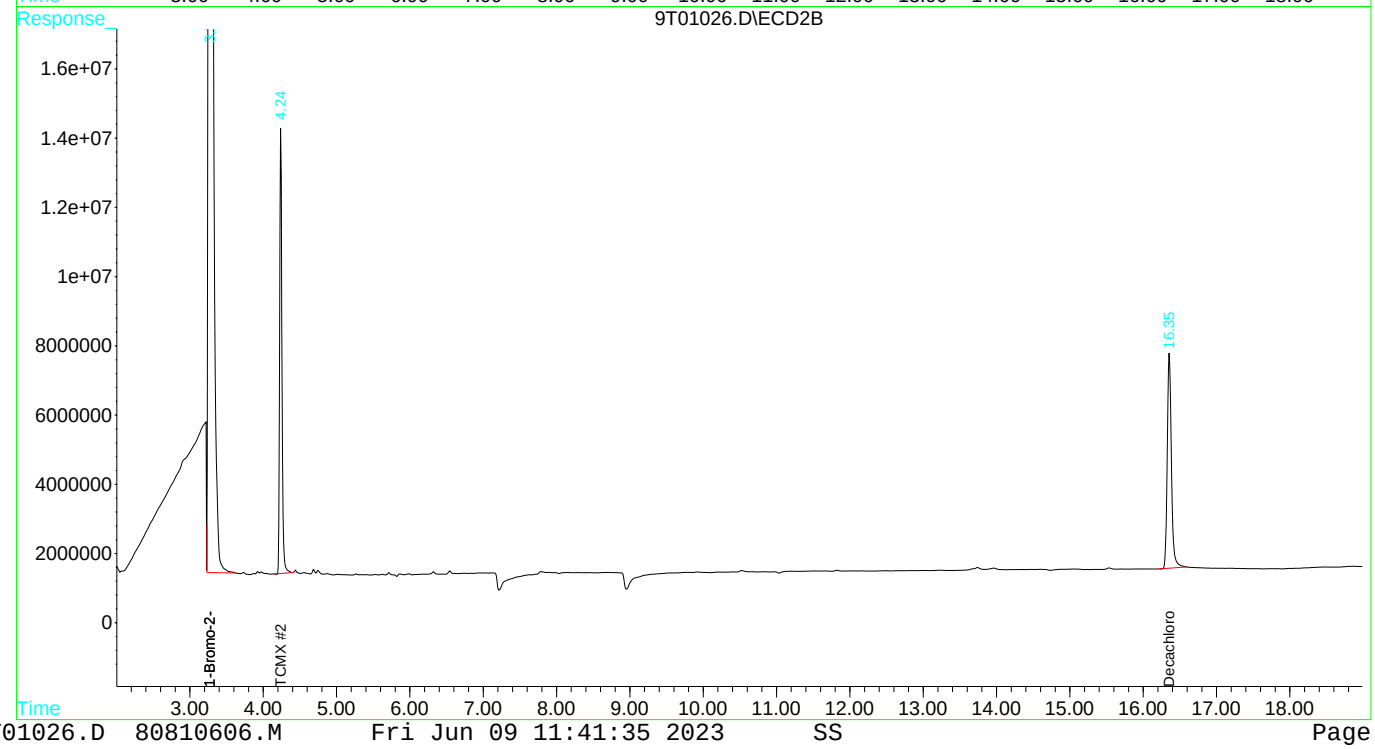
Quantitation Report (QT Reviewed)

Signal #1 : G:\HPCHEM\GCECD9\DATA\20230608\9T01026.D\ECD1A.CH Vial: 1
Signal #2 : G:\HPCHEM\GCECD9\DATA\20230608\9T01026.D\ECD2B.CH
Acq On : 8 Jun 2023 7:28 pm Operator: WD
Sample : BAF0218-BLK1 Inst : HP G1530A
Misc : Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Jun 9 11:28 2023 Quant Results File: 80810606.RES

Quant Method : G:\HPCHEM\G...\80810606.M (Chemstation Integrator)
Title : Pesticides by Method SW-846 8081B
Last Update : Tue Jun 06 16:57:33 2023
Response via : Multiple Level Calibration
DataAcq Meth : RUNPEST.M

Volume Inj. : 2ul
Signal #1 Phase : RTx-50 Signal #2 Phase: RTx-CLPesticides II
Signal #1 Info : 30M x 0.53mm x 0. Signal #2 Info : 30M x 0.53mm x 0.42um





ANALYSIS DATA SHEET

Pesticides - SW 846 8081B

Client:	**Dynamic Earth LLC**	**Project:**	**Turtle Mill Brook-Eco. Evaluatic**
Client Sample ID:	**Blank**	**Work Order:**	**23E1424**
Lab Sample ID:	**BAF0463-BLK1**		

Init/Final Vol:	15 g / 10 mL	Prep Date:	06/13/2023 07:10	File ID:	9T01121.D
		Prep Batch:	BAF0463	Analyzed:	06/13/2023 17:58
		Matrix:	Soil	Sequence:	SAF0265
		Prep Method:	Microwave Extraction		

CAS NO.	COMPOUND	CONC. (mg/kg wet)	MDL	RL	Qual
72-54-8	4,4'-DDD	ND	0.000595	0.00130	U
72-55-9	4,4'-DDE	ND	0.000711	0.00130	U
50-29-3	4,4'-DDT	ND	0.000918	0.00130	U
309-00-2	Aldrin	ND	0.000616	0.00130	U
319-84-6	alpha-BHC	ND	0.000387	0.00130	U
319-85-7	beta-BHC	ND	0.000621	0.00130	U
57-74-9	Chlordane	ND	0.000578	0.00130	U
319-86-8	delta-BHC	ND	0.000604	0.00130	U
60-57-1	Dieldrin	ND	0.000680	0.00130	U
959-98-8	Endosulfan I	ND	0.000614	0.00130	U
33213-65-9	Endosulfan II	ND	0.000591	0.00130	U
1031-07-8	Endosulfan sulfate	ND	0.000489	0.00130	U
115-29-7	Endosulfans, Total (alpha and beta)	ND	0.000591	0.00130	U
72-20-8	Endrin	ND	0.000449	0.00130	U
7421-93-4	Endrin aldehyde	ND	0.000518	0.00130	U
53494-70-5	Endrin ketone	ND	0.000458	0.00130	U
58-89-9	gamma-BHC (Lindane)	ND	0.000412	0.00130	U
76-44-8	Heptachlor	ND	0.000348	0.00130	U
1024-57-3	Heptachlor Epoxide	ND	0.000656	0.00130	U
72-43-5	Methoxychlor	ND	0.000381	0.00130	U
8001-35-2	Toxaphene	ND	0.0626	0.0660	U

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Quantitation Report (QT Reviewed)

Signal #1 : G:\HPCHEM\GCECD9\DATA\20230613\9T01121.D\ECD1A.CH Vial: 1
Signal #2 : G:\HPCHEM\GCECD9\DATA\20230613\9T01121.D\ECD2B.CH
Acq On : 13 Jun 2023 5:58 pm Operator: WD
Sample : BAF0463-BLK1 Inst : HP G1530A
Misc : Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Jun 14 12:57 2023 Quant Results File: 80810606.RES

Quant Method : G:\HPCHEM\G...\80810606.M (Chemstation Integrator)
Title : Pesticides by Method SW-846 8081B
Last Update : Tue Jun 06 16:57:33 2023
Response via : Initial Calibration
DataAcq Meth : RUNPEST.M

Volume Inj. : 2ul
Signal #1 Phase : RTx-50 Signal #2 Phase: RTx-CLPesticides II
Signal #1 Info : 30M x 0.53mm x 0. Signal #2 Info : 30M x 0.53mm x 0.42um

	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/kg	ug/kg
	Internal Standards						
1) I	1-Bromo-2-nitrob	3.11	3.29	5956.8E6	4472.9E6	400.000	400.000m
25) I	1-Bromo-2-nitrob	3.11	3.29	5956.8E6	4424.4E6	400.000	400.000m
	System Monitoring Compounds						
2) S	TCMX	3.84f	4.26f	449.9E6	340.1E6	33.617m	40.111m
	Spiked Amount 50.000	Range 43 - 129		Recovery =		67.23%	80.22%
22) S	Decachlorobiphen	13.28f	16.35	199.4E6	236.9E6	13.012m	25.088 #
	Spiked Amount 50.000	Range 42 - 136		Recovery =		26.02%#	50.18%
	Target Compounds						
	Sum Chlordane (gamma)			0	0	N.D.	N.D.
	Average Chlordane (gamma)					0.000	0.000
	Sum Toxaphene (1)			0	0	N.D.	N.D.
	Average Toxaphene (1)					0.000	0.000

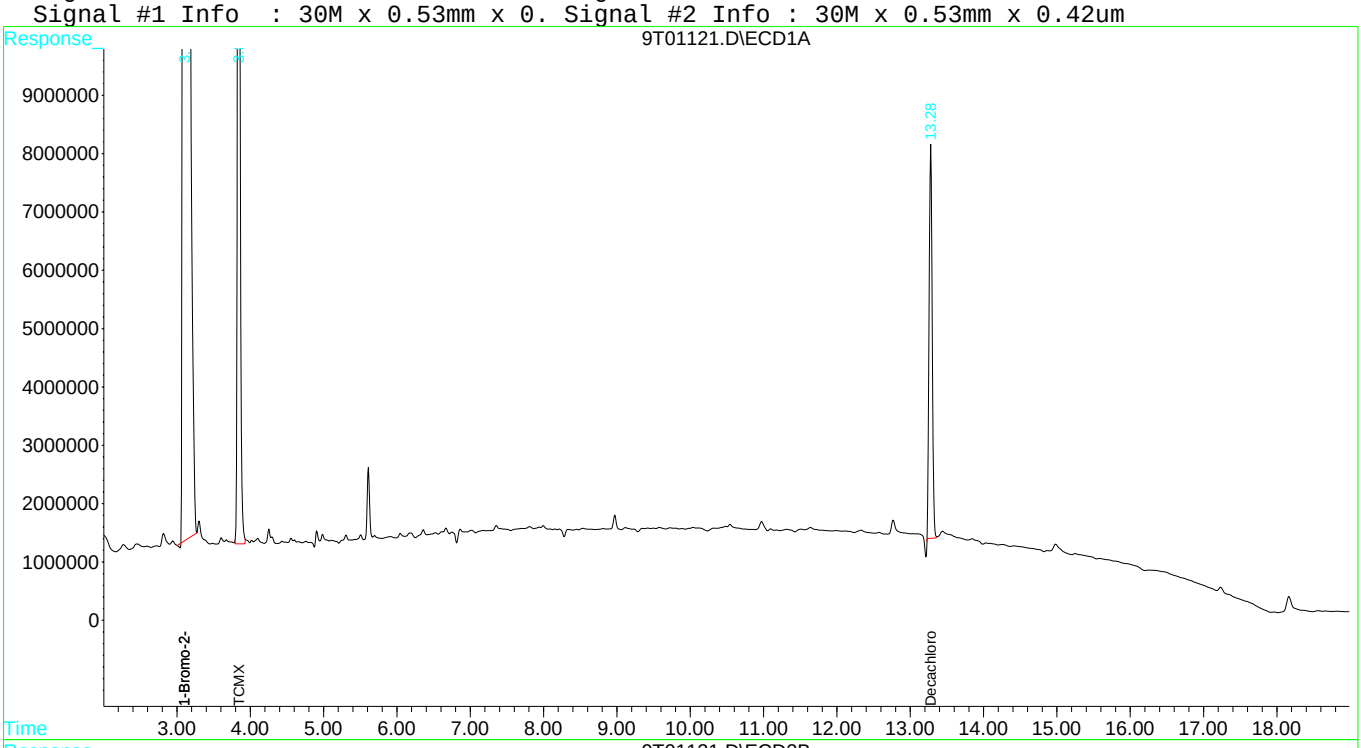
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9T01121.D 80810606.M Wed Jun 14 13:11:58 2023 SS Page 1

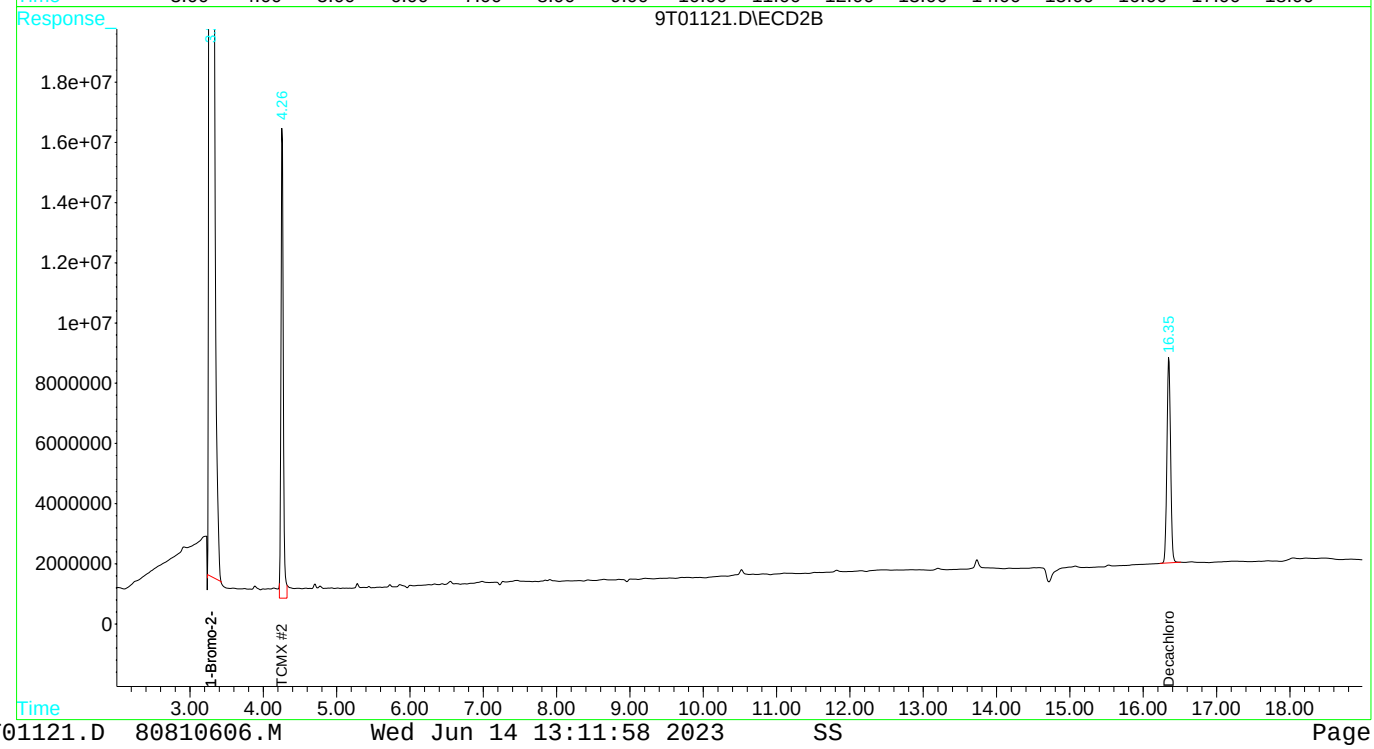
Quantitation Report (QT Reviewed)

Signal #1 : G:\HPCHEM\GCECD9\DATA\20230613\9T01121.D\ECD1A.CH Vial: 1
Signal #2 : G:\HPCHEM\GCECD9\DATA\20230613\9T01121.D\ECD2B.CH
Acq On : 13 Jun 2023 5:58 pm Operator: WD
Sample : BAF0463-BLK1 Inst : HP G1530A
Misc : Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Jun 14 12:57 2023 Quant Results File: 80810606.RES

Quant Method : G:\HPCHEM\G...\80810606.M (Chemstation Integrator)
Title : Pesticides by Method SW-846 8081B
Last Update : Tue Jun 06 16:57:33 2023
Response via : Multiple Level Calibration
DataAcq Meth : RUNPEST.M

Volume Inj. : 2ul
Signal #1 Phase : RTx-50 Signal #2 Phase: RTx-CLPesticides II
Signal #1 Info : 30M x 0.53mm x 0. Signal #2 Info : 30M x 0.53mm x 0.42um





ANALYSIS DATA SHEET

Pesticides - SW 846 8081B

Client: **Dynamic Earth LLC**
Client Sample ID: **SW-1**
Lab Sample ID: **23E1424-01**
Project: **Turtle Mill Brook-Eco. Evaluation**
Work Order: **23E1424**

Date Sampled:	05/30/23 11:20	Prep Date:	06/05/23 17:59	File ID:	9T00995.D
Init/Final Vol:	1000 mL / 10 m	Prep Batch:	BAE1181	Analyzed:	06/07/23 00:56
Dilution:	1	Matrix:	Surface Water	Sequence:	SAF0127
		Prep Method:	Sep Funnel GC 8000		

CAS NO.	COMPOUND	CONC. (ug/L)	MDL	RL	Qual
72-54-8	4,4'-DDD	ND	0.000378	0.0200	U
72-55-9	4,4'-DDE	ND	0.000234	0.0200	U
50-29-3	4,4'-DDT	ND	0.000319	0.0200	U
309-00-2	Aldrin	ND	0.000527	0.0200	U
319-84-6	alpha-BHC	ND	0.000255	0.0200	U
319-85-7	beta-BHC	ND	0.000371	0.0200	U
57-74-9	Chlordane	ND	0.000327	0.0500	U
319-86-8	delta-BHC	ND	0.000320	0.0200	U
60-57-1	Dieldrin	ND	0.000271	0.0200	U
959-98-8	Endosulfan I	ND	0.000380	0.0200	U
33213-65-9	Endosulfan II	ND	0.000254	0.0200	U
1031-07-8	Endosulfan sulfate	ND	0.000138	0.0200	U
72-20-8	Endrin	ND	0.000229	0.0200	U
7421-93-4	Endrin aldehyde	ND	0.000318	0.0200	U
53494-70-5	Endrin ketone	ND	0.000203	0.0200	U
58-89-9	gamma-BHC (Lindane)	ND	0.000241	0.0200	U
76-44-8	Heptachlor	ND	0.000563	0.0200	U
1024-57-3	Heptachlor Epoxide	ND	0.000302	0.0200	U
72-43-5	Methoxychlor	ND	0.000343	0.0200	U
8001-35-2	Toxaphene	ND	0.0237	0.200	U

ND, U - Indicates compound analyzed for but not detected
J - Indicates estimated value
B - Indicates compound found in associated blank
E - Concentration exceeds highest calibration standard
D - Indicates result is based on a dilution
H - Indicates a Hold Time violation
P - Greater than 25% diff. between 2 GC columns.
MDL - Minimum detection limit, **RL** - Reporting limit

F-I

Quantitation Report (QT Reviewed)

Signal #1 : G:\HPCHEM\GCECD9\DATA\20230606\9T00995.D\ECD1A.CH Vial: 19
Signal #2 : G:\HPCHEM\GCECD9\DATA\20230606\9T00995.D\ECD2B.CH
Acq On : 7 Jun 2023 12:56 am Operator: WD
Sample : 23E1424-01 Inst : HP G1530A
Misc : Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Jun 7 13:14 2023 Quant Results File: 80810606.RES

Quant Method : G:\HPCHEM\G...\80810606.M (Chemstation Integrator)
Title : Pesticides by Method SW-846 8081B
Last Update : Tue Jun 06 16:57:33 2023
Response via : Initial Calibration
DataAcq Meth : RUNPEST.M

Volume Inj. : 2ul
Signal #1 Phase : RTx-50 Signal #2 Phase: RTx-CLPesticides II
Signal #1 Info : 30M x 0.53mm x 0. Signal #2 Info : 30M x 0.53mm x 0.42um

	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/kg	ug/kg
	Internal Standards						
1) I	1-Bromo-2-nitrob	3.06	3.25	4749.9E6	3268.1E6	400.000	400.000
25) I	1-Bromo-2-nitrob	3.06	3.25	4749.9E6	3268.1E6	400.000	400.000
	System Monitoring Compounds						
2) S	TCMX	3.77	4.20	406.5E6	243.2E6	38.085	39.252
	Spiked Amount 50.000	Range 43 - 129		Recovery =		76.17%	78.50%
22) S	Decachlorobiphen	13.22	16.35	419.9E6	273.6E6	34.358	39.665m
	Spiked Amount 50.000	Range 42 - 136		Recovery =		68.72%	79.33%
	Target Compounds						
	Sum Chlordane (gamma)			0	0	N.D.	N.D.
	Average Chlordane (gamma)					0.000	0.000
	Sum Toxaphene (1)			0	0	N.D.	N.D.
	Average Toxaphene (1)					0.000	0.000

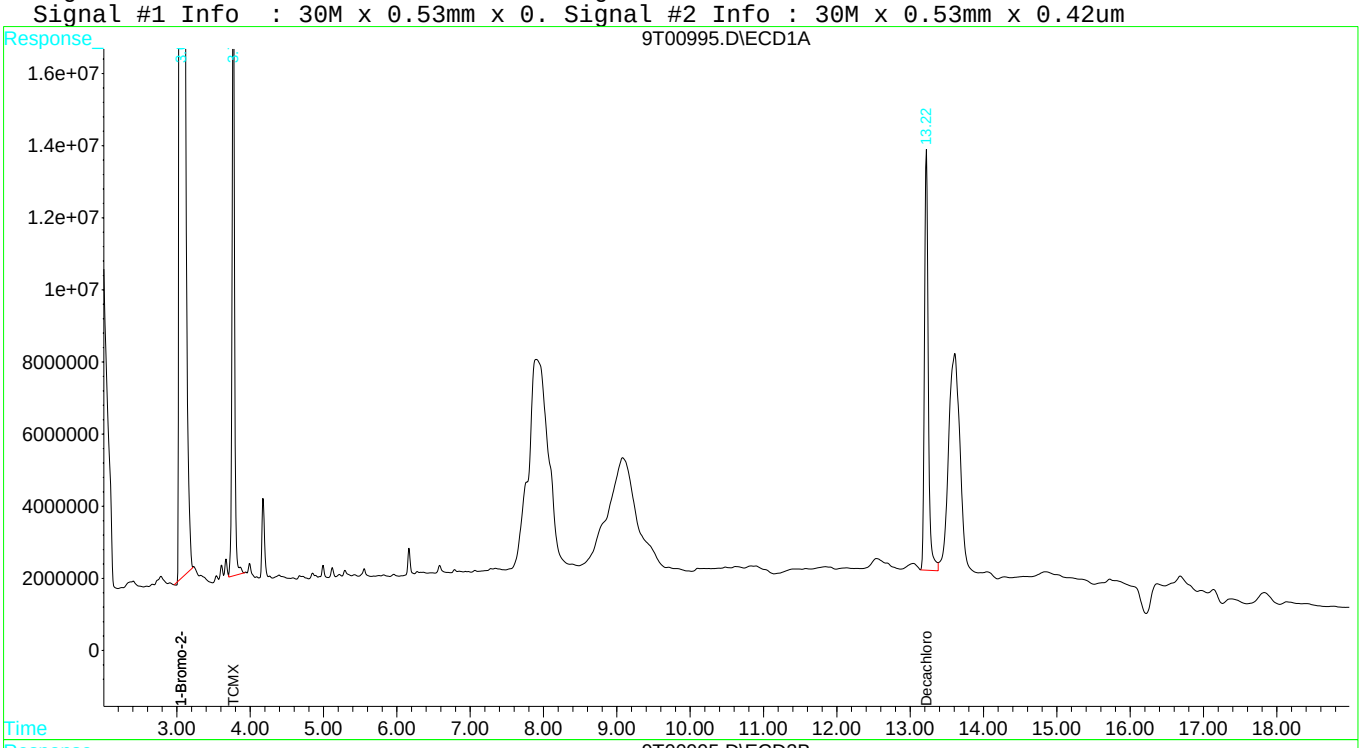
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9T00995.D 80810606.M Wed Jun 07 13:28:13 2023 SS

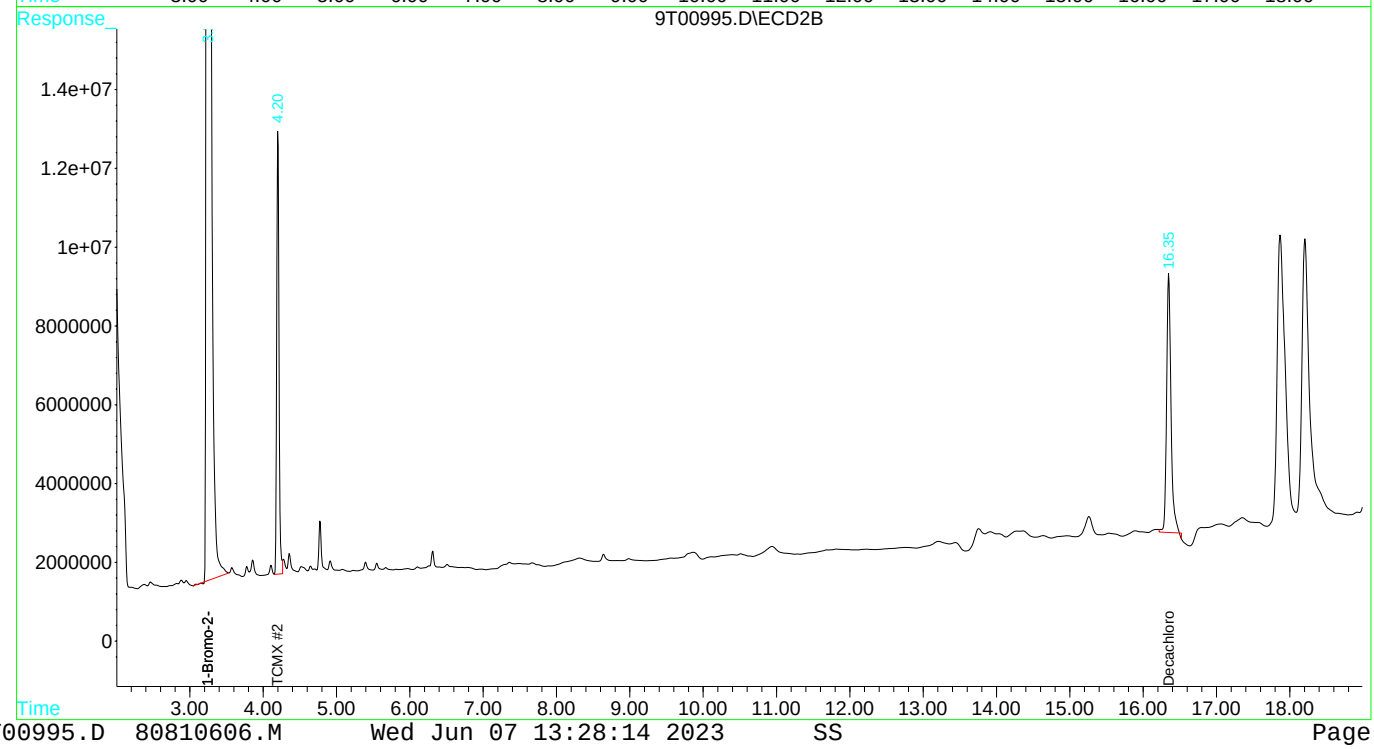
Quantitation Report (QT Reviewed)

Signal #1 : G:\HPCHEM\GCECD9\DATA\20230606\9T00995.D\ECD1A.CH Vial: 19
Signal #2 : G:\HPCHEM\GCECD9\DATA\20230606\9T00995.D\ECD2B.CH
Acq On : 7 Jun 2023 12:56 am Operator: WD
Sample : 23E1424-01 Inst : HP G1530A
Misc : Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Jun 7 13:14 2023 Quant Results File: 80810606.RES

Quant Method : G:\HPCHEM\G...\80810606.M (Chemstation Integrator)
Title : Pesticides by Method SW-846 8081B
Last Update : Tue Jun 06 16:57:33 2023
Response via : Multiple Level Calibration
DataAcq Meth : RUNPEST.M

Volume Inj. : 2ul
Signal #1 Phase : RTx-50 Signal #2 Phase: RTx-CLPesticides II
Signal #1 Info : 30M x 0.53mm x 0. Signal #2 Info : 30M x 0.53mm x 0.42um





ANALYSIS DATA SHEET

Pesticides - SW 846 8081B

Client: **Dynamic Earth LLC**
Client Sample ID: **SED-1**
Lab Sample ID: **23E1424-02**
Project: **Turtle Mill Brook-Eco. Evaluation**
Work Order: **23E1424**

Date Sampled:	05/30/23 11:30	Prep Date:	06/06/23 15:37	File ID:	7T33840.D
Init/Final Vol:	15 g / 10 mL	Prep Batch:	BAF0218	Analyzed:	06/08/23 22:48
Dilution:	1	Matrix:	Soil	Sequence:	SAF0179
Percent Solids:	59.65	Prep Method:	Microwave Extraction		

CAS NO.	COMPOUND	CONC. (mg/kg dry)	MDL	RL	Qual
72-54-8	4,4'-DDD	0.00848	0.000998	0.00218	
72-55-9	4,4'-DDE	0.00382	0.00119	0.00218	
50-29-3	4,4'-DDT	ND	0.00154	0.00218	U
309-00-2	Aldrin	ND	0.00103	0.00218	U
319-84-6	alpha-BHC	ND	0.000649	0.00218	U
319-85-7	beta-BHC	ND	0.00104	0.00218	U
57-74-9	Chlordane	ND	0.000969	0.00218	U
319-86-8	delta-BHC	ND	0.00101	0.00218	U
60-57-1	Dieldrin	ND	0.00114	0.00218	U
959-98-8	Endosulfan I	ND	0.00103	0.00218	U
33213-65-9	Endosulfan II	ND	0.000991	0.00218	U
1031-07-8	Endosulfan sulfate	ND	0.000820	0.00218	U
115-29-7	Endosulfans, Total (alpha and beta)	ND	0.000991	0.00218	U
72-20-8	Endrin	ND	0.000753	0.00218	U
7421-93-4	Endrin aldehyde	ND	0.000868	0.00218	U
53494-70-5	Endrin ketone	ND	0.000768	0.00218	U
58-89-9	gamma-BHC (Lindane)	ND	0.000691	0.00218	U
76-44-8	Heptachlor	ND	0.000583	0.00218	U
1024-57-3	Heptachlor Epoxide	ND	0.00110	0.00218	U
72-43-5	Methoxychlor	ND	0.000639	0.00218	U
8001-35-2	Toxaphene	ND	0.105	0.111	U

ND, U - Indicates compound analyzed for but not detected
J - Indicates estimated value
B - Indicates compound found in associated blank
E - Concentration exceeds highest calibration standard
D - Indicates result is based on a dilution
H - Indicates a Hold Time violation
P - Greater than 25% diff. between 2 GC columns.
MDL - Minimum detection limit, **RL** - Reporting limit

F-I

Quantitation Report (QT Reviewed)

Signal #1 : G:\HPCHEM\GCECD7\DATA\20230608\7T33840.D\ECD1A.CH Vial: 12
Signal #2 : G:\HPCHEM\GCECD7\DATA\20230608\7T33840.D\ECD2B.CH
Acq On : 8 Jun 2023 22:48 Operator: sdp
Sample : 23E1424-02 Inst : GCECD-7
Misc : Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Jun 9 12:10 2023 Quant Results File: 80810607.RES

Quant Method : G:\HPCHEM\G...\80810607.M (Chemstation Integrator)
Title : Pesticides by Method SW-846 8081B
Last Update : Fri Jun 09 11:59:49 2023
Response via : Initial Calibration
DataAcq Meth : RUNPEST.M

Volume Inj. : 2ul
Signal #1 Phase : RTx-50 Signal #2 Phase: RTx-CLPesticides II
Signal #1 Info : 30M x 0.53mm x 0. Signal #2 Info : 30M x 0.53mm x 0.42um

	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/kg	ug/kg
	Internal Standards						
1) I	1-Bromo-2-nitrob	2.82	3.07	23505.8E6	8908.6E6	400.000	400.000
25) I	1-Bromo-2-nitrob	2.82	3.07	23505.8E6	8908.6E6	400.000	400.000
	System Monitoring Compounds						
2) S	TCMX	3.73	4.47	1943.3E6	789.9E6	37.866	42.708
	Spiked Amount 50.000	Range 43 - 129		Recovery =		75.73%	85.42%
22) S	Decachlorobiphen	13.44	15.48	1894.9E6	775.9E6	47.736	57.239m
	Spiked Amount 50.000	Range 42 - 136		Recovery =		95.47%	114.48%
	Target Compounds						
11)	4,4'-DDE	8.49	9.99	237.1E6	184.9E6	3.419m	9.446m#
14)	4,4'-DDD	9.56	11.00	369.0E6	141.7E6	7.588m	10.935m#
16) M	4,4'-DDT	10.05	11.55	40408443	24356679	0.860m	1.963m#
	Sum Chlordane (gamma)			0	0	N.D.	N.D.
	Average Chlordane (gamma)					0.000	0.000
	Sum Toxaphene (1)			0	0	N.D.	N.D.
	Average Toxaphene (1)					0.000	0.000

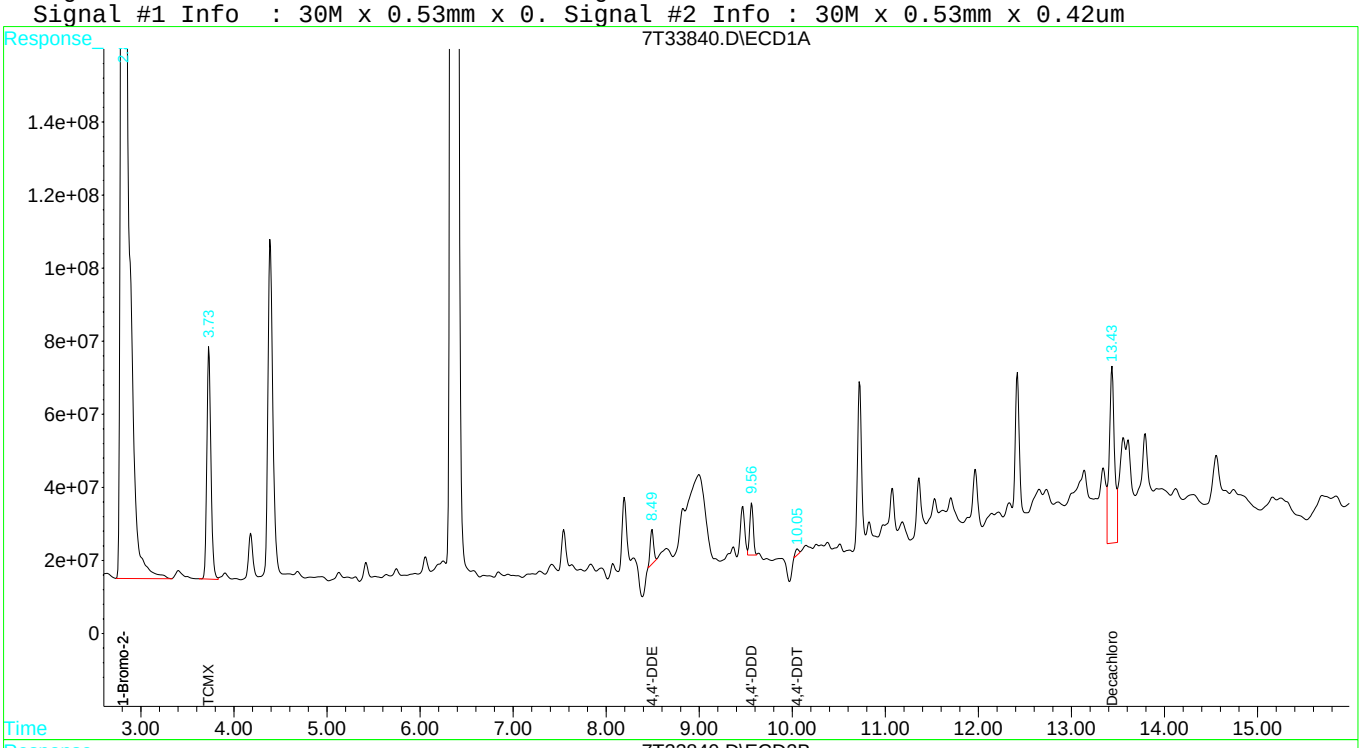
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.
7T33840.D 80810607.M Tue Jul 11 16:33:15 2023 SS

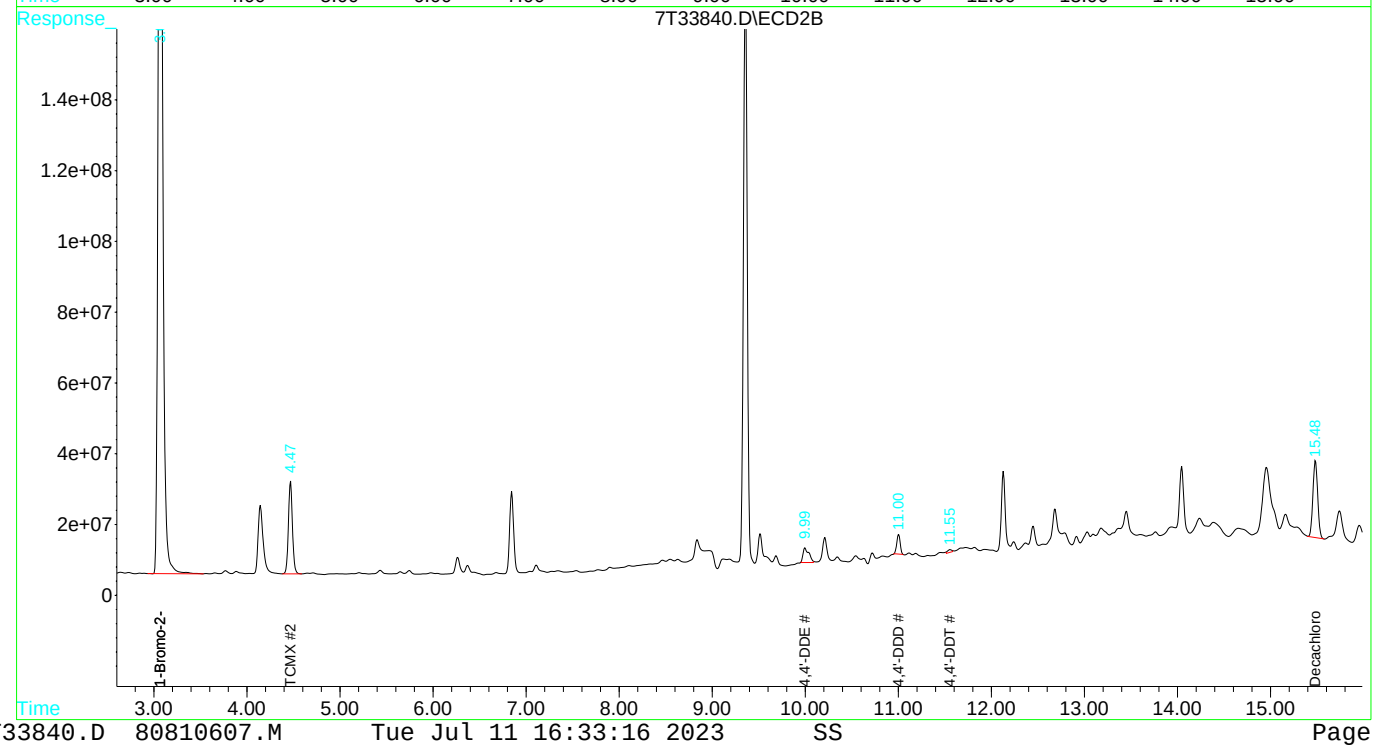
Quantitation Report (QT Reviewed)

Signal #1 : G:\HPCHEM\GCECD7\DATA\20230608\7T33840.D\ECD1A.CH Vial: 12
Signal #2 : G:\HPCHEM\GCECD7\DATA\20230608\7T33840.D\ECD2B.CH
Acq On : 8 Jun 2023 22:48 Operator: sdp
Sample : 23E1424-02 Inst : GCECD-7
Misc : Multiplr: 1.00
IntFile Signal #1: AUTOINT1.E IntFile Signal #2: AUTOINT2.E
Quant Time: Jun 9 12:10 2023 Quant Results File: 80810607.RES

Quant Method : G:\HPCHEM\G...\80810607.M (Chemstation Integrator)
Title : Pesticides by Method SW-846 8081B
Last Update : Fri Jun 09 11:59:49 2023
Response via : Multiple Level Calibration
DataAcq Meth : RUNPEST.M

Volume Inj. : 2ul
Signal #1 Phase : RTx-50 Signal #2 Phase: RTx-CLPesticides II
Signal #1 Info : 30M x 0.53mm x 0. Signal #2 Info : 30M x 0.53mm x 0.42um





ANALYSIS DATA SHEET

Pesticides - SW 846 8081B

Client: **Dynamic Earth LLC**
Client Sample ID: **SW-2**
Lab Sample ID: **23E1424-03**
Project: **Turtle Mill Brook-Eco. Evaluation**
Work Order: **23E1424**

Date Sampled:	05/30/23 11:45	Prep Date:	06/05/23 17:59	File ID:	9T01028.D
Init/Final Vol:	1000 mL / 10 m	Prep Batch:	BAE1181	Analyzed:	06/08/23 20:12
Dilution:	1	Matrix:	Surface Water	Sequence:	SAF0176
		Prep Method:	Sep Funnel GC 8000		

CAS NO.	COMPOUND	CONC. (ug/L)	MDL	RL	Qual
72-54-8	4,4'-DDD	ND	0.000378	0.0200	U
72-55-9	4,4'-DDE	ND	0.000234	0.0200	U
50-29-3	4,4'-DDT	ND	0.000319	0.0200	U
309-00-2	Aldrin	ND	0.000527	0.0200	U
319-84-6	alpha-BHC	ND	0.000255	0.0200	U
319-85-7	beta-BHC	ND	0.000371	0.0200	U
57-74-9	Chlordane	ND	0.000327	0.0500	U
319-86-8	delta-BHC	ND	0.000320	0.0200	U
60-57-1	Dieldrin	ND	0.000271	0.0200	U
959-98-8	Endosulfan I	ND	0.000380	0.0200	U
33213-65-9	Endosulfan II	ND	0.000254	0.0200	U
1031-07-8	Endosulfan sulfate	ND	0.000138	0.0200	U
72-20-8	Endrin	ND	0.000229	0.0200	U
7421-93-4	Endrin aldehyde	ND	0.000318	0.0200	U
53494-70-5	Endrin ketone	ND	0.000203	0.0200	U
58-89-9	gamma-BHC (Lindane)	ND	0.000241	0.0200	U
76-44-8	Heptachlor	ND	0.000563	0.0200	U
1024-57-3	Heptachlor Epoxide	ND	0.000302	0.0200	U
72-43-5	Methoxychlor	ND	0.000343	0.0200	U
8001-35-2	Toxaphene	ND	0.0237	0.200	U

ND, U - Indicates compound analyzed for but not detected
J - Indicates estimated value
B - Indicates compound found in associated blank
E - Concentration exceeds highest calibration standard
D - Indicates result is based on a dilution
H - Indicates a Hold Time violation
P - Greater than 25% diff. between 2 GC columns.
MDL - Minimum detection limit, **RL** - Reporting limit

F-I

Quantitation Report (QT Reviewed)

Signal #1 : G:\HPCHEM\GCECD9\DATA\20230608\9T01028.D\ECD1A.CH Vial: 3
Signal #2 : G:\HPCHEM\GCECD9\DATA\20230608\9T01028.D\ECD2B.CH
Acq On : 8 Jun 2023 8:12 pm Operator: WD
Sample : 23E1424-03 Inst : HP G1530A
Misc : Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Jun 9 11:13 2023 Quant Results File: 80810606.RES

Quant Method : G:\HPCHEM\G...\80810606.M (Chemstation Integrator)
Title : Pesticides by Method SW-846 8081B
Last Update : Tue Jun 06 16:57:33 2023
Response via : Initial Calibration
DataAcq Meth : RUNPEST.M

Volume Inj. : 2ul
Signal #1 Phase : RTx-50 Signal #2 Phase: RTx-CLPesticides II
Signal #1 Info : 30M x 0.53mm x 0. Signal #2 Info : 30M x 0.53mm x 0.42um

	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/kg	ug/kg
	Internal Standards						
1) I	1-Bromo-2-nitrob	3.06	3.25	5157.2E6	3641.2E6	400.000	400.000
25) I	1-Bromo-2-nitrob	3.06	3.25	5157.2E6	3641.2E6	400.000	400.000
	System Monitoring Compounds						
2) S	TCMX	3.77	4.20	423.6E6	273.8E6	36.552	39.662
	Spiked Amount 50.000	Range 43 - 129		Recovery =		73.10%	79.32%
22) S	Decachlorobiphen	13.22	16.35	509.4E6	369.7E6	38.391	48.106 #
	Spiked Amount 50.000	Range 42 - 136		Recovery =		76.78%	96.21%
	Target Compounds						
	Sum Chlordane (gamma)			0	0	N.D.	N.D.
	Average Chlordane (gamma)					0.000	0.000
	Sum Toxaphene (1)			0	0	N.D.	N.D.
	Average Toxaphene (1)					0.000	0.000

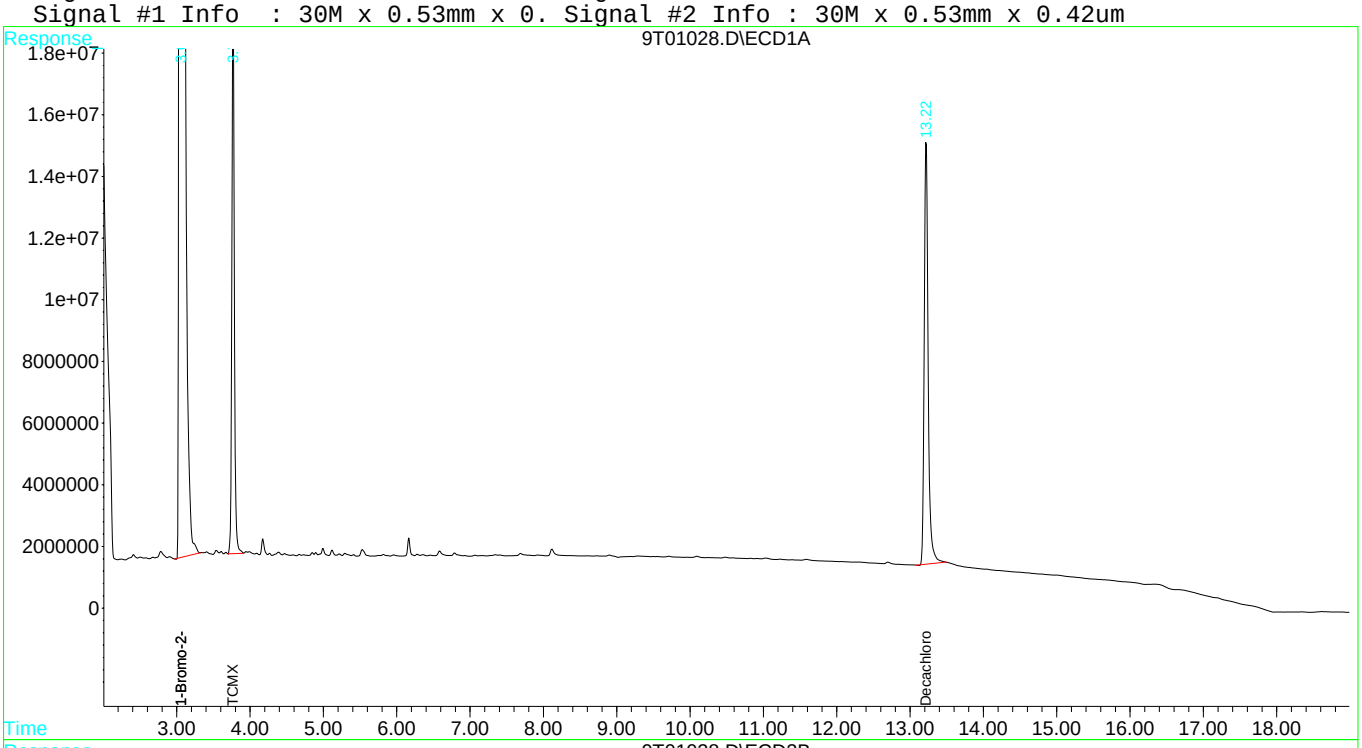
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.
9T01028.D 80810606.M Fri Jun 09 11:41:38 2023 SS

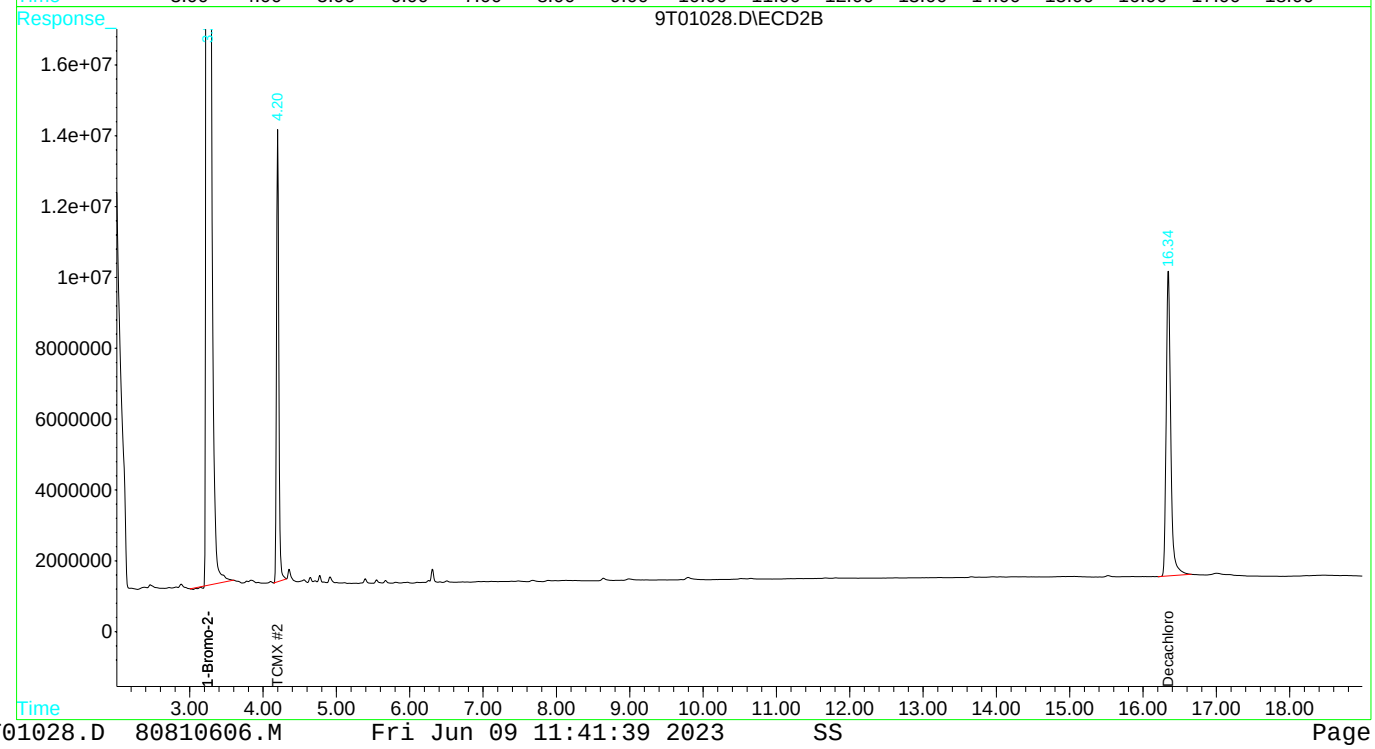
Quantitation Report (QT Reviewed)

Signal #1 : G:\HPCHEM\GCECD9\DATA\20230608\9T01028.D\ECD1A.CH Vial: 3
Signal #2 : G:\HPCHEM\GCECD9\DATA\20230608\9T01028.D\ECD2B.CH
Acq On : 8 Jun 2023 8:12 pm Operator: WD
Sample : 23E1424-03 Inst : HP G1530A
Misc : Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Jun 9 11:13 2023 Quant Results File: 80810606.RES

Quant Method : G:\HPCHEM\G...\80810606.M (Chemstation Integrator)
Title : Pesticides by Method SW-846 8081B
Last Update : Tue Jun 06 16:57:33 2023
Response via : Multiple Level Calibration
DataAcq Meth : RUNPEST.M

Volume Inj. : 2ul
Signal #1 Phase : RTx-50 Signal #2 Phase: RTx-CLPesticides II
Signal #1 Info : 30M x 0.53mm x 0. Signal #2 Info : 30M x 0.53mm x 0.42um





ANALYSIS DATA SHEET

Pesticides - SW 846 8081B

Client: **Dynamic Earth LLC**
Client Sample ID: **SED-2**
Lab Sample ID: **23E1424-04**
Project: **Turtle Mill Brook-Eco. Evaluation**
Work Order: **23E1424**

Date Sampled:	05/30/23 11:50	Prep Date:	06/06/23 15:37	File ID:	7T33841.D
Init/Final Vol:	15 g / 10 mL	Prep Batch:	BAF0218	Analyzed:	06/08/23 23:06
Dilution:	1	Matrix:	Soil	Sequence:	SAF0179
Percent Solids:	69.61	Prep Method:	Microwave Extraction		

CAS NO.	COMPOUND	CONC. (mg/kg dry)	MDL	RL	Qual
72-54-8	4,4'-DDD	ND	0.000855	0.00187	U
72-55-9	4,4'-DDE	ND	0.00102	0.00187	U
50-29-3	4,4'-DDT	ND	0.00132	0.00187	U
309-00-2	Aldrin	ND	0.000885	0.00187	U
319-84-6	alpha-BHC	ND	0.000556	0.00187	U
319-85-7	beta-BHC	ND	0.000892	0.00187	U
57-74-9	Chlordane	ND	0.000830	0.00187	U
319-86-8	delta-BHC	ND	0.000868	0.00187	U
60-57-1	Dieldrin	ND	0.000977	0.00187	U
959-98-8	Endosulfan I	ND	0.000882	0.00187	U
33213-65-9	Endosulfan II	ND	0.000849	0.00187	U
1031-07-8	Endosulfan sulfate	ND	0.000703	0.00187	U
115-29-7	Endosulfans, Total (alpha and beta)	ND	0.000849	0.00187	U
72-20-8	Endrin	ND	0.000645	0.00187	U
7421-93-4	Endrin aldehyde	ND	0.000744	0.00187	U
53494-70-5	Endrin ketone	ND	0.000658	0.00187	U
58-89-9	gamma-BHC (Lindane)	ND	0.000592	0.00187	U
76-44-8	Heptachlor	ND	0.000500	0.00187	U
1024-57-3	Heptachlor Epoxide	ND	0.000942	0.00187	U
72-43-5	Methoxychlor	ND	0.000547	0.00187	U
8001-35-2	Toxaphene	ND	0.0900	0.0948	U

ND, U - Indicates compound analyzed for but not detected
J - Indicates estimated value
B - Indicates compound found in associated blank
E - Concentration exceeds highest calibration standard
D - Indicates result is based on a dilution
H - Indicates a Hold Time violation
P - Greater than 25% diff. between 2 GC columns.
MDL - Minimum detection limit, **RL** - Reporting limit

F-I

Quantitation Report (QT Reviewed)

Signal #1 : G:\HPCHEM\GCECD7\DATA\20230608\7T33841.D\ECD1A.CH Vial: 13
Signal #2 : G:\HPCHEM\GCECD7\DATA\20230608\7T33841.D\ECD2B.CH
Acq On : 8 Jun 2023 23:06 Operator: sdp
Sample : 23E1424-04 Inst : GCECD-7
Misc : Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Jun 9 12:11 2023 Quant Results File: 80810607.RES

Quant Method : G:\HPCHEM\G...\80810607.M (Chemstation Integrator)
Title : Pesticides by Method SW-846 8081B
Last Update : Fri Jun 09 11:59:49 2023
Response via : Initial Calibration
DataAcq Meth : RUNPEST.M

Volume Inj. : 2ul
Signal #1 Phase : RTx-50 Signal #2 Phase: RTx-CLPesticides II
Signal #1 Info : 30M x 0.53mm x 0. Signal #2 Info : 30M x 0.53mm x 0.42um

	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/kg	ug/kg
	Internal Standards						
1) I	1-Bromo-2-nitrob	2.82	3.07	19340.5E6	8808.5E6	400.000	400.000
25) I	1-Bromo-2-nitrob	2.82	3.07	19340.5E6	8808.5E6	400.000	400.000
	System Monitoring Compounds						
2) S	TCMX	3.73	4.47	2192.8E6	840.2E6	51.927	45.943
	Spiked Amount 50.000	Range 43 - 129		Recovery =		103.85%	91.89%
22) S	Decachlorobiphen	13.44	15.48	1794.5E6	978.5E6	54.943	72.999m#
	Spiked Amount 50.000	Range 42 - 136		Recovery =		109.89%	146.00%#
	Target Compounds						
	Sum Chlordane (gamma)			0	0	N.D.	N.D.
	Average Chlordane (gamma)					0.000	0.000
	Sum Toxaphene (1)			0	0	N.D.	N.D.
	Average Toxaphene (1)					0.000	0.000

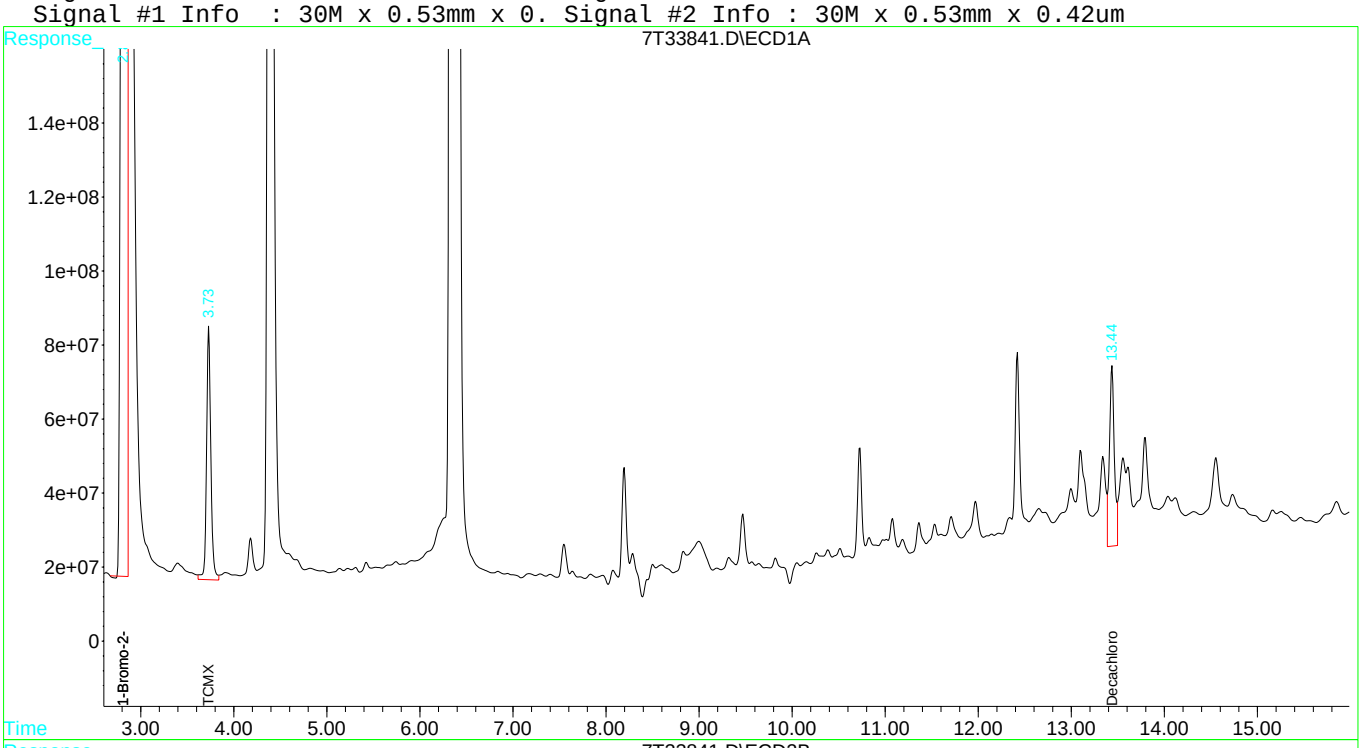
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.
7T33841.D 80810607.M Tue Jul 11 16:33:17 2023 SS

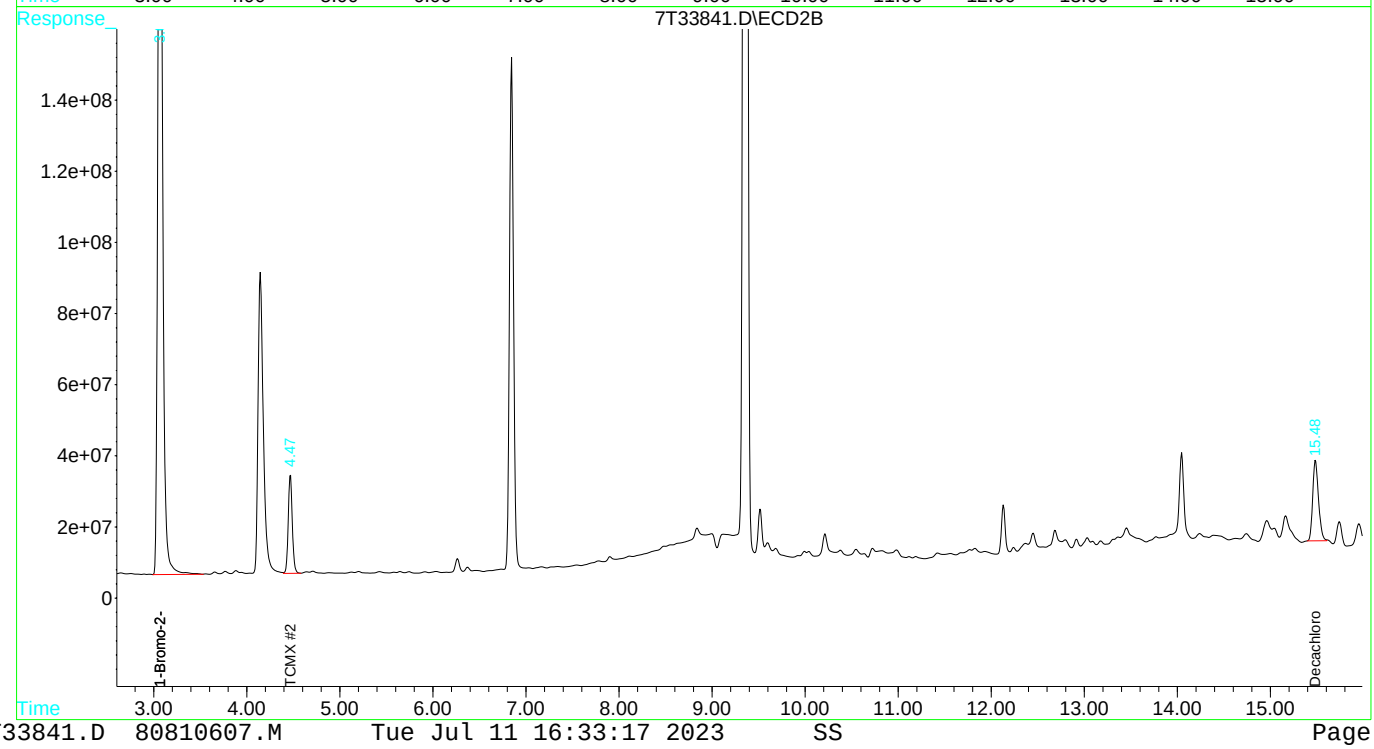
Quantitation Report (QT Reviewed)

Signal #1 : G:\HPCHEM\GCECD7\DATA\20230608\7T33841.D\ECD1A.CH Vial: 13
Signal #2 : G:\HPCHEM\GCECD7\DATA\20230608\7T33841.D\ECD2B.CH
Acq On : 8 Jun 2023 23:06 Operator: sdp
Sample : 23E1424-04 Inst : GCECD-7
Misc : Multiplr: 1.00
IntFile Signal #1: AUTOINT1.E IntFile Signal #2: AUTOINT2.E
Quant Time: Jun 9 12:11 2023 Quant Results File: 80810607.RES

Quant Method : G:\HPCHEM\G...\80810607.M (Chemstation Integrator)
Title : Pesticides by Method SW-846 8081B
Last Update : Fri Jun 09 11:59:49 2023
Response via : Multiple Level Calibration
DataAcq Meth : RUNPEST.M

Volume Inj. : 2ul
Signal #1 Phase : RTx-50 Signal #2 Phase: RTx-CLPesticides II
Signal #1 Info : 30M x 0.53mm x 0. Signal #2 Info : 30M x 0.53mm x 0.42um





ANALYSIS DATA SHEET

Pesticides - SW 846 8081B

Client: **Dynamic Earth LLC**
Client Sample ID: **SW-3**
Lab Sample ID: **23E1424-05**
Project: **Turtle Mill Brook-Eco. Evaluation**
Work Order: **23E1424**

Date Sampled:	05/30/23 12:00	Prep Date:	06/05/23 17:59	File ID:	9T01029.D
Init/Final Vol:	1000 mL / 10 m	Prep Batch:	BAE1181	Analyzed:	06/08/23 20:35
Dilution:	1	Matrix:	Surface Water	Sequence:	SAF0176
		Prep Method:	Sep Funnel GC 8000		

CAS NO.	COMPOUND	CONC. (ug/L)	MDL	RL	Qual
72-54-8	4,4'-DDD	ND	0.000378	0.0200	U
72-55-9	4,4'-DDE	ND	0.000234	0.0200	U
50-29-3	4,4'-DDT	ND	0.000319	0.0200	U
309-00-2	Aldrin	ND	0.000527	0.0200	U
319-84-6	alpha-BHC	ND	0.000255	0.0200	U
319-85-7	beta-BHC	ND	0.000371	0.0200	U
57-74-9	Chlordane	ND	0.000327	0.0500	U
319-86-8	delta-BHC	ND	0.000320	0.0200	U
60-57-1	Dieldrin	ND	0.000271	0.0200	U
959-98-8	Endosulfan I	ND	0.000380	0.0200	U
33213-65-9	Endosulfan II	ND	0.000254	0.0200	U
1031-07-8	Endosulfan sulfate	ND	0.000138	0.0200	U
72-20-8	Endrin	ND	0.000229	0.0200	U
7421-93-4	Endrin aldehyde	ND	0.000318	0.0200	U
53494-70-5	Endrin ketone	ND	0.000203	0.0200	U
58-89-9	gamma-BHC (Lindane)	ND	0.000241	0.0200	U
76-44-8	Heptachlor	ND	0.000563	0.0200	U
1024-57-3	Heptachlor Epoxide	ND	0.000302	0.0200	U
72-43-5	Methoxychlor	ND	0.000343	0.0200	U
8001-35-2	Toxaphene	ND	0.0237	0.200	U

ND, U - Indicates compound analyzed for but not detected
J - Indicates estimated value
B - Indicates compound found in associated blank
E - Concentration exceeds highest calibration standard
D - Indicates result is based on a dilution
H - Indicates a Hold Time violation
P - Greater than 25% diff. between 2 GC columns.
MDL - Minimum detection limit, **RL** - Reporting limit

F-I

Quantitation Report (QT Reviewed)

Signal #1 : G:\HPCHEM\GCECD9\DATA\20230608\9T01029.D\ECD1A.CH Vial: 4
Signal #2 : G:\HPCHEM\GCECD9\DATA\20230608\9T01029.D\ECD2B.CH
Acq On : 8 Jun 2023 8:35 pm Operator: WD
Sample : 23E1424-05 Inst : HP G1530A
Misc : Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Jun 9 11:13 2023 Quant Results File: 80810606.RES

Quant Method : G:\HPCHEM\G...\80810606.M (Chemstation Integrator)
Title : Pesticides by Method SW-846 8081B
Last Update : Tue Jun 06 16:57:33 2023
Response via : Initial Calibration
DataAcq Meth : RUNPEST.M

Volume Inj. : 2ul
Signal #1 Phase : RTx-50 Signal #2 Phase: RTx-CLPesticides II
Signal #1 Info : 30M x 0.53mm x 0. Signal #2 Info : 30M x 0.53mm x 0.42um

	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/kg	ug/kg
	Internal Standards						
1) I	1-Bromo-2-nitrob	3.06	3.25	4889.0E6	3450.7E6	400.000	400.000
25) I	1-Bromo-2-nitrob	3.06	3.25	4889.0E6	3450.7E6	400.000	400.000
	System Monitoring Compounds						
2) S	TCMX	3.77	4.20	419.4E6	270.5E6	38.176	41.354
	Spiked Amount 50.000	Range 43 - 129		Recovery =		76.35%	82.71%
22) S	Decachlorobiphen	13.22	16.35	479.4E6	347.0E6	38.118	47.647
	Spiked Amount 50.000	Range 42 - 136		Recovery =		76.24%	95.29%
	Target Compounds						
	Sum Chlordane (gamma)			0	0	N.D.	N.D.
	Average Chlordane (gamma)					0.000	0.000
	Sum Toxaphene (1)			0	0	N.D.	N.D.
	Average Toxaphene (1)					0.000	0.000

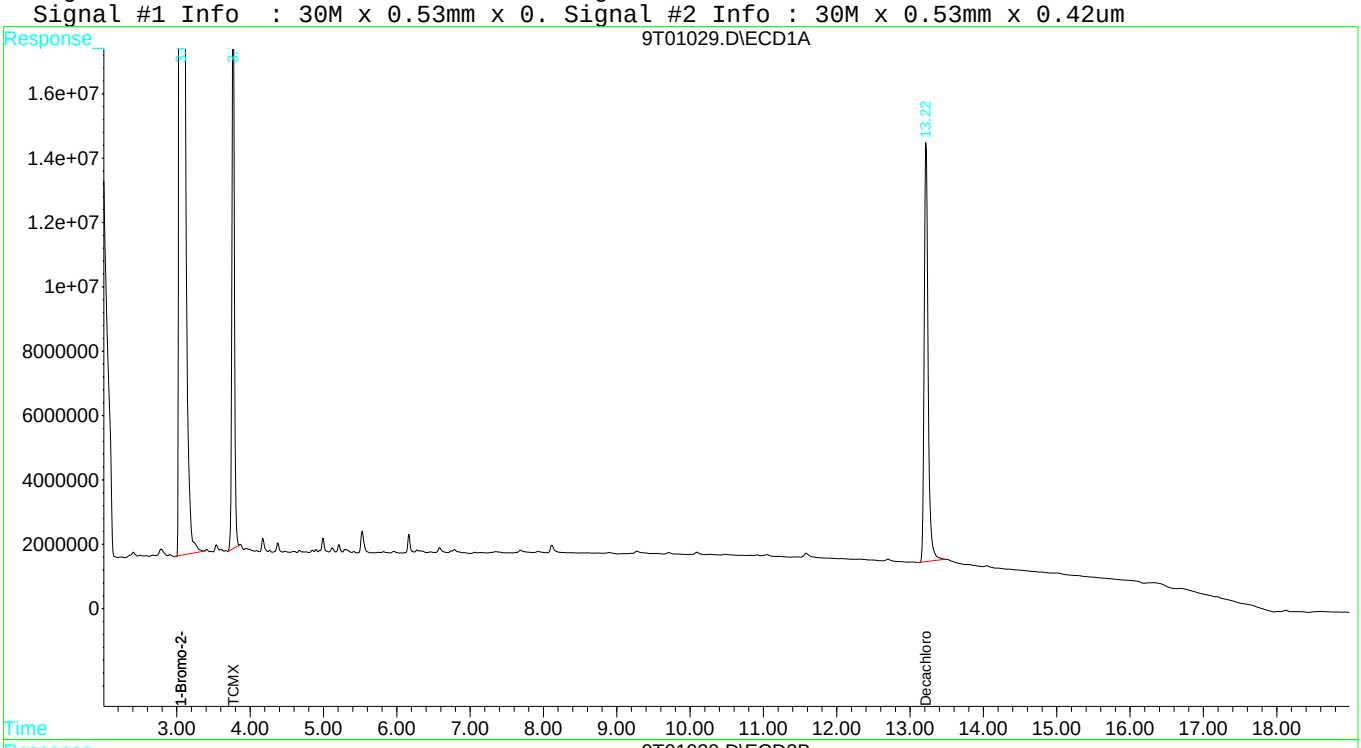
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.
9T01029.D 80810606.M Fri Jun 09 11:41:40 2023 SS

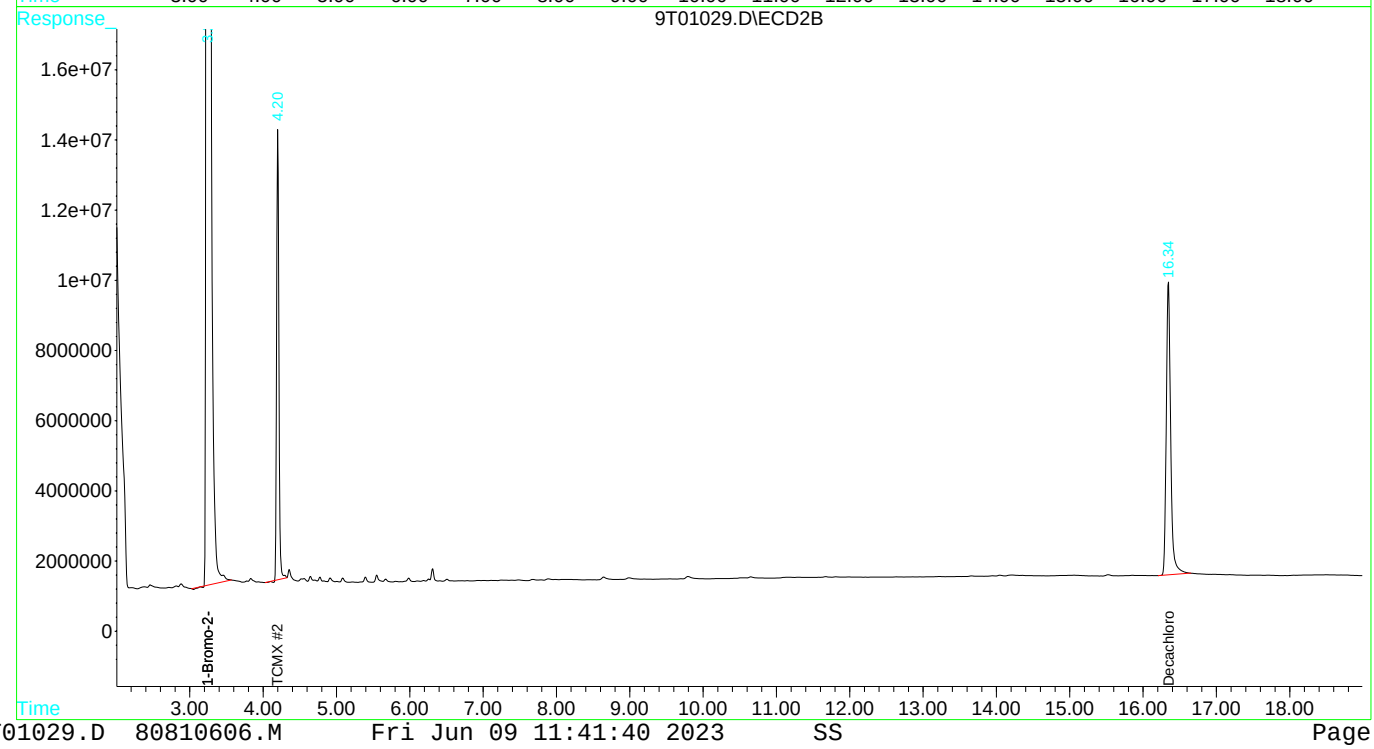
Quantitation Report (QT Reviewed)

Signal #1 : G:\HPCHEM\GCECD9\DATA\20230608\9T01029.D\ECD1A.CH Vial: 4
Signal #2 : G:\HPCHEM\GCECD9\DATA\20230608\9T01029.D\ECD2B.CH
Acq On : 8 Jun 2023 8:35 pm Operator: WD
Sample : 23E1424-05 Inst : HP G1530A
Misc : Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Jun 9 11:13 2023 Quant Results File: 80810606.RES

Quant Method : G:\HPCHEM\G...\80810606.M (Chemstation Integrator)
Title : Pesticides by Method SW-846 8081B
Last Update : Tue Jun 06 16:57:33 2023
Response via : Multiple Level Calibration
DataAcq Meth : RUNPEST.M

Volume Inj. : 2ul
Signal #1 Phase : RTx-50 Signal #2 Phase: RTx-CLPesticides II
Signal #1 Info : 30M x 0.53mm x 0. Signal #2 Info : 30M x 0.53mm x 0.42um





ANALYSIS DATA SHEET

Pesticides - SW 846 8081B

Client: **Dynamic Earth LLC**
Client Sample ID: **SED-3**
Lab Sample ID: **23E1424-06**
Project: **Turtle Mill Brook-Eco. Evaluation**
Work Order: **23E1424**

Date Sampled:	05/30/23 12:05	Prep Date:	06/06/23 15:37	File ID:	7T33842.D
Init/Final Vol:	15 g / 10 mL	Prep Batch:	BAF0218	Analyzed:	06/08/23 23:24
Dilution:	1	Matrix:	Soil	Sequence:	SAF0179
Percent Solids:	79.25	Prep Method:	Microwave Extraction		

CAS NO.	COMPOUND	CONC. (mg/kg dry)	MDL	RL	Qual
72-54-8	4,4'-DDD	ND	0.000751	0.00164	U
72-55-9	4,4'-DDE	ND	0.000897	0.00164	U
50-29-3	4,4'-DDT	ND	0.00116	0.00164	U
309-00-2	Aldrin	ND	0.000777	0.00164	U
319-84-6	alpha-BHC	ND	0.000488	0.00164	U
319-85-7	beta-BHC	ND	0.000784	0.00164	U
57-74-9	Chlordane	ND	0.000729	0.00164	U
319-86-8	delta-BHC	ND	0.000762	0.00164	U
60-57-1	Dieldrin	ND	0.000858	0.00164	U
959-98-8	Endosulfan I	ND	0.000775	0.00164	U
33213-65-9	Endosulfan II	ND	0.000746	0.00164	U
1031-07-8	Endosulfan sulfate	ND	0.000617	0.00164	U
115-29-7	Endosulfans, Total (alpha and beta)	ND	0.000746	0.00164	U
72-20-8	Endrin	ND	0.000567	0.00164	U
7421-93-4	Endrin aldehyde	ND	0.000654	0.00164	U
53494-70-5	Endrin ketone	ND	0.000578	0.00164	U
58-89-9	gamma-BHC (Lindane)	ND	0.000520	0.00164	U
76-44-8	Heptachlor	ND	0.000439	0.00164	U
1024-57-3	Heptachlor Epoxide	ND	0.000828	0.00164	U
72-43-5	Methoxychlor	ND	0.000481	0.00164	U
8001-35-2	Toxaphene	ND	0.0790	0.0833	U

ND, U - Indicates compound analyzed for but not detected
J - Indicates estimated value
B - Indicates compound found in associated blank
E - Concentration exceeds highest calibration standard
D - Indicates result is based on a dilution
H - Indicates a Hold Time violation
P - Greater than 25% diff. between 2 GC columns.
MDL - Minimum detection limit, **RL** - Reporting limit

F-I

Quantitation Report (QT Reviewed)

Signal #1 : G:\HPCHEM\GCECD7\DATA\20230608\7T33842.D\ECD1A.CH Vial: 14
Signal #2 : G:\HPCHEM\GCECD7\DATA\20230608\7T33842.D\ECD2B.CH
Acq On : 8 Jun 2023 11:24 pm Operator: sdp
Sample : 23E1424-06 Inst : HP G1530A
Misc : Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Jun 9 12:12 2023 Quant Results File: 80810607.RES

Quant Method : G:\HPCHEM\G...\80810607.M (Chemstation Integrator)
Title : Pesticides by Method SW-846 8081B
Last Update : Fri Jun 09 11:59:49 2023
Response via : Initial Calibration
DataAcq Meth : RUNPEST.M

Volume Inj. : 2ul
Signal #1 Phase : RTx-50 Signal #2 Phase: RTx-CLPesticides II
Signal #1 Info : 30M x 0.53mm x 0. Signal #2 Info : 30M x 0.53mm x 0.42um

	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/kg	ug/kg
	Internal Standards						
1) I	1-Bromo-2-nitrob	2.82	3.07	20353.2E6	8550.4E6	400.000	400.000
25) I	1-Bromo-2-nitrob	2.82	3.07	20353.2E6	8550.4E6	400.000	400.000
	System Monitoring Compounds						
2) S	TCMX	3.73	4.47	2108.2E6	843.3E6	47.441	47.507
	Spiked Amount 50.000	Range 43 - 129		Recovery =		94.88%	95.01%
22) S	Decachlorobiphen	13.44	15.48	1012.3E6	520.5E6	29.450m	40.005 #
	Spiked Amount 50.000	Range 42 - 136		Recovery =		58.90%	80.01%
	Target Compounds						
	Sum Chlordane (gamma)			0	0	N.D.	N.D.
	Average Chlordane (gamma)					0.000	0.000
	Sum Toxaphene (1)			0	0	N.D.	N.D.
	Average Toxaphene (1)					0.000	0.000

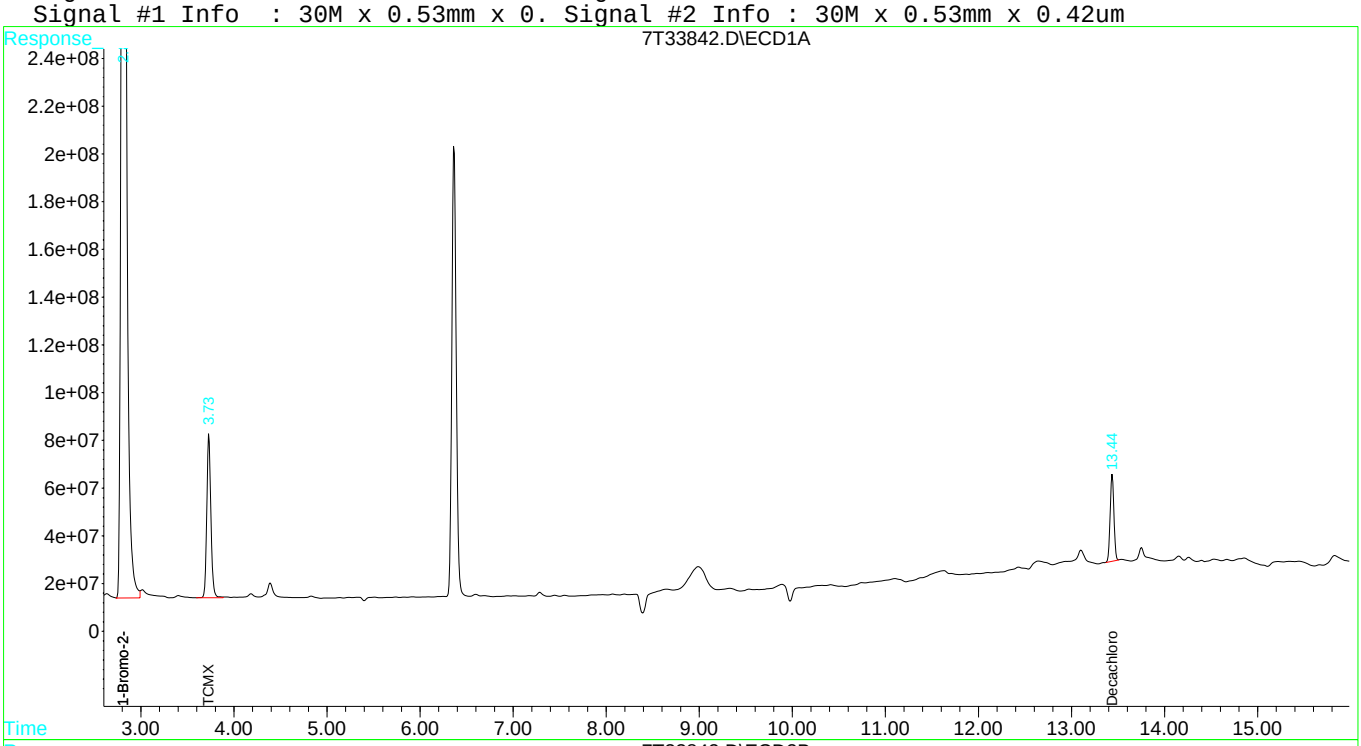
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7T33842.D 80810607.M Fri Jun 09 12:26:42 2023 SS

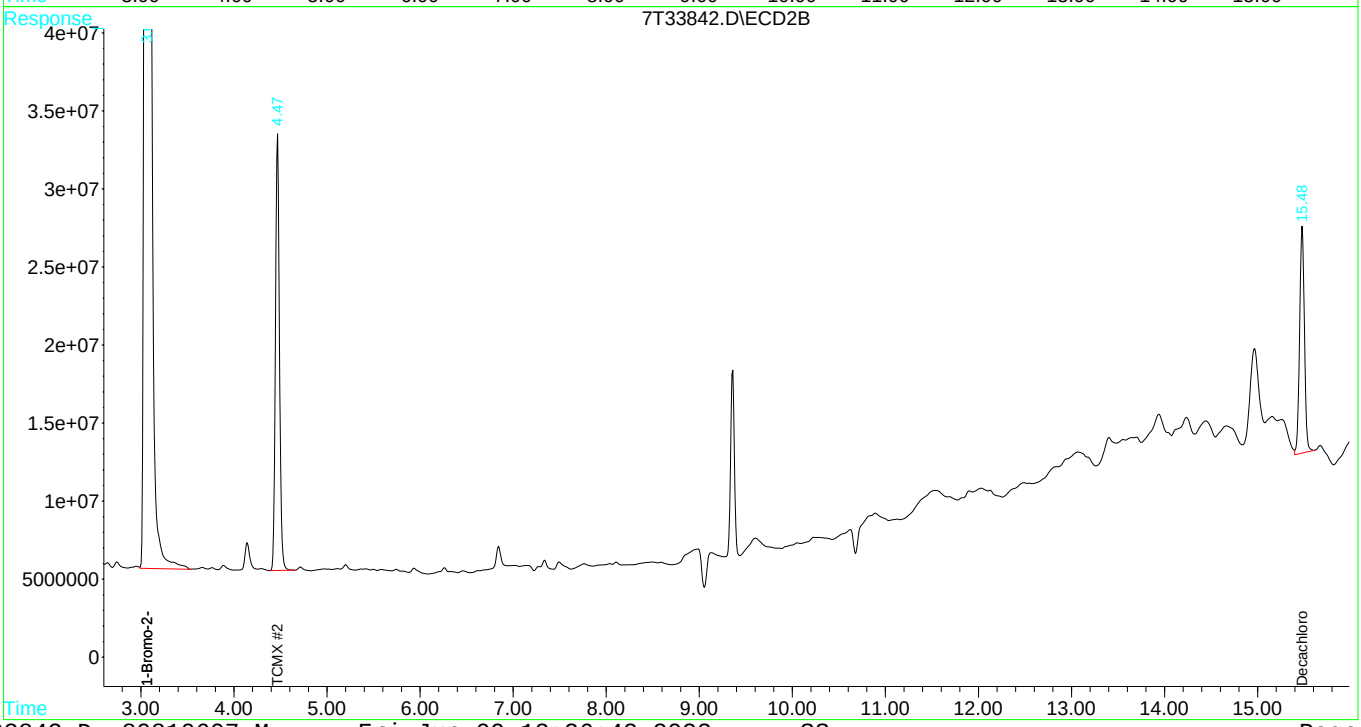
Quantitation Report (QT Reviewed)

Signal #1 : G:\HPCHEM\GCECD7\DATA\20230608\7T33842.D\ECD1A.CH Vial: 14
Signal #2 : G:\HPCHEM\GCECD7\DATA\20230608\7T33842.D\ECD2B.CH
Acq On : 8 Jun 2023 11:24 pm Operator: sdp
Sample : 23E1424-06 Inst : HP G1530A
Misc : Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Jun 9 12:12 2023 Quant Results File: 80810607.RES

Quant Method : G:\HPCHEM\G...\80810607.M (Chemstation Integrator)
Title : Pesticides by Method SW-846 8081B
Last Update : Fri Jun 09 11:59:49 2023
Response via : Multiple Level Calibration
DataAcq Meth : RUNPEST.M

Volume Inj. : 2ul
Signal #1 Phase : RTx-50 Signal #2 Phase: RTx-CLPesticides II
Signal #1 Info : 30M x 0.53mm x 0. Signal #2 Info : 30M x 0.53mm x 0.42um





ANALYSIS DATA SHEET

Pesticides - SW 846 8081B

Client: **Dynamic Earth LLC**
Client Sample ID: **SW-4**
Lab Sample ID: **23E1424-07**
Project: **Turtle Mill Brook-Eco. Evaluation**
Work Order: **23E1424**

Date Sampled:	05/30/23 12:25	Prep Date:	06/05/23 17:59	File ID:	9T01030.D
Init/Final Vol:	1000 mL / 10 m	Prep Batch:	BAE1181	Analyzed:	06/08/23 20:57
Dilution:	1	Matrix:	Surface Water	Sequence:	SAF0176
		Prep Method:	Sep Funnel GC 8000		

CAS NO.	COMPOUND	CONC. (ug/L)	MDL	RL	Qual
72-54-8	4,4'-DDD	ND	0.000378	0.0200	U
72-55-9	4,4'-DDE	ND	0.000234	0.0200	U
50-29-3	4,4'-DDT	ND	0.000319	0.0200	U
309-00-2	Aldrin	ND	0.000527	0.0200	U
319-84-6	alpha-BHC	ND	0.000255	0.0200	U
319-85-7	beta-BHC	ND	0.000371	0.0200	U
57-74-9	Chlordane	ND	0.000327	0.0500	U
319-86-8	delta-BHC	ND	0.000320	0.0200	U
60-57-1	Dieldrin	ND	0.000271	0.0200	U
959-98-8	Endosulfan I	ND	0.000380	0.0200	U
33213-65-9	Endosulfan II	ND	0.000254	0.0200	U
1031-07-8	Endosulfan sulfate	ND	0.000138	0.0200	U
72-20-8	Endrin	ND	0.000229	0.0200	U
7421-93-4	Endrin aldehyde	ND	0.000318	0.0200	U
53494-70-5	Endrin ketone	ND	0.000203	0.0200	U
58-89-9	gamma-BHC (Lindane)	ND	0.000241	0.0200	U
76-44-8	Heptachlor	ND	0.000563	0.0200	U
1024-57-3	Heptachlor Epoxide	ND	0.000302	0.0200	U
72-43-5	Methoxychlor	ND	0.000343	0.0200	U
8001-35-2	Toxaphene	ND	0.0237	0.200	U

ND, U - Indicates compound analyzed for but not detected
J - Indicates estimated value
B - Indicates compound found in associated blank
E - Concentration exceeds highest calibration standard
D - Indicates result is based on a dilution
H - Indicates a Hold Time violation
P - Greater than 25% diff. between 2 GC columns.
MDL - Minimum detection limit, **RL** - Reporting limit

F-I

Quantitation Report (QT Reviewed)

Signal #1 : G:\HPCHEM\GCECD9\DATA\20230608\9T01030.D\ECD1A.CH Vial: 5
Signal #2 : G:\HPCHEM\GCECD9\DATA\20230608\9T01030.D\ECD2B.CH
Acq On : 8 Jun 2023 8:57 pm Operator: WD
Sample : 23E1424-07 Inst : HP G1530A
Misc : Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Jun 9 11:29 2023 Quant Results File: 80810606.RES

Quant Method : G:\HPCHEM\G...\80810606.M (Chemstation Integrator)
Title : Pesticides by Method SW-846 8081B
Last Update : Tue Jun 06 16:57:33 2023
Response via : Initial Calibration
DataAcq Meth : RUNPEST.M

Volume Inj. : 2ul
Signal #1 Phase : RTx-50 Signal #2 Phase: RTx-CLPesticides II
Signal #1 Info : 30M x 0.53mm x 0. Signal #2 Info : 30M x 0.53mm x 0.42um

	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/kg	ug/kg
	Internal Standards						
1) I	1-Bromo-2-nitrob	3.06	3.25	4572.6E6	3290.2E6	400.000	400.000
25) I	1-Bromo-2-nitrob	3.06	3.25	4572.6E6	3290.2E6	400.000	400.000
	System Monitoring Compounds						
2) S	TCMX	3.77	4.20	401.7E6	267.3E6	39.101	42.849
	Spiked Amount 50.000	Range 43 - 129		Recovery =		78.20%	85.70%
22) S	Decachlorobiphen	13.22	16.34	503.0E6	365.4E6	42.762	52.617
	Spiked Amount 50.000	Range 42 - 136		Recovery =		85.52%	105.23%
	Target Compounds						
	Sum Chlordane (gamma)			0	0	N.D.	N.D.
	Average Chlordane (gamma)					0.000	0.000
	Sum Toxaphene (1)			0	0	N.D.	N.D.
	Average Toxaphene (1)					0.000	0.000

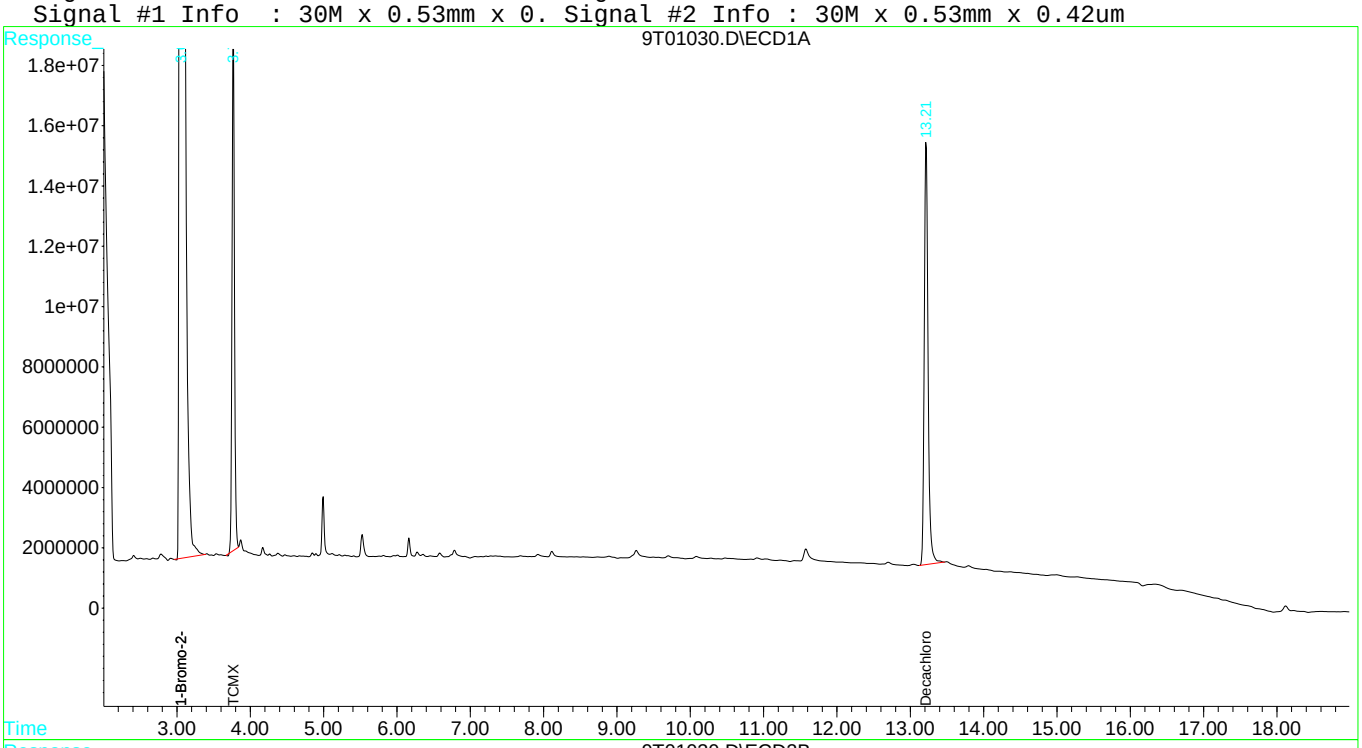
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9T01030.D 80810606.M Fri Jun 09 11:41:42 2023 SS

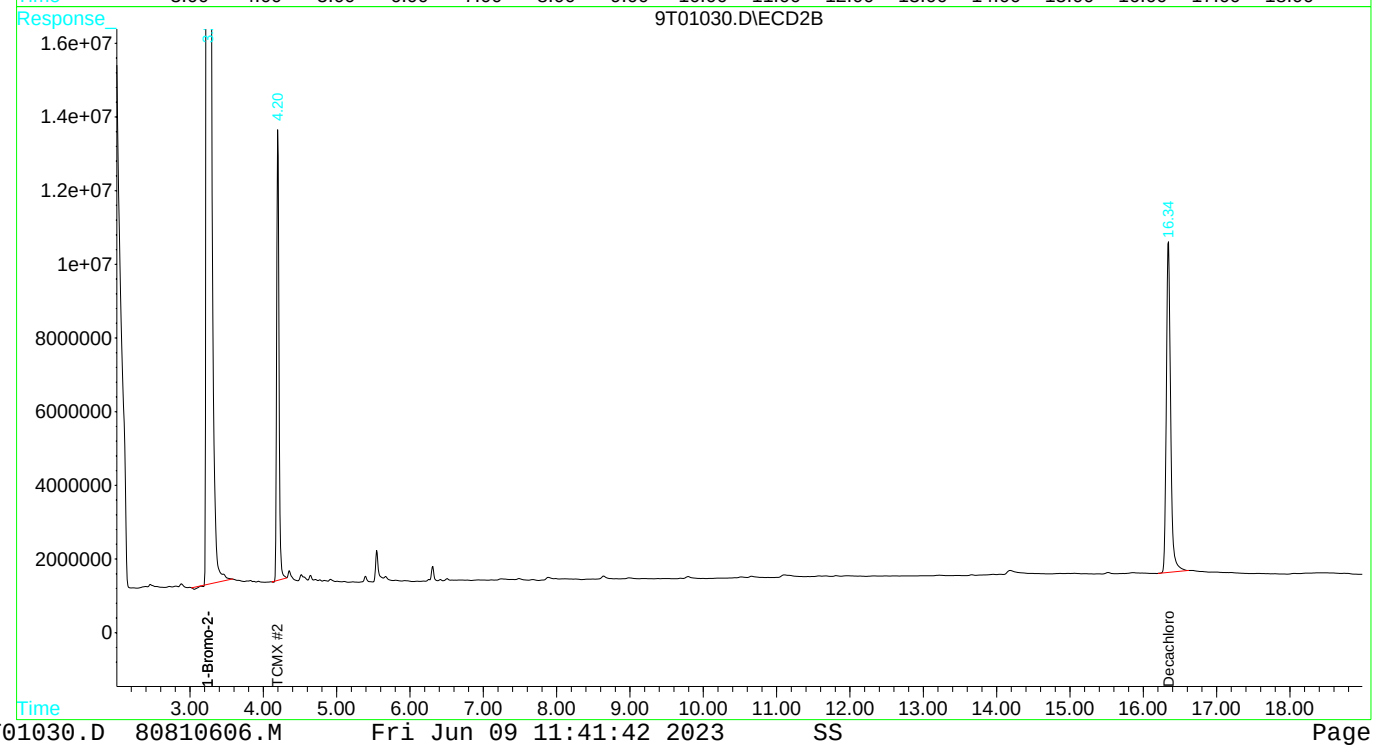
Quantitation Report (QT Reviewed)

Signal #1 : G:\HPCHEM\GCECD9\DATA\20230608\9T01030.D\ECD1A.CH Vial: 5
Signal #2 : G:\HPCHEM\GCECD9\DATA\20230608\9T01030.D\ECD2B.CH
Acq On : 8 Jun 2023 8:57 pm Operator: WD
Sample : 23E1424-07 Inst : HP G1530A
Misc : Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Jun 9 11:29 2023 Quant Results File: 80810606.RES

Quant Method : G:\HPCHEM\G...\80810606.M (Chemstation Integrator)
Title : Pesticides by Method SW-846 8081B
Last Update : Tue Jun 06 16:57:33 2023
Response via : Multiple Level Calibration
DataAcq Meth : RUNPEST.M

Volume Inj. : 2ul
Signal #1 Phase : RTx-50 Signal #2 Phase: RTx-CLPesticides II
Signal #1 Info : 30M x 0.53mm x 0. Signal #2 Info : 30M x 0.53mm x 0.42um





ANALYSIS DATA SHEET

Pesticides - SW 846 8081B

Client: **Dynamic Earth LLC**
Client Sample ID: **SED-4**
Lab Sample ID: **23E1424-08**
Project: **Turtle Mill Brook-Eco. Evaluation**
Work Order: **23E1424**

Date Sampled:	05/30/23 12:30	Prep Date:	06/06/23 15:37	File ID:	7T33843.D
Init/Final Vol:	15 g / 10 mL	Prep Batch:	BAF0218	Analyzed:	06/08/23 23:42
Dilution:	1	Matrix:	Soil	Sequence:	SAF0179
Percent Solids:	85.35	Prep Method:	Microwave Extraction		

CAS NO.	COMPOUND	CONC. (mg/kg dry)	MDL	RL	Qual
72-54-8	4,4'-DDD	0.00448	0.000697	0.00152	
72-55-9	4,4'-DDE	0.00555	0.000833	0.00152	
50-29-3	4,4'-DDT	ND	0.00108	0.00152	U
309-00-2	Aldrin	ND	0.000722	0.00152	U
319-84-6	alpha-BHC	ND	0.000453	0.00152	U
319-85-7	beta-BHC	ND	0.000728	0.00152	U
57-74-9	Chlordane	ND	0.000677	0.00152	U
319-86-8	delta-BHC	ND	0.000708	0.00152	U
60-57-1	Dieldrin	ND	0.000797	0.00152	U
959-98-8	Endosulfan I	ND	0.000719	0.00152	U
33213-65-9	Endosulfan II	ND	0.000692	0.00152	U
1031-07-8	Endosulfan sulfate	ND	0.000573	0.00152	U
115-29-7	Endosulfans, Total (alpha and beta)	ND	0.000692	0.00152	U
72-20-8	Endrin	ND	0.000526	0.00152	U
7421-93-4	Endrin aldehyde	ND	0.000607	0.00152	U
53494-70-5	Endrin ketone	ND	0.000537	0.00152	U
58-89-9	gamma-BHC (Lindane)	ND	0.000483	0.00152	U
76-44-8	Heptachlor	ND	0.000408	0.00152	U
1024-57-3	Heptachlor Epoxide	ND	0.000769	0.00152	U
72-43-5	Methoxychlor	ND	0.000446	0.00152	U
8001-35-2	Toxaphene	ND	0.0734	0.0773	U

ND, U - Indicates compound analyzed for but not detected
J - Indicates estimated value
B - Indicates compound found in associated blank
E - Concentration exceeds highest calibration standard
D - Indicates result is based on a dilution
H - Indicates a Hold Time violation
P - Greater than 25% diff. between 2 GC columns.
MDL - Minimum detection limit, **RL** - Reporting limit

F-I

Quantitation Report (QT Reviewed)

Signal #1 : G:\HPCHEM\GCECD7\DATA\20230608\7T33843.D\ECD1A.CH Vial: 15
Signal #2 : G:\HPCHEM\GCECD7\DATA\20230608\7T33843.D\ECD2B.CH
Acq On : 8 Jun 2023 23:42 Operator: sdp
Sample : 23E1424-08 Inst : GCECD-7
Misc : Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Jun 9 12:22 2023 Quant Results File: 80810607.RES

Quant Method : G:\HPCHEM\G...\80810607.M (Chemstation Integrator)
Title : Pesticides by Method SW-846 8081B
Last Update : Fri Jun 09 11:59:49 2023
Response via : Initial Calibration
DataAcq Meth : RUNPEST.M

Volume Inj. : 2ul
Signal #1 Phase : RTx-50 Signal #2 Phase: RTx-CLPesticides II
Signal #1 Info : 30M x 0.53mm x 0. Signal #2 Info : 30M x 0.53mm x 0.42um

	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/kg	ug/kg
	Internal Standards						
1) I	1-Bromo-2-nitrob	2.81	3.07	22322.9E6	8541.4E6	400.000	400.000
25) I	1-Bromo-2-nitrob	2.81	3.07	22322.9E6	8541.4E6	400.000	400.000
	System Monitoring Compounds						
2) S	TCMX	3.73	4.47	2101.0E6	836.3E6	43.108	47.159
Spiked Amount	50.000	Range 43 - 129		Recovery =		86.22%	94.32%
22) S	Decachlorobiphen	13.43	15.48	974.7E6	555.6E6	25.856m	42.750m#
Spiked Amount	50.000	Range 42 - 136		Recovery =		51.71%	85.50%
	Target Compounds						
11)	4,4'-DDE	8.49	9.99	467.7E6	184.2E6	7.100m	9.813m#
14)	4,4'-DDD	9.56	11.01	264.8E6	121.7E6	5.733m	9.795 #
	Sum Chlordane (gamma)			0	0	N.D.	N.D.
	Average Chlordane (gamma)					0.000	0.000
	Sum Toxaphene (1)			0	0	N.D.	N.D.
	Average Toxaphene (1)					0.000	0.000

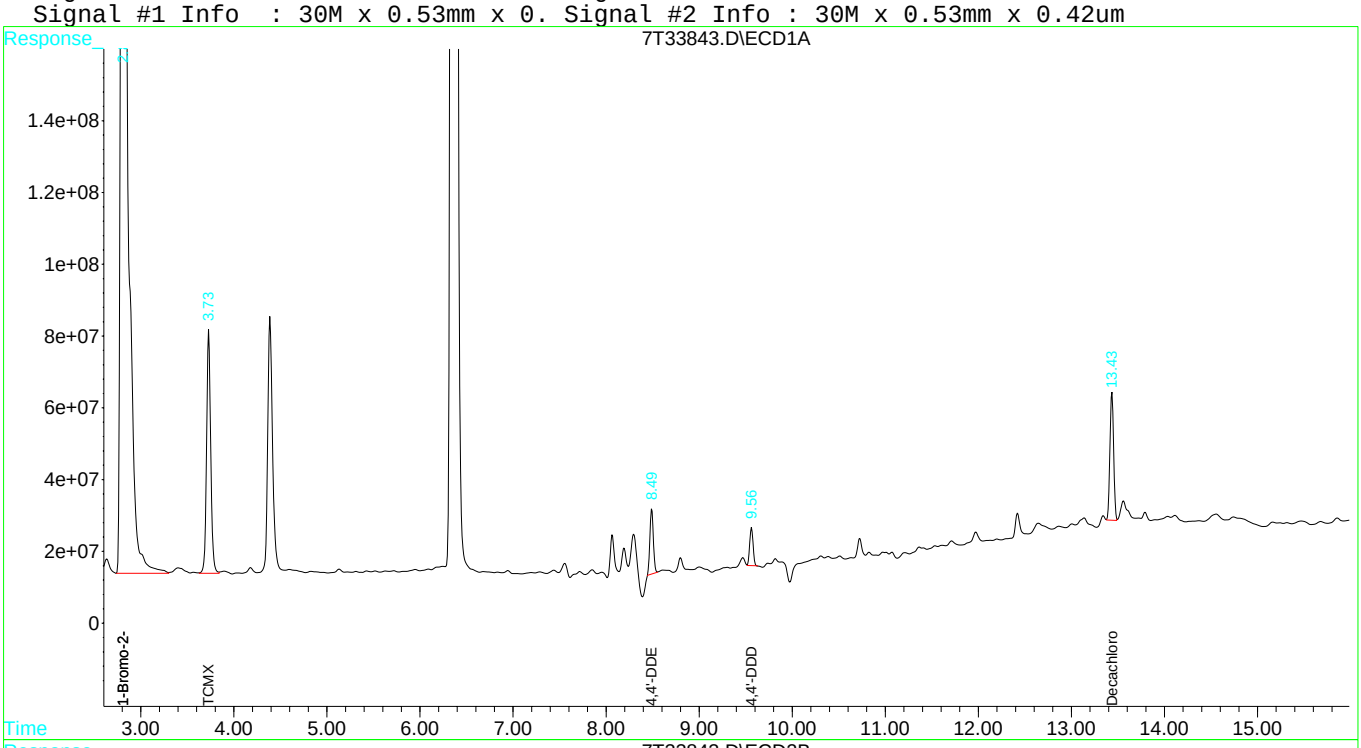
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.
7T33843.D 80810607.M Tue Jul 11 16:33:19 2023 SS

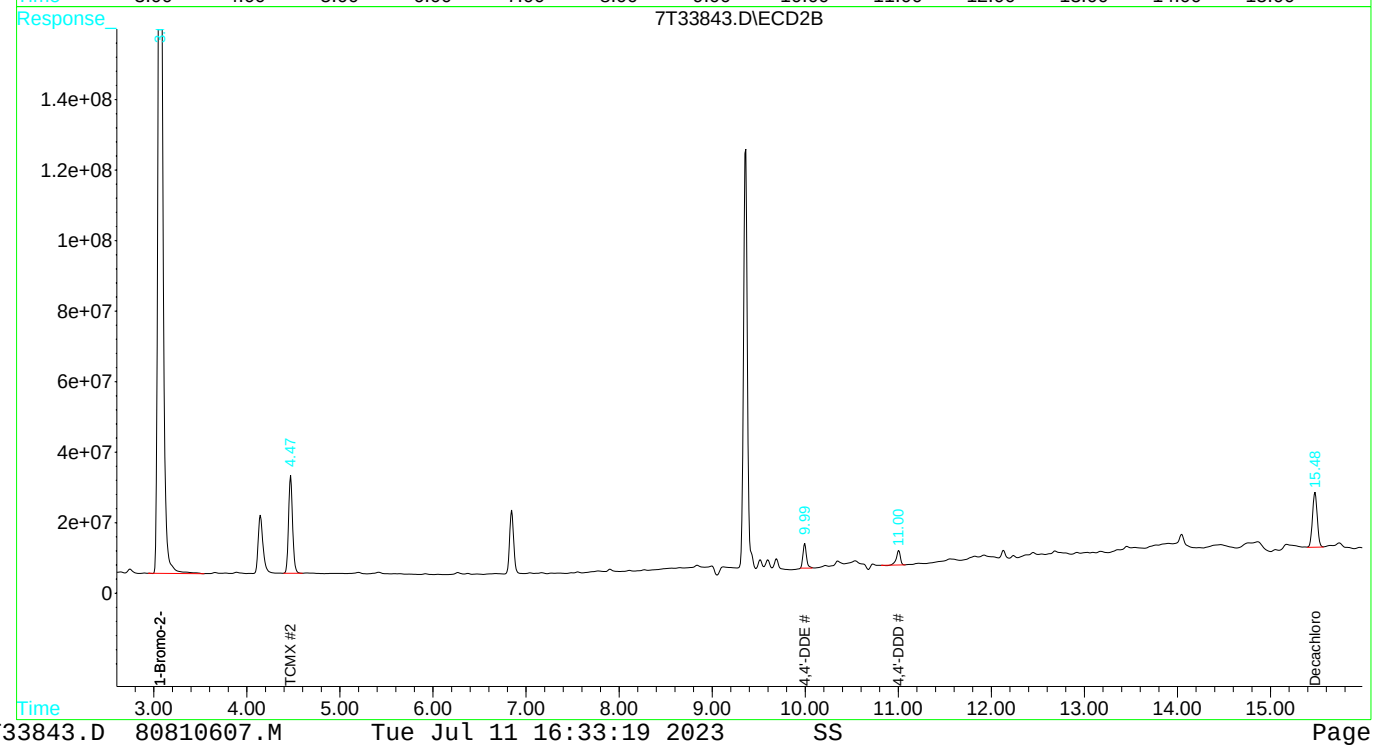
Quantitation Report (QT Reviewed)

Signal #1 : G:\HPCHEM\GCECD7\DATA\20230608\7T33843.D\ECD1A.CH Vial: 15
Signal #2 : G:\HPCHEM\GCECD7\DATA\20230608\7T33843.D\ECD2B.CH
Acq On : 8 Jun 2023 23:42 Operator: sdp
Sample : 23E1424-08 Inst : GCECD-7
Misc : Multiplr: 1.00
IntFile Signal #1: AUTOINT1.E IntFile Signal #2: AUTOINT2.E
Quant Time: Jun 9 12:22 2023 Quant Results File: 80810607.RES

Quant Method : G:\HPCHEM\G...\80810607.M (Chemstation Integrator)
Title : Pesticides by Method SW-846 8081B
Last Update : Fri Jun 09 11:59:49 2023
Response via : Multiple Level Calibration
DataAcq Meth : RUNPEST.M

Volume Inj. : 2ul
Signal #1 Phase : RTx-50 Signal #2 Phase: RTx-CLPesticides II
Signal #1 Info : 30M x 0.53mm x 0. Signal #2 Info : 30M x 0.53mm x 0.42um





ANALYSIS DATA SHEET

Pesticides - SW 846 8081B

Client: **Dynamic Earth LLC**
Client Sample ID: **SW-5**
Lab Sample ID: **23E1424-09**
Project: **Turtle Mill Brook-Eco. Evaluation**
Work Order: **23E1424**

Date Sampled:	05/30/23 12:40	Prep Date:	06/05/23 17:59	File ID:	9T01031.D
Init/Final Vol:	1000 mL / 10 m	Prep Batch:	BAE1181	Analyzed:	06/08/23 21:19
Dilution:	1	Matrix:	Surface Water	Sequence:	SAF0176
		Prep Method:	Sep Funnel GC 8000		

CAS NO.	COMPOUND	CONC. (ug/L)	MDL	RL	Qual
72-54-8	4,4'-DDD	ND	0.000378	0.0200	U
72-55-9	4,4'-DDE	ND	0.000234	0.0200	U
50-29-3	4,4'-DDT	ND	0.000319	0.0200	U
309-00-2	Aldrin	ND	0.000527	0.0200	U
319-84-6	alpha-BHC	ND	0.000255	0.0200	U
319-85-7	beta-BHC	ND	0.000371	0.0200	U
57-74-9	Chlordane	ND	0.000327	0.0500	U
319-86-8	delta-BHC	ND	0.000320	0.0200	U
60-57-1	Dieldrin	ND	0.000271	0.0200	U
959-98-8	Endosulfan I	ND	0.000380	0.0200	U
33213-65-9	Endosulfan II	ND	0.000254	0.0200	U
1031-07-8	Endosulfan sulfate	ND	0.000138	0.0200	U
72-20-8	Endrin	ND	0.000229	0.0200	U
7421-93-4	Endrin aldehyde	ND	0.000318	0.0200	U
53494-70-5	Endrin ketone	ND	0.000203	0.0200	U
58-89-9	gamma-BHC (Lindane)	ND	0.000241	0.0200	U
76-44-8	Heptachlor	ND	0.000563	0.0200	U
1024-57-3	Heptachlor Epoxide	ND	0.000302	0.0200	U
72-43-5	Methoxychlor	ND	0.000343	0.0200	U
8001-35-2	Toxaphene	ND	0.0237	0.200	U

ND, U - Indicates compound analyzed for but not detected
J - Indicates estimated value
B - Indicates compound found in associated blank
E - Concentration exceeds highest calibration standard
D - Indicates result is based on a dilution
H - Indicates a Hold Time violation
P - Greater than 25% diff. between 2 GC columns.
MDL - Minimum detection limit, **RL** - Reporting limit

F-I

Quantitation Report (QT Reviewed)

Signal #1 : G:\HPCHEM\GCECD9\DATA\20230608\9T01031.D\ECD1A.CH Vial: 6
Signal #2 : G:\HPCHEM\GCECD9\DATA\20230608\9T01031.D\ECD2B.CH
Acq On : 8 Jun 2023 9:19 pm Operator: WD
Sample : 23E1424-09 Inst : HP G1530A
Misc : Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Jun 9 11:29 2023 Quant Results File: 80810606.RES

Quant Method : G:\HPCHEM\G...\80810606.M (Chemstation Integrator)
Title : Pesticides by Method SW-846 8081B
Last Update : Tue Jun 06 16:57:33 2023
Response via : Initial Calibration
DataAcq Meth : RUNPEST.M

Volume Inj. : 2ul
Signal #1 Phase : RTx-50 Signal #2 Phase: RTx-CLPesticides II
Signal #1 Info : 30M x 0.53mm x 0. Signal #2 Info : 30M x 0.53mm x 0.42um

	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/kg	ug/kg
	Internal Standards						
1) I	1-Bromo-2-nitrob	3.06	3.25	3989.6E6	2837.9E6	400.000	400.000
25) I	1-Bromo-2-nitrob	3.06	3.25	3989.6E6	2837.9E6	400.000	400.000
	System Monitoring Compounds						
2) S	TCMX	3.77	4.20	439.5E6	276.7E6	49.026	51.437
	Spiked Amount 50.000	Range 43 - 129		Recovery =		98.05%	102.87%
22) S	Decachlorobiphen	13.22	16.35	499.5E6	362.1E6	48.665	60.445
	Spiked Amount 50.000	Range 42 - 136		Recovery =		97.33%	120.89%
	Target Compounds						
	Sum Chlordane (gamma)			0	0	N.D.	N.D.
	Average Chlordane (gamma)					0.000	0.000
	Sum Toxaphene (1)			0	0	N.D.	N.D.
	Average Toxaphene (1)					0.000	0.000

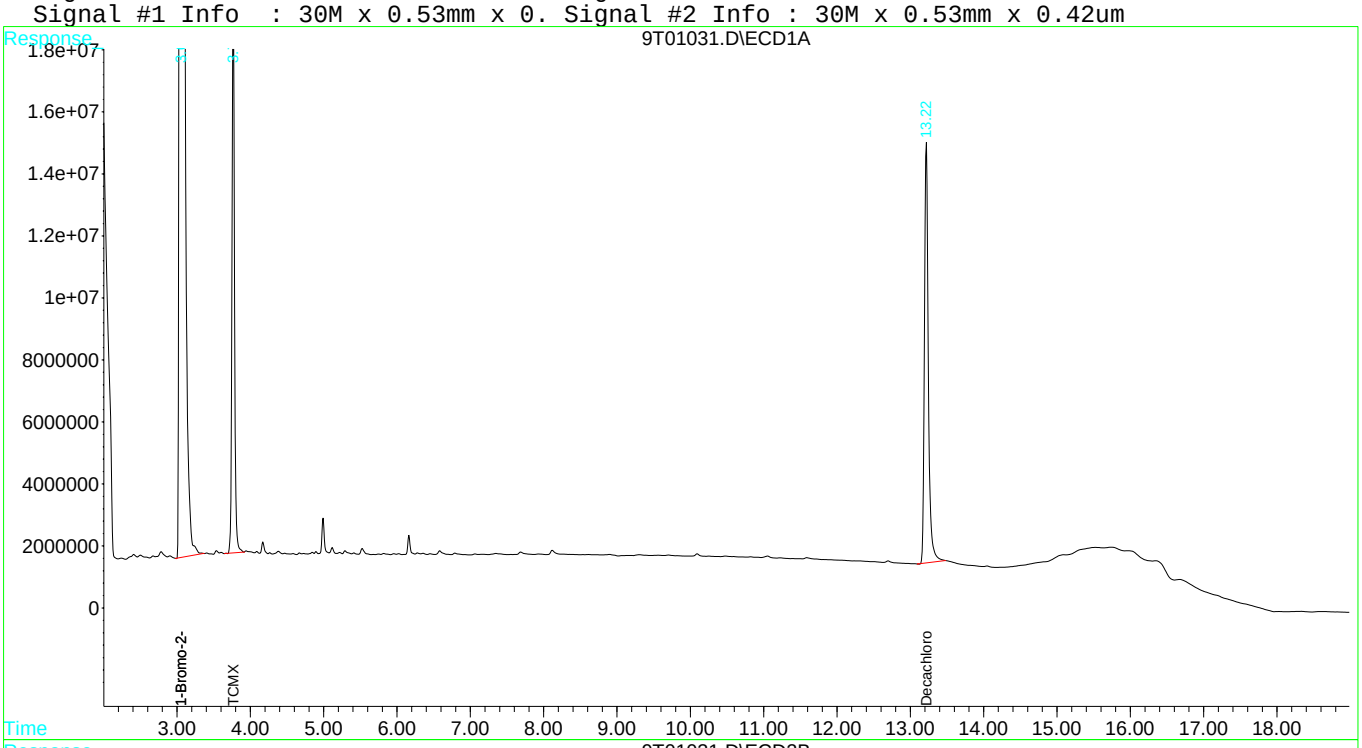
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9T01031.D 80810606.M Fri Jun 09 11:41:44 2023 SS Page 1

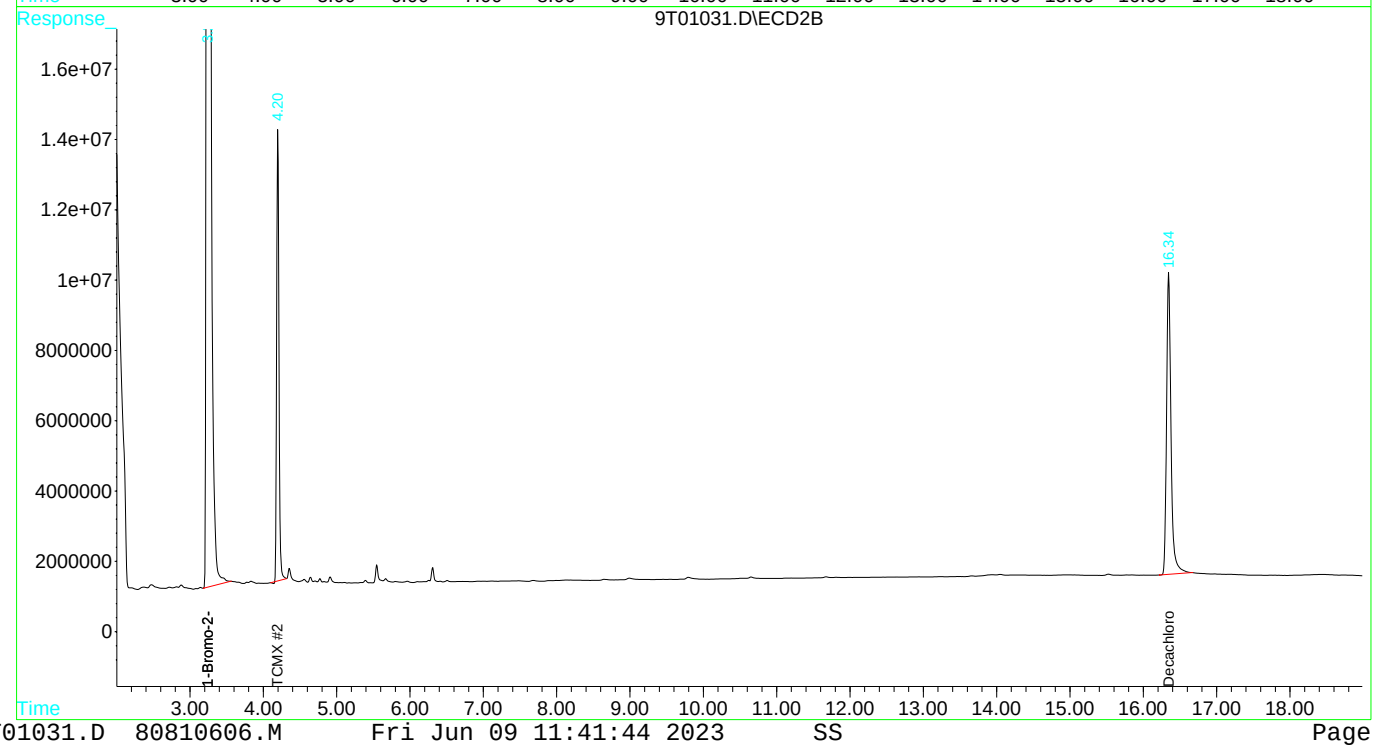
Quantitation Report (QT Reviewed)

Signal #1 : G:\HPCHEM\GCECD9\DATA\20230608\9T01031.D\ECD1A.CH Vial: 6
Signal #2 : G:\HPCHEM\GCECD9\DATA\20230608\9T01031.D\ECD2B.CH
Acq On : 8 Jun 2023 9:19 pm Operator: WD
Sample : 23E1424-09 Inst : HP G1530A
Misc : Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Jun 9 11:29 2023 Quant Results File: 80810606.RES

Quant Method : G:\HPCHEM\G...\80810606.M (Chemstation Integrator)
Title : Pesticides by Method SW-846 8081B
Last Update : Tue Jun 06 16:57:33 2023
Response via : Multiple Level Calibration
DataAcq Meth : RUNPEST.M

Volume Inj. : 2ul
Signal #1 Phase : RTx-50 Signal #2 Phase: RTx-CLPesticides II
Signal #1 Info : 30M x 0.53mm x 0. Signal #2 Info : 30M x 0.53mm x 0.42um





ANALYSIS DATA SHEET

Pesticides - SW 846 8081B

Client: **Dynamic Earth LLC**
Client Sample ID: **SED-5**
Lab Sample ID: **23E1424-10**
Project: **Turtle Mill Brook-Eco. Evaluation**
Work Order: **23E1424**

Date Sampled:	05/30/23 12:45	Prep Date:	06/06/23 15:37	File ID:	7T33844.D
Init/Final Vol:	15 g / 10 mL	Prep Batch:	BAF0218	Analyzed:	06/09/23 00:01
Dilution:	1	Matrix:	Soil	Sequence:	SAF0179
Percent Solids:	73.04	Prep Method:	Microwave Extraction		

CAS NO.	COMPOUND	CONC. (mg/kg dry)	MDL	RL	Qual
72-54-8	4,4'-DDD	ND	0.000815	0.00178	U
72-55-9	4,4'-DDE	ND	0.000973	0.00178	U
50-29-3	4,4'-DDT	ND	0.00126	0.00178	U
309-00-2	Aldrin	ND	0.000843	0.00178	U
319-84-6	alpha-BHC	ND	0.000530	0.00178	U
319-85-7	beta-BHC	ND	0.000850	0.00178	U
57-74-9	Chlordane	ND	0.000791	0.00178	U
319-86-8	delta-BHC	ND	0.000827	0.00178	U
60-57-1	Dieldrin	ND	0.000931	0.00178	U
959-98-8	Endosulfan I	ND	0.000841	0.00178	U
33213-65-9	Endosulfan II	ND	0.000809	0.00178	U
1031-07-8	Endosulfan sulfate	ND	0.000670	0.00178	U
115-29-7	Endosulfans, Total (alpha and beta)	ND	0.000809	0.00178	U
72-20-8	Endrin	ND	0.000615	0.00178	U
7421-93-4	Endrin aldehyde	ND	0.000709	0.00178	U
53494-70-5	Endrin ketone	ND	0.000627	0.00178	U
58-89-9	gamma-BHC (Lindane)	ND	0.000564	0.00178	U
76-44-8	Heptachlor	ND	0.000476	0.00178	U
1024-57-3	Heptachlor Epoxide	ND	0.000898	0.00178	U
72-43-5	Methoxychlor	ND	0.000522	0.00178	U
8001-35-2	Toxaphene	ND	0.0857	0.0904	U

ND, U - Indicates compound analyzed for but not detected
J - Indicates estimated value
B - Indicates compound found in associated blank
E - Concentration exceeds highest calibration standard
D - Indicates result is based on a dilution
H - Indicates a Hold Time violation
P - Greater than 25% diff. between 2 GC columns.
MDL - Minimum detection limit, **RL** - Reporting limit

F-I

Quantitation Report (QT Reviewed)

Signal #1 : G:\HPCHEM\GCECD7\DATA\20230608\7T33844.D\ECD1A.CH Vial: 16
Signal #2 : G:\HPCHEM\GCECD7\DATA\20230608\7T33844.D\ECD2B.CH
Acq On : 9 Jun 2023 00:01 Operator: sdp
Sample : 23E1424-10 Inst : GCECD-7
Misc : Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Jun 9 12:23 2023 Quant Results File: 80810607.RES

Quant Method : G:\HPCHEM\G...\80810607.M (Chemstation Integrator)
Title : Pesticides by Method SW-846 8081B
Last Update : Fri Jun 09 11:59:49 2023
Response via : Initial Calibration
DataAcq Meth : RUNPEST.M

Volume Inj. : 2ul
Signal #1 Phase : RTx-50 Signal #2 Phase: RTx-CLPesticides II
Signal #1 Info : 30M x 0.53mm x 0. Signal #2 Info : 30M x 0.53mm x 0.42um

	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/kg	ug/kg
	Internal Standards						
1) I	1-Bromo-2-nitrob	2.81	3.07	23339.3E6	9148.0E6	400.000	400.000
25) I	1-Bromo-2-nitrob	2.81	3.07	23339.3E6	9148.0E6	400.000	400.000
	System Monitoring Compounds						
2) S	TCMX	3.73	4.47	1953.7E6	833.9E6	38.338	43.909
	Spiked Amount 50.000	Range 43 - 129		Recovery =		76.68%	87.82%
22) S	Decachlorobiphen	13.44	15.47	999.3E6	591.7E6	25.353	42.509m#
	Spiked Amount 50.000	Range 42 - 136		Recovery =		50.71%	85.02%
	Target Compounds						
11)	4,4'-DDE	8.49	9.99	64324603	36942550	0.934m	1.838m#
14)	4,4'-DDD	9.56	11.00	23468006	14674636	0.486m	1.103m#
	Sum Chlordane (gamma)			0	0	N.D.	N.D.
	Average Chlordane (gamma)					0.000	0.000
	Sum Toxaphene (1)			0	0	N.D.	N.D.
	Average Toxaphene (1)					0.000	0.000

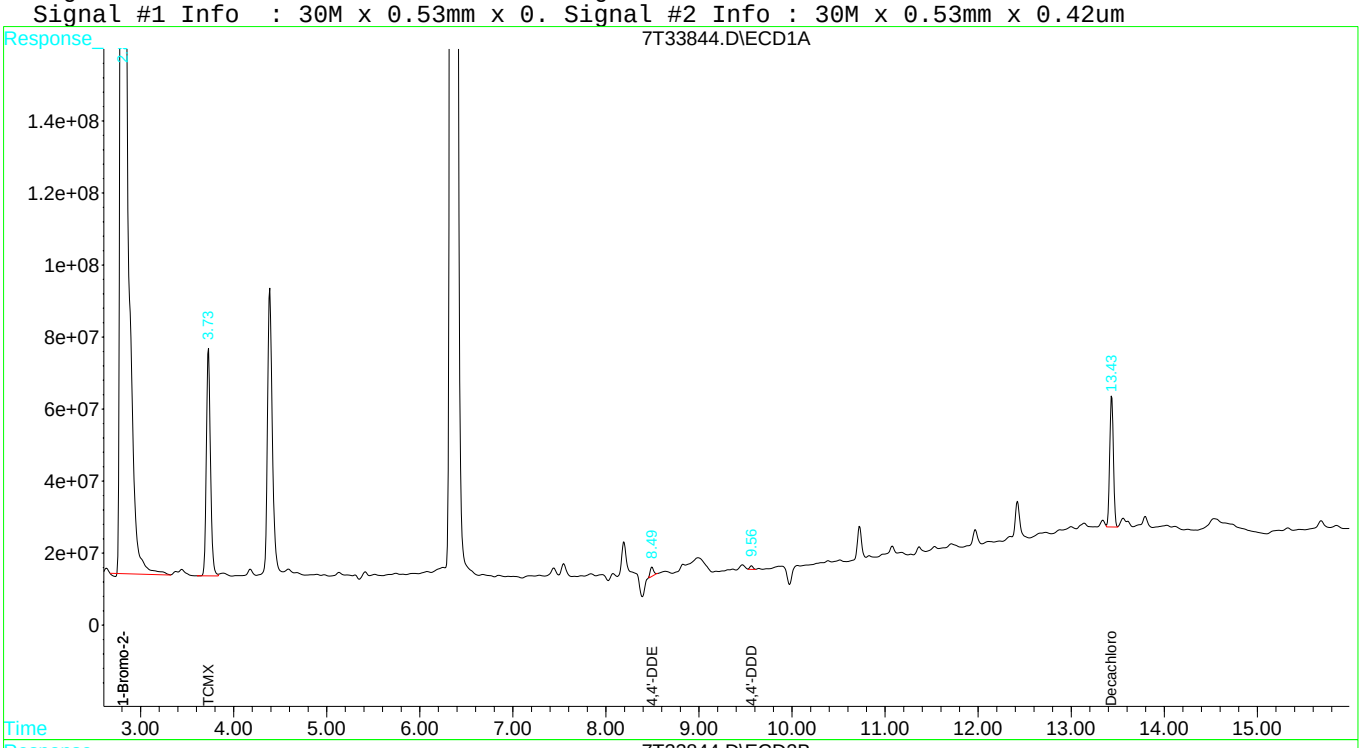
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7T33844.D 80810607.M Tue Jul 11 16:33:21 2023 SS

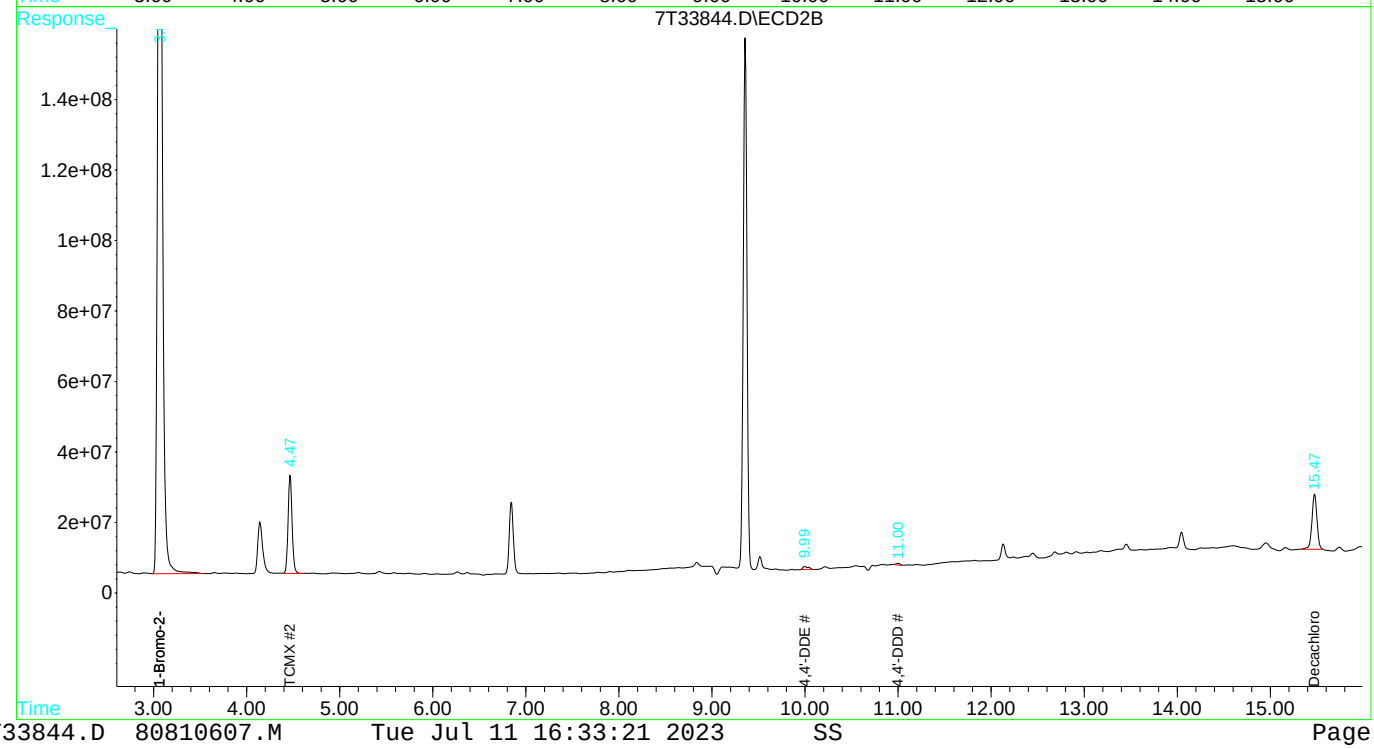
Quantitation Report (QT Reviewed)

Signal #1 : G:\HPCHEM\GCECD7\DATA\20230608\7T33844.D\ECD1A.CH Vial: 16
Signal #2 : G:\HPCHEM\GCECD7\DATA\20230608\7T33844.D\ECD2B.CH
Acq On : 9 Jun 2023 00:01 Operator: sdp
Sample : 23E1424-10 Inst : GCECD-7
Misc : Multiplr: 1.00
IntFile Signal #1: AUTOINT1.E IntFile Signal #2: AUTOINT2.E
Quant Time: Jun 9 12:23 2023 Quant Results File: 80810607.RES

Quant Method : G:\HPCHEM\G...\80810607.M (Chemstation Integrator)
Title : Pesticides by Method SW-846 8081B
Last Update : Fri Jun 09 11:59:49 2023
Response via : Multiple Level Calibration
DataAcq Meth : RUNPEST.M

Volume Inj. : 2ul
Signal #1 Phase : RTx-50 Signal #2 Phase: RTx-CLPesticides II
Signal #1 Info : 30M x 0.53mm x 0. Signal #2 Info : 30M x 0.53mm x 0.42um





ANALYSIS DATA SHEET

Pesticides - SW 846 8081B

Client: **Dynamic Earth LLC**
Client Sample ID: **SW-6**
Lab Sample ID: **23E1424-11**
Project: **Turtle Mill Brook-Eco. Evaluation**
Work Order: **23E1424**

Date Sampled:	05/30/23 13:00	Prep Date:	06/05/23 17:59	File ID:	9T01032.D
Init/Final Vol:	1000 mL / 10 m	Prep Batch:	BAE1181	Analyzed:	06/08/23 21:41
Dilution:	1	Matrix:	Surface Water	Sequence:	SAF0176
		Prep Method:	Sep Funnel GC 8000		

CAS NO.	COMPOUND	CONC. (ug/L)	MDL	RL	Qual
72-54-8	4,4'-DDD	ND	0.000378	0.0200	U
72-55-9	4,4'-DDE	ND	0.000234	0.0200	U
50-29-3	4,4'-DDT	ND	0.000319	0.0200	U
309-00-2	Aldrin	ND	0.000527	0.0200	U
319-84-6	alpha-BHC	ND	0.000255	0.0200	U
319-85-7	beta-BHC	ND	0.000371	0.0200	U
57-74-9	Chlordane	ND	0.000327	0.0500	U
319-86-8	delta-BHC	ND	0.000320	0.0200	U
60-57-1	Dieldrin	ND	0.000271	0.0200	U
959-98-8	Endosulfan I	ND	0.000380	0.0200	U
33213-65-9	Endosulfan II	ND	0.000254	0.0200	U
1031-07-8	Endosulfan sulfate	ND	0.000138	0.0200	U
72-20-8	Endrin	ND	0.000229	0.0200	U
7421-93-4	Endrin aldehyde	ND	0.000318	0.0200	U
53494-70-5	Endrin ketone	ND	0.000203	0.0200	U
58-89-9	gamma-BHC (Lindane)	ND	0.000241	0.0200	U
76-44-8	Heptachlor	ND	0.000563	0.0200	U
1024-57-3	Heptachlor Epoxide	ND	0.000302	0.0200	U
72-43-5	Methoxychlor	ND	0.000343	0.0200	U
8001-35-2	Toxaphene	ND	0.0237	0.200	U

ND, U - Indicates compound analyzed for but not detected
J - Indicates estimated value
B - Indicates compound found in associated blank
E - Concentration exceeds highest calibration standard
D - Indicates result is based on a dilution
H - Indicates a Hold Time violation
P - Greater than 25% diff. between 2 GC columns.
MDL - Minimum detection limit, **RL** - Reporting limit

F-I

Quantitation Report (QT Reviewed)

Signal #1 : G:\HPCHEM\GCECD9\DATA\20230608\9T01032.D\ECD1A.CH Vial: 7
Signal #2 : G:\HPCHEM\GCECD9\DATA\20230608\9T01032.D\ECD2B.CH
Acq On : 8 Jun 2023 9:41 pm Operator: WD
Sample : 23E1424-11 Inst : HP G1530A
Misc : Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Jun 9 11:30 2023 Quant Results File: 80810606.RES

Quant Method : G:\HPCHEM\G...\80810606.M (Chemstation Integrator)
Title : Pesticides by Method SW-846 8081B
Last Update : Tue Jun 06 16:57:33 2023
Response via : Initial Calibration
DataAcq Meth : RUNPEST.M

Volume Inj. : 2ul
Signal #1 Phase : RTx-50 Signal #2 Phase: RTx-CLPesticides II
Signal #1 Info : 30M x 0.53mm x 0. Signal #2 Info : 30M x 0.53mm x 0.42um

	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/kg	ug/kg
	Internal Standards						
1) I	1-Bromo-2-nitrob	3.06	3.25	4489.9E6	3308.0E6	400.000	400.000
25) I	1-Bromo-2-nitrob	3.06	3.25	4489.9E6	3308.0E6	400.000	400.000
	System Monitoring Compounds						
2) S	TCMX	3.77	4.20	430.4E6	267.9E6	42.661	42.715
	Spiked Amount 50.000	Range 43 - 129		Recovery =		85.32%	85.43%
22) S	Decachlorobiphen	13.22	16.35	472.5E6	347.5E6	40.901	49.770
	Spiked Amount 50.000	Range 42 - 136		Recovery =		81.80%	99.54%
	Target Compounds						
	Sum Chlordane (gamma)			0	0	N.D.	N.D.
	Average Chlordane (gamma)					0.000	0.000
	Sum Toxaphene (1)			0	0	N.D.	N.D.
	Average Toxaphene (1)					0.000	0.000

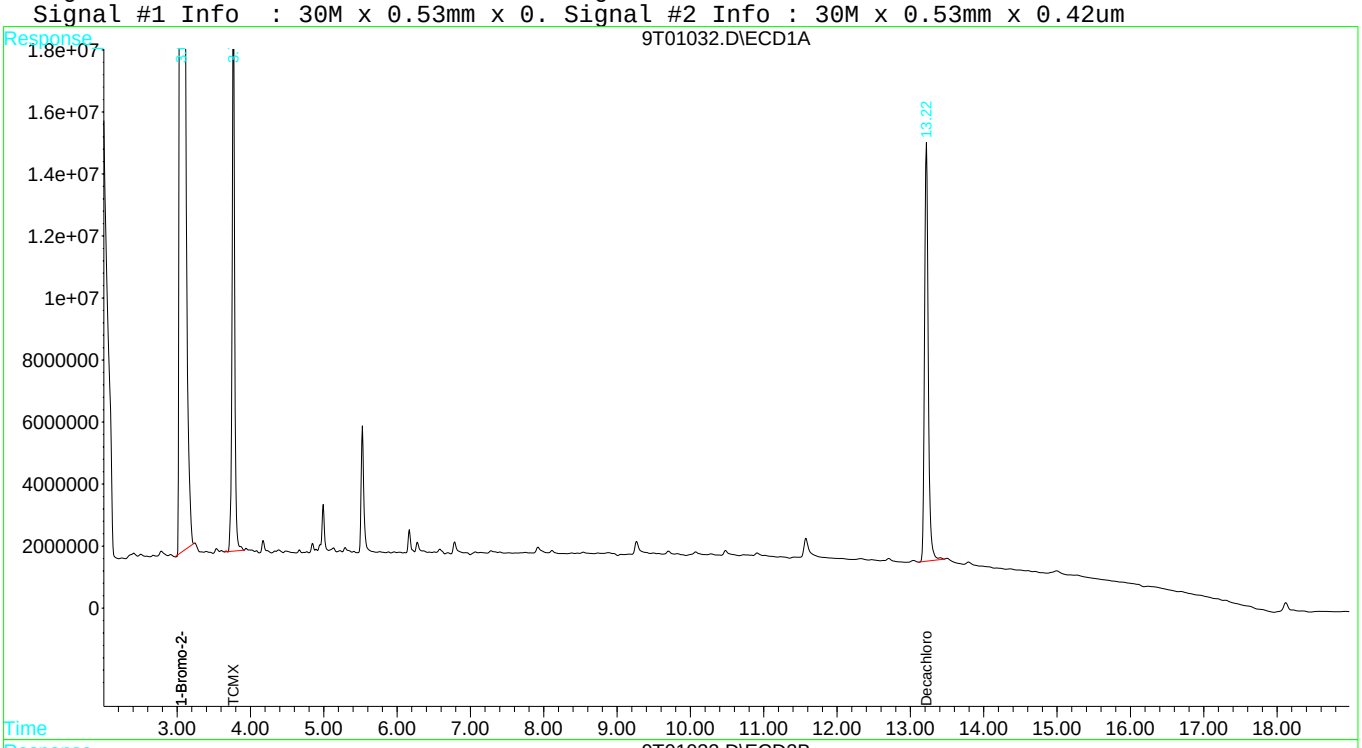
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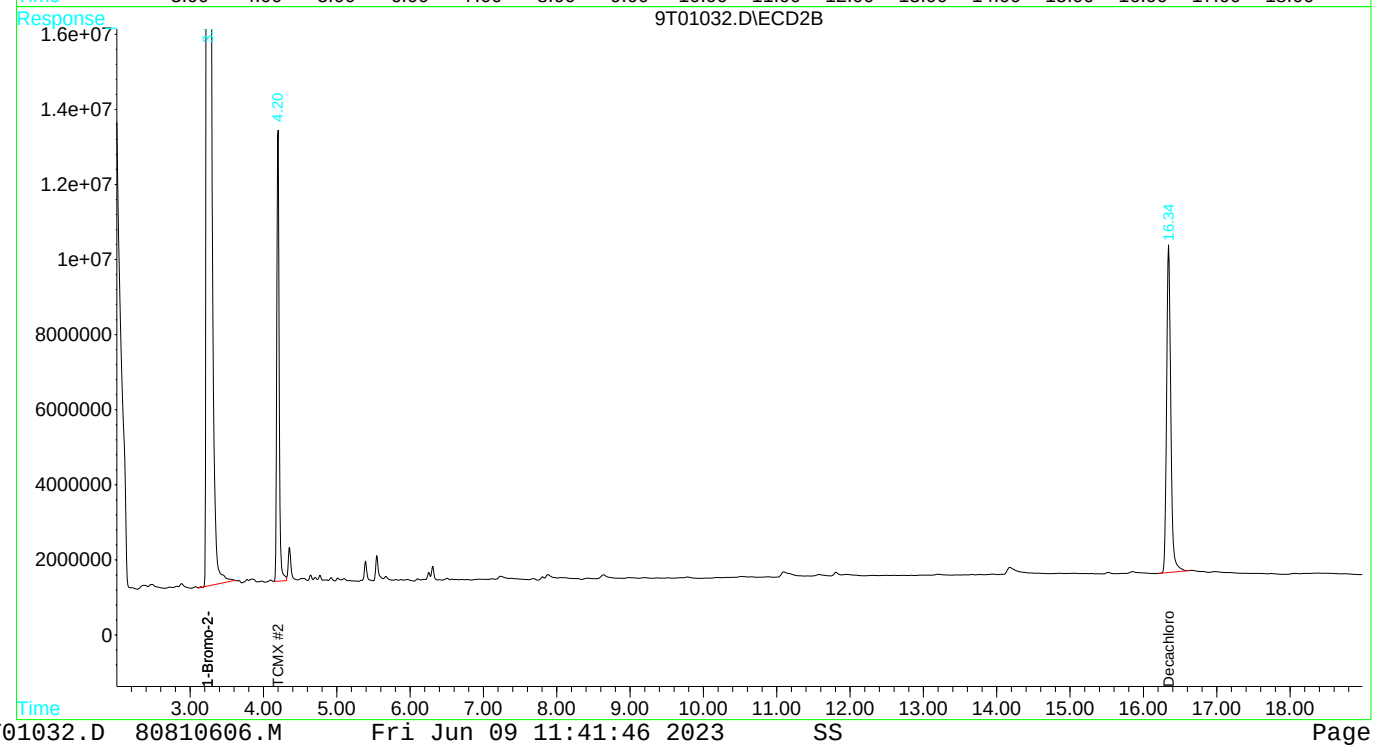
Quantitation Report (QT Reviewed)

Signal #1 : G:\HPCHEM\GCECD9\DATA\20230608\9T01032.D\ECD1A.CH Vial: 7
Signal #2 : G:\HPCHEM\GCECD9\DATA\20230608\9T01032.D\ECD2B.CH
Acq On : 8 Jun 2023 9:41 pm Operator: WD
Sample : 23E1424-11 Inst : HP G1530A
Misc : Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Jun 9 11:30 2023 Quant Results File: 80810606.RES

Quant Method : G:\HPCHEM\G...\80810606.M (Chemstation Integrator)
Title : Pesticides by Method SW-846 8081B
Last Update : Tue Jun 06 16:57:33 2023
Response via : Multiple Level Calibration
DataAcq Meth : RUNPEST.M

Volume Inj. : 2ul
Signal #1 Phase : RTx-50 Signal #2 Phase: RTx-CLPesticides II
Signal #1 Info : 30M x 0.53mm x 0. Signal #2 Info : 30M x 0.53mm x 0.42um





ANALYSIS DATA SHEET

Pesticides - SW 846 8081B

Client: **Dynamic Earth LLC**
Client Sample ID: **SED-6**
Lab Sample ID: **23E1424-12**
Project: **Turtle Mill Brook-Eco. Evaluation**
Work Order: **23E1424**

Date Sampled:	05/30/23 13:05	Prep Date:	06/06/23 15:37	File ID:	7T33845.D
Init/Final Vol:	15 g / 10 mL	Prep Batch:	BAF0218	Analyzed:	06/09/23 00:19
Dilution:	1	Matrix:	Soil	Sequence:	SAF0179
Percent Solids:	58.82	Prep Method:	Microwave Extraction		

CAS NO.	COMPOUND	CONC. (mg/kg dry)	MDL	RL	Qual
72-54-8	4,4'-DDD	0.00742	0.00101	0.00221	
72-55-9	4,4'-DDE	ND	0.00121	0.00221	U
50-29-3	4,4'-DDT [2C]	0.00475	0.00156	0.00221	
309-00-2	Aldrin	ND	0.00105	0.00221	U
319-84-6	alpha-BHC	ND	0.000658	0.00221	U
319-85-7	beta-BHC	ND	0.00106	0.00221	U
57-74-9	Chlordane	ND	0.000983	0.00221	U
319-86-8	delta-BHC	ND	0.00103	0.00221	U
60-57-1	Dieldrin	ND	0.00116	0.00221	U
959-98-8	Endosulfan I	ND	0.00104	0.00221	U
33213-65-9	Endosulfan II	ND	0.00100	0.00221	U
1031-07-8	Endosulfan sulfate	ND	0.000831	0.00221	U
115-29-7	Endosulfans, Total (alpha and beta)	ND	0.00100	0.00221	U
72-20-8	Endrin	ND	0.000763	0.00221	U
7421-93-4	Endrin aldehyde	ND	0.000881	0.00221	U
53494-70-5	Endrin ketone	ND	0.000779	0.00221	U
58-89-9	gamma-BHC (Lindane)	ND	0.000700	0.00221	U
76-44-8	Heptachlor	ND	0.000592	0.00221	U
1024-57-3	Heptachlor Epoxide	ND	0.00112	0.00221	U
72-43-5	Methoxychlor	ND	0.000648	0.00221	U
8001-35-2	Toxaphene	ND	0.106	0.112	U

ND, U - Indicates compound analyzed for but not detected
J - Indicates estimated value
B - Indicates compound found in associated blank
E - Concentration exceeds highest calibration standard
D - Indicates result is based on a dilution
H - Indicates a Hold Time violation
P - Greater than 25% diff. between 2 GC columns.
MDL - Minimum detection limit, **RL** - Reporting limit

F-I

Quantitation Report (QT Reviewed)

Signal #1 : G:\HPCHEM\GCECD7\DATA\20230608\7T33845.D\ECD1A.CH Vial: 17
Signal #2 : G:\HPCHEM\GCECD7\DATA\20230608\7T33845.D\ECD2B.CH
Acq On : 9 Jun 2023 00:19 Operator: sdp
Sample : 23E1424-12 Inst : GCECD-7
Misc : Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Jun 9 12:24 2023 Quant Results File: 80810607.RES

Quant Method : G:\HPCHEM\G...\80810607.M (Chemstation Integrator)
Title : Pesticides by Method SW-846 8081B
Last Update : Fri Jun 09 11:59:49 2023
Response via : Initial Calibration
DataAcq Meth : RUNPEST.M

Volume Inj. : 2ul
Signal #1 Phase : RTx-50 Signal #2 Phase: RTx-CLPesticides II
Signal #1 Info : 30M x 0.53mm x 0. Signal #2 Info : 30M x 0.53mm x 0.42um

	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/kg	ug/kg
	Internal Standards						
1) I	1-Bromo-2-nitrob	2.81	3.07	21654.7E6	10008.0E6	400.000	400.000
25) I	1-Bromo-2-nitrob	2.81	3.07	21654.7E6	10008.0E6	400.000	400.000
	System Monitoring Compounds						
2) S	TCMX	3.73	4.47	1990.9E6	772.4E6	42.108	37.173
Spiked Amount	50.000	Range 43 - 129		Recovery =		84.22%	74.35%
22) S	Decachlorobiphen	13.44	15.48	1911.3E6	1274.6E6	52.265	83.695m#
Spiked Amount	50.000	Range 42 - 136		Recovery =		104.53%	167.39%#
	Target Compounds						
14)	4,4'-DDD	9.56	11.00	293.3E6	177.0E6	6.548m	12.156m#
16) M	4,4'-DDT	10.04	11.56	271.7E6	58345962	6.274m	4.187m#
Sum Chlordane (gamma)				0	0	N.D.	N.D.
Average Chlordane (gamma)						0.000	0.000
Sum Toxaphene (1)				0	0	N.D.	N.D.
Average Toxaphene (1)						0.000	0.000

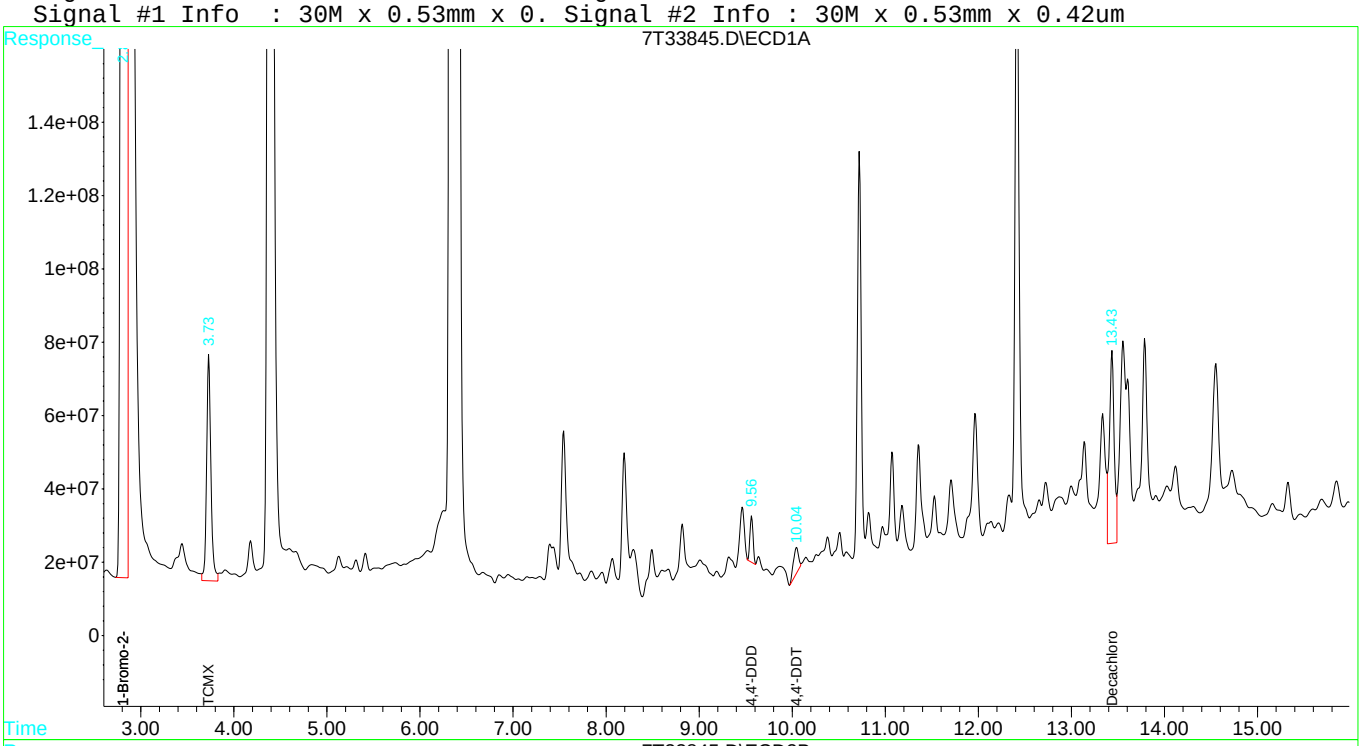
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.
7T33845.D 80810607.M Tue Jul 11 16:33:23 2023 SS

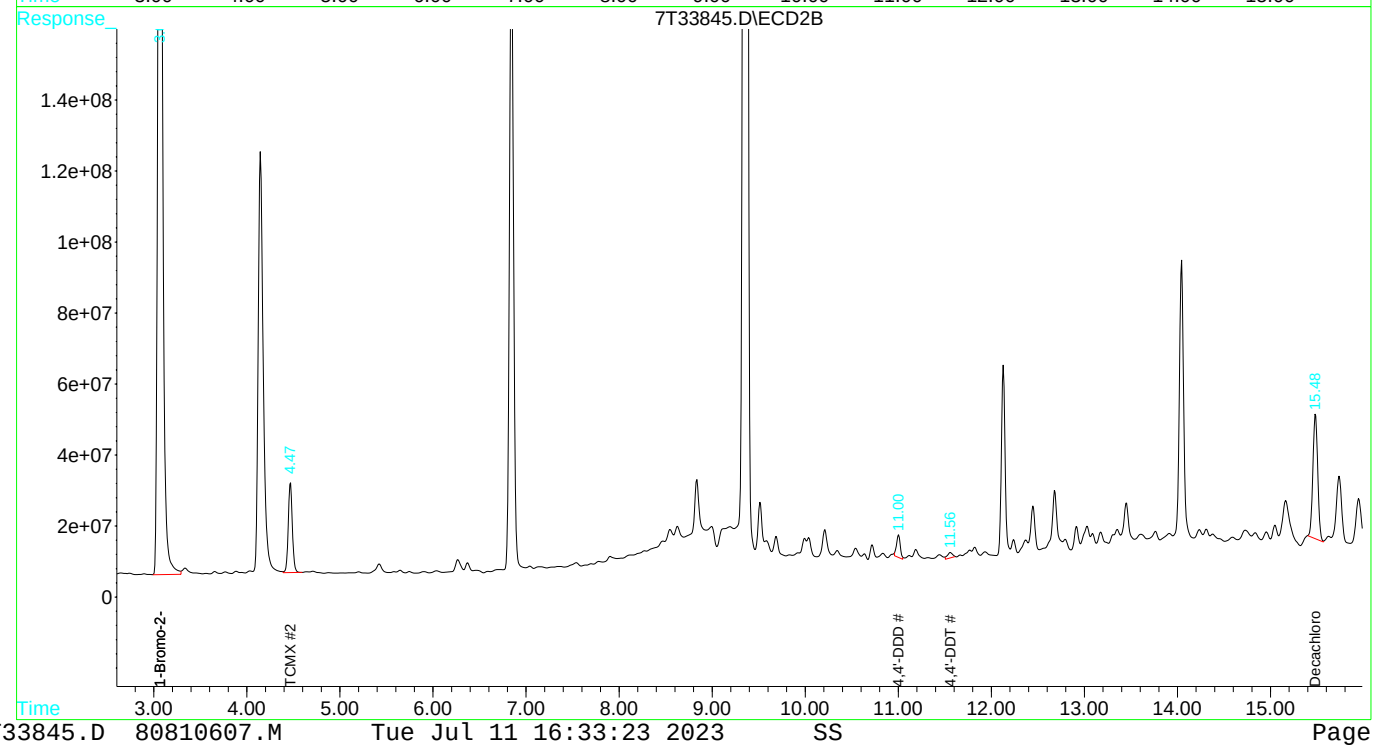
Quantitation Report (QT Reviewed)

Signal #1 : G:\HPCHEM\GCECD7\DATA\20230608\7T33845.D\ECD1A.CH Vial: 17
Signal #2 : G:\HPCHEM\GCECD7\DATA\20230608\7T33845.D\ECD2B.CH
Acq On : 9 Jun 2023 00:19 Operator: sdp
Sample : 23E1424-12 Inst : GCECD-7
Misc : Multiplr: 1.00
IntFile Signal #1: AUTOINT1.E IntFile Signal #2: AUTOINT2.E
Quant Time: Jun 9 12:24 2023 Quant Results File: 80810607.RES

Quant Method : G:\HPCHEM\G...\80810607.M (Chemstation Integrator)
Title : Pesticides by Method SW-846 8081B
Last Update : Fri Jun 09 11:59:49 2023
Response via : Multiple Level Calibration
DataAcq Meth : RUNPEST.M

Volume Inj. : 2ul
Signal #1 Phase : RTx-50 Signal #2 Phase: RTx-CLPesticides II
Signal #1 Info : 30M x 0.53mm x 0. Signal #2 Info : 30M x 0.53mm x 0.42um





ANALYSIS DATA SHEET

Pesticides - SW 846 8081B

Client: **Dynamic Earth LLC**
Client Sample ID: **SW-7**
Lab Sample ID: **23E1424-13**
Project: **Turtle Mill Brook-Eco. Evaluation**
Work Order: **23E1424**

Date Sampled:	05/30/23 13:15	Prep Date:	06/05/23 17:59	File ID:	9T01034.D
Init/Final Vol:	1000 mL / 10 m	Prep Batch:	BAE1181	Analyzed:	06/08/23 22:03
Dilution:	1	Matrix:	Surface Water	Sequence:	SAF0176
		Prep Method:	Sep Funnel GC 8000		

CAS NO.	COMPOUND	CONC. (ug/L)	MDL	RL	Qual
72-54-8	4,4'-DDD	ND	0.000378	0.0200	U
72-55-9	4,4'-DDE	ND	0.000234	0.0200	U
50-29-3	4,4'-DDT	ND	0.000319	0.0200	U
309-00-2	Aldrin	ND	0.000527	0.0200	U
319-84-6	alpha-BHC	ND	0.000255	0.0200	U
319-85-7	beta-BHC	ND	0.000371	0.0200	U
57-74-9	Chlordane	ND	0.000327	0.0500	U
319-86-8	delta-BHC	ND	0.000320	0.0200	U
60-57-1	Dieldrin	ND	0.000271	0.0200	U
959-98-8	Endosulfan I	ND	0.000380	0.0200	U
33213-65-9	Endosulfan II	ND	0.000254	0.0200	U
1031-07-8	Endosulfan sulfate	ND	0.000138	0.0200	U
72-20-8	Endrin	ND	0.000229	0.0200	U
7421-93-4	Endrin aldehyde	ND	0.000318	0.0200	U
53494-70-5	Endrin ketone	ND	0.000203	0.0200	U
58-89-9	gamma-BHC (Lindane)	ND	0.000241	0.0200	U
76-44-8	Heptachlor	ND	0.000563	0.0200	U
1024-57-3	Heptachlor Epoxide	ND	0.000302	0.0200	U
72-43-5	Methoxychlor	ND	0.000343	0.0200	U
8001-35-2	Toxaphene	ND	0.0237	0.200	U

ND, U - Indicates compound analyzed for but not detected
J - Indicates estimated value
B - Indicates compound found in associated blank
E - Concentration exceeds highest calibration standard
D - Indicates result is based on a dilution
H - Indicates a Hold Time violation
P - Greater than 25% diff. between 2 GC columns.
MDL - Minimum detection limit, **RL** - Reporting limit

F-I

Quantitation Report (QT Reviewed)

Signal #1 : G:\HPCHEM\GCECD9\DATA\20230608\9T01034.D\ECD1A.CH Vial: 8
Signal #2 : G:\HPCHEM\GCECD9\DATA\20230608\9T01034.D\ECD2B.CH
Acq On : 8 Jun 2023 10:03 pm Operator: WD
Sample : 23E1424-13 Inst : HP G1530A
Misc : Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Jun 9 11:13 2023 Quant Results File: 80810606.RES

Quant Method : G:\HPCHEM\G...\80810606.M (Chemstation Integrator)
Title : Pesticides by Method SW-846 8081B
Last Update : Tue Jun 06 16:57:33 2023
Response via : Initial Calibration
DataAcq Meth : RUNPEST.M

Volume Inj. : 2ul
Signal #1 Phase : RTx-50 Signal #2 Phase: RTx-CLPesticides II
Signal #1 Info : 30M x 0.53mm x 0. Signal #2 Info : 30M x 0.53mm x 0.42um

	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/kg	ug/kg
	Internal Standards						
1) I	1-Bromo-2-nitrob	3.06	3.25	4726.3E6	3334.9E6	400.000	400.000
25) I	1-Bromo-2-nitrob	3.06	3.25	4726.3E6	3334.9E6	400.000	400.000
	System Monitoring Compounds						
2) S	TCMX	3.77	4.20	426.5E6	276.1E6	40.166	43.663
	Spiked Amount 50.000	Range 43 - 129		Recovery =		80.33%	87.33%
22) S	Decachlorobiphen	13.22	16.35	502.4E6	361.0E6	41.319	51.283
	Spiked Amount 50.000	Range 42 - 136		Recovery =		82.64%	102.57%
	Target Compounds						
	Sum Chlordane (gamma)			0	0	N.D.	N.D.
	Average Chlordane (gamma)					0.000	0.000
	Sum Toxaphene (1)			0	0	N.D.	N.D.
	Average Toxaphene (1)					0.000	0.000

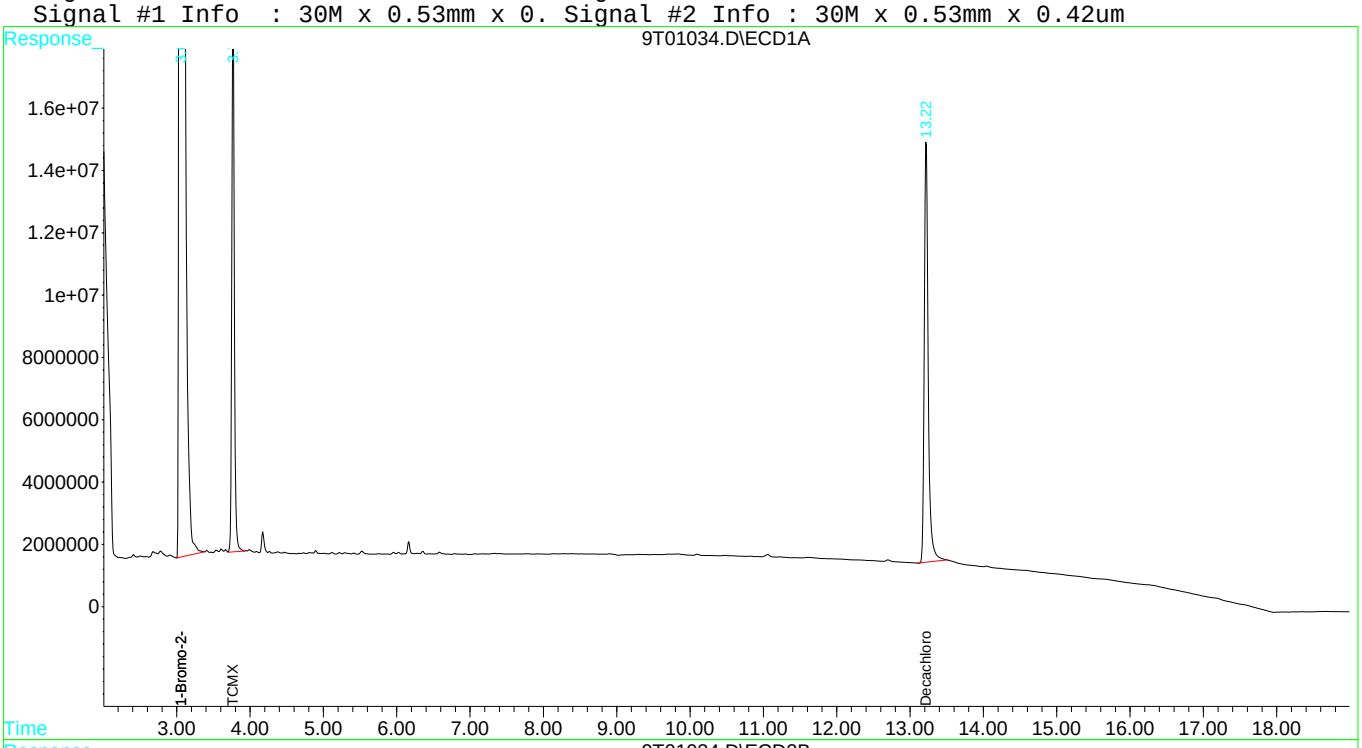
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.
9T01034.D 80810606.M Fri Jun 09 11:41:47 2023 SS Page 1

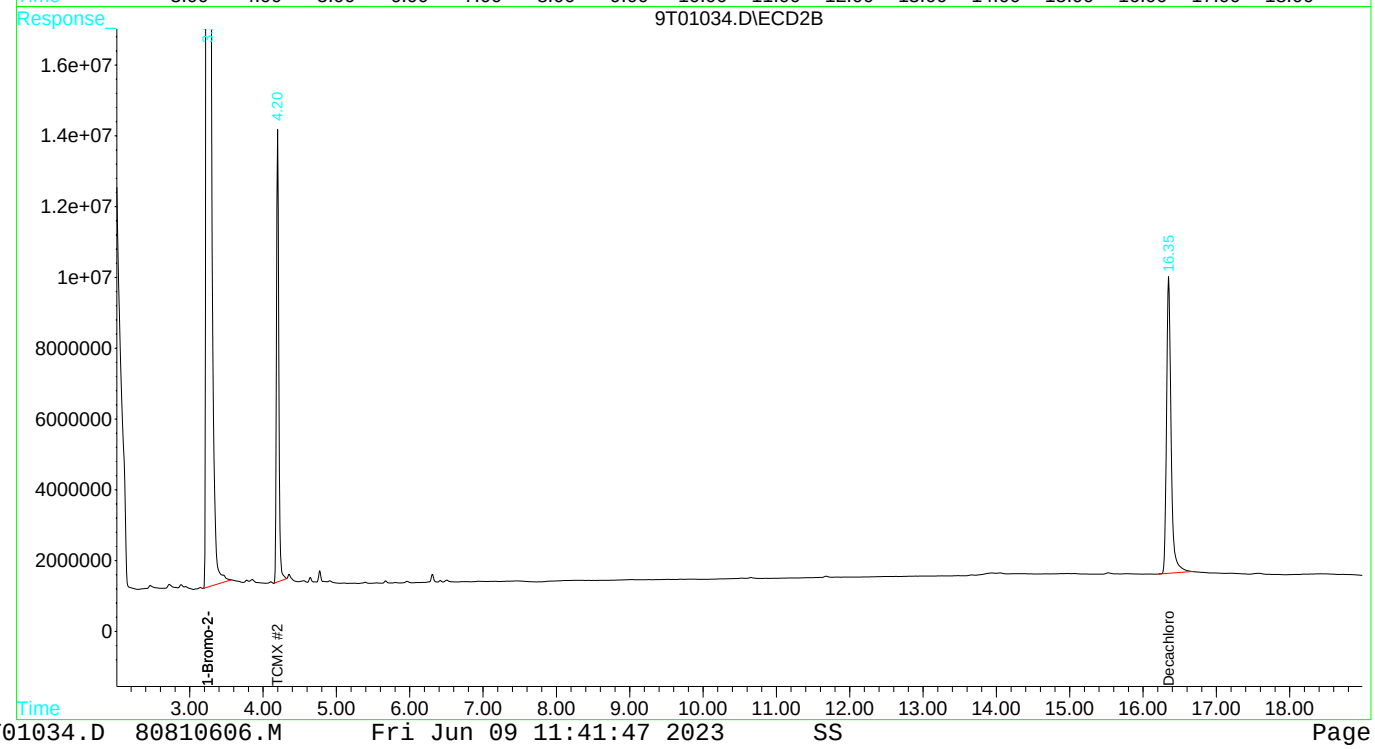
Quantitation Report (QT Reviewed)

Signal #1 : G:\HPCHEM\GCECD9\DATA\20230608\9T01034.D\ECD1A.CH Vial: 8
Signal #2 : G:\HPCHEM\GCECD9\DATA\20230608\9T01034.D\ECD2B.CH
Acq On : 8 Jun 2023 10:03 pm Operator: WD
Sample : 23E1424-13 Inst : HP G1530A
Misc : Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Jun 9 11:13 2023 Quant Results File: 80810606.RES

Quant Method : G:\HPCHEM\G...\80810606.M (Chemstation Integrator)
Title : Pesticides by Method SW-846 8081B
Last Update : Tue Jun 06 16:57:33 2023
Response via : Multiple Level Calibration
DataAcq Meth : RUNPEST.M

Volume Inj. : 2ul
Signal #1 Phase : RTx-50 Signal #2 Phase: RTx-CLPesticides II
Signal #1 Info : 30M x 0.53mm x 0. Signal #2 Info : 30M x 0.53mm x 0.42um





ANALYSIS DATA SHEET

Pesticides - SW 846 8081B

Client: **Dynamic Earth LLC**
Client Sample ID: **SED-7**
Lab Sample ID: **23E1424-14**
Project: **Turtle Mill Brook-Eco. Evaluation**
Work Order: **23E1424**

Date Sampled:	05/30/23 13:20	Prep Date:	06/06/23 15:37	File ID:	7T33846.D
Init/Final Vol:	15 g / 10 mL	Prep Batch:	BAF0218	Analyzed:	06/09/23 00:37
Dilution:	1	Matrix:	Soil	Sequence:	SAF0179
Percent Solids:	76.92	Prep Method:	Microwave Extraction		

CAS NO.	COMPOUND	CONC. (mg/kg dry)	MDL	RL	Qual
72-54-8	4,4'-DDD	ND	0.000774	0.00169	U
72-55-9	4,4'-DDE	ND	0.000924	0.00169	U
50-29-3	4,4'-DDT	ND	0.00119	0.00169	U
309-00-2	Aldrin	ND	0.000801	0.00169	U
319-84-6	alpha-BHC	ND	0.000503	0.00169	U
319-85-7	beta-BHC	ND	0.000807	0.00169	U
57-74-9	Chlordane	ND	0.000751	0.00169	U
319-86-8	delta-BHC	ND	0.000785	0.00169	U
60-57-1	Dieldrin	ND	0.000884	0.00169	U
959-98-8	Endosulfan I	ND	0.000798	0.00169	U
33213-65-9	Endosulfan II	ND	0.000768	0.00169	U
1031-07-8	Endosulfan sulfate	ND	0.000636	0.00169	U
115-29-7	Endosulfans, Total (alpha and beta)	ND	0.000768	0.00169	U
72-20-8	Endrin	ND	0.000584	0.00169	U
7421-93-4	Endrin aldehyde	ND	0.000673	0.00169	U
53494-70-5	Endrin ketone	ND	0.000595	0.00169	U
58-89-9	gamma-BHC (Lindane)	ND	0.000536	0.00169	U
76-44-8	Heptachlor	ND	0.000452	0.00169	U
1024-57-3	Heptachlor Epoxide	ND	0.000853	0.00169	U
72-43-5	Methoxychlor	ND	0.000495	0.00169	U
8001-35-2	Toxaphene	ND	0.0814	0.0858	U

ND, U - Indicates compound analyzed for but not detected
J - Indicates estimated value
B - Indicates compound found in associated blank
E - Concentration exceeds highest calibration standard
D - Indicates result is based on a dilution
H - Indicates a Hold Time violation
P - Greater than 25% diff. between 2 GC columns.
MDL - Minimum detection limit, **RL** - Reporting limit

F-I

Quantitation Report (QT Reviewed)

Signal #1 : G:\HPCHEM\GCECD7\DATA\20230608\7T33846.D\ECD1A.CH Vial: 18
Signal #2 : G:\HPCHEM\GCECD7\DATA\20230608\7T33846.D\ECD2B.CH
Acq On : 9 Jun 2023 12:37 am Operator: sdp
Sample : 23E1424-14 Inst : HP G1530A
Misc : Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Jun 9 12:24 2023 Quant Results File: 80810607.RES

Quant Method : G:\HPCHEM\G...\80810607.M (Chemstation Integrator)
Title : Pesticides by Method SW-846 8081B
Last Update : Fri Jun 09 11:59:49 2023
Response via : Initial Calibration
DataAcq Meth : RUNPEST.M

Volume Inj. : 2ul
Signal #1 Phase : RTx-50 Signal #2 Phase: RTx-CLPesticides II
Signal #1 Info : 30M x 0.53mm x 0. Signal #2 Info : 30M x 0.53mm x 0.42um

	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/kg	ug/kg
	Internal Standards						
1) I	1-Bromo-2-nitrob	2.81	3.07	24228.1E6	9386.9E6	400.000	400.000
25) I	1-Bromo-2-nitrob	2.81	3.07	24228.1E6	9386.9E6	400.000	400.000
	System Monitoring Compounds						
2) S	TCMX	3.73	4.47	2081.7E6	789.7E6	39.353	40.522
	Spiked Amount 50.000	Range 43 - 129		Recovery =		78.71%	81.04%
22) S	Decachlorobiphen	13.44	15.48	1569.5E6	748.6E6	38.360	52.407m#
	Spiked Amount 50.000	Range 42 - 136		Recovery =		76.72%	104.81%
	Target Compounds						
	Sum Chlordane (gamma)			0	0	N.D.	N.D.
	Average Chlordane (gamma)					0.000	0.000
	Sum Toxaphene (1)			0	0	N.D.	N.D.
	Average Toxaphene (1)					0.000	0.000

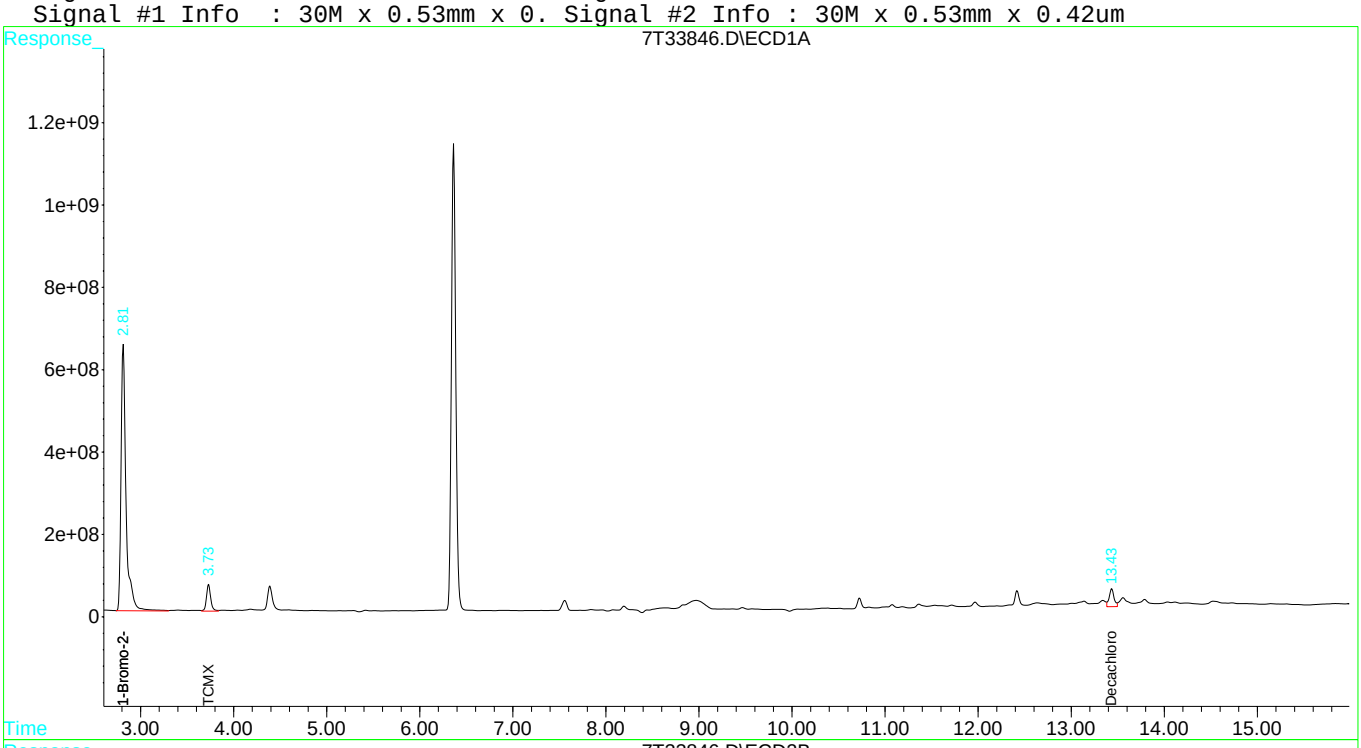
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.
7T33846.D 80810607.M Fri Jun 09 12:26:49 2023 SS Page 1

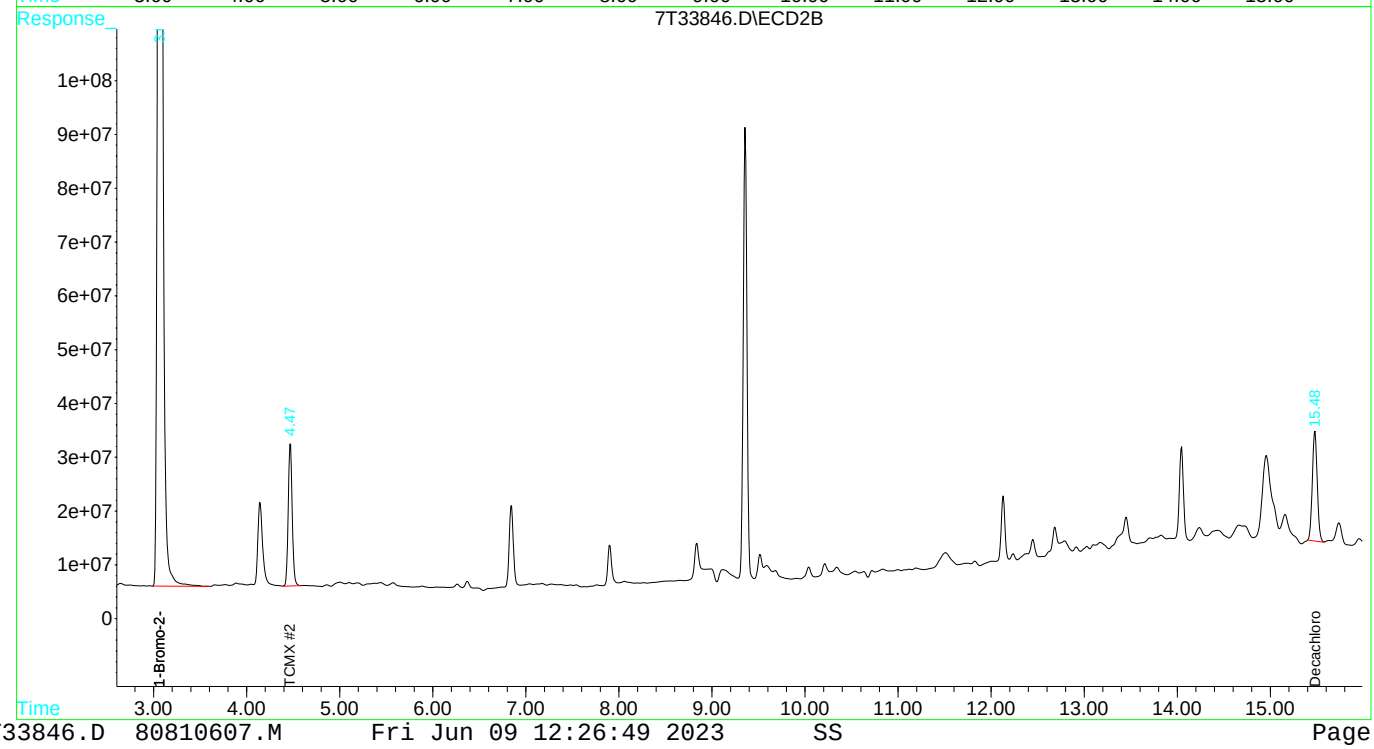
Quantitation Report (QT Reviewed)

Signal #1 : G:\HPCHEM\GCECD7\DATA\20230608\7T33846.D\ECD1A.CH Vial: 18
Signal #2 : G:\HPCHEM\GCECD7\DATA\20230608\7T33846.D\ECD2B.CH
Acq On : 9 Jun 2023 12:37 am Operator: sdp
Sample : 23E1424-14 Inst : HP G1530A
Misc : Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Jun 9 12:24 2023 Quant Results File: 80810607.RES

Quant Method : G:\HPCHEM\G...\80810607.M (Chemstation Integrator)
Title : Pesticides by Method SW-846 8081B
Last Update : Fri Jun 09 11:59:49 2023
Response via : Multiple Level Calibration
DataAcq Meth : RUNPEST.M

Volume Inj. : 2ul
Signal #1 Phase : RTx-50 Signal #2 Phase: RTx-CLPesticides II
Signal #1 Info : 30M x 0.53mm x 0. Signal #2 Info : 30M x 0.53mm x 0.42um





ANALYSIS DATA SHEET

Pesticides - SW 846 8081B

Client: **Dynamic Earth LLC**
Client Sample ID: **SED-1A**
Lab Sample ID: **23E1424-16**
Project: **Turtle Mill Brook-Eco. Evaluation**
Work Order: **23E1424**

Date Sampled:	05/30/23 11:35	Prep Date:	06/13/23 07:10	File ID:	9T01131.D
Init/Final Vol:	15 g / 10 mL	Prep Batch:	BAF0463	Analyzed:	06/13/23 21:39
Dilution:	1	Matrix:	Soil	Sequence:	SAF0265
Percent Solids:	54.48	Prep Method:	Microwave Extraction		

CAS NO.	COMPOUND	CONC. (mg/kg dry)	MDL	RL	Qual
72-54-8	4,4'-DDD [2C]	0.00521	0.00109	0.00239	
72-55-9	4,4'-DDE	0.00274	0.00130	0.00239	
50-29-3	4,4'-DDT	0.00204	0.00168	0.00239	J
309-00-2	Aldrin	ND	0.00113	0.00239	U
319-84-6	alpha-BHC	ND	0.000710	0.00239	U
319-85-7	beta-BHC	ND	0.00114	0.00239	U
57-74-9	Chlordane	ND	0.00106	0.00239	U
319-86-8	delta-BHC	ND	0.00111	0.00239	U
60-57-1	Dieldrin	ND	0.00125	0.00239	U
959-98-8	Endosulfan I	ND	0.00113	0.00239	U
33213-65-9	Endosulfan II	ND	0.00108	0.00239	U
1031-07-8	Endosulfan sulfate	ND	0.000898	0.00239	U
115-29-7	Endosulfans, Total (alpha and beta)	ND	0.00108	0.00239	U
72-20-8	Endrin	ND	0.000824	0.00239	U
7421-93-4	Endrin aldehyde	ND	0.000951	0.00239	U
53494-70-5	Endrin ketone	ND	0.000841	0.00239	U
58-89-9	gamma-BHC (Lindane)	ND	0.000756	0.00239	U
76-44-8	Heptachlor	ND	0.000639	0.00239	U
1024-57-3	Heptachlor Epoxide	ND	0.00120	0.00239	U
72-43-5	Methoxychlor	ND	0.000699	0.00239	U
8001-35-2	Toxaphene	ND	0.115	0.121	U

ND, U - Indicates compound analyzed for but not detected
J - Indicates estimated value
B - Indicates compound found in associated blank
E - Concentration exceeds highest calibration standard
D - Indicates result is based on a dilution
H - Indicates a Hold Time violation
P - Greater than 25% diff. between 2 GC columns.
MDL - Minimum detection limit, **RL** - Reporting limit

F-I

Quantitation Report (QT Reviewed)

Signal #1 : G:\HPCHEM\GCECD9\DATA\20230613\9T01131.D\ECD1A.CH Vial: 11
Signal #2 : G:\HPCHEM\GCECD9\DATA\20230613\9T01131.D\ECD2B.CH
Acq On : 13 Jun 2023 9:39 pm Operator: WD
Sample : 23E1424-16 Inst : HP G1530A
Misc : Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Jun 14 13:02 2023 Quant Results File: 80810606.RES

Quant Method : G:\HPCHEM\G...\80810606.M (Chemstation Integrator)
Title : Pesticides by Method SW-846 8081B
Last Update : Tue Jun 06 16:57:33 2023
Response via : Initial Calibration
DataAcq Meth : RUNPEST.M

Volume Inj. : 2ul
Signal #1 Phase : RTx-50 Signal #2 Phase: RTx-CLPesticides II
Signal #1 Info : 30M x 0.53mm x 0. Signal #2 Info : 30M x 0.53mm x 0.42um

	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/kg	ug/kg
	Internal Standards						
1) I	1-Bromo-2-nitrob	3.06	3.24	5825.5E6	4295.2E6	400.000	400.000
25) I	1-Bromo-2-nitrob	3.06	3.24	5825.5E6	4295.2E6	400.000	400.000
	System Monitoring Compounds						
2) S	TCMX	3.76	4.20	427.7E6	337.4E6	32.678m	41.429 #
Spiked Amount	50.000	Range	43 - 129	Recovery	=	65.36%	82.86%
22) S	Decachlorobiphen	13.21	16.32f	286.8E6	385.4E6	19.138m	42.507m#
Spiked Amount	50.000	Range	42 - 136	Recovery	=	38.28%#	85.01%
	Target Compounds						
11)	4,4'-DDE	6.93	8.26f	32059042	17347767	2.242m	1.792m
14)	4,4'-DDD	7.90	9.46f	99905232	22814146	8.861m	4.258m#
16) M	4,4'-DDT	8.45	10.24	14202787	10134158	1.673m	3.487m#
Sum Chlordane (gamma)				0	0	N.D.	N.D.
Average Chlordane (gamma)						0.000	0.000
Sum Toxaphene (1)				0	0	N.D.	N.D.
Average Toxaphene (1)						0.000	0.000

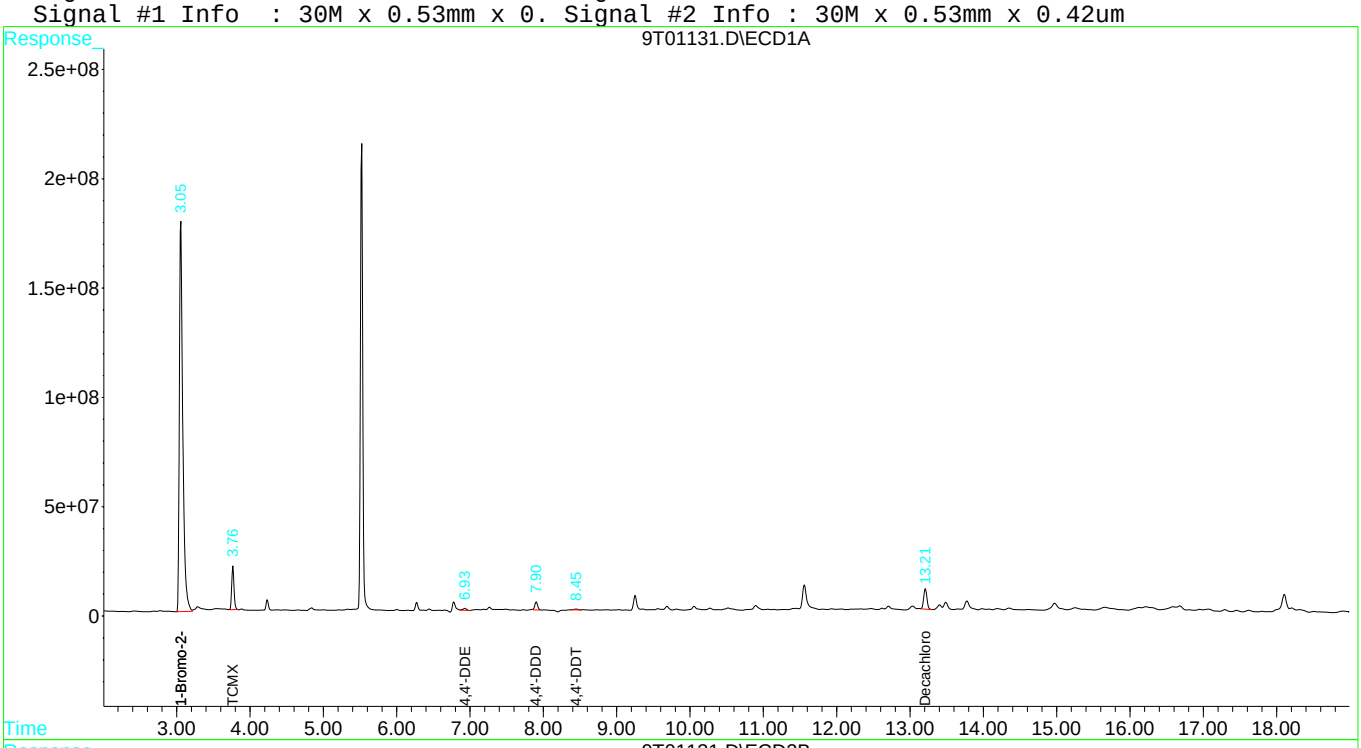
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.
9T01131.D 80810606.M Wed Jun 14 13:12:18 2023 SS Page 1

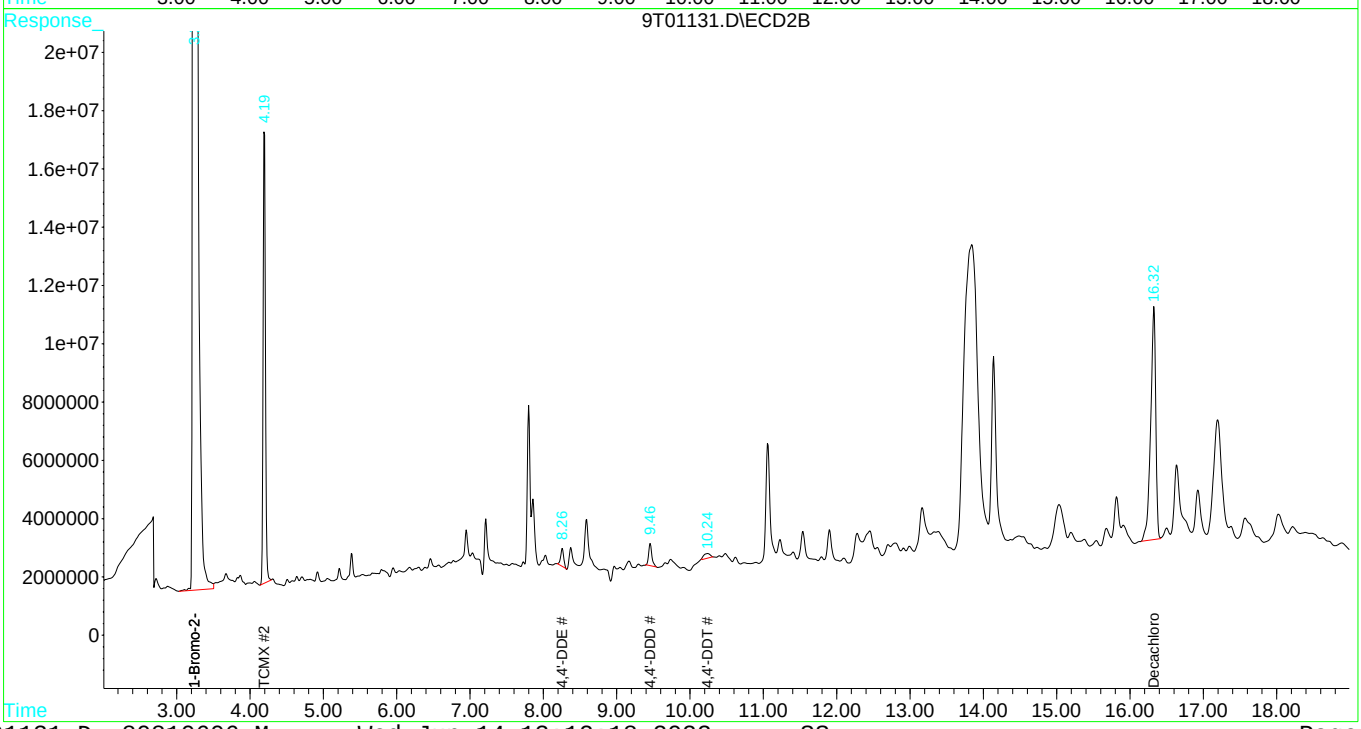
Quantitation Report (QT Reviewed)

Signal #1 : G:\HPCHEM\GCECD9\DATA\20230613\9T01131.D\ECD1A.CH Vial: 11
Signal #2 : G:\HPCHEM\GCECD9\DATA\20230613\9T01131.D\ECD2B.CH
Acq On : 13 Jun 2023 9:39 pm Operator: WD
Sample : 23E1424-16 Inst : HP G1530A
Misc : Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Jun 14 13:02 2023 Quant Results File: 80810606.RES

Quant Method : G:\HPCHEM\G...\80810606.M (Chemstation Integrator)
Title : Pesticides by Method SW-846 8081B
Last Update : Tue Jun 06 16:57:33 2023
Response via : Multiple Level Calibration
DataAcq Meth : RUNPEST.M

Volume Inj. : 2ul
Signal #1 Phase : RTx-50 Signal #2 Phase: RTx-CLPesticides II
Signal #1 Info : 30M x 0.53mm x 0. Signal #2 Info : 30M x 0.53mm x 0.42um





ANALYSIS DATA SHEET

Pesticides - SW 846 8081B

Client: **Dynamic Earth LLC**
Client Sample ID: **SED-4A**
Lab Sample ID: **23E1424-17**
Project: **Turtle Mill Brook-Eco. Evaluation**
Work Order: **23E1424**

Date Sampled:	05/30/23 12:35	Prep Date:	06/13/23 07:10	File ID:	9T01132.D
Init/Final Vol:	15 g / 10 mL	Prep Batch:	BAF0463	Analyzed:	06/13/23 22:01
Dilution:	1	Matrix:	Soil	Sequence:	SAF0265
Percent Solids:	77.27	Prep Method:	Microwave Extraction		

CAS NO.	COMPOUND	CONC. (mg/kg dry)	MDL	RL	Qual
72-54-8	4,4'-DDD	0.0122	0.000770	0.00168	
72-55-9	4,4'-DDE	0.0128	0.000920	0.00168	
50-29-3	4,4'-DDT	ND	0.00119	0.00168	U
309-00-2	Aldrin	ND	0.000797	0.00168	U
319-84-6	alpha-BHC	ND	0.000501	0.00168	U
319-85-7	beta-BHC	ND	0.000804	0.00168	U
57-74-9	Chlordane	ND	0.000748	0.00168	U
319-86-8	delta-BHC	ND	0.000782	0.00168	U
60-57-1	Dieldrin	ND	0.000880	0.00168	U
959-98-8	Endosulfan I	ND	0.000795	0.00168	U
33213-65-9	Endosulfan II	ND	0.000765	0.00168	U
1031-07-8	Endosulfan sulfate	ND	0.000633	0.00168	U
115-29-7	Endosulfans, Total (alpha and beta)	ND	0.000765	0.00168	U
72-20-8	Endrin	ND	0.000581	0.00168	U
7421-93-4	Endrin aldehyde	ND	0.000670	0.00168	U
53494-70-5	Endrin ketone	ND	0.000593	0.00168	U
58-89-9	gamma-BHC (Lindane)	ND	0.000533	0.00168	U
76-44-8	Heptachlor	ND	0.000450	0.00168	U
1024-57-3	Heptachlor Epoxide	ND	0.000849	0.00168	U
72-43-5	Methoxychlor	ND	0.000493	0.00168	U
8001-35-2	Toxaphene	ND	0.0811	0.0854	U

ND, U - Indicates compound analyzed for but not detected
J - Indicates estimated value
B - Indicates compound found in associated blank
E - Concentration exceeds highest calibration standard
D - Indicates result is based on a dilution
H - Indicates a Hold Time violation
P - Greater than 25% diff. between 2 GC columns.
MDL - Minimum detection limit, **RL** - Reporting limit

F-I

Quantitation Report (QT Reviewed)

Signal #1 : G:\HPCHEM\GCECD9\DATA\20230613\9T01132.D\ECD1A.CH Vial: 12
Signal #2 : G:\HPCHEM\GCECD9\DATA\20230613\9T01132.D\ECD2B.CH
Acq On : 13 Jun 2023 10:01 pm Operator: WD
Sample : 23E1424-17 Inst : HP G1530A
Misc : Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Jun 14 13:03 2023 Quant Results File: 80810606.RES

Quant Method : G:\HPCHEM\G...\80810606.M (Chemstation Integrator)
Title : Pesticides by Method SW-846 8081B
Last Update : Tue Jun 06 16:57:33 2023
Response via : Initial Calibration
DataAcq Meth : RUNPEST.M

Volume Inj. : 2ul
Signal #1 Phase : RTx-50 Signal #2 Phase: RTx-CLPesticides II
Signal #1 Info : 30M x 0.53mm x 0. Signal #2 Info : 30M x 0.53mm x 0.42um

	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/kg	ug/kg
	Internal Standards						
1) I	1-Bromo-2-nitrob	3.06	3.25	5656.1E6	4196.8E6	400.000	400.000
25) I	1-Bromo-2-nitrob	3.06	3.25	5656.1E6	4196.8E6	400.000	400.000
	System Monitoring Compounds						
2) S	TCMX	3.77	4.20	566.5E6	322.0E6	44.575m	40.473
	Spiked Amount 50.000	Range 43 - 129		Recovery =		89.15%	80.95%
22) S	Decachlorobiphen	13.21	16.33f	275.9E6	297.0E6	18.959m	33.527m#
	Spiked Amount 50.000	Range 42 - 136		Recovery =		37.92%#	67.05%
	Target Compounds						
11)	4,4'-DDE	6.93	8.26	206.4E6	150.8E6	14.867	15.940
14)	4,4'-DDD	7.90	9.46f	155.0E6	85503206	14.157	16.332
16) M	4,4'-DDT	8.42	10.19f	3123120	2442192	0.379m	0.860m#
	Sum Chlordane (gamma)			0	0	N.D.	N.D.
	Average Chlordane (gamma)					0.000	0.000
	Sum Toxaphene (1)			0	0	N.D.	N.D.
	Average Toxaphene (1)					0.000	0.000

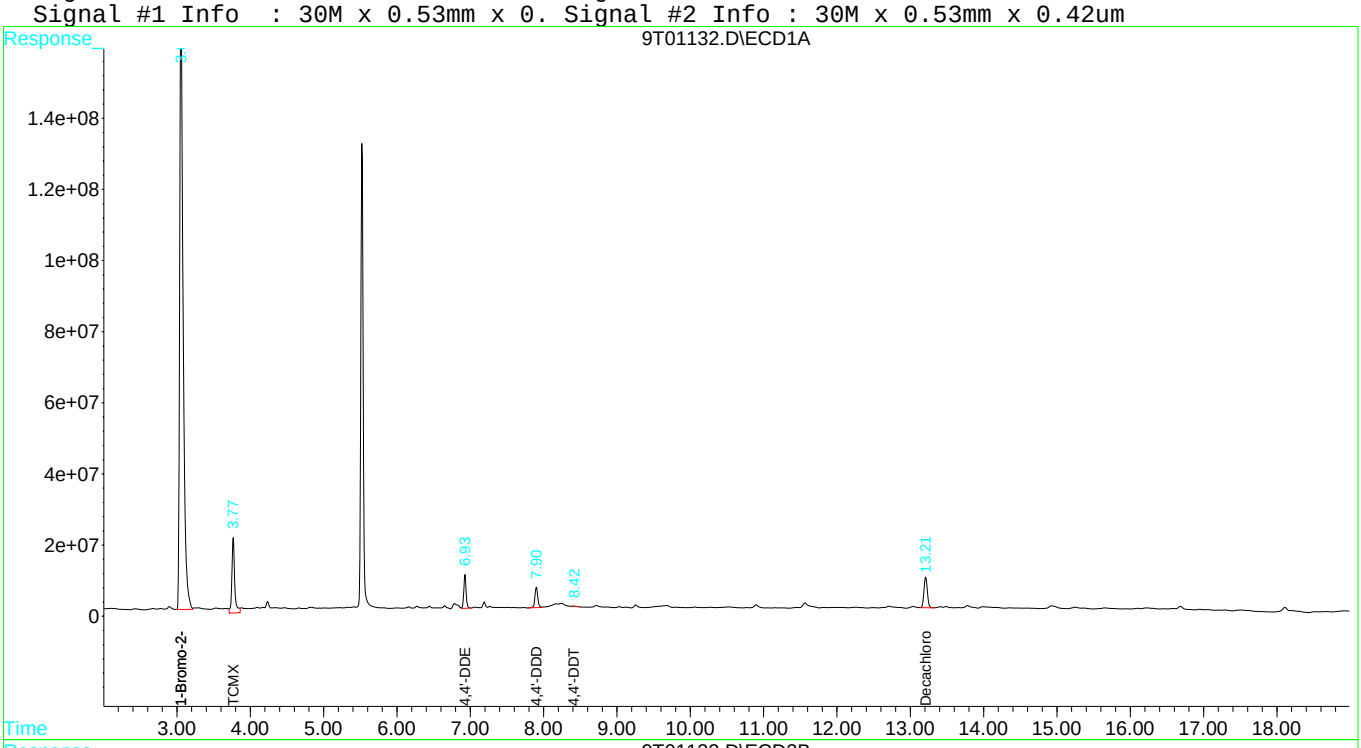
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.
9T01132.D 80810606.M Wed Jun 14 13:12:20 2023 SS Page 1

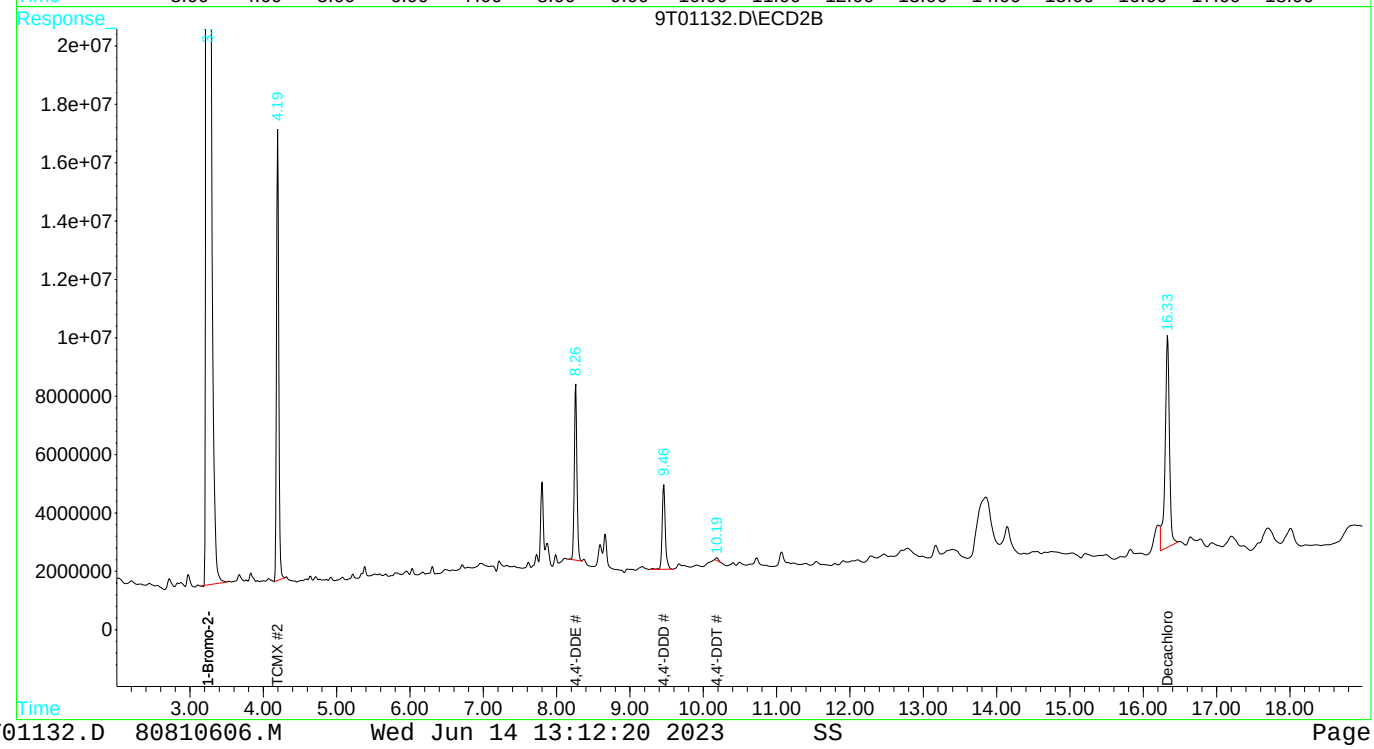
Quantitation Report (QT Reviewed)

Signal #1 : G:\HPCHEM\GCECD9\DATA\20230613\9T01132.D\ECD1A.CH Vial: 12
Signal #2 : G:\HPCHEM\GCECD9\DATA\20230613\9T01132.D\ECD2B.CH
Acq On : 13 Jun 2023 10:01 pm Operator: WD
Sample : 23E1424-17 Inst : HP G1530A
Misc : Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Jun 14 13:03 2023 Quant Results File: 80810606.RES

Quant Method : G:\HPCHEM\G...\80810606.M (Chemstation Integrator)
Title : Pesticides by Method SW-846 8081B
Last Update : Tue Jun 06 16:57:33 2023
Response via : Multiple Level Calibration
DataAcq Meth : RUNPEST.M

Volume Inj. : 2ul
Signal #1 Phase : RTx-50 Signal #2 Phase: RTx-CLPesticides II
Signal #1 Info : 30M x 0.53mm x 0. Signal #2 Info : 30M x 0.53mm x 0.42um





ANALYSIS DATA SHEET

Pesticides - SW 846 8081B

Client: **Dynamic Earth LLC**
Client Sample ID: **SED-6A**
Lab Sample ID: **23E1424-18**
Project: **Turtle Mill Brook-Eco. Evaluation**
Work Order: **23E1424**

Date Sampled:	05/30/23 13:05	Prep Date:	06/13/23 07:10	File ID:	9T01133.D
Init/Final Vol:	15 g / 10 mL	Prep Batch:	BAF0463	Analyzed:	06/13/23 22:23
Dilution:	1	Matrix:	Soil	Sequence:	SAF0265
Percent Solids:	53.18	Prep Method:	Microwave Extraction		

CAS NO.	COMPOUND	CONC. (mg/kg dry)	MDL	RL	Qual
72-54-8	4,4'-DDD [2C]	0.00305	0.00112	0.00244	
72-55-9	4,4'-DDE	0.00297	0.00134	0.00244	
50-29-3	4,4'-DDT	ND	0.00173	0.00244	U
309-00-2	Aldrin	ND	0.00116	0.00244	U
319-84-6	alpha-BHC	ND	0.000728	0.00244	U
319-85-7	beta-BHC	ND	0.00117	0.00244	U
57-74-9	Chlordane	ND	0.00109	0.00244	U
319-86-8	delta-BHC	ND	0.00114	0.00244	U
60-57-1	Dieldrin	ND	0.00128	0.00244	U
959-98-8	Endosulfan I	ND	0.00115	0.00244	U
33213-65-9	Endosulfan II	ND	0.00111	0.00244	U
1031-07-8	Endosulfan sulfate	ND	0.000920	0.00244	U
115-29-7	Endosulfans, Total (alpha and beta)	ND	0.00111	0.00244	U
72-20-8	Endrin	ND	0.000844	0.00244	U
7421-93-4	Endrin aldehyde	ND	0.000974	0.00244	U
53494-70-5	Endrin ketone	ND	0.000861	0.00244	U
58-89-9	gamma-BHC (Lindane)	ND	0.000775	0.00244	U
76-44-8	Heptachlor	ND	0.000654	0.00244	U
1024-57-3	Heptachlor Epoxide	ND	0.00123	0.00244	U
72-43-5	Methoxychlor	ND	0.000716	0.00244	U
8001-35-2	Toxaphene	ND	0.118	0.124	U

ND, U - Indicates compound analyzed for but not detected
J - Indicates estimated value
B - Indicates compound found in associated blank
E - Concentration exceeds highest calibration standard
D - Indicates result is based on a dilution
H - Indicates a Hold Time violation
P - Greater than 25% diff. between 2 GC columns.
MDL - Minimum detection limit, **RL** - Reporting limit

F-I

Quantitation Report (QT Reviewed)

Signal #1 : G:\HPCHEM\GCECD9\DATA\20230613\9T01133.D\ECD1A.CH Vial: 13
Signal #2 : G:\HPCHEM\GCECD9\DATA\20230613\9T01133.D\ECD2B.CH
Acq On : 13 Jun 2023 10:23 pm Operator: WD
Sample : 23E1424-18 Inst : HP G1530A
Misc : Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Jun 14 13:03 2023 Quant Results File: 80810606.RES

Quant Method : G:\HPCHEM\G...\80810606.M (Chemstation Integrator)
Title : Pesticides by Method SW-846 8081B
Last Update : Tue Jun 06 16:57:33 2023
Response via : Initial Calibration
DataAcq Meth : RUNPEST.M

Volume Inj. : 2ul
Signal #1 Phase : RTx-50 Signal #2 Phase: RTx-CLPesticides II
Signal #1 Info : 30M x 0.53mm x 0. Signal #2 Info : 30M x 0.53mm x 0.42um

	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/kg	ug/kg
	Internal Standards						
1) I	1-Bromo-2-nitrob	3.06	3.25	4303.9E6	3431.6E6	400.000	400.000
25) I	1-Bromo-2-nitrob	3.06	3.25	4303.9E6	3431.6E6	400.000	400.000
	System Monitoring Compounds						
2) S	TCMX	3.77	4.19	256.1E6	205.9E6	26.478m	31.655m
	Spiked Amount 50.000	Range 43 - 129		Recovery =		52.96%	63.31%
22) S	Decachlorobiphen	13.21	16.33f	160.5E6	180.5E6	14.497m	24.927m#
	Spiked Amount 50.000	Range 42 - 136		Recovery =		28.99%#	49.85%
	Target Compounds						
11)	4,4'-DDE	6.93	8.27	25080863	23933414	2.374m	3.094 #
14)	4,4'-DDD	7.90	9.45f	35719269	10421003	4.288m	2.434m#
16) M	4,4'-DDT	8.45	10.20	8237825	4654471	1.313m	2.005m#
	Sum Chlordane (gamma)			0	0	N.D.	N.D.
	Average Chlordane (gamma)					0.000	0.000
	Sum Toxaphene (1)			0	0	N.D.	N.D.
	Average Toxaphene (1)					0.000	0.000

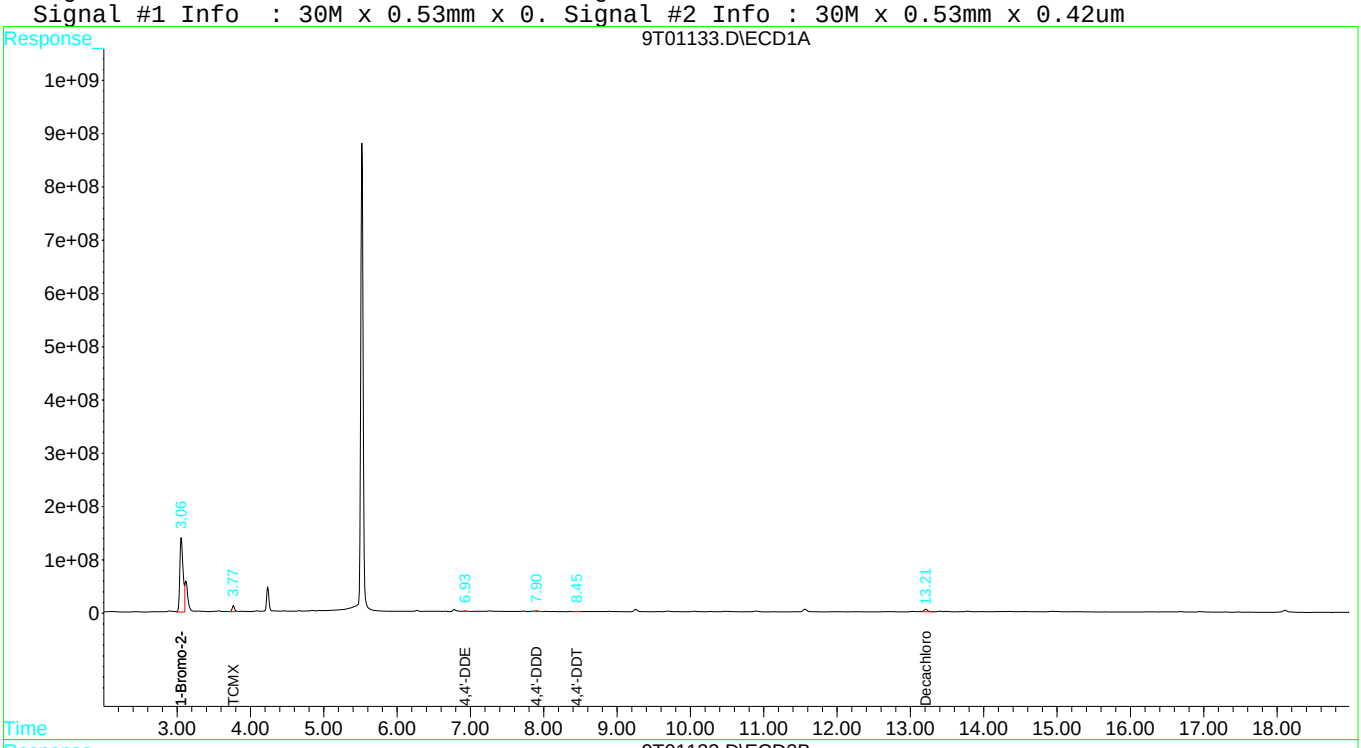
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.
9T01133.D 80810606.M Wed Jun 14 13:12:22 2023 SS Page 1

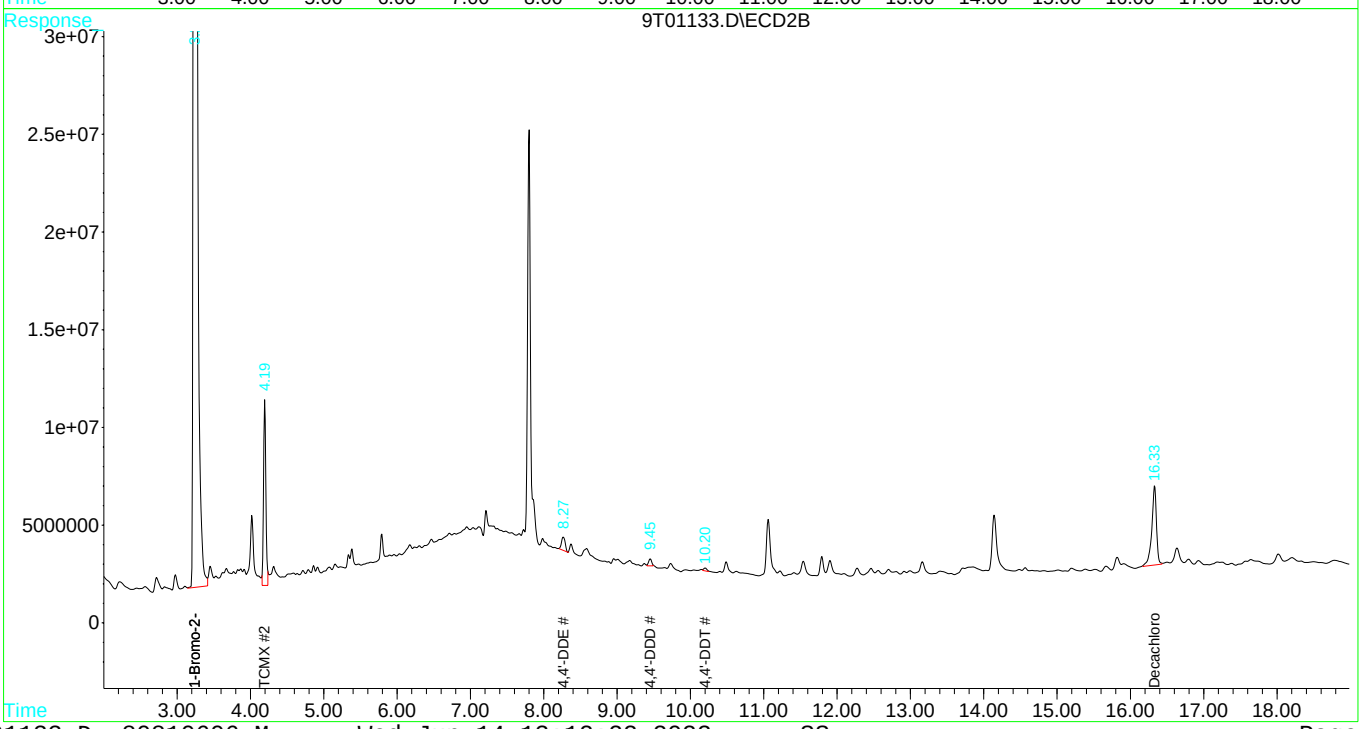
Quantitation Report (QT Reviewed)

Signal #1 : G:\HPCHEM\GCECD9\DATA\20230613\9T01133.D\ECD1A.CH Vial: 13
Signal #2 : G:\HPCHEM\GCECD9\DATA\20230613\9T01133.D\ECD2B.CH
Acq On : 13 Jun 2023 10:23 pm Operator: WD
Sample : 23E1424-18 Inst : HP G1530A
Misc : Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Jun 14 13:03 2023 Quant Results File: 80810606.RES

Quant Method : G:\HPCHEM\G...\80810606.M (Chemstation Integrator)
Title : Pesticides by Method SW-846 8081B
Last Update : Tue Jun 06 16:57:33 2023
Response via : Multiple Level Calibration
DataAcq Meth : RUNPEST.M

Volume Inj. : 2ul
Signal #1 Phase : RTx-50 Signal #2 Phase: RTx-CLPesticides II
Signal #1 Info : 30M x 0.53mm x 0. Signal #2 Info : 30M x 0.53mm x 0.42um





SURROGATE RECOVERIES

Analysis Class: PESTICIDES

Matrix: Ground Water **Method:** SW 846 8081B

Pesticides

Lab Number	File ID	TCMX	DCB	TCMX[2C]	DCB[2C]
23E1424-01	9T00995.D	76.2	68.7	78.5	79.3
23E1424-03	9T01028.D	73.1	76.8	79.3	96.2
23E1424-05	9T01029.D	76.4	76.2	82.7	95.3
23E1424-07	9T01030.D	78.2	85.5	85.7	105
23E1424-09	9T01031.D	98.1	97.3	103	121
23E1424-11	9T01032.D	85.3	81.8	85.4	99.5
23E1424-13	9T01034.D	80.3	82.6	87.3	103
BAE1181-BLK2	9T01051.D	79.7	85.8	85.9	108
BAE1181-BS2	9T01052.D	79.6	88.8	80.6	105
BAE1181-MS1	9T01353.D	101	68.8	109	66.1
BAE1181-MSD1	9T01354.D	99.5	65.3	110	66.0

Surrogate Limits

Acronym	Lo Limit	Hi Limit	Analyte
TCMX	30	150	Tetrachloro-m-xylene
DCB	30	150	Decachlorobiphenyl
TCMX[2C]	30	150	Tetrachloro-m-xylene [2C]
DCB[2C]	30	150	Decachlorobiphenyl [2C]

F-II

* - Outside of QC Limits

SURROGATE RECOVERIES

Analysis Class: PESTICIDES

Matrix: Soil **Method:** SW 846 8081B

Pesticides

Lab Number	File ID	TCMX	DCB	TCMX[2C]	DCB[2C]
23E1424-02	7T33840.D	75.7	95.5	85.4	114
23E1424-04	7T33841.D	104	110	91.9	146 *
23E1424-06	7T33842.D	94.9	58.9	95.0	80.0
23E1424-08	7T33843.D	86.2	51.7	94.3	85.5
23E1424-10	7T33844.D	76.7	50.7	87.8	85.0
23E1424-12	7T33845.D	84.2	105	74.3	167 *
23E1424-14	7T33846.D	78.7	76.7	81.0	105
23E1424-16	9T01131.D	65.4	38.3 *	82.9	85.0
23E1424-17	9T01132.D	89.1	37.9 *	80.9	67.1
23E1424-18	9T01133.D	53.0	29.0 *	63.3	49.9
BAF0218-BLK1	9T01026.D	84.7	57.3	89.5	69.9
BAF0218-BS1	9T01027.D	82.6	57.4	82.2	70.8
BAF0218-MS1	7T33893.D	59.3	85.1	59.9	46.9
BAF0218-MSD1	7T33894.D	86.0	137 *	87.7	62.7
BAF0463-BLK1	9T01121.D	67.2	26.0 *	80.2	50.2
BAF0463-BS1	9T01122.D	93.1	45.9	96.1	61.9
BAF0463-MS1	9T01161.D	45.5	109	55.7	233 *
BAF0463-MSD1	9T01162.D	41.4 *	38.4 *	53.3	75.0

Surrogate Limits

Acronym	Lo Limit	Hi Limit	Analyte
TCMX	30	150	Tetrachloro-m-xylene
DCB	30	150	Decachlorobiphenyl
TCMX[2C]	30	150	Tetrachloro-m-xylene [2C]
DCB[2C]	30	150	Decachlorobiphenyl [2C]

F-II

* - Outside of QC Limits

Batch BAE1181 **Method: SW 846 8081B** **Prepared: 06/05/2023**

BAE1181-BS2 **Source:**

Analyte	Result	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
4,4'-DDD	0.0370	ug/L	0.0500		74.0	66-143		
4,4'-DDE	0.0309	ug/L	0.0500		61.8	55-144		
4,4'-DDT	0.0388	ug/L	0.0500		77.6	60-137		
Aldrin	0.0325	ug/L	0.0500		65.0	55-127		
alpha-BHC	0.0310	ug/L	0.0500		62.0	46-121		
alpha-Chlordane (cis)	0.0378	ug/L	0.0500		75.6	70-130		
beta-BHC	0.0378	ug/L	0.0500		75.6	49-123		
Chlordane	0.0758	ug/L	0.100		75.8	70-130		
delta-BHC	0.0440	ug/L	0.0500		88.0	71-124		
Dieldrin	0.0361	ug/L	0.0500		72.2	53-134		
Endosulfan I	0.0408	ug/L	0.0500		81.6	72-131		
Endosulfan II	0.0429	ug/L	0.0500		85.8	62-131		
Endosulfan sulfate	0.0503	ug/L	0.0500		101	81-132		
Endrin	0.0379	ug/L	0.0500		75.8*	77-133		
Endrin aldehyde	0.0428	ug/L	0.0500		85.6	72-132		
Endrin ketone	0.0471	ug/L	0.0500		94.2	62-144		
gamma-BHC (Lindane)	0.0339	ug/L	0.0500		67.8	60-145		
gamma-Chlordane	0.0380	ug/L	0.0500		76.0	70-130		
Heptachlor	0.0395	ug/L	0.0500		79.0	58-131		
Heptachlor Epoxide	0.0391	ug/L	0.0500		78.2	67-136		
Methoxychlor	0.0666	ug/L	0.0500		133	60-136		

Batch BAE1181 (cont.) **Method: SW 846 8081B** **Prepared: 06/28/2023**

BAE1181-MS1 **Source:** 23F1189-03

Analyte	Result	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
4,4'-DDD	0.120	ug/L	0.100	ND	120	60-140		
4,4'-DDE	0.354	ug/L	0.100	ND	354*	60-140		
4,4'-DDT	0.0754	ug/L	0.100	ND	75.4	60-140		
Aldrin	0.0802	ug/L	0.100	ND	80.2	60-140		
alpha-BHC	0.0708	ug/L	0.100	ND	70.8	60-140		
alpha-Chlordane (cis)	0.106	ug/L	0.100	ND	106	60-140		
beta-BHC	0.113	ug/L	0.100	ND	113	60-140		
Chlordane	0.180	ug/L	0.200	ND	90.0	60-140		
delta-BHC	0.170	ug/L	0.100	ND	170*	60-140		
Dieldrin	0.0646	ug/L	0.100	ND	64.6	60-140		
Endosulfan I	0.121	ug/L	0.100	ND	121	60-140		
Endosulfan II	0.0956	ug/L	0.100	ND	95.6	60-140		
Endosulfan sulfate	0.0832	ug/L	0.100	ND	83.2	60-140		
Endrin	0.0982	ug/L	0.100	ND	98.2	60-140		
Endrin aldehyde	0.0874	ug/L	0.100	ND	87.4	60-140		
Endrin ketone	0.0916	ug/L	0.100	ND	91.6	60-140		
gamma-BHC (Lindane)	0.0814	ug/L	0.100	ND	81.4	60-140		
gamma-Chlordane	0.0736	ug/L	0.100	ND	73.6	60-140		
Heptachlor	0.117	ug/L	0.100	ND	117	60-140		
Heptachlor Epoxide	0.0932	ug/L	0.100	ND	93.2	60-140		
Methoxychlor	0.113	ug/L	0.100	ND	113	60-140		

* - Outside of QC Limits J - Result is between the MDL and RL for an Analysis reported to an RL

F-III NC - Outside the recovery criteria but Spike Amount <1/4 amount found in Source Sample

Batch BAE1181 (cont.) **Method: SW 846 8081B** **Prepared: 06/28/2023**

BAE1181-MSD1 **Source:** 23F1189-03

Analyte	Result	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
4,4'-DDD	0.0984	ug/L	0.100	ND	98.4	60-140	19.4	25
4,4'-DDE	0.352	ug/L	0.100	ND	352*	60-140	0.567	25
4,4'-DDT	0.0738	ug/L	0.100	ND	73.8	60-140	2.14	25
Aldrin	0.0790	ug/L	0.100	ND	79.0	60-140	1.51	25
alpha-BHC	0.0716	ug/L	0.100	ND	71.6	60-140	1.12	25
alpha-Chlordane (cis)	0.105	ug/L	0.100	ND	105	60-140	1.13	25
beta-BHC	0.110	ug/L	0.100	ND	110	60-140	2.68	25
Chlordane	0.178	ug/L	0.200	ND	88.9	60-140	1.23	25
delta-BHC	0.167	ug/L	0.100	ND	167*	60-140	1.54	25
Dieldrin	0.0646	ug/L	0.100	ND	64.6	60-140	0.00	25
Endosulfan I	0.119	ug/L	0.100	ND	119	60-140	1.50	25
Endosulfan II	0.0832	ug/L	0.100	ND	83.2	60-140	13.9	25
Endosulfan sulfate	0.0816	ug/L	0.100	ND	81.6	60-140	1.94	25
Endrin	0.0880	ug/L	0.100	ND	88.0	60-140	11.0	25
Endrin aldehyde	0.0858	ug/L	0.100	ND	85.8	60-140	1.85	25
Endrin ketone	0.0894	ug/L	0.100	ND	89.4	60-140	2.43	25
gamma-BHC (Lindane)	0.0798	ug/L	0.100	ND	79.8	60-140	1.99	25
gamma-Chlordane	0.0726	ug/L	0.100	ND	72.6	60-140	1.37	25
Heptachlor	0.108	ug/L	0.100	ND	108	60-140	8.54	25
Heptachlor Epoxide	0.0930	ug/L	0.100	ND	93.0	60-140	0.215	25
Methoxychlor	0.113	ug/L	0.100	ND	113	60-140	0.353	25

* - Outside of QC Limits J - Result is between the MDL and RL for an Analysis reported to an RL

NC - Outside the recovery criteria but Spike Amount <1/4 amount found in Source Sample

Batch BAF0218 **Method: SW 846 8081B** **Prepared: 06/06/2023**

BAF0218-BS1 **Source:**

Analyte	Result	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
4,4'-DDD	0.0316	mg/kg wet	0.0333		94.9	91.1-141		
4,4'-DDE	0.0319	mg/kg wet	0.0333		95.8*	98.2-139		
4,4'-DDT	0.0388	mg/kg wet	0.0333		116	23.3-144		
Aldrin	0.0295	mg/kg wet	0.0333		88.4	75-130		
alpha-BHC	0.0274	mg/kg wet	0.0333		82.1	74.3-132		
alpha-Chlordane (cis)	0.0297	mg/kg wet	0.0333		89.2	70-130		
beta-BHC	0.0285	mg/kg wet	0.0333		85.6	76.9-128		
Chlordane	0.0609	mg/kg wet	0.0667		91.3	70-130		
delta-BHC	0.0280	mg/kg wet	0.0333		84.1	61-155		
Dieldrin	0.0290	mg/kg wet	0.0333		87.1	74.9-130		
Endosulfan I	0.0314	mg/kg wet	0.0333		94.2	60.8-126		
Endosulfan II	0.0202	mg/kg wet	0.0333		60.6*	72.7-125		
Endosulfan sulfate	0.0335	mg/kg wet	0.0333		101	63.7-128		
Endrin	0.0322	mg/kg wet	0.0333		96.5	77.7-141		
Endrin aldehyde	0.0271	mg/kg wet	0.0333		81.4	57.7-113		
Endrin ketone	0.0327	mg/kg wet	0.0333		98.1	64.1-133		
gamma-BHC (Lindane)	0.0304	mg/kg wet	0.0333		91.2	74-133		
gamma-Chlordane	0.0312	mg/kg wet	0.0333		93.5	70-130		
Heptachlor	0.0320	mg/kg wet	0.0333		96.1	74.4-132		
Heptachlor Epoxide	0.0311	mg/kg wet	0.0333		93.4	75.2-127		
Methoxychlor	0.0470	mg/kg wet	0.0333		141	37.4-147		

* - Outside of QC Limits J - Result is between the MDL and RL for an Analysis reported to an RL

F-III NC - Outside the recovery criteria but Spike Amount <1/4 amount found in Source Sample

Batch BAF0218 (cont.) **Method: SW 846 8081B** **Prepared: 06/06/2023**

BAF0218-MS1 **Source:** 23E1416-14

Analyte	Result	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
4,4'-DDD	0.0403	mg/kg dry	0.0392	ND	103	56.4-168		
4,4'-DDE	0.0230	mg/kg dry	0.0392	ND	58.7*	67.4-153		
4,4'-DDT	0.00956	mg/kg dry	0.0392	ND	24.4	15-117		
Aldrin	0.0226	mg/kg dry	0.0392	ND	57.6	49.4-130		
alpha-BHC	0.0243	mg/kg dry	0.0392	ND	62.1	48.9-139		
alpha-Chlordane (cis)	0.0236	mg/kg dry	0.0392	ND	60.1	60-140		
beta-BHC	0.0222	mg/kg dry	0.0392	ND	56.7	43.1-140		
Chlordane	0.0479	mg/kg dry	0.0783	ND	61.2	60-140		
delta-BHC	0.0236	mg/kg dry	0.0392	ND	60.2	36.1-164		
Dieldrin	0.0403	mg/kg dry	0.0392	ND	103	55.1-122		
Endosulfan I	0.0325	mg/kg dry	0.0392	ND	82.9	42.1-110		
Endosulfan II	0.0271	mg/kg dry	0.0392	ND	69.1	46.9-119		
Endosulfan sulfate	0.0121	mg/kg dry	0.0392	ND	31.0	24.6-139		
Endrin	0.0223	mg/kg dry	0.0392	ND	57.0	40.4-139		
Endrin aldehyde	0.0321	mg/kg dry	0.0392	ND	82.0	36.3-126		
Endrin ketone	0.0329	mg/kg dry	0.0392	ND	83.9	15-149		
gamma-BHC (Lindane)	0.0233	mg/kg dry	0.0392	ND	59.5	32.3-140		
gamma-Chlordane	0.0244	mg/kg dry	0.0392	ND	62.2	60-140		
Heptachlor	0.0202	mg/kg dry	0.0392	ND	51.5	15-147		
Heptachlor Epoxide	0.0220	mg/kg dry	0.0392	ND	56.1	49-121		
Methoxychlor	0.0291	mg/kg dry	0.0392	ND	74.2	15-122		

* - Outside of QC Limits J - Result is between the MDL and RL for an Analysis reported to an RL

NC - Outside the recovery criteria but Spike Amount <1/4 amount found in Source Sample

Batch BAF0218 (cont.) **Method: SW 846 8081B** **Prepared: 06/06/2023**

BAF0218-MSD1 **Source:** 23E1416-14

Analyte	Result	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
4,4'-DDD	0.0562	mg/kg dry	0.0392	ND	143	56.4-168	32.9*	30
4,4'-DDE	0.0318	mg/kg dry	0.0392	ND	81.2	67.4-153	32.2*	30
4,4'-DDT	0.0116	mg/kg dry	0.0392	ND	29.7	15-117	19.6	30
Aldrin	0.0312	mg/kg dry	0.0392	ND	79.6	49.4-130	32.1*	30
alpha-BHC	0.0353	mg/kg dry	0.0392	ND	90.2	48.9-139	36.8*	30
alpha-Chlordane (cis)	0.0335	mg/kg dry	0.0392	ND	85.5	60-140	34.9*	30
beta-BHC	0.0314	mg/kg dry	0.0392	ND	80.0	43.1-140	34.1*	30
Chlordane	0.0682	mg/kg dry	0.0783	ND	87.1	60-140	35.0*	30
delta-BHC	0.0334	mg/kg dry	0.0392	ND	85.3	36.1-164	34.5*	30
Dieldrin	0.0432	mg/kg dry	0.0392	ND	110	55.1-122	7.00	30
Endosulfan I	0.0428	mg/kg dry	0.0392	ND	109	42.1-110	27.4	30
Endosulfan II	0.0388	mg/kg dry	0.0392	ND	99.1	46.9-119	35.6*	30
Endosulfan sulfate	0.00859	mg/kg dry	0.0392	ND	21.9*	24.6-139	34.2*	30
Endrin	0.0305	mg/kg dry	0.0392	ND	77.8	40.4-139	31.0*	30
Endrin aldehyde	0.0409	mg/kg dry	0.0392	ND	104	36.3-126	23.9	30
Endrin ketone	0.0446	mg/kg dry	0.0392	ND	114	15-149	30.3*	30
gamma-BHC (Lindane)	0.0331	mg/kg dry	0.0392	ND	84.5	32.3-140	34.6*	30
gamma-Chlordane	0.0347	mg/kg dry	0.0392	ND	88.7	60-140	35.2*	30
Heptachlor	0.0266	mg/kg dry	0.0392	ND	68.0	15-147	27.5	30
Heptachlor Epoxide	0.0317	mg/kg dry	0.0392	ND	80.9	49-121	36.1*	30
Methoxychlor	0.0286	mg/kg dry	0.0392	ND	72.9	15-122	1.74	30

* - Outside of QC Limits J - Result is between the MDL and RL for an Analysis reported to an RL

NC - Outside the recovery criteria but Spike Amount <1/4 amount found in Source Sample

Batch BAF0463 **Method: SW 846 8081B** **Prepared: 06/13/2023**

BAF0463-BS1 **Source:**

Analyte	Result	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
4,4'-DDD	0.0358	mg/kg wet	0.0333		107	91.1-141		
4,4'-DDE	0.0352	mg/kg wet	0.0333		106	98.2-139		
4,4'-DDT	0.0463	mg/kg wet	0.0333		139	23.3-144		
Aldrin	0.0334	mg/kg wet	0.0333		100	75-130		
alpha-BHC	0.0315	mg/kg wet	0.0333		94.4	74.3-132		
alpha-Chlordane (cis)	0.0341	mg/kg wet	0.0333		102	70-130		
beta-BHC	0.0253	mg/kg wet	0.0333		75.8*	76.9-128		
Chlordane	0.0679	mg/kg wet	0.0667		102	70-130		
delta-BHC	0.0328	mg/kg wet	0.0333		98.5	61-155		
Dieldrin	0.0334	mg/kg wet	0.0333		100	74.9-130		
Endosulfan I	0.0334	mg/kg wet	0.0333		100	60.8-126		
Endosulfan II	0.0352	mg/kg wet	0.0333		106	72.7-125		
Endosulfan sulfate	0.0386	mg/kg wet	0.0333		116	63.7-128		
Endrin	0.0371	mg/kg wet	0.0333		111	77.7-141		
Endrin aldehyde	0.0278	mg/kg wet	0.0333		83.4	57.7-113		
Endrin ketone	0.0370	mg/kg wet	0.0333		111	64.1-133		
gamma-BHC (Lindane)	0.0347	mg/kg wet	0.0333		104	74-133		
gamma-Chlordane	0.0338	mg/kg wet	0.0333		101	70-130		
Heptachlor	0.0372	mg/kg wet	0.0333		112	74.4-132		
Heptachlor Epoxide	0.0328	mg/kg wet	0.0333		98.3	75.2-127		
Methoxychlor	0.0612	mg/kg wet	0.0333		184*	37.4-147		

* - Outside of QC Limits J - Result is between the MDL and RL for an Analysis reported to an RL

NC - Outside the recovery criteria but Spike Amount <1/4 amount found in Source Sample

F-III

Batch BAF0463 (cont.) **Method: SW 846 8081B** **Prepared: 06/13/2023**

BAF0463-MS1 **Source:** 23F0508-01

Analyte	Result	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
4,4'-DDD	0.00938	mg/kg dry	0.0366	0.00870	1.86*	56.4-168		
4,4'-DDE	0.0119	mg/kg dry	0.0366	0.0220	-27.7*	67.4-153		
4,4'-DDT	0.0115	mg/kg dry	0.0366	0.00144	27.6	15-117		
Aldrin	0.0172	mg/kg dry	0.0366	0.0130	11.6*	49.4-130		
alpha-BHC	0.0184	mg/kg dry	0.0366	ND	50.3	48.9-139		
alpha-Chlordane (cis)	0.0261	mg/kg dry	0.0366	0.0600	-92.6*	60-140		
beta-BHC	0.00542	mg/kg dry	0.0366	ND	14.8*	43.1-140		
Chlordane	0.0400	mg/kg dry	0.0732	0.0931	-72.5*	60-140		
delta-BHC	0.00971	mg/kg dry	0.0366	ND	26.5*	36.1-164		
Dieldrin	0.0280	mg/kg dry	0.0366	0.0582	-82.7*	55.1-122		
Endosulfan I	0.00280	mg/kg dry	0.0366	ND	7.66*	42.1-110		
Endosulfan II	0.00385	mg/kg dry	0.0366	ND	10.5*	46.9-119		
Endosulfan sulfate	ND	mg/kg dry	0.0366	ND	*	24.6-139		
Endrin	0.0133	mg/kg dry	0.0366	ND	36.4*	40.4-139		
Endrin aldehyde	0.00430	mg/kg dry	0.0366	ND	11.8*	36.3-126		
Endrin ketone	0.00471	mg/kg dry	0.0366	ND	12.9*	15-149		
gamma-BHC (Lindane)	0.00605	mg/kg dry	0.0366	ND	16.5*	32.3-140		
gamma-Chlordane	0.0139	mg/kg dry	0.0366	0.0331	-52.4*	60-140		
Heptachlor	0.00653	mg/kg dry	0.0366	ND	17.8	15-147		
Heptachlor Epoxide	0.00463	mg/kg dry	0.0366	ND	12.6*	49-121		
Methoxychlor	0.00326	mg/kg dry	0.0366	ND	8.90*	15-122		

* - Outside of QC Limits J - Result is between the MDL and RL for an Analysis reported to an RL

F-III NC - Outside the recovery criteria but Spike Amount <1/4 amount found in Source Sample

Batch BAF0463 (cont.) **Method: SW 846 8081B** **Prepared: 06/13/2023**

BAF0463-MSD1 **Source:** 23F0508-01

Analyte	Result	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
4,4'-DDD	0.00831	mg/kg dry	0.0366	0.00870	-1.06*	56.4-168	12.1	30
4,4'-DDE	0.0121	mg/kg dry	0.0366	0.0220	-27.2*	67.4-153	1.53	30
4,4'-DDT	0.0105	mg/kg dry	0.0366	0.00144	24.8	15-117	9.22	30
Aldrin	0.0160	mg/kg dry	0.0366	0.0130	8.36*	49.4-130	7.06	30
alpha-BHC	0.0869	mg/kg dry	0.0366	ND	237*	48.9-139	130*	30
alpha-Chlordane (cis)	0.0263	mg/kg dry	0.0366	0.0600	-92.1*	60-140	0.643	30
beta-BHC	0.00239	mg/kg dry	0.0366	ND	6.52*	43.1-140	77.7*	30
Chlordane	0.0417	mg/kg dry	0.0732	0.0931	-70.2*	60-140	4.07	30
delta-BHC	0.00745	mg/kg dry	0.0366	ND	20.3*	36.1-164	26.4	30
Dieldrin	0.0255	mg/kg dry	0.0366	0.0582	-89.6*	55.1-122	9.43	30
Endosulfan I	0.00384	mg/kg dry	0.0366	ND	10.5*	42.1-110	31.3*	30
Endosulfan II	0.00378	mg/kg dry	0.0366	ND	10.3*	46.9-119	1.92	30
Endosulfan sulfate	0.00146	mg/kg dry	0.0366	ND	4.00*	24.6-139		30
Endrin	0.0118	mg/kg dry	0.0366	ND	32.2*	40.4-139	12.4	30
Endrin aldehyde	0.00660	mg/kg dry	0.0366	ND	18.0*	36.3-126	42.1*	30
Endrin ketone	0.00299	mg/kg dry	0.0366	ND	8.18*	15-149	44.5*	30
gamma-BHC (Lindane)	0.00315	mg/kg dry	0.0366	ND	8.60*	32.3-140	63.2*	30
gamma-Chlordane	0.0154	mg/kg dry	0.0366	0.0331	-48.3*	60-140	10.2	30
Heptachlor	0.00467	mg/kg dry	0.0366	ND	12.8*	15-147	33.2*	30
Heptachlor Epoxide	0.00412	mg/kg dry	0.0366	ND	11.3*	49-121	11.5	30
Methoxychlor	0.00354	mg/kg dry	0.0366	ND	9.68*	15-122	8.40	30

* - Outside of QC Limits J - Result is between the MDL and RL for an Analysis reported to an RL

F-III NC - Outside the recovery criteria but Spike Amount <1/4 amount found in Source Sample

METHOD BLANK SUMMARY

Batch ID: **BAE1181**

Lab Number	Sample Id	Extraction Date	Analysis Date
23E1424-01	SW-1	06/05/2023	06/07/2023 00:56
23E1424-03	SW-2	06/05/2023	06/08/2023 20:12
23E1424-05	SW-3	06/05/2023	06/08/2023 20:35
23E1424-07	SW-4	06/05/2023	06/08/2023 20:57
23E1424-09	SW-5	06/05/2023	06/08/2023 21:19
23E1424-11	SW-6	06/05/2023	06/08/2023 21:41
23E1424-13	SW-7	06/05/2023	06/08/2023 22:03
BAE1181-BLK2	BLK2	06/05/2023	06/09/2023 18:58
BAE1181-BS2	BS2	06/05/2023	06/09/2023 19:21

Lab Number	Sample Id	Extraction Date	Analysis Date
BAE1181-MS1	MS1	06/28/2023	06/30/2023 01:07
BAE1181-MSD1	MSD1	06/28/2023	06/30/2023 01:29

Batch ID: **BAF0218**

Lab Number	Sample Id	Extraction Date	Analysis Date
BAF0218-BLK1	BLK1	06/06/2023	06/08/2023 19:28
BAF0218-BS1	BS1	06/06/2023	06/08/2023 19:50
BAF0218-MS1	MS1	06/06/2023	06/10/2023 21:09
BAF0218-MSD1	MSD1	06/06/2023	06/10/2023 21:27
23E1424-02	SED-1	06/06/2023	06/08/2023 22:48
23E1424-04	SED-2	06/06/2023	06/08/2023 23:06
23E1424-06	SED-3	06/06/2023	06/08/2023 23:24
23E1424-08	SED-4	06/06/2023	06/08/2023 23:42
23E1424-10	SED-5	06/06/2023	06/09/2023 00:01
23E1424-12	SED-6	06/06/2023	06/09/2023 00:19
23E1424-14	SED-7	06/06/2023	06/09/2023 00:37

Batch ID: **BAF0463**

Lab Number	Sample Id	Extraction Date	Analysis Date
BAF0463-BLK1	BLK1	06/13/2023	06/13/2023 17:58
BAF0463-BS1	BS1	06/13/2023	06/13/2023 18:20
BAF0463-MS1	MS1	06/13/2023	06/15/2023 00:27
BAF0463-MSD1	MSD1	06/13/2023	06/15/2023 00:49
23E1424-16	SED-1A	06/13/2023	06/13/2023 21:39
23E1424-17	SED-4A	06/13/2023	06/13/2023 22:01
23E1424-18	SED-6A	06/13/2023	06/13/2023 22:23

SURROGATE RT DRIFT REPORT

Analysis Class: PESTICIDES

Sequence :

		TCMX			DCB			TCMX[2C]			DCB[2C]		
Lab Number	File ID	RT	Ref RT	Drift	RT	Ref RT	Drift	RT	Ref RT	Drift	RT	Ref RT	Drift
BAF0463-MS1	9T01161.D	3.77			13.21			4.19			16.33		
BAF0463-MSD1	9T01162.D	3.77			13.21			4.19			16.33		

Sequence : SAF0127

		TCMX			DCB			TCMX[2C]			DCB[2C]		
Lab Number	File ID	RT	Ref RT	Drift	RT	Ref RT	Drift	RT	Ref RT	Drift	RT	Ref RT	Drift
23E1424-01	9T00995.D	3.77	3.77	0.00	13.22	13.22	0.00	4.2	4.2	0.00	16.35	16.35	0.00

Sequence : SAF0176

		TCMX			DCB			TCMX[2C]			DCB[2C]		
Lab Number	File ID	RT	Ref RT	Drift	RT	Ref RT	Drift	RT	Ref RT	Drift	RT	Ref RT	Drift
BAF0218-BLK1	9T01026.D	3.83	3.77	0.06	13.27	13.22	0.05	4.24	4.2	0.04	16.36	16.35	0.01
BAF0218-BLK1	9T01026.D	3.83	3.77	0.06	13.27	13.22	0.05	4.24	4.2	0.04	16.36	16.35	0.01
BAF0218-BS1	9T01027.D	3.77	3.77	0.00	13.23	13.22	0.01	4.2	4.2	0.00	16.35	16.35	0.00
23E1424-03	9T01028.D	3.77	3.77	0.00	13.22	13.22	0.00	4.2	4.2	0.00	16.35	16.35	0.00
23E1424-05	9T01029.D	3.77	3.77	0.00	13.22	13.22	0.00	4.2	4.2	0.00	16.35	16.35	0.00
23E1424-07	9T01030.D	3.77	3.77	0.00	13.22	13.22	0.00	4.2	4.2	0.00	16.34	16.35	-0.01
23E1424-09	9T01031.D	3.77	3.77	0.00	13.22	13.22	0.00	4.2	4.2	0.00	16.35	16.35	0.00
23E1424-11	9T01032.D	3.77	3.77	0.00	13.22	13.22	0.00	4.2	4.2	0.00	16.35	16.35	0.00
23E1424-13	9T01034.D	3.77	3.77	0.00	13.22	13.22	0.00	4.2	4.2	0.00	16.35	16.35	0.00

Surrogate		Limit
TCMX	Tetrachloro-m-xylene	0.10
DCB	Decachlorobiphenyl	0.10
TCMX[2C]	Tetrachloro-m-xylene [2C]	0.10
DCB[2C]	Decachlorobiphenyl [2C]	0.10

DISS = Dissolved Analysis

F-V

SURROGATE RT DRIFT REPORT

Analysis Class: PESTICIDES

Sequence : SAF0179

		TCMX			DCB			TCMX[2C]			DCB[2C]		
Lab Number	File ID	RT	Ref RT	Drift	RT	Ref RT	Drift	RT	Ref RT	Drift	RT	Ref RT	Drift
23E1424-02	7T33840.D	3.73	3.73	0.00	13.44	13.43	0.01	4.47	4.47	0.00	15.48	15.48	0.00
23E1424-02	7T33840.D	3.73	3.73	0.00	13.44	13.43	0.01	4.47	4.47	0.00	15.48	15.48	0.00
23E1424-04	7T33841.D	3.73	3.73	0.00	13.44	13.43	0.01	4.47	4.47	0.00	15.48	15.48	0.00
23E1424-04	7T33841.D	3.73	3.73	0.00	13.44	13.43	0.01	4.47	4.47	0.00	15.48	15.48	0.00
23E1424-06	7T33842.D	3.73	3.73	0.00	13.44	13.43	0.01	4.47	4.47	0.00	15.48	15.48	0.00
23E1424-06	7T33842.D	3.73	3.73	0.00	13.44	13.43	0.01	4.47	4.47	0.00	15.48	15.48	0.00
23E1424-08	7T33843.D	3.73	3.73	0.00	13.43	13.43	0.00	4.47	4.47	0.00	15.48	15.48	0.00
23E1424-08	7T33843.D	3.73	3.73	0.00	13.43	13.43	0.00	4.47	4.47	0.00	15.48	15.48	0.00
23E1424-10	7T33844.D	3.73	3.73	0.00	13.44	13.43	0.01	4.47	4.47	0.00	15.47	15.48	-0.01
23E1424-10	7T33844.D	3.73	3.73	0.00	13.44	13.43	0.01	4.47	4.47	0.00	15.47	15.48	-0.01
23E1424-12	7T33845.D	3.73	3.73	0.00	13.44	13.43	0.01	4.47	4.47	0.00	15.48	15.48	0.00
23E1424-12	7T33845.D	3.73	3.73	0.00	13.44	13.43	0.01	4.47	4.47	0.00	15.48	15.48	0.00
23E1424-14	7T33846.D	3.73	3.73	0.00	13.44	13.43	0.01	4.47	4.47	0.00	15.48	15.48	0.00
23E1424-14	7T33846.D	3.73	3.73	0.00	13.44	13.43	0.01	4.47	4.47	0.00	15.48	15.48	0.00

Sequence : SAF0191

		TCMX			DCB			TCMX[2C]			DCB[2C]		
Lab Number	File ID	RT	Ref RT	Drift	RT	Ref RT	Drift	RT	Ref RT	Drift	RT	Ref RT	Drift
BAE1181-BLK2	9T01051.D	3.77	3.77	0.00	13.22	13.22	0.00	4.2	4.2	0.00	16.35	16.35	0.00
BAE1181-BS2	9T01052.D	3.77	3.77	0.00	13.22	13.22	0.00	4.2	4.2	0.00	16.35	16.35	0.00

Sequence : SAF0209

		TCMX			DCB			TCMX[2C]			DCB[2C]		
Lab Number	File ID	RT	Ref RT	Drift	RT	Ref RT	Drift	RT	Ref RT	Drift	RT	Ref RT	Drift
BAF0218-MS1	7T33893.D	3.73	3.73	0.00	13.43	13.44	-0.01	4.47	4.47	0.00	15.47	15.47	0.00
BAF0218-MSD1	7T33894.D	3.73	3.73	0.00	13.43	13.44	-0.01	4.47	4.47	0.00	15.47	15.47	0.00

Surrogate		Limit
TCMX	Tetrachloro-m-xylene	0.10
DCB	Decachlorobiphenyl	0.10
TCMX[2C]	Tetrachloro-m-xylene [2C]	0.10
DCB[2C]	Decachlorobiphenyl [2C]	0.10

DISS = Dissolved Analysis

F-V

SURROGATE RT DRIFT REPORT

Analysis Class: PESTICIDES

Sequence : SAF0265

		TCMX			DCB			TCMX[2C]			DCB[2C]		
Lab Number	File ID	RT	Ref RT	Drift	RT	Ref RT	Drift	RT	Ref RT	Drift	RT	Ref RT	Drift
BAF0463-BLK1	9T01121.D	3.84	3.78	0.06	13.28	13.22	0.06	4.26	4.21	0.05	16.35	16.34	0.01
BAF0463-BLK1	9T01121.D	3.84	3.78	0.06	13.28	13.22	0.06	4.26	4.21	0.05	16.35	16.34	0.01
BAF0463-BS1	9T01122.D	3.78	3.78	0.00	13.22	13.22	0.00	4.2	4.21	-0.01	16.34	16.34	0.00
23E1424-16	9T01131.D	3.76	3.78	-0.02	13.21	13.22	-0.01	4.2	4.21	-0.01	16.32	16.34	-0.02
23E1424-16	9T01131.D	3.76	3.78	-0.02	13.21	13.22	-0.01	4.2	4.21	-0.01	16.32	16.34	-0.02
23E1424-17	9T01132.D	3.77	3.78	-0.01	13.21	13.22	-0.01	4.2	4.21	-0.01	16.33	16.34	-0.01
23E1424-17	9T01132.D	3.77	3.78	-0.01	13.21	13.22	-0.01	4.2	4.21	-0.01	16.33	16.34	-0.01
23E1424-18	9T01133.D	3.77	3.78	-0.01	13.21	13.22	-0.01	4.19	4.21	-0.02	16.33	16.34	-0.01
23E1424-18	9T01133.D	3.77	3.78	-0.01	13.21	13.22	-0.01	4.19	4.21	-0.02	16.33	16.34	-0.01

Sequence : SAF0602

		TCMX			DCB			TCMX[2C]			DCB[2C]		
Lab Number	File ID	RT	Ref RT	Drift	RT	Ref RT	Drift	RT	Ref RT	Drift	RT	Ref RT	Drift
BAE1181-MS1	9T01353.D	3.74	3.75	-0.01	13.13	13.13	0.00	4.16	4.17	-0.01	16.23	16.24	-0.01
BAE1181-MSD1	9T01354.D	3.74	3.75	-0.01	13.13	13.13	0.00	4.16	4.17	-0.01	16.24	16.24	0.00

Surrogate		Limit
TCMX	Tetrachloro-m-xylene	0.10
DCB	Decachlorobiphenyl	0.10
TCMX[2C]	Tetrachloro-m-xylene [2C]	0.10
DCB[2C]	Decachlorobiphenyl [2C]	0.10

DISS = Dissolved Analysis

F-V

Response Factor Report GCECD-9

Method : G:\HPCHEM\GCECD9\METHODS\80810606.M (Chemstation Integrator)
Title : Pesticides by Method SW-846 8081B
Last Update : Tue Jun 06 16:57:33 2023

Calibration Files
2 =9T00943.D 5 =9T00944.D 10 =9T00945.D
20 =9T00946.D 35 =9T00947.D 50 =9T00948.D

		Compound	2	5	10	20	35	50	Avg		%RSD
1)	I	1-Bromo-2-nitrobenzen	----------			ISTD	----------				
2)	S	TCMX	0.827	0.791	0.860	0.861	0.950	0.898	0.899	0	9.28
3)		alpha-BHC	1.195	1.046	1.292	1.351	1.602	1.543	1.479	0	19.28
4)	M	gamma-BHC (Lindane)	1.120	0.968	1.178	1.222	1.434	1.381	1.331	0	17.52
5)	M	Heptachlor	1.100	0.919	1.072	1.090	1.267	1.208	1.179	0	13.46
6)		beta-BHC	0.560	0.468	0.538	0.525	0.608	0.572	0.566	0	9.74
7)		delta-BHC	0.884	0.802	1.002	1.089	1.346	1.314	1.221	0	24.23
8)	M	Aldrin	1.194	0.969	1.181	1.198	1.391	1.321	1.289	0	14.15
9)		Heptachlor epoxide	1.136	0.931	1.105	1.103	1.202	1.136	1.148	0	10.51
10)		Endosulfan I	0.939	0.838	0.994	1.064	1.082	1.016	1.057	0	13.28
11)		4,4'-DDE	0.851	0.712	0.872	0.882	1.006	0.980	0.982	0	18.32
12)	M	Dieldrin	1.001	0.852	1.005	1.036	1.209	1.156	1.130	0	16.01
13)	M	Endrin	0.899	0.709	0.834	0.814	0.956	0.892	0.892	0	12.07
14)		4,4'-DDD	0.758	0.539	0.660	0.685	0.802	0.777	0.774	0	18.25
15)		Endosulfan II	0.837	0.666	0.797	0.797	0.897	0.819	0.855	0	13.06
16)	M	4,4'-DDT	0.486	0.423	0.458	0.481	0.584	0.579	0.583	0	24.22
17)		Endrin aldehyde	0.848	0.715	0.778	0.773	0.847	0.810	0.823	0	8.78
18)		Endosulfan sulfate	0.684	0.574	0.671	0.688	0.779	0.758	0.744	0	14.35
19)		Methoxychlor	0.232	0.188	0.222	0.210	0.261	0.253	0.250	0	16.80
20)		Mirex	0.894	0.708	0.774	0.736	0.779	0.735	0.769	0	8.43
21)		Endrin ketone	0.931	0.743	0.888	0.874	0.983	0.946	0.945	0	12.14
22)	S	Decachlorobiphenyl		0.887	1.022	0.960	1.042	1.042	1.029	0	9.24
23)	L1	Chlordane (gamma)	1.028	0.866	1.084	1.076	1.188	1.141	1.155	0	15.35
24)	L1	Chlordane (alpha)	1.063	0.892	1.046	1.043	1.160	1.106	1.126	0	13.19
25)	I	1-Bromo-2-nitrobenzen	----------			ISTD	----------				
26)	L2	Toxaphene (1)							0.000	0	-1.00

Signal #2 Calibration Files
2 =9T00943C.D 5 =9T00944.D 10 =9T00945.D
20 =9T00946.D 35 =9T00947.D 50 =9T00948.D

		Compound	2	5	10	20	35	50	Avg		%RSD
1)	I	1-Bromo-2-nitrobenzen	----------			ISTD	----------				
2)	S	TCMX	0.769	0.667	0.720	0.671	0.748	0.759	0.758	0	10.37
3)		alpha-BHC	1.050	0.940	1.168	1.240	1.484	1.454	1.380	0	22.40
4)	M	gamma-BHC (Lindane)	0.964	0.797	1.024	1.057	1.240	1.210	1.164	0	19.83
5)	M	Heptachlor	0.968	0.875	1.038	1.076	1.261	1.230	1.190	0	18.92
6)		beta-BHC	0.346	0.392	0.473	0.490	0.599	0.572	0.529	0	21.72
7)		delta-BHC	0.569	0.579	0.646	0.667	0.821	0.809	0.787	0	24.52
8)	M	Aldrin	1.086	0.896	1.102	1.138	1.328	1.275	1.238	0	17.01
9)		Heptachlor epoxide	1.082	0.833	0.986	0.996	1.152	1.098	1.090	0	13.69
10)		Endosulfan I	0.715	0.891	0.885	0.914	1.032	0.977	0.971	0	15.15
11)		4,4'-DDE	1.015	0.779	0.718	0.788	0.918	0.875	0.902	0	14.46
12)	M	Dieldrin	0.930	0.819	0.873	0.933	1.110	1.067	1.073	0	20.09
13)	M	Endrin	0.752	0.625	0.706	0.683	0.779	0.736	0.757	0	12.56
14)		4,4'-DDD	0.477	0.415	0.476	0.424	0.487	0.487	0.499	0	14.98
15)		Endosulfan II	0.717	0.631	0.700	0.725	0.814	0.814	0.813	0	17.62
16)	M	4,4'-DDT	0.233	0.165	0.201	0.199	0.239	0.266	0.271	0	34.56
17)		Endrin aldehyde	0.755	0.577	0.623	0.586	0.649	0.677	0.705	0	16.67
18)		Endosulfan sulfate	0.493	0.381	0.449	0.446	0.524	0.505	0.515	0	18.28
19)		Methoxychlor	0.105	0.084	0.101	0.100	0.123	0.111	0.113	0	17.15
20)		Mirex	0.607	0.454	0.501	0.460	0.482	0.445	0.481	0	11.50
21)		Endrin ketone	0.923	0.705	0.835	0.834	0.979	0.944	0.934	0	14.72
22)	S	Decachlorobiphenyl		0.791	0.876	0.775	0.868	0.818	0.844	0	7.75
23)	L1	Chlordane (gamma)	0.855	0.801	0.845	0.866	1.035	0.990	0.978	0	15.83
24)	L1	Chlordane (alpha)	0.987	0.756	0.781	0.862	0.992	0.947	0.952	0	14.90
25)	I	1-Bromo-2-nitrobenzen	----------			ISTD	----------				

(#) = Out of Range ### Number of calibration levels exceeded format ###

Response Factor Report GCECD-9

Method   : G:\HPCHEM\GCECD9\METHODS\80810606.M (Chemstation Integrator)
Title   : Pesticides by Method SW-846 8081B
Last Update : Tue Jun 06 16:57:33 2023

Calibration Files
2 =9T00943C.D 5 =9T00944.D 10 =9T00945.D
20 =9T00946.D 35 =9T00947.D 50 =9T00948.D

	Compound	2	5	10	20	35	50	Avg	%RSD
26) L2	Toxaphene (1)							0.000 0	-1.00

(#) = Out of Range ### Number of calibration levels exceeded format ###

Compound List Report GCECD-9

Method : G:\HPCHEM\GCECD9\METHODS\80810606.M (Chemstation Integrator)
Title : Pesticides by Method SW-846 8081B
Last Update : Tue Jun 06 16:57:33 2023
Response via : Initial Calibration
Total Cpnds : 53

PK#	Type	Compound Name	Exp_RT	Rel_RT	Cal	A/H	ID
1	I	1-Bromo-2-nitrobenzene (A)	3.06	1.000	A	A	B
2	S	TCMX	3.77	1.233	A	A	B
3		alpha-BHC	4.36	1.423	QO	A	B
4	M	gamma-BHC (Lindane)	4.71	1.539	A	A	B
5	M	Heptachlor	5.28	1.725	A	A	B
6		beta-BHC	4.80	1.570	A	A	B
7		delta-BHC	5.03	1.642	Q	A	B
8	M	Aldrin	5.67	1.852	A	A	B
9		Heptachlor epoxide	6.48	2.118	A	A	B
10		Endosulfan I	7.06	2.307	A	A	B
11		4,4'-DDE	6.94	2.267	A	A	B
12	M	Dieldrin	7.43	2.427	A	A	B
13	M	Endrin	7.82	2.556	A	A	B
14		4,4'-DDD	7.91	2.585	A	A	B
15		Endosulfan II	8.23	2.688	A	A	B
16	M	4,4'-DDT	8.43	2.754	A	A	B
17		Endrin aldehyde	9.04	2.953	A	A	B
18		Endosulfan sulfate	9.97	3.257	A	A	B
19		Methoxychlor	9.40	3.072	A	A	B
20		Mirex	9.71	3.174	A	A	B
21		Endrin ketone	10.61	3.466	A	A	B
22	S	Decachlorobiphenyl	13.23	4.321	A	A	B
23	L1	Chlordane (gamma)	6.66	2.175	A	A	B
24	L1	Chlordane (alpha)	6.85	2.238	A	A	B
25	I	1-Bromo-2-nitrobenzene (B)	3.06	1.000	A	A	B
26	L2	Toxaphene (1)	12.00	3.921	A	A	R
27		Signal #2	35.00	11.436	A	A	B
28	I	1-Bromo-2-nitrobenzene (A) #2	3.25	1.000	A	A	B
29	S	TCMX #2	4.21	1.293	A	A	B
30		alpha-BHC #2	4.94	1.519	Q	A	B
31	M	gamma-BHC (Lindane) #2	5.41	1.663	A	A	B
32	M	Heptachlor #2	6.05	1.859	A	A	B
33		beta-BHC #2	5.50	1.690	A	A	B
34		delta-BHC #2	5.92	1.821	Q	A	B
35	M	Aldrin #2	6.54	2.010	A	A	B
36		Heptachlor epoxide #2	7.41	2.279	A	A	B
37		Endosulfan I #2	8.13	2.500	A	A	B
38		4,4'-DDE #2	8.28	2.547	A	A	B
39	M	Dieldrin #2	8.66	2.663	A	A	B
40	M	Endrin #2	9.30	2.860	A	A	B
41		4,4'-DDD #2	9.50	2.920	A	A	B
42		Endosulfan II #2	9.76	3.001	A	A	B
43	M	4,4'-DDT #2	10.22	3.141	A	A	B
44		Endrin aldehyde #2	10.54	3.239	A	A	B
45		Endosulfan sulfate #2	11.22	3.450	A	A	B
46		Methoxychlor #2	11.95	3.673	A	A	B
47		Mirex #2	12.57	3.863	A	A	B
48		Endrin ketone #2	12.65	3.889	A	A	B
49	S	Decachlorobiphenyl #2	16.37	5.031	A	A	B
50	L1	Chlordane (gamma) #2	7.74	2.380	A	A	B
51	L1	Chlordane (alpha) #2	8.00	2.461	A	A	B
52	I	1-Bromo-2-nitrobenzene (B) #2	3.25	1.000	A	A	B
53	L2	Toxaphene (1) #2	11.95	3.673	A	A	R

Cal A = Average L = Linear LO = Linear w/origin Q = Quad QO = Quad w/origin
A/H = Area or Height
ID R = R.T. B = R.T. & Q Q = Qvalue L = Largest A = All

80810606.M Tue Jun 06 17:44:55 2023 SS

Response Factor Report HP G1530A

Method : G:\HPCHEM\GCECD7\METHODS\80810607.M (Chemstation Integrator)
Title : Pesticides by Method SW-846 8081B
Last Update : Thu Jun 08 17:43:15 2023

Calibration Files
2 =7T33140.D 5 =7T33141.D 10 =7T33142.D
20 =7T33143.D 35 =7T33144.D 50 =7T33797.D

		Compound	2	5	10	20	35	50	Avg		%RSD
1)	I	1-Bromo-2-nitrobenzen	ISTD								
2)	S	TCMX	0.681	0.844	0.890	0.849	0.965	0.987	0.873	0	9.72
3)		alpha-BHC	1.071	1.194	1.373	1.318	1.647	1.648	1.440	0	13.63
4)	M	gamma-BHC (Lindane)	1.107	1.165	1.334	1.253	1.533	1.528	1.355	0	10.60
5)	M	Heptachlor	1.184	1.270	1.408	1.294	1.548	1.518	1.354	0	8.94
6)		beta-BHC	0.533	0.552	0.607	0.556	0.653	0.634	0.581	0	6.82
7)		delta-BHC	1.085	1.134	1.299	1.240	1.586	1.596	1.384	0	13.28
8)	M	Aldrin	1.193	1.148	1.285	1.200	1.461	1.450	1.298	0	8.38
9)		Heptachlor epoxide	1.078	1.148	1.263	1.160	1.383	1.354	1.206	0	8.53
10)		Endosulfan I	0.860	1.016	1.128	1.038	1.233	1.208	1.071	0	10.34
11)		4,4'-DDE	1.013	1.049	1.188	1.107	1.344	1.337	1.180	0	9.41
12)	M	Dieldrin	0.960	1.068	1.200	1.118	1.337	1.345	1.185	0	10.01
13)	M	Endrin	0.966	1.020	1.126	1.043	1.255	1.242	1.084	0	10.25
14)		4,4'-DDD	0.639	0.733	0.794	0.758	0.930	0.935	0.828	0	11.54
15)		Endosulfan II	0.664	0.866	0.979	0.929	1.122	1.110	0.954	0	13.64
16)	M	4,4'-DDT	0.541	0.672	0.772	0.733	0.915	0.924	0.800	0	15.22
17)		Endrin aldehyde	0.538	0.584	0.666	0.613	0.734	0.716	0.657	0	12.33
18)		Endosulfan sulfate	0.457	0.559	0.626	0.575	0.682	0.668	0.609	0	11.57
19)		Methoxychlor	0.254	0.292	0.326	0.304	0.365	0.361	0.332	0	12.42
20)		Mirex	0.572	0.530	0.602	0.551	0.614	0.558	0.576	0	15.83
21)		Endrin ketone	0.669	0.665	0.735	0.679	0.807	0.788	0.745	0	12.79
22)	S	Decachlorobiphenyl		0.760	0.720	0.668	0.737	0.677	0.676	0	12.42
23)	L1	Chlordane (gamma)	1.045	1.119	1.247	1.157	1.385	1.381	1.234	0	8.73
24)	L1	Chlordane (alpha)	1.039	1.141	1.271	1.165	1.389	1.366	1.222	0	8.59
25)	I	1-Bromo-2-nitrobenzen	ISTD								
26)	L2	Toxaphene (1)							0.532	0	0.00

Signal #2 Calibration Files
2 =7T33792.D 5 =7T33793.D 10 =7T33794.D
20 =7T33795.D 35 =7T33796.D 50 =7T33828.D

		Compound	2	5	10	20	35	50	Avg		%RSD
1)	I	1-Bromo-2-nitrobenzen	ISTD								
2)	S	TCMX	0.722	0.809	0.862	0.790	0.918	0.909	0.830	0	7.28
3)		alpha-BHC	0.994	1.144	1.284	1.250	1.533	1.574	1.372	0	14.19
4)	M	gamma-BHC (Lindane)	0.964	1.105	1.225	1.175	1.429	1.455	1.273	0	12.35
5)	M	Heptachlor	1.092	1.194	1.284	1.193	1.406	1.412	1.261	0	7.94
6)		beta-BHC	0.476	0.541	0.580	0.531	0.621	0.618	0.554	0	7.93
7)		delta-BHC	0.982	1.103	1.218	1.170	1.425	1.459	1.280	0	12.48
8)	M	Aldrin	0.965	1.083	1.191	1.128	1.346	1.365	1.198	0	10.37
9)		Heptachlor epoxide	0.949	1.103	1.179	1.089	1.265	1.266	1.122	0	9.34
10)		Endosulfan I	0.625	0.797	0.917	0.879	1.044	1.051	0.901	0	14.08
11)		4,4'-DDE	0.773	0.857	0.835	0.808	0.959	0.972	0.879	0	7.35
12)	M	Dieldrin	0.793	0.812	0.873	0.823	0.990	1.002	0.905	0	8.39
13)	M	Endrin	0.714	0.649	0.691	0.674	0.803	0.816	0.730	0	8.20
14)		4,4'-DDD	0.464	0.498	0.533	0.627	0.588	0.767	0.582	0	15.80
15)		Endosulfan II	0.639	0.565	0.623	0.668	0.614	0.703	0.638	0	9.24
16)	M	4,4'-DDT	0.371	0.439	0.566	0.479	0.600	0.646	0.557	0	16.93
17)		Endrin aldehyde	0.411	0.463	0.510	0.464	0.544	0.574	0.516	0	12.06
18)		Endosulfan sulfate	0.466	0.516	0.553	0.557	0.631	0.669	0.580	0	11.40
19)		Methoxychlor	0.207	0.265	0.257	0.244	0.306	0.307	0.279	0	12.60
20)		Mirex	0.487	0.416	0.439	0.421	0.469	0.486	0.456	0	11.76
21)		Endrin ketone	0.552	0.605	0.655	0.618	0.728	0.734	0.653	0	9.05
22)	S	Decachlorobiphenyl		0.600	0.627	0.566	0.642	0.627	0.609	0	12.28
23)	L1	Chlordane (gamma)	1.535	1.380	1.291	1.124	1.285	1.304	1.236	0	13.06
24)	L1	Chlordane (alpha)	0.659	0.866	1.007	0.965	1.145	1.159	0.992	0	15.32
25)	I	1-Bromo-2-nitrobenzen	ISTD								

(#) = Out of Range ### Number of calibration levels exceeded format ###

Response Factor Report HP G1530A

Method : G:\HPCHEM\GCECD7\METHODS\80810607.M (Chemstation Integrator)
Title : Pesticides by Method SW-846 8081B
Last Update : Thu Jun 08 17:43:15 2023

Calibration Files
2 =7T33792.D 5 =7T33793.D 10 =7T33794.D
20 =7T33795.D 35 =7T33796.D 50 =7T33828.D

	Compound	2	5	10	20	35	50	Avg	%RSD
26) L2	Toxaphene (1)							0.436 0	0.00

(#) = Out of Range ### Number of calibration levels exceeded format ###

Compound List Report HP G1530A

Method : G:\HPCHEM\GCECD7\METHODS\80810607.M (Chemstation Integrator)
Title : Pesticides by Method SW-846 8081B
Last Update : Tue Jun 20 17:03:26 2023
Response via : Initial Calibration
Total Cpnds : 53

PK#	Type	Compound Name	Exp_RT	Rel_RT	Cal	A/H	ID
1	I	1-Bromo-2-nitrobenzene (A)	2.82	1.000	A	A	B
2	S	TCMX	3.74	1.323	A	A	B
3		alpha-BHC	4.62	1.637	A	A	B
4	M	gamma-BHC (Lindane)	5.20	1.843	A	A	B
5	M	Heptachlor	6.10	2.162	A	A	B
6		beta-BHC	5.37	1.901	A	A	B
7		delta-BHC	5.70	2.020	A	A	B
8	M	Aldrin	6.68	2.365	A	A	B
9		Heptachlor epoxide	7.83	2.774	A	A	B
10		Endosulfan I	8.55	3.029	A	A	B
11		4,4'-DDE	8.49	3.007	A	A	B
12	M	Dieldrin	8.99	3.184	A	A	B
13	M	Endrin	9.40	3.329	A	A	B
14		4,4'-DDD	9.56	3.387	A	A	B
15		Endosulfan II	9.80	3.470	A	A	B
16	M	4,4'-DDT	10.05	3.560	A	A	B
17		Endrin aldehyde	10.53	3.731	A	A	B
18		Endosulfan sulfate	11.08	3.925	A	A	B
19		Methoxychlor	10.90	3.862	A	A	B
20		Mirex	11.28	3.994	A	A	B
21		Endrin ketone	11.75	4.160	A	A	B
22	S	Decachlorobiphenyl	13.43	4.758	A	A	B
23	L1	Chlordane (gamma)	8.06	2.856	A	A	B
24	L1	Chlordane (alpha)	8.31	2.944	A	A	B
25	I	1-Bromo-2-nitrobenzene (B)	2.82	1.000	A	A	B
26	L2	Toxaphene (1)	9.84	3.487	A	A	R
27		Signal #2	35.00	12.396	A	A	B
28	I	1-Bromo-2-nitrobenzene (A) #2	3.07	1.000	A	A	B
29	S	TCMX #2	4.47	1.453	A	A	B
30		alpha-BHC #2	5.68	1.849	A	A	B
31	M	gamma-BHC (Lindane) #2	6.42	2.089	A	A	B
32	M	Heptachlor #2	7.33	2.386	A	A	B
33		beta-BHC #2	6.59	2.143	A	A	B
34		delta-BHC #2	7.19	2.339	A	A	B
35	M	Aldrin #2	7.97	2.595	A	A	B
36		Heptachlor epoxide #2	9.06	2.950	A	A	B
37		Endosulfan I #2	9.78	3.185	A	A	B
38		4,4'-DDE #2	9.99	3.251	A	A	B
39	M	Dieldrin #2	10.28	3.344	A	A	B
40	M	Endrin #2	10.81	3.519	A	A	B
41		4,4'-DDD #2	11.00	3.580	A	A	B
42		Endosulfan II #2	11.18	3.638	A	A	B
43	M	4,4'-DDT #2	11.54	3.756	A	A	B
44		Endrin aldehyde #2	11.75	3.825	A	A	B
45		Endosulfan sulfate #2	12.23	3.979	A	A	B
46		Methoxychlor #2	12.68	4.127	A	A	B
47		Mirex #2	13.09	4.262	A	A	B
48		Endrin ketone #2	13.12	4.270	A	A	B
49	S	Decachlorobiphenyl #2	15.46	5.033	A	A	B
50	L1	Chlordane (gamma) #2	9.41	3.064	A	A	B
51	L1	Chlordane (alpha) #2	9.68	3.151	A	A	B
52	I	1-Bromo-2-nitrobenzene (B) #2	3.07	1.000	A	A	B
53	L2	Toxaphene (1) #2	11.39	3.708	A	A	R

Cal A = Average L = Linear LO = Linear w/origin Q = Quad QO = Quad w/origin
A/H = Area or Height
ID R = R.T. B = R.T. & Q Q = Qvalue L = Largest A = All

80810607.M Thu Jul 13 12:49:24 2023 SS

Response Factor Report HP G1530A

Method : G:\HPCHEM\GCECD9\METHODS\80810616.M (Chemstation Integrator)
Title : Pesticides by Method SW-846 8081B
Last Update : Fri Jun 16 17:01:33 2023

Calibration Files
2 =9T01167.D 5 =9T01168.D 10 =9T01169.D
20 =9T01170.D 35 =9T01171.D 50 =9T01172.D

		Compound	2	5	10	20	35	50	Avg		%RSD
1)	I	1-Bromo-2-nitrobenzen	ISTD								
2)	S	TCMX	0.849	0.858	0.957	0.859	1.009	0.909	0.924	0	6.76
3)		alpha-BHC	1.180	1.224	1.478	1.472	1.813	1.630	1.586	0	15.45
4)	M	gamma-BHC (Lindane)	1.113	1.156	1.376	1.359	1.664	1.486	1.455	0	14.09
5)	M	Heptachlor	1.193	1.195	1.383	1.331	1.597	1.419	1.378	0	9.61
6)		beta-BHC	0.574	0.554	0.591	0.541	0.608	0.568	0.569	0	4.16
7)		delta-BHC	1.012	1.043	1.275	1.269	1.555	1.482	1.388	0	16.61
8)	M	Aldrin	1.114	1.111	1.291	1.269	1.519	1.360	1.329	0	10.74
9)		Heptachlor epoxide	1.100	1.088	1.196	1.155	1.324	1.182	1.180	0	6.48
10)		Endosulfan I	0.993	0.997	1.112	1.056	1.228	1.086	1.078	0	6.71
11)		4,4'-DDE	0.725	0.722	0.834	0.836	1.045	1.043	0.957	0	17.38
12)	M	Dieldrin	1.011	1.001	1.144	1.115	1.334	1.197	1.178	0	9.91
13)	M	Endrin	0.950	0.909	1.041	1.002	1.198	1.047	1.053	0	8.79
14)		4,4'-DDD	0.679	0.669	0.780	0.733	0.864	0.767	0.826	0	14.59
15)		Endosulfan II	0.926	0.916	0.999	0.946	1.118	0.945	0.993	0	6.90
16)	M	4,4'-DDT	0.760	0.723	0.852	0.788	0.958	0.896	0.915	0	15.35
17)		Endrin aldehyde	0.903	0.848	0.916	0.842	0.954	0.837	0.874	0	5.13
18)		Endosulfan sulfate	0.984	0.939	1.030	0.953	1.106	0.966	1.001	0	5.59
19)		Methoxychlor	0.512	0.496	0.528	0.497	0.558	0.461	0.497	0	6.37
20)		Mirex	1.014	0.938	0.980	0.872	0.947	0.831	0.895	0	7.95
21)		Endrin ketone	1.060	1.050	1.160	1.101	1.271	1.126	1.136	0	6.29
22)	S	Decachlorobiphenyl		1.112	1.152	1.036	1.128	0.989	1.041	0	7.21
23)	L1	Chlordane (gamma)	1.078	1.097	1.218	1.158	1.374	1.237	1.250	0	9.49
24)	L1	Chlordane (alpha)	1.094	1.067	1.189	1.134	1.336	1.197	1.215	0	8.61
25)	I	1-Bromo-2-nitrobenzen	ISTD								
26)	L2	Toxaphene (1)							0.000	0	-1.00

Signal #2 Calibration Files
2 =9T01167.D 5 =9T01168.D 10 =9T01169.D
20 =9T01170.D 35 =9T01171.D 50 =9T01172.D

		Compound	2	5	10	20	35	50	Avg		%RSD
1)	I	1-Bromo-2-nitrobenzen	ISTD								
2)	S	TCMX	0.710	0.734	0.858	0.769	0.861	0.833	0.816	0	7.48
3)		alpha-BHC	1.017	1.076	1.343	1.360	1.706	1.585	1.498	0	19.16
4)	M	gamma-BHC (Lindane)	0.994	1.026	1.259	1.259	1.540	1.418	1.368	0	16.61
5)	M	Heptachlor	1.141	1.141	1.337	1.318	1.532	1.465	1.364	0	10.70
6)		beta-BHC	0.485	0.456	0.500	0.538	0.523	0.529	0.505	0	6.55
7)		delta-BHC	0.818	0.777	1.010	0.998	1.258	1.204	1.154	0	21.04
8)	M	Aldrin	1.068	1.035	1.220	1.201	1.462	1.351	1.308	0	13.12
9)		Heptachlor epoxide	1.001	0.975	1.117	1.081	1.286	1.183	1.159	0	10.03
10)		Endosulfan I	0.880	0.856	0.965	0.914	1.076	1.062	0.999	0	9.38
11)		4,4'-DDE	0.755	0.756	0.835	0.787	0.898	0.988	0.919	0	16.84
12)	M	Dieldrin	0.931	0.919	1.059	1.056	1.287	1.180	1.164	0	14.29
13)	M	Endrin	0.854	0.825	0.962	0.920	1.113	0.997	1.007	0	11.90
14)		4,4'-DDD	0.561	0.549	0.618	0.570	0.701	0.714	0.685	0	16.95
15)		Endosulfan II	0.863	0.837	0.955	0.859	1.068	0.889	0.959	0	10.71
16)	M	4,4'-DDT	0.660	0.644	0.733	0.706	0.852	0.809	0.817	0	17.05
17)		Endrin aldehyde	0.856	0.788	0.864	0.777	0.870	0.818	0.831	0	5.08
18)		Endosulfan sulfate	0.862	0.811	0.894	0.841	0.976	0.885	0.912	0	7.72
19)		Methoxychlor	0.450	0.445	0.462	0.429	0.489	0.431	0.454	0	4.75
20)		Mirex	0.923	0.837	0.866	0.772	0.844	0.738	0.801	0	8.08
21)		Endrin ketone	1.041	0.968	1.081	1.025	1.201	1.059	1.102	0	7.75
22)	S	Decachlorobiphenyl		1.132	1.232	1.113	1.215	1.102	1.114	0	6.64
23)	L1	Chlordane (gamma)	0.985	0.963	1.098	1.063	1.288	1.158	1.182	0	13.20
24)	L1	Chlordane (alpha)	1.019	0.988	1.104	1.057	1.265	1.159	1.167	0	10.79
25)	I	1-Bromo-2-nitrobenzen	ISTD								

(#) = Out of Range ### Number of calibration levels exceeded format ###

Response Factor Report HP G1530A

Method : G:\HPCHEM\GCECD9\METHODS\80810616.M (Chemstation Integrator)
Title : Pesticides by Method SW-846 8081B
Last Update : Fri Jun 16 17:01:33 2023

Calibration Files
2 =9T01167.D 5 =9T01168.D 10 =9T01169.D
20 =9T01170.D 35 =9T01171.D 50 =9T01172.D

Compound	2	5	10	20	35	50	Avg	%RSD
26) L2 Toxaphene (1)							0.000 0	-1.00

(#) = Out of Range ### Number of calibration levels exceeded format ###

Compound List Report HP G1530A

Method : G:\HPCHEM\GCECD9\METHODS\80810616.M (Chemstation Integrator)
Title : Pesticides by Method SW-846 8081B
Last Update : Fri Jun 16 17:01:33 2023
Response via : Initial Calibration
Total Cpnds : 53

PK#	Type	Compound Name	Exp_RT	Rel_RT	Cal	A/H	ID
1	I	1-Bromo-2-nitrobenzene (A)	3.03	1.000	A	A	B
2	S	TCMX	3.74	1.234	A	A	B
3		alpha-BHC	4.32	1.425	QO	A	B
4	M	gamma-BHC (Lindane)	4.67	1.542	A	A	B
5	M	Heptachlor	5.24	1.729	A	A	B
6		beta-BHC	4.76	1.572	A	A	B
7		delta-BHC	4.98	1.645	Q	A	B
8	M	Aldrin	5.62	1.856	A	A	B
9		Heptachlor epoxide	6.44	2.124	A	A	B
10		Endosulfan I	7.01	2.313	A	A	B
11		4,4'-DDE	6.89	2.274	A	A	B
12	M	Dieldrin	7.37	2.434	A	A	B
13	M	Endrin	7.76	2.562	A	A	B
14		4,4'-DDD	7.85	2.591	A	A	B
15		Endosulfan II	8.16	2.694	A	A	B
16	M	4,4'-DDT	8.36	2.760	A	A	B
17		Endrin aldehyde	8.97	2.960	A	A	B
18		Endosulfan sulfate	9.89	3.265	A	A	B
19		Methoxychlor	9.33	3.080	A	A	B
20		Mirex	9.64	3.181	A	A	B
21		Endrin ketone	10.53	3.474	A	A	B
22	S	Decachlorobiphenyl	13.13	4.335	A	A	B
23	L1	Chlordane (gamma)	6.61	2.182	A	A	B
24	L1	Chlordane (alpha)	6.80	2.244	A	A	B
25	I	1-Bromo-2-nitrobenzene (B)	3.03	1.000	A	A	B
26	L2	Toxaphene (1)	12.00	3.961	A	A	R
27		Signal #2	35.00	11.553	A	A	B
28	I	1-Bromo-2-nitrobenzene (A) #2	3.22	1.000	A	A	B
29	S	TCMX #2	4.17	1.295	A	A	B
30		alpha-BHC #2	4.90	1.521	Q	A	B
31	M	gamma-BHC (Lindane) #2	5.37	1.667	A	A	B
32	M	Heptachlor #2	6.00	1.864	A	A	B
33		beta-BHC #2	5.45	1.694	A	A	B
34		delta-BHC #2	5.88	1.826	Q	A	B
35	M	Aldrin #2	6.49	2.015	A	A	B
36		Heptachlor epoxide #2	7.36	2.285	A	A	B
37		Endosulfan I #2	8.07	2.505	A	A	B
38		4,4'-DDE #2	8.22	2.553	A	A	B
39	M	Dieldrin #2	8.59	2.668	A	A	B
40	M	Endrin #2	9.22	2.865	A	A	B
41		4,4'-DDD #2	9.42	2.927	A	A	B
42		Endosulfan II #2	9.68	3.006	A	A	B
43	M	4,4'-DDT #2	10.13	3.148	A	A	B
44		Endrin aldehyde #2	10.45	3.246	A	A	B
45		Endosulfan sulfate #2	11.13	3.457	A	A	B
46		Methoxychlor #2	11.86	3.683	A	A	B
47		Mirex #2	12.46	3.871	A	A	B
48		Endrin ketone #2	12.55	3.899	A	A	B
49	S	Decachlorobiphenyl #2	16.25	5.049	A	A	B
50	L1	Chlordane (gamma) #2	7.68	2.384	A	A	B
51	L1	Chlordane (alpha) #2	7.94	2.465	A	A	B
52	I	1-Bromo-2-nitrobenzene (B) #2	3.22	1.000	A	A	B
53	L2	Toxaphene (1) #2	11.92	3.702	A	A	R

Cal A = Average L = Linear LO = Linear w/origin Q = Quad QO = Quad w/origin
A/H = Area or Height
ID R = R.T. B = R.T. & Q Q = Qvalue L = Largest A = All

80810616.M Fri Jun 16 17:46:54 2023 SS

CALIBRATION VERIFICATION SUMMARY

Client: **Dynamic Earth LLC**
Work Order: **23E1424**

Lab Sample ID (50 pp):	SAF0179-CCV1(1)	Init. Calib. Date(s):	06/07/2023
File ID:	7T33828.D	Date Analyzed:	06/08/2023 18:25
Pesticides	Column 1	Matrix:	Soil

Individual Mix Compound		RT WINDOW		$\overline{CF}$	CF	%D
		FROM	TO			
Aldrin	06.68	06.58	06.78	1	1	2.60
alpha-BHC	04.62	04.52	04.72	2	2	0.90
alpha-Chlordane (cis)	08.31	08.21	08.41	1	1	11.40
beta-BHC	05.36	05.26	05.46	1	1	1.10
delta-BHC	05.70	05.60	05.80	2	2	2.30
Dieldrin	08.99	08.89	09.09	1	1	17.10
Endosulfan I	08.55	08.45	08.65	1	1	13.80
Endosulfan II	09.80	09.70	09.90	1	1	25.60 *
Endosulfan sulfate	11.09	10.99	11.19	1	1	29.50 *
Endrin	09.40	09.30	09.50	1	1	12.10
Endrin aldehyde	10.54	10.44	10.64	1	1	25.30 *
Endrin ketone	11.75	11.65	11.85	1	1	29.20 *
gamma-Chlordane	08.06	07.96	08.16	1	1	10.00
gamma-BHC (Lindane)	05.20	05.10	05.30	2	2	1.70
4,4'-DDT	10.05	09.95	10.15	1	1	15.50
4,4'-DDE	08.49	08.39	08.59	1	1	9.10
4,4'-DDD	09.56	09.46	09.66	1	1	24.60 *
Methoxychlor	10.91	10.81	11.01	0	0	9.80
Heptachlor Epoxide	07.83	07.73	07.93	1	1	10.80
Heptachlor	06.10	06.00	06.20	2	2	0.30
Chlordane	08.06	07.96	08.16	1	1	10.70
1-Bromo-2-nitrobenzene (IS1)	02.81	-----	-----	1	1	0.00
1-Bromo-2-nitrobenzene (IS2)	02.81	-----	-----	1	1	0.00
Decachlorobiphenyl	13.43	13.33	13.53	1	1	32.30 *
Tetrachloro-m-xylene	03.73	03.63	03.83	1	1	7.70

* - Outside of QC limits

F-VII

CALIBRATION VERIFICATION SUMMARY

Client: **Dynamic Earth LLC**
Work Order: **23E1424**

Lab Sample ID (50 pp):	SAF0179-CCV1(2)	Init. Calib. Date(s):	06/07/2023
File ID:	7T33828.D	Date Analyzed:	06/08/2023 18:25
Pesticides	Column 2	Matrix:	Soil

Individual Mix Compound		RT WINDOW		$\overline{CF}$	CF	%D
		FROM	TO			
Aldrin [2C]	07.98	07.88	08.08	1	1	11.10
alpha-BHC [2C]	05.69	05.59	05.79	1	1	6.20
alpha-Chlordane (cis) [2C]	09.69	09.59	09.79	1	1	17.10
beta-BHC [2C]	06.59	06.49	06.69	1	1	12.40
delta-BHC [2C]	07.19	07.09	07.29	1	1	8.70
Dieldrin [2C]	10.28	10.18	10.38	1	1	16.10
Endosulfan I [2C]	09.79	09.69	09.89	1	1	17.50
Endosulfan II [2C]	11.19	11.09	11.29	1	1	18.30
Endosulfan sulfate [2C]	12.23	12.13	12.33	1	1	15.50
Endrin [2C]	10.82	10.72	10.92	1	1	7.00
Endrin aldehyde [2C]	11.76	11.66	11.86	1	1	15.50
Endrin ketone [2C]	13.13	13.03	13.23	1	1	17.30
gamma-Chlordane [2C]	09.42	09.32	09.52	1	1	4.90
gamma-BHC (Lindane) [2C]	06.43	06.33	06.53	1	1	7.60
4,4'-DDT [2C]	11.55	11.45	11.65	1	1	2.00
4,4'-DDE [2C]	10.00	09.90	10.10	1	1	13.70
4,4'-DDD [2C]	11.01	10.91	11.11	1	1	14.20
Methoxychlor [2C]	12.68	12.58	12.78	0	0	4.10
Heptachlor Epoxide [2C]	09.07	08.97	09.17	1	1	13.90
Heptachlor [2C]	07.34	07.24	07.44	1	1	7.70
Chlordane [2C]	09.42	09.32	09.52	1	1	6.00
1-Bromo-2-nitrobenzene [2C] (IS	03.07	-----	-----	1	1	0.00
1-Bromo-2-nitrobenzene [2C] (IS	03.07	-----	-----	1	1	0.00
Decachlorobiphenyl [2C]	15.48	15.38	15.58	1	1	17.20
Tetrachloro-m-xylene [2C]	04.47	04.37	04.57	1	1	7.70

* - Outside of QC limits

F-VII

Quantitation Report (QT Reviewed)

Signal #1 : G:\HPCHEM\GCECD7\DATA\20230608\7T33828.D\ECD1A.CH Vial: 3
Signal #2 : G:\HPCHEM\GCECD7\DATA\20230608\7T33828.D\ECD2B.CH
Acq On : 8 Jun 2023 6:25 pm Operator: sdp
Sample : SEQ-CCV Inst : HP G1530A
Misc : Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Jun 9 11:55 2023 Quant Results File: 80810607.RES

Quant Method : G:\HPCHEM\G...\80810607.M (Chemstation Integrator)
Title : Pesticides by Method SW-846 8081B
Last Update : Thu Jun 08 19:03:28 2023
Response via : Initial Calibration
DataAcq Meth : RUNPEST.M

Volume Inj. : 2ul
Signal #1 Phase : RTx-50 Signal #2 Phase: RTx-CLPesticides II
Signal #1 Info : 30M x 0.53mm x 0. Signal #2 Info : 30M x 0.53mm x 0.42um

		Compound	RT#1	RT#2	Resp#1	Resp#2	ug/kg	ug/kg
		Internal Standards						
1)	I	1-Bromo-2-nitrob	2.81	3.07	19602.7E6	8390.3E6	400.000	400.000
25)	I	1-Bromo-2-nitrob	2.81	3.07	19602.7E6	8390.3E6	400.000	400.000
		System Monitoring Compounds						
2)	S	TCMX	3.73	4.47	2211.4E6	896.2E6	51.667	51.449
		Spiked Amount 50.000	Range 43 - 129		Recovery =		103.33%	102.90%
22)	S	Decachlorobiphen	13.43	15.48	1465.8E6	762.6E6	44.279m	59.731m#
		Spiked Amount 50.000	Range 42 - 136		Recovery =		88.56%	119.46%
		Target Compounds						
3)		alpha-BHC	4.62	5.69	3991.9E6	1458.3E6	56.560	50.692
4)	M	gamma-BHC (Linda	5.20	6.43	3768.3E6	1283.6E6	56.756	48.079
5)	M	Heptachlor	6.10	7.34	3699.6E6	1247.3E6	55.751	47.154
6)		beta-BHC	5.36	6.59	1591.2E6	542.1E6	55.909	46.693
7)		delta-BHC	5.70	7.19	3740.2E6	1260.2E6	55.128	46.950
8)	M	Aldrin	6.68	7.98	3463.1E6	1108.9E6	54.451	44.132
9)		Heptachlor epoxi	7.83	9.07	2825.7E6	965.3E6	47.802	41.001
10)		Endosulfan I	8.55	9.79	2537.2E6	793.1E6	48.327	41.968
11)		4,4'-DDE	8.49	10.00	2700.9E6	823.3E6	46.692	44.648
12)	M	Dieldrin	8.99	10.28	2602.2E6	875.5E6	44.817	46.137
13)	M	Endrin	9.40	10.82	2219.4E6	725.3E6	41.792	47.383
14)		4,4'-DDD	9.56	11.01	1742.4E6	630.6E6	42.963	51.665
15)		Endosulfan II	9.80	11.19	1873.6E6	675.3E6	40.078m	50.436 #
16)	M	4,4'-DDT	10.05	11.55	1802.6E6	651.2E6	45.987	55.740
17)		Endrin aldehyde	10.54	11.76	1632.1E6	610.5E6	50.676	56.414
18)		Endosulfan sulfa	11.09	12.23	1393.7E6	657.2E6	46.718	53.992m
19)		Methoxychlor	10.91	12.68	927.2E6	315.1E6	56.963	53.780m
20)		Mirex	11.28	13.10	1689.6E6	388.8E6	59.846	40.621m#
21)		Endrin ketone	11.75	13.13	1842.2E6	807.2E6	50.484m	58.895m
23)	L1	Chlordane (gamma	8.06	9.42	2971.8E6	1111.0E6	49.133	42.866m
24)	L1	Chlordane (alpha	8.31	9.69	2824.9E6	855.5E6	47.162	41.118
		Sum Chlordane (gamma)			5796.6E6	1966.5E6	96.294	83.983
		Average Chlordane (gamma)					48.147	41.992
		Sum Toxaphene (1)			0	0	N.D.	N.D.
		Average Toxaphene (1)					0.000	0.000

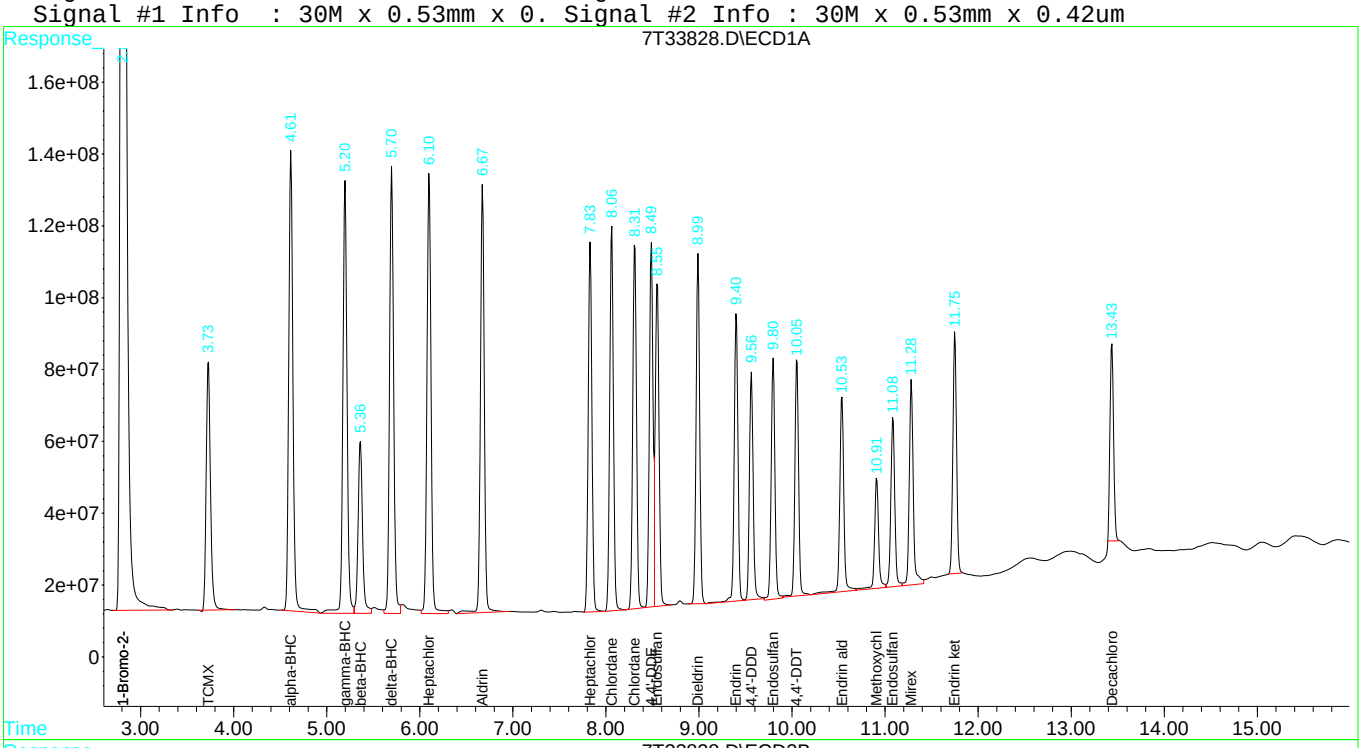
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.
7T33828.D 80810607.M Fri Jun 09 12:26:17 2023 SS

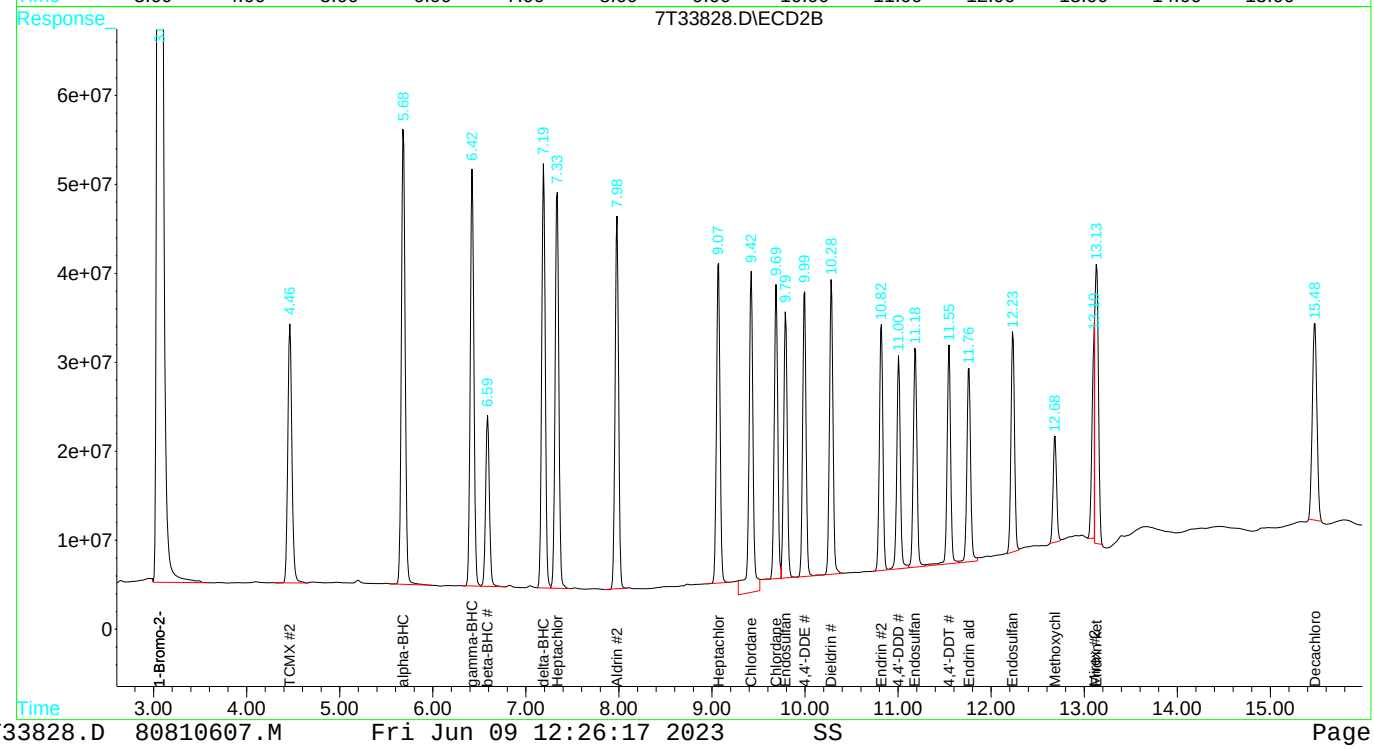
Quantitation Report (QT Reviewed)

Signal #1 : G:\HPCHEM\GCECD7\DATA\20230608\7T33828.D\ECD1A.CH Vial: 3
Signal #2 : G:\HPCHEM\GCECD7\DATA\20230608\7T33828.D\ECD2B.CH
Acq On : 8 Jun 2023 6:25 pm Operator: sdp
Sample : SEQ-CCV Inst : HP G1530A
Misc : Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Jun 9 11:55 2023 Quant Results File: 80810607.RES

Quant Method : G:\HPCHEM\G...\80810607.M (Chemstation Integrator)
Title : Pesticides by Method SW-846 8081B
Last Update : Thu Jun 08 19:03:28 2023
Response via : Multiple Level Calibration
DataAcq Meth : RUNPEST.M

Volume Inj. : 2ul
Signal #1 Phase : RTx-50 Signal #2 Phase: RTx-CLPesticides II
Signal #1 Info : 30M x 0.53mm x 0. Signal #2 Info : 30M x 0.53mm x 0.42um





CALIBRATION VERIFICATION SUMMARY

Client: **Dynamic Earth LLC**
Work Order: **23E1424**

Lab Sample ID (50 pp):	SAF0209-CCV1(1)	Init. Calib. Date(s):	06/07/2023
File ID:	7T33874.D	Date Analyzed:	06/10/2023 14:06
Pesticides	Column 1	Matrix:	Water

Individual Mix Compound		RT WINDOW		$\overline{CF}$	CF	%D
		FROM	TO			
Aldrin	06.67	06.57	06.77	1	1	8.70
alpha-BHC	04.62	04.52	04.72	2	2	4.40
alpha-Chlordane (cis)	08.31	08.21	08.41	1	1	16.60
beta-BHC	05.36	05.26	05.46	1	1	9.30
delta-BHC	05.70	05.60	05.80	2	1	7.60
Dieldrin	08.99	08.89	09.09	1	1	16.40
Endosulfan I	08.55	08.45	08.65	1	1	18.20
Endosulfan II	09.80	09.70	09.90	1	1	22.50 *
Endosulfan sulfate	11.08	10.98	11.18	1	1	25.40 *
Endrin	09.40	09.30	09.50	1	1	4.70
Endrin aldehyde	10.54	10.44	10.64	1	1	24.90 *
Endrin ketone	11.75	11.65	11.85	1	1	22.00 *
gamma-Chlordane	08.06	07.96	08.16	1	1	15.30
gamma-BHC (Lindane)	05.20	05.10	05.30	2	1	5.80
4,4'-DDT	10.05	09.95	10.15	1	1	6.70
4,4'-DDE	08.49	08.39	08.59	1	1	13.60
4,4'-DDD	09.56	09.46	09.66	1	1	18.90
Methoxychlor	10.91	10.81	11.01	0	0	6.50
Heptachlor Epoxide	07.83	07.73	07.93	1	1	14.70
Heptachlor	06.10	06.00	06.20	2	1	5.70
Chlordane	08.06	07.96	08.16	1	1	15.90
1-Bromo-2-nitrobenzene (IS1)	02.81	-----	-----	1	1	0.00
1-Bromo-2-nitrobenzene (IS2)	02.81	-----	-----	1	1	0.00
Decachlorobiphenyl	13.44	13.34	13.54	1	1	29.40 *
Tetrachloro-m-xylene	03.73	03.63	03.83	1	1	6.30

* - Outside of QC limits

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CALIBRATION VERIFICATION SUMMARY

Client: **Dynamic Earth LLC**
Work Order: **23E1424**

Lab Sample ID (50 pp):	SAF0209-CCV1(2)	Init. Calib. Date(s):	06/07/2023
File ID:	7T33874.D	Date Analyzed:	06/10/2023 14:06
Pesticides	Column 2	Matrix:	Water

Individual Mix Compound		RT WINDOW		$\overline{CF}$	CF	%D
		FROM	TO			
Aldrin [2C]	07.98	07.88	08.08	1	1	14.20
alpha-BHC [2C]	05.68	05.58	05.78	1	1	8.00
alpha-Chlordane (cis) [2C]	09.69	09.59	09.79	1	1	16.70
beta-BHC [2C]	06.59	06.49	06.69	1	1	14.00
delta-BHC [2C]	07.19	07.09	07.29	1	1	11.40
Dieldrin [2C]	10.28	10.18	10.38	1	1	16.40
Endosulfan I [2C]	09.79	09.69	09.89	1	1	15.70
Endosulfan II [2C]	11.18	11.08	11.28	1	1	13.20
Endosulfan sulfate [2C]	12.23	12.13	12.33	1	1	14.10
Endrin [2C]	10.82	10.72	10.92	1	1	1.20
Endrin aldehyde [2C]	11.76	11.66	11.86	1	1	18.20
Endrin ketone [2C]	13.13	13.03	13.23	1	1	7.10
gamma-Chlordane [2C]	09.42	09.32	09.52	1	1	15.50
gamma-BHC (Lindane) [2C]	06.42	06.32	06.52	1	1	10.20
4,4'-DDT [2C]	11.54	11.44	11.64	1	1	0.40
4,4'-DDE [2C]	09.99	09.89	10.09	1	1	13.30
4,4'-DDD [2C]	11.01	10.91	11.11	1	1	12.30
Methoxychlor [2C]	12.68	12.58	12.78	0	0	1.50
Heptachlor Epoxide [2C]	09.07	08.97	09.17	1	1	14.50
Heptachlor [2C]	07.34	07.24	07.44	1	1	9.70
Chlordane [2C]	09.42	09.32	09.52	1	1	16.10
1-Bromo-2-nitrobenzene [2C] (IS	03.07	-----	-----	1	1	0.00
1-Bromo-2-nitrobenzene [2C] (IS	03.07	-----	-----	1	1	0.00
Decachlorobiphenyl [2C]	15.47	15.37	15.57	1	1	21.70 *
Tetrachloro-m-xylene [2C]	04.47	04.37	04.57	1	1	8.00

* - Outside of QC limits

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Quantitation Report (QT Reviewed)

Signal #1 : G:\HPCHEM\GCECD7\DATA\20230610\7T33874.D\ECD1A.CH Vial: 3
Signal #2 : G:\HPCHEM\GCECD7\DATA\20230610\7T33874.D\ECD2B.CH
Acq On : 10 Jun 2023 2:06 pm Operator: WD
Sample : SEQ-CCV Inst : HP G1530A
Misc : Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Jun 12 13:44 2023 Quant Results File: 80810607.RES

Quant Method : G:\HPCHEM\G...\80810607.M (Chemstation Integrator)
Title : Pesticides by Method SW-846 8081B
Last Update : Sat Jun 10 14:07:28 2023
Response via : Initial Calibration
DataAcq Meth : RUNPEST.M

Volume Inj. : 2ul
Signal #1 Phase : RTx-50 Signal #2 Phase: RTx-CLPesticides II
Signal #1 Info : 30M x 0.53mm x 0. Signal #2 Info : 30M x 0.53mm x 0.42um

		Compound	RT#1	RT#2	Resp#1	Resp#2	ug/kg	ug/kg
		Internal Standards						
1)	I	1-Bromo-2-nitrob	2.81	3.07	21641.2E6	9009.1E6	400.000	400.000
25)	I	1-Bromo-2-nitrob	2.81	3.07	21641.2E6	9009.1E6	400.000	400.000
		System Monitoring Compounds						
2)	S	TCMX	3.73	4.47	2478.5E6	958.6E6	52.454	51.250
		Spiked Amount 50.000	Range 43 - 129		Recovery =		104.91%	102.50%
22)	S	Decachlorobiphen	13.44	15.47	1687.7E6	774.3E6	46.180	56.478m
		Spiked Amount 50.000	Range 42 - 136		Recovery =		92.36%	112.96%
		Target Compounds						
3)		alpha-BHC	4.62	5.68	4248.7E6	1536.3E6	54.528	49.734
4)	M	gamma-BHC (Linda	5.20	6.42	3851.7E6	1339.2E6	52.548	46.715
5)	M	Heptachlor	6.10	7.34	3840.2E6	1309.8E6	52.419	46.118
6)		beta-BHC	5.36	6.59	1576.0E6	571.1E6	50.157	45.813
7)		delta-BHC	5.70	7.19	3906.2E6	1313.5E6	52.152	45.575
8)	M	Aldrin	6.67	7.98	3582.3E6	1148.8E6	51.020	42.582
9)		Heptachlor epoxi	7.83	9.07	2983.2E6	1028.9E6	45.713	40.701m
10)		Endosulfan I	8.55	9.79	2657.6E6	869.9E6	45.853	42.868
11)		4,4'-DDE	8.49	9.99	2834.6E6	888.9E6	44.388	44.894
12)	M	Dieldrin	8.99	10.28	2897.0E6	935.8E6	45.195	45.926
13)	M	Endrin	9.40	10.82	2656.5E6	827.8E6	45.310	50.368
14)		4,4'-DDD	9.56	11.01	2070.4E6	692.6E6	46.243	52.847
15)		Endosulfan II	9.80	11.18	2154.0E6	769.8E6	41.737	53.547 #
16)	M	4,4'-DDT	10.05	11.54	2196.1E6	682.8E6	50.751	54.424m
17)		Endrin aldehyde	10.54	11.76	1809.3E6	634.8E6	50.887	54.628
18)		Endosulfan sulfa	11.08	12.23	1628.3E6	718.1E6	49.440	54.939
19)		Methoxychlor	10.91	12.68	1061.2E6	358.0E6	59.052m	56.906m
20)		Mirex	11.28	13.10	1840.4E6	437.9E6	59.045m	42.610m#
21)		Endrin ketone	11.75	13.13	2238.7E6	686.8E6	55.570	46.665m
23)	L1	Chlordane (gamma	8.06	9.42	3088.5E6	961.0E6	46.253m	34.529m#
24)	L1	Chlordane (alpha	8.31	9.69	2936.0E6	922.8E6	44.400m	41.306m
		Sum Chlordane (gamma)			6024.5E6	1883.7E6	90.653	75.835
		Average Chlordane (gamma)					45.327	37.918
		Sum Toxaphene (1)			0	0	N.D.	N.D.
		Average Toxaphene (1)					0.000	0.000

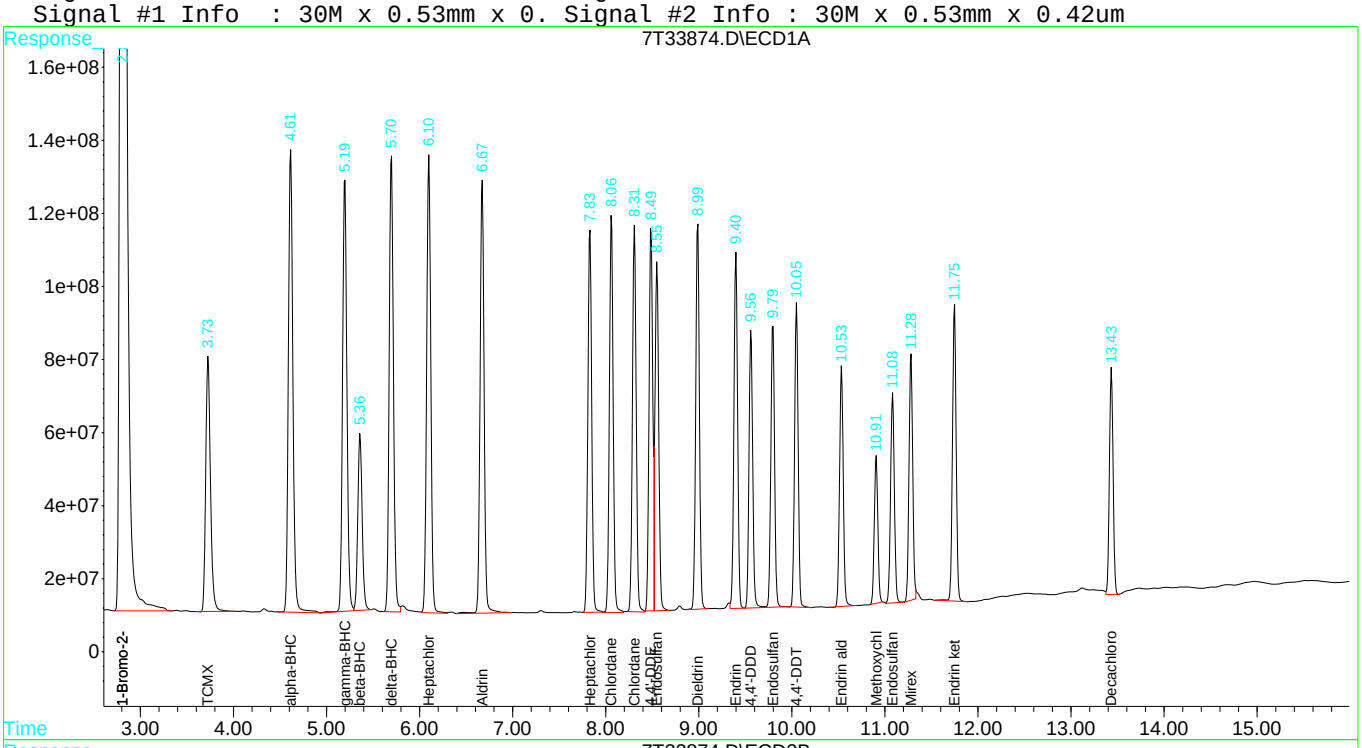
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

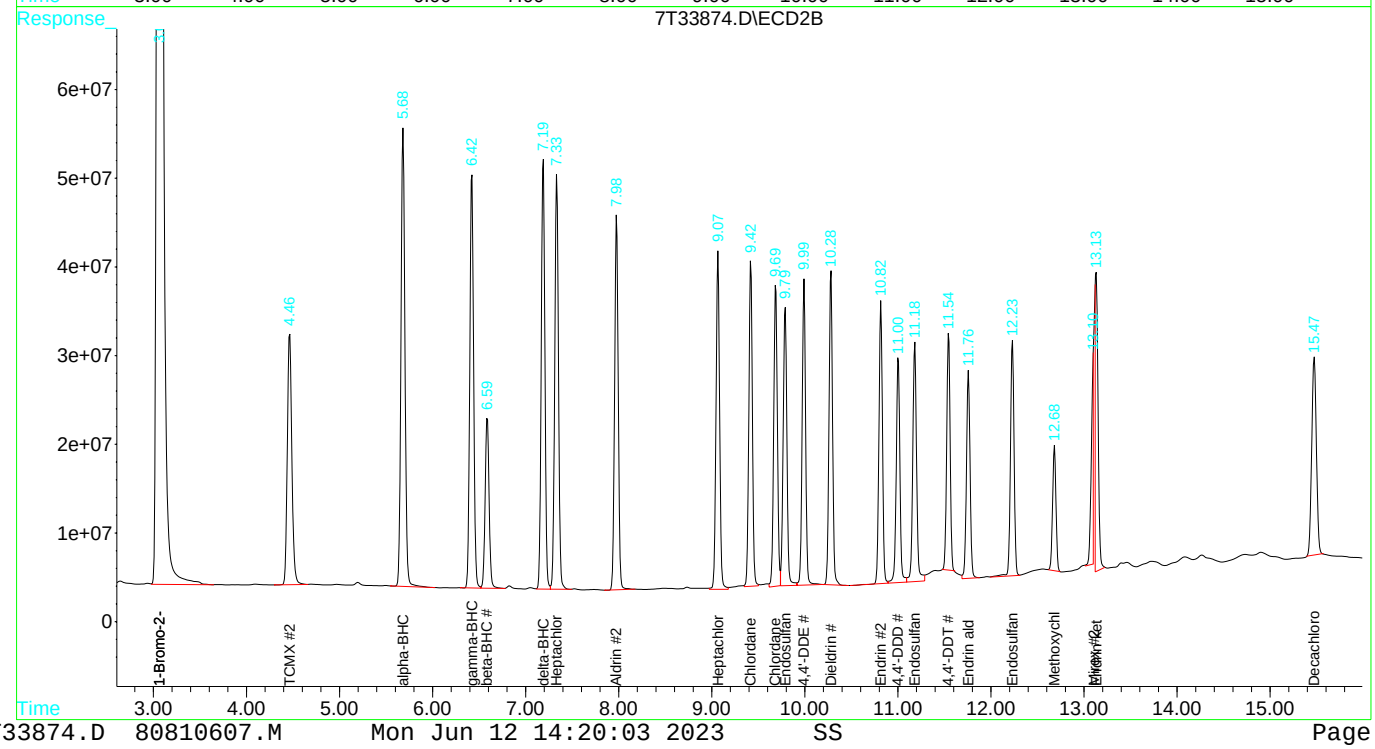
Quantitation Report (QT Reviewed)

Signal #1 : G:\HPCHEM\GCECD7\DATA\20230610\7T33874.D\ECD1A.CH Vial: 3
Signal #2 : G:\HPCHEM\GCECD7\DATA\20230610\7T33874.D\ECD2B.CH
Acq On : 10 Jun 2023 2:06 pm Operator: WD
Sample : SEQ-CCV Inst : HP G1530A
Misc : Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Jun 12 13:44 2023 Quant Results File: 80810607.RES

Quant Method : G:\HPCHEM\G...\80810607.M (Chemstation Integrator)
Title : Pesticides by Method SW-846 8081B
Last Update : Sat Jun 10 14:07:28 2023
Response via : Multiple Level Calibration
DataAcq Meth : RUNPEST.M

Volume Inj. : 2ul
Signal #1 Phase : RTx-50 Signal #2 Phase: RTx-CLPesticides II
Signal #1 Info : 30M x 0.53mm x 0. Signal #2 Info : 30M x 0.53mm x 0.42um





CALIBRATION VERIFICATION SUMMARY

Client: **Dynamic Earth LLC**
Work Order: **23E1424**

Lab Sample ID (50 pp):	SAF0127-CCV1(1)	Init. Calib. Date(s):	06/05/2023
File ID:	9T00979.D	Date Analyzed:	06/06/2023 19:02
Pesticides	Column 1	Matrix:	Soil

Individual Mix Compound		RT WINDOW		$\overline{CF}$	CF	%D
		FROM	TO			
Aldrin	05.67	05.57	05.77	1	1	1.20
alpha-BHC	04.35	04.25	04.45	1	2	4.40
alpha-Chlordane (cis)	06.85	06.75	06.95	1	1	0.80
beta-BHC	04.80	04.70	04.90	1	1	0.50
delta-BHC	05.02	04.92	05.12	1	1	12.50
Dieldrin	07.43	07.33	07.53	1	1	1.20
Endosulfan I	07.06	06.96	07.16	1	1	1.90
Endosulfan II	08.23	08.13	08.33	1	1	0.90
Endosulfan sulfate	09.97	09.87	10.07	1	1	16.50
Endrin	07.82	07.72	07.92	1	1	5.40
Endrin aldehyde	09.04	08.94	09.14	1	1	2.80
Endrin ketone	10.61	10.51	10.71	1	1	8.60
gamma-Chlordane	06.66	06.56	06.76	1	1	0.10
gamma-BHC (Lindane)	04.71	04.61	04.81	1	1	5.00
4,4'-DDT	08.42	08.32	08.52	1	1	9.70
4,4'-DDE	06.94	06.84	07.04	1	1	3.90
4,4'-DDD	07.91	07.81	08.01	1	1	6.70
Methoxychlor	09.40	09.30	09.50	0	0	39.50 *
Heptachlor Epoxide	06.48	06.38	06.58	1	1	1.70
Heptachlor	05.28	05.18	05.38	1	1	13.60
Chlordane	06.66	06.56	06.76	1	1	0.40
1-Bromo-2-nitrobenzene (IS1)	03.06	-----	-----	1	1	0.00
1-Bromo-2-nitrobenzene (IS2)	03.06	-----	-----	1	1	0.00
Decachlorobiphenyl	13.22	13.12	13.32	1	1	6.20
Tetrachloro-m-xylene	03.77	03.67	03.87	1	1	2.30

* - Outside of QC limits

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CALIBRATION VERIFICATION SUMMARY

Client: **Dynamic Earth LLC**
Work Order: **23E1424**

Lab Sample ID (50 pp):	SAF0127-CCV1(2)	Init. Calib. Date(s):	06/05/2023
File ID:	9T00979.D	Date Analyzed:	06/06/2023 19:02
Pesticides	Column 2	Matrix:	Soil

Individual Mix Compound		RT WINDOW		$\overline{CF}$	CF	%D
		FROM	TO			
Aldrin [2C]	06.53	06.43	06.63	1	1	1.00
alpha-BHC [2C]	04.94	04.84	05.04	1	1	5.90
alpha-Chlordane (cis) [2C]	08.00	07.90	08.10	1	1	6.50
beta-BHC [2C]	05.49	05.39	05.59	1	1	2.60
delta-BHC [2C]	05.92	05.82	06.02	1	1	29.40 *
Dieldrin [2C]	08.66	08.56	08.76	1	1	1.60
Endosulfan I [2C]	08.13	08.03	08.23	1	1	1.80
Endosulfan II [2C]	09.75	09.65	09.85	1	1	2.60
Endosulfan sulfate [2C]	11.21	11.11	11.31	1	1	37.80 *
Endrin [2C]	09.30	09.20	09.40	1	1	8.70
Endrin aldehyde [2C]	10.53	10.43	10.63	1	1	0.30
Endrin ketone [2C]	12.64	12.54	12.74	1	1	5.40
gamma-Chlordane [2C]	07.73	07.63	07.83	1	1	5.10
gamma-BHC (Lindane) [2C]	05.41	05.31	05.51	1	1	10.30
4,4'-DDT [2C]	10.20	10.10	10.30	0	0	81.00 *
4,4'-DDE [2C]	08.28	08.18	08.38	1	1	3.00
4,4'-DDD [2C]	09.48	09.38	09.58	0	1	4.50
Methoxychlor [2C]	11.94	11.84	12.04	0	0	142.00*
Heptachlor Epoxide [2C]	07.41	07.31	07.51	1	1	1.40
Heptachlor [2C]	06.04	05.94	06.14	1	1	16.40
Chlordane [2C]	07.73	07.63	07.83	1	1	5.80
1-Bromo-2-nitrobenzene [2C] (IS	03.25	-----	-----	1	1	0.00
1-Bromo-2-nitrobenzene [2C] (IS	03.25	-----	-----	1	1	0.00
Decachlorobiphenyl [2C]	16.35	16.25	16.45	1	1	10.10
Tetrachloro-m-xylene [2C]	04.20	04.10	04.30	1	1	2.80

* - Outside of QC limits

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Quantitation Report (QT Reviewed)

Signal #1 : G:\HPCHEM\GCECD9\DATA\20230606\9T00979.D\ECD1A.CH Vial: 3
Signal #2 : G:\HPCHEM\GCECD9\DATA\20230606\9T00979.D\ECD2B.CH
Acq On : 6 Jun 2023 7:02 pm Operator: WD
Sample : SEQ-CCV Inst : HP G1530A
Misc : Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Jun 7 12:50 2023 Quant Results File: 80810606.RES

Quant Method : G:\HPCHEM\G...\80810606.M (Chemstation Integrator)
Title : Pesticides by Method SW-846 8081B
Last Update : Tue Jun 06 16:57:33 2023
Response via : Initial Calibration
DataAcq Meth : RUNPEST.M

Volume Inj. : 2ul
Signal #1 Phase : RTx-50 Signal #2 Phase: RTx-CLPesticides II
Signal #1 Info : 30M x 0.53mm x 0. Signal #2 Info : 30M x 0.53mm x 0.42um

		Compound	RT#1	RT#2	Resp#1	Resp#2	ug/kg	ug/kg
		Internal Standards						
1)	I	1-Bromo-2-nitrob	3.06	3.25	4227.4E6	2937.6E6	400.000	400.000
25)	I	1-Bromo-2-nitrob	3.06	3.25	4227.4E6	2937.6E6	400.000	400.000
		System Monitoring Compounds						
2)	S	TCMX	3.77	4.20	463.9E6	270.6E6	48.842	48.592
		Spiked Amount 50.000	Range 43 - 129		Recovery =		97.68%	97.18%
22)	S	Decachlorobiphen	13.22	16.35	579.5E6	342.8E6	53.285	55.289
		Spiked Amount 50.000	Range 42 - 136		Recovery =		106.57%	110.58%
		Target Compounds						
3)		alpha-BHC	4.35	4.94	816.1E6	536.8E6	47.880	47.454
4)	M	gamma-BHC (Linda	4.71	5.41	738.4E6	471.2E6	52.483	55.140
5)	M	Heptachlor	5.28	6.04	708.3E6	508.7E6	56.820	58.202
6)		beta-BHC	4.80	5.49	300.4E6	199.4E6	50.238	51.319
7)		delta-BHC	5.02	5.92	725.9E6	373.7E6	49.437	58.162
8)	M	Aldrin	5.67	6.53	689.1E6	459.2E6	50.578	50.512
9)		Heptachlor epoxi	6.48	7.41	596.4E6	394.9E6	49.146	49.318
10)		Endosulfan I	7.06	8.13	548.0E6	350.1E6	49.073	49.094
11)		4,4'-DDE	6.94	8.28	538.9E6	341.0E6	51.928	51.499
12)	M	Dieldrin	7.43	8.66	604.2E6	400.2E6	50.577	50.805
13)	M	Endrin	7.82	9.30	496.7E6	302.4E6	52.700	54.364
14)		4,4'-DDD	7.91	9.48	436.7E6	191.4E6	53.374	52.234m
15)		Endosulfan II	8.23	9.75	455.7E6	290.6E6	50.443	48.680
16)	M	4,4'-DDT	8.42	10.20	338.0E6	179.9E6	54.870m	90.492m#
17)		Endrin aldehyde	9.04	10.53	422.6E6	258.0E6	48.611	49.846
18)		Endosulfan sulfa	9.97	11.21	458.1E6	260.6E6	58.227	68.924
19)		Methoxychlor	9.40	11.94	184.1E6	100.6E6	69.756m	120.823 #
21)		Endrin ketone	10.61	12.64	542.0E6	361.4E6	54.284	52.707
23)	L1	Chlordane (gamma	6.66	7.73	609.5E6	377.7E6	49.944	52.567
24)	L1	Chlordane (alpha	6.85	8.00	590.5E6	372.5E6	49.621	53.249
		Sum Chlordane (gamma)			1200.0E6	750.2E6	99.566	105.817
		Average Chlordane (gamma)					49.783	52.908
		Sum Toxaphene (1)			0	0	N.D.	N.D.
		Average Toxaphene (1)					0.000	0.000

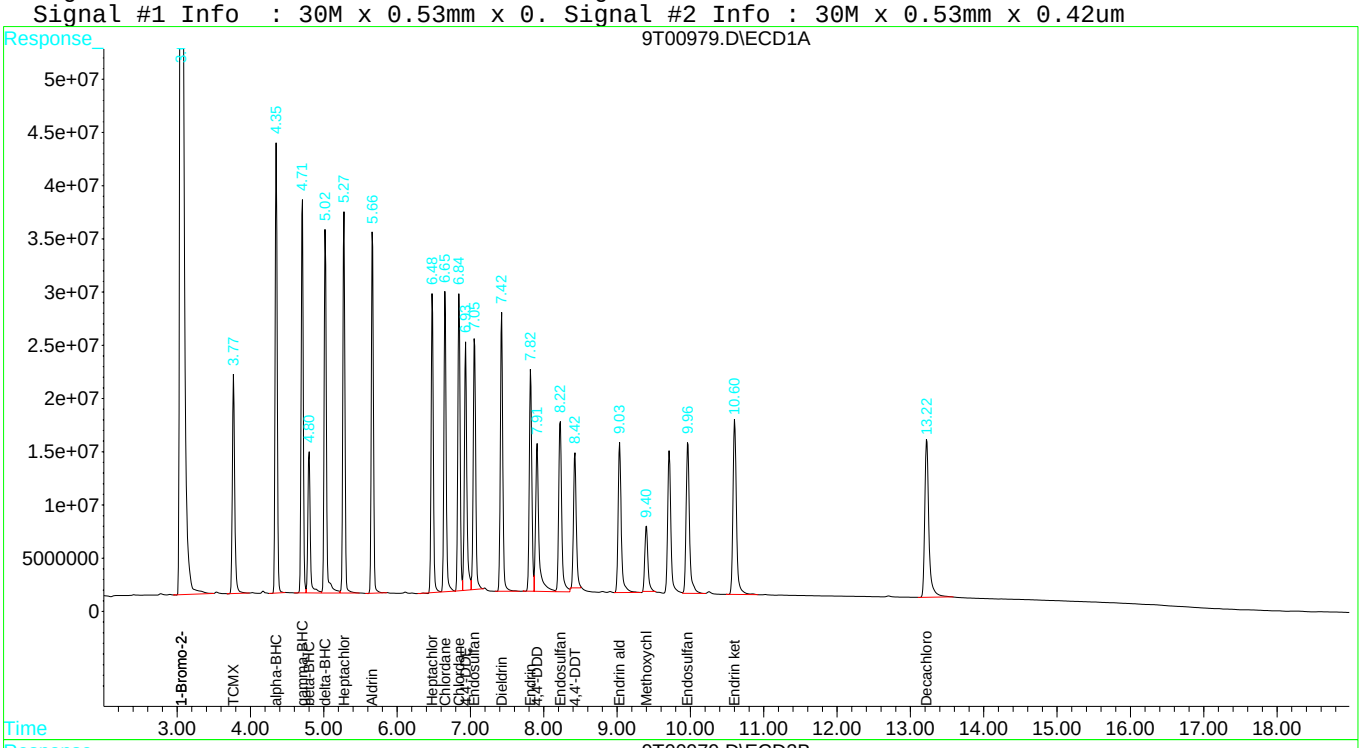
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

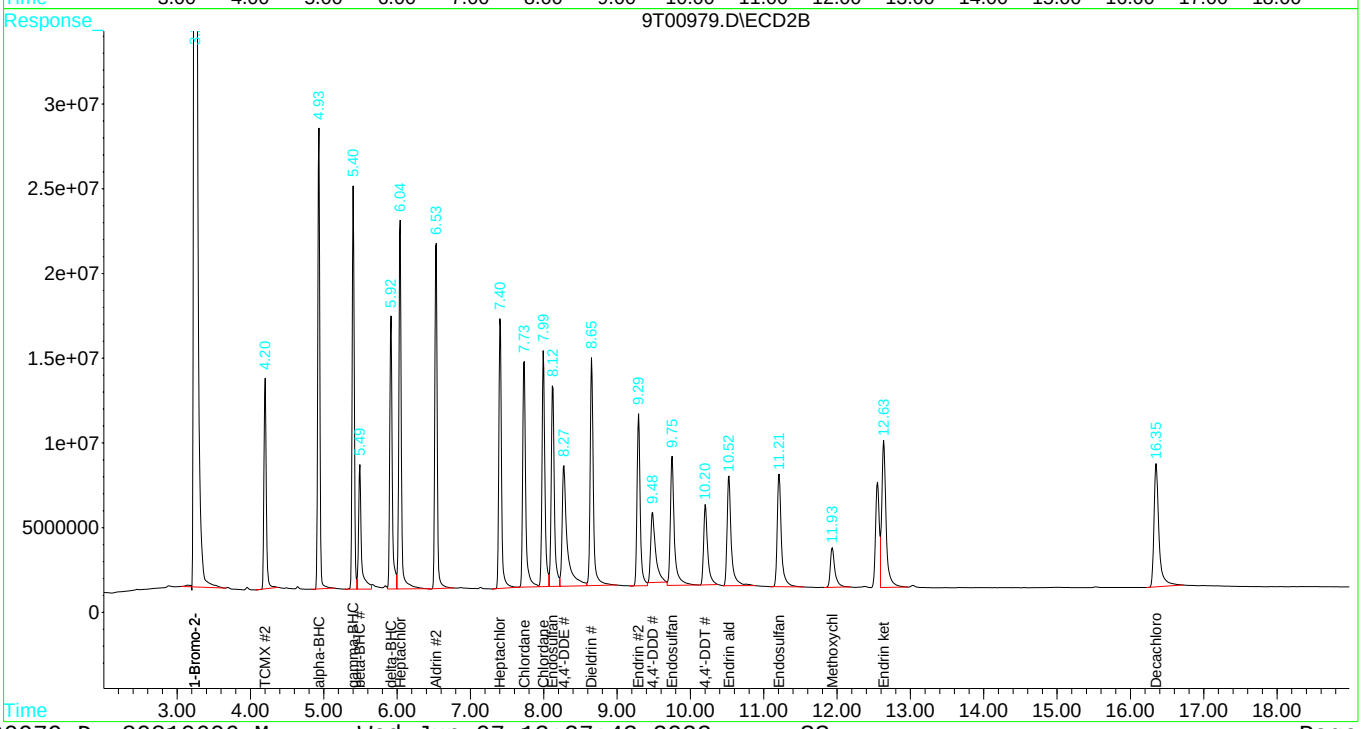
Quantitation Report (QT Reviewed)

Signal #1 : G:\HPCHEM\GCECD9\DATA\20230606\9T00979.D\ECD1A.CH Vial: 3
Signal #2 : G:\HPCHEM\GCECD9\DATA\20230606\9T00979.D\ECD2B.CH
Acq On : 6 Jun 2023 7:02 pm Operator: WD
Sample : SEQ-CCV Inst : HP G1530A
Misc : Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Jun 7 12:50 2023 Quant Results File: 80810606.RES

Quant Method : G:\HPCHEM\G...\80810606.M (Chemstation Integrator)
Title : Pesticides by Method SW-846 8081B
Last Update : Tue Jun 06 16:57:33 2023
Response via : Multiple Level Calibration
DataAcq Meth : RUNPEST.M

Volume Inj. : 2ul
Signal #1 Phase : RTx-50 Signal #2 Phase: RTx-CLPesticides II
Signal #1 Info : 30M x 0.53mm x 0. Signal #2 Info : 30M x 0.53mm x 0.42um





CALIBRATION VERIFICATION SUMMARY

Client: **Dynamic Earth LLC**
Work Order: **23E1424**

Lab Sample ID (50 pp):	SAF0176-CCV1(1)	Init. Calib. Date(s):	06/05/2023
File ID:	9T01025.D	Date Analyzed:	06/08/2023 15:44
Pesticides	Column 1	Matrix:	Soil

Individual Mix Compound		RT WINDOW		$\overline{CF}$	CF	%D
		FROM	TO			
Aldrin	05.66	05.56	05.76	1	1	5.20
alpha-BHC	04.35	04.25	04.45	1	1	2.00
alpha-Chlordane (cis)	06.85	06.75	06.95	1	1	6.90
beta-BHC	04.80	04.70	04.90	1	1	8.10
delta-BHC	05.02	04.92	05.12	1	1	4.70
Dieldrin	07.43	07.33	07.53	1	1	5.20
Endosulfan I	07.06	06.96	07.16	1	1	7.80
Endosulfan II	08.23	08.13	08.33	1	1	2.90
Endosulfan sulfate	09.97	09.87	10.07	1	1	11.20
Endrin	07.82	07.72	07.92	1	1	4.50
Endrin aldehyde	09.04	08.94	09.14	1	1	8.80
Endrin ketone	10.61	10.51	10.71	1	1	2.50
gamma-Chlordane	06.66	06.56	06.76	1	1	6.40
gamma-BHC (Lindane)	04.71	04.61	04.81	1	1	1.70
4,4'-DDT	08.43	08.33	08.53	1	1	16.60
4,4'-DDE	06.94	06.84	07.04	1	1	6.20
4,4'-DDD	07.91	07.81	08.01	1	1	0.80
Methoxychlor	09.40	09.30	09.50	0	0	40.30 *
Heptachlor Epoxide	06.48	06.38	06.58	1	1	7.50
Heptachlor	05.28	05.18	05.38	1	1	5.50
Chlordane	06.66	06.56	06.76	1	1	6.70
1-Bromo-2-nitrobenzene (IS1)	03.06	-----	-----	1	1	0.00
1-Bromo-2-nitrobenzene (IS2)	03.06	-----	-----	1	1	0.00
Decachlorobiphenyl	13.22	13.12	13.32	1	1	1.60
Tetrachloro-m-xylene	03.77	03.67	03.87	1	1	8.10

* - Outside of QC limits

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CALIBRATION VERIFICATION SUMMARY

Client: **Dynamic Earth LLC**
Work Order: **23E1424**

Lab Sample ID (50 pp):	SAF0176-CCV1(2)	Init. Calib. Date(s):	06/05/2023
File ID:	9T01025.D	Date Analyzed:	06/08/2023 15:44
Pesticides	Column 2	Matrix:	Soil

Individual Mix Compound		RT WINDOW		$\overline{CF}$	CF	%D
		FROM	TO			
Aldrin [2C]	06.53	06.43	06.63	1	1	0.70
alpha-BHC [2C]	04.94	04.84	05.04	1	1	2.50
alpha-Chlordane (cis) [2C]	08.00	07.90	08.10	1	1	9.40
beta-BHC [2C]	05.49	05.39	05.59	1	0	10.20
delta-BHC [2C]	05.92	05.82	06.02	1	1	31.60 *
Dieldrin [2C]	08.65	08.55	08.75	1	1	0.60
Endosulfan I [2C]	08.12	08.02	08.22	1	1	2.20
Endosulfan II [2C]	09.75	09.65	09.85	1	1	4.30
Endosulfan sulfate [2C]	11.21	11.11	11.31	1	1	51.30 *
Endrin [2C]	09.29	09.19	09.39	1	1	19.20
Endrin aldehyde [2C]	10.52	10.42	10.62	1	1	1.00
Endrin ketone [2C]	12.64	12.54	12.74	1	1	6.20
gamma-Chlordane [2C]	07.73	07.63	07.83	1	1	8.80
gamma-BHC (Lindane) [2C]	05.41	05.31	05.51	1	1	7.10
4,4'-DDT [2C]	10.21	10.11	10.31	0	1	121.00*
4,4'-DDE [2C]	08.28	08.18	08.38	1	1	3.30
4,4'-DDD [2C]	09.48	09.38	09.58	0	1	38.60 *
Methoxychlor [2C]	11.93	11.83	12.03	0	0	194.00*
Heptachlor Epoxide [2C]	07.41	07.31	07.51	1	1	1.90
Heptachlor [2C]	06.04	05.94	06.14	1	1	8.60
Chlordane [2C]	07.73	07.63	07.83	1	1	9.10
1-Bromo-2-nitrobenzene [2C] (IS	03.25	-----	-----	1	1	0.00
1-Bromo-2-nitrobenzene [2C] (IS	03.25	-----	-----	1	1	0.00
Decachlorobiphenyl [2C]	16.35	16.25	16.45	1	1	19.40
Tetrachloro-m-xylene [2C]	04.20	04.10	04.30	1	1	4.70

* - Outside of QC limits

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Quantitation Report (QT Reviewed)

Signal #1 : G:\HPCHEM\GCECD9\DATA\20230608\9T01025.D\ECD1A.CH Vial: 3
Signal #2 : G:\HPCHEM\GCECD9\DATA\20230608\9T01025.D\ECD2B.CH
Acq On : 8 Jun 2023 3:44 pm Operator: WD
Sample : SEQ-CCV Inst : HP G1530A
Misc : Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Jun 8 18:08 2023 Quant Results File: 80810606.RES

Quant Method : G:\HPCHEM\G...\80810606.M (Chemstation Integrator)
Title : Pesticides by Method SW-846 8081B
Last Update : Tue Jun 06 16:57:33 2023
Response via : Initial Calibration
DataAcq Meth : RUNPEST.M

Volume Inj. : 2ul
Signal #1 Phase : RTx-50 Signal #2 Phase: RTx-CLPesticides II
Signal #1 Info : 30M x 0.53mm x 0. Signal #2 Info : 30M x 0.53mm x 0.42um

		Compound	RT#1	RT#2	Resp#1	Resp#2	ug/kg	ug/kg	
		Internal Standards							
1)	I	1-Bromo-2-nitrob	3.06	3.25	4403.5E6	3159.7E6	400.000	400.000	
25)	I	1-Bromo-2-nitrob	3.06	3.25	4403.5E6	3159.7E6	400.000	400.000	
		System Monitoring Compounds							
2)	S	TCMX	3.77	4.20	454.7E6	285.5E6	45.953	47.662	
		Spiked Amount 50.000	Range 43 - 129		Recovery =		91.91%	95.32%	
22)	S	Decachlorobiphen	13.22	16.35	559.1E6	399.8E6	49.350	59.953	
		Spiked Amount 50.000	Range 42 - 136		Recovery =		98.70%	119.91%	
		Target Compounds							
3)		alpha-BHC	4.35	4.94	798.2E6	558.7E6	45.043	46.009	
4)	M	gamma-BHC (Linda	4.71	5.41	720.5E6	492.2E6	49.160	53.549	
5)	M	Heptachlor	5.28	6.04	685.2E6	510.4E6	52.772	54.291	
6)		beta-BHC	4.80	5.49	286.3E6	187.6E6	45.963	44.879	
7)		delta-BHC	5.02	5.92	703.7E6	408.9E6	46.197	59.067	#
8)	M	Aldrin	5.66	6.53	672.8E6	485.3E6	47.407	49.635	
9)		Heptachlor epoxi	6.48	7.41	585.0E6	422.5E6	46.274	49.051	
10)		Endosulfan I	7.06	8.12	536.2E6	375.1E6	46.098	48.905	
11)		4,4'-DDE	6.94	8.28	507.0E6	367.9E6	46.902	51.662	
12)	M	Dieldrin	7.43	8.65	590.1E6	426.1E6	47.421	50.292	
13)	M	Endrin	7.82	9.29	512.8E6	356.7E6	52.236	59.623	
14)		4,4'-DDD	7.91	9.48	429.4E6	273.2E6	50.387	69.312	#
15)		Endosulfan II	8.23	9.75	456.9E6	334.8E6	48.556	52.143	
16)	M	4,4'-DDT	8.43	10.21	374.1E6	236.5E6	58.298	110.607	#
17)		Endrin aldehyde	9.04	10.52	413.1E6	281.0E6	45.616	50.482	
18)		Endosulfan sulfa	9.97	11.21	455.5E6	307.7E6	55.583	75.646	#
19)		Methoxychlor	9.40	11.93	192.9E6	131.7E6	70.155	147.113	#
20)		Mirex	9.71	12.55	410.5E6	263.2E6	48.456	69.310	#
21)		Endrin ketone	10.61	12.64	532.9E6	391.4E6	51.239	53.080	
23)	L1	Chlordane (gamma	6.66	7.73	594.7E6	420.5E6	46.785	54.408	
24)	L1	Chlordane (alpha	6.85	8.00	576.8E6	411.7E6	46.529	54.721	
		Sum Chlordane (gamma)			1171.6E6	832.2E6	93.314	109.130	
Average		Chlordane (gamma)					46.657	54.565	
		Sum Toxaphene (1)			0	0	N.D.	N.D.	
Average		Toxaphene (1)					0.000	0.000	

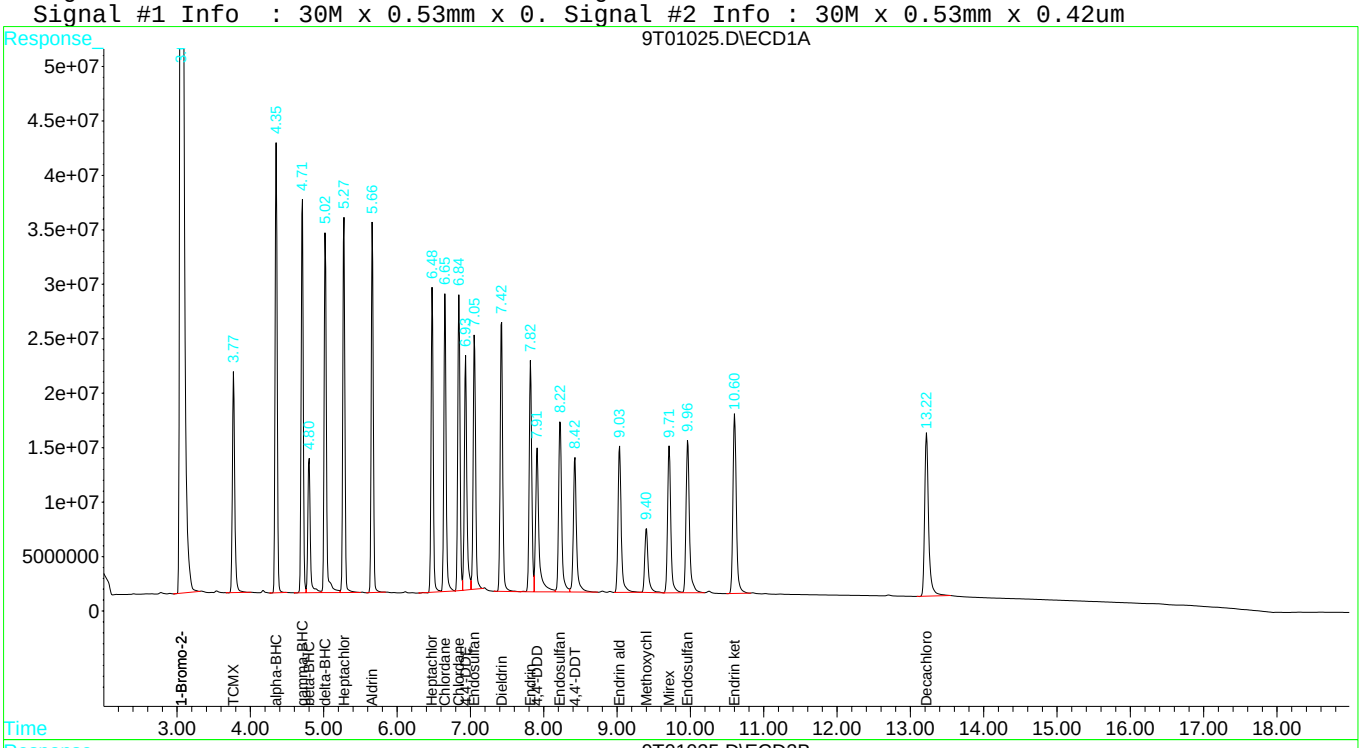
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

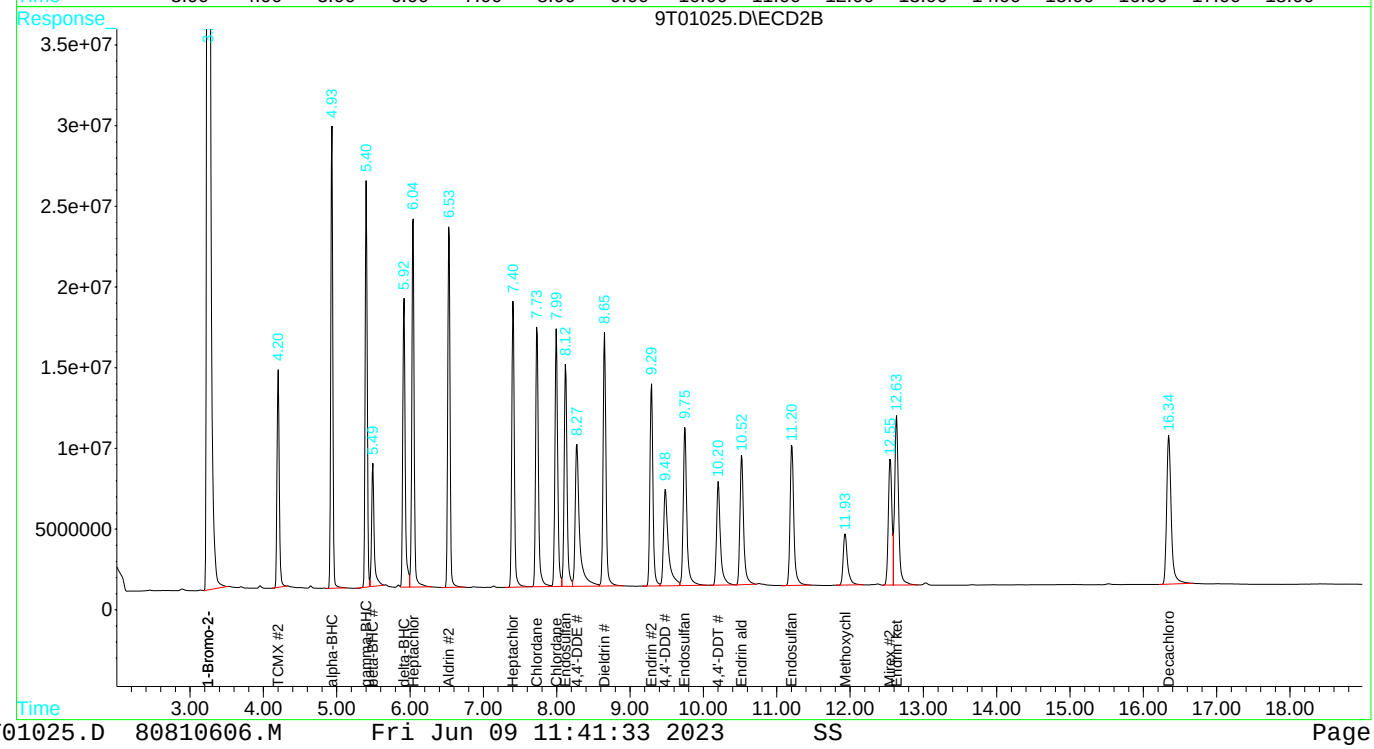
Quantitation Report (QT Reviewed)

Signal #1 : G:\HPCHEM\GCECD9\DATA\20230608\9T01025.D\ECD1A.CH Vial: 3
Signal #2 : G:\HPCHEM\GCECD9\DATA\20230608\9T01025.D\ECD2B.CH
Acq On : 8 Jun 2023 3:44 pm Operator: WD
Sample : SEQ-CCV Inst : HP G1530A
Misc : Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Jun 8 18:08 2023 Quant Results File: 80810606.RES

Quant Method : G:\HPCHEM\G...\80810606.M (Chemstation Integrator)
Title : Pesticides by Method SW-846 8081B
Last Update : Tue Jun 06 16:57:33 2023
Response via : Multiple Level Calibration
DataAcq Meth : RUNPEST.M

Volume Inj. : 2ul
Signal #1 Phase : RTx-50 Signal #2 Phase: RTx-CLPesticides II
Signal #1 Info : 30M x 0.53mm x 0. Signal #2 Info : 30M x 0.53mm x 0.42um





CALIBRATION VERIFICATION SUMMARY

Client: **Dynamic Earth LLC**
Work Order: **23E1424**

Lab Sample ID (50 pp):	SAF0191-CCV1(1)	Init. Calib. Date(s):	06/05/2023
File ID:	9T01049A.D	Date Analyzed:	06/09/2023 17:52
Pesticides	Column 1	Matrix:	Soil

Individual Mix Compound		RT WINDOW		$\overline{CF}$	CF	%D
		FROM	TO			
Aldrin	05.66	05.56	05.76	1	1	1.50
alpha-BHC	04.35	04.25	04.45	1	1	0.60
alpha-Chlordane (cis)	06.84	06.74	06.94	1	1	2.80
beta-BHC	04.80	04.70	04.90	1	1	3.80
delta-BHC	05.02	04.92	05.12	1	1	7.30
Dieldrin	07.42	07.32	07.52	1	1	1.50
Endosulfan I	07.06	06.96	07.16	1	1	4.00
Endosulfan II	08.22	08.12	08.32	1	1	1.60
Endosulfan sulfate	09.96	09.86	10.06	1	1	19.70
Endrin	07.82	07.72	07.92	1	1	6.10
Endrin aldehyde	09.03	08.93	09.13	1	1	3.70
Endrin ketone	10.60	10.50	10.70	1	1	11.40
gamma-Chlordane	06.65	06.55	06.75	1	1	2.10
gamma-BHC (Lindane)	04.71	04.61	04.81	1	1	1.30
4,4'-DDT	08.42	08.32	08.52	1	1	16.00
4,4'-DDE	06.93	06.83	07.03	1	1	7.50
4,4'-DDD	07.91	07.81	08.01	1	1	1.80
Methoxychlor	09.40	09.30	09.50	0	0	58.60 *
Heptachlor Epoxide	06.48	06.38	06.58	1	1	4.20
Heptachlor	05.28	05.18	05.38	1	1	12.50
Chlordane	06.65	06.55	06.75	1	1	2.40
1-Bromo-2-nitrobenzene (IS1)	03.06	-----	-----	1	1	0.00
1-Bromo-2-nitrobenzene (IS2)	03.06	-----	-----	1	1	0.00
Decachlorobiphenyl	13.22	13.12	13.32	1	1	1.80
Tetrachloro-m-xylene	03.77	03.67	03.87	1	1	6.40

* - Outside of QC limits

F-VII

CALIBRATION VERIFICATION SUMMARY

Client: **Dynamic Earth LLC**
Work Order: **23E1424**

Lab Sample ID (50 pp):	SAF0191-CCV1(2)	Init. Calib. Date(s):	06/05/2023
File ID:	9T01049A.D	Date Analyzed:	06/09/2023 17:52
Pesticides	Column 2	Matrix:	Soil

Individual Mix Compound		RT WINDOW		$\overline{CF}$	CF	%D
		FROM	TO			
Aldrin [2C]	06.53	06.43	06.63	1	1	4.10
alpha-BHC [2C]	04.93	04.83	05.03	1	1	6.30
alpha-Chlordane (cis) [2C]	07.99	07.89	08.09	1	1	16.80
beta-BHC [2C]	05.49	05.39	05.59	1	0	6.00
delta-BHC [2C]	05.91	05.81	06.01	1	1	31.80 *
Dieldrin [2C]	08.65	08.55	08.75	1	1	5.70
Endosulfan I [2C]	08.12	08.02	08.22	1	1	3.60
Endosulfan II [2C]	09.75	09.65	09.85	1	1	9.70
Endosulfan sulfate [2C]	11.21	11.11	11.31	1	1	65.70 *
Endrin [2C]	09.29	09.19	09.39	1	1	24.60 *
Endrin aldehyde [2C]	10.52	10.42	10.62	1	1	8.70
Endrin ketone [2C]	12.63	12.53	12.73	1	1	14.70
gamma-Chlordane [2C]	07.73	07.63	07.83	1	1	15.80
gamma-BHC (Lindane) [2C]	05.40	05.30	05.50	1	1	12.50
4,4'-DDT [2C]	10.20	10.10	10.30	0	1	157.00*
4,4'-DDE [2C]	08.27	08.17	08.37	1	1	5.20
4,4'-DDD [2C]	09.48	09.38	09.58	0	1	43.70 *
Methoxychlor [2C]	11.93	11.83	12.03	0	0	247.00*
Heptachlor Epoxide [2C]	07.41	07.31	07.51	1	1	3.50
Heptachlor [2C]	06.04	05.94	06.14	1	1	15.90
Chlordane [2C]	07.73	07.63	07.83	1	1	16.30
1-Bromo-2-nitrobenzene [2C] (IS	03.25	-----	-----	1	1	0.00
1-Bromo-2-nitrobenzene [2C] (IS	03.25	-----	-----	1	1	0.00
Decachlorobiphenyl [2C]	16.35	16.25	16.45	1	1	27.70 *
Tetrachloro-m-xylene [2C]	04.20	04.10	04.30	1	1	1.30

* - Outside of QC limits

F-VII

Quantitation Report (QT Reviewed)

Signal #1 : G:\HPCHEM\GCECD9\DATA\20230609\9T01049A.D\ECD1A.CH Vial: 3
Signal #2 : G:\HPCHEM\GCECD9\DATA\20230609\9T01049A.D\ECD2B.CH
Acq On : 9 Jun 2023 5:52 pm Operator: WD
Sample : SEQ-CCV Inst : HP G1530A
Misc : Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Jun 10 12:32 2023 Quant Results File: 80810606.RES

Quant Method : G:\HPCHEM\G...\80810606.M (Chemstation Integrator)
Title : Pesticides by Method SW-846 8081B
Last Update : Tue Jun 06 16:57:33 2023
Response via : Initial Calibration
DataAcq Meth : RUNPEST.M

Volume Inj. : 2ul
Signal #1 Phase : RTx-50 Signal #2 Phase: RTx-CLPesticides II
Signal #1 Info : 30M x 0.53mm x 0. Signal #2 Info : 30M x 0.53mm x 0.42um

		Compound	RT#1	RT#2	Resp#1	Resp#2	ug/kg	ug/kg
		Internal Standards						
1)	I	1-Bromo-2-nitrob	3.06	3.25	4232.6E6	3010.5E6	400.000	400.000
25)	I	1-Bromo-2-nitrob	3.06	3.25	4232.6E6	3010.5E6	400.000	400.000
		System Monitoring Compounds						
2)	S	TCMX	3.77	4.20	445.1E6	289.1E6	46.800	50.644
		Spiked Amount 50.000	Range 43 - 129		Recovery =		93.60%	101.29%
22)	S	Decachlorobiphen	13.22	16.35	556.0E6	407.4E6	51.062	64.112 #
		Spiked Amount 50.000	Range 42 - 136		Recovery =		102.12%	128.22%
		Target Compounds						
3)		alpha-BHC	4.35	4.93	787.1E6	552.2E6	46.177	47.628
4)	M	gamma-BHC (Linda	4.71	5.40	713.4E6	492.4E6	50.647	56.226
5)	M	Heptachlor	5.28	6.04	701.8E6	518.8E6	56.236	57.926
6)		beta-BHC	4.80	5.49	288.1E6	187.2E6	48.110	47.014
7)		delta-BHC	5.02	5.91	693.4E6	390.0E6	47.293	59.120m#
8)	M	Aldrin	5.66	6.53	672.0E6	485.1E6	49.262	52.072
9)		Heptachlor epoxi	6.48	7.41	582.3E6	424.6E6	47.920	51.742
10)		Endosulfan I	7.06	8.12	536.9E6	378.7E6	48.022	51.818
11)		4,4'-DDE	6.93	8.27	480.6E6	357.1E6	46.256	52.617
12)	M	Dieldrin	7.42	8.65	589.1E6	426.7E6	49.248	52.855
13)	M	Endrin	7.82	9.29	500.4E6	355.2E6	53.027	62.303
14)		4,4'-DDD	7.91	9.48	417.0E6	269.8E6	50.901	71.850 #
15)		Endosulfan II	8.22	9.75	459.6E6	335.4E6	50.816	54.834
16)	M	4,4'-DDT	8.42	10.20	357.6E6	261.5E6	57.980m	128.374 #
17)		Endrin aldehyde	9.03	10.52	418.9E6	288.2E6	48.130	54.339
18)		Endosulfan sulfa	9.96	11.21	471.4E6	321.1E6	59.846	82.851 #
19)		Methoxychlor	9.40	11.93	209.5E6	148.2E6	79.277	173.722 #
20)		Mirex	9.71	12.55	423.0E6	272.3E6	51.952	75.260 #
21)		Endrin ketone	10.60	12.63	556.8E6	403.1E6	55.703	57.372
23)	L1	Chlordane (gamma	6.65	7.73	598.2E6	426.2E6	48.956	57.883
24)	L1	Chlordane (alpha	6.84	7.99	579.4E6	418.6E6	48.622	58.394
		Sum Chlordane (gamma)			1177.5E6	844.8E6	97.578	116.276
Average		Chlordane (gamma)					48.789	58.138
		Sum Toxaphene (1)			0	0	N.D.	N.D.
Average		Toxaphene (1)					0.000	0.000

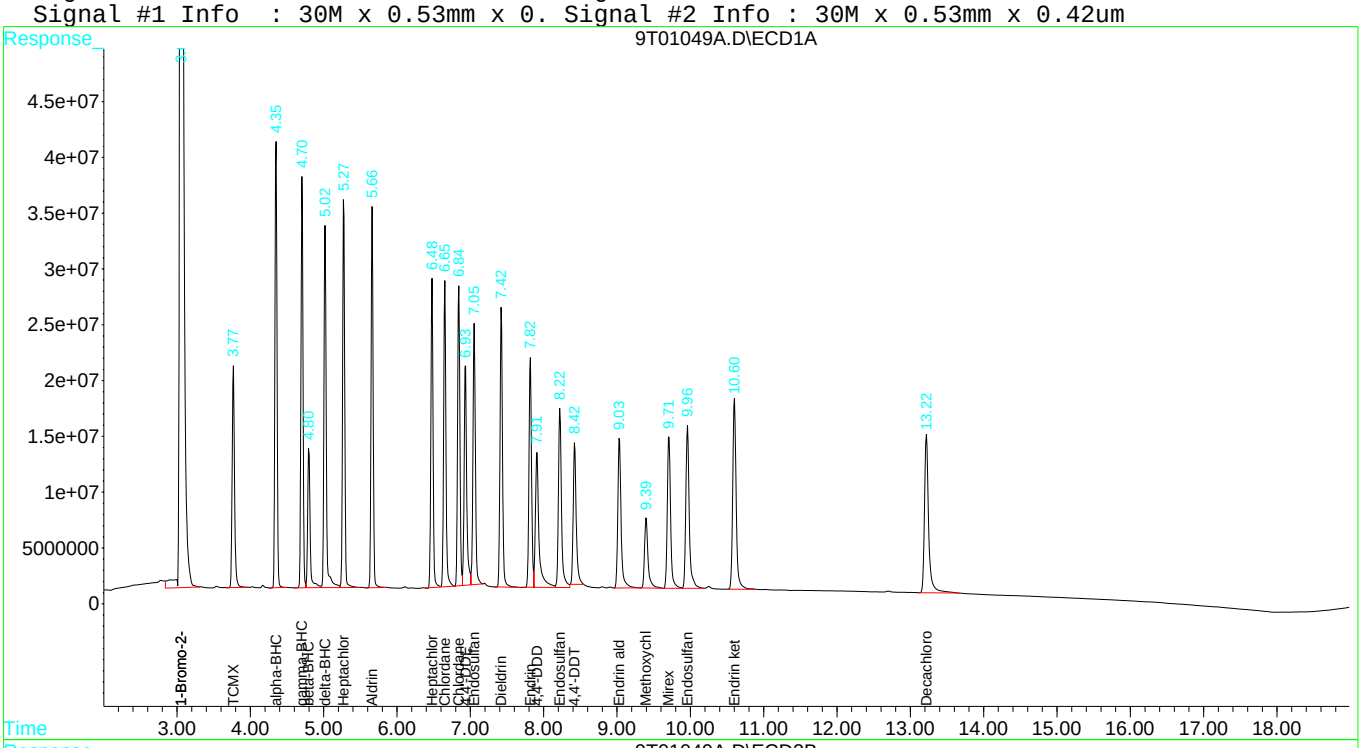
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

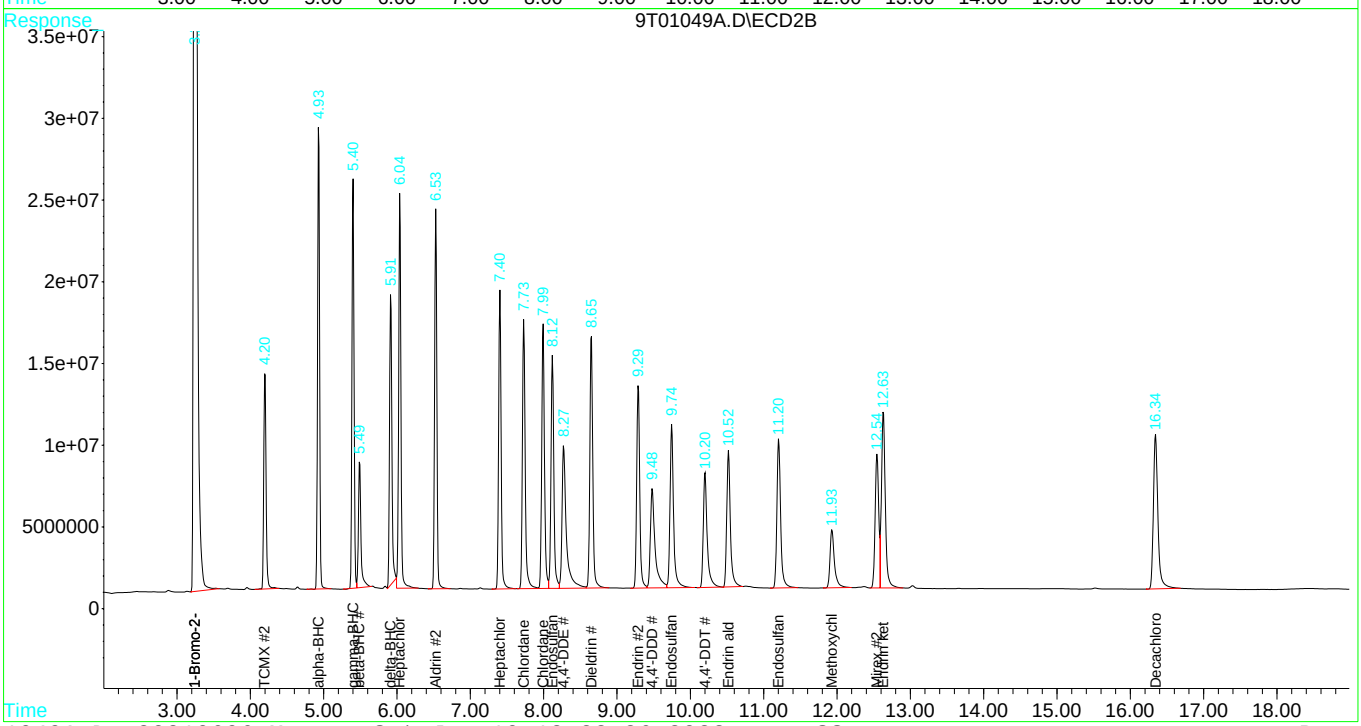
Quantitation Report (QT Reviewed)

Signal #1 : G:\HPCHEM\GCECD9\DATA\20230609\9T01049A.D\ECD1A.CH Vial: 3
Signal #2 : G:\HPCHEM\GCECD9\DATA\20230609\9T01049A.D\ECD2B.CH
Acq On : 9 Jun 2023 5:52 pm Operator: WD
Sample : SEQ-CCV Inst : HP G1530A
Misc : Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Jun 10 12:32 2023 Quant Results File: 80810606.RES

Quant Method : G:\HPCHEM\G...\80810606.M (Chemstation Integrator)
Title : Pesticides by Method SW-846 8081B
Last Update : Tue Jun 06 16:57:33 2023
Response via : Multiple Level Calibration
DataAcq Meth : RUNPEST.M

Volume Inj. : 2ul
Signal #1 Phase : RTx-50 Signal #2 Phase: RTx-CLPesticides II
Signal #1 Info : 30M x 0.53mm x 0. Signal #2 Info : 30M x 0.53mm x 0.42um





CALIBRATION VERIFICATION SUMMARY

Client: **Dynamic Earth LLC**
Work Order: **23E1424**

Lab Sample ID (50 pp):	SAF0265-CCV1(1)	Init. Calib. Date(s):	06/05/2023
File ID:	9T01120.D	Date Analyzed:	06/13/2023 16:23
Pesticides	Column 1	Matrix:	Soil

Individual Mix Compound		RT WINDOW		$\overline{CF}$	CF	%D
		FROM	TO			
Aldrin	05.68	05.58	05.78	1	1	2.20
alpha-BHC	04.36	04.26	04.46	1	2	3.00
alpha-Chlordane (cis)	06.85	06.75	06.95	1	1	2.70
beta-BHC	04.81	04.71	04.91	1	1	8.50
delta-BHC	05.03	04.93	05.13	1	1	10.40
Dieldrin	07.43	07.33	07.53	1	1	3.20
Endosulfan I	07.06	06.96	07.16	1	1	7.80
Endosulfan II	08.23	08.13	08.33	1	1	0.50
Endosulfan sulfate	09.97	09.87	10.07	1	1	17.50
Endrin	07.83	07.73	07.93	1	1	9.70
Endrin aldehyde	09.04	08.94	09.14	1	1	7.20
Endrin ketone	10.61	10.51	10.71	1	1	6.10
gamma-Chlordane	06.66	06.56	06.76	1	1	3.10
gamma-BHC (Lindane)	04.72	04.62	04.82	1	1	3.70
4,4'-DDT	08.43	08.33	08.53	1	1	19.30
4,4'-DDE	06.94	06.84	07.04	1	1	0.40
4,4'-DDD	07.92	07.82	08.02	1	1	1.90
Methoxychlor	09.40	09.30	09.50	0	0	72.50 *
Heptachlor Epoxide	06.49	06.39	06.59	1	1	5.80
Heptachlor	05.29	05.19	05.39	1	1	8.60
Chlordane	06.66	06.56	06.76	1	1	2.90
1-Bromo-2-nitrobenzene (IS1)	03.06	-----	-----	1	1	0.00
1-Bromo-2-nitrobenzene (IS2)	03.06	-----	-----	1	1	0.00
Decachlorobiphenyl	13.22	13.12	13.32	1	1	19.80
Tetrachloro-m-xylene	03.78	03.68	03.88	1	1	4.10

* - Outside of QC limits

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CALIBRATION VERIFICATION SUMMARY

Client: **Dynamic Earth LLC**
Work Order: **23E1424**

Lab Sample ID (50 pp):	SAF0265-CCV1(2)	Init. Calib. Date(s):	06/05/2023
File ID:	9T01120.D	Date Analyzed:	06/13/2023 16:23
Pesticides	Column 2	Matrix:	Soil

Individual Mix Compound		RT WINDOW		$\overline{CF}$	CF	%D
		FROM	TO			
Aldrin [2C]	06.54	06.44	06.64	1	1	4.50
alpha-BHC [2C]	04.94	04.84	05.04	1	1	3.30
alpha-Chlordane (cis) [2C]	08.00	07.90	08.10	1	1	7.20
beta-BHC [2C]	05.50	05.40	05.60	1	0	7.70
delta-BHC [2C]	05.92	05.82	06.02	1	1	32.40 *
Dieldrin [2C]	08.65	08.55	08.75	1	1	3.90
Endosulfan I [2C]	08.13	08.03	08.23	1	1	6.80
Endosulfan II [2C]	09.75	09.65	09.85	1	1	3.00
Endosulfan sulfate [2C]	11.20	11.10	11.30	1	1	51.00 *
Endrin [2C]	09.29	09.19	09.39	1	1	16.40
Endrin aldehyde [2C]	10.52	10.42	10.62	1	1	4.00
Endrin ketone [2C]	12.63	12.53	12.73	1	1	2.90
gamma-Chlordane [2C]	07.74	07.64	07.84	1	1	6.30
gamma-BHC (Lindane) [2C]	05.41	05.31	05.51	1	1	9.80
4,4'-DDT [2C]	10.20	10.10	10.30	0	1	168.00*
4,4'-DDE [2C]	08.27	08.17	08.37	1	1	0.30
4,4'-DDD [2C]	09.47	09.37	09.57	0	1	39.10 *
Methoxychlor [2C]	11.92	11.82	12.02	0	0	250.00*
Heptachlor Epoxide [2C]	07.41	07.31	07.51	1	1	5.40
Heptachlor [2C]	06.05	05.95	06.15	1	1	1.40
Chlordane [2C]	07.74	07.64	07.84	1	1	6.70
1-Bromo-2-nitrobenzene [2C] (IS	03.25	-----	-----	1	1	0.00
1-Bromo-2-nitrobenzene [2C] (IS	03.25	-----	-----	1	1	0.00
Decachlorobiphenyl [2C]	16.34	16.24	16.44	1	1	4.20
Tetrachloro-m-xylene [2C]	04.21	04.11	04.31	1	1	2.10

* - Outside of QC limits

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Quantitation Report (QT Reviewed)

Signal #1 : G:\HPCHEM\GCECD9\DATA\20230613\9T01120.D\ECD1A.CH Vial: 3
Signal #2 : G:\HPCHEM\GCECD9\DATA\20230613\9T01120.D\ECD2B.CH
Acq On : 13 Jun 2023 4:23 pm Operator: WD
Sample : SEQ-CCV Inst : HP G1530A
Misc : Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Jun 14 11:50 2023 Quant Results File: 80810606.RES

Quant Method : G:\HPCHEM\G...\80810606.M (Chemstation Integrator)
Title : Pesticides by Method SW-846 8081B
Last Update : Tue Jun 06 16:57:33 2023
Response via : Initial Calibration
DataAcq Meth : RUNPEST.M

Volume Inj. : 2ul
Signal #1 Phase : RTx-50 Signal #2 Phase: RTx-CLPesticides II
Signal #1 Info : 30M x 0.53mm x 0. Signal #2 Info : 30M x 0.53mm x 0.42um

		Compound	RT#1	RT#2	Resp#1	Resp#2	ug/kg	ug/kg	
		Internal Standards							
1)	I	1-Bromo-2-nitrob	3.06	3.25	4543.5E6	3340.5E6	400.000	400.000	
25)	I	1-Bromo-2-nitrob	3.06	3.25	4543.5E6	3340.5E6	400.000	400.000	
		System Monitoring Compounds							
2)	S	TCMX	3.78	4.21	489.4E6	310.1E6	47.939	48.964	
		Spiked Amount 50.000	Range 43 - 129		Recovery =		95.88%	97.93%	
22)	S	Decachlorobiphen	13.22	16.34f	470.1E6	368.9E6	40.220m	52.325	#
		Spiked Amount 50.000	Range 42 - 136		Recovery =		80.44%	104.65%	
		Target Compounds							
3)		alpha-BHC	4.36	4.94	865.0E6	595.4E6	47.237	46.354	
4)	M	gamma-BHC (Linda	4.72	5.41	783.8E6	533.6E6	51.832	54.913	
5)	M	Heptachlor	5.29	6.05	727.7E6	504.0E6	54.320	50.711	
6)		beta-BHC	4.81	5.50	294.0E6	203.9E6	45.736	46.142	
7)		delta-BHC	5.03	5.92	765.5E6	434.7E6	48.558	59.356m	
8)	M	Aldrin	5.68	6.54	716.4E6	493.8E6	48.925	47.771	
9)		Heptachlor epoxi	6.49	7.41	614.1E6	430.7E6	47.083	47.296	
10)		Endosulfan I	7.06	8.13	553.2E6	377.7E6	46.089	46.577	
11)		4,4'-DDE	6.94	8.27	559.8E6	375.3E6	50.193	49.847	
12)	M	Dieldrin	7.43	8.65	621.5E6	430.3E6	48.408	48.030	
13)	M	Endrin	7.83	9.29	555.4E6	368.3E6	54.828	58.225	
14)		4,4'-DDD	7.92	9.47	448.0E6	289.8E6	50.945	69.554	#
15)		Endosulfan II	8.23	9.75	482.9E6	329.2E6	49.744	48.507	
16)	M	4,4'-DDT	8.43	10.20	394.8E6	302.9E6	59.631m	134.016	#
17)		Endrin aldehyde	9.04	10.52	433.7E6	282.6E6	46.424	48.012	
18)		Endosulfan sulfa	9.97	11.20	496.8E6	324.8E6	58.759	75.524	#
19)		Methoxychlor	9.40	11.92	244.7E6	165.5E6	86.273	174.803	#
20)		Mirex	9.72	12.55	409.6E6	263.6E6	46.861	65.652	#
21)		Endrin ketone	10.61	12.63	569.2E6	378.5E6	53.041	48.545	
23)	L1	Chlordane (gamma	6.66	7.74	635.3E6	434.2E6	48.440	53.140	
24)	L1	Chlordane (alpha	6.85	8.00	622.3E6	426.3E6	48.654	53.600	
		Sum Chlordane (gamma)			1257.7E6	860.5E6	97.094	106.740	
Average		Chlordane (gamma)					48.547	53.370	
		Sum Toxaphene (1)			0	0	N.D.	N.D.	
Average		Toxaphene (1)					0.000	0.000	

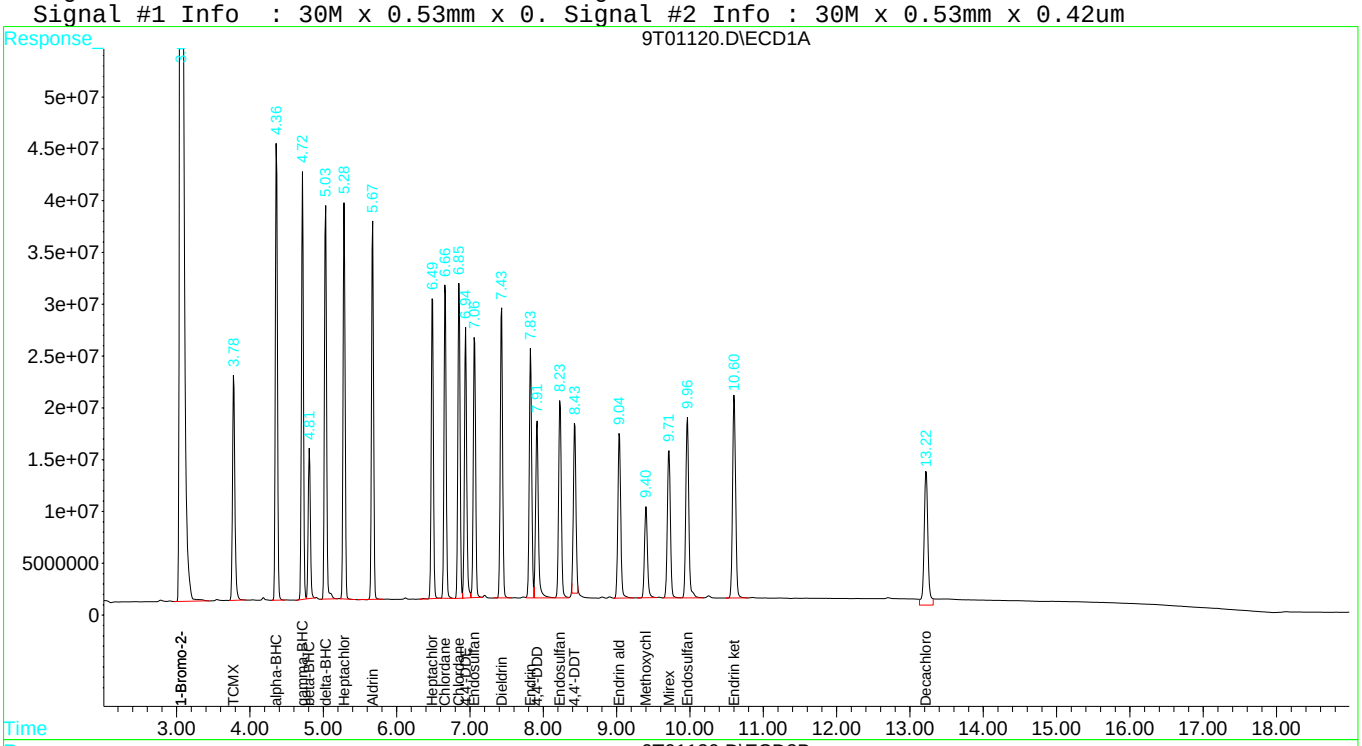
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

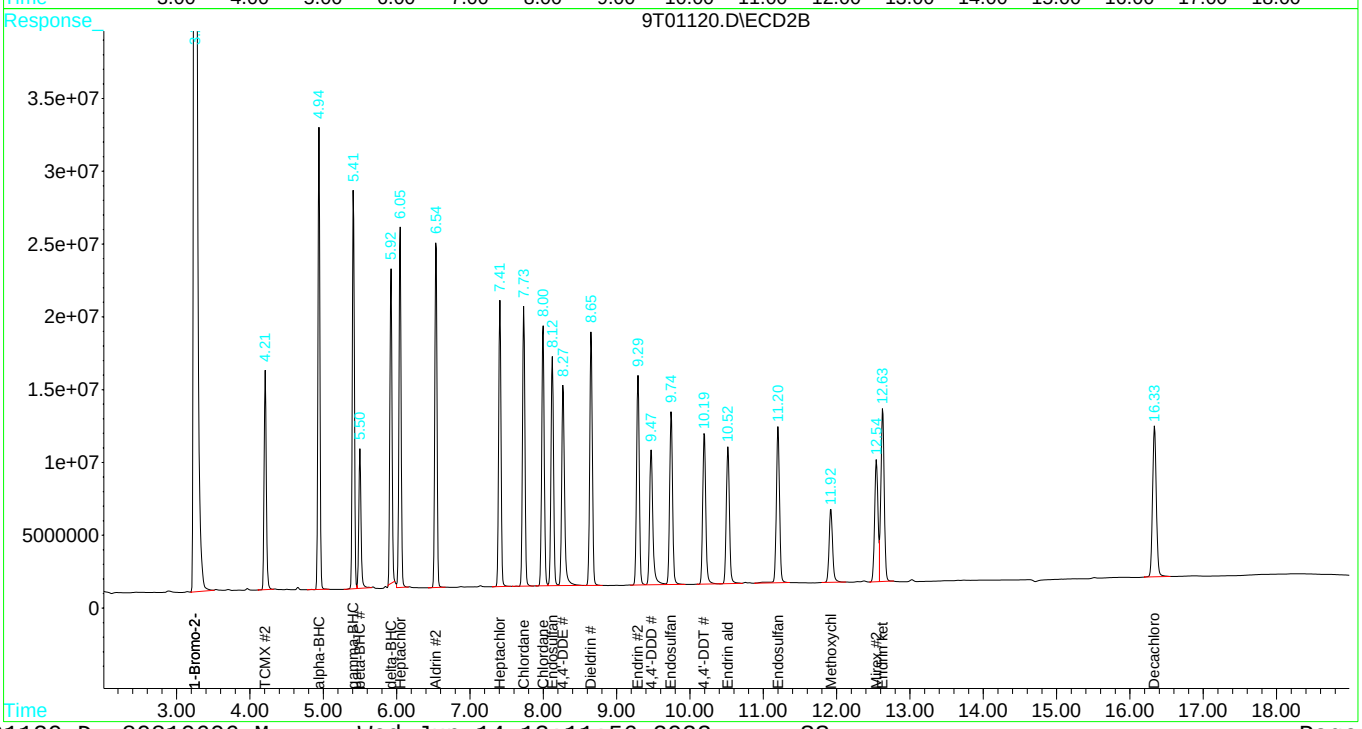
Quantitation Report (QT Reviewed)

Signal #1 : G:\HPCHEM\GCECD9\DATA\20230613\9T01120.D\ECD1A.CH Vial: 3
Signal #2 : G:\HPCHEM\GCECD9\DATA\20230613\9T01120.D\ECD2B.CH
Acq On : 13 Jun 2023 4:23 pm Operator: WD
Sample : SEQ-CCV Inst : HP G1530A
Misc : Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Jun 14 11:50 2023 Quant Results File: 80810606.RES

Quant Method : G:\HPCHEM\G...\80810606.M (Chemstation Integrator)
Title : Pesticides by Method SW-846 8081B
Last Update : Tue Jun 06 16:57:33 2023
Response via : Multiple Level Calibration
DataAcq Meth : RUNPEST.M

Volume Inj. : 2ul
Signal #1 Phase : RTx-50 Signal #2 Phase: RTx-CLPesticides II
Signal #1 Info : 30M x 0.53mm x 0. Signal #2 Info : 30M x 0.53mm x 0.42um





CALIBRATION VERIFICATION SUMMARY

Client: **Dynamic Earth LLC**
Work Order: **23E1424**

Lab Sample ID (50 pp):	SAF0602-CCV1(1)	Init. Calib. Date(s):	06/15/2023
File ID:	9T01334.D	Date Analyzed:	06/29/2023 17:48
Pesticides	Column 1	Matrix:	Soil

Individual Mix Compound		RT WINDOW		$\overline{CF}$	CF	%D
		FROM	TO			
Aldrin	05.62	05.52	05.72	1	1	0.10
alpha-BHC	04.32	04.22	04.42	2	2	2.10
alpha-Chlordane (cis)	06.80	06.70	06.90	1	1	2.10
beta-BHC	04.77	04.67	04.87	1	1	7.40
delta-BHC	04.99	04.89	05.09	1	1	5.10
Dieldrin	07.37	07.27	07.47	1	1	2.40
Endosulfan I	07.01	06.91	07.11	1	1	2.20
Endosulfan II	08.16	08.06	08.26	1	1	2.60
Endosulfan sulfate	09.89	09.79	09.99	1	1	2.70
Endrin	07.77	07.67	07.87	1	1	0.00
Endrin aldehyde	08.97	08.87	09.07	1	1	8.60
Endrin ketone	10.53	10.43	10.63	1	1	0.20
gamma-Chlordane	06.61	06.51	06.71	1	1	2.60
gamma-BHC (Lindane)	04.67	04.57	04.77	1	1	1.10
4,4'-DDT	08.36	08.26	08.46	1	1	18.40
4,4'-DDE	06.89	06.79	06.99	1	1	5.50
4,4'-DDD	07.85	07.75	07.95	1	1	8.10
Methoxychlor	09.33	09.23	09.43	0	0	7.00
Heptachlor Epoxide	06.44	06.34	06.54	1	1	2.00
Heptachlor	05.24	05.14	05.34	1	1	2.80
Chlordane	06.61	06.51	06.71	1	1	2.30
1-Bromo-2-nitrobenzene (IS1)	03.03	-----	-----	1	1	0.00
1-Bromo-2-nitrobenzene (IS2)	03.03	-----	-----	1	1	0.00
Decachlorobiphenyl	13.13	13.03	13.23	1	1	11.40
Tetrachloro-m-xylene	03.75	03.65	03.85	1	1	3.30

* - Outside of QC limits

F-VII

CALIBRATION VERIFICATION SUMMARY

Client: **Dynamic Earth LLC**
Work Order: **23E1424**

Lab Sample ID (50 pp):	SAF0602-CCV1(2)	Init. Calib. Date(s):	06/15/2023
File ID:	9T01334.D	Date Analyzed:	06/29/2023 17:48
Pesticides	Column 2	Matrix:	Soil

Individual Mix Compound		RT WINDOW		$\overline{CF}$	CF	%D
		FROM	TO			
Aldrin [2C]	06.49	06.39	06.59	1	1	3.30
alpha-BHC [2C]	04.90	04.80	05.00	1	2	11.80
alpha-Chlordane (cis) [2C]	07.93	07.83	08.03	1	1	4.00
beta-BHC [2C]	05.46	05.36	05.56	1	1	10.80
delta-BHC [2C]	05.88	05.78	05.98	1	1	3.10
Dieldrin [2C]	08.59	08.49	08.69	1	1	8.60
Endosulfan I [2C]	08.06	07.96	08.16	1	1	9.10
Endosulfan II [2C]	09.67	09.57	09.77	1	1	3.60
Endosulfan sulfate [2C]	11.12	11.02	11.22	1	1	3.70
Endrin [2C]	09.22	09.12	09.32	1	1	7.10
Endrin aldehyde [2C]	10.44	10.34	10.54	1	1	13.20
Endrin ketone [2C]	12.54	12.44	12.64	1	1	4.60
gamma-Chlordane [2C]	07.67	07.57	07.77	1	1	5.90
gamma-BHC (Lindane) [2C]	05.37	05.27	05.47	1	2	10.50
4,4'-DDT [2C]	10.12	10.02	10.22	1	1	11.70
4,4'-DDE [2C]	08.21	08.11	08.31	1	1	19.70
4,4'-DDD [2C]	09.40	09.30	09.50	1	1	13.30
Methoxychlor [2C]	11.84	11.74	11.94	0	0	2.60
Heptachlor Epoxide [2C]	07.35	07.25	07.45	1	1	5.50
Heptachlor [2C]	06.00	05.90	06.10	1	1	7.00
Chlordane [2C]	07.67	07.57	07.77	1	1	4.90
1-Bromo-2-nitrobenzene [2C] (IS	03.22	-----	-----	1	1	0.00
1-Bromo-2-nitrobenzene [2C] (IS	03.22	-----	-----	1	1	0.00
Decachlorobiphenyl [2C]	16.24	16.14	16.34	1	1	2.70
Tetrachloro-m-xylene [2C]	04.17	04.07	04.27	1	1	2.80

* - Outside of QC limits

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Quantitation Report (QT Reviewed)

Signal #1 : G:\HPCHEM\GCECD9\DATA\20230629\9T01334.D\ECD1A.CH Vial: 3
Signal #2 : G:\HPCHEM\GCECD9\DATA\20230629\9T01334.D\ECD2B.CH
Acq On : 29 Jun 2023 5:48 pm Operator: WD
Sample : SEQ-CCV Inst : HP G1530A
Misc : Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Jun 29 18:17 2023 Quant Results File: 80810616.RES

Quant Method : G:\HPCHEM\G...\80810616.M (Chemstation Integrator)
Title : Pesticides by Method SW-846 8081B
Last Update : Fri Jun 16 17:01:33 2023
Response via : Initial Calibration
DataAcq Meth : RUNPEST.M

Volume Inj. : 2ul
Signal #1 Phase : RTx-50 Signal #2 Phase: RTx-CLPesticides II
Signal #1 Info : 30M x 0.53mm x 0. Signal #2 Info : 30M x 0.53mm x 0.42um

		Compound	RT#1	RT#2	Resp#1	Resp#2	ug/kg	ug/kg
		Internal Standards						
1)	I	1-Bromo-2-nitrob	3.03	3.22	8622.1E6	5695.2E6	400.000m	400.000
25)	I	1-Bromo-2-nitrob	3.03	3.22	8027.7E6	5695.2E6	400.000m	400.000
		System Monitoring Compounds						
2)	S	TCMX	3.75	4.17	935.1E6	542.9E6	46.934	46.712
		Spiked Amount 50.000	Range 43 - 129		Recovery =		93.87%	93.42%
22)	S	Decachlorobiphen	13.13	16.24	915.4E6	752.5E6	40.790m	47.456
		Spiked Amount 50.000	Range 42 - 136		Recovery =		81.58%	94.91%
		Target Compounds						
3)		alpha-BHC	4.32	4.90	1745.5E6	1192.8E6	46.823	49.764
4)	M	gamma-BHC (Linda	4.67	5.37	1585.8E6	1076.0E6	50.564m	55.253
5)	M	Heptachlor	5.24	6.00	1443.5E6	1038.9E6	48.581m	53.509
6)		beta-BHC	4.77	5.46	568.2E6	398.0E6	46.322	55.380
7)		delta-BHC	4.99	5.88	1573.0E6	795.8E6	47.788	43.181
8)	M	Aldrin	5.62	6.49	1434.4E6	961.6E6	50.054m	51.632
9)		Heptachlor epoxi	6.44	7.35	1246.4E6	870.3E6	49.002	52.756
10)		Endosulfan I	7.01	8.06	1136.2E6	776.2E6	48.899	54.554
11)		4,4'-DDE	6.89	8.21	1088.2E6	783.7E6	52.733m	59.866
12)	M	Dieldrin	7.37	8.59	1299.6E6	899.3E6	51.185	54.284
13)	M	Endrin	7.77	9.22	1134.7E6	767.8E6	50.014	53.573
14)		4,4'-DDD	7.85	9.40	962.2E6	552.5E6	54.036	56.633m
15)		Endosulfan II	8.16	9.67	1042.2E6	707.6E6	48.688	51.802
16)	M	4,4'-DDT	8.36	10.12	805.0E6	649.8E6	40.813	55.871 #
17)		Endrin aldehyde	8.97	10.44	860.5E6	513.4E6	45.693	43.378
18)		Endosulfan sulfa	9.89	11.12	1049.1E6	672.9E6	48.637	51.836
19)		Methoxychlor	9.33	11.84	498.1E6	331.4E6	46.488	51.283
20)		Mirex	9.63	12.46	790.0E6	526.5E6	40.930m	46.156
21)		Endrin ketone	10.53	12.54	1222.7E6	820.3E6	49.915	52.297
23)	L1	Chlordane (gamma	6.61	7.67	1311.9E6	891.2E6	48.687	52.936
24)	L1	Chlordane (alpha	6.80	7.93	1283.0E6	863.5E6	48.972	51.980
		Sum Chlordane (gamma)			2594.9E6	1754.7E6	97.659	104.916
Average		Chlordane (gamma)					48.829	52.458
		Sum Toxaphene (1)			0	0	N.D.	N.D.
Average		Toxaphene (1)					0.000	0.000

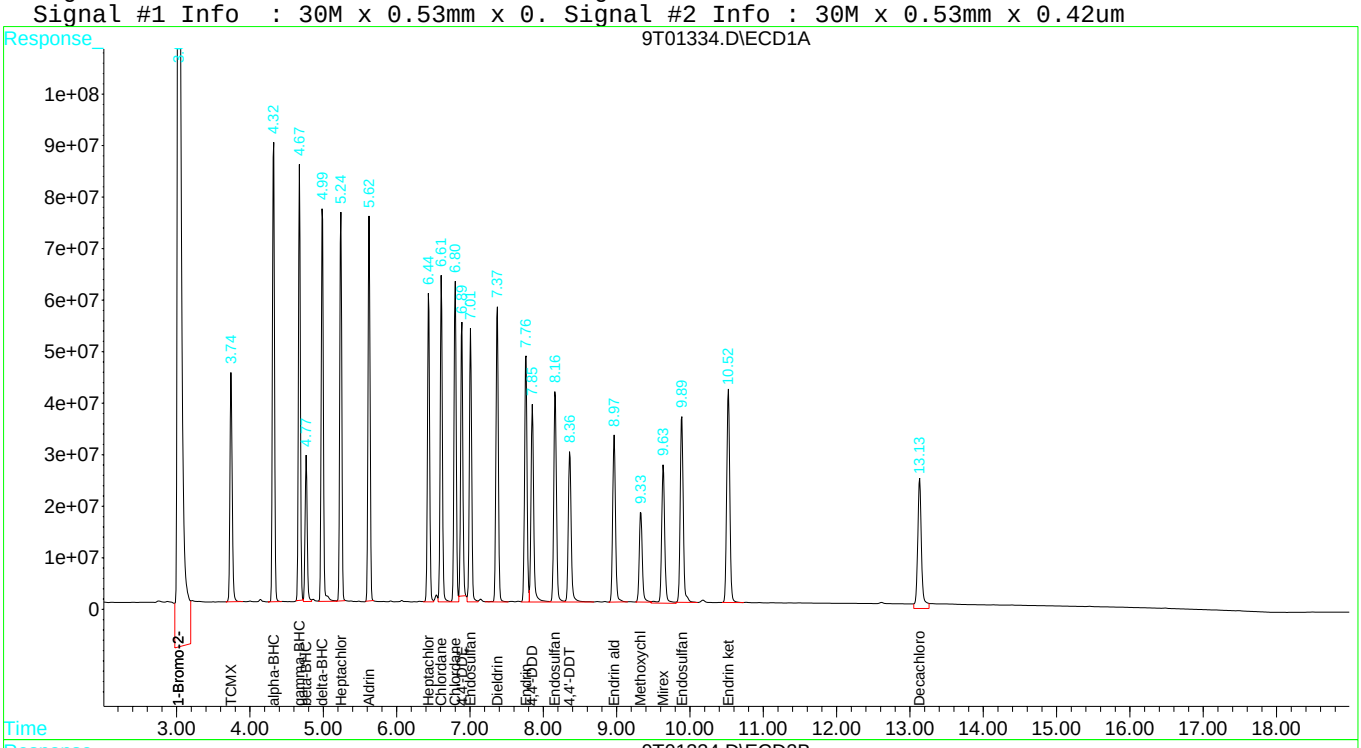
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

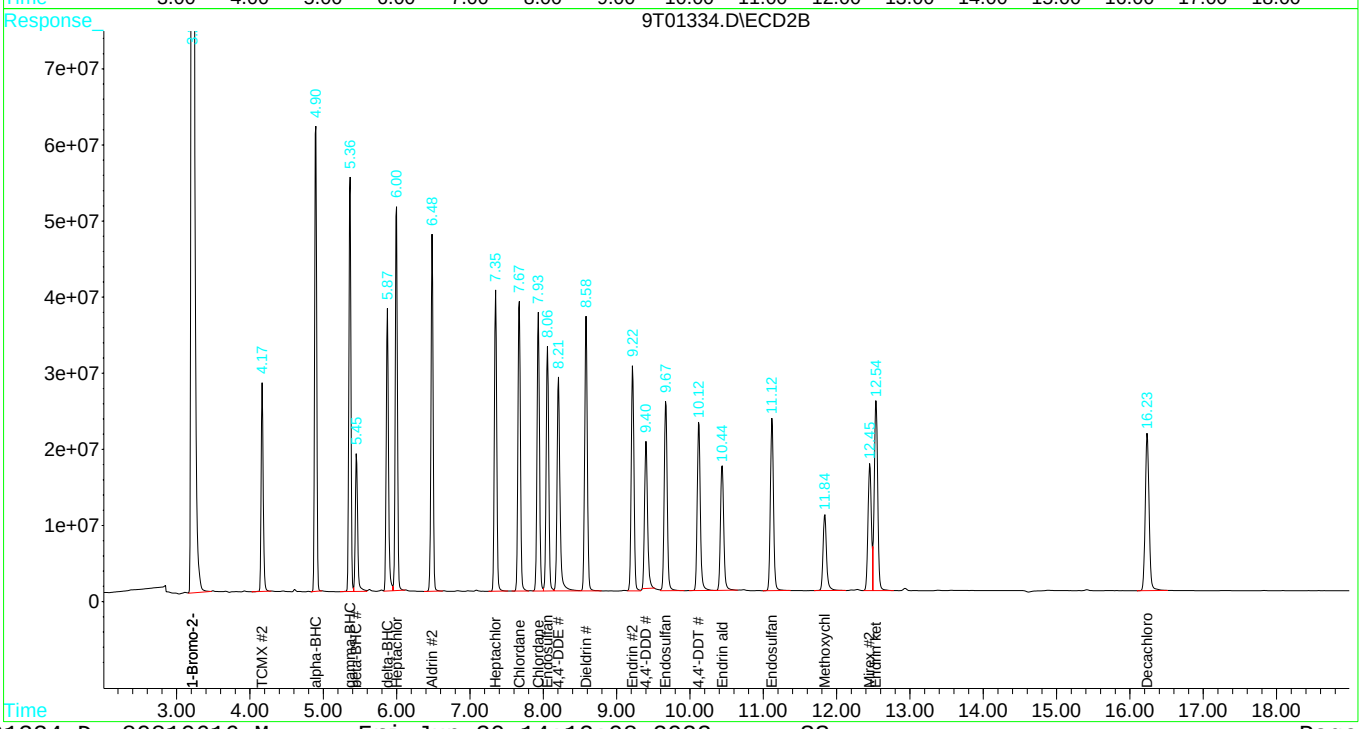
Quantitation Report (QT Reviewed)

Signal #1 : G:\HPCHEM\GCECD9\DATA\20230629\9T01334.D\ECD1A.CH Vial: 3
Signal #2 : G:\HPCHEM\GCECD9\DATA\20230629\9T01334.D\ECD2B.CH
Acq On : 29 Jun 2023 5:48 pm Operator: WD
Sample : SEQ-CCV Inst : HP G1530A
Misc : Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Jun 29 18:17 2023 Quant Results File: 80810616.RES

Quant Method : G:\HPCHEM\G...\80810616.M (Chemstation Integrator)
Title : Pesticides by Method SW-846 8081B
Last Update : Fri Jun 16 17:01:33 2023
Response via : Multiple Level Calibration
DataAcq Meth : RUNPEST.M

Volume Inj. : 2ul
Signal #1 Phase : RTx-50 Signal #2 Phase: RTx-CLPesticides II
Signal #1 Info : 30M x 0.53mm x 0. Signal #2 Info : 30M x 0.53mm x 0.42um





AQUA PRO-TECH LABORATORIES
Certified Environmental Testing

GENERAL CHEMISTRY

Dynamic Earth LLC

Work Order: 23E1424

Project: Turtle Mill Brook-Eco. Evaluation

ANALYSIS DATA SHEET

General Chemistry

Client: Dynamic Earth LLC
Project: Turtle Mill Brook-Eco. Evaluation
Work Order: 23E1424

General Chemistry

23E1424-01 (Surface Water) - SW-1

Analyte	Units	Conc.	RL	DF	Qual	Analyzed	Method
pH	pH Units	7.06	0.0100	1	H	05/31/23 18:42	SM 4500-H B-11
Temp at time of pH, °C	°C	15.9	1.00	1		05/31/23 18:43	SM 2550 B-10

23E1424-02 (Soil) - SED-1

Analyte	Units	Conc.	MDL	DF	Qual	Analyzed	Method
Percent Solids	%	59.6		1		06/01/23 10:54	Gravimetric
Redox Potential	mV	191	-1000	1		06/01/23 12:54	SM 2580 (mod)
Temp at time of pH, °C	°C	19.4	1.00	1		06/01/23 12:56	SM 2550 B-10
pH	pH Units	5.56	0.0100	1		06/01/23 12:55	SW 846 9045D

23E1424-03 (Surface Water) - SW-2

Analyte	Units	Conc.	RL	DF	Qual	Analyzed	Method
pH	pH Units	7.11	0.0100	1	H	05/31/23 18:42	SM 4500-H B-11
Temp at time of pH, °C	°C	15.1	1.00	1		05/31/23 18:43	SM 2550 B-10

23E1424-04 (Soil) - SED-2

Analyte	Units	Conc.	MDL	DF	Qual	Analyzed	Method
Percent Solids	%	69.6		1		06/01/23 10:54	Gravimetric
Redox Potential	mV	189	-1000	1		06/01/23 12:54	SM 2580 (mod)
pH	pH Units	5.42	0.0100	1		06/01/23 12:55	SW 846 9045D
Temp at time of pH, °C	°C	19.4	1.00	1		06/01/23 12:56	SM 2550 B-10

23E1424-05 (Surface Water) - SW-3

Analyte	Units	Conc.	RL	DF	Qual	Analyzed	Method
pH	pH Units	7.19	0.0100	1	H	05/31/23 18:42	SM 4500-H B-11
Temp at time of pH, °C	°C	15.7	1.00	1		05/31/23 18:43	SM 2550 B-10

23E1424-06 (Soil) - SED-3

Analyte	Units	Conc.	MDL	DF	Qual	Analyzed	Method
Percent Solids	%	79.3		1		06/01/23 10:54	Gravimetric
pH	pH Units	7.92	0.0100	1		06/01/23 12:55	SW 846 9045D
Redox Potential	mV	142	-1000	1		06/01/23 12:54	SM 2580 (mod)
Temp at time of pH, °C	°C	19.7	1.00	1		06/01/23 12:56	SM 2550 B-10

23E1424-07 (Surface Water) - SW-4

Analyte	Units	Conc.	RL	DF	Qual	Analyzed	Method
pH	pH Units	7.19	0.0100	1	H	05/31/23 18:42	SM 4500-H B-11
Temp at time of pH, °C	°C	15.7	1.00	1		05/31/23 18:43	SM 2550 B-10

ND - Indicates compound analyzed for but not detected
J - Indicates estimated value
B - Indicates compound found in associated blank
E - Concentration exceeds highest calibration standard
D - Indicates result is based on a dilution
H - Indicates a Hold Time violation
P - Greater than 25% diff. between 2 GC columns.
MDL - Minimum detection limit, **RL** - Reporting limit

F-I

General Chemistry (Con't)

23E1424-08 (Soil) - SED-4

Analyte	Units	Conc.	MDL	DF	Qual	Analyzed	Method
Percent Solids	%	85.4		1		06/01/23 10:54	Gravimetric
Temp at time of pH, °C	°C	19.5	1.00	1		06/01/23 12:56	SM 2550 B-10
pH	pH Units	7.34	0.0100	1		06/01/23 12:55	SW 846 9045D
Redox Potential	mV	149	-1000	1		06/01/23 12:54	SM 2580 (mod)

23E1424-09 (Surface Water) - SW-5

Analyte	Units	Conc.	RL	DF	Qual	Analyzed	Method
pH	pH Units	7.15	0.0100	1	H	05/31/23 18:42	SM 4500-H B-11
Temp at time of pH, °C	°C	15.7	1.00	1		05/31/23 18:43	SM 2550 B-10

23E1424-10 (Soil) - SED-5

Analyte	Units	Conc.	MDL	DF	Qual	Analyzed	Method
Percent Solids	%	73.0		1		06/01/23 10:54	Gravimetric
Redox Potential	mV	153	-1000	1		06/01/23 12:54	SM 2580 (mod)
Temp at time of pH, °C	°C	19.6	1.00	1		06/01/23 12:56	SM 2550 B-10
pH	pH Units	7.29	0.0100	1		06/01/23 12:55	SW 846 9045D

23E1424-11 (Surface Water) - SW-6

Analyte	Units	Conc.	RL	DF	Qual	Analyzed	Method
pH	pH Units	8.83	0.0100	1	H	05/31/23 18:42	SM 4500-H B-11
Temp at time of pH, °C	°C	15.9	1.00	1		05/31/23 18:43	SM 2550 B-10

23E1424-12 (Soil) - SED-6

Analyte	Units	Conc.	RL	DF	Qual	Analyzed	Method
pH	pH Units	5.70	0.0100	1		06/01/23 12:55	SW 846 9045D
Temp at time of pH, °C	°C	19.6	1.00	1		06/01/23 12:56	SM 2550 B-10
Percent Solids	%	58.8		1		06/01/23 10:54	Gravimetric
Redox Potential	mV	142	-1000	1		06/01/23 12:54	SM 2580 (mod)

23E1424-13 (Surface Water) - SW-7

Analyte	Units	Conc.	RL	DF	Qual	Analyzed	Method
pH	pH Units	7.12	0.0100	1	H	05/31/23 18:42	SM 4500-H B-11
Temp at time of pH, °C	°C	16.8	1.00	1		05/31/23 18:43	SM 2550 B-10

23E1424-14 (Soil) - SED-7

Analyte	Units	Conc.	RL	DF	Qual	Analyzed	Method
pH	pH Units	6.80	0.0100	1		06/01/23 12:55	SW 846 9045D
Redox Potential	mV	147	-1000	1		06/01/23 12:54	SM 2580 (mod)
Temp at time of pH, °C	°C	19.7	1.00	1		06/01/23 12:56	SM 2550 B-10
Percent Solids	%	76.9		1		06/01/23 10:54	Gravimetric

23E1424-16 (Soil) - SED-1A

Analyte	Units	Conc.	MDL	DF	Qual	Analyzed	Method
Percent Solids	%	54.5		1		06/13/23 11:18	Gravimetric
Temp at time of pH, °C	°C	20.4	1.00	1		06/15/23 16:14	SM 2550 B-10
Redox Potential	mV	190	-1000	1		06/15/23 14:48	SM 2580 (mod)
pH	pH Units	7.40	0.0100	1		06/15/23 14:47	SW 846 9045D

23E1424-17 (Soil) - SED-4A

Analyte	Units	Conc.	RL	DF	Qual	Analyzed	Method
Redox Potential	mV	209	-1000	1		06/15/23 14:48	SM 2580 (mod)
pH	pH Units	7.44	0.0100	1		06/15/23 14:47	SW 846 9045D
Percent Solids	%	77.3		1		06/13/23 11:18	Gravimetric
Temp at time of pH, °C	°C	20.6	1.00	1		06/15/23 16:14	SM 2550 B-10

ND - Indicates compound analyzed for but not detected
J - Indicates estimated value
B - Indicates compound found in associated blank
E - Concentration exceeds highest calibration standard
D - Indicates result is based on a dilution
H - Indicates a Hold Time violation
P - Greater than 25% diff. between 2 GC columns.
MDL - Minimum detection limit, **RL** - Reporting limit

F-I

General Chemistry (Con't)

23E1424-18 (Soil) - SED-6A

Analyte	Units	Conc.	MDL	DF	Qual	Analyzed	Method
Percent Solids	%	53.2		1		06/13/23 11:18	Gravimetric
pH	pH Units	7.20	0.0100	1		06/15/23 14:47	SW 846 9045D
Redox Potential	mV	212	-1000	1		06/15/23 14:48	SM 2580 (mod)
Temp at time of pH, °C	°C	20.5	1.00	1		06/15/23 16:14	SM 2550 B-10

Total Metals

23E1424-01 (Surface Water) - SW-1

Analyte	Units	Conc.	RL	DF	Qual	Analyzed	Method
Hardness	mg/L	182	2.50	1		06/07/23 14:54	SM 2340 B-11

23E1424-03 (Surface Water) - SW-2

Analyte	Units	Conc.	RL	DF	Qual	Analyzed	Method
Hardness	mg/L	177	2.50	1		06/07/23 14:56	SM 2340 B-11

23E1424-05 (Surface Water) - SW-3

Analyte	Units	Conc.	RL	DF	Qual	Analyzed	Method
Hardness	mg/L	196	2.50	1		06/07/23 14:59	SM 2340 B-11

23E1424-07 (Surface Water) - SW-4

Analyte	Units	Conc.	RL	DF	Qual	Analyzed	Method
Hardness	mg/L	259	2.50	1		06/07/23 15:01	SM 2340 B-11

23E1424-09 (Surface Water) - SW-5

Analyte	Units	Conc.	RL	DF	Qual	Analyzed	Method
Hardness	mg/L	220	2.50	1		06/07/23 15:03	SM 2340 B-11

23E1424-11 (Surface Water) - SW-6

Analyte	Units	Conc.	RL	DF	Qual	Analyzed	Method
Hardness	mg/L	88.8	2.50	1		06/07/23 15:05	SM 2340 B-11

23E1424-13 (Surface Water) - SW-7

Analyte	Units	Conc.	RL	DF	Qual	Analyzed	Method
Hardness	mg/L	256	2.50	1		06/07/23 15:07	SM 2340 B-11

ND - Indicates compound analyzed for but not detected
J - Indicates estimated value
B - Indicates compound found in associated blank
E - Concentration exceeds highest calibration standard
D - Indicates result is based on a dilution
H - Indicates a Hold Time violation
P - Greater than 25% diff. between 2 GC columns.
MDL - Minimum detection limit, **RL** - Reporting limit

General Chemistry - Quality Control

pH		Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch BAE1219				Prepared & Analyzed: 5/31/2023						
BAE1219-DUP1	**Source: 23E1424-13**	7.11	0.0100	pH Units		7.12			0.14	20
Batch BAF0020				Prepared & Analyzed: 6/1/2023						
BAF0020-DUP1	**Source: 23E1424-14**	6.85	0.0100	pH Units		6.80			0.73	20
Batch BAF0598				Prepared & Analyzed: 6/15/2023						
BAF0598-DUP1	**Source: 23F0521-03**	8.86	0.0100	pH Units		8.81			0.57	20

Redox Potential		Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch BAF0019				Prepared & Analyzed: 6/1/2023						
BAF0019-BS1		199	-1000	mV	200		99.5	90-110		
BAF0019-DUP1	**Source: 23E1424-14**	144	-1000	mV		147			2.06	20
Batch BAF0599				Prepared & Analyzed: 6/15/2023						
BAF0599-BS1		198	-1000	mV	200		99.0	90-110		
BAF0599-DUP1	**Source: 23F0521-03**	109	-1000	mV		106			2.79	20

Temp at time of pH, °C		Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch BAE1220				Prepared & Analyzed: 5/31/2023						
BAE1220-DUP1	**Source: 23E1424-13**	16.9	1.00	°C		16.8			0.59	20
Batch BAF0021				Prepared & Analyzed: 6/1/2023						
BAF0021-DUP1	**Source: 23E1424-14**	19.8	1.00	°C		19.7			0.51	20

ND - Indicates compound analyzed for but not detected
J - Indicates estimated value
B - Indicates compound found in associated blank
E - Concentration exceeds highest calibration standard
D - Indicates result is based on a dilution
H - Indicates a Hold Time violation
P - Greater than 25% diff. between 2 GC columns.
MDL - Minimum detection limit, **RL** - Reporting limit

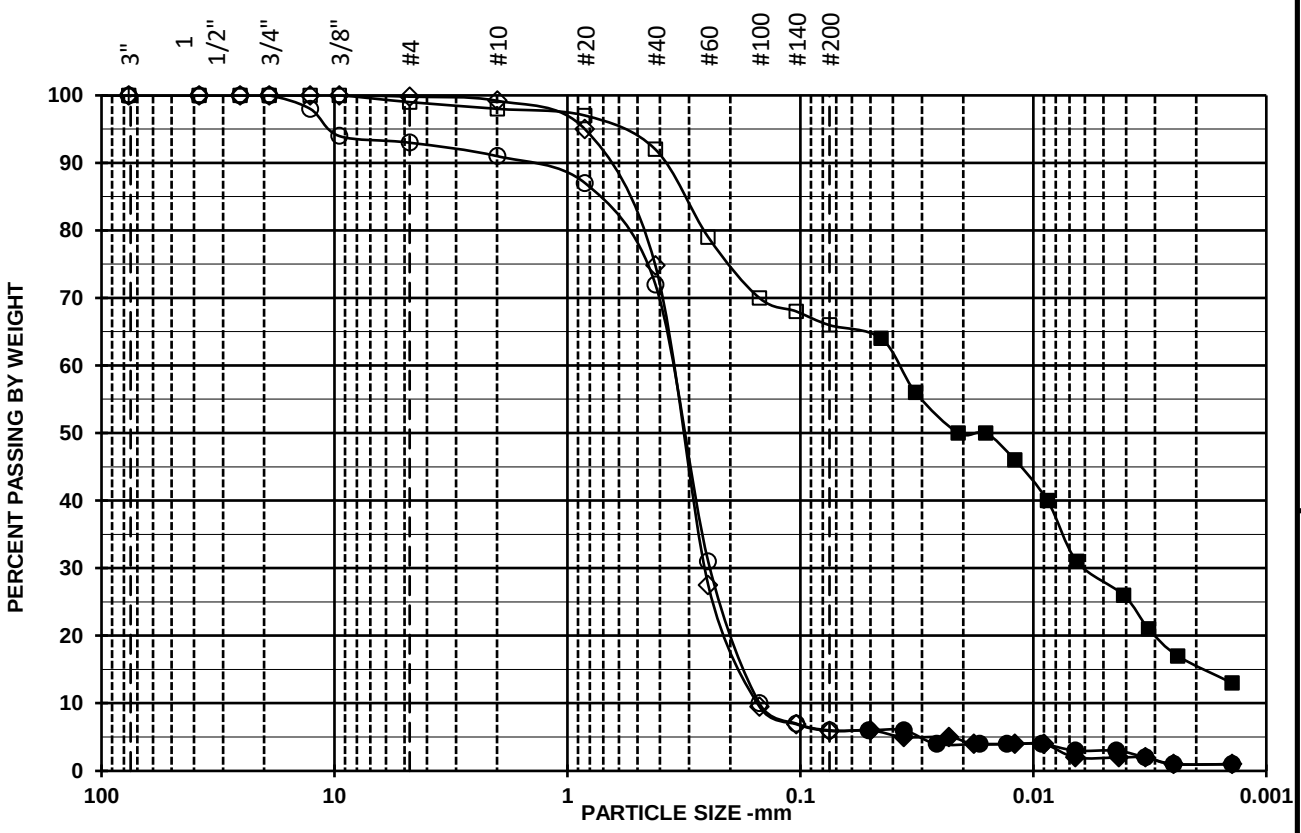
SUBCONTRACTING

APL #23E1424

LABORATORY TESTING DATA SUMMARY

SAMPLE SOURCE: FIELD ID		Client ID	IDENTIFICATION TESTS				REMARKS
			D2216 WATER CONTENT (%)	D2488 USCS SYMB. (1)	D6913 & D7928 SIEVE MINUS NO. 200 (%)	D6913 & D7928 HYDROMETER % MINUS 2 μm (%)	
23E1424	02	SED-1		CL	66	16	
23E1424	04	SED-2		SP-SM	5.9	1	
23E1424	06	SED-3		SP-SM	6	1	
23E1424	08	SED-4		SP	1	0	
23E1424	010	SED-5		SP-SM	5.5	2	
23E1424	012	SED-6		SM	19	5	
23E1424	014	SED-7		SP	1	0	

Note: (1) USCS symbol based on visual observation and Sieve reported.



Open Symbols: Sieve analysis by ASTM D6913
Filled symbols: Hydrometer analysis by ASTM D7928 corrected for complete sample

SYMBOL	w (%)	LL	PL	PI	USCS	AASHTO	USCS DESCRIPTION AND REMARKS	DATE
□					CL		Brown, Sandy lean clay organic mat'l noted	06/16/23
◇					SP-SM		Brown, Poorly graded sand with silt	06/16/23
○					SP-SM		Gray, Poorly graded sand with silt, Insufficient sample size	06/16/23

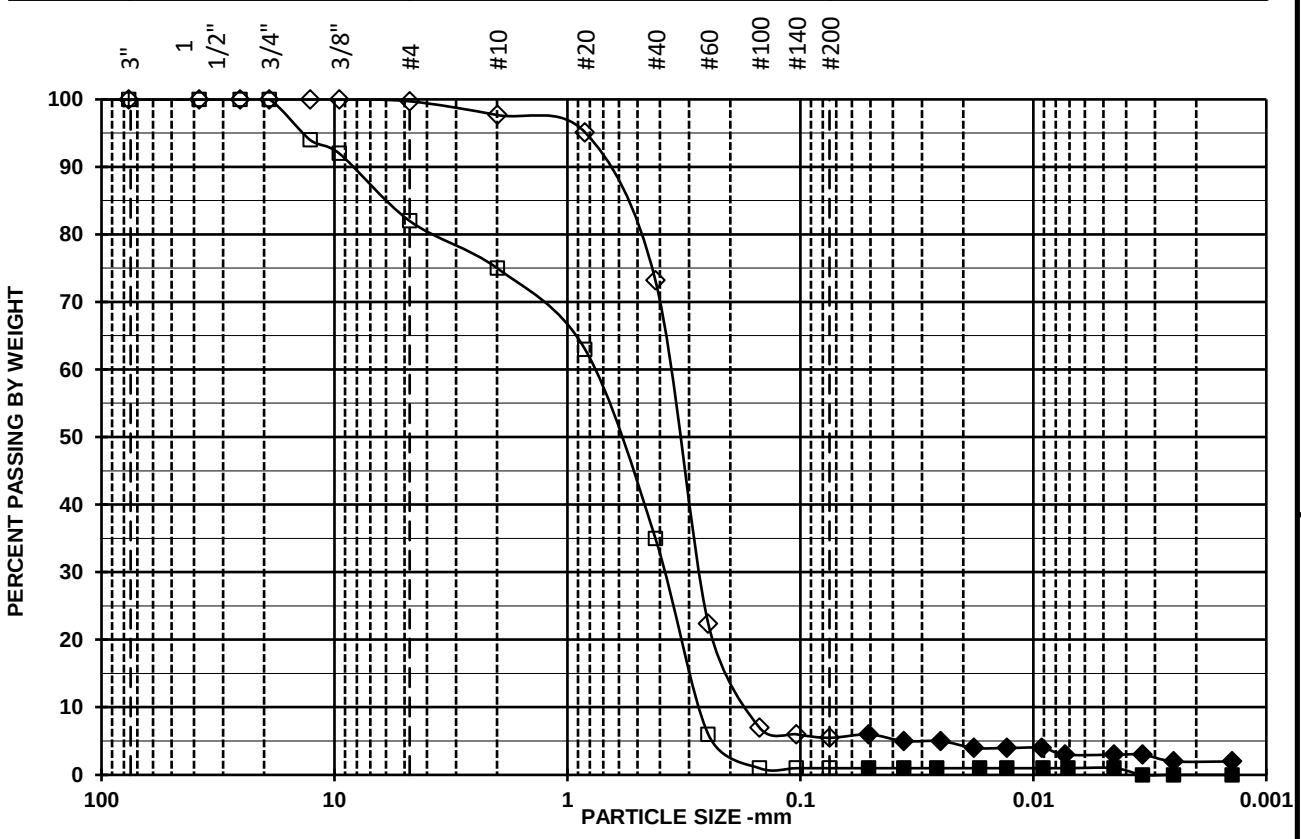
APL #23E1424

TerraSense #23008097A

Symbol	□	◇	○
Group	23E1424	23E1424	23E1424
ID#	02	04	06
Sample	SED-1	SED-2	SED-3
% +3"	0	0	0
% Gravel	1	0.2	7
% SAND	33	93.9	87
%C SAND	1	0.6	2
%M SAND	6	24.4	19
%F SAND	26	68.9	66
% FINES	66	5.9	6
D_{100} (mm)	9.53	9.53	19.1
D_{60} (mm)	0.038	0.356	0.36
D_{30} (mm)	0.006	0.26	0.24
D_{10} (mm)		0.15	0.15
Cc		1.3	1.1
Cu		2.4	2.4

Sieve Size/ID #	Percent Finer Data		
6"	100	100.0	100
4"	100	100.0	100
3"	100	100.0	100
1 1/2"	100	100.0	100
1"	100	100.0	100
3/4"	100	100.0	100
1/2"	100	100.0	98
3/8"	100	100.0	94
#4	99	99.8	93
#10	98	99.2	91
#20	97	95.0	87
#40	92	74.8	72
#60	79	27.5	31
#100	70	9.5	10
#140	68	6.9	7
#200	66	5.9	6
5μ m	28	2	3
2μ m	16	1	1
1μ m	11	1	1

PARTICLE SIZE DISTRIBUTION
ASTM D6913 & ASTM D7928



Open Symbols: Sieve analysis by ASTM D6913
Filled symbols: Hydrometer analysis by ASTM D7928 corrected for complete sample

SYMBOL	w (%)	LL	PL	PI	USCS	AASHTO	USCS DESCRIPTION AND REMARKS	DATE
□					SP		Brown, Poorly graded sand with gravel, Insufficient sample size	06/16/23
◇					SP-SM		Brown, Poorly graded sand with silt wood & organic mat'l noted	06/16/23
○								

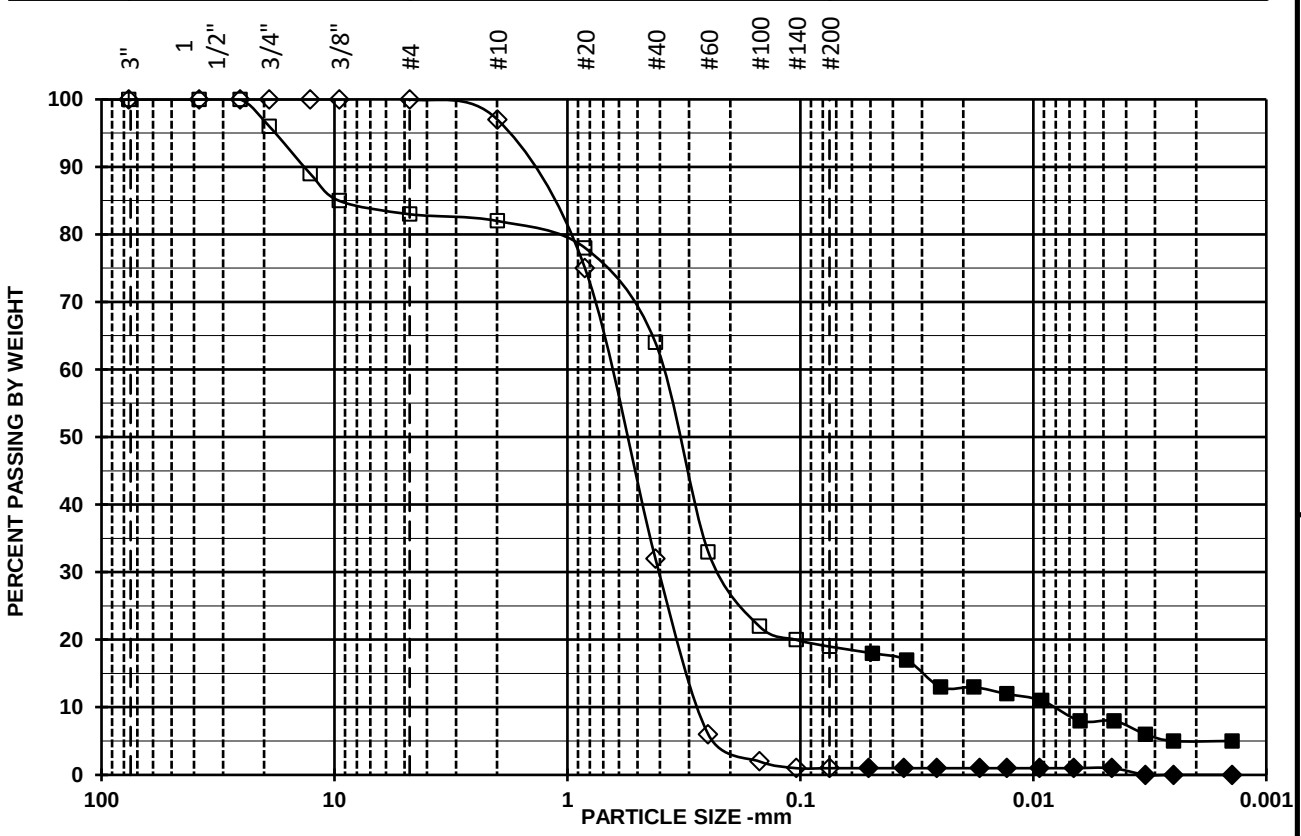
APL #23E1424

TerraSense #23008097A

Symbol	□	◇	○
Group	23E1424	23E1424	
ID#	08	010	
Sample	SED-4	SED-5	
% +3"	0	0	
% Gravel	18	0.3	
% SAND	81	94.2	
%C SAND	7	2	
%M SAND	40	24.5	
%F SAND	34	67.7	
% FINES	1	5.5	
D_{100} (mm)	19.1	9.53	
D_{60} (mm)	0.78	0.366	
D_{30} (mm)	0.38	0.27	
D_{10} (mm)	0.27	0.17	
Cc	0.7	1.2	
Cu	2.9	2.2	

Sieve Size/ID #	Percent Finer Data	
6"	100	100.0
4"	100	100.0
3"	100	100.0
1 1/2"	100	100.0
1"	100	100.0
3/4"	100	100.0
1/2"	94	100.0
3/8"	92	100.0
#4	82	99.7
#10	75	97.7
#20	63	95.1
#40	35	73.2
#60	6	22.4
#100	1	7.0
#140	1	6.0
#200	1	5.5
5μ m	1	3
2μ m	0	2
1μ m	0	2

PARTICLE SIZE DISTRIBUTION
ASTM D6913 & ASTM D7928



Open Symbols: Sieve analysis by ASTM D6913
Filled symbols: Hydrometer analysis by ASTM D7928 corrected for complete sample

SYMBOL	w (%)	LL	PL	PI	USCS	AASHTO	USCS DESCRIPTION AND REMARKS	DATE
□					SM		Gray, Silty sand with gravel, Insufficient sample size	06/16/23
◇					SP		Brown, Poorly graded sand	06/16/23
○								

APL #23E1424

TerraSense #23008097A

Symbol	□	◇	○
Group	23E1424	23E1424	
ID#	012	014	
Sample	SED-6	SED-7	
% +3"	0	0	
% Gravel	17	0	
% SAND	64	99	
%C SAND	1	3	
%M SAND	18	65	
%F SAND	45	31	
% FINES	19	1	
D_{100} (mm)	25.4	19.1	
D_{60} (mm)	0.392	0.659	
D_{30} (mm)	0.22	0.4	
D_{10} (mm)	0.008	0.27	
Cc	15.2	0.9	
Cu	48.4	2.4	

Sieve Size/ID #	Percent Finer Data	
6"	100	100
4"	100	100
3"	100	100
1 1/2"	100	100
1"	100	100
3/4"	96	100
1/2"	89	100
3/8"	85	100
#4	83	100
#10	82	97
#20	78	75
#40	64	32
#60	33	6
#100	22	2
#140	20	1
#200	19	1
5μ m	8	1
2μ m	5	0
1μ m	5	0

PARTICLE SIZE DISTRIBUTION
ASTM D6913 & ASTM D7928

Please Update Analysis

Pace®

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Aqua Pro-Tech, a Pace® Analytical Laboratory
1275 Bloomfield Avenue, Fairfield, NJ 07004 (973) 227-0422

SUBCONTRACT ORDER

230080097A-7932

SENDING LABORATORY:

Aqua Pro-Tech Laboratories
1275 Bloomfield Ave, Bldg 6
Fairfield, NJ 07004
Phone: (973) 227-0422
Fax: (973) 227-2183

Project Mgr: Paul Maide
Email: paul.maide@pacelabs.com
Send Invoice to: FAIR.AP@pacelabs.com
Send Report to: FAIR.Reporting@pacelabs.com

RECEIVING LABORATORY:

Terra Sense
45 H Commerce Way
Totowa, NJ 07512
Phone: (973) 812-1818
Fax: (973) 812-8640

Turn-Around Time

- [ ] APL Standard 2 Weeks
- [ ] Rush (Choose One Below)
  - [ ] 24 Hr.
  - [ ] 48 Hr.
  - [ ] 72 Hr.
  - [ ] 1 Week
  - [ ] **Other (provide Date/Time)

Date _____ Time _____

**May Need Lab Approval

Report / Electronic Format

- [ ] Results Only
- [ ] NJ DEP Reduced
- [ ] NJ DEP Full
- [ ] State Forms/E2 Reporting
- [ ] Email Delivery
- [ ] Hazsite EDD
- [ ] Excel

PWSID # _____ SRP# _____

APL Order ID: 23E1424

Laboratory ID	APL Lab ID	Sampled	SampleType	Matrix	Analysis Requested	[Comments]
	23E1424-02	05/30/2023 11:30	Grab	S	Sieve Hydrometer Particle Size	
	Sample Name/Location: SED-1				*Containers Supplied:* Glass Jar, 16 oz. (B)	
	Comments:					
	23E1424-04	05/30/2023 11:50	Grab	S	Sieve Hydrometer Particle Size	
	Sample Name/Location: SED-2				*Containers Supplied:* Glass Jar, 16 oz. (B)	
	Comments:					
	23E1424-06	05/30/2023 12:05	Grab	S	Sieve Hydrometer Particle Size	
	Sample Name/Location: SED-3				*Containers Supplied:* Glass Jar, 16 oz. (B)	
	Comments:					

Released By	Drew McMahon	Date / Time	6/1/23	Received By	AJ	Date / Time	6/2/23
Released By		Date / Time		Received By		Date / Time	

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1275 Bloomfield Avenue, Fairfield, NJ 07004 (973) 227-0422

SUBCONTRACT ORDER

APL Order ID: 23E1424

Laboratory ID	APL Lab ID	Sampled	SampleType	Matrix	Analysis Requested	[Comments]
	23E1424-08	05/30/2023 12:30	Grab	S	Sieve Hydrometer Particle Size	
	Sample Name/Location: SED-4				*Containers Supplied:* Glass Jar, 16 oz. (B)	
	Comments:					
	23E1424-10	05/30/2023 12:45	Grab	S	Sieve Hydrometer Particle Size	
	Sample Name/Location: SED-5				*Containers Supplied:* Glass Jar, 16 oz. (B)	
	Comments:					
	23E1424-12	05/30/2023 13:05	Grab	S	Sieve Hydrometer Particle Size	
	Sample Name/Location: SED-6				*Containers Supplied:* Glass Jar, 16 oz. (B)	
	Comments:					
	23E1424-14	05/30/2023 13:20	Grab	S	Sieve Hydrometer Particle Size	
	Sample Name/Location: SED-7				*Containers Supplied:* Glass Jar, 16 oz. (B)	
	Comments:					

Released By	Date / Time	Received By	Date / Time
Released By	Date / Time	Received By	Date / Time

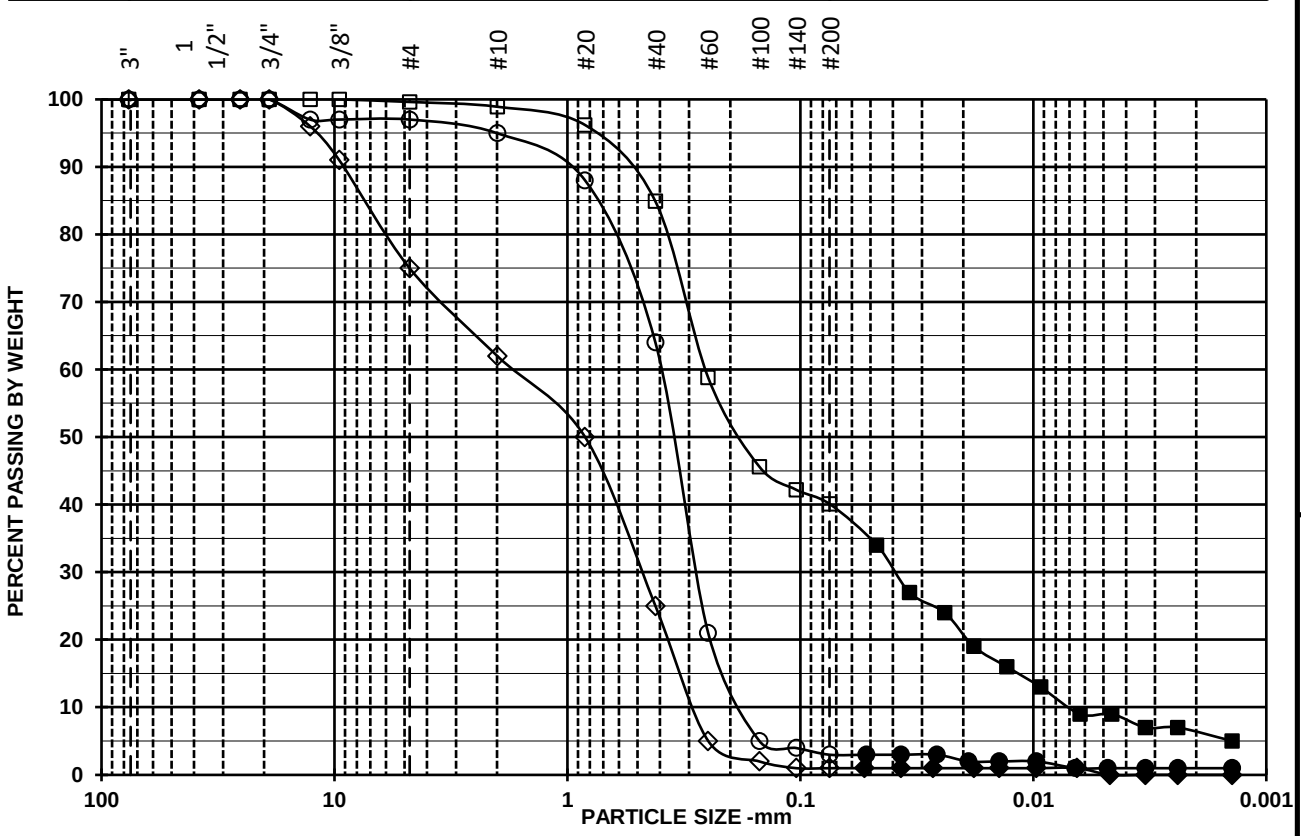
SUBCONTRACTING

APL #23E1424

LABORATORY TESTING DATA SUMMARY

SAMPLE SOURCE: FIELD ID		Client ID	IDENTIFICATION TESTS				REMARKS
			D2216 WATER CONTENT (%)	D2488 USCS SYMB. (1)	D6913 & D7928 SIEVE MINUS NO. 200 (%)	D6913 & D7928 HYDROMETER % MINUS 2 μm (%)	
23E1424	16	SED-1A		SM	40.1	6	
23E1424	17	SED-4A		SP	1	0	
23E1424	18	SED-6A		SP	3	1	

Note: (1) USCS symbol based on visual observation and Sieve reported.



Open Symbols: Sieve analysis by ASTM D6913
Filled symbols: Hydrometer analysis by ASTM D7928 corrected for complete sample

SYMBOL	w (%)	LL	PL	PI	USCS	AASHTO	USCS DESCRIPTION AND REMARKS	DATE
□					SM		Brownish gray, Silty sand organic mat'l noted	06/26/23
◇					SP		Brown, Poorly graded sand with gravel, Insufficient sample size	06/26/23
○					SP		Brownish gray, Poorly graded sand organic mat'l noted, Insufficient sample size	06/26/23

APL #23E1424

TerraSense #23008097A

Symbol	□	◇	○
Group	23E1424	23E1424	23E1424
ID#	16	17	18
Sample	SED-1A	SED-4A	SED-6A
% +3"	0	0	0
% Gravel	0.4	25	3
% SAND	59.5	74	94
%C SAND	0.7	13	2
%M SAND	14	37	31
%F SAND	44.8	24	61
% FINES	40.1	1	3
D_{100} (mm)	9.53	19.1	19.1
D_{60} (mm)	0.255	1.73	0.399
D_{30} (mm)	0.039	0.48	0.28
D_{10} (mm)	0.007	0.28	0.18
Cc	0.9	0.5	1.1
Cu	37	6.2	2.2

Sieve Size/ID #	Percent Finer Data		
6"	100.0	100	100
4"	100.0	100	100
3"	100.0	100	100
1 1/2"	100.0	100	100
1"	100.0	100	100
3/4"	100.0	100	100
1/2"	100.0	96	97
3/8"	100.0	91	97
#4	99.6	75	97
#10	98.9	62	95
#20	96.2	50	88
#40	84.9	25	64
#60	58.8	5	21
#100	45.6	2	5
#140	42.2	1	4
#200	40.1	1	3
5μ m	9	0	1
2μ m	6	0	1
1μ m	4	0	1

PARTICLE SIZE DISTRIBUTION
ASTM D6913 & ASTM D7928

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1275 Bloomfield Avenue, Fairfield, NJ 07004 (973) 227-0422

SUBCONTRACT ORDER

230080097A-7932 (2)

APL Order ID: 23E1424

Laboratory ID	APL Lab ID	Sampled	SampleType	Matrix	Analysis Requested	[Comments]
	23E1424-10	05/30/2023 12:45	Grab	S	Sieve Hydrometer	
	Sample Name/Location: SED-5				*Containers Supplied:* Glass Jar, 16 oz. (B)	
	Comments:					
	23E1424-12	05/30/2023 13:05	Grab	S	Sieve Hydrometer	
	Sample Name/Location: SED-6				*Containers Supplied:* Glass Jar, 16 oz. (B)	
	Comments:					
	23E1424-14	05/30/2023 13:20	Grab	S	Sieve Hydrometer	
	Sample Name/Location: SED-7				*Containers Supplied:* Glass Jar, 16 oz. (B)	
	Comments:					
	23E1424-16	05/30/2023 11:35	Grab	S	Sieve Hydrometer [RL 6/12]	
	Sample Name/Location: SED-1A				*Containers Supplied:* Glass Jar, 16 oz. (B)	
	Comments:					
	23E1424-17	05/30/2023 12:35	Grab	S	Sieve Hydrometer [RL 6/12]	
	Sample Name/Location: SED-4A				*Containers Supplied:* Glass Jar, 16 oz. (B)	
	Comments:					
	23E1424-18	05/30/2023 13:05	Grab	S	Sieve Hydrometer [RL 6/12]	
	Sample Name/Location: SED-6A				*Containers Supplied:* Glass Jar, 16 oz. (B)	
	Comments:					

Released By	Drew McMahon	Date / Time 6/13/23	Received By	AJ	Date / Time 6/13/23
Released By		Date / Time	Received By		Date / Time

SUBCONTRACTING

ALPHA ANALYTICAL

World Class Chemistry

www.alphalab.com



Lab Number: L2333497

Client: Aqua Pro-Tech Laboratories

ATTN: Reporting Department

Project Name: 23E1424

Project Number: 23E1424

The original project report/data package is held by Alpha Analytical. This report/data package is paginated and should be reproduced only in its entirety. Alpha Analytical holds no responsibility for results and/or data that are not consistent with the original.

ANALYTICAL DATA PACKAGE FOR THE
NEW JERSEY DEPARTMENT OF ENVIRONMENTAL PROTECTION
TRENTON NEW JERSEY 08625

Agency/Division:	**Bureau/Office:**
Project No: 23E1424	**Contract No:**
Laboratory: Alpha Analytical	**Laboratory Location:** Westborough, Ma.
	Laboratory Phone Number: (508) 898-9220
SDG No: L2333497	**NJDEP Certification #:** MA015/MA935
Date of First Sample Receipt: 06/13/2023	**Date of Last Sample Receipt:** 06/13/2023

Agency Sample Number	Laboratory Sample Number	Sample Location	Date/Time of Collection
23E1424-02	L2333497-01	23E1424	05/30/2023 11:30
23E1424-04	L2333497-02	23E1424	05/30/2023 11:50
23E1424-06	L2333497-03	23E1424	05/30/2023 12:05
23E1424-08	L2333497-04	23E1424	05/30/2023 12:30
23E1424-10	L2333497-05	23E1424	05/30/2023 12:45
23E1424-12	L2333497-06	23E1424	05/30/2023 13:05
23E1424-14	L2333497-07	23E1424	05/30/2023 13:20
23E1424-16	L2333497-08	23E1424	05/30/2023 11:35
23E1424-17	L2333497-09	23E1424	05/30/2023 12:35
23E1424-18	L2333497-10	23E1424	05/30/2023 13:05

I certify that this data package is in compliance with the terms and conditions of this contract, both technically and for completeness, for other than the conditions detailed above. Release of the data contained in this hardcopy data package and in the computer-readable data submitted on disk or electronically has been authorized by the laboratory director or his/her designee, as verified by the following signature.

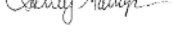
Technical Director/Representative (Typed)	Ashaley Moynihan	06/27/23
Technical Director/Representative (Signature)		

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Chain of Custody

6/14/23

L2333497

SUBCONTRACT ORDER

Pace® Analytical Services
Aqua Pro-Tech, a Pace® Analytical Laboratory
1275 Bloomfield Avenue, Fairfield, NJ 07004 (973) 227-0422

SENDING LABORATORY:

Aqua Pro-Tech Laboratories
1275 Bloomfield Ave, Bldg 6
Fairfield, NJ 07004
Phone: (973) 227-0422
Fax: (973) 227-2183

Project Mgr: Paul Maide
Email: paul.maide@pacelabs.com
Send Invoice to: FAIR.AP@pacelabs.com
Send Report to: FAIR.Reporting@pacelabs.com

RECEIVING LABORATORY:

Alpha Analytical- Mahwah Service Cente
35 Whitney Road, Suite 5
Mahwah, NJ 07430
Phone: (201) 847-9100
Fax:

Turn-Around Time
- [ ] APL Standard 2 Weeks
- [ ] Rush (Choose One Below)
  - [ ] 24 Hr.
  - [ ] 48 Hr.
  - [ ] 72 Hr.
  - [x] 1 Week
  - [ ] **Other (provide Date/Time)

Date _____ Time _____
**May Need Lab Approval

Report / Electronic Format
- [ ] Results Only
- [x] NJ DEP Reduced
- [ ] NJ DEP Full
- [ ] State Forms/E2 Reporting
- [ ] Email Delivery
- [ ] Hasta EDD
- [ ] Excel

PWSID # _____ SRP# _____

APL Order ID: 23E1424

Laboratory ID	APL Lab ID	Sampled	SampleType	Matrix	Analysis Requested	[Comments]
-01	23E1424-02	05/30/2023 11:30	Grab	S	TOC - Sub (TOC)	
	Sample Name/Location: SED-1				*Containers Supplied:* Glass Jar, 4 oz. (C)	
	Comments:					
-02	23E1424-04	05/30/2023 11:50	Grab	S	TOC - Sub (TOC)	
	Sample Name/Location: SED-2				*Containers Supplied:* Glass Jar, 4 oz. (C)	
	Comments:					
-03	23E1424-06	05/30/2023 12:05	Grab	S	TOC - Sub (TOC)	
	Sample Name/Location: SED-3				*Containers Supplied:* Glass Jar, 4 oz. (C)	
	Comments:					
-04	23E1424-08	05/30/2023 12:30	Grab	S	TOC - Sub (TOC)	
	Sample Name/Location: SED-4				*Containers Supplied:* Glass Jar, 4 oz. (C)	
	Comments:					

Released By		Date / Time 6/13/23 1718	Received By	(APL)	Date / Time 6/13/23 1718
Released By	(APL)	Date / Time 6/13/23 1815	Received By		Date / Time 6/13/23 18.30

6/13/23 2215

6/14/23 500 6/14/23 0010 6/14/23 0520

Page 1 of 2

6/14/23

L2333497

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SUBCONTRACT ORDER

APL Order ID: 23E1424

Laboratory ID	APL Lab ID	Sampled	SampleType	Matrix	Analysis Requested	[Comments]
-05	23E1424-10	05/30/2023 12:45	Grab	S	TOC - Sub (TOC)	
	Sample Name/Location: SED-5				*Containers Supplied:* Glass Jar, 4 oz. (C)	
	Comments:					
-06	23E1424-12	05/30/2023 13:05	Grab	S	TOC - Sub (TOC)	
	Sample Name/Location: SED-6				*Containers Supplied:* Glass Jar, 4 oz. (C)	
	Comments:					
-07	23E1424-14	05/30/2023 13:20	Grab	S	TOC - Sub (TOC)	
	Sample Name/Location: SED-7				*Containers Supplied:* Glass Jar, 4 oz. (C)	
	Comments:					
-08	23E1424-16	05/30/2023 11:35	Grab	S	TOC - Sub (TOC) [RL 6/12]	
	Sample Name/Location: SED-1A				*Containers Supplied:* Glass Jar, 4 oz. (C)	
	Comments:					
-09	23E1424-17	05/30/2023 12:35	Grab	S	TOC - Sub (TOC) [RL 6/12]	
	Sample Name/Location: SED-4A				*Containers Supplied:* Glass Jar, 4 oz. (C)	
	Comments:					
-10	23E1424-18	05/30/2023 13:05	Grab	S	TOC - Sub (TOC) [RL 6/12]	
	Sample Name/Location: SED-6A				*Containers Supplied:* Glass Jar, 4 oz. (C)	
	Comments:					

Released By _____ Date / Time 6/13/23 1718 Received By _____ (AAL) Date / Time 6/13/23 1718

Released By _____ (AAL) Date / Time 6/13/23 1815 Received By _____ Date / Time 6/13/23 18:30

6/13/23 2215

6/14/23 0000

6/14/23 0000

6/14/23 0700

6/14/23 0700

ALPHA ANALYTICAL LABORATORIES, INC.
LOGIN CHAIN OF CUSTODY REPORT
Jun 27 2023, 12:32 pm

Login Number: L2333497
Account: AQUAPROTECH Aqua Pro-Tech LaboratoriesProject: 23E1424
Received: 13JUN23 Due Date: 27JUN23

Sample #	Client ID	Mat	PR	Collected
L2333497-01	23E1424-02	3	S0	30MAY23 11:30
TOC OK OOH NJ-RED Package Due Date: 06/27/23				
A2-TOC-LK-2REPS-PPM,NJ-RED,NJDEP				
L2333497-02	23E1424-04	3	S0	30MAY23 11:50
TOC OK OOH Package Due Date: 06/27/23				
A2-TOC-LK-2REPS-PPM				
L2333497-03	23E1424-06	3	S0	30MAY23 12:05
TOC OK OOH Package Due Date: 06/27/23				
A2-TOC-LK-2REPS-PPM				
L2333497-04	23E1424-08	3	S0	30MAY23 12:30
TOC OK OOH Package Due Date: 06/27/23				
A2-TOC-LK-2REPS-PPM				
L2333497-05	23E1424-10	3	S0	30MAY23 12:45
TOC OK OOH Package Due Date: 06/27/23				
A2-TOC-LK-2REPS-PPM				
L2333497-06	23E1424-12	3	S0	30MAY23 13:05
TOC OK OOH Package Due Date: 06/27/23				
A2-TOC-LK-2REPS-PPM				
L2333497-07	23E1424-14	3	S0	30MAY23 13:20
TOC OK OOH Package Due Date: 06/27/23				

ALPHA ANALYTICAL LABORATORIES, INC.
LOGIN CHAIN OF CUSTODY REPORT
Jun 27 2023, 12:32 pm

Login Number: L2333497
Account: AQUAPROTECH Aqua Pro-Tech Laboratories Project: 23E1424
Received: 13JUN23 Due Date: 27JUN23

Sample #	Client ID	Mat	PR	Collected
A2-TOC-LK-2REPS-PPM				
L2333497-08	23E1424-16	3	S0	30MAY23 11:35
TOC OK OOH Package Due Date: 06/27/23				
A2-TOC-LK-2REPS-PPM				
L2333497-09	23E1424-17	3	S0	30MAY23 12:35
TOC OK OOH Package Due Date: 06/27/23				
A2-TOC-LK-2REPS-PPM				
L2333497-10	23E1424-18	3	S0	30MAY23 13:05
TOC OK OOH Package Due Date: 06/27/23				
A2-TOC-LK-2REPS-PPM				

Logged By: Nadine Yakes

ALPHA ANALYTICAL LABORATORIES
Container Tracking Report

Container ID	Type	Status	Transaction Date	From Response	From Location	From Operator	To Response	To Location	To Operator
L2333497-01A	Glass-A.120	INTACT	18-JUN-23	A2-CUSTODY-REFRIDGE	A2-WET CHEMISTRY	Sonal Patel	A2-CUSTODY-FRZ1-X2	A2-CUSTODY-FRZ1-X2	Sonal Patel
L2333497-01A	Glass-A.120	INTACT	18-JUN-23	A2-CUSTODY-REFRIDGE	A2-CUSTODY-FRZ1-X2	Sonal Patel	A2-WET CHEMISTRY	A2-WET CHEMISTRY	Sonal Patel
L2333497-01A	Glass-A.120	INTACT	14-JUN-23	A2-CUSTODY-REFRIDGE	A2-CUSTODY-REFRIDGE	Cecilia Gomes	A2-CUSTODY-FRZ1-X2	A2-CUSTODY-FRZ1-X2	Cecilia Gomes
L2333497-01A	Glass-A.120	INTACT	14-JUN-23	A2-LOGIN	A2-LOGIN	Andrew Kussmaul	A2-CUSTODY-REFRIDGE	A2-CUSTODY-REFRIDGE	Andrew Kussmaul
L2333497-02A	Glass-A.120	INTACT	18-JUN-23	A2-CUSTODY-REFRIDGE	A2-WET CHEMISTRY	Sonal Patel	A2-CUSTODY-FRZ1-X2	A2-CUSTODY-FRZ1-X2	Sonal Patel
L2333497-02A	Glass-A.120	INTACT	18-JUN-23	A2-CUSTODY-REFRIDGE	A2-CUSTODY-FRZ1-X2	Sonal Patel	A2-WET CHEMISTRY	A2-WET CHEMISTRY	Sonal Patel
L2333497-02A	Glass-A.120	INTACT	14-JUN-23	A2-CUSTODY-REFRIDGE	A2-CUSTODY-REFRIDGE	Cecilia Gomes	A2-CUSTODY-FRZ1-X2	A2-CUSTODY-FRZ1-X2	Cecilia Gomes
L2333497-02A	Glass-A.120	INTACT	14-JUN-23	A2-LOGIN	A2-LOGIN	Andrew Kussmaul	A2-CUSTODY-REFRIDGE	A2-CUSTODY-REFRIDGE	Andrew Kussmaul
L2333497-03A	Glass-A.120	INTACT	18-JUN-23	A2-CUSTODY-REFRIDGE	A2-WET CHEMISTRY	Sonal Patel	A2-CUSTODY-FRZ1-X2	A2-CUSTODY-FRZ1-X2	Sonal Patel
L2333497-03A	Glass-A.120	INTACT	18-JUN-23	A2-CUSTODY-REFRIDGE	A2-CUSTODY-FRZ1-X2	Sonal Patel	A2-WET CHEMISTRY	A2-WET CHEMISTRY	Sonal Patel
L2333497-03A	Glass-A.120	INTACT	14-JUN-23	A2-CUSTODY-REFRIDGE	A2-CUSTODY-REFRIDGE	Cecilia Gomes	A2-CUSTODY-FRZ1-X2	A2-CUSTODY-FRZ1-X2	Cecilia Gomes
L2333497-03A	Glass-A.120	INTACT	14-JUN-23	A2-LOGIN	A2-LOGIN	Andrew Kussmaul	A2-CUSTODY-REFRIDGE	A2-CUSTODY-REFRIDGE	Andrew Kussmaul
L2333497-04A	Glass-A.120	INTACT	18-JUN-23	A2-CUSTODY-REFRIDGE	A2-WET CHEMISTRY	Sonal Patel	A2-CUSTODY-FRZ1-X2	A2-CUSTODY-FRZ1-X2	Sonal Patel
L2333497-04A	Glass-A.120	INTACT	18-JUN-23	A2-CUSTODY-REFRIDGE	A2-CUSTODY-FRZ1-X2	Sonal Patel	A2-WET CHEMISTRY	A2-WET CHEMISTRY	Sonal Patel
L2333497-04A	Glass-A.120	INTACT	14-JUN-23	A2-CUSTODY-REFRIDGE	A2-CUSTODY-REFRIDGE	Cecilia Gomes	A2-CUSTODY-FRZ1-X2	A2-CUSTODY-FRZ1-X2	Cecilia Gomes
L2333497-04A	Glass-A.120	INTACT	14-JUN-23	A2-LOGIN	A2-LOGIN	Andrew Kussmaul	A2-CUSTODY-REFRIDGE	A2-CUSTODY-REFRIDGE	Andrew Kussmaul
L2333497-05A	Glass-A.120	INTACT	18-JUN-23	A2-CUSTODY-REFRIDGE	A2-WET CHEMISTRY	Sonal Patel	A2-CUSTODY-FRZ1-X2	A2-CUSTODY-FRZ1-X2	Sonal Patel
L2333497-05A	Glass-A.120	INTACT	18-JUN-23	A2-CUSTODY-REFRIDGE	A2-CUSTODY-FRZ1-X2	Sonal Patel	A2-WET CHEMISTRY	A2-WET CHEMISTRY	Sonal Patel
L2333497-05A	Glass-A.120	INTACT	14-JUN-23	A2-CUSTODY-REFRIDGE	A2-CUSTODY-REFRIDGE	Cecilia Gomes	A2-CUSTODY-FRZ1-X2	A2-CUSTODY-FRZ1-X2	Cecilia Gomes
L2333497-05A	Glass-A.120	INTACT	14-JUN-23	A2-LOGIN	A2-LOGIN	Andrew Kussmaul	A2-CUSTODY-REFRIDGE	A2-CUSTODY-REFRIDGE	Andrew Kussmaul
L2333497-06A	Glass-A.120	INTACT	18-JUN-23	A2-CUSTODY-REFRIDGE	A2-WET CHEMISTRY	Sonal Patel	A2-CUSTODY-FRZ1-X2	A2-CUSTODY-FRZ1-X2	Sonal Patel
L2333497-06A	Glass-A.120	INTACT	18-JUN-23	A2-CUSTODY-REFRIDGE	A2-CUSTODY-FRZ1-X2	Sonal Patel	A2-WET CHEMISTRY	A2-WET CHEMISTRY	Sonal Patel
L2333497-06A	Glass-A.120	INTACT	14-JUN-23	A2-CUSTODY-REFRIDGE	A2-CUSTODY-REFRIDGE	Cecilia Gomes	A2-CUSTODY-FRZ1-X2	A2-CUSTODY-FRZ1-X2	Cecilia Gomes
L2333497-06A	Glass-A.120	INTACT	14-JUN-23	A2-LOGIN	A2-LOGIN	Andrew Kussmaul	A2-CUSTODY-REFRIDGE	A2-CUSTODY-REFRIDGE	Andrew Kussmaul
L2333497-07A	Glass-A.120	INTACT	18-JUN-23	A2-CUSTODY-REFRIDGE	A2-WET CHEMISTRY	Sonal Patel	A2-CUSTODY-FRZ1-X2	A2-CUSTODY-FRZ1-X2	Sonal Patel

Container ID	Type	Status	Transaction Date	From Response	From Location	From Operator	To Response	To Location	To Operator
L2333497-07A	Glass-A.120	INTACT	18-JUN-23	A2-CUSTODY-REFRIDGE	A2-CUSTODY-FRZ1-X2	Sonal Patel	A2-WET CHEMISTRY	A2-WET CHEMISTRY	Sonal Patel
L2333497-07A	Glass-A.120	INTACT	14-JUN-23	A2-CUSTODY-REFRIDGE	A2-CUSTODY-REFRIDGE	Cecilia Gomes	A2-CUSTODY-FRZ1-X2	A2-CUSTODY-FRZ1-X2	Cecilia Gomes
L2333497-07A	Glass-A.120	INTACT	14-JUN-23	A2-LOGIN	A2-LOGIN	Andrew Kussmaul	A2-CUSTODY-REFRIDGE	A2-CUSTODY-REFRIDGE	Andrew Kussmaul
L2333497-08A	Glass-A.120	INTACT	18-JUN-23	A2-CUSTODY-REFRIDGE	A2-WET CHEMISTRY	Sonal Patel	A2-CUSTODY-FRZ1-X2	A2-CUSTODY-FRZ1-X2	Sonal Patel
L2333497-08A	Glass-A.120	INTACT	18-JUN-23	A2-CUSTODY-REFRIDGE	A2-CUSTODY-FRZ1-X2	Sonal Patel	A2-WET CHEMISTRY	A2-WET CHEMISTRY	Sonal Patel
L2333497-08A	Glass-A.120	INTACT	14-JUN-23	A2-CUSTODY-REFRIDGE	A2-CUSTODY-REFRIDGE	Cecilia Gomes	A2-CUSTODY-FRZ1-X2	A2-CUSTODY-FRZ1-X2	Cecilia Gomes
L2333497-08A	Glass-A.120	INTACT	14-JUN-23	A2-LOGIN	A2-LOGIN	Andrew Kussmaul	A2-CUSTODY-REFRIDGE	A2-CUSTODY-REFRIDGE	Andrew Kussmaul
L2333497-09A	Glass-A.120	INTACT	18-JUN-23	A2-CUSTODY-REFRIDGE	A2-WET CHEMISTRY	Sonal Patel	A2-CUSTODY-FRZ1-X2	A2-CUSTODY-FRZ1-X2	Sonal Patel
L2333497-09A	Glass-A.120	INTACT	18-JUN-23	A2-CUSTODY-REFRIDGE	A2-CUSTODY-FRZ1-X2	Sonal Patel	A2-WET CHEMISTRY	A2-WET CHEMISTRY	Sonal Patel
L2333497-09A	Glass-A.120	INTACT	14-JUN-23	A2-CUSTODY-REFRIDGE	A2-CUSTODY-REFRIDGE	Cecilia Gomes	A2-CUSTODY-FRZ1-X2	A2-CUSTODY-FRZ1-X2	Cecilia Gomes
L2333497-09A	Glass-A.120	INTACT	14-JUN-23	A2-LOGIN	A2-LOGIN	Andrew Kussmaul	A2-CUSTODY-REFRIDGE	A2-CUSTODY-REFRIDGE	Andrew Kussmaul
L2333497-10A	Glass-A.120	INTACT	18-JUN-23	A2-CUSTODY-REFRIDGE	A2-WET CHEMISTRY	Sonal Patel	A2-CUSTODY-FRZ1-X2	A2-CUSTODY-FRZ1-X2	Sonal Patel
L2333497-10A	Glass-A.120	INTACT	18-JUN-23	A2-CUSTODY-REFRIDGE	A2-CUSTODY-FRZ1-X2	Sonal Patel	A2-WET CHEMISTRY	A2-WET CHEMISTRY	Sonal Patel
L2333497-10A	Glass-A.120	INTACT	14-JUN-23	A2-CUSTODY-REFRIDGE	A2-CUSTODY-REFRIDGE	Cecilia Gomes	A2-CUSTODY-FRZ1-X2	A2-CUSTODY-FRZ1-X2	Cecilia Gomes
L2333497-10A	Glass-A.120	INTACT	14-JUN-23	A2-LOGIN	A2-LOGIN	Andrew Kussmaul	A2-CUSTODY-REFRIDGE	A2-CUSTODY-REFRIDGE	Andrew Kussmaul

Methodology Review

REFERENCES

13 Determination of Total Organic Carbon in Sediment. U.S. EPA, Region II. July 27, 1988.

LIMITATION OF LIABILITIES

Alpha Analytical performs services with reasonable care and diligence normal to the analytical testing laboratory industry. In the event of an error, the sole and exclusive responsibility of Alpha Analytical shall be to re-perform the work at it's own expense. In no event shall Alpha Analytical be held liable for any incidental, consequential or special damages, including but not limited to, damages in any way connected with the use of, interpretation of, information or analysis provided by Alpha Analytical.

We strongly urge our clients to comply with EPA protocol regarding sample volume, preservation, cooling, containers, sampling procedures, holding time and splitting of samples in the field.

Laboratory Chronicle

Sample Receipt and Container Information

Were project specific reporting limits specified? NO

Cooler Information

Cooler	Custody Seal
A	Absent

Container Information

Container ID	Container Type	Cooler	Initial pH	Final pH	Temp deg C	Pres	Seal	Frozen Date/Time	Analysis(*)
L2333497-01A	Glass 120ml/4oz unpreserved	A	NA		3.5	Y	Absent		A2-TOC-LK-2REPS-PPM(14)
L2333497-02A	Glass 120ml/4oz unpreserved	A	NA		3.5	Y	Absent		A2-TOC-LK-2REPS-PPM(14)
L2333497-03A	Glass 120ml/4oz unpreserved	A	NA		3.5	Y	Absent		A2-TOC-LK-2REPS-PPM(14)
L2333497-04A	Glass 120ml/4oz unpreserved	A	NA		3.5	Y	Absent		A2-TOC-LK-2REPS-PPM(14)
L2333497-05A	Glass 120ml/4oz unpreserved	A	NA		3.5	Y	Absent		A2-TOC-LK-2REPS-PPM(14)
L2333497-06A	Glass 120ml/4oz unpreserved	A	NA		3.5	Y	Absent		A2-TOC-LK-2REPS-PPM(14)
L2333497-07A	Glass 120ml/4oz unpreserved	A	NA		3.5	Y	Absent		A2-TOC-LK-2REPS-PPM(14)
L2333497-08A	Glass 120ml/4oz unpreserved	A	NA		3.5	Y	Absent		A2-TOC-LK-2REPS-PPM(14)
L2333497-09A	Glass 120ml/4oz unpreserved	A	NA		3.5	Y	Absent		A2-TOC-LK-2REPS-PPM(14)
L2333497-10A	Glass 120ml/4oz unpreserved	A	NA		3.5	Y	Absent		A2-TOC-LK-2REPS-PPM(14)

*Values in parentheses indicate holding time in days

Conformance/Non-Conformance Summary

Case Narrative

The samples were received in accordance with the Chain of Custody and no significant deviations were encountered during the preparation or analysis unless otherwise noted. Sample Receipt, Container Information, and the Chain of Custody are located at the back of the report.

Results contained within this report relate only to the samples submitted under this Alpha Lab Number and meet NELAP requirements for all NELAP accredited parameters unless otherwise noted in the following narrative. The data presented in this report is organized by parameter (i.e. VOC, SVOC, etc.). Sample specific Quality Control data (i.e. Surrogate Spike Recovery) is reported at the end of the target analyte list for each individual sample, followed by the Laboratory Batch Quality Control at the end of each parameter. Tentatively Identified Compounds (TICs), if requested, are reported for compounds identified to be present and are not part of the method/program Target Compound List, even if only a subset of the TCL are being reported. If a sample was re-analyzed or re-extracted due to a required quality control corrective action and if both sets of data are reported, the Laboratory ID of the re-analysis or re-extraction is designated with an "R" or "RE", respectively. When multiple Batch Quality Control elements are reported (e.g. more than one LCS), the associated samples for each element are noted in the grey shaded header line of each data table. Any Laboratory Batch, Sample Specific % recovery or RPD value that is outside the listed Acceptance Criteria is bolded in the report. All specific QC information is also incorporated in the Data Usability format of our Data Merger tool where it can be reviewed along with any associated usability implications. Soil/sediments, solids and tissues are reported on a dry weight basis unless otherwise noted. Definitions of all data qualifiers and acronyms used in this report are provided in the Glossary located at the back of the report.

In reference to questions H (CAM) or 4 (RCP) when "NO" is checked, the performance criteria for CAM and RCP methods allow for some quality control failures to occur and still be within method compliance. In these instances the specific failure is not narrated but noted in the associated QC table. The information is also incorporated in the Data Usability format of our Data Merger tool where it can be reviewed along with any associated usability implications.

Please see the associated ADEx data file for a comparison of laboratory reporting limits that were achieved with the regulatory Numerical Standards requested on the Chain of Custody.

HOLD POLICY
For samples submitted on hold, Alpha's policy is to hold samples (with the exception of Air canisters) free of charge for 21 calendar days from the date the project is completed. After 21 calendar days, we will dispose of all samples submitted including those put on hold unless you have contacted your Client Service Representative and made arrangements for Alpha to continue to hold the samples. Air canisters will be disposed after 3 business days from the date the project is completed.

Please contact Client Services at 800-624-9220 with any questions.

Case Narrative (continued)

Report Submission

All non-detect (ND) or estimated concentrations (J-qualified) have been quantitated to the limit noted in the MDL column.

Total Organic Carbon

L2333497-01 through 10: The sample was analyzed with the method required holding time exceeded.

L2333497-07: The Sample Replicate RPD for is outside the acceptance criteria of 30%. A double-burn re-analysis was performed with a confirming result. The results of the original analysis are reported. The elevated RPD has been attributed to the non-homogeneous nature of the sample.

WG1794439-1: The required batch QC was prepared; however, the native sample required a different reporting method; therefore, the associated QC results could not be reported.

The WG1795877-3 Laboratory Duplicate RPD for total organic carbon (rep1) (26%), performed on L2333497-10, is outside the acceptance criteria of 25%. The elevated RPD has been attributed to the non-homogeneous nature of the native sample.

The WG1795877-4 MS recoveries for total organic carbon (rep1) (132%) performed on L2333497-10, do not apply because the sample concentrations are greater than four times the spike amounts added.

I, the undersigned, attest under the pains and penalties of perjury that, to the best of my knowledge and belief and based upon my personal inquiry of those responsible for providing the information contained in this analytical report, such information is accurate and complete. This certificate of analysis is not complete unless this page accompanies any and all pages of this report.

Authorized Signature: Report Date: 06/27/23

Title: Technical Director/Representative

Glossary

GLOSSARY

Acronyms

DL - Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the limit of quantitation (LOQ). The DL includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)

EDL - Estimated Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The EDL includes any adjustments from dilutions, concentrations or moisture content, where applicable. The use of EDLs is specific to the analysis of PAHs using Solid-Phase Microextraction (SPME).

EMPC - Estimated Maximum Possible Concentration: The concentration that results from the signal present at the retention time of an analyte when the ions meet all of the identification criteria except the ion abundance ratio criteria. An EMPC is a worst-case estimate of the concentration.

EPA - Environmental Protection Agency.

LCS - Laboratory Control Sample: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.

LCSD - Laboratory Control Sample Duplicate: Refer to LCS.

LFB - Laboratory Fortified Blank: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.

LOD - Limit of Detection: This value represents the level to which a target analyte can reliably be detected for a specific analyte in a specific matrix by a specific method. The LOD includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)

LOQ - Limit of Quantitation: The value at which an instrument can accurately measure an analyte at a specific concentration. The LOQ includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)

Limit of Quantitation: The value at which an instrument can accurately measure an analyte at a specific concentration. The LOQ includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)

MDL - Method Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The MDL includes any adjustments from dilutions, concentrations or moisture content, where applicable.

MS - Matrix Spike Sample: A sample prepared by adding a known mass of target analyte to a specified amount of matrix sample for which an independent estimate of target analyte concentration is available. For Method 332.0, the spike recovery is calculated using the native concentration, including estimated values.

MSD - Matrix Spike Sample Duplicate: Refer to MS.

NA - Not Applicable.

NC - Not Calculated: Term is utilized when one or more of the results utilized in the calculation are non-detect at the parameter's reporting unit.

NDPA/DPA - N-Nitrosodiphenylamine/Diphenylamine.

NI - Not Ignitable.

NP - Non-Plastic: Term is utilized for the analysis of Atterberg Limits in soil.

NR - No Results: Term is utilized when 'No Target Compounds Requested' is reported for the analysis of Volatile or Semivolatile Organic TIC only requests.

RL - Reporting Limit: The value at which an instrument can accurately measure an analyte at a specific concentration. The RL includes any adjustments from dilutions, concentrations or moisture content, where applicable.

RPD - Relative Percent Difference: The results from matrix and/or matrix spike duplicates are primarily designed to assess the precision of analytical results in a given matrix and are expressed as relative percent difference (RPD). Values which are less than five times the reporting limit for any individual parameter are evaluated by utilizing the absolute difference between the values; although the RPD value will be provided in the report.

SRM - Standard Reference Material: A reference sample of a known or certified value that is of the same or similar matrix as the associated field samples.

STLP - Semi-dynamic Tank Leaching Procedure per EPA Method 1315.

TEF - Toxic Equivalency Factors: The values assigned to each dioxin and furan to evaluate their toxicity relative to 2,3,7,8-TCDD.

TEQ - Toxic Equivalent: The measure of a sample's toxicity derived by multiplying each dioxin and furan by its corresponding TEF and then summing the resulting values.

TIC - Tentatively Identified Compound: A compound that has been identified to be present and is not part of the target compound list (TCL) for the method and/or program. All TICs are qualitatively identified and reported as estimated concentrations.

Report Format: DU Report with 'J' Qualifiers

Footnotes

1 - The reference for this analyte should be considered modified since this analyte is absent from the target analyte list of the original method.

Terms

Analytical Method: Both the document from which the method originates and the analytical reference method. (Example: EPA 8260B is shown as 1,8260B.) The codes for the reference method documents are provided in the References section of the Addendum.

Chlordane: The target compound Chlordane (CAS No. 57-74-9) is reported for GC ECD analyses. Per EPA,this compound "refers to a mixture of chlordane isomers, other chlorinated hydrocarbons and numerous other components." (Reference: USEPA Toxicological Review of Chlordane, In Support of Summary Information on the Integrated Risk Information System (IRIS), December 1997.)

Difference: With respect to Total Oxidizable Precursor (TOP) Assay analysis, the difference is defined as the Post-Treatment value minus the Pre-Treatment value.

Final pH: As it pertains to Sample Receipt & Container Information section of the report, Final pH reflects pH of container determined after adjustment at the laboratory, if applicable. If no adjustment required, value reflects Initial pH.

Frozen Date/Time: With respect to Volatile Organics in soil, Frozen Date/Time reflects the date/time at which associated Reagent Water-preserved vials were initially frozen. Note: If frozen date/time is beyond 48 hours from sample collection, value will be reflected in 'bold'.

Gasoline Range Organics (GRO): Gasoline Range Organics (GRO) results include all chromatographic peaks eluting from Methyl tert butyl ether through Naphthalene, with the exception of GRO analysis in support of State of Ohio programs, which includes all chromatographic peaks eluting from Hexane through Dodecane.

Initial pH: As it pertains to Sample Receipt & Container Information section of the report, Initial pH reflects pH of container determined upon receipt, if applicable.

PAH Total: With respect to Alkylated PAH analyses, the 'PAHs, Total' result is defined as the summation of results for all or a subset of the following compounds: Naphthalene, C1-C4 Naphthalenes, 2-Methylnaphthalene, 1-Methylnaphthalene, Biphenyl, Acenaphthylene, Acenaphthene, Fluorene, C1-C3 Fluorenes, Phenanthrene, C1-C4 Phenanthrenes/Anthracenes, Anthracene, Fluoranthene, Pyrene, C1-C4 Fluoranthenes/Pyrenes, Benz(a)anthracene, Chrysene, C1-C4 Chrysenes, Benzo(b)fluoranthene, Benzo(j)+(k)fluoranthene, Benzo(e)pyrene, Benzo(a)pyrene, Perylene, Indeno(1,2,3-cd)pyrene, Dibenz(ah)+(ac)anthracene, Benzo(g,h,i)perylene. If a 'Total' result is requested, the results of its individual components will also be reported.

PFAS Total: With respect to PFAS analyses, the 'PFAS, Total (5)' result is defined as the summation of results for: PFHpA, PFHxS, PFOA, PFNA and PFOS. In addition, the 'PFAS, Total (6)' result is defined as the summation of results for: PFHpA, PFHxS, PFOA, PFNA, PFDA and PFOS. For MassDEP DW compliance analysis only, the 'PFAS, Total (6)' result is defined as the summation of results at or above the RL. Note: If a 'Total' result is requested, the results of its individual components will also be reported.

Total: With respect to Organic analyses, a 'Total' result is defined as the summation of results for individual isomers or Aroclors. If a 'Total' result is requested, the results of its individual components will also be reported. This is applicable to 'Total' results for methods 8260, 8081 and 8082.

Data Qualifiers

A - Spectra identified as "Aldol Condensates" are byproducts of the extraction/concentration procedures when acetone is introduced in the process.

B - The analyte was detected above the reporting limit in the associated method blank. Flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank. For MCP-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank. For DOD-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank AND the analyte was detected above one-half the reporting limit (or above the reporting limit for common lab contaminants) in the associated method blank. For NJ-Air-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte above the reporting limit. For NJ-related projects (excluding Air), flag only applies to associated field samples that have detectable concentrations of the analyte, which was detected above the reporting limit in the associated method blank or above five times the reporting limit for common lab contaminants (Phthalates, Acetone, Methylene Chloride, 2-Butanone).

C - Co-elution: The target analyte co-elutes with a known lab standard (i.e. surrogate, internal standards, etc.) for co-extracted analyses.

D - Concentration of analyte was quantified from diluted analysis. Flag only applies to field samples that have detectable concentrations of the analyte.

E - Concentration of analyte exceeds the range of the calibration curve and/or linear range of the instrument.

F - The ratio of quantifier ion response to qualifier ion response falls outside of the laboratory criteria. Results are considered to be an estimated maximum concentration.

G - The concentration may be biased high due to matrix interferences (i.e, co-elution) with non-target compound(s). The result should be considered estimated.

H - The analysis of pH was performed beyond the regulatory-required holding time of 15 minutes from the time of sample collection.

I - The lower value for the two columns has been reported due to obvious interference.

M - Reporting Limit (RL) exceeds the MCP CAM Reporting Limit for this analyte.

NJ - Presumptive evidence of compound. This represents an estimated concentration for Tentatively Identified Compounds (TICs), where

Report Format: DU Report with 'J' Qualifiers

Data Qualifiers

the identification is based on a mass spectral library search.

P - The RPD between the results for the two columns exceeds the method-specified criteria.

Q - The quality control sample exceeds the associated acceptance criteria. For DOD-related projects, LCS and/or Continuing Calibration Standard exceedences are also qualified on all associated sample results. Note: This flag is not applicable for matrix spike recoveries when the sample concentration is greater than 4x the spike added or for batch duplicate RPD when the sample concentrations are less than 5x the RL. (Metals only.)

R - Analytical results are from sample re-analysis.

RE - Analytical results are from sample re-extraction.

S - Analytical results are from modified screening analysis.

V - The surrogate associated with this target analyte has a recovery outside the QC acceptance limits. (Applicable to MassDEP DW Compliance samples only.)

Z - The batch matrix spike and/or duplicate associated with this target analyte has a recovery/RPD outside the QC acceptance limits. (Applicable to MassDEP DW Compliance samples only.)

J - Estimated value. The Target analyte concentration is below the quantitation limit (RL), but above the Method Detection Limit (MDL) or Estimated Detection Limit (EDL) for SPME-related analyses. This represents an estimated concentration for Tentatively Identified Compounds (TICs).

ND - Not detected at the method detection limit (MDL) for the sample, or estimated detection limit (EDL) for SPME-related analyses.

Wet Chemistry

Organic Carbon Analysis

Results Summary

Form 1
WETCHEM

Client	: Aqua Pro-Tech Laboratories	**Lab Number**	: L2333497
Project Name	: 23E1424	**Project Number**	: 23E1424
Lab ID	: L2333497-01	**Date Collected**	: 05/30/23 11:30
Client ID	: 23E1424-02	**Date Received**	: 06/13/23
Sample Location	:	**Date Analyzed**	: 06/20/23 11:10
Sample Matrix	: SOIL	**Dilution Factor**	: 1
Analytical Method	: 13,-	**Analyst**	: SPP
Lab File ID	: WG1794439,SPP,toc4,csv	**Instrument ID**	: TOC4
Sample Amount	:	**%Solids**	: NA
Digestion Method	:	**Date Digested**	:

		mg/kg			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
7440-44-0	Total Organic Carbon (Rep1)	19600	500	500.	
7440-44-0	Total Organic Carbon (Rep2)	23000	500	500.	
7440-44-0	Total Organic Carbon (Average)	21300	500	500.	

Form 1
WETCHEM

Client	: Aqua Pro-Tech Laboratories	**Lab Number**	: L2333497
Project Name	: 23E1424	**Project Number**	: 23E1424
Lab ID	: L2333497-02	**Date Collected**	: 05/30/23 11:50
Client ID	: 23E1424-04	**Date Received**	: 06/13/23
Sample Location	:	**Date Analyzed**	: 06/20/23 11:10
Sample Matrix	: SOIL	**Dilution Factor**	: 1
Analytical Method	: 13,-	**Analyst**	: SPP
Lab File ID	: WG1794439,SPP,toc4,csv	**Instrument ID**	: TOC4
Sample Amount	:	**%Solids**	: NA
Digestion Method	:	**Date Digested**	:

		mg/kg			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
7440-44-0	Total Organic Carbon (Rep1)	21800	500	500.	
7440-44-0	Total Organic Carbon (Rep2)	24200	500	500.	
7440-44-0	Total Organic Carbon (Average)	23000	500	500.	

Form 1
WETCHEM

Client	: Aqua Pro-Tech Laboratories	**Lab Number**	: L2333497
Project Name	: 23E1424	**Project Number**	: 23E1424
Lab ID	: L2333497-03	**Date Collected**	: 05/30/23 12:05
Client ID	: 23E1424-06	**Date Received**	: 06/13/23
Sample Location	:	**Date Analyzed**	: 06/20/23 11:10
Sample Matrix	: SOIL	**Dilution Factor**	: 1
Analytical Method	: 13,-	**Analyst**	: SPP
Lab File ID	: WG1794439,SPP,toc4,csv	**Instrument ID**	: TOC4
Sample Amount	:	**%Solids**	: NA
Digestion Method	:	**Date Digested**	:

		mg/kg			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
7440-44-0	Total Organic Carbon (Rep1)	13300	500	500.	
7440-44-0	Total Organic Carbon (Rep2)	14000	500	500.	
7440-44-0	Total Organic Carbon (Average)	13600	500	500.	

Form 1
WETCHEM

Client	: Aqua Pro-Tech Laboratories	**Lab Number**	: L2333497
Project Name	: 23E1424	**Project Number**	: 23E1424
Lab ID	: L2333497-04	**Date Collected**	: 05/30/23 12:30
Client ID	: 23E1424-08	**Date Received**	: 06/13/23
Sample Location	:	**Date Analyzed**	: 06/20/23 11:10
Sample Matrix	: SOIL	**Dilution Factor**	: 1
Analytical Method	: 13,-	**Analyst**	: SPP
Lab File ID	: WG1794439,SPP,toc4,csv	**Instrument ID**	: TOC4
Sample Amount	:	**%Solids**	: NA
Digestion Method	:	**Date Digested**	:

		mg/kg			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
7440-44-0	Total Organic Carbon (Rep1)	3600	500	500.	
7440-44-0	Total Organic Carbon (Rep2)	3800	500	500.	
7440-44-0	Total Organic Carbon (Average)	3700	500	500.	

Form 1
WETCHEM

Client	: Aqua Pro-Tech Laboratories	**Lab Number**	: L2333497
Project Name	: 23E1424	**Project Number**	: 23E1424
Lab ID	: L2333497-05	**Date Collected**	: 05/30/23 12:45
Client ID	: 23E1424-10	**Date Received**	: 06/13/23
Sample Location	:	**Date Analyzed**	: 06/20/23 11:10
Sample Matrix	: SOIL	**Dilution Factor**	: 1
Analytical Method	: 13,-	**Analyst**	: SPP
Lab File ID	: WG1794439,SPP,toc4,csv	**Instrument ID**	: TOC4
Sample Amount	:	**%Solids**	: NA
Digestion Method	:	**Date Digested**	:

		mg/kg			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
7440-44-0	Total Organic Carbon (Rep1)	14500	500	500.	
7440-44-0	Total Organic Carbon (Rep2)	14600	500	500.	
7440-44-0	Total Organic Carbon (Average)	14600	500	500.	

Form 1
WETCHEM

Client	: Aqua Pro-Tech Laboratories	**Lab Number**	: L2333497
Project Name	: 23E1424	**Project Number**	: 23E1424
Lab ID	: L2333497-06	**Date Collected**	: 05/30/23 13:05
Client ID	: 23E1424-12	**Date Received**	: 06/13/23
Sample Location	:	**Date Analyzed**	: 06/20/23 11:10
Sample Matrix	: SOIL	**Dilution Factor**	: 1
Analytical Method	: 13,-	**Analyst**	: SPP
Lab File ID	: WG1794439,SPP,toc4,csv	**Instrument ID**	: TOC4
Sample Amount	:	**%Solids**	: NA
Digestion Method	:	**Date Digested**	:

		mg/kg			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
7440-44-0	Total Organic Carbon (Rep1)	50600	500	500.	
7440-44-0	Total Organic Carbon (Rep2)	58000	500	500.	
7440-44-0	Total Organic Carbon (Average)	54300	500	500.	

Form 1
WETCHEM

Client	: Aqua Pro-Tech Laboratories	**Lab Number**	: L2333497
Project Name	: 23E1424	**Project Number**	: 23E1424
Lab ID	: L2333497-07	**Date Collected**	: 05/30/23 13:20
Client ID	: 23E1424-14	**Date Received**	: 06/13/23
Sample Location	:	**Date Analyzed**	: 06/20/23 11:10
Sample Matrix	: SOIL	**Dilution Factor**	: 1
Analytical Method	: 13,-	**Analyst**	: SPP
Lab File ID	: WG1794439,SPP,toc4,csv	**Instrument ID**	: TOC4
Sample Amount	:	**%Solids**	: NA
Digestion Method	:	**Date Digested**	:

		mg/kg			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
7440-44-0	Total Organic Carbon (Rep1)	5780	500	500.	
7440-44-0	Total Organic Carbon (Rep2)	3930	500	500.	
7440-44-0	Total Organic Carbon (Average)	4860	500	500.	

Form 1
WETCHEM

Client	: Aqua Pro-Tech Laboratories	**Lab Number**	: L2333497
Project Name	: 23E1424	**Project Number**	: 23E1424
Lab ID	: L2333497-08	**Date Collected**	: 05/30/23 11:35
Client ID	: 23E1424-16	**Date Received**	: 06/13/23
Sample Location	:	**Date Analyzed**	: 06/20/23 11:10
Sample Matrix	: SOIL	**Dilution Factor**	: 1
Analytical Method	: 13,-	**Analyst**	: SPP
Lab File ID	: WG1794439,SPP,toc4,csv	**Instrument ID**	: TOC4
Sample Amount	:	**%Solids**	: NA
Digestion Method	:	**Date Digested**	:

		mg/kg			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
7440-44-0	Total Organic Carbon (Rep1)	8130	500	500.	
7440-44-0	Total Organic Carbon (Rep2)	9780	500	500.	
7440-44-0	Total Organic Carbon (Average)	8960	500	500.	

Form 1
WETCHEM

Client	: Aqua Pro-Tech Laboratories	**Lab Number**	: L2333497
Project Name	: 23E1424	**Project Number**	: 23E1424
Lab ID	: L2333497-09	**Date Collected**	: 05/30/23 12:35
Client ID	: 23E1424-17	**Date Received**	: 06/13/23
Sample Location	:	**Date Analyzed**	: 06/20/23 11:10
Sample Matrix	: SOIL	**Dilution Factor**	: 1
Analytical Method	: 13,-	**Analyst**	: SPP
Lab File ID	: WG1794439,SPP,toc4,csv	**Instrument ID**	: TOC4
Sample Amount	:	**%Solids**	: NA
Digestion Method	:	**Date Digested**	:

		mg/kg			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
7440-44-0	Total Organic Carbon (Rep1)	2010	500	500.	
7440-44-0	Total Organic Carbon (Rep2)	1380	500	500.	
7440-44-0	Total Organic Carbon (Average)	1700	500	500.	

Form 1
WETCHEM

Client	: Aqua Pro-Tech Laboratories	**Lab Number**	: L2333497
Project Name	: 23E1424	**Project Number**	: 23E1424
Lab ID	: L2333497-10	**Date Collected**	: 05/30/23 13:05
Client ID	: 23E1424-18	**Date Received**	: 06/13/23
Sample Location	:	**Date Analyzed**	: 06/21/23 18:46
Sample Matrix	: SOIL	**Dilution Factor**	: 1
Analytical Method	: 13,-	**Analyst**	: SPP
Lab File ID	: WG1795877,SPP,toc4,csv	**Instrument ID**	: TOC4
Sample Amount	:	**%Solids**	: NA
Digestion Method	:	**Date Digested**	:

		mg/kg			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
7440-44-0	Total Organic Carbon (Rep1)	45600	500	500.	
7440-44-0	Total Organic Carbon (Rep2)	42500	500	500.	
7440-44-0	Total Organic Carbon (Average)	44000	500	500.	

Form 1
WETCHEM

Client	: Aqua Pro-Tech Laboratories	**Lab Number**	: L2333497
Project Name	: 23E1424	**Project Number**	: 23E1424
Lab ID	: WG1794439-1	**Date Collected**	: NA
Client ID	: WG1794439-1BLANK	**Date Received**	: NA
Sample Location	:	**Date Analyzed**	: 06/20/23 11:10
Sample Matrix	: SOIL	**Dilution Factor**	: 1
Analytical Method	: 13,-	**Analyst**	: SPP
Lab File ID	: WG1794439,SPP,toc4,csv	**Instrument ID**	: TOC4
Sample Amount	:	**%Solids**	: NA
Digestion Method	:	**Date Digested**	:

		mg/kg			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
7440-44-0	Total Organic Carbon (Rep1)	ND	500	500.	U
7440-44-0	Total Organic Carbon (Rep2)	ND	500	500.	U
7440-44-0	Total Organic Carbon (Average)	ND	500	500.	U

Form 1
WETCHEM

Client	: Aqua Pro-Tech Laboratories	**Lab Number**	: L2333497
Project Name	: 23E1424	**Project Number**	: 23E1424
Lab ID	: WG1795877-1	**Date Collected**	: NA
Client ID	: WG1795877-1BLANK	**Date Received**	: NA
Sample Location	:	**Date Analyzed**	: 06/21/23 18:46
Sample Matrix	: SOIL	**Dilution Factor**	: 1
Analytical Method	: 13,-	**Analyst**	: SPP
Lab File ID	: WG1795877,SPP,toc4,csv	**Instrument ID**	: TOC4
Sample Amount	:	**%Solids**	: NA
Digestion Method	:	**Date Digested**	:

		mg/kg			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
7440-44-0	Total Organic Carbon (Rep1)	ND	500	500.	U
7440-44-0	Total Organic Carbon (Rep2)	ND	500	500.	U
7440-44-0	Total Organic Carbon (Average)	ND	500	500.	U

Form 1
WETCHEM

Client	: Aqua Pro-Tech Laboratories	**Lab Number**	: L2333497
Project Name	: 23E1424	**Project Number**	: 23E1424
Lab ID	: WG1795877-3	**Date Collected**	: 05/30/23 13:05
Client ID	: 23E1424-18DUP	**Date Received**	: 06/13/23
Sample Location	:	**Date Analyzed**	: 06/21/23 18:46
Sample Matrix	: SOIL	**Dilution Factor**	: 1
Analytical Method	: 13,-	**Analyst**	: SPP
Lab File ID	: WG1795877,SPP,toc4,csv	**Instrument ID**	: TOC4
Sample Amount	:	**%Solids**	: NA
Digestion Method	:	**Date Digested**	:

		mg/kg			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
7440-44-0	Total Organic Carbon (Rep1)	35000	500	500.	
7440-44-0	Total Organic Carbon (Rep2)	41300	500	500.	
7440-44-0	Total Organic Carbon (Average)	38200	500	500.	

Calibration Summary

Form 2A
Initial and Continuing Calibration Verification

Client	: Aqua Pro-Tech Laboratories	**Lab Number**	: L2333497
Project Name	: 23E1424	**Project Number**	: 23E1424
Instrument ID	: TOC4	**Units**	:

	Initial Calibration			Continuing Calibration(s)						
Lab ID :	R1709780-19			R1709780-10			R1709780-11		R1709780-12	
Date Analyzed :	06/20/23 10:53			06/20/23 15:06			06/20/23 19:54		06/20/23 13:53	
Parameter	**True**	**Found**	**%R**	**True**	**Found**	**%R**	**Found**	**%R**	**Found**	**%R**
Total Organic Carbon (Rep1)	1.000	1.060	106	1.000	1.040	104	1.070	107	1.060	106

Form 2A
Initial and Continuing Calibration Verification

Client	: Aqua Pro-Tech Laboratories	**Lab Number**	: L2333497
Project Name	: 23E1424	**Project Number**	: 23E1424
Instrument ID	: TOC4	**Units**	:

	Initial Calibration			Continuing Calibration(s)						
Lab ID :				R1709780-13			R1709780-14		R1709780-15	
Date Analyzed :				06/20/23 20:49			06/20/23 16:03		06/20/23 12:12	
Parameter	**True**	**Found**	**%R**	**True**	**Found**	**%R**	**Found**	**%R**	**Found**	**%R**
Total Organic Carbon (Rep1)				1.000	1.070	107	1.050	105	1.200	120

Form 2A
Initial and Continuing Calibration Verification

Client	: Aqua Pro-Tech Laboratories	**Lab Number**	: L2333497
Project Name	: 23E1424	**Project Number**	: 23E1424
Instrument ID	: TOC4	**Units**	:

	Initial Calibration			Continuing Calibration(s)						
Lab ID :				R1709780-16			R1709780-9		R1711110-3	
Date Analyzed :				06/20/23 18:59			06/20/23 17:27		06/21/23 19:55	
Parameter	**True**	**Found**	**%R**	**True**	**Found**	**%R**	**Found**	**%R**	**Found**	**%R**
Total Organic Carbon (Rep1)				1.000	1.060	106	1.070	107	1.120	112

Form 2A
Initial and Continuing Calibration Verification

Client	: Aqua Pro-Tech Laboratories	**Lab Number**	: L2333497
Project Name	: 23E1424	**Project Number**	: 23E1424
Instrument ID	: TOC4	**Units**	:

	Initial Calibration			Continuing Calibration(s)						
Lab ID :				R1711110-4						
Date Analyzed :				06/21/23 19:18						
Parameter	**True**	**Found**	**%R**	**True**	**Found**	**%R**	**Found**	**%R**	**Found**	**%R**
Total Organic Carbon (Rep1)				1.000	0.990	99				

Form 2A
Initial and Continuing Calibration Verification

Client	: Aqua Pro-Tech Laboratories	**Lab Number**	: L2333497
Project Name	: 23E1424	**Project Number**	: 23E1424
Instrument ID	: TOC4	**Units**	:

	Initial Calibration			Continuing Calibration(s)						
Lab ID :	R1711110-6			R1709780-10			R1709780-11		R1709780-12	
Date Analyzed :	06/21/23 18:37			06/20/23 15:06			06/20/23 19:54		06/20/23 13:53	
Parameter	**True**	**Found**	**%R**	**True**	**Found**	**%R**	**Found**	**%R**	**Found**	**%R**
Total Organic Carbon (Rep1)	1.000	1.030	103	1.000	1.040	104	1.070	107	1.060	106

Form 2A
Initial and Continuing Calibration Verification

Client	: Aqua Pro-Tech Laboratories	**Lab Number**	: L2333497
Project Name	: 23E1424	**Project Number**	: 23E1424
Instrument ID	: TOC4	**Units**	:

	Initial Calibration			Continuing Calibration(s)						
Lab ID :				R1709780-13			R1709780-14		R1709780-15	
Date Analyzed :				06/20/23 20:49			06/20/23 16:03		06/20/23 12:12	
Parameter	**True**	**Found**	**%R**	**True**	**Found**	**%R**	**Found**	**%R**	**Found**	**%R**
Total Organic Carbon (Rep1)				1.000	1.070	107	1.050	105	1.200	120

Form 2A
Initial and Continuing Calibration Verification

Client	: Aqua Pro-Tech Laboratories	**Lab Number**	: L2333497
Project Name	: 23E1424	**Project Number**	: 23E1424
Instrument ID	: TOC4	**Units**	:

	Initial Calibration			Continuing Calibration(s)						
Lab ID :				R1709780-16			R1709780-9		R1711110-3	
Date Analyzed :				06/20/23 18:59			06/20/23 17:27		06/21/23 19:55	
Parameter	**True**	**Found**	**%R**	**True**	**Found**	**%R**	**Found**	**%R**	**Found**	**%R**
Total Organic Carbon (Rep1)				1.000	1.060	106	1.070	107	1.120	112

Form 2A
Initial and Continuing Calibration Verification

Client	: Aqua Pro-Tech Laboratories	**Lab Number**	: L2333497
Project Name	: 23E1424	**Project Number**	: 23E1424
Instrument ID	: TOC4	**Units**	:

	Initial Calibration			Continuing Calibration(s)						
Lab ID :				R1711110-4						
Date Analyzed :				06/21/23 19:18						
Parameter	**True**	**Found**	**%R**	**True**	**Found**	**%R**	**Found**	**%R**	**Found**	**%R**
Total Organic Carbon (Rep1)				1.000	0.990	99				

Blank Results Summary

Form 3
Blanks

Client	: Aqua Pro-Tech Laboratories	**Lab Number**	: L2333497
Project Name	: 23E1424	**Project Number**	: 23E1424
Instrument ID	: TOC4		

	Initial Calibration Blank		Continuing Calibration Blank(s)						Preparation Blank	
Lab ID :	R1709780-18		R1709780-8		R1709780-7		R1709780-6		WG1794439-1	
Date Analyzed :	06/20/23 11:02		06/20/23 12:16		06/20/23 13:58		06/20/23 15:11		06/20/23 11:10	
Parameter	mg/kg	Q	mg/kg	Q	mg/kg	Q	mg/kg	Q	mg/kg	Q
Total Organic Carbon (Rep1)	0.0500	U	0.0500	U	0.0500	U	0.0500	U	500.	U
Total Organic Carbon (Rep2)									500.	U
Total Organic Carbon (Average)									500.	U

Form 3
Blanks

Client	: Aqua Pro-Tech Laboratories	**Lab Number**	: L2333497
Project Name	: 23E1424	**Project Number**	: 23E1424
Instrument ID	: TOC4		

	Initial Calibration Blank	Continuing Calibration Blank(s)						Preparation Blank	
Lab ID :		R1709780-5		R1709780-4		R1709780-2			
Date Analyzed :		06/20/23 16:07		06/20/23 17:33		06/20/23 19:03			
Parameter	**Q**		**Q**		**Q**		**Q**		**Q**
Total Organic Carbon (Rep1)		0.0500	U	0.0500	U	0.0500	U		

Form 3
Blanks

Client	: Aqua Pro-Tech Laboratories	**Lab Number**	: L2333497
Project Name	: 23E1424	**Project Number**	: 23E1424
Instrument ID	: TOC4		

	Initial Calibration Blank	Continuing Calibration Blank(s)		Preparation Blank	
Lab ID :		R1709780-3	R1709780-1		
Date Analyzed :		06/20/23 19:58	06/20/23 20:54		
Parameter	Q	Q	Q	Q	Q
Total Organic Carbon (Rep1)		0.0500 U	0.0500 U		

Form 3
Blanks

Client	: Aqua Pro-Tech Laboratories	**Lab Number**	: L2333497
Project Name	: 23E1424	**Project Number**	: 23E1424
Instrument ID	: TOC4		

	Initial Calibration Blank		Continuing Calibration Blank(s)						Preparation Blank	
Lab ID :	R1711110-5		R1711110-2		R1711110-1				WG1795877-1	
Date Analyzed :	06/21/23 18:42		06/21/23 19:23		06/21/23 20:00				06/21/23 18:46	
Parameter	mg/kg	Q	mg/kg	Q	mg/kg	Q	mg/kg	Q	mg/kg	Q
Total Organic Carbon (Rep1)	0.0500	U	0.0500	U	0.0500	U			500.	U
Total Organic Carbon (Rep2)									500.	U
Total Organic Carbon (Average)									500.	U

APL

AQUA PRO-TECH LABORATORIES
A Pace® Analytical Laboratory
1275 Bloomfield Avenue, Fairfield, NJ 07004 (973) 227-0422

ANALYTICAL RESULTS

REDUCED DELIVERABLES FORMAT

APL Work Order Number: 23E1425

Dynamic Earth LLC

Project: Supplemental HAP Investigation



Sudip Pradhan
Laboratory Director

All Results meet the requirements of the National Environmental Laboratory Accreditation Conference and/or State specific certifications as applicable.

Report Date: Jul 18, 2023

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AQUA PRO-TECH LABORATORIES
Certified Environmental Testing

Sample Summary

Work Order: 23E1425

Client: Dynamic Earth LLC

Project: Supplemental HAP Investigation

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
T-3-1B	23E1425-01	Soil	05/30/2023 09:25	05/31/2023 16:30
T-3-2B	23E1425-02	Soil	05/30/2023 09:35	05/31/2023 16:30
T-3-3B	23E1425-03	Soil	05/30/2023 09:42	05/31/2023 16:30
T-3-4B	23E1425-04	Soil	05/30/2023 09:50	05/31/2023 16:30
F-13R	23E1425-05	Soil	05/30/2023 10:50	05/31/2023 16:30
F-15-3R	23E1425-06	Soil	05/30/2023 10:45	05/31/2023 16:30
F-5-2R	23E1425-07	Soil	05/30/2023 10:40	05/31/2023 16:30
TRENCH-6	23E1425-08	Soil	05/30/2023 11:35	05/31/2023 16:30
TRENCH-7	23E1425-09	Soil	05/30/2023 11:45	05/31/2023 16:30
T-3-1C	23E1425-10	Soil	05/30/2023 09:28	05/31/2023 16:30
TRENCH-7A	23E1425-19	Soil	05/30/2023 11:50	05/31/2023 16:30
TRENCH-9	23E1425-22	Soil	05/30/2023 12:05	05/31/2023 16:30

PN: 23E1425

APL 23E1425

AQUA PRO-TECH LABORATORIES

www.aquaprotechlabs.com

Fairfield, NJ 07004
TEL: 973-227-0422
FAX: 973-227-2813

CHAIN OF CUSTODY

Client:	Dynamic Earth, LLC	Send Report To:	O. Mahmoud
Address:	1904 Main Street	Address:	
	Lake Como, NJ		
Phone:	732-280-0830	Phone:	
E-Mail:	omahmoud@dynamic-earth.com	Send Invoice To:	
Project Name:	Supplemental HAP Investigation	Address:	
Project Manager:	Omar Mahmoud	Sampling Location:	Edgetown, NJ
Project or PO #:	3272-98-005EC	Sampled By:	Omar Mahmoud

Turn-Around Time
- [ ] APL Standard 2 Weeks
- [ ] Rush (Choose One Below)
- [ ] 1 Day [ ] 2 Days [ ] 3 Days
- [x] 1 Week [ ] Other (Specify Below)

Date and Time Required: _____
**May Need Lab Approval

Report / Electronic Format
- [ ] Results Only / NY ASP-A
- [x] Reduced: NJ DEP
- [ ] Full: NJ DEP / NY ASP-B
- [ ] State Forms/E2 Reporting
- [x] Excel Summary
- [ ] EqUIS
- [ ] EnviroData
- [ ] Hazsite EDD

PWSID # _____ SRP# _____

Contamination Level
- [ ] Low
- [ ] Medium
- [ ] High

Comments/Special Instructions:
* Hold sample

Cooler Temp: 4

Matrix Abbreviations:
DW - Drinking Water; GW - Groundwater; WW - Wastewater; SW - Surface Water; L - Lake, Pool, SPA; S - Soil; SD - Solid; SL - Sludge; C - Concrete; W - Wipes; O - Oil; PC - Paint Chips

APL Order # (APL Will Provide): 23E1425

ANALYSIS REQUESTED

Sample #	Sample Source: Field ID	Collect Date	Collect Time	Matrix	Sample Type: Grab	Sample Type: Comp	No. of Bottles	Preservative	Dieldrin
-01	T-3-1B	5/30/23	0925	S	X		1		X
-10	* T-3-1C		0928		X		1		X
-11	* T-3-1D		0930		X		1		X
-02	T-3-2B		0935		X		1		X
-12	* T-3-2C		0938		X		1		X
-13	* T-3-2D		0940		X		1		X
-03	T-3-3B		0942		X		1		X
-14	* T-3-3C		0943		X		1		X
-15	* T-3-3D		0945		X		1		X
-04	T-3-4B		0950		X		1		X

RELINQUISHED BY:	Print: Omar Mahmoud	RECEIVED BY:	Print:	Date: 5/31/23
	Sign:		Sign:	Time:
RELINQUISHED BY:	Print:	RECEIVED BY:	Print:	Date: 5/31/23
	Sign		Sign:	Time: 1500
RELINQUISHED BY:	Print:	RECEIVED BY:	Print: Rose Nelp	Date: 5/31/23
	Sign:		Sign:	Time: 1630

CERTIFICATIONS: NELAP (National Environmental Accreditation Program) NJDEP #07010 PADEP #68-02903 NYDOH #11634

By signing this Chain of Custody Agreement, customer expressly agrees to pay APL for all charges, reasonably incurred in connection with analysis and reporting for these samples.

PN: 23E1425

APL
AQUA PRO-TECH LABORATORIES

www.aquaprotechlabs.com
1275 Bloomfield Avenue Building 6
Fairfield, NJ 07004
TEL: 973-227-0422
FAX: 973-227-2813

Contamination Level: ☐ Low ☐ Medium ☐ High

CHAIN OF CUSTODY

Client:	Dynamic Earth, LLC	Send Report To:	O. Mahmoud
Address:	1904 Main Street, Lake Como, NJ 07719	Address:	
Phone:	732-280-0830	Phone:	
E-Mail:	omahmoud@dynamic-earth.us	Send Invoice To:	
Project Name:	Supp. HAP Inv.	Address:	
Project Manager:	Omar Mahmoud	Sampling Location:	Eatontown, NJ
Project or PO #:	3272-98-005EC	Sampled By:	Omar Mahmoud

Turn-Around Time
☐ APL Standard 2 Weeks
Rush (Choose One Below)
☐ 1 Day ☐ 2 Days ☐ 3 Days
☑ 1 Week ☐ Other (Specify Below)

Date and Time Required: _____
**May Need Lab Approval

Report / Electronic Format
☐ Results Only / NY ASP-A
☑ Reduced: NJ DEP
☐ Full: NJ DEP / NY ASP-B
☐ State Forms/E2 Reporting
☑ Excel Summary
☐ EqUIS
☐ EnviroData
☐ Hazsite EDD

PWSID # _____ SRP# _____

Comments/Special Instructions:
* Hold sample C - contingent analysis

Cooler Temp: 4

Matrix Abbreviations:
DW - Drinking Water; GW - Groundwater; WW - Wastewater; SW - Surface Water; L - Lake; Pool; SPA; S - Soil; SD - Solid; SL - Sludge; C - Concrete; W - Wipes; O - Oil; PC - Paint Chips

APL Order # (APL Will Provide): 23G1425

Sample #	Sample Source: Field ID	Collect Date	Collect Time	Matrix	Sample Type: Grab	Sample Type: Comp	No. of Bottles	Preservative	ANALYSIS REQUESTED: Dieldrin	SPLP Dieldrin	Chlordane
-16	* T-3-4C	5/30/23	0953	S	X				X		
-17	* T-3-4D		0955		X				X		
-05	F-13R		1050		X				C	X	
-06	F-15-3R		1045		X				C	X	
-07	F-5-2R		1040		X				C	X	
-08	TRENCH-6		1135		X						X
-18	* TRENCH-6A		1140		X						X
-09	TRENCH-7		1145		X						X
-19	* TRENCH-7A		1150		X						X
-20	* TRENCH-8		1155		X						X

RELINQUISHED BY:	Print: Omar Mahmoud	RECEIVED BY:	Print:
	Sign:		Sign:
			Date: 5/31/23 Time:
RELINQUISHED BY:	Print:	RECEIVED BY:	Print:
	Sign		Sign:
			Date: 5/31/23 Time: 1540
RELINQUISHED BY:	Print:	RECEIVED BY:	Print: Rush Way
	Sign:		Sign:
			Date: 5/31/23 Time: 1630

CERTIFICATIONS: NELAP (National Environmental Accreditation Program) NJDEP #07010 PADEP #68-02903 NYDOH #11634

By signing this Chain of Custody Agreement, customer expressly agrees to pay APL for all charges, reasonably incurred in connection with analysis and reporting for these samples.

PN: 23E1425

APL

AQUA PRO-TECH LABORATORIES

www.aquaprotechlabs.com

1275 Bloomfield Avenue Building 6
Fairfield, NJ 07004

TEL: 973-227-0422
FAX: 973-227-2813

CHAIN OF CUSTODY

Client:	Dynamic Earth, LLC	Send Report To:	O. Mahmoud
Address:	1904 Main Street	Address:	
	Lake Como, NJ 07719		
Phone:	732-280-0830	Phone:	
E-Mail:	Omahmud@dynamicearth.com	Send Invoice To:	
Project Name:	Supp. HAP Inv.	Address:	
Project Manager:	Omar Mahmoud	Sampling Location:	Eatontown NJ
Project or PO #:	3272-98-005Ec	Sampled By:	Omar Mahmoud

Turn-Around Time
- [ ] APL Standard 2 Weeks
- [ ] Rush (Choose One Below)
- [ ] 1 Day [ ] 2 Days [ ] 3 Days
- [x] 1 Week [ ] Other (Specify Below)

Date and Time Required: _____
**May Need Lab Approval

Report / Electronic Format
- [ ] Results Only / NY ASP-A
- [x] Reduced: NJ DEP
- [ ] Full: NJ DEP / NY ASP-B
- [ ] State Forms/E2 Reporting
- [x] Excel Summary
- [ ] EqUIS
- [ ] EnviroData
- [ ] Hazsite EDD

PWSID # _____ SRP# _____

Contamination Level
- [ ] Low
- [ ] Medium
- [ ] High

Comments/Special Instructions:
* Hold Sample

Cooler Temp: 4

APL Order # (APL Will Provide): 23E1425

Matrix Abbreviations:
DW - Drinking Water; GW - Groundwater; WW - Wastewater; SW - Surface Water; L - Lake, Pool, SPA; S - Soil; SD - Solid; SL - Sludge; C - Concrete; W - Wipes; O - Oil; PC - Paint Chips

ANALYSIS REQUESTED

Sample #	Sample Source: Field ID	Collect Date	Collect Time	Matrix	Sample Type: Grab	Sample Type: Comp	No. of Bottles	Preservative	Chlordane										
-21	*TRENCH-8A	5/30/23	1200	S	X				X										
-22	*TRENCH-9		1205		X				X										
-23	*TRENCH-9A		1210		X				X										

RELINQUISHED BY:	Print: Omar Mahmoud	RECEIVED BY:	Print:	Date: 5/31/23
	Sign:		Sign:	Time:
RELINQUISHED BY:	Print:	RECEIVED BY:	Print: WC	Date: 5/31/23
	Sign		Sign:	Time: 800
RELINQUISHED BY:	Print: WC	RECEIVED BY:	Print: Rick Nap	Date: 53123
	Sign:		Sign:	Time: 1630

CERTIFICATIONS: NELAP (National Environmental Accreditation Program) NJDEP #07010 PADEP #68-02903 NYDOH #11634

By signing this Chain of Custody Agreement, customer expressly agrees to pay APL for all charges, reasonably incurred in connection with analysis and reporting for these samples.

Extractable Petroleum Hydrocarbons:

Gas Chromatography/Flame Ionization Detector

New Jersey Department of Environmental Protection Site Remediation Program Extractable Petroleum Hydrocarbons Methodology (Version 3.0).
USEPA SW-846 Test Methods for Evaluating Solid Waste Physical/Chemical Methods Update III, Method 8015B or NJDEP Office of Quality Assurance Quantitation of Semi-Volatile Petroleum Products in Water, Soil and Sediment OQA-QAM-025, Revision 6.

Metals:

Inductively-Coupled Plasma Atomic Emission Spectrometry or Inductively-Coupled Plasma Mass Spectroscopy

Wastewater and Groundwater Samples: USEPA Methods for the Analysis of Water and Wastes, Method 200.7, Method 200.8.
Soil Samples: USEPA Methods for Evaluating Solid Waste Physical/Chemical Methods Update III, Method 6010D.

Mercury:

Cold Vapor Atomic Absorption Spectrometry

Wastewater and Groundwater Samples: USEPA Methods for the Analysis of Water and Wastes, Method 245.1.
Soil Samples: USEPA SW-846 Test Methods for Evaluating Solid Waste Physical/Chemical Methods Update III, Method 7471B.

Volatile Organic Compounds:

Purge and Trap Gas Chromatography/Mass Spectroscopy

Drinking Water Samples: USEPA Methods for the Determination of Organic Compounds in Drinking Water, Method 524.2.
Wastewater Samples: USEPA Methods for the Analysis of Water and Wastes, Method 624.1, Method 8260C.
Soil and Groundwater Samples: USEPA SW-846 Test Methods for Evaluating Solid Waste Physical/Chemical Methods Update III, Method 8260C.

Semi-Volatile Organic Compounds:

Gas Chromatography/Mass Spectroscopy

Wastewater Samples: USEPA Methods for the Analysis of Water and Wastes, Method 625.1, Method 8270D.
Soil and Groundwater Samples: USEPA SW-846 Test Methods for Evaluating Solid Waste Physical/Chemical Methods Update III, Method 8270D.

PFAS Compounds:

Liquid Chromatography/Tandem Mass Spectroscopy

Drinking Water Samples: USEPA Methods for the Determination of Selected Perfluorinated Alkyl Acids in Drinking Water by Solid Phase Extraction and Liquid Chromatography/Tandem Mass Spectrometry (LC/MS/MS), Method 537.

Pesticides:

Gas Chromatography/Electron Capture Detector

Wastewater Samples: USEPA Methods for the Analysis of Water and Wastes, Method 608.3, Method 8081B.
Soil and Groundwater Samples: USEPA SW-846 Test Methods for Evaluating Solid Waste Physical/Chemical Methods Update III, Method 8081B.

Polychlorinated Biphenyls (PCBs):

Gas Chromatography/Electron Capture Detector

Wastewater Samples: USEPA Methods for the Analysis of Water and Wastes, Method 608.3, Method 8082A.
Soil and Groundwater Samples: USEPA SW-846 Test Methods for Evaluating Solid Waste Physical/Chemical Methods Update III, Method 8082A.

General Chemistry Methods:

Various general chemistry methods are taken from "Standard Methods for the Examination of Water and Wastewater, 19th Edition".

Specific method citations can be found on the Analytical Results Summary page of this report listed under 'Method'.

** A complete list of APL's certified Methods are accessible on the Standards And Docs page of the Results Retrieval System

MDL:

Method Detection Limit. The minimum reportable concentration of a substance that can be measured and reported with 99% confidence that the analyte concentration is greater than zero. The value is calculated from the analysis of seven replicates of a spike sample. On analytical reports this value is corrected for percent moisture and any concentration or dilution factors.

RL:

Reporting Limit. The Concentration of the lowest calibration standard that was included in the initial calibration of the instrument. On analytical reports this value is corrected for percent moisture and any concentration or dilution factors.

Concentration (Conc) / Result:

If the compound is detected, the measured concentration is reported. If this column is left blank, or contains a 'less than' (<) symbol, the compound was not detected.

Tentatively Identified Compound (TIC):

A TIC is a non-targeted compound, not included in the calibration, identified by a mass spectral library search.

Qualifiers:

- **U:** Indicates the compound was analyzed for but was not detected.
- **J:** Indicates an estimated value. All tentatively identified compounds (TICs) and results below the RL receive this qualifier.
- **B:** Indicates the analyte was found in the method blank as well as the sample.
- **N:** Used when reporting a specific tentatively identified compound.
- **E:** Indicates that the concentration of the compound exceeds the calibration range of the instrument. The results of a diluted analysis will also be reported. The results of the dilution should be used for those compounds exceeding the calibration range in the undiluted analysis.

DATA OF KNOWN QUALITY CONFORMANCE/NON-CONFORMANCE SUMMARY QUESTIONNAIRE

Laboratory Name: Aqua Pro-Tech Laboratories **Client:** Dynamic Earth LLC

Project Location: Supplemental HAP Investigation **Project Number:** 23E1425

Laboratory Sample ID(s): 01-10, 19, 22 **Sampling Date(s):** May 30,2023

List DKQP Methods Used: SW 846 8081B;Gravimetric;SW 846 1312;SW 846 9040C

1	For each analytical method referenced in this laboratory report package, were all specified QA/QC performance criteria followed, including the requirement to explain any criteria falling outside of acceptable guidelines, as specified in the NJDEP Data of Known Quality performance standards?	☑ Yes ☐ No
1A	Were the method specified handling, preservation, and holding time requirements met?	☑ Yes ☐ No
1B	EPH Method: Was the EPH method conducted without significant modifications (see Section 11.3 of respective DKQ methods)	☐ Yes ☐ No ☑ N/A
2	Were all samples received by the laboratory in a condition consistent with that described on the associated chain-of-custody document(s)?	☑ Yes ☐ No
3	Were samples received at an appropriate temperature (4±2° C)?	☑ Yes ☐ No ☐ N/A
4	Were all QA/QC performance criteria specified in the NJDEP DKQP standards achieved?	☐ Yes ☑ No
5	Were reporting limits specified or referenced on the chain-of-custody or communicated to the laboratory prior to sample receipt? Were these reporting limits met?	☑ Yes ☐ No ☑ Yes ☐ No ☐ N/A
6	For each analytical method referenced in this laboratory report package, were results reported for all constituents identified in the method-specific analyte lists presented in the DKQP documents and/or site-specific QAPP?	☑ Yes ☐ No
7	Are project-specific matrix spikes and/or laboratory duplicates included in this data set?	☐ Yes ☑ No

Notes: For all questions to which the response was "No° (with the exception of question #7), additional information should be provided in an attached narrative. If the answer to question #1, #1A, or #1B is "No", the data package does not meet the requirements for Data of Known Quality.°

QUALITY CONTROL
Conformance/Non-Conformance Summary

ANALYSIS: PESTICIDES [8081B]

COMMENTS:
Batch BAF0218:
The blank spike and matrix spike recovery for 4,4'-DDE was outside QC limits (low).
The blank spike recovery for Endosulfan II was outside QC limits (low).
The matrix spike duplicate recovery for Endosulfan sulfate was outside QC limits (low).
Batch BAF0463:
The blank spike, matrix spike and matrix spike duplicate recovery for beta-BHC was outside QC limits (low).
The matrix spike and matrix spike duplicate recovery for some analytes was outside QC limits (low).

The surrogate (Decachlorobiphenyl) recovery for sample 23E1425-01 was outside QC limits (high).
The surrogate (Decachlorobiphenyl [2C]) recovery for samples 23E1425-01, 02 and 09RE1 was outside QC limits (high).



Reviewed By: _____ (IK) 7/18/2023
Sudip Pradhan - Laboratory Director — Date

For any questions about your Quality Control, please call us at 973-227-0422

Positive Results Only Summary

23E1425-04 (Soil) Sample Name: **T-3-4B**

SW 846 8081B - Pesticides

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed
Dieldrin	0.000977	J	0.000744	0.00142	mg/kg dry	1	6/10/23 19:19

23E1425-05 (Soil) Sample Name: **F-13R**

SW 846 1312 - SPLP Pesticides

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed
Dieldrin	0.238		0.000271	0.0200	ug/L	1	6/21/23 23:55

Gravimetric - General Chemistry

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed
SPLP Soil Weight	82.9				g	1	6/16/23 16:00

SW 846 1312 - General Chemistry

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed
SPLP Leachate Volume	2000				mL	1	6/17/23 9:00

SW 846 9040C - General Chemistry

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed
SPLP Leachate pH	5.05	H	0.0100	0.0100	pH Units	1	6/17/23 9:00

23E1425-06 (Soil) Sample Name: **F-15-3R**

SW 846 1312 - SPLP Pesticides

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed
Dieldrin	0.185		0.000271	0.0200	ug/L	1	6/22/23 0:18

Gravimetric - General Chemistry

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed
SPLP Soil Weight	84.1				g	1	6/16/23 16:00

SW 846 1312 - General Chemistry

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed
SPLP Leachate Volume	2000				mL	1	6/17/23 10:00

SW 846 9040C - General Chemistry

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed
SPLP Leachate pH	5.07	H	0.0100	0.0100	pH Units	1	6/17/23 9:00

23E1425-07 (Soil) Sample Name: **F-5-2R**

ND - Indicates compound analyzed for but not detected
J - Indicates estimated value
B - Indicates compound found in associated blank
E - Concentration exceeds highest calibration standard
D - Indicates result is based on a dilution
H - Indicates a Hold Time violation
P - Greater than 25% diff. between 2 GC columns.
MDL - Minimum detection limit, **RL** - Reporting limit
D1 - Sample was Decanted (Dissolved)

Positive Results Only Summary

23E1425-07 (Soil) Sample Name: F-5-2R

Gravimetric - General Chemistry

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed
SPLP Soil Weight	93.5				g	1	6/16/23 16:00

SW 846 1312 - General Chemistry

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed
SPLP Leachate Volume	2000				mL	1	6/17/23 9:00

SW 846 9040C - General Chemistry

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed
SPLP Leachate pH	5.06	H	0.0100	0.0100	pH Units	1	6/17/23 9:00

23E1425-08 (Soil) Sample Name: TRENCH-6

SW 846 8081B - Pesticides

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed
Chlordane [2C]	0.00729		0.000622	0.00140	mg/kg dry	1	6/10/23 20:33

23E1425-09 (Soil) Sample Name: TRENCH-7

SW 846 8081B - Pesticides

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed
Chlordane	3.16	D	0.0131	0.0295	mg/kg dry	20	6/12/23 18:35

23E1425-19 (Soil) Sample Name: TRENCH-7A

SW 846 8081B - Pesticides

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed
Chlordane [2C]	0.000987	J	0.000629	0.00141	mg/kg dry	1	6/14/23 18:40

23E1425-22 (Soil) Sample Name: TRENCH-9

SW 846 8081B - Pesticides

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed
Chlordane [2C]	0.0287		0.000746	0.00168	mg/kg dry	1	6/14/23 18:58

ND - Indicates compound analyzed for but not detected
J - Indicates estimated value
B - Indicates compound found in associated blank
E - Concentration exceeds highest calibration standard
D - Indicates result is based on a dilution
H - Indicates a Hold Time violation
P - Greater than 25% diff. between 2 GC columns.
MDL - Minimum detection limit, **RL** - Reporting limit
D1 - Sample was Decanted (Dissolved)

APL
AQUA PRO-TECH LABORATORIES
Certified Environmental Testing

All Results Summary

Client: Dynamic Earth LLC
Project: Supplemental HAP Investigation
Work Order: 23E1425
Date to Lab: 5/31/2023 4:30:00PM

23E1425-01 (Soil) Sample Name: T-3-1B Collected: 5/30/2023 9:25:00AM

SW 846 8081B - Pesticides

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed
Dieldrin	ND	U	0.000834	0.00159	mg/kg	1	6/10/23 18:24

Gravimetric - General Chemistry

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed
Percent Solids	**81.6**				**%**	**1**	**6/1/23 10:54**

23E1425-02 (Soil) Sample Name: T-3-2B Collected: 5/30/2023 9:35:00AM

SW 846 8081B - Pesticides

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed
Dieldrin	ND	U	0.000867	0.00166	mg/kg	1	6/10/23 18:43

Gravimetric - General Chemistry

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed
Percent Solids	**78.4**				**%**	**1**	**6/1/23 10:54**

23E1425-03 (Soil) Sample Name: T-3-3B Collected: 5/30/2023 9:42:00AM

SW 846 8081B - Pesticides

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed
Dieldrin	ND	U	0.000743	0.00142	mg/kg	1	6/10/23 19:01

Gravimetric - General Chemistry

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed
Percent Solids	**91.5**				**%**	**1**	**6/1/23 10:54**

ND, U - Indicates compound analyzed for but not detected
J - Indicates estimated value
B - Indicates compound found in associated blank
E - Concentration exceeds highest calibration standard
D - Indicates result is based on a dilution
H - Indicates a Hold Time violation
P - Greater than 25% diff. between 2 GC columns.
MDL - Minimum detection limit, **RL** - Reporting limit
D1 - Sample was Decanted (Dissolved)

APL
AQUA PRO-TECH LABORATORIES
Certified Environmental Testing

All Results Summary

Client: Dynamic Earth LLC **Work Order:** 23E1425
Project: Supplemental HAP Investigation **Date to Lab:** 5/31/2023 4:30:00PM

23E1425-04 (Soil) Sample Name: T-3-4B Collected: 5/30/2023 9:50:00AM

SW 846 8081B - Pesticides

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed
Dieldrin	0.000977	J	0.000744	0.00142	mg/kg	1	6/10/23 19:19

Gravimetric - General Chemistry

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed
Percent Solids	91.4				%	1	6/1/23 10:54

23E1425-05 (Soil) Sample Name: F-13R Collected: 5/30/2023 10:50:00AM

SW 846 1312 - SPLP Pesticides

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed
Dieldrin	0.238		0.000271	0.0200	ug/L	1	6/21/23 23:55

Gravimetric - General Chemistry

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed
Percent Solids	82.9				%	1	6/1/23 10:54
SPLP Soil Weight	82.9				g	1	6/16/23 16:00

SW 846 1312 - General Chemistry

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed
SPLP Leachate Volume	2000				mL	1	6/17/23 9:00

SW 846 9040C - General Chemistry

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed
SPLP Leachate pH	5.05	H	0.0100	0.0100	pH Units	1	6/17/23 9:00

23E1425-06 (Soil) Sample Name: F-15-3R Collected: 5/30/2023 10:45:00AM

SW 846 1312 - SPLP Pesticides

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed
Dieldrin	0.185		0.000271	0.0200	ug/L	1	6/22/23 0:18

Gravimetric - General Chemistry

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed
Percent Solids	84.1				%	1	6/1/23 10:54
SPLP Soil Weight	84.1				g	1	6/16/23 16:00

ND, U - Indicates compound analyzed for but not detected
J - Indicates estimated value
B - Indicates compound found in associated blank
E - Concentration exceeds highest calibration standard
D - Indicates result is based on a dilution
H - Indicates a Hold Time violation
P - Greater than 25% diff. between 2 GC columns.
MDL - Minimum detection limit, **RL** - Reporting limit
D1 - Sample was Decanted (Dissolved)

APL
AQUA PRO-TECH LABORATORIES
Certified Environmental Testing

All Results Summary

Client: Dynamic Earth LLC
Project: Supplemental HAP Investigation
Work Order: 23E1425
Date to Lab: 5/31/2023 4:30:00PM

23E1425-06 (Soil) Sample Name: F-15-3R Collected: 5/30/2023 10:45:00AM

SW 846 1312 - General Chemistry

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed
SPLP Leachate Volume	**2000**				**mL**	**1**	**6/17/23 10:00**

SW 846 9040C - General Chemistry

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed
SPLP Leachate pH	**5.07**	H	**0.0100**	**0.0100**	**pH Units**	**1**	**6/17/23 9:00**

23E1425-07 (Soil) Sample Name: F-5-2R Collected: 5/30/2023 10:40:00AM

SW 846 1312 - SPLP Pesticides

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed
Dieldrin	ND	U	0.000271	0.0200	ug/L	1	6/22/23 0:40

Gravimetric - General Chemistry

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed
Percent Solids	**93.5**				**%**	**1**	**6/1/23 10:54**
SPLP Soil Weight	**93.5**				**g**	**1**	**6/16/23 16:00**

SW 846 1312 - General Chemistry

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed
SPLP Leachate Volume	**2000**				**mL**	**1**	**6/17/23 9:00**

SW 846 9040C - General Chemistry

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed
SPLP Leachate pH	**5.06**	H	**0.0100**	**0.0100**	**pH Units**	**1**	**6/17/23 9:00**

23E1425-08 (Soil) Sample Name: TRENCH-6 Collected: 5/30/2023 11:35:00AM

SW 846 8081B - Pesticides

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed
Chlordane [2C]	**0.00729**		**0.000622**	**0.00140**	**mg/kg**	**1**	**6/10/23 20:33**

Gravimetric - General Chemistry

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed
Percent Solids	**92.9**				**%**	**1**	**6/1/23 10:54**

ND, U - Indicates compound analyzed for but not detected
J - Indicates estimated value
B - Indicates compound found in associated blank
E - Concentration exceeds highest calibration standard
D - Indicates result is based on a dilution
H - Indicates a Hold Time violation
P - Greater than 25% diff. between 2 GC columns.
MDL - Minimum detection limit, **RL** - Reporting limit
D1 - Sample was Decanted (Dissolved)

APL
AQUA PRO-TECH LABORATORIES
Certified Environmental Testing

All Results Summary

Client: Dynamic Earth LLC **Work Order:** 23E1425
Project: Supplemental HAP Investigation **Date to Lab:** 5/31/2023 4:30:00PM

23E1425-09 (Soil) Sample Name: **TRENCH-7** Collected: **5/30/2023 11:45:00AM**

SW 846 8081B - Pesticides

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed
Chlordane	**3.16**	D	**0.0131**	**0.0295**	**mg/kg**	**20**	**6/12/23 18:35**

Gravimetric - General Chemistry

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed
Percent Solids	**88.1**				**%**	**1**	**6/1/23 10:54**

23E1425-10 (Soil) Sample Name: **T-3-1C** Collected: **5/30/2023 9:28:00AM**

SW 846 8081B - Pesticides

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed
Dieldrin [2C]	ND	U	0.000747	0.00143	mg/kg	1	6/13/23 19:52

Gravimetric - General Chemistry

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed
Percent Solids	**91.0**				**%**	**1**	**6/13/23 11:18**

23E1425-19 (Soil) Sample Name: **TRENCH-7A** Collected: **5/30/2023 11:50:00AM**

SW 846 8081B - Pesticides

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed
Chlordane [2C]	**0.000987**	J	**0.000629**	**0.00141**	**mg/kg**	**1**	**6/14/23 18:40**

Gravimetric - General Chemistry

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed
Percent Solids	**91.9**				**%**	**1**	**6/13/23 11:18**

ND, U - Indicates compound analyzed for but not detected
J - Indicates estimated value
B - Indicates compound found in associated blank
E - Concentration exceeds highest calibration standard
D - Indicates result is based on a dilution
H - Indicates a Hold Time violation
P - Greater than 25% diff. between 2 GC columns.
MDL - Minimum detection limit, **RL** - Reporting limit
D1 - Sample was Decanted (Dissolved)

APL
AQUA PRO-TECH LABORATORIES
Certified Environmental Testing

All Results Summary

Client:	Dynamic Earth LLC	**Work Order:**	23E1425
Project:	Supplemental HAP Investigation	**Date to Lab:**	5/31/2023 4:30:00PM

23E1425-22 (Soil) Sample Name: **TRENCH-9** Collected: **5/30/2023 12:05:00PM**

SW 846 8081B - Pesticides

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed
Chlordane [2C]	0.0287		0.000746	0.00168	mg/kg	1	6/14/23 18:58

Gravimetric - General Chemistry

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed
Percent Solids	77.5				%	1	6/13/23 11:18

ND, U - Indicates compound analyzed for but not detected
J - Indicates estimated value
B - Indicates compound found in associated blank
E - Concentration exceeds highest calibration standard

D - Indicates result is based on a dilution
H - Indicates a Hold Time violation
P - Greater than 25% diff. between 2 GC columns.
MDL - Minimum detection limit, **RL** - Reporting limit
D1 - Sample was Decanted (Dissolved)

PESTICIDES

Dynamic Earth LLC

Work Order: 23E1425

Project: Supplemental HAP Investigation

ANALYSIS DATA SHEET

SPLP Pesticides - SW 846 1312

Client:	**Dynamic Earth LLC**	**Project:**	**Supplemental HAP Investigatio**
Client Sample ID:	**Blank**	**Work Order:**	**23E1425**
Lab Sample ID:	**BAC0149-BLK4**		

		Prep Date:	06/20/2023 20:53	File ID:	9T01230.D
Init/Final Vol:	1000 mL / 10 mL	Prep Batch:	BAC0149	Analyzed:	06/21/2023 20:13
		Matrix:	Water	Sequence:	SAF0421
		Prep Method:	Sep Funnel TCLP/SPLP		

CAS NO.	COMPOUND	CONC. (ug/L)	MDL	RL	Qual
60-57-1	Dieldrin	ND	0.000271	0.0200	U

9

9.1.

F-I

Quantitation Report (QT Reviewed)

Signal #1 : G:\HPCHEM\GCECD9\DATA\20230621\9T01230.D\ECD1A.CH Vial: 6
Signal #2 : G:\HPCHEM\GCECD9\DATA\20230621\9T01230.D\ECD2B.CH
Acq On : 21 Jun 2023 8:13 pm Operator: WD
Sample : BAC0149-BLK4 Inst : HP G1530A
Misc : Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Jun 22 13:56 2023 Quant Results File: 80810616.RES

Quant Method : G:\HPCHEM\G...\80810616.M (Chemstation Integrator)
Title : Pesticides by Method SW-846 8081B
Last Update : Fri Jun 16 17:01:33 2023
Response via : Initial Calibration
DataAcq Meth : RUNPEST.M

Volume Inj. : 2ul
Signal #1 Phase : RTx-50 Signal #2 Phase: RTx-CLPesticides II
Signal #1 Info : 30M x 0.53mm x 0. Signal #2 Info : 30M x 0.53mm x 0.42um

	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/kg	ug/kg
	Internal Standards						
1) I	1-Bromo-2-nitrob	3.04	3.22	4285.4E6	3110.4E6	400.000	400.000
25) I	1-Bromo-2-nitrob	3.04	3.22	4285.4E6	3110.4E6	400.000	400.000
	System Monitoring Compounds						
2) S	TCMX	3.74	4.17	465.2E6	291.0E6	46.977	45.841
	Spiked Amount 50.000	Range 43 - 129		Recovery =		93.95%	91.68%
22) S	Decachlorobiphen	13.14	16.25	492.9E6	378.8E6	44.196	43.747
	Spiked Amount 50.000	Range 42 - 136		Recovery =		88.39%	87.49%
	Target Compounds						
	Sum Chlordane (gamma)			0	0	N.D.	N.D.
	Average Chlordane (gamma)					0.000	0.000
	Sum Toxaphene (1)			0	0	N.D.	N.D.
	Average Toxaphene (1)					0.000	0.000

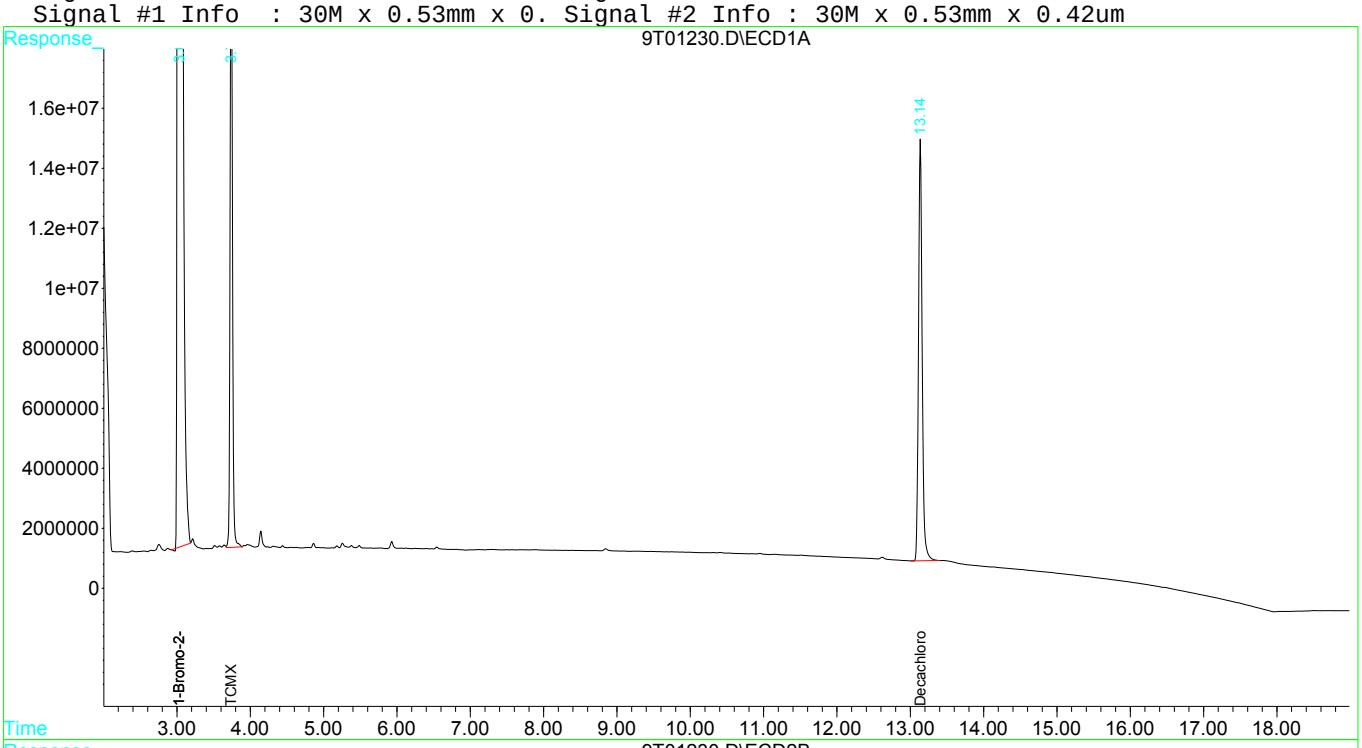
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.
9T01230.D 80810616.M Thu Jun 22 14:29:36 2023 SS

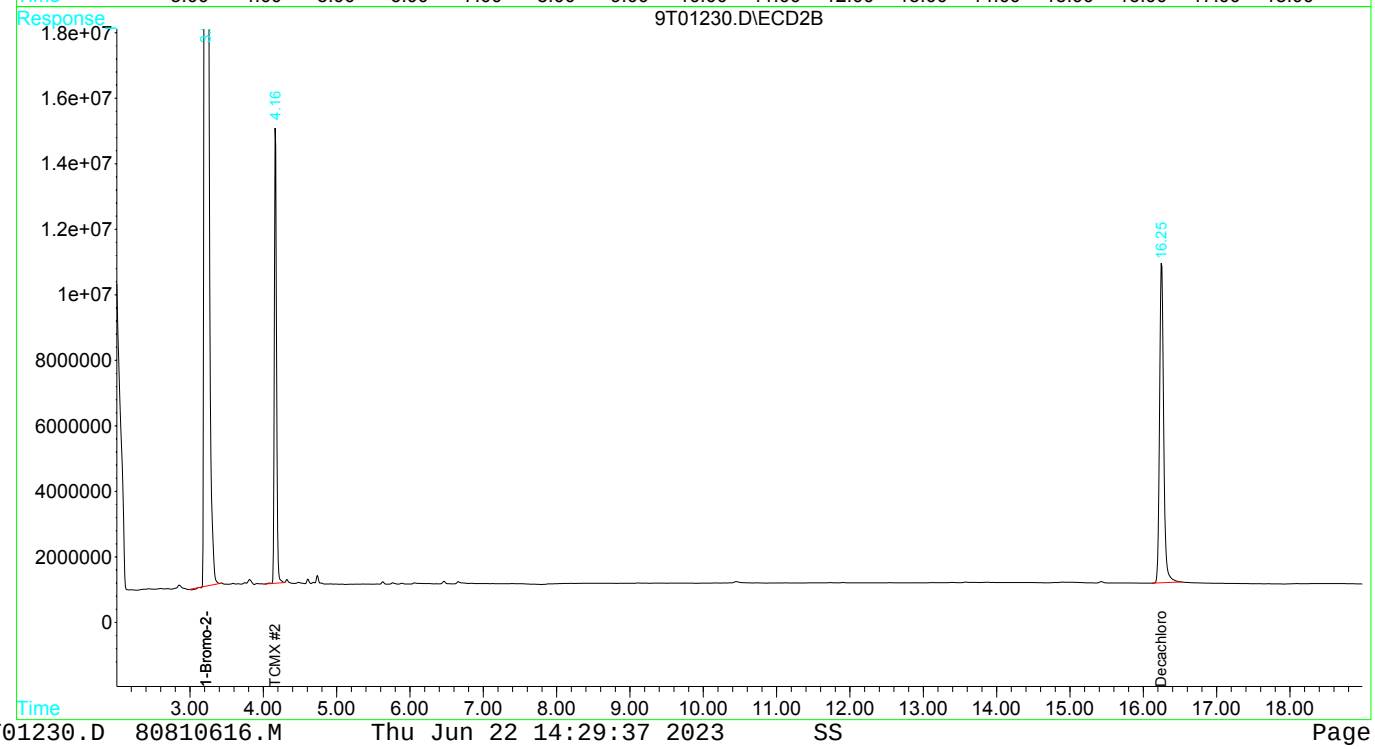
Quantitation Report (QT Reviewed)

Signal #1 : G:\HPCHEM\GCECD9\DATA\20230621\9T01230.D\ECD1A.CH Vial: 6
Signal #2 : G:\HPCHEM\GCECD9\DATA\20230621\9T01230.D\ECD2B.CH
Acq On : 21 Jun 2023 8:13 pm Operator: WD
Sample : BAC0149-BLK4 Inst : HP G1530A
Misc : Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Jun 22 13:56 2023 Quant Results File: 80810616.RES

Quant Method : G:\HPCHEM\G...\80810616.M (Chemstation Integrator)
Title : Pesticides by Method SW-846 8081B
Last Update : Fri Jun 16 17:01:33 2023
Response via : Multiple Level Calibration
DataAcq Meth : RUNPEST.M

Volume Inj. : 2ul
Signal #1 Phase : RTx-50 Signal #2 Phase: RTx-CLPesticides II
Signal #1 Info : 30M x 0.53mm x 0. Signal #2 Info : 30M x 0.53mm x 0.42um





ANALYSIS DATA SHEET

Pesticides - SW 846 8081B

Client:	**Dynamic Earth LLC**	**Project:**	**Supplemental HAP Investigatio**
Client Sample ID:	**Blank**	**Work Order:**	**23E1425**
Lab Sample ID:	**BAF0218-BLK1**		

		Prep Date:	06/06/2023 15:37	File ID:	9T01026.D
Init/Final Vol:	15 g / 10 mL	Prep Batch:	BAF0218	Analyzed:	06/08/2023 19:28
		Matrix:	Soil	Sequence:	SAF0176
		Prep Method:	Microwave Extraction		

CAS NO.	COMPOUND	CONC. (mg/kg wet)	MDL	RL	Qual
57-74-9	Chlordane	ND	0.000578	0.00130	U
60-57-1	Dieldrin	ND	0.000680	0.00130	U

F-I

Quantitation Report (QT Reviewed)

Signal #1 : G:\HPCHEM\GCECD9\DATA\20230608\9T01026.D\ECD1A.CH Vial: 1
Signal #2 : G:\HPCHEM\GCECD9\DATA\20230608\9T01026.D\ECD2B.CH
Acq On : 8 Jun 2023 7:28 pm Operator: WD
Sample : BAF0218-BLK1 Inst : HP G1530A
Misc : Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Jun 9 11:28 2023 Quant Results File: 80810606.RES

Quant Method : G:\HPCHEM\G...\80810606.M (Chemstation Integrator)
Title : Pesticides by Method SW-846 8081B
Last Update : Tue Jun 06 16:57:33 2023
Response via : Initial Calibration
DataAcq Meth : RUNPEST.M

Volume Inj. : 2ul
Signal #1 Phase : RTx-50 Signal #2 Phase: RTx-CLPesticides II
Signal #1 Info : 30M x 0.53mm x 0. Signal #2 Info : 30M x 0.53mm x 0.42um

	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/kg	ug/kg
	Internal Standards						
1) I	1-Bromo-2-nitrob	3.10	3.28	4371.2E6	3284.8E6	400.000	400.000
25) I	1-Bromo-2-nitrob	3.10	3.28	4371.2E6	3284.8E6	400.000	400.000
	System Monitoring Compounds						
2) S	TCMX	3.83f	4.24f	415.7E6	278.7E6	42.328m	44.752
	Spiked Amount 50.000	Range 43 - 129		Recovery =		84.66%	89.50%
22) S	Decachlorobiphen	13.27f	16.36	322.3E6	242.5E6	28.657m	34.974
	Spiked Amount 50.000	Range 42 - 136		Recovery =		57.31%	69.95%
	Target Compounds						
	Sum Chlordane (gamma)			0	0	N.D.	N.D.
	Average Chlordane (gamma)					0.000	0.000
	Sum Toxaphene (1)			0	0	N.D.	N.D.
	Average Toxaphene (1)					0.000	0.000

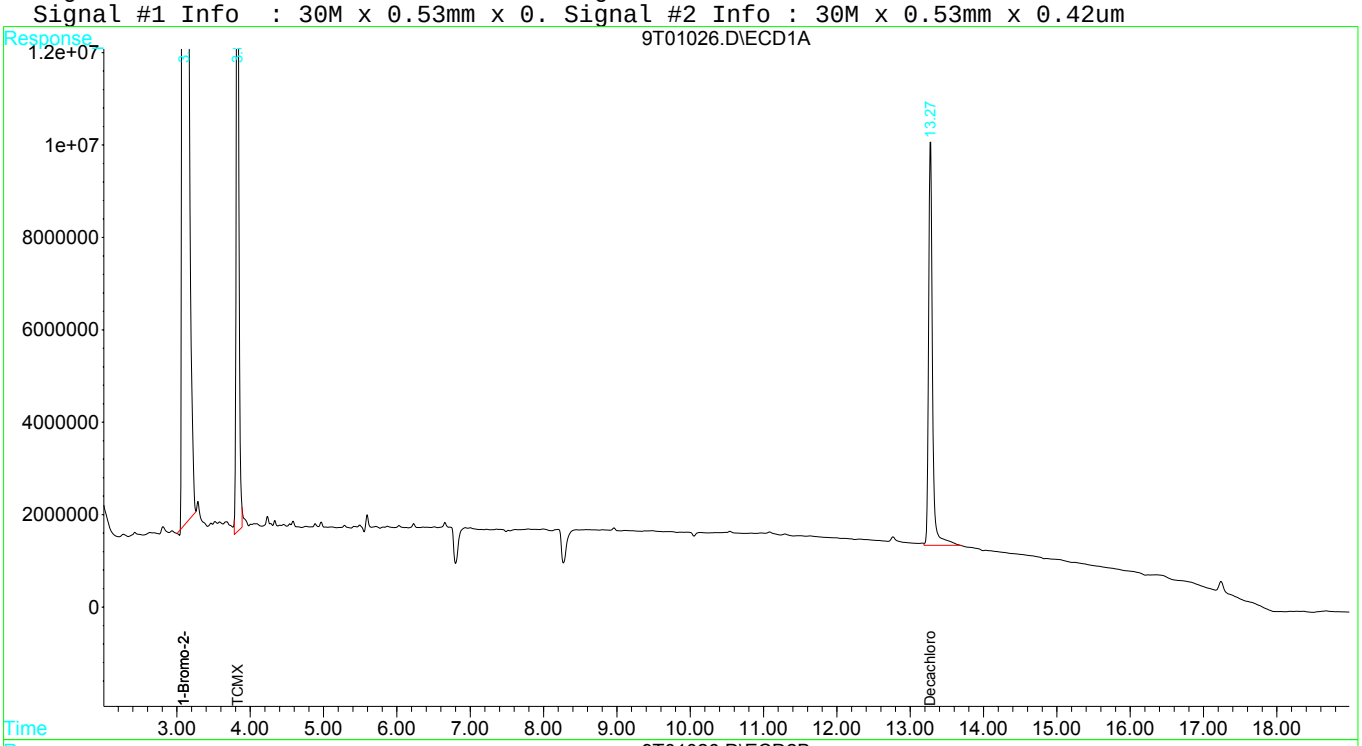
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9T01026.D 80810606.M Fri Jun 09 11:41:34 2023 SS

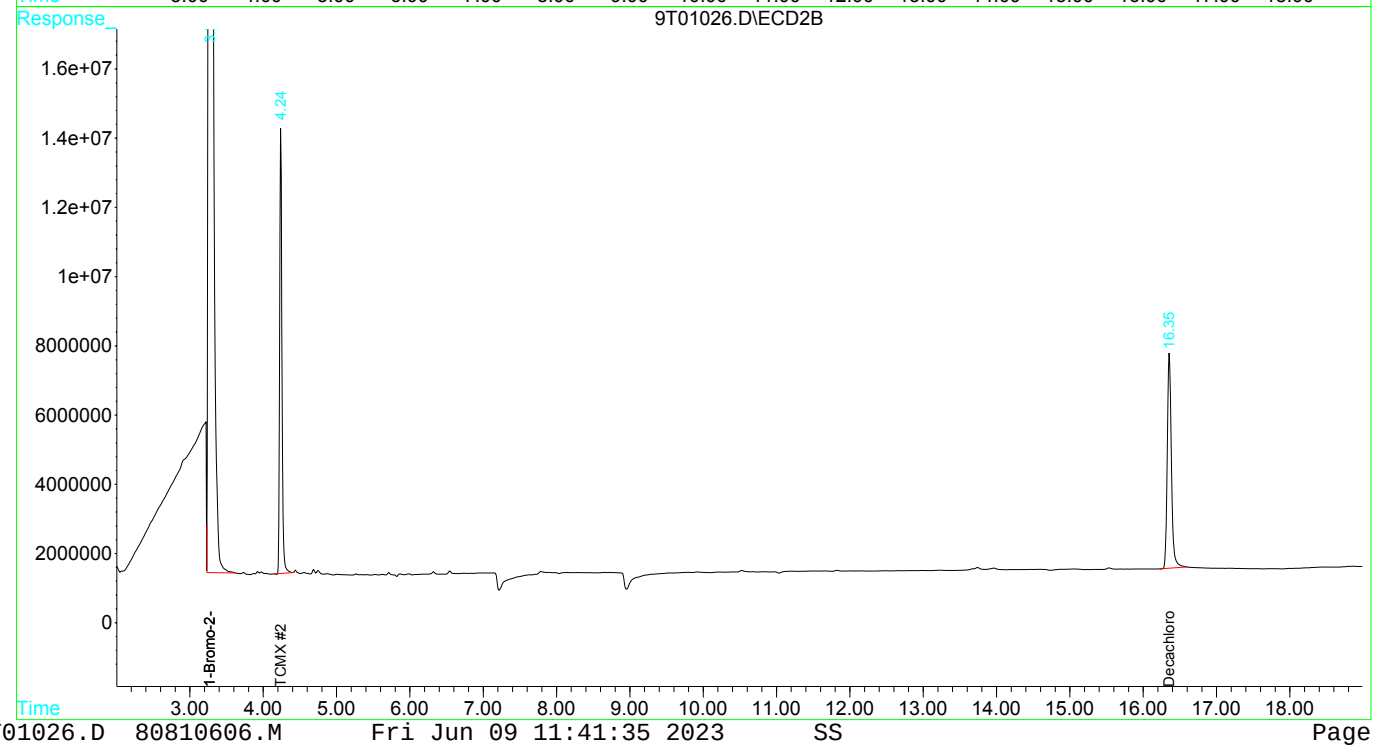
Quantitation Report (QT Reviewed)

Signal #1 : G:\HPCHEM\GCECD9\DATA\20230608\9T01026.D\ECD1A.CH Vial: 1
Signal #2 : G:\HPCHEM\GCECD9\DATA\20230608\9T01026.D\ECD2B.CH
Acq On : 8 Jun 2023 7:28 pm Operator: WD
Sample : BAF0218-BLK1 Inst : HP G1530A
Misc : Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Jun 9 11:28 2023 Quant Results File: 80810606.RES

Quant Method : G:\HPCHEM\G...\80810606.M (Chemstation Integrator)
Title : Pesticides by Method SW-846 8081B
Last Update : Tue Jun 06 16:57:33 2023
Response via : Multiple Level Calibration
DataAcq Meth : RUNPEST.M

Volume Inj. : 2ul
Signal #1 Phase : RTx-50 Signal #2 Phase: RTx-CLPesticides II
Signal #1 Info : 30M x 0.53mm x 0. Signal #2 Info : 30M x 0.53mm x 0.42um





ANALYSIS DATA SHEET

Pesticides - SW 846 8081B

Client:	**Dynamic Earth LLC**	**Project:**	**Supplemental HAP Investigatio**
Client Sample ID:	**Blank**	**Work Order:**	**23E1425**
Lab Sample ID:	**BAF0463-BLK1**		

		Prep Date:	06/13/2023 07:10	File ID:	9T01121.D
Init/Final Vol:	15 g / 10 mL	Prep Batch:	BAF0463	Analyzed:	06/13/2023 17:58
		Matrix:	Soil	Sequence:	SAF0265
		Prep Method:	Microwave Extraction		

CAS NO.	COMPOUND	CONC. (mg/kg wet)	MDL	RL	Qual
57-74-9	Chlordane	ND	0.000578	0.00130	U
60-57-1	Dieldrin	ND	0.000680	0.00130	U

F-I

Quantitation Report (QT Reviewed)

Signal #1 : G:\HPCHEM\GCECD9\DATA\20230613\9T01121.D\ECD1A.CH Vial: 1
Signal #2 : G:\HPCHEM\GCECD9\DATA\20230613\9T01121.D\ECD2B.CH
Acq On : 13 Jun 2023 5:58 pm Operator: WD
Sample : BAF0463-BLK1 Inst : HP G1530A
Misc : Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Jun 14 12:57 2023 Quant Results File: 80810606.RES

Quant Method : G:\HPCHEM\G...\80810606.M (Chemstation Integrator)
Title : Pesticides by Method SW-846 8081B
Last Update : Tue Jun 06 16:57:33 2023
Response via : Initial Calibration
DataAcq Meth : RUNPEST.M

Volume Inj. : 2ul
Signal #1 Phase : RTx-50 Signal #2 Phase: RTx-CLPesticides II
Signal #1 Info : 30M x 0.53mm x 0. Signal #2 Info : 30M x 0.53mm x 0.42um

	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/kg	ug/kg
	Internal Standards						
1) I	1-Bromo-2-nitrob	3.11	3.29	5956.8E6	4472.9E6	400.000	400.000m
25) I	1-Bromo-2-nitrob	3.11	3.29	5956.8E6	4424.4E6	400.000	400.000m
	System Monitoring Compounds						
2) S	TCMX	3.84f	4.26f	449.9E6	340.1E6	33.617m	40.111m
	Spiked Amount 50.000	Range 43 - 129		Recovery =		67.23%	80.22%
22) S	Decachlorobiphen	13.28f	16.35	199.4E6	236.9E6	13.012m	25.088 #
	Spiked Amount 50.000	Range 42 - 136		Recovery =		26.02%#	50.18%
	Target Compounds						
	Sum Chlordane (gamma)			0	0	N.D.	N.D.
	Average Chlordane (gamma)					0.000	0.000
	Sum Toxaphene (1)			0	0	N.D.	N.D.
	Average Toxaphene (1)					0.000	0.000

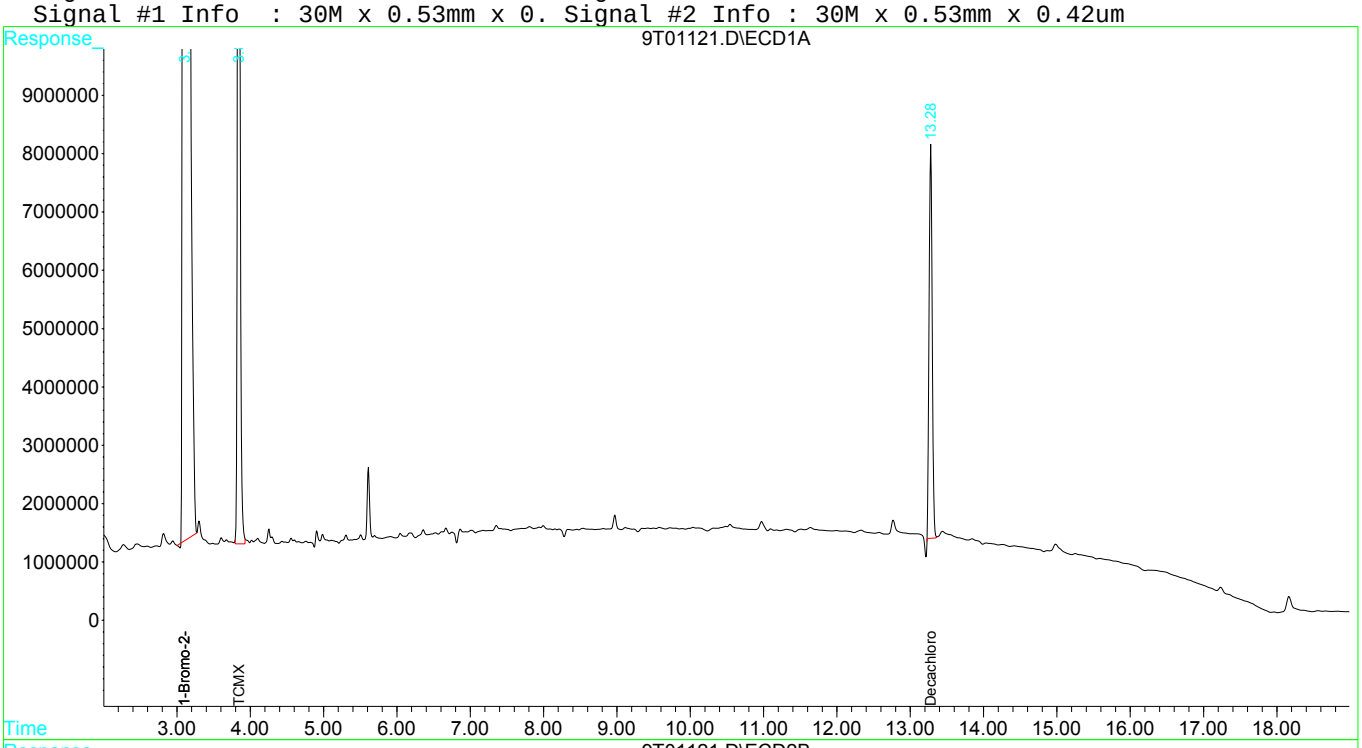
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9T01121.D 80810606.M Wed Jun 14 13:11:58 2023 SS Page 1

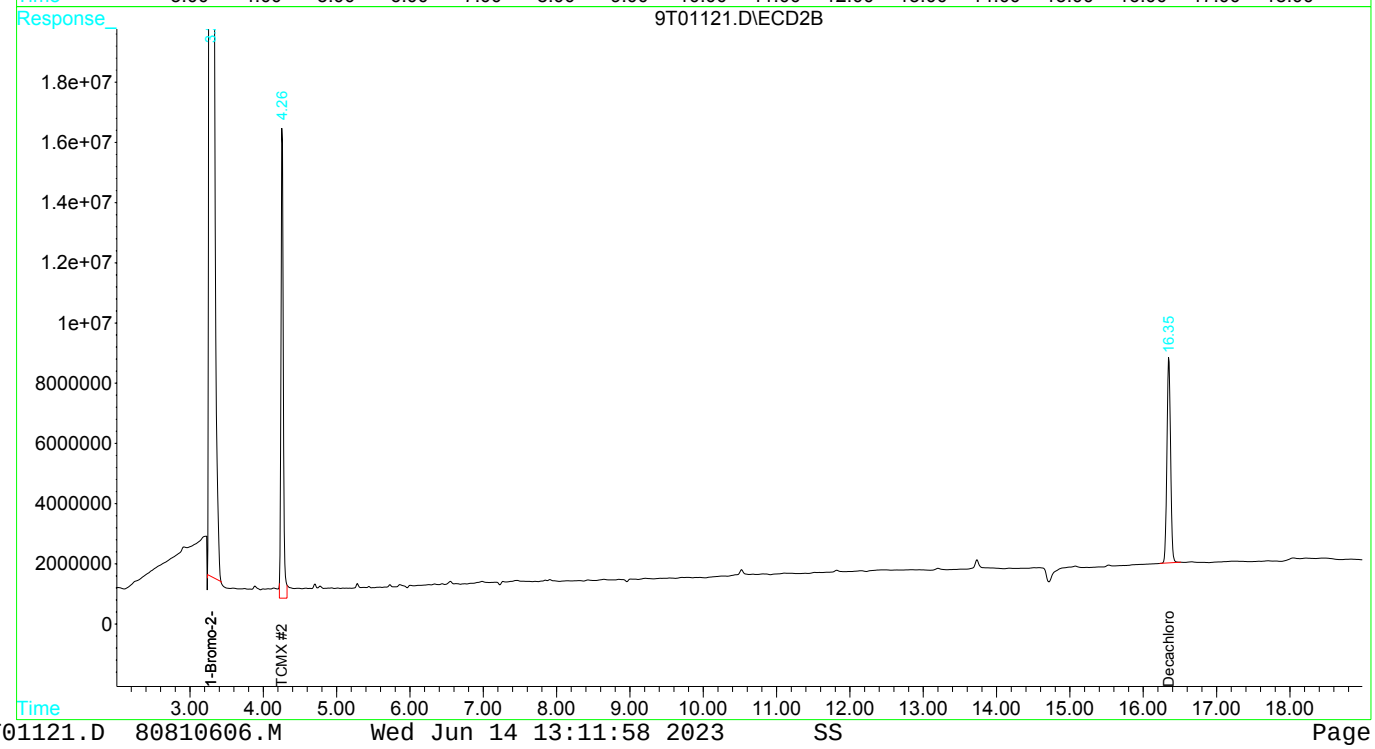
Quantitation Report (QT Reviewed)

Signal #1 : G:\HPCHEM\GCECD9\DATA\20230613\9T01121.D\ECD1A.CH Vial: 1
Signal #2 : G:\HPCHEM\GCECD9\DATA\20230613\9T01121.D\ECD2B.CH
Acq On : 13 Jun 2023 5:58 pm Operator: WD
Sample : BAF0463-BLK1 Inst : HP G1530A
Misc : Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Jun 14 12:57 2023 Quant Results File: 80810606.RES

Quant Method : G:\HPCHEM\G...\80810606.M (Chemstation Integrator)
Title : Pesticides by Method SW-846 8081B
Last Update : Tue Jun 06 16:57:33 2023
Response via : Multiple Level Calibration
DataAcq Meth : RUNPEST.M

Volume Inj. : 2ul
Signal #1 Phase : RTx-50 Signal #2 Phase: RTx-CLPesticides II
Signal #1 Info : 30M x 0.53mm x 0. Signal #2 Info : 30M x 0.53mm x 0.42um





ANALYSIS DATA SHEET

Pesticides - SW 846 8081B

Client: **Dynamic Earth LLC**
Client Sample ID: **T-3-1B**
Lab Sample ID: **23E1425-01**
Project: **Supplemental HAP Investigation**
Work Order: **23E1425**

Date Sampled:	05/30/23 09:25	Prep Date:	06/06/23 15:37	File ID:	7T33884.D
Init/Final Vol:	15 g / 10 mL	Prep Batch:	BAF0218	Analyzed:	06/10/23 18:24
Dilution:	1	Matrix:	Soil	Sequence:	SAF0209
Percent Solids:	81.58	Prep Method:	Microwave Extraction		

CAS NO.	COMPOUND	CONC. (mg/kg dry)	MDL	RL	Qual
60-57-1	Dieldrin	ND	0.000834	0.00159	U

ND, U - Indicates compound analyzed for but not detected
J - Indicates estimated value
B - Indicates compound found in associated blank
E - Concentration exceeds highest calibration standard
D - Indicates result is based on a dilution
H - Indicates a Hold Time violation
P - Greater than 25% diff. between 2 GC columns.
MDL - Minimum detection limit, **RL** - Reporting limit

F-I

Quantitation Report (QT Reviewed)

Signal #1 : G:\HPCHEM\GCECD7\DATA\20230610\7T33884.D\ECD1A.CH Vial: 10
Signal #2 : G:\HPCHEM\GCECD7\DATA\20230610\7T33884.D\ECD2B.CH
Acq On : 10 Jun 2023 6:24 pm Operator: WD
Sample : 23E1425-01 Inst : GCECD-7
Misc : Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Jun 12 13:37 2023 Quant Results File: 80810607.RES

Quant Method : G:\HPCHEM\G...\80810607.M (Chemstation Integrator)
Title : Pesticides by Method SW-846 8081B
Last Update : Mon Jun 12 13:20:50 2023
Response via : Initial Calibration
DataAcq Meth : RUNPEST.M

Volume Inj. : 2ul
Signal #1 Phase : RTx-50 Signal #2 Phase: RTx-CLPesticides II
Signal #1 Info : 30M x 0.53mm x 0. Signal #2 Info : 30M x 0.53mm x 0.42um

	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/kg	ug/kg
	Internal Standards						
1) I	1-Bromo-2-nitrob	2.81	3.07	19503.1E6	9134.1E6	400.000	400.000
25) I	1-Bromo-2-nitrob	2.81	3.07	19503.1E6	9134.1E6	400.000	400.000
	System Monitoring Compounds						
2) S	TCMX	3.73	4.47	1685.3E6	796.7E6	39.578	42.013
	Spiked Amount 50.000	Range 43 - 129		Recovery =		79.16%	84.03%
22) S	Decachlorobiphen	13.42	15.49	2849.6E6	4994.8E6	86.520m	359.359 #
	Spiked Amount 50.000	Range 42 - 136		Recovery =		173.04%#	718.72%#
	Target Compounds						
23) L1	Chlordane (gamma	8.06	9.42	315.4E6	127.0E6	5.241m	4.502m
24) L1	Chlordane (alpha	8.29	9.68	2827.8E6	365.8E6	47.453m	16.149m#
	Sum Chlordane (gamma)			3143.2E6	492.8E6	52.693	20.651
Average	Chlordane (gamma)					26.347	10.325
	Sum Toxaphene (1)			0	0	N.D.	N.D.
Average	Toxaphene (1)					0.000	0.000

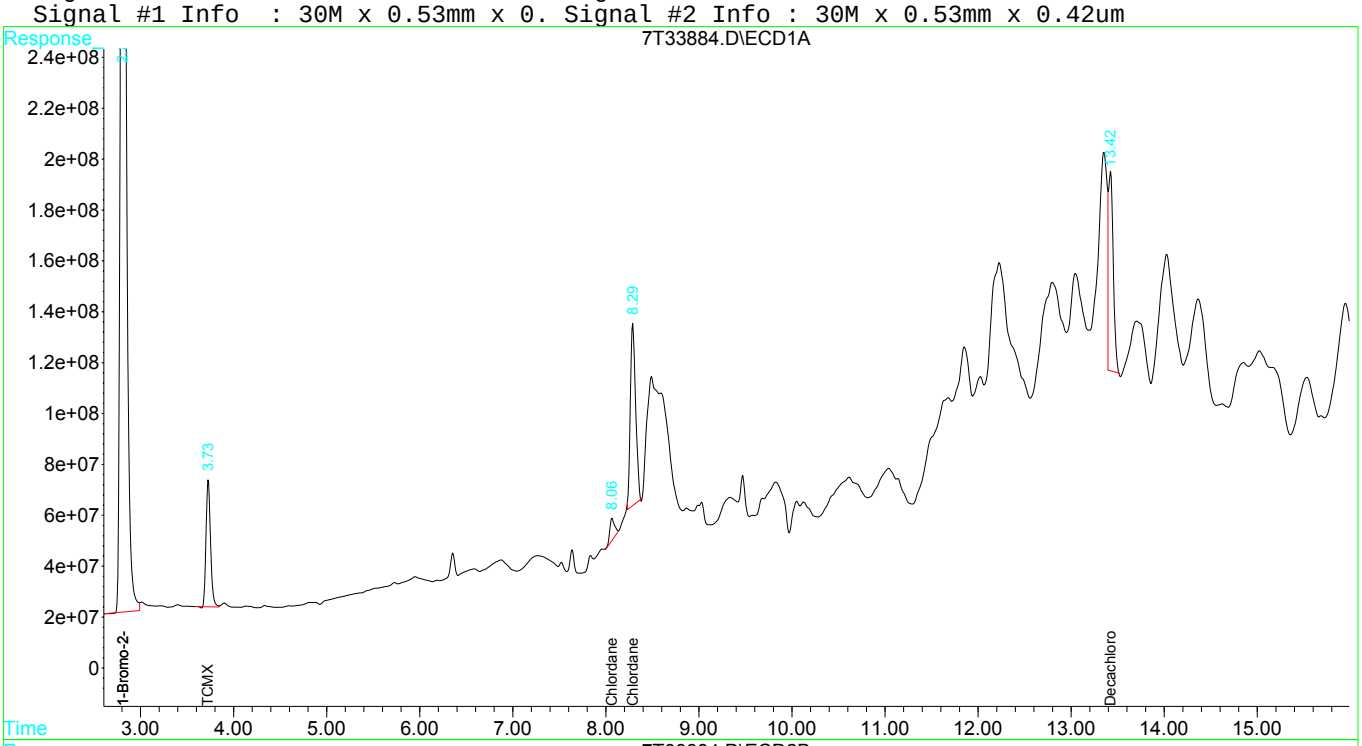
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

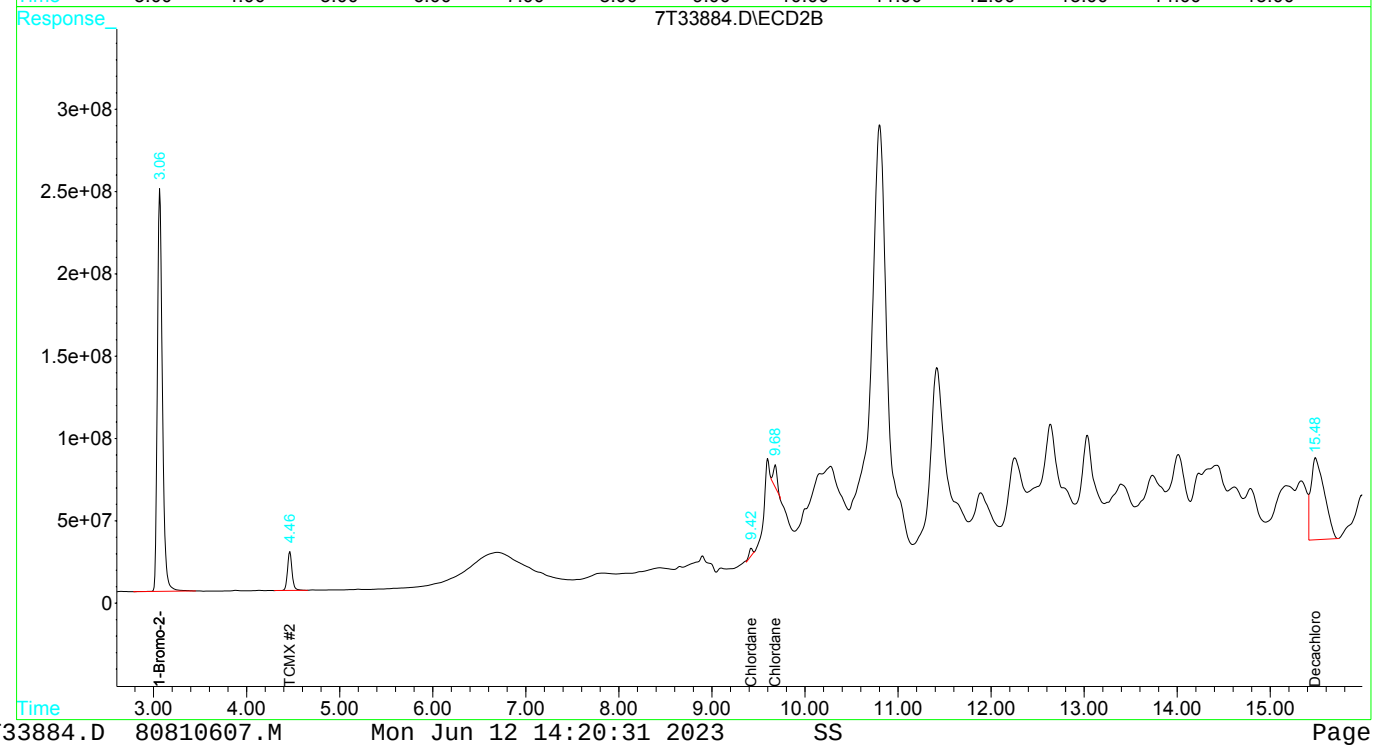
Quantitation Report (QT Reviewed)

Signal #1 : G:\HPCHEM\GCECD7\DATA\20230610\7T33884.D\ECD1A.CH Vial: 10
Signal #2 : G:\HPCHEM\GCECD7\DATA\20230610\7T33884.D\ECD2B.CH
Acq On : 10 Jun 2023 6:24 pm Operator: WD
Sample : 23E1425-01 Inst : GCECD-7
Misc : Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Jun 12 13:37 2023 Quant Results File: 80810607.RES

Quant Method : G:\HPCHEM\G...\80810607.M (Chemstation Integrator)
Title : Pesticides by Method SW-846 8081B
Last Update : Mon Jun 12 13:20:50 2023
Response via : Multiple Level Calibration
DataAcq Meth : RUNPEST.M

Volume Inj. : 2ul
Signal #1 Phase : RTx-50 Signal #2 Phase: RTx-CLPesticides II
Signal #1 Info : 30M x 0.53mm x 0. Signal #2 Info : 30M x 0.53mm x 0.42um





ANALYSIS DATA SHEET

Pesticides - SW 846 8081B

Client: **Dynamic Earth LLC**
Client Sample ID: **T-3-2B**
Lab Sample ID: **23E1425-02**
Project: **Supplemental HAP Investigation**
Work Order: **23E1425**

Date Sampled:	05/30/23 09:35	Prep Date:	06/06/23 15:37	File ID:	7T33885.D
Init/Final Vol:	15 g / 10 mL	Prep Batch:	BAF0218	Analyzed:	06/10/23 18:43
Dilution:	1	Matrix:	Soil	Sequence:	SAF0209
Percent Solids:	78.45	Prep Method:	Microwave Extraction		

CAS NO.	COMPOUND	CONC. (mg/kg dry)	MDL	RL	Qual
60-57-1	Dieldrin	ND	0.000867	0.00166	U

ND, U - Indicates compound analyzed for but not detected
J - Indicates estimated value
B - Indicates compound found in associated blank
E - Concentration exceeds highest calibration standard
D - Indicates result is based on a dilution
H - Indicates a Hold Time violation
P - Greater than 25% diff. between 2 GC columns.
MDL - Minimum detection limit, **RL** - Reporting limit

F-I

Quantitation Report (QT Reviewed)

Signal #1 : G:\HPCHEM\GCECD7\DATA\20230610\7T33885.D\ECD1A.CH Vial: 11
Signal #2 : G:\HPCHEM\GCECD7\DATA\20230610\7T33885.D\ECD2B.CH
Acq On : 10 Jun 2023 6:43 pm Operator: WD
Sample : 23E1425-02 Inst : GCECD-7
Misc : Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Jun 12 13:37 2023 Quant Results File: 80810607.RES

Quant Method : G:\HPCHEM\G...\80810607.M (Chemstation Integrator)
Title : Pesticides by Method SW-846 8081B
Last Update : Mon Jun 12 13:20:50 2023
Response via : Initial Calibration
DataAcq Meth : RUNPEST.M

Volume Inj. : 2ul
Signal #1 Phase : RTx-50 Signal #2 Phase: RTx-CLPesticides II
Signal #1 Info : 30M x 0.53mm x 0. Signal #2 Info : 30M x 0.53mm x 0.42um

	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/kg	ug/kg
	Internal Standards						
1) I	1-Bromo-2-nitrob	2.81	3.07	19431.4E6	8286.7E6	400.000	400.000
25) I	1-Bromo-2-nitrob	2.81	3.07	19431.4E6	8286.7E6	400.000	400.000
	System Monitoring Compounds						
2) S	TCMX	3.73	4.46	1861.7E6	787.5E6	43.882	45.771
	Spiked Amount 50.000	Range 43 - 129		Recovery =		87.76%	91.54%
22) S	Decachlorobiphen	13.43	15.47	804.8E6	975.3E6	24.525m	77.344m#
	Spiked Amount 50.000	Range 42 - 136		Recovery =		49.05%	154.69%#
	Target Compounds						
11)	4,4'-DDE	8.48	9.99	133.0E6	59438496	2.320m	3.264m#
23) L1	Chlordane (gamma	8.07	9.41	207.5E6	29253208	3.461m	1.143m#
24) L1	Chlordane (alpha	8.28f	9.69	385.1E6	29131973	6.486m	1.418m#
	Sum Chlordane (gamma)			592.6E6	58385180	9.948	2.560
Average	Chlordane (gamma)					4.974	1.280
	Sum Toxaphene (1)			0	0	N.D.	N.D.
Average	Toxaphene (1)					0.000	0.000

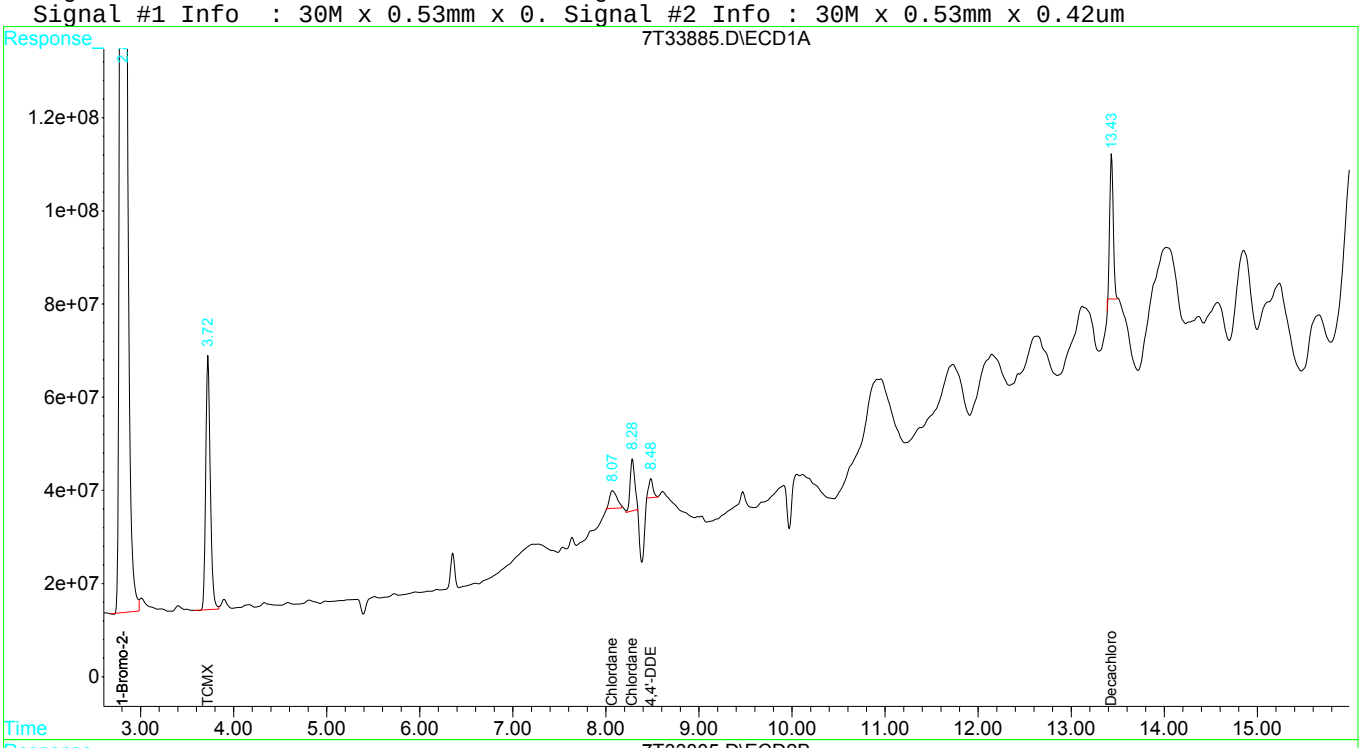
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7T33885.D 80810607.M Mon Jun 12 14:20:32 2023 SS

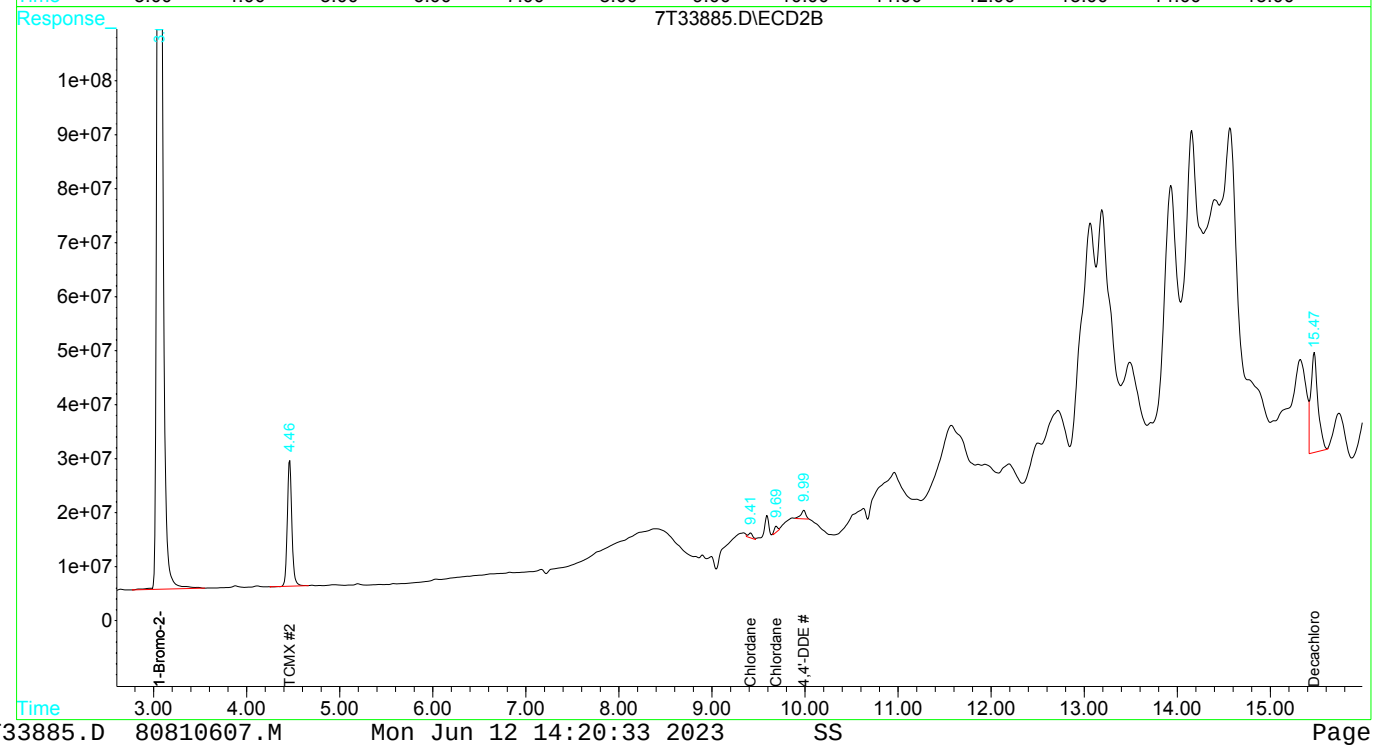
Quantitation Report (QT Reviewed)

Signal #1 : G:\HPCHEM\GCECD7\DATA\20230610\7T33885.D\ECD1A.CH Vial: 11
Signal #2 : G:\HPCHEM\GCECD7\DATA\20230610\7T33885.D\ECD2B.CH
Acq On : 10 Jun 2023 6:43 pm Operator: WD
Sample : 23E1425-02 Inst : GCECD-7
Misc : Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Jun 12 13:37 2023 Quant Results File: 80810607.RES

Quant Method : G:\HPCHEM\G...\80810607.M (Chemstation Integrator)
Title : Pesticides by Method SW-846 8081B
Last Update : Mon Jun 12 13:20:50 2023
Response via : Multiple Level Calibration
DataAcq Meth : RUNPEST.M

Volume Inj. : 2ul
Signal #1 Phase : RTx-50 Signal #2 Phase: RTx-CLPesticides II
Signal #1 Info : 30M x 0.53mm x 0. Signal #2 Info : 30M x 0.53mm x 0.42um





ANALYSIS DATA SHEET

Pesticides - SW 846 8081B

Client: **Dynamic Earth LLC**
Client Sample ID: **T-3-3B**
Lab Sample ID: **23E1425-03**
Project: **Supplemental HAP Investigation**
Work Order: **23E1425**

Date Sampled:	05/30/23 09:42	Prep Date:	06/06/23 15:37	File ID:	7T33886.D
Init/Final Vol:	15 g / 10 mL	Prep Batch:	BAF0218	Analyzed:	06/10/23 19:01
Dilution:	1	Matrix:	Soil	Sequence:	SAF0209
Percent Solids:	91.46	Prep Method:	Microwave Extraction		

CAS NO.	COMPOUND	CONC. (mg/kg dry)	MDL	RL	Qual
60-57-1	Dieldrin	ND	0.000743	0.00142	U

ND, U - Indicates compound analyzed for but not detected
J - Indicates estimated value
B - Indicates compound found in associated blank
E - Concentration exceeds highest calibration standard
D - Indicates result is based on a dilution
H - Indicates a Hold Time violation
P - Greater than 25% diff. between 2 GC columns.
MDL - Minimum detection limit, **RL** - Reporting limit

F-I

Quantitation Report (QT Reviewed)

Signal #1 : G:\HPCHEM\GCECD7\DATA\20230610\7T33886.D\ECD1A.CH Vial: 12
Signal #2 : G:\HPCHEM\GCECD7\DATA\20230610\7T33886.D\ECD2B.CH
Acq On : 10 Jun 2023 7:01 pm Operator: WD
Sample : 23E1425-03 Inst : GCECD-7
Misc : Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Jun 12 13:39 2023 Quant Results File: 80810607.RES

Quant Method : G:\HPCHEM\G...\80810607.M (Chemstation Integrator)
Title : Pesticides by Method SW-846 8081B
Last Update : Mon Jun 12 13:20:50 2023
Response via : Initial Calibration
DataAcq Meth : RUNPEST.M

Volume Inj. : 2ul
Signal #1 Phase : RTx-50 Signal #2 Phase: RTx-CLPesticides II
Signal #1 Info : 30M x 0.53mm x 0. Signal #2 Info : 30M x 0.53mm x 0.42um

	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/kg	ug/kg
	Internal Standards						
1) I	1-Bromo-2-nitrob	2.81	3.07	26529.6E6	11160.7E6	400.000	400.000
25) I	1-Bromo-2-nitrob	2.81	3.07	26529.6E6	11160.7E6	400.000	400.000
	System Monitoring Compounds						
2) S	TCMX	3.73	4.47	2131.3E6	876.4E6	36.794	37.823
Spiked Amount	50.000	Range	43 - 129	Recovery	=	73.59%	75.65%
22) S	Decachlorobiphen	13.43	15.48	1602.6E6	852.5E6	35.771m	50.197m#
Spiked Amount	50.000	Range	42 - 136	Recovery	=	71.54%	100.39%
	Target Compounds						
11)	4,4'-DDE	8.49	9.99	258.1E6	83679510	3.296m	3.412m
14)	4,4'-DDD	9.46f	10.96f	979.6E6	92212435	17.847m	5.679m#
16) M	4,4'-DDT	10.04	11.54	49715414	187.1E6	0.937m	12.037m#
23) L1	Chlordane (gamma	8.07	9.42	283.8E6	150.0E6	3.467m	4.352 #
24) L1	Chlordane (alpha	8.28f	9.69	1102.8E6	109.7E6	13.604m	3.962 #
Sum	Chlordane (gamma)			1386.5E6	259.7E6	17.070	8.314
Average	Chlordane (gamma)					8.535	4.157
Sum	Toxaphene (1)			0	0	N.D.	N.D.
Average	Toxaphene (1)					0.000	0.000

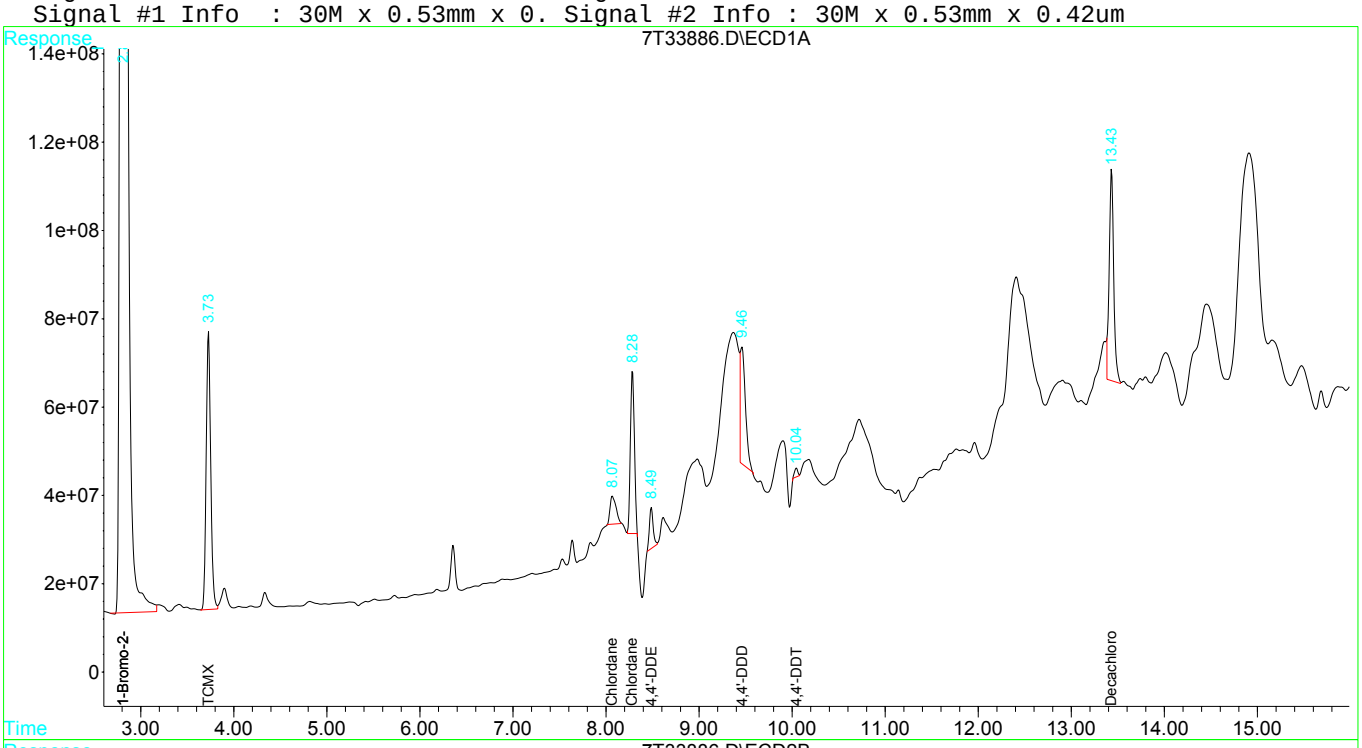
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

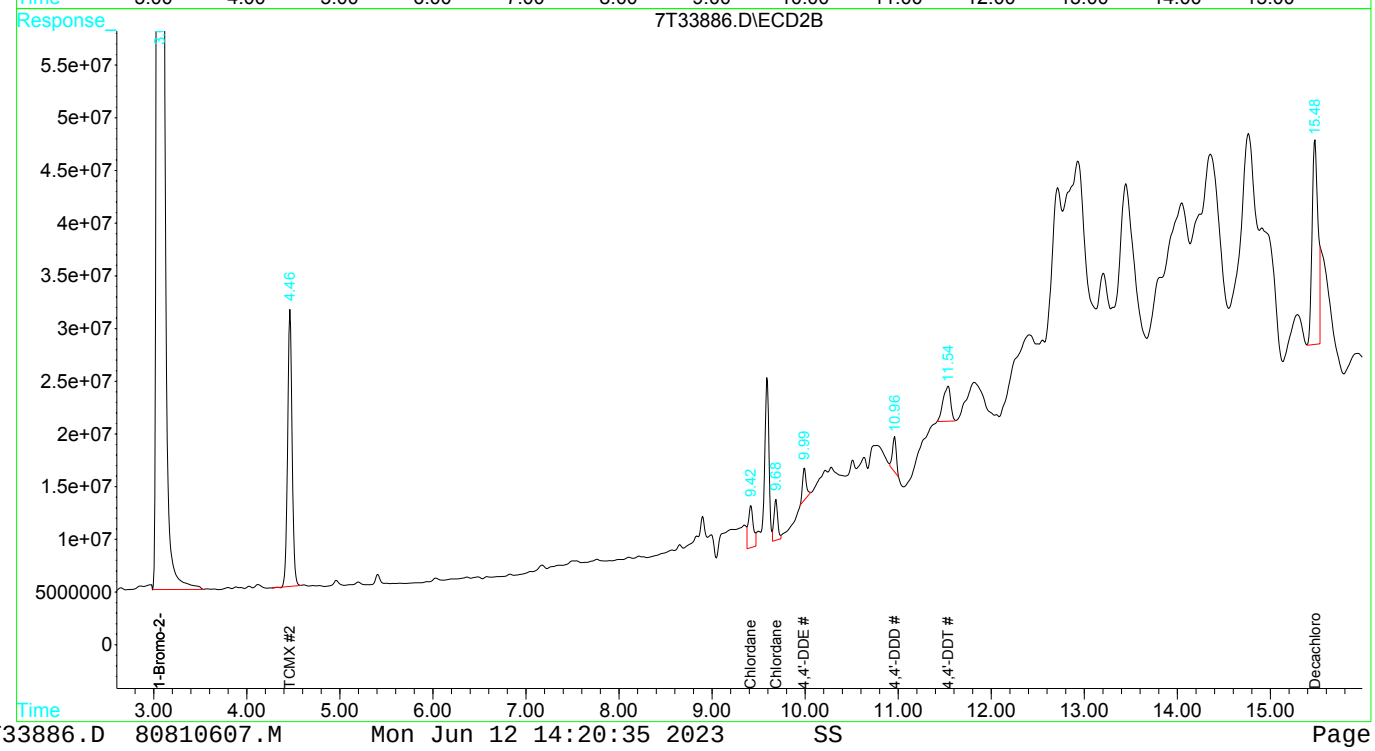
Quantitation Report (QT Reviewed)

Signal #1 : G:\HPCHEM\GCECD7\DATA\20230610\7T33886.D\ECD1A.CH Vial: 12
Signal #2 : G:\HPCHEM\GCECD7\DATA\20230610\7T33886.D\ECD2B.CH
Acq On : 10 Jun 2023 7:01 pm Operator: WD
Sample : 23E1425-03 Inst : GCECD-7
Misc : Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Jun 12 13:39 2023 Quant Results File: 80810607.RES

Quant Method : G:\HPCHEM\G...\80810607.M (Chemstation Integrator)
Title : Pesticides by Method SW-846 8081B
Last Update : Mon Jun 12 13:20:50 2023
Response via : Multiple Level Calibration
DataAcq Meth : RUNPEST.M

Volume Inj. : 2ul
Signal #1 Phase : RTx-50 Signal #2 Phase: RTx-CLPesticides II
Signal #1 Info : 30M x 0.53mm x 0. Signal #2 Info : 30M x 0.53mm x 0.42um





ANALYSIS DATA SHEET

Pesticides - SW 846 8081B

Client: **Dynamic Earth LLC**
Client Sample ID: **T-3-4B**
Lab Sample ID: **23E1425-04**
Project: **Supplemental HAP Investigation**
Work Order: **23E1425**

Date Sampled:	05/30/23 09:50	Prep Date:	06/06/23 15:37	File ID:	7T33887.D
Init/Final Vol:	15 g / 10 mL	Prep Batch:	BAF0218	Analyzed:	06/10/23 19:19
Dilution:	1	Matrix:	Soil	Sequence:	SAF0209
Percent Solids:	91.42	Prep Method:	Microwave Extraction		

CAS NO.	COMPOUND	CONC. (mg/kg dry)	MDL	RL	Qual
60-57-1	Dieldrin	0.000977	0.000744	0.00142	J

ND, U - Indicates compound analyzed for but not detected
J - Indicates estimated value
B - Indicates compound found in associated blank
E - Concentration exceeds highest calibration standard

D - Indicates result is based on a dilution
H - Indicates a Hold Time violation
P - Greater than 25% diff. between 2 GC columns.
MDL - Minimum detection limit, **RL** - Reporting limit

F-I

Quantitation Report (QT Reviewed)

Signal #1 : G:\HPCHEM\GCECD7\DATA\20230610\7T33887.D\ECD1A.CH Vial: 13
Signal #2 : G:\HPCHEM\GCECD7\DATA\20230610\7T33887.D\ECD2B.CH
Acq On : 10 Jun 2023 7:19 pm Operator: WD
Sample : 23E1425-04 Inst : GCECD-7
Misc : Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Jun 12 13:41 2023 Quant Results File: 80810607.RES

Quant Method : G:\HPCHEM\G...\80810607.M (Chemstation Integrator)
Title : Pesticides by Method SW-846 8081B
Last Update : Mon Jun 12 13:20:50 2023
Response via : Initial Calibration
DataAcq Meth : RUNPEST.M

Volume Inj. : 2ul
Signal #1 Phase : RTx-50 Signal #2 Phase: RTx-CLPesticides II
Signal #1 Info : 30M x 0.53mm x 0. Signal #2 Info : 30M x 0.53mm x 0.42um

	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/kg	ug/kg
	Internal Standards						
1) I	1-Bromo-2-nitrob	2.81	3.07	19423.6E6	8387.2E6	400.000	400.000
25) I	1-Bromo-2-nitrob	2.81	3.07	19423.6E6	8387.2E6	400.000	400.000
	System Monitoring Compounds						
2) S	TCMX	3.73	4.47	2096.2E6	886.3E6	49.427	50.899
Spiked Amount	50.000	Range	43 - 129	Recovery	=	98.85%	101.80%
22) S	Decachlorobiphen	13.43	15.47	1134.1E6	451.6E6	34.573m	35.382m
Spiked Amount	50.000	Range	42 - 136	Recovery	=	69.15%	70.76%
	Target Compounds						
11)	4,4'-DDE	8.48	9.99	284.7E6	101.1E6	4.967m	5.482m
12) M	Dieldrin	8.99	10.28	76915920	19461665	1.337m	1.026m
14)	4,4'-DDD	9.56	10.96f	27579925	198.6E6	0.686m	16.277m#
16) M	4,4'-DDT	10.05	11.54	74685072	62943887	1.923m	5.389m#
23) L1	Chlordane (gamma	8.06	9.42	410.5E6	110.2E6	6.850m	4.253m#
24) L1	Chlordane (alpha	8.28f	9.68	2469.6E6	184.9E6	41.611m	8.892m#
Sum	Chlordane (gamma)			2880.2E6	295.1E6	48.462	13.145
Average	Chlordane (gamma)					24.231	6.572
Sum	Toxaphene (1)			0	0	N.D.	N.D.
Average	Toxaphene (1)					0.000	0.000

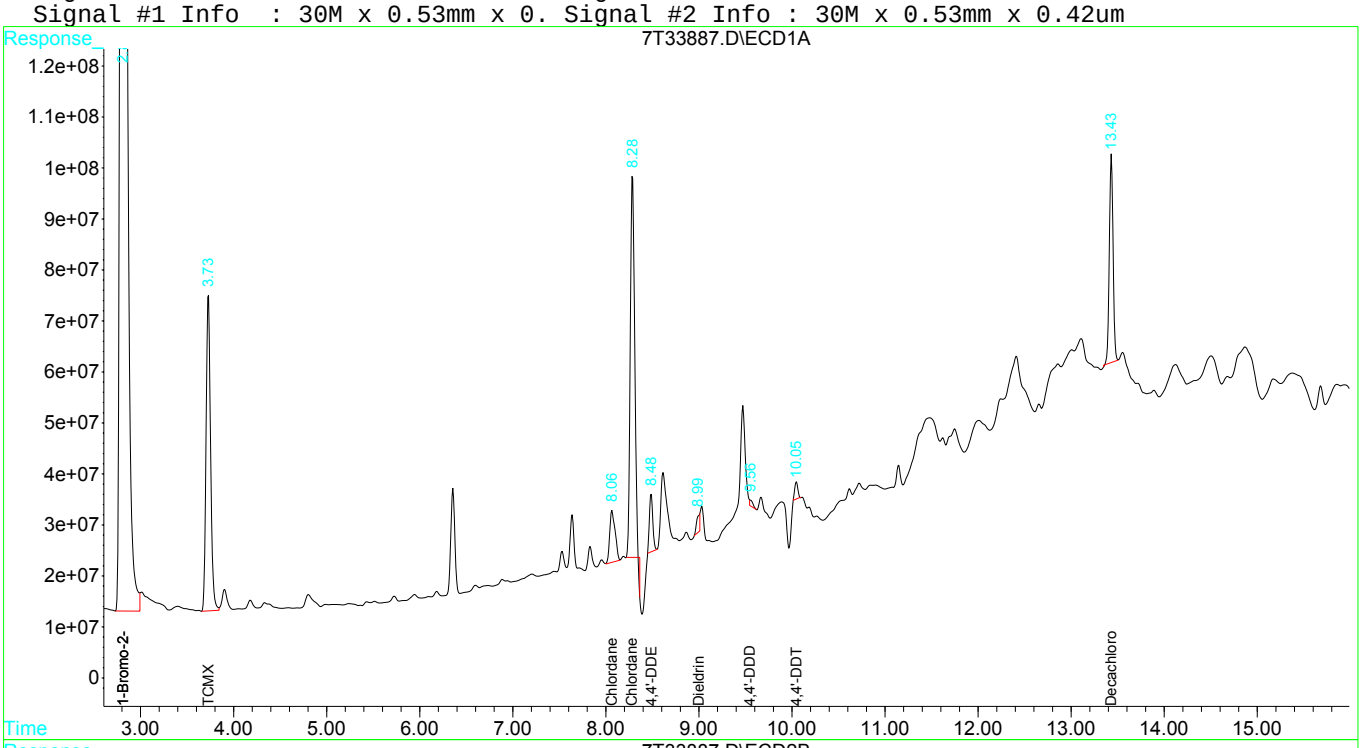
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7T33887.D 80810607.M Mon Jun 12 14:20:36 2023 SS Page 1

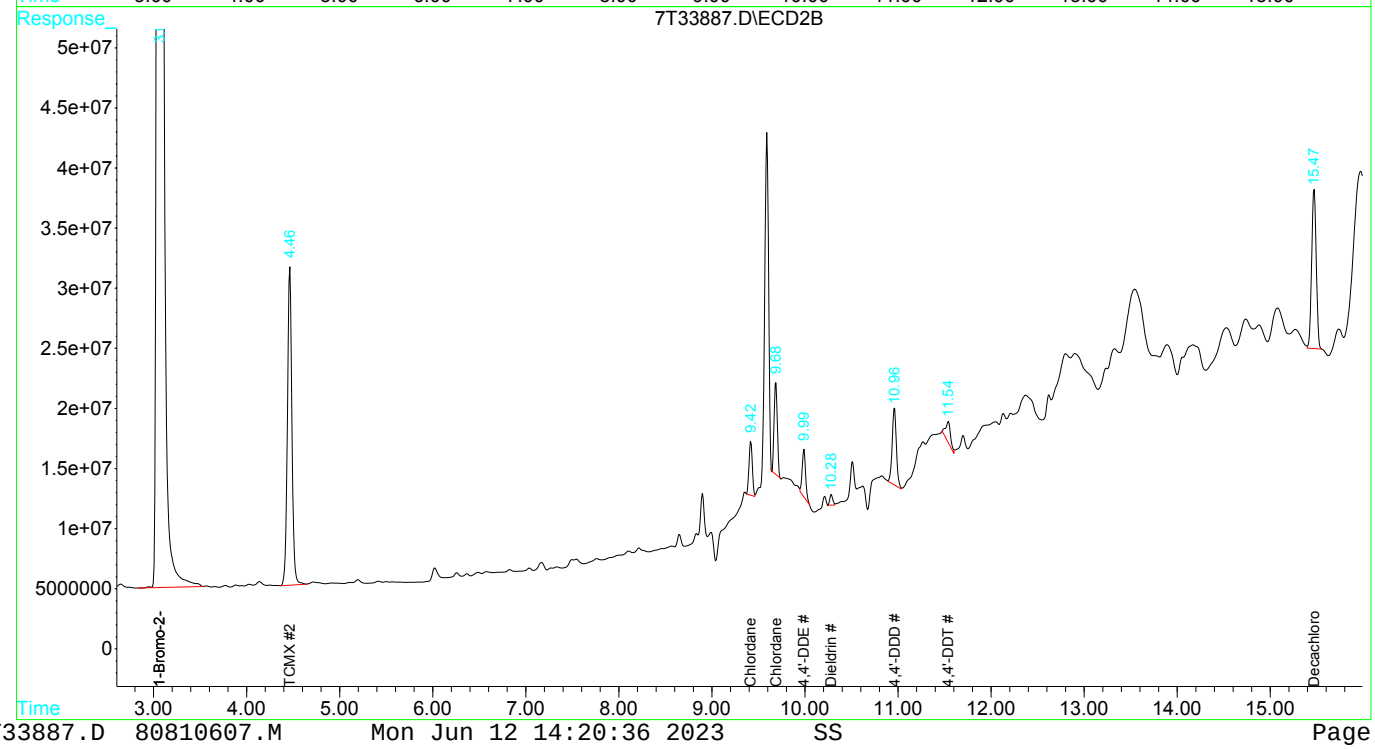
Quantitation Report (QT Reviewed)

Signal #1 : G:\HPCHEM\GCECD7\DATA\20230610\7T33887.D\ECD1A.CH Vial: 13
Signal #2 : G:\HPCHEM\GCECD7\DATA\20230610\7T33887.D\ECD2B.CH
Acq On : 10 Jun 2023 7:19 pm Operator: WD
Sample : 23E1425-04 Inst : GCECD-7
Misc : Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Jun 12 13:41 2023 Quant Results File: 80810607.RES

Quant Method : G:\HPCHEM\G...\80810607.M (Chemstation Integrator)
Title : Pesticides by Method SW-846 8081B
Last Update : Mon Jun 12 13:20:50 2023
Response via : Multiple Level Calibration
DataAcq Meth : RUNPEST.M

Volume Inj. : 2ul
Signal #1 Phase : RTx-50 Signal #2 Phase: RTx-CLPesticides II
Signal #1 Info : 30M x 0.53mm x 0. Signal #2 Info : 30M x 0.53mm x 0.42um





ANALYSIS DATA SHEET

SPLP Pesticides - SW 846 1312

Client: **Dynamic Earth LLC**
Client Sample ID: **F-13R**
Lab Sample ID: **23E1425-05**
Project: **Supplemental HAP Investigation**
Work Order: **23E1425**

Date Sampled:	05/30/23 10:50	Prep Date:	06/20/23 20:53	File ID:	9T01240.D
Init/Final Vol:	1000 mL / 10 m	Prep Batch:	BAC0149	Analyzed:	06/21/23 23:55
Dilution:	1	Matrix:	Soil	Sequence:	SAF0421
Percent Solids:	82.93	Prep Method:	Sep Funnel TCLP/SPLP		

CAS NO.	COMPOUND	CONC. (ug/L)	MDL	RL	Qual
60-57-1	Dieldrin	0.238	0.000271	0.0200	

ND, U - Indicates compound analyzed for but not detected
J - Indicates estimated value
B - Indicates compound found in associated blank
E - Concentration exceeds highest calibration standard
D - Indicates result is based on a dilution
H - Indicates a Hold Time violation
P - Greater than 25% diff. between 2 GC columns.
MDL - Minimum detection limit, **RL** - Reporting limit

F-I

Quantitation Report (QT Reviewed)

Signal #1 : G:\HPCHEM\GCECD9\DATA\20230621\9T01240.D\ECD1A.CH Vial: 16
Signal #2 : G:\HPCHEM\GCECD9\DATA\20230621\9T01240.D\ECD2B.CH
Acq On : 21 Jun 2023 11:55 pm Operator: WD
Sample : 23E1425-05 Inst : GCECD-9
Misc : Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Jun 22 14:25 2023 Quant Results File: 80810616.RES

Quant Method : G:\HPCHEM\G...\80810616.M (Chemstation Integrator)
Title : Pesticides by Method SW-846 8081B
Last Update : Fri Jun 16 17:01:33 2023
Response via : Initial Calibration
DataAcq Meth : RUNPEST.M

Volume Inj. : 2ul
Signal #1 Phase : RTx-50 Signal #2 Phase: RTx-CLPesticides II
Signal #1 Info : 30M x 0.53mm x 0. Signal #2 Info : 30M x 0.53mm x 0.42um

	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/kg	ug/kg
	Internal Standards						
1) I	1-Bromo-2-nitrob	3.04	3.22	4057.9E6	2903.5E6	400.000	400.000
25) I	1-Bromo-2-nitrob	3.04	3.22	4057.9E6	2903.5E6	400.000	400.000
	System Monitoring Compounds						
2) S	TCMX	3.74	4.17	399.5E6	304.1E6	42.608	51.324
	Spiked Amount 50.000	Range 43 - 129		Recovery =		85.22%	102.65%
22) S	Decachlorobiphen	13.14	16.25	412.0E6	310.8E6	39.013	38.444
	Spiked Amount 50.000	Range 42 - 136		Recovery =		78.03%	76.89%
	Target Compounds						
12) M	Dieldrin	7.37	8.59	284.1E6	205.5E6	23.778	24.324
	Sum Chlordane (gamma)			0	0	N.D.	N.D.
	Average Chlordane (gamma)					0.000	0.000
	Sum Toxaphene (1)			0	0	N.D.	N.D.
	Average Toxaphene (1)					0.000	0.000

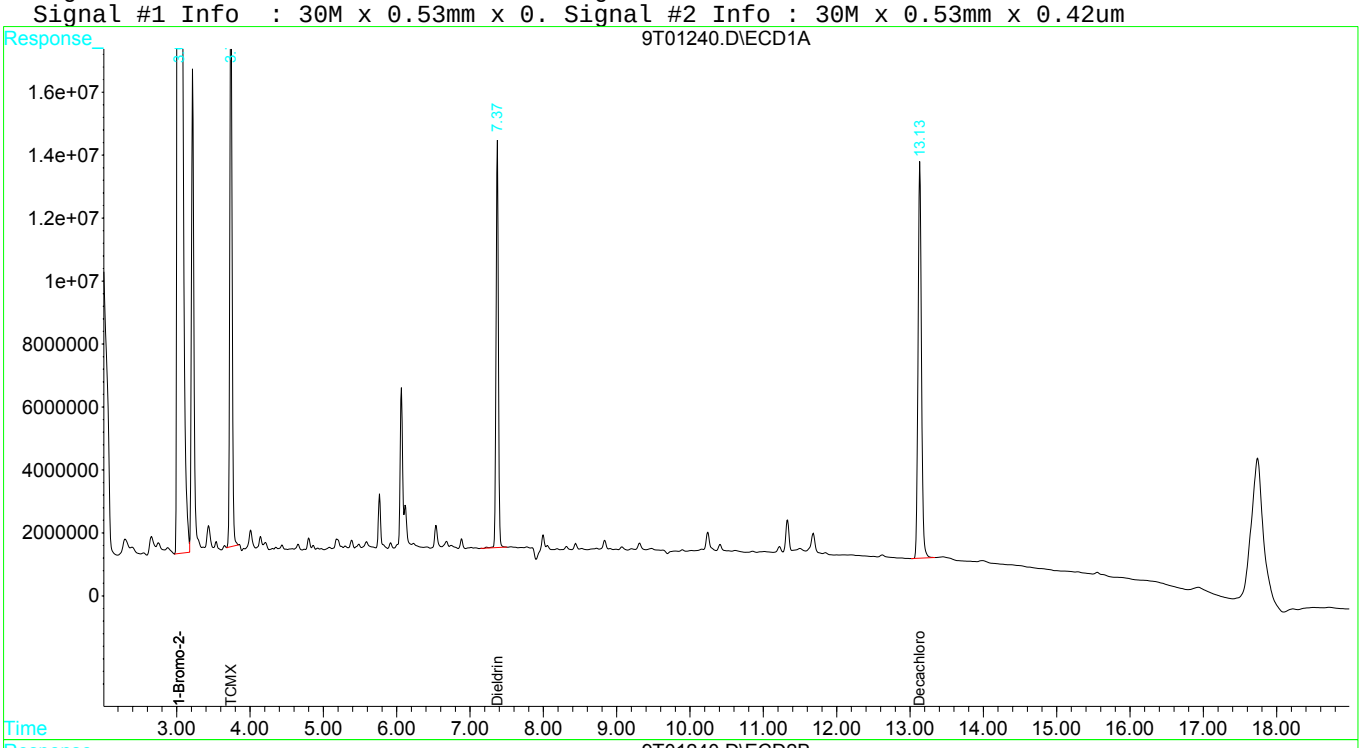
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.
9T01240.D 80810616.M Thu Jun 22 14:38:42 2023 SS

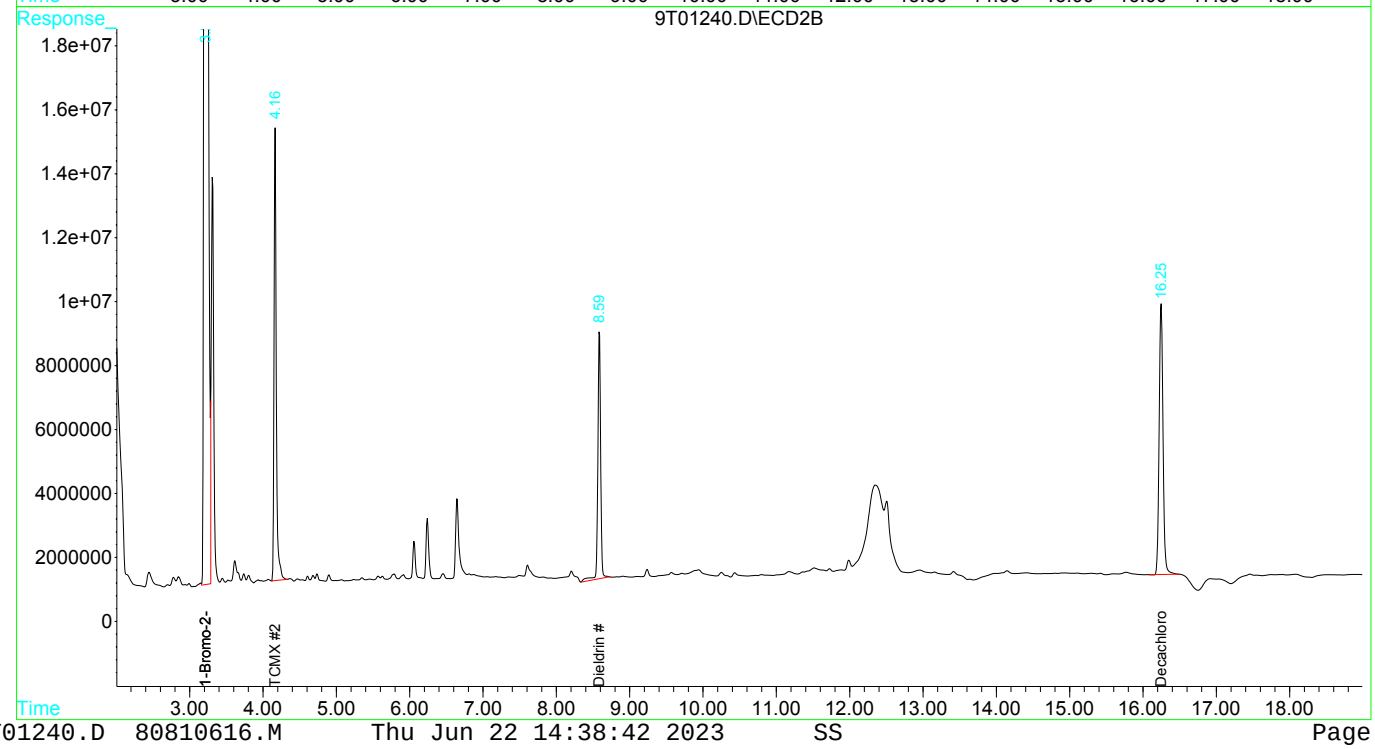
Quantitation Report (QT Reviewed)

Signal #1 : G:\HPCHEM\GCECD9\DATA\20230621\9T01240.D\ECD1A.CH Vial: 16
Signal #2 : G:\HPCHEM\GCECD9\DATA\20230621\9T01240.D\ECD2B.CH
Acq On : 21 Jun 2023 11:55 pm Operator: WD
Sample : 23E1425-05 Inst : GCECD-9
Misc : Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Jun 22 14:25 2023 Quant Results File: 80810616.RES

Quant Method : G:\HPCHEM\G...\80810616.M (Chemstation Integrator)
Title : Pesticides by Method SW-846 8081B
Last Update : Fri Jun 16 17:01:33 2023
Response via : Multiple Level Calibration
DataAcq Meth : RUNPEST.M

Volume Inj. : 2ul
Signal #1 Phase : RTx-50 Signal #2 Phase: RTx-CLPesticides II
Signal #1 Info : 30M x 0.53mm x 0. Signal #2 Info : 30M x 0.53mm x 0.42um





ANALYSIS DATA SHEET

SPLP Pesticides - SW 846 1312

Client: **Dynamic Earth LLC**
Client Sample ID: **F-15-3R**
Lab Sample ID: **23E1425-06**
Project: **Supplemental HAP Investigation**
Work Order: **23E1425**

Date Sampled:	05/30/23 10:45	Prep Date:	06/20/23 20:53	File ID:	9T01241.D
Init/Final Vol:	1000 mL / 10 m	Prep Batch:	BAC0149	Analyzed:	06/22/23 00:18
Dilution:	1	Matrix:	Soil	Sequence:	SAF0421
Percent Solids:	84.12	Prep Method:	Sep Funnel TCLP/SPLP		

CAS NO.	COMPOUND	CONC. (ug/L)	MDL	RL	Qual
60-57-1	Dieldrin	0.185	0.000271	0.0200	

ND, U - Indicates compound analyzed for but not detected
J - Indicates estimated value
B - Indicates compound found in associated blank
E - Concentration exceeds highest calibration standard
D - Indicates result is based on a dilution
H - Indicates a Hold Time violation
P - Greater than 25% diff. between 2 GC columns.
MDL - Minimum detection limit, **RL** - Reporting limit

F-I

Quantitation Report (QT Reviewed)

Signal #1 : G:\HPCHEM\GCECD9\DATA\20230621\9T01241.D\ECD1A.CH Vial: 17
Signal #2 : G:\HPCHEM\GCECD9\DATA\20230621\9T01241.D\ECD2B.CH
Acq On : 22 Jun 2023 12:18 am Operator: WD
Sample : 23E1425-06 Inst : GCECD-9
Misc : Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Jun 22 14:26 2023 Quant Results File: 80810616.RES

Quant Method : G:\HPCHEM\G...\80810616.M (Chemstation Integrator)
Title : Pesticides by Method SW-846 8081B
Last Update : Fri Jun 16 17:01:33 2023
Response via : Initial Calibration
DataAcq Meth : RUNPEST.M

Volume Inj. : 2ul
Signal #1 Phase : RTx-50 Signal #2 Phase: RTx-CLPesticides II
Signal #1 Info : 30M x 0.53mm x 0. Signal #2 Info : 30M x 0.53mm x 0.42um

	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/kg	ug/kg
	Internal Standards						
1) I	1-Bromo-2-nitrob	3.03	3.22	4312.0E6	3244.6E6	400.000	400.000
25) I	1-Bromo-2-nitrob	3.03	3.22	4312.0E6	3244.6E6	400.000	400.000
	System Monitoring Compounds						
2) S	TCMX	3.74	4.16	420.5E6	295.4E6	42.204	44.610
	Spiked Amount 50.000	Range 43 - 129		Recovery =		84.41%	89.22%
22) S	Decachlorobiphen	13.13	16.25	458.7E6	352.3E6	40.869	38.995
	Spiked Amount 50.000	Range 42 - 136		Recovery =		81.74%	77.99%
	Target Compounds						
9)	Heptachlor epoxi	6.43	7.35	9037684	6600834	0.710m	0.702m
11)	4,4'-DDE	6.88	8.20	17837344	12609592	1.728	1.691m
12) M	Dieldrin	7.37	8.58	235.4E6	224.9E6	18.535	23.823 #
16) M	4,4'-DDT	8.35	10.12	2187119	2731509	0.222m	0.412m#
	Sum Chlordane (gamma)			0	0	N.D.	N.D.
	Average Chlordane (gamma)					0.000	0.000
	Sum Toxaphene (1)			0	0	N.D.	N.D.
	Average Toxaphene (1)					0.000	0.000

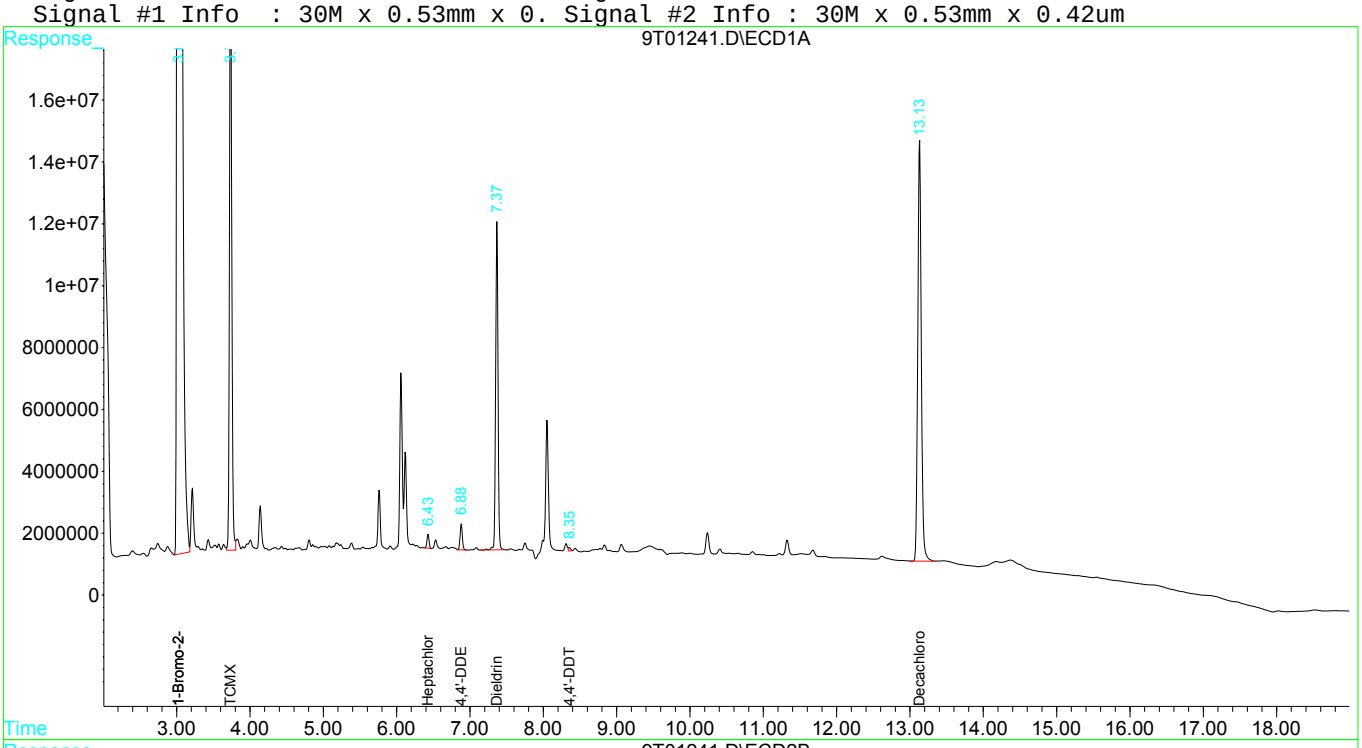
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.
9T01241.D 80810616.M Thu Jun 22 14:38:43 2023 SS

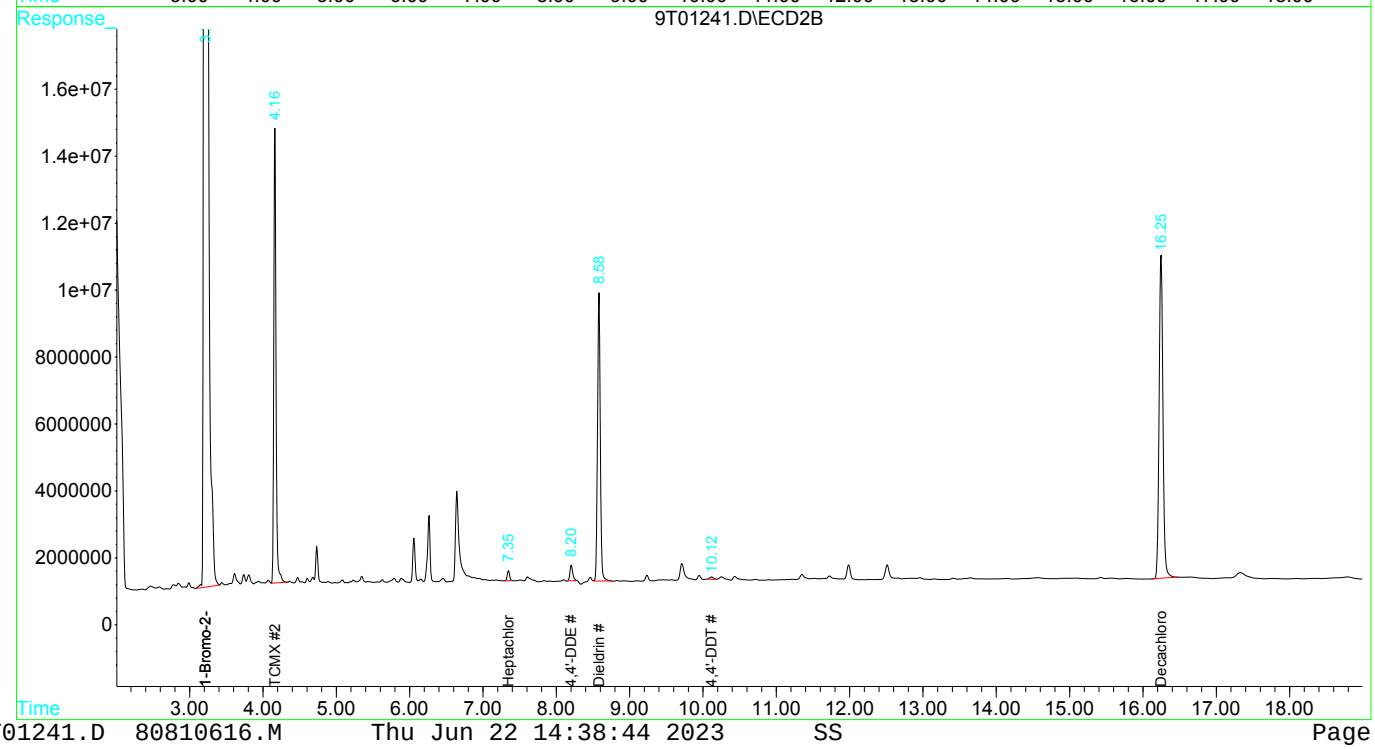
Quantitation Report (QT Reviewed)

Signal #1 : G:\HPCHEM\GCECD9\DATA\20230621\9T01241.D\ECD1A.CH Vial: 17
Signal #2 : G:\HPCHEM\GCECD9\DATA\20230621\9T01241.D\ECD2B.CH
Acq On : 22 Jun 2023 12:18 am Operator: WD
Sample : 23E1425-06 Inst : GCECD-9
Misc : Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Jun 22 14:26 2023 Quant Results File: 80810616.RES

Quant Method : G:\HPCHEM\G...\80810616.M (Chemstation Integrator)
Title : Pesticides by Method SW-846 8081B
Last Update : Fri Jun 16 17:01:33 2023
Response via : Multiple Level Calibration
DataAcq Meth : RUNPEST.M

Volume Inj. : 2ul
Signal #1 Phase : RTx-50 Signal #2 Phase: RTx-CLPesticides II
Signal #1 Info : 30M x 0.53mm x 0. Signal #2 Info : 30M x 0.53mm x 0.42um





ANALYSIS DATA SHEET

SPLP Pesticides - SW 846 1312

Client: **Dynamic Earth LLC**
Client Sample ID: **F-5-2R**
Lab Sample ID: **23E1425-07**
Project: **Supplemental HAP Investigation**
Work Order: **23E1425**

Date Sampled:	05/30/23 10:40	Prep Date:	06/20/23 20:53	File ID:	9T01242.D
Init/Final Vol:	1000 mL / 10 m	Prep Batch:	BAC0149	Analyzed:	06/22/23 00:40
Dilution:	1	Matrix:	Soil	Sequence:	SAF0421
Percent Solids:	93.50	Prep Method:	Sep Funnel TCLP/SPLP		

CAS NO.	COMPOUND	CONC. (ug/L)	MDL	RL	Qual
60-57-1	Dieldrin	ND	0.000271	0.0200	U

ND, U - Indicates compound analyzed for but not detected
J - Indicates estimated value
B - Indicates compound found in associated blank
E - Concentration exceeds highest calibration standard
D - Indicates result is based on a dilution
H - Indicates a Hold Time violation
P - Greater than 25% diff. between 2 GC columns.
MDL - Minimum detection limit, **RL** - Reporting limit

F-I

Quantitation Report (QT Reviewed)

Signal #1 : G:\HPCHEM\GCECD9\DATA\20230621\9T01242.D\ECD1A.CH Vial: 18
Signal #2 : G:\HPCHEM\GCECD9\DATA\20230621\9T01242.D\ECD2B.CH
Acq On : 22 Jun 2023 12:40 am Operator: WD
Sample : 23E1425-07 Inst : GCECD-9
Misc : Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Jun 22 14:27 2023 Quant Results File: 80810616.RES

Quant Method : G:\HPCHEM\G...\80810616.M (Chemstation Integrator)
Title : Pesticides by Method SW-846 8081B
Last Update : Fri Jun 16 17:01:33 2023
Response via : Initial Calibration
DataAcq Meth : RUNPEST.M

Volume Inj. : 2ul
Signal #1 Phase : RTx-50 Signal #2 Phase: RTx-CLPesticides II
Signal #1 Info : 30M x 0.53mm x 0. Signal #2 Info : 30M x 0.53mm x 0.42um

	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/kg	ug/kg
	Internal Standards						
1) I	1-Bromo-2-nitrob	3.03	3.22	3926.9E6	3008.9E6	400.000	400.000
25) I	1-Bromo-2-nitrob	3.03	3.22	3926.9E6	3008.9E6	400.000	400.000
	System Monitoring Compounds						
2) S	TCMX	3.74	4.16	420.9E6	297.2E6	46.391	48.409
	Spiked Amount 50.000	Range 43 - 129		Recovery =		92.78%	96.82%
22) S	Decachlorobiphen	13.13	16.25	475.8E6	363.9E6	46.556	43.441
	Spiked Amount 50.000	Range 42 - 136		Recovery =		93.11%	86.88%
	Target Compounds						
	Sum Chlordane (gamma)			0	0	N.D.	N.D.
	Average Chlordane (gamma)					0.000	0.000
	Sum Toxaphene (1)			0	0	N.D.	N.D.
	Average Toxaphene (1)					0.000	0.000

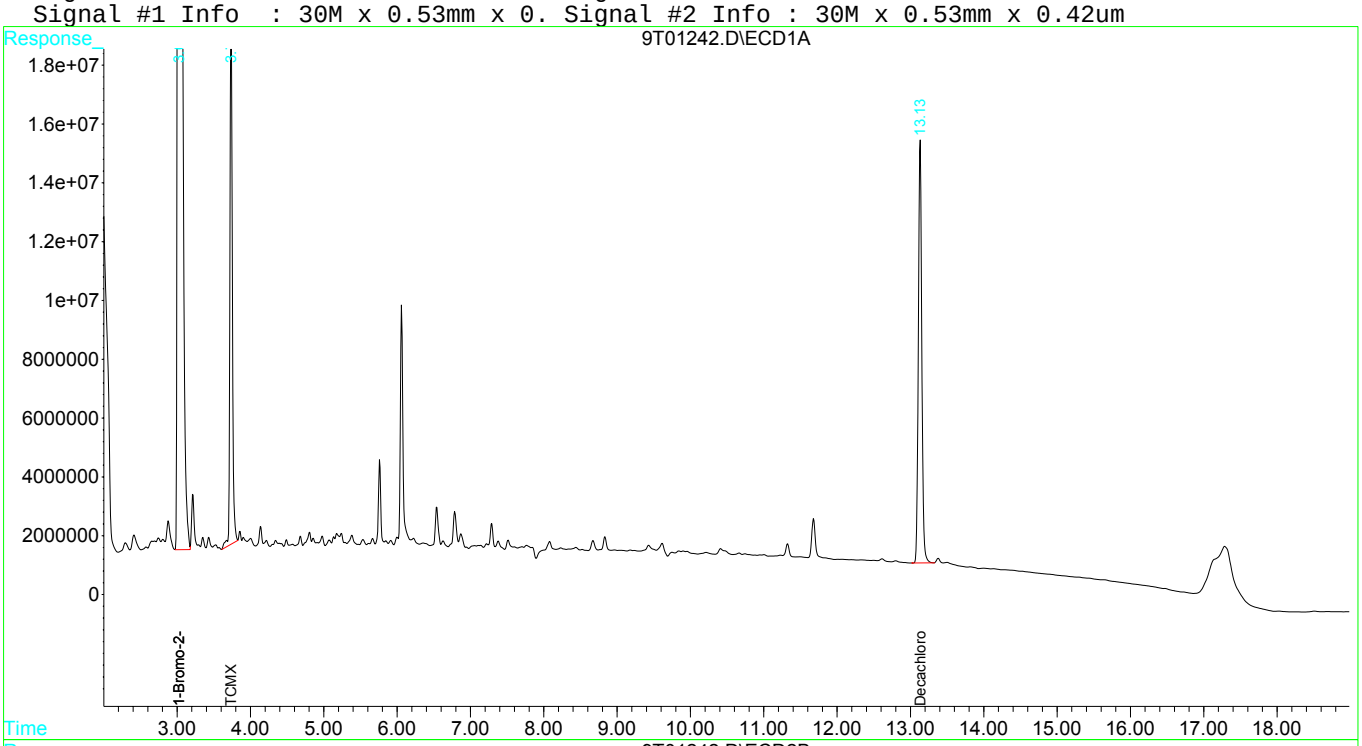
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.
9T01242.D 80810616.M Thu Jun 22 14:38:45 2023 SS

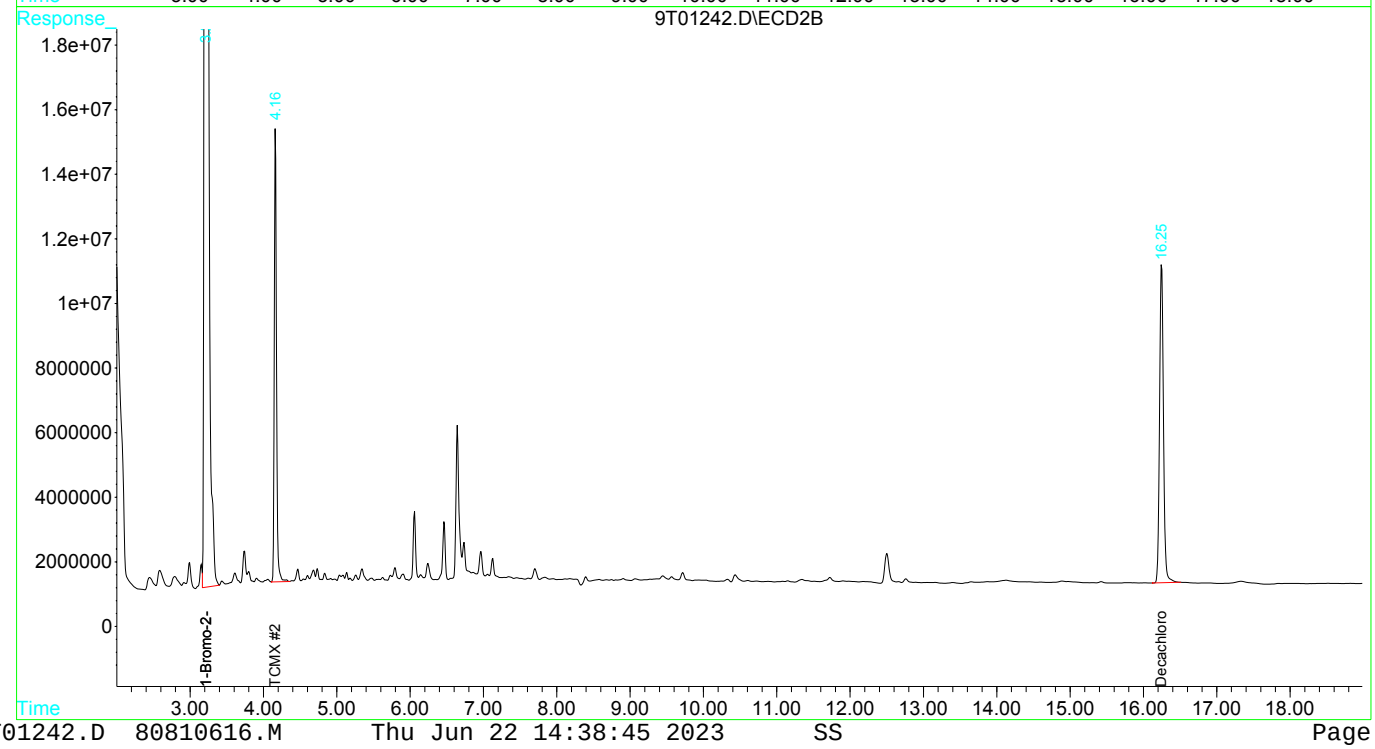
Quantitation Report (QT Reviewed)

Signal #1 : G:\HPCHEM\GCECD9\DATA\20230621\9T01242.D\ECD1A.CH Vial: 18
Signal #2 : G:\HPCHEM\GCECD9\DATA\20230621\9T01242.D\ECD2B.CH
Acq On : 22 Jun 2023 12:40 am Operator: WD
Sample : 23E1425-07 Inst : GCECD-9
Misc : Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Jun 22 14:27 2023 Quant Results File: 80810616.RES

Quant Method : G:\HPCHEM\G...\80810616.M (Chemstation Integrator)
Title : Pesticides by Method SW-846 8081B
Last Update : Fri Jun 16 17:01:33 2023
Response via : Multiple Level Calibration
DataAcq Meth : RUNPEST.M

Volume Inj. : 2ul
Signal #1 Phase : RTx-50 Signal #2 Phase: RTx-CLPesticides II
Signal #1 Info : 30M x 0.53mm x 0. Signal #2 Info : 30M x 0.53mm x 0.42um





ANALYSIS DATA SHEET

Pesticides - SW 846 8081B

Client: **Dynamic Earth LLC**
Client Sample ID: **TRENCH-6**
Lab Sample ID: **23E1425-08**
Project: **Supplemental HAP Investigation**
Work Order: **23E1425**

Date Sampled:	05/30/23 11:35	Prep Date:	06/06/23 15:37	File ID:	7T33891.D
Init/Final Vol:	15 g / 10 mL	Prep Batch:	BAF0218	Analyzed:	06/10/23 20:33
Dilution:	1	Matrix:	Soil	Sequence:	SAF0209
Percent Solids:	92.89	Prep Method:	Microwave Extraction		

CAS NO.	COMPOUND	CONC. (mg/kg dry)	MDL	RL	Qual
57-74-9	Chlordane [2C]	0.00729	0.000622	0.00140	

ND, U - Indicates compound analyzed for but not detected
J - Indicates estimated value
B - Indicates compound found in associated blank
E - Concentration exceeds highest calibration standard

D - Indicates result is based on a dilution
H - Indicates a Hold Time violation
P - Greater than 25% diff. between 2 GC columns.
MDL - Minimum detection limit, **RL** - Reporting limit

F-I

Quantitation Report (QT Reviewed)

Signal #1 : G:\HPCHEM\GCECD7\DATA\20230610\7T33891.D\ECD1A.CH Vial: 17
Signal #2 : G:\HPCHEM\GCECD7\DATA\20230610\7T33891.D\ECD2B.CH
Acq On : 10 Jun 2023 8:33 pm Operator: WD
Sample : 23E1425-08 Inst : GCECD-7
Misc : Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Jun 12 13:48 2023 Quant Results File: 80810607.RES

Quant Method : G:\HPCHEM\G...\80810607.M (Chemstation Integrator)
Title : Pesticides by Method SW-846 8081B
Last Update : Mon Jun 12 13:20:50 2023
Response via : Initial Calibration
DataAcq Meth : RUNPEST.M

Volume Inj. : 2ul
Signal #1 Phase : RTx-50 Signal #2 Phase: RTx-CLPesticides II
Signal #1 Info : 30M x 0.53mm x 0. Signal #2 Info : 30M x 0.53mm x 0.42um

	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/kg	ug/kg
	Internal Standards						
1) I	1-Bromo-2-nitrob	2.81	3.07	17731.8E6	7365.7E6	400.000	400.000
25) I	1-Bromo-2-nitrob	2.81	3.07	17731.8E6	7365.7E6	400.000	400.000
	System Monitoring Compounds						
2) S	TCMX	3.73	4.46	2168.7E6	904.2E6	56.016	59.128
Spiked Amount	50.000	Range 43 - 129		Recovery =		112.03%	118.26%
22) S	Decachlorobiphen	13.43	15.47	1139.8E6	523.9E6	38.064m	46.741m
Spiked Amount	50.000	Range 42 - 136		Recovery =		76.13%	93.48%
	Target Compounds						
11)	4,4'-DDE	8.49	9.99	35653244	10713011	0.681m	0.662m
12) M	Dieldrin	9.02f	10.27	78086520	8982936	1.487m	0.539m#
16) M	4,4'-DDT	10.05	11.54	43364054	18776158	1.223m	1.831m#
23) L1	Chlordane (gamma	8.06	9.42	383.1E6	98853745	7.002m	4.345m#
24) L1	Chlordane (alpha	8.29	9.68	801.9E6	106.4E6	14.800m	5.823m#
Sum	Chlordane (gamma)			1185.0E6	205.2E6	21.802	10.167
Average	Chlordane (gamma)					10.901	5.084
Sum	Toxaphene (1)			0	0	N.D.	N.D.
Average	Toxaphene (1)					0.000	0.000

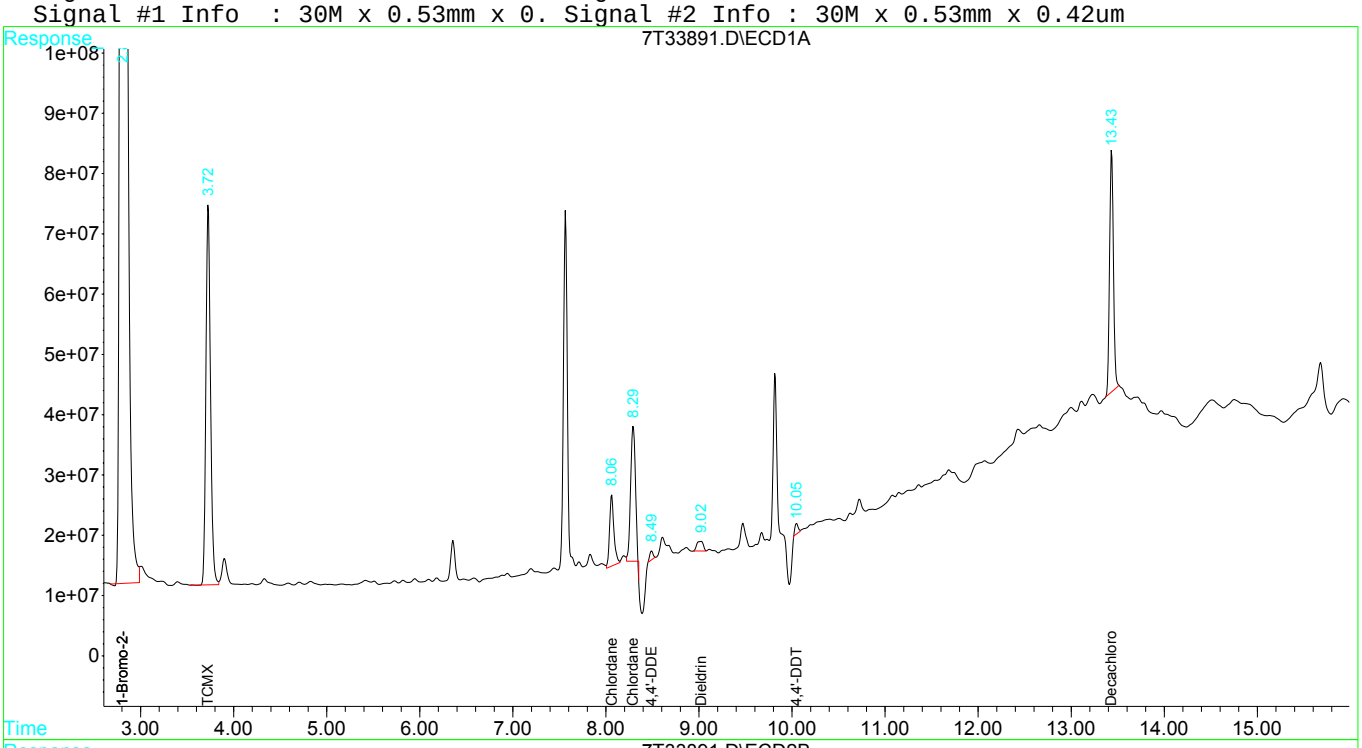
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7T33891.D 80810607.M Mon Jun 12 14:20:43 2023 SS

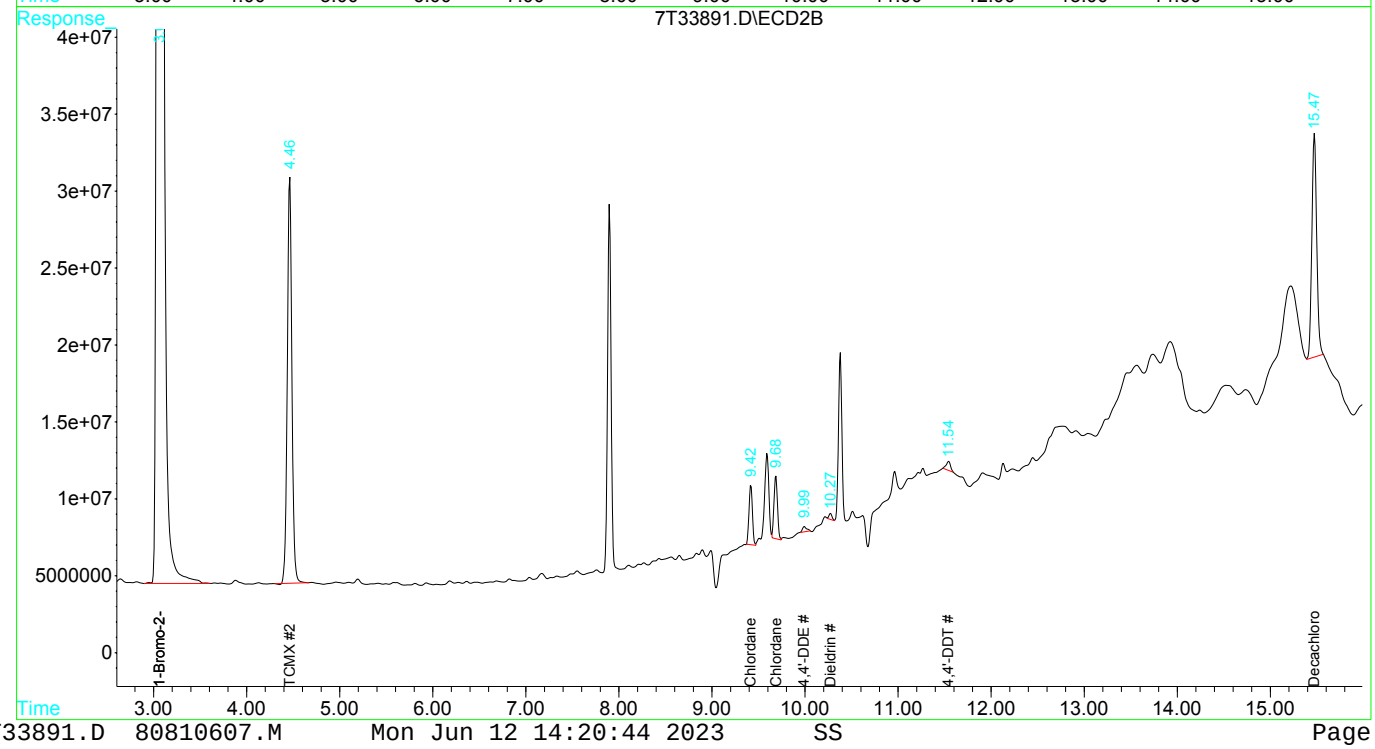
Quantitation Report (QT Reviewed)

Signal #1 : G:\HPCHEM\GCECD7\DATA\20230610\7T33891.D\ECD1A.CH Vial: 17
Signal #2 : G:\HPCHEM\GCECD7\DATA\20230610\7T33891.D\ECD2B.CH
Acq On : 10 Jun 2023 8:33 pm Operator: WD
Sample : 23E1425-08 Inst : GCECD-7
Misc : Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Jun 12 13:48 2023 Quant Results File: 80810607.RES

Quant Method : G:\HPCHEM\G...\80810607.M (Chemstation Integrator)
Title : Pesticides by Method SW-846 8081B
Last Update : Mon Jun 12 13:20:50 2023
Response via : Multiple Level Calibration
DataAcq Meth : RUNPEST.M

Volume Inj. : 2ul
Signal #1 Phase : RTx-50 Signal #2 Phase: RTx-CLPesticides II
Signal #1 Info : 30M x 0.53mm x 0. Signal #2 Info : 30M x 0.53mm x 0.42um





ANALYSIS DATA SHEET

Pesticides - SW 846 8081B

Client: **Dynamic Earth LLC**
Client Sample ID: **TRENCH-7**
Lab Sample ID: **23E1425-09RE1**
Project: **Supplemental HAP Investigation**
Work Order: **23E1425**

Date Sampled:	05/30/23 11:45	Prep Date:	06/06/23 15:37	File ID:	9T01102.D
Init/Final Vol:	15 g / 10 mL	Prep Batch:	BAF0218	Analyzed:	06/12/23 18:35
Dilution:	20	Matrix:	Soil	Sequence:	SAF0245
Percent Solids:	88.09	Prep Method:	Microwave Extraction		

CAS NO.	COMPOUND	CONC. (mg/kg dry)	MDL	RL	Qual
57-74-9	Chlordane	3.16	0.0131	0.0295	D

ND, U - Indicates compound analyzed for but not detected
J - Indicates estimated value
B - Indicates compound found in associated blank
E - Concentration exceeds highest calibration standard
D - Indicates result is based on a dilution
H - Indicates a Hold Time violation
P - Greater than 25% diff. between 2 GC columns.
MDL - Minimum detection limit, **RL** - Reporting limit

F-I

Quantitation Report (QT Reviewed)

Signal #1 : G:\HPCHEM\GCECD9\DATA\20230612\9T01102.D\ECD1A.CH Vial: 5
Signal #2 : G:\HPCHEM\GCECD9\DATA\20230612\9T01102.D\ECD2B.CH
Acq On : 12 Jun 2023 6:35 pm Operator: WD
Sample : 23E1425-09RE1 Inst : GCECD-9
Misc : 20X Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Jun 12 19:19 2023 Quant Results File: 80810606.RES

Quant Method : G:\HPCHEM\G...\80810606.M (Chemstation Integrator)
Title : Pesticides by Method SW-846 8081B
Last Update : Tue Jun 06 16:57:33 2023
Response via : Initial Calibration
DataAcq Meth : RUNPEST.M

Volume Inj. : 2ul
Signal #1 Phase : RTx-50 Signal #2 Phase: RTx-CLPesticides II
Signal #1 Info : 30M x 0.53mm x 0. Signal #2 Info : 30M x 0.53mm x 0.42um

	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/kg	ug/kg
	Internal Standards						
1) I	1-Bromo-2-nitrob	3.06	3.25	4898.1E6	3572.3E6	400.000	400.000
25) I	1-Bromo-2-nitrob	3.06	3.25	4898.1E6	3572.3E6	400.000	400.000
	System Monitoring Compounds						
2) S	TCMX	3.77	4.20	20629387	14741855	1.874	2.177
	Spiked Amount 50.000	Range 43 - 129		Recovery =		3.75%#	4.35%#
22) S	Decachlorobiphen	13.21	16.34f	26173585	27532496	2.077m	3.652m#
	Spiked Amount 50.000	Range 42 - 136		Recovery =		4.15%#	7.30%#
	Target Compounds						
23) L1	Chlordane (gamma	6.65	7.72	800.7E6	513.1E6	56.629m	58.719m
24) L1	Chlordane (alpha	6.81f	7.99	2098.1E6	690.1E6	152.157m	81.132m#
	Sum Chlordane (gamma)			2898.9E6	1203.2E6	208.786	139.851
Average	Chlordane (gamma)					104.393	69.926
	Sum Toxaphene (1)			0	0	N.D.	N.D.
Average	Toxaphene (1)					0.000	0.000

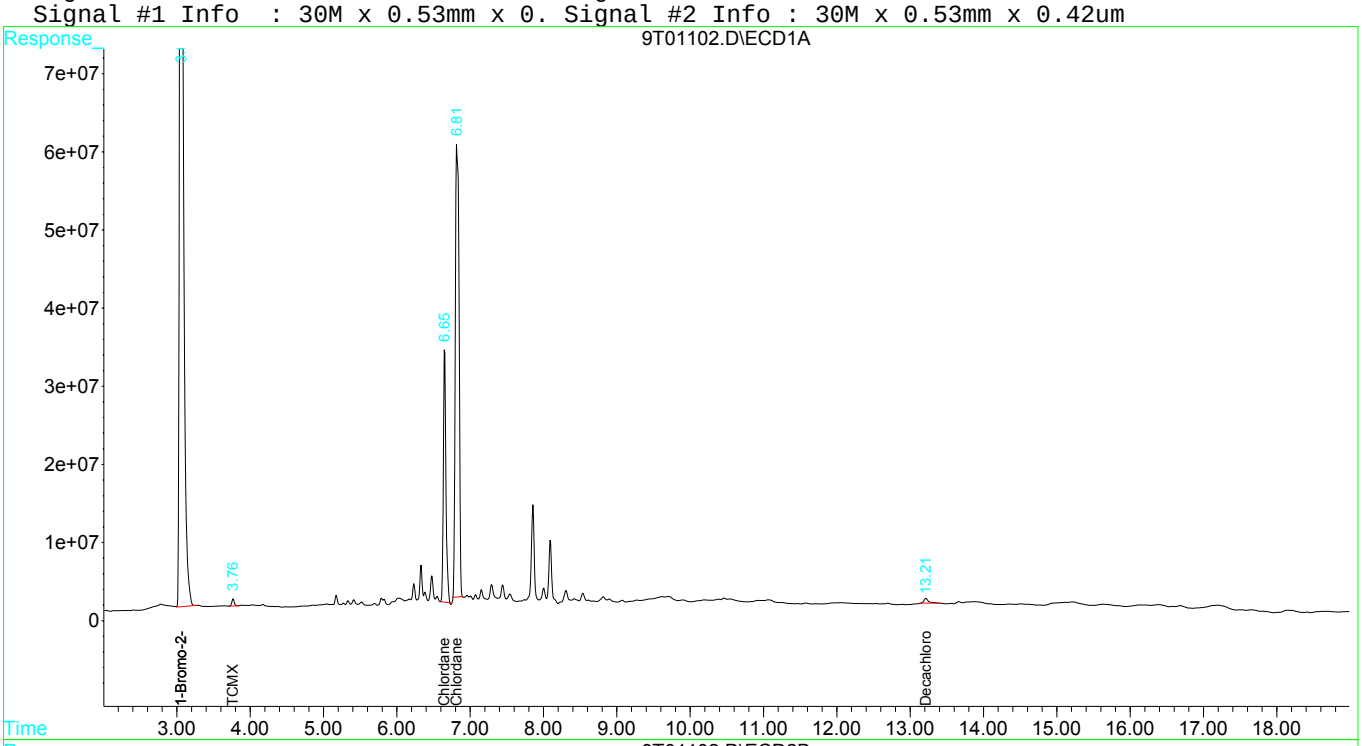
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.
9T01102.D 80810606.M Tue Jun 13 13:51:42 2023 SS

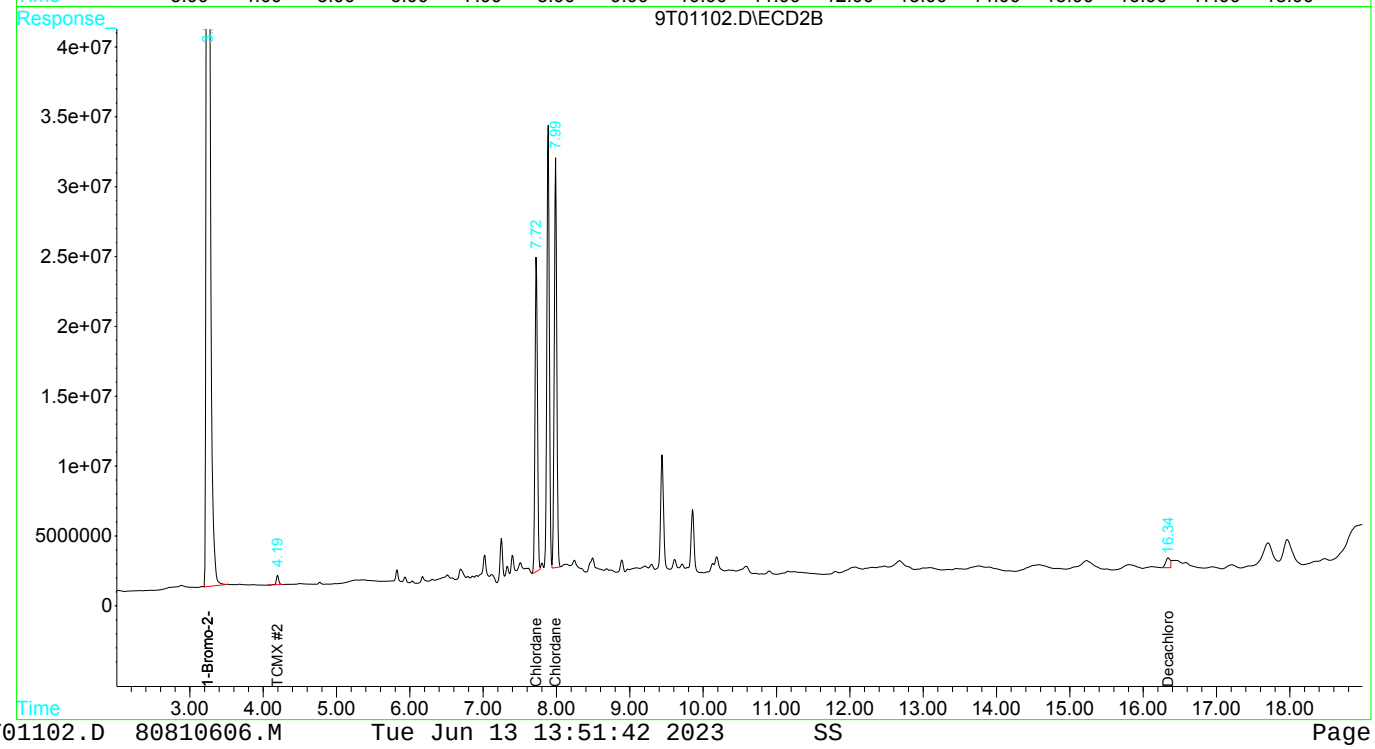
Quantitation Report (QT Reviewed)

Signal #1 : G:\HPCHEM\GCECD9\DATA\20230612\9T01102.D\ECD1A.CH Vial: 5
Signal #2 : G:\HPCHEM\GCECD9\DATA\20230612\9T01102.D\ECD2B.CH
Acq On : 12 Jun 2023 6:35 pm Operator: WD
Sample : 23E1425-09RE1 Inst : GCECD-9
Misc : 20X Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Jun 12 19:19 2023 Quant Results File: 80810606.RES

Quant Method : G:\HPCHEM\G...\80810606.M (Chemstation Integrator)
Title : Pesticides by Method SW-846 8081B
Last Update : Tue Jun 06 16:57:33 2023
Response via : Multiple Level Calibration
DataAcq Meth : RUNPEST.M

Volume Inj. : 2ul
Signal #1 Phase : RTx-50 Signal #2 Phase: RTx-CLPesticides II
Signal #1 Info : 30M x 0.53mm x 0. Signal #2 Info : 30M x 0.53mm x 0.42um





ANALYSIS DATA SHEET

Pesticides - SW 846 8081B

Client: **Dynamic Earth LLC**
Client Sample ID: **T-3-1C**
Lab Sample ID: **23E1425-10**
Project: **Supplemental HAP Investigation**
Work Order: **23E1425**

Date Sampled:	05/30/23 09:28	Prep Date:	06/13/23 07:10	File ID:	7T33927.D
Init/Final Vol:	15 g / 10 mL	Prep Batch:	BAF0463	Analyzed:	06/13/23 19:52
Dilution:	1	Matrix:	Soil	Sequence:	SAF0272
Percent Solids:	91.03	Prep Method:	Microwave Extraction		

CAS NO.	COMPOUND	CONC. (mg/kg dry)	MDL	RL	Qual
60-57-1	Dieldrin [2C]	ND	0.000747	0.00143	U

ND, U - Indicates compound analyzed for but not detected
J - Indicates estimated value
B - Indicates compound found in associated blank
E - Concentration exceeds highest calibration standard
D - Indicates result is based on a dilution
H - Indicates a Hold Time violation
P - Greater than 25% diff. between 2 GC columns.
MDL - Minimum detection limit, **RL** - Reporting limit

F-I

Quantitation Report (QT Reviewed)

Signal #1 : G:\HPCHEM\GCECD7\DATA\20230613\7T33927.D\ECD1A.CH Vial: 7
Signal #2 : G:\HPCHEM\GCECD7\DATA\20230613\7T33927.D\ECD2B.CH
Acq On : 13 Jun 2023 7:52 pm Operator: WD
Sample : 23E1425-10 Inst : HP G1530A
Misc : Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Jun 14 13:46 2023 Quant Results File: 80810607.RES

Quant Method : G:\HPCHEM\G...\80810607.M (Chemstation Integrator)
Title : Pesticides by Method SW-846 8081B
Last Update : Wed Jun 14 11:40:42 2023
Response via : Initial Calibration
DataAcq Meth : RUNPEST.M

Volume Inj. : 2ul
Signal #1 Phase : RTx-50 Signal #2 Phase: RTx-CLPesticides II
Signal #1 Info : 30M x 0.53mm x 0. Signal #2 Info : 30M x 0.53mm x 0.42um

	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/kg	ug/kg
	Internal Standards						
1) I	1-Bromo-2-nitrob	2.82	3.08	22870.3E6	9256.2E6	400.000	400.000
25) I	1-Bromo-2-nitrob	2.82	3.08	22870.3E6	9256.2E6	400.000	400.000
	System Monitoring Compounds						
2) S	TCMX	3.74	4.47	2137.5E6	834.0E6	42.807	43.400
	Spiked Amount 50.000	Range 43 - 129		Recovery =		85.61%	86.80%
22) S	Decachlorobiphen	13.44	15.48	998.8E6	456.5E6	25.859m	32.412 #
	Spiked Amount 50.000	Range 42 - 136		Recovery =		51.72%	64.82%
	Target Compounds						
11)	4,4'-DDE	8.49	9.99	9249004	2221122	0.137m	0.109m
12) M	Dieldrin	8.99	10.29	14588457	2730356	0.215m	0.130m#
	Sum Chlordane (gamma)			0	0	N.D.	N.D.
	Average Chlordane (gamma)					0.000	0.000
	Sum Toxaphene (1)			0	0	N.D.	N.D.
	Average Toxaphene (1)					0.000	0.000

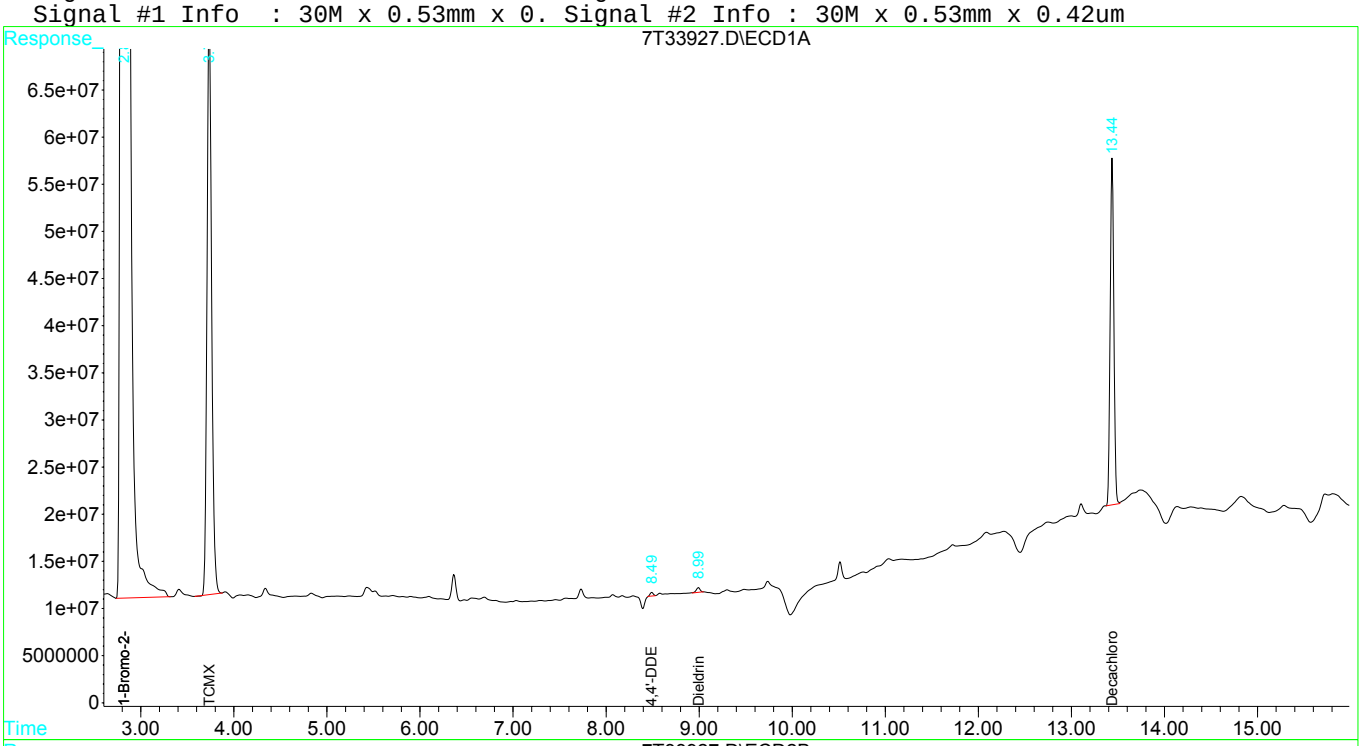
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.
7T33927.D 80810607.M Wed Jun 14 14:04:19 2023 SS

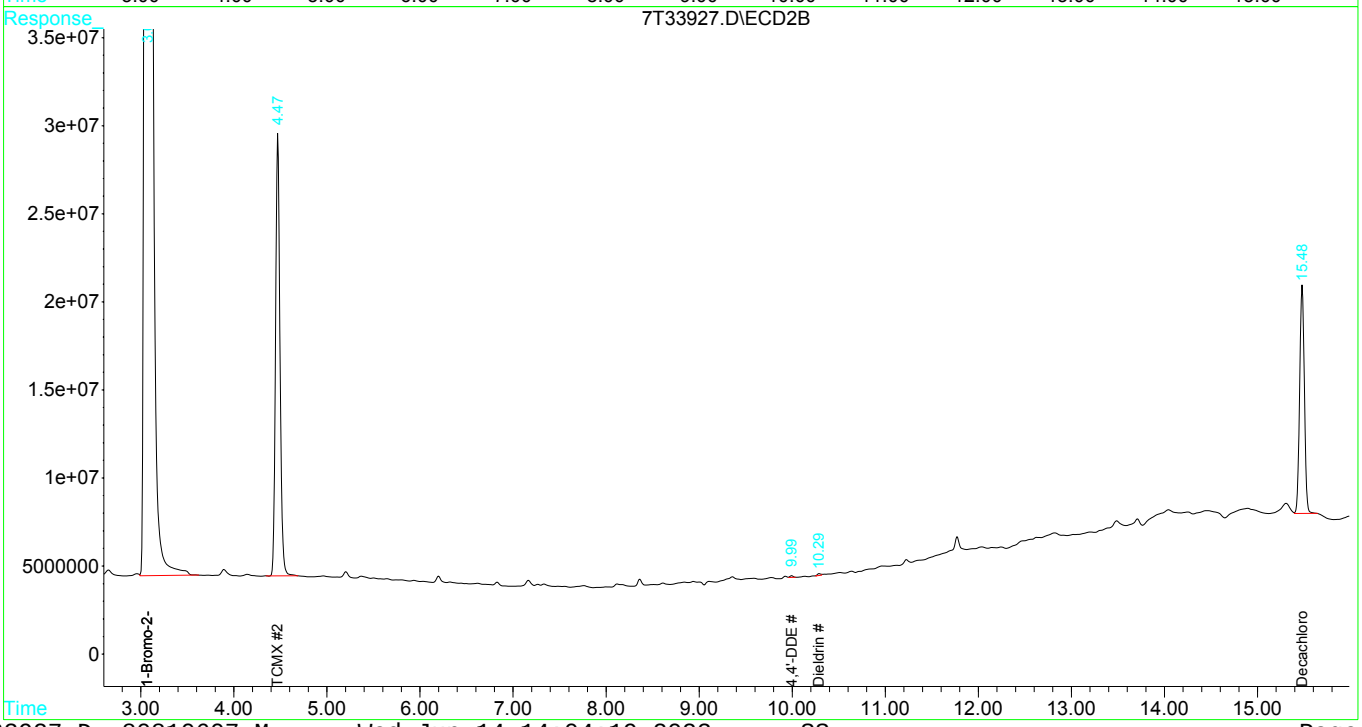
Quantitation Report (QT Reviewed)

Signal #1 : G:\HPCHEM\GCECD7\DATA\20230613\7T33927.D\ECD1A.CH Vial: 7
Signal #2 : G:\HPCHEM\GCECD7\DATA\20230613\7T33927.D\ECD2B.CH
Acq On : 13 Jun 2023 7:52 pm Operator: WD
Sample : 23E1425-10 Inst : HP G1530A
Misc : Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Jun 14 13:46 2023 Quant Results File: 80810607.RES

Quant Method : G:\HPCHEM\G...\80810607.M (Chemstation Integrator)
Title : Pesticides by Method SW-846 8081B
Last Update : Wed Jun 14 11:40:42 2023
Response via : Multiple Level Calibration
DataAcq Meth : RUNPEST.M

Volume Inj. : 2ul
Signal #1 Phase : RTx-50 Signal #2 Phase: RTx-CLPesticides II
Signal #1 Info : 30M x 0.53mm x 0. Signal #2 Info : 30M x 0.53mm x 0.42um





ANALYSIS DATA SHEET

Pesticides - SW 846 8081B

Client: **Dynamic Earth LLC**
Client Sample ID: **TRENCH-7A**
Lab Sample ID: **23E1425-19**
Project: **Supplemental HAP Investigation**
Work Order: **23E1425**

Date Sampled:	05/30/23 11:50	Prep Date:	06/13/23 07:10	File ID:	7T33945.D
Init/Final Vol:	15 g / 10 mL	Prep Batch:	BAF0463	Analyzed:	06/14/23 18:40
Dilution:	1	Matrix:	Soil	Sequence:	SAF0291
Percent Solids:	91.88	Prep Method:	Microwave Extraction		

CAS NO.	COMPOUND	CONC. (mg/kg dry)	MDL	RL	Qual
57-74-9	Chlordane [2C]	0.000987	0.000629	0.00141	J

ND, U - Indicates compound analyzed for but not detected
J - Indicates estimated value
B - Indicates compound found in associated blank
E - Concentration exceeds highest calibration standard

D - Indicates result is based on a dilution
H - Indicates a Hold Time violation
P - Greater than 25% diff. between 2 GC columns.
MDL - Minimum detection limit, **RL** - Reporting limit

F-I

Quantitation Report (QT Reviewed)

Signal #1 : G:\HPCHEM\GCECD7\DATA\20230614\7T33945.D\ECD1A.CH Vial: 2
Signal #2 : G:\HPCHEM\GCECD7\DATA\20230614\7T33945.D\ECD2B.CH
Acq On : 14 Jun 2023 6:40 pm Operator: WD
Sample : 23E1425-19 Inst : HP G1530A
Misc : Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Jun 15 12:11 2023 Quant Results File: 80810607.RES

Quant Method : G:\HPCHEM\G...\80810607.M (Chemstation Integrator)
Title : Pesticides by Method SW-846 8081B
Last Update : Thu Jun 15 11:19:26 2023
Response via : Initial Calibration
DataAcq Meth : RUNPEST.M

Volume Inj. : 2ul
Signal #1 Phase : RTx-50 Signal #2 Phase: RTx-CLPesticides II
Signal #1 Info : 30M x 0.53mm x 0. Signal #2 Info : 30M x 0.53mm x 0.42um

	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/kg	ug/kg
	Internal Standards						
1) I	1-Bromo-2-nitrob	2.82	3.07	21607.9E6	8983.6E6	400.000	400.000
25) I	1-Bromo-2-nitrob	2.82	3.07	21607.9E6	8983.6E6	400.000	400.000
	System Monitoring Compounds						
2) S	TCMX	3.73	4.47	2151.8E6	868.8E6	45.610	46.580
Spiked Amount	50.000	Range	43 - 129	Recovery	=	91.22%	93.16%
22) S	Decachlorobiphen	13.43	15.47	833.1E6	411.6E6	22.831m	30.107m#
Spiked Amount	50.000	Range	42 - 136	Recovery	=	45.66%	60.21%
	Target Compounds						
11)	4,4'-DDE	8.49	9.99	50040071	12958683	0.785m	0.656m
14)	4,4'-DDD	9.47f	10.96f	69420642	28130869	1.553m	2.153m#
16) M	4,4'-DDT	10.05	11.55	19850320	9671758	0.459m	0.773m#
23) L1	Chlordane (gamma	8.07	9.42	66152244	15954862	0.992m	0.575m#
24) L1	Chlordane (alpha	8.28f	9.68	407.9E6	17491752	6.178m	0.785m#
Sum	Chlordane (gamma)			474.0E6	33446614	7.170	1.360
Average	Chlordane (gamma)					3.585	0.680
Sum	Toxaphene (1)			0	0	N.D.	N.D.
Average	Toxaphene (1)					0.000	0.000

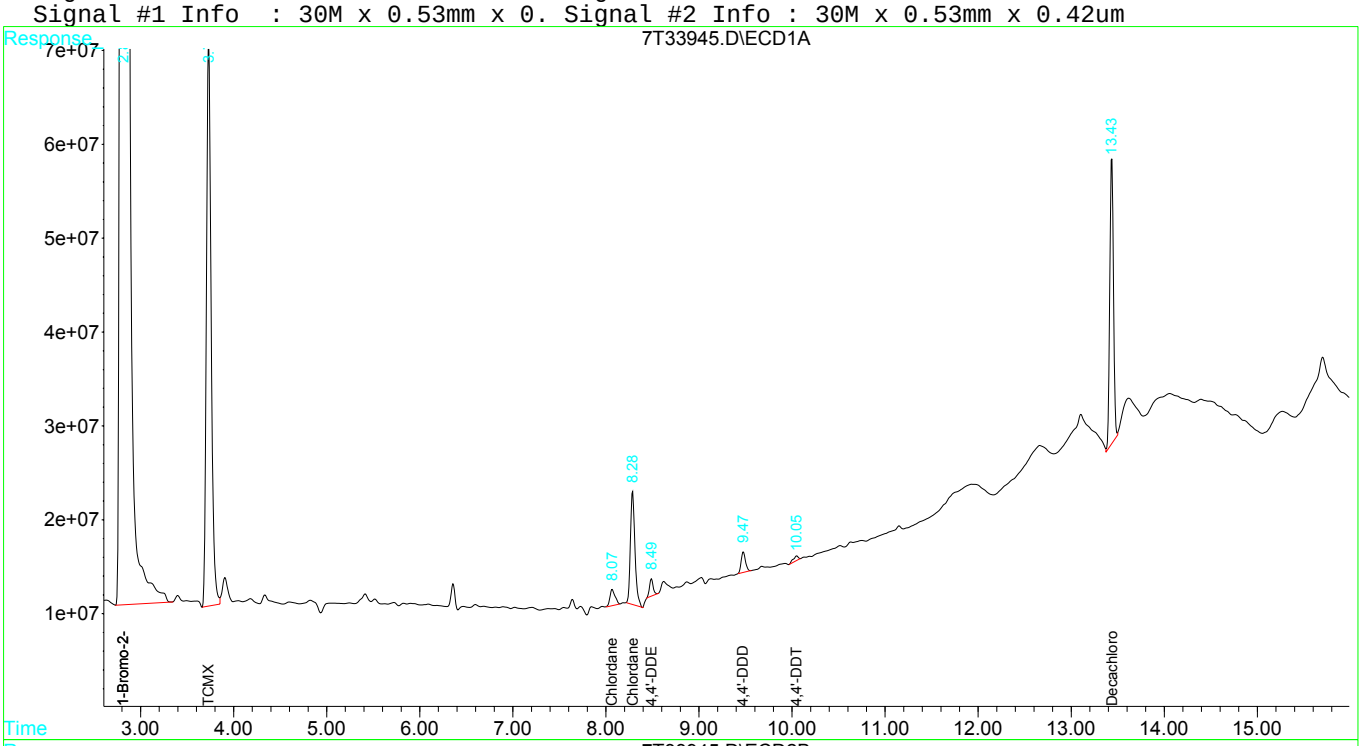
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7T33945.D 80810607.M Thu Jun 15 13:23:40 2023 SS

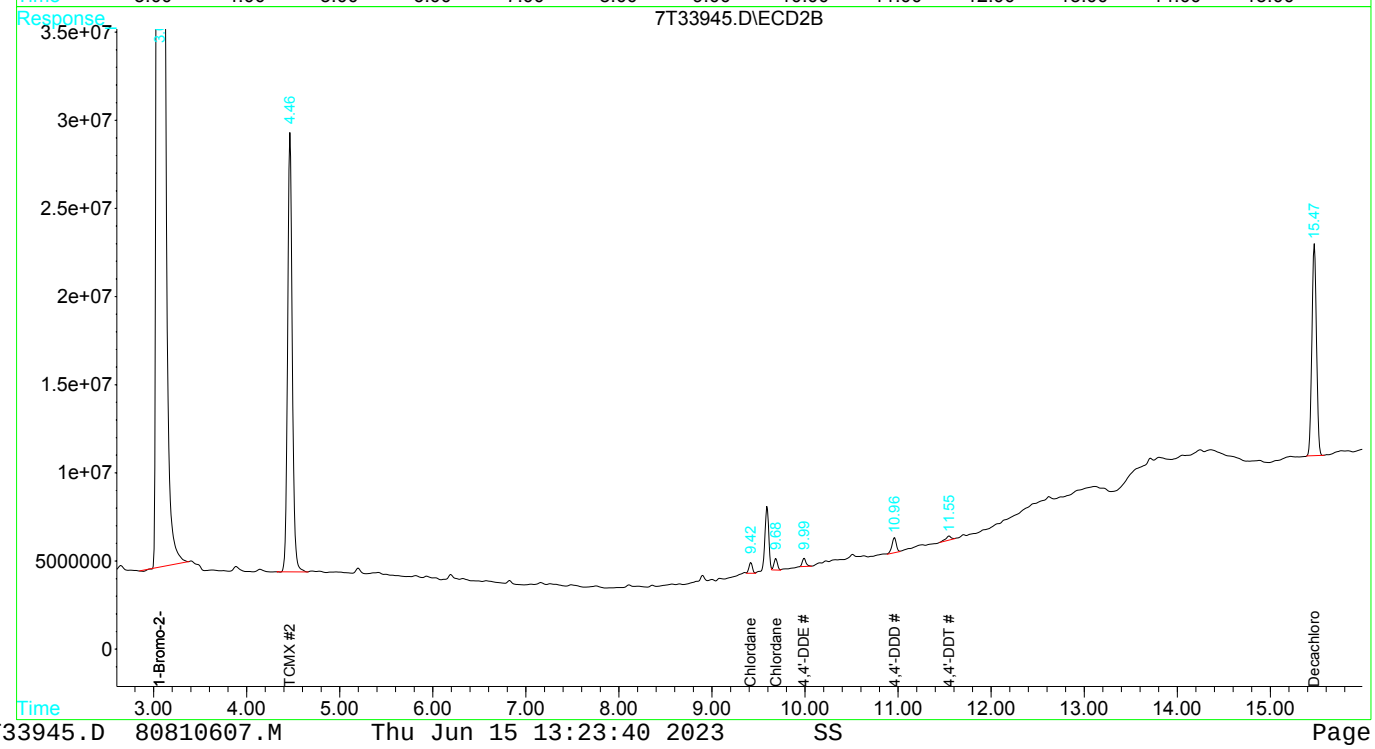
Quantitation Report (QT Reviewed)

Signal #1 : G:\HPCHEM\GCECD7\DATA\20230614\7T33945.D\ECD1A.CH Vial: 2
Signal #2 : G:\HPCHEM\GCECD7\DATA\20230614\7T33945.D\ECD2B.CH
Acq On : 14 Jun 2023 6:40 pm Operator: WD
Sample : 23E1425-19 Inst : HP G1530A
Misc : Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Jun 15 12:11 2023 Quant Results File: 80810607.RES

Quant Method : G:\HPCHEM\G...\80810607.M (Chemstation Integrator)
Title : Pesticides by Method SW-846 8081B
Last Update : Thu Jun 15 11:19:26 2023
Response via : Multiple Level Calibration
DataAcq Meth : RUNPEST.M

Volume Inj. : 2ul
Signal #1 Phase : RTx-50 Signal #2 Phase: RTx-CLPesticides II
Signal #1 Info : 30M x 0.53mm x 0. Signal #2 Info : 30M x 0.53mm x 0.42um





ANALYSIS DATA SHEET

Pesticides - SW 846 8081B

Client: **Dynamic Earth LLC**
Client Sample ID: **TRENCH-9**
Lab Sample ID: **23E1425-22**
Project: **Supplemental HAP Investigation**
Work Order: **23E1425**

Date Sampled:	05/30/23 12:05	Prep Date:	06/13/23 07:10	File ID:	7T33946.D
Init/Final Vol:	15 g / 10 mL	Prep Batch:	BAF0463	Analyzed:	06/14/23 18:58
Dilution:	1	Matrix:	Soil	Sequence:	SAF0291
Percent Solids:	77.45	Prep Method:	Microwave Extraction		

CAS NO.	COMPOUND	CONC. (mg/kg dry)	MDL	RL	Qual
57-74-9	Chlordane [2C]	0.0287	0.000746	0.00168	

ND, U - Indicates compound analyzed for but not detected
J - Indicates estimated value
B - Indicates compound found in associated blank
E - Concentration exceeds highest calibration standard

D - Indicates result is based on a dilution
H - Indicates a Hold Time violation
P - Greater than 25% diff. between 2 GC columns.
MDL - Minimum detection limit, **RL** - Reporting limit

F-I

Quantitation Report (QT Reviewed)

Signal #1 : G:\HPCHEM\GCECD7\DATA\20230614\7T33946.D\ECD1A.CH Vial: 3
Signal #2 : G:\HPCHEM\GCECD7\DATA\20230614\7T33946.D\ECD2B.CH
Acq On : 14 Jun 2023 6:58 pm Operator: WD
Sample : 23E1425-22 Inst : HP G1530A
Misc : Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Jun 15 12:14 2023 Quant Results File: 80810607.RES

Quant Method : G:\HPCHEM\G...\80810607.M (Chemstation Integrator)
Title : Pesticides by Method SW-846 8081B
Last Update : Thu Jun 15 11:19:26 2023
Response via : Initial Calibration
DataAcq Meth : RUNPEST.M

Volume Inj. : 2ul
Signal #1 Phase : RTx-50 Signal #2 Phase: RTx-CLPesticides II
Signal #1 Info : 30M x 0.53mm x 0. Signal #2 Info : 30M x 0.53mm x 0.42um

	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/kg	ug/kg
	Internal Standards						
1) I	1-Bromo-2-nitrob	2.81	3.07	20830.2E6	8669.7E6	400.000	400.000
25) I	1-Bromo-2-nitrob	2.81	3.07	20830.2E6	8669.7E6	400.000	400.000
	System Monitoring Compounds						
2) S	TCMX	3.73	4.47	2419.6E6	992.1E6	53.202	55.118
	Spiked Amount 50.000	Range 43 - 129		Recovery =		106.40%	110.24%
22) S	Decachlorobiphen	13.43	15.47	987.0E6	487.0E6	28.058m	36.911m#
	Spiked Amount 50.000	Range 42 - 136		Recovery =		56.12%	73.82%
	Target Compounds						
11)	4,4'-DDE	8.49	9.99	568.6E6	121.3E6	9.251m	6.368m#
14)	4,4'-DDD	9.47f	10.96f	806.0E6	326.2E6	18.702m	25.868m#
16) M	4,4'-DDT	10.05	11.54	157.0E6	129.6E6	3.770m	10.735m#
23) L1	Chlordane (gamma	8.06	9.42	1190.6E6	313.0E6	18.524m	11.689m#
24) L1	Chlordane (alpha	8.29f	9.69	4405.4E6	464.8E6	69.215m	21.622m#
	Sum Chlordane (gamma)			5596.0E6	777.9E6	87.739	33.310
	Average Chlordane (gamma)					43.870	16.655
	Sum Toxaphene (1)			0	0	N.D.	N.D.
	Average Toxaphene (1)					0.000	0.000

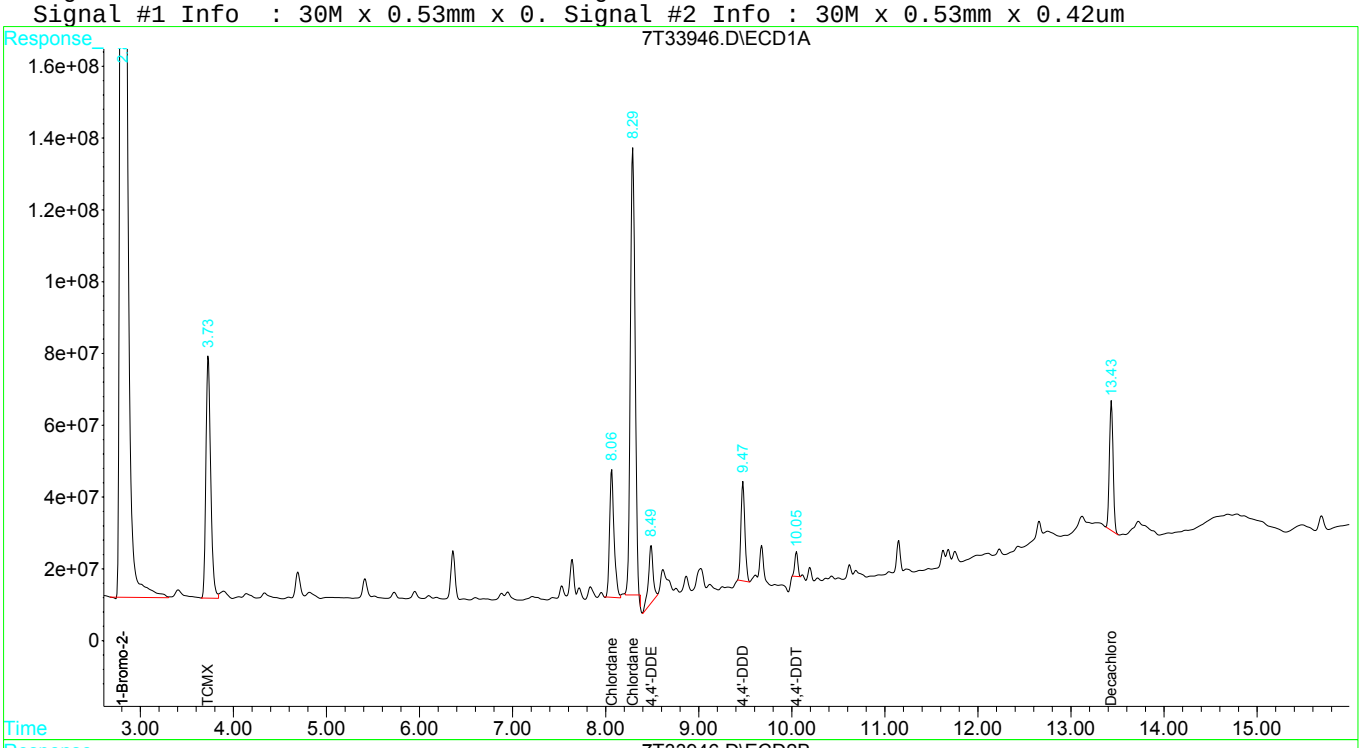
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7T33946.D 80810607.M Thu Jun 15 13:23:41 2023 SS

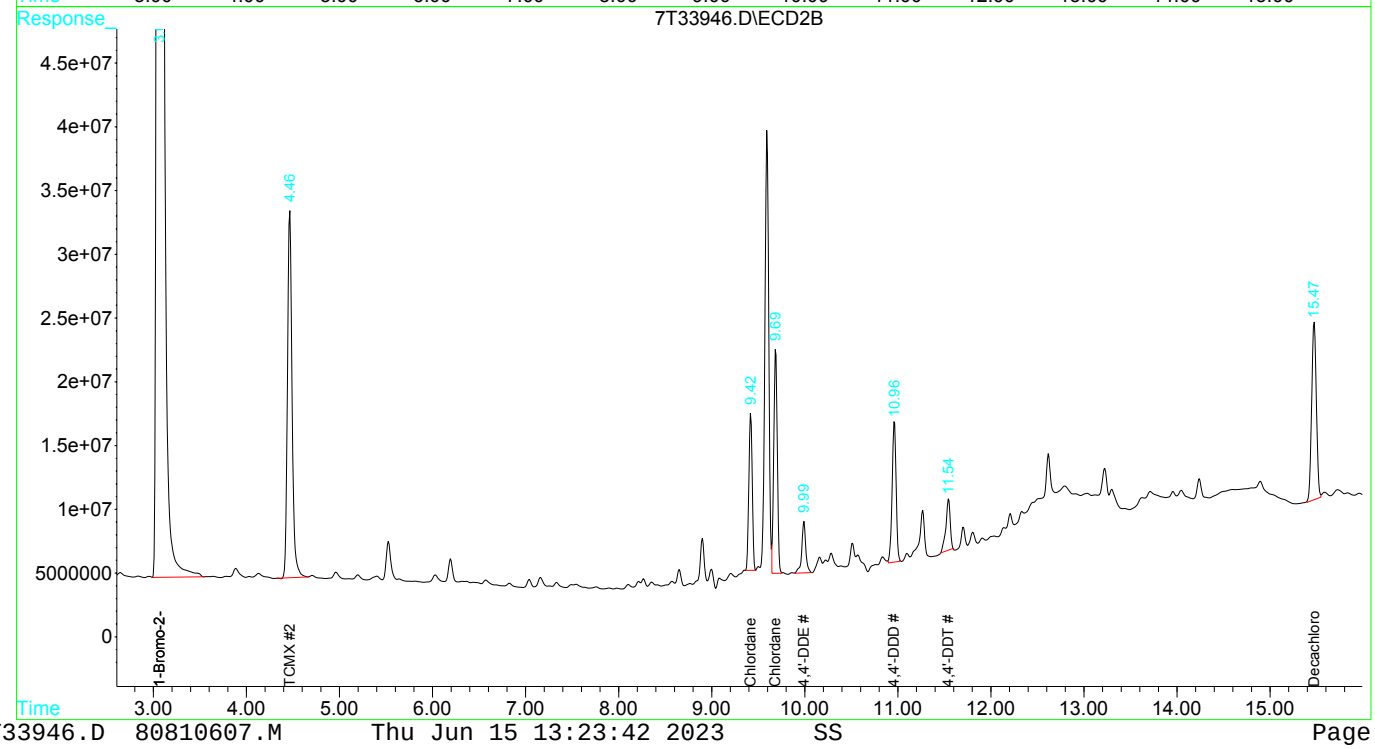
Quantitation Report (QT Reviewed)

Signal #1 : G:\HPCHEM\GCECD7\DATA\20230614\7T33946.D\ECD1A.CH Vial: 3
Signal #2 : G:\HPCHEM\GCECD7\DATA\20230614\7T33946.D\ECD2B.CH
Acq On : 14 Jun 2023 6:58 pm Operator: WD
Sample : 23E1425-22 Inst : HP G1530A
Misc : Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Jun 15 12:14 2023 Quant Results File: 80810607.RES

Quant Method : G:\HPCHEM\G...\80810607.M (Chemstation Integrator)
Title : Pesticides by Method SW-846 8081B
Last Update : Thu Jun 15 11:19:26 2023
Response via : Multiple Level Calibration
DataAcq Meth : RUNPEST.M

Volume Inj. : 2ul
Signal #1 Phase : RTx-50 Signal #2 Phase: RTx-CLPesticides II
Signal #1 Info : 30M x 0.53mm x 0. Signal #2 Info : 30M x 0.53mm x 0.42um





SURROGATE RECOVERIES

Analysis Class: PESTICIDES

Matrix: Soil **Method:** SW 846 8081B

Pesticides

Lab Number	File ID	TCMX	DCB	TCMX[2C]	DCB[2C]
23E1425-01	7T33884.D	79.2	173 *	84.0	719 *
23E1425-02	7T33885.D	87.8	49.0	91.5	155 *
23E1425-03	7T33886.D	73.6	71.5	75.6	100
23E1425-04	7T33887.D	98.9	69.1	102	70.8
23E1425-08	7T33891.D	112	76.1	118	93.5
23E1425-09RE1	9T01102.D	74.8	83.2	87.2	146 *
23E1425-10	7T33927.D	85.6	51.7	86.8	64.8
23E1425-19	7T33945.D	91.2	45.7	93.2	60.2
23E1425-22	7T33946.D	106	56.1	110	73.8
BAF0218-BLK1	9T01026.D	84.7	57.3	89.5	69.9
BAF0218-BS1	9T01027.D	82.6	57.4	82.2	70.8
BAF0218-MS1	7T33893.D	59.3	85.1	59.9	46.9
BAF0218-MSD1	7T33894.D	86.0	137 *	87.7	62.7
BAF0463-BLK1	9T01121.D	67.2	26.0 *	80.2	50.2
BAF0463-BS1	9T01122.D	93.1	45.9	96.1	61.9
BAF0463-MS1	9T01161.D	45.5	109	55.7	233 *
BAF0463-MSD1	9T01162.D	41.4 *	38.4 *	53.3	75.0

Surrogate Limits

Acronym	Lo Limit	Hi Limit	Analyte
TCMX	30	150	Tetrachloro-m-xylene
DCB	30	150	Decachlorobiphenyl
TCMX[2C]	30	150	Tetrachloro-m-xylene [2C]
DCB[2C]	30	150	Decachlorobiphenyl [2C]

F-II

* - Outside of QC Limits

SURROGATE RECOVERIES

Analysis Class: PESTICIDES

Matrix: Water **Method:** SW 846 1312

SPLP Pesticides

Lab Number	File ID	TCMX	DCB	TCMX[2C]	DCB[2C]
23E1425-05	9T01240.D	85.2	78.0	103	76.9
23E1425-06	9T01241.D	84.4	81.7	89.2	78.0
23E1425-07	9T01242.D	92.8	93.1	96.8	86.9
BAC0149-BLK4	9T01230.D	94.0	88.4	91.7	87.5
BAC0149-BS4	9T01231.D	78.3	84.4	78.1	85.4
BAC0149-MRL1	7T33344.D	104	62.8	96.0	62.2
BAC0149-MRL2	7T33345.D	106	51.8	100	53.1
BAC0149-MRL4	7T33321.D	77.0	74.1	75.4	72.4
BAC0149-MRL5	7T33322.D	79.6	62.5	78.8	59.7
BAC0149-MS1	7T33334.D	67.5	80.9	72.5	101
BAC0149-MSD1	7T33335.D	68.7	85.7	73.9	78.8

Surrogate Limits

Acronym	Lo Limit	Hi Limit	Analyte
TCMX	30	150	Tetrachloro-m-xylene
DCB	30	150	Decachlorobiphenyl
TCMX[2C]	30	150	Tetrachloro-m-xylene [2C]
DCB[2C]	30	150	Decachlorobiphenyl [2C]

F-II

* - Outside of QC Limits

Batch BAF0218 **Method: SW 846 8081B** **Prepared: 06/06/2023**

BAF0218-BS1 **Source:**

Analyte	Result	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
4,4'-DDD	0.0316	mg/kg wet	0.0333		94.9	91.1-141		
4,4'-DDE	0.0319	mg/kg wet	0.0333		95.8*	98.2-139		
4,4'-DDT	0.0388	mg/kg wet	0.0333		116	23.3-144		
Aldrin	0.0295	mg/kg wet	0.0333		88.4	75-130		
alpha-BHC	0.0274	mg/kg wet	0.0333		82.1	74.3-132		
beta-BHC	0.0285	mg/kg wet	0.0333		85.6	76.9-128		
Chlordane	0.0609	mg/kg wet	0.0667		91.3	70-130		
delta-BHC	0.0280	mg/kg wet	0.0333		84.1	61-155		
Dieldrin	0.0290	mg/kg wet	0.0333		87.1	74.9-130		
Endosulfan I	0.0314	mg/kg wet	0.0333		94.2	60.8-126		
Endosulfan II	0.0202	mg/kg wet	0.0333		60.6*	72.7-125		
Endosulfan sulfate	0.0335	mg/kg wet	0.0333		101	63.7-128		
Endrin	0.0322	mg/kg wet	0.0333		96.5	77.7-141		
Endrin aldehyde	0.0271	mg/kg wet	0.0333		81.4	57.7-113		
Endrin ketone	0.0327	mg/kg wet	0.0333		98.1	64.1-133		
gamma-BHC (Lindane)	0.0304	mg/kg wet	0.0333		91.2	74-133		
Heptachlor	0.0320	mg/kg wet	0.0333		96.1	74.4-132		
Heptachlor Epoxide	0.0311	mg/kg wet	0.0333		93.4	75.2-127		
Methoxychlor	0.0470	mg/kg wet	0.0333		141	37.4-147		

* - Outside of QC Limits J - Result is between the MDL and RL for an Analysis reported to an RL

F-III NC - Outside the recovery criteria but Spike Amount <1/4 amount found in Source Sample

Batch BAF0218 (cont.) **Method: SW 846 8081B** **Prepared: 06/06/2023**

BAF0218-MS1 **Source:** 23E1416-14

Analyte	Result	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
4,4'-DDD	0.0403	mg/kg dry	0.0392	ND	103	56.4-168		
4,4'-DDE	0.0230	mg/kg dry	0.0392	ND	58.7*	67.4-153		
4,4'-DDT	0.00956	mg/kg dry	0.0392	ND	24.4	15-117		
Aldrin	0.0226	mg/kg dry	0.0392	ND	57.6	49.4-130		
alpha-BHC	0.0243	mg/kg dry	0.0392	ND	62.1	48.9-139		
beta-BHC	0.0222	mg/kg dry	0.0392	ND	56.7	43.1-140		
Chlordane	0.0479	mg/kg dry	0.0783	ND	61.2	60-140		
delta-BHC	0.0236	mg/kg dry	0.0392	ND	60.2	36.1-164		
Dieldrin	0.0403	mg/kg dry	0.0392	ND	103	55.1-122		
Endosulfan I	0.0325	mg/kg dry	0.0392	ND	82.9	42.1-110		
Endosulfan II	0.0271	mg/kg dry	0.0392	ND	69.1	46.9-119		
Endosulfan sulfate	0.0121	mg/kg dry	0.0392	ND	31.0	24.6-139		
Endrin	0.0223	mg/kg dry	0.0392	ND	57.0	40.4-139		
Endrin aldehyde	0.0321	mg/kg dry	0.0392	ND	82.0	36.3-126		
Endrin ketone	0.0329	mg/kg dry	0.0392	ND	83.9	15-149		
gamma-BHC (Lindane)	0.0233	mg/kg dry	0.0392	ND	59.5	32.3-140		
Heptachlor	0.0202	mg/kg dry	0.0392	ND	51.5	15-147		
Heptachlor Epoxide	0.0220	mg/kg dry	0.0392	ND	56.1	49-121		
Methoxychlor	0.0291	mg/kg dry	0.0392	ND	74.2	15-122		

* - Outside of QC Limits J - Result is between the MDL and RL for an Analysis reported to an RL

NC - Outside the recovery criteria but Spike Amount <1/4 amount found in Source Sample

F-III

Batch BAF0218 (cont.) **Method: SW 846 8081B** **Prepared: 06/06/2023**

BAF0218-MSD1 **Source:** 23E1416-14

Analyte	Result	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
4,4'-DDD	0.0562	mg/kg dry	0.0392	ND	143	56.4-168	32.9*	30
4,4'-DDE	0.0318	mg/kg dry	0.0392	ND	81.2	67.4-153	32.2*	30
4,4'-DDT	0.0116	mg/kg dry	0.0392	ND	29.7	15-117	19.6	30
Aldrin	0.0312	mg/kg dry	0.0392	ND	79.6	49.4-130	32.1*	30
alpha-BHC	0.0353	mg/kg dry	0.0392	ND	90.2	48.9-139	36.8*	30
beta-BHC	0.0314	mg/kg dry	0.0392	ND	80.0	43.1-140	34.1*	30
Chlordane	0.0682	mg/kg dry	0.0783	ND	87.1	60-140	35.0*	30
delta-BHC	0.0334	mg/kg dry	0.0392	ND	85.3	36.1-164	34.5*	30
Dieldrin	0.0432	mg/kg dry	0.0392	ND	110	55.1-122	7.00	30
Endosulfan I	0.0428	mg/kg dry	0.0392	ND	109	42.1-110	27.4	30
Endosulfan II	0.0388	mg/kg dry	0.0392	ND	99.1	46.9-119	35.6*	30
Endosulfan sulfate	0.00859	mg/kg dry	0.0392	ND	21.9*	24.6-139	34.2*	30
Endrin	0.0305	mg/kg dry	0.0392	ND	77.8	40.4-139	31.0*	30
Endrin aldehyde	0.0409	mg/kg dry	0.0392	ND	104	36.3-126	23.9	30
Endrin ketone	0.0446	mg/kg dry	0.0392	ND	114	15-149	30.3*	30
gamma-BHC (Lindane)	0.0331	mg/kg dry	0.0392	ND	84.5	32.3-140	34.6*	30
Heptachlor	0.0266	mg/kg dry	0.0392	ND	68.0	15-147	27.5	30
Heptachlor Epoxide	0.0317	mg/kg dry	0.0392	ND	80.9	49-121	36.1*	30
Methoxychlor	0.0286	mg/kg dry	0.0392	ND	72.9	15-122	1.74	30

* - Outside of QC Limits J - Result is between the MDL and RL for an Analysis reported to an RL

NC - Outside the recovery criteria but Spike Amount <1/4 amount found in Source Sample

F-III

Batch BAF0463 **Method: SW 846 8081B** **Prepared: 06/13/2023**

BAF0463-BS1 **Source:**

Analyte	Result	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
4,4'-DDD	0.0358	mg/kg wet	0.0333		107	91.1-141		
4,4'-DDE	0.0352	mg/kg wet	0.0333		106	98.2-139		
4,4'-DDT	0.0463	mg/kg wet	0.0333		139	23.3-144		
Aldrin	0.0334	mg/kg wet	0.0333		100	75-130		
alpha-BHC	0.0315	mg/kg wet	0.0333		94.4	74.3-132		
beta-BHC	0.0253	mg/kg wet	0.0333		75.8*	76.9-128		
Chlordane	0.0679	mg/kg wet	0.0667		102	70-130		
delta-BHC	0.0328	mg/kg wet	0.0333		98.5	61-155		
Dieldrin	0.0334	mg/kg wet	0.0333		100	74.9-130		
Endosulfan I	0.0334	mg/kg wet	0.0333		100	60.8-126		
Endosulfan II	0.0352	mg/kg wet	0.0333		106	72.7-125		
Endosulfan sulfate	0.0386	mg/kg wet	0.0333		116	63.7-128		
Endrin	0.0371	mg/kg wet	0.0333		111	77.7-141		
Endrin aldehyde	0.0278	mg/kg wet	0.0333		83.4	57.7-113		
Endrin ketone	0.0370	mg/kg wet	0.0333		111	64.1-133		
gamma-BHC (Lindane)	0.0347	mg/kg wet	0.0333		104	74-133		
Heptachlor	0.0372	mg/kg wet	0.0333		112	74.4-132		
Heptachlor Epoxide	0.0328	mg/kg wet	0.0333		98.3	75.2-127		
Methoxychlor	0.0612	mg/kg wet	0.0333		184*	37.4-147		

* - Outside of QC Limits J - Result is between the MDL and RL for an Analysis reported to an RL

F-III NC - Outside the recovery criteria but Spike Amount <1/4 amount found in Source Sample

Batch BAF0463 (cont.) **Method: SW 846 8081B** **Prepared: 06/13/2023**

BAF0463-MS1 **Source:** 23F0508-01

Analyte	Result	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
4,4'-DDD	0.00938	mg/kg dry	0.0366	0.00870	1.86*	56.4-168		
4,4'-DDE	0.0119	mg/kg dry	0.0366	0.0220	-27.7*	67.4-153		
4,4'-DDT	0.0115	mg/kg dry	0.0366	0.00144	27.6	15-117		
Aldrin	0.0172	mg/kg dry	0.0366	0.0130	11.6*	49.4-130		
alpha-BHC	0.0184	mg/kg dry	0.0366	ND	50.3	48.9-139		
beta-BHC	0.00542	mg/kg dry	0.0366	ND	14.8*	43.1-140		
Chlordane	0.0400	mg/kg dry	0.0732	0.0931	-72.5*	60-140		
delta-BHC	0.00971	mg/kg dry	0.0366	ND	26.5*	36.1-164		
Dieldrin	0.0280	mg/kg dry	0.0366	0.0582	-82.7*	55.1-122		
Endosulfan I	0.00280	mg/kg dry	0.0366	ND	7.66*	42.1-110		
Endosulfan II	0.00385	mg/kg dry	0.0366	ND	10.5*	46.9-119		
Endosulfan sulfate	ND	mg/kg dry	0.0366	ND	*	24.6-139		
Endrin	0.0133	mg/kg dry	0.0366	ND	36.4*	40.4-139		
Endrin aldehyde	0.00430	mg/kg dry	0.0366	ND	11.8*	36.3-126		
Endrin ketone	0.00471	mg/kg dry	0.0366	ND	12.9*	15-149		
gamma-BHC (Lindane)	0.00605	mg/kg dry	0.0366	ND	16.5*	32.3-140		
Heptachlor	0.00653	mg/kg dry	0.0366	ND	17.8	15-147		
Heptachlor Epoxide	0.00463	mg/kg dry	0.0366	ND	12.6*	49-121		
Methoxychlor	0.00326	mg/kg dry	0.0366	ND	8.90*	15-122		

* - Outside of QC Limits J - Result is between the MDL and RL for an Analysis reported to an RL

F-III NC - Outside the recovery criteria but Spike Amount <1/4 amount found in Source Sample

Batch BAF0463 (cont.) **Method: SW 846 8081B** **Prepared: 06/13/2023**

BAF0463-MSD1 **Source:** 23F0508-01

Analyte	Result	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
4,4'-DDD	0.00831	mg/kg dry	0.0366	0.00870	-1.06*	56.4-168	12.1	30
4,4'-DDE	0.0121	mg/kg dry	0.0366	0.0220	-27.2*	67.4-153	1.53	30
4,4'-DDT	0.0105	mg/kg dry	0.0366	0.00144	24.8	15-117	9.22	30
Aldrin	0.0160	mg/kg dry	0.0366	0.0130	8.36*	49.4-130	7.06	30
alpha-BHC	0.0869	mg/kg dry	0.0366	ND	237*	48.9-139	130*	30
beta-BHC	0.00239	mg/kg dry	0.0366	ND	6.52*	43.1-140	77.7*	30
Chlordane	0.0417	mg/kg dry	0.0732	0.0931	-70.2*	60-140	4.07	30
delta-BHC	0.00745	mg/kg dry	0.0366	ND	20.3*	36.1-164	26.4	30
Dieldrin	0.0255	mg/kg dry	0.0366	0.0582	-89.6*	55.1-122	9.43	30
Endosulfan I	0.00384	mg/kg dry	0.0366	ND	10.5*	42.1-110	31.3*	30
Endosulfan II	0.00378	mg/kg dry	0.0366	ND	10.3*	46.9-119	1.92	30
Endosulfan sulfate	0.00146	mg/kg dry	0.0366	ND	4.00*	24.6-139		30
Endrin	0.0118	mg/kg dry	0.0366	ND	32.2*	40.4-139	12.4	30
Endrin aldehyde	0.00660	mg/kg dry	0.0366	ND	18.0*	36.3-126	42.1*	30
Endrin ketone	0.00299	mg/kg dry	0.0366	ND	8.18*	15-149	44.5*	30
gamma-BHC (Lindane)	0.00315	mg/kg dry	0.0366	ND	8.60*	32.3-140	63.2*	30
Heptachlor	0.00467	mg/kg dry	0.0366	ND	12.8*	15-147	33.2*	30
Heptachlor Epoxide	0.00412	mg/kg dry	0.0366	ND	11.3*	49-121	11.5	30
Methoxychlor	0.00354	mg/kg dry	0.0366	ND	9.68*	15-122	8.40	30

* - Outside of QC Limits J - Result is between the MDL and RL for an Analysis reported to an RL

F-III NC - Outside the recovery criteria but Spike Amount <1/4 amount found in Source Sample

Batch BAC0149 **Method: SW 846 1312** **Prepared: 06/20/2023**

BAC0149-BS4 **Source:**

Analyte	Result	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Dieldrin	0.0354	ug/L	0.0500		70.8	53-134		

Batch BAC0149 (cont.) **Method: SW 846 1312** **Prepared: 03/15/2023**

BAC0149-MS1 **Source:** 23B0777-01

Analyte	Result	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Dieldrin	0.0591	ug/L	0.0500	ND	118	60-140		

Batch BAC0149 (cont.) **Method: SW 846 1312** **Prepared: 03/15/2023**

BAC0149-MSD1 **Source:** 23B0777-01

Analyte	Result	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Dieldrin	0.0634	ug/L	0.0500	ND	127	60-140	7.02	25

* - Outside of QC Limits J - Result is between the MDL and RL for an Analysis reported to an RL

F-III NC - Outside the recovery criteria but Spike Amount <1/4 amount found in Source Sample

METHOD BLANK SUMMARY

Batch ID: **BAC0149**

Lab Number	Sample Id	Extraction Date	Analysis Date
BAC0149-MS1	MS1	03/15/2023	03/16/2023 23:19
BAC0149-MSD1	MSD1	03/15/2023	03/16/2023 23:46
BAC0149-MRL4	MRL4	03/15/2023	03/16/2023 17:21
BAC0149-MRL5	MRL5	03/15/2023	03/16/2023 17:49
BAC0149-MRL1	MRL1	03/16/2023	03/17/2023 18:37
BAC0149-MRL2	MRL2	03/16/2023	03/17/2023 19:04

Lab Number	Sample Id	Extraction Date	Analysis Date
BAC0149-BLK4	BLK4	06/20/2023	06/21/2023 20:13
BAC0149-BS4	BS4	06/20/2023	06/21/2023 20:35
23E1425-05	F-13R	06/20/2023	06/21/2023 23:55
23E1425-06	F-15-3R	06/20/2023	06/22/2023 00:18
23E1425-07	F-5-2R	06/20/2023	06/22/2023 00:40

Batch ID: **BAF0218**

Lab Number	Sample Id	Extraction Date	Analysis Date
BAF0218-BLK1	BLK1	06/06/2023	06/08/2023 19:28
BAF0218-BS1	BS1	06/06/2023	06/08/2023 19:50
BAF0218-MS1	MS1	06/06/2023	06/10/2023 21:09
BAF0218-MSD1	MSD1	06/06/2023	06/10/2023 21:27
23E1425-01	T-3-1B	06/06/2023	06/10/2023 18:24
23E1425-02	T-3-2B	06/06/2023	06/10/2023 18:43
23E1425-03	T-3-3B	06/06/2023	06/10/2023 19:01
23E1425-04	T-3-4B	06/06/2023	06/10/2023 19:19
23E1425-08	TRENCH-6	06/06/2023	06/10/2023 20:33
23E1425-09RE1	TRENCH-7	06/06/2023	06/12/2023 18:35

Batch ID: **BAF0463**

Lab Number	Sample Id	Extraction Date	Analysis Date
BAF0463-BLK1	BLK1	06/13/2023	06/13/2023 17:58
BAF0463-BS1	BS1	06/13/2023	06/13/2023 18:20
BAF0463-MS1	MS1	06/13/2023	06/15/2023 00:27
BAF0463-MSD1	MSD1	06/13/2023	06/15/2023 00:49
23E1425-10	T-3-1C	06/13/2023	06/13/2023 19:52
23E1425-19	TRENCH-7A	06/13/2023	06/14/2023 18:40
23E1425-22	TRENCH-9	06/13/2023	06/14/2023 18:58

SURROGATE RT DRIFT REPORT

Analysis Class: PESTICIDES

Sequence :

		TCMX			DCB			TCMX[2C]			DCB[2C]		
Lab Number	File ID	RT	Ref RT	Drift	RT	Ref RT	Drift	RT	Ref RT	Drift	RT	Ref RT	Drift
BAF0463-MS1	9T01161.D	3.77			13.21			4.19			16.33		
BAF0463-MSD1	9T01162.D	3.77			13.21			4.19			16.33		

Sequence : SAC0343

		TCMX			DCB			TCMX[2C]			DCB[2C]		
Lab Number	File ID	RT	Ref RT	Drift	RT	Ref RT	Drift	RT	Ref RT	Drift	RT	Ref RT	Drift
BAC0149-MRL4	7T33321.D	4.32	4.33	-0.01	22.07	22.08	-0.01	5.42	5.42	0.00	23.51	23.51	0.00
BAC0149-MRL5	7T33322.D	4.32	4.33	-0.01	22.06	22.08	-0.02	5.42	5.42	0.00	23.5	23.51	-0.01
BAC0149-MS1	7T33334.D	4.33	4.33	0.00	22.07	22.08	-0.01	5.42	5.42	0.00	23.5	23.51	-0.01
BAC0149-MSD1	7T33335.D	4.33	4.33	0.00	22.06	22.08	-0.02	5.43	5.42	0.01	23.49	23.51	-0.02

Sequence : SAC0362

		TCMX			DCB			TCMX[2C]			DCB[2C]		
Lab Number	File ID	RT	Ref RT	Drift	RT	Ref RT	Drift	RT	Ref RT	Drift	RT	Ref RT	Drift
BAC0149-MRL1	7T33344.D	4.31			22.08			5.4			23.51		
BAC0149-MRL2	7T33345.D	4.31			22.08			5.4			23.51		

Sequence : SAF0176

		TCMX			DCB			TCMX[2C]			DCB[2C]		
Lab Number	File ID	RT	Ref RT	Drift	RT	Ref RT	Drift	RT	Ref RT	Drift	RT	Ref RT	Drift
BAF0218-BLK1	9T01026.D	3.83	3.77	0.06	13.27	13.22	0.05	4.24	4.2	0.04	16.36	16.35	0.01
BAF0218-BS1	9T01027.D	3.77	3.77	0.00	13.23	13.22	0.01	4.2	4.2	0.00	16.35	16.35	0.00

Sequence : SAF0209

		TCMX			DCB			TCMX[2C]			DCB[2C]		
Lab Number	File ID	RT	Ref RT	Drift	RT	Ref RT	Drift	RT	Ref RT	Drift	RT	Ref RT	Drift
23E1425-01	7T33884.D	3.73	3.73	0.00	13.42	13.44	-0.02	4.47	4.47	0.00	15.49	15.47	0.02
23E1425-02	7T33885.D	3.73	3.73	0.00	13.43	13.44	-0.01	4.46	4.47	-0.01	15.47	15.47	0.00
23E1425-03	7T33886.D	3.73	3.73	0.00	13.43	13.44	-0.01	4.47	4.47	0.00	15.48	15.47	0.01
23E1425-04	7T33887.D	3.73	3.73	0.00	13.43	13.44	-0.01	4.47	4.47	0.00	15.47	15.47	0.00
23E1425-08	7T33891.D	3.73	3.73	0.00	13.43	13.44	-0.01	4.46	4.47	-0.01	15.47	15.47	0.00
BAF0218-MS1	7T33893.D	3.73	3.73	0.00	13.43	13.44	-0.01	4.47	4.47	0.00	15.47	15.47	0.00
BAF0218-MSD1	7T33894.D	3.73	3.73	0.00	13.43	13.44	-0.01	4.47	4.47	0.00	15.47	15.47	0.00

Surrogate		Limit
TCMX	Tetrachloro-m-xylene	0.10
DCB	Decachlorobiphenyl	0.10
TCMX[2C]	Tetrachloro-m-xylene [2C]	0.10
DCB[2C]	Decachlorobiphenyl [2C]	0.10

DISS = Dissolved Analysis

F-V

SURROGATE RT DRIFT REPORT

Analysis Class: PESTICIDES

Sequence : SAF0245

		TCMX			DCB			TCMX[2C]			DCB[2C]		
Lab Number	File ID	RT	Ref RT	Drift	RT	Ref RT	Drift	RT	Ref RT	Drift	RT	Ref RT	Drift
23E1425-09RE1	9T01102.D	3.77	3.78	-0.01	13.21	13.22	-0.01	4.2	4.21	-0.01	16.34	16.34	0.00

Sequence : SAF0265

		TCMX			DCB			TCMX[2C]			DCB[2C]		
Lab Number	File ID	RT	Ref RT	Drift	RT	Ref RT	Drift	RT	Ref RT	Drift	RT	Ref RT	Drift
BAF0463-BLK1	9T01121.D	3.84	3.78	0.06	13.28	13.22	0.06	4.26	4.21	0.05	16.35	16.34	0.01
BAF0463-BS1	9T01122.D	3.78	3.78	0.00	13.22	13.22	0.00	4.2	4.21	-0.01	16.34	16.34	0.00

Sequence : SAF0272

		TCMX			DCB			TCMX[2C]			DCB[2C]		
Lab Number	File ID	RT	Ref RT	Drift	RT	Ref RT	Drift	RT	Ref RT	Drift	RT	Ref RT	Drift
23E1425-10	7T33927.D	3.74	3.74	0.00	13.44	13.44	0.00	4.47	4.48	-0.01	15.48	15.48	0.00

Sequence : SAF0291

		TCMX			DCB			TCMX[2C]			DCB[2C]		
Lab Number	File ID	RT	Ref RT	Drift	RT	Ref RT	Drift	RT	Ref RT	Drift	RT	Ref RT	Drift
23E1425-19	7T33945.D	3.73	3.73	0.00	13.43	13.44	-0.01	4.47	4.47	0.00	15.47	15.47	0.00
23E1425-22	7T33946.D	3.73	3.73	0.00	13.43	13.44	-0.01	4.47	4.47	0.00	15.47	15.47	0.00

Sequence : SAF0421

		TCMX			DCB			TCMX[2C]			DCB[2C]		
Lab Number	File ID	RT	Ref RT	Drift	RT	Ref RT	Drift	RT	Ref RT	Drift	RT	Ref RT	Drift
BAC0149-BLK4	9T01230.D	3.74	3.74	0.00	13.14	13.14	0.00	4.17	4.17	0.00	16.25	16.25	0.00
BAC0149-BS4	9T01231.D	3.74	3.74	0.00	13.14	13.14	0.00	4.17	4.17	0.00	16.25	16.25	0.00
23E1425-05	9T01240.D	3.74	3.74	0.00	13.14	13.14	0.00	4.17	4.17	0.00	16.25	16.25	0.00
23E1425-06	9T01241.D	3.74	3.74	0.00	13.13	13.14	-0.01	4.16	4.17	-0.01	16.25	16.25	0.00
23E1425-07	9T01242.D	3.74	3.74	0.00	13.13	13.14	-0.01	4.16	4.17	-0.01	16.25	16.25	0.00

Surrogate		Limit
TCMX	Tetrachloro-m-xylene	0.10
DCB	Decachlorobiphenyl	0.10
TCMX[2C]	Tetrachloro-m-xylene [2C]	0.10
DCB[2C]	Decachlorobiphenyl [2C]	0.10

DISS = Dissolved Analysis

F-V

Response Factor Report HP G1530A

Method : G:\HPCHEM\GCECD7\METHODS\80810307.M (Chemstation Integrator)
Title : Pesticides by Method SW-846 8081B
Last Update : Wed Mar 08 12:38:44 2023

Calibration Files
2 =7T33140.D 5 =7T33141.D 10 =7T33142.D
20 =7T33143.D 35 =7T33144.D 50 =7T33158.D

		Compound	2	5	10	20	35	50	Avg		%RSD
1)	I	1-Bromo-2-nitrobenzen	ISTD								
2)	S	TCMX	0.681	0.844	0.890	0.849	0.965	0.987	0.869	0	10.22
3)		alpha-BHC	1.071	1.194	1.373	1.318	1.647	1.648	1.427	0	14.24
4)	M	gamma-BHC (Lindane)	1.107	1.165	1.334	1.253	1.533	1.528	1.346	0	11.10
5)	M	Heptachlor	1.184	1.270	1.408	1.294	1.548	1.518	1.348	0	9.39
6)		beta-BHC	0.533	0.552	0.607	0.556	0.653	0.634	0.580	0	7.22
7)		delta-BHC	1.085	1.134	1.299	1.240	1.586	1.596	1.373	0	13.92
8)	M	Aldrin	1.193	1.148	1.285	1.200	1.461	1.450	1.290	0	8.72
9)		Heptachlor epoxide	1.078	1.148	1.263	1.160	1.383	1.354	1.207	0	9.04
10)		Endosulfan I	0.860	1.016	1.128	1.038	1.233	1.208	1.066	0	10.90
11)		4,4'-DDE	1.013	1.049	1.188	1.107	1.344	1.337	1.185	0	9.85
12)	M	Dieldrin	0.960	1.068	1.200	1.118	1.337	1.345	1.183	0	10.62
13)	M	Endrin	0.966	1.020	1.126	1.043	1.255	1.242	1.103	0	9.00
14)		4,4'-DDD	0.639	0.733	0.794	0.758	0.930	0.935	0.822	0	12.11
15)		Endosulfan II	0.664	0.866	0.979	0.929	1.122	1.110	0.954	0	14.46
16)	M	4,4'-DDT	0.541	0.672	0.772	0.733	0.915	0.924	0.794	0	16.08
17)		Endrin aldehyde	0.538	0.584	0.666	0.613	0.734	0.716	0.639	0	9.73
18)		Endosulfan sulfate	0.457	0.559	0.626	0.575	0.682	0.668	0.599	0	11.15
19)		Methoxychlor	0.254	0.292	0.326	0.304	0.365	0.361	0.325	0	11.07
20)		Mirex	0.572	0.530	0.602	0.551	0.614	0.558	0.550	0	7.63
21)		Endrin ketone	0.669	0.665	0.735	0.679	0.807	0.788	0.719	0	7.17
22)	S	Decachlorobiphenyl		0.760	0.720	0.668	0.737	0.677	0.662	0	11.84
23)	L1	Chlordane (gamma)	1.045	1.119	1.247	1.157	1.385	1.381	1.233	0	9.26
24)	L1	Chlordane (alpha)	1.039	1.141	1.271	1.165	1.389	1.366	1.225	0	9.04
25)	I	1-Bromo-2-nitrobenzen	ISTD								
26)	L2	Toxaphene (1)							0.532	0	0.00

Signal #2 Calibration Files
2 =7T33140.D 5 =7T33141.D 10 =7T33142.D
20 =7T33143.D 35 =7T33144.D 50 =

		Compound	2	5	10	20	35	50	Avg		%RSD
1)	I	1-Bromo-2-nitrobenzen	ISTD								
2)	S	TCMX	0.722	0.809	0.862	0.790	0.918	0.909	0.827	0	7.65
3)		alpha-BHC	0.994	1.144	1.284	1.250	1.533	1.574	1.363	0	15.01
4)	M	gamma-BHC (Lindane)	0.964	1.105	1.225	1.175	1.429	1.455	1.272	0	13.11
5)	M	Heptachlor	1.092	1.194	1.284	1.193	1.406	1.412	1.266	0	8.26
6)		beta-BHC	0.476	0.541	0.580	0.531	0.621	0.618	0.556	0	8.22
7)		delta-BHC	0.982	1.103	1.218	1.170	1.425	1.459	1.281	0	13.22
8)	M	Aldrin	0.965	1.083	1.191	1.128	1.346	1.365	1.204	0	10.81
9)		Heptachlor epoxide	0.949	1.103	1.179	1.089	1.265	1.266	1.137	0	8.71
10)		Endosulfan I	0.625	0.797	0.917	0.879	1.044	1.051	0.908	0	14.61
11)		4,4'-DDE	0.773	0.857	0.835	0.808	0.959	0.972	0.880	0	7.77
12)	M	Dieldrin	0.793	0.812	0.873	0.823	0.990	1.002	0.901	0	8.84
13)	M	Endrin	0.714	0.649	0.691	0.674	0.803	0.816	0.737	0	8.00
14)		4,4'-DDD	0.464	0.498	0.533	0.627	0.588	0.767	0.575	0	16.42
15)		Endosulfan II	0.639	0.565	0.623	0.668	0.614	0.703	0.628	0	8.19
16)	M	4,4'-DDT	0.371	0.439	0.566	0.479	0.600	0.646	0.551	0	17.75
17)		Endrin aldehyde	0.411	0.463	0.510	0.464	0.544	0.574	0.503	0	9.88
18)		Endosulfan sulfate	0.466	0.516	0.553	0.557	0.631	0.669	0.569	0	10.49
19)		Methoxychlor	0.207	0.265	0.257	0.244	0.306	0.307	0.277	0	13.18
20)		Mirex	0.487	0.416	0.439	0.421	0.469	0.486	0.442	0	6.93
21)		Endrin ketone	0.552	0.605	0.655	0.618	0.728	0.734	0.659	0	9.09
22)	S	Decachlorobiphenyl		0.600	0.627	0.566	0.642	0.627	0.588	0	7.20
23)	L1	Chlordane (gamma)	1.535	1.380	1.291	1.124	1.285	1.304	1.268	0	10.54
24)	L1	Chlordane (alpha)	0.659	0.866	1.007	0.965	1.145	1.159	1.001	0	15.77
25)	I	1-Bromo-2-nitrobenzen	ISTD								

(#) = Out of Range ### Number of calibration levels exceeded format ###

Response Factor Report HP G1530A

Method : G:\HPCHEM\GCECD7\METHODS\80810307.M (Chemstation Integrator)
Title : Pesticides by Method SW-846 8081B
Last Update : Wed Mar 08 12:38:44 2023

Calibration Files
2 =7T33140.D 5 =7T33141.D 10 =7T33142.D
20 =7T33143.D 35 =7T33144.D 50 =

Compound	2	5	10	20	35	50	Avg	%RSD
26) L2 Toxaphene (1)							0.436 0	0.00

(#) = Out of Range ### Number of calibration levels exceeded format ###

Compound List Report HP G1530A

Method : G:\HPCHEM\GCECD7\METHODS\80810307.M (Chemstation Integrator)
Title : Pesticides by Method SW-846 8081B
Last Update : Wed Mar 08 12:38:44 2023
Response via : Initial Calibration
Total Cpnds : 53

PK#	Type	Compound Name	Exp_RT	Rel_RT	Cal	A/H	ID
1	I	1-Bromo-2-nitrobenzene (A)	3.09	1.000	A	A	B
2	S	TCMX	4.32	1.399	A	A	B
3		alpha-BHC	5.64	1.825	A	A	B
4	M	gamma-BHC (Lindane)	6.56	2.125	A	A	B
5	M	Heptachlor	8.18	2.649	A	A	B
6		beta-BHC	6.87	2.223	A	A	B
7		delta-BHC	7.44	2.409	A	A	B
8	M	Aldrin	9.33	3.022	A	A	B
9		Heptachlor epoxide	12.17	3.939	A	A	B
10		Endosulfan I	14.13	4.576	A	A	B
11		4,4'-DDE	14.30	4.630	A	A	B
12	M	Dieldrin	15.50	5.017	A	A	B
13	M	Endrin	16.76	5.426	A	A	B
14		4,4'-DDD	17.83	5.773	A	A	B
15		Endosulfan II	18.13	5.869	A	A	B
16	M	4,4'-DDT	19.04	6.164	A	A	B
17		Endrin aldehyde	19.57	6.338	A	A	B
18		Endosulfan sulfate	20.38	6.600	A	A	B
19		Methoxychlor	20.23	6.549	A	A	B
20		Mirex	20.12	6.514	A	A	B
21		Endrin ketone	20.76	6.722	A	A	B
22	S	Decachlorobiphenyl	22.07	7.146	A	A	B
23	L1	Chlordane (gamma)	12.80	4.144	A	A	B
24	L1	Chlordane (alpha)	13.51	4.373	A	A	B
25	I	1-Bromo-2-nitrobenzene (B)	3.09	1.000	A	A	B
26	L2	Toxaphene (1)	20.23	6.549	A	A	R
27		Signal #2	35.00	11.332	A	A	B
28	I	1-Bromo-2-nitrobenzene (A) #2	3.43	1.000	A	A	B
29	S	TCMX #2	5.42	1.579	A	A	B
30		alpha-BHC #2	7.46	2.173	A	A	B
31	M	gamma-BHC (Lindane) #2	8.92	2.600	A	A	B
32	M	Heptachlor #2	10.95	3.190	A	A	B
33		beta-BHC #2	9.35	2.723	A	A	B
34		delta-BHC #2	10.71	3.122	A	A	B
35	M	Aldrin #2	12.55	3.658	A	A	B
36		Heptachlor epoxide #2	15.90	4.635	A	A	B
37		Endosulfan I #2	18.22	5.310	A	A	B
38		4,4'-DDE #2	19.03	5.544	A	A	B
39	M	Dieldrin #2	19.24	5.608	A	A	B
40	M	Endrin #2	19.91	5.802	A	A	B
41		4,4'-DDD #2	20.27	5.906	A	A	B
42		Endosulfan II #2	20.30	5.915	A	A	B
43	M	4,4'-DDT #2	20.72	6.037	A	A	B
44		Endrin aldehyde #2	20.82	6.067	A	A	B
45		Endosulfan sulfate #2	21.17	6.169	A	A	B
46		Methoxychlor #2	21.56	6.282	A	A	B
47		Mirex #2	21.72	6.330	A	A	B
48		Endrin ketone #2	21.79	6.349	A	A	B
49	S	Decachlorobiphenyl #2	23.51	6.850	A	A	B
50	L1	Chlordane (gamma) #2	17.09	4.979	A	A	B
51	L1	Chlordane (alpha) #2	18.04	5.256	A	A	B
52	I	1-Bromo-2-nitrobenzene (B) #2	3.43	1.000	A	A	B
53	L2	Toxaphene (1) #2	20.49	5.971	A	A	R

Cal A = Average L = Linear LO = Linear w/origin Q = Quad QO = Quad w/origin
A/H = Area or Height
ID R = R.T. B = R.T. & Q Q = Qvalue L = Largest A = All

80810307.M Wed Mar 08 15:02:14 2023 SS

Response Factor Report GCECD-9

Method : G:\HPCHEM\GCECD9\METHODS\80810606.M (Chemstation Integrator)
Title : Pesticides by Method SW-846 8081B
Last Update : Tue Jun 06 16:57:33 2023

Calibration Files
2 =9T00943.D 5 =9T00944.D 10 =9T00945.D
20 =9T00946.D 35 =9T00947.D 50 =9T00948.D

		Compound	2	5	10	20	35	50	Avg		%RSD
1)	I	1-Bromo-2-nitrobenzen	ISTD								
2)	S	TCMX	0.827	0.791	0.860	0.861	0.950	0.898	0.899	0	9.28
3)		alpha-BHC	1.195	1.046	1.292	1.351	1.602	1.543	1.479	0	19.28
4)	M	gamma-BHC (Lindane)	1.120	0.968	1.178	1.222	1.434	1.381	1.331	0	17.52
5)	M	Heptachlor	1.100	0.919	1.072	1.090	1.267	1.208	1.179	0	13.46
6)		beta-BHC	0.560	0.468	0.538	0.525	0.608	0.572	0.566	0	9.74
7)		delta-BHC	0.884	0.802	1.002	1.089	1.346	1.314	1.221	0	24.23
8)	M	Aldrin	1.194	0.969	1.181	1.198	1.391	1.321	1.289	0	14.15
9)		Heptachlor epoxide	1.136	0.931	1.105	1.103	1.202	1.136	1.148	0	10.51
10)		Endosulfan I	0.939	0.838	0.994	1.064	1.082	1.016	1.057	0	13.28
11)		4,4'-DDE	0.851	0.712	0.872	0.882	1.006	0.980	0.982	0	18.32
12)	M	Dieldrin	1.001	0.852	1.005	1.036	1.209	1.156	1.130	0	16.01
13)	M	Endrin	0.899	0.709	0.834	0.814	0.956	0.892	0.892	0	12.07
14)		4,4'-DDD	0.758	0.539	0.660	0.685	0.802	0.777	0.774	0	18.25
15)		Endosulfan II	0.837	0.666	0.797	0.797	0.897	0.819	0.855	0	13.06
16)	M	4,4'-DDT	0.486	0.423	0.458	0.481	0.584	0.579	0.583	0	24.22
17)		Endrin aldehyde	0.848	0.715	0.778	0.773	0.847	0.810	0.823	0	8.78
18)		Endosulfan sulfate	0.684	0.574	0.671	0.688	0.779	0.758	0.744	0	14.35
19)		Methoxychlor	0.232	0.188	0.222	0.210	0.261	0.253	0.250	0	16.80
20)		Mirex	0.894	0.708	0.774	0.736	0.779	0.735	0.769	0	8.43
21)		Endrin ketone	0.931	0.743	0.888	0.874	0.983	0.946	0.945	0	12.14
22)	S	Decachlorobiphenyl		0.887	1.022	0.960	1.042	1.042	1.029	0	9.24
23)	L1	Chlordane (gamma)	1.028	0.866	1.084	1.076	1.188	1.141	1.155	0	15.35
24)	L1	Chlordane (alpha)	1.063	0.892	1.046	1.043	1.160	1.106	1.126	0	13.19
25)	I	1-Bromo-2-nitrobenzen	ISTD								
26)	L2	Toxaphene (1)							0.000	0	-1.00

Signal #2 Calibration Files
2 =9T00943C.D 5 =9T00944.D 10 =9T00945.D
20 =9T00946.D 35 =9T00947.D 50 =9T00948.D

		Compound	2	5	10	20	35	50	Avg		%RSD
1)	I	1-Bromo-2-nitrobenzen	ISTD								
2)	S	TCMX	0.769	0.667	0.720	0.671	0.748	0.759	0.758	0	10.37
3)		alpha-BHC	1.050	0.940	1.168	1.240	1.484	1.454	1.380	0	22.40
4)	M	gamma-BHC (Lindane)	0.964	0.797	1.024	1.057	1.240	1.210	1.164	0	19.83
5)	M	Heptachlor	0.968	0.875	1.038	1.076	1.261	1.230	1.190	0	18.92
6)		beta-BHC	0.346	0.392	0.473	0.490	0.599	0.572	0.529	0	21.72
7)		delta-BHC	0.569	0.579	0.646	0.667	0.821	0.809	0.787	0	24.52
8)	M	Aldrin	1.086	0.896	1.102	1.138	1.328	1.275	1.238	0	17.01
9)		Heptachlor epoxide	1.082	0.833	0.986	0.996	1.152	1.098	1.090	0	13.69
10)		Endosulfan I	0.715	0.891	0.885	0.914	1.032	0.977	0.971	0	15.15
11)		4,4'-DDE	1.015	0.779	0.718	0.788	0.918	0.875	0.902	0	14.46
12)	M	Dieldrin	0.930	0.819	0.873	0.933	1.110	1.067	1.073	0	20.09
13)	M	Endrin	0.752	0.625	0.706	0.683	0.779	0.736	0.757	0	12.56
14)		4,4'-DDD	0.477	0.415	0.476	0.424	0.487	0.487	0.499	0	14.98
15)		Endosulfan II	0.717	0.631	0.700	0.725	0.814	0.814	0.813	0	17.62
16)	M	4,4'-DDT	0.233	0.165	0.201	0.199	0.239	0.266	0.271	0	34.56
17)		Endrin aldehyde	0.755	0.577	0.623	0.586	0.649	0.677	0.705	0	16.67
18)		Endosulfan sulfate	0.493	0.381	0.449	0.446	0.524	0.505	0.515	0	18.28
19)		Methoxychlor	0.105	0.084	0.101	0.100	0.123	0.111	0.113	0	17.15
20)		Mirex	0.607	0.454	0.501	0.460	0.482	0.445	0.481	0	11.50
21)		Endrin ketone	0.923	0.705	0.835	0.834	0.979	0.944	0.934	0	14.72
22)	S	Decachlorobiphenyl		0.791	0.876	0.775	0.868	0.818	0.844	0	7.75
23)	L1	Chlordane (gamma)	0.855	0.801	0.845	0.866	1.035	0.990	0.978	0	15.83
24)	L1	Chlordane (alpha)	0.987	0.756	0.781	0.862	0.992	0.947	0.952	0	14.90
25)	I	1-Bromo-2-nitrobenzen	ISTD								

(#) = Out of Range ### Number of calibration levels exceeded format ###

Response Factor Report GCECD-9

Method : G:\HPCHEM\GCECD9\METHODS\80810606.M (Chemstation Integrator)
Title : Pesticides by Method SW-846 8081B
Last Update : Tue Jun 06 16:57:33 2023

Calibration Files
2 =9T00943C.D 5 =9T00944.D 10 =9T00945.D
20 =9T00946.D 35 =9T00947.D 50 =9T00948.D

Compound	2	5	10	20	35	50	Avg	%RSD
26) L2 Toxaphene (1)							0.000 0	-1.00

(#) = Out of Range ### Number of calibration levels exceeded format ###

Compound List Report GCECD-9

Method : G:\HPCHEM\GCECD9\METHODS\80810606.M (Chemstation Integrator)
Title : Pesticides by Method SW-846 8081B
Last Update : Tue Jun 06 16:57:33 2023
Response via : Initial Calibration
Total Cpnds : 53

PK#	Type	Compound Name	Exp_RT	Rel_RT	Cal	A/H	ID
1	I	1-Bromo-2-nitrobenzene (A)	3.06	1.000	A	A	B
2	S	TCMX	3.77	1.233	A	A	B
3		alpha-BHC	4.36	1.423	QO	A	B
4	M	gamma-BHC (Lindane)	4.71	1.539	A	A	B
5	M	Heptachlor	5.28	1.725	A	A	B
6		beta-BHC	4.80	1.570	A	A	B
7		delta-BHC	5.03	1.642	Q	A	B
8	M	Aldrin	5.67	1.852	A	A	B
9		Heptachlor epoxide	6.48	2.118	A	A	B
10		Endosulfan I	7.06	2.307	A	A	B
11		4,4'-DDE	6.94	2.267	A	A	B
12	M	Dieldrin	7.43	2.427	A	A	B
13	M	Endrin	7.82	2.556	A	A	B
14		4,4'-DDD	7.91	2.585	A	A	B
15		Endosulfan II	8.23	2.688	A	A	B
16	M	4,4'-DDT	8.43	2.754	A	A	B
17		Endrin aldehyde	9.04	2.953	A	A	B
18		Endosulfan sulfate	9.97	3.257	A	A	B
19		Methoxychlor	9.40	3.072	A	A	B
20		Mirex	9.71	3.174	A	A	B
21		Endrin ketone	10.61	3.466	A	A	B
22	S	Decachlorobiphenyl	13.23	4.321	A	A	B
23	L1	Chlordane (gamma)	6.66	2.175	A	A	B
24	L1	Chlordane (alpha)	6.85	2.238	A	A	B
25	I	1-Bromo-2-nitrobenzene (B)	3.06	1.000	A	A	B
26	L2	Toxaphene (1)	12.00	3.921	A	A	R
27		Signal #2	35.00	11.436	A	A	B
28	I	1-Bromo-2-nitrobenzene (A) #2	3.25	1.000	A	A	B
29	S	TCMX #2	4.21	1.293	A	A	B
30		alpha-BHC #2	4.94	1.519	Q	A	B
31	M	gamma-BHC (Lindane) #2	5.41	1.663	A	A	B
32	M	Heptachlor #2	6.05	1.859	A	A	B
33		beta-BHC #2	5.50	1.690	A	A	B
34		delta-BHC #2	5.92	1.821	Q	A	B
35	M	Aldrin #2	6.54	2.010	A	A	B
36		Heptachlor epoxide #2	7.41	2.279	A	A	B
37		Endosulfan I #2	8.13	2.500	A	A	B
38		4,4'-DDE #2	8.28	2.547	A	A	B
39	M	Dieldrin #2	8.66	2.663	A	A	B
40	M	Endrin #2	9.30	2.860	A	A	B
41		4,4'-DDD #2	9.50	2.920	A	A	B
42		Endosulfan II #2	9.76	3.001	A	A	B
43	M	4,4'-DDT #2	10.22	3.141	A	A	B
44		Endrin aldehyde #2	10.54	3.239	A	A	B
45		Endosulfan sulfate #2	11.22	3.450	A	A	B
46		Methoxychlor #2	11.95	3.673	A	A	B
47		Mirex #2	12.57	3.863	A	A	B
48		Endrin ketone #2	12.65	3.889	A	A	B
49	S	Decachlorobiphenyl #2	16.37	5.031	A	A	B
50	L1	Chlordane (gamma) #2	7.74	2.380	A	A	B
51	L1	Chlordane (alpha) #2	8.00	2.461	A	A	B
52	I	1-Bromo-2-nitrobenzene (B) #2	3.25	1.000	A	A	B
53	L2	Toxaphene (1) #2	11.95	3.673	A	A	R

Cal A = Average L = Linear LO = Linear w/origin Q = Quad QO = Quad w/origin
A/H = Area or Height
ID R = R.T. B = R.T. & Q Q = Qvalue L = Largest A = All

80810606.M Tue Jun 06 17:44:55 2023 SS

Response Factor Report HP G1530A

Method : G:\HPCHEM\GCECD7\METHODS\80810607.M (Chemstation Integrator)
Title : Pesticides by Method SW-846 8081B
Last Update : Thu Jun 08 17:43:15 2023

Calibration Files
2 =7T33140.D 5 =7T33141.D 10 =7T33142.D
20 =7T33143.D 35 =7T33144.D 50 =7T33797.D

		Compound	2	5	10	20	35	50	Avg		%RSD
1)	I	1-Bromo-2-nitrobenzen	ISTD								
2)	S	TCMX	0.681	0.844	0.890	0.849	0.965	0.987	0.873	0	9.72
3)		alpha-BHC	1.071	1.194	1.373	1.318	1.647	1.648	1.440	0	13.63
4)	M	gamma-BHC (Lindane)	1.107	1.165	1.334	1.253	1.533	1.528	1.355	0	10.60
5)	M	Heptachlor	1.184	1.270	1.408	1.294	1.548	1.518	1.354	0	8.94
6)		beta-BHC	0.533	0.552	0.607	0.556	0.653	0.634	0.581	0	6.82
7)		delta-BHC	1.085	1.134	1.299	1.240	1.586	1.596	1.384	0	13.28
8)	M	Aldrin	1.193	1.148	1.285	1.200	1.461	1.450	1.298	0	8.38
9)		Heptachlor epoxide	1.078	1.148	1.263	1.160	1.383	1.354	1.206	0	8.53
10)		Endosulfan I	0.860	1.016	1.128	1.038	1.233	1.208	1.071	0	10.34
11)		4,4'-DDE	1.013	1.049	1.188	1.107	1.344	1.337	1.180	0	9.41
12)	M	Dieldrin	0.960	1.068	1.200	1.118	1.337	1.345	1.185	0	10.01
13)	M	Endrin	0.966	1.020	1.126	1.043	1.255	1.242	1.084	0	10.25
14)		4,4'-DDD	0.639	0.733	0.794	0.758	0.930	0.935	0.828	0	11.54
15)		Endosulfan II	0.664	0.866	0.979	0.929	1.122	1.110	0.954	0	13.64
16)	M	4,4'-DDT	0.541	0.672	0.772	0.733	0.915	0.924	0.800	0	15.22
17)		Endrin aldehyde	0.538	0.584	0.666	0.613	0.734	0.716	0.657	0	12.33
18)		Endosulfan sulfate	0.457	0.559	0.626	0.575	0.682	0.668	0.609	0	11.57
19)		Methoxychlor	0.254	0.292	0.326	0.304	0.365	0.361	0.332	0	12.42
20)		Mirex	0.572	0.530	0.602	0.551	0.614	0.558	0.576	0	15.83
21)		Endrin ketone	0.669	0.665	0.735	0.679	0.807	0.788	0.745	0	12.79
22)	S	Decachlorobiphenyl		0.760	0.720	0.668	0.737	0.677	0.676	0	12.42
23)	L1	Chlordane (gamma)	1.045	1.119	1.247	1.157	1.385	1.381	1.234	0	8.73
24)	L1	Chlordane (alpha)	1.039	1.141	1.271	1.165	1.389	1.366	1.222	0	8.59
25)	I	1-Bromo-2-nitrobenzen	ISTD								
26)	L2	Toxaphene (1)							0.532	0	0.00

Signal #2 Calibration Files
2 =7T33792.D 5 =7T33793.D 10 =7T33794.D
20 =7T33795.D 35 =7T33796.D 50 =7T33828.D

		Compound	2	5	10	20	35	50	Avg		%RSD
1)	I	1-Bromo-2-nitrobenzen	ISTD								
2)	S	TCMX	0.722	0.809	0.862	0.790	0.918	0.909	0.830	0	7.28
3)		alpha-BHC	0.994	1.144	1.284	1.250	1.533	1.574	1.372	0	14.19
4)	M	gamma-BHC (Lindane)	0.964	1.105	1.225	1.175	1.429	1.455	1.273	0	12.35
5)	M	Heptachlor	1.092	1.194	1.284	1.193	1.406	1.412	1.261	0	7.94
6)		beta-BHC	0.476	0.541	0.580	0.531	0.621	0.618	0.554	0	7.93
7)		delta-BHC	0.982	1.103	1.218	1.170	1.425	1.459	1.280	0	12.48
8)	M	Aldrin	0.965	1.083	1.191	1.128	1.346	1.365	1.198	0	10.37
9)		Heptachlor epoxide	0.949	1.103	1.179	1.089	1.265	1.266	1.122	0	9.34
10)		Endosulfan I	0.625	0.797	0.917	0.879	1.044	1.051	0.901	0	14.08
11)		4,4'-DDE	0.773	0.857	0.835	0.808	0.959	0.972	0.879	0	7.35
12)	M	Dieldrin	0.793	0.812	0.873	0.823	0.990	1.002	0.905	0	8.39
13)	M	Endrin	0.714	0.649	0.691	0.674	0.803	0.816	0.730	0	8.20
14)		4,4'-DDD	0.464	0.498	0.533	0.627	0.588	0.767	0.582	0	15.80
15)		Endosulfan II	0.639	0.565	0.623	0.668	0.614	0.703	0.638	0	9.24
16)	M	4,4'-DDT	0.371	0.439	0.566	0.479	0.600	0.646	0.557	0	16.93
17)		Endrin aldehyde	0.411	0.463	0.510	0.464	0.544	0.574	0.516	0	12.06
18)		Endosulfan sulfate	0.466	0.516	0.553	0.557	0.631	0.669	0.580	0	11.40
19)		Methoxychlor	0.207	0.265	0.257	0.244	0.306	0.307	0.279	0	12.60
20)		Mirex	0.487	0.416	0.439	0.421	0.469	0.486	0.456	0	11.76
21)		Endrin ketone	0.552	0.605	0.655	0.618	0.728	0.734	0.653	0	9.05
22)	S	Decachlorobiphenyl		0.600	0.627	0.566	0.642	0.627	0.609	0	12.28
23)	L1	Chlordane (gamma)	1.535	1.380	1.291	1.124	1.285	1.304	1.236	0	13.06
24)	L1	Chlordane (alpha)	0.659	0.866	1.007	0.965	1.145	1.159	0.992	0	15.32
25)	I	1-Bromo-2-nitrobenzen	ISTD								

(#) = Out of Range ### Number of calibration levels exceeded format ###

Response Factor Report HP G1530A

Method : G:\HPCHEM\GCECD7\METHODS\80810607.M (Chemstation Integrator)
Title : Pesticides by Method SW-846 8081B
Last Update : Thu Jun 08 17:43:15 2023

Calibration Files
2 =7T33792.D 5 =7T33793.D 10 =7T33794.D
20 =7T33795.D 35 =7T33796.D 50 =7T33828.D

Compound	2	5	10	20	35	50	Avg	%RSD
26) L2 Toxaphene (1)							0.436 0	0.00

(#) = Out of Range ### Number of calibration levels exceeded format ###

Compound List Report HP G1530A

Method : G:\HPCHEM\GCECD7\METHODS\80810607.M (Chemstation Integrator)
Title : Pesticides by Method SW-846 8081B
Last Update : Tue Jun 20 17:03:26 2023
Response via : Initial Calibration
Total Cpnds : 53

PK#	Type	Compound Name	Exp_RT	Rel_RT	Cal	A/H	ID
1	I	1-Bromo-2-nitrobenzene (A)	2.82	1.000	A	A	B
2	S	TCMX	3.74	1.323	A	A	B
3		alpha-BHC	4.62	1.637	A	A	B
4	M	gamma-BHC (Lindane)	5.20	1.843	A	A	B
5	M	Heptachlor	6.10	2.162	A	A	B
6		beta-BHC	5.37	1.901	A	A	B
7		delta-BHC	5.70	2.020	A	A	B
8	M	Aldrin	6.68	2.365	A	A	B
9		Heptachlor epoxide	7.83	2.774	A	A	B
10		Endosulfan I	8.55	3.029	A	A	B
11		4,4'-DDE	8.49	3.007	A	A	B
12	M	Dieldrin	8.99	3.184	A	A	B
13	M	Endrin	9.40	3.329	A	A	B
14		4,4'-DDD	9.56	3.387	A	A	B
15		Endosulfan II	9.80	3.470	A	A	B
16	M	4,4'-DDT	10.05	3.560	A	A	B
17		Endrin aldehyde	10.53	3.731	A	A	B
18		Endosulfan sulfate	11.08	3.925	A	A	B
19		Methoxychlor	10.90	3.862	A	A	B
20		Mirex	11.28	3.994	A	A	B
21		Endrin ketone	11.75	4.160	A	A	B
22	S	Decachlorobiphenyl	13.43	4.758	A	A	B
23	L1	Chlordane (gamma)	8.06	2.856	A	A	B
24	L1	Chlordane (alpha)	8.31	2.944	A	A	B
25	I	1-Bromo-2-nitrobenzene (B)	2.82	1.000	A	A	B
26	L2	Toxaphene (1)	9.84	3.487	A	A	R
27		Signal #2	35.00	12.396	A	A	B
28	I	1-Bromo-2-nitrobenzene (A) #2	3.07	1.000	A	A	B
29	S	TCMX #2	4.47	1.453	A	A	B
30		alpha-BHC #2	5.68	1.849	A	A	B
31	M	gamma-BHC (Lindane) #2	6.42	2.089	A	A	B
32	M	Heptachlor #2	7.33	2.386	A	A	B
33		beta-BHC #2	6.59	2.143	A	A	B
34		delta-BHC #2	7.19	2.339	A	A	B
35	M	Aldrin #2	7.97	2.595	A	A	B
36		Heptachlor epoxide #2	9.06	2.950	A	A	B
37		Endosulfan I #2	9.78	3.185	A	A	B
38		4,4'-DDE #2	9.99	3.251	A	A	B
39	M	Dieldrin #2	10.28	3.344	A	A	B
40	M	Endrin #2	10.81	3.519	A	A	B
41		4,4'-DDD #2	11.00	3.580	A	A	B
42		Endosulfan II #2	11.18	3.638	A	A	B
43	M	4,4'-DDT #2	11.54	3.756	A	A	B
44		Endrin aldehyde #2	11.75	3.825	A	A	B
45		Endosulfan sulfate #2	12.23	3.979	A	A	B
46		Methoxychlor #2	12.68	4.127	A	A	B
47		Mirex #2	13.09	4.262	A	A	B
48		Endrin ketone #2	13.12	4.270	A	A	B
49	S	Decachlorobiphenyl #2	15.46	5.033	A	A	B
50	L1	Chlordane (gamma) #2	9.41	3.064	A	A	B
51	L1	Chlordane (alpha) #2	9.68	3.151	A	A	B
52	I	1-Bromo-2-nitrobenzene (B) #2	3.07	1.000	A	A	B
53	L2	Toxaphene (1) #2	11.39	3.708	A	A	R

Cal A = Average L = Linear LO = Linear w/origin Q = Quad QO = Quad w/origin
A/H = Area or Height
ID R = R.T. B = R.T. & Q Q = Qvalue L = Largest A = All

80810607.M Thu Jul 13 12:49:24 2023 SS

Response Factor Report HP G1530A

Method : G:\HPCHEM\GCECD9\METHODS\80810616.M (Chemstation Integrator)
Title : Pesticides by Method SW-846 8081B
Last Update : Fri Jun 16 17:01:33 2023

Calibration Files
2 =9T01167.D 5 =9T01168.D 10 =9T01169.D
20 =9T01170.D 35 =9T01171.D 50 =9T01172.D

		Compound	2	5	10	20	35	50	Avg		%RSD
1)	I	1-Bromo-2-nitrobenzen	ISTD								
2)	S	TCMX	0.849	0.858	0.957	0.859	1.009	0.909	0.924	0	6.76
3)		alpha-BHC	1.180	1.224	1.478	1.472	1.813	1.630	1.586	0	15.45
4)	M	gamma-BHC (Lindane)	1.113	1.156	1.376	1.359	1.664	1.486	1.455	0	14.09
5)	M	Heptachlor	1.193	1.195	1.383	1.331	1.597	1.419	1.378	0	9.61
6)		beta-BHC	0.574	0.554	0.591	0.541	0.608	0.568	0.569	0	4.16
7)		delta-BHC	1.012	1.043	1.275	1.269	1.555	1.482	1.388	0	16.61
8)	M	Aldrin	1.114	1.111	1.291	1.269	1.519	1.360	1.329	0	10.74
9)		Heptachlor epoxide	1.100	1.088	1.196	1.155	1.324	1.182	1.180	0	6.48
10)		Endosulfan I	0.993	0.997	1.112	1.056	1.228	1.086	1.078	0	6.71
11)		4,4'-DDE	0.725	0.722	0.834	0.836	1.045	1.043	0.957	0	17.38
12)	M	Dieldrin	1.011	1.001	1.144	1.115	1.334	1.197	1.178	0	9.91
13)	M	Endrin	0.950	0.909	1.041	1.002	1.198	1.047	1.053	0	8.79
14)		4,4'-DDD	0.679	0.669	0.780	0.733	0.864	0.767	0.826	0	14.59
15)		Endosulfan II	0.926	0.916	0.999	0.946	1.118	0.945	0.993	0	6.90
16)	M	4,4'-DDT	0.760	0.723	0.852	0.788	0.958	0.896	0.915	0	15.35
17)		Endrin aldehyde	0.903	0.848	0.916	0.842	0.954	0.837	0.874	0	5.13
18)		Endosulfan sulfate	0.984	0.939	1.030	0.953	1.106	0.966	1.001	0	5.59
19)		Methoxychlor	0.512	0.496	0.528	0.497	0.558	0.461	0.497	0	6.37
20)		Mirex	1.014	0.938	0.980	0.872	0.947	0.831	0.895	0	7.95
21)		Endrin ketone	1.060	1.050	1.160	1.101	1.271	1.126	1.136	0	6.29
22)	S	Decachlorobiphenyl		1.112	1.152	1.036	1.128	0.989	1.041	0	7.21
23)	L1	Chlordane (gamma)	1.078	1.097	1.218	1.158	1.374	1.237	1.250	0	9.49
24)	L1	Chlordane (alpha)	1.094	1.067	1.189	1.134	1.336	1.197	1.215	0	8.61
25)	I	1-Bromo-2-nitrobenzen	ISTD								
26)	L2	Toxaphene (1)							0.000	0	-1.00

Signal #2 Calibration Files
2 =9T01167.D 5 =9T01168.D 10 =9T01169.D
20 =9T01170.D 35 =9T01171.D 50 =9T01172.D

		Compound	2	5	10	20	35	50	Avg		%RSD
1)	I	1-Bromo-2-nitrobenzen	ISTD								
2)	S	TCMX	0.710	0.734	0.858	0.769	0.861	0.833	0.816	0	7.48
3)		alpha-BHC	1.017	1.076	1.343	1.360	1.706	1.585	1.498	0	19.16
4)	M	gamma-BHC (Lindane)	0.994	1.026	1.259	1.259	1.540	1.418	1.368	0	16.61
5)	M	Heptachlor	1.141	1.141	1.337	1.318	1.532	1.465	1.364	0	10.70
6)		beta-BHC	0.485	0.456	0.500	0.538	0.523	0.529	0.505	0	6.55
7)		delta-BHC	0.818	0.777	1.010	0.998	1.258	1.204	1.154	0	21.04
8)	M	Aldrin	1.068	1.035	1.220	1.201	1.462	1.351	1.308	0	13.12
9)		Heptachlor epoxide	1.001	0.975	1.117	1.081	1.286	1.183	1.159	0	10.03
10)		Endosulfan I	0.880	0.856	0.965	0.914	1.076	1.062	0.999	0	9.38
11)		4,4'-DDE	0.755	0.756	0.835	0.787	0.898	0.988	0.919	0	16.84
12)	M	Dieldrin	0.931	0.919	1.059	1.056	1.287	1.180	1.164	0	14.29
13)	M	Endrin	0.854	0.825	0.962	0.920	1.113	0.997	1.007	0	11.90
14)		4,4'-DDD	0.561	0.549	0.618	0.570	0.701	0.714	0.685	0	16.95
15)		Endosulfan II	0.863	0.837	0.955	0.859	1.068	0.889	0.959	0	10.71
16)	M	4,4'-DDT	0.660	0.644	0.733	0.706	0.852	0.809	0.817	0	17.05
17)		Endrin aldehyde	0.856	0.788	0.864	0.777	0.870	0.818	0.831	0	5.08
18)		Endosulfan sulfate	0.862	0.811	0.894	0.841	0.976	0.885	0.912	0	7.72
19)		Methoxychlor	0.450	0.445	0.462	0.429	0.489	0.431	0.454	0	4.75
20)		Mirex	0.923	0.837	0.866	0.772	0.844	0.738	0.801	0	8.08
21)		Endrin ketone	1.041	0.968	1.081	1.025	1.201	1.059	1.102	0	7.75
22)	S	Decachlorobiphenyl		1.132	1.232	1.113	1.215	1.102	1.114	0	6.64
23)	L1	Chlordane (gamma)	0.985	0.963	1.098	1.063	1.288	1.158	1.182	0	13.20
24)	L1	Chlordane (alpha)	1.019	0.988	1.104	1.057	1.265	1.159	1.167	0	10.79
25)	I	1-Bromo-2-nitrobenzen	ISTD								

(#) = Out of Range ### Number of calibration levels exceeded format ###

Response Factor Report HP G1530A

Method : G:\HPCHEM\GCECD9\METHODS\80810616.M (Chemstation Integrator)
Title : Pesticides by Method SW-846 8081B
Last Update : Fri Jun 16 17:01:33 2023

Calibration Files
2 =9T01167.D 5 =9T01168.D 10 =9T01169.D
20 =9T01170.D 35 =9T01171.D 50 =9T01172.D

Compound	2	5	10	20	35	50	Avg	%RSD
26) L2 Toxaphene (1)							0.000 0	-1.00

(#) = Out of Range ### Number of calibration levels exceeded format ###

Compound List Report HP G1530A

Method : G:\HPCHEM\GCECD9\METHODS\80810616.M (Chemstation Integrator)
Title : Pesticides by Method SW-846 8081B
Last Update : Fri Jun 16 17:01:33 2023
Response via : Initial Calibration
Total Cpnds : 53

PK#	Type	Compound Name	Exp_RT	Rel_RT	Cal	A/H	ID
1	I	1-Bromo-2-nitrobenzene (A)	3.03	1.000	A	A	B
2	S	TCMX	3.74	1.234	A	A	B
3		alpha-BHC	4.32	1.425	QO	A	B
4	M	gamma-BHC (Lindane)	4.67	1.542	A	A	B
5	M	Heptachlor	5.24	1.729	A	A	B
6		beta-BHC	4.76	1.572	A	A	B
7		delta-BHC	4.98	1.645	Q	A	B
8	M	Aldrin	5.62	1.856	A	A	B
9		Heptachlor epoxide	6.44	2.124	A	A	B
10		Endosulfan I	7.01	2.313	A	A	B
11		4,4'-DDE	6.89	2.274	A	A	B
12	M	Dieldrin	7.37	2.434	A	A	B
13	M	Endrin	7.76	2.562	A	A	B
14		4,4'-DDD	7.85	2.591	A	A	B
15		Endosulfan II	8.16	2.694	A	A	B
16	M	4,4'-DDT	8.36	2.760	A	A	B
17		Endrin aldehyde	8.97	2.960	A	A	B
18		Endosulfan sulfate	9.89	3.265	A	A	B
19		Methoxychlor	9.33	3.080	A	A	B
20		Mirex	9.64	3.181	A	A	B
21		Endrin ketone	10.53	3.474	A	A	B
22	S	Decachlorobiphenyl	13.13	4.335	A	A	B
23	L1	Chlordane (gamma)	6.61	2.182	A	A	B
24	L1	Chlordane (alpha)	6.80	2.244	A	A	B
25	I	1-Bromo-2-nitrobenzene (B)	3.03	1.000	A	A	B
26	L2	Toxaphene (1)	12.00	3.961	A	A	R
27		Signal #2	35.00	11.553	A	A	B
28	I	1-Bromo-2-nitrobenzene (A) #2	3.22	1.000	A	A	B
29	S	TCMX #2	4.17	1.295	A	A	B
30		alpha-BHC #2	4.90	1.521	Q	A	B
31	M	gamma-BHC (Lindane) #2	5.37	1.667	A	A	B
32	M	Heptachlor #2	6.00	1.864	A	A	B
33		beta-BHC #2	5.45	1.694	A	A	B
34		delta-BHC #2	5.88	1.826	Q	A	B
35	M	Aldrin #2	6.49	2.015	A	A	B
36		Heptachlor epoxide #2	7.36	2.285	A	A	B
37		Endosulfan I #2	8.07	2.505	A	A	B
38		4,4'-DDE #2	8.22	2.553	A	A	B
39	M	Dieldrin #2	8.59	2.668	A	A	B
40	M	Endrin #2	9.22	2.865	A	A	B
41		4,4'-DDD #2	9.42	2.927	A	A	B
42		Endosulfan II #2	9.68	3.006	A	A	B
43	M	4,4'-DDT #2	10.13	3.148	A	A	B
44		Endrin aldehyde #2	10.45	3.246	A	A	B
45		Endosulfan sulfate #2	11.13	3.457	A	A	B
46		Methoxychlor #2	11.86	3.683	A	A	B
47		Mirex #2	12.46	3.871	A	A	B
48		Endrin ketone #2	12.55	3.899	A	A	B
49	S	Decachlorobiphenyl #2	16.25	5.049	A	A	B
50	L1	Chlordane (gamma) #2	7.68	2.384	A	A	B
51	L1	Chlordane (alpha) #2	7.94	2.465	A	A	B
52	I	1-Bromo-2-nitrobenzene (B) #2	3.22	1.000	A	A	B
53	L2	Toxaphene (1) #2	11.92	3.702	A	A	R

Cal A = Average L = Linear LO = Linear w/origin Q = Quad QO = Quad w/origin
A/H = Area or Height
ID R = R.T. B = R.T. & Q Q = Qvalue L = Largest A = All

80810616.M Fri Jun 16 17:46:54 2023 SS

CALIBRATION VERIFICATION SUMMARY

Client: **Dynamic Earth LLC**
Work Order: **23E1425**

Lab Sample ID (50 pp):	SAC0343-CCV1(1)	Init. Calib. Date(s):	03/07/2023
File ID:	7T33318.D	Date Analyzed:	03/16/2023 15:59
SPLP Pesticides	Column 1	Matrix:	Soil

Individual Mix Compound		RT WINDOW		$\overline{CF}$	CF	%D
		FROM	TO			
Aldrin	09.32	-----	-----	1	1	10.10
alpha-BHC	05.64	-----	-----	1	1	7.80
alpha-Chlordane (cis)	13.48	-----	-----	1	1	13.20
beta-BHC	06.86	-----	-----	1	1	11.30
delta-BHC	07.43	-----	-----	1	1	8.80
Dieldrin	15.46	-----	-----	1	1	6.40
Endosulfan I	14.10	-----	-----	1	1	7.60
Endosulfan II	18.09	-----	-----	1	1	2.80
Endosulfan sulfate	20.37	-----	-----	1	1	10.60
Endrin	16.72	-----	-----	1	1	3.50
Endrin aldehyde	19.55	-----	-----	1	1	4.10
Endrin ketone	20.76	-----	-----	1	1	13.00
gamma-Chlordane	12.77	-----	-----	1	1	9.10
gamma-BHC (Lindane)	06.56	-----	-----	1	1	8.90
4,4'-DDT	19.02	-----	-----	1	1	1.00
4,4'-DDE	14.27	-----	-----	1	1	8.20
4,4'-DDD	17.79	-----	-----	1	1	1.30
Methoxychlor	20.21	-----	-----	0	0	1.50
Heptachlor Epoxide	12.14	-----	-----	1	1	9.70
Heptachlor	08.17	-----	-----	1	1	7.00
Chlordane	13.48	-----	-----	1	1	11.20
1-Bromo-2-nitrobenzene (IS1)	03.10	-----	-----	Err: Seq Cal issue	1	0.00
1-Bromo-2-nitrobenzene (IS2)	03.10	-----	-----	Err: Seq Cal issue	1	0.00
Decachlorobiphenyl	22.08	21.98	22.18	Err: Seq Cal issue	1	0.00
Tetrachloro-m-xylene	04.33	04.23	04.43	Err: Seq Cal issue	1	0.00

* - Outside of QC limits

F-VII

CALIBRATION VERIFICATION SUMMARY

Client: **Dynamic Earth LLC**
Work Order: **23E1425**

Lab Sample ID (50 pp):	SAC0343-CCV1(2)	Init. Calib. Date(s):	03/07/2023
File ID:	7T33318.D	Date Analyzed:	03/16/2023 15:59
SPLP Pesticides	Column 2	Matrix:	Soil

Individual Mix Compound		RT WINDOW		$\overline{CF}$	CF	%D
		FROM	TO			
Aldrin [2C]	12.53	-----	-----	1	1	13.10
alpha-BHC [2C]	07.45	-----	-----	1	1	11.40
alpha-Chlordane (cis) [2C]	18.00	-----	-----	1	1	10.20
beta-BHC [2C]	09.33	-----	-----	1	0	16.10
delta-BHC [2C]	10.69	-----	-----	1	1	11.60
Dieldrin [2C]	19.23	-----	-----	1	1	17.40
Endosulfan I [2C]	18.19	-----	-----	1	1	10.40
Endosulfan II [2C]	20.29	-----	-----	1	1	7.90
Endosulfan sulfate [2C]	21.17	-----	-----	1	0	14.30
Endrin [2C]	19.90	-----	-----	1	1	12.50
Endrin aldehyde [2C]	20.81	-----	-----	1	0	17.80
Endrin ketone [2C]	21.79	-----	-----	1	1	15.50
gamma-Chlordane [2C]	17.05	-----	-----	1	1	19.10
gamma-BHC (Lindane) [2C]	08.91	-----	-----	1	1	12.90
4,4'-DDT [2C]	20.71	-----	-----	1	1	4.60
4,4'-DDE [2C]	19.01	-----	-----	1	1	16.50
4,4'-DDD [2C]	20.25	-----	-----	1	1	5.40
Methoxychlor [2C]	21.57	-----	-----	0	0	2.90
Heptachlor Epoxide [2C]	15.87	-----	-----	1	1	14.70
Heptachlor [2C]	10.93	-----	-----	1	1	10.90
Chlordane [2C]	18.00	-----	-----	1	1	15.20
1-Bromo-2-nitrobenzene [2C] (IS	03.44	-----	-----	Err: Seq Cal issue	1	0.00
1-Bromo-2-nitrobenzene [2C] (IS	03.44	-----	-----	Err: Seq Cal issue	1	0.00
Decachlorobiphenyl [2C]	23.51	23.41	23.61	Err: Seq Cal issue	1	0.00
Tetrachloro-m-xylene [2C]	05.42	05.32	05.52	Err: Seq Cal issue	1	0.00

* - Outside of QC limits

F-VII

Quantitation Report (QT Reviewed)

Signal #1 : G:\HPCHEM\GCECD7\DATA\20230316\7T33318.D\ECD1A.CH Vial: 3
Signal #2 : G:\HPCHEM\GCECD7\DATA\20230316\7T33318.D\ECD2B.CH
Acq On : 16 Mar 2023 3:59 pm Operator: WD
Sample : SEQ-CCV@50PPB Inst : GCECD-7
Misc : Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Mar 16 16:59 2023 Quant Results File: 80810307.RES

Quant Method : G:\HPCHEM\G...\80810307.M (Chemstation Integrator)
Title : Pesticides by Method SW-846 8081B
Last Update : Thu Mar 16 16:57:05 2023
Response via : Initial Calibration
DataAcq Meth : RUNPEST2.M

Volume Inj. : 2ul
Signal #1 Phase : RTx-50 Signal #2 Phase: RTx-CLPesticides II
Signal #1 Info : 30M x 0.53mm x 0. Signal #2 Info : 30M x 0.53mm x 0.42um

	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/kg	ug/kg
	Internal Standards						
1) I	1-Bromo-2-nitrob	3.10	3.44	27813.6E6	11904.0E6	400.000	400.000
25) I	1-Bromo-2-nitrob	3.10	3.44	27813.6E6	11904.0E6	400.000	400.000
	System Monitoring Compounds						
2) S	TCMX	4.33	5.42	2703.5E6	1032.1E6	44.737	41.916
	Spiked Amount 50.000	Range 43 - 129		Recovery =		89.47%	83.83%
22) S	Decachlorobiphen	22.08	23.51	1873.8E6	751.5E6	40.712m	42.981m
	Spiked Amount 50.000	Range 42 - 136		Recovery =		81.42%	85.96%
	Target Compounds						
3)	alpha-BHC	5.64	7.45	4573.6E6	1797.9E6	46.106	44.317
4) M	gamma-BHC (Linda	6.56	8.91	4261.3E6	1648.9E6	45.533	43.563
5) M	Heptachlor	8.17	10.93	4356.0E6	1679.2E6	46.481	44.556
6)	beta-BHC	6.86	9.33	1786.2E6	694.4E6	44.326	41.954
7)	delta-BHC	7.43	10.69	4350.1E6	1684.5E6	45.576	44.204
8) M	Aldrin	9.32	12.53	4033.8E6	1557.0E6	44.968	43.452
9)	Heptachlor epoxi	12.14	15.87	3790.8E6	1444.3E6	45.163	42.669
10)	Endosulfan I	14.10	18.19	3426.9E6	1210.0E6	46.223	44.796
11)	4,4'-DDE	14.27	19.01	3781.1E6	1093.5E6	45.880	41.736
12) M	Dieldrin	15.46	19.23	3851.6E6	1108.1E6	46.808	41.323
13) M	Endrin	16.72	19.90	3699.0E6	958.9E6	48.246	43.733
14)	4,4'-DDD	17.79	20.25	2821.5E6	900.7E6	49.364	52.676m
15)	Endosulfan II	18.09	20.29	3223.5E6	860.6E6	48.603	46.067m
16) M	4,4'-DDT	19.02	20.71	2733.4E6	781.7E6	49.507	47.701
17)	Endrin aldehyde	19.55	20.81	2131.2E6	615.0E6	47.927m	41.088m
18)	Endosulfan sulfa	20.37	21.17	1861.7E6	725.8E6	44.717	42.836m
19)	Methoxychlor	20.21	21.57	1111.8E6	400.3E6	49.241	48.551
20)	Mirex	20.11	21.73	1760.8E6	618.6E6	46.033	47.034
21)	Endrin ketone	20.76	21.79	2174.5E6	829.0E6	43.512	42.271m
23) L1	Chlordane (gamma	12.77	17.05	3895.7E6	1526.2E6	45.433	40.457m
24) L1	Chlordane (alpha	13.48	18.00	3697.7E6	1337.7E6	43.395	44.885
	Sum Chlordane (gamma)			7593.5E6	2863.9E6	88.827	85.342
Average	Chlordane (gamma)					44.414	42.671
	Sum Toxaphene (1)			0	0	N.D.	N.D.
Average	Toxaphene (1)					0.000	0.000

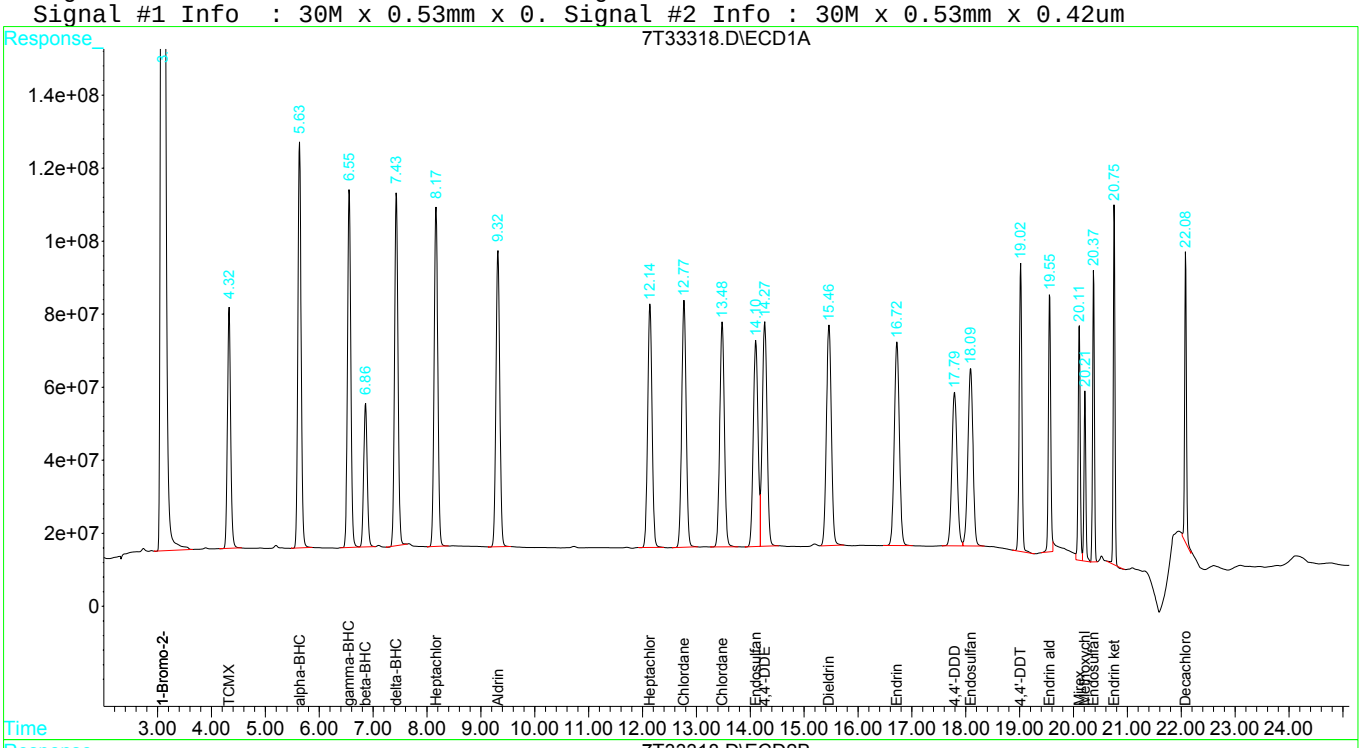
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.
7T33318.D 80810307.M Fri Mar 17 11:58:40 2023 SS Page 1

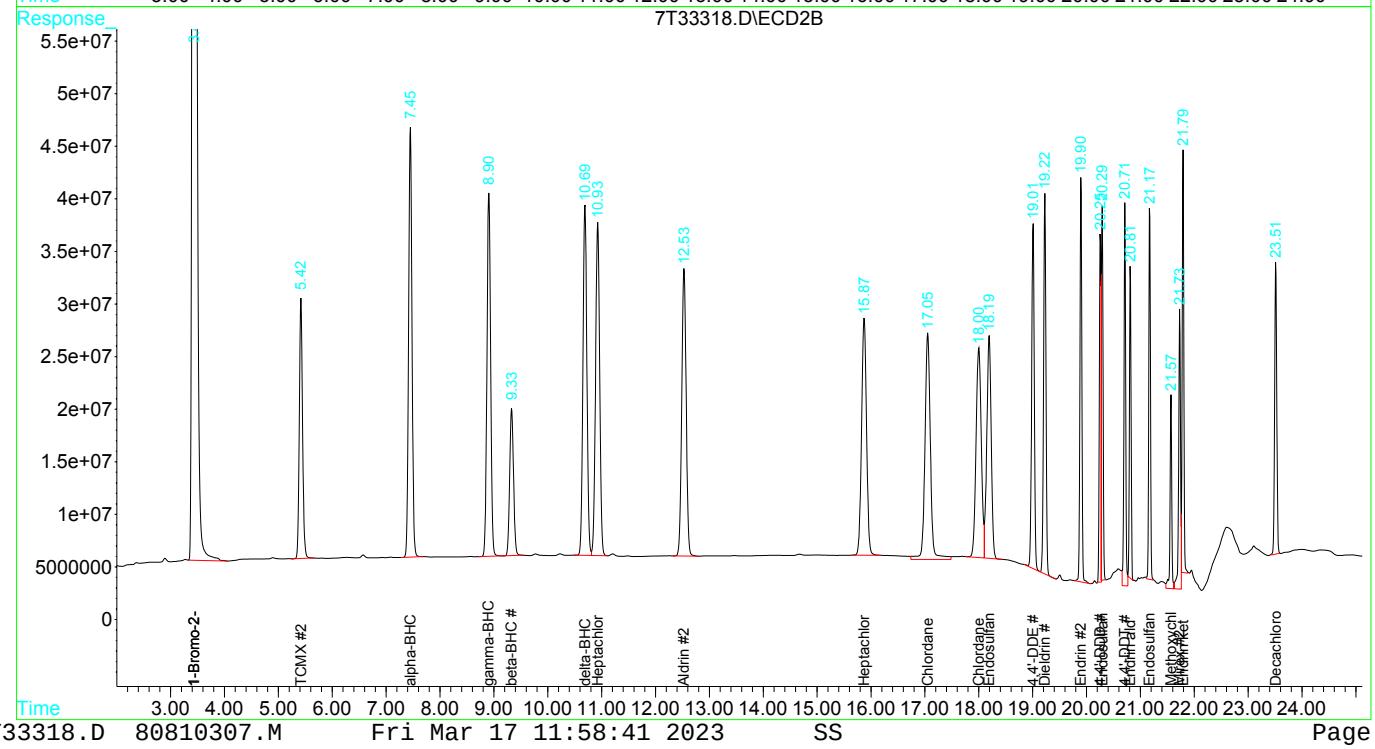
Quantitation Report (QT Reviewed)

Signal #1 : G:\HPCHEM\GCECD7\DATA\20230316\7T33318.D\ECD1A.CH Vial: 3
Signal #2 : G:\HPCHEM\GCECD7\DATA\20230316\7T33318.D\ECD2B.CH
Acq On : 16 Mar 2023 3:59 pm Operator: WD
Sample : SEQ-CCV@50PPB Inst : GCECD-7
Misc : Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Mar 16 16:59 2023 Quant Results File: 80810307.RES

Quant Method : G:\HPCHEM\G...\80810307.M (Chemstation Integrator)
Title : Pesticides by Method SW-846 8081B
Last Update : Thu Mar 16 16:57:05 2023
Response via : Multiple Level Calibration
DataAcq Meth : RUNPEST2.M

Volume Inj. : 2ul
Signal #1 Phase : RTx-50 Signal #2 Phase: RTx-CLPesticides II
Signal #1 Info : 30M x 0.53mm x 0. Signal #2 Info : 30M x 0.53mm x 0.42um





CALIBRATION VERIFICATION SUMMARY

Client: **Dynamic Earth LLC**
Work Order: **23E1425**

Lab Sample ID (50 pp):	SAF0209-CCV1(1)	Init. Calib. Date(s):	06/07/2023
File ID:	7T33874.D	Date Analyzed:	06/10/2023 14:06
Pesticides	Column 1	Matrix:	Water

Individual Mix Compound		RT WINDOW		$\overline{CF}$	CF	%D
		FROM	TO			
Aldrin	06.67	06.57	06.77	1	1	8.70
alpha-BHC	04.62	04.52	04.72	2	2	4.40
alpha-Chlordane (cis)	08.31	08.21	08.41	1	1	16.60
beta-BHC	05.36	05.26	05.46	1	1	9.30
delta-BHC	05.70	05.60	05.80	2	1	7.60
Dieldrin	08.99	08.89	09.09	1	1	16.40
Endosulfan I	08.55	08.45	08.65	1	1	18.20
Endosulfan II	09.80	09.70	09.90	1	1	22.50 *
Endosulfan sulfate	11.08	10.98	11.18	1	1	25.40 *
Endrin	09.40	09.30	09.50	1	1	4.70
Endrin aldehyde	10.54	10.44	10.64	1	1	24.90 *
Endrin ketone	11.75	11.65	11.85	1	1	22.00 *
gamma-Chlordane	08.06	07.96	08.16	1	1	15.30
gamma-BHC (Lindane)	05.20	05.10	05.30	2	1	5.80
4,4'-DDT	10.05	09.95	10.15	1	1	6.70
4,4'-DDE	08.49	08.39	08.59	1	1	13.60
4,4'-DDD	09.56	09.46	09.66	1	1	18.90
Methoxychlor	10.91	10.81	11.01	0	0	6.50
Heptachlor Epoxide	07.83	07.73	07.93	1	1	14.70
Heptachlor	06.10	06.00	06.20	2	1	5.70
Chlordane	08.06	07.96	08.16	1	1	15.90
1-Bromo-2-nitrobenzene (IS1)	02.81	-----	-----	1	1	0.00
1-Bromo-2-nitrobenzene (IS2)	02.81	-----	-----	1	1	0.00
Decachlorobiphenyl	13.44	13.34	13.54	1	1	29.40 *
Tetrachloro-m-xylene	03.73	03.63	03.83	1	1	6.30

* - Outside of QC limits

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CALIBRATION VERIFICATION SUMMARY

Client: **Dynamic Earth LLC**
Work Order: **23E1425**

Lab Sample ID (50 pp):	SAF0209-CCV1(2)	Init. Calib. Date(s):	06/07/2023
File ID:	7T33874.D	Date Analyzed:	06/10/2023 14:06
Pesticides	Column 2	Matrix:	Water

Individual Mix Compound		RT WINDOW		$\overline{CF}$	CF	%D
		FROM	TO			
Aldrin [2C]	07.98	07.88	08.08	1	1	14.20
alpha-BHC [2C]	05.68	05.58	05.78	1	1	8.00
alpha-Chlordane (cis) [2C]	09.69	09.59	09.79	1	1	16.70
beta-BHC [2C]	06.59	06.49	06.69	1	1	14.00
delta-BHC [2C]	07.19	07.09	07.29	1	1	11.40
Dieldrin [2C]	10.28	10.18	10.38	1	1	16.40
Endosulfan I [2C]	09.79	09.69	09.89	1	1	15.70
Endosulfan II [2C]	11.18	11.08	11.28	1	1	13.20
Endosulfan sulfate [2C]	12.23	12.13	12.33	1	1	14.10
Endrin [2C]	10.82	10.72	10.92	1	1	1.20
Endrin aldehyde [2C]	11.76	11.66	11.86	1	1	18.20
Endrin ketone [2C]	13.13	13.03	13.23	1	1	7.10
gamma-Chlordane [2C]	09.42	09.32	09.52	1	1	15.50
gamma-BHC (Lindane) [2C]	06.42	06.32	06.52	1	1	10.20
4,4'-DDT [2C]	11.54	11.44	11.64	1	1	0.40
4,4'-DDE [2C]	09.99	09.89	10.09	1	1	13.30
4,4'-DDD [2C]	11.01	10.91	11.11	1	1	12.30
Methoxychlor [2C]	12.68	12.58	12.78	0	0	1.50
Heptachlor Epoxide [2C]	09.07	08.97	09.17	1	1	14.50
Heptachlor [2C]	07.34	07.24	07.44	1	1	9.70
Chlordane [2C]	09.42	09.32	09.52	1	1	16.10
1-Bromo-2-nitrobenzene [2C] (IS	03.07	-----	-----	1	1	0.00
1-Bromo-2-nitrobenzene [2C] (IS	03.07	-----	-----	1	1	0.00
Decachlorobiphenyl [2C]	15.47	15.37	15.57	1	1	21.70 *
Tetrachloro-m-xylene [2C]	04.47	04.37	04.57	1	1	8.00

* - Outside of QC limits

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Quantitation Report (QT Reviewed)

Signal #1 : G:\HPCHEM\GCECD7\DATA\20230610\7T33874.D\ECD1A.CH Vial: 3
Signal #2 : G:\HPCHEM\GCECD7\DATA\20230610\7T33874.D\ECD2B.CH
Acq On : 10 Jun 2023 2:06 pm Operator: WD
Sample : SEQ-CCV Inst : HP G1530A
Misc : Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Jun 12 13:44 2023 Quant Results File: 80810607.RES

Quant Method : G:\HPCHEM\G...\80810607.M (Chemstation Integrator)
Title : Pesticides by Method SW-846 8081B
Last Update : Sat Jun 10 14:07:28 2023
Response via : Initial Calibration
DataAcq Meth : RUNPEST.M

Volume Inj. : 2ul
Signal #1 Phase : RTx-50 Signal #2 Phase: RTx-CLPesticides II
Signal #1 Info : 30M x 0.53mm x 0. Signal #2 Info : 30M x 0.53mm x 0.42um

		Compound	RT#1	RT#2	Resp#1	Resp#2	ug/kg	ug/kg
		Internal Standards						
1)	I	1-Bromo-2-nitrob	2.81	3.07	21641.2E6	9009.1E6	400.000	400.000
25)	I	1-Bromo-2-nitrob	2.81	3.07	21641.2E6	9009.1E6	400.000	400.000
		System Monitoring Compounds						
2)	S	TCMX	3.73	4.47	2478.5E6	958.6E6	52.454	51.250
		Spiked Amount 50.000	Range 43 - 129		Recovery =		104.91%	102.50%
22)	S	Decachlorobiphen	13.44	15.47	1687.7E6	774.3E6	46.180	56.478m
		Spiked Amount 50.000	Range 42 - 136		Recovery =		92.36%	112.96%
		Target Compounds						
3)		alpha-BHC	4.62	5.68	4248.7E6	1536.3E6	54.528	49.734
4)	M	gamma-BHC (Linda	5.20	6.42	3851.7E6	1339.2E6	52.548	46.715
5)	M	Heptachlor	6.10	7.34	3840.2E6	1309.8E6	52.419	46.118
6)		beta-BHC	5.36	6.59	1576.0E6	571.1E6	50.157	45.813
7)		delta-BHC	5.70	7.19	3906.2E6	1313.5E6	52.152	45.575
8)	M	Aldrin	6.67	7.98	3582.3E6	1148.8E6	51.020	42.582
9)		Heptachlor epoxi	7.83	9.07	2983.2E6	1028.9E6	45.713	40.701m
10)		Endosulfan I	8.55	9.79	2657.6E6	869.9E6	45.853	42.868
11)		4,4'-DDE	8.49	9.99	2834.6E6	888.9E6	44.388	44.894
12)	M	Dieldrin	8.99	10.28	2897.0E6	935.8E6	45.195	45.926
13)	M	Endrin	9.40	10.82	2656.5E6	827.8E6	45.310	50.368
14)		4,4'-DDD	9.56	11.01	2070.4E6	692.6E6	46.243	52.847
15)		Endosulfan II	9.80	11.18	2154.0E6	769.8E6	41.737	53.547 #
16)	M	4,4'-DDT	10.05	11.54	2196.1E6	682.8E6	50.751	54.424m
17)		Endrin aldehyde	10.54	11.76	1809.3E6	634.8E6	50.887	54.628
18)		Endosulfan sulfa	11.08	12.23	1628.3E6	718.1E6	49.440	54.939
19)		Methoxychlor	10.91	12.68	1061.2E6	358.0E6	59.052m	56.906m
20)		Mirex	11.28	13.10	1840.4E6	437.9E6	59.045m	42.610m#
21)		Endrin ketone	11.75	13.13	2238.7E6	686.8E6	55.570	46.665m
23)	L1	Chlordane (gamma	8.06	9.42	3088.5E6	961.0E6	46.253m	34.529m#
24)	L1	Chlordane (alpha	8.31	9.69	2936.0E6	922.8E6	44.400m	41.306m
		Sum Chlordane (gamma)			6024.5E6	1883.7E6	90.653	75.835
		Average Chlordane (gamma)					45.327	37.918
		Sum Toxaphene (1)			0	0	N.D.	N.D.
		Average Toxaphene (1)					0.000	0.000

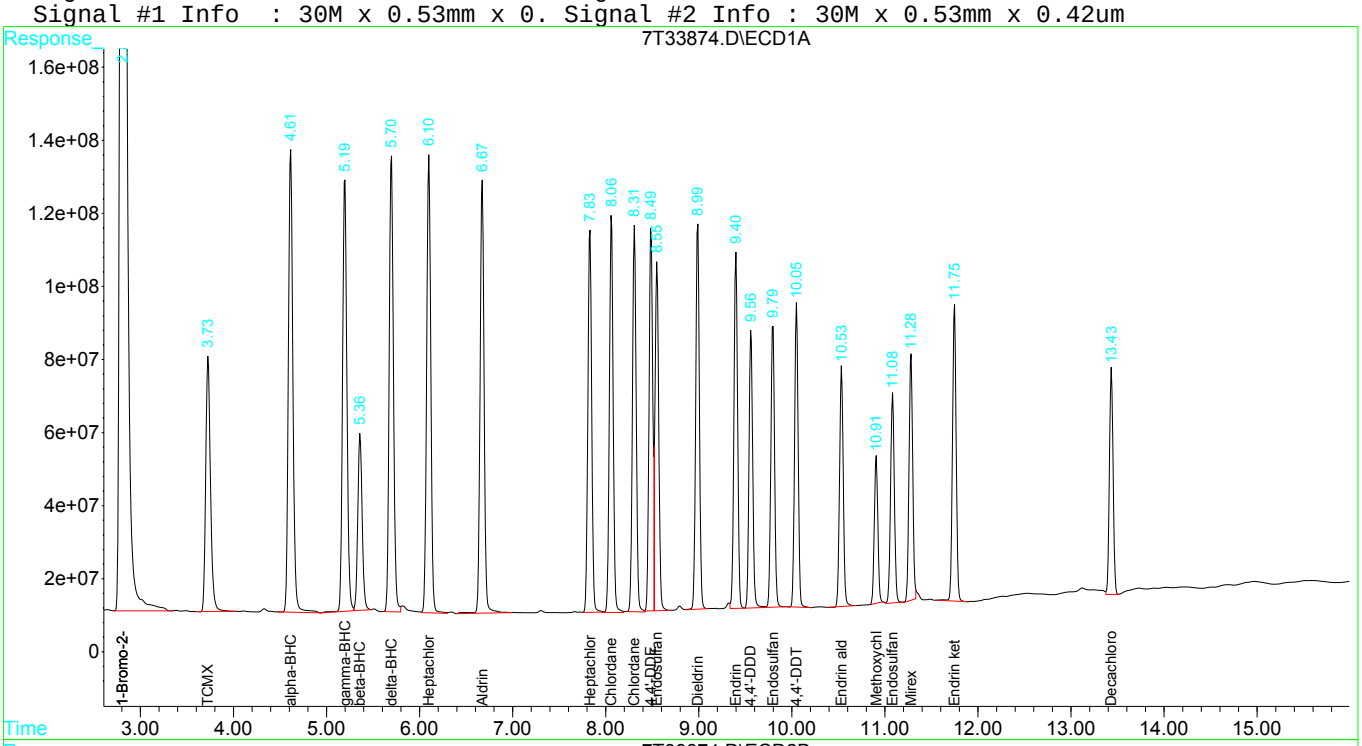
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.
7T33874.D 80810607.M Mon Jun 12 14:20:03 2023 SS

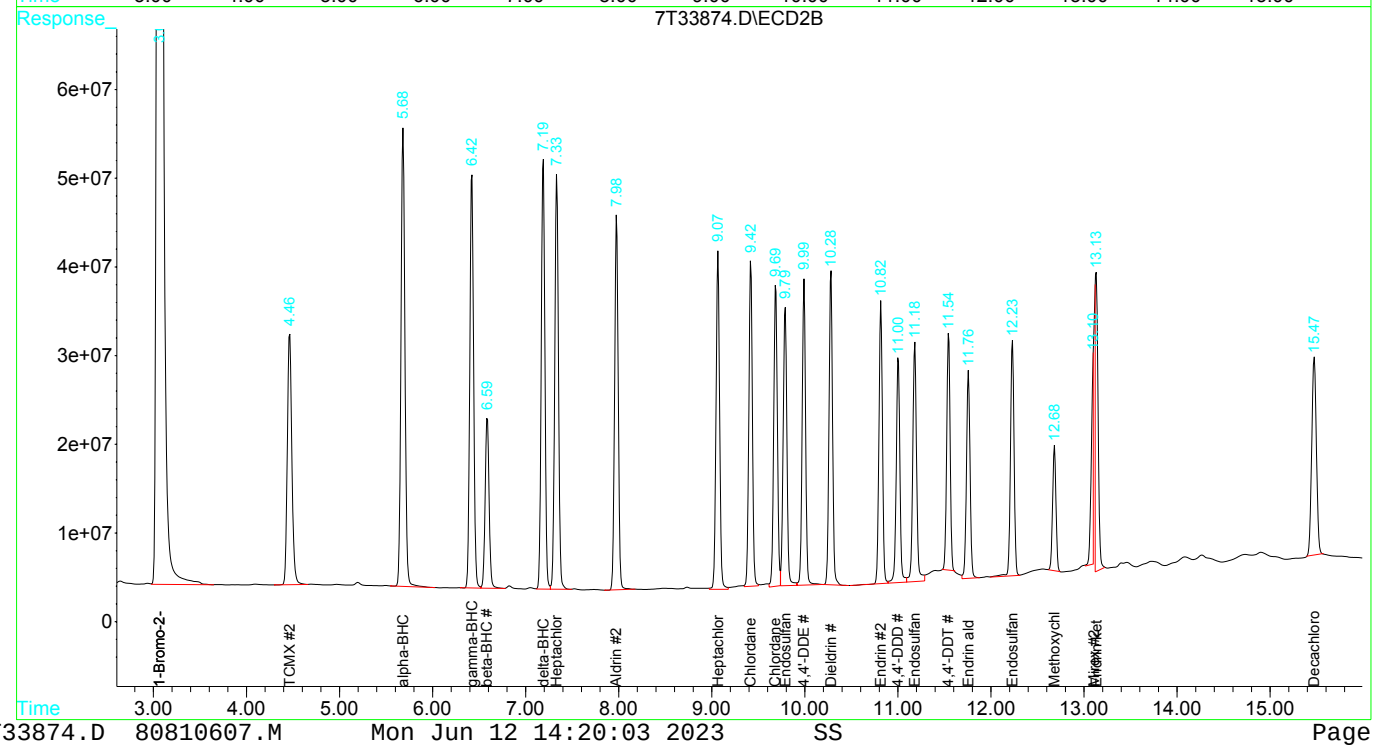
Quantitation Report (QT Reviewed)

Signal #1 : G:\HPCHEM\GCECD7\DATA\20230610\7T33874.D\ECD1A.CH Vial: 3
Signal #2 : G:\HPCHEM\GCECD7\DATA\20230610\7T33874.D\ECD2B.CH
Acq On : 10 Jun 2023 2:06 pm Operator: WD
Sample : SEQ-CCV Inst : HP G1530A
Misc : Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Jun 12 13:44 2023 Quant Results File: 80810607.RES

Quant Method : G:\HPCHEM\G...\80810607.M (Chemstation Integrator)
Title : Pesticides by Method SW-846 8081B
Last Update : Sat Jun 10 14:07:28 2023
Response via : Multiple Level Calibration
DataAcq Meth : RUNPEST.M

Volume Inj. : 2ul
Signal #1 Phase : RTx-50 Signal #2 Phase: RTx-CLPesticides II
Signal #1 Info : 30M x 0.53mm x 0. Signal #2 Info : 30M x 0.53mm x 0.42um





CALIBRATION VERIFICATION SUMMARY

Client: **Dynamic Earth LLC**
Work Order: **23E1425**

Lab Sample ID (50 pp):	SAF0272-CCV1(1)	Init. Calib. Date(s):	06/07/2023
File ID:	7T33920.D	Date Analyzed:	06/13/2023 16:14
Pesticides	Column 1	Matrix:	Soil

Individual Mix Compound		RT WINDOW		$\overline{CF}$	CF	%D
		FROM	TO			
Aldrin	06.68	06.58	06.78	1	1	5.80
alpha-BHC	04.63	04.53	04.73	2	2	0.10
beta-BHC	05.37	05.27	05.47	1	1	1.20
delta-BHC	05.71	05.61	05.81	2	2	1.90
Dieldrin	09.00	08.90	09.10	1	1	15.90
Endosulfan I	08.56	08.46	08.66	1	1	18.00
Endosulfan II	09.81	09.71	09.91	1	1	22.60 *
Endosulfan sulfate	11.09	10.99	11.19	1	1	25.10 *
Endrin	09.41	09.31	09.51	1	1	3.10
Endrin aldehyde	10.54	10.44	10.64	1	1	20.80 *
Endrin ketone	11.76	11.66	11.86	1	1	21.80 *
gamma-BHC (Lindane)	05.21	05.11	05.31	2	2	1.80
4,4'-DDT	10.06	09.96	10.16	1	1	5.80
4,4'-DDE	08.50	08.40	08.60	1	1	12.40
4,4'-DDD	09.57	09.47	09.67	1	1	18.70
Methoxychlor	10.91	10.81	11.01	0	0	8.60
Heptachlor Epoxide	07.84	07.74	07.94	1	1	14.80
Heptachlor	06.11	06.01	06.21	2	1	1.10
Chlordane	08.07	07.97	08.17	1	1	15.60
Decachlorobiphenyl	13.44	13.34	13.54	1	1	30.00 *
Tetrachloro-m-xylene	03.74	03.64	03.84	1	1	4.90

* - Outside of QC limits

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CALIBRATION VERIFICATION SUMMARY

Client: **Dynamic Earth LLC**
Work Order: **23E1425**

Lab Sample ID (50 pp):	SAF0272-CCV1(2)	Init. Calib. Date(s):	06/07/2023
File ID:	7T33920.D	Date Analyzed:	06/13/2023 16:14
Pesticides	Column 2	Matrix:	Soil

Individual Mix Compound		RT WINDOW		$\overline{CF}$	CF	%D
		FROM	TO			
Aldrin [2C]	07.99	07.89	08.09	1	1	12.00
alpha-BHC [2C]	05.69	05.59	05.79	1	1	5.70
beta-BHC [2C]	06.60	06.50	06.70	1	1	12.80
delta-BHC [2C]	07.20	07.10	07.30	1	1	9.60
Dieldrin [2C]	10.29	10.19	10.39	1	1	13.90
Endosulfan I [2C]	09.80	09.70	09.90	1	1	16.10
Endosulfan II [2C]	11.19	11.09	11.29	1	1	16.10
Endosulfan sulfate [2C]	12.23	12.13	12.33	1	1	12.10
Endrin [2C]	10.82	10.72	10.92	1	1	4.90
Endrin aldehyde [2C]	11.76	11.66	11.86	1	1	10.30
Endrin ketone [2C]	13.13	13.03	13.23	1	1	6.30
gamma-BHC (Lindane) [2C]	06.43	06.33	06.53	1	1	8.00
4,4'-DDT [2C]	11.55	11.45	11.65	1	1	3.30
4,4'-DDE [2C]	10.00	09.90	10.10	1	1	13.10
4,4'-DDD [2C]	11.01	10.91	11.11	1	1	10.40
Methoxychlor [2C]	12.69	12.59	12.79	0	0	6.80
Heptachlor Epoxide [2C]	09.07	08.97	09.17	1	1	13.90
Heptachlor [2C]	07.34	07.24	07.44	1	1	7.10
Chlordane [2C]	09.43	09.33	09.53	1	1	14.30
Decachlorobiphenyl [2C]	15.48	15.38	15.58	1	1	18.40
Tetrachloro-m-xylene [2C]	04.48	04.38	04.58	1	1	6.60

* - Outside of QC limits

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Quantitation Report (QT Reviewed)

Signal #1 : G:\HPCHEM\GCECD7\DATA\20230613\7T33920.D\ECD1A.CH Vial: 3
Signal #2 : G:\HPCHEM\GCECD7\DATA\20230613\7T33920.D\ECD2B.CH
Acq On : 13 Jun 2023 4:14 pm Operator: WD
Sample : SEQ-CCV Inst : HP G1530A
Misc : Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Jun 13 17:36 2023 Quant Results File: 80810607.RES

Quant Method : G:\HPCHEM\G...\80810607.M (Chemstation Integrator)
Title : Pesticides by Method SW-846 8081B
Last Update : Tue Jun 13 17:34:41 2023
Response via : Initial Calibration
DataAcq Meth : RUNPEST.M

Volume Inj. : 2ul
Signal #1 Phase : RTx-50 Signal #2 Phase: RTx-CLPesticides II
Signal #1 Info : 30M x 0.53mm x 0. Signal #2 Info : 30M x 0.53mm x 0.42um

		Compound	RT#1	RT#2	Resp#1	Resp#2	ug/kg	ug/kg
		Internal Standards						
1)	I	1-Bromo-2-nitrob	2.82	3.08	21397.4E6	8960.8E6	400.000	400.000
25)	I	1-Bromo-2-nitrob	2.82	3.08	21397.4E6	8960.8E6	400.000	400.000
		System Monitoring Compounds						
2)	S	TCMX	3.74	4.48	2486.3E6	968.2E6	53.219	52.042
		Spiked Amount 50.000	Range 43 - 129		Recovery =		106.44%	104.08%
22)	S	Decachlorobiphen	13.44	15.48	1654.4E6	802.9E6	45.784	58.880m#
		Spiked Amount 50.000	Range 42 - 136		Recovery =		91.57%	117.76%
		Target Compounds						
3)		alpha-BHC	4.63	5.69	4391.9E6	1567.1E6	57.008	51.004
4)	M	gamma-BHC (Linda	5.21	6.43	4119.0E6	1364.9E6	56.835	47.869
5)	M	Heptachlor	6.11	7.34	3980.1E6	1341.2E6	54.948	47.475
6)		beta-BHC	5.37	6.60	1737.9E6	576.0E6	55.941	46.456
7)		delta-BHC	5.71	7.20	4099.7E6	1332.3E6	55.359	46.474
8)	M	Aldrin	6.68	7.99	3657.0E6	1171.7E6	52.677	43.661
9)		Heptachlor epoxi	7.84	9.07	2943.8E6	1031.6E6	45.623	41.029
10)		Endosulfan I	8.56	9.80	2632.9E6	860.9E6	45.944	42.655
11)		4,4'-DDE	8.50	10.00	2841.4E6	886.1E6	45.001	44.995
12)	M	Dieldrin	9.00	10.29	2880.4E6	958.7E6	45.448	47.304
13)	M	Endrin	9.41	10.82	2669.3E6	873.9E6	46.047	53.462
14)		4,4'-DDD	9.57	11.01	2050.7E6	703.4E6	46.324	53.957
15)		Endosulfan II	9.81	11.19	2126.2E6	740.4E6	41.667	51.776
16)	M	4,4'-DDT	10.06	11.55	2192.0E6	704.4E6	51.232	56.455m
17)		Endrin aldehyde	10.54	11.76	1887.2E6	692.6E6	53.682	59.926
18)		Endosulfan sulfa	11.09	12.23	1616.0E6	730.2E6	49.625	56.166m
19)		Methoxychlor	10.91	12.69	1026.3E6	374.7E6	57.760m	59.880m
20)		Mirex	11.29	13.11	1857.9E6	565.4E6	60.286m	55.314m
21)		Endrin ketone	11.76	13.13	2221.0E6	781.6E6	55.758	53.393m
23)	L1	Chlordane (gamma	8.07	9.43	3059.7E6	986.6E6	46.344	35.640
24)	L1	Chlordane (alpha	8.32	9.69	2917.3E6	928.0E6	44.620	41.761
		Sum Chlordane (gamma)			5977.0E6	1914.5E6	90.963	77.401
Average		Chlordane (gamma)					45.482	38.701
		Sum Toxaphene (1)			0	0	N.D.	N.D.
Average		Toxaphene (1)					0.000	0.000

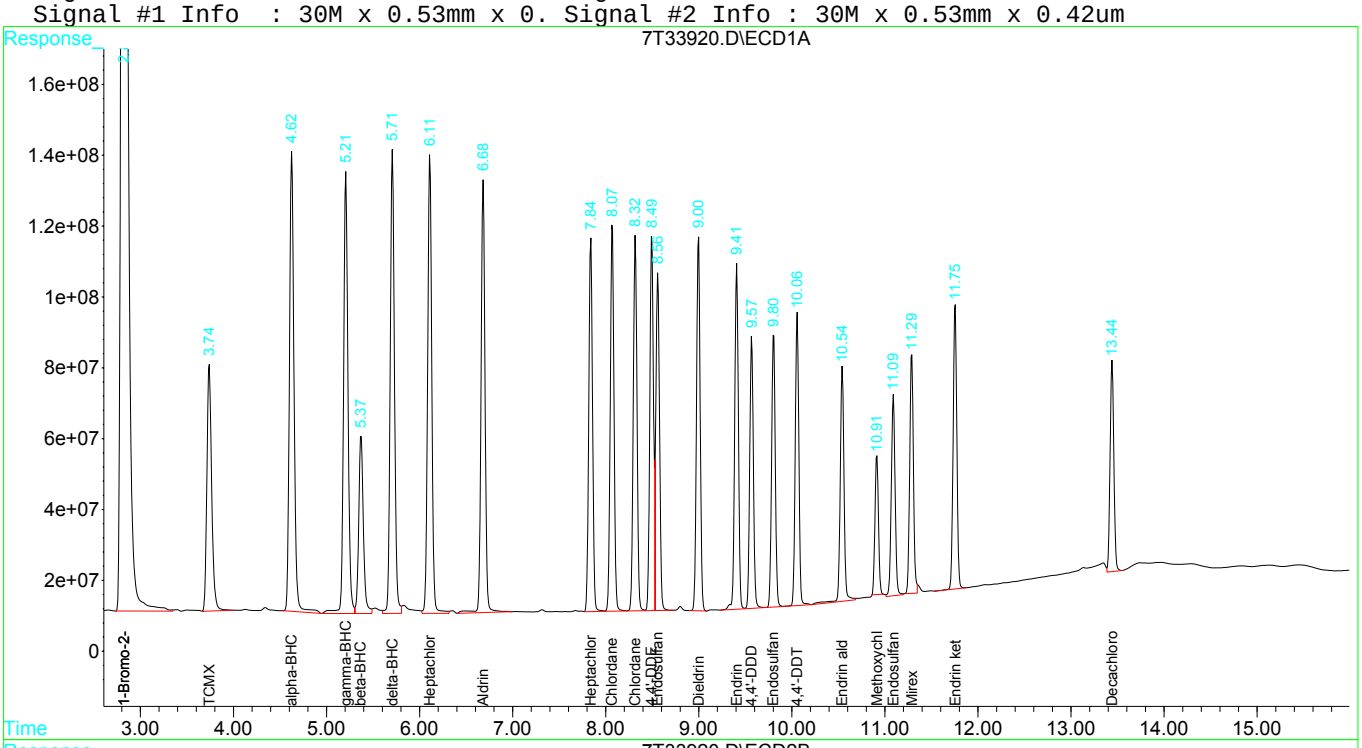
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7T33920.D 80810607.M Wed Jun 14 14:04:06 2023 SS

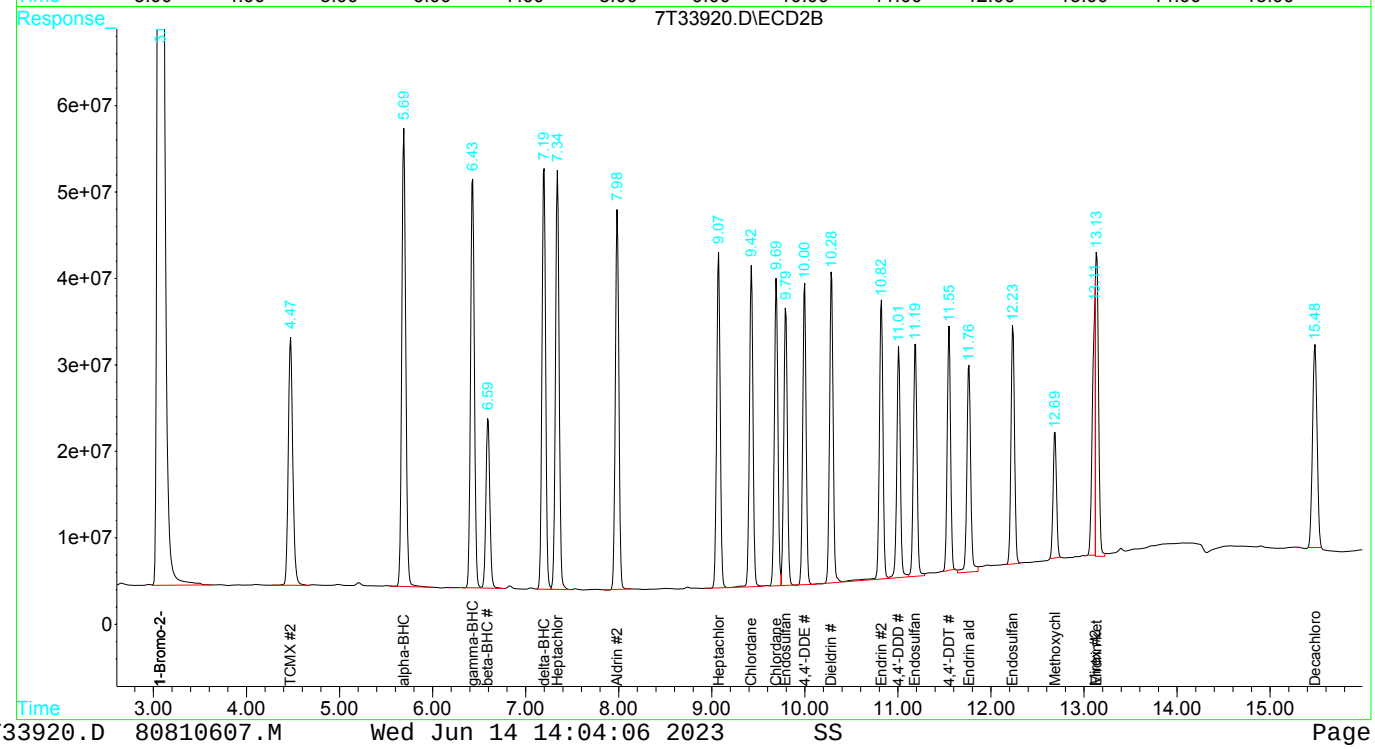
Quantitation Report (QT Reviewed)

Signal #1 : G:\HPCHEM\GCECD7\DATA\20230613\7T33920.D\ECD1A.CH Vial: 3
Signal #2 : G:\HPCHEM\GCECD7\DATA\20230613\7T33920.D\ECD2B.CH
Acq On : 13 Jun 2023 4:14 pm Operator: WD
Sample : SEQ-CCV Inst : HP G1530A
Misc : Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Jun 13 17:36 2023 Quant Results File: 80810607.RES

Quant Method : G:\HPCHEM\G...\80810607.M (Chemstation Integrator)
Title : Pesticides by Method SW-846 8081B
Last Update : Tue Jun 13 17:34:41 2023
Response via : Multiple Level Calibration
DataAcq Meth : RUNPEST.M

Volume Inj. : 2ul
Signal #1 Phase : RTx-50 Signal #2 Phase: RTx-CLPesticides II
Signal #1 Info : 30M x 0.53mm x 0. Signal #2 Info : 30M x 0.53mm x 0.42um





CALIBRATION VERIFICATION SUMMARY

Client: **Dynamic Earth LLC**
Work Order: **23E1425**

Lab Sample ID (50 pp):	SAF0291-CCV1(1)	Init. Calib. Date(s):	06/07/2023
File ID:	7T33943.D	Date Analyzed:	06/14/2023 17:05
Pesticides	Column 1	Matrix:	Soil

Individual Mix Compound		RT WINDOW		$\overline{CF}$	CF	%D
		FROM	TO			
Aldrin	06.68	06.58	06.78	1	1	3.60
alpha-BHC	04.62	04.52	04.72	2	2	0.80
beta-BHC	05.37	05.27	05.47	1	1	4.30
delta-BHC	05.70	05.60	05.80	2	2	3.10
Dieldrin	08.99	08.89	09.09	1	1	25.80 *
Endosulfan I	08.56	08.46	08.66	1	1	22.20 *
Endosulfan II	09.80	09.70	09.90	1	1	24.90 *
Endosulfan sulfate	11.09	10.99	11.19	1	1	37.20 *
Endrin	09.40	09.30	09.50	1	1	15.10
Endrin aldehyde	10.54	10.44	10.64	1	1	40.40 *
Endrin ketone	11.75	11.65	11.85	1	1	37.90 *
gamma-BHC (Lindane)	05.20	05.10	05.30	2	2	0.60
4,4'-DDT	10.06	09.96	10.16	1	1	24.30 *
4,4'-DDE	08.49	08.39	08.59	1	1	17.30
4,4'-DDD	09.56	09.46	09.66	1	1	28.60 *
Methoxychlor	10.91	10.81	11.01	0	0	25.70 *
Heptachlor Epoxide	07.84	07.74	07.94	1	1	12.90
Heptachlor	06.11	06.01	06.21	2	2	0.10
Chlordane	08.07	07.97	08.17	1	1	15.80
Decachlorobiphenyl	13.44	13.34	13.54	1	1	36.10 *
Tetrachloro-m-xylene	03.73	03.63	03.83	1	1	2.50

* - Outside of QC limits

F-VII

CALIBRATION VERIFICATION SUMMARY

Client: **Dynamic Earth LLC**
Work Order: **23E1425**

Lab Sample ID (50 pp):	SAF0291-CCV1(2)	Init. Calib. Date(s):	06/07/2023
File ID:	7T33943.D	Date Analyzed:	06/14/2023 17:05
Pesticides	Column 2	Matrix:	Soil

Individual Mix Compound		RT WINDOW		$\overline{CF}$	CF	%D
		FROM	TO			
Aldrin [2C]	07.98	07.88	08.08	1	1	10.60
alpha-BHC [2C]	05.69	05.59	05.79	1	1	4.80
beta-BHC [2C]	06.59	06.49	06.69	1	1	11.40
delta-BHC [2C]	07.19	07.09	07.29	1	1	8.70
Dieldrin [2C]	10.28	10.18	10.38	1	1	15.80
Endosulfan I [2C]	09.79	09.69	09.89	1	1	15.80
Endosulfan II [2C]	11.18	11.08	11.28	1	1	19.40
Endosulfan sulfate [2C]	12.23	12.13	12.33	1	1	15.70
Endrin [2C]	10.82	10.72	10.92	1	1	0.20
Endrin aldehyde [2C]	11.76	11.66	11.86	1	1	20.10 *
Endrin ketone [2C]	13.13	13.03	13.23	1	1	4.40
gamma-BHC (Lindane) [2C]	06.42	06.32	06.52	1	1	7.00
4,4'-DDT [2C]	11.55	11.45	11.65	1	1	2.60
4,4'-DDE [2C]	09.99	09.89	10.09	1	1	14.00
4,4'-DDD [2C]	11.01	10.91	11.11	1	1	14.80
Methoxychlor [2C]	12.68	12.58	12.78	0	0	0.30
Heptachlor Epoxide [2C]	09.07	08.97	09.17	1	1	13.60
Heptachlor [2C]	07.34	07.24	07.44	1	1	6.60
Chlordane [2C]	09.42	09.32	09.52	1	1	14.40
Decachlorobiphenyl [2C]	15.47	15.37	15.57	1	1	20.70 *
Tetrachloro-m-xylene [2C]	04.47	04.37	04.57	1	1	6.70

* - Outside of QC limits

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Quantitation Report (QT Reviewed)

Signal #1 : G:\HPCHEM\GCECD7\DATA\20230614\7T33943.D\ECD1A.CH Vial: 3
Signal #2 : G:\HPCHEM\GCECD7\DATA\20230614\7T33943.D\ECD2B.CH
Acq On : 14 Jun 2023 5:05 pm Operator: WD
Sample : SEQ-CCV Inst : HP G1530A
Misc : Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Jun 15 11:19 2023 Quant Results File: 80810607.RES

Quant Method : G:\HPCHEM\G...\80810607.M (Chemstation Integrator)
Title : Pesticides by Method SW-846 8081B
Last Update : Wed Jun 14 17:27:55 2023
Response via : Initial Calibration
DataAcq Meth : RUNPEST.M

Volume Inj. : 2ul
Signal #1 Phase : RTx-50 Signal #2 Phase: RTx-CLPesticides II
Signal #1 Info : 30M x 0.53mm x 0. Signal #2 Info : 30M x 0.53mm x 0.42um

		Compound	RT#1	RT#2	Resp#1	Resp#2	ug/kg	ug/kg
		Internal Standards						
1)	I	1-Bromo-2-nitrob	2.82	3.07	21787.3E6	8972.2E6	400.000	400.000
25)	I	1-Bromo-2-nitrob	2.82	3.07	21787.3E6	8972.2E6	400.000	400.000
		System Monitoring Compounds						
2)	S	TCMX	3.73	4.47	2595.5E6	968.2E6	54.562	51.979
		Spiked Amount 50.000	Range 43 - 129		Recovery =		109.12%	103.96%
22)	S	Decachlorobiphen	13.44	15.47	1538.8E6	781.6E6	41.822m	57.246m#
		Spiked Amount 50.000	Range 42 - 136		Recovery =		83.64%	114.49%
		Target Compounds						
3)		alpha-BHC	4.62	5.69	4512.9E6	1583.3E6	57.530	51.468
4)	M	gamma-BHC (Linda	5.20	6.42	4143.0E6	1381.1E6	56.143	48.376
5)	M	Heptachlor	6.11	7.34	4101.6E6	1349.0E6	55.611	47.692
6)		beta-BHC	5.37	6.59	1673.8E6	586.0E6	52.912	47.204
7)		delta-BHC	5.70	7.19	4123.8E6	1348.1E6	54.688	46.966
8)	M	Aldrin	6.68	7.98	3810.1E6	1192.5E6	53.900	44.383
9)		Heptachlor epoxi	7.84	9.07	3064.3E6	1035.4E6	46.641	41.128
10)		Endosulfan I	8.56	9.79	2544.5E6	865.8E6	43.606	42.845
11)		4,4'-DDE	8.49	9.99	2732.1E6	877.5E6	42.495	44.502
12)	M	Dieldrin	8.99	10.28	2590.5E6	939.5E6	40.142m	46.296
13)	M	Endrin	9.40	10.82	2382.5E6	832.7E6	40.364m	50.875 #
14)		4,4'-DDD	9.56	11.01	1834.3E6	669.8E6	40.695m	51.316 #
15)		Endosulfan II	9.80	11.18	2100.2E6	712.1E6	40.422m	49.733
16)	M	4,4'-DDT	10.06	11.55	1794.9E6	664.8E6	41.202	53.210 #
17)		Endrin aldehyde	10.54	11.76	1447.5E6	617.9E6	40.438	53.390 #
18)		Endosulfan sulfa	11.09	12.23	1380.3E6	701.5E6	41.628m	53.892m#
19)		Methoxychlor	10.91	12.68	849.5E6	350.3E6	46.956	55.909m
20)		Mirex	11.29	13.10	1627.2E6	419.7E6	51.857	41.014m
21)		Endrin ketone	11.75	13.13	1794.1E6	768.8E6	44.236	52.455m
23)	L1	Chlordane (gamma	8.07	9.42	3148.3E6	983.3E6	46.832	35.479m
24)	L1	Chlordane (alpha	8.31	9.69	2927.5E6	930.4E6	43.975	41.817
		Sum Chlordane (gamma)			6075.8E6	1913.7E6	90.807	77.296
Average		Chlordane (gamma)					45.403	38.648
		Sum Toxaphene (1)			0	0	N.D.	N.D.
Average		Toxaphene (1)					0.000	0.000

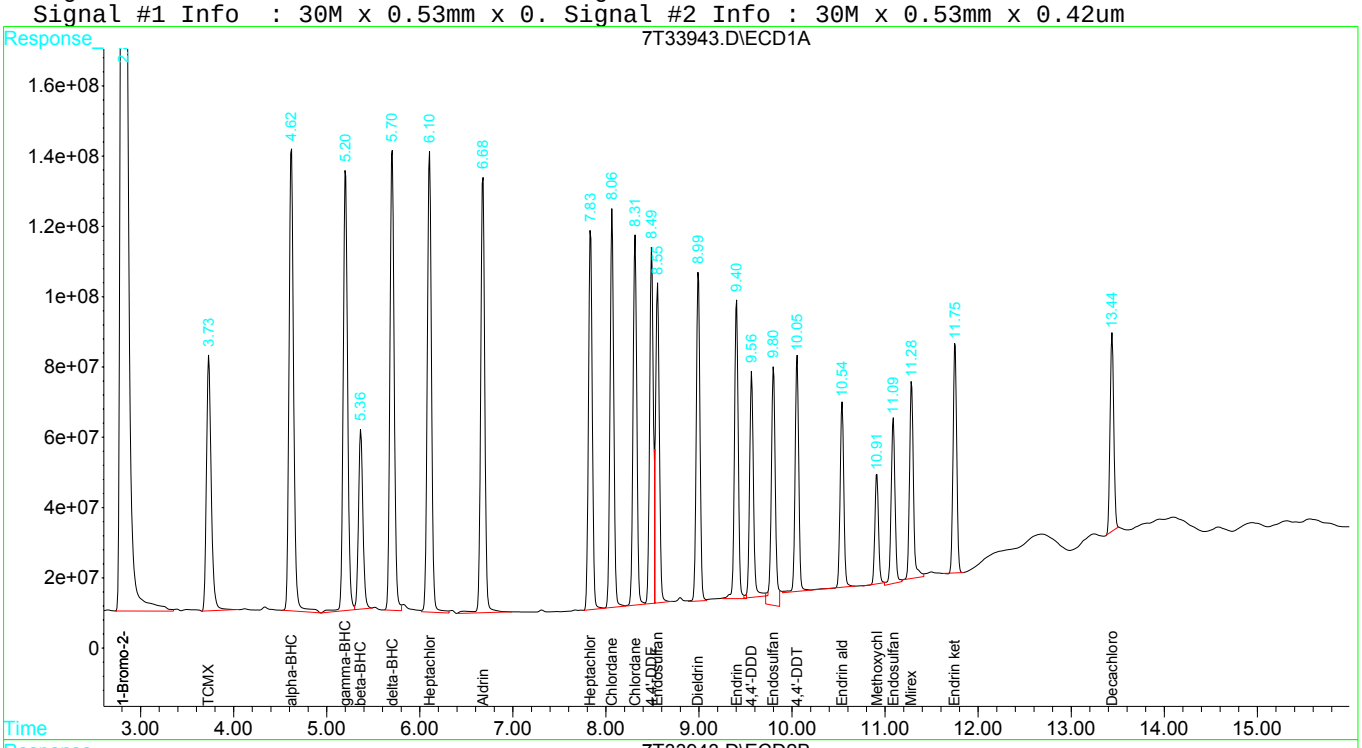
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.
7T33943.D 80810607.M Thu Jun 15 13:23:36 2023 SS

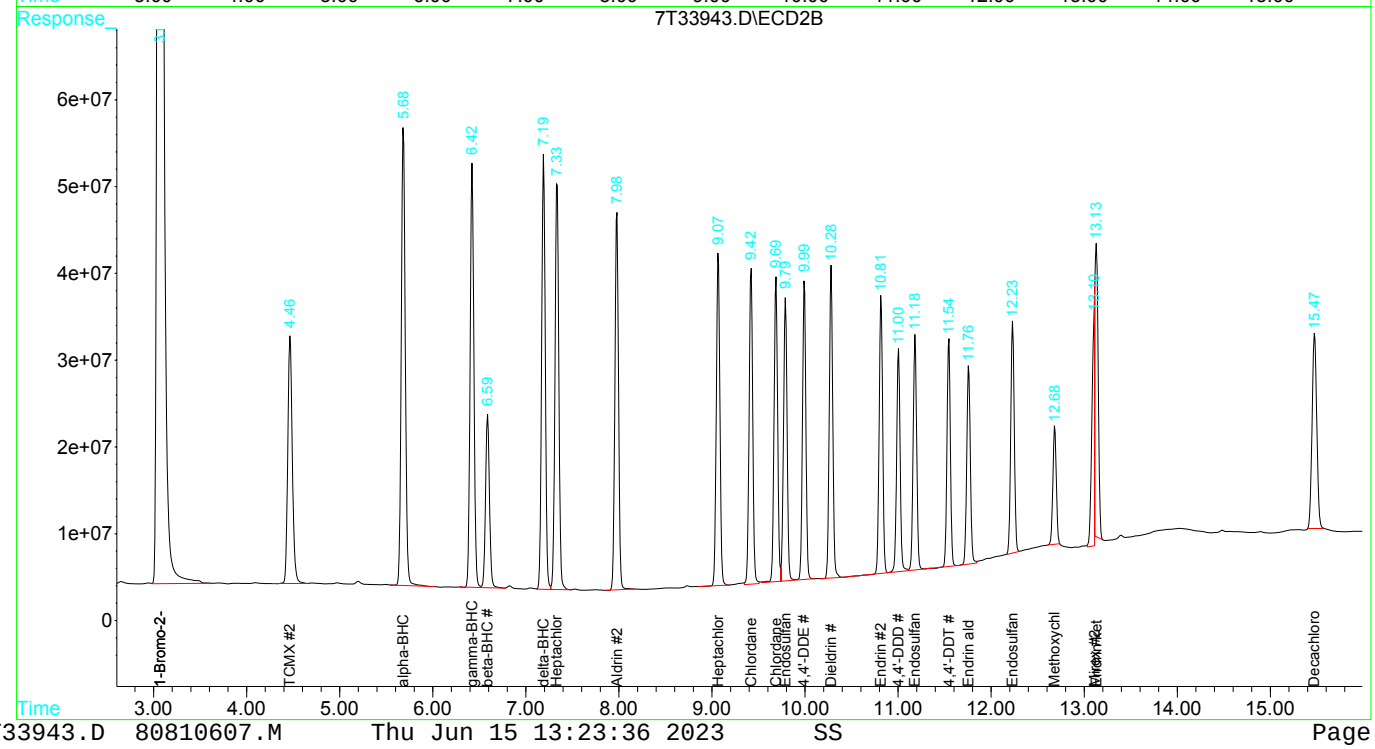
Quantitation Report (QT Reviewed)

Signal #1 : G:\HPCHEM\GCECD7\DATA\20230614\7T33943.D\ECD1A.CH Vial: 3
Signal #2 : G:\HPCHEM\GCECD7\DATA\20230614\7T33943.D\ECD2B.CH
Acq On : 14 Jun 2023 5:05 pm Operator: WD
Sample : SEQ-CCV Inst : HP G1530A
Misc : Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Jun 15 11:19 2023 Quant Results File: 80810607.RES

Quant Method : G:\HPCHEM\G...\80810607.M (Chemstation Integrator)
Title : Pesticides by Method SW-846 8081B
Last Update : Wed Jun 14 17:27:55 2023
Response via : Multiple Level Calibration
DataAcq Meth : RUNPEST.M

Volume Inj. : 2ul
Signal #1 Phase : RTx-50 Signal #2 Phase: RTx-CLPesticides II
Signal #1 Info : 30M x 0.53mm x 0. Signal #2 Info : 30M x 0.53mm x 0.42um





CALIBRATION VERIFICATION SUMMARY

Client: **Dynamic Earth LLC**
Work Order: **23E1425**

Lab Sample ID (50 pp):	SAF0176-CCV1(1)	Init. Calib. Date(s):	06/05/2023
File ID:	9T01025.D	Date Analyzed:	06/08/2023 15:44
Pesticides	Column 1	Matrix:	Soil

Individual Mix Compound		RT WINDOW		$\overline{CF}$	CF	%D
		FROM	TO			
Aldrin	05.66	05.56	05.76	1	1	5.20
alpha-BHC	04.35	04.25	04.45	1	1	2.00
beta-BHC	04.80	04.70	04.90	1	1	8.10
delta-BHC	05.02	04.92	05.12	1	1	4.70
Dieldrin	07.43	07.33	07.53	1	1	5.20
Endosulfan I	07.06	06.96	07.16	1	1	7.80
Endosulfan II	08.23	08.13	08.33	1	1	2.90
Endosulfan sulfate	09.97	09.87	10.07	1	1	11.20
Endrin	07.82	07.72	07.92	1	1	4.50
Endrin aldehyde	09.04	08.94	09.14	1	1	8.80
Endrin ketone	10.61	10.51	10.71	1	1	2.50
gamma-BHC (Lindane)	04.71	04.61	04.81	1	1	1.70
4,4'-DDT	08.43	08.33	08.53	1	1	16.60
4,4'-DDE	06.94	06.84	07.04	1	1	6.20
4,4'-DDD	07.91	07.81	08.01	1	1	0.80
Methoxychlor	09.40	09.30	09.50	0	0	40.30 *
Heptachlor Epoxide	06.48	06.38	06.58	1	1	7.50
Heptachlor	05.28	05.18	05.38	1	1	5.50
Chlordane	06.66	06.56	06.76	1	1	6.70
Decachlorobiphenyl	13.22	13.12	13.32	1	1	1.60
Tetrachloro-m-xylene	03.77	03.67	03.87	1	1	8.10

* - Outside of QC limits

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CALIBRATION VERIFICATION SUMMARY

Client: **Dynamic Earth LLC**
Work Order: **23E1425**

Lab Sample ID (50 pp):	SAF0176-CCV1(2)	Init. Calib. Date(s):	06/05/2023
File ID:	9T01025.D	Date Analyzed:	06/08/2023 15:44
Pesticides	Column 2	Matrix:	Soil

Individual Mix Compound		RT WINDOW		$\overline{CF}$	CF	%D
		FROM	TO			
Aldrin [2C]	06.53	06.43	06.63	1	1	0.70
alpha-BHC [2C]	04.94	04.84	05.04	1	1	2.50
beta-BHC [2C]	05.49	05.39	05.59	1	0	10.20
delta-BHC [2C]	05.92	05.82	06.02	1	1	31.60 *
Dieldrin [2C]	08.65	08.55	08.75	1	1	0.60
Endosulfan I [2C]	08.12	08.02	08.22	1	1	2.20
Endosulfan II [2C]	09.75	09.65	09.85	1	1	4.30
Endosulfan sulfate [2C]	11.21	11.11	11.31	1	1	51.30 *
Endrin [2C]	09.29	09.19	09.39	1	1	19.20
Endrin aldehyde [2C]	10.52	10.42	10.62	1	1	1.00
Endrin ketone [2C]	12.64	12.54	12.74	1	1	6.20
gamma-BHC (Lindane) [2C]	05.41	05.31	05.51	1	1	7.10
4,4'-DDT [2C]	10.21	10.11	10.31	0	1	121.00*
4,4'-DDE [2C]	08.28	08.18	08.38	1	1	3.30
4,4'-DDD [2C]	09.48	09.38	09.58	0	1	38.60 *
Methoxychlor [2C]	11.93	11.83	12.03	0	0	194.00*
Heptachlor Epoxide [2C]	07.41	07.31	07.51	1	1	1.90
Heptachlor [2C]	06.04	05.94	06.14	1	1	8.60
Chlordane [2C]	07.73	07.63	07.83	1	1	9.10
Decachlorobiphenyl [2C]	16.35	16.25	16.45	1	1	19.40
Tetrachloro-m-xylene [2C]	04.20	04.10	04.30	1	1	4.70

* - Outside of QC limits

F-VII

Quantitation Report (QT Reviewed)

Signal #1 : G:\HPCHEM\GCECD9\DATA\20230608\9T01025.D\ECD1A.CH Vial: 3
Signal #2 : G:\HPCHEM\GCECD9\DATA\20230608\9T01025.D\ECD2B.CH
Acq On : 8 Jun 2023 3:44 pm Operator: WD
Sample : SEQ-CCV Inst : HP G1530A
Misc : Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Jun 8 18:08 2023 Quant Results File: 80810606.RES

Quant Method : G:\HPCHEM\G...\80810606.M (Chemstation Integrator)
Title : Pesticides by Method SW-846 8081B
Last Update : Tue Jun 06 16:57:33 2023
Response via : Initial Calibration
DataAcq Meth : RUNPEST.M

Volume Inj. : 2ul
Signal #1 Phase : RTx-50 Signal #2 Phase: RTx-CLPesticides II
Signal #1 Info : 30M x 0.53mm x 0. Signal #2 Info : 30M x 0.53mm x 0.42um

		Compound	RT#1	RT#2	Resp#1	Resp#2	ug/kg	ug/kg	
		Internal Standards							
1)	I	1-Bromo-2-nitrob	3.06	3.25	4403.5E6	3159.7E6	400.000	400.000	
25)	I	1-Bromo-2-nitrob	3.06	3.25	4403.5E6	3159.7E6	400.000	400.000	
		System Monitoring Compounds							
2)	S	TCMX	3.77	4.20	454.7E6	285.5E6	45.953	47.662	
		Spiked Amount 50.000	Range 43 - 129		Recovery =		91.91%	95.32%	
22)	S	Decachlorobiphen	13.22	16.35	559.1E6	399.8E6	49.350	59.953	
		Spiked Amount 50.000	Range 42 - 136		Recovery =		98.70%	119.91%	
		Target Compounds							
3)		alpha-BHC	4.35	4.94	798.2E6	558.7E6	45.043	46.009	
4)	M	gamma-BHC (Linda	4.71	5.41	720.5E6	492.2E6	49.160	53.549	
5)	M	Heptachlor	5.28	6.04	685.2E6	510.4E6	52.772	54.291	
6)		beta-BHC	4.80	5.49	286.3E6	187.6E6	45.963	44.879	
7)		delta-BHC	5.02	5.92	703.7E6	408.9E6	46.197	59.067	#
8)	M	Aldrin	5.66	6.53	672.8E6	485.3E6	47.407	49.635	
9)		Heptachlor epoxi	6.48	7.41	585.0E6	422.5E6	46.274	49.051	
10)		Endosulfan I	7.06	8.12	536.2E6	375.1E6	46.098	48.905	
11)		4,4'-DDE	6.94	8.28	507.0E6	367.9E6	46.902	51.662	
12)	M	Dieldrin	7.43	8.65	590.1E6	426.1E6	47.421	50.292	
13)	M	Endrin	7.82	9.29	512.8E6	356.7E6	52.236	59.623	
14)		4,4'-DDD	7.91	9.48	429.4E6	273.2E6	50.387	69.312	#
15)		Endosulfan II	8.23	9.75	456.9E6	334.8E6	48.556	52.143	
16)	M	4,4'-DDT	8.43	10.21	374.1E6	236.5E6	58.298	110.607	#
17)		Endrin aldehyde	9.04	10.52	413.1E6	281.0E6	45.616	50.482	
18)		Endosulfan sulfa	9.97	11.21	455.5E6	307.7E6	55.583	75.646	#
19)		Methoxychlor	9.40	11.93	192.9E6	131.7E6	70.155	147.113	#
20)		Mirex	9.71	12.55	410.5E6	263.2E6	48.456	69.310	#
21)		Endrin ketone	10.61	12.64	532.9E6	391.4E6	51.239	53.080	
23)	L1	Chlordane (gamma	6.66	7.73	594.7E6	420.5E6	46.785	54.408	
24)	L1	Chlordane (alpha	6.85	8.00	576.8E6	411.7E6	46.529	54.721	
		Sum Chlordane (gamma)			1171.6E6	832.2E6	93.314	109.130	
Average		Chlordane (gamma)					46.657	54.565	
		Sum Toxaphene (1)			0	0	N.D.	N.D.	
Average		Toxaphene (1)					0.000	0.000	

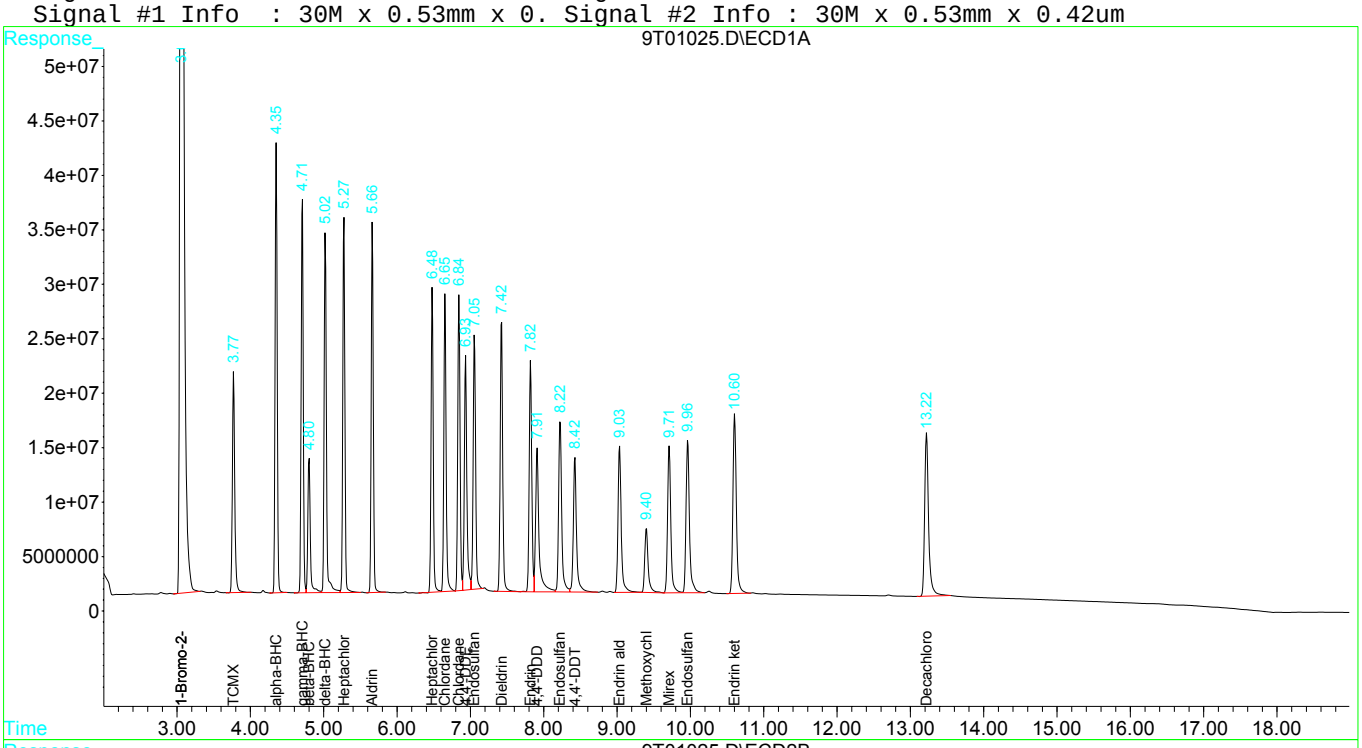
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

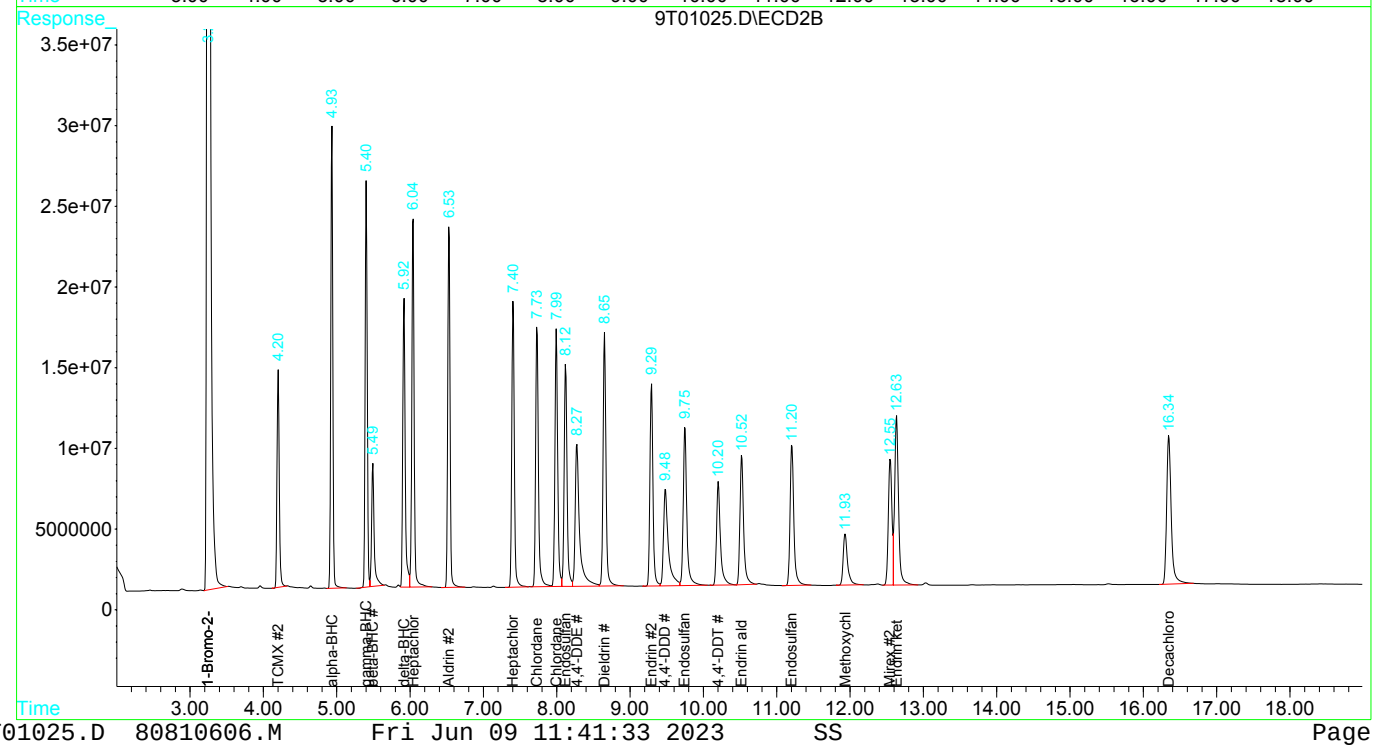
Quantitation Report (QT Reviewed)

Signal #1 : G:\HPCHEM\GCECD9\DATA\20230608\9T01025.D\ECD1A.CH Vial: 3
Signal #2 : G:\HPCHEM\GCECD9\DATA\20230608\9T01025.D\ECD2B.CH
Acq On : 8 Jun 2023 3:44 pm Operator: WD
Sample : SEQ-CCV Inst : HP G1530A
Misc : Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Jun 8 18:08 2023 Quant Results File: 80810606.RES

Quant Method : G:\HPCHEM\G...\80810606.M (Chemstation Integrator)
Title : Pesticides by Method SW-846 8081B
Last Update : Tue Jun 06 16:57:33 2023
Response via : Multiple Level Calibration
DataAcq Meth : RUNPEST.M

Volume Inj. : 2ul
Signal #1 Phase : RTx-50 Signal #2 Phase: RTx-CLPesticides II
Signal #1 Info : 30M x 0.53mm x 0. Signal #2 Info : 30M x 0.53mm x 0.42um





CALIBRATION VERIFICATION SUMMARY

Client: **Dynamic Earth LLC**
Work Order: **23E1425**

Lab Sample ID (50 pp):	SAF0245-CCV1(1)	Init. Calib. Date(s):	06/05/2023
File ID:	9T01094.D	Date Analyzed:	06/12/2023 14:57
Pesticides	Column 1	Matrix:	Soil

Individual Mix Compound		RT WINDOW		$\overline{CF}$	CF	%D
		FROM	TO			
Aldrin	05.67	05.57	05.77	1	1	2.30
alpha-BHC	04.36	04.26	04.46	1	2	2.30
beta-BHC	04.81	04.71	04.91	1	1	5.60
delta-BHC	05.03	04.93	05.13	1	1	11.60
Dieldrin	07.43	07.33	07.53	1	1	2.50
Endosulfan I	07.06	06.96	07.16	1	1	6.00
Endosulfan II	08.23	08.13	08.33	1	1	0.30
Endosulfan sulfate	09.96	09.86	10.06	1	1	19.40
Endrin	07.82	07.72	07.92	1	1	7.70
Endrin aldehyde	09.04	08.94	09.14	1	1	6.10
Endrin ketone	10.60	10.50	10.70	1	1	8.00
gamma-BHC (Lindane)	04.71	04.61	04.81	1	1	3.50
4,4'-DDT	08.42	08.32	08.52	1	1	18.50
4,4'-DDE	06.94	06.84	07.04	1	1	1.80
4,4'-DDD	07.91	07.81	08.01	1	1	3.90
Methoxychlor	09.40	09.30	09.50	0	0	59.10 *
Heptachlor Epoxide	06.48	06.38	06.58	1	1	4.60
Heptachlor	05.28	05.18	05.38	1	1	10.20
Chlordane	06.66	06.56	06.76	1	1	1.70
Decachlorobiphenyl	13.22	13.12	13.32	1	1	20.00
Tetrachloro-m-xylene	03.78	03.68	03.88	1	1	5.50

* - Outside of QC limits

F-VII

CALIBRATION VERIFICATION SUMMARY

Client: **Dynamic Earth LLC**
Work Order: **23E1425**

Lab Sample ID (50 pp):	SAF0245-CCV1(2)	Init. Calib. Date(s):	06/05/2023
File ID:	9T01094.D	Date Analyzed:	06/12/2023 14:57
Pesticides	Column 2	Matrix:	Soil

Individual Mix Compound		RT WINDOW		$\overline{CF}$	CF	%D
		FROM	TO			
Aldrin [2C]	06.54	06.44	06.64	1	1	0.30
alpha-BHC [2C]	04.94	04.84	05.04	1	1	4.50
beta-BHC [2C]	05.50	05.40	05.60	1	1	5.00
delta-BHC [2C]	05.92	05.82	06.02	1	1	33.30 *
Dieldrin [2C]	08.65	08.55	08.75	1	1	0.30
Endosulfan I [2C]	08.12	08.02	08.22	1	1	2.60
Endosulfan II [2C]	09.75	09.65	09.85	1	1	1.40
Endosulfan sulfate [2C]	11.20	11.10	11.30	1	1	55.80 *
Endrin [2C]	09.29	09.19	09.39	1	1	19.10
Endrin aldehyde [2C]	10.52	10.42	10.62	1	1	0.10
Endrin ketone [2C]	12.63	12.53	12.73	1	1	3.00
gamma-BHC (Lindane) [2C]	05.41	05.31	05.51	1	1	11.90
4,4'-DDT [2C]	10.20	10.10	10.30	0	1	151.00*
4,4'-DDE [2C]	08.27	08.17	08.37	1	1	2.00
4,4'-DDD [2C]	09.47	09.37	09.57	0	1	31.10 *
Methoxychlor [2C]	11.93	11.83	12.03	0	0	235.00*
Heptachlor Epoxide [2C]	07.41	07.31	07.51	1	1	2.10
Heptachlor [2C]	06.04	05.94	06.14	1	1	6.20
Chlordane [2C]	07.73	07.63	07.83	1	1	11.10
Decachlorobiphenyl [2C]	16.34	16.24	16.44	1	1	10.40
Tetrachloro-m-xylene [2C]	04.21	04.11	04.31	1	1	1.10

* - Outside of QC limits

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Quantitation Report (QT Reviewed)

Signal #1 : G:\HPCHEM\GCECD9\DATA\20230612\9T01094.D\ECD1A.CH Vial: 3
Signal #2 : G:\HPCHEM\GCECD9\DATA\20230612\9T01094.D\ECD2B.CH
Acq On : 12 Jun 2023 2:57 pm Operator: WD
Sample : SEQ-CCV Inst : GCECD-9
Misc : Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Jun 12 16:18 2023 Quant Results File: 80810606.RES

Quant Method : G:\HPCHEM\G...\80810606.M (Chemstation Integrator)
Title : Pesticides by Method SW-846 8081B
Last Update : Tue Jun 06 16:57:33 2023
Response via : Initial Calibration
DataAcq Meth : RUNPEST.M

Volume Inj. : 2ul
Signal #1 Phase : RTx-50 Signal #2 Phase: RTx-CLPesticides II
Signal #1 Info : 30M x 0.53mm x 0. Signal #2 Info : 30M x 0.53mm x 0.42um

		Compound	RT#1	RT#2	Resp#1	Resp#2	ug/kg	ug/kg
		Internal Standards						
1)	I	1-Bromo-2-nitrob	3.06	3.25	4436.6E6	3213.8E6	400.000	400.000
25)	I	1-Bromo-2-nitrob	3.06	3.25	4436.6E6	3213.8E6	400.000	400.000
		System Monitoring Compounds						
2)	S	TCMX	3.78	4.21	471.2E6	301.3E6	47.266	49.455
		Spiked Amount 50.000	Range 43 - 129		Recovery =		94.53%	98.91%
22)	S	Decachlorobiphen	13.22	16.34f	458.1E6	376.0E6	40.134	55.437 #
		Spiked Amount 50.000	Range 42 - 136		Recovery =		80.27%	110.87%
		Target Compounds						
3)		alpha-BHC	4.36	4.94	838.9E6	579.6E6	46.929	46.874
4)	M	gamma-BHC (Linda	4.71	5.41	764.0E6	523.3E6	51.741	55.972
5)	M	Heptachlor	5.28	6.04	721.0E6	507.9E6	55.117	53.122
6)		beta-BHC	4.81	5.50	296.3E6	201.8E6	47.208	47.478
7)		delta-BHC	5.03	5.92	755.9E6	421.1E6	49.072	59.726m
8)	M	Aldrin	5.67	6.54	698.6E6	495.8E6	48.861	49.852
9)		Heptachlor epoxi	6.48	7.41	607.3E6	428.6E6	47.680	48.928
10)		Endosulfan I	7.06	8.12	550.7E6	380.1E6	46.989	48.717
11)		4,4'-DDE	6.94	8.27	534.8E6	369.6E6	49.107	51.018
12)	M	Dieldrin	7.43	8.65	611.3E6	429.8E6	48.759	49.867
13)	M	Endrin	7.82	9.29	532.4E6	362.4E6	53.831	59.556
14)		4,4'-DDD	7.91	9.47f	446.3E6	262.8E6	51.970	65.559m#
15)		Endosulfan II	8.23	9.75	475.5E6	330.9E6	50.163	50.677
16)	M	4,4'-DDT	8.42	10.20	383.1E6	273.1E6	59.247m	125.610 #
17)		Endrin aldehyde	9.04	10.52	428.4E6	283.4E6	46.959	50.049
18)		Endosulfan sulfa	9.96	11.20	492.8E6	322.3E6	59.693	77.912 #
19)		Methoxychlor	9.40	11.93	220.3E6	152.5E6	79.530	167.421 #
20)		Mirex	9.71	12.54	410.4E6	268.2E6	48.081	69.422 #
21)		Endrin ketone	10.60	12.63	566.1E6	386.4E6	54.022	51.511
23)	L1	Chlordane (gamma	6.66	7.73	628.0E6	434.8E6	49.037	55.311
24)	L1	Chlordane (alpha	6.85	8.00	614.9E6	426.9E6	49.230	55.782
		Sum Chlordane (gamma)			1242.9E6	861.7E6	98.266	111.094
Average		Chlordane (gamma)					49.133	55.547
		Sum Toxaphene (1)			0	0	N.D.	N.D.
Average		Toxaphene (1)					0.000	0.000

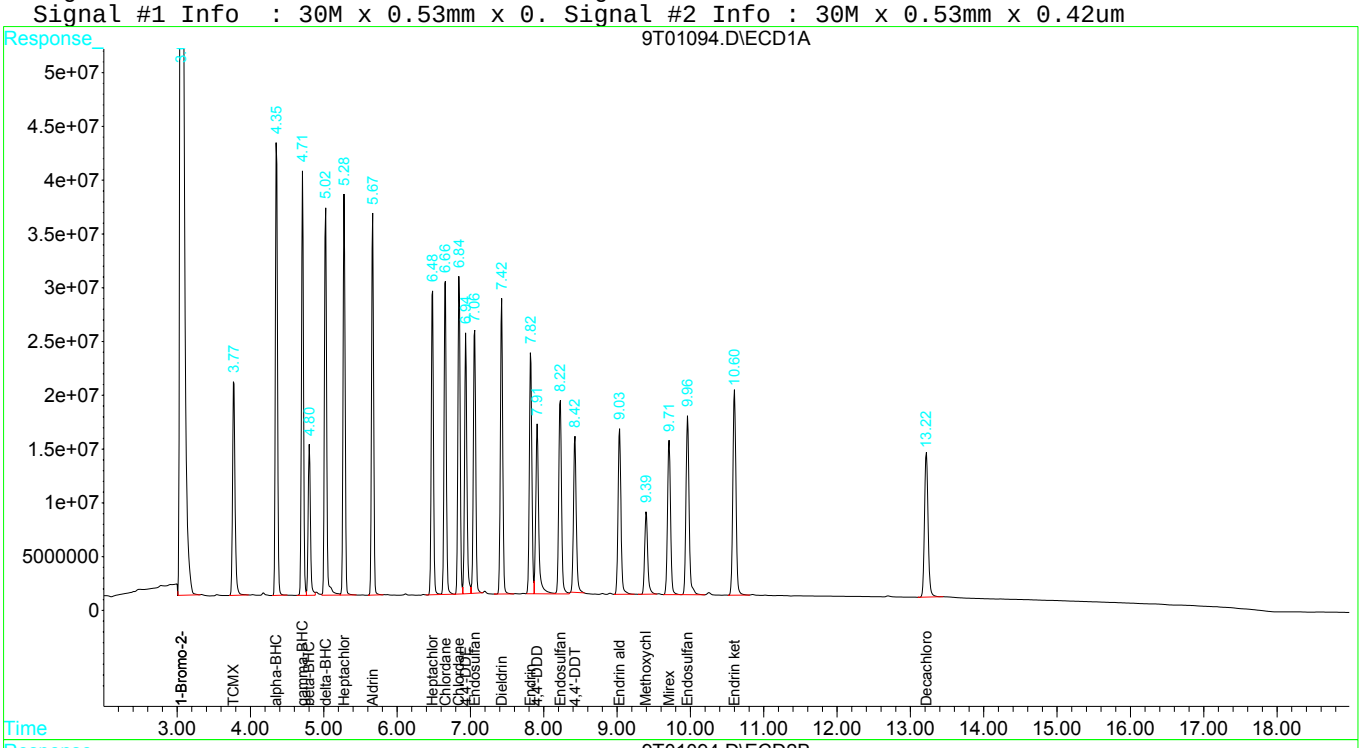
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9T01094.D 80810606.M Tue Jun 13 13:51:32 2023 SS

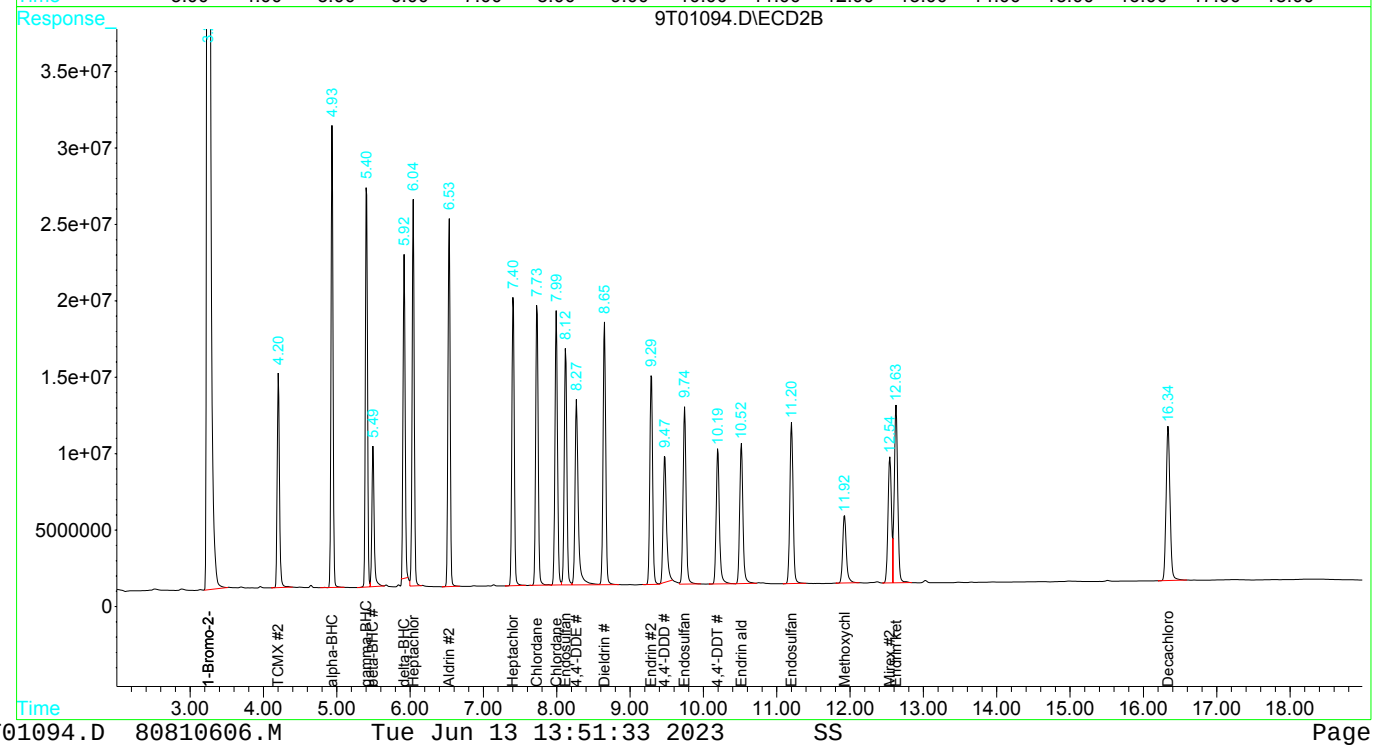
Quantitation Report (QT Reviewed)

Signal #1 : G:\HPCHEM\GCECD9\DATA\20230612\9T01094.D\ECD1A.CH Vial: 3
Signal #2 : G:\HPCHEM\GCECD9\DATA\20230612\9T01094.D\ECD2B.CH
Acq On : 12 Jun 2023 2:57 pm Operator: WD
Sample : SEQ-CCV Inst : GCECD-9
Misc : Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Jun 12 16:18 2023 Quant Results File: 80810606.RES

Quant Method : G:\HPCHEM\G...\80810606.M (Chemstation Integrator)
Title : Pesticides by Method SW-846 8081B
Last Update : Tue Jun 06 16:57:33 2023
Response via : Multiple Level Calibration
DataAcq Meth : RUNPEST.M

Volume Inj. : 2ul
Signal #1 Phase : RTx-50 Signal #2 Phase: RTx-CLPesticides II
Signal #1 Info : 30M x 0.53mm x 0. Signal #2 Info : 30M x 0.53mm x 0.42um





CALIBRATION VERIFICATION SUMMARY

Client: **Dynamic Earth LLC**
Work Order: **23E1425**

Lab Sample ID (50 pp):	SAF0265-CCV1(1)	Init. Calib. Date(s):	06/05/2023
File ID:	9T01120.D	Date Analyzed:	06/13/2023 16:23
Pesticides	Column 1	Matrix:	Soil

Individual Mix Compound		RT WINDOW		$\overline{CF}$	CF	%D
		FROM	TO			
Aldrin	05.68	05.58	05.78	1	1	2.20
alpha-BHC	04.36	04.26	04.46	1	2	3.00
beta-BHC	04.81	04.71	04.91	1	1	8.50
delta-BHC	05.03	04.93	05.13	1	1	10.40
Dieldrin	07.43	07.33	07.53	1	1	3.20
Endosulfan I	07.06	06.96	07.16	1	1	7.80
Endosulfan II	08.23	08.13	08.33	1	1	0.50
Endosulfan sulfate	09.97	09.87	10.07	1	1	17.50
Endrin	07.83	07.73	07.93	1	1	9.70
Endrin aldehyde	09.04	08.94	09.14	1	1	7.20
Endrin ketone	10.61	10.51	10.71	1	1	6.10
gamma-BHC (Lindane)	04.72	04.62	04.82	1	1	3.70
4,4'-DDT	08.43	08.33	08.53	1	1	19.30
4,4'-DDE	06.94	06.84	07.04	1	1	0.40
4,4'-DDD	07.92	07.82	08.02	1	1	1.90
Methoxychlor	09.40	09.30	09.50	0	0	72.50 *
Heptachlor Epoxide	06.49	06.39	06.59	1	1	5.80
Heptachlor	05.29	05.19	05.39	1	1	8.60
Chlordane	06.66	06.56	06.76	1	1	2.90
Decachlorobiphenyl	13.22	13.12	13.32	1	1	19.80
Tetrachloro-m-xylene	03.78	03.68	03.88	1	1	4.10

* - Outside of QC limits

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CALIBRATION VERIFICATION SUMMARY

Client: **Dynamic Earth LLC**
Work Order: **23E1425**

Lab Sample ID (50 pp):	SAF0265-CCV1(2)	Init. Calib. Date(s):	06/05/2023
File ID:	9T01120.D	Date Analyzed:	06/13/2023 16:23
Pesticides	Column 2	Matrix:	Soil

Individual Mix Compound		RT WINDOW		$\overline{CF}$	CF	%D
		FROM	TO			
Aldrin [2C]	06.54	06.44	06.64	1	1	4.50
alpha-BHC [2C]	04.94	04.84	05.04	1	1	3.30
beta-BHC [2C]	05.50	05.40	05.60	1	0	7.70
delta-BHC [2C]	05.92	05.82	06.02	1	1	32.40 *
Dieldrin [2C]	08.65	08.55	08.75	1	1	3.90
Endosulfan I [2C]	08.13	08.03	08.23	1	1	6.80
Endosulfan II [2C]	09.75	09.65	09.85	1	1	3.00
Endosulfan sulfate [2C]	11.20	11.10	11.30	1	1	51.00 *
Endrin [2C]	09.29	09.19	09.39	1	1	16.40
Endrin aldehyde [2C]	10.52	10.42	10.62	1	1	4.00
Endrin ketone [2C]	12.63	12.53	12.73	1	1	2.90
gamma-BHC (Lindane) [2C]	05.41	05.31	05.51	1	1	9.80
4,4'-DDT [2C]	10.20	10.10	10.30	0	1	168.00*
4,4'-DDE [2C]	08.27	08.17	08.37	1	1	0.30
4,4'-DDD [2C]	09.47	09.37	09.57	0	1	39.10 *
Methoxychlor [2C]	11.92	11.82	12.02	0	0	250.00*
Heptachlor Epoxide [2C]	07.41	07.31	07.51	1	1	5.40
Heptachlor [2C]	06.05	05.95	06.15	1	1	1.40
Chlordane [2C]	07.74	07.64	07.84	1	1	6.70
Decachlorobiphenyl [2C]	16.34	16.24	16.44	1	1	4.20
Tetrachloro-m-xylene [2C]	04.21	04.11	04.31	1	1	2.10

* - Outside of QC limits

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Quantitation Report (QT Reviewed)

Signal #1 : G:\HPCHEM\GCECD9\DATA\20230613\9T01120.D\ECD1A.CH Vial: 3
Signal #2 : G:\HPCHEM\GCECD9\DATA\20230613\9T01120.D\ECD2B.CH
Acq On : 13 Jun 2023 4:23 pm Operator: WD
Sample : SEQ-CCV Inst : HP G1530A
Misc : Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Jun 14 11:50 2023 Quant Results File: 80810606.RES

Quant Method : G:\HPCHEM\G...\80810606.M (Chemstation Integrator)
Title : Pesticides by Method SW-846 8081B
Last Update : Tue Jun 06 16:57:33 2023
Response via : Initial Calibration
DataAcq Meth : RUNPEST.M

Volume Inj. : 2ul
Signal #1 Phase : RTx-50 Signal #2 Phase: RTx-CLPesticides II
Signal #1 Info : 30M x 0.53mm x 0. Signal #2 Info : 30M x 0.53mm x 0.42um

		Compound	RT#1	RT#2	Resp#1	Resp#2	ug/kg	ug/kg	
		Internal Standards							
1)	I	1-Bromo-2-nitrob	3.06	3.25	4543.5E6	3340.5E6	400.000	400.000	
25)	I	1-Bromo-2-nitrob	3.06	3.25	4543.5E6	3340.5E6	400.000	400.000	
		System Monitoring Compounds							
2)	S	TCMX	3.78	4.21	489.4E6	310.1E6	47.939	48.964	
		Spiked Amount 50.000	Range 43 - 129		Recovery =		95.88%	97.93%	
22)	S	Decachlorobiphen	13.22	16.34f	470.1E6	368.9E6	40.220m	52.325	#
		Spiked Amount 50.000	Range 42 - 136		Recovery =		80.44%	104.65%	
		Target Compounds							
3)		alpha-BHC	4.36	4.94	865.0E6	595.4E6	47.237	46.354	
4)	M	gamma-BHC (Linda	4.72	5.41	783.8E6	533.6E6	51.832	54.913	
5)	M	Heptachlor	5.29	6.05	727.7E6	504.0E6	54.320	50.711	
6)		beta-BHC	4.81	5.50	294.0E6	203.9E6	45.736	46.142	
7)		delta-BHC	5.03	5.92	765.5E6	434.7E6	48.558	59.356m	
8)	M	Aldrin	5.68	6.54	716.4E6	493.8E6	48.925	47.771	
9)		Heptachlor epoxi	6.49	7.41	614.1E6	430.7E6	47.083	47.296	
10)		Endosulfan I	7.06	8.13	553.2E6	377.7E6	46.089	46.577	
11)		4,4'-DDE	6.94	8.27	559.8E6	375.3E6	50.193	49.847	
12)	M	Dieldrin	7.43	8.65	621.5E6	430.3E6	48.408	48.030	
13)	M	Endrin	7.83	9.29	555.4E6	368.3E6	54.828	58.225	
14)		4,4'-DDD	7.92	9.47	448.0E6	289.8E6	50.945	69.554	#
15)		Endosulfan II	8.23	9.75	482.9E6	329.2E6	49.744	48.507	
16)	M	4,4'-DDT	8.43	10.20	394.8E6	302.9E6	59.631m	134.016	#
17)		Endrin aldehyde	9.04	10.52	433.7E6	282.6E6	46.424	48.012	
18)		Endosulfan sulfa	9.97	11.20	496.8E6	324.8E6	58.759	75.524	#
19)		Methoxychlor	9.40	11.92	244.7E6	165.5E6	86.273	174.803	#
20)		Mirex	9.72	12.55	409.6E6	263.6E6	46.861	65.652	#
21)		Endrin ketone	10.61	12.63	569.2E6	378.5E6	53.041	48.545	
23)	L1	Chlordane (gamma	6.66	7.74	635.3E6	434.2E6	48.440	53.140	
24)	L1	Chlordane (alpha	6.85	8.00	622.3E6	426.3E6	48.654	53.600	
		Sum Chlordane (gamma)			1257.7E6	860.5E6	97.094	106.740	
Average		Chlordane (gamma)					48.547	53.370	
		Sum Toxaphene (1)			0	0	N.D.	N.D.	
Average		Toxaphene (1)					0.000	0.000	

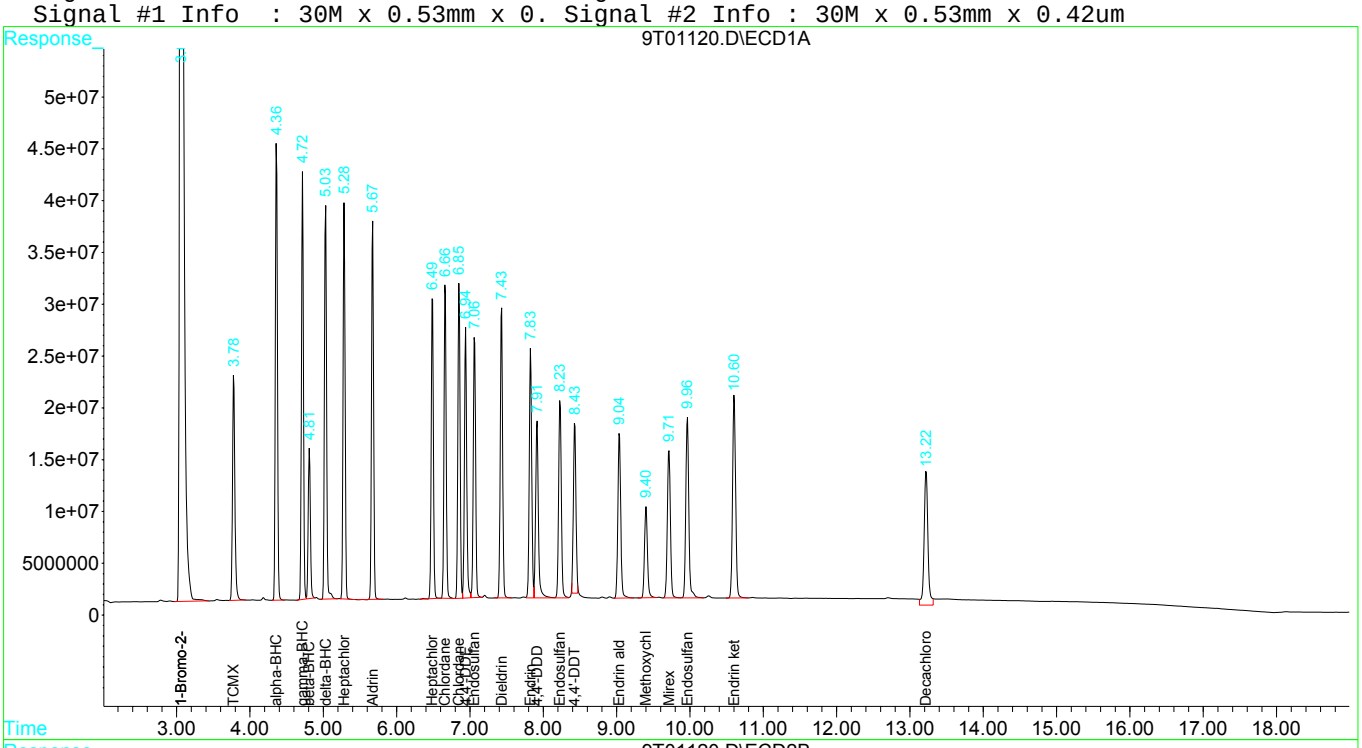
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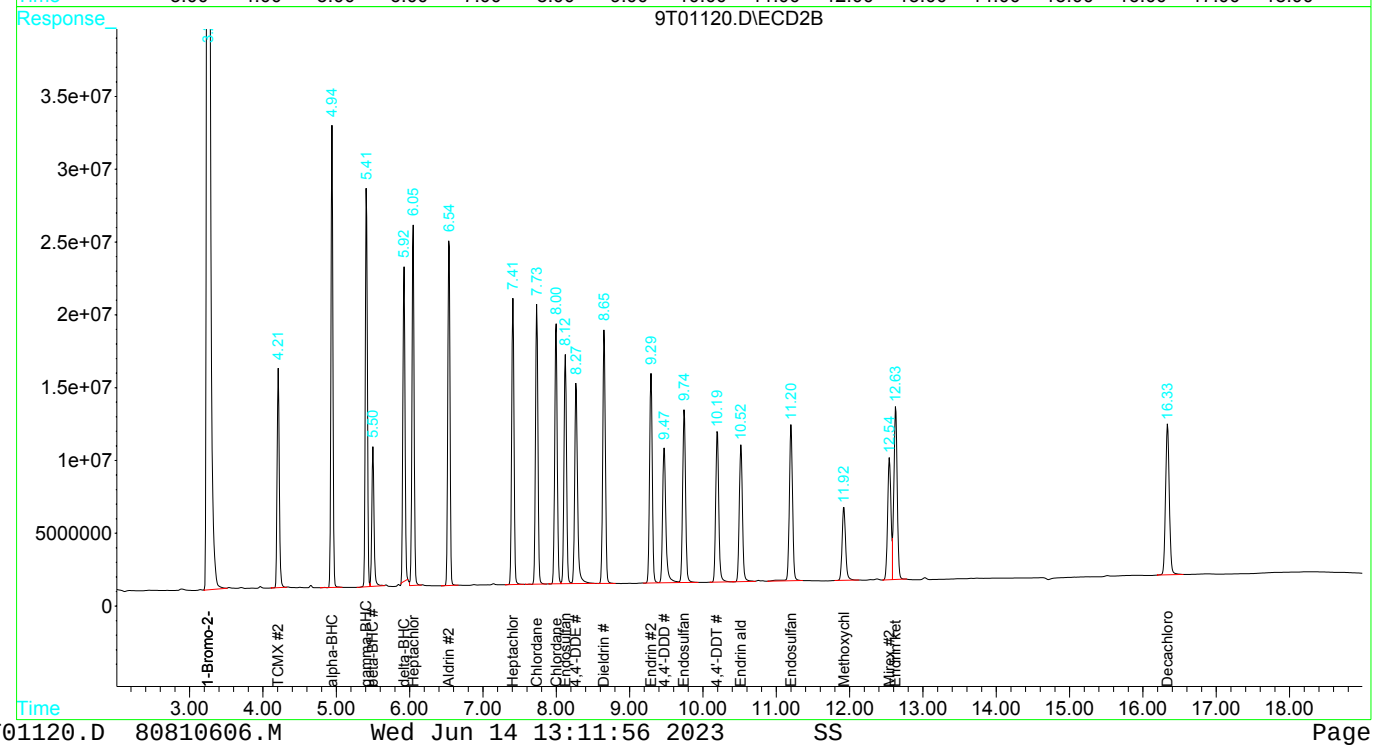
Quantitation Report (QT Reviewed)

Signal #1 : G:\HPCHEM\GCECD9\DATA\20230613\9T01120.D\ECD1A.CH Vial: 3
Signal #2 : G:\HPCHEM\GCECD9\DATA\20230613\9T01120.D\ECD2B.CH
Acq On : 13 Jun 2023 4:23 pm Operator: WD
Sample : SEQ-CCV Inst : HP G1530A
Misc : Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Jun 14 11:50 2023 Quant Results File: 80810606.RES

Quant Method : G:\HPCHEM\G...\80810606.M (Chemstation Integrator)
Title : Pesticides by Method SW-846 8081B
Last Update : Tue Jun 06 16:57:33 2023
Response via : Multiple Level Calibration
DataAcq Meth : RUNPEST.M

Volume Inj. : 2ul
Signal #1 Phase : RTx-50 Signal #2 Phase: RTx-CLPesticides II
Signal #1 Info : 30M x 0.53mm x 0. Signal #2 Info : 30M x 0.53mm x 0.42um





CALIBRATION VERIFICATION SUMMARY

Client: **Dynamic Earth LLC**
Work Order: **23E1425**

Lab Sample ID (50 pp):	SAF0421-CCV1(1)	Init. Calib. Date(s):	06/15/2023
File ID:	9T01227.D	Date Analyzed:	06/21/2023 19:06
SPLP Pesticides	Column 1	Matrix:	Soil

Individual Mix Compound		RT WINDOW		$\overline{CF}$	CF	%D
		FROM	TO			
Aldrin	05.63	-----	-----	1	2	15.20
alpha-BHC	04.32	-----	-----	2	2	13.90
beta-BHC	04.77	-----	-----	1	1	10.80
delta-BHC	04.99	-----	-----	1	2	16.70
Dieldrin	07.38	-----	-----	1	1	14.40
Endosulfan I	07.01	-----	-----	1	1	12.80
Endosulfan II	08.17	-----	-----	1	1	8.50
Endosulfan sulfate	09.90	-----	-----	1	1	9.50
Endrin	07.77	-----	-----	1	1	17.40
Endrin aldehyde	08.97	-----	-----	1	1	4.00
Endrin ketone	10.53	-----	-----	1	1	9.70
gamma-BHC (Lindane)	04.68	-----	-----	1	2	14.20
4,4'-DDT	08.37	-----	-----	1	1	0.30
4,4'-DDE	06.89	-----	-----	1	1	17.80
4,4'-DDD	07.86	-----	-----	1	1	14.30
Methoxychlor	09.34	-----	-----	0	1	10.30
Heptachlor Epoxide	06.44	-----	-----	1	1	13.10
Heptachlor	05.24	-----	-----	1	2	14.30
Chlordane	06.61	-----	-----	1	1	11.30
1-Bromo-2-nitrobenzene (IS1)	03.04	-----	-----	1	1	0.00
1-Bromo-2-nitrobenzene (IS2)	03.04	-----	-----	1	1	0.00
Decachlorobiphenyl	13.14	13.04	13.24	1	1	16.30
Tetrachloro-m-xylene	03.74	03.64	03.84	1	1	21.00 *

* - Outside of QC limits

F-VII

CALIBRATION VERIFICATION SUMMARY

Client: **Dynamic Earth LLC**
Work Order: **23E1425**

Lab Sample ID (50 pp):	SAF0421-CCV1(2)	Init. Calib. Date(s):	06/15/2023
File ID:	9T01227.D	Date Analyzed:	06/21/2023 19:06
SPLP Pesticides	Column 2	Matrix:	Soil

Individual Mix Compound		RT WINDOW		$\overline{CF}$	CF	%D
		FROM	TO			
Aldrin [2C]	06.49	-----	-----	1	1	3.00
alpha-BHC [2C]	04.90	-----	-----	1	2	5.20
beta-BHC [2C]	05.45	-----	-----	1	1	7.80
delta-BHC [2C]	05.88	-----	-----	1	1	4.00
Dieldrin [2C]	08.59	-----	-----	1	1	1.40
Endosulfan I [2C]	08.06	-----	-----	1	1	4.50
Endosulfan II [2C]	09.68	-----	-----	1	1	2.60
Endosulfan sulfate [2C]	11.13	-----	-----	1	1	1.50
Endrin [2C]	09.23	-----	-----	1	1	4.60
Endrin aldehyde [2C]	10.45	-----	-----	1	1	12.80
Endrin ketone [2C]	12.55	-----	-----	1	1	3.40
gamma-BHC (Lindane) [2C]	05.37	-----	-----	1	1	4.50
4,4'-DDT [2C]	10.13	-----	-----	1	1	5.30
4,4'-DDE [2C]	08.21	-----	-----	1	1	11.00
4,4'-DDD [2C]	09.41	-----	-----	1	1	6.90
Methoxychlor [2C]	11.85	-----	-----	0	0	3.50
Heptachlor Epoxide [2C]	07.36	-----	-----	1	1	1.10
Heptachlor [2C]	06.00	-----	-----	1	1	3.60
Chlordane [2C]	07.68	-----	-----	1	1	0.20
1-Bromo-2-nitrobenzene [2C] (IS	03.22	-----	-----	1	1	0.00
1-Bromo-2-nitrobenzene [2C] (IS	03.22	-----	-----	1	1	0.00
Decachlorobiphenyl [2C]	16.25	16.15	16.35	1	1	5.10
Tetrachloro-m-xylene [2C]	04.17	04.07	04.27	1	1	2.40

* - Outside of QC limits

F-VII

Quantitation Report (QT Reviewed)

Signal #1 : G:\HPCHEM\GCECD9\DATA\20230621\9T01227.D\ECD1A.CH Vial: 3
Signal #2 : G:\HPCHEM\GCECD9\DATA\20230621\9T01227.D\ECD2B.CH
Acq On : 21 Jun 2023 7:06 pm Operator: WD
Sample : SEQ-CCV Inst : HP G1530A
Misc : Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Jun 22 14:06 2023 Quant Results File: 80810616.RES

Quant Method : G:\HPCHEM\G...\80810616.M (Chemstation Integrator)
Title : Pesticides by Method SW-846 8081B
Last Update : Fri Jun 16 17:01:33 2023
Response via : Initial Calibration
DataAcq Meth : RUNPEST.M

Volume Inj. : 2ul
Signal #1 Phase : RTx-50 Signal #2 Phase: RTx-CLPesticides II
Signal #1 Info : 30M x 0.53mm x 0. Signal #2 Info : 30M x 0.53mm x 0.42um

		Compound	RT#1	RT#2	Resp#1	Resp#2	ug/kg	ug/kg
		Internal Standards						
1)	I	1-Bromo-2-nitrob	3.04	3.22	3774.5E6	2983.0E6	400.000	400.000
25)	I	1-Bromo-2-nitrob	3.04	3.22	3774.5E6	2983.0E6	400.000	400.000
		System Monitoring Compounds						
2)	S	TCMX	3.74	4.17	479.7E6	283.4E6	54.997	46.552
		Spiked Amount 50.000	Range 43 - 129		Recovery =		109.99%	93.10%
22)	S	Decachlorobiphen	13.14	16.25	526.0E6	403.6E6	53.540	48.592
		Spiked Amount 50.000	Range 42 - 136		Recovery =		107.08%	97.18%
		Target Compounds						
3)		alpha-BHC	4.32	4.90	852.4E6	587.7E6	52.214	46.896
4)	M	gamma-BHC (Linda	4.68	5.37	784.2E6	532.9E6	57.116	52.249
5)	M	Heptachlor	5.24	6.00	743.6E6	526.6E6	57.166	51.781
6)		beta-BHC	4.77	5.45	297.6E6	202.8E6	55.420	53.877
7)		delta-BHC	4.99	5.88	764.4E6	413.2E6	52.896	42.815
8)	M	Aldrin	5.63	6.49	722.7E6	502.5E6	57.610	51.511
9)		Heptachlor epoxi	6.44	7.36	629.5E6	436.8E6	56.535	50.554
10)		Endosulfan I	7.01	8.06	573.6E6	389.4E6	56.392	52.251
11)		4,4'-DDE	6.89	8.21	532.2E6	380.7E6	58.905m	55.524
12)	M	Dieldrin	7.38	8.59	635.6E6	440.2E6	57.187	50.724
13)	M	Endrin	7.77	9.23	583.2E6	392.5E6	58.720	52.289
14)		4,4'-DDD	7.86	9.41	445.3E6	273.2E6	57.126	53.471
15)		Endosulfan II	8.17	9.68	508.1E6	348.4E6	54.229	48.692
16)	M	4,4'-DDT	8.37	10.13	430.5E6	320.7E6	49.856	52.649
17)		Endrin aldehyde	8.97	10.45	428.7E6	270.4E6	51.995	43.617
18)		Endosulfan sulfa	9.90	11.13	517.1E6	335.0E6	54.762	49.274
19)		Methoxychlor	9.34	11.85	258.7E6	175.3E6	55.158	51.773
20)		Mirex	9.64	12.47	410.1E6	282.2E6	48.537	47.223
21)		Endrin ketone	10.53	12.55	588.4E6	396.6E6	54.870	48.275
23)	L1	Chlordane (gamma	6.61	7.68	656.1E6	442.6E6	55.620	50.187
24)	L1	Chlordane (alpha	6.80	7.94	638.6E6	434.8E6	55.680	49.972
		Sum Chlordane (gamma)			1294.7E6	877.4E6	111.300	100.159
Average		Chlordane (gamma)					55.650	50.079
		Sum Toxaphene (1)			0	0	N.D.	N.D.
Average		Toxaphene (1)					0.000	0.000

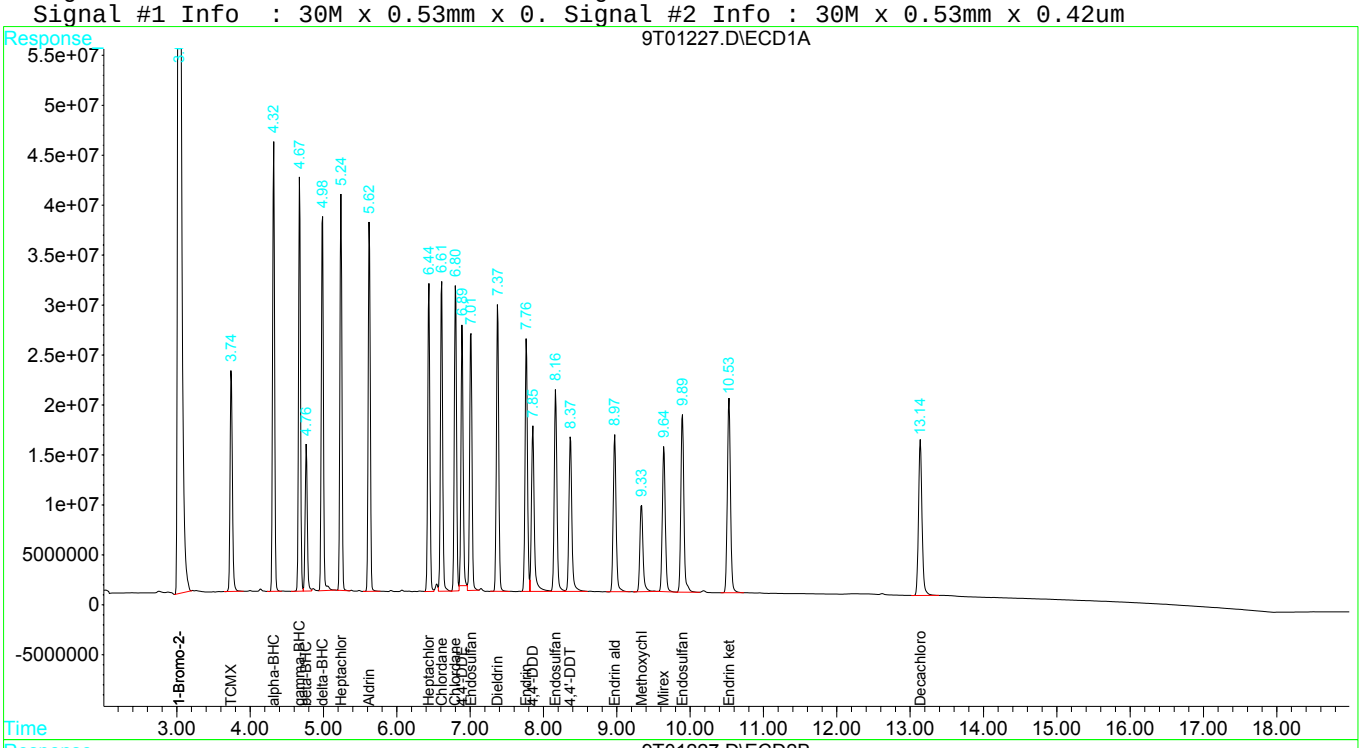
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.
9T01227.D 80810616.M Thu Jun 22 14:29:31 2023 SS

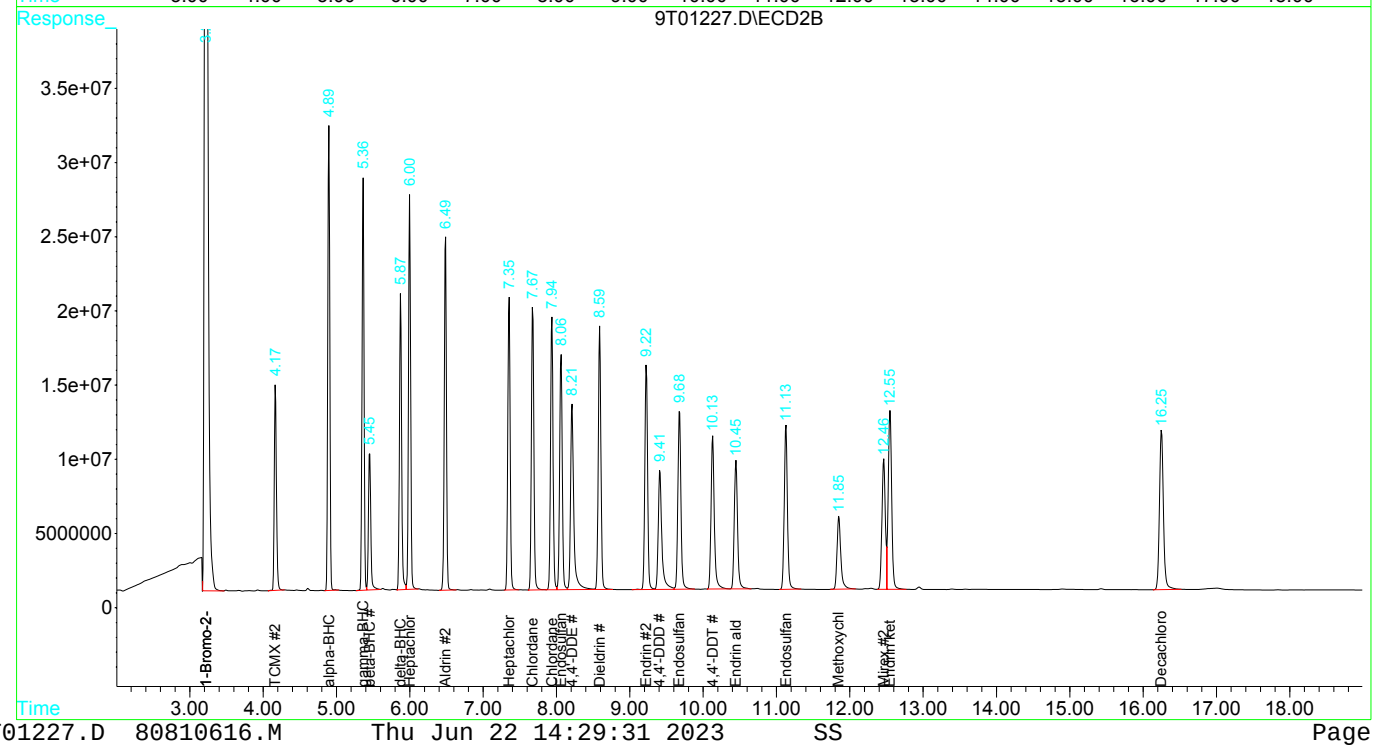
Quantitation Report (QT Reviewed)

Signal #1 : G:\HPCHEM\GCECD9\DATA\20230621\9T01227.D\ECD1A.CH Vial: 3
Signal #2 : G:\HPCHEM\GCECD9\DATA\20230621\9T01227.D\ECD2B.CH
Acq On : 21 Jun 2023 7:06 pm Operator: WD
Sample : SEQ-CCV Inst : HP G1530A
Misc : Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Jun 22 14:06 2023 Quant Results File: 80810616.RES

Quant Method : G:\HPCHEM\G...\80810616.M (Chemstation Integrator)
Title : Pesticides by Method SW-846 8081B
Last Update : Fri Jun 16 17:01:33 2023
Response via : Multiple Level Calibration
DataAcq Meth : RUNPEST.M

Volume Inj. : 2ul
Signal #1 Phase : RTx-50 Signal #2 Phase: RTx-CLPesticides II
Signal #1 Info : 30M x 0.53mm x 0. Signal #2 Info : 30M x 0.53mm x 0.42um





AQUA PRO-TECH LABORATORIES
Certified Environmental Testing

GENERAL CHEMISTRY

Dynamic Earth LLC

Work Order: 23E1425

Project: Supplemental HAP Investigation

ANALYSIS DATA SHEET

General Chemistry

Client: Dynamic Earth LLC
Project: Supplemental HAP Investigation
Work Order: 23E1425

General Chemistry

23E1425-01 (Soil) - T-3-1B

Analyte	Units	Conc.	MDL	DF	Qual	Analyzed	Method
Percent Solids	%	81.6		1		06/01/23 10:54	Gravimetric

23E1425-02 (Soil) - T-3-2B

Analyte	Units	Conc.	MDL	DF	Qual	Analyzed	Method
Percent Solids	%	78.4		1		06/01/23 10:54	Gravimetric

23E1425-03 (Soil) - T-3-3B

Analyte	Units	Conc.	MDL	DF	Qual	Analyzed	Method
Percent Solids	%	91.5		1		06/01/23 10:54	Gravimetric

23E1425-04 (Soil) - T-3-4B

Analyte	Units	Conc.	MDL	DF	Qual	Analyzed	Method
Percent Solids	%	91.4		1		06/01/23 10:54	Gravimetric

23E1425-05 (Soil) - F-13R

Analyte	Units	Conc.	MDL	DF	Qual	Analyzed	Method
Percent Solids	%	82.9		1		06/01/23 10:54	Gravimetric
SPLP Leachate pH	pH Units	5.05	0.0100	1	H	06/17/23 09:00	SW 846 9040C
SPLP Leachate Volume	mL	2000		1		06/17/23 09:00	SW 846 1312
SPLP Soil Weight	g	82.9		1		06/16/23 16:00	Gravimetric

23E1425-06 (Soil) - F-15-3R

Analyte	Units	Conc.	RL	DF	Qual	Analyzed	Method
SPLP Soil Weight	g	84.1		1		06/16/23 16:00	Gravimetric
Percent Solids	%	84.1		1		06/01/23 10:54	Gravimetric
SPLP Leachate Volume	mL	2000		1		06/17/23 10:00	SW 846 1312
SPLP Leachate pH	pH Units	5.07	0.0100	1	H	06/17/23 09:00	SW 846 9040C

23E1425-07 (Soil) - F-5-2R

Analyte	Units	Conc.	MDL	DF	Qual	Analyzed	Method
Percent Solids	%	93.5		1		06/01/23 10:54	Gravimetric
SPLP Leachate pH	pH Units	5.06	0.0100	1	H	06/17/23 09:00	SW 846 9040C
SPLP Leachate Volume	mL	2000		1		06/17/23 09:00	SW 846 1312
SPLP Soil Weight	g	93.5		1		06/16/23 16:00	Gravimetric

23E1425-08 (Soil) - TRENCH-6

Analyte	Units	Conc.	MDL	DF	Qual	Analyzed	Method
Percent Solids	%	92.9		1		06/01/23 10:54	Gravimetric

23E1425-09 (Soil) - TRENCH-7

Analyte	Units	Conc.	MDL	DF	Qual	Analyzed	Method
Percent Solids	%	88.1		1		06/01/23 10:54	Gravimetric

ND - Indicates compound analyzed for but not detected
J - Indicates estimated value
B - Indicates compound found in associated blank
E - Concentration exceeds highest calibration standard
D - Indicates result is based on a dilution
H - Indicates a Hold Time violation
P - Greater than 25% diff. between 2 GC columns.
MDL - Minimum detection limit, **RL** - Reporting limit

F-I

General Chemistry (Con't)

23E1425-10 (Soil) - T-3-1C

Analyte	Units	Conc.	MDL	DF	Qual	Analyzed	Method
Percent Solids	%	91.0		1		06/13/23 11:18	Gravimetric

23E1425-19 (Soil) - TRENCH-7A

Analyte	Units	Conc.	MDL	DF	Qual	Analyzed	Method
Percent Solids	%	91.9		1		06/13/23 11:18	Gravimetric

23E1425-22 (Soil) - TRENCH-9

Analyte	Units	Conc.	MDL	DF	Qual	Analyzed	Method
Percent Solids	%	77.5		1		06/13/23 11:18	Gravimetric

ND - Indicates compound analyzed for but not detected
J - Indicates estimated value
B - Indicates compound found in associated blank
E - Concentration exceeds highest calibration standard

D - Indicates result is based on a dilution
H - Indicates a Hold Time violation
P - Greater than 25% diff. between 2 GC columns.
MDL - Minimum detection limit, **RL** - Reporting limit

Pace Analytical Services, LLC-Fairfield
1275 Bloomfield Avenue, Fairfield, NJ 07004 (973) 227-0422

ANALYTICAL RESULTS

STANDARD DELIVERABLES FORMAT

WORK ORDER NUMBER: 24I3001

Dynamic Earth LLC

Project: Hole 19-HAP



Sudip Pradhan
Laboratory Director

All Results meet the requirements of the National Environmental Laboratory Accreditation Conference and/or State specific certifications as applicable.

Report Date: Oct 07, 2024

Pace Analytical Services, LLC-Fairfield

Analytical Results Summary
Hole 19-HAP

Client:	**Dynamic Earth LLC**	**Contact:**	**Omar Mahmoud**
Work Order ID:	**24I3001**	**Received:**	09/27/24 18:20

Sample ID/Analysis	Method	Prepared	Analyzed	Result	Qual	MDL	RL	Units
24I3001-01 (Soil)	F19-1			Collected:	09/27/24 00:00			
General Chemistry								
Percent Solids	Gravimetric	09/30/24 10:25	10/01/24 00:00	**91.8**				**%**
24I3001-01 (Soil)	F19-1			Collected:	09/27/24 00:00			
Total Metals								
Arsenic	SW 846 6010D	09/30/24 09:32	10/01/24 12:23	**9.77**			**1.36**	**mg/kg dry**
Lead	SW 846 6010D	09/30/24 09:32	10/01/24 12:23	**15.4**			**1.36**	**mg/kg dry**
24I3001-01 (Soil)	F19-1			Collected:	09/27/24 00:00			
Pesticides								
4,4'-DDD	SW 846 8081B	09/30/24 15:34	09/30/24 21:21	ND	U	0.000648	0.00142	mg/kg dry
4,4'-DDE	SW 846 8081B	09/30/24 15:34	09/30/24 21:21	ND	U	0.000774	0.00142	mg/kg dry
4,4'-DDT	SW 846 8081B	09/30/24 15:34	09/30/24 21:21	ND	U	0.00100	0.00142	mg/kg dry
Aldrin	SW 846 8081B	09/30/24 15:34	09/30/24 21:21	ND	U	0.000671	0.00142	mg/kg dry
alpha-BHC	SW 846 8081B	09/30/24 15:34	09/30/24 21:21	ND	U	0.000421	0.00142	mg/kg dry
beta-BHC	SW 846 8081B	09/30/24 15:34	09/30/24 21:21	ND	U	0.000676	0.00142	mg/kg dry
Chlordane	SW 846 8081B	09/30/24 15:34	09/30/24 21:21	ND	U	0.000629	0.00142	mg/kg dry
delta-BHC	SW 846 8081B	09/30/24 15:34	09/30/24 21:21	ND	U	0.000658	0.00142	mg/kg dry
Dieldrin	SW 846 8081B	09/30/24 15:34	09/30/24 21:21	ND	U	0.000740	0.00142	mg/kg dry
Endosulfan I	SW 846 8081B	09/30/24 15:34	09/30/24 21:21	ND	U	0.000669	0.00142	mg/kg dry
Endosulfan II	SW 846 8081B	09/30/24 15:34	09/30/24 21:21	ND	U	0.000643	0.00142	mg/kg dry
Endosulfan sulfate	SW 846 8081B	09/30/24 15:34	09/30/24 21:21	ND	U	0.000532	0.00142	mg/kg dry
Endosulfans, Total (alpha and beta)	SW 846 8081B	09/30/24 15:34	09/30/24 21:21	ND	U	0.000643	0.00142	mg/kg dry
Endrin	SW 846 8081B	09/30/24 15:34	09/30/24 21:21	ND	U	0.000489	0.00142	mg/kg dry
Endrin aldehyde	SW 846 8081B	09/30/24 15:34	09/30/24 21:21	ND	U	0.000564	0.00142	mg/kg dry
Endrin ketone	SW 846 8081B	09/30/24 15:34	09/30/24 21:21	ND	U	0.000499	0.00142	mg/kg dry
gamma-BHC (Lindane)	SW 846 8081B	09/30/24 15:34	09/30/24 21:21	ND	U	0.000449	0.00142	mg/kg dry
Heptachlor	SW 846 8081B	09/30/24 15:34	09/30/24 21:21	ND	U	0.000379	0.00142	mg/kg dry
Heptachlor Epoxide	SW 846 8081B	09/30/24 15:34	09/30/24 21:21	ND	U	0.000714	0.00142	mg/kg dry
Methoxychlor	SW 846 8081B	09/30/24 15:34	09/30/24 21:21	ND	U	0.000415	0.00142	mg/kg dry
Toxaphene	SW 846 8081B	09/30/24 15:34	09/30/24 21:21	ND	U	0.0682	0.0719	mg/kg dry
24I3001-02 (Soil)	F19-2			Collected:	09/27/24 00:00			
General Chemistry								
Percent Solids	Gravimetric	09/30/24 10:25	10/01/24 00:00	**89.7**				**%**

FootNotes

RL - Reporting limit
MDL - Minimum detection limit
ND, U - Indicates compound analyzed for but not detected
J - Indicates estimated value

B - Indicates compound found in associated blank
E - Concentration exceeds highest calibration standard
D - Indicates result is based on a dilution
P - Greater than 25% diff. between 2 GC columns.
H - Indicates a Hold Time violation
D1 - Sample was Decanted (Dissolved)

Pace Analytical Services, LLC-Fairfield

Analytical Results Summary

Hole 19-HAP

Client: Dynamic Earth LLC **Contact:** Omar Mahmoud

Work Order ID: 24I3001 **Received:** 09/27/24 18:20

Sample ID/Analysis	Method	Prepared	Analyzed	Result	Qual	MDL	RL	Units
24I3001-02 (Soil)	F19-2			Collected: 09/27/24 00:00				
Total Metals								
Arsenic	SW 846 6010D	09/30/24 09:32	10/01/24 14:10	**8.94**			**1.33**	**mg/kg dry**
Lead	SW 846 6010D	09/30/24 09:32	10/01/24 14:10	**15.1**			**1.33**	**mg/kg dry**
24I3001-02 (Soil)	F19-2			Collected: 09/27/24 00:00				
Pesticides								
4,4'-DDD	SW 846 8081B	09/30/24 15:34	09/30/24 21:43	ND	U	0.000663	0.00145	mg/kg dry
4,4'-DDE	SW 846 8081B	09/30/24 15:34	09/30/24 21:43	ND	U	0.000792	0.00145	mg/kg dry
4,4'-DDT	SW 846 8081B	09/30/24 15:34	09/30/24 21:43	ND	U	0.00102	0.00145	mg/kg dry
Aldrin	SW 846 8081B	09/30/24 15:34	09/30/24 21:43	ND	U	0.000686	0.00145	mg/kg dry
alpha-BHC	SW 846 8081B	09/30/24 15:34	09/30/24 21:43	ND	U	0.000431	0.00145	mg/kg dry
beta-BHC	SW 846 8081B	09/30/24 15:34	09/30/24 21:43	ND	U	0.000692	0.00145	mg/kg dry
Chlordane	SW 846 8081B	09/30/24 15:34	09/30/24 21:43	ND	U	0.000644	0.00145	mg/kg dry
delta-BHC	SW 846 8081B	09/30/24 15:34	09/30/24 21:43	ND	U	0.000673	0.00145	mg/kg dry
Dieldrin	SW 846 8081B	09/30/24 15:34	09/30/24 21:43	ND	U	0.000758	0.00145	mg/kg dry
Endosulfan I	SW 846 8081B	09/30/24 15:34	09/30/24 21:43	ND	U	0.000684	0.00145	mg/kg dry
Endosulfan II	SW 846 8081B	09/30/24 15:34	09/30/24 21:43	ND	U	0.000659	0.00145	mg/kg dry
Endosulfan sulfate	SW 846 8081B	09/30/24 15:34	09/30/24 21:43	ND	U	0.000545	0.00145	mg/kg dry
Endosulfans, Total (alpha and beta)	SW 846 8081B	09/30/24 15:34	09/30/24 21:43	ND	U	0.000659	0.00145	mg/kg dry
Endrin	SW 846 8081B	09/30/24 15:34	09/30/24 21:43	ND	U	0.000500	0.00145	mg/kg dry
Endrin aldehyde	SW 846 8081B	09/30/24 15:34	09/30/24 21:43	ND	U	0.000577	0.00145	mg/kg dry
Endrin ketone	SW 846 8081B	09/30/24 15:34	09/30/24 21:43	ND	U	0.000510	0.00145	mg/kg dry
gamma-BHC (Lindane)	SW 846 8081B	09/30/24 15:34	09/30/24 21:43	ND	U	0.000459	0.00145	mg/kg dry
Heptachlor	SW 846 8081B	09/30/24 15:34	09/30/24 21:43	ND	U	0.000388	0.00145	mg/kg dry
Heptachlor Epoxide	SW 846 8081B	09/30/24 15:34	09/30/24 21:43	ND	U	0.000731	0.00145	mg/kg dry
Methoxychlor	SW 846 8081B	09/30/24 15:34	09/30/24 21:43	ND	U	0.000425	0.00145	mg/kg dry
Toxaphene	SW 846 8081B	09/30/24 15:34	09/30/24 21:43	ND	U	0.0698	0.0735	mg/kg dry
24I3001-03 (Soil)	F19-3			Collected: 09/27/24 00:00				
General Chemistry								
Percent Solids	Gravimetric	09/30/24 10:25	10/01/24 00:00	**93.4**				**%**
24I3001-03 (Soil)	F19-3			Collected: 09/27/24 00:00				
Total Metals								
Arsenic	SW 846 6010D	09/30/24 09:32	10/01/24 14:13	**8.27**			**1.28**	**mg/kg dry**
Lead	SW 846 6010D	09/30/24 09:32	10/01/24 14:13	**11.1**			**1.28**	**mg/kg dry**

FootNotes

RL - Reporting limit
MDL - Minimum detection limit
ND, U - Indicates compound analyzed for but not detected
J - Indicates estimated value

B - Indicates compound found in associated blank
E - Concentration exceeds highest calibration standard
D - Indicates result is based on a dilution
P - Greater than 25% diff. between 2 GC columns.
H - Indicates a Hold Time violation
D1 - Sample was Decanted (Dissolved)

Pace Analytical Services, LLC-Fairfield

Analytical Results Summary
Hole 19-HAP

Client: Dynamic Earth LLC **Contact:** Omar Mahmoud

Work Order ID: 24I3001 **Received:** 09/27/24 18:20

Sample ID/Analysis	Method	Prepared	Analyzed	Result	Qual	MDL	RL	Units
24I3001-03 (Soil)	F19-3			Collected:	09/27/24 00:00			
Pesticides								
4,4'-DDD	SW 846 8081B	09/30/24 15:34	09/30/24 22:06	ND	U	0.000637	0.00139	mg/kg dry
4,4'-DDE	SW 846 8081B	09/30/24 15:34	09/30/24 22:06	ND	U	0.000761	0.00139	mg/kg dry
4,4'-DDT	SW 846 8081B	09/30/24 15:34	09/30/24 22:06	ND	U	0.000983	0.00139	mg/kg dry
Aldrin	SW 846 8081B	09/30/24 15:34	09/30/24 22:06	ND	U	0.000660	0.00139	mg/kg dry
alpha-BHC	SW 846 8081B	09/30/24 15:34	09/30/24 22:06	ND	U	0.000414	0.00139	mg/kg dry
beta-BHC	SW 846 8081B	09/30/24 15:34	09/30/24 22:06	ND	U	0.000665	0.00139	mg/kg dry
Chlordane	SW 846 8081B	09/30/24 15:34	09/30/24 22:06	ND	U	0.000619	0.00139	mg/kg dry
delta-BHC	SW 846 8081B	09/30/24 15:34	09/30/24 22:06	ND	U	0.000647	0.00139	mg/kg dry
Dieldrin	SW 846 8081B	09/30/24 15:34	09/30/24 22:06	ND	U	0.000728	0.00139	mg/kg dry
Endosulfan I	SW 846 8081B	09/30/24 15:34	09/30/24 22:06	ND	U	0.000657	0.00139	mg/kg dry
Endosulfan II	SW 846 8081B	09/30/24 15:34	09/30/24 22:06	ND	U	0.000633	0.00139	mg/kg dry
Endosulfan sulfate	SW 846 8081B	09/30/24 15:34	09/30/24 22:06	ND	U	0.000524	0.00139	mg/kg dry
Endosulfans, Total (alpha and beta)	SW 846 8081B	09/30/24 15:34	09/30/24 22:06	ND	U	0.000633	0.00139	mg/kg dry
Endrin	SW 846 8081B	09/30/24 15:34	09/30/24 22:06	ND	U	0.000481	0.00139	mg/kg dry
Endrin aldehyde	SW 846 8081B	09/30/24 15:34	09/30/24 22:06	ND	U	0.000555	0.00139	mg/kg dry
Endrin ketone	SW 846 8081B	09/30/24 15:34	09/30/24 22:06	ND	U	0.000490	0.00139	mg/kg dry
gamma-BHC (Lindane)	SW 846 8081B	09/30/24 15:34	09/30/24 22:06	ND	U	0.000441	0.00139	mg/kg dry
Heptachlor	SW 846 8081B	09/30/24 15:34	09/30/24 22:06	ND	U	0.000373	0.00139	mg/kg dry
Heptachlor Epoxide	SW 846 8081B	09/30/24 15:34	09/30/24 22:06	ND	U	0.000702	0.00139	mg/kg dry
Methoxychlor	SW 846 8081B	09/30/24 15:34	09/30/24 22:06	ND	U	0.000408	0.00139	mg/kg dry
Toxaphene	SW 846 8081B	09/30/24 15:34	09/30/24 22:06	ND	U	0.0671	0.0707	mg/kg dry
24I3001-26 (Soil)	G19			Collected:	09/27/24 00:00			
General Chemistry								
Percent Solids	Gravimetric	09/30/24 10:25	10/01/24 00:00	**95.4**				**%**
24I3001-26 (Soil)	G19			Collected:	09/27/24 00:00			
Total Metals								
Arsenic	SW 846 6010D	09/30/24 09:32	10/01/24 14:17	**11.3**			**1.33**	**mg/kg dry**
Lead	SW 846 6010D	09/30/24 09:32	10/01/24 14:17	**371**			**1.33**	**mg/kg dry**
Mercury	SW 846 7473	09/30/24 10:55	09/30/24 12:39	**1.25**			**0.0210**	**mg/kg dry**
24I3001-26 (Soil)	G19			Collected:	09/27/24 00:00			
Pesticides								

FootNotes

RL - Reporting limit
MDL - Minimum detection limit
ND, U - Indicates compound analyzed for but not detected
J - Indicates estimated value

B - Indicates compound found in associated blank
E - Concentration exceeds highest calibration standard
D - Indicates result is based on a dilution
P - Greater than 25% diff. between 2 GC columns.
H - Indicates a Hold Time violation
D1 - Sample was Decanted (Dissolved)

Pace Analytical Services, LLC-Fairfield

Analytical Results Summary
Hole 19-HAP

Client: Dynamic Earth LLC **Contact:** Omar Mahmoud

Work Order ID: 24I3001 **Received:** 09/27/24 18:20

Sample ID/Analysis	Method	Prepared	Analyzed	Result	Qual	MDL	RL	Units
24I3001-26 (Soil)	G19			Collected: 09/27/24 00:00				
Pesticides								
4,4'-DDD	SW 846 8081B	09/30/24 15:34	09/30/24 22:28	ND	U	0.000624	0.00136	mg/kg dry
4,4'-DDE	SW 846 8081B	09/30/24 15:34	09/30/24 22:28	ND	U	0.000745	0.00136	mg/kg dry
4,4'-DDT	SW 846 8081B	09/30/24 15:34	09/30/24 22:28	ND	U	0.000962	0.00136	mg/kg dry
Aldrin	SW 846 8081B	09/30/24 15:34	09/30/24 22:28	ND	U	0.000646	0.00136	mg/kg dry
alpha-BHC	SW 846 8081B	09/30/24 15:34	09/30/24 22:28	ND	U	0.000406	0.00136	mg/kg dry
beta-BHC	SW 846 8081B	09/30/24 15:34	09/30/24 22:28	ND	U	0.000651	0.00136	mg/kg dry
Chlordane	SW 846 8081B	09/30/24 15:34	09/30/24 22:28	**0.0275**		**0.000606**	**0.00136**	**mg/kg dry**
delta-BHC	SW 846 8081B	09/30/24 15:34	09/30/24 22:28	ND	U	0.000633	0.00136	mg/kg dry
Dieldrin	SW 846 8081B	09/30/24 15:34	09/30/24 22:28	ND	U	0.000713	0.00136	mg/kg dry
Endosulfan I	SW 846 8081B	09/30/24 15:34	09/30/24 22:28	ND	U	0.000643	0.00136	mg/kg dry
Endosulfan II	SW 846 8081B	09/30/24 15:34	09/30/24 22:28	ND	U	0.000619	0.00136	mg/kg dry
Endosulfan sulfate	SW 846 8081B	09/30/24 15:34	09/30/24 22:28	ND	U	0.000512	0.00136	mg/kg dry
Endosulfans, Total (alpha and beta)	SW 846 8081B	09/30/24 15:34	09/30/24 22:28	ND	U	0.000619	0.00136	mg/kg dry
Endrin	SW 846 8081B	09/30/24 15:34	09/30/24 22:28	ND	U	0.000471	0.00136	mg/kg dry
Endrin aldehyde	SW 846 8081B	09/30/24 15:34	09/30/24 22:28	ND	U	0.000543	0.00136	mg/kg dry
Endrin ketone	SW 846 8081B	09/30/24 15:34	09/30/24 22:28	ND	U	0.000480	0.00136	mg/kg dry
gamma-BHC (Lindane)	SW 846 8081B	09/30/24 15:34	09/30/24 22:28	ND	U	0.000432	0.00136	mg/kg dry
Heptachlor	SW 846 8081B	09/30/24 15:34	09/30/24 22:28	ND	U	0.000365	0.00136	mg/kg dry
Heptachlor Epoxide	SW 846 8081B	09/30/24 15:34	09/30/24 22:28	ND	U	0.000687	0.00136	mg/kg dry
Methoxychlor	SW 846 8081B	09/30/24 15:34	09/30/24 22:28	ND	U	0.000399	0.00136	mg/kg dry
Toxaphene	SW 846 8081B	09/30/24 15:34	09/30/24 22:28	ND	U	0.0656	0.0692	mg/kg dry
24I3001-27 (Soil)	G19-1			Collected: 09/27/24 00:00				
General Chemistry								
Percent Solids	Gravimetric	10/03/24 09:03	10/03/24 09:03	**93.9**				**%**
24I3001-27 (Soil)	G19-1			Collected: 09/27/24 00:00				
Total Metals								
Lead	SW 846 6010D	10/03/24 09:25	10/03/24 17:41	**48.9**			**1.32**	**mg/kg dry**
24I3001-28 (Soil)	G19-2			Collected: 09/27/24 00:00				
General Chemistry								
Percent Solids	Gravimetric	10/03/24 09:03	10/03/24 09:03	**92.5**				**%**

FootNotes

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MDL - Minimum detection limit
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B - Indicates compound found in associated blank
E - Concentration exceeds highest calibration standard
D - Indicates result is based on a dilution
P - Greater than 25% diff. between 2 GC columns.
H - Indicates a Hold Time violation
D1 - Sample was Decanted (Dissolved)

Pace Analytical Services, LLC-Fairfield

Analytical Results Summary

Hole 19-HAP

Client:	**Dynamic Earth LLC**	**Contact:**	**Omar Mahmoud**
Work Order ID:	**24I3001**	**Received:**	09/27/24 18:20

Sample ID/Analysis	Method	Prepared	Analyzed	Result	Qual	MDL	RL	Units
24I3001-28 (Soil)	G19-2			Collected:	09/27/24 00:00			
Total Metals								
Lead	SW 846 6010D	10/03/24 09:25	10/03/24 17:58	**12.1**			**1.40**	**mg/kg dry**
24I3001-29 (Soil)	G19-3			Collected:	09/27/24 00:00			
General Chemistry								
Percent Solids	Gravimetric	10/03/24 09:03	10/03/24 09:03	**93.8**				**%**
24I3001-29 (Soil)	G19-3			Collected:	09/27/24 00:00			
Total Metals								
Lead	SW 846 6010D	10/03/24 09:25	10/03/24 18:10	**14.8**			**1.37**	**mg/kg dry**
24I3001-30 (Soil)	G19-4			Collected:	09/27/24 00:00			
General Chemistry								
Percent Solids	Gravimetric	10/03/24 09:03	10/03/24 09:03	**95.3**				**%**
24I3001-30 (Soil)	G19-4			Collected:	09/27/24 00:00			
Total Metals								
Lead	SW 846 6010D	10/03/24 09:25	10/03/24 18:27	**2110**	**D**		**6.63**	**mg/kg dry**
24I3001-31 (Soil)	G19A			Collected:	09/27/24 00:00			
General Chemistry								
Percent Solids	Gravimetric	10/03/24 09:03	10/03/24 09:03	**92.0**				**%**
24I3001-31 (Soil)	G19A			Collected:	09/27/24 00:00			
Total Metals								
Lead	SW 846 6010D	10/03/24 09:25	10/03/24 18:16	**354**			**1.29**	**mg/kg dry**
24I3001-32 (Soil)	G19B			Collected:	09/27/24 00:00			
General Chemistry								
Percent Solids	Gravimetric	10/04/24 00:00	10/04/24 00:00	**90.6**				**%**

FootNotes

RL - Reporting limit
MDL - Minimum detection limit
ND, U - Indicates compound analyzed for but not detected
J - Indicates estimated value

B - Indicates compound found in associated blank
E - Concentration exceeds highest calibration standard
D - Indicates result is based on a dilution
P - Greater than 25% diff. between 2 GC columns.
H - Indicates a Hold Time violation
D1 - Sample was Decanted (Dissolved)

Pace Analytical Services, LLC-Fairfield

Analytical Results Summary

Hole 19-HAP

Client:	**Dynamic Earth LLC**	**Contact:**	**Omar Mahmoud**
Work Order ID:	**24I3001**	**Received:**	09/27/24 18:20

Sample ID/Analysis	Method	Prepared	Analyzed	Result	Qual	MDL	RL	Units
24I3001-32 (Soil)	G19B			Collected: 09/27/24 00:00				
Total Metals								
Lead	SW 846 6010D	10/04/24 09:27	10/04/24 17:00	**96.3**			**1.41**	**mg/kg dry**
24I3001-41 (Soil)	G19-4B			Collected: 09/27/24 00:00				
General Chemistry								
Percent Solids	Gravimetric	10/04/24 00:00	10/04/24 00:00	**91.3**				**%**
24I3001-41 (Soil)	G19-4B			Collected: 09/27/24 00:00				
Total Metals								
Lead	SW 846 6010D	10/04/24 09:27	10/04/24 17:04	**11.9**			**1.34**	**mg/kg dry**

FootNotes

RL - Reporting limit
MDL - Minimum detection limit
ND, U - Indicates compound analyzed for but not detected
J - Indicates estimated value

B - Indicates compound found in associated blank
E - Concentration exceeds highest calibration standard
D - Indicates result is based on a dilution
P - Greater than 25% diff. between 2 GC columns.
H - Indicates a Hold Time violation
D1 - Sample was Decanted (Dissolved)

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24I3001
Dynamic Earth- Wawa
Price List 2024 / HOLE 19-HAP

CONTAMINATION LEVEL
☐ HIGH ☐ MEDIUM ☐ LOW

CHAIN OF CUSTODY

CLIENT: Dynamic Earth, LLC	SEND REPORT TO: O. Mahmoud
ADDRESS: 1904 Main Street Lake Como, NJ 07719	ADDRESS:
PHONE: 732-280-0830	PHONE:
E-MAIL: omahmoud@dynamic-earth.com	FAX:
PROJECT NAME: Hole 19 - HAP	SEND INVOICE TO:
PROJECT MGR: Omar Mahmoud	ADDRESS: Eatontown, NJ
PROJECT or PO #: 3272-98-005EL	SAMPLED BY: O. Mahmoud

TURN-AROUND TIME
- ☐ APL STANDARD 2 weeks
- ☐ RUSH (choose one below)
  - ☐ 24 hr. date & time required
  - ☒ 48 hr. date & time required
  - ☐ 72 hr. date & time required
  - ☐ 1 week

REPORT FORMAT
- ☐ RESULTS ONLY
- ☐ NJ DEP REDUCED
- ☑ NJ DEP FULL
- ☐ STATE FORMS/E2 REPORTING

PWSID#

ELECTRONIC FORMAT
- ☐ EMAIL DELIVERY
- ☒ HAZSITE EDD
- ☑ EXCEL

SRP#

MATRIX ABBREVIATIONS: D - DRINKING WATER G - GROUNDWATER W - WASTEWATER S - SOIL SL - SLUDGE C - CONCRETE L - LAKE

APL Lab ID#	Sample Source: Field ID	Date	Time	Sample Type GRAB	Sample Type COMP	MATRIX	No. of Bottles	Preservative	Analysis Requested
	F19-1	9/27/24		X		S			Pb, As, TCL Pesticides
	F19-2			X					
	F19-3			X					
	* F19-4			X					
	* F19-5			X					
	* F19-6			X					
	* F19-7			Y					
	* F19-1A			X					
	* F19-1B			X					

RELINQUISHED BY (Print) Omar Mahmoud	DATE 9/27/24	RECEIVED BY (Print) Vito DeRosa	
Signature	Time 1440	Signature NBE	1440
RELINQUISHED BY (Print) Vito DeRosa	DATE 9/27/24	RECEIVED BY (Print)	
Signature NBE	Time 1815	Signature	9/27/24 1820
RELINQUISHED BY (Print)	DATE	RECEIVED BY (Print)	
Signature	Time	Signature	

COMMENTS/SPECIAL INSTRUCTIONS
* Hold Sample

Cooler Temp. upon receipt at lab 0.8 C

CERTIFICATIONS: NELAP (National Environmental Laboratory Accredation Program) NJDEP #07010 PADEP #68-02903 NYDOH #11634 CTPH #0233 US ARMY

By signing this Chain of Custody Agreement, customer expressly agrees to pay APL for all charges, reasonably incurred in connection with analysis and reporting for these samples

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Pace Analytical Services-Fairfield
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FAIRFIELD, NEW JERSEY 07004

TEL: 973.227.0422
FAX: 973.227.2813

CHAIN OF CUSTODY

CLIENT: Dynamic Earth, LLC	SEND REPORT TO: O. Mahmoud
ADDRESS: 1904 Main St Lake Como, NJ 07719	ADDRESS:
PHONE: 732-280-0830	PHONE:
E-MAIL: omahmoud@dynamic-earth.com	FAX:
PROJECT NAME: Fdk 19-1HAP	SEND INVOICE TO:
PROJECT MGR: Omar Mahmoud	ADDRESS:
PROJECT or PO #: 3272-98-005EL	SAMPLED BY: O. Mahmoud

TURN-AROUND TIME
- ☐ APL STANDARD 2 weeks
- ☐ RUSH (choose one below)
  - ☐ 24 hr. date & time required
  - ☑ 48 hr. date & time required
  - ☐ 72 hr. date & time required
  - ☐ 1 week

REPORT FORMAT
- ☐ RESULTS ONLY
- ☐ NJ DEP REDUCED
- ☑ NJ DEP FULL
- ☐ STATE FORMS/E2 REPORTING

PWSID#

ELECTRONIC FORMAT
- ☐ EMAIL DELIVERY
- ☑ HAZSITE EDD
- ☐ EXCEL

SRP#

CONTAMINATION LEVEL
☐ HIGH ☐ MEDIUM ☐ LOW

MATRIX ABBREVIATIONS: D - DRINKING WATER G - GROUNDWATER W - WASTEWATER S - SOIL SL - SLUDGE C - CONCRETE L - LAKE

APL Lab ID#	Sample Source: Field ID	Date	Time	Sample Type GRAB	Sample Type COMP	MATRIX	No. of Bottles	Preservative	Analysis Requested
	* F19-1C	9/27/24		X		S			Pb, As, TCL Pesticides
	* F19-2A			X					
	* F19-2B			X					
	* F19-2C			X					
	* F19-3A			X					
	* F19-3B			X					
	* F19-3C			X					
	* F19-4A			X					
	* F19-4B			X					

RELINQUISHED BY (Print) Omar Mahmoud	DATE 9/27/24	RECEIVED BY (Print) Vito Perosa	
Signature	Time 1440	Signature	
RELINQUISHED BY (Print) Vito Perosa	DATE 9/27/24	RECEIVED BY (Print)	
Signature	Time 1815	Signature	9/28/24 1820
RELINQUISHED BY (Print)	DATE	RECEIVED BY (Print)	
Signature	Time	Signature	

COMMENTS/SPECIAL INSTRUCTIONS
* Hold sample

Cooler Temp. upon receipt at lab 0.8C

CERTIFICATIONS: NELAP (National Environmental Laboratory Accredation Program) NJDEP #07010 PADEP #68-02903 NYDOH #11634 CTPH #0233 US ARMY

By signing this Chain of Custody Agreement, customer expressly agrees to pay APL for all charges, reasonably incurred in connection with analysis and reporting for these samples

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1275 BLOOMFIELD AVE.
FAIRFIELD, NEW JERSEY 07004

TEL: 973.227.0422
FAX: 973.227.2813

CHAIN OF CUSTODY

CLIENT: Dynamic Earth, LLC	SEND REPORT TO: O. Mahmoud
ADDRESS: 1904 Main Street	ADDRESS:
Lake Como, NJ 07719	
PHONE: 732-280-0830	PHONE:
E-MAIL: omahmoud@dynamicearth.com	FAX:
PROJECT NAME: Hole 19 - HAP	SEND INVOICE TO:
PROJECT MGR: Omar Mahmoud	ADDRESS: Eatontown, NJ
PROJECT or PO #: 3272-98-0052	SAMPLED BY: O. Mahmoud

TURN-AROUND TIME
- ☐ APL STANDARD 2 weeks
- ☐ RUSH (choose one below)
  - ☐ 24 hr. date & time required
  - ☑ 48 hr. date & time required
  - ☐ 72 hr. date & time required
  - ☐ 1 week

REPORT FORMAT
- ☐ RESULTS ONLY
- ☐ NJ DEP REDUCED
- ☑ NJ DEP FULL
- ☐ STATE FORMS/E2 REPORTING

PWSID#

ELECTRONIC FORMAT
- ☐ EMAIL DELIVERY
- ☑ HAZSITE EDD
- ☐ EXCEL

SRP#

CONTAMINATION LEVEL
☐ HIGH ☐ MEDIUM ☐ LOW

MATRIX ABBREVIATIONS: D - DRINKING WATER G - GROUNDWATER W - WASTEWATER S - SOIL SL - SLUDGE C - CONCRETE L - LAKE

APL Lab ID#	Sample Source: Field ID	Date	Time	Sample Type GRAB	Sample Type COMP	MATRIX	No. of Bottles	Preservative	Analysis Requested
	* FIG-5A	9/27/24		X					Pb, As, TCL Pesticides
	* FIG-5B			X					
	* FIG-6A			X					
	* FIG-6B			X					
	* FIG-7A			X					
	* FIG-7B			X					
	G19			X					Hg, Pb, As, TCL Pesticides
	* G19-1			X					
	* G19-2			X					

RELINQUISHED BY (Print) Omar Mahmoud	DATE 9/27/24	RECEIVED BY (Print) Vito DeRosa NJR	
Signature	Time 1440	Signature	
RELINQUISHED BY (Print) Vito DeRosa NJR	DATE 9/27/24	RECEIVED BY (Print)	9/27/24
Signature	Time 1815	Signature	1820
RELINQUISHED BY (Print)	DATE	RECEIVED BY (Print)	
Signature	Time	Signature	

COMMENTS/SPECIAL INSTRUCTIONS
* Hold Sample

Cooler Temp. upon receipt at lab 0.8°C

CERTIFICATIONS: NELAP (National Environmental Laboratory Accredation Program) NJDEP #07010 PADEP #68-02903 NYDOH #11634 CTPH #0233 US ARMY
By signing this Chain of Custody Agreement, customer expressly agrees to pay APL for all charges, reasonably incurred in connection with analysis and reporting for these samples

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Pace Analytical Services-Fairfield

www.pacelabs.com

[redacted]
FAIRFIELD, NEW JERSEY 07004

TEL: 973.227.0422
FAX: 973.227.2813

CHAIN OF CUSTODY

CLIENT: Dynamic Earth, LLC	SEND REPORT TO: O. Mahmoud
ADDRESS: 1904 Main St. Lake Como, NJ 07719	ADDRESS:
PHONE: 732-280-0820	PHONE:
E-MAIL: Omahmoud@dynamicearth.com	FAX:
PROJECT NAME: Hole 19-HAA	SEND INVOICE TO:
PROJECT MGR: Omar Mahmud	ADDRESS: Eatontown, NJ
PROJECT or PO #: 3272-98-005EL	SAMPLED BY: O. Mahmoud

TURN-AROUND TIME

- ☐ APL STANDARD 2 weeks
- ☐ RUSH (choose one below)
  - ☐ 24 hr. date & time required
  - ☑ 48 hr. date & time required
  - ☐ 72 hr. date & time required
  - ☐ 1 week

REPORT FORMAT

- ☐ RESULTS ONLY
- ☐ NJ DEP REDUCED
- ☑ NJ DEP FULL
- ☐ STATE FORMS/E2 REPORTING

PWSID#

ELECTRONIC FORMAT

- ☐ EMAIL DELIVERY
- ☑ HAZSITE EDD
- ☐ EXCEL

SRP#

CONTAMINATION LEVEL

☐ HIGH ☐ MEDIUM ☐ LOW

MATRIX ABBREVIATIONS: D - DRINKING WATER G - GROUNDWATER W - WASTEWATER S - SOIL SL - SLUDGE C - CONCRETE L - LAKE

APL Lab ID#	Sample Source: Field ID	Date	Time	Sample Type GRAB	Sample Type COMP	MATRIX	No. of Bottles	Preservative	Analysis Requested
	* G19-3	9/27/24		X		S			Hg, Pb, As, TCL Pesticides
	* G19-4			X					
	* G19A			X					
	* G19B			X					
	* G19C			X					
	* G19-1A			X					
	* G19-2A			X					
	* G19-3A			X					
	* G19-4A			X					

RELINQUISHED BY (Print) Omar Mahmud	DATE 9/27/24	RECEIVED BY (Print) Vito Perito	
Signature	Time 1445	Signature	
RELINQUISHED BY (Print) Vito DeRosa	DATE 9/27	RECEIVED BY (Print)	9/27/24
Signature	Time 1815	Signature	1820
RELINQUISHED BY (Print)	DATE	RECEIVED BY (Print)	
Signature	Time	Signature	

COMMENTS/SPECIAL INSTRUCTIONS

* Hold sample

Cooler Temp. upon receipt at lab 0.8C

CERTIFICATIONS: NELAP (National Environmental Laboratory Accredation Program) NJDEP #07010 PADEP #68-02903 NYDOH #11634 CTPH #0233 US ARMY

By signing this Chain of Custody Agreement, customer expressly agrees to pay APL for all charges, reasonably incurred in connection with analysis and reporting for these samples

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FAIRFIELD, NEW JERSEY 07004

TEL: 973.227.0422
FAX: 973.227.2813

CHAIN OF CUSTODY

PAGE 5 OF 5

CLIENT: Dynamic Earth, LLC	SEND REPORT TO: O. Mahmoud
ADDRESS: 1904 Main St. Lake Lowe, NJ 07719	ADDRESS:
PHONE: 732-280-0830	PHONE:
E-MAIL: Omahmud@dynamicearth.com	FAX:
PROJECT NAME: Hole 19 - HAP	SEND INVOICE TO:
PROJECT MGR: Omar Mahmoud	ADDRESS: Eatontown, NJ
PROJECT or PO #: 327248-005	SAMPLED BY: O. Mahmoud

TURN-AROUND TIME
- ☐ APL STANDARD 2 weeks
- ☐ RUSH (choose one below)
  - ☐ 24 hr. date & time required
  - ☑ 48 hr. date & time required
  - ☐ 72 hr. date & time required
  - ☐ 1 week

REPORT FORMAT
- ☐ RESULTS ONLY
- ☐ NJ DEP REDUCED
- ☑ NJ DEP FULL
- ☐ STATE FORMS/E2 REPORTING

PWSID#

ELECTRONIC FORMAT
- ☐ EMAIL DELIVERY
- ☑ HAZSITE EDD
- ☐ EXCEL

SRP#

CONTAMINATION LEVEL
☐ HIGH ☐ MEDIUM ☐ LOW

MATRIX ABBREVIATIONS: D - DRINKING WATER G - GROUNDWATER W - WASTEWATER S - SOIL SL - SLUDGE C - CONCRETE L - LAKE

APL Lab ID#	Sample Source: Field ID	Date	Time	Sample Type GRAB	Sample Type COMP	MATRIX	No. of Bottles	Preservative	Analysis Requested
	* G19-1B	9/27/24		X		S			Hg, Pb, As, TCL Pesticides
	* G19-2B			X					
	* G19-3B			X					
	* G19-4B			X					

RELINQUISHED BY (Print) Omar Mahmoud	DATE 9/27/24	RECEIVED BY (Print) VITO DEROSA	
Signature	Time 1400	Signature	
RELINQUISHED BY (Print) VITO DEROSA	DATE 9/27/24	RECEIVED BY (Print)	9/27/24
Signature	Time 1823	Signature	1826
RELINQUISHED BY (Print)	DATE	RECEIVED BY (Print)	
Signature	Time	Signature	

COMMENTS/SPECIAL INSTRUCTIONS
* Hold Sample

Cooler Temp. upon receipt at lab 0.8C

CERTIFICATIONS: NELAP (National Environmental Laboratory Accredation Program) NJDEP #07010 PADEP #68-02903 NYDOH #11634 CTPH #0233 US ARMY

By signing this Chain of Custody Agreement, customer expressly agrees to pay APL for all charges, reasonably incurred in connection with analysis and reporting for these samples

Sample Condition Upon Receipt Form (SCUR)

Pace ANALYTICAL SERVICES

Affix Sample Label Here

Date and Initials of person:
Examining contents:_____
Label:_____
Deliver to location:_____
pH:_____

Thermometer Used: 7Hn Date: 9/27/24 Time: 18:20 Initials: ZH

State of Origin: NJ

Cooler #1 Temp.°C 1.8 **(Visual)** -1 **(Correction Factor)** 0.8 **(Actual)**

☑ Samples on ice, cooling process has begun

Courier: ☐ Fed Ex ☐ UPS ☐ USPS ☐ Client ☐ Commercial ☑ Pace ☐ Other_____

Shipping Method: ☐ First Overnight ☐ Priority Overnight ☐ Standard Overnight ☐ Ground ☐ Other_____

Tracking # _____

Custody Seal on Cooler/Box Present: ☐ Yes ☑ No **Seals intact:** ☐ Yes ☐ No **Ice:** (Wet) Blue Melted None

Packing Material: ☐ Bubble Wrap ☐ Bubble Bags ☑ None ☐ Other_____

Samples were collected by Pace employee ☐ Yes ☑ No ☐ N/A

		Comments:
Chain of Custody Present	☑Yes ☐ No ☐ N/A	
Chain of Custody Filled Out	☑Yes ☐ No ☐ N/A	
Relinquished Signature on COC	☑Yes ☐ No ☐ N/A	
Sampler Name and Signature on COC	☑Yes ☐ No ☐ N/A	
Samples Arrived within Hold Time	☑Yes ☐ No ☐ N/A	
Rush TAT requested on COC	☑Yes ☐ No ☐ N/A	2 Day
Sufficient Volume	☑Yes ☐ No ☐ N/A	
Correct Containers Used	☑Yes ☐ No ☐ N/A	
Containers Intact	☑Yes ☐ No ☐ N/A	
Sample Labels match COC (sample IDs & date/time of collection)	☑Yes ☐ No ☐ N/A	
All containers needing acid/base preservation have been checked.	☐Yes ☐ No ☑ N/A	Preservation Information: Preservative:_____
All Containers needing preservation are found to be in compliance with EPA recommendation: Exceptions: Vials, Microbiology, O&G, Metals	☐Yes ☐ No ☑ N/A	Lot #/Trace #:_____ Date:_____ Time:_____ Initials:_____
Headspace in VOA Vials? (>6mm):	☐Yes ☐ No ☑N/A	
Trip Blank Present:	☐Yes ☐ No ☑N/A	

Additional Login Comments:

Client notification/ Resolution

Person Contacted: Date/Time:

Comments/Resolution:

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Certified Environmental Testing

ANALYTICAL RESULTS

REDUCED DELIVERABLES FORMAT

APL Work Order Number: 2120937

Dynamic Earth LLC

Project: Old Orchard G.C.



Brian Wood
Laboratory Director

All Results meet the requirements of the National Environmental Laboratory Accreditation Conference and/or State specific certifications as applicable.

Report Date: Jan 23, 2023

1275 Bloomfield Ave., Bldg. 6, Fairfield, New Jersey 07004
(t) 973.227.0422 (f) 973.227.2813 (w) www.aquaprotechlabs.com

NELAC National Environmental Laboratory Accreditation Conference
NJDEP #07010 / NYDOH #11634 / PADEP #68-02903

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Certified Environmental Testing

Sample Summary

Work Order: 2120937

Client: Dynamic Earth LLC

Project: Old Orchard G.C.

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
T-2A	2120937-01	Soil	12/20/2022 08:30	12/23/2022 12:00
T-2-1	2120937-02	Soil	12/20/2022 08:36	12/23/2022 12:00
T-2-2	2120937-03	Soil	12/20/2022 08:40	12/23/2022 12:00
T-2-3	2120937-04	Soil	12/20/2022 08:44	12/23/2022 12:00
T-2-4	2120937-05	Soil	12/20/2022 08:48	12/23/2022 12:00
T-3A	2120937-06	Soil	12/20/2022 08:52	12/23/2022 12:00
T-3-1	2120937-07	Soil	12/20/2022 08:58	12/23/2022 12:00
T-3-2	2120937-08	Soil	12/20/2022 09:02	12/23/2022 12:00
T-3-3	2120937-09	Soil	12/20/2022 09:06	12/23/2022 12:00
T-3-4	2120937-10	Soil	12/20/2022 09:10	12/23/2022 12:00
T-4A	2120937-11	Soil	12/20/2022 09:14	12/23/2022 12:00
T-4-1	2120937-12	Soil	12/20/2022 09:20	12/23/2022 12:00
T-4-2	2120937-13	Soil	12/20/2022 09:24	12/23/2022 12:00
T-4-3	2120937-14	Soil	12/20/2022 09:28	12/23/2022 12:00
T-4-4	2120937-15	Soil	12/20/2022 09:32	12/23/2022 12:00
T-12A	2120937-16	Soil	12/20/2022 09:36	12/23/2022 12:00
T-12-1	2120937-17	Soil	12/20/2022 09:42	12/23/2022 12:00
T-12-2	2120937-18	Soil	12/20/2022 09:46	12/23/2022 12:00
T-12-3	2120937-19	Soil	12/20/2022 09:50	12/23/2022 12:00
T-12-4	2120937-20	Soil	12/20/2022 09:54	12/23/2022 12:00
T-14A	2120937-21	Soil	12/20/2022 09:58	12/23/2022 12:00
T-14-1	2120937-22	Soil	12/20/2022 10:04	12/23/2022 12:00
T-14-2	2120937-23	Soil	12/20/2022 10:08	12/23/2022 12:00
T-14-3	2120937-24	Soil	12/20/2022 10:12	12/23/2022 12:00
T-14-4	2120937-25	Soil	12/20/2022 10:16	12/23/2022 12:00
WA-2R	2120937-26	Soil	12/20/2022 10:20	12/23/2022 12:00
WA-3R	2120937-27	Soil	12/20/2022 10:22	12/23/2022 12:00
G-6-2R	2120937-28	Soil	12/21/2022 17:00	12/23/2022 12:00
G-9A-R	2120937-29	Soil	12/21/2022 10:24	12/23/2022 12:00
G-9-1-R	2120937-30	Soil	12/21/2022 10:30	12/23/2022 12:00
G-9-2-R	2120937-31	Soil	12/21/2022 10:34	12/23/2022 12:00
G-9-3-R	2120937-32	Soil	12/21/2022 10:38	12/23/2022 12:00
G-9-4-R	2120937-33	Soil	12/21/2022 10:42	12/23/2022 12:00

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AQUA PRO-TECH LABORATORIES
Certified Environmental Testing

Sample Summary (con't)

Work Order: 2120937

Client: Dynamic Earth LLC

Project: Old Orchard G.C.

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
G-6-R	2120937-34	Soil	12/21/2022 17:10	12/23/2022 12:00
G-12A	2120937-35	Soil	12/21/2022 10:46	12/23/2022 12:00
G-12-1	2120937-36	Soil	12/21/2022 10:52	12/23/2022 12:00
G-12-2	2120937-37	Soil	12/21/2022 10:56	12/23/2022 12:00
G-12-3	2120937-38	Soil	12/21/2022 11:00	12/23/2022 12:00
G-12-4	2120937-39	Soil	12/21/2022 11:04	12/23/2022 12:00
T-2B	2120937-41	Soil	12/20/2022 08:32	12/23/2022 12:00
T-3-1A	2120937-42	Soil	12/20/2022 09:00	12/23/2022 12:00
T-3-2A	2120937-43	Soil	12/20/2022 09:04	12/23/2022 12:00
T-3-3A	2120937-44	Soil	12/20/2022 09:08	12/23/2022 12:00
T-3-4A	2120937-45	Soil	12/20/2022 09:12	12/23/2022 12:00
T-12-1A	2120937-46	Soil	12/20/2022 09:44	12/23/2022 12:00
T-12-3A	2120937-47	Soil	12/20/2022 09:52	12/23/2022 12:00
T-14-4A	2120937-48	Soil	12/20/2022 10:48	12/23/2022 12:00
G-12-2A	2120937-49	Soil	12/21/2022 10:58	12/23/2022 12:00
G-12-3A	2120937-50	Soil	12/21/2022 11:02	12/23/2022 12:00
T-2C	2120937-51	Soil	12/20/2022 08:34	12/23/2022 12:00

PN: 2120937

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AQUA PRO-TECH LABORATORIES

www.aquaprotechlabs.com

1275 Bloomfield Avenue - Building

CHAIN OF CUSTODY

APL 2120937

AQUA PRO-TECH LABORATORIES

www.aquaprotechlabs.com

☐ Low ☐ Medium ☐ High

Client:	Dynamic Earth	Send Report To:	S. Spurlock
Address:	1904 Main Street	Address:	
	Lake Como, NJ 07719		
ne:	732-280-0830	Phone:	
ail:	sspurlock@dynamicearth.com	Send Invoice To:	
ect ne:	Old Orchard G.C.	Address:	
Project Manager:	Spencer Spurlock	Sampling Location:	Eatontown, NJ
Project or PO #:	3272-98-005EC	Sampled By:	Omar Mahmud

Turn-Around Time

- ☐ APL Standard 2 Weeks
- ☐ Rush (Choose One Below)
- ☐ 1 Day ☐ 2 Days ☐ 3 Days
- ✓ 1 Week ☐ Other (Specify Below)

Date and Time Required: _____

**May Need Lab Approval

Report / Electronic Format

- ☐ Results Only / NY ASP-A
- ✓ Reduced: NJ DEP
- ☐ Full: NJ DEP / NY ASP-B
- ☐ State Forms/E2 Reporting
- ✓ Excel Summary
- ☐ EqUIS
- ☐ EnviroData
- ☐ Hazsite EDD

PWSID # _____ SRP# _____

Comments/Special Instructions:

* Hold sample

Cooler Temp: 4.0°C

ANALYSIS REQUESTED

APL Order # (APL Will Provide): 2120937

Matrix Abbreviations:

DW - Drinking Water; GW - Groundwater; WW - Wastewater; SW - Surface Water; L - Lake; Pool; SPA; S - Soil; SD - Solid; SL - Sludge; C - Concrete; W - Wipes; O - Oil; PC - Paint Chips

Sample #	Sample Source: Field ID	Collect Date	Collect Time	Matrix	Sample Type: Grab	Sample Type: Comp	No. of Bottles	Preservative	Dieldrin
-01	T-2A	12/20/22	0830	S	X				X
	T-2B *		0832		X				X
	T-2C *		0834		X				X
-02	T-2-1		0836		X				X
	T-2-1A *		0838		X				X
-03	T-2-2		0840		X				X
	T-2-2A *		0842		X				X
-04	T-2-3		0844		X				X
	T-2-3A *		0846		X				X
-05	T-2-4		0848		X				X

RELINQUISHED BY:	Print: Omar Mahmud	RECEIVED BY:	Print: Ryan Munson	Date:	12/23/22
	Sign:		Sign:	Time:	10:30
RELINQUISHED BY:	Print: Ryan Munson 12.23.22	RECEIVED BY:	Print: Rose Nap	Date:	12-23-22
	Sign: 12:00		Sign:	Time:	1200
RELINQUISHED BY:	Print:	RECEIVED BY:	Print:	Date:	
	Sign:		Sign:	Time:	

CERTIFICATIONS: NELAP (National Environmental Accreditation Program) NJDEP #07010 PADEP #68-02903 NYDOH #11634

By signing this Chain of Custody Agreement, customer expressly agrees to pay APL for all charges, reasonably incurred in connection with analysis and reporting for these samples.

PN: 2120937

APL

AQUA PRO-TECH LABORATORIES

www.aquaprotechlabs.com

1275 Bloomfield Avenue Building 6
Fairfield, NJ 07004

TEL: 973-227-0422
FAX: 973-227-2813

CHAIN OF CUSTODY

Client:	Dynamic Earth, LLC	Send Report To:	S. Spurlock
Address:	1904 Main Street, Lake Como, NJ 07719	Address:	
Phone:	732-280-0830	Phone:	
E-Mail:	sspurlock@dynam-erth.com	Send Invoice To:	
Project Name:	Old Orchard G.C.	Address:	
Project Manager:	Spencer Spurlock	Sampling Location:	Eatontown, NJ
Project or PO #:	3272-98-005EC	Sampled By:	Omar Mahmoud

Contamination Level: ☐ Low ☐ Medium ☐ High

Turn-Around Time
☐ APL Standard 2 Weeks
☐ Rush (Choose One Below)
☐ 1 Day ☐ 2 Days ☐ 3 Days
☑ 1 Week ☐ Other (Specify Below)

Date and Time Required: _____
**May Need Lab Approval

Report / Electronic Format
☐ Results Only / NY ASP-A
☑ ~~Reduced~~: NJ DEP
☐ Full: NJ DEP / NY ASP-B
☐ State Forms/E2 Reporting
☑ Excel Summary
☐ EqUIS
☐ EnviroData
☐ Hazsite EDD

PWSID # _____ SRP# _____

Comments/Special Instructions:
* Hold sample

Cooler Temp: 4.0°C

APL Order # (APL Will Provide): 2120937

Matrix Abbreviations: DW - Drinking Water; GW - Groundwater; WW - Wastewater; SW - Surface Water; L - Lake, Pool, SPA; S - Soil; SD - Solid; SL - Sludge; C - Concrete; W - Wipes; O - Oil; PC - Paint Chips

ANALYSIS REQUESTED: Dieldrin

Sample #	Sample Source: Field ID	Collect Date	Collect Time	Matrix	Sample Type: Grab	Sample Type: Comp	No. of Bottles	Preservative	Dieldrin
	T-2-4A*	12/20/22	0850	S	X				X
-06	T-3A		0852		X				X
	T-3B*		0854		X				X
	T-3C*		0856		X				X
-07	T-3-1		0858		X				X
	T-3-1A*		0900		X				X
-08	T-3-2		0902		X				X
	T-3-2A*		0904		X				X
-09	T-3-3		0906		X				X
	T-3-3A*		0906		X				X

RELINQUISHED BY:	Print: Omar Mahmoud	RECEIVED BY:	Print: Ryan Munson	Date: 12/23/22	
	Sign:		Sign:	Time: 10:30	
RELINQUISHED BY:	Print: Ryan Munson 12-23-22	RECEIVED BY:	Print: Rose Wap	Date: 12-23-22	
	Sign: 12:00		Sign:	Time: 1200	
RELINQUISHED BY:	Print:	RECEIVED BY:	Print:	Date:	
	Sign:		Sign:	Time:	

CERTIFICATIONS: NELAP (National Environmental Accreditation Program) NJDEP #07010 PADEP #68-02903 NYDOH #11634

By signing this Chain of Custody Agreement, customer expressly agrees to pay APL for all charges, reasonably incurred in connection with analysis and reporting for these samples.

PN: 2120937

APL

AQUA PRO-TECH LABORATORIES

www.aquaprotechlabs.com

1275 Bloomfield Avenue Building 6
Fairfield, NJ 07004

TEL: 973-227-0422
FAX: 973-227-2813

CHAIN OF CUSTODY

Client:	Dynamic Earth LLC	Send Report To:	S. Spurlock
Address:	1904 Main Street	Address:	
	Lake Como, NJ 07719		
Phone:	732-280-0830	Phone:	
E-Mail:	sspurlock@dynamicearth.com	Send Invoice To:	
Project Name:	Old Orchard G.C.	Address:	
Project Manager:	Spencer Spurlock	Sampling Location:	Eatontown, NJ
Project or PO #:	3272-98-605EC	Sampled By:	Omar Mahmoud

Turn-Around Time
- [ ] APL Standard 2 Weeks
- [ ] Rush (Choose One Below)
- [ ] 1 Day [ ] 2 Days [ ] 3 Days
- [x] 1 Week [ ] Other (Specify Below)

Date and Time Required: _____
**May Need Lab Approval

Report / Electronic Format
- [ ] **Results Only** / NY ASP-A
- [x] **Reduced:** NJ DEP
- [ ] **Full:** NJ DEP / NY ASP-B
- [ ] State Forms/E2 Reporting
- [x] Excel Summary
- [ ] EqUIS
- [ ] EnviroData
- [ ] Hazsite EDD

PWSID # _____ SRP# _____

Contamination Level
- [ ] Low
- [ ] Medium
- [ ] High

Comments/Special Instructions:

* Hold sample

Cooler Temp: 4.0°C

APL Order # (APL Will Provide): 2120937

Matrix Abbreviations:
DW - Drinking Water; GW - Groundwater; WW - Wastewater; SW - Surface Water; L - Lake; Pool; SPA; S - Soil; SD - Solid; SL - Sludge; C - Concrete; W - Wipes; O - Oil; PC - Paint Chips

ANALYSIS REQUESTED

Sample #	Sample Source: Field ID	Collect Date	Collect Time	Matrix	Sample Type: Grab	Sample Type: Comp	No. of Bottles	Preservative	Dieldrin										
-10	T-3-4	12/20/22	0910	S	X				X										
	T-3-4A *		0912		X				X										
-11	T-4A		0914		X				X										
	T-4B *		0916		X				X										
	T-4C *		0918		X				X										
-12	T-4-1		0920		X				X										
	T-4-1A *		0922		X				X										
-13	T-4-2		0924		X				X										
	T-4-2A *		0926		X				X										
-14	T-4-3		0928		X				X										

RELINQUISHED BY:	Print: Omar Mahmoud Sign:	**RECEIVED BY:**	Print: Ryan Munson Sign:	Date: 12/23/22 Time: 10:30
RELINQUISHED BY:	Print: Ryan Munson 12.23.22 Sign: 12:00	**RECEIVED BY:**	Print: ROSE NG Sign:	Date: 12-23-22 Time: 1200
RELINQUISHED BY:	Print: Sign:	**RECEIVED BY:**	Print: Sign:	Date: Time:

CERTIFICATIONS: NELAP (National Environmental Accreditation Program) NJDEP #07010 PADEP #68-02903 NYDOH #11634

By signing this Chain of Custody Agreement, customer expressly agrees to pay APL for all charges, reasonably incurred in connection with analysis and reporting for these samples.

PN: 2120937

APL

AQUA PRO-TECH LABORATORIES

www.aquaprotechlabs.com

1275 Bloomfield Avenue Building 6
Fairfield, NJ 07004

TEL: 973-227-0422
FAX: 973-227-2813

CHAIN OF CUSTODY

Client:	Dynamic Earth, LLC	Send Report To:	S. Spurlock
Address:	1904 Main Street	Address:	
	Lake Como, NJ 07719		
Phone:	732-280-0530	Phone:	
E-Mail:	sspurlock@dynamic-earth.com	Send Invoice To:	
Project Name:	Old Orchard G.C.	Address:	
Project Manager:	Spencer Spurlock	Sampling Location:	Eatontown, NJ
Project or PO #:	3272-98-005E2	Sampled By:	Omar Mahmoud

Turn-Around Time
- [ ] APL Standard 2 Weeks
- [ ] Rush (Choose One Below)
- [ ] 1 Day [ ] 2 Days [ ] 3 Days
- [x] 1 Week [ ] Other (Specify Below)

Date and Time Required: _____
**May Need Lab Approval

Report / Electronic Format
- [ ] Results Only / NY ASP-A
- [x] Reduced: NJ DEP
- [ ] Full: NJ DEP / NY ASP-B
- [ ] State Forms/E2 Reporting
- [x] Excel Summary
- [ ] EqUIS
- [ ] EnviroData
- [ ] Hazsite EDD

PWSID # _____ SRP# _____

Contamination Level
- [ ] Low
- [ ] Medium
- [ ] High

Comments/Special Instructions:
* Hold sample

Cooler Temp: 4.0°C

APL Order # (APL Will Provide): 2120937

Matrix Abbreviations: DW - Drinking Water; GW - Groundwater; WW - Wastewater; SW - Surface Water; L - Lake, Pool, SPA; S - Soil; SD - Solid; SL - Sludge; C - Concrete; W - Wipes; O - Oil; PC - Paint Chips

ANALYSIS REQUESTED: Dieldrin

Sample #	Sample Source: Field ID	Collect Date	Collect Time	Matrix	Sample Type: Grab	Sample Type: Comp	No. of Bottles	Preservative	Dieldrin
	T-4-3A *	12/20/22	0930	S	X				X
-15	T-4-4		0932		X				X
	T-4-4A *		0934		X				X
-16	T-12A		0936		X				X
	T-12B *		0938		X				X
	T-12C *		0940		X				X
-17	T-12-1		0942		X				X
	T-12-1A *		0944		X				X
-18	T-12-2		0946		X				X
	T-12-2A *		0948		X				X

RELINQUISHED BY:	Print: Omar Mahmoud	RECEIVED BY:	Print: Ryan Munson	Date: 12/23/22
	Sign:		Sign:	Time: 10:30
RELINQUISHED BY:	Print: Ryan Munson 12.23.22	RECEIVED BY:	Print: Rose Nap	Date: 12-23-22
	Sign: 12:00		Sign:	Time: 1200
RELINQUISHED BY:	Print:	RECEIVED BY:	Print:	Date:
	Sign:		Sign:	Time:

CERTIFICATIONS: NELAP (National Environmental Accreditation Program) NJDEP #07010 PADEP #68-02903 NYDOH #11634

By signing this Chain of Custody Agreement, customer expressly agrees to pay APL for all charges, reasonably incurred in connection with analysis and reporting for these samples.

PN: 2120937

APL

AQUA PRO-TECH LABORATORIES

www.aquaprotechlabs.com

1275 Bloomfield Avenue Building 6
Fairfield, NJ 07004

TEL: 973-227-0422
FAX: 973-227-2813

CHAIN OF CUSTODY

Client:	Dynamic Earth, LLC	Send Report To:	S. Spurlock
Address:	1904, Main Street	Address:	
	Lake Como, NJ 07719		
Phone:	732-280-0830	Phone:	
E-Mail:	sspurlock@dynamic-earth.com	Send Invoice To:	
Project Name:	Old Orchard G.C.	Address:	
Project Manager:	Spencer Spurlock	Sampling Location:	Eatontown, NJ
Project or PO #:	3272-98-005EC	Sampled By:	Omar Mahmood

Turn-Around Time
- [ ] APL Standard 2 Weeks
- [ ] Rush (Choose One Below)
- [ ] 1 Day [ ] 2 Days [ ] 3 Days
- [x] 1 Week [ ] Other (Specify Below)

Date and Time Required: _____
**May Need Lab Approval

Report / Electronic Format
- [ ] Results Only / NY ASP-A
- [x] Reduced: NJ DEP
- [ ] Full: NJ DEP / NY ASP-B
- [ ] State Forms/E2 Reporting
- [x] Excel Summary
- [ ] EqUIS
- [ ] EnviroData
- [ ] Hazsite EDD

PWSID # _____ SRP# _____

Contamination Level
- [ ] Low
- [ ] Medium
- [ ] High

Comments/Special Instructions:

* Hold Sample

Cooler Temp: 4.0°C

APL Order # (APL Will Provide): 2120937

Matrix Abbreviations:
DW - Drinking Water; GW - Groundwater; WW - Wastewater; SW - Surface Water; L - Lake; Pool; SPA; S - Soil; SD - Solid; SL - Sludge; C - Concrete; W - Wipes; O - Oil; PC - Paint Chips

ANALYSIS REQUESTED

Sample #	Sample Source: Field ID	Collect Date	Collect Time	Matrix	Sample Type: Grab	Sample Type: Comp	No. of Bottles	Preservative	Dieldrin
-19	T-12-3	12/20/22	0950	S	X				X
	T-12-3A *		0952		X				X
-20	T-12-4		0954		X				X
	T-12-4A *		0956		X				X
-21	T-14A		0958		X				X
	T-14B *		1000		X				X
	T-14C *		1002		X				X
-22	T-14-1		1004		X				X
	T-14-1A *		1006		X				X
-23	T-14-2		1005		X				X

RELINQUISHED BY:	Print: Omar Mahmood	RECEIVED BY:	Print: Ryan Munson	Date: 12/23/22
	Sign:		Sign:	Time: 10:30
RELINQUISHED BY:	Print: Ryan Munson 12.23.22	RECEIVED BY:	Print: RUSH NAP	Date: 12-23-22
	Sign 12:00		Sign:	Time: 1200
RELINQUISHED BY:	Print:	RECEIVED BY:	Print:	Date:
	Sign:		Sign:	Time:

CERTIFICATIONS: NELAP (National Environmental Accreditation Program) NJDEP #07010 PADEP #68-02903 NYDOH #11634

By signing this Chain of Custody Agreement, customer expressly agrees to pay APL for all charges, reasonably incurred in connection with analysis and reporting for these samples.

PN: 2120937

APL

AQUA PRO-TECH LABORATORIES

www.aquaprotechlabs.com

1275 Bloomfield Avenue Building 6
Fairfield, NJ 07004

TEL: 973-227-0422
FAX: 973-227-2813

CHAIN OF CUSTODY

Client:	Dynamic Earth, LLC	Send Report To:	S. Spurlock
Address:	1904 Main Street	Address:	
	Lake Como, NJ 07719		
Phone:	732-280-0830	Phone:	
E-Mail:	sspurlock@dynamic-earth.com	Send Invoice To:	
Project Name:	Old Orchard Co. C.	Address:	
Project Manager:	Spencer Spurlock	Sampling Location:	Eatontown, NJ
Project or PO #:	3272-98-005 EC	Sampled By:	Omar Mahmoud

Turn-Around Time
- [ ] APL Standard 2 Weeks
- [ ] Rush (Choose One Below)
- [ ] 1 Day [ ] 2 Days [ ] 3 Days
- [x] 1 Week [ ] Other (Specify Below)

Date and Time Required: _____
**May Need Lab Approval

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- [ ] State Forms/E2 Reporting
- [x] Excel Summary
- [ ] EqUIS
- [ ] EnviroData
- [ ] Hazsite EDD

PWSID # _____ SRP# _____

Contamination Level
- [ ] Low
- [ ] Medium
- [ ] High

Comments/Special Instructions:
* Hold sample

Cooler Temp: 4.0°

APL Order # (APL Will Provide): 2120937

Matrix Abbreviations:
DW - Drinking Water; GW - Groundwater; WW - Wastewater; SW - Surface Water; L - Lake; Pool; SPA; S - Soil; SD - Solid; SL - Sludge; C - Concrete; W - Wipes; O - Oil; PC - Paint Chips

ANALYSIS REQUESTED

Sample #	Sample Source: Field ID	Collect Date	Collect Time	Matrix	Sample Type: Grab	Sample Type: Comp	No. of Bottles	Preservative	Dieldrin	Lead SPLP	Beta-BHC SPLP	Mercury SPLP	Heptachlor Epoxide
	T-14-2A *	12/20/22	1010	S	X				X				
-24	T-14-3		1012		X				X				
	T-14-3A *		1014		X				X				
-25	T-14-4		1016		X				X				
	T-14-4A *		1018		X				X				
-26	WA-2R		1020		X					X			
-27	WA-3R		1022		X					X	X		
-28	G-6-2R	12/21/22	1700		X							X	
-29	G-9A-R		1024		X							X	X
	G-9B-R *		1026		X							[illegible]	X

RELINQUISHED BY:	Print: Omar Mahmoud	RECEIVED BY:	Print: Ryan Munson	Date:	12/23/22
	Sign:		Sign:	Time:	10:30
RELINQUISHED BY:	Print: Ryan Munson 12-23-22	RECEIVED BY:	Print: ROSE NAP	Date:	12-23-22
	Sign: 12:00		Sign:	Time:	1200
RELINQUISHED BY:	Print:	RECEIVED BY:	Print:	Date:	
	Sign:		Sign:	Time:	

CERTIFICATIONS: NELAP (National Environmental Accreditation Program) NJDEP #07010 PADEP #68-02903 NYDOH #11634

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PN: 2120937

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Fairfield, NJ 07004

TEL: 973-227-0422
FAX: 973-227-2813

CHAIN OF CUSTODY

Client:	Dynamic Earth, LLC	Send Report To:	
Address:		Address:	
Phone:		Phone:	
E-Mail:	SAME	Send Invoice To:	
Project Name:		Address:	
Project Manager:		Sampling Location:	Edgewater, NJ
Project or PO #:		Sampled By:	Omar Mahmood

Turn-Around Time
- [ ] APL Standard 2 Weeks
- [ ] Rush (Choose One Below)
- [ ] 1 Day [ ] 2 Days [ ] 3 Days
- [x] 1 Week [ ] Other (Specify Below)

Date and Time Required: _____
**May Need Lab Approval

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- [ ] State Forms/E2 Reporting
- [x] Excel Summary
- [ ] EqUIS
- [ ] EnviroData
- [ ] Hazsite EDD

PWSID # _____ SRP# _____

Contamination Level
- [ ] Low
- [ ] Medium
- [ ] High

Comments/Special Instructions:
* Hold Sample

Cooler Temp: 4.0°C

APL Order # (APL Will Provide): 2120937

Matrix Abbreviations:
DW - Drinking Water; GW - Groundwater; WW - Wastewater; SW - Surface Water; L - Lake; Pool; SPA; S - Soil; SD - Solid; SL - Sludge; C - Concrete; W - Wipes; O - Oil; PC - Paint Chips

ANALYSIS REQUESTED

Sample #	Sample Source: Field ID	Collect Date	Collect Time	Matrix	Sample Type: Grab	Sample Type: Comp	No. of Bottles	Preservative	Heptachlor Epoxide	4,4'-DDE SPLP	Mercury SPLP
	G-9C-R *	12/21/22	1028	S	X				X		
-30	G-9-1-R		1030		X				X		
	G-9-1A-R *		1032		X				X		
-31	G-9-2-R		1034		X				X		X
	G-9-2A-R *		1036		X				X		
-32	G-9-3-R		1038		X				X		
	G-9-3A-R *		1040		X				X		
-33	G-9-4-R		1042		X				X		
	G-9-4A-R *		1044		X				X		
-34	G-6-R		1710		X					X	

RELINQUISHED BY:	Print: Omar Mahmood	RECEIVED BY:	Print: Ryan Munson	Date:	12/23/22
	Sign:		Sign:	Time:	10:30
RELINQUISHED BY:	Print: Ryan Munson 12-23-22	RECEIVED BY:	Print: Rose Wap	Date:	12-23-22
	Sign 12:00		Sign:	Time:	1200
RELINQUISHED BY:	Print:	RECEIVED BY:	Print:	Date:	
	Sign:		Sign:	Time:	

CERTIFICATIONS: NELAP (National Environmental Accreditation Program) NJDEP #07010 PADEP #68-02903 NYDOH #11634

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PN: 2120937

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Fairfield, NJ 07004

TEL: 973-227-0422
FAX: 973-227-2813

CHAIN OF CUSTODY

Client:	Dynamic Earth, LLC	Send Report To:	
Address:		Address:	
Phone:		Phone:	
E-Mail:		Send Invoice To:	
Project Name:	SAME	Address:	
Project Manager:		Sampling Location:	Eatontown, NJ
Project or PO #:		Sampled By:	Omar Mahmoud

Turn-Around Time
- [ ] APL Standard 2 Weeks
- [ ] Rush (Choose One Below)
- [ ] 1 Day [ ] 2 Days [ ] 3 Days
- [x] 1 Week [ ] Other (Specify Below)

Date and Time Required: _____
**May Need Lab Approval

Report / Electronic Format
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- [ ] **Full:** NJ DEP / NY ASP-B
- [ ] State Forms/E2 Reporting
- [x] Excel Summary
- [ ] EqUIS
- [ ] EnviroData
- [ ] Hazsite EDD

PWSID # _____ SRP# _____

Contamination Level
- [ ] Low
- [ ] Medium
- [ ] High

Comments/Special Instructions:
* Hold sample

Cooler Temp: 4.0°C

Matrix Abbreviations:
DW - Drinking Water; GW - Groundwater; WW - Wastewater; SW - Surface Water; L - Lake; Pool; SPA; S - Soil; SO - Solid; SL - Sludge; C - Concrete; W - Wipes; O - Oil; PC - Paint Chips

APL Order # (APL Will Provide): 2120937

Sample #	Sample Source: Field ID	Collect Date	Collect Time	Matrix	Sample Type: Grab	Sample Type: Comp	No. of Bottles	Preservative	ANALYSIS REQUESTED: Heptachlor Epoxide
-35	G-12A	12/21/22	1046	S	X				X
	G-12B *		1048		X				X
	G-12C *		1050		X				X
-36	G-12-1		1052		X				X
	G-12-1A *		1054		X				X
-37	G-12-2		1056		X				X
	G-12-2A *		1058		X				X
-38	G-12-3		1100		X				X
	G-12-3A *		1102		X				X
-39	G-12-4		1104		X				X

RELINQUISHED BY:	Print: Omar Mahmoud	RECEIVED BY:	Print: Ryan Munson	Date:	12/23/22
	Sign:		Sign:	Time:	10:30
RELINQUISHED BY:	Print: Ryan Munson 12.23.22	RECEIVED BY:	Print: Rose Nap	Date:	12-23-22
	Sign: 12:00		Sign:	Time:	1200
RELINQUISHED BY:	Print:	RECEIVED BY:	Print:	Date:	
	Sign:		Sign:	Time:	

CERTIFICATIONS: NELAP (National Environmental Accreditation Program) NJDEP #07010 PADEP #68-02903 NYDOH #11634

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PN: 2120937

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1275 Bloomfield Avenue - Building

APL 2120937

AQUA PRO-TECH LABORATORIES

www.aquaprotechlabs.com

Low
Medium
High

CHAIN OF CUSTODY

Page 1 of 16

Client:	Dynamic Earth	Send Report To:	S. Spurlock
Address:	1904 Main Street	Address:	
	Lake Como, NJ 07719		
Phone:	732-280-0830	Phone:	
Email:	sspurlock@dynamicearth.us	Send Invoice To:	
Project Name:	Old Orchard G.C.	Address:	
Project Manager:	Spencer Spurlock	Sampling Location	Eatontown, NJ
Project or PO #:	3272-98-005EC	Sampled By:	Omar Mahmood

Turn-Around Time

- [ ] APL Standard 2 Weeks
- [ ] Rush (Choose One Below)
- [ ] 1 Day [ ] 2 Days [ ] 3 Days
- [x] 1 Week [ ] Other (Specify Below)

Date and Time Required: _____

**May Need Lab Approval

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- [ ] State Forms/E2 Reporting
- [x] Excel Summary
- [ ] EqUIS
- [ ] EnviroData
- [ ] Hazsite EDD

PWSID # _____ SRP# _____

Comments/Special Instructions:

* Hold sample

Cooler Temp: 4.0°C

Matrix Abbreviations:

DW - Drinking Water; GW - Groundwater; WW - Wastewater; SW - Surface Water; L - Lake; Pool; SPA; S - Soil; SD - Solid; SL - Sludge; C - Concrete; W - Wipes; O - Oil; PC - Paint Chips

APL Order # (APL Will Provide): 2120937

Sample #	Sample Source: Field ID	Collect Date	Collect Time	Matrix	Sample Type: Grab	Sample Type: Comp	No. of Bottles	Preservative	ANALYSIS REQUESTED: Dieldrin
-01	T-2A	12/20/22	0830	S	X				X
-A1	T-2B *		0832		X				X
-S1	T-2C *		0834		X				X
-02	T-2-1		0836		X				X
	T-2-1A *		0838		X				X
-03	T-2-2		0840		X				X
	T-2-2A *		0842		X				X
-04	T-2-3		0844		X				X
	T-2-3A *		0846		X				X
-05	T-2-4		0848		X				X

RELINQUISHED BY:	Print: Omar Mahmood	RECEIVED BY:	Print: Ryan Munson	Date:	12/23/22
	Sign:		Sign:	Time:	10:30
RELINQUISHED BY:	Print: Ryan Munson 12.23.22	RECEIVED BY:	Print: Rose Nap	Date:	12-23-22
	Sign 12:00		Sign:	Time:	1200
RELINQUISHED BY:	Print:	RECEIVED BY:	Print:	Date:	
	Sign:		Sign:	Time:	

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PN: 2120937

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1275 Bloomfield Avenue Building 6
Fairfield, NJ 07004

TEL: 973-227-0422
FAX: 973-227-2813

CHAIN OF CUSTODY

Client:	Dynamic Earth, LLC	Send Report To:	S Spurlock
Address:	1904 Main Street, Lake Como, NJ 07719	Address:	
Phone:	732-280-0830	Phone:	
E-Mail:	sspurlock@dynamic-earth.com	Send Invoice To:	
Project Name:	Old Orchard GC.	Address:	
Project Manager:	Spencer Spurlock	Sampling Location:	Eatontown, NJ
Project or PO #:	3272-98-005 EC	Sampled By:	Omar Mahmoud

Turn-Around Time
- [ ] APL Standard 2 Weeks
- [ ] Rush (Choose One Below).
- [ ] 1 Day [ ] 2 Days [ ] 3 Days
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Date and Time Required: _____
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- [x] Excel Summary
- [ ] EqUIS
- [ ] EnviroData
- [ ] Hazsite EDD

PWSID # _____ SRP# _____

Contamination Level
- [ ] Low
- [ ] Medium
- [ ] High

Comments/Special Instructions:
* Hold sample

Cooler Temp: 4.0°C

APL Order # (APL Will Provide): 2120937

Matrix Abbreviations:
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Sample #	Sample Source: Field ID	Collect Date	Collect Time	Matrix	Sample Type: Grab	Sample Type: Comp	No. of Bottles	Preservative	ANALYSIS REQUESTED: Dieldrin										
	T-2-4A *	12/20/22	0850	S	X				X										
-06	T-3A		0852		X				X										
	T-3B *		0854		X				X										
	T-3C *		0856		X				X										
-07	T-3-1		0858		X				X										
-42	T-3-1A *		0900		X				X										
-08	T-3-2		0902		X				X										
-43	T-3-2A *		0904		X				X										
-09	T-3-3		0906		X				X										
-44	T-3-3A *		0908		X				X										

RELINQUISHED BY:	Print: Omar Mahmoud	RECEIVED BY:	Print: Ryan Munson	Date:	12/23/22
	Sign:		Sign:	Time:	10:30
RELINQUISHED BY:	Print: Ryan Munson 12-23-22	RECEIVED BY:	Print: Rose Wap	Date:	12-23-22
	Sign: 12:00		Sign:	Time:	1200
RELINQUISHED BY:	Print:	RECEIVED BY:	Print:	Date:	
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Phone:	732-280-0830	Phone:	
E-Mail:	sperlock@dynamic-earth.com	Send Invoice To:	
Project Name:	Old Orchard G.C.	Address:	
Project Manager:	Spencer Sperlock	Sampling Location:	Eatontown, NJ
Project or PO #:	3272-98-005EC	Sampled By:	Omar Mahmood

Turn-Around Time
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Date and Time Required: _____
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- [ ] State Forms/E2 Reporting
- [x] Excel Summary
- [ ] EqUIS
- [ ] EnviroData
- [ ] Hazsite EDD

PWSID # _____ SRP# _____

Contamination Level
- [ ] Low
- [ ] Medium
- [ ] High

Comments/Special Instructions:
* Hold Sample

Cooler Temp: 4.0°C

APL Order # (APL Will Provide): 2120937

Matrix Abbreviations: DW - Drinking Water; GW - Groundwater; WW - Wastewater; SW - Surface Water; L - Lake; Pool; SPA; S - Soil; SD - Solid; SL - Sludge; C - Concrete; W - Wipes; O - Oil; PC - Paint Chips

ANALYSIS REQUESTED: Dieldrin

Sample #	Sample Source: Field ID	Collect Date	Collect Time	Matrix	Sample Type: Grab	Sample Type: Comp	No. of Bottles	Preservative	Dieldrin
-10	T-3-4	12/20/22	0910	S	X				X
-45	T-3-4A *		0912		X				X
-11	T-4A		0914		X				X
	T-4B *		0916		X				X
	T-4C *		0918		X				X
-12	T-4-1		0920		X				X
	T-4-1A *		0922		X				X
-13	T-4-2		0924		X				X
	T-4-2A *		0926		X				X
-14	T-4-3		0928		X				X

RELINQUISHED BY:	Print: Omar Mahmood	RECEIVED BY:	Print: Ryan Munson	Date: 12/23/22
	Sign:		Sign:	Time: 10:30
RELINQUISHED BY:	Print: Ryan Munson 12.22.22	RECEIVED BY:	Print: ROSE NG	Date: 12-23-22
	Sign 12:00		Sign:	Time: 1200
RELINQUISHED BY:	Print:	RECEIVED BY:	Print:	Date:
	Sign:		Sign:	Time:

CERTIFICATIONS: NELAP (National Environmental Accreditation Program) NJDEP #07010 PADEP #68-02903 NYDOH #11634

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Phone:	732-280-0530	Phone:	
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Project Name:	Old Orchard G.C.	Address:	
Project Manager:	Spencer Sparlock	Sampling Location:	Eatontown, NJ
Project or PO #:	3272-48-0052	Sampled By:	Omar Mahmoud

Contamination Level: [ ] Low [ ] Medium [ ] High

Turn-Around Time
[ ] APL Standard 2 Weeks
[ ] Rush (Choose One Below)
[ ] 1 Day [ ] 2 Days [ ] 3 Days
[✓] 1 Week [ ] Other (Specify Below)

Date and Time Required: _____
**May Need Lab Approval

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[✓] Reduced: NJ DEP
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[ ] State Forms/E2 Reporting
[✓] Excel Summary
[ ] EqUIS
[ ] EnviroData
[ ] Hazsite EDD

PWSID # _____ SRP# _____

Comments/Special Instructions:
* Hold sample

Cooler Temp: 4.0°C

APL Order # (APL Will Provide): 2120937

Matrix Abbreviations: DW - Drinking Water; GW - Groundwater; WW - Wastewater; SW - Surface Water; L - Lake, Pool, SPA; S - Soil; SD - Solid; SL - Sludge; C - Concrete; W - Wipes; O - Oil; PC - Paint Chips

ANALYSIS REQUESTED: Dieldrin

Sample #	Sample Source: Field ID	Collect Date	Collect Time	Matrix	Sample Type: Grab	Sample Type: Comp	No. of Bottles	Preservative	Dieldrin
	T-4-3A *	12/20/22	0930	S	X				X
-15	T-4-4		0932		X				X
	T-4-4A *		0934		X				X
-16	T-12A		0936		X				X
	T-12B *		0938		X				X
	T-12C *		0940		X				X
-17	T-12-1		0942		X				X
-46	T-12-1A *		0944		X				X
-18	T-12-2		0946		X				X
	T-12-2A *		0948		X				X

RELINQUISHED BY:	Print: Omar Mahmoud	RECEIVED BY:	Print: Ryan Munson	Date:	12/23/22
	Sign:		Sign:	Time:	10:20
RELINQUISHED BY:	Print: Ryan Munson 12.23.22	RECEIVED BY:	Print: Rose Nap	Date:	12-23-22
	Sign: 12:00		Sign:	Time:	1200
RELINQUISHED BY:	Print:	RECEIVED BY:	Print:	Date:	
	Sign:		Sign:	Time:	

CERTIFICATIONS: NELAP (National Environmental Accreditation Program) NJDEP #07010 PADEP #68-02903 NYDOH #11634

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PN: 2120937

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Fairfield, NJ 07004

TEL: 973-227-0422
FAX: 973-227-2813

CHAIN OF CUSTODY

Client:	Dynamic Earth, LLC	Send Report To:	S. Spurlock
Address:	1904 Main Street	Address:	
	Lake Como, NJ 07719		
Phone:	732-280-0830	Phone:	
E-Mail:	sspurlock@dynamic-earth.com	Send Invoice To:	
Project Name:	Old Orchard G.C.	Address:	
Project Manager:	Spencer Spurlock	Sampling Location:	Eatontown, NJ
Project or PO #:	3272-98-005EC	Sampled By:	Omar Mahmoud

Turn-Around Time
- [ ] APL Standard 2 Weeks
- [ ] Rush (Choose One Below)
- [ ] 1 Day [ ] 2 Days [ ] 3 Days
- [x] 1 Week [ ] Other (Specify Below)

Date and Time Required: _____
**May Need Lab Approval

Report / Electronic Format
- [ ] Results Only / NY ASP-A
- [x] Reduced: NJ DEP
- [ ] Full: NJ DEP / NY ASP-B
- [ ] State Forms/E2 Reporting
- [x] Excel Summary
- [ ] EqUIS
- [ ] EnviroData
- [ ] Hazsite EDD

PWSID # _____ SRP# _____

Contamination Level
- [ ] Low
- [ ] Medium
- [ ] High

Comments/Special Instructions:
* Hold sample

Cooler Temp: 4.0°C

APL Order # (APL Will Provide): 2120937

Matrix Abbreviations: DW - Drinking Water; GW - Groundwater; WW - Wastewater; SW - Surface Water; L - Lake, Pool, SPA; S - Soil; SD - Solid; SL - Sludge; C - Concrete; W - Wipes; O - Oil; PC - Paint Chips

ANALYSIS REQUESTED: Dieldrin

Sample #	Sample Source: Field ID	Collect Date	Collect Time	Matrix	Sample Type: Grab	Sample Type: Comp	No. of Bottles	Preservative	Dieldrin
-19	T-12-3	12/20/22	0950	S	X				X
-47	T-12-3A *		0952		X				X
-20	T-12-4		0954		X				X
	T-12-4A *		0956		X				X
-21	T-14A		0958		X				X
	T-14B *		1000		X				X
	T-14C *		1002		X				X
-22	T-14-1		1004		X				X
	T-14-1A *		1006		X				X
-23	T-14-2		1008		X				X

RELINQUISHED BY:	Print: Omar Mahmoud	RECEIVED BY:	Print: Ryan Munson	Date: 12/23/22
	Sign:		Sign:	Time: 10:30
RELINQUISHED BY:	Print: Ryan Munson 12.23.22	RECEIVED BY:	Print: Rose Nap	Date: 12-23-22
	Sign 12:00		Sign:	Time: 1200
RELINQUISHED BY:	Print:	RECEIVED BY:	Print:	Date:
	Sign:		Sign:	Time:

CERTIFICATIONS: NELAP (National Environmental Accreditation Program) NJDEP #07010 PADEP #68-02903 NYDOH #11634

By signing this Chain of Custody Agreement, customer expressly agrees to pay APL for all charges, reasonably incurred in connection with analysis and reporting for these samples.

PN: 2120937

APL

AQUA PRO-TECH LABORATORIES

www.aquaprotechlabs.com

1275 Bloomfield Avenue Building 6
Fairfield, NJ 07004

TEL: 973-227-0422
FAX: 973-227-2813

CHAIN OF CUSTODY

Page 6 of 16

Client:	Dynamic Earth, LLC	Send Report To:	S. Spurlock
Address:	1604 Main Street	Address:	
	Lake Como, NJ 07719		
Phone:	732-280-0830	Phone:	
E-Mail:	Sspurlock@dynamic-earth.com	Send Invoice To:	
Project Name:	Old Orchard G.C.	Address:	
Project Manager:	Spencer Spurlock	Sampling Location:	Eatontown, NJ
Project or PO #:	3272-98-005 EC	Sampled By:	Omar Mahmoud

Turn-Around Time
- [ ] APL Standard 2 Weeks
- [ ] Rush (Choose One Below)
- [ ] 1 Day [ ] 2 Days [ ] 3 Days
- [x] 1 Week [ ] Other (Specify Below)

Date and Time Required: _____
**May Need Lab Approval

Contamination Level
- [ ] Low
- [ ] Medium
- [ ] High

Report / Electronic Format
- [ ] Results Only / NY ASP-A
- [x] Reduced: NJ DEP
- [ ] Full: NJ DEP / NY ASP-B
- [ ] State Forms/E2 Reporting
- [x] Excel Summary
- [ ] EqUIS
- [ ] EnviroData
- [ ] Hazsite EDD

PWSID # _____ SRP# _____

Comments/Special Instructions:
* Hold sample

Cooler Temp: 4.0°

APL Order # (APL Will Provide): 2120937

Matrix Abbreviations: DW - Drinking Water; GW - Groundwater; WW - Wastewater; SW - Surface Water; L - Lake, Pool, SPA; S - Soil; SD - Solid; SL - Sludge; C - Concrete; W - Wipes; O - Oil; PC - Paint Chips

ANALYSIS REQUESTED: Dieldrin; Lead SPLP; Beta-BHC SPLP; Mercury SPLP; Heptachlor Epoxide

Sample #	Sample Source: Field ID	Collect Date	Collect Time	Matrix	Sample Type: Grab	Sample Type: Comp	No. of Bottles	Preservative	Dieldrin	Lead SPLP	Beta-BHC SPLP	Mercury SPLP	Heptachlor Epoxide
	T-14-2A *	12/20/22	1010	S	X				X				
-24	T-14-3		1012		X				X				
	T-14-3A *		1014		X				X				
-25	T-14-4		1016		X				X				
-48	T-14-4A *		1018		X				X				
-26	WA-2R		1020		X					X			
-27	WA-3R		1022		X					X	X		
-28	G-6-2R	12/21/22	1700		X							X	
-29	G-9A-R		1024		X							X	X
	G-9B-R *		1026		X							X	X

RELINQUISHED BY:	Print: Omar Mahmoud	RECEIVED BY:	Print: Ryan Munson	Date:	12/23/22
	Sign:		Sign:	Time:	10:30
RELINQUISHED BY:	Print: Ryan Munson 12-23-22	RECEIVED BY:	Print: ROSE NAP	Date:	12-23-22
	Sign: 12:00		Sign:	Time:	1200
RELINQUISHED BY:	Print:	RECEIVED BY:	Print:	Date:	
	Sign:		Sign:	Time:	

CERTIFICATIONS: NELAP (National Environmental Accreditation Program) NJDEP #07010 PADEP #68-02903 NYDOH #11634

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APL

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www.aquaprotechlabs.com

1275 Bloomfield Avenue Building 6
Fairfield, NJ 07004

TEL: 973-227-0422
FAX: 973-227-2813

CHAIN OF CUSTODY

Client:	Dynamic Earth, LLC	Send Report To:	
Address:		Address:	
Phone:		Phone:	
E-Mail:	SAME	Send Invoice To:	
Project Name:		Address:	
Project Manager:		Sampling Location:	Edgetown, NJ
Project or PO #:		Sampled By:	Omar Mahmud

Turn-Around Time
- [ ] APL Standard 2 Weeks
- [ ] Rush (Choose One Below)
- [ ] 1 Day [ ] 2 Days [ ] 3 Days
- [x] 1 Week [ ] Other (Specify Below)

Date and Time Required: _____
**May Need Lab Approval

Report / Electronic Format
- [ ] Results Only / NY ASP-A
- [x] Reduced: NJ DEP
- [ ] Full: NJ DEP / NY ASP-B
- [ ] State Forms/E2 Reporting
- [x] Excel Summary
- [ ] EqUIS
- [ ] EnviroData
- [ ] Hazsite EDD

PWSID # _____ SRP# _____

Contamination Level
- [ ] Low
- [ ] Medium
- [ ] High

Comments/Special Instructions:
* Hold Sample

Cooler Temp: 4.0°C

APL Order # (APL Will Provide): 2120937

Matrix Abbreviations: DW - Drinking Water; GW - Groundwater; WW - Wastewater; SW - Surface Water; L - Lake, Pool, SPA; S - Soil; SD - Solid; SL - Sludge; C - Concrete; W - Wipes; O - Oil; PC - Paint Chips

ANALYSIS REQUESTED

Sample #	Sample Source: Field ID	Collect Date	Collect Time	Matrix	Sample Type: Grab	Sample Type: Comp	No. of Bottles	Preservative	Heptachlor Epox.	4,4'-DDE SPLP	Mercury SPLP
	G-9C-R *	12/21/22	1028	S	X				X		
-30	G-9-1-R		1030		X				X		
	G-9-1A-R *		1032		X				X		
-31	G-9-2-R		1034		X				X		X
	G-9-2A-R *		1036		X				X		
-32	G-9-3-R		1038		X				X		
	G-9-3A-R *		1040		X				X		
-33	G-9-4-R		1042		X				X		
	G-9-4A-R *		1044		X				X		
-34	G-6-R		1710		X					X	

RELINQUISHED BY:	Print: Omar Mahmud	RECEIVED BY:	Print: Ryan Munson	Date:	12/23/22
	Sign:		Sign:	Time:	10:30
RELINQUISHED BY:	Print: Ryan Munson 12-23-22	RECEIVED BY:	Print: Rose Wall	Date:	12-23-22
	Sign 12:00		Sign:	Time:	1200
RELINQUISHED BY:	Print:	RECEIVED BY:	Print:	Date:	
	Sign:		Sign:	Time:	

CERTIFICATIONS: NELAP (National Environmental Accreditation Program) NJDEP #07010 PADEP #68-02903 NYDOH #11634

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APL

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Fairfield, NJ 07004
TEL: 973-227-0422
FAX: 973-227-2813

CHAIN OF CUSTODY

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Client:	Dynamic Earth, LLC	Send Report To:	
Address:		Address:	
Phone:		Phone:	
E-Mail:		Send Invoice To:	
Project Name:	SAP	Address:	
Project Manager:		Sampling Location:	Eatontown, NJ
Project or PO #:		Sampled By:	Omar Mahmood

Turn-Around Time
- [ ] APL Standard 2 Weeks
- [ ] Rush (Choose One Below)
- [ ] 1 Day [ ] 2 Days [ ] 3 Days
- [x] 1 Week [ ] Other (Specify Below)

Date and Time Required: _____
**May Need Lab Approval

Report / Electronic Format
- [ ] Results Only / NY ASP-A
- [x] Reduced: NJ DEP
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- [ ] State Forms/E2 Reporting
- [x] Excel Summary
- [ ] EqUIS
- [ ] EnviroData
- [ ] Hazsite EDD

PWSID # _____ SRP# _____

Contamination Level
- [ ] Low
- [ ] Medium
- [ ] High

Comments/Special Instructions:
* Hold Sample

Cooler Temp: 4.0°C

Matrix Abbreviations:
DW - Drinking Water; GW - Groundwater; WW - Wastewater; SW - Surface Water; L - Lake, Pool, SPA; S - Soil; SD - Solid; SL - Sludge; C - Concrete; W - Wipes; O - Oil; PC - Paint Chips

APL Order # (APL Will Provide): 2120937

Sample #	Sample Source: Field ID	Collect Date	Collect Time	Matrix	Sample Type: Grab	Sample Type: Comp	No. of Bottles	Preservative	ANALYSIS REQUESTED: Heptachlor Epoxide
-35	G-12A	12/21/22	1046	S	X				X
	G-12B *		1048		X				X
	G-12C *		1050		X				X
-36	G-12-1		1052		X				X
	G-12-1A *		1054		X				X
-37	G-12-2		1056		X				X
-49	G-12-2A *		1058		X				X
-38	G-12-3		1100		X				X
-50	G-12-3A *		1102		X				X
-39	G-12-4		1104		X				X

RELINQUISHED BY:	Print: Omar Mahmood	RECEIVED BY:	Print: Ryan Munson	Date: 12/23/22
	Sign:		Sign:	Time: 10:30
RELINQUISHED BY:	Print: Ryan Munson 12.23.22	RECEIVED BY:	Print: Rose Nap	Date: 12-23-22
	Sign: 12:00		Sign:	Time: 1200
RELINQUISHED BY:	Print:	RECEIVED BY:	Print:	Date:
	Sign:		Sign:	Time:

CERTIFICATIONS: NELAP (National Environmental Accreditation Program) NJDEP #07010 PADEP #68-02903 NYDOH #11634

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Extractable Petroleum Hydrocarbons:

Gas Chromatography/Flame Ionization Detector

New Jersey Department of Environmental Protection Site Remediation Program Extractable Petroleum Hydrocarbons Methodology (Version 3.0).
USEPA SW-846 Test Methods for Evaluating Solid Waste Physical/Chemical Methods Update III, Method 8015B or NJDEP Office of Quality Assurance Quantitation of Semi-Volatile Petroleum Products in Water, Soil and Sediment OQA-QAM-025, Revision 6.

Metals:

Inductively-Coupled Plasma Atomic Emission Spectrometry or Inductively-Coupled Plasma Mass Spectroscopy

Wastewater and Groundwater Samples: USEPA Methods for the Analysis of Water and Wastes, Method 200.7, Method 200.8.
Soil Samples: USEPA Methods for Evaluating Solid Waste Physical/Chemical Methods Update III, Method 6010D.

Mercury:

Cold Vapor Atomic Absorption Spectrometry

Wastewater and Groundwater Samples: USEPA Methods for the Analysis of Water and Wastes, Method 245.1.
Soil Samples: USEPA SW-846 Test Methods for Evaluating Solid Waste Physical/Chemical Methods Update III, Method 7471B.

Volatile Organic Compounds:

Purge and Trap Gas Chromatography/Mass Spectroscopy

Drinking Water Samples: USEPA Methods for the Determination of Organic Compounds in Drinking Water, Method 524.2.
Wastewater Samples: USEPA Methods for the Analysis of Water and Wastes, Method 624.1, Method 8260C.
Soil and Groundwater Samples: USEPA SW-846 Test Methods for Evaluating Solid Waste Physical/Chemical Methods Update III, Method 8260C.

Semi-Volatile Organic Compounds:

Gas Chromatography/Mass Spectroscopy

Wastewater Samples: USEPA Methods for the Analysis of Water and Wastes, Method 625.1, Method 8270D.
Soil and Groundwater Samples: USEPA SW-846 Test Methods for Evaluating Solid Waste Physical/Chemical Methods Update III, Method 8270D.

PFAS Compounds:

Liquid Chromatography/Tandem Mass Spectroscopy

Drinking Water Samples: USEPA Methods for the Determination of Selected Perfluorinated Alkyl Acids in Drinking Water by Solid Phase Extraction and Liquid Chromatography/Tandem Mass Spectrometry (LC/MS/MS), Method 537.

Pesticides:

Gas Chromatography/Electron Capture Detector

Wastewater Samples: USEPA Methods for the Analysis of Water and Wastes, Method 608.3, Method 8081B.
Soil and Groundwater Samples: USEPA SW-846 Test Methods for Evaluating Solid Waste Physical/Chemical Methods Update III, Method 8081B.

Polychlorinated Biphenyls (PCBs):

Gas Chromatography/Electron Capture Detector

Wastewater Samples: USEPA Methods for the Analysis of Water and Wastes, Method 608.3, Method 8082A.
Soil and Groundwater Samples: USEPA SW-846 Test Methods for Evaluating Solid Waste Physical/Chemical Methods Update III, Method 8082A.

General Chemistry Methods:

Various general chemistry methods are taken from "Standard Methods for the Examination of Water and Wastewater, 19th Edition".

Specific method citations can be found on the Analytical Results Summary page of this report listed under 'Method'.

** A complete list of APL's certified Methods are accessible on the Standards And Docs page of the Results Retrieval System

MDL:

Method Detection Limit. The minimum reportable concentration of a substance that can be measured and reported with 99% confidence that the analyte concentration is greater than zero. The value is calculated from the analysis of seven replicates of a spike sample. On analytical reports this value is corrected for percent moisture and any concentration or dilution factors.

RL:

Reporting Limit. The Concentration of the lowest calibration standard that was included in the initial calibration of the instrument. On analytical reports this value is corrected for percent moisture and any concentration or dilution factors.

Concentration (Conc) / Result:

If the compound is detected, the measured concentration is reported. If this column is left blank, or contains a 'less than' (<) symbol, the compound was not detected.

Tentatively Identified Compound (TIC):

A TIC is a non-targeted compound, not included in the calibration, identified by a mass spectral library search.

Qualifiers:

- **U:** Indicates the compound was analyzed for but was not detected.
- **J:** Indicates an estimated value. All tentatively identified compounds (TICs) and results below the RL receive this qualifier.
- **B:** Indicates the analyte was found in the method blank as well as the sample.
- **N:** Used when reporting a specific tentatively identified compound.
- **E:** Indicates that the concentration of the compound exceeds the calibration range of the instrument. The results of a diluted analysis will also be reported. The results of the dilution should be used for those compounds exceeding the calibration range in the undiluted analysis.

DATA OF KNOWN QUALITY CONFORMANCE/NON-CONFORMANCE SUMMARY QUESTIONNAIRE

Laboratory Name: Aqua Pro-Tech Laboratories **Client:** Dynamic Earth LLC

Project Location: Old Orchard G.C. **Project Number:** 2120937

Laboratory Sample ID(s): 01-51 **Sampling Date(s):** December 20-21,2022

List DKQP Methods Used: SW 846 8081B;SW 846 1312/200.8;SW 846 1312;SW 846 9040C;Gravimetric

1	For each analytical method referenced in this laboratory report package, were all specified QA/QC performance criteria followed, including the requirement to explain any criteria falling outside of acceptable guidelines, as specified in the NJDEP Data of Known Quality performance standards?	☑ Yes ☐ No
1A	Were the method specified handling, preservation, and holding time requirements met?	☐ Yes ☑ No
1B	EPH Method: Was the EPH method conducted without significant modifications (see Section 11.3 of respective DKQ methods)	☐ Yes ☐ No ☑ N/A
2	Were all samples received by the laboratory in a condition consistent with that described on the associated chain-of-custody document(s)?	☑ Yes ☐ No
3	Were samples received at an appropriate temperature (4±2° C)?	☑ Yes ☐ No ☐ N/A
4	Were all QA/QC performance criteria specified in the NJDEP DKQP standards achieved?	☐ Yes ☑ No
5	Were reporting limits specified or referenced on the chain-of-custody or communicated to the laboratory prior to sample receipt? Were these reporting limits met?	☑ Yes ☐ No ☑ Yes ☐ No ☐ N/A
6	For each analytical method referenced in this laboratory report package, were results reported for all constituents identified in the method-specific analyte lists presented in the DKQP documents and/or site-specific QAPP?	☑ Yes ☐ No
7	Are project-specific matrix spikes and/or laboratory duplicates included in this data set?	☑ Yes ☐ No

Notes: For all questions to which the response was "No° (with the exception of question #7), additional information should be provided in an attached narrative. If the answer to question #1, #1A, or #1B is "No", the data package does not meet the requirements for Data of Known Quality.°

QUALITY CONTROL
Conformance/Non-Conformance Summary

ANALYSIS: INORGANICS [1312/7470A/1312/200.8]

COMMENTS:
All samples met QC criteria.

ANALYSIS: PESTICIDES [8081B]

COMMENTS:
The surrogate (Decachlorobiphenyl) recovery for sample 2120937-38 was outside QC limits (high).
The surrogate (Decachlorobiphenyl [2C]) recovery for samples 2120937-38 and 42RE1 was outside QC limits (low).

Samples 2120937-41 through 50 were run outside hold time per client's request.

Reviewed By: _____ (JM) 1/23/2023
Brian Wood - Laboratory Director — Date

For any questions about your Quality Control, please call us at 973-227-0422

Positive Results Only Summary

2120937-01 (Soil) Sample Name: **T-2A**

SW 846 8081B - Pesticides

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed
Dieldrin	0.0898		0.000785	0.00150	mg/kg dry	1	12/30/22 9:57

2120937-02 (Soil) Sample Name: **T-2-1**

SW 846 8081B - Pesticides

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed
Dieldrin	0.00447		0.000875	0.00167	mg/kg dry	1	12/30/22 10:22

2120937-03 (Soil) Sample Name: **T-2-2**

SW 846 8081B - Pesticides

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed
Dieldrin	0.0158		0.000818	0.00156	mg/kg dry	1	12/30/22 10:48

2120937-04 (Soil) Sample Name: **T-2-3**

SW 846 8081B - Pesticides

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed
Dieldrin	0.00487		0.000806	0.00154	mg/kg dry	1	12/30/22 11:13

2120937-05 (Soil) Sample Name: **T-2-4**

SW 846 8081B - Pesticides

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed
Dieldrin	0.0214		0.000821	0.00157	mg/kg dry	1	12/30/22 11:39

2120937-06 (Soil) Sample Name: **T-3A**

SW 846 8081B - Pesticides

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed
Dieldrin [2C]	0.00104	J	0.000758	0.00145	mg/kg dry	1	12/30/22 12:04

2120937-07 (Soil) Sample Name: **T-3-1**

SW 846 8081B - Pesticides

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed
Dieldrin	0.0592		0.000780	0.00149	mg/kg dry	1	12/30/22 12:29

2120937-08 (Soil) Sample Name: **T-3-2**

ND - Indicates compound analyzed for but not detected
J - Indicates estimated value
B - Indicates compound found in associated blank
E - Concentration exceeds highest calibration standard
D - Indicates result is based on a dilution
H - Indicates a Hold Time violation
P - Greater than 25% diff. between 2 GC columns.
MDL - Minimum detection limit, **RL** - Reporting limit

Positive Results Only Summary

2120937-08 (Soil) Sample Name: **T-3-2**

SW 846 8081B - Pesticides

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed
Dieldrin	0.360	D	0.00785	0.0150	mg/kg dry	10	1/3/23 16:26

2120937-09 (Soil) Sample Name: **T-3-3**

SW 846 8081B - Pesticides

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed
Dieldrin	0.156		0.000796	0.00152	mg/kg dry	1	12/30/22 13:20

2120937-10 (Soil) Sample Name: **T-3-4**

SW 846 8081B - Pesticides

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed
Dieldrin	0.178		0.000805	0.00154	mg/kg dry	1	12/30/22 13:45

2120937-11 (Soil) Sample Name: **T-4A**

SW 846 8081B - Pesticides

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed
Dieldrin	0.0126		0.000766	0.00146	mg/kg dry	1	12/30/22 14:11

2120937-12 (Soil) Sample Name: **T-4-1**

SW 846 8081B - Pesticides

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed
Dieldrin	0.0220		0.000791	0.00151	mg/kg dry	1	12/30/22 14:36

2120937-13 (Soil) Sample Name: **T-4-2**

SW 846 8081B - Pesticides

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed
Dieldrin [2C]	0.000899	J	0.000797	0.00152	mg/kg dry	1	12/30/22 15:02

2120937-16 (Soil) Sample Name: **T-12A**

SW 846 8081B - Pesticides

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed
Dieldrin [2C]	0.00162		0.000798	0.00152	mg/kg dry	1	12/31/22 6:06

2120937-17 (Soil) Sample Name: **T-12-1**

ND - Indicates compound analyzed for but not detected
J - Indicates estimated value
B - Indicates compound found in associated blank
E - Concentration exceeds highest calibration standard
D - Indicates result is based on a dilution
H - Indicates a Hold Time violation
P - Greater than 25% diff. between 2 GC columns.
MDL - Minimum detection limit, **RL** - Reporting limit

Positive Results Only Summary

2120937-17 (Soil) Sample Name: **T-12-1**

SW 846 8081B - Pesticides

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed
Dieldrin	0.0514		0.000792	0.00151	mg/kg dry	1	12/31/22 6:31

2120937-18 (Soil) Sample Name: **T-12-2**

SW 846 8081B - Pesticides

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed
Dieldrin [2C]	0.00159		0.000789	0.00151	mg/kg dry	1	12/31/22 6:57

2120937-19 (Soil) Sample Name: **T-12-3**

SW 846 8081B - Pesticides

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed
Dieldrin	0.0705		0.000788	0.00151	mg/kg dry	1	12/31/22 7:22

2120937-20 (Soil) Sample Name: **T-12-4**

SW 846 8081B - Pesticides

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed
Dieldrin	0.000858	J	0.000789	0.00151	mg/kg dry	1	12/31/22 7:47

2120937-21 (Soil) Sample Name: **T-14A**

SW 846 8081B - Pesticides

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed
Dieldrin [2C]	0.00419		0.000785	0.00150	mg/kg dry	1	12/31/22 8:13

2120937-22 (Soil) Sample Name: **T-14-1**

SW 846 8081B - Pesticides

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed
Dieldrin [2C]	0.00361		0.000767	0.00147	mg/kg dry	1	12/31/22 8:38

2120937-24 (Soil) Sample Name: **T-14-3**

SW 846 8081B - Pesticides

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed
Dieldrin	0.0107		0.000770	0.00147	mg/kg dry	1	12/31/22 9:29

2120937-25 (Soil) Sample Name: **T-14-4**

ND - Indicates compound analyzed for but not detected
J - Indicates estimated value
B - Indicates compound found in associated blank
E - Concentration exceeds highest calibration standard
D - Indicates result is based on a dilution
H - Indicates a Hold Time violation
P - Greater than 25% diff. between 2 GC columns.
MDL - Minimum detection limit, **RL** - Reporting limit

Positive Results Only Summary

2120937-25 (Soil) Sample Name: **T-14-4**

SW 846 8081B - Pesticides

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed
Dieldrin	0.129		0.000757	0.00145	mg/kg dry	1	12/31/22 9:54

2120937-26 (Soil) Sample Name: **WA-2R**

SW 846 1312/200.8 - SPLP Metals

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed
Lead	0.0585		0.000338	0.00200	mg/L	1	12/30/22 10:53

Gravimetric - General Chemistry

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed
SPLP Soil Weight	93.2				g	1	12/26/22 10:33

SW 846 1312 - General Chemistry

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed
SPLP Leachate Volume	2000				mL	1	12/26/22 10:33

SW 846 9040C - General Chemistry

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed
SPLP Leachate pH	8.40		0.0100	0.0100	pH Units	1	12/26/22 10:33

2120937-27 (Soil) Sample Name: **WA-3R**

SW 846 1312/200.8 - SPLP Metals

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed
Lead	0.121		0.000338	0.00200	mg/L	1	12/30/22 11:13

Gravimetric - General Chemistry

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed
SPLP Soil Weight	92.5				g	1	12/26/22 10:33

SW 846 1312 - General Chemistry

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed
SPLP Leachate Volume	2000				mL	1	12/26/22 10:33

SW 846 9040C - General Chemistry

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed
SPLP Leachate pH	8.50		0.0100	0.0100	pH Units	1	12/29/22 10:41

2120937-28 (Soil) Sample Name: **G-6-2R**

ND - Indicates compound analyzed for but not detected
J - Indicates estimated value
B - Indicates compound found in associated blank
E - Concentration exceeds highest calibration standard
D - Indicates result is based on a dilution
H - Indicates a Hold Time violation
P - Greater than 25% diff. between 2 GC columns.
MDL - Minimum detection limit, **RL** - Reporting limit

Positive Results Only Summary

2120937-28 (Soil) Sample Name: G-6-2R

Gravimetric - General Chemistry

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed
SPLP Soil Weight	84.8				g	1	12/26/22 10:33

SW 846 1312 - General Chemistry

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed
SPLP Leachate Volume	2000				mL	1	12/26/22 10:33

SW 846 9040C - General Chemistry

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed
SPLP Leachate pH	8.30		0.0100	0.0100	pH Units	1	12/29/22 10:41

2120937-29 (Soil) Sample Name: G-9A-R

Gravimetric - General Chemistry

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed
SPLP Soil Weight	82.3				g	1	12/26/22 10:33

SW 846 1312 - General Chemistry

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed
SPLP Leachate Volume	2000				mL	1	12/26/22 10:33

SW 846 9040C - General Chemistry

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed
SPLP Leachate pH	8.20		0.0100	0.0100	pH Units	1	12/29/22 10:41

2120937-30 (Soil) Sample Name: G-9-1-R

SW 846 8081B - Pesticides

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed
Heptachlor Epoxide [2C]	0.0708		0.000824	0.00163	mg/kg dry	1	12/31/22 14:59

2120937-31 (Soil) Sample Name: G-9-2-R

SW 846 8081B - Pesticides

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed
Heptachlor Epoxide [2C]	0.0258		0.000794	0.00157	mg/kg dry	1	12/31/22 15:24

Gravimetric - General Chemistry

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed
SPLP Soil Weight	82.7				g	1	12/26/22 10:33

ND - Indicates compound analyzed for but not detected
J - Indicates estimated value
B - Indicates compound found in associated blank
E - Concentration exceeds highest calibration standard
D - Indicates result is based on a dilution
H - Indicates a Hold Time violation
P - Greater than 25% diff. between 2 GC columns.
MDL - Minimum detection limit, **RL** - Reporting limit

Positive Results Only Summary

2120937-31 (Soil) Sample Name: G-9-2-R

SW 846 1312 - General Chemistry

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed
SPLP Leachate Volume	2000				mL	1	12/26/22 10:33

SW 846 9040C - General Chemistry

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed
SPLP Leachate pH	8.10		0.0100	0.0100	pH Units	1	12/29/22 10:41

2120937-32 (Soil) Sample Name: G-9-3-R

SW 846 8081B - Pesticides

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed
Heptachlor Epoxide [2C]	0.0147		0.000776	0.00154	mg/kg dry	1	12/31/22 15:50

2120937-33 (Soil) Sample Name: G-9-4-R

SW 846 8081B - Pesticides

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed
Heptachlor Epoxide [2C]	0.00976		0.000791	0.00157	mg/kg dry	1	12/31/22 16:15

2120937-34 (Soil) Sample Name: G-6-R

SW 846 1312 - SPLP Pesticides

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed
4,4'-DDE	0.146		0.000468	0.0400	ug/L	1	12/30/22 21:38

Gravimetric - General Chemistry

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed
SPLP Soil Weight	44.4				g	1	12/28/22 17:00

SW 846 1312 - General Chemistry

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed
SPLP Leachate Volume	1000				mL	1	12/29/22 10:00

SW 846 9040C - General Chemistry

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed
SPLP Leachate pH	5.02		0.0100	0.0100	pH Units	1	12/29/22 10:00

2120937-35 (Soil) Sample Name: G-12A

SW 846 8081B - Pesticides

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed

ND - Indicates compound analyzed for but not detected
J - Indicates estimated value
B - Indicates compound found in associated blank
E - Concentration exceeds highest calibration standard
D - Indicates result is based on a dilution
H - Indicates a Hold Time violation
P - Greater than 25% diff. between 2 GC columns.
MDL - Minimum detection limit, **RL** - Reporting limit

Positive Results Only Summary

2120937-35 (Soil) Sample Name: **G-12A**

SW 846 8081B - Pesticides (con't)

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed
Heptachlor Epoxide [2C]	0.0767		0.000788	0.00156	mg/kg dry	1	12/31/22 16:40

2120937-36 (Soil) Sample Name: **G-12-1**

SW 846 8081B - Pesticides

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed
Heptachlor Epoxide [2C]	0.0467		0.000758	0.00150	mg/kg dry	1	12/31/22 17:06

2120937-37 (Soil) Sample Name: **G-12-2**

SW 846 8081B - Pesticides

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed
Heptachlor Epoxide [2C]	0.162		0.000771	0.00153	mg/kg dry	1	12/31/22 17:31

2120937-38 (Soil) Sample Name: **G-12-3**

SW 846 8081B - Pesticides

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed
Heptachlor Epoxide [2C]	0.103		0.000789	0.00156	mg/kg dry	1	12/31/22 17:57

2120937-39 (Soil) Sample Name: **G-12-4**

SW 846 8081B - Pesticides

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed
Heptachlor Epoxide [2C]	0.0344		0.000743	0.00147	mg/kg dry	1	12/31/22 18:22

2120937-41 (Soil) Sample Name: **T-2B**

SW 846 8081B - Pesticides

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed
Dieldrin [2C]	0.00790	H	0.000831	0.00159	mg/kg dry	1	1/12/23 23:30

2120937-42 (Soil) Sample Name: **T-3-1A**

SW 846 8081B - Pesticides

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed
Dieldrin [2C]	0.398	D, H	0.00766	0.0147	mg/kg dry	10	1/14/23 5:06

2120937-43 (Soil) Sample Name: **T-3-2A**

ND - Indicates compound analyzed for but not detected
J - Indicates estimated value
B - Indicates compound found in associated blank
E - Concentration exceeds highest calibration standard
D - Indicates result is based on a dilution
H - Indicates a Hold Time violation
P - Greater than 25% diff. between 2 GC columns.
MDL - Minimum detection limit, **RL** - Reporting limit

Positive Results Only Summary

2120937-43 (Soil) Sample Name: **T-3-2A**

SW 846 8081B - Pesticides

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed
Dieldrin	0.222	H	0.000778	0.00149	mg/kg dry	1	1/13/23 0:21

2120937-44 (Soil) Sample Name: **T-3-3A**

SW 846 8081B - Pesticides

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed
Dieldrin [2C]	0.0329	H	0.000765	0.00146	mg/kg dry	1	1/13/23 0:46

2120937-45 (Soil) Sample Name: **T-3-4A**

SW 846 8081B - Pesticides

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed
Dieldrin [2C]	0.0331	H	0.000763	0.00146	mg/kg dry	1	1/13/23 1:12

2120937-48 (Soil) Sample Name: **T-14-4A**

SW 846 8081B - Pesticides

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed
Dieldrin	0.00328	H	0.000753	0.00144	mg/kg dry	1	1/13/23 2:28

2120937-49 (Soil) Sample Name: **G-12-2A**

SW 846 8081B - Pesticides

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed
Heptachlor Epoxide [2C]	0.000814	J, H	0.000715	0.00142	mg/kg dry	1	1/13/23 2:53

2120937-50 (Soil) Sample Name: **G-12-3A**

SW 846 8081B - Pesticides

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed
Heptachlor Epoxide	0.00382	H	0.000721	0.00143	mg/kg dry	1	1/13/23 3:19

ND - Indicates compound analyzed for but not detected
J - Indicates estimated value
B - Indicates compound found in associated blank
E - Concentration exceeds highest calibration standard
D - Indicates result is based on a dilution
H - Indicates a Hold Time violation
P - Greater than 25% diff. between 2 GC columns.
MDL - Minimum detection limit, **RL** - Reporting limit

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All Results Summary

Client: Dynamic Earth LLC
Project: Old Orchard G.C.

Work Order: 2120937
Date to Lab: 12/23/2022 12:00:00PM

2120937-01 (Soil) Sample Name: T-2A Collected: 12/20/2022 8:30:00AM

SW 846 8081B - Pesticides

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed
Dieldrin	0.0898		0.000785	0.00150	mg/kg	1	12/30/22 9:57

Gravimetric - General Chemistry

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed
Percent Solids	86.6				%	1	12/27/22 11:23

2120937-02 (Soil) Sample Name: T-2-1 Collected: 12/20/2022 8:36:00AM

SW 846 8081B - Pesticides

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed
Dieldrin	0.00447		0.000875	0.00167	mg/kg	1	12/30/22 10:22

Gravimetric - General Chemistry

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed
Percent Solids	77.7				%	1	12/27/22 11:23

2120937-03 (Soil) Sample Name: T-2-2 Collected: 12/20/2022 8:40:00AM

SW 846 8081B - Pesticides

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed
Dieldrin	0.0158		0.000818	0.00156	mg/kg	1	12/30/22 10:48

Gravimetric - General Chemistry

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed
Percent Solids	83.2				%	1	12/27/22 11:23

ND, U - Indicates compound analyzed for but not detected
J - Indicates estimated value
B - Indicates compound found in associated blank
E - Concentration exceeds highest calibration standard
D - Indicates result is based on a dilution
H - Indicates a Hold Time violation
P - Greater than 25% diff. between 2 GC columns.
MDL - Minimum detection limit, **RL** - Reporting limit

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All Results Summary

Client: Dynamic Earth LLC
Project: Old Orchard G.C.

Work Order: 2120937
Date to Lab: 12/23/2022 12:00:00PM

2120937-04 (Soil) Sample Name: **T-2-3** Collected: **12/20/2022 8:44:00AM**

SW 846 8081B - Pesticides

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed
Dieldrin	0.00487		0.000806	0.00154	mg/kg	1	12/30/22 11:13

Gravimetric - General Chemistry

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed
Percent Solids	84.4				%	1	12/27/22 11:23

2120937-05 (Soil) Sample Name: **T-2-4** Collected: **12/20/2022 8:48:00AM**

SW 846 8081B - Pesticides

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed
Dieldrin	0.0214		0.000821	0.00157	mg/kg	1	12/30/22 11:39

Gravimetric - General Chemistry

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed
Percent Solids	82.8				%	1	12/27/22 11:23

2120937-06 (Soil) Sample Name: **T-3A** Collected: **12/20/2022 8:52:00AM**

SW 846 8081B - Pesticides

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed
Dieldrin [2C]	0.00104	J	0.000758	0.00145	mg/kg	1	12/30/22 12:04

Gravimetric - General Chemistry

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed
Percent Solids	89.7				%	1	12/27/22 11:23

ND, U - Indicates compound analyzed for but not detected
J - Indicates estimated value
B - Indicates compound found in associated blank
E - Concentration exceeds highest calibration standard
D - Indicates result is based on a dilution
H - Indicates a Hold Time violation
P - Greater than 25% diff. between 2 GC columns.
MDL - Minimum detection limit, **RL** - Reporting limit

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All Results Summary

Client: Dynamic Earth LLC
Project: Old Orchard G.C.
Work Order: 2120937
Date to Lab: 12/23/2022 12:00:00PM

2120937-07 (Soil) Sample Name: **T-3-1** Collected: **12/20/2022 8:58:00AM**

SW 846 8081B - Pesticides

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed
Dieldrin	0.0592		0.000780	0.00149	mg/kg	1	12/30/22 12:29

Gravimetric - General Chemistry

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed
Percent Solids	87.2				%	1	12/27/22 11:23

2120937-08 (Soil) Sample Name: **T-3-2** Collected: **12/20/2022 9:02:00AM**

SW 846 8081B - Pesticides

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed
Dieldrin	0.360	D	0.00785	0.0150	mg/kg	10	1/3/23 16:26

Gravimetric - General Chemistry

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed
Percent Solids	86.7				%	1	12/27/22 11:23

2120937-09 (Soil) Sample Name: **T-3-3** Collected: **12/20/2022 9:06:00AM**

SW 846 8081B - Pesticides

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed
Dieldrin	0.156		0.000796	0.00152	mg/kg	1	12/30/22 13:20

Gravimetric - General Chemistry

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed
Percent Solids	85.4				%	1	12/27/22 11:23

ND, U - Indicates compound analyzed for but not detected
J - Indicates estimated value
B - Indicates compound found in associated blank
E - Concentration exceeds highest calibration standard
D - Indicates result is based on a dilution
H - Indicates a Hold Time violation
P - Greater than 25% diff. between 2 GC columns.
MDL - Minimum detection limit, **RL** - Reporting limit

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All Results Summary

Client: Dynamic Earth LLC
Project: Old Orchard G.C.

Work Order: 2120937
Date to Lab: 12/23/2022 12:00:00PM

2120937-10 (Soil) Sample Name: **T-3-4** Collected: **12/20/2022 9:10:00AM**

SW 846 8081B - Pesticides

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed
Dieldrin	0.178		0.000805	0.00154	mg/kg	1	12/30/22 13:45

Gravimetric - General Chemistry

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed
Percent Solids	84.4				%	1	12/27/22 11:23

2120937-11 (Soil) Sample Name: **T-4A** Collected: **12/20/2022 9:14:00AM**

SW 846 8081B - Pesticides

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed
Dieldrin	0.0126		0.000766	0.00146	mg/kg	1	12/30/22 14:11

Gravimetric - General Chemistry

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed
Percent Solids	88.8				%	1	12/27/22 11:23

2120937-12 (Soil) Sample Name: **T-4-1** Collected: **12/20/2022 9:20:00AM**

SW 846 8081B - Pesticides

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed
Dieldrin	0.0220		0.000791	0.00151	mg/kg	1	12/30/22 14:36

Gravimetric - General Chemistry

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed
Percent Solids	86.0				%	1	12/27/22 11:23

ND, U - Indicates compound analyzed for but not detected
J - Indicates estimated value
B - Indicates compound found in associated blank
E - Concentration exceeds highest calibration standard
D - Indicates result is based on a dilution
H - Indicates a Hold Time violation
P - Greater than 25% diff. between 2 GC columns.
MDL - Minimum detection limit, **RL** - Reporting limit

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All Results Summary

Client: Dynamic Earth LLC
Project: Old Orchard G.C.

Work Order: 2120937
Date to Lab: 12/23/2022 12:00:00PM

2120937-13 (Soil) Sample Name: **T-4-2** Collected: **12/20/2022 9:24:00AM**

SW 846 8081B - Pesticides

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed
Dieldrin [2C]	**0.000899**	J	**0.000797**	**0.00152**	**mg/kg**	**1**	**12/30/22 15:02**

Gravimetric - General Chemistry

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed
Percent Solids	**85.3**				**%**	**1**	**12/27/22 11:23**

2120937-14 (Soil) Sample Name: **T-4-3** Collected: **12/20/2022 9:28:00AM**

SW 846 8081B - Pesticides

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed
Dieldrin	ND	U	0.000821	0.00157	mg/kg	1	12/30/22 15:27

Gravimetric - General Chemistry

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed
Percent Solids	**82.9**				**%**	**1**	**12/27/22 11:23**

2120937-15 (Soil) Sample Name: **T-4-4** Collected: **12/20/2022 9:32:00AM**

SW 846 8081B - Pesticides

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed
Dieldrin [2C]	ND	U	0.000771	0.00147	mg/kg	1	12/31/22 5:41

Gravimetric - General Chemistry

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed
Percent Solids	**88.2**				**%**	**1**	**12/27/22 11:23**

ND, U - Indicates compound analyzed for but not detected
J - Indicates estimated value
B - Indicates compound found in associated blank
E - Concentration exceeds highest calibration standard
D - Indicates result is based on a dilution
H - Indicates a Hold Time violation
P - Greater than 25% diff. between 2 GC columns.
MDL - Minimum detection limit, **RL** - Reporting limit

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All Results Summary

Client: Dynamic Earth LLC
Project: Old Orchard G.C.

Work Order: 2120937
Date to Lab: 12/23/2022 12:00:00PM

2120937-16 (Soil) Sample Name: **T-12A** Collected: **12/20/2022 9:36:00AM**

SW 846 8081B - Pesticides

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed
Dieldrin [2C]	0.00162		0.000798	0.00152	mg/kg	1	12/31/22 6:06

Gravimetric - General Chemistry

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed
Percent Solids	85.3				%	1	12/27/22 11:23

2120937-17 (Soil) Sample Name: **T-12-1** Collected: **12/20/2022 9:42:00AM**

SW 846 8081B - Pesticides

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed
Dieldrin	0.0514		0.000792	0.00151	mg/kg	1	12/31/22 6:31

Gravimetric - General Chemistry

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed
Percent Solids	85.9				%	1	12/27/22 11:23

2120937-18 (Soil) Sample Name: **T-12-2** Collected: **12/20/2022 9:46:00AM**

SW 846 8081B - Pesticides

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed
Dieldrin [2C]	0.00159		0.000789	0.00151	mg/kg	1	12/31/22 6:57

Gravimetric - General Chemistry

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed
Percent Solids	86.1				%	1	12/27/22 11:23

ND, U - Indicates compound analyzed for but not detected
J - Indicates estimated value
B - Indicates compound found in associated blank
E - Concentration exceeds highest calibration standard
D - Indicates result is based on a dilution
H - Indicates a Hold Time violation
P - Greater than 25% diff. between 2 GC columns.
MDL - Minimum detection limit, **RL** - Reporting limit

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All Results Summary

Client: Dynamic Earth LLC
Project: Old Orchard G.C.
Work Order: 2120937
Date to Lab: 12/23/2022 12:00:00PM

2120937-19 (Soil) Sample Name: **T-12-3** Collected: **12/20/2022 9:50:00AM**

SW 846 8081B - Pesticides

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed
Dieldrin	0.0705		0.000788	0.00151	mg/kg	1	12/31/22 7:22

Gravimetric - General Chemistry

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed
Percent Solids	86.3				%	1	12/27/22 11:23

2120937-20 (Soil) Sample Name: **T-12-4** Collected: **12/20/2022 9:54:00AM**

SW 846 8081B - Pesticides

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed
Dieldrin	0.000858	J	0.000789	0.00151	mg/kg	1	12/31/22 7:47

Gravimetric - General Chemistry

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed
Percent Solids	86.2				%	1	12/27/22 11:23

2120937-21 (Soil) Sample Name: **T-14A** Collected: **12/20/2022 9:58:00AM**

SW 846 8081B - Pesticides

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed
Dieldrin [2C]	0.00419		0.000785	0.00150	mg/kg	1	12/31/22 8:13

Gravimetric - General Chemistry

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed
Percent Solids	86.6				%	1	12/27/22 11:23

ND, U - Indicates compound analyzed for but not detected
J - Indicates estimated value
B - Indicates compound found in associated blank
E - Concentration exceeds highest calibration standard
D - Indicates result is based on a dilution
H - Indicates a Hold Time violation
P - Greater than 25% diff. between 2 GC columns.
MDL - Minimum detection limit, **RL** - Reporting limit

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All Results Summary

Client: Dynamic Earth LLC
Project: Old Orchard G.C.
Work Order: 2120937
Date to Lab: 12/23/2022 12:00:00PM

2120937-22 (Soil) Sample Name: **T-14-1** Collected: **12/20/2022 10:04:00AM**

SW 846 8081B - Pesticides

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed
Dieldrin [2C]	**0.00361**		**0.000767**	**0.00147**	**mg/kg**	**1**	**12/31/22 8:38**

Gravimetric - General Chemistry

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed
Percent Solids	**88.7**				**%**	**1**	**12/27/22 11:23**

2120937-23 (Soil) Sample Name: **T-14-2** Collected: **12/20/2022 10:08:00AM**

SW 846 8081B - Pesticides

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed
Dieldrin	ND	U	0.000785	0.00150	mg/kg	1	12/31/22 9:04

Gravimetric - General Chemistry

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed
Percent Solids	**86.6**				**%**	**1**	**12/27/22 11:23**

2120937-24 (Soil) Sample Name: **T-14-3** Collected: **12/20/2022 10:12:00AM**

SW 846 8081B - Pesticides

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed
Dieldrin	**0.0107**		**0.000770**	**0.00147**	**mg/kg**	**1**	**12/31/22 9:29**

Gravimetric - General Chemistry

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed
Percent Solids	**88.3**				**%**	**1**	**12/27/22 11:23**

ND, U - Indicates compound analyzed for but not detected
J - Indicates estimated value
B - Indicates compound found in associated blank
E - Concentration exceeds highest calibration standard
D - Indicates result is based on a dilution
H - Indicates a Hold Time violation
P - Greater than 25% diff. between 2 GC columns.
MDL - Minimum detection limit, **RL** - Reporting limit

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All Results Summary

Client: Dynamic Earth LLC
Project: Old Orchard G.C.
Work Order: 2120937
Date to Lab: 12/23/2022 12:00:00PM

2120937-25 (Soil) Sample Name: T-14-4 Collected: 12/20/2022 10:16:00AM

SW 846 8081B - Pesticides

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed
Dieldrin	0.129		0.000757	0.00145	mg/kg	1	12/31/22 9:54

Gravimetric - General Chemistry

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed
Percent Solids	89.9				%	1	12/27/22 11:23

2120937-26 (Soil) Sample Name: WA-2R Collected: 12/20/2022 10:20:00AM

SW 846 1312/200.8 - SPLP Metals

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed
Lead	0.0585		0.000338	0.00200	mg/L	1	12/30/22 10:53

Gravimetric - General Chemistry

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed
Percent Solids	93.2				%	1	12/27/22 11:23
SPLP Soil Weight	93.2				g	1	12/26/22 10:33

SW 846 1312 - General Chemistry

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed
SPLP Leachate Volume	2000				mL	1	12/26/22 10:33

SW 846 9040C - General Chemistry

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed
SPLP Leachate pH	8.40		0.0100	0.0100	pH Units	1	12/26/22 10:33

2120937-27 (Soil) Sample Name: WA-3R Collected: 12/20/2022 10:22:00AM

SW 846 1312/200.8 - SPLP Metals

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed
Lead	0.121		0.000338	0.00200	mg/L	1	12/30/22 11:13

SW 846 1312 - SPLP Pesticides

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed
beta-BHC	ND	U	0.000412	0.0222	ug/L	1	12/30/22 21:13

ND, U - Indicates compound analyzed for but not detected
J - Indicates estimated value
B - Indicates compound found in associated blank
E - Concentration exceeds highest calibration standard
D - Indicates result is based on a dilution
H - Indicates a Hold Time violation
P - Greater than 25% diff. between 2 GC columns.
MDL - Minimum detection limit, **RL** - Reporting limit

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All Results Summary

Client: Dynamic Earth LLC
Project: Old Orchard G.C.
Work Order: 2120937
Date to Lab: 12/23/2022 12:00:00PM

2120937-27 (Soil) Sample Name: **WA-3R** Collected: **12/20/2022 10:22:00AM**

Gravimetric - General Chemistry

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed
Percent Solids	**92.5**				**%**	**1**	**12/27/22 11:23**
SPLP Soil Weight	**92.5**				**g**	**1**	**12/26/22 10:33**

SW 846 1312 - General Chemistry

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed
SPLP Leachate Volume	**2000**				**mL**	**1**	**12/26/22 10:33**

SW 846 9040C - General Chemistry

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed
SPLP Leachate pH	**8.50**		**0.0100**	**0.0100**	**pH Units**	**1**	**12/29/22 10:41**

2120937-28 (Soil) Sample Name: **G-6-2R** Collected: **12/21/2022 5:00:00PM**

SW 846 1312/7470A - SPLP Metals

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed
Mercury	ND	U	0.000296	0.00100	mg/L	1	12/30/22 12:33

Gravimetric - General Chemistry

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed
Percent Solids	**84.8**				**%**	**1**	**12/27/22 11:23**
SPLP Soil Weight	**84.8**				**g**	**1**	**12/26/22 10:33**

SW 846 1312 - General Chemistry

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed
SPLP Leachate Volume	**2000**				**mL**	**1**	**12/26/22 10:33**

SW 846 9040C - General Chemistry

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed
SPLP Leachate pH	**8.30**		**0.0100**	**0.0100**	**pH Units**	**1**	**12/29/22 10:41**

ND, U - Indicates compound analyzed for but not detected
J - Indicates estimated value
B - Indicates compound found in associated blank
E - Concentration exceeds highest calibration standard
D - Indicates result is based on a dilution
H - Indicates a Hold Time violation
P - Greater than 25% diff. between 2 GC columns.
MDL - Minimum detection limit, **RL** - Reporting limit

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All Results Summary

Client: Dynamic Earth LLC
Project: Old Orchard G.C.

Work Order: 2120937
Date to Lab: 12/23/2022 12:00:00PM

2120937-29 (Soil) Sample Name: **G-9A-R** Collected: **12/21/2022 10:24:00AM**

SW 846 1312/7470A - SPLP Metals

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed
Mercury	ND	U	0.000296	0.00100	mg/L	1	12/30/22 12:36

SW 846 8081B - Pesticides

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed
Heptachlor Epoxide	ND	U	0.000797	0.00158	mg/kg	1	12/31/22 14:33

Gravimetric - General Chemistry

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed
Percent Solids	**82.3**				**%**	**1**	**12/27/22 11:23**
SPLP Soil Weight	**82.3**				**g**	**1**	**12/26/22 10:33**

SW 846 1312 - General Chemistry

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed
SPLP Leachate Volume	**2000**				**mL**	**1**	**12/26/22 10:33**

SW 846 9040C - General Chemistry

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed
SPLP Leachate pH	**8.20**		**0.0100**	**0.0100**	**pH Units**	**1**	**12/29/22 10:41**

2120937-30 (Soil) Sample Name: **G-9-1-R** Collected: **12/21/2022 10:30:00AM**

SW 846 8081B - Pesticides

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed
Heptachlor Epoxide [2C]	**0.0708**		**0.000824**	**0.00163**	**mg/kg**	**1**	**12/31/22 14:59**

Gravimetric - General Chemistry

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed
Percent Solids	**79.6**				**%**	**1**	**12/27/22 11:23**

ND, U - Indicates compound analyzed for but not detected
J - Indicates estimated value
B - Indicates compound found in associated blank
E - Concentration exceeds highest calibration standard
D - Indicates result is based on a dilution
H - Indicates a Hold Time violation
P - Greater than 25% diff. between 2 GC columns.
MDL - Minimum detection limit, **RL** - Reporting limit

All Results Summary

Client: Dynamic Earth LLC
Project: Old Orchard G.C.
Work Order: 2120937
Date to Lab: 12/23/2022 12:00:00PM

2120937-31 (Soil) Sample Name: G-9-2-R Collected: 12/21/2022 10:34:00AM

SW 846 1312/7470A - SPLP Metals

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed
Mercury	ND	U	0.000296	0.00100	mg/L	1	12/30/22 12:40

SW 846 8081B - Pesticides

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed
Heptachlor Epoxide [2C]	**0.0258**		**0.000794**	**0.00157**	**mg/kg**	**1**	**12/31/22 15:24**

Gravimetric - General Chemistry

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed
Percent Solids	**82.7**				**%**	**1**	**12/27/22 11:23**
SPLP Soil Weight	**82.7**				**g**	**1**	**12/26/22 10:33**

SW 846 1312 - General Chemistry

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed
SPLP Leachate Volume	**2000**				**mL**	**1**	**12/26/22 10:33**

SW 846 9040C - General Chemistry

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed
SPLP Leachate pH	**8.10**		**0.0100**	**0.0100**	**pH Units**	**1**	**12/29/22 10:41**

2120937-32 (Soil) Sample Name: G-9-3-R Collected: 12/21/2022 10:38:00AM

SW 846 8081B - Pesticides

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed
Heptachlor Epoxide [2C]	**0.0147**		**0.000776**	**0.00154**	**mg/kg**	**1**	**12/31/22 15:50**

Gravimetric - General Chemistry

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed
Percent Solids	**84.6**				**%**	**1**	**12/27/22 11:23**

ND, U - Indicates compound analyzed for but not detected
J - Indicates estimated value
B - Indicates compound found in associated blank
E - Concentration exceeds highest calibration standard
D - Indicates result is based on a dilution
H - Indicates a Hold Time violation
P - Greater than 25% diff. between 2 GC columns.
MDL - Minimum detection limit, **RL** - Reporting limit

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All Results Summary

Client: Dynamic Earth LLC
Project: Old Orchard G.C.
Work Order: 2120937
Date to Lab: 12/23/2022 12:00:00PM

2120937-33 (Soil) Sample Name: G-9-4-R Collected: 12/21/2022 10:42:00AM

SW 846 8081B - Pesticides

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed
Heptachlor Epoxide [2C]	0.00976		0.000791	0.00157	mg/kg	1	12/31/22 16:15

Gravimetric - General Chemistry

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed
Percent Solids	82.9				%	1	12/27/22 11:23

2120937-34 (Soil) Sample Name: G-6-R Collected: 12/21/2022 5:10:00PM

SW 846 1312 - SPLP Pesticides

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed
4,4'-DDE	0.146		0.000468	0.0400	ug/L	1	12/30/22 21:38

Gravimetric - General Chemistry

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed
Percent Solids	88.9				%	1	12/27/22 11:23
SPLP Soil Weight	44.4				g	1	12/28/22 17:00

SW 846 1312 - General Chemistry

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed
SPLP Leachate Volume	1000				mL	1	12/29/22 10:00

SW 846 9040C - General Chemistry

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed
SPLP Leachate pH	5.02		0.0100	0.0100	pH Units	1	12/29/22 10:00

2120937-35 (Soil) Sample Name: G-12A Collected: 12/21/2022 10:46:00AM

SW 846 8081B - Pesticides

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed
Heptachlor Epoxide [2C]	0.0767		0.000788	0.00156	mg/kg	1	12/31/22 16:40

Gravimetric - General Chemistry

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed
Percent Solids	83.3				%	1	12/27/22 11:23

ND, U - Indicates compound analyzed for but not detected
J - Indicates estimated value
B - Indicates compound found in associated blank
E - Concentration exceeds highest calibration standard
D - Indicates result is based on a dilution
H - Indicates a Hold Time violation
P - Greater than 25% diff. between 2 GC columns.
MDL - Minimum detection limit, **RL** - Reporting limit

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All Results Summary

Client: Dynamic Earth LLC
Project: Old Orchard G.C.
Work Order: 2120937
Date to Lab: 12/23/2022 12:00:00PM

2120937-36 (Soil) Sample Name: **G-12-1** Collected: **12/21/2022 10:52:00AM**

SW 846 8081B - Pesticides

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed
Heptachlor Epoxide [2C]	0.0467		0.000758	0.00150	mg/kg	1	12/31/22 17:06

Gravimetric - General Chemistry

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed
Percent Solids	86.5				%	1	12/27/22 11:23

2120937-37 (Soil) Sample Name: **G-12-2** Collected: **12/21/2022 10:56:00AM**

SW 846 8081B - Pesticides

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed
Heptachlor Epoxide [2C]	0.162		0.000771	0.00153	mg/kg	1	12/31/22 17:31

Gravimetric - General Chemistry

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed
Percent Solids	85.1				%	1	12/27/22 11:23

2120937-38 (Soil) Sample Name: **G-12-3** Collected: **12/21/2022 11:00:00AM**

SW 846 8081B - Pesticides

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed
Heptachlor Epoxide [2C]	0.103		0.000789	0.00156	mg/kg	1	12/31/22 17:57

Gravimetric - General Chemistry

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed
Percent Solids	83.2				%	1	12/27/22 11:23

ND, U - Indicates compound analyzed for but not detected
J - Indicates estimated value
B - Indicates compound found in associated blank
E - Concentration exceeds highest calibration standard
D - Indicates result is based on a dilution
H - Indicates a Hold Time violation
P - Greater than 25% diff. between 2 GC columns.
MDL - Minimum detection limit, **RL** - Reporting limit

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All Results Summary

Client: Dynamic Earth LLC
Project: Old Orchard G.C.

Work Order: 2120937
Date to Lab: 12/23/2022 12:00:00PM

2120937-39 (Soil) Sample Name: **G-12-4** Collected: **12/21/2022 11:04:00AM**

SW 846 8081B - Pesticides

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed
Heptachlor Epoxide [2C]	0.0344		0.000743	0.00147	mg/kg	1	12/31/22 18:22

Gravimetric - General Chemistry

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed
Percent Solids	88.3				%	1	12/27/22 11:23

2120937-41 (Soil) Sample Name: **T-2B** Collected: **12/20/2022 8:32:00AM**

SW 846 8081B - Pesticides

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed
Dieldrin [2C]	0.00790	H	0.000831	0.00159	mg/kg	1	1/12/23 23:30

Gravimetric - General Chemistry

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed
Percent Solids	81.8				%	1	1/12/23 11:43

2120937-42 (Soil) Sample Name: **T-3-1A** Collected: **12/20/2022 9:00:00AM**

SW 846 8081B - Pesticides

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed
Dieldrin [2C]	0.398	D, H	0.00766	0.0147	mg/kg	10	1/14/23 5:06

Gravimetric - General Chemistry

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed
Percent Solids	88.7				%	1	1/12/23 11:43

ND, U - Indicates compound analyzed for but not detected
J - Indicates estimated value
B - Indicates compound found in associated blank
E - Concentration exceeds highest calibration standard
D - Indicates result is based on a dilution
H - Indicates a Hold Time violation
P - Greater than 25% diff. between 2 GC columns.
MDL - Minimum detection limit, **RL** - Reporting limit

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All Results Summary

Client: Dynamic Earth LLC
Project: Old Orchard G.C.

Work Order: 2120937
Date to Lab: 12/23/2022 12:00:00PM

2120937-43 (Soil) Sample Name: **T-3-2A** Collected: **12/20/2022 9:04:00AM**

SW 846 8081B - Pesticides

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed
Dieldrin	0.222	H	0.000778	0.00149	mg/kg	1	1/13/23 0:21

Gravimetric - General Chemistry

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed
Percent Solids	87.4				%	1	1/12/23 11:43

2120937-44 (Soil) Sample Name: **T-3-3A** Collected: **12/20/2022 9:08:00AM**

SW 846 8081B - Pesticides

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed
Dieldrin [2C]	0.0329	H	0.000765	0.00146	mg/kg	1	1/13/23 0:46

Gravimetric - General Chemistry

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed
Percent Solids	88.8				%	1	1/12/23 11:43

2120937-45 (Soil) Sample Name: **T-3-4A** Collected: **12/20/2022 9:12:00AM**

SW 846 8081B - Pesticides

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed
Dieldrin [2C]	0.0331	H	0.000763	0.00146	mg/kg	1	1/13/23 1:12

Gravimetric - General Chemistry

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed
Percent Solids	89.1				%	1	1/12/23 11:43

ND, U - Indicates compound analyzed for but not detected
J - Indicates estimated value
B - Indicates compound found in associated blank
E - Concentration exceeds highest calibration standard
D - Indicates result is based on a dilution
H - Indicates a Hold Time violation
P - Greater than 25% diff. between 2 GC columns.
MDL - Minimum detection limit, **RL** - Reporting limit

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All Results Summary

Client: Dynamic Earth LLC
Project: Old Orchard G.C.
Work Order: 2120937
Date to Lab: 12/23/2022 12:00:00PM

2120937-46 (Soil) Sample Name: **T-12-1A** Collected: **12/20/2022 9:44:00AM**

SW 846 8081B - Pesticides

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed
Dieldrin	ND	U, H	0.000787	0.00150	mg/kg	1	1/13/23 1:37

Gravimetric - General Chemistry

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed
Percent Solids	**86.4**				**%**	**1**	**1/12/23 11:43**

2120937-47 (Soil) Sample Name: **T-12-3A** Collected: **12/20/2022 9:52:00AM**

SW 846 8081B - Pesticides

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed
Dieldrin [2C]	ND	U, H	0.000790	0.00151	mg/kg	1	1/13/23 2:02

Gravimetric - General Chemistry

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed
Percent Solids	**86.1**				**%**	**1**	**1/12/23 11:43**

2120937-48 (Soil) Sample Name: **T-14-4A** Collected: **12/20/2022 10:48:00AM**

SW 846 8081B - Pesticides

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed
Dieldrin	**0.00328**	H	**0.000753**	**0.00144**	**mg/kg**	**1**	**1/13/23 2:28**

Gravimetric - General Chemistry

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed
Percent Solids	**90.3**				**%**	**1**	**1/12/23 11:43**

ND, U - Indicates compound analyzed for but not detected
J - Indicates estimated value
B - Indicates compound found in associated blank
E - Concentration exceeds highest calibration standard
D - Indicates result is based on a dilution
H - Indicates a Hold Time violation
P - Greater than 25% diff. between 2 GC columns.
MDL - Minimum detection limit, **RL** - Reporting limit

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All Results Summary

Client: Dynamic Earth LLC
Project: Old Orchard G.C.

Work Order: 2120937
Date to Lab: 12/23/2022 12:00:00PM

2120937-49 (Soil) Sample Name: **G-12-2A** Collected: **12/21/2022 10:58:00AM**

SW 846 8081B - Pesticides

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed
Heptachlor Epoxide [2C]	0.000814	J, H	0.000715	0.00142	mg/kg	1	1/13/23 2:53

Gravimetric - General Chemistry

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed
Percent Solids	91.7				%	1	1/12/23 11:43

2120937-50 (Soil) Sample Name: **G-12-3A** Collected: **12/21/2022 11:02:00AM**

SW 846 8081B - Pesticides

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed
Heptachlor Epoxide	0.00382	H	0.000721	0.00143	mg/kg	1	1/13/23 3:19

Gravimetric - General Chemistry

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed
Percent Solids	91.0				%	1	1/12/23 11:43

2120937-51 (Soil) Sample Name: **T-2C** Collected: **12/20/2022 8:34:00AM**

Gravimetric - General Chemistry

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed
Percent Solids	82.4				%	1	1/13/23 11:11

ND, U - Indicates compound analyzed for but not detected
J - Indicates estimated value
B - Indicates compound found in associated blank
E - Concentration exceeds highest calibration standard
D - Indicates result is based on a dilution
H - Indicates a Hold Time violation
P - Greater than 25% diff. between 2 GC columns.
MDL - Minimum detection limit, **RL** - Reporting limit

MERCURY

Dynamic Earth LLC

Work Order: 2120937

Project: Old Orchard G.C.

ANALYSIS DATA SHEET

Mercury

Client: Dynamic Earth LLC
Project: Old Orchard G.C.
Work Order: 2120937

SPLP Metals - Aqueous (SW 846 1312/7470A)

Lab Number	Analyte	Extract	Concentration	Units	RL	DF	Analyst	Analyzed
B2L3017-BLK1	Mercury	40 mL / 40 mL	ND	mg/L	0.00100	1	SG	12/30/2022 11:17
S2L3008-CCB1	Mercury	N/A	ND	ug/L	1.00	1	SG	12/30/2022 12:09
S2L3008-CCB2	Mercury	N/A	ND	ug/L	1.00	1	SG	12/30/2022 12:58
S2L3008-CCB3	Mercury	N/A	ND	ug/L	1.00	1	SG	12/30/2022 13:10
S2L3008-ICB1	Mercury	N/A	ND	ug/L	1.00	1	SG	12/30/2022 11:06

ND - Indicates compound analyzed for but not detected

RL - Reporting limit
DF - Dilution Factor

F-I

ANALYSIS DATA SHEET

Mercury

Client: Dynamic Earth LLC
Project: Old Orchard G.C.
Work Order: 2120937

SPLP Metals - Aqueous (SW 846 1312/7470A)

Lab Number	Analyte	Extract	Conc.	Units	RL	DF	Qual	Analyst	Analyzed
2120937-28	Mercury	40 / 40	ND	mg/L	0.00100	1	U	SG	12/30/22 12:33
2120937-29	Mercury	40 / 40	ND	mg/L	0.00100	1	U	SG	12/30/22 12:36
2120937-31	Mercury	40 / 40	ND	mg/L	0.00100	1	U	SG	12/30/22 12:40

9
9.2.

ND, U - Indicates compound analyzed for but not detected
D - Indicates result is based on a dilution
E - Concentration exceeds highest calibration standard
H - Indicates a Hold Time violation

RL - Reporting limit
DF - Dilution Factor

B - Indicates compound found in associated blank

F-I

Batch B2L3017 **Method: SW 846 1312/7470A** **Prepared: 12/30/2022**

B2L3017-BS1 **Source:**

Analyte	Result	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Mercury	0.00986	mg/L	0.0100		98.6	80-120		

Batch B2L3017 (cont.) **Method: SW 846 1312/7470A** **Prepared: 12/30/2022**

B2L3017-DUP1 **Source:** 2120936-01

Analyte	Result	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Mercury	ND	mg/L		ND				20

Batch B2L3017 (cont.) **Method: SW 846 1312/7470A** **Prepared: 12/30/2022**

B2L3017-MS1 **Source:** 2120936-01

Analyte	Result	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Mercury	0.00973	mg/L	0.0100	ND	97.3	80-120		

Batch B2L3017 (cont.) **Method: SW 846 1312/7470A** **Prepared: 12/30/2022**

B2L3017-MSD1 **Source:** 2120936-01

Analyte	Result	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Mercury	0.00977	mg/L	0.0100	ND	97.7	80-120	0.336	20

* - Outside of QC Limits J - Result is between the MDL and RL for an Analysis reported to an RL

F-III NC - Outside the recovery criteria but Spike Amount <1/4 amount found in Source Sample

METHOD BLANK SUMMARY

Batch ID: **B2L3017**

Lab Number	Sample Id	Extraction Date	Analysis Date
B2L3017-BLK1	BLK1	12/30/2022	12/30/2022 11:17
B2L3017-BS1	BS1	12/30/2022	12/30/2022 11:21
B2L3017-DUP1	DUP1	12/30/2022	12/30/2022 11:30
B2L3017-MS1	MS1	12/30/2022	12/30/2022 11:34
B2L3017-MSD1	MSD1	12/30/2022	12/30/2022 11:38
2120937-28	G-6-2R	12/30/2022	12/30/2022 12:33
2120937-29	G-9A-R	12/30/2022	12/30/2022 12:36
2120937-31	G-9-2-R	12/30/2022	12/30/2022 12:40

ANALYSIS SEQUENCE SUMMARY

Laboratory:	Aqua Pro-Tech Laboratories	Work Order:	2120937
Client:	Dynamic Earth LLC	Project:	Old Orchard G.C.
Sequence:	S2L3008	Instrument:	Mercury Analyzer

Sample Name	Lab Sample ID	FileID	Analysis Date/Time
Initial Cal Check	S2L3008-ICV1	2022-12-30-a.csv-010	12/30/22 11:01
Initial Cal Blank	S2L3008-ICB1	2022-12-30-a.csv-011	12/30/22 11:06
Instrument RL Check	S2L3008-CRL1	2022-12-30-a.csv-012	12/30/22 11:10
Blank	B2L3017-BLK1	2022-12-30-a.csv-013	12/30/22 11:17
LCS	B2L3017-BS1	2022-12-30-a.csv-014	12/30/22 11:21
Duplicate	B2L3017-DUP1	2022-12-30-a.csv-017	12/30/22 11:30
Matrix Spike	B2L3017-MS1	2022-12-30-a.csv-018	12/30/22 11:34
Matrix Spike Dup	B2L3017-MSD1	2022-12-30-a.csv-019	12/30/22 11:38
Calibration Check	S2L3008-CCV1	2022-12-30-a.csv-023	12/30/22 12:04
Calibration Blank	S2L3008-CCB1	2022-12-30-a.csv-024	12/30/22 12:09
G-6-2R	2120937-28	2022-12-30-a.csv-030	12/30/22 12:33
G-9A-R	2120937-29	2022-12-30-a.csv-031	12/30/22 12:36
G-9-2-R	2120937-31	2022-12-30-a.csv-032	12/30/22 12:40
Calibration Check	S2L3008-CCV2	2022-12-30-a.csv-035	12/30/22 12:54
Calibration Blank	S2L3008-CCB2	2022-12-30-a.csv-036	12/30/22 12:58
Calibration Check	S2L3008-CCV3	2022-12-30-a.csv-038	12/30/22 13:06
Calibration Blank	S2L3008-CCB3	2022-12-30-a.csv-039	12/30/22 13:10

F-V

SEQUENCE CALIBRATION CHECKS

SW 846 1312/7470A

Client: **Dynamic Earth LLC**
Project: **Old Orchard G.C.**
Work Order: **2120937**

Sequence: S2L3008
Instrument: Mercury Analyzer

Lab Sample ID	Analyte	True	Found	%R	Units	Control Limit
S2L3008-ICV1	Mercury	10.0	9.78	97.8	ug/L	90-110
S2L3008-CCV1	Mercury	10.0	9.29	92.9	ug/L	80-120
S2L3008-CCV2	Mercury	10.0	9.13	91.3	ug/L	80-120
S2L3008-CCV3	Mercury	10.0	10.0	100	ug/L	80-120

ICV = Initial Cal Verification CCV = Continuing Cal Verification IFB = Interference Check Standard B
SCV = Second Source Cal Verification LCV = Low Cal Check

METALS

Dynamic Earth LLC

Work Order: 2120937

Project: Old Orchard G.C.

ANALYSIS DATA SHEET

Client: Dynamic Earth LLC
Client Sample ID: Blank
Lab Sample ID: B2L3006-BLK1
Project: Old Orchard G.C.
Work Order: 2120937

Init/Final Vol:	50 mL / 50 mL	Prep Date:	12/30/2022 7:52:00AM
Matrix:	Soil	Prep Method:	Hot Block ICPMS SPLP

SPLP Metals - Aqueous (SW 846 1312/200.8)

CAS NO.	Analyte	Analyzed	Concentration	Units	RL	DF	Analyst	Sequence/Batch
7439-92-1	Lead	12/30/2022 10:48	ND	mg/L	0.00200	1	RS	S2L3020/B2L3006

ND - Indicates compound analyzed for but not detected

RL - Reporting limit
DF - Dilution Factor

F-I

ANALYSIS DATA SHEET

Client: **Dynamic Earth LLC**
Client Sample ID: **Calibration Blank**
Lab Sample ID: **S2L3020-CCB3**
Project: **Old Orchard G.C.**
Work Order: **2120937**

Init/Final Vol:	N/A	Prep Date:	12/30/2022 7:00:48AM
Matrix:	Water	Prep Method:	

SPLP Metals - Aqueous (SW 846 1312/200.8)

CAS NO.	Analyte	Analyzed	Concentration	Units	RL	DF	Analyst	Sequence/Batch
7439-92-1	Lead	12/30/2022 11:01	ND	ug/L	2.00	1	RS	S2L3020/S2L3020

ND - Indicates compound analyzed for but not detected

RL - Reporting limit
DF - Dilution Factor

F-I

ANALYSIS DATA SHEET

Client: **Dynamic Earth LLC**
Client Sample ID: **Calibration Blank**
Lab Sample ID: **S2L3020-CCB4**
Project: **Old Orchard G.C.**
Work Order: **2120937**

Init/Final Vol:	N/A	Prep Date:	12/30/2022 7:00:48AM
Matrix:	Water	Prep Method:	

SPLP Metals - Aqueous (SW 846 1312/200.8)

CAS NO.	Analyte	Analyzed	Concentration	Units	RL	DF	Analyst	Sequence/Batch
7439-92-1	Lead	12/30/2022 11:30	ND	ug/L	2.00	1	RS	S2L3020/S2L3020

10 10.1.

ND - Indicates compound analyzed for but not detected

RL - Reporting limit
DF - Dilution Factor

F-I

ANALYSIS DATA SHEET

Client: **Dynamic Earth LLC**
Client Sample ID: **Initial Cal Blank**
Lab Sample ID: **S2L3020-ICB1**
Project: **Old Orchard G.C.**
Work Order: **2120937**

Init/Final Vol:	N/A	Prep Date:	12/30/2022 7:00:48AM
Matrix:	Water	Prep Method:	

SPLP Metals - Aqueous (SW 846 1312/200.8)

CAS NO.	Analyte	Analyzed	Concentration	Units	RL	DF	Analyst	Sequence/Batch
7439-92-1	Lead	12/30/2022 08:48	ND	ug/L	2.00	1	RS	S2L3020/S2L3020

ND - Indicates compound analyzed for but not detected

RL - Reporting limit
DF - Dilution Factor

F-I

ANALYSIS DATA SHEET

Client: **Dynamic Earth LLC**
Client Sample ID: **WA-2R**
Lab Sample ID: **2120937-26**
Project: **Old Orchard G.C.**
Work Order: **2120937**

Date Sampled:	12/20/22 10:20	Prep Date:	12/30/22 07:52
Init/Final Vol:	50 mL / 50 mL	Prep Method:	Hot Block ICPMS SPLP
Matrix:	Soil		
Percent Solids:	93.20		

SPLP Metals - Aqueous (SW 846 1312/200.8)

CAS NO.	Analyte	Analyzed	Conc.	Units	RL	DF	Qual	Analyst	Sequence/Batch
7439-92-1	Lead	12/30/22 10:53	0.0585	mg/L	0.00200	1		RS	S2L3020/B2L3006

10 10.2.

ND, U - Indicates compound analyzed for but not detected
D - Indicates result is based on a dilution
E - Concentration exceeds highest calibration standard
H - Indicates a Hold Time violation

RL - Reporting limit
DF - Dilution Factor

B - Indicates compound found in associated blank

F-I

ANALYSIS DATA SHEET

Client: **Dynamic Earth LLC**
Client Sample ID: **WA-3R**
Lab Sample ID: **2120937-27**
Project: **Old Orchard G.C.**
Work Order: **2120937**

Date Sampled:	12/20/22 10:22	Prep Date:	12/30/22 07:52
Init/Final Vol:	50 mL / 50 mL	Prep Method:	Hot Block ICPMS SPLP
Matrix:	Soil		
Percent Solids:	92.46		

SPLP Metals - Aqueous (SW 846 1312/200.8)

CAS NO.	Analyte	Analyzed	Conc.	Units	RL	DF	Qual	Analyst	Sequence/Batch
7439-92-1	Lead	12/30/22 11:13	0.121	mg/L	0.00200	1		RS	S2L3020/B2L3006

10 10.2.

ND, U - Indicates compound analyzed for but not detected
D - Indicates result is based on a dilution
E - Concentration exceeds highest calibration standard
H - Indicates a Hold Time violation

RL - Reporting limit
DF - Dilution Factor

B - Indicates compound found in associated blank

F-I

Batch B2L3006 **Method: SW 846 1312/200.8** **Prepared: 12/30/2022**

B2L3006-BS1 **Source:**

Analyte	Result	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Lead	0.0961	mg/L	0.100		96.1	85-115		

Batch B2L3006 (cont.) **Method: SW 846 1312/200.8** **Prepared: 12/30/2022**

B2L3006-DUP1 **Source:** 2120937-26

Analyte	Result	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Lead	0.0653	mg/L		0.0585			11.0	20

Batch B2L3006 (cont.) **Method: SW 846 1312/200.8** **Prepared: 12/30/2022**

B2L3006-MS1 **Source:** 2120937-26

Analyte	Result	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Lead	0.151	mg/L	0.100	0.0585	92.5	70-130		

Batch B2L3006 (cont.) **Method: SW 846 1312/200.8** **Prepared: 12/30/2022**

B2L3006-MSD1 **Source:** 2120937-26

Analyte	Result	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Lead	0.166	mg/L	0.100	0.0585	108	70-130	9.61	20

Sequence S2L3020 **Method: SW 846 1312/200.8** **Prepared: 12/30/2022**

S2L3020-SRD1 **Source:** 2120937-26

Analyte	Result	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Lead	0.0767	mg/L		0.0585			27.0*	10

* - Outside of QC Limits J - Result is between the MDL and RL for an Analysis reported to an RL

F-III NC - Outside the recovery criteria but Spike Amount <1/4 amount found in Source Sample

METHOD BLANK SUMMARY

Batch ID: **B2L3006**

Lab Number	Sample Id	Extraction Date	Analysis Date
B2L3006-BLK1	BLK1	12/30/2022	12/30/2022 10:48
B2L3006-BS1	BS1	12/30/2022	12/30/2022 10:51
B2L3006-DUP1	DUP1	12/30/2022	12/30/2022 10:56
B2L3006-MS1	MS1	12/30/2022	12/30/2022 11:03
B2L3006-MSD1	MSD1	12/30/2022	12/30/2022 11:05
2120937-26	WA-2R	12/30/2022	12/30/2022 10:53
2120937-27	WA-3R	12/30/2022	12/30/2022 11:13

ANALYSIS SEQUENCE SUMMARY

Laboratory:	Aqua Pro-Tech Laboratories	Work Order:	2120937
Client:	Dynamic Earth LLC	Project:	Old Orchard G.C.
Sequence:	S2L3020	Instrument:	ICP/MS-3

Sample Name	Lab Sample ID	FileID	Analysis Date/Time
Initial Cal Check	S2L3020-ICV1	2022-12-30-a-005	12/30/22 08:46
Initial Cal Blank	S2L3020-ICB1	2022-12-30-a-006	12/30/22 08:48
Instrument RL Check	S2L3020-CRL3	2022-12-30-a-009	12/30/22 08:56
Instrument RL Check	S2L3020-CRL4	2022-12-30-a-010	12/30/22 08:58
Blank	B2L3006-BLK1	2022-12-30-a-039	12/30/22 10:48
LCS	B2L3006-BS1	2022-12-30-a-040	12/30/22 10:51
WA-2R	2120937-26	2022-12-30-a-041	12/30/22 10:53
Duplicate	B2L3006-DUP1	2022-12-30-a-042	12/30/22 10:56
Calibration Check	S2L3020-CCV3	2022-12-30-a-043	12/30/22 10:58
Calibration Blank	S2L3020-CCB3	2022-12-30-a-044	12/30/22 11:01
Matrix Spike	B2L3006-MS1	2022-12-30-a-045	12/30/22 11:03
Matrix Spike Dup	B2L3006-MSD1	2022-12-30-a-046	12/30/22 11:05
Serial Dilution	S2L3020-SRD1	2022-12-30-a-047	12/30/22 11:08
WA-3R	2120937-27	2022-12-30-a-049	12/30/22 11:13
Calibration Check	S2L3020-CCV4	2022-12-30-a-051	12/30/22 11:28
Calibration Blank	S2L3020-CCB4	2022-12-30-a-052	12/30/22 11:30

F-V

SEQUENCE CALIBRATION CHECKS

SW 846 1312/200.8

Client: **Dynamic Earth LLC**
Project: **Old Orchard G.C.**
Work Order: **2120937**

Sequence: S2L3020
Instrument: ICP/MS-3

Lab Sample ID	Analyte	True	Found	%R	Units	Control Limit
S2L3020-ICV1	Lead	100	98.2	98.2	ug/L	90-110
S2L3020-CCV3	Lead	100	98.2	98.2	ug/L	85-115
S2L3020-CCV4	Lead	100	114	114	ug/L	85-115

ICV = Initial Cal Verification CCV = Continuing Cal Verification IFB = Interference Check Standard B
SCV = Second Source Cal Verification LCV = Low Cal Check

PESTICIDES

Dynamic Earth LLC

Work Order: 2120937

Project: Old Orchard G.C.

ANALYSIS DATA SHEET

Pesticides - SW 846 8081B

Client:	**Dynamic Earth LLC**	**Project:**	**Old Orchard G.C.**
Client Sample ID:	**Blank**	**Work Order:**	**2120937**
Lab Sample ID:	**B2L2804-BLK1**		

Init/Final Vol:	15 g / 10 mL	Prep Date:	12/28/2022 08:30	File ID:	7T31533.D
		Prep Batch:	B2L2804	Analyzed:	12/29/2022 18:18
		Matrix:	Soil	Sequence:	S2L3013
		Prep Method:	Microwave Extraction		

CAS NO.	COMPOUND	CONC. (mg/kg wet)	MDL	RL	Qual
60-57-1	Dieldrin	ND	0.000680	0.00130	U
1024-57-3	Heptachlor Epoxide	ND	0.000656	0.00130	U

F-I

Quantitation Report (QT Reviewed)

Signal #1 : G:\HPCHEM\GCECD7\DATA\20221229\7T31533.D\ECD1A.CH Vial: 8
Signal #2 : G:\HPCHEM\GCECD7\DATA\20221229\7T31533.D\ECD2B.CH
Acq On : 29 Dec 2022 6:18 pm Operator: WD
Sample : B2L2804-BLK1 Inst : GCECD-7
Misc : Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Dec 30 12:11 2022 Quant Results File: 80811228.RES

Quant Method : G:\HPCHEM\G...\80811228.M (Chemstation Integrator)
Title : Pesticides by Method SW-846 8081B
Last Update : Fri Dec 30 10:52:46 2022
Response via : Initial Calibration
DataAcq Meth : RUNPEST1.M

Volume Inj. : 2ul
Signal #1 Phase : RTx-50 Signal #2 Phase: RTx-CLPesticides II
Signal #1 Info : 30M x 0.53mm x 0. Signal #2 Info : 30M x 0.53mm x 0.42um

Compound	RT#1	RT#2	Resp#1	Resp#2	ug/kg	ug/kg
System Monitoring Compounds						
1) S TCMX	3.99	4.91	1047.9E6	725.6E6	33.094m	49.525m#
Spiked Amount 50.000	Range 43 - 129		Recovery =		66.19%	99.05%
21) S Decachlorobiphen	18.73	20.29	1221.6E6	458.7E6	43.707m	42.120m
Spiked Amount 50.000	Range 42 - 136		Recovery =		87.41%	84.24%
Target Compounds						
Sum Chlordane (gamma)			0	0	N.D.	N.D.
Average Chlordane (gamma)					0.000	0.000
Sum Toxaphene (1)			0	0	N.D.	N.D.
Average Toxaphene (1)					0.000	0.000

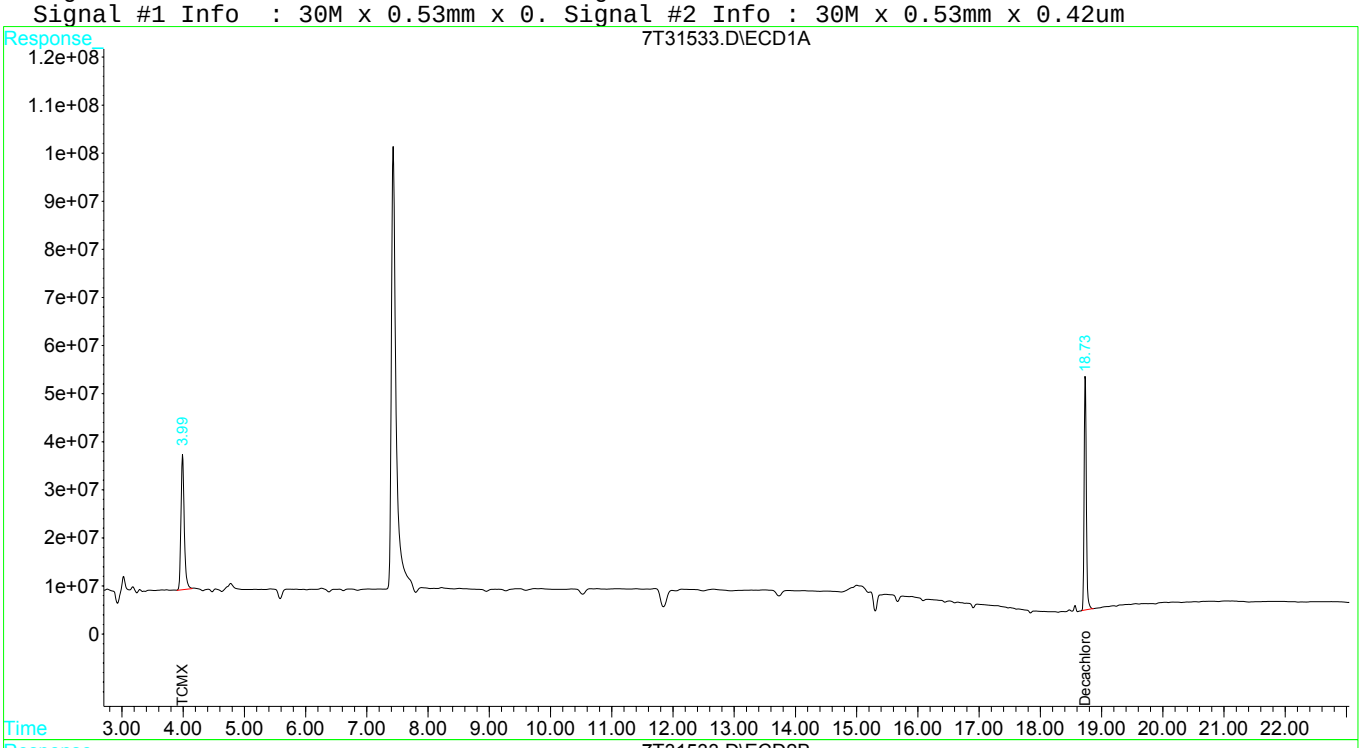
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.
7T31533.D 80811228.M Fri Dec 30 13:34:49 2022 SS Page 1

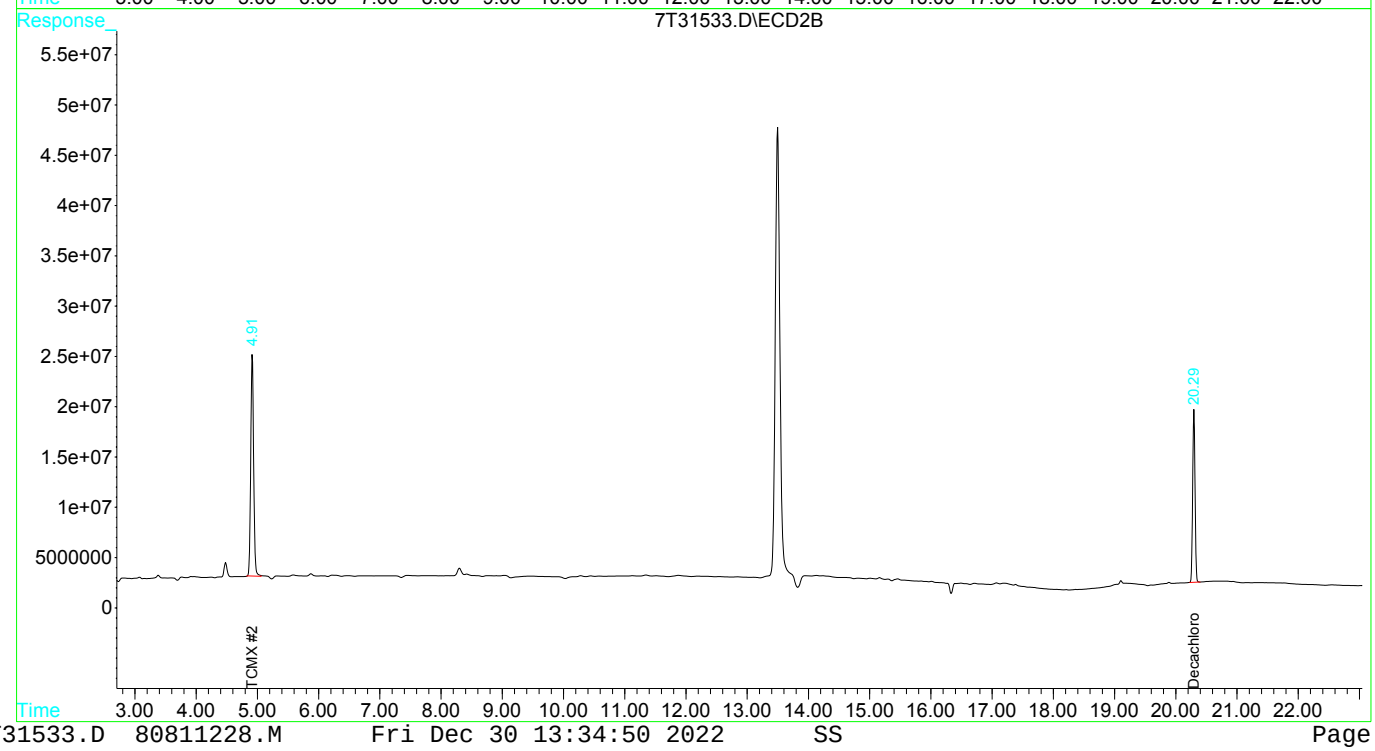
Quantitation Report (QT Reviewed)

Signal #1 : G:\HPCHEM\GCECD7\DATA\20221229\7T31533.D\ECD1A.CH Vial: 8
Signal #2 : G:\HPCHEM\GCECD7\DATA\20221229\7T31533.D\ECD2B.CH
Acq On : 29 Dec 2022 6:18 pm Operator: WD
Sample : B2L2804-BLK1 Inst : GCECD-7
Misc : Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Dec 30 12:11 2022 Quant Results File: 80811228.RES

Quant Method : G:\HPCHEM\G...\80811228.M (Chemstation Integrator)
Title : Pesticides by Method SW-846 8081B
Last Update : Fri Dec 30 10:52:46 2022
Response via : Multiple Level Calibration
DataAcq Meth : RUNPEST1.M

Volume Inj. : 2ul
Signal #1 Phase : RTx-50 Signal #2 Phase: RTx-CLPesticides II
Signal #1 Info : 30M x 0.53mm x 0. Signal #2 Info : 30M x 0.53mm x 0.42um





ANALYSIS DATA SHEET

Pesticides - SW 846 8081B

Client:	**Dynamic Earth LLC**	**Project:**	**Old Orchard G.C.**
Client Sample ID:	**Blank**	**Work Order:**	**2120937**
Lab Sample ID:	**B2L2832-BLK1**		

Init/Final Vol:	15 g / 10 mL	Prep Date:	12/28/2022 16:06	File ID:	7T31549.D
		Prep Batch:	B2L2832	Analyzed:	12/30/2022 01:04
		Matrix:	Soil	Sequence:	S2L3013
		Prep Method:	Microwave Extraction		

CAS NO.	COMPOUND	CONC. (mg/kg wet)	MDL	RL	Qual
60-57-1	Dieldrin	ND	0.000680	0.00130	U
1024-57-3	Heptachlor Epoxide	ND	0.000656	0.00130	U

F-I

Quantitation Report (QT Reviewed)

Signal #1 : G:\HPCHEM\GCECD7\DATA\20221229\7T31549.D\ECD1A.CH Vial: 24
Signal #2 : G:\HPCHEM\GCECD7\DATA\20221229\7T31549.D\ECD2B.CH
Acq On : 30 Dec 2022 1:04 am Operator: WD
Sample : B2L2832-BLK1 Inst : GCECD-7
Misc : Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Dec 30 12:45 2022 Quant Results File: 80811228.RES

Quant Method : G:\HPCHEM\G...\80811228.M (Chemstation Integrator)
Title : Pesticides by Method SW-846 8081B
Last Update : Fri Dec 30 10:52:46 2022
Response via : Initial Calibration
DataAcq Meth : RUNPEST1.M

Volume Inj. : 2ul
Signal #1 Phase : RTx-50 Signal #2 Phase: RTx-CLPesticides II
Signal #1 Info : 30M x 0.53mm x 0. Signal #2 Info : 30M x 0.53mm x 0.42um

Compound	RT#1	RT#2	Resp#1	Resp#2	ug/kg	ug/kg
System Monitoring Compounds						
1) S TCMX	4.00	4.92	1056.1E6	715.1E6	33.356	48.805m#
Spiked Amount 50.000	Range 43 - 129		Recovery =		66.71%	97.61%
21) S Decachlorobiphen	18.74	20.30	1269.6E6	467.7E6	45.423	42.944
Spiked Amount 50.000	Range 42 - 136		Recovery =		90.85%	85.89%
Target Compounds						
Sum Chlordane (gamma)			0	0	N.D.	N.D.
Average Chlordane (gamma)					0.000	0.000
Sum Toxaphene (1)			0	0	N.D.	N.D.
Average Toxaphene (1)					0.000	0.000

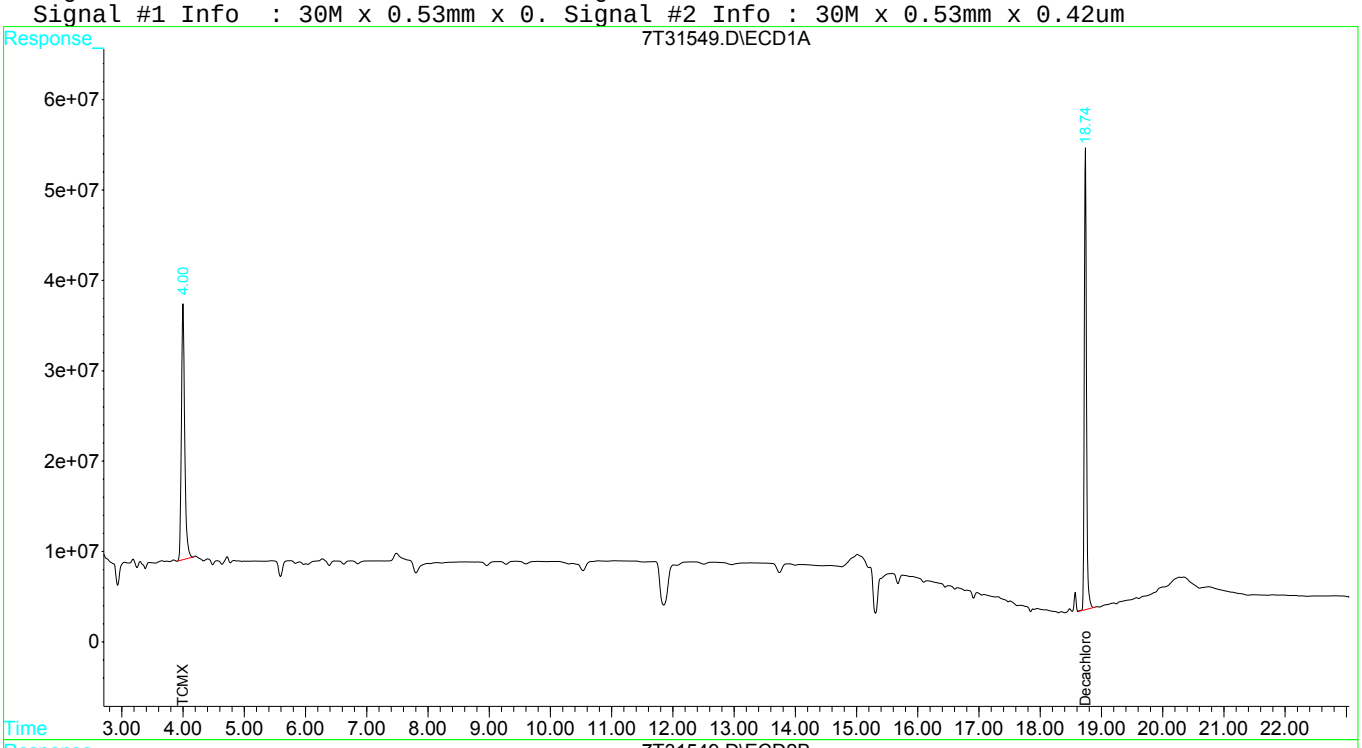
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.
7T31549.D 80811228.M Fri Dec 30 13:35:20 2022 SS

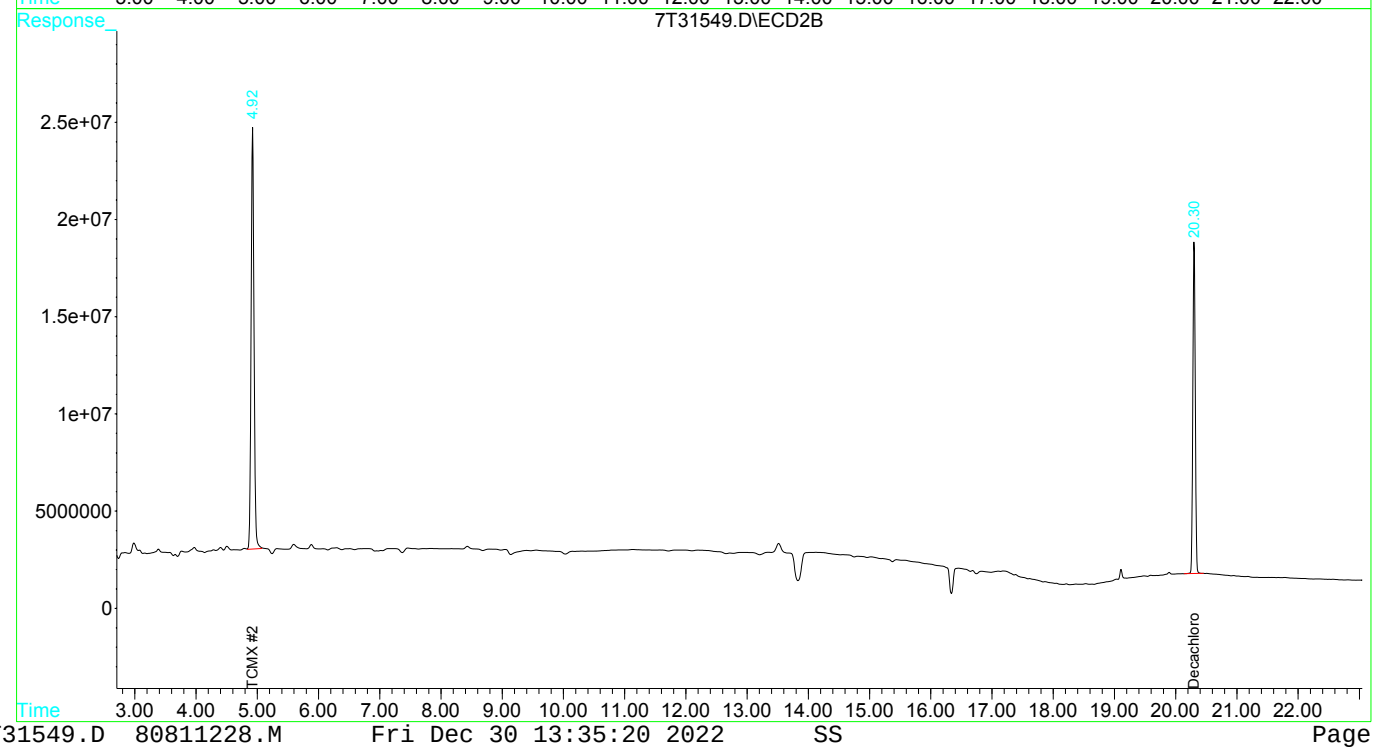
Quantitation Report (QT Reviewed)

Signal #1 : G:\HPCHEM\GCECD7\DATA\20221229\7T31549.D\ECD1A.CH Vial: 24
Signal #2 : G:\HPCHEM\GCECD7\DATA\20221229\7T31549.D\ECD2B.CH
Acq On : 30 Dec 2022 1:04 am Operator: WD
Sample : B2L2832-BLK1 Inst : GCECD-7
Misc : Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Dec 30 12:45 2022 Quant Results File: 80811228.RES

Quant Method : G:\HPCHEM\G...\80811228.M (Chemstation Integrator)
Title : Pesticides by Method SW-846 8081B
Last Update : Fri Dec 30 10:52:46 2022
Response via : Multiple Level Calibration
DataAcq Meth : RUNPEST1.M

Volume Inj. : 2ul
Signal #1 Phase : RTx-50 Signal #2 Phase: RTx-CLPesticides II
Signal #1 Info : 30M x 0.53mm x 0. Signal #2 Info : 30M x 0.53mm x 0.42um





ANALYSIS DATA SHEET

Pesticides - SW 846 8081B

Client:	**Dynamic Earth LLC**	**Project:**	**Old Orchard G.C.**
Client Sample ID:	**Blank**	**Work Order:**	**2120937**
Lab Sample ID:	**B2L2901-BLK1**		

Init/Final Vol:	15 g / 10 mL	Prep Date:	12/29/2022 07:13	File ID:	7T31568.D
		Prep Batch:	B2L2901	Analyzed:	12/30/2022 09:06
		Matrix:	Soil	Sequence:	S2L3013
		Prep Method:	Microwave Extraction		

CAS NO.	COMPOUND	CONC. (mg/kg wet)	MDL	RL	Qual
60-57-1	Dieldrin	ND	0.000680	0.00130	U
1024-57-3	Heptachlor Epoxide	ND	0.000656	0.00130	U

F-I

Quantitation Report (QT Reviewed)

Signal #1 : G:\HPCHEM\GCECD7\DATA\20221229\7T31568.D\ECD1A.CH Vial: 43
Signal #2 : G:\HPCHEM\GCECD7\DATA\20221229\7T31568.D\ECD2B.CH
Acq On : 30 Dec 2022 9:06 am Operator: WD
Sample : B2L2901-BLK1 Inst : GCECD-7
Misc : Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Dec 30 13:27 2022 Quant Results File: 80811228.RES

Quant Method : G:\HPCHEM\G...\80811228.M (Chemstation Integrator)
Title : Pesticides by Method SW-846 8081B
Last Update : Fri Dec 30 10:52:46 2022
Response via : Initial Calibration
DataAcq Meth : RUNPEST1.M

Volume Inj. : 2ul
Signal #1 Phase : RTx-50 Signal #2 Phase: RTx-CLPesticides II
Signal #1 Info : 30M x 0.53mm x 0. Signal #2 Info : 30M x 0.53mm x 0.42um

Compound	RT#1	RT#2	Resp#1	Resp#2	ug/kg	ug/kg
System Monitoring Compounds						
1) S TCMX	4.01	4.94	1372.4E6	887.2E6	43.344	60.556 #
Spiked Amount 50.000	Range 43 - 129		Recovery =		86.69%	121.11%
21) S Decachlorobiphen	18.74	20.31	1176.7E6	519.1E6	42.101m	47.663
Spiked Amount 50.000	Range 42 - 136		Recovery =		84.20%	95.33%
Target Compounds						
Sum Chlordane (gamma)			0	0	N.D.	N.D.
Average Chlordane (gamma)					0.000	0.000
Sum Toxaphene (1)			0	0	N.D.	N.D.
Average Toxaphene (1)					0.000	0.000

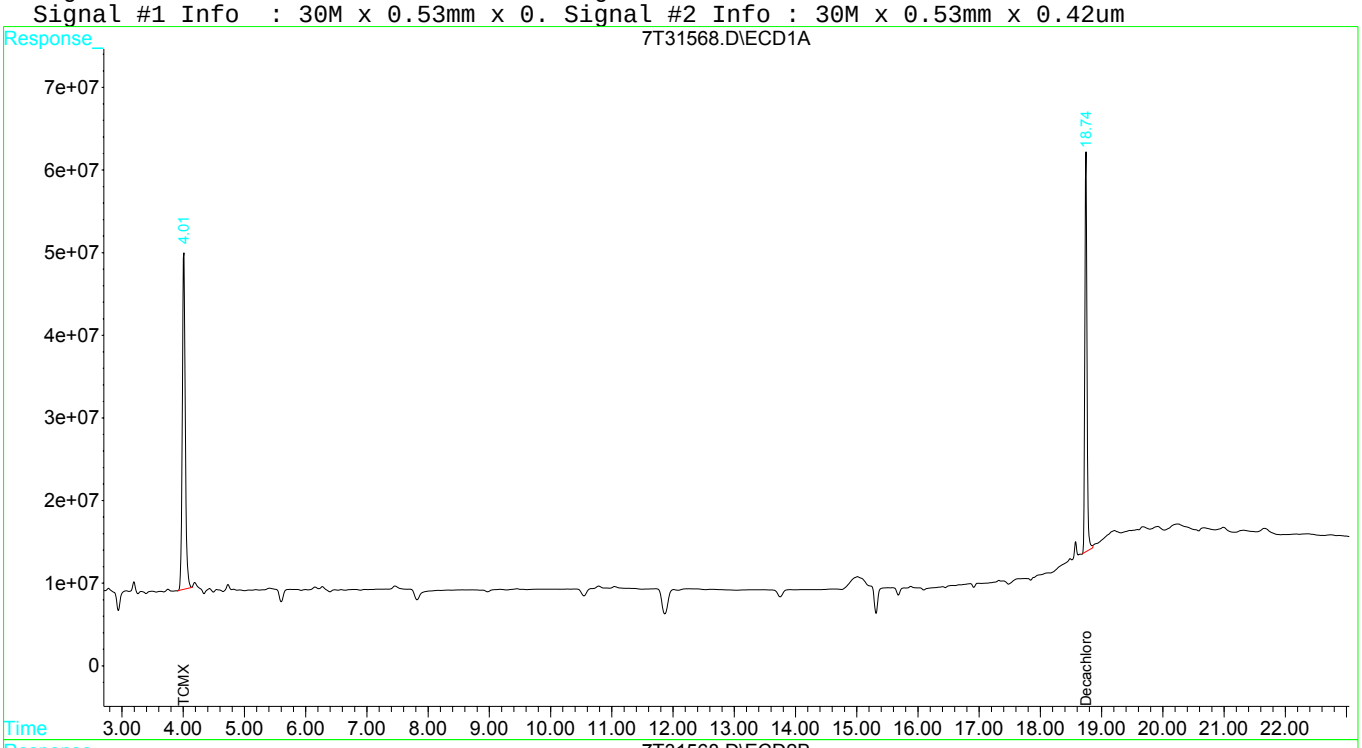
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7T31568.D 80811228.M Fri Dec 30 13:35:52 2022 SS

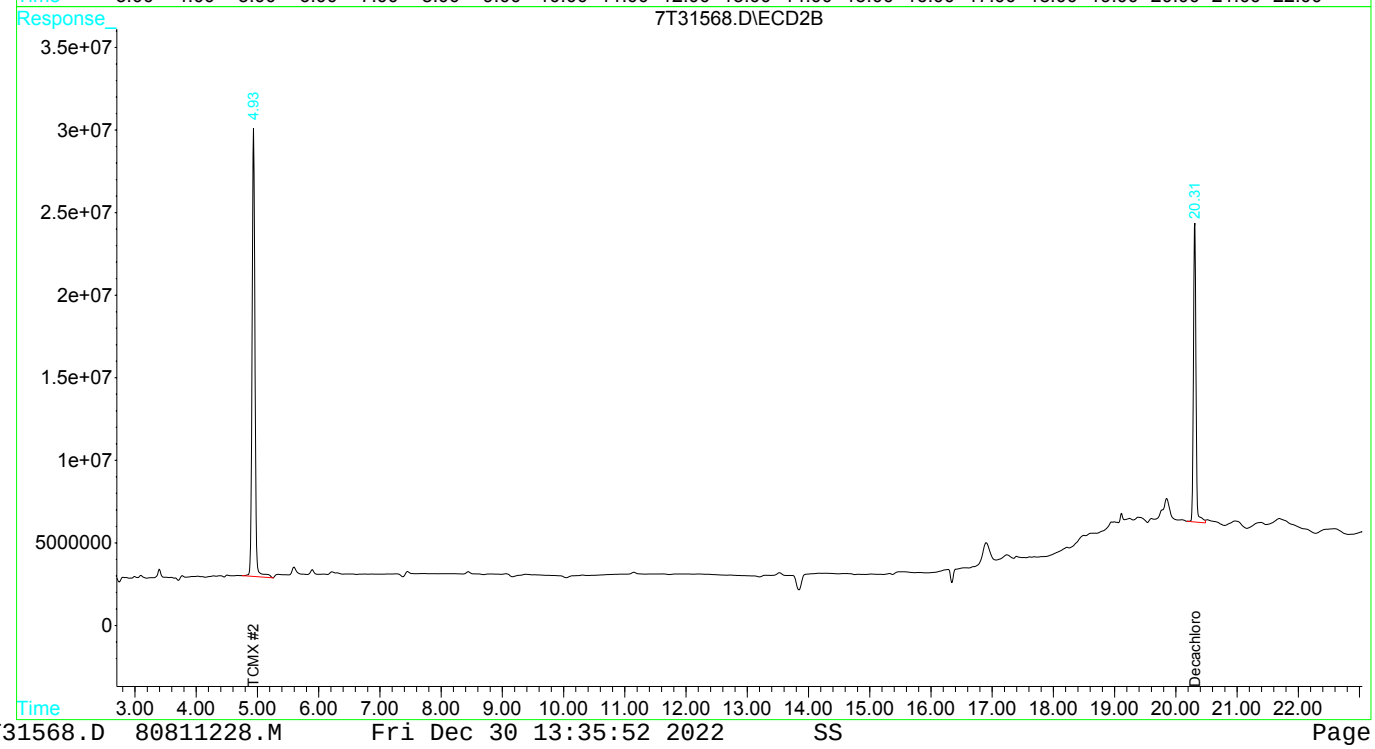
Quantitation Report (QT Reviewed)

Signal #1 : G:\HPCHEM\GCECD7\DATA\20221229\7T31568.D\ECD1A.CH Vial: 43
Signal #2 : G:\HPCHEM\GCECD7\DATA\20221229\7T31568.D\ECD2B.CH
Acq On : 30 Dec 2022 9:06 am Operator: WD
Sample : B2L2901-BLK1 Inst : GCECD-7
Misc : Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Dec 30 13:27 2022 Quant Results File: 80811228.RES

Quant Method : G:\HPCHEM\G...\80811228.M (Chemstation Integrator)
Title : Pesticides by Method SW-846 8081B
Last Update : Fri Dec 30 10:52:46 2022
Response via : Multiple Level Calibration
DataAcq Meth : RUNPEST1.M

Volume Inj. : 2ul
Signal #1 Phase : RTx-50 Signal #2 Phase: RTx-CLPesticides II
Signal #1 Info : 30M x 0.53mm x 0. Signal #2 Info : 30M x 0.53mm x 0.42um





ANALYSIS DATA SHEET

SPLP Pesticides - SW 846 1312

Client:	**Dynamic Earth LLC**	**Project:**	**Old Orchard G.C.**
Client Sample ID:	**Blank**	**Work Order:**	**2120937**
Lab Sample ID:	**B2L2929-BLK1**		

		Prep Date:	12/29/2022 17:37	File ID:	7T31593.D
Init/Final Vol:	1000 mL / 10 mL	Prep Batch:	B2L2929	Analyzed:	12/30/2022 20:22
		Matrix:	Water	Sequence:	SAA0020
		Prep Method:	Sep Funnel TCLP/SPLP		

CAS NO.	COMPOUND	CONC. (ug/L)	MDL	RL	Qual
72-55-9	4,4'-DDE	ND	0.000234	0.0200	U
319-85-7	beta-BHC	ND	0.000371	0.0200	U

F-I

Quantitation Report (QT Reviewed)

Signal #1 : G:\HPCHEM\GCECD7\DATA\20221230\7T31593.D\ECD1A.CH Vial: 4
Signal #2 : G:\HPCHEM\GCECD7\DATA\20221230\7T31593.D\ECD2B.CH
Acq On : 30 Dec 2022 8:22 pm Operator: WD
Sample : B2L2929-BLK1 Inst : GCECD-7
Misc : Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Jan 3 11:53 2023 Quant Results File: 80811228.RES

Quant Method : G:\HPCHEM\G...\80811228.M (Chemstation Integrator)
Title : Pesticides by Method SW-846 8081B
Last Update : Tue Jan 03 10:57:11 2023
Response via : Initial Calibration
DataAcq Meth : RUNPEST1.M

Volume Inj. : 2ul
Signal #1 Phase : RTx-50 Signal #2 Phase: RTx-CLPesticides II
Signal #1 Info : 30M x 0.53mm x 0. Signal #2 Info : 30M x 0.53mm x 0.42um

Compound	RT#1	RT#2	Resp#1	Resp#2	ug/kg	ug/kg
System Monitoring Compounds						
1) S TCMX	4.07	5.01	870.0E6	561.3E6	27.477m	38.310 #
Spiked Amount 50.000	Range 43 - 129		Recovery =		54.95%	76.62%
21) S Decachlorobiphen	18.80	20.38	1054.8E6	395.1E6	37.741m	36.282m
Spiked Amount 50.000	Range 42 - 136		Recovery =		75.48%	72.56%
Target Compounds						
Sum Chlordane (gamma)			0	0	N.D.	N.D.
Average Chlordane (gamma)					0.000	0.000
Sum Toxaphene (1)			0	0	N.D.	N.D.
Average Toxaphene (1)					0.000	0.000

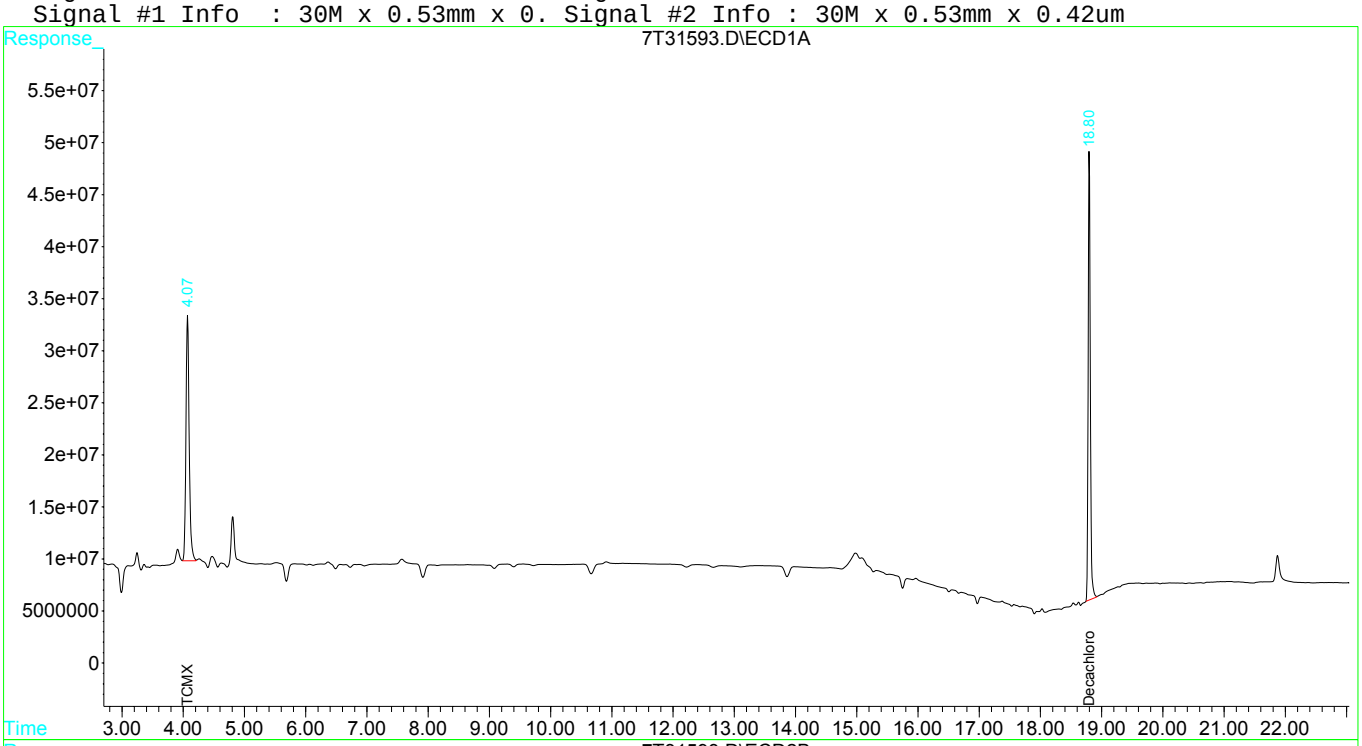
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.
7T31593.D 80811228.M Tue Jan 03 13:54:18 2023 SS

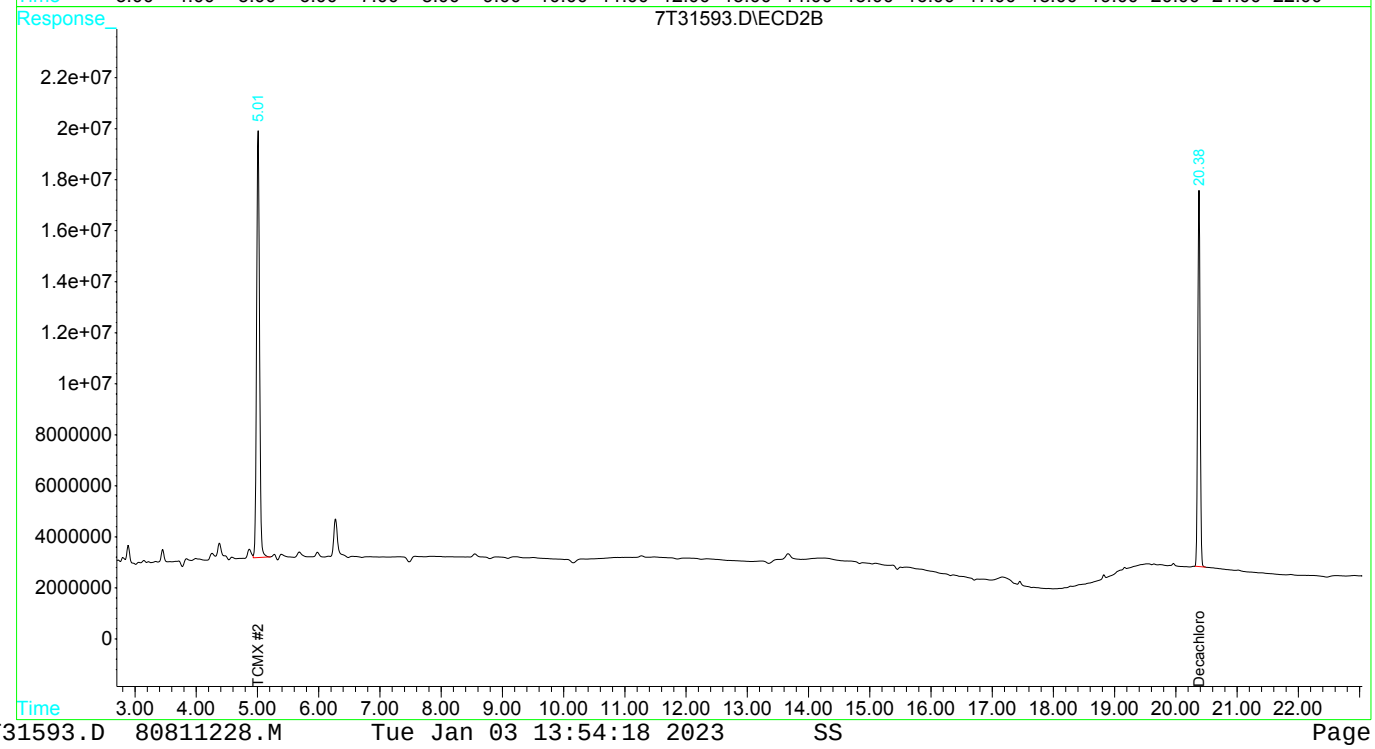
Quantitation Report (QT Reviewed)

Signal #1 : G:\HPCHEM\GCECD7\DATA\20221230\7T31593.D\ECD1A.CH Vial: 4
Signal #2 : G:\HPCHEM\GCECD7\DATA\20221230\7T31593.D\ECD2B.CH
Acq On : 30 Dec 2022 8:22 pm Operator: WD
Sample : B2L2929-BLK1 Inst : GCECD-7
Misc : Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Jan 3 11:53 2023 Quant Results File: 80811228.RES

Quant Method : G:\HPCHEM\G...\80811228.M (Chemstation Integrator)
Title : Pesticides by Method SW-846 8081B
Last Update : Tue Jan 03 10:57:11 2023
Response via : Multiple Level Calibration
DataAcq Meth : RUNPEST1.M

Volume Inj. : 2ul
Signal #1 Phase : RTx-50 Signal #2 Phase: RTx-CLPesticides II
Signal #1 Info : 30M x 0.53mm x 0. Signal #2 Info : 30M x 0.53mm x 0.42um





ANALYSIS DATA SHEET

Pesticides - SW 846 8081B

Client:	**Dynamic Earth LLC**	**Project:**	**Old Orchard G.C.**
Client Sample ID:	**Blank**	**Work Order:**	**2120937**
Lab Sample ID:	**BAA0335-BLK1**		

Init/Final Vol:	15 g / 10 mL	Prep Date:	01/11/2023 15:05	File ID:	7T31822.D
		Prep Batch:	BAA0335	Analyzed:	01/12/2023 15:28
		Matrix:	Soil	Sequence:	SAA0209
		Prep Method:	Microwave Extraction		

CAS NO.	COMPOUND	CONC. (mg/kg wet)	MDL	RL	Qual
60-57-1	Dieldrin	ND	0.000680	0.00130	U
1024-57-3	Heptachlor Epoxide	ND	0.000656	0.00130	U

F-I

Quantitation Report (QT Reviewed)

Signal #1 : G:\HPCHEM\GCECD7\DATA\20230112\7T31822.D\ECD1A.CH Vial: 6
Signal #2 : G:\HPCHEM\GCECD7\DATA\20230112\7T31822.D\ECD2B.CH
Acq On : 12 Jan 2023 3:28 pm Operator: WD
Sample : BAA0335-BLK1 Inst : GCECD-7
Misc : Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Jan 13 12:54 2023 Quant Results File: 80811228.RES

Quant Method : G:\HPCHEM\G...\80811228.M (Chemstation Integrator)
Title : Pesticides by Method SW-846 8081B
Last Update : Fri Jan 13 12:01:01 2023
Response via : Initial Calibration
DataAcq Meth : RUNPEST1.M

Volume Inj. : 2ul
Signal #1 Phase : RTx-50 Signal #2 Phase: RTx-CLPesticides II
Signal #1 Info : 30M x 0.53mm x 0. Signal #2 Info : 30M x 0.53mm x 0.42um

Compound	RT#1	RT#2	Resp#1	Resp#2	ug/kg	ug/kg
System Monitoring Compounds						
1) S TCMX	4.46	5.46	1757.4E6	797.5E6	55.502	54.431
Spiked Amount 50.000	Range 43 - 129		Recovery =		111.00%	108.86%
21) S Decachlorobiphen	19.10	20.78	1230.0E6	513.5E6	44.009	47.151
Spiked Amount 50.000	Range 42 - 136		Recovery =		88.02%	94.30%
Target Compounds						
Sum Chlordane (gamma)			0	0	N.D.	N.D.
Average Chlordane (gamma)					0.000	0.000
Sum Toxaphene (1)			0	0	N.D.	N.D.
Average Toxaphene (1)					0.000	0.000

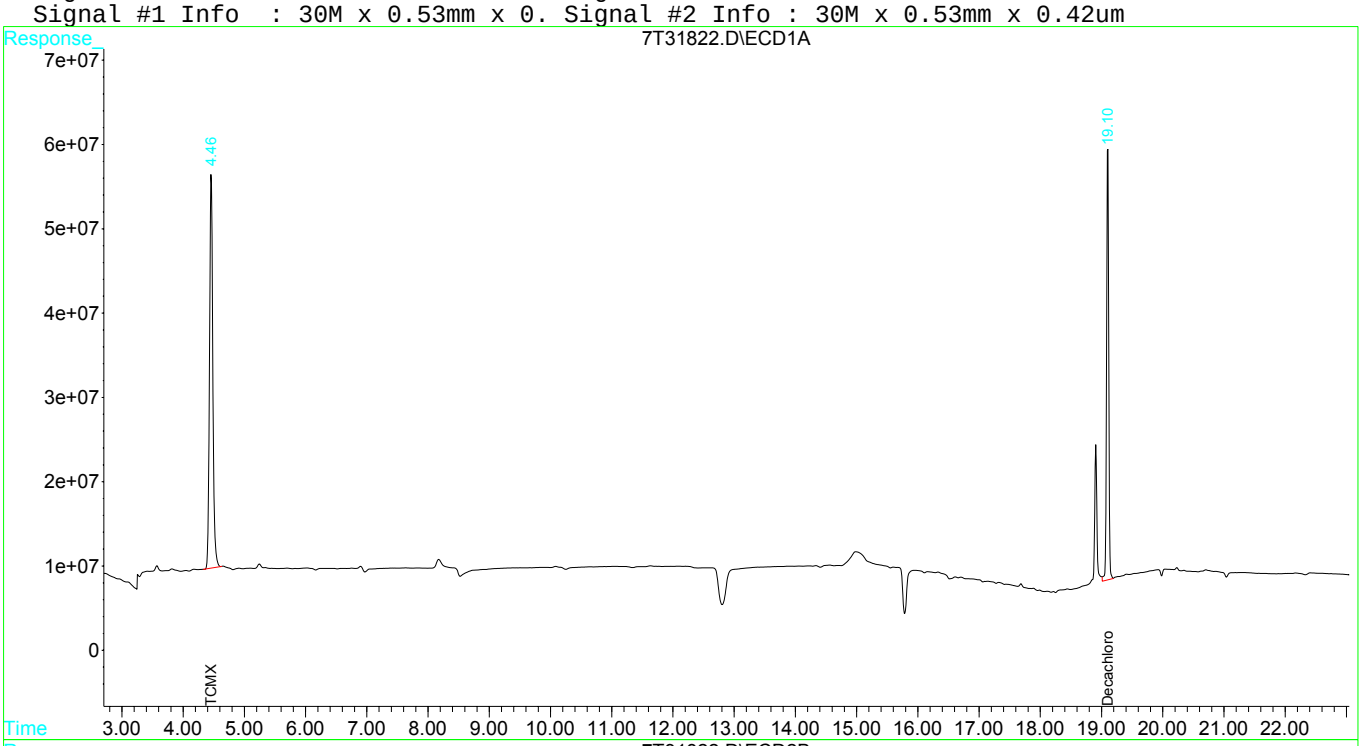
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7T31822.D 80811228.M Mon Jan 23 11:16:44 2023 SS

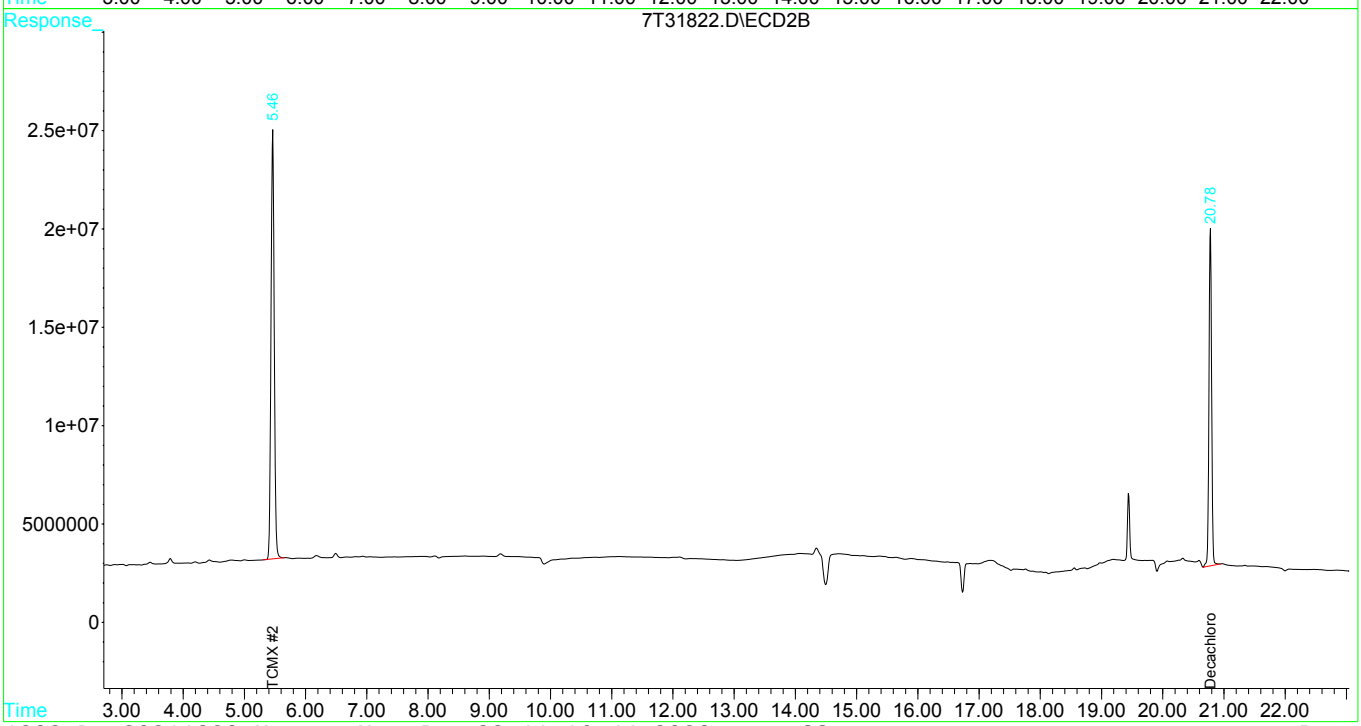
Quantitation Report (QT Reviewed)

Signal #1 : G:\HPCHEM\GCECD7\DATA\20230112\7T31822.D\ECD1A.CH Vial: 6
Signal #2 : G:\HPCHEM\GCECD7\DATA\20230112\7T31822.D\ECD2B.CH
Acq On : 12 Jan 2023 3:28 pm Operator: WD
Sample : BAA0335-BLK1 Inst : GCECD-7
Misc : Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Jan 13 12:54 2023 Quant Results File: 80811228.RES

Quant Method : G:\HPCHEM\G...\80811228.M (Chemstation Integrator)
Title : Pesticides by Method SW-846 8081B
Last Update : Fri Jan 13 12:01:01 2023
Response via : Multiple Level Calibration
DataAcq Meth : RUNPEST1.M

Volume Inj. : 2ul
Signal #1 Phase : RTx-50 Signal #2 Phase: RTx-CLPesticides II
Signal #1 Info : 30M x 0.53mm x 0. Signal #2 Info : 30M x 0.53mm x 0.42um





ANALYSIS DATA SHEET

Pesticides - SW 846 8081B

Client: **Dynamic Earth LLC**
Client Sample ID: **T-2A**
Lab Sample ID: **2120937-01**
Project: **Old Orchard G.C.**
Work Order: **2120937**

Date Sampled:	12/20/22 08:30	Prep Date:	12/28/22 08:30	File ID:	7T31570.D
Init/Final Vol:	15 g / 10 mL	Prep Batch:	B2L2804	Analyzed:	12/30/22 09:57
Dilution:	1	Matrix:	Soil	Sequence:	SAA0005
Percent Solids:	86.62	Prep Method:	Microwave Extraction		

CAS NO.	COMPOUND	CONC. (mg/kg dry)	MDL	RL	Qual
60-57-1	Dieldrin	0.0898	0.000785	0.00150	

11 11.2.

ND, U - Indicates compound analyzed for but not detected
J - Indicates estimated value
B - Indicates compound found in associated blank
E - Concentration exceeds highest calibration standard

D - Indicates result is based on a dilution
H - Indicates a Hold Time violation
P - Greater than 25% diff. between 2 GC columns.
MDL - Minimum detection limit, **RL** - Reporting limit

F-I

Quantitation Report (QT Reviewed)

Signal #1 : G:\HPCHEM\GCECD7\DATA\20221229A\7T31570.D\ECD1A.CH Vial: 45
Signal #2 : G:\HPCHEM\GCECD7\DATA\20221229A\7T31570.D\ECD2B.CH
Acq On : 30 Dec 2022 9:57 Operator: WD
Sample : 2120937-01 Inst : GCECD-7
Misc : Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Jan 3 12:17 2023 Quant Results File: 80811228.RES

Quant Method : G:\HPCHEM\G...\80811228.M (Chemstation Integrator)
Title : Pesticides by Method SW-846 8081B
Last Update : Fri Dec 30 10:52:46 2022
Response via : Initial Calibration
DataAcq Meth : RUNPEST1.M

Volume Inj. : 2ul
Signal #1 Phase : RTx-50 Signal #2 Phase: RTx-CLPesticides II
Signal #1 Info : 30M x 0.53mm x 0. Signal #2 Info : 30M x 0.53mm x 0.42um

	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/kg	ug/kg
	System Monitoring Compounds						
1) S	TCMX	4.01	4.93	821.5E6	492.8E6	25.944	33.632 #
	Spiked Amount 50.000	Range 43 - 129		Recovery =		51.89%	67.26%
21) S	Decachlorobiphen	18.74	20.31	736.7E6	304.9E6	26.359	27.996m
	Spiked Amount 50.000	Range 42 - 136		Recovery =		52.72%	55.99%
	Target Compounds						
8)	Heptachlor epoxi	10.13	13.19	417.6E6	140.6E6	9.464m	7.551m
10)	4,4'-DDE	11.70	15.17	4903.0E6	2006.4E6	113.116	132.372
11) M	Dieldrin	12.70	15.41	5203.1E6	2136.0E6	116.734	128.781
13)	4,4'-DDD	14.28	16.50	378.1E6	151.2E6	13.668	14.336
15) M	4,4'-DDT	15.09	17.08	225.9E6	117.9E6	6.621	10.798 #
22) L1	Chlordane (gamma	10.62	14.01	1698.7E6	630.2E6	37.514	33.707
23) L1	Chlordane (alpha	11.12	14.52	3777.7E6	905.1E6	82.333	51.802 #
	Sum Chlordane (gamma)			5476.5E6	1535.3E6	119.847	85.508
Average	Chlordane (gamma)					59.924	42.754
	Sum Toxaphene (1)			0	0	N.D.	N.D.
Average	Toxaphene (1)					0.000	0.000

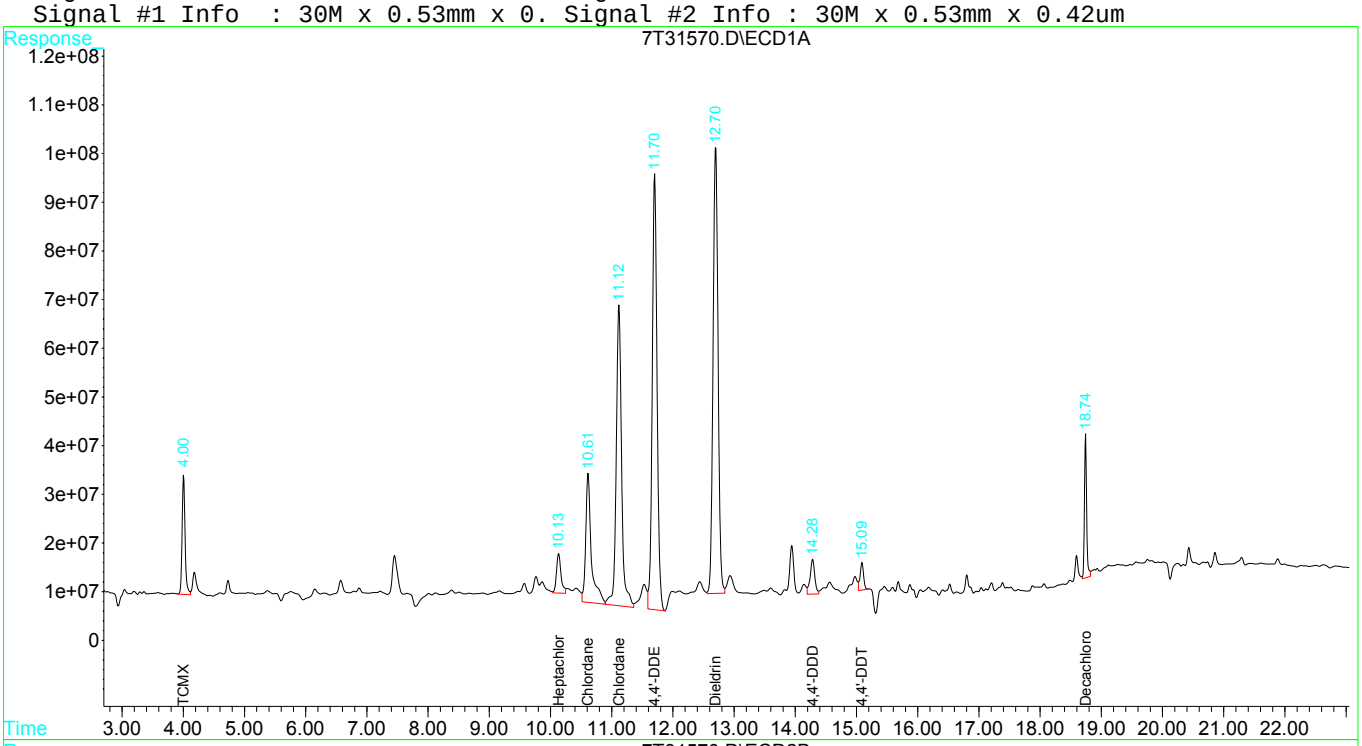
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7T31570.D 80811228.M Tue Jan 03 12:40:21 2023 SS

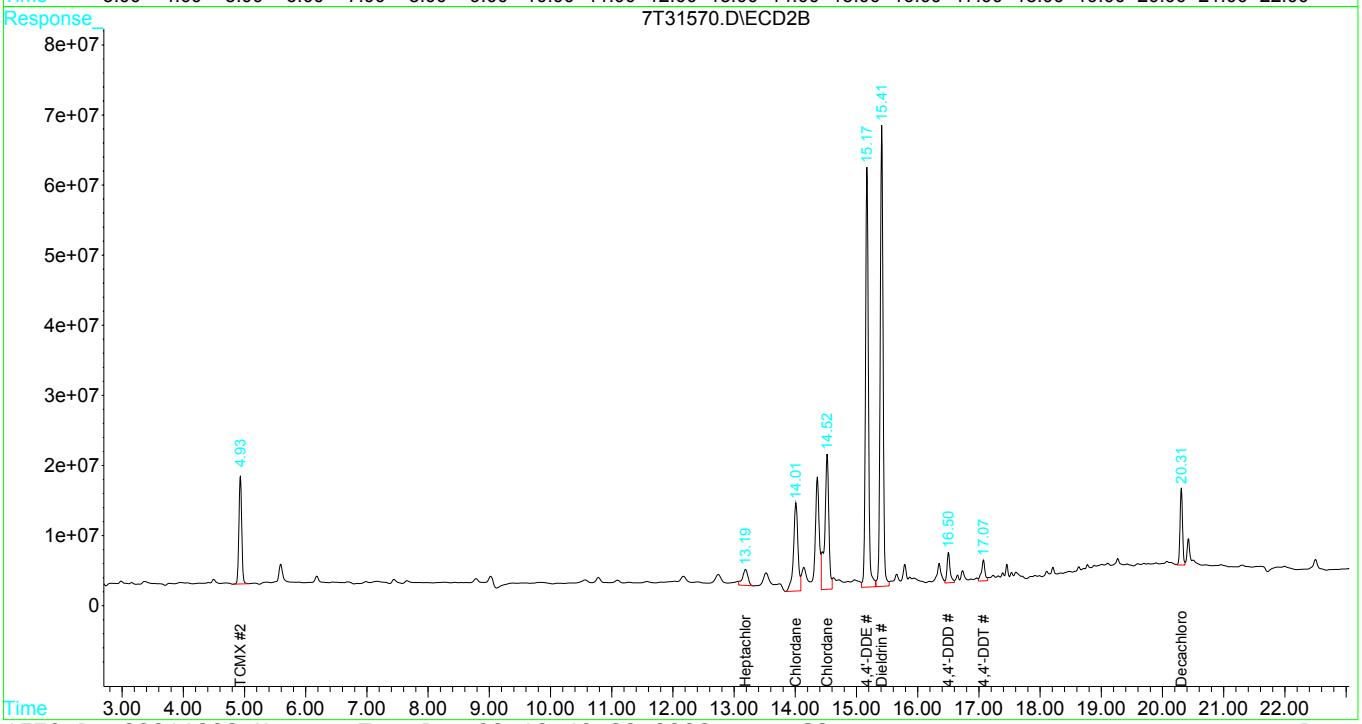
Quantitation Report (QT Reviewed)

Signal #1 : G:\HPCHEM\GCECD7\DATA\20221229A\7T31570.D\ECD1A.CH Vial: 45
Signal #2 : G:\HPCHEM\GCECD7\DATA\20221229A\7T31570.D\ECD2B.CH
Acq On : 30 Dec 2022 9:57 Operator: WD
Sample : 2120937-01 Inst : GCECD-7
Misc : Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Jan 3 12:17 2023 Quant Results File: 80811228.RES

Quant Method : G:\HPCHEM\G...\80811228.M (Chemstation Integrator)
Title : Pesticides by Method SW-846 8081B
Last Update : Fri Dec 30 10:52:46 2022
Response via : Multiple Level Calibration
DataAcq Meth : RUNPEST1.M

Volume Inj. : 2ul
Signal #1 Phase : RTx-50 Signal #2 Phase: RTx-CLPesticides II
Signal #1 Info : 30M x 0.53mm x 0. Signal #2 Info : 30M x 0.53mm x 0.42um





ANALYSIS DATA SHEET

Pesticides - SW 846 8081B

Client: **Dynamic Earth LLC**
Client Sample ID: **T-2-1**
Lab Sample ID: **2120937-02**
Project: **Old Orchard G.C.**
Work Order: **2120937**

Date Sampled:	12/20/22 08:36	Prep Date:	12/29/22 07:13	File ID:	7T31571.D
Init/Final Vol:	15 g / 10 mL	Prep Batch:	B2L2901	Analyzed:	12/30/22 10:22
Dilution:	1	Matrix:	Soil	Sequence:	SAA0005
Percent Solids:	77.70	Prep Method:	Microwave Extraction		

CAS NO.	COMPOUND	CONC. (mg/kg dry)	MDL	RL	Qual
60-57-1	Dieldrin	0.00447	0.000875	0.00167	

11 11.2.

ND, U - Indicates compound analyzed for but not detected
J - Indicates estimated value
B - Indicates compound found in associated blank
E - Concentration exceeds highest calibration standard

D - Indicates result is based on a dilution
H - Indicates a Hold Time violation
P - Greater than 25% diff. between 2 GC columns.
MDL - Minimum detection limit, **RL** - Reporting limit

F-I

Quantitation Report (QT Reviewed)

Signal #1 : G:\HPCHEM\GCECD7\DATA\20221229A\7T31571.D\ECD1A.CH Vial: 46
Signal #2 : G:\HPCHEM\GCECD7\DATA\20221229A\7T31571.D\ECD2B.CH
Acq On : 30 Dec 2022 10:22 Operator: WD
Sample : 2120937-02 Inst : GCECD-7
Misc : Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Jan 3 12:19 2023 Quant Results File: 80811228.RES

Quant Method : G:\HPCHEM\G...\80811228.M (Chemstation Integrator)
Title : Pesticides by Method SW-846 8081B
Last Update : Fri Dec 30 10:52:46 2022
Response via : Initial Calibration
DataAcq Meth : RUNPEST1.M

Volume Inj. : 2ul
Signal #1 Phase : RTx-50 Signal #2 Phase: RTx-CLPesticides II
Signal #1 Info : 30M x 0.53mm x 0. Signal #2 Info : 30M x 0.53mm x 0.42um

	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/kg	ug/kg
	System Monitoring Compounds						
1) S	TCMX	4.01	4.93	1111.8E6	666.5E6	35.113	45.491 #
Spiked Amount	50.000	Range	43 - 129	Recovery	=	70.23%	90.98%
21) S	Decachlorobiphen	18.74	20.30	1034.7E6	408.0E6	37.021	37.461m
Spiked Amount	50.000	Range	42 - 136	Recovery	=	74.04%	74.92%
	Target Compounds						
8)	Heptachlor epoxi	10.14	13.20	159.5E6	87989394	3.614	4.726 #
10)	4,4'-DDE	11.71	15.20f	984.8E6	770.9E6	22.719	50.859 #
11) M	Dieldrin	12.70	15.41	232.4E6	105.8E6	5.214	6.376
13)	4,4'-DDD	14.31	16.50	339.6E6	61367874	12.276	5.820 #
15) M	4,4'-DDT	15.09	17.08	209.9E6	101.6E6	6.152	9.305 #
22) L1	Chlordane (gamma	10.62	14.01	500.7E6	178.3E6	11.056	9.537
23) L1	Chlordane (alpha	11.11	14.52	3483.1E6	338.0E6	75.912	19.348 #
Sum	Chlordane (gamma)			3983.8E6	516.4E6	86.968	28.885
Average	Chlordane (gamma)					43.484	14.443
Sum	Toxaphene (1)			0	0	N.D.	N.D.
Average	Toxaphene (1)					0.000	0.000

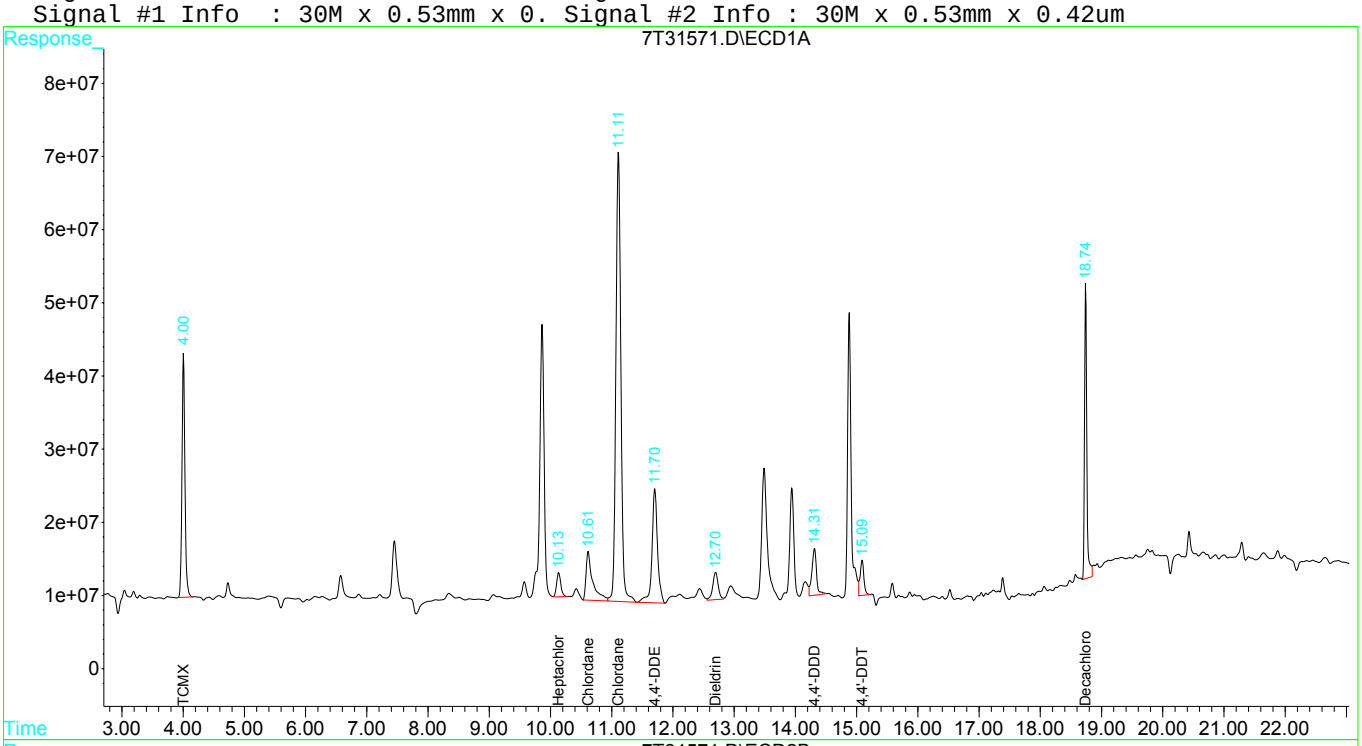
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7T31571.D 80811228.M Tue Jan 03 12:40:23 2023 SS

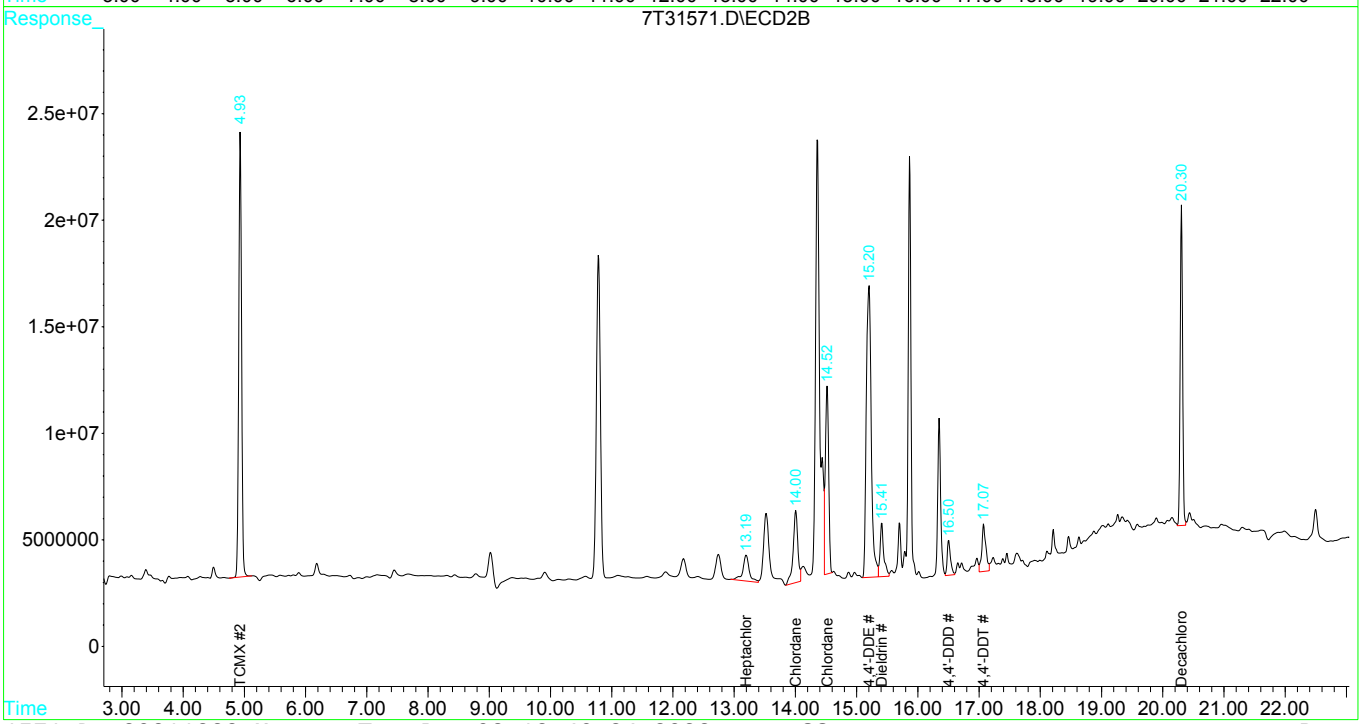
Quantitation Report (QT Reviewed)

Signal #1 : G:\HPCHEM\GCECD7\DATA\20221229A\7T31571.D\ECD1A.CH Vial: 46
Signal #2 : G:\HPCHEM\GCECD7\DATA\20221229A\7T31571.D\ECD2B.CH
Acq On : 30 Dec 2022 10:22 Operator: WD
Sample : 2120937-02 Inst : GCECD-7
Misc : Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Jan 3 12:19 2023 Quant Results File: 80811228.RES

Quant Method : G:\HPCHEM\G...\80811228.M (Chemstation Integrator)
Title : Pesticides by Method SW-846 8081B
Last Update : Fri Dec 30 10:52:46 2022
Response via : Multiple Level Calibration
DataAcq Meth : RUNPEST1.M

Volume Inj. : 2ul
Signal #1 Phase : RTx-50 Signal #2 Phase: RTx-CLPesticides II
Signal #1 Info : 30M x 0.53mm x 0. Signal #2 Info : 30M x 0.53mm x 0.42um





ANALYSIS DATA SHEET

Pesticides - SW 846 8081B

Client: **Dynamic Earth LLC**
Client Sample ID: **T-2-2**
Lab Sample ID: **2120937-03**
Project: **Old Orchard G.C.**
Work Order: **2120937**

Date Sampled:	12/20/22 08:40	Prep Date:	12/28/22 08:30	File ID:	7T31572.D
Init/Final Vol:	15 g / 10 mL	Prep Batch:	B2L2804	Analyzed:	12/30/22 10:48
Dilution:	1	Matrix:	Soil	Sequence:	SAA0005
Percent Solids:	83.18	Prep Method:	Microwave Extraction		

CAS NO.	COMPOUND	CONC. (mg/kg dry)	MDL	RL	Qual
60-57-1	Dieldrin	0.0158	0.000818	0.00156	

11 11.2.

ND, U - Indicates compound analyzed for but not detected
J - Indicates estimated value
B - Indicates compound found in associated blank
E - Concentration exceeds highest calibration standard

D - Indicates result is based on a dilution
H - Indicates a Hold Time violation
P - Greater than 25% diff. between 2 GC columns.
MDL - Minimum detection limit, **RL** - Reporting limit

F-I

Quantitation Report (QT Reviewed)

Signal #1 : G:\HPCHEM\GCECD7\DATA\20221229A\7T31572.D\ECD1A.CH Vial: 47
Signal #2 : G:\HPCHEM\GCECD7\DATA\20221229A\7T31572.D\ECD2B.CH
Acq On : 30 Dec 2022 10:48 Operator: WD
Sample : 2120937-03 Inst : GCECD-7
Misc : Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Jan 3 12:20 2023 Quant Results File: 80811228.RES

Quant Method : G:\HPCHEM\G...\80811228.M (Chemstation Integrator)
Title : Pesticides by Method SW-846 8081B
Last Update : Fri Dec 30 10:52:46 2022
Response via : Initial Calibration
DataAcq Meth : RUNPEST1.M

Volume Inj. : 2ul
Signal #1 Phase : RTx-50 Signal #2 Phase: RTx-CLPesticides II
Signal #1 Info : 30M x 0.53mm x 0. Signal #2 Info : 30M x 0.53mm x 0.42um

	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/kg	ug/kg
	System Monitoring Compounds						
1) S	TCMX	4.00	4.93	735.1E6	440.6E6	23.218	30.075 #
	Spiked Amount 50.000	Range 43 - 129		Recovery =		46.44%	60.15%
21) S	Decachlorobiphen	18.74	20.31	638.0E6	273.9E6	22.825	25.151
	Spiked Amount 50.000	Range 42 - 136		Recovery =		45.65%	50.30%
	Target Compounds						
8)	Heptachlor epoxi	10.13	13.19	374.4E6	136.5E6	8.484m	7.331m
10)	4,4'-DDE	11.70	15.17	2982.7E6	884.9E6	68.814	58.382m
11) M	Dieldrin	12.69	15.41	878.7E6	362.0E6	19.714m	21.827m
13)	4,4'-DDD	14.29	16.50	498.8E6	186.4E6	18.033	17.675
15) M	4,4'-DDT	15.09	17.07	430.3E6	133.6E6	12.615m	12.232m
22) L1	Chlordane (gamma	10.61	14.01	1051.4E6	508.1E6	23.219m	27.174
23) L1	Chlordane (alpha	11.11	14.52	4877.5E6	840.0E6	106.303m	48.077 #
	Sum Chlordane (gamma)			5928.9E6	1348.1E6	129.521	75.251
Average	Chlordane (gamma)					64.761	37.625
	Sum Toxaphene (1)			0	0	N.D.	N.D.
Average	Toxaphene (1)					0.000	0.000

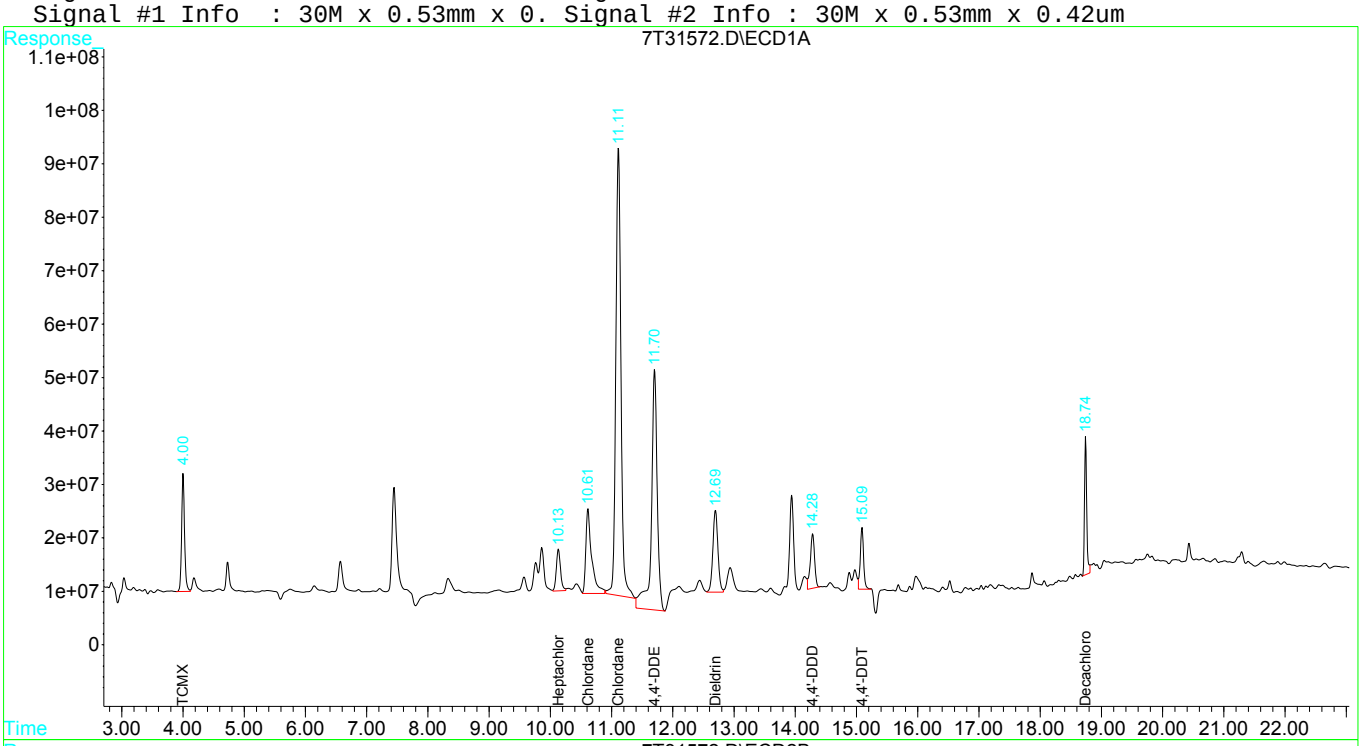
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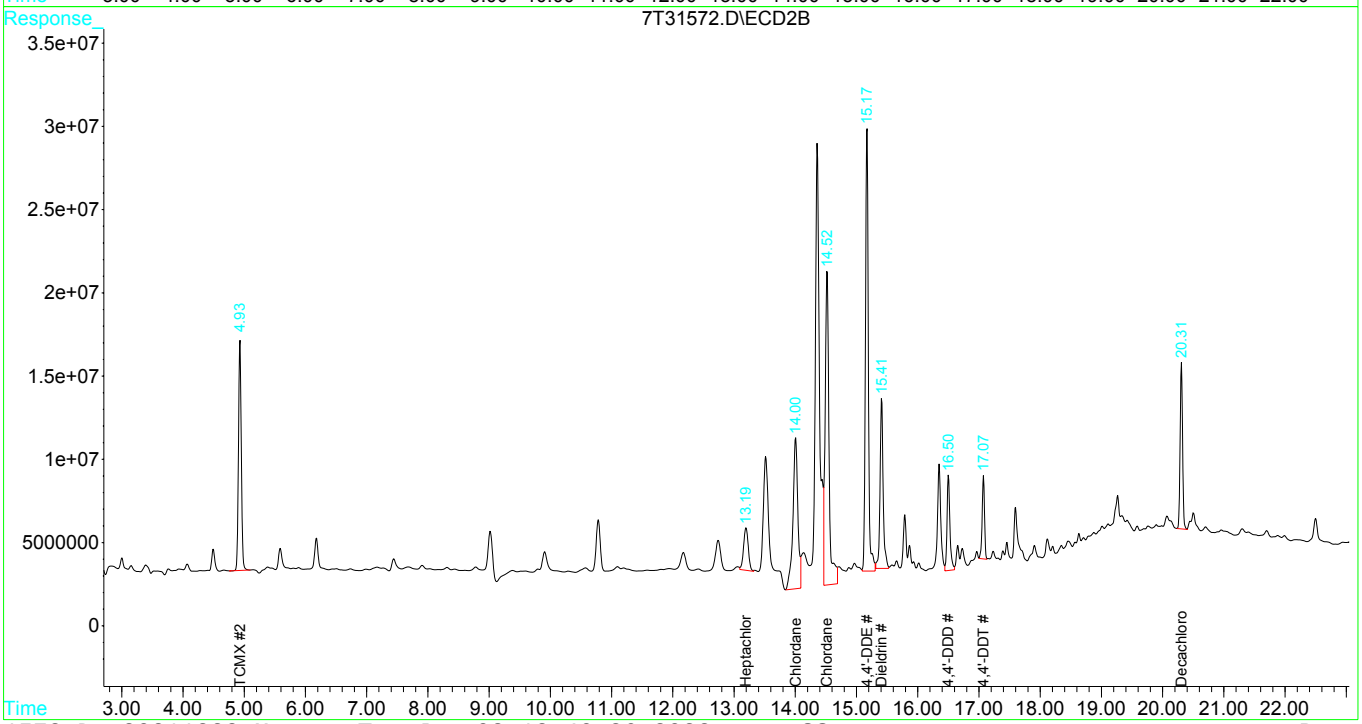
Quantitation Report (QT Reviewed)

Signal #1 : G:\HPCHEM\GCECD7\DATA\20221229A\7T31572.D\ECD1A.CH Vial: 47
Signal #2 : G:\HPCHEM\GCECD7\DATA\20221229A\7T31572.D\ECD2B.CH
Acq On : 30 Dec 2022 10:48 Operator: WD
Sample : 2120937-03 Inst : GCECD-7
Misc : Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Jan 3 12:20 2023 Quant Results File: 80811228.RES

Quant Method : G:\HPCHEM\G...\80811228.M (Chemstation Integrator)
Title : Pesticides by Method SW-846 8081B
Last Update : Fri Dec 30 10:52:46 2022
Response via : Multiple Level Calibration
DataAcq Meth : RUNPEST1.M

Volume Inj. : 2ul
Signal #1 Phase : RTx-50 Signal #2 Phase: RTx-CLPesticides II
Signal #1 Info : 30M x 0.53mm x 0. Signal #2 Info : 30M x 0.53mm x 0.42um





ANALYSIS DATA SHEET

Pesticides - SW 846 8081B

Client: **Dynamic Earth LLC**
Client Sample ID: **T-2-3**
Lab Sample ID: **2120937-04**
Project: **Old Orchard G.C.**
Work Order: **2120937**

Date Sampled:	12/20/22 08:44	Prep Date:	12/28/22 08:30	File ID:	7T31573.D
Init/Final Vol:	15 g / 10 mL	Prep Batch:	B2L2804	Analyzed:	12/30/22 11:13
Dilution:	1	Matrix:	Soil	Sequence:	SAA0005
Percent Solids:	84.40	Prep Method:	Microwave Extraction		

CAS NO.	COMPOUND	CONC. (mg/kg dry)	MDL	RL	Qual
60-57-1	Dieldrin	0.00487	0.000806	0.00154	

11 11.2.

ND, U - Indicates compound analyzed for but not detected
J - Indicates estimated value
B - Indicates compound found in associated blank
E - Concentration exceeds highest calibration standard

D - Indicates result is based on a dilution
H - Indicates a Hold Time violation
P - Greater than 25% diff. between 2 GC columns.
MDL - Minimum detection limit, **RL** - Reporting limit

F-I

Quantitation Report (QT Reviewed)

Signal #1 : G:\HPCHEM\GCECD7\DATA\20221229A\7T31573.D\ECD1A.CH Vial: 48
Signal #2 : G:\HPCHEM\GCECD7\DATA\20221229A\7T31573.D\ECD2B.CH
Acq On : 30 Dec 2022 11:13 Operator: WD
Sample : 2120937-04 Inst : GCECD-7
Misc : Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Jan 3 12:21 2023 Quant Results File: 80811228.RES

Quant Method : G:\HPCHEM\G...\80811228.M (Chemstation Integrator)
Title : Pesticides by Method SW-846 8081B
Last Update : Fri Dec 30 10:52:46 2022
Response via : Initial Calibration
DataAcq Meth : RUNPEST1.M

Volume Inj. : 2ul
Signal #1 Phase : RTx-50 Signal #2 Phase: RTx-CLPesticides II
Signal #1 Info : 30M x 0.53mm x 0. Signal #2 Info : 30M x 0.53mm x 0.42um

	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/kg	ug/kg
	System Monitoring Compounds						
1) S	TCMX	4.01	4.93	918.3E6	601.8E6	29.002	41.075m#
	Spiked Amount 50.000	Range 43 - 129		Recovery =		58.00%	82.15%
21) S	Decachlorobiphen	18.74	20.30	817.3E6	351.9E6	29.240	32.312m
	Spiked Amount 50.000	Range 42 - 136		Recovery =		58.48%	64.62%
	Target Compounds						
8)	Heptachlor epoxi	10.15f	13.19	84065704	17316265	1.905	0.930m#
10)	4,4'-DDE	11.70	15.17	2604.1E6	794.8E6	60.079	52.437
11) M	Dieldrin	12.69	15.41	275.0E6	127.9E6	6.169m	7.709m
13)	4,4'-DDD	14.28	16.50	560.9E6	189.3E6	20.279	17.950
15) M	4,4'-DDT	15.09	17.07	525.3E6	224.1E6	15.401m	20.520m#
22) L1	Chlordane (gamma	10.63f	14.00	161.9E6	162.9E6	3.574	8.710 #
23) L1	Chlordane (alpha	11.10	14.52	1300.3E6	136.5E6	28.339	7.813 #
	Sum Chlordane (gamma)			1462.1E6	299.4E6	31.913	16.523
Average	Chlordane (gamma)					15.957	8.262
	Sum Toxaphene (1)			0	0	N.D.	N.D.
Average	Toxaphene (1)					0.000	0.000

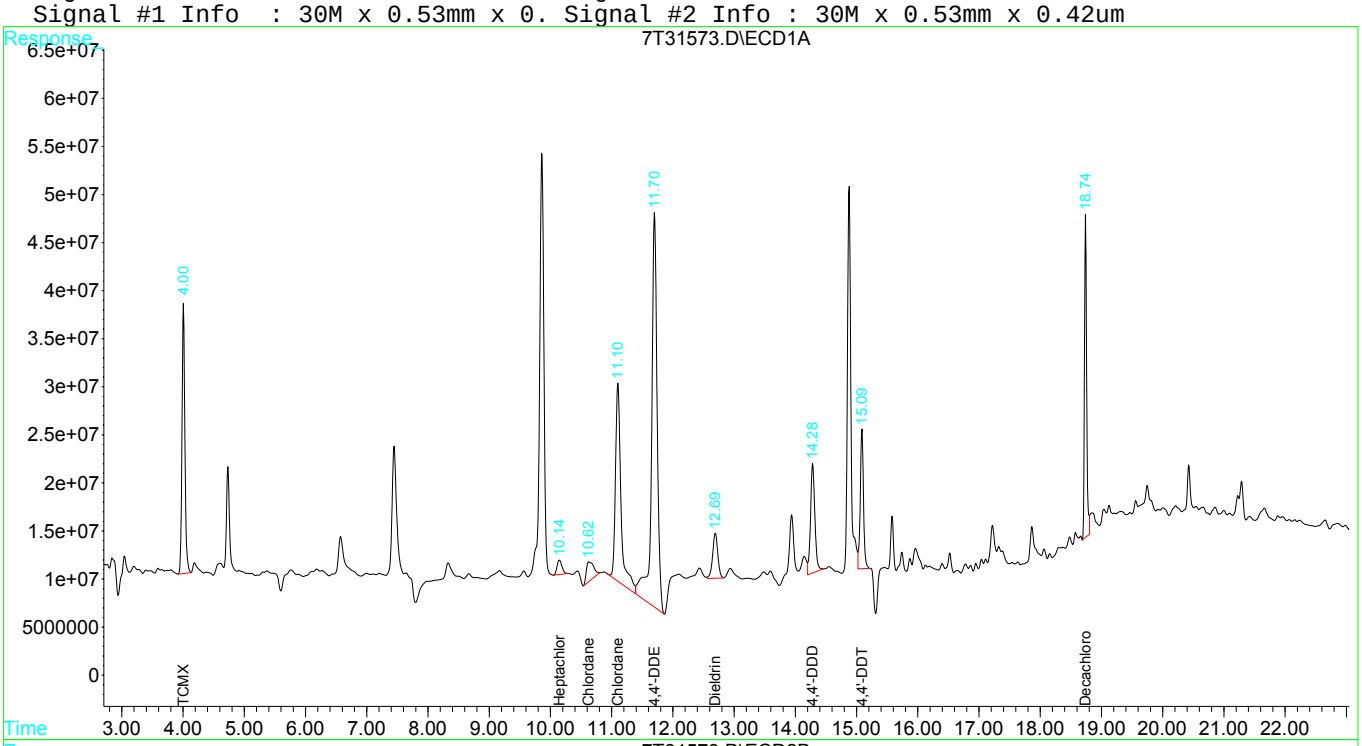
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7T31573.D 80811228.M Tue Jan 03 12:40:27 2023 SS

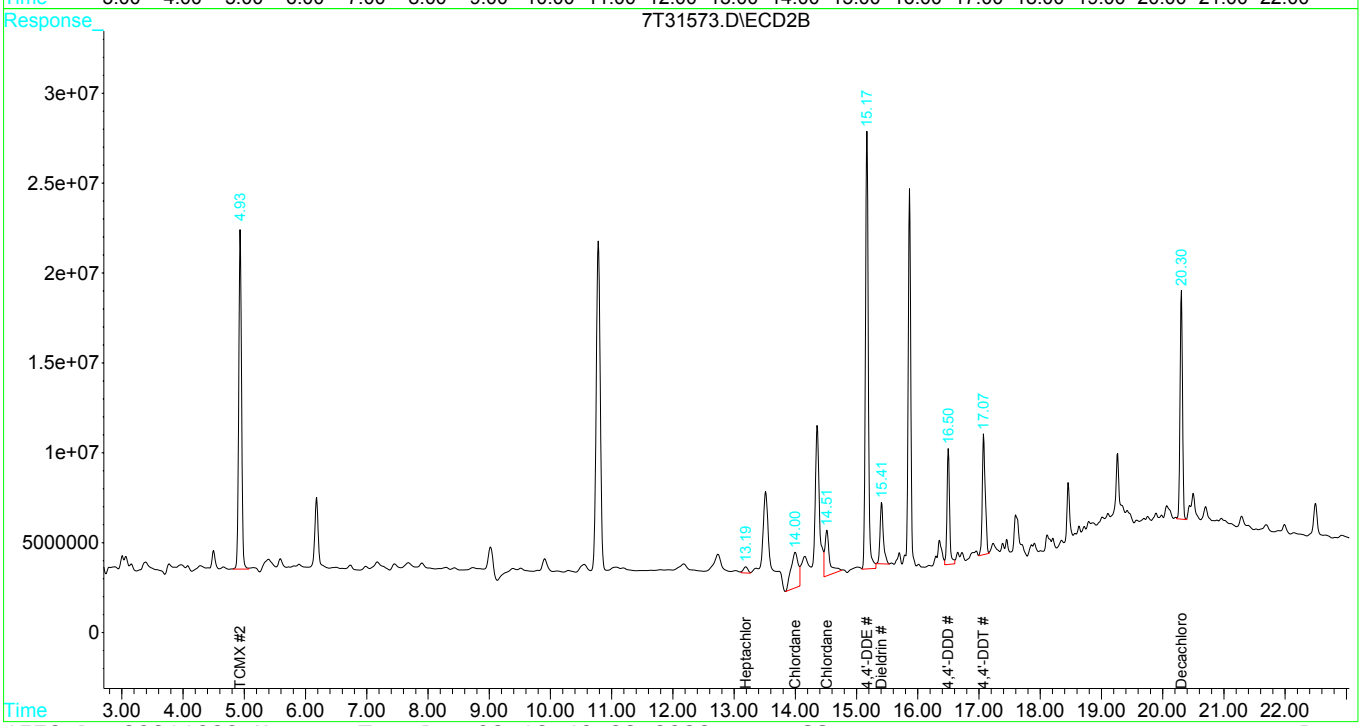
Quantitation Report (QT Reviewed)

Signal #1 : G:\HPCHEM\GCECD7\DATA\20221229A\7T31573.D\ECD1A.CH Vial: 48
Signal #2 : G:\HPCHEM\GCECD7\DATA\20221229A\7T31573.D\ECD2B.CH
Acq On : 30 Dec 2022 11:13 Operator: WD
Sample : 2120937-04 Inst : GCECD-7
Misc : Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Jan 3 12:21 2023 Quant Results File: 80811228.RES

Quant Method : G:\HPCHEM\G...\80811228.M (Chemstation Integrator)
Title : Pesticides by Method SW-846 8081B
Last Update : Fri Dec 30 10:52:46 2022
Response via : Multiple Level Calibration
DataAcq Meth : RUNPEST1.M

Volume Inj. : 2ul
Signal #1 Phase : RTx-50 Signal #2 Phase: RTx-CLPesticides II
Signal #1 Info : 30M x 0.53mm x 0. Signal #2 Info : 30M x 0.53mm x 0.42um





ANALYSIS DATA SHEET

Pesticides - SW 846 8081B

Client: **Dynamic Earth LLC**
Client Sample ID: **T-2-4**
Lab Sample ID: **2120937-05**
Project: **Old Orchard G.C.**
Work Order: **2120937**

Date Sampled:	12/20/22 08:48	Prep Date:	12/28/22 08:30	File ID:	7T31574.D
Init/Final Vol:	15 g / 10 mL	Prep Batch:	B2L2804	Analyzed:	12/30/22 11:39
Dilution:	1	Matrix:	Soil	Sequence:	SAA0005
Percent Solids:	82.85	Prep Method:	Microwave Extraction		

CAS NO.	COMPOUND	CONC. (mg/kg dry)	MDL	RL	Qual
60-57-1	Dieldrin	0.0214	0.000821	0.00157	

ND, U - Indicates compound analyzed for but not detected
J - Indicates estimated value
B - Indicates compound found in associated blank
E - Concentration exceeds highest calibration standard

D - Indicates result is based on a dilution
H - Indicates a Hold Time violation
P - Greater than 25% diff. between 2 GC columns.
MDL - Minimum detection limit, **RL** - Reporting limit

F-I

Quantitation Report (QT Reviewed)

Signal #1 : G:\HPCHEM\GCECD7\DATA\20221229A\7T31574.D\ECD1A.CH Vial: 49
Signal #2 : G:\HPCHEM\GCECD7\DATA\20221229A\7T31574.D\ECD2B.CH
Acq On : 30 Dec 2022 11:39 Operator: WD
Sample : 2120937-05 Inst : GCECD-7
Misc : Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Jan 3 12:23 2023 Quant Results File: 80811228.RES

Quant Method : G:\HPCHEM\G...\80811228.M (Chemstation Integrator)
Title : Pesticides by Method SW-846 8081B
Last Update : Fri Dec 30 10:52:46 2022
Response via : Initial Calibration
DataAcq Meth : RUNPEST1.M

Volume Inj. : 2ul
Signal #1 Phase : RTx-50 Signal #2 Phase: RTx-CLPesticides II
Signal #1 Info : 30M x 0.53mm x 0. Signal #2 Info : 30M x 0.53mm x 0.42um

	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/kg	ug/kg
	System Monitoring Compounds						
1) S	TCMX	4.01	4.93	861.1E6	576.9E6	27.195	39.373 #
Spiked Amount	50.000	Range 43 - 129		Recovery =		54.39%	78.75%
21) S	Decachlorobiphen	18.74	20.31	798.9E6	329.9E6	28.585	30.291
Spiked Amount	50.000	Range 42 - 136		Recovery =		57.17%	60.58%
	Target Compounds						
8)	Heptachlor epoxi	10.13	13.19	315.9E6	103.7E6	7.157m	5.567m
10)	4,4'-DDE	11.70	15.17	3032.6E6	855.8E6	69.963	56.463
11) M	Dieldrin	12.69	15.41	1183.0E6	465.6E6	26.542m	28.068m
13)	4,4'-DDD	14.28	16.50	372.5E6	178.3E6	13.468m	16.907 #
15) M	4,4'-DDT	15.09	17.07	361.8E6	170.6E6	10.606m	15.614m#
22) L1	Chlordane (gamma	10.61	14.00	957.1E6	473.2E6	21.135m	25.306
23) L1	Chlordane (alpha	11.10	14.52	5983.5E6	753.6E6	130.407m	43.132 #
Sum	Chlordane (gamma)			6940.6E6	1226.8E6	151.542	68.438
Average	Chlordane (gamma)					75.771	34.219
Sum	Toxaphene (1)			0	0	N.D.	N.D.
Average	Toxaphene (1)					0.000	0.000

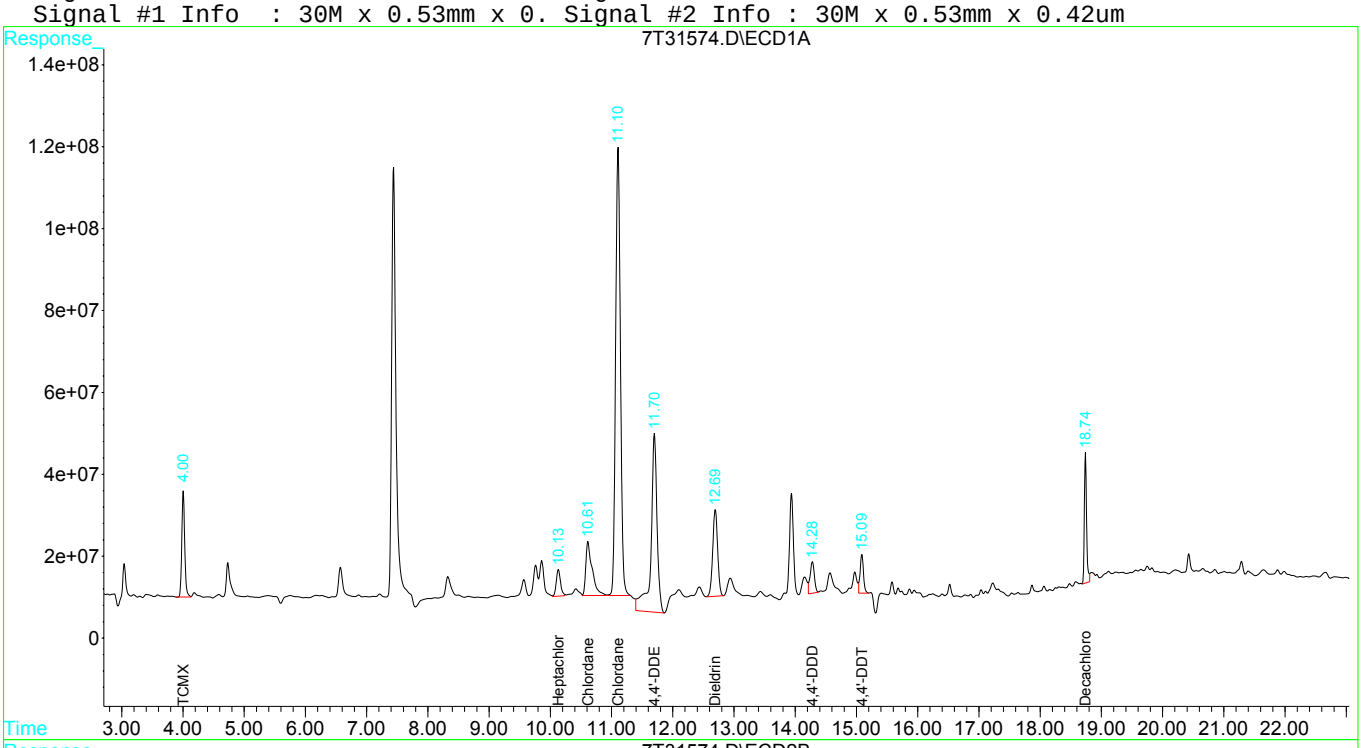
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7T31574.D 80811228.M Tue Jan 03 12:40:29 2023 SS

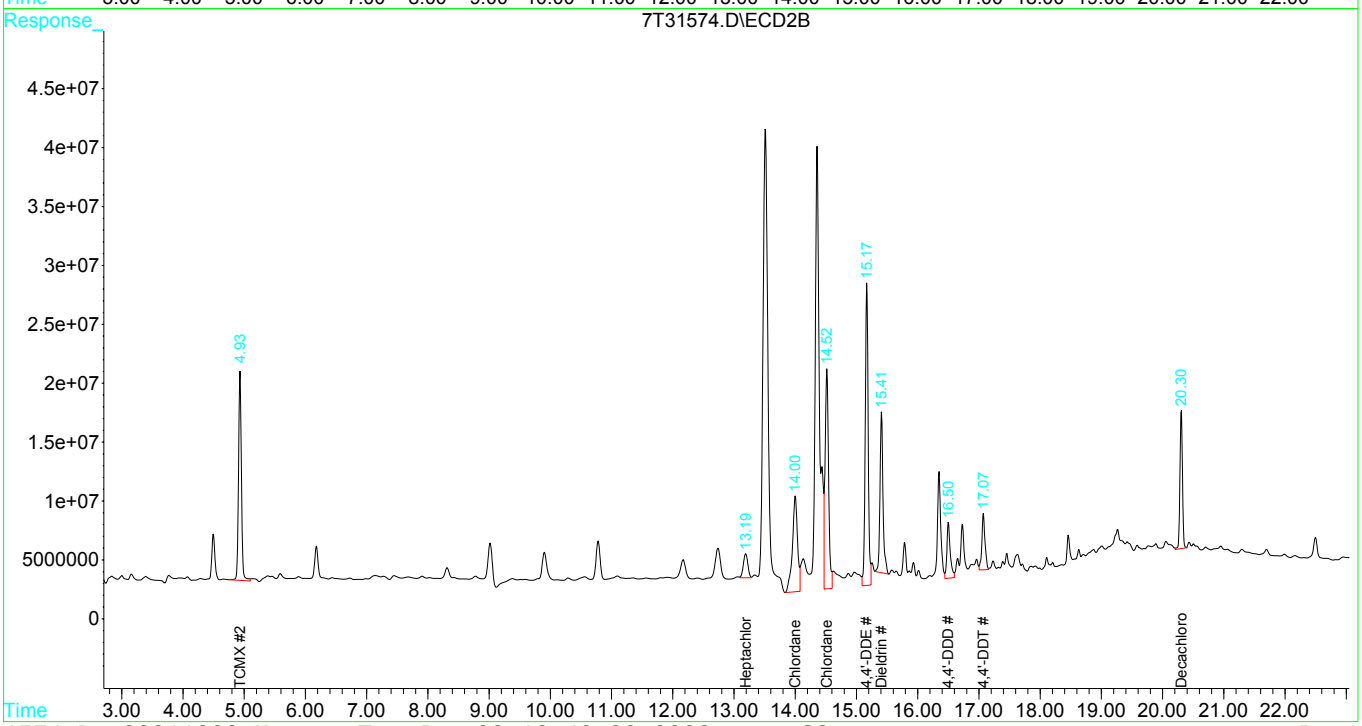
Quantitation Report (QT Reviewed)

Signal #1 : G:\HPCHEM\GCECD7\DATA\20221229A\7T31574.D\ECD1A.CH Vial: 49
Signal #2 : G:\HPCHEM\GCECD7\DATA\20221229A\7T31574.D\ECD2B.CH
Acq On : 30 Dec 2022 11:39 Operator: WD
Sample : 2120937-05 Inst : GCECD-7
Misc : Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Jan 3 12:23 2023 Quant Results File: 80811228.RES

Quant Method : G:\HPCHEM\G...\80811228.M (Chemstation Integrator)
Title : Pesticides by Method SW-846 8081B
Last Update : Fri Dec 30 10:52:46 2022
Response via : Multiple Level Calibration
DataAcq Meth : RUNPEST1.M

Volume Inj. : 2ul
Signal #1 Phase : RTx-50 Signal #2 Phase: RTx-CLPesticides II
Signal #1 Info : 30M x 0.53mm x 0. Signal #2 Info : 30M x 0.53mm x 0.42um





ANALYSIS DATA SHEET

Pesticides - SW 846 8081B

Client: **Dynamic Earth LLC**
Client Sample ID: **T-3A**
Lab Sample ID: **2120937-06**
Project: **Old Orchard G.C.**
Work Order: **2120937**

Date Sampled:	12/20/22 08:52	Prep Date:	12/28/22 08:30	File ID:	7T31575.D
Init/Final Vol:	15 g / 10 mL	Prep Batch:	B2L2804	Analyzed:	12/30/22 12:04
Dilution:	1	Matrix:	Soil	Sequence:	SAA0005
Percent Solids:	89.71	Prep Method:	Microwave Extraction		

CAS NO.	COMPOUND	CONC. (mg/kg dry)	MDL	RL	Qual
60-57-1	Dieldrin [2C]	0.00104	0.000758	0.00145	J

11 11.2.

ND, U - Indicates compound analyzed for but not detected
J - Indicates estimated value
B - Indicates compound found in associated blank
E - Concentration exceeds highest calibration standard

D - Indicates result is based on a dilution
H - Indicates a Hold Time violation
P - Greater than 25% diff. between 2 GC columns.
MDL - Minimum detection limit, **RL** - Reporting limit

F-I

Quantitation Report (QT Reviewed)

Signal #1 : G:\HPCHEM\GCECD7\DATA\20221229A\7T31575.D\ECD1A.CH Vial: 50
Signal #2 : G:\HPCHEM\GCECD7\DATA\20221229A\7T31575.D\ECD2B.CH
Acq On : 30 Dec 2022 12:04 Operator: WD
Sample : 2120937-06 Inst : GCECD-7
Misc : Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Jan 3 12:24 2023 Quant Results File: 80811228.RES

Quant Method : G:\HPCHEM\G...\80811228.M (Chemstation Integrator)
Title : Pesticides by Method SW-846 8081B
Last Update : Fri Dec 30 10:52:46 2022
Response via : Initial Calibration
DataAcq Meth : RUNPEST1.M

Volume Inj. : 2ul
Signal #1 Phase : RTx-50 Signal #2 Phase: RTx-CLPesticides II
Signal #1 Info : 30M x 0.53mm x 0. Signal #2 Info : 30M x 0.53mm x 0.42um

	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/kg	ug/kg
	System Monitoring Compounds						
1) S	TCMX	4.01	4.93	903.1E6	648.6E6	28.523	44.268 #
	Spiked Amount 50.000	Range 43 - 129		Recovery =		57.05%	88.54%
21) S	Decachlorobiphen	18.74	20.31	836.1E6	332.4E6	29.914	30.518
	Spiked Amount 50.000	Range 42 - 136		Recovery =		59.83%	61.04%
	Target Compounds						
10)	4,4'-DDE	11.70	15.17	4600.6E6	1687.6E6	106.139m	111.342m
11) M	Dieldrin	12.69	15.41	70161299	23289686	1.574m	1.404
13)	4,4'-DDD	14.28	16.50	963.7E6	360.5E6	34.840m	34.190m
15) M	4,4'-DDT	15.09	17.07	718.7E6	217.1E6	21.070m	19.872m
	Sum Chlordane (gamma)			0	0	N.D.	N.D.
	Average Chlordane (gamma)					0.000	0.000
	Sum Toxaphene (1)			0	0	N.D.	N.D.
	Average Toxaphene (1)					0.000	0.000

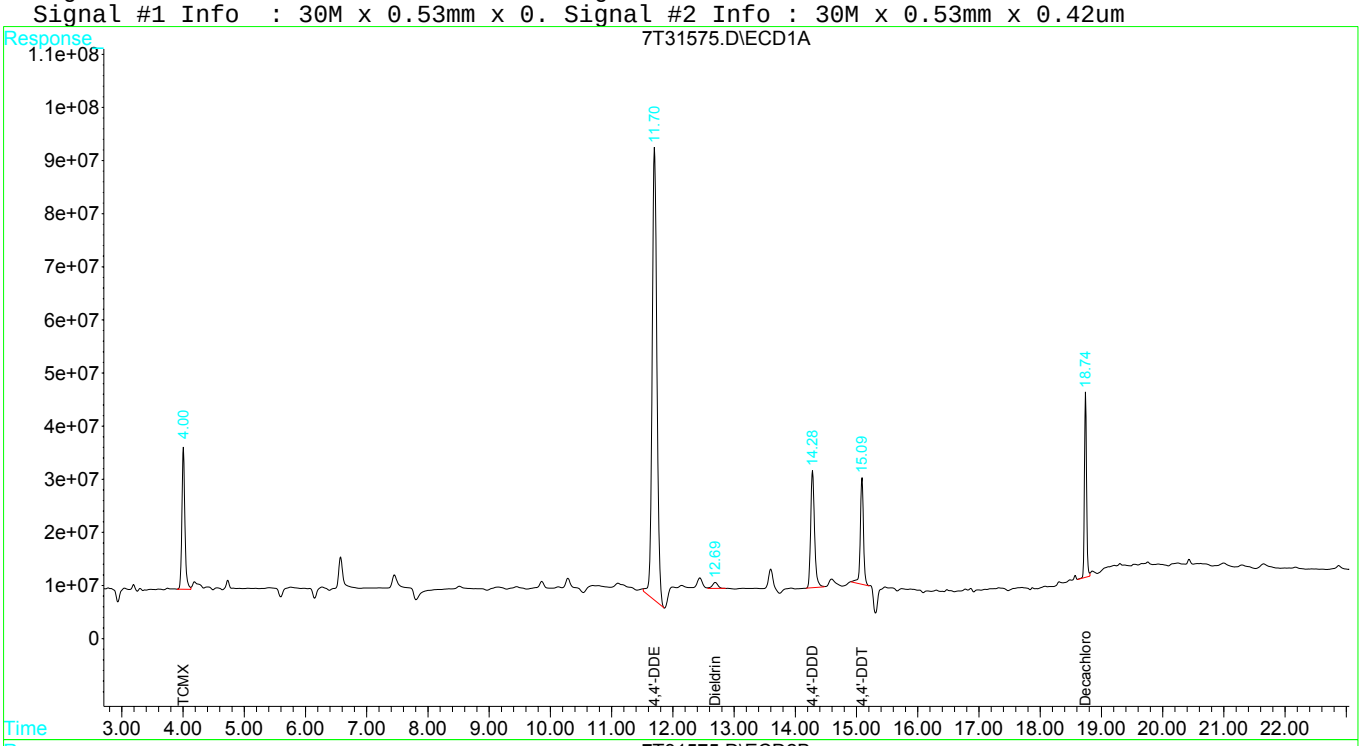
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.
7T31575.D 80811228.M Tue Jan 03 12:40:31 2023 SS

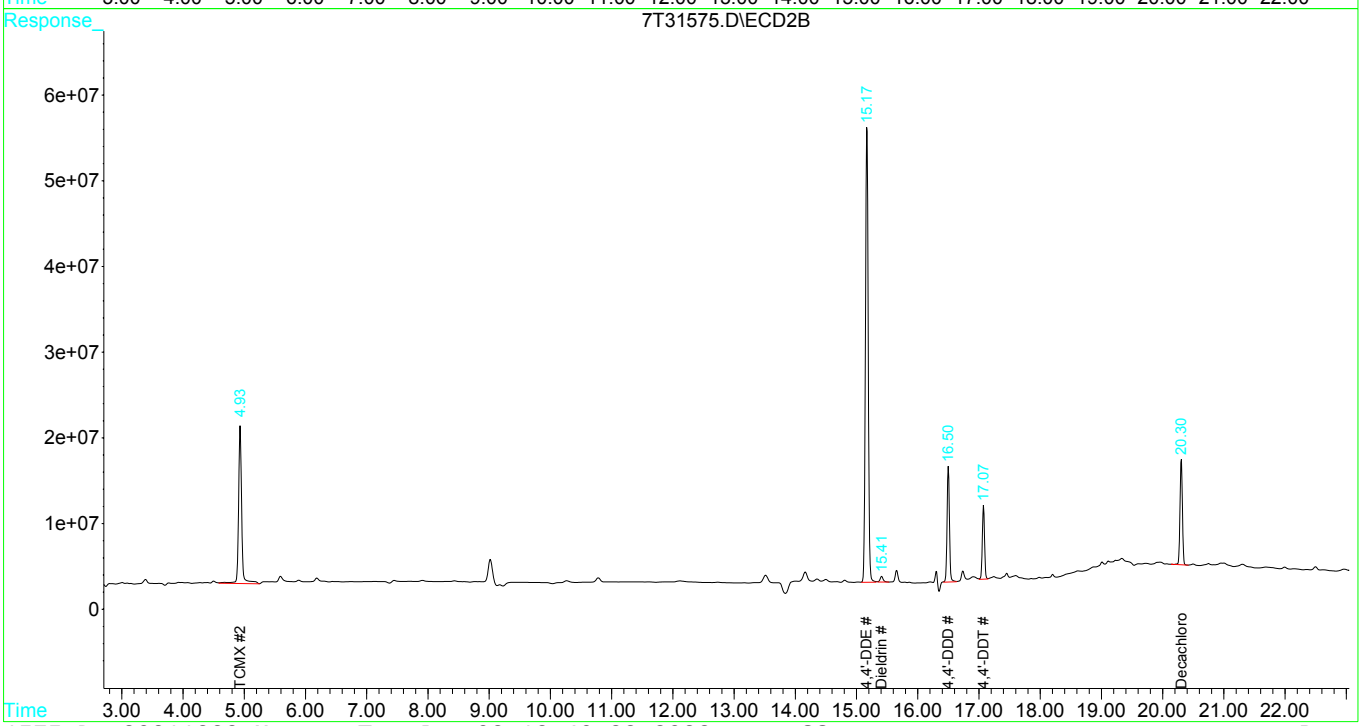
Quantitation Report (QT Reviewed)

Signal #1 : G:\HPCHEM\GCECD7\DATA\20221229A\7T31575.D\ECD1A.CH Vial: 50
Signal #2 : G:\HPCHEM\GCECD7\DATA\20221229A\7T31575.D\ECD2B.CH
Acq On : 30 Dec 2022 12:04 Operator: WD
Sample : 2120937-06 Inst : GCECD-7
Misc : Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Jan 3 12:24 2023 Quant Results File: 80811228.RES

Quant Method : G:\HPCHEM\G...\80811228.M (Chemstation Integrator)
Title : Pesticides by Method SW-846 8081B
Last Update : Fri Dec 30 10:52:46 2022
Response via : Multiple Level Calibration
DataAcq Meth : RUNPEST1.M

Volume Inj. : 2ul
Signal #1 Phase : RTx-50 Signal #2 Phase: RTx-CLPesticides II
Signal #1 Info : 30M x 0.53mm x 0. Signal #2 Info : 30M x 0.53mm x 0.42um





ANALYSIS DATA SHEET

Pesticides - SW 846 8081B

Client: **Dynamic Earth LLC**
Client Sample ID: **T-3-1**
Lab Sample ID: **2120937-07**
Project: **Old Orchard G.C.**
Work Order: **2120937**

Date Sampled:	12/20/22 08:58	Prep Date:	12/28/22 08:30	File ID:	7T31576.D
Init/Final Vol:	15 g / 10 mL	Prep Batch:	B2L2804	Analyzed:	12/30/22 12:29
Dilution:	1	Matrix:	Soil	Sequence:	SAA0005
Percent Solids:	87.18	Prep Method:	Microwave Extraction		

CAS NO.	COMPOUND	CONC. (mg/kg dry)	MDL	RL	Qual
60-57-1	Dieldrin	0.0592	0.000780	0.00149	

11 11.2.

ND, U - Indicates compound analyzed for but not detected
J - Indicates estimated value
B - Indicates compound found in associated blank
E - Concentration exceeds highest calibration standard

D - Indicates result is based on a dilution
H - Indicates a Hold Time violation
P - Greater than 25% diff. between 2 GC columns.
MDL - Minimum detection limit, **RL** - Reporting limit

F-I

Quantitation Report (QT Reviewed)

Signal #1 : G:\HPCHEM\GCECD7\DATA\20221229A\7T31576.D\ECD1A.CH Vial: 51
Signal #2 : G:\HPCHEM\GCECD7\DATA\20221229A\7T31576.D\ECD2B.CH
Acq On : 30 Dec 2022 12:29 Operator: WD
Sample : 2120937-07 Inst : GCECD-7
Misc : Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Jan 3 12:25 2023 Quant Results File: 80811228.RES

Quant Method : G:\HPCHEM\G...\80811228.M (Chemstation Integrator)
Title : Pesticides by Method SW-846 8081B
Last Update : Fri Dec 30 10:52:46 2022
Response via : Initial Calibration
DataAcq Meth : RUNPEST1.M

Volume Inj. : 2ul
Signal #1 Phase : RTx-50 Signal #2 Phase: RTx-CLPesticides II
Signal #1 Info : 30M x 0.53mm x 0. Signal #2 Info : 30M x 0.53mm x 0.42um

	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/kg	ug/kg
	System Monitoring Compounds						
1) S	TCMX	4.01	4.93	1050.8E6	768.5E6	33.188	52.449 #
	Spiked Amount 50.000	Range 43 - 129		Recovery =		66.38%	104.90%
21) S	Decachlorobiphen	18.74	20.31	1056.4E6	450.4E6	37.797	41.355
	Spiked Amount 50.000	Range 42 - 136		Recovery =		75.59%	82.71%
	Target Compounds						
8)	Heptachlor epoxi	10.13	13.19	55327207	27025920	1.254m	1.451m
10)	4,4'-DDE	11.70	15.17	8197.3E6	3199.1E6	189.117	211.063
11) M	Dieldrin	12.70	15.41	3449.9E6	1355.8E6	77.399	81.739
13)	4,4'-DDD	14.28	16.50	992.9E6	375.0E6	35.896m	35.566m
15) M	4,4'-DDT	15.09	17.07	871.1E6	322.1E6	25.538m	29.490m
	Sum Chlordane (gamma)			0	0	N.D.	N.D.
	Average Chlordane (gamma)					0.000	0.000
	Sum Toxaphene (1)			0	0	N.D.	N.D.
	Average Toxaphene (1)					0.000	0.000

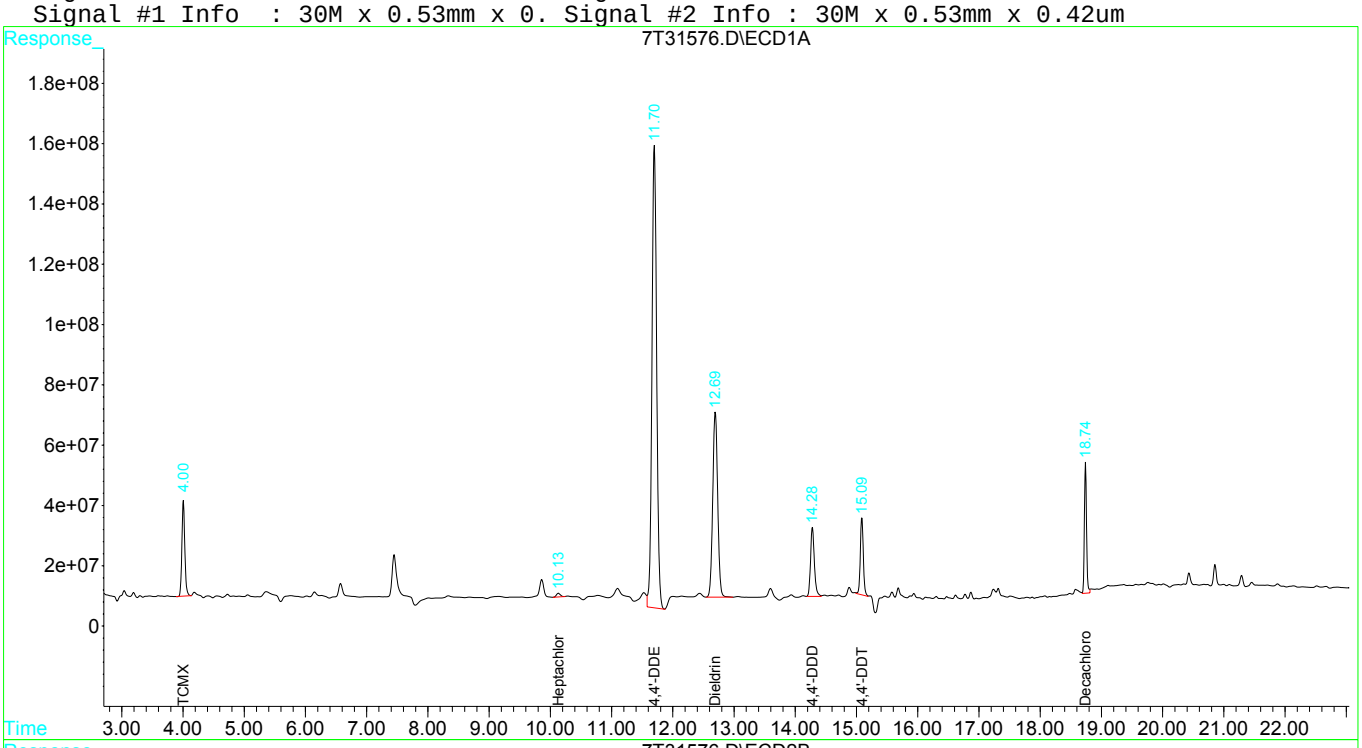
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.
7T31576.D 80811228.M Tue Jan 03 12:40:33 2023 SS

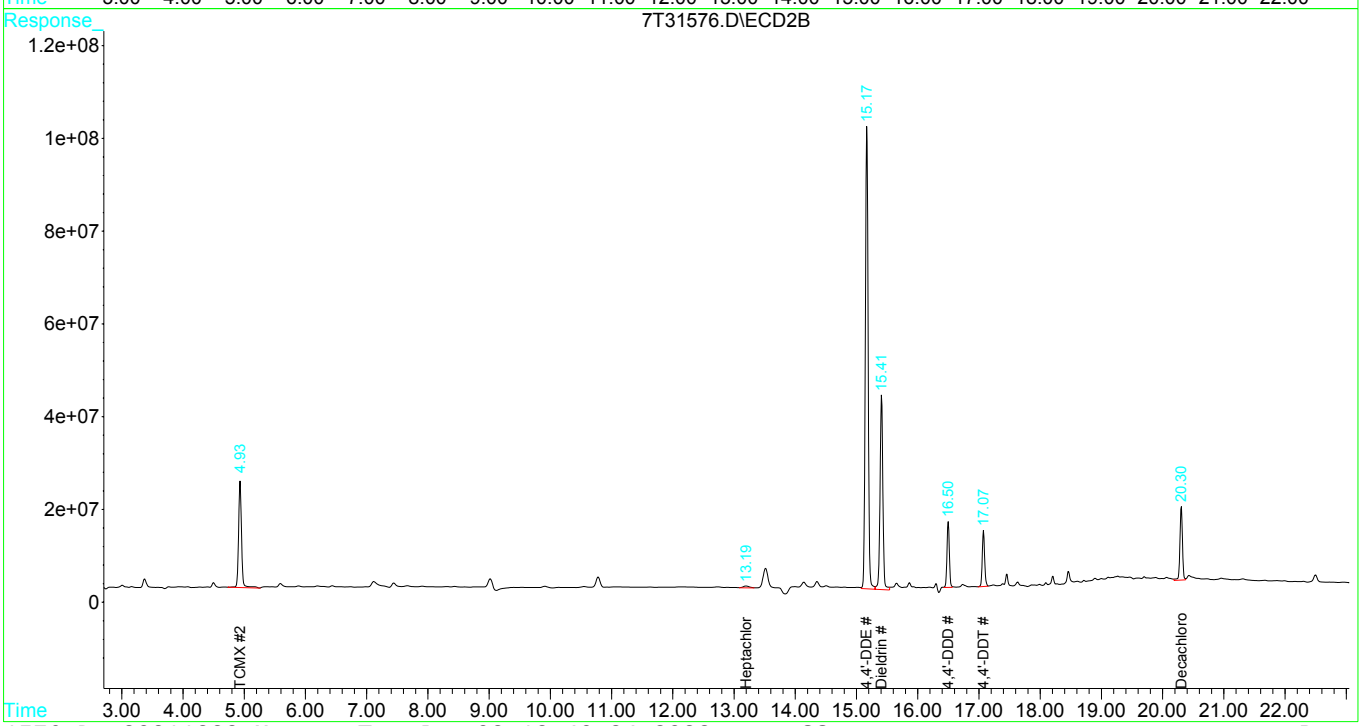
Quantitation Report (QT Reviewed)

Signal #1 : G:\HPCHEM\GCECD7\DATA\20221229A\7T31576.D\ECD1A.CH Vial: 51
Signal #2 : G:\HPCHEM\GCECD7\DATA\20221229A\7T31576.D\ECD2B.CH
Acq On : 30 Dec 2022 12:29 Operator: WD
Sample : 2120937-07 Inst : GCECD-7
Misc : Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Jan 3 12:25 2023 Quant Results File: 80811228.RES

Quant Method : G:\HPCHEM\G...\80811228.M (Chemstation Integrator)
Title : Pesticides by Method SW-846 8081B
Last Update : Fri Dec 30 10:52:46 2022
Response via : Multiple Level Calibration
DataAcq Meth : RUNPEST1.M

Volume Inj. : 2ul
Signal #1 Phase : RTx-50 Signal #2 Phase: RTx-CLPesticides II
Signal #1 Info : 30M x 0.53mm x 0. Signal #2 Info : 30M x 0.53mm x 0.42um





ANALYSIS DATA SHEET

Pesticides - SW 846 8081B

Client: **Dynamic Earth LLC**
Client Sample ID: **T-3-2**
Lab Sample ID: **2120937-08RE1**
Project: **Old Orchard G.C.**
Work Order: **2120937**

Date Sampled:	12/20/22 09:02	Prep Date:	12/28/22 08:30	File ID:	7T31661.D
Init/Final Vol:	15 g / 10 mL	Prep Batch:	B2L2804	Analyzed:	01/03/23 16:26
Dilution:	10	Matrix:	Soil	Sequence:	SAA0029
Percent Solids:	86.65	Prep Method:	Microwave Extraction		

CAS NO.	COMPOUND	CONC. (mg/kg dry)	MDL	RL	Qual
60-57-1	Dieldrin	0.360	0.00785	0.0150	D

11 11.2.

ND, U - Indicates compound analyzed for but not detected
J - Indicates estimated value
B - Indicates compound found in associated blank
E - Concentration exceeds highest calibration standard

D - Indicates result is based on a dilution
H - Indicates a Hold Time violation
P - Greater than 25% diff. between 2 GC columns.
MDL - Minimum detection limit, **RL** - Reporting limit

F-I

Quantitation Report (QT Reviewed)

Signal #1 : G:\HPCHEM\GCECD7\DATA\20230103\7T31661.D\ECD1A.CH Vial: 6
Signal #2 : G:\HPCHEM\GCECD7\DATA\20230103\7T31661.D\ECD2B.CH
Acq On : 3 Jan 2023 4:26 pm Operator: WD
Sample : 2120937-08RE1 Inst : HP G1530A
Misc : 10X Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Jan 3 17:15 2023 Quant Results File: 80811228.RES

Quant Method : G:\HPCHEM\G...\80811228.M (Chemstation Integrator)
Title : Pesticides by Method SW-846 8081B
Last Update : Tue Jan 03 16:46:04 2023
Response via : Initial Calibration
DataAcq Meth : RUNPEST1.M

Volume Inj. : 2ul
Signal #1 Phase : RTx-50 Signal #2 Phase: RTx-CLPesticides II
Signal #1 Info : 30M x 0.53mm x 0. Signal #2 Info : 30M x 0.53mm x 0.42um

Compound	RT#1	RT#2	Resp#1	Resp#2	ug/kg	ug/kg
System Monitoring Compounds						
1) S TCMX	4.16	5.11	150.7E6	70145559	4.759	4.787m
Spiked Amount 50.000	Range 43 - 129		Recovery =		9.52%#	9.57%#
21) S Decachlorobiphen	18.86	20.46	148.7E6	50608977	5.320m	4.647m
Spiked Amount 50.000	Range 42 - 136		Recovery =		10.64%#	9.29%#
Target Compounds						
10) 4,4'-DDE	12.03	15.36	1964.9E6	755.8E6	45.331	49.866
11) M Dieldrin	13.06	15.60	2086.3E6	814.0E6	46.808	49.078
Sum Chlordane (gamma)			0	0	N.D.	N.D.
Average Chlordane (gamma)					0.000	0.000
Sum Toxaphene (1)			0	0	N.D.	N.D.
Average Toxaphene (1)					0.000	0.000

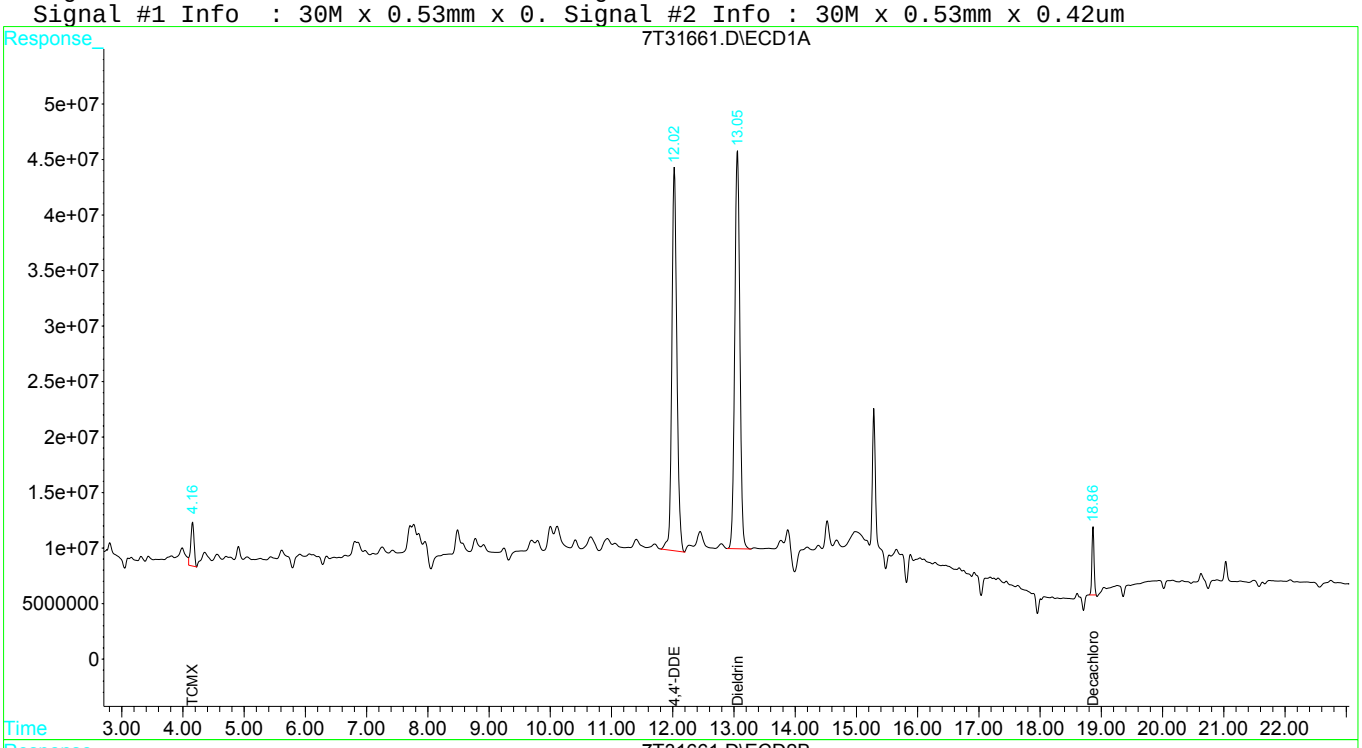
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.
7T31661.D 80811228.M Tue Jan 03 19:00:09 2023 SS

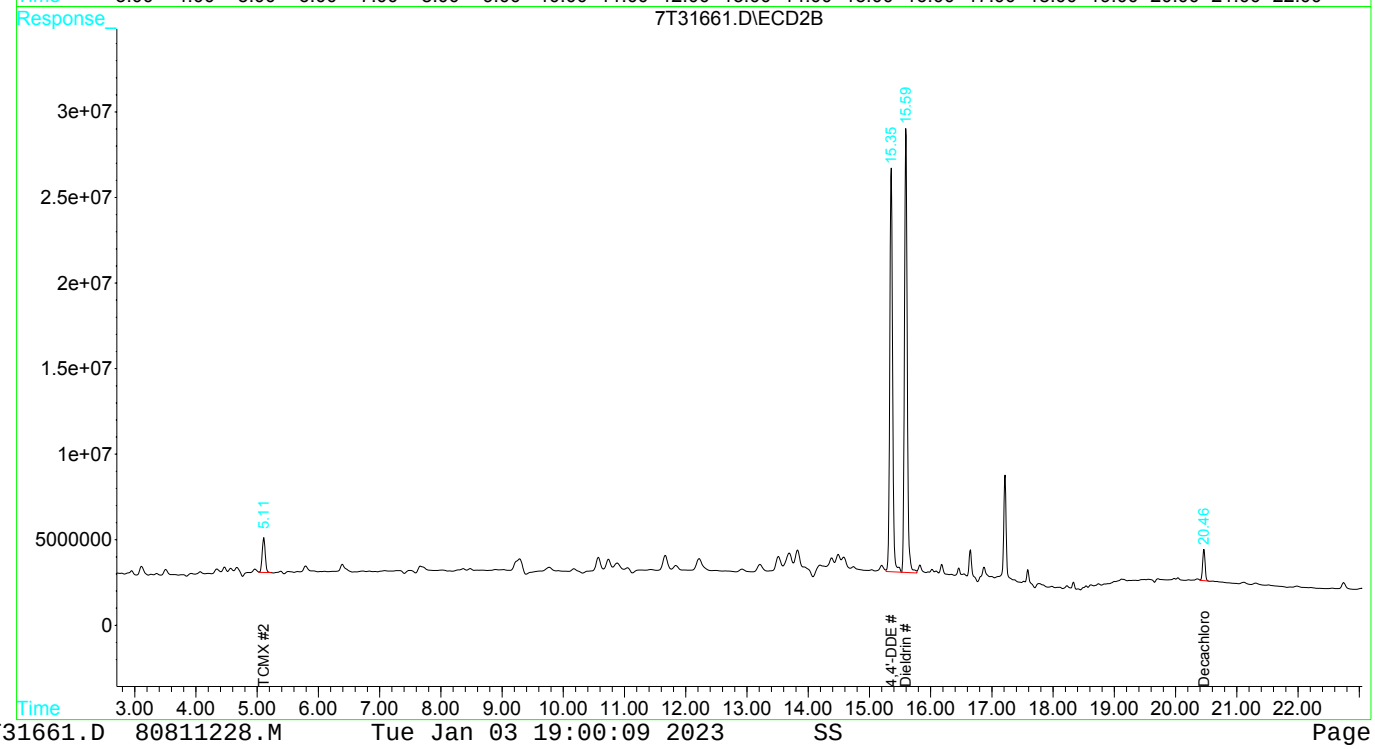
Quantitation Report (QT Reviewed)

Signal #1 : G:\HPCHEM\GCECD7\DATA\20230103\7T31661.D\ECD1A.CH Vial: 6
Signal #2 : G:\HPCHEM\GCECD7\DATA\20230103\7T31661.D\ECD2B.CH
Acq On : 3 Jan 2023 4:26 pm Operator: WD
Sample : 2120937-08RE1 Inst : HP G1530A
Misc : 10X Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Jan 3 17:15 2023 Quant Results File: 80811228.RES

Quant Method : G:\HPCHEM\G...\80811228.M (Chemstation Integrator)
Title : Pesticides by Method SW-846 8081B
Last Update : Tue Jan 03 16:46:04 2023
Response via : Multiple Level Calibration
DataAcq Meth : RUNPEST1.M

Volume Inj. : 2ul
Signal #1 Phase : RTx-50 Signal #2 Phase: RTx-CLPesticides II
Signal #1 Info : 30M x 0.53mm x 0. Signal #2 Info : 30M x 0.53mm x 0.42um





ANALYSIS DATA SHEET

Pesticides - SW 846 8081B

Client: **Dynamic Earth LLC**
Client Sample ID: **T-3-3**
Lab Sample ID: **2120937-09**
Project: **Old Orchard G.C.**
Work Order: **2120937**

Date Sampled:	12/20/22 09:06	Prep Date:	12/28/22 08:30	File ID:	7T31578.D
Init/Final Vol:	15 g / 10 mL	Prep Batch:	B2L2804	Analyzed:	12/30/22 13:20
Dilution:	1	Matrix:	Soil	Sequence:	SAA0005
Percent Solids:	85.38	Prep Method:	Microwave Extraction		

CAS NO.	COMPOUND	CONC. (mg/kg dry)	MDL	RL	Qual
60-57-1	Dieldrin	0.156	0.000796	0.00152	

11 11.2.

ND, U - Indicates compound analyzed for but not detected
J - Indicates estimated value
B - Indicates compound found in associated blank
E - Concentration exceeds highest calibration standard

D - Indicates result is based on a dilution
H - Indicates a Hold Time violation
P - Greater than 25% diff. between 2 GC columns.
MDL - Minimum detection limit, **RL** - Reporting limit

F-I

Quantitation Report (QT Reviewed)

Signal #1 : G:\HPCHEM\GCECD7\DATA\20221229A\7T31578.D\ECD1A.CH Vial: 53
Signal #2 : G:\HPCHEM\GCECD7\DATA\20221229A\7T31578.D\ECD2B.CH
Acq On : 30 Dec 2022 13:20 Operator: WD
Sample : 2120937-09 Inst : GCECD-7
Misc : Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Jan 3 12:27 2023 Quant Results File: 80811228.RES

Quant Method : G:\HPCHEM\G...\80811228.M (Chemstation Integrator)
Title : Pesticides by Method SW-846 8081B
Last Update : Fri Dec 30 10:52:46 2022
Response via : Initial Calibration
DataAcq Meth : RUNPEST1.M

Volume Inj. : 2ul
Signal #1 Phase : RTx-50 Signal #2 Phase: RTx-CLPesticides II
Signal #1 Info : 30M x 0.53mm x 0. Signal #2 Info : 30M x 0.53mm x 0.42um

	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/kg	ug/kg
	System Monitoring Compounds						
1) S	TCMX	4.01	4.93	1161.1E6	757.2E6	36.670	51.681 #
	Spiked Amount 50.000	Range 43 - 129		Recovery =		73.34%	103.36%
21) S	Decachlorobiphen	18.74	20.30	1037.5E6	418.5E6	37.120m	38.429m
	Spiked Amount 50.000	Range 42 - 136		Recovery =		74.24%	76.86%
	Target Compounds						
8)	Heptachlor epoxi	10.13	13.19	156.0E6	33354505	3.536m	1.791m#
10)	4,4'-DDE	11.70	15.17	28685.4E6	11893.5E6	661.792	784.685
11) M	Dieldrin	12.69	15.41	8927.9E6	3797.9E6	200.299	228.975
13)	4,4'-DDD	14.27	16.50	7910.9E6	3065.3E6	285.995m	290.699m
15) M	4,4'-DDT	15.08	17.07	7382.8E6	2856.1E6	216.433m	261.479m
22) L1	Chlordane (gamma	10.63f	13.99	141.0E6	243.0E6	3.115m	12.995 #
23) L1	Chlordane (alpha	11.10	14.52	2508.7E6	257.1E6	54.675	14.716 #
	Sum Chlordane (gamma)			2649.7E6	500.1E6	57.790	27.711
Average	Chlordane (gamma)					28.895	13.856
	Sum Toxaphene (1)			0	0	N.D.	N.D.
Average	Toxaphene (1)					0.000	0.000

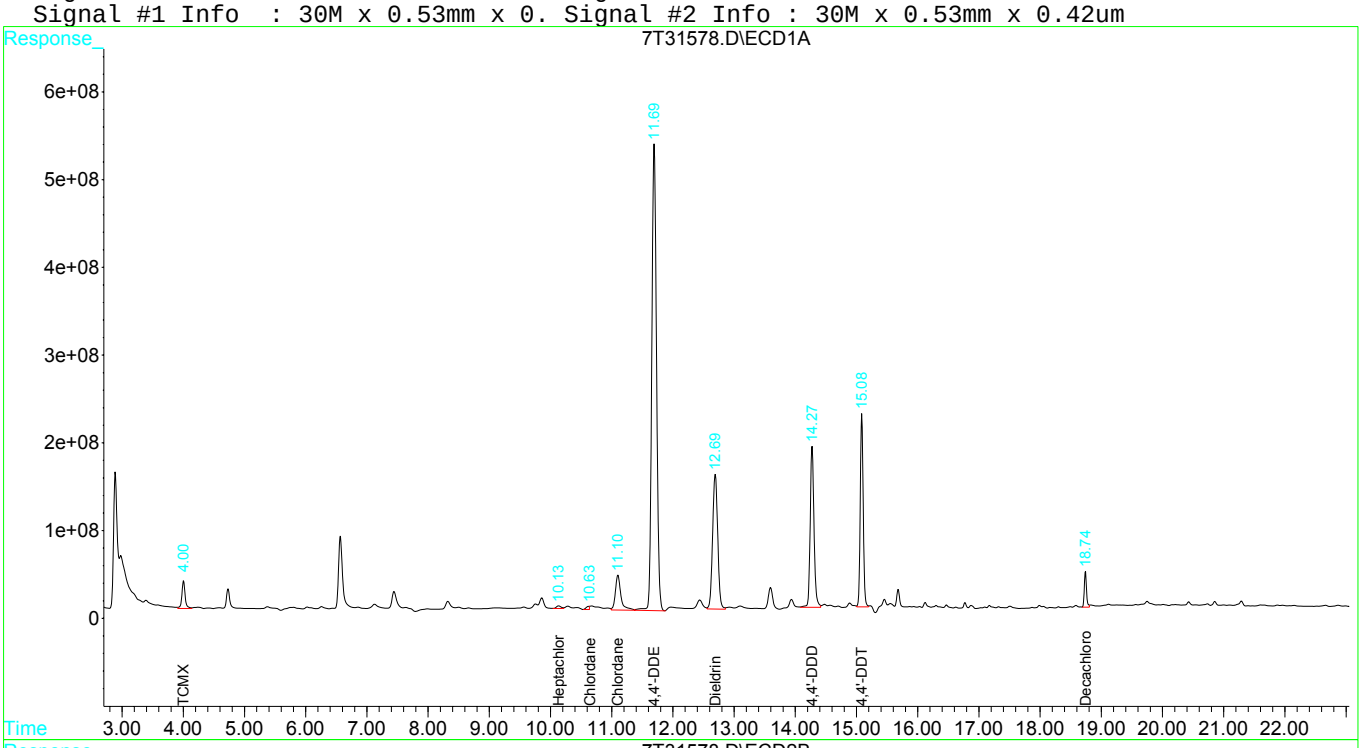
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

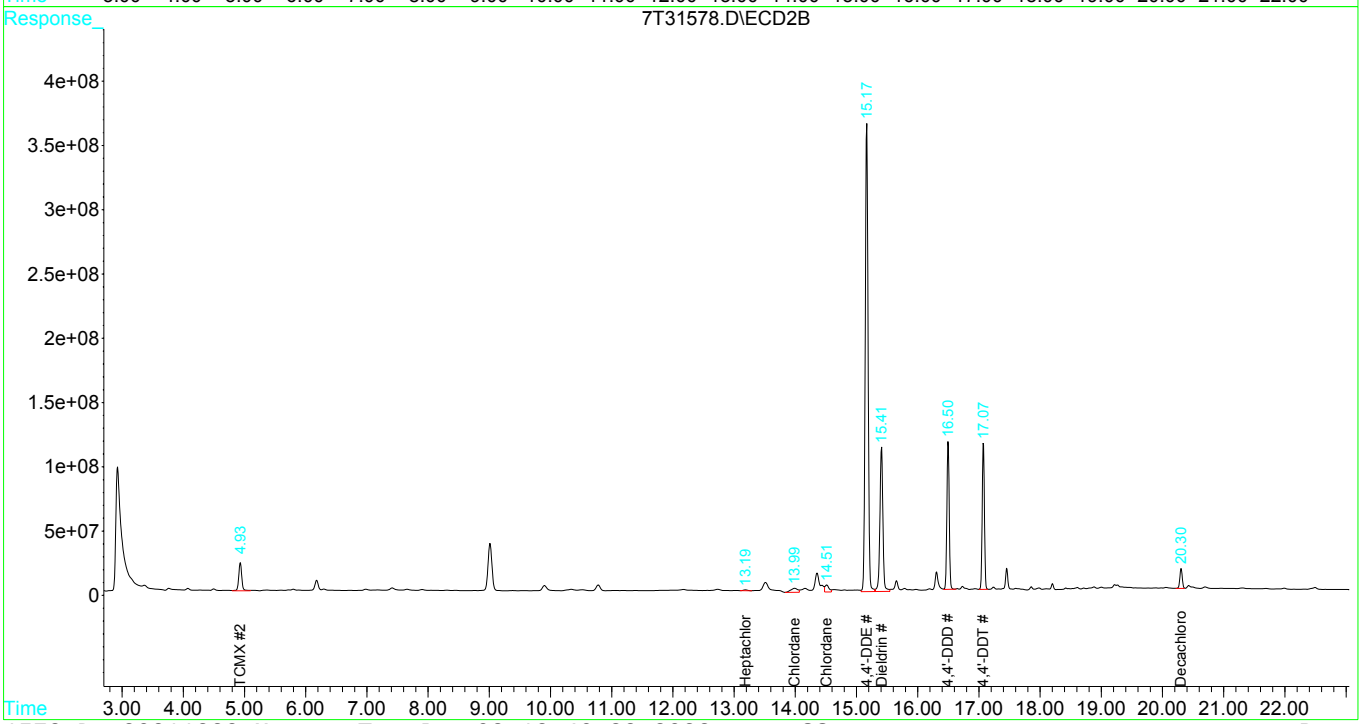
Quantitation Report (QT Reviewed)

Signal #1 : G:\HPCHEM\GCECD7\DATA\20221229A\7T31578.D\ECD1A.CH Vial: 53
Signal #2 : G:\HPCHEM\GCECD7\DATA\20221229A\7T31578.D\ECD2B.CH
Acq On : 30 Dec 2022 13:20 Operator: WD
Sample : 2120937-09 Inst : GCECD-7
Misc : Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Jan 3 12:27 2023 Quant Results File: 80811228.RES

Quant Method : G:\HPCHEM\G...\80811228.M (Chemstation Integrator)
Title : Pesticides by Method SW-846 8081B
Last Update : Fri Dec 30 10:52:46 2022
Response via : Multiple Level Calibration
DataAcq Meth : RUNPEST1.M

Volume Inj. : 2ul
Signal #1 Phase : RTx-50 Signal #2 Phase: RTx-CLPesticides II
Signal #1 Info : 30M x 0.53mm x 0. Signal #2 Info : 30M x 0.53mm x 0.42um





ANALYSIS DATA SHEET

Pesticides - SW 846 8081B

Client: **Dynamic Earth LLC**
Client Sample ID: **T-3-4**
Lab Sample ID: **2120937-10**
Project: **Old Orchard G.C.**
Work Order: **2120937**

Date Sampled:	12/20/22 09:10	Prep Date:	12/28/22 08:30	File ID:	7T31579.D
Init/Final Vol:	15 g / 10 mL	Prep Batch:	B2L2804	Analyzed:	12/30/22 13:45
Dilution:	1	Matrix:	Soil	Sequence:	SAA0005
Percent Solids:	84.45	Prep Method:	Microwave Extraction		

CAS NO.	COMPOUND	CONC. (mg/kg dry)	MDL	RL	Qual
60-57-1	Dieldrin	0.178	0.000805	0.00154	

ND, U - Indicates compound analyzed for but not detected
J - Indicates estimated value
B - Indicates compound found in associated blank
E - Concentration exceeds highest calibration standard

D - Indicates result is based on a dilution
H - Indicates a Hold Time violation
P - Greater than 25% diff. between 2 GC columns.
MDL - Minimum detection limit, **RL** - Reporting limit

F-I

Quantitation Report (QT Reviewed)

Signal #1 : G:\HPCHEM\GCECD7\DATA\20221229A\7T31579.D\ECD1A.CH Vial: 54
Signal #2 : G:\HPCHEM\GCECD7\DATA\20221229A\7T31579.D\ECD2B.CH
Acq On : 30 Dec 2022 13:45 Operator: WD
Sample : 2120937-10 Inst : GCECD-7
Misc : Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Jan 3 12:28 2023 Quant Results File: 80811228.RES

Quant Method : G:\HPCHEM\G...\80811228.M (Chemstation Integrator)
Title : Pesticides by Method SW-846 8081B
Last Update : Fri Dec 30 10:52:46 2022
Response via : Initial Calibration
DataAcq Meth : RUNPEST1.M

Volume Inj. : 2ul
Signal #1 Phase : RTx-50 Signal #2 Phase: RTx-CLPesticides II
Signal #1 Info : 30M x 0.53mm x 0. Signal #2 Info : 30M x 0.53mm x 0.42um

	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/kg	ug/kg
	System Monitoring Compounds						
1) S	TCMX	4.00	4.93	807.1E6	544.8E6	25.491	37.180 #
Spiked Amount	50.000	Range	43 - 129	Recovery	=	50.98%	74.36%
21) S	Decachlorobiphen	18.74	20.31	718.4E6	296.8E6	25.702	27.256
Spiked Amount	50.000	Range	42 - 136	Recovery	=	51.40%	54.51%
	Target Compounds						
8)	Heptachlor epoxi	10.13	13.19	442.7E6	171.8E6	10.031m	9.225m
10)	4,4'-DDE	11.69	15.17	19453.9E6	7906.7E6	448.815	521.651
11) M	Dieldrin	12.69	15.41	10022.0E6	3982.8E6	224.847	240.124
13)	4,4'-DDD	14.27	16.50	4667.8E6	1775.0E6	168.750m	168.330
15) M	4,4'-DDT	15.08	17.07	3411.3E6	1261.3E6	100.005m	115.475
22) L1	Chlordane (gamma	10.62	14.00	184.1E6	49302395	4.065	2.637m#
23) L1	Chlordane (alpha	11.11	14.51	1162.8E6	90009220	25.342	5.152m#
Sum	Chlordane (gamma)			1346.9E6	139.3E6	29.408	7.789
Average	Chlordane (gamma)					14.704	3.894
Sum	Toxaphene (1)			0	0	N.D.	N.D.
Average	Toxaphene (1)					0.000	0.000

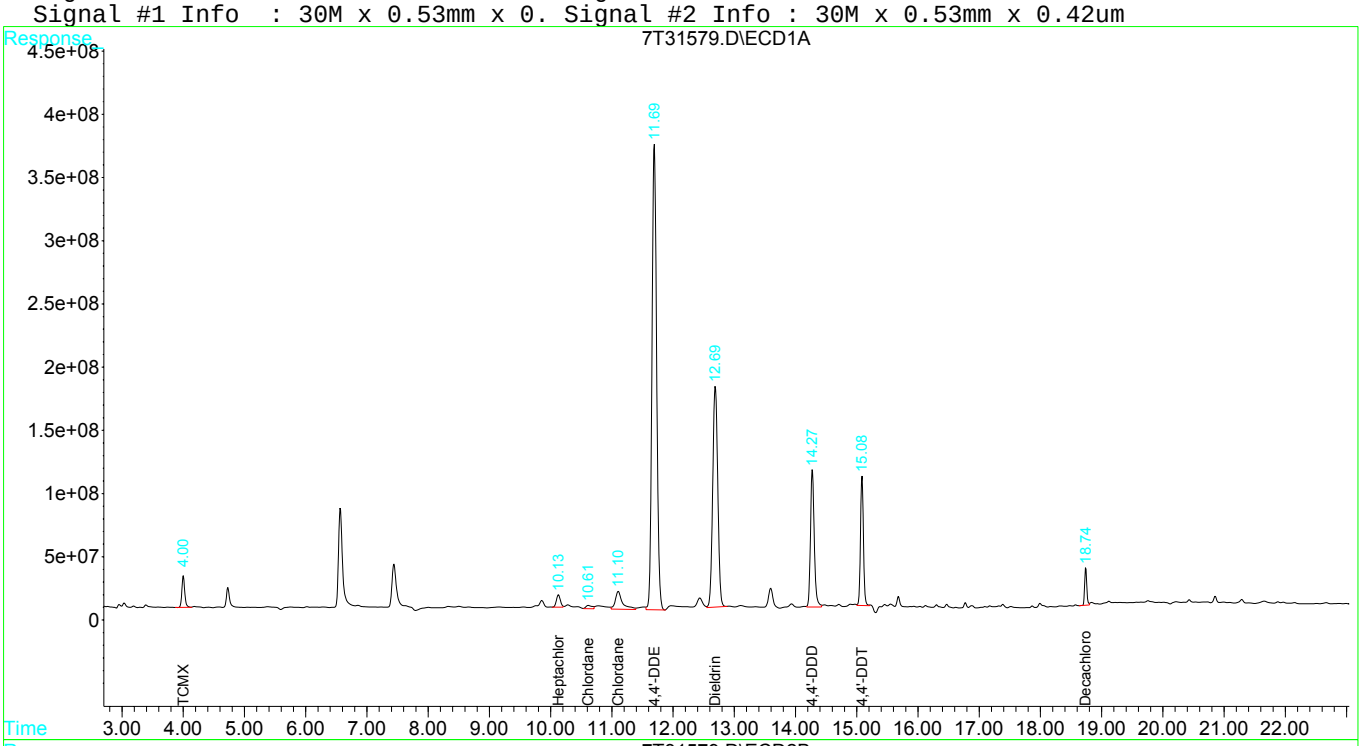
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.
7T31579.D 80811228.M Tue Jan 03 12:40:39 2023 SS

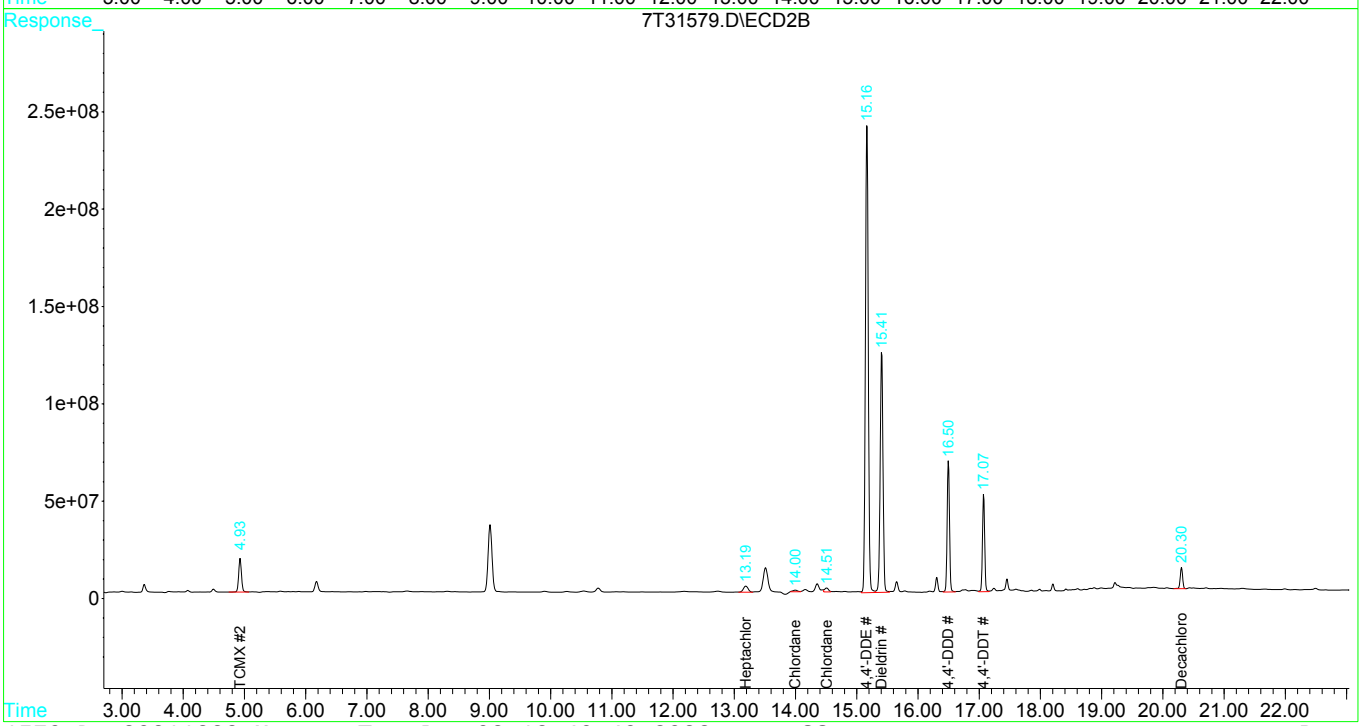
Quantitation Report (QT Reviewed)

Signal #1 : G:\HPCHEM\GCECD7\DATA\20221229A\7T31579.D\ECD1A.CH Vial: 54
Signal #2 : G:\HPCHEM\GCECD7\DATA\20221229A\7T31579.D\ECD2B.CH
Acq On : 30 Dec 2022 13:45 Operator: WD
Sample : 2120937-10 Inst : GCECD-7
Misc : Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Jan 3 12:28 2023 Quant Results File: 80811228.RES

Quant Method : G:\HPCHEM\G...\80811228.M (Chemstation Integrator)
Title : Pesticides by Method SW-846 8081B
Last Update : Fri Dec 30 10:52:46 2022
Response via : Multiple Level Calibration
DataAcq Meth : RUNPEST1.M

Volume Inj. : 2ul
Signal #1 Phase : RTx-50 Signal #2 Phase: RTx-CLPesticides II
Signal #1 Info : 30M x 0.53mm x 0. Signal #2 Info : 30M x 0.53mm x 0.42um





ANALYSIS DATA SHEET

Pesticides - SW 846 8081B

Client: **Dynamic Earth LLC**
Client Sample ID: **T-4A**
Lab Sample ID: **2120937-11**
Project: **Old Orchard G.C.**
Work Order: **2120937**

Date Sampled:	12/20/22 09:14	Prep Date:	12/28/22 08:30	File ID:	7T31580.D
Init/Final Vol:	15 g / 10 mL	Prep Batch:	B2L2804	Analyzed:	12/30/22 14:11
Dilution:	1	Matrix:	Soil	Sequence:	SAA0005
Percent Solids:	88.82	Prep Method:	Microwave Extraction		

CAS NO.	COMPOUND	CONC. (mg/kg dry)	MDL	RL	Qual
60-57-1	Dieldrin	0.0126	0.000766	0.00146	

ND, U - Indicates compound analyzed for but not detected
J - Indicates estimated value
B - Indicates compound found in associated blank
E - Concentration exceeds highest calibration standard

D - Indicates result is based on a dilution
H - Indicates a Hold Time violation
P - Greater than 25% diff. between 2 GC columns.
MDL - Minimum detection limit, **RL** - Reporting limit

F-I

Quantitation Report (QT Reviewed)

Signal #1 : G:\HPCHEM\GCECD7\DATA\20221229A\7T31580.D\ECD1A.CH Vial: 55
Signal #2 : G:\HPCHEM\GCECD7\DATA\20221229A\7T31580.D\ECD2B.CH
Acq On : 30 Dec 2022 14:11 Operator: WD
Sample : 2120937-11 Inst : GCECD-7
Misc : Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Jan 3 12:29 2023 Quant Results File: 80811228.RES

Quant Method : G:\HPCHEM\G...\80811228.M (Chemstation Integrator)
Title : Pesticides by Method SW-846 8081B
Last Update : Fri Dec 30 10:52:46 2022
Response via : Initial Calibration
DataAcq Meth : RUNPEST1.M

Volume Inj. : 2ul
Signal #1 Phase : RTx-50 Signal #2 Phase: RTx-CLPesticides II
Signal #1 Info : 30M x 0.53mm x 0. Signal #2 Info : 30M x 0.53mm x 0.42um

	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/kg	ug/kg
	System Monitoring Compounds						
1) S	TCMX	4.01	4.93	1076.7E6	815.5E6	34.004	55.659 #
Spiked Amount	50.000 Range	43 - 129	Recovery =			68.01%	111.32%
21) S	Decachlorobiphen	18.74	20.31	1114.6E6	437.6E6	39.877	40.183
Spiked Amount	50.000 Range	42 - 136	Recovery =			79.75%	80.37%
	Target Compounds						
8)	Heptachlor epoxi	10.13	13.19	549.4E6	193.7E6	12.450	10.404
10)	4,4'-DDE	11.70	15.17	11040.5E6	4267.0E6	254.713	281.516
11) M	Dieldrin	12.70	15.41	747.2E6	295.5E6	16.763	17.817
13)	4,4'-DDD	14.28	16.50	2381.1E6	860.4E6	86.082m	81.599m
15) M	4,4'-DDT	15.09	17.08	1355.1E6	489.3E6	39.726m	44.796
22) L1	Chlordane (gamma	10.62	14.00	87530298	40686663	1.933	2.176m
23) L1	Chlordane (alpha	11.11	14.52	110.8E6	37551223	2.414m	2.149
Sum	Chlordane (gamma)			198.3E6	78237886	4.347	4.325
Average	Chlordane (gamma)					2.173	2.163
Sum	Toxaphene (1)			0	0	N.D.	N.D.
Average	Toxaphene (1)					0.000	0.000

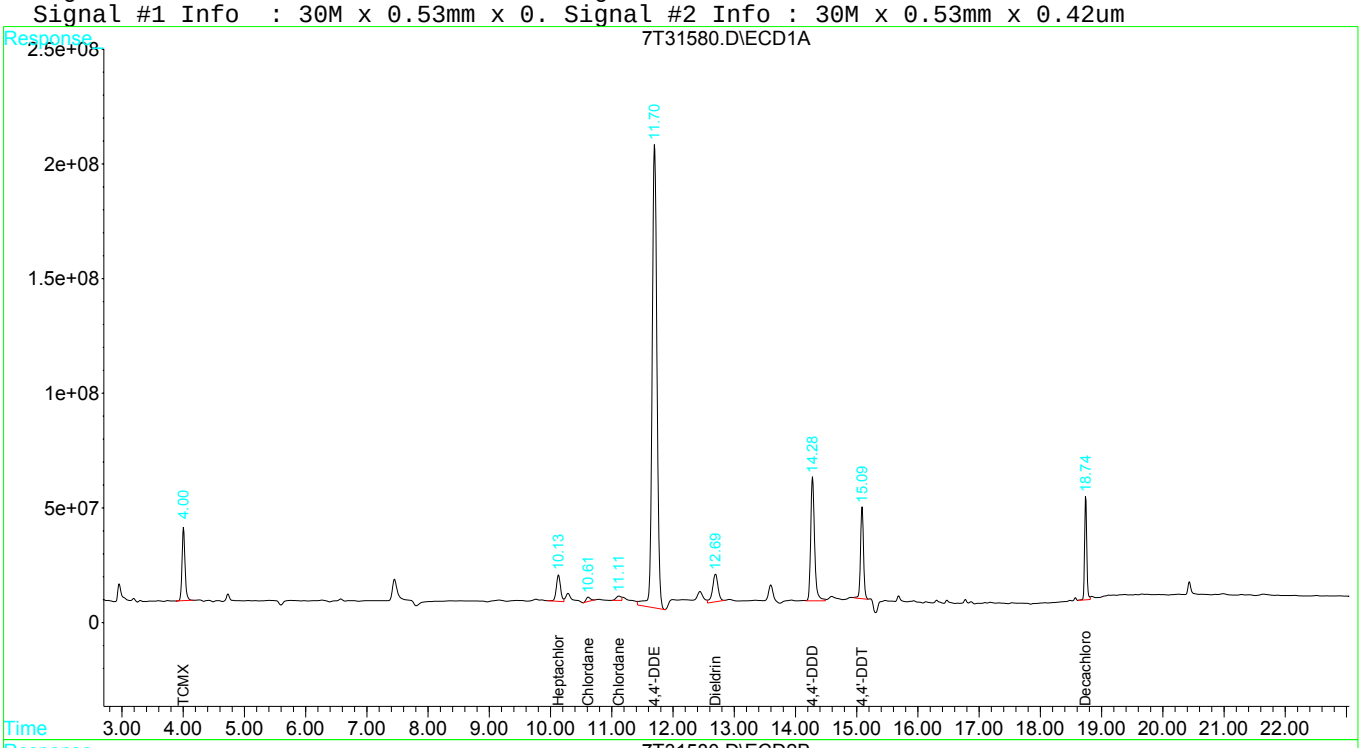
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7T31580.D 80811228.M Tue Jan 03 12:40:41 2023 SS Page 1

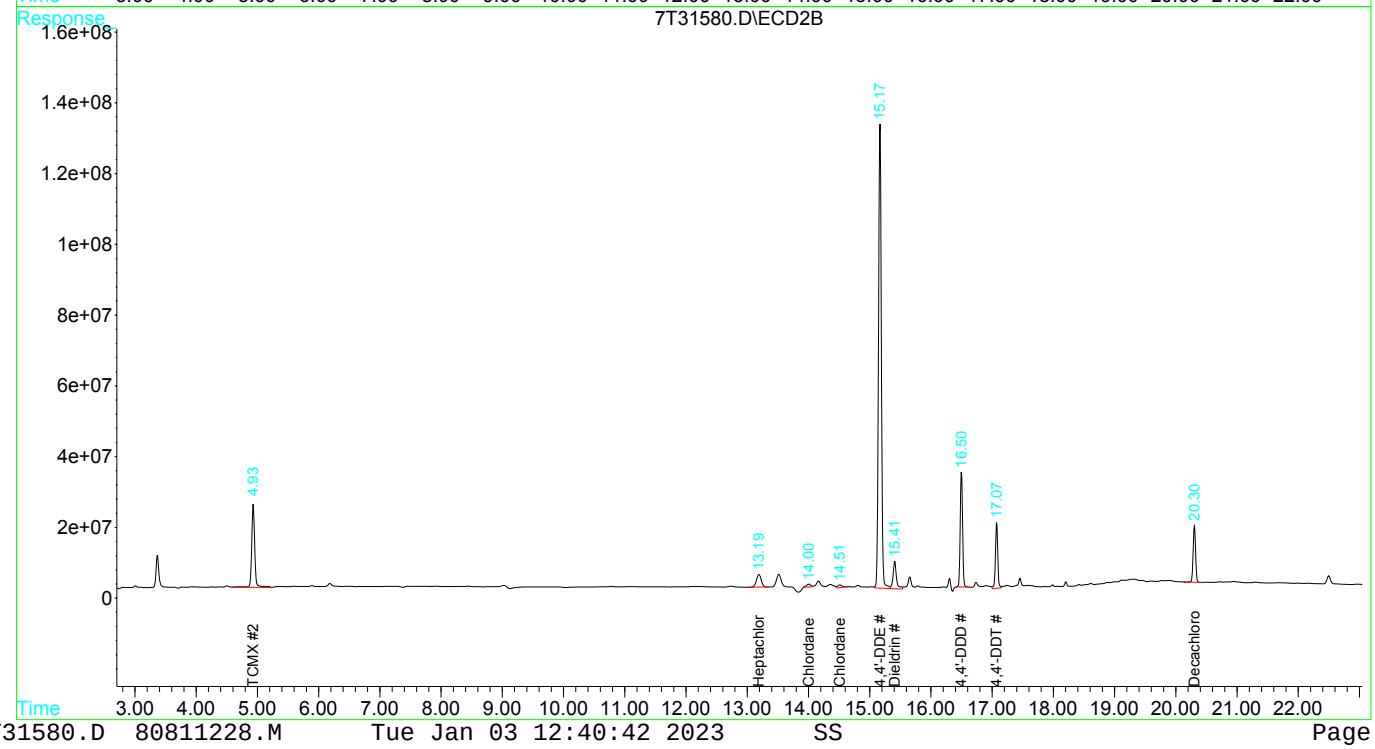
Quantitation Report (QT Reviewed)

Signal #1 : G:\HPCHEM\GCECD7\DATA\20221229A\7T31580.D\ECD1A.CH Vial: 55
Signal #2 : G:\HPCHEM\GCECD7\DATA\20221229A\7T31580.D\ECD2B.CH
Acq On : 30 Dec 2022 14:11 Operator: WD
Sample : 2120937-11 Inst : GCECD-7
Misc : Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Jan 3 12:29 2023 Quant Results File: 80811228.RES

Quant Method : G:\HPCHEM\G...\80811228.M (Chemstation Integrator)
Title : Pesticides by Method SW-846 8081B
Last Update : Fri Dec 30 10:52:46 2022
Response via : Multiple Level Calibration
DataAcq Meth : RUNPEST1.M

Volume Inj. : 2ul
Signal #1 Phase : RTx-50 Signal #2 Phase: RTx-CLPesticides II
Signal #1 Info : 30M x 0.53mm x 0. Signal #2 Info : 30M x 0.53mm x 0.42um





ANALYSIS DATA SHEET

Pesticides - SW 846 8081B

Client: **Dynamic Earth LLC**
Client Sample ID: **T-4-1**
Lab Sample ID: **2120937-12**
Project: **Old Orchard G.C.**
Work Order: **2120937**

Date Sampled:	12/20/22 09:20	Prep Date:	12/28/22 08:30	File ID:	7T31581.D
Init/Final Vol:	15 g / 10 mL	Prep Batch:	B2L2804	Analyzed:	12/30/22 14:36
Dilution:	1	Matrix:	Soil	Sequence:	SAA0005
Percent Solids:	85.99	Prep Method:	Microwave Extraction		

CAS NO.	COMPOUND	CONC. (mg/kg dry)	MDL	RL	Qual
60-57-1	Dieldrin	0.0220	0.000791	0.00151	

ND, U - Indicates compound analyzed for but not detected
J - Indicates estimated value
B - Indicates compound found in associated blank
E - Concentration exceeds highest calibration standard

D - Indicates result is based on a dilution
H - Indicates a Hold Time violation
P - Greater than 25% diff. between 2 GC columns.
MDL - Minimum detection limit, **RL** - Reporting limit

F-I

Quantitation Report (QT Reviewed)

Signal #1 : G:\HPCHEM\GCECD7\DATA\20221229A\7T31581.D\ECD1A.CH Vial: 56
Signal #2 : G:\HPCHEM\GCECD7\DATA\20221229A\7T31581.D\ECD2B.CH
Acq On : 30 Dec 2022 14:36 Operator: WD
Sample : 2120937-12 Inst : GCECD-7
Misc : Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Jan 3 12:30 2023 Quant Results File: 80811228.RES

Quant Method : G:\HPCHEM\G...\80811228.M (Chemstation Integrator)
Title : Pesticides by Method SW-846 8081B
Last Update : Fri Dec 30 10:52:46 2022
Response via : Initial Calibration
DataAcq Meth : RUNPEST1.M

Volume Inj. : 2ul
Signal #1 Phase : RTx-50 Signal #2 Phase: RTx-CLPesticides II
Signal #1 Info : 30M x 0.53mm x 0. Signal #2 Info : 30M x 0.53mm x 0.42um

	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/kg	ug/kg
	System Monitoring Compounds						
1) S	TCMX	4.00	4.93	1029.6E6	763.9E6	32.517	52.134 #
	Spiked Amount 50.000	Range 43 - 129		Recovery =		65.03%	104.27%
21) S	Decachlorobiphen	18.74	20.31	1025.1E6	448.7E6	36.677	41.201
	Spiked Amount 50.000	Range 42 - 136		Recovery =		73.35%	82.40%
	Target Compounds						
8)	Heptachlor epoxi	10.13	13.20	5382.0E6	2245.9E6	121.957	120.622
10)	4,4'-DDE	11.70	15.17	53506.2E6	22638.4E6	1234.425	1493.589
11) M	Dieldrin	12.70	15.41	1263.1E6	542.7E6	28.338	32.722
13)	4,4'-DDD	14.28	16.50	17568.1E6	7102.3E6	635.124	673.548
15) M	4,4'-DDT	15.09	17.08	12905.2E6	4765.4E6	378.329	436.282
22) L1	Chlordane (gamma	10.61	14.01	4452.2E6	2107.2E6	98.320	112.701
23) L1	Chlordane (alpha	11.12	14.52	2870.5E6	725.3E6	62.560	41.514 #
	Sum Chlordane (gamma)			7322.7E6	2832.6E6	160.880	154.215
Average	Chlordane (gamma)					80.440	77.108
	Sum Toxaphene (1)			0	0	N.D.	N.D.
Average	Toxaphene (1)					0.000	0.000

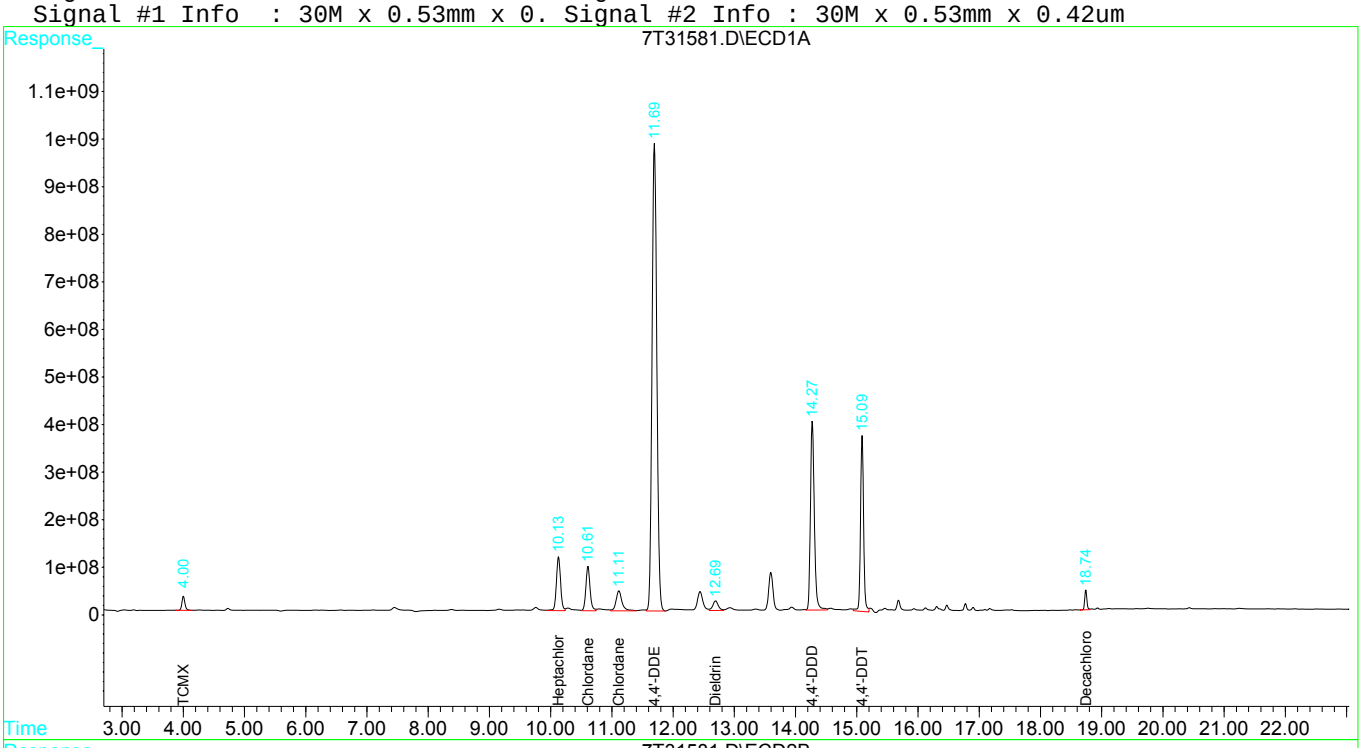
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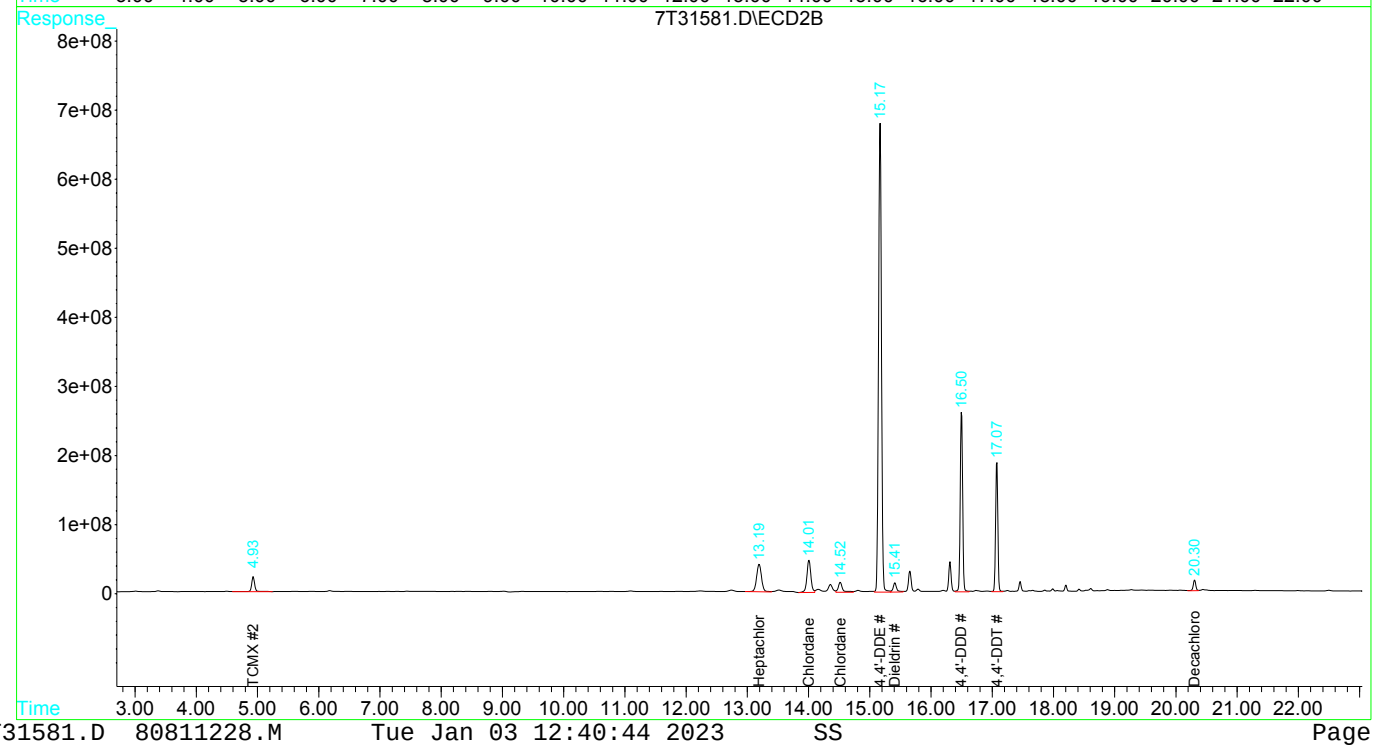
Quantitation Report (QT Reviewed)

Signal #1 : G:\HPCHEM\GCECD7\DATA\20221229A\7T31581.D\ECD1A.CH Vial: 56
Signal #2 : G:\HPCHEM\GCECD7\DATA\20221229A\7T31581.D\ECD2B.CH
Acq On : 30 Dec 2022 14:36 Operator: WD
Sample : 2120937-12 Inst : GCECD-7
Misc : Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Jan 3 12:30 2023 Quant Results File: 80811228.RES

Quant Method : G:\HPCHEM\G...\80811228.M (Chemstation Integrator)
Title : Pesticides by Method SW-846 8081B
Last Update : Fri Dec 30 10:52:46 2022
Response via : Multiple Level Calibration
DataAcq Meth : RUNPEST1.M

Volume Inj. : 2ul
Signal #1 Phase : RTx-50 Signal #2 Phase: RTx-CLPesticides II
Signal #1 Info : 30M x 0.53mm x 0. Signal #2 Info : 30M x 0.53mm x 0.42um





ANALYSIS DATA SHEET

Pesticides - SW 846 8081B

Client: **Dynamic Earth LLC**
Client Sample ID: **T-4-2**
Lab Sample ID: **2120937-13**
Project: **Old Orchard G.C.**
Work Order: **2120937**

Date Sampled:	12/20/22 09:24	Prep Date:	12/28/22 08:30	File ID:	7T31582.D
Init/Final Vol:	15 g / 10 mL	Prep Batch:	B2L2804	Analyzed:	12/30/22 15:02
Dilution:	1	Matrix:	Soil	Sequence:	SAA0005
Percent Solids:	85.29	Prep Method:	Microwave Extraction		

CAS NO.	COMPOUND	CONC. (mg/kg dry)	MDL	RL	Qual
60-57-1	Dieldrin [2C]	0.000899	0.000797	0.00152	J

11 11.2.

ND, U - Indicates compound analyzed for but not detected
J - Indicates estimated value
B - Indicates compound found in associated blank
E - Concentration exceeds highest calibration standard

D - Indicates result is based on a dilution
H - Indicates a Hold Time violation
P - Greater than 25% diff. between 2 GC columns.
MDL - Minimum detection limit, **RL** - Reporting limit

F-I

Quantitation Report (QT Reviewed)

Signal #1 : G:\HPCHEM\GCECD7\DATA\20221229A\7T31582.D\ECD1A.CH Vial: 57
Signal #2 : G:\HPCHEM\GCECD7\DATA\20221229A\7T31582.D\ECD2B.CH
Acq On : 30 Dec 2022 15:02 Operator: WD
Sample : 2120937-13 Inst : GCECD-7
Misc : Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Jan 3 12:31 2023 Quant Results File: 80811228.RES

Quant Method : G:\HPCHEM\G...\80811228.M (Chemstation Integrator)
Title : Pesticides by Method SW-846 8081B
Last Update : Fri Dec 30 10:52:46 2022
Response via : Initial Calibration
DataAcq Meth : RUNPEST1.M

Volume Inj. : 2ul
Signal #1 Phase : RTx-50 Signal #2 Phase: RTx-CLPesticides II
Signal #1 Info : 30M x 0.53mm x 0. Signal #2 Info : 30M x 0.53mm x 0.42um

	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/kg	ug/kg
	System Monitoring Compounds						
1) S	TCMX	4.01	4.93	1125.3E6	834.2E6	35.540	56.934 #
	Spiked Amount 50.000	Range 43 - 129		Recovery =		71.08%	113.87%
21) S	Decachlorobiphen	18.74	20.31	1201.6E6	453.1E6	42.993	41.609
	Spiked Amount 50.000	Range 42 - 136		Recovery =		85.99%	83.22%
	Target Compounds						
10)	4,4'-DDE	11.70	15.17	13913.9E6	5535.3E6	321.003	365.198
11) M	Dieldrin	12.69	15.41	54291651	19059270	1.218m	1.149m
13)	4,4'-DDD	14.28	16.50	1429.2E6	537.9E6	51.668m	51.014m
15) M	4,4'-DDT	15.09	17.07	697.5E6	216.6E6	20.448m	19.831m
	Sum Chlordane (gamma)			0	0	N.D.	N.D.
	Average Chlordane (gamma)					0.000	0.000
	Sum Toxaphene (1)			0	0	N.D.	N.D.
	Average Toxaphene (1)					0.000	0.000

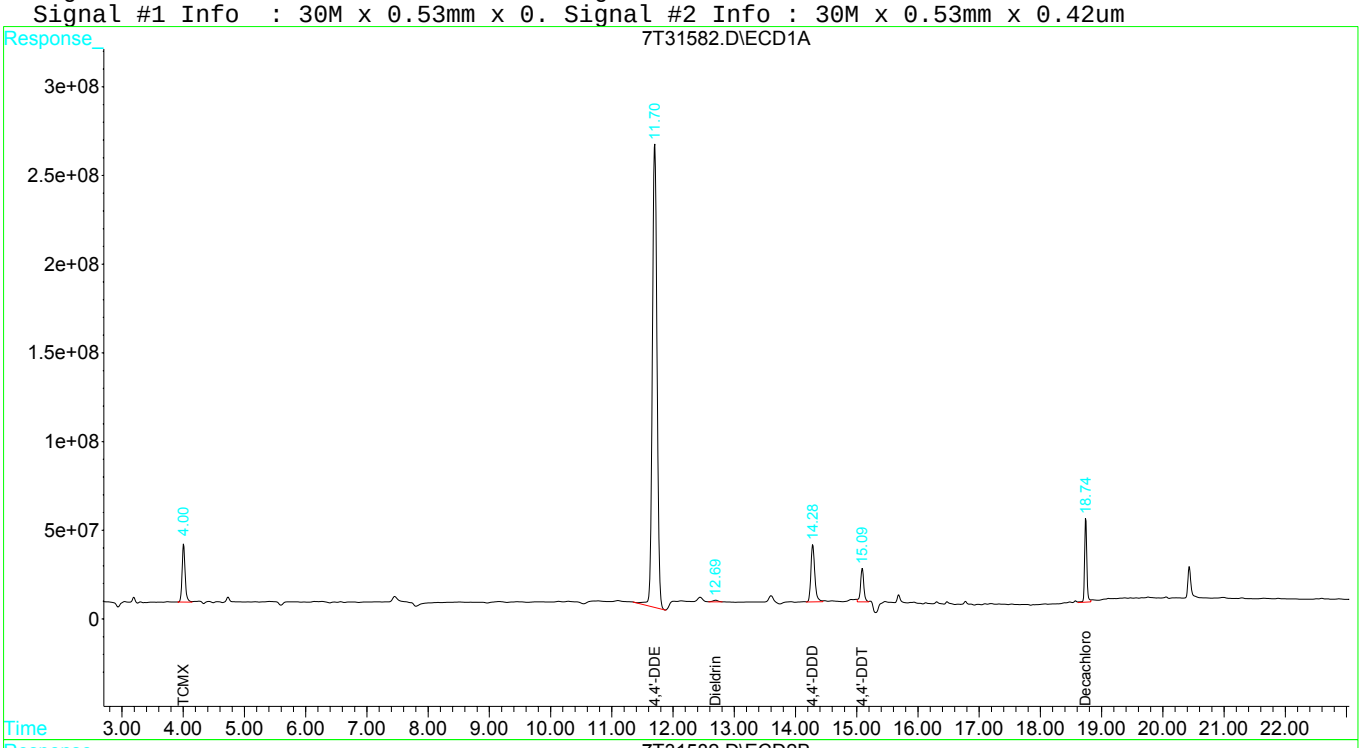
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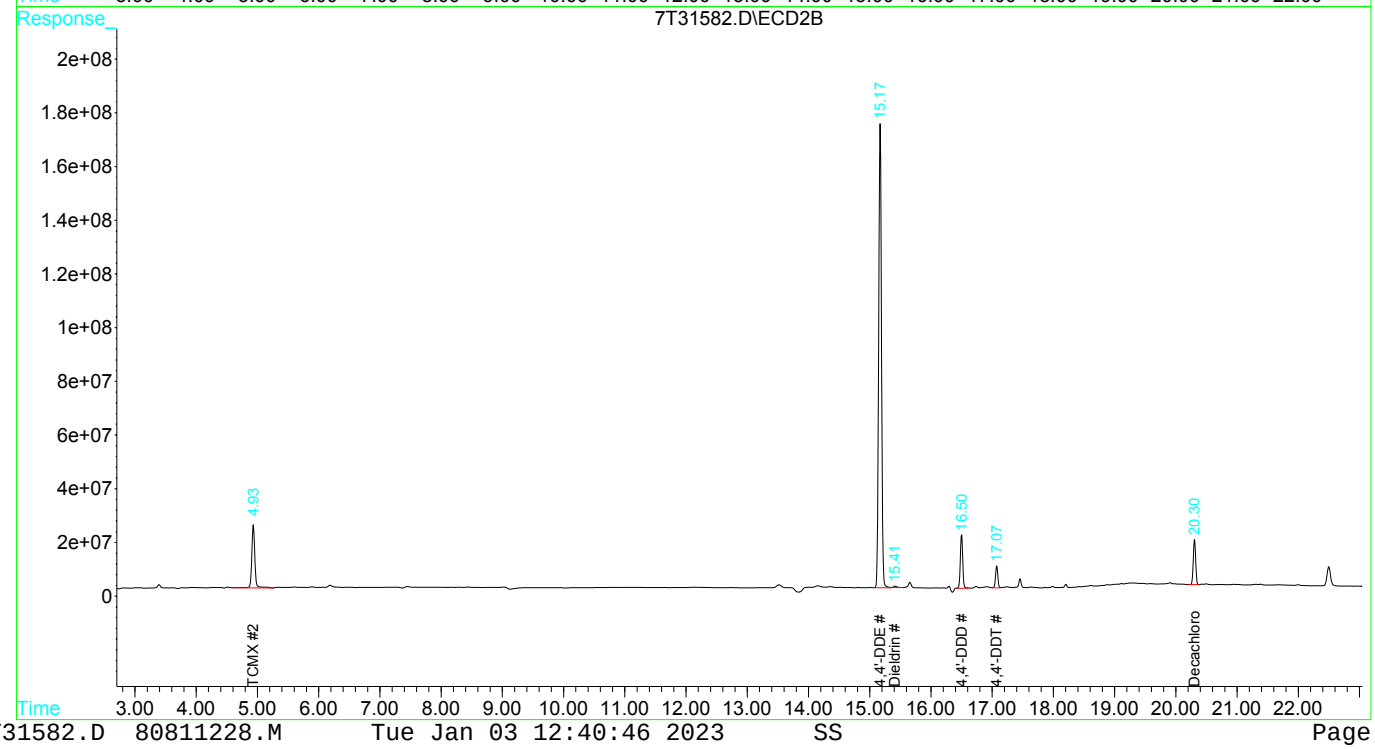
Quantitation Report (QT Reviewed)

Signal #1 : G:\HPCHEM\GCECD7\DATA\20221229A\7T31582.D\ECD1A.CH Vial: 57
Signal #2 : G:\HPCHEM\GCECD7\DATA\20221229A\7T31582.D\ECD2B.CH
Acq On : 30 Dec 2022 15:02 Operator: WD
Sample : 2120937-13 Inst : GCECD-7
Misc : Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Jan 3 12:31 2023 Quant Results File: 80811228.RES

Quant Method : G:\HPCHEM\G...\80811228.M (Chemstation Integrator)
Title : Pesticides by Method SW-846 8081B
Last Update : Fri Dec 30 10:52:46 2022
Response via : Multiple Level Calibration
DataAcq Meth : RUNPEST1.M

Volume Inj. : 2ul
Signal #1 Phase : RTx-50 Signal #2 Phase: RTx-CLPesticides II
Signal #1 Info : 30M x 0.53mm x 0. Signal #2 Info : 30M x 0.53mm x 0.42um





ANALYSIS DATA SHEET

Pesticides - SW 846 8081B

Client: **Dynamic Earth LLC**
Client Sample ID: **T-4-3**
Lab Sample ID: **2120937-14**
Project: **Old Orchard G.C.**
Work Order: **2120937**

Date Sampled:	12/20/22 09:28	Prep Date:	12/28/22 16:06	File ID:	7T31583.D
Init/Final Vol:	15 g / 10 mL	Prep Batch:	B2L2832	Analyzed:	12/30/22 15:27
Dilution:	1	Matrix:	Soil	Sequence:	SAA0005
Percent Solids:	82.85	Prep Method:	Microwave Extraction		

CAS NO.	COMPOUND	CONC. (mg/kg dry)	MDL	RL	Qual
60-57-1	Dieldrin	ND	0.000821	0.00157	U

ND, U - Indicates compound analyzed for but not detected
J - Indicates estimated value
B - Indicates compound found in associated blank
E - Concentration exceeds highest calibration standard

D - Indicates result is based on a dilution
H - Indicates a Hold Time violation
P - Greater than 25% diff. between 2 GC columns.
MDL - Minimum detection limit, **RL** - Reporting limit

F-I

Quantitation Report (QT Reviewed)

Signal #1 : G:\HPCHEM\GCECD7\DATA\20221229A\7T31583.D\ECD1A.CH Vial: 58
Signal #2 : G:\HPCHEM\GCECD7\DATA\20221229A\7T31583.D\ECD2B.CH
Acq On : 30 Dec 2022 15:27 Operator: WD
Sample : 2120937-14 Inst : GCECD-7
Misc : Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Jan 3 12:31 2023 Quant Results File: 80811228.RES

Quant Method : G:\HPCHEM\G...\80811228.M (Chemstation Integrator)
Title : Pesticides by Method SW-846 8081B
Last Update : Fri Dec 30 10:52:46 2022
Response via : Initial Calibration
DataAcq Meth : RUNPEST1.M

Volume Inj. : 2ul
Signal #1 Phase : RTx-50 Signal #2 Phase: RTx-CLPesticides II
Signal #1 Info : 30M x 0.53mm x 0. Signal #2 Info : 30M x 0.53mm x 0.42um

Compound	RT#1	RT#2	Resp#1	Resp#2	ug/kg	ug/kg
System Monitoring Compounds						
1) S TCMX	4.01	4.93	1150.3E6	814.2E6	36.331	55.569 #
Spiked Amount 50.000	Range 43 - 129		Recovery =		72.66%	111.14%
21) S Decachlorobiphen	18.74	20.31	1059.0E6	406.2E6	37.890	37.301
Spiked Amount 50.000	Range 42 - 136		Recovery =		75.78%	74.60%
Target Compounds						
Sum Chlordane (gamma)			0	0	N.D.	N.D.
Average Chlordane (gamma)					0.000	0.000
Sum Toxaphene (1)			0	0	N.D.	N.D.
Average Toxaphene (1)					0.000	0.000

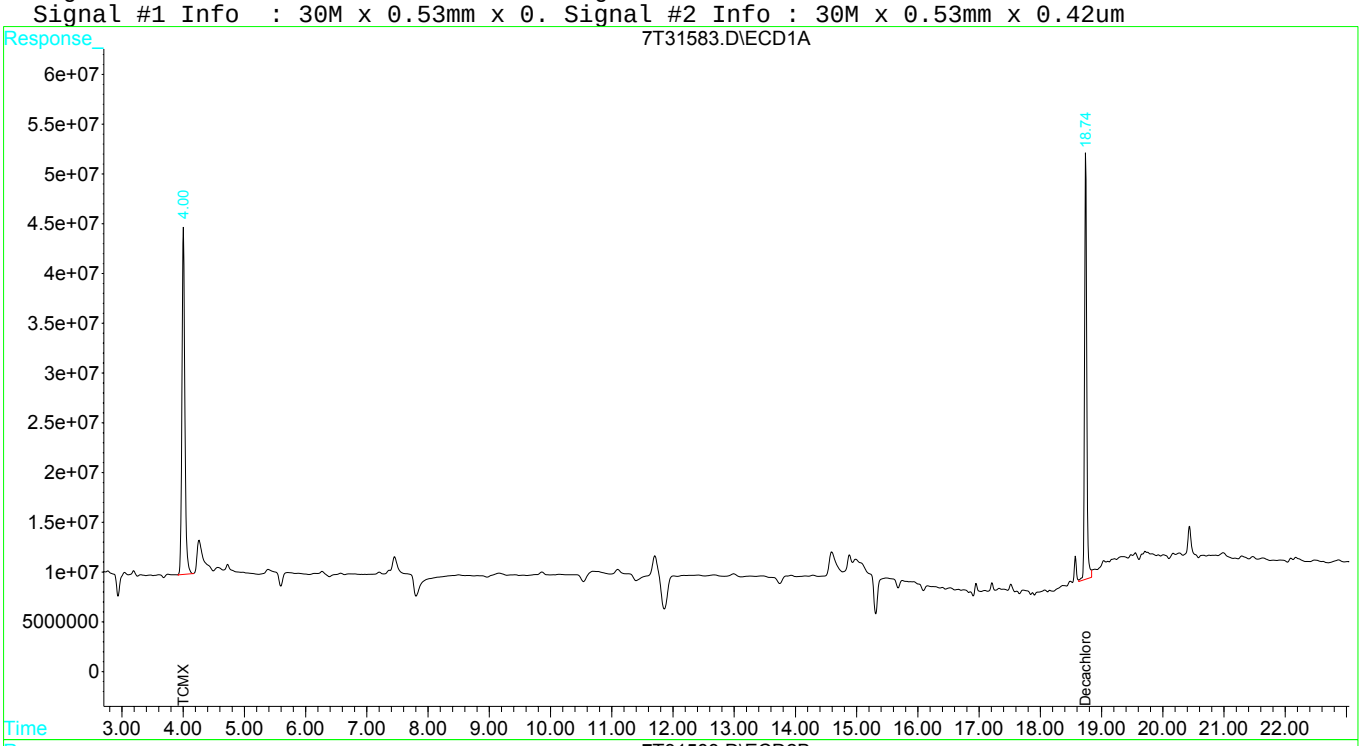
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7T31583.D 80811228.M Tue Jan 03 12:40:47 2023 SS

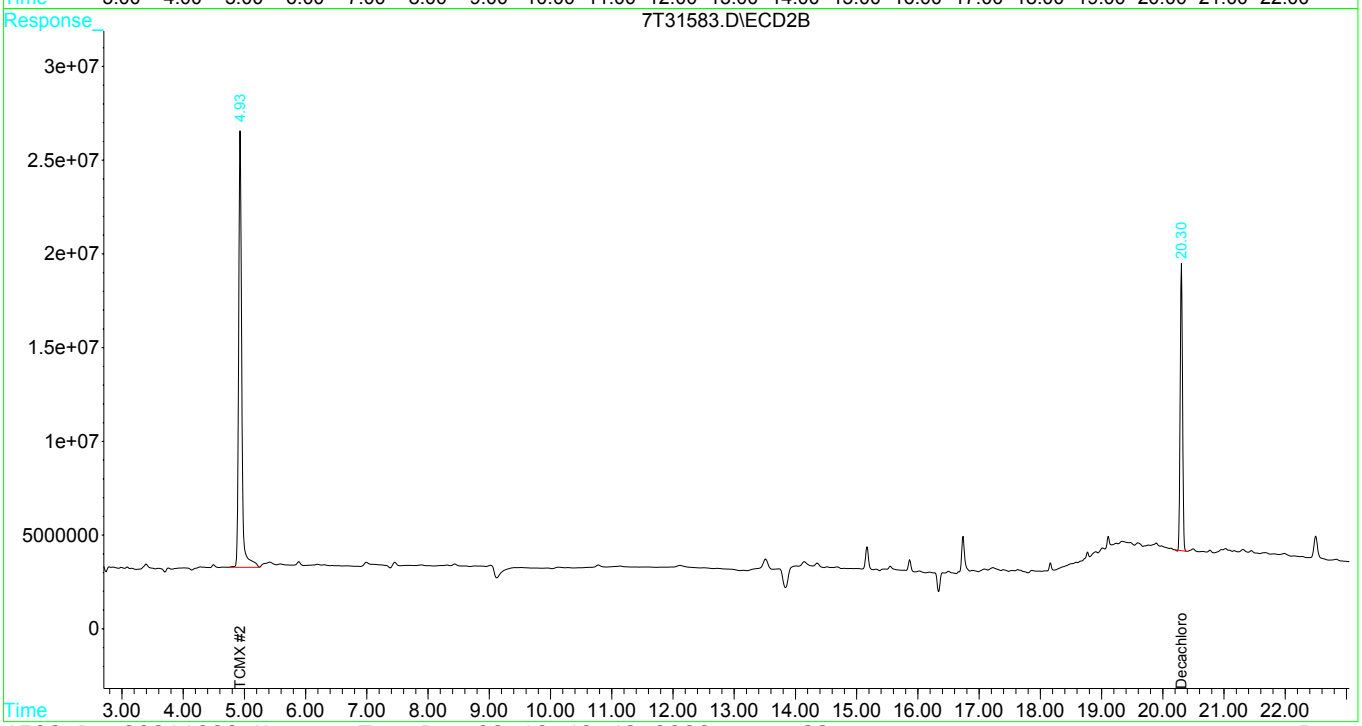
Quantitation Report (QT Reviewed)

Signal #1 : G:\HPCHEM\GCECD7\DATA\20221229A\7T31583.D\ECD1A.CH Vial: 58
Signal #2 : G:\HPCHEM\GCECD7\DATA\20221229A\7T31583.D\ECD2B.CH
Acq On : 30 Dec 2022 15:27 Operator: WD
Sample : 2120937-14 Inst : GCECD-7
Misc : Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Jan 3 12:31 2023 Quant Results File: 80811228.RES

Quant Method : G:\HPCHEM\G...\80811228.M (Chemstation Integrator)
Title : Pesticides by Method SW-846 8081B
Last Update : Fri Dec 30 10:52:46 2022
Response via : Multiple Level Calibration
DataAcq Meth : RUNPEST1.M

Volume Inj. : 2ul
Signal #1 Phase : RTx-50 Signal #2 Phase: RTx-CLPesticides II
Signal #1 Info : 30M x 0.53mm x 0. Signal #2 Info : 30M x 0.53mm x 0.42um





ANALYSIS DATA SHEET

Pesticides - SW 846 8081B

Client: **Dynamic Earth LLC**
Client Sample ID: **T-4-4**
Lab Sample ID: **2120937-15**
Project: **Old Orchard G.C.**
Work Order: **2120937**

Date Sampled:	12/20/22 09:32	Prep Date:	12/28/22 16:06	File ID:	7T31615.D
Init/Final Vol:	15 g / 10 mL	Prep Batch:	B2L2832	Analyzed:	12/31/22 05:41
Dilution:	1	Matrix:	Soil	Sequence:	SAA0020
Percent Solids:	88.23	Prep Method:	Microwave Extraction		

CAS NO.	COMPOUND	CONC. (mg/kg dry)	MDL	RL	Qual
60-57-1	Dieldrin [2C]	ND	0.000771	0.00147	U

ND, U - Indicates compound analyzed for but not detected
J - Indicates estimated value
B - Indicates compound found in associated blank
E - Concentration exceeds highest calibration standard

D - Indicates result is based on a dilution
H - Indicates a Hold Time violation
P - Greater than 25% diff. between 2 GC columns.
MDL - Minimum detection limit, **RL** - Reporting limit

F-I

Quantitation Report (QT Reviewed)

Signal #1 : G:\HPCHEM\GCECD7\DATA\20221230\7T31615.D\ECD1A.CH Vial: 26
Signal #2 : G:\HPCHEM\GCECD7\DATA\20221230\7T31615.D\ECD2B.CH
Acq On : 31 Dec 2022 5:41 am Operator: WD
Sample : 2120937-15 Inst : GCECD-7
Misc : Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Jan 3 13:15 2023 Quant Results File: 80811228.RES

Quant Method : G:\HPCHEM\G...\80811228.M (Chemstation Integrator)
Title : Pesticides by Method SW-846 8081B
Last Update : Tue Jan 03 12:41:54 2023
Response via : Initial Calibration
DataAcq Meth : RUNPEST1.M

Volume Inj. : 2ul
Signal #1 Phase : RTx-50 Signal #2 Phase: RTx-CLPesticides II
Signal #1 Info : 30M x 0.53mm x 0. Signal #2 Info : 30M x 0.53mm x 0.42um

Compound	RT#1	RT#2	Resp#1	Resp#2	ug/kg	ug/kg
System Monitoring Compounds						
1) S TCMX	4.08	5.02	1187.8E6	704.3E6	37.513	48.068m#
Spiked Amount 50.000	Range 43 - 129		Recovery =		75.03%	96.14%
21) S Decachlorobiphen	18.80	20.39	1207.7E6	448.8E6	43.210m	41.214
Spiked Amount 50.000	Range 42 - 136		Recovery =		86.42%	82.43%
Target Compounds						
11) M Dieldrin	12.87	15.50	22301145	8116637	0.500m	0.489m
Sum Chlordane (gamma)			0	0	N.D.	N.D.
Average Chlordane (gamma)					0.000	0.000
Sum Toxaphene (1)			0	0	N.D.	N.D.
Average Toxaphene (1)					0.000	0.000

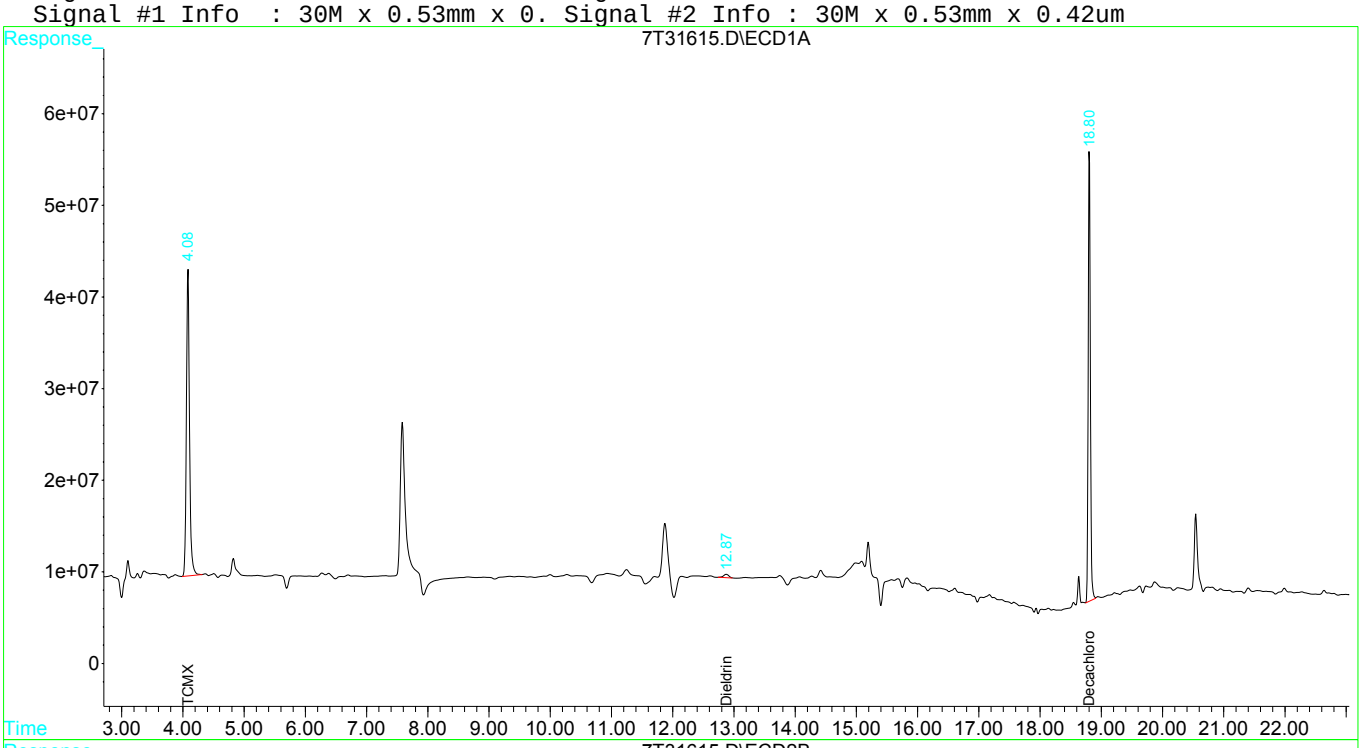
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.
7T31615.D 80811228.M Tue Jan 03 13:55:22 2023 SS Page 1

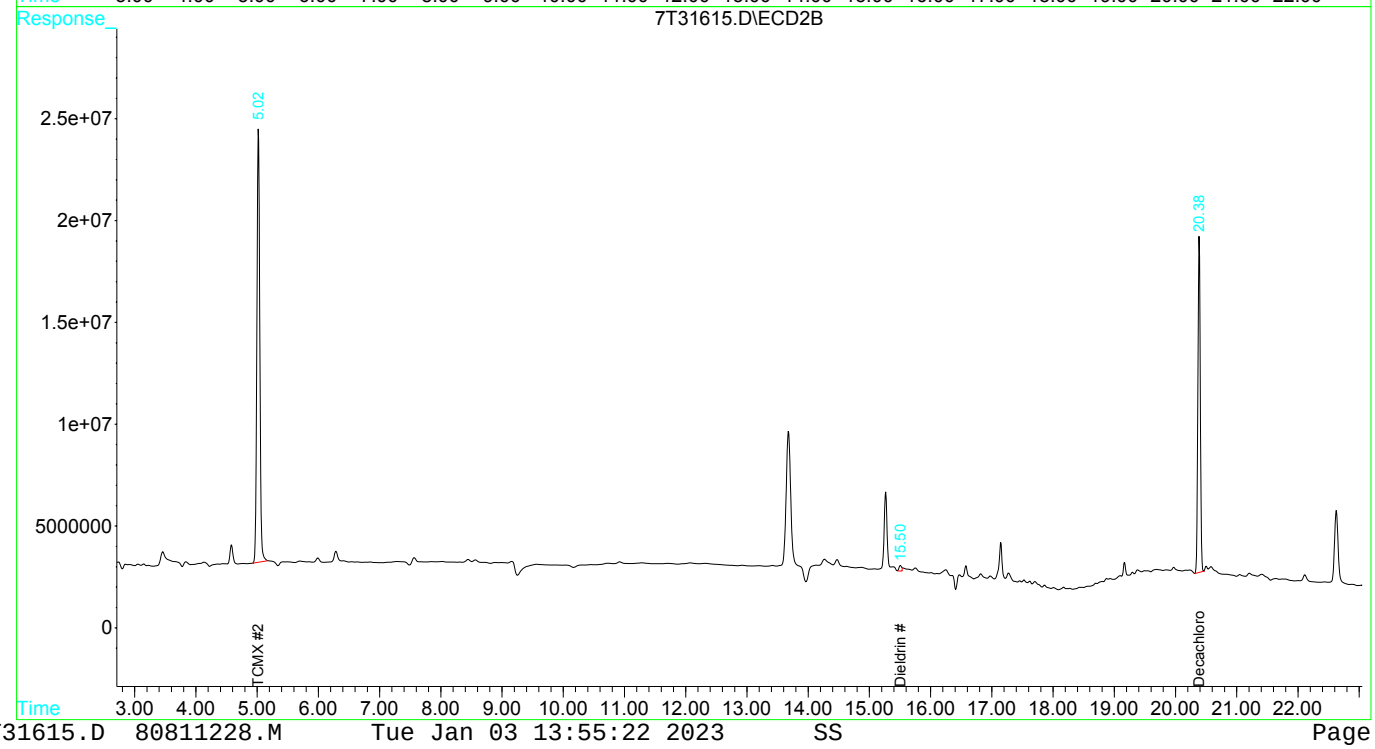
Quantitation Report (QT Reviewed)

Signal #1 : G:\HPCHEM\GCECD7\DATA\20221230\7T31615.D\ECD1A.CH Vial: 26
Signal #2 : G:\HPCHEM\GCECD7\DATA\20221230\7T31615.D\ECD2B.CH
Acq On : 31 Dec 2022 5:41 am Operator: WD
Sample : 2120937-15 Inst : GCECD-7
Misc : Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Jan 3 13:15 2023 Quant Results File: 80811228.RES

Quant Method : G:\HPCHEM\G...\80811228.M (Chemstation Integrator)
Title : Pesticides by Method SW-846 8081B
Last Update : Tue Jan 03 12:41:54 2023
Response via : Multiple Level Calibration
DataAcq Meth : RUNPEST1.M

Volume Inj. : 2ul
Signal #1 Phase : RTx-50 Signal #2 Phase: RTx-CLPesticides II
Signal #1 Info : 30M x 0.53mm x 0. Signal #2 Info : 30M x 0.53mm x 0.42um





ANALYSIS DATA SHEET

Pesticides - SW 846 8081B

Client: **Dynamic Earth LLC**
Client Sample ID: **T-12A**
Lab Sample ID: **2120937-16**
Project: **Old Orchard G.C.**
Work Order: **2120937**

Date Sampled:	12/20/22 09:36	Prep Date:	12/28/22 16:06	File ID:	7T31616.D
Init/Final Vol:	15 g / 10 mL	Prep Batch:	B2L2832	Analyzed:	12/31/22 06:06
Dilution:	1	Matrix:	Soil	Sequence:	SAA0020
Percent Solids:	85.26	Prep Method:	Microwave Extraction		

CAS NO.	COMPOUND	CONC. (mg/kg dry)	MDL	RL	Qual
60-57-1	Dieldrin [2C]	0.00162	0.000798	0.00152	

ND, U - Indicates compound analyzed for but not detected
J - Indicates estimated value
B - Indicates compound found in associated blank
E - Concentration exceeds highest calibration standard

D - Indicates result is based on a dilution
H - Indicates a Hold Time violation
P - Greater than 25% diff. between 2 GC columns.
MDL - Minimum detection limit, **RL** - Reporting limit

F-I

Quantitation Report (QT Reviewed)

Signal #1 : G:\HPCHEM\GCECD7\DATA\20221230\7T31616.D\ECD1A.CH Vial: 27
Signal #2 : G:\HPCHEM\GCECD7\DATA\20221230\7T31616.D\ECD2B.CH
Acq On : 31 Dec 2022 6:06 am Operator: WD
Sample : 2120937-16 Inst : GCECD-7
Misc : Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Jan 3 13:16 2023 Quant Results File: 80811228.RES

Quant Method : G:\HPCHEM\G...\80811228.M (Chemstation Integrator)
Title : Pesticides by Method SW-846 8081B
Last Update : Tue Jan 03 12:41:54 2023
Response via : Initial Calibration
DataAcq Meth : RUNPEST1.M

Volume Inj. : 2ul
Signal #1 Phase : RTx-50 Signal #2 Phase: RTx-CLPesticides II
Signal #1 Info : 30M x 0.53mm x 0. Signal #2 Info : 30M x 0.53mm x 0.42um

Compound	RT#1	RT#2	Resp#1	Resp#2	ug/kg	ug/kg
System Monitoring Compounds						
1) S TCMX	4.08	5.02	1283.7E6	832.6E6	40.544	56.829 #
Spiked Amount 50.000	Range 43 - 129		Recovery =		81.09%	113.66%
21) S Decachlorobiphen	18.81	20.39	1269.9E6	489.1E6	45.434	44.914
Spiked Amount 50.000	Range 42 - 136		Recovery =		90.87%	89.83%
Target Compounds						
11) M Dieldrin	12.88	15.51	101.3E6	34365756	2.272	2.072
Sum Chlordane (gamma)			0	0	N.D.	N.D.
Average Chlordane (gamma)					0.000	0.000
Sum Toxaphene (1)			0	0	N.D.	N.D.
Average Toxaphene (1)					0.000	0.000

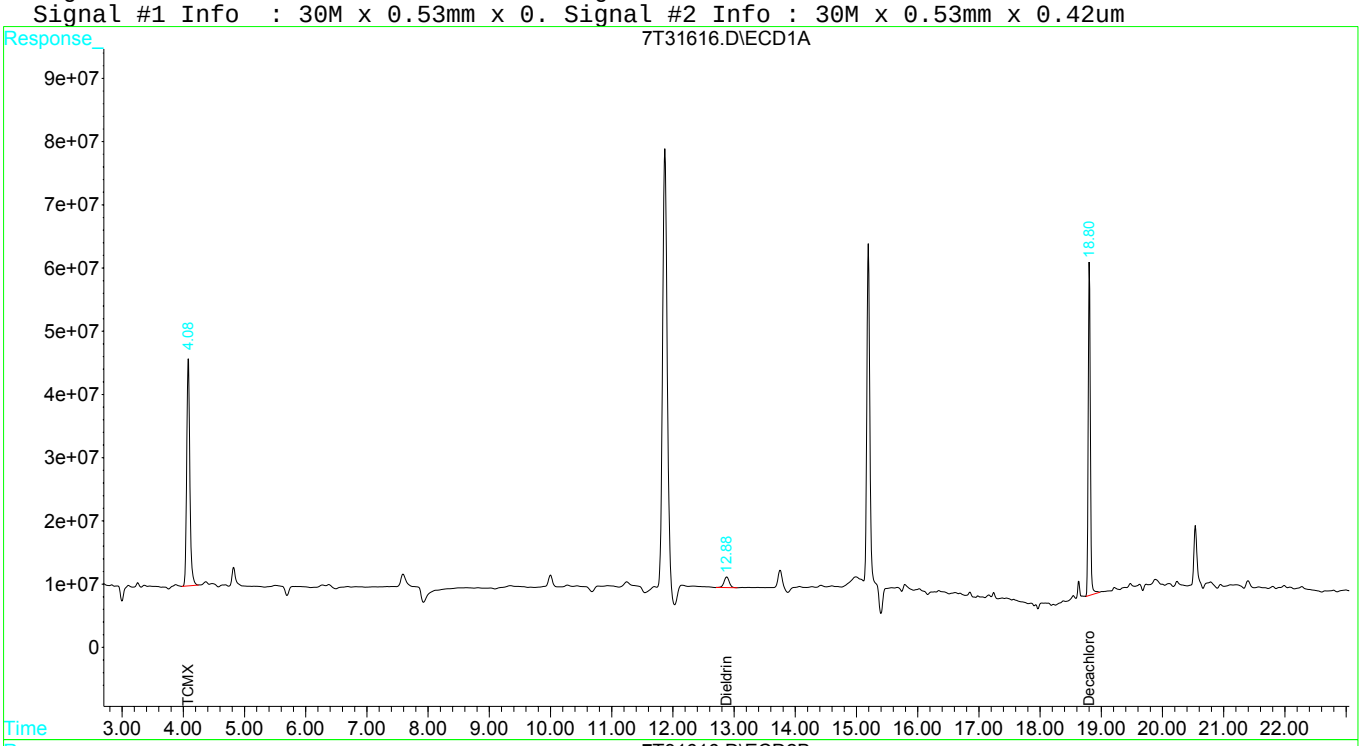
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.
7T31616.D 80811228.M Tue Jan 03 13:55:23 2023 SS Page 1

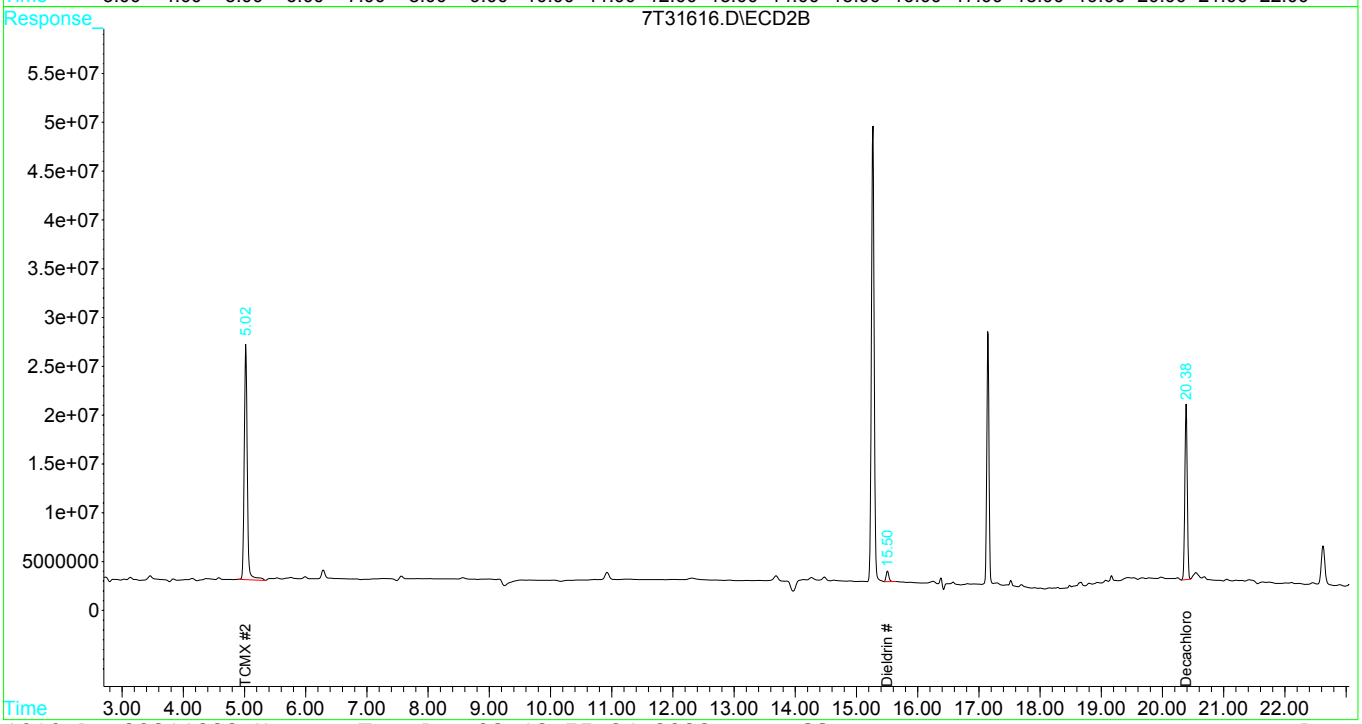
Quantitation Report (QT Reviewed)

Signal #1 : G:\HPCHEM\GCECD7\DATA\20221230\7T31616.D\ECD1A.CH Vial: 27
Signal #2 : G:\HPCHEM\GCECD7\DATA\20221230\7T31616.D\ECD2B.CH
Acq On : 31 Dec 2022 6:06 am Operator: WD
Sample : 2120937-16 Inst : GCECD-7
Misc : Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Jan 3 13:16 2023 Quant Results File: 80811228.RES

Quant Method : G:\HPCHEM\G...\80811228.M (Chemstation Integrator)
Title : Pesticides by Method SW-846 8081B
Last Update : Tue Jan 03 12:41:54 2023
Response via : Multiple Level Calibration
DataAcq Meth : RUNPEST1.M

Volume Inj. : 2ul
Signal #1 Phase : RTx-50 Signal #2 Phase: RTx-CLPesticides II
Signal #1 Info : 30M x 0.53mm x 0. Signal #2 Info : 30M x 0.53mm x 0.42um





ANALYSIS DATA SHEET

Pesticides - SW 846 8081B

Client: **Dynamic Earth LLC**
Client Sample ID: **T-12-1**
Lab Sample ID: **2120937-17**
Project: **Old Orchard G.C.**
Work Order: **2120937**

Date Sampled:	12/20/22 09:42	Prep Date:	12/28/22 16:06	File ID:	7T31617.D
Init/Final Vol:	15 g / 10 mL	Prep Batch:	B2L2832	Analyzed:	12/31/22 06:31
Dilution:	1	Matrix:	Soil	Sequence:	SAA0020
Percent Solids:	85.86	Prep Method:	Microwave Extraction		

CAS NO.	COMPOUND	CONC. (mg/kg dry)	MDL	RL	Qual
60-57-1	Dieldrin	0.0514	0.000792	0.00151	

ND, U - Indicates compound analyzed for but not detected
J - Indicates estimated value
B - Indicates compound found in associated blank
E - Concentration exceeds highest calibration standard

D - Indicates result is based on a dilution
H - Indicates a Hold Time violation
P - Greater than 25% diff. between 2 GC columns.
MDL - Minimum detection limit, **RL** - Reporting limit

F-I

Quantitation Report (QT Reviewed)

Signal #1 : G:\HPCHEM\GCECD7\DATA\20221230\7T31617.D\ECD1A.CH Vial: 28
Signal #2 : G:\HPCHEM\GCECD7\DATA\20221230\7T31617.D\ECD2B.CH
Acq On : 31 Dec 2022 6:31 am Operator: WD
Sample : 2120937-17 Inst : GCECD-7
Misc : Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Jan 3 13:16 2023 Quant Results File: 80811228.RES

Quant Method : G:\HPCHEM\G...\80811228.M (Chemstation Integrator)
Title : Pesticides by Method SW-846 8081B
Last Update : Tue Jan 03 12:41:54 2023
Response via : Initial Calibration
DataAcq Meth : RUNPEST1.M

Volume Inj. : 2ul
Signal #1 Phase : RTx-50 Signal #2 Phase: RTx-CLPesticides II
Signal #1 Info : 30M x 0.53mm x 0. Signal #2 Info : 30M x 0.53mm x 0.42um

Compound	RT#1	RT#2	Resp#1	Resp#2	ug/kg	ug/kg
System Monitoring Compounds						
1) S TCMX	4.08	5.02	1313.6E6	837.4E6	41.487	57.154 #
Spiked Amount 50.000	Range 43 - 129		Recovery =		82.97%	114.31%
21) S Decachlorobiphen	18.80	20.39	1243.1E6	509.2E6	44.477m	46.756m
Spiked Amount 50.000	Range 42 - 136		Recovery =		88.95%	93.51%
Target Compounds						
11) M Dieldrin	12.88	15.51	2948.3E6	1106.9E6	66.146	66.736m
Sum Chlordane (gamma)			0	0	N.D.	N.D.
Average Chlordane (gamma)					0.000	0.000
Sum Toxaphene (1)			0	0	N.D.	N.D.
Average Toxaphene (1)					0.000	0.000

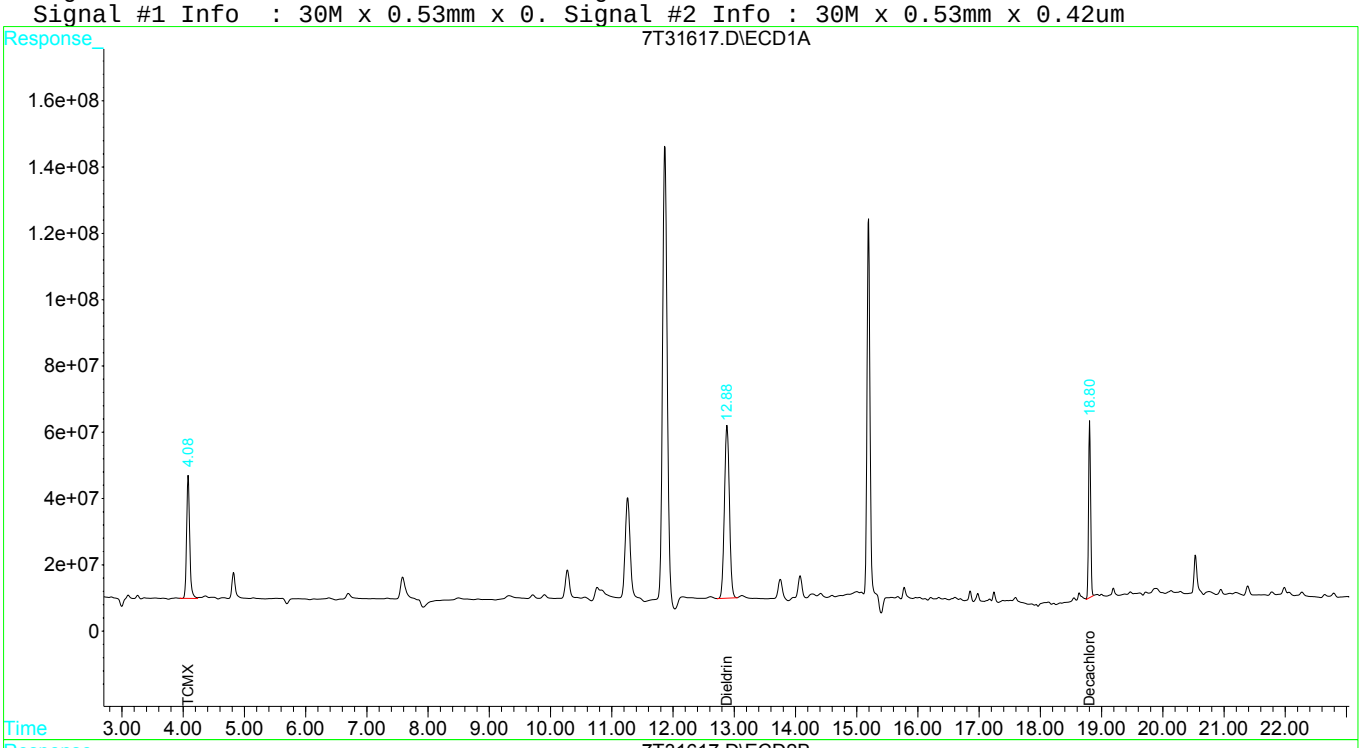
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.
7T31617.D 80811228.M Tue Jan 03 13:55:26 2023 SS Page 1

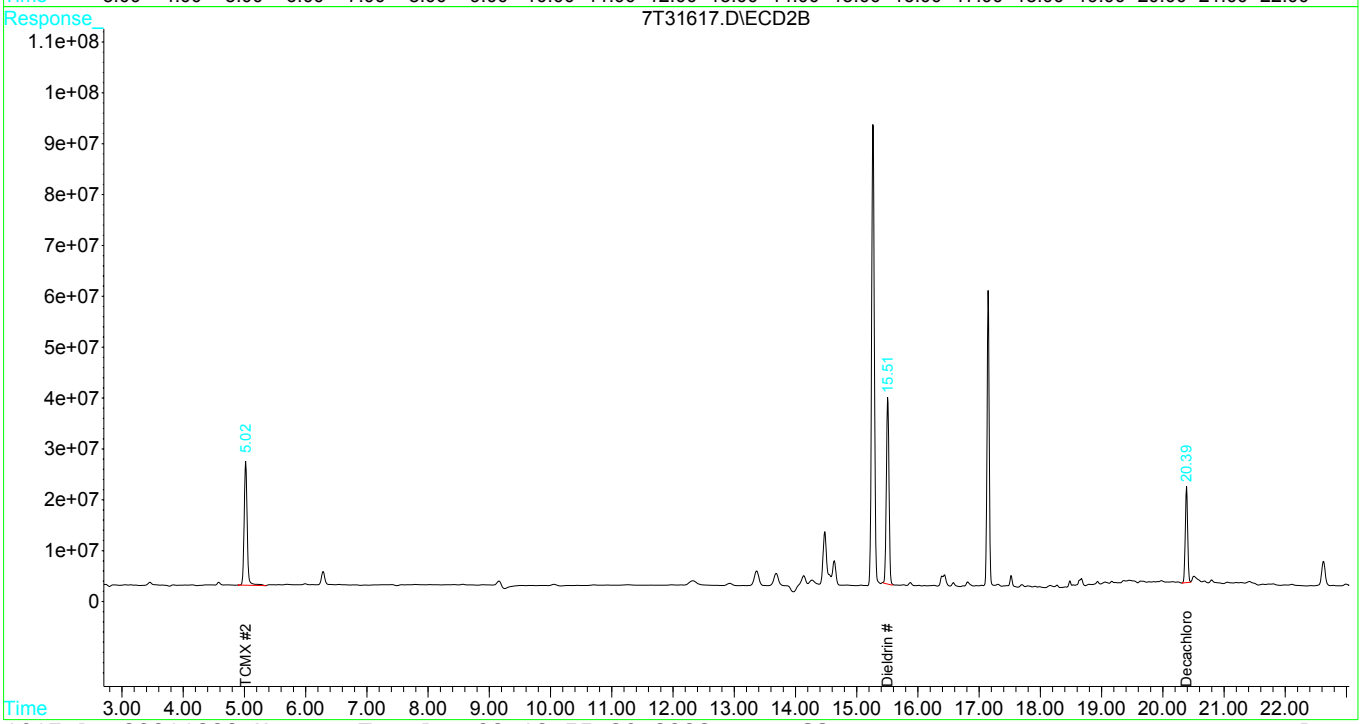
Quantitation Report (QT Reviewed)

Signal #1 : G:\HPCHEM\GCECD7\DATA\20221230\7T31617.D\ECD1A.CH Vial: 28
Signal #2 : G:\HPCHEM\GCECD7\DATA\20221230\7T31617.D\ECD2B.CH
Acq On : 31 Dec 2022 6:31 am Operator: WD
Sample : 2120937-17 Inst : GCECD-7
Misc : Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Jan 3 13:16 2023 Quant Results File: 80811228.RES

Quant Method : G:\HPCHEM\G...\80811228.M (Chemstation Integrator)
Title : Pesticides by Method SW-846 8081B
Last Update : Tue Jan 03 12:41:54 2023
Response via : Multiple Level Calibration
DataAcq Meth : RUNPEST1.M

Volume Inj. : 2ul
Signal #1 Phase : RTx-50 Signal #2 Phase: RTx-CLPesticides II
Signal #1 Info : 30M x 0.53mm x 0. Signal #2 Info : 30M x 0.53mm x 0.42um





ANALYSIS DATA SHEET

Pesticides - SW 846 8081B

Client: **Dynamic Earth LLC**
Client Sample ID: **T-12-2**
Lab Sample ID: **2120937-18**
Project: **Old Orchard G.C.**
Work Order: **2120937**

Date Sampled:	12/20/22 09:46	Prep Date:	12/28/22 16:06	File ID:	7T31618.D
Init/Final Vol:	15 g / 10 mL	Prep Batch:	B2L2832	Analyzed:	12/31/22 06:57
Dilution:	1	Matrix:	Soil	Sequence:	SAA0020
Percent Solids:	86.14	Prep Method:	Microwave Extraction		

CAS NO.	COMPOUND	CONC. (mg/kg dry)	MDL	RL	Qual
60-57-1	Dieldrin [2C]	0.00159	0.000789	0.00151	

ND, U - Indicates compound analyzed for but not detected
J - Indicates estimated value
B - Indicates compound found in associated blank
E - Concentration exceeds highest calibration standard

D - Indicates result is based on a dilution
H - Indicates a Hold Time violation
P - Greater than 25% diff. between 2 GC columns.
MDL - Minimum detection limit, **RL** - Reporting limit

F-I

Quantitation Report (QT Reviewed)

Signal #1 : G:\HPCHEM\GCECD7\DATA\20221230\7T31618.D\ECD1A.CH Vial: 29
Signal #2 : G:\HPCHEM\GCECD7\DATA\20221230\7T31618.D\ECD2B.CH
Acq On : 31 Dec 2022 6:57 am Operator: WD
Sample : 2120937-18 Inst : GCECD-7
Misc : Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Jan 3 13:16 2023 Quant Results File: 80811228.RES

Quant Method : G:\HPCHEM\G...\80811228.M (Chemstation Integrator)
Title : Pesticides by Method SW-846 8081B
Last Update : Tue Jan 03 12:41:54 2023
Response via : Initial Calibration
DataAcq Meth : RUNPEST1.M

Volume Inj. : 2ul
Signal #1 Phase : RTx-50 Signal #2 Phase: RTx-CLPesticides II
Signal #1 Info : 30M x 0.53mm x 0. Signal #2 Info : 30M x 0.53mm x 0.42um

Compound	RT#1	RT#2	Resp#1	Resp#2	ug/kg	ug/kg
System Monitoring Compounds						
1) S TCMX	4.08	5.02	1265.9E6	736.2E6	39.980	50.247m#
Spiked Amount 50.000	Range 43 - 129		Recovery =		79.96%	100.49%
21) S Decachlorobiphen	18.81	20.39	1129.1E6	479.7E6	40.399	44.051
Spiked Amount 50.000	Range 42 - 136		Recovery =		80.80%	88.10%
Target Compounds						
11) M Dieldrin	12.87	15.50	96210556	34011361	2.159m	2.051m
Sum Chlordane (gamma)			0	0	N.D.	N.D.
Average Chlordane (gamma)					0.000	0.000
Sum Toxaphene (1)			0	0	N.D.	N.D.
Average Toxaphene (1)					0.000	0.000

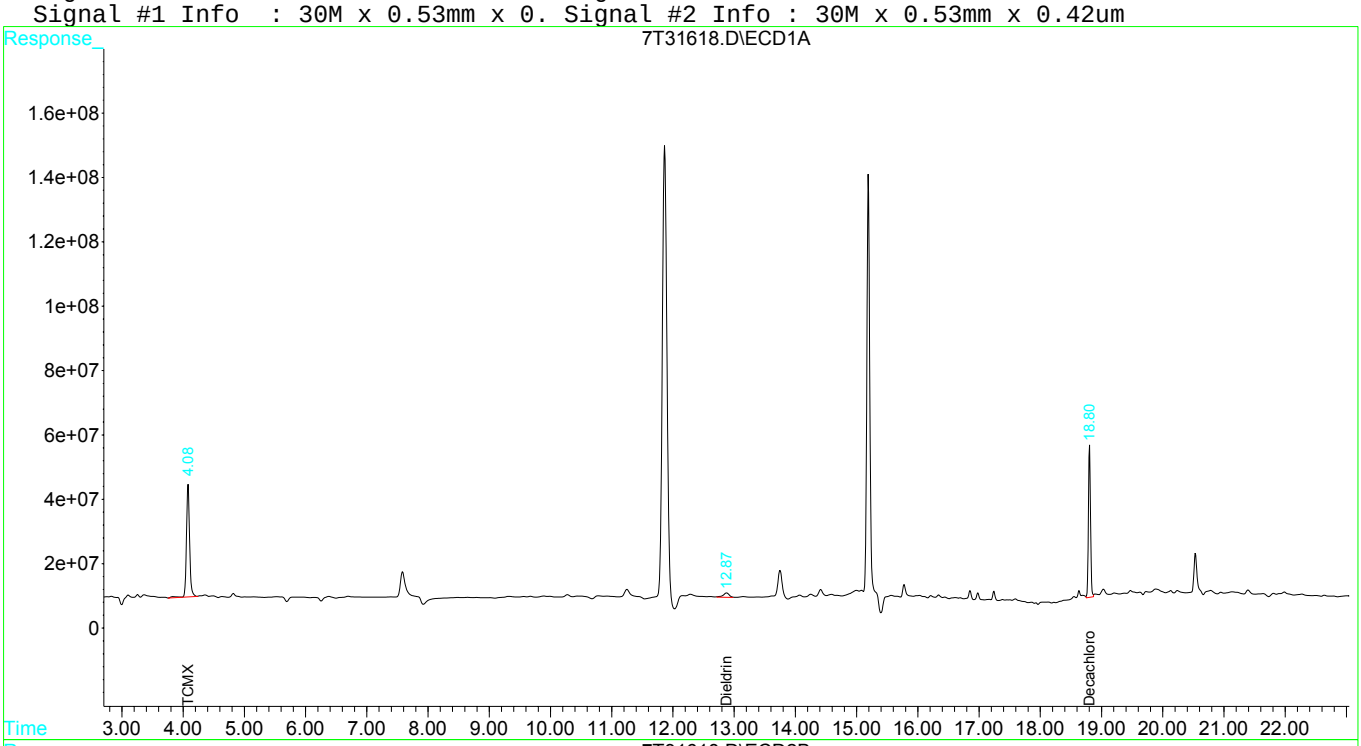
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.
7T31618.D 80811228.M Tue Jan 03 13:55:27 2023 SS

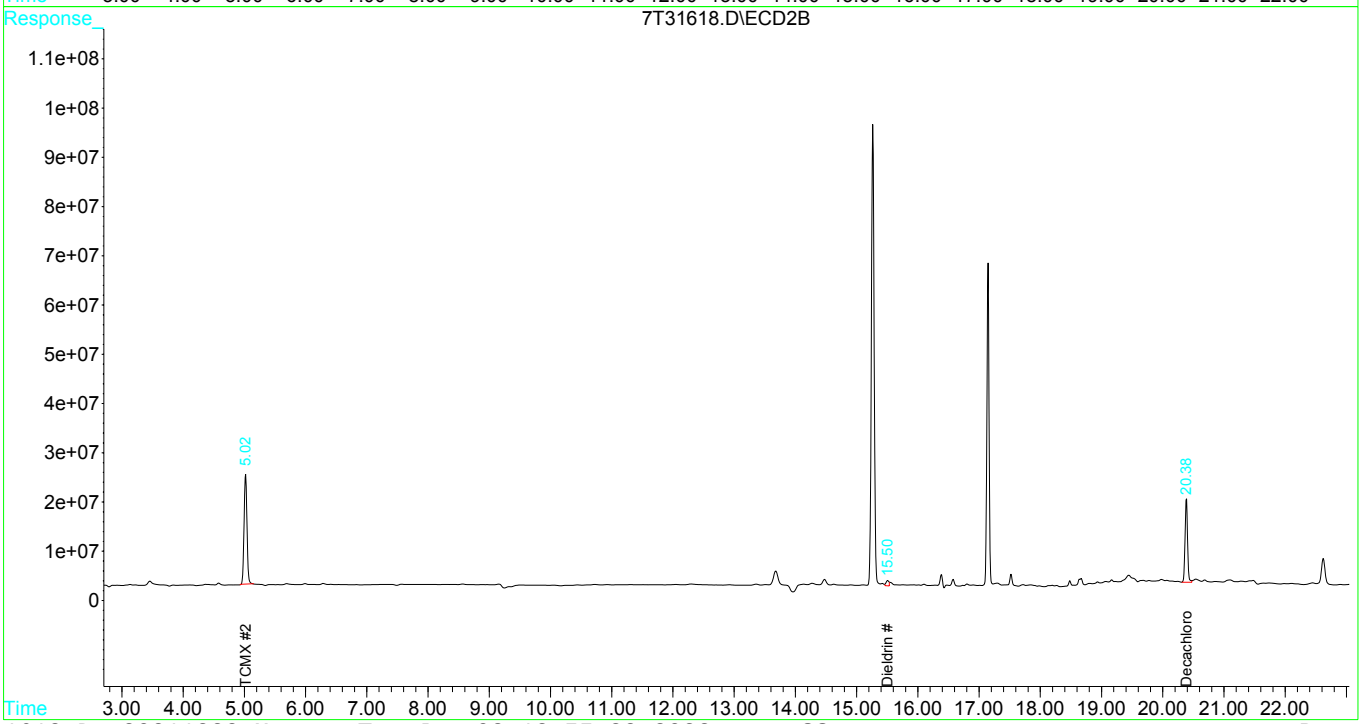
Quantitation Report (QT Reviewed)

Signal #1 : G:\HPCHEM\GCECD7\DATA\20221230\7T31618.D\ECD1A.CH Vial: 29
Signal #2 : G:\HPCHEM\GCECD7\DATA\20221230\7T31618.D\ECD2B.CH
Acq On : 31 Dec 2022 6:57 am Operator: WD
Sample : 2120937-18 Inst : GCECD-7
Misc : Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Jan 3 13:16 2023 Quant Results File: 80811228.RES

Quant Method : G:\HPCHEM\G...\80811228.M (Chemstation Integrator)
Title : Pesticides by Method SW-846 8081B
Last Update : Tue Jan 03 12:41:54 2023
Response via : Multiple Level Calibration
DataAcq Meth : RUNPEST1.M

Volume Inj. : 2ul
Signal #1 Phase : RTx-50 Signal #2 Phase: RTx-CLPesticides II
Signal #1 Info : 30M x 0.53mm x 0. Signal #2 Info : 30M x 0.53mm x 0.42um





ANALYSIS DATA SHEET

Pesticides - SW 846 8081B

Client: **Dynamic Earth LLC**
Client Sample ID: **T-12-3**
Lab Sample ID: **2120937-19**
Project: **Old Orchard G.C.**
Work Order: **2120937**

Date Sampled:	12/20/22 09:50	Prep Date:	12/28/22 16:06	File ID:	7T31619.D
Init/Final Vol:	15 g / 10 mL	Prep Batch:	B2L2832	Analyzed:	12/31/22 07:22
Dilution:	1	Matrix:	Soil	Sequence:	SAA0020
Percent Solids:	86.29	Prep Method:	Microwave Extraction		

CAS NO.	COMPOUND	CONC. (mg/kg dry)	MDL	RL	Qual
60-57-1	Dieldrin	0.0705	0.000788	0.00151	

ND, U - Indicates compound analyzed for but not detected
J - Indicates estimated value
B - Indicates compound found in associated blank
E - Concentration exceeds highest calibration standard

D - Indicates result is based on a dilution
H - Indicates a Hold Time violation
P - Greater than 25% diff. between 2 GC columns.
MDL - Minimum detection limit, **RL** - Reporting limit

F-I

Quantitation Report (QT Reviewed)

Signal #1 : G:\HPCHEM\GCECD7\DATA\20221230\7T31619.D\ECD1A.CH Vial: 30
Signal #2 : G:\HPCHEM\GCECD7\DATA\20221230\7T31619.D\ECD2B.CH
Acq On : 31 Dec 2022 7:22 am Operator: WD
Sample : 2120937-19 Inst : GCECD-7
Misc : Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Jan 3 13:17 2023 Quant Results File: 80811228.RES

Quant Method : G:\HPCHEM\G...\80811228.M (Chemstation Integrator)
Title : Pesticides by Method SW-846 8081B
Last Update : Tue Jan 03 12:41:54 2023
Response via : Initial Calibration
DataAcq Meth : RUNPEST1.M

Volume Inj. : 2ul
Signal #1 Phase : RTx-50 Signal #2 Phase: RTx-CLPesticides II
Signal #1 Info : 30M x 0.53mm x 0. Signal #2 Info : 30M x 0.53mm x 0.42um

Compound	RT#1	RT#2	Resp#1	Resp#2	ug/kg	ug/kg
System Monitoring Compounds						
1) S TCMX	4.08	5.02	1212.1E6	755.9E6	38.282m	51.588 #
Spiked Amount 50.000	Range 43 - 129		Recovery =		76.56%	103.18%
21) S Decachlorobiphen	18.80	20.39	1165.2E6	481.6E6	41.688	44.219
Spiked Amount 50.000	Range 42 - 136		Recovery =		83.38%	88.44%
Target Compounds						
11) M Dieldrin	12.88	15.51	4067.7E6	1557.0E6	91.261	93.874
Sum Chlordane (gamma)			0	0	N.D.	N.D.
Average Chlordane (gamma)					0.000	0.000
Sum Toxaphene (1)			0	0	N.D.	N.D.
Average Toxaphene (1)					0.000	0.000

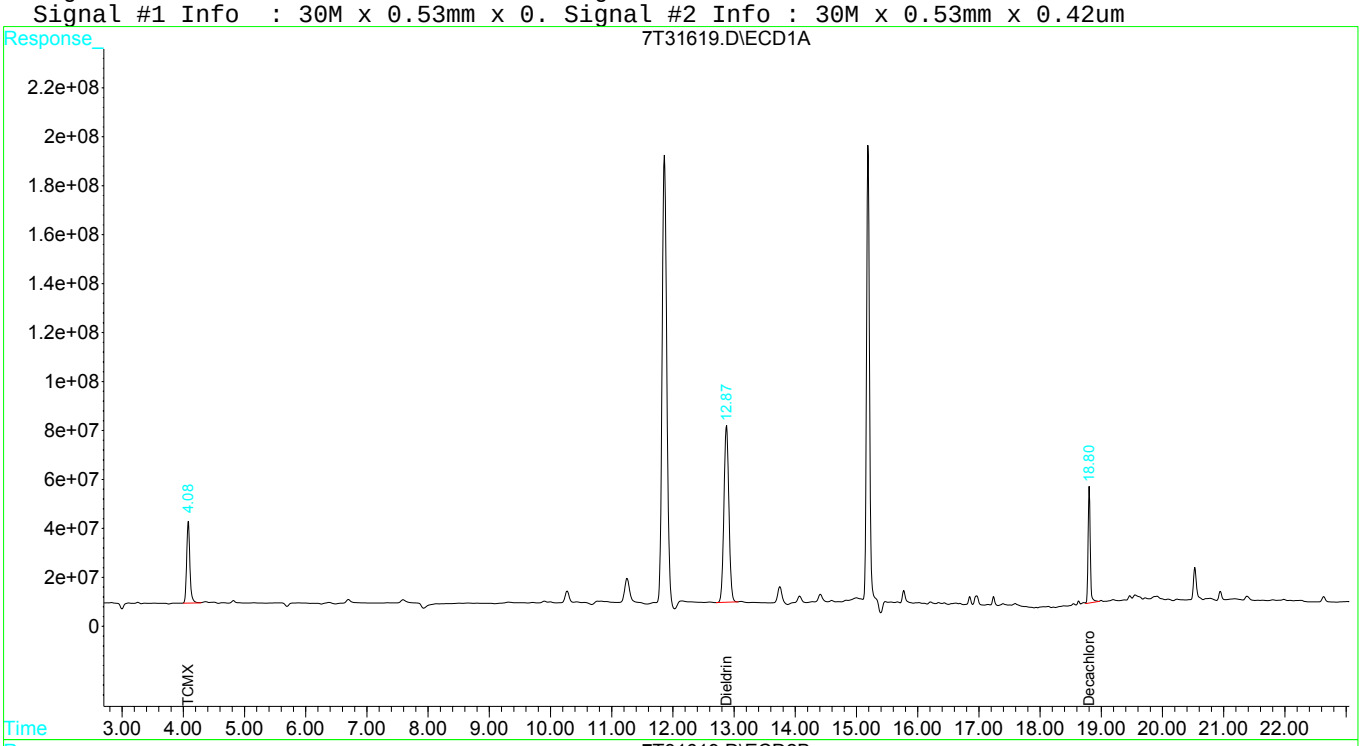
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.
7T31619.D 80811228.M Tue Jan 03 13:55:29 2023 SS Page 1

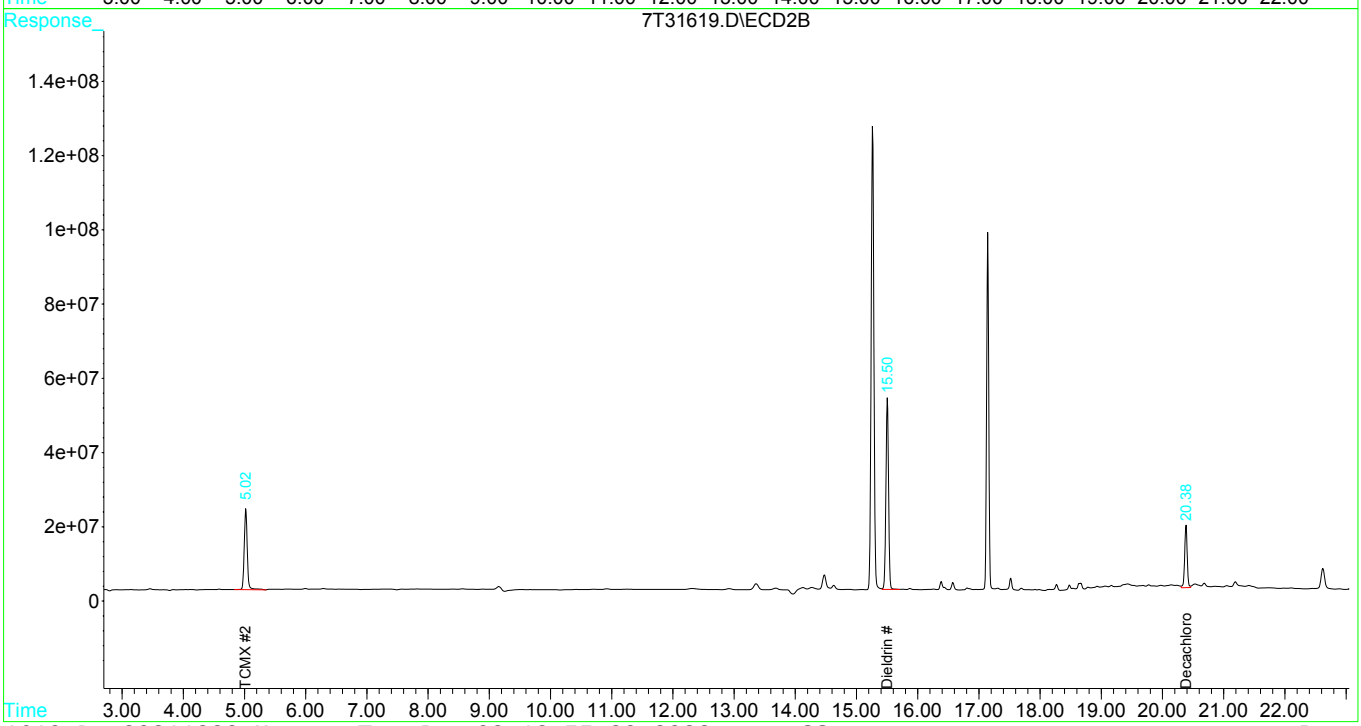
Quantitation Report (QT Reviewed)

Signal #1 : G:\HPCHEM\GCECD7\DATA\20221230\7T31619.D\ECD1A.CH Vial: 30
Signal #2 : G:\HPCHEM\GCECD7\DATA\20221230\7T31619.D\ECD2B.CH
Acq On : 31 Dec 2022 7:22 am Operator: WD
Sample : 2120937-19 Inst : GCECD-7
Misc : Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Jan 3 13:17 2023 Quant Results File: 80811228.RES

Quant Method : G:\HPCHEM\G...\80811228.M (Chemstation Integrator)
Title : Pesticides by Method SW-846 8081B
Last Update : Tue Jan 03 12:41:54 2023
Response via : Multiple Level Calibration
DataAcq Meth : RUNPEST1.M

Volume Inj. : 2ul
Signal #1 Phase : RTx-50 Signal #2 Phase: RTx-CLPesticides II
Signal #1 Info : 30M x 0.53mm x 0. Signal #2 Info : 30M x 0.53mm x 0.42um





ANALYSIS DATA SHEET

Pesticides - SW 846 8081B

Client: **Dynamic Earth LLC**
Client Sample ID: **T-12-4**
Lab Sample ID: **2120937-20**
Project: **Old Orchard G.C.**
Work Order: **2120937**

Date Sampled:	12/20/22 09:54	Prep Date:	12/28/22 16:06	File ID:	7T31620.D
Init/Final Vol:	15 g / 10 mL	Prep Batch:	B2L2832	Analyzed:	12/31/22 07:47
Dilution:	1	Matrix:	Soil	Sequence:	SAA0020
Percent Solids:	86.20	Prep Method:	Microwave Extraction		

CAS NO.	COMPOUND	CONC. (mg/kg dry)	MDL	RL	Qual
60-57-1	Dieldrin	0.000858	0.000789	0.00151	J

ND, U - Indicates compound analyzed for but not detected
J - Indicates estimated value
B - Indicates compound found in associated blank
E - Concentration exceeds highest calibration standard
D - Indicates result is based on a dilution
H - Indicates a Hold Time violation
P - Greater than 25% diff. between 2 GC columns.
MDL - Minimum detection limit, **RL** - Reporting limit

F-I

Quantitation Report (QT Reviewed)

Signal #1 : G:\HPCHEM\GCECD7\DATA\20221230\7T31620.D\ECD1A.CH Vial: 31
Signal #2 : G:\HPCHEM\GCECD7\DATA\20221230\7T31620.D\ECD2B.CH
Acq On : 31 Dec 2022 7:47 am Operator: WD
Sample : 2120937-20 Inst : GCECD-7
Misc : Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Jan 3 13:17 2023 Quant Results File: 80811228.RES

Quant Method : G:\HPCHEM\G...\80811228.M (Chemstation Integrator)
Title : Pesticides by Method SW-846 8081B
Last Update : Tue Jan 03 12:41:54 2023
Response via : Initial Calibration
DataAcq Meth : RUNPEST1.M

Volume Inj. : 2ul
Signal #1 Phase : RTx-50 Signal #2 Phase: RTx-CLPesticides II
Signal #1 Info : 30M x 0.53mm x 0. Signal #2 Info : 30M x 0.53mm x 0.42um

Compound	RT#1	RT#2	Resp#1	Resp#2	ug/kg	ug/kg
System Monitoring Compounds						
1) S TCMX	4.08	5.02	1080.6E6	665.4E6	34.130	45.413 #
Spiked Amount 50.000	Range 43 - 129		Recovery =		68.26%	90.83%
21) S Decachlorobiphen	18.81	20.39	1041.8E6	404.2E6	37.273	37.118
Spiked Amount 50.000	Range 42 - 136		Recovery =		74.55%	74.24%
Target Compounds						
11) M Dieldrin	12.88	15.51	49541751	21294056	1.111m	1.284
Sum Chlordane (gamma)			0	0	N.D.	N.D.
Average Chlordane (gamma)					0.000	0.000
Sum Toxaphene (1)			0	0	N.D.	N.D.
Average Toxaphene (1)					0.000	0.000

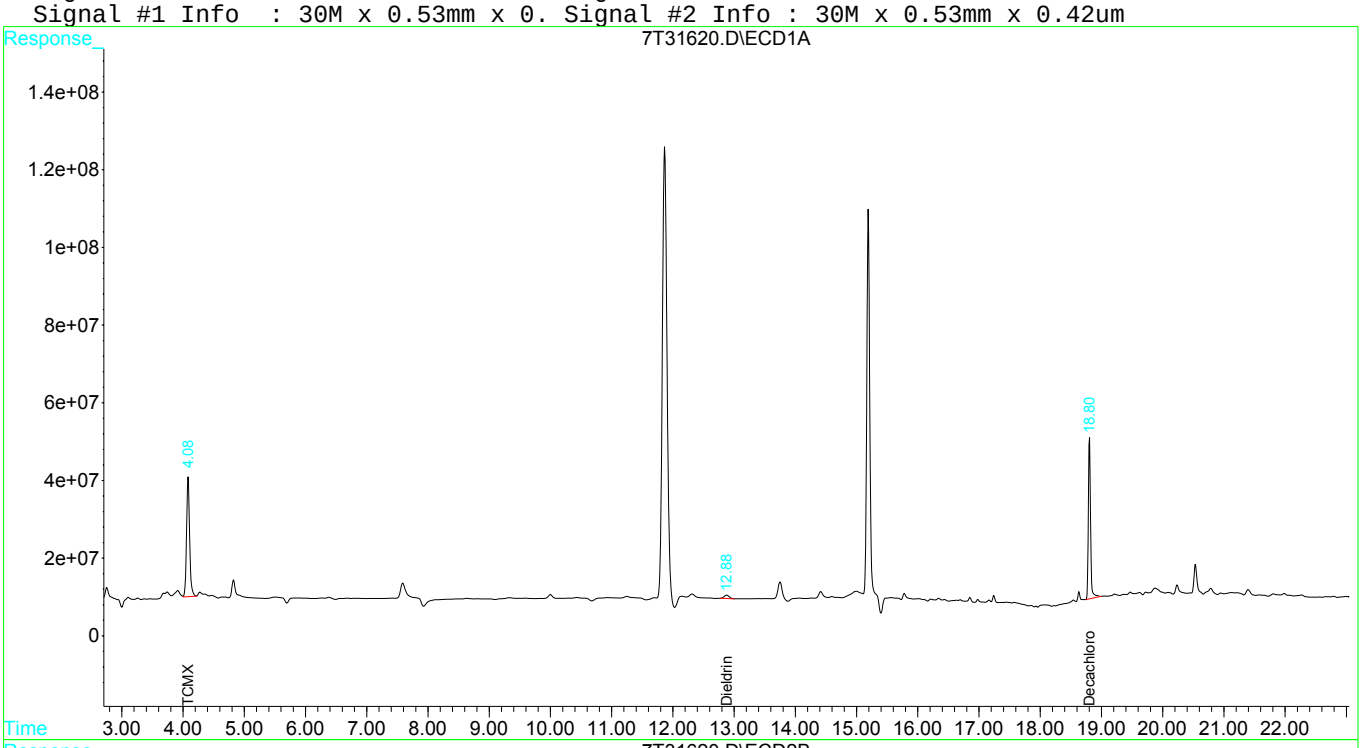
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.
7T31620.D 80811228.M Tue Jan 03 13:55:31 2023 SS

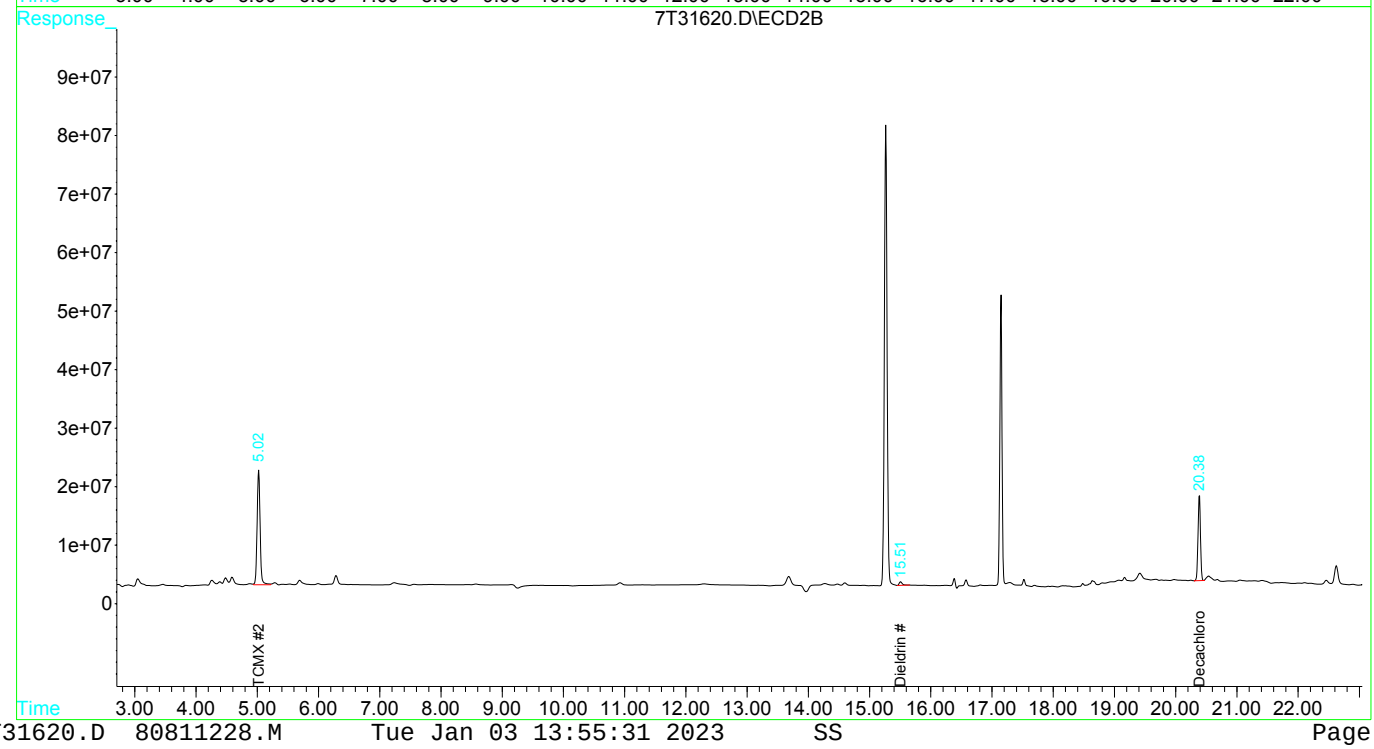
Quantitation Report (QT Reviewed)

Signal #1 : G:\HPCHEM\GCECD7\DATA\20221230\7T31620.D\ECD1A.CH Vial: 31
Signal #2 : G:\HPCHEM\GCECD7\DATA\20221230\7T31620.D\ECD2B.CH
Acq On : 31 Dec 2022 7:47 am Operator: WD
Sample : 2120937-20 Inst : GCECD-7
Misc : Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Jan 3 13:17 2023 Quant Results File: 80811228.RES

Quant Method : G:\HPCHEM\G...\80811228.M (Chemstation Integrator)
Title : Pesticides by Method SW-846 8081B
Last Update : Tue Jan 03 12:41:54 2023
Response via : Multiple Level Calibration
DataAcq Meth : RUNPEST1.M

Volume Inj. : 2ul
Signal #1 Phase : RTx-50 Signal #2 Phase: RTx-CLPesticides II
Signal #1 Info : 30M x 0.53mm x 0. Signal #2 Info : 30M x 0.53mm x 0.42um





ANALYSIS DATA SHEET

Pesticides - SW 846 8081B

Client: **Dynamic Earth LLC**
Client Sample ID: **T-14A**
Lab Sample ID: **2120937-21**
Project: **Old Orchard G.C.**
Work Order: **2120937**

Date Sampled:	12/20/22 09:58	Prep Date:	12/28/22 16:06	File ID:	7T31621.D
Init/Final Vol:	15 g / 10 mL	Prep Batch:	B2L2832	Analyzed:	12/31/22 08:13
Dilution:	1	Matrix:	Soil	Sequence:	SAA0020
Percent Solids:	86.63	Prep Method:	Microwave Extraction		

CAS NO.	COMPOUND	CONC. (mg/kg dry)	MDL	RL	Qual
60-57-1	Dieldrin [2C]	0.00419	0.000785	0.00150	

ND, U - Indicates compound analyzed for but not detected
J - Indicates estimated value
B - Indicates compound found in associated blank
E - Concentration exceeds highest calibration standard

D - Indicates result is based on a dilution
H - Indicates a Hold Time violation
P - Greater than 25% diff. between 2 GC columns.
MDL - Minimum detection limit, **RL** - Reporting limit

F-I

Quantitation Report (QT Reviewed)

Signal #1 : G:\HPCHEM\GCECD7\DATA\20221230\7T31621.D\ECD1A.CH Vial: 32
Signal #2 : G:\HPCHEM\GCECD7\DATA\20221230\7T31621.D\ECD2B.CH
Acq On : 31 Dec 2022 8:13 am Operator: WD
Sample : 2120937-21 Inst : GCECD-7
Misc : Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Jan 3 13:18 2023 Quant Results File: 80811228.RES

Quant Method : G:\HPCHEM\G...\80811228.M (Chemstation Integrator)
Title : Pesticides by Method SW-846 8081B
Last Update : Tue Jan 03 12:41:54 2023
Response via : Initial Calibration
DataAcq Meth : RUNPEST1.M

Volume Inj. : 2ul
Signal #1 Phase : RTx-50 Signal #2 Phase: RTx-CLPesticides II
Signal #1 Info : 30M x 0.53mm x 0. Signal #2 Info : 30M x 0.53mm x 0.42um

Compound	RT#1	RT#2	Resp#1	Resp#2	ug/kg	ug/kg
System Monitoring Compounds						
1) S TCMX	4.08	5.02	1165.4E6	698.7E6	36.805m	47.684m#
Spiked Amount 50.000	Range 43 - 129		Recovery =		73.61%	95.37%
21) S Decachlorobiphen	18.80	20.38	1128.7E6	440.8E6	40.384m	40.476m
Spiked Amount 50.000	Range 42 - 136		Recovery =		80.77%	80.95%
Target Compounds						
11) M Dieldrin	12.88	15.51	258.2E6	90408524	5.792	5.451
Sum Chlordane (gamma)			0	0	N.D.	N.D.
Average Chlordane (gamma)					0.000	0.000
Sum Toxaphene (1)			0	0	N.D.	N.D.
Average Toxaphene (1)					0.000	0.000

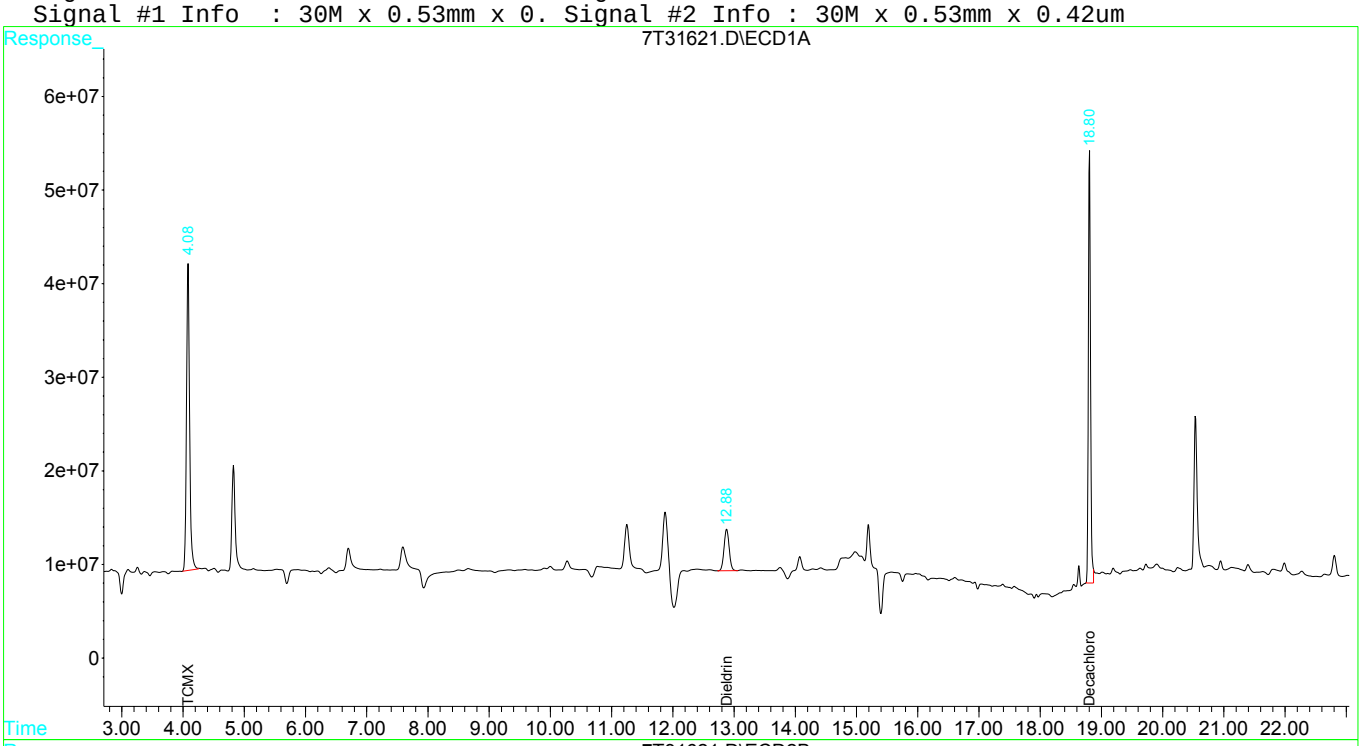
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7T31621.D 80811228.M Tue Jan 03 13:55:33 2023 SS

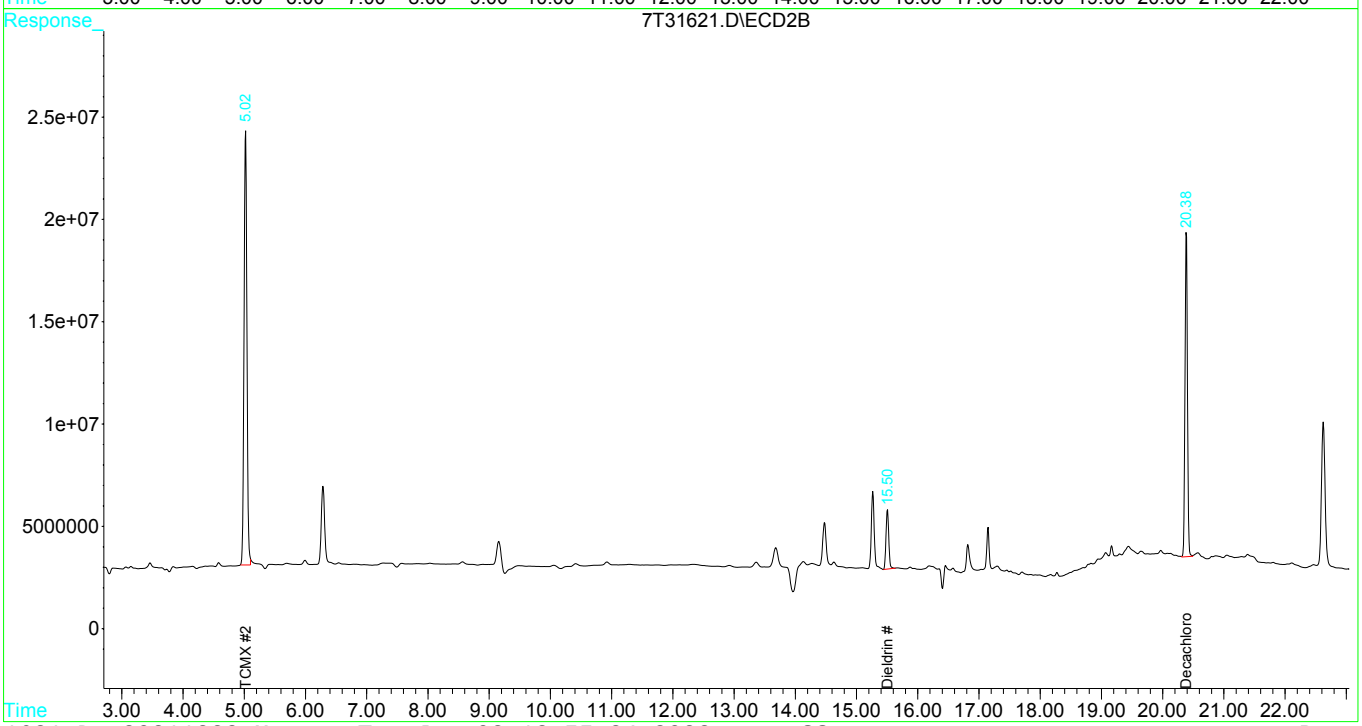
Quantitation Report (QT Reviewed)

Signal #1 : G:\HPCHEM\GCECD7\DATA\20221230\7T31621.D\ECD1A.CH Vial: 32
Signal #2 : G:\HPCHEM\GCECD7\DATA\20221230\7T31621.D\ECD2B.CH
Acq On : 31 Dec 2022 8:13 am Operator: WD
Sample : 2120937-21 Inst : GCECD-7
Misc : Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Jan 3 13:18 2023 Quant Results File: 80811228.RES

Quant Method : G:\HPCHEM\G...\80811228.M (Chemstation Integrator)
Title : Pesticides by Method SW-846 8081B
Last Update : Tue Jan 03 12:41:54 2023
Response via : Multiple Level Calibration
DataAcq Meth : RUNPEST1.M

Volume Inj. : 2ul
Signal #1 Phase : RTx-50 Signal #2 Phase: RTx-CLPesticides II
Signal #1 Info : 30M x 0.53mm x 0. Signal #2 Info : 30M x 0.53mm x 0.42um





ANALYSIS DATA SHEET

Pesticides - SW 846 8081B

Client: **Dynamic Earth LLC**
Client Sample ID: **T-14-1**
Lab Sample ID: **2120937-22**
Project: **Old Orchard G.C.**
Work Order: **2120937**

Date Sampled:	12/20/22 10:04	Prep Date:	12/28/22 16:06	File ID:	7T31622.D
Init/Final Vol:	15 g / 10 mL	Prep Batch:	B2L2832	Analyzed:	12/31/22 08:38
Dilution:	1	Matrix:	Soil	Sequence:	SAA0020
Percent Solids:	88.66	Prep Method:	Microwave Extraction		

CAS NO.	COMPOUND	CONC. (mg/kg dry)	MDL	RL	Qual
60-57-1	Dieldrin [2C]	0.00361	0.000767	0.00147	

ND, U - Indicates compound analyzed for but not detected
J - Indicates estimated value
B - Indicates compound found in associated blank
E - Concentration exceeds highest calibration standard

D - Indicates result is based on a dilution
H - Indicates a Hold Time violation
P - Greater than 25% diff. between 2 GC columns.
MDL - Minimum detection limit, **RL** - Reporting limit

F-I

Quantitation Report (QT Reviewed)

Signal #1 : G:\HPCHEM\GCECD7\DATA\20221230\7T31622.D\ECD1A.CH Vial: 33
Signal #2 : G:\HPCHEM\GCECD7\DATA\20221230\7T31622.D\ECD2B.CH
Acq On : 31 Dec 2022 8:38 am Operator: WD
Sample : 2120937-22 Inst : GCECD-7
Misc : Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Jan 3 13:22 2023 Quant Results File: 80811228.RES

Quant Method : G:\HPCHEM\G...\80811228.M (Chemstation Integrator)
Title : Pesticides by Method SW-846 8081B
Last Update : Tue Jan 03 12:41:54 2023
Response via : Initial Calibration
DataAcq Meth : RUNPEST1.M

Volume Inj. : 2ul
Signal #1 Phase : RTx-50 Signal #2 Phase: RTx-CLPesticides II
Signal #1 Info : 30M x 0.53mm x 0. Signal #2 Info : 30M x 0.53mm x 0.42um

Compound	RT#1	RT#2	Resp#1	Resp#2	ug/kg	ug/kg
System Monitoring Compounds						
1) S TCMX	4.08	5.02	1220.9E6	742.2E6	38.558	50.657m#
Spiked Amount 50.000	Range 43 - 129		Recovery =		77.12%	101.31%
21) S Decachlorobiphen	18.81	20.39	1157.6E6	451.8E6	41.417	41.487
Spiked Amount 50.000	Range 42 - 136		Recovery =		82.83%	82.97%
Target Compounds						
11) M Dieldrin	12.88	15.50	224.4E6	79683752	5.034m	4.804m
Sum Chlordane (gamma)			0	0	N.D.	N.D.
Average Chlordane (gamma)					0.000	0.000
Sum Toxaphene (1)			0	0	N.D.	N.D.
Average Toxaphene (1)					0.000	0.000

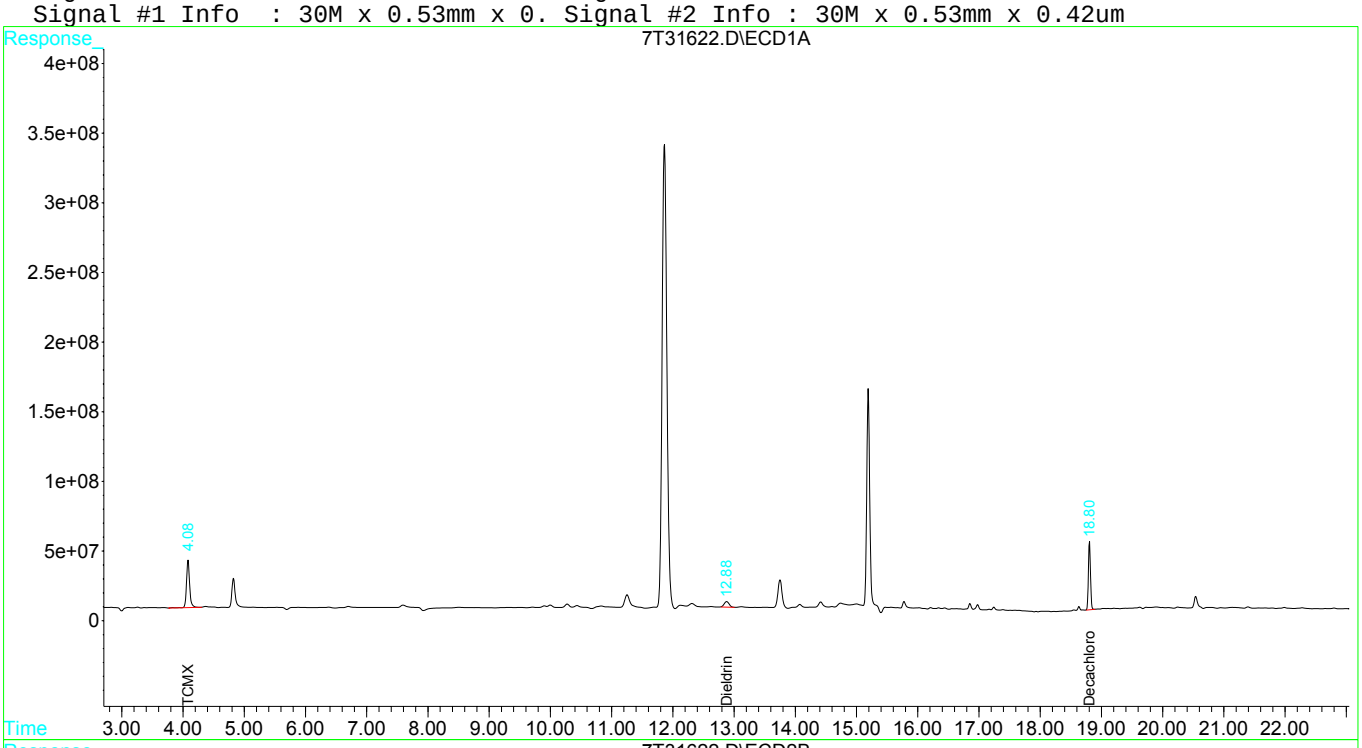
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.
7T31622.D 80811228.M Tue Jan 03 13:55:36 2023 SS

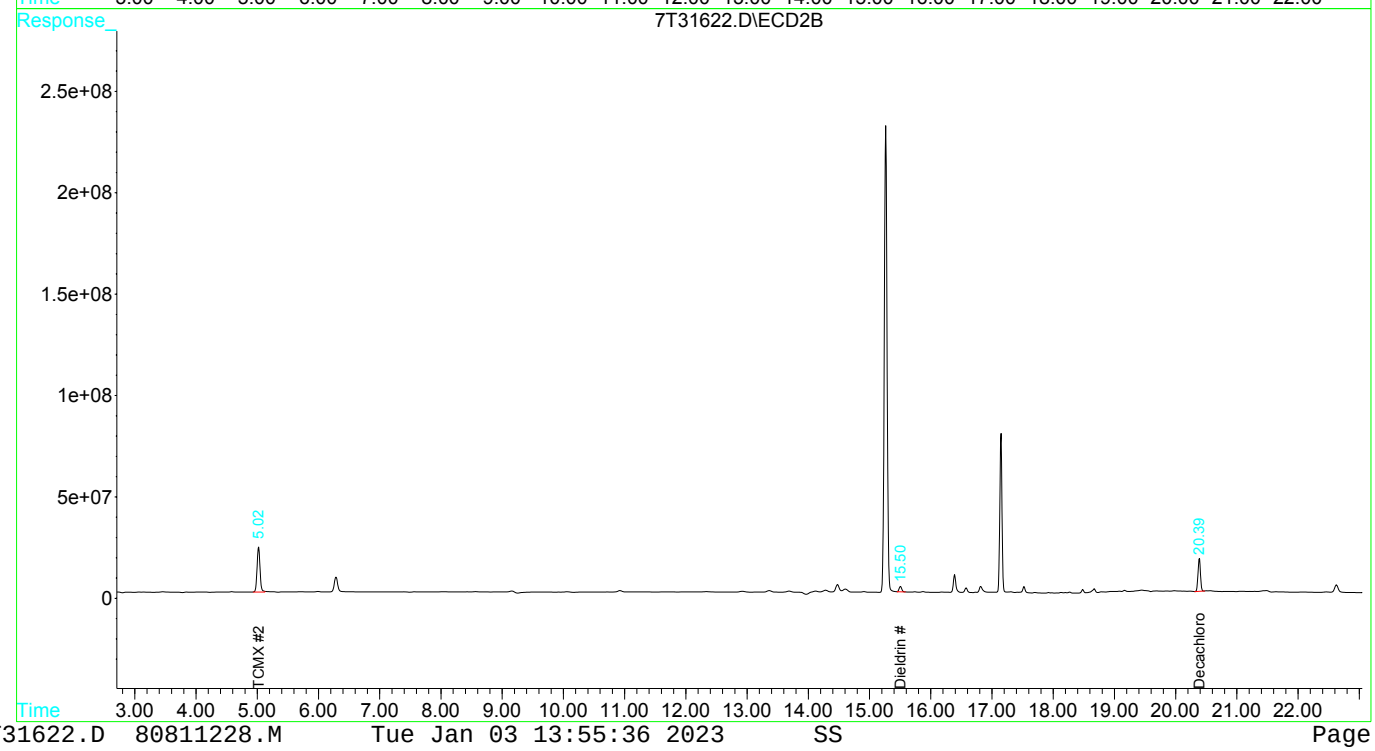
Quantitation Report (QT Reviewed)

Signal #1 : G:\HPCHEM\GCECD7\DATA\20221230\7T31622.D\ECD1A.CH Vial: 33
Signal #2 : G:\HPCHEM\GCECD7\DATA\20221230\7T31622.D\ECD2B.CH
Acq On : 31 Dec 2022 8:38 am Operator: WD
Sample : 2120937-22 Inst : GCECD-7
Misc : Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Jan 3 13:22 2023 Quant Results File: 80811228.RES

Quant Method : G:\HPCHEM\G...\80811228.M (Chemstation Integrator)
Title : Pesticides by Method SW-846 8081B
Last Update : Tue Jan 03 12:41:54 2023
Response via : Multiple Level Calibration
DataAcq Meth : RUNPEST1.M

Volume Inj. : 2ul
Signal #1 Phase : RTx-50 Signal #2 Phase: RTx-CLPesticides II
Signal #1 Info : 30M x 0.53mm x 0. Signal #2 Info : 30M x 0.53mm x 0.42um





ANALYSIS DATA SHEET

Pesticides - SW 846 8081B

Client: **Dynamic Earth LLC**
Client Sample ID: **T-14-2**
Lab Sample ID: **2120937-23**
Project: **Old Orchard G.C.**
Work Order: **2120937**

Date Sampled:	12/20/22 10:08	Prep Date:	12/28/22 16:06	File ID:	7T31623.D
Init/Final Vol:	15 g / 10 mL	Prep Batch:	B2L2832	Analyzed:	12/31/22 09:04
Dilution:	1	Matrix:	Soil	Sequence:	SAA0020
Percent Solids:	86.63	Prep Method:	Microwave Extraction		

CAS NO.	COMPOUND	CONC. (mg/kg dry)	MDL	RL	Qual
60-57-1	Dieldrin	ND	0.000785	0.00150	U

11 11.2.

ND, U - Indicates compound analyzed for but not detected
J - Indicates estimated value
B - Indicates compound found in associated blank
E - Concentration exceeds highest calibration standard

D - Indicates result is based on a dilution
H - Indicates a Hold Time violation
P - Greater than 25% diff. between 2 GC columns.
MDL - Minimum detection limit, **RL** - Reporting limit

F-I

Quantitation Report (QT Reviewed)

Signal #1 : G:\HPCHEM\GCECD7\DATA\20221230\7T31623.D\ECD1A.CH Vial: 34
Signal #2 : G:\HPCHEM\GCECD7\DATA\20221230\7T31623.D\ECD2B.CH
Acq On : 31 Dec 2022 9:04 am Operator: WD
Sample : 2120937-23 Inst : GCECD-7
Misc : Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Jan 3 13:23 2023 Quant Results File: 80811228.RES

Quant Method : G:\HPCHEM\G...\80811228.M (Chemstation Integrator)
Title : Pesticides by Method SW-846 8081B
Last Update : Tue Jan 03 12:41:54 2023
Response via : Initial Calibration
DataAcq Meth : RUNPEST1.M

Volume Inj. : 2ul
Signal #1 Phase : RTx-50 Signal #2 Phase: RTx-CLPesticides II
Signal #1 Info : 30M x 0.53mm x 0. Signal #2 Info : 30M x 0.53mm x 0.42um

Compound	RT#1	RT#2	Resp#1	Resp#2	ug/kg	ug/kg
System Monitoring Compounds						
1) S TCMX	4.09	5.02	1354.7E6	849.3E6	42.785	57.967 #
Spiked Amount 50.000	Range 43 - 129		Recovery =		85.57%	115.93%
21) S Decachlorobiphen	18.81	20.39	1369.1E6	504.1E6	48.983	46.292
Spiked Amount 50.000	Range 42 - 136		Recovery =		97.97%	92.58%
Target Compounds						
11) M Dieldrin	12.87	15.50	23136134	8981749	0.519m	0.542m
Sum Chlordane (gamma)			0	0	N.D.	N.D.
Average Chlordane (gamma)					0.000	0.000
Sum Toxaphene (1)			0	0	N.D.	N.D.
Average Toxaphene (1)					0.000	0.000

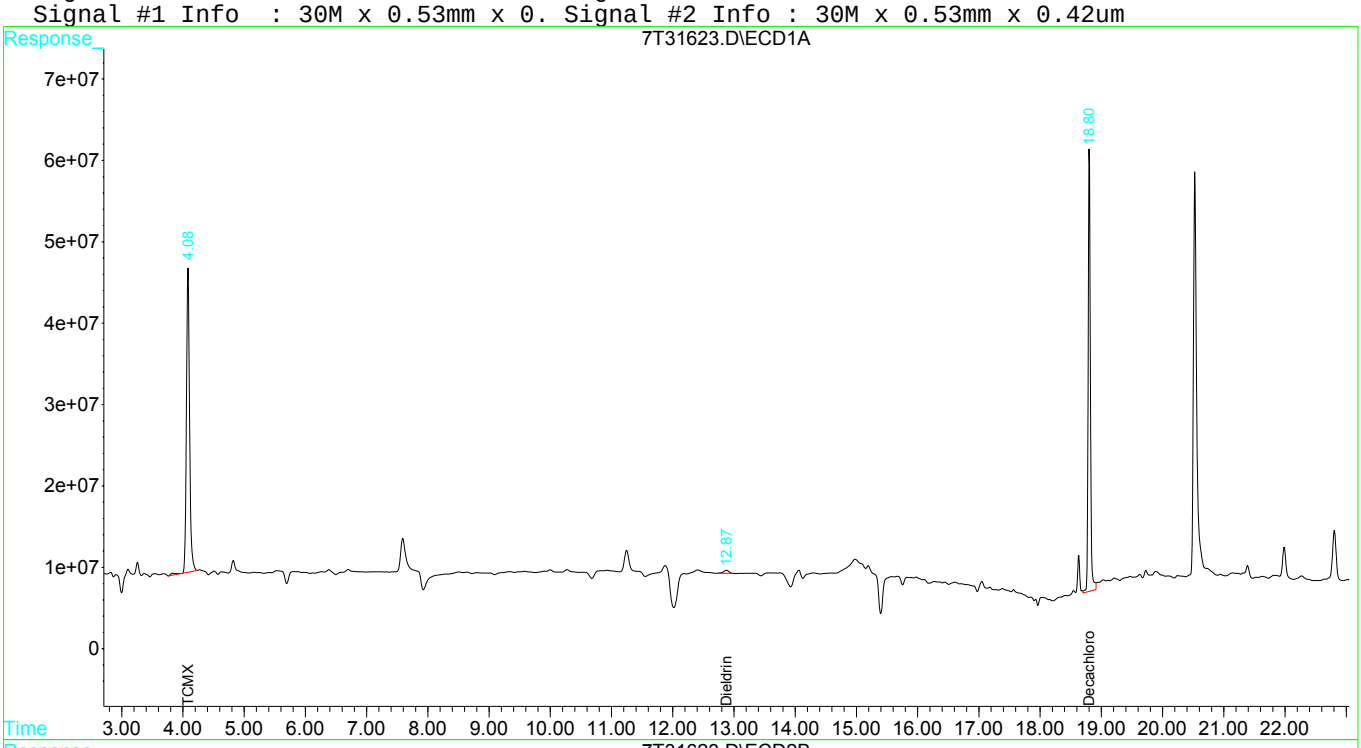
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.
7T31623.D 80811228.M Tue Jan 03 13:55:38 2023 SS

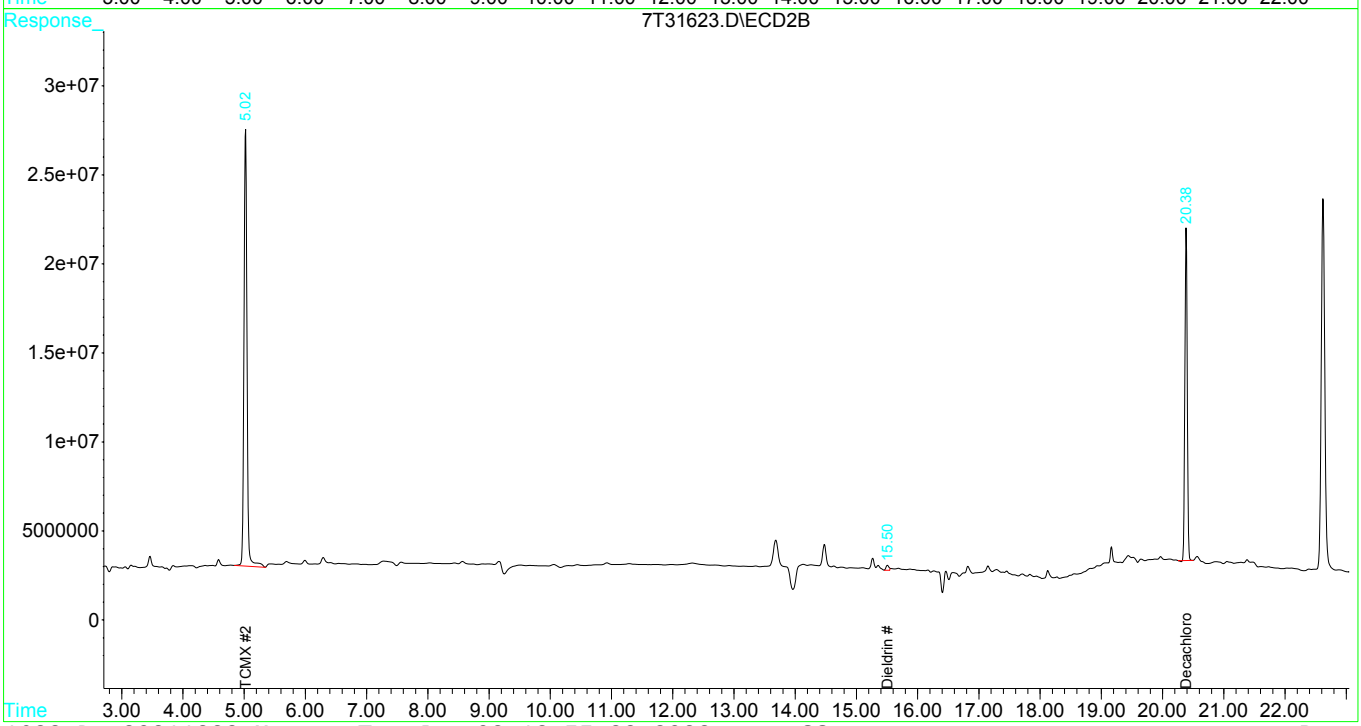
Quantitation Report (QT Reviewed)

Signal #1 : G:\HPCHEM\GCECD7\DATA\20221230\7T31623.D\ECD1A.CH Vial: 34
Signal #2 : G:\HPCHEM\GCECD7\DATA\20221230\7T31623.D\ECD2B.CH
Acq On : 31 Dec 2022 9:04 am Operator: WD
Sample : 2120937-23 Inst : GCECD-7
Misc : Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Jan 3 13:23 2023 Quant Results File: 80811228.RES

Quant Method : G:\HPCHEM\G...\80811228.M (Chemstation Integrator)
Title : Pesticides by Method SW-846 8081B
Last Update : Tue Jan 03 12:41:54 2023
Response via : Multiple Level Calibration
DataAcq Meth : RUNPEST1.M

Volume Inj. : 2ul
Signal #1 Phase : RTx-50 Signal #2 Phase: RTx-CLPesticides II
Signal #1 Info : 30M x 0.53mm x 0. Signal #2 Info : 30M x 0.53mm x 0.42um





ANALYSIS DATA SHEET

Pesticides - SW 846 8081B

Client: **Dynamic Earth LLC**
Client Sample ID: **T-14-3**
Lab Sample ID: **2120937-24**
Project: **Old Orchard G.C.**
Work Order: **2120937**

Date Sampled:	12/20/22 10:12	Prep Date:	12/28/22 16:06	File ID:	7T31624.D
Init/Final Vol:	15 g / 10 mL	Prep Batch:	B2L2832	Analyzed:	12/31/22 09:29
Dilution:	1	Matrix:	Soil	Sequence:	SAA0020
Percent Solids:	88.27	Prep Method:	Microwave Extraction		

CAS NO.	COMPOUND	CONC. (mg/kg dry)	MDL	RL	Qual
60-57-1	Dieldrin	0.0107	0.000770	0.00147	

ND, U - Indicates compound analyzed for but not detected
J - Indicates estimated value
B - Indicates compound found in associated blank
E - Concentration exceeds highest calibration standard

D - Indicates result is based on a dilution
H - Indicates a Hold Time violation
P - Greater than 25% diff. between 2 GC columns.
MDL - Minimum detection limit, **RL** - Reporting limit

F-I

Quantitation Report (QT Reviewed)

Signal #1 : G:\HPCHEM\GCECD7\DATA\20221230\7T31624.D\ECD1A.CH Vial: 35
Signal #2 : G:\HPCHEM\GCECD7\DATA\20221230\7T31624.D\ECD2B.CH
Acq On : 31 Dec 2022 9:29 am Operator: WD
Sample : 2120937-24 Inst : GCECD-7
Misc : Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Jan 3 13:23 2023 Quant Results File: 80811228.RES

Quant Method : G:\HPCHEM\G...\80811228.M (Chemstation Integrator)
Title : Pesticides by Method SW-846 8081B
Last Update : Tue Jan 03 12:41:54 2023
Response via : Initial Calibration
DataAcq Meth : RUNPEST1.M

Volume Inj. : 2ul
Signal #1 Phase : RTx-50 Signal #2 Phase: RTx-CLPesticides II
Signal #1 Info : 30M x 0.53mm x 0. Signal #2 Info : 30M x 0.53mm x 0.42um

Compound	RT#1	RT#2	Resp#1	Resp#2	ug/kg	ug/kg
System Monitoring Compounds						
1) S TCMX	4.09	5.03	1143.9E6	730.5E6	36.127	49.856 #
Spiked Amount 50.000	Range 43 - 129		Recovery =		72.25%	99.71%
21) S Decachlorobiphen	18.81	20.40	1180.3E6	458.2E6	42.228	42.070
Spiked Amount 50.000	Range 42 - 136		Recovery =		84.46%	84.14%
Target Compounds						
11) M Dieldrin	12.90f	15.52	631.4E6	256.3E6	14.165	15.454
Sum Chlordane (gamma)			0	0	N.D.	N.D.
Average Chlordane (gamma)					0.000	0.000
Sum Toxaphene (1)			0	0	N.D.	N.D.
Average Toxaphene (1)					0.000	0.000

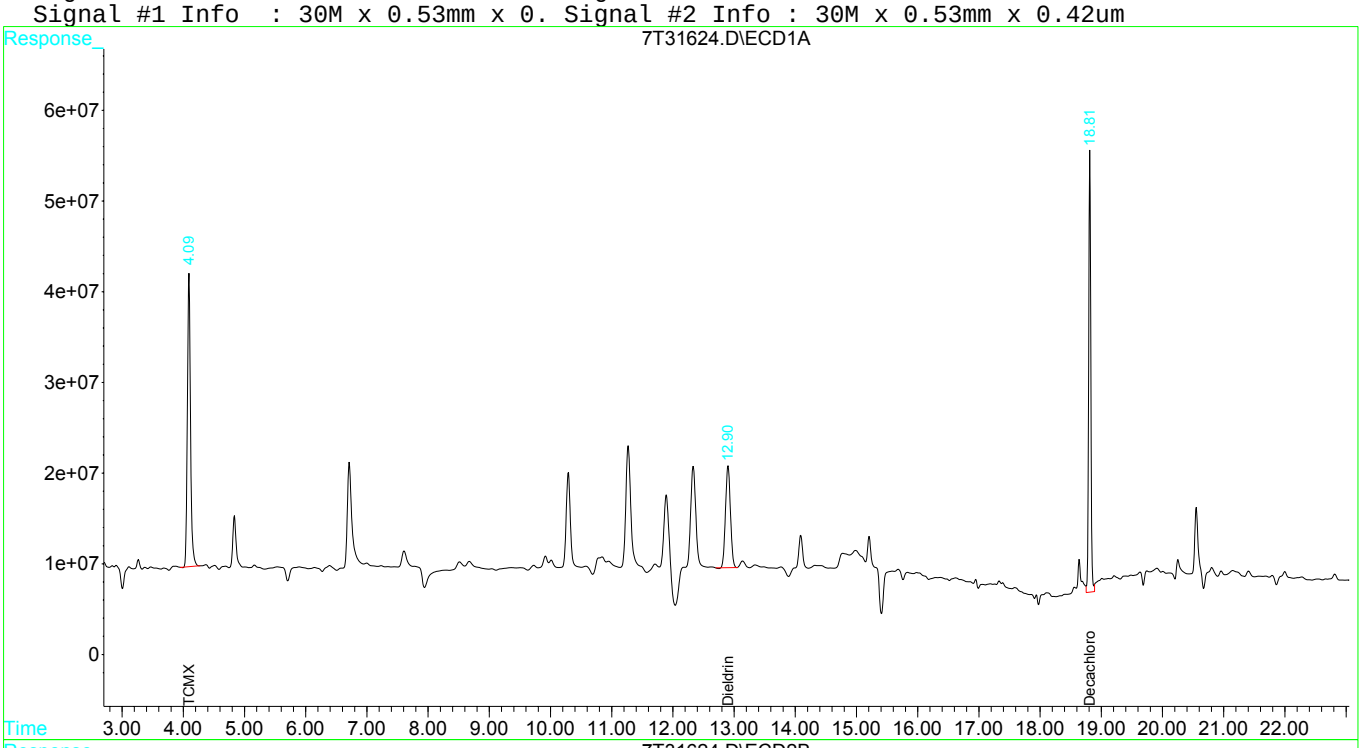
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.
7T31624.D 80811228.M Tue Jan 03 13:55:40 2023 SS Page 1

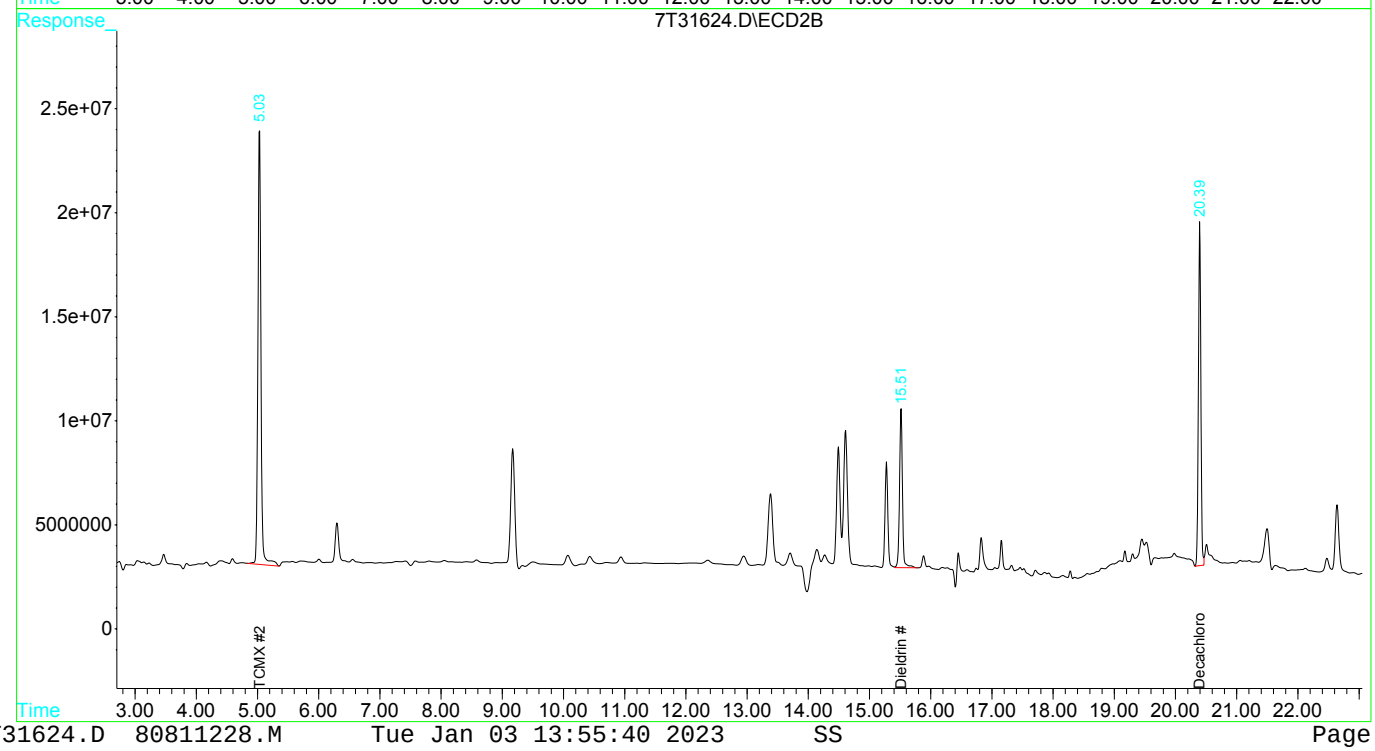
Quantitation Report (QT Reviewed)

Signal #1 : G:\HPCHEM\GCECD7\DATA\20221230\7T31624.D\ECD1A.CH Vial: 35
Signal #2 : G:\HPCHEM\GCECD7\DATA\20221230\7T31624.D\ECD2B.CH
Acq On : 31 Dec 2022 9:29 am Operator: WD
Sample : 2120937-24 Inst : GCECD-7
Misc : Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Jan 3 13:23 2023 Quant Results File: 80811228.RES

Quant Method : G:\HPCHEM\G...\80811228.M (Chemstation Integrator)
Title : Pesticides by Method SW-846 8081B
Last Update : Tue Jan 03 12:41:54 2023
Response via : Multiple Level Calibration
DataAcq Meth : RUNPEST1.M

Volume Inj. : 2ul
Signal #1 Phase : RTx-50 Signal #2 Phase: RTx-CLPesticides II
Signal #1 Info : 30M x 0.53mm x 0. Signal #2 Info : 30M x 0.53mm x 0.42um





ANALYSIS DATA SHEET

Pesticides - SW 846 8081B

Client: **Dynamic Earth LLC**
Client Sample ID: **T-14-4**
Lab Sample ID: **2120937-25**
Project: **Old Orchard G.C.**
Work Order: **2120937**

Date Sampled:	12/20/22 10:16	Prep Date:	12/28/22 16:06	File ID:	7T31625.D
Init/Final Vol:	15 g / 10 mL	Prep Batch:	B2L2832	Analyzed:	12/31/22 09:54
Dilution:	1	Matrix:	Soil	Sequence:	SAA0020
Percent Solids:	89.88	Prep Method:	Microwave Extraction		

CAS NO.	COMPOUND	CONC. (mg/kg dry)	MDL	RL	Qual
60-57-1	Dieldrin	0.129	0.000757	0.00145	

ND, U - Indicates compound analyzed for but not detected
J - Indicates estimated value
B - Indicates compound found in associated blank
E - Concentration exceeds highest calibration standard

D - Indicates result is based on a dilution
H - Indicates a Hold Time violation
P - Greater than 25% diff. between 2 GC columns.
MDL - Minimum detection limit, **RL** - Reporting limit

F-I

Quantitation Report (QT Reviewed)

Signal #1 : G:\HPCHEM\GCECD7\DATA\20221230\7T31625.D\ECD1A.CH Vial: 36
Signal #2 : G:\HPCHEM\GCECD7\DATA\20221230\7T31625.D\ECD2B.CH
Acq On : 31 Dec 2022 9:54 am Operator: WD
Sample : 2120937-25 Inst : GCECD-7
Misc : Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Jan 3 13:24 2023 Quant Results File: 80811228.RES

Quant Method : G:\HPCHEM\G...\80811228.M (Chemstation Integrator)
Title : Pesticides by Method SW-846 8081B
Last Update : Tue Jan 03 12:41:54 2023
Response via : Initial Calibration
DataAcq Meth : RUNPEST1.M

Volume Inj. : 2ul
Signal #1 Phase : RTx-50 Signal #2 Phase: RTx-CLPesticides II
Signal #1 Info : 30M x 0.53mm x 0. Signal #2 Info : 30M x 0.53mm x 0.42um

Compound	RT#1	RT#2	Resp#1	Resp#2	ug/kg	ug/kg
System Monitoring Compounds						
1) S TCMX	4.09	5.03	1209.2E6	739.9E6	38.190m	50.496m#
Spiked Amount 50.000	Range 43 - 129		Recovery =		76.38%	100.99%
21) S Decachlorobiphen	18.81	20.40	1261.5E6	507.3E6	45.136	46.583
Spiked Amount 50.000	Range 42 - 136		Recovery =		90.27%	93.17%
Target Compounds						
11) M Dieldrin	12.90	15.52	7766.5E6	2975.3E6	174.244	179.381m
Sum Chlordane (gamma)			0	0	N.D.	N.D.
Average Chlordane (gamma)					0.000	0.000
Sum Toxaphene (1)			0	0	N.D.	N.D.
Average Toxaphene (1)					0.000	0.000

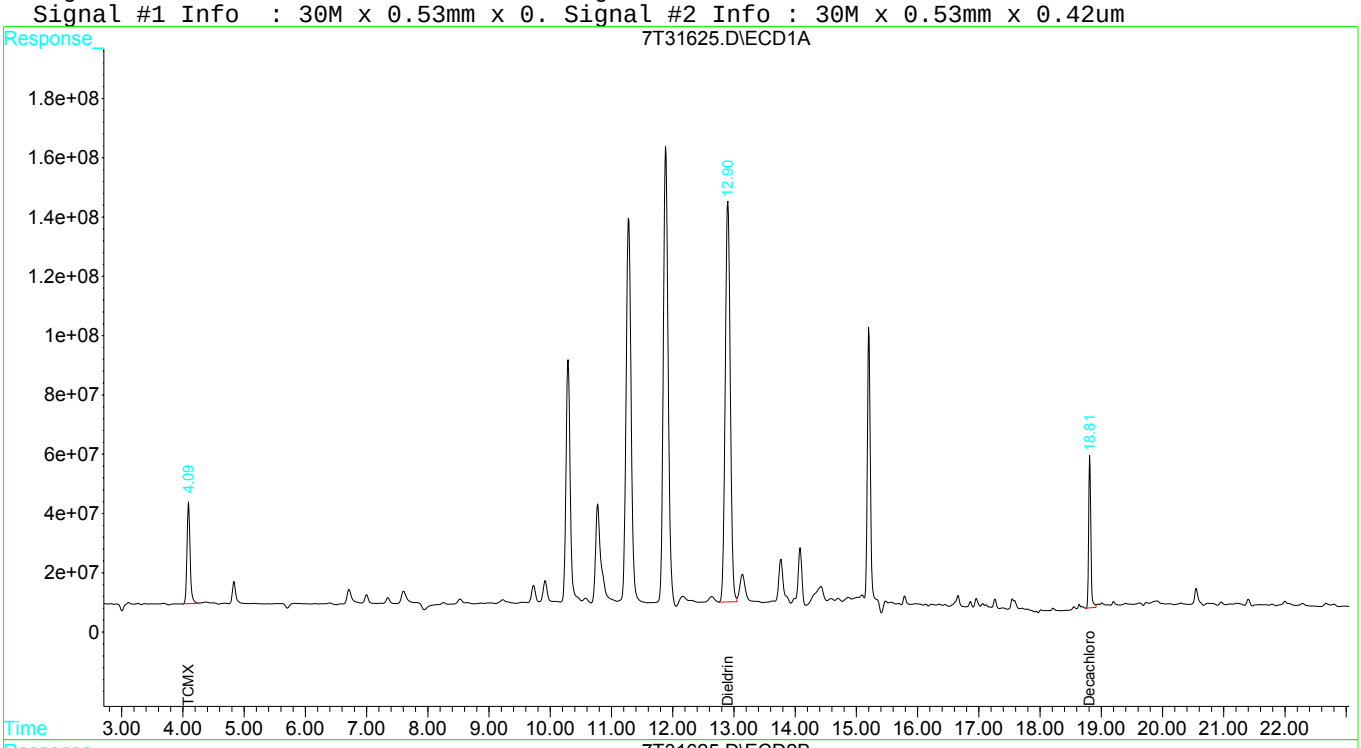
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.
7T31625.D 80811228.M Tue Jan 03 13:55:42 2023 SS

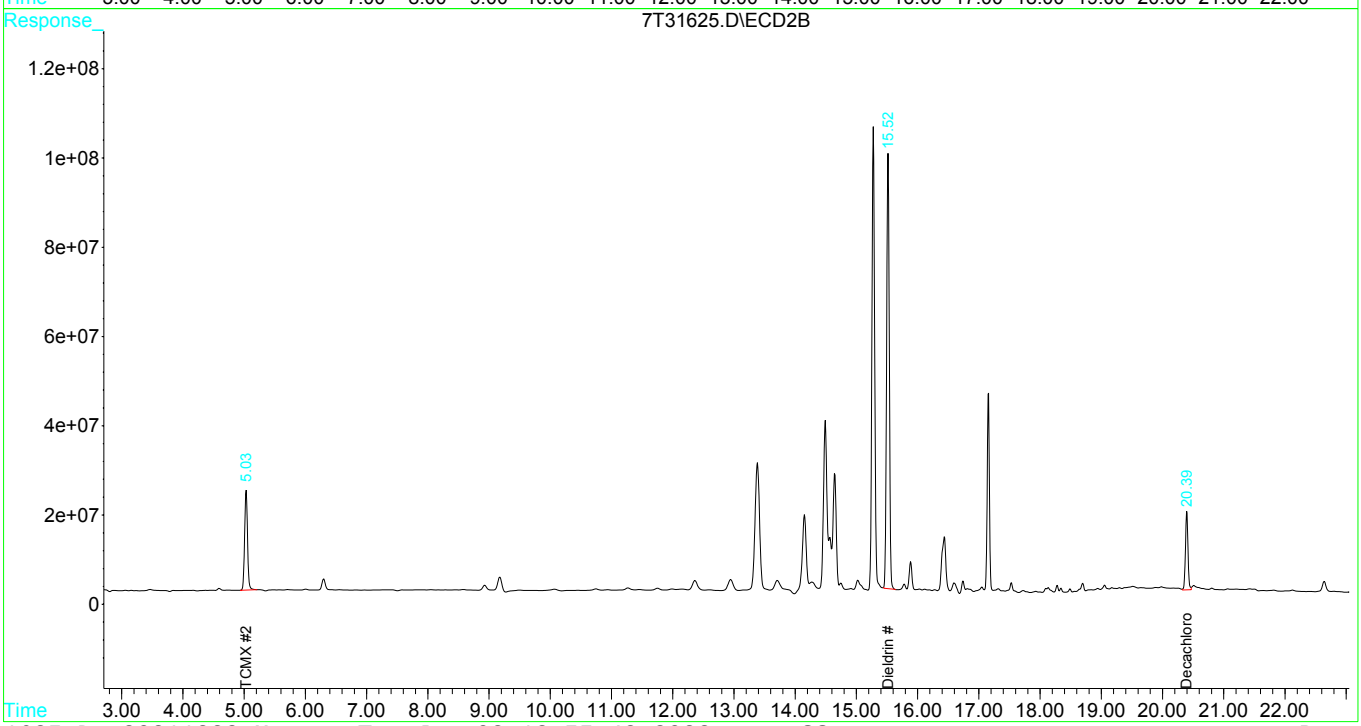
Quantitation Report (QT Reviewed)

Signal #1 : G:\HPCHEM\GCECD7\DATA\20221230\7T31625.D\ECD1A.CH Vial: 36
Signal #2 : G:\HPCHEM\GCECD7\DATA\20221230\7T31625.D\ECD2B.CH
Acq On : 31 Dec 2022 9:54 am Operator: WD
Sample : 2120937-25 Inst : GCECD-7
Misc : Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Jan 3 13:24 2023 Quant Results File: 80811228.RES

Quant Method : G:\HPCHEM\G...\80811228.M (Chemstation Integrator)
Title : Pesticides by Method SW-846 8081B
Last Update : Tue Jan 03 12:41:54 2023
Response via : Multiple Level Calibration
DataAcq Meth : RUNPEST1.M

Volume Inj. : 2ul
Signal #1 Phase : RTx-50 Signal #2 Phase: RTx-CLPesticides II
Signal #1 Info : 30M x 0.53mm x 0. Signal #2 Info : 30M x 0.53mm x 0.42um





ANALYSIS DATA SHEET

SPLP Pesticides - SW 846 1312

Client: **Dynamic Earth LLC**
Client Sample ID: **WA-3R**
Lab Sample ID: **2120937-27**
Project: **Old Orchard G.C.**
Work Order: **2120937**

Date Sampled:	12/20/22 10:22	Prep Date:	12/29/22 17:37	File ID:	7T31595.D
Init/Final Vol:	900 mL / 10 mL	Prep Batch:	B2L2929	Analyzed:	12/30/22 21:13
Dilution:	1	Matrix:	Soil	Sequence:	SAA0020
Percent Solids:	92.46	Prep Method:	Sep Funnel TCLP/SPLP		

CAS NO.	COMPOUND	CONC. (ug/L)	MDL	RL	Qual
319-85-7	beta-BHC	ND	0.000412	0.0222	U

ND, U - Indicates compound analyzed for but not detected
J - Indicates estimated value
B - Indicates compound found in associated blank
E - Concentration exceeds highest calibration standard

D - Indicates result is based on a dilution
H - Indicates a Hold Time violation
P - Greater than 25% diff. between 2 GC columns.
MDL - Minimum detection limit, **RL** - Reporting limit

F-I

Quantitation Report (QT Reviewed)

Signal #1 : G:\HPCHEM\GCECD7\DATA\20221230\7T31595.D\ECD1A.CH Vial: 6
Signal #2 : G:\HPCHEM\GCECD7\DATA\20221230\7T31595.D\ECD2B.CH
Acq On : 30 Dec 2022 9:13 pm Operator: WD
Sample : 2120937-27 Inst : GCECD-7
Misc : SPLP Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Jan 3 12:04 2023 Quant Results File: 80811228.RES

Quant Method : G:\HPCHEM\G...\80811228.M (Chemstation Integrator)
Title : Pesticides by Method SW-846 8081B
Last Update : Tue Jan 03 10:57:11 2023
Response via : Initial Calibration
DataAcq Meth : RUNPEST1.M

Volume Inj. : 2ul
Signal #1 Phase : RTx-50 Signal #2 Phase: RTx-CLPesticides II
Signal #1 Info : 30M x 0.53mm x 0. Signal #2 Info : 30M x 0.53mm x 0.42um

Compound	RT#1	RT#2	Resp#1	Resp#2	ug/kg	ug/kg
System Monitoring Compounds						
1) S TCMX	4.07	5.01	1190.1E6	630.3E6	37.588m	43.022m
Spiked Amount 50.000	Range 43 - 129		Recovery =		75.18%	86.04%
21) S Decachlorobiphen	18.80	20.38	1042.8E6	392.1E6	37.311	36.007
Spiked Amount 50.000	Range 42 - 136		Recovery =		74.62%	72.01%
Target Compounds						
Sum Chlordane (gamma)			0	0	N.D.	N.D.
Average Chlordane (gamma)					0.000	0.000
Sum Toxaphene (1)			0	0	N.D.	N.D.
Average Toxaphene (1)					0.000	0.000

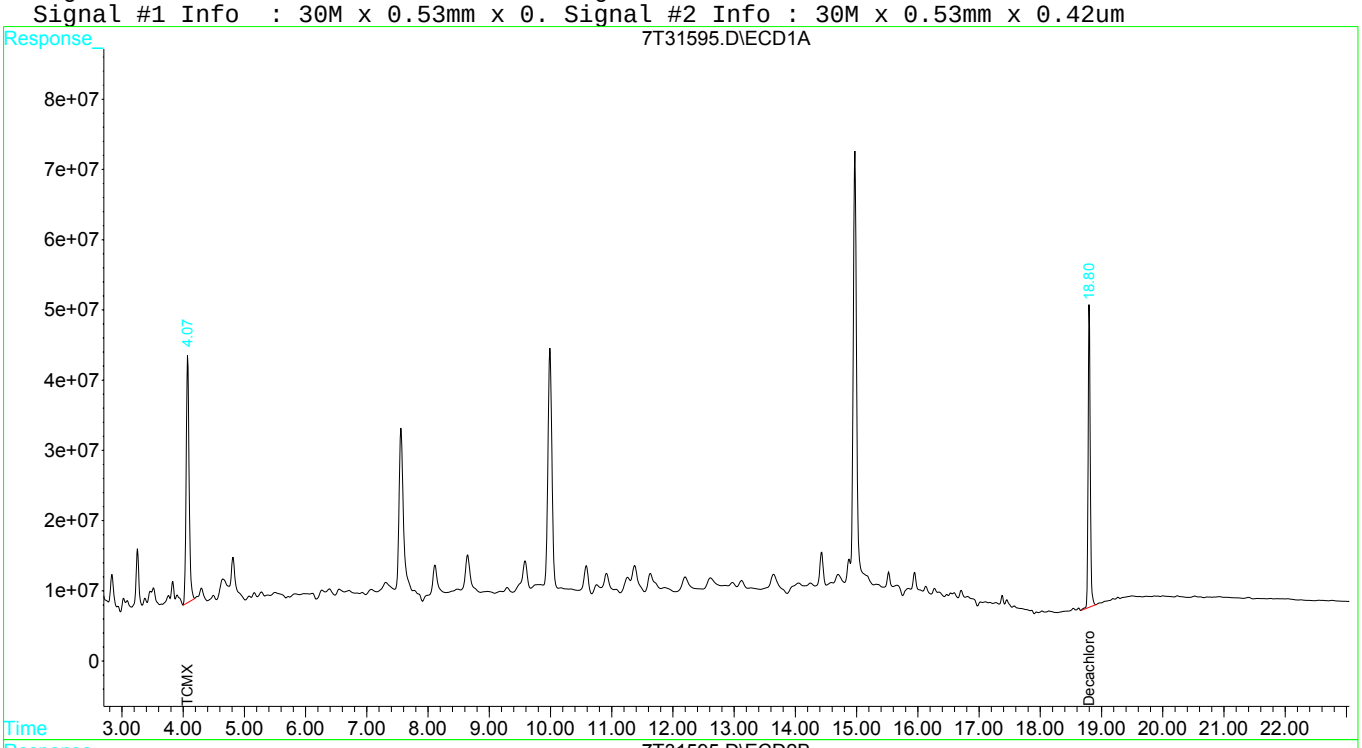
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.
7T31595.D 80811228.M Tue Jan 03 13:54:22 2023 SS

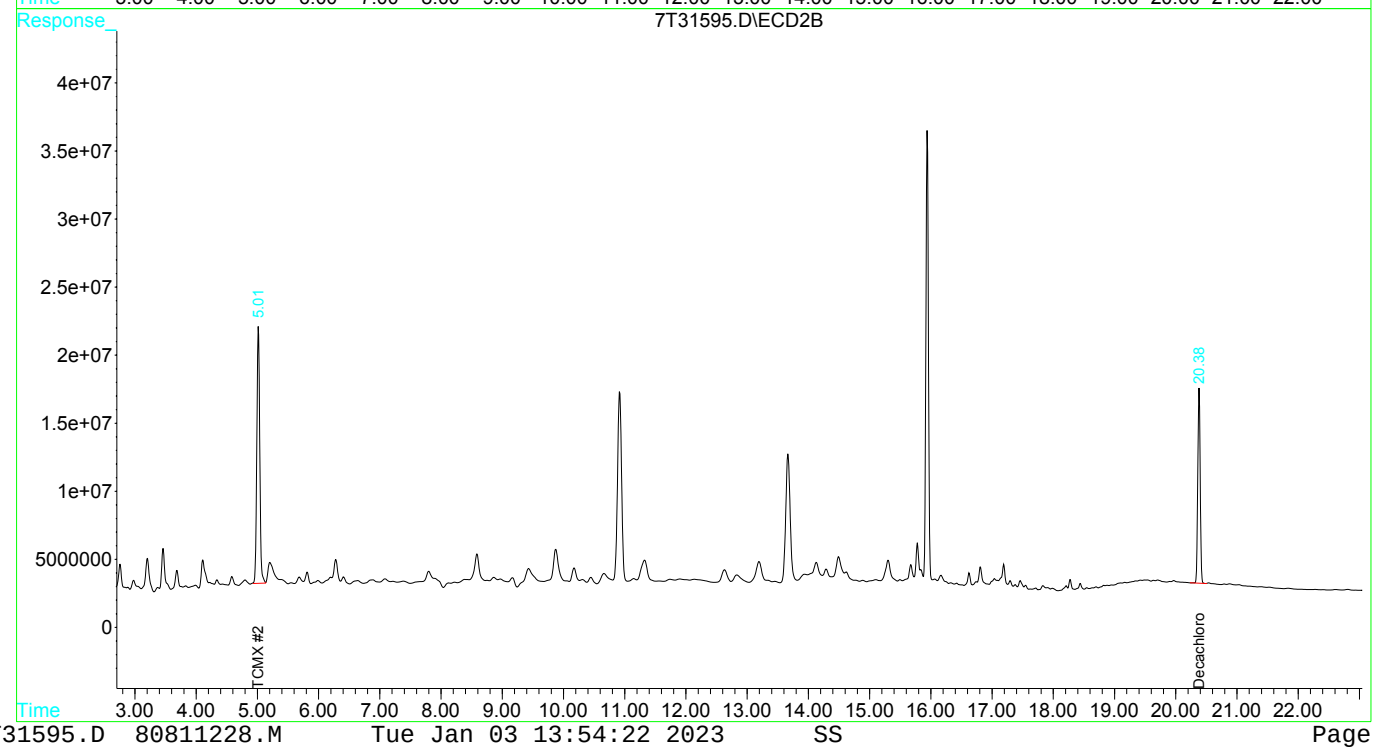
Quantitation Report (QT Reviewed)

Signal #1 : G:\HPCHEM\GCECD7\DATA\20221230\7T31595.D\ECD1A.CH Vial: 6
Signal #2 : G:\HPCHEM\GCECD7\DATA\20221230\7T31595.D\ECD2B.CH
Acq On : 30 Dec 2022 9:13 pm Operator: WD
Sample : 2120937-27 Inst : GCECD-7
Misc : SPLP Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Jan 3 12:04 2023 Quant Results File: 80811228.RES

Quant Method : G:\HPCHEM\G...\80811228.M (Chemstation Integrator)
Title : Pesticides by Method SW-846 8081B
Last Update : Tue Jan 03 10:57:11 2023
Response via : Multiple Level Calibration
DataAcq Meth : RUNPEST1.M

Volume Inj. : 2ul
Signal #1 Phase : RTx-50 Signal #2 Phase: RTx-CLPesticides II
Signal #1 Info : 30M x 0.53mm x 0. Signal #2 Info : 30M x 0.53mm x 0.42um





ANALYSIS DATA SHEET

Pesticides - SW 846 8081B

Client: **Dynamic Earth LLC**
Client Sample ID: **G-9A-R**
Lab Sample ID: **2120937-29**
Project: **Old Orchard G.C.**
Work Order: **2120937**

Date Sampled:	12/21/22 10:24	Prep Date:	12/28/22 16:06	File ID:	7T31636.D
Init/Final Vol:	15 g / 10 mL	Prep Batch:	B2L2832	Analyzed:	12/31/22 14:33
Dilution:	1	Matrix:	Soil	Sequence:	SAA0020
Percent Solids:	82.30	Prep Method:	Microwave Extraction		

CAS NO.	COMPOUND	CONC. (mg/kg dry)	MDL	RL	Qual
1024-57-3	Heptachlor Epoxide	ND	0.000797	0.00158	U

ND, U - Indicates compound analyzed for but not detected
J - Indicates estimated value
B - Indicates compound found in associated blank
E - Concentration exceeds highest calibration standard

D - Indicates result is based on a dilution
H - Indicates a Hold Time violation
P - Greater than 25% diff. between 2 GC columns.
MDL - Minimum detection limit, **RL** - Reporting limit

F-I

Quantitation Report (QT Reviewed)

Signal #1 : G:\HPCHEM\GCECD7\DATA\20221230\7T31636.D\ECD1A.CH Vial: 47
Signal #2 : G:\HPCHEM\GCECD7\DATA\20221230\7T31636.D\ECD2B.CH
Acq On : 31 Dec 2022 2:33 pm Operator: WD
Sample : 2120937-29 Inst : GCECD-7
Misc : Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Jan 3 13:43 2023 Quant Results File: 80811228.RES

Quant Method : G:\HPCHEM\G...\80811228.M (Chemstation Integrator)
Title : Pesticides by Method SW-846 8081B
Last Update : Tue Jan 03 13:40:33 2023
Response via : Initial Calibration
DataAcq Meth : RUNPEST1.M

Volume Inj. : 2ul
Signal #1 Phase : RTx-50 Signal #2 Phase: RTx-CLPesticides II
Signal #1 Info : 30M x 0.53mm x 0. Signal #2 Info : 30M x 0.53mm x 0.42um

Compound	RT#1	RT#2	Resp#1	Resp#2	ug/kg	ug/kg
System Monitoring Compounds						
1) S TCMX	4.12	5.06	1180.2E6	734.3E6	37.272	50.118 #
Spiked Amount 50.000	Range 43 - 129		Recovery =		74.54%	100.24%
21) S Decachlorobiphen	18.83	20.42	1243.7E6	431.2E6	44.499	39.598
Spiked Amount 50.000	Range 42 - 136		Recovery =		89.00%	79.20%
Target Compounds						
Sum Chlordane (gamma)			0	0	N.D.	N.D.
Average Chlordane (gamma)					0.000	0.000
Sum Toxaphene (1)			0	0	N.D.	N.D.
Average Toxaphene (1)					0.000	0.000

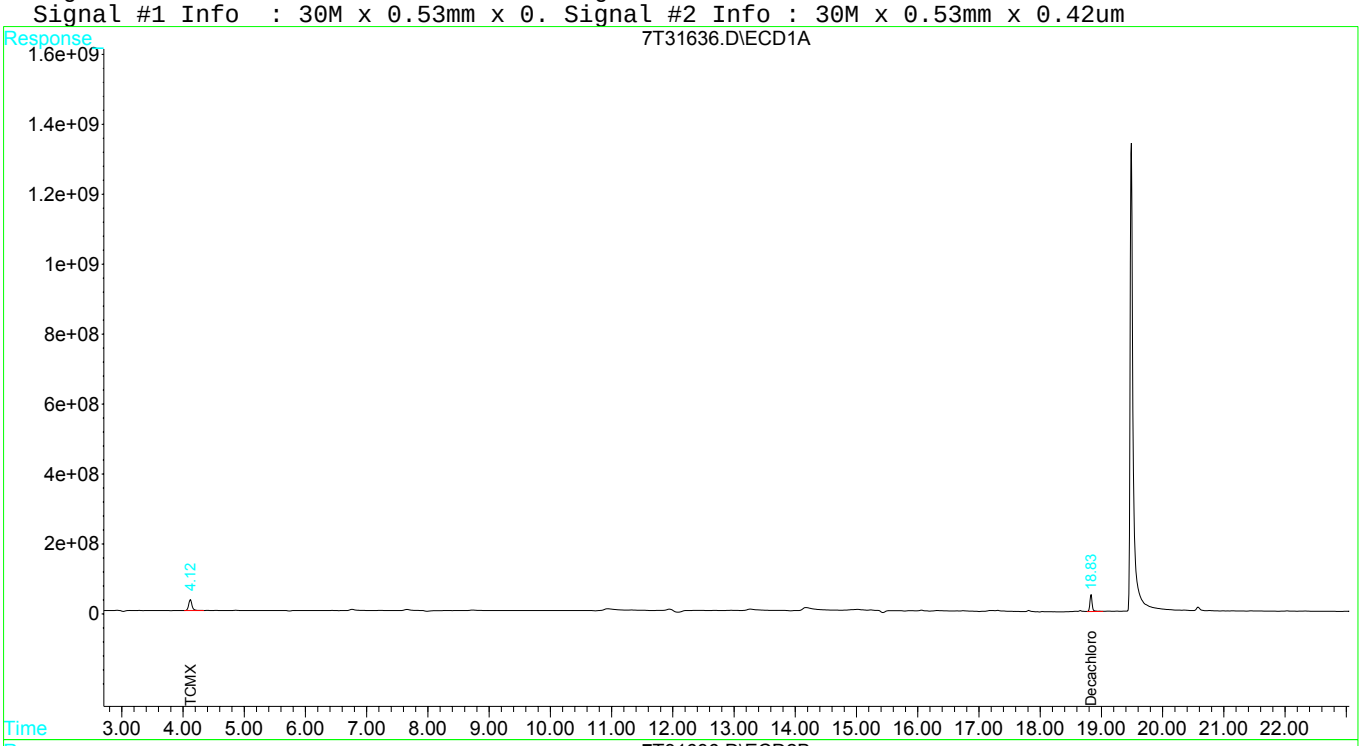
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.
7T31636.D 80811228.M Tue Jan 03 13:56:04 2023 SS

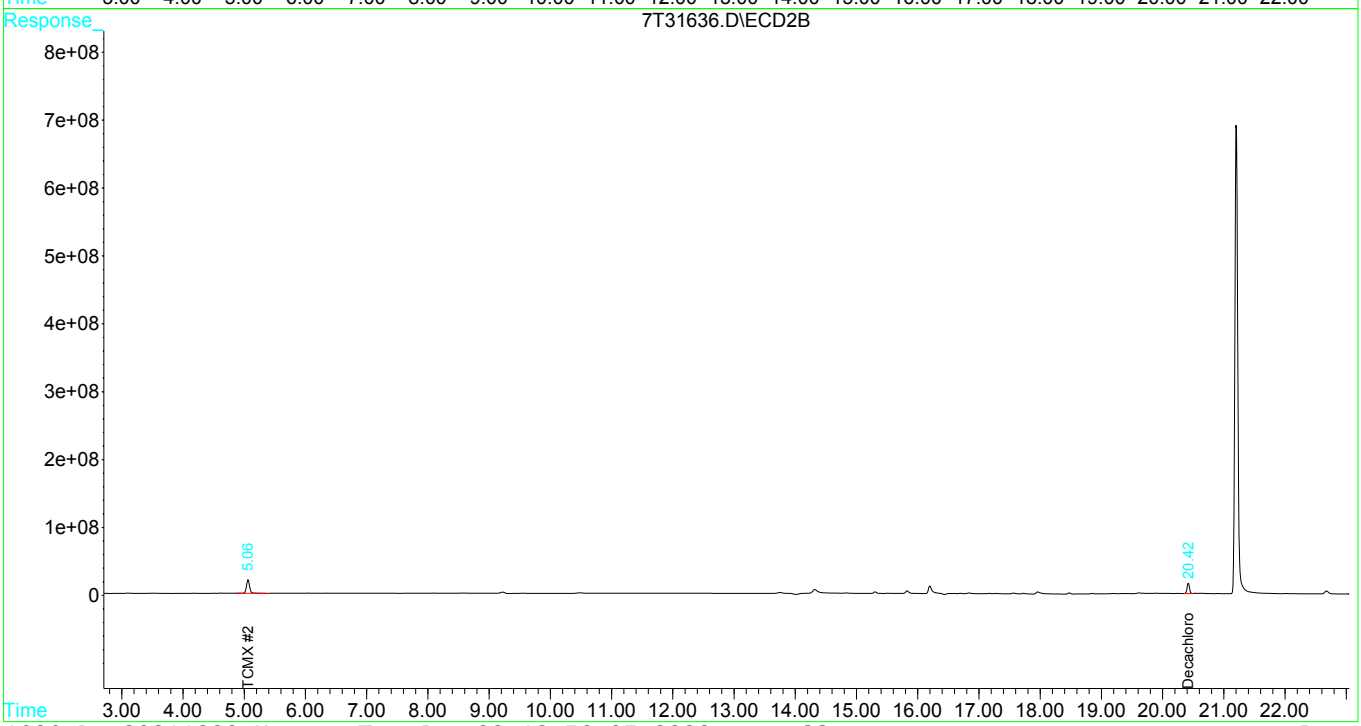
Quantitation Report (QT Reviewed)

Signal #1 : G:\HPCHEM\GCECD7\DATA\20221230\7T31636.D\ECD1A.CH Vial: 47
Signal #2 : G:\HPCHEM\GCECD7\DATA\20221230\7T31636.D\ECD2B.CH
Acq On : 31 Dec 2022 2:33 pm Operator: WD
Sample : 2120937-29 Inst : GCECD-7
Misc : Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Jan 3 13:43 2023 Quant Results File: 80811228.RES

Quant Method : G:\HPCHEM\G...\80811228.M (Chemstation Integrator)
Title : Pesticides by Method SW-846 8081B
Last Update : Tue Jan 03 13:40:33 2023
Response via : Multiple Level Calibration
DataAcq Meth : RUNPEST1.M

Volume Inj. : 2ul
Signal #1 Phase : RTx-50 Signal #2 Phase: RTx-CLPesticides II
Signal #1 Info : 30M x 0.53mm x 0. Signal #2 Info : 30M x 0.53mm x 0.42um





ANALYSIS DATA SHEET

Pesticides - SW 846 8081B

Client: **Dynamic Earth LLC**
Client Sample ID: **G-9-1-R**
Lab Sample ID: **2120937-30**
Project: **Old Orchard G.C.**
Work Order: **2120937**

Date Sampled:	12/21/22 10:30	Prep Date:	12/28/22 16:06	File ID:	7T31637.D
Init/Final Vol:	15 g / 10 mL	Prep Batch:	B2L2832	Analyzed:	12/31/22 14:59
Dilution:	1	Matrix:	Soil	Sequence:	SAA0020
Percent Solids:	79.60	Prep Method:	Microwave Extraction		

CAS NO.	COMPOUND	CONC. (mg/kg dry)	MDL	RL	Qual
1024-57-3	Heptachlor Epoxide [2C]	0.0708	0.000824	0.00163	

ND, U - Indicates compound analyzed for but not detected
J - Indicates estimated value
B - Indicates compound found in associated blank
E - Concentration exceeds highest calibration standard

D - Indicates result is based on a dilution
H - Indicates a Hold Time violation
P - Greater than 25% diff. between 2 GC columns.
MDL - Minimum detection limit, **RL** - Reporting limit

F-I

Quantitation Report (QT Reviewed)

Signal #1 : G:\HPCHEM\GCECD7\DATA\20221230\7T31637.D\ECD1A.CH Vial: 48
Signal #2 : G:\HPCHEM\GCECD7\DATA\20221230\7T31637.D\ECD2B.CH
Acq On : 31 Dec 2022 2:59 pm Operator: WD
Sample : 2120937-30 Inst : GCECD-7
Misc : Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Jan 3 13:44 2023 Quant Results File: 80811228.RES

Quant Method : G:\HPCHEM\G...\80811228.M (Chemstation Integrator)
Title : Pesticides by Method SW-846 8081B
Last Update : Tue Jan 03 13:40:33 2023
Response via : Initial Calibration
DataAcq Meth : RUNPEST1.M

Volume Inj. : 2ul
Signal #1 Phase : RTx-50 Signal #2 Phase: RTx-CLPesticides II
Signal #1 Info : 30M x 0.53mm x 0. Signal #2 Info : 30M x 0.53mm x 0.42um

Compound	RT#1	RT#2	Resp#1	Resp#2	ug/kg	ug/kg
System Monitoring Compounds						
1) S TCMX	4.12	5.06	1112.0E6	652.8E6	35.121	44.552m#
Spiked Amount 50.000	Range 43 - 129		Recovery =		70.24%	89.10%
21) S Decachlorobiphen	18.83	20.42	1495.4E6	586.9E6	53.502m	53.890m
Spiked Amount 50.000	Range 42 - 136		Recovery =		107.00%	107.78%
Target Compounds						
8) Heptachlor epoxi	10.34	13.43	4201.1E6	1574.7E6	95.197m	84.571m
Sum Chlordane (gamma)			0	0	N.D.	N.D.
Average Chlordane (gamma)					0.000	0.000
Sum Toxaphene (1)			0	0	N.D.	N.D.
Average Toxaphene (1)					0.000	0.000

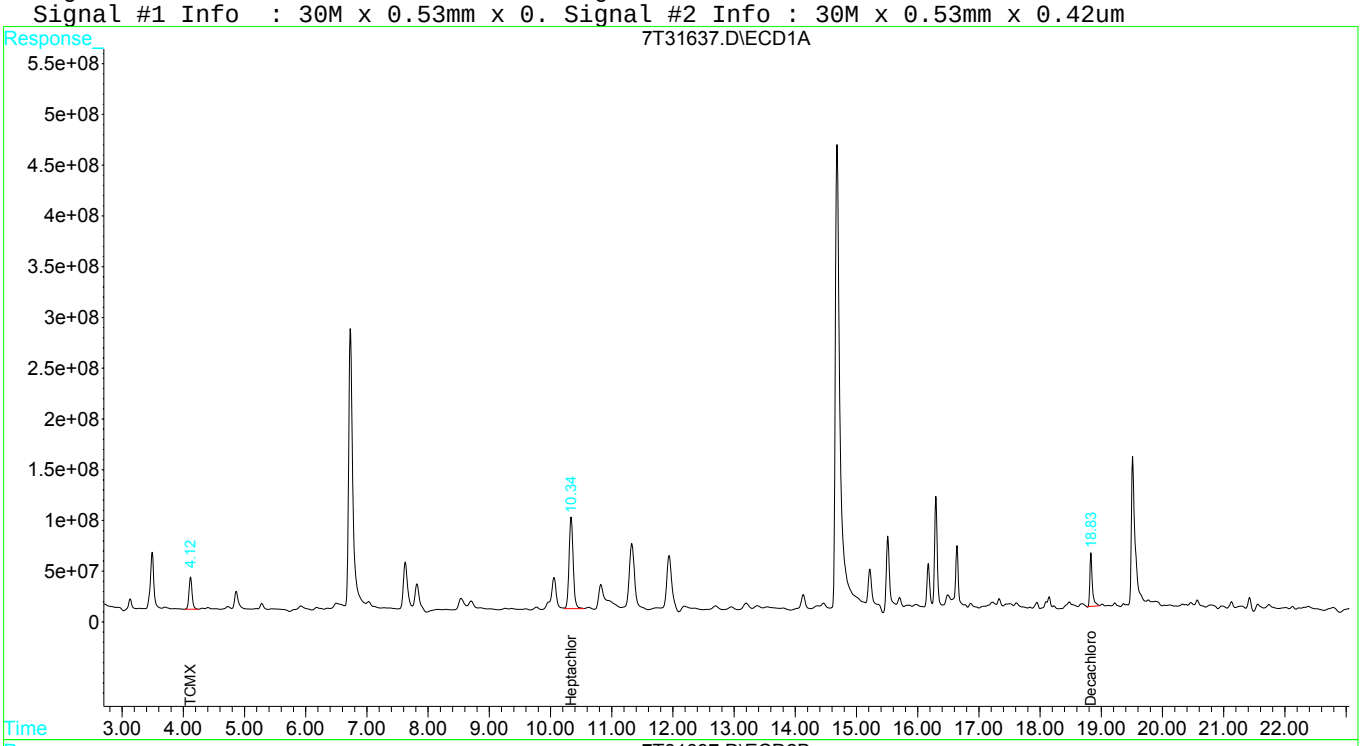
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.
7T31637.D 80811228.M Tue Jan 03 13:56:06 2023 SS

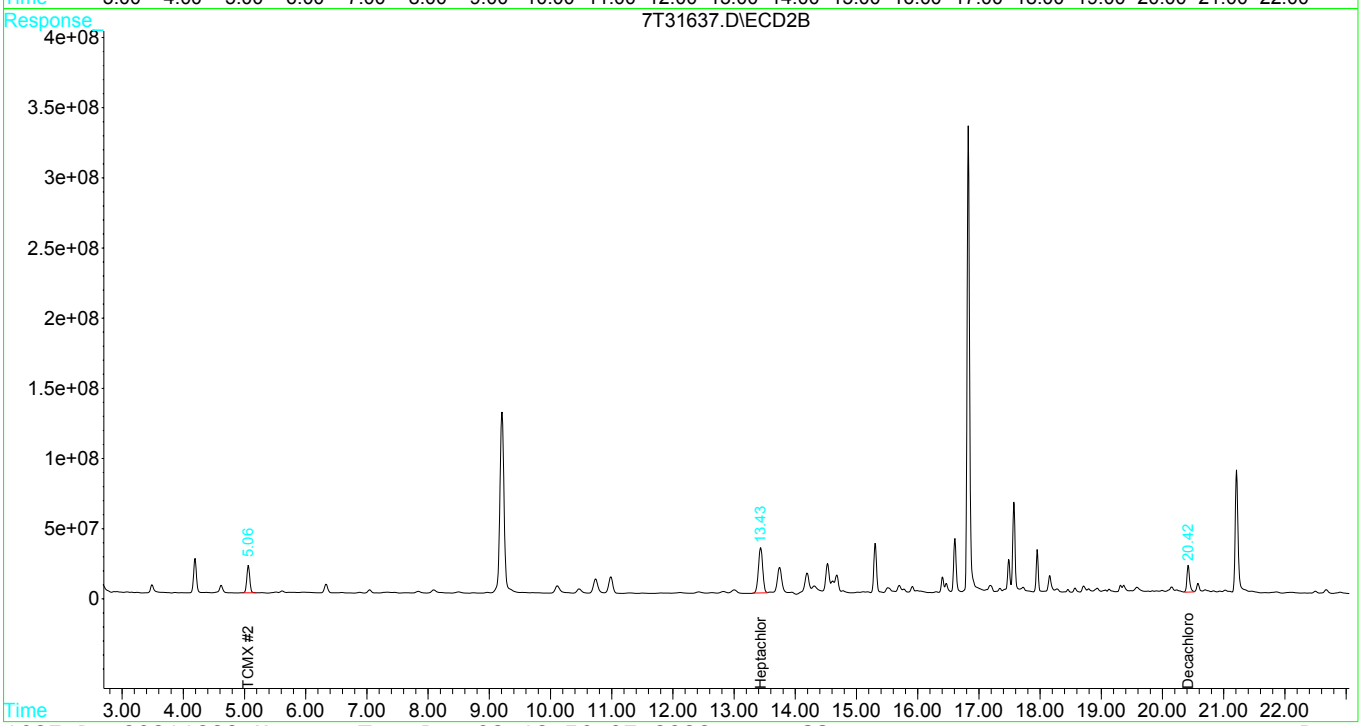
Quantitation Report (QT Reviewed)

Signal #1 : G:\HPCHEM\GCECD7\DATA\20221230\7T31637.D\ECD1A.CH Vial: 48
Signal #2 : G:\HPCHEM\GCECD7\DATA\20221230\7T31637.D\ECD2B.CH
Acq On : 31 Dec 2022 2:59 pm Operator: WD
Sample : 2120937-30 Inst : GCECD-7
Misc : Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Jan 3 13:44 2023 Quant Results File: 80811228.RES

Quant Method : G:\HPCHEM\G...\80811228.M (Chemstation Integrator)
Title : Pesticides by Method SW-846 8081B
Last Update : Tue Jan 03 13:40:33 2023
Response via : Multiple Level Calibration
DataAcq Meth : RUNPEST1.M

Volume Inj. : 2ul
Signal #1 Phase : RTx-50 Signal #2 Phase: RTx-CLPesticides II
Signal #1 Info : 30M x 0.53mm x 0. Signal #2 Info : 30M x 0.53mm x 0.42um





ANALYSIS DATA SHEET

Pesticides - SW 846 8081B

Client: **Dynamic Earth LLC**
Client Sample ID: **G-9-2-R**
Lab Sample ID: **2120937-31**
Project: **Old Orchard G.C.**
Work Order: **2120937**

Date Sampled:	12/21/22 10:34	Prep Date:	12/28/22 16:06	File ID:	7T31638.D
Init/Final Vol:	15 g / 10 mL	Prep Batch:	B2L2832	Analyzed:	12/31/22 15:24
Dilution:	1	Matrix:	Soil	Sequence:	SAA0020
Percent Solids:	82.67	Prep Method:	Microwave Extraction		

CAS NO.	COMPOUND	CONC. (mg/kg dry)	MDL	RL	Qual
1024-57-3	Heptachlor Epoxide [2C]	0.0258	0.000794	0.00157	

ND, U - Indicates compound analyzed for but not detected
J - Indicates estimated value
B - Indicates compound found in associated blank
E - Concentration exceeds highest calibration standard

D - Indicates result is based on a dilution
H - Indicates a Hold Time violation
P - Greater than 25% diff. between 2 GC columns.
MDL - Minimum detection limit, **RL** - Reporting limit

F-I

Quantitation Report (QT Reviewed)

Signal #1 : G:\HPCHEM\GCECD7\DATA\20221230\7T31638.D\ECD1A.CH Vial: 49
Signal #2 : G:\HPCHEM\GCECD7\DATA\20221230\7T31638.D\ECD2B.CH
Acq On : 31 Dec 2022 3:24 pm Operator: WD
Sample : 2120937-31 Inst : GCECD-7
Misc : Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Jan 3 13:44 2023 Quant Results File: 80811228.RES

Quant Method : G:\HPCHEM\G...\80811228.M (Chemstation Integrator)
Title : Pesticides by Method SW-846 8081B
Last Update : Tue Jan 03 13:40:33 2023
Response via : Initial Calibration
DataAcq Meth : RUNPEST1.M

Volume Inj. : 2ul
Signal #1 Phase : RTx-50 Signal #2 Phase: RTx-CLPesticides II
Signal #1 Info : 30M x 0.53mm x 0. Signal #2 Info : 30M x 0.53mm x 0.42um

Compound	RT#1	RT#2	Resp#1	Resp#2	ug/kg	ug/kg
System Monitoring Compounds						
1) S TCMX	4.12	5.07	1206.0E6	712.1E6	38.088	48.602 #
Spiked Amount 50.000	Range 43 - 129		Recovery =		76.18%	97.20%
21) S Decachlorobiphen	18.83	20.42	1176.1E6	517.5E6	42.079m	47.515m
Spiked Amount 50.000	Range 42 - 136		Recovery =		84.16%	95.03%
Target Compounds						
8) Heptachlor epoxi	10.34	13.43	1695.4E6	596.4E6	38.419m	32.033m
Sum Chlordane (gamma)			0	0	N.D.	N.D.
Average Chlordane (gamma)					0.000	0.000
Sum Toxaphene (1)			0	0	N.D.	N.D.
Average Toxaphene (1)					0.000	0.000

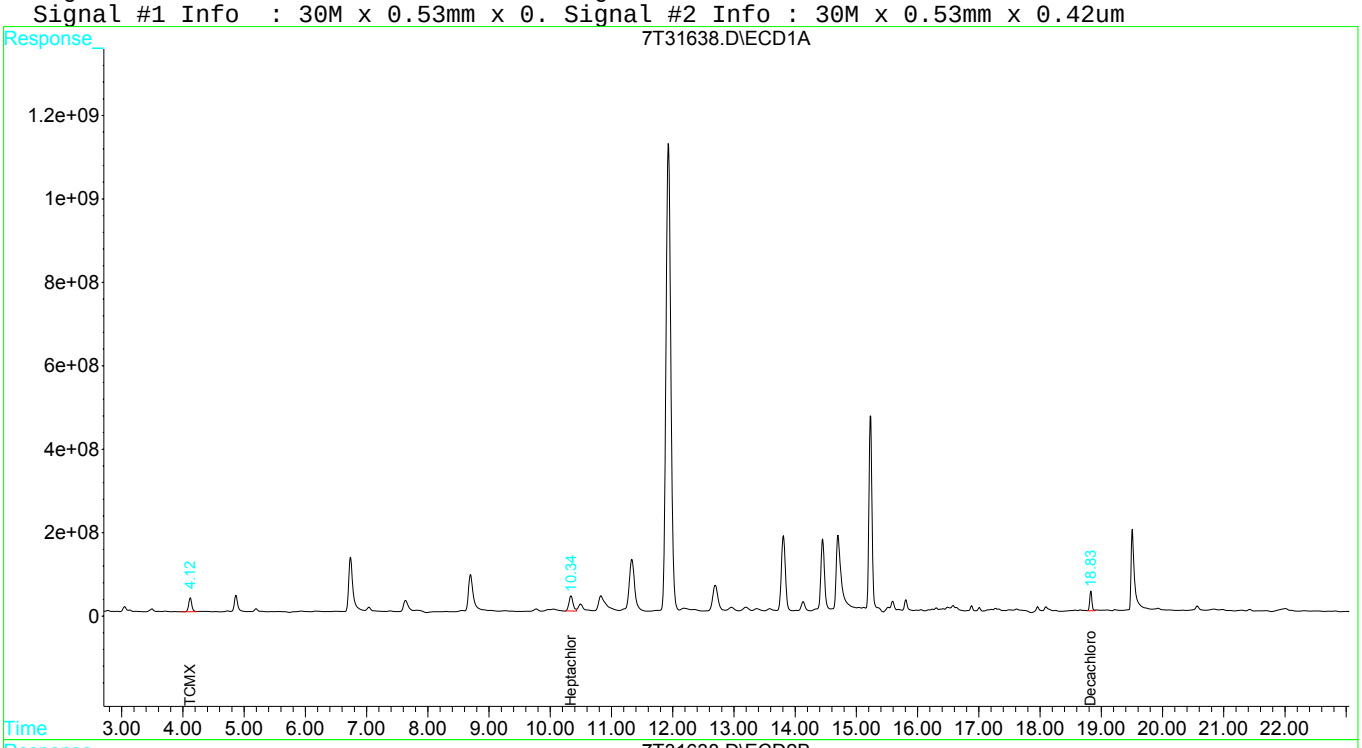
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.
7T31638.D 80811228.M Tue Jan 03 13:56:08 2023 SS

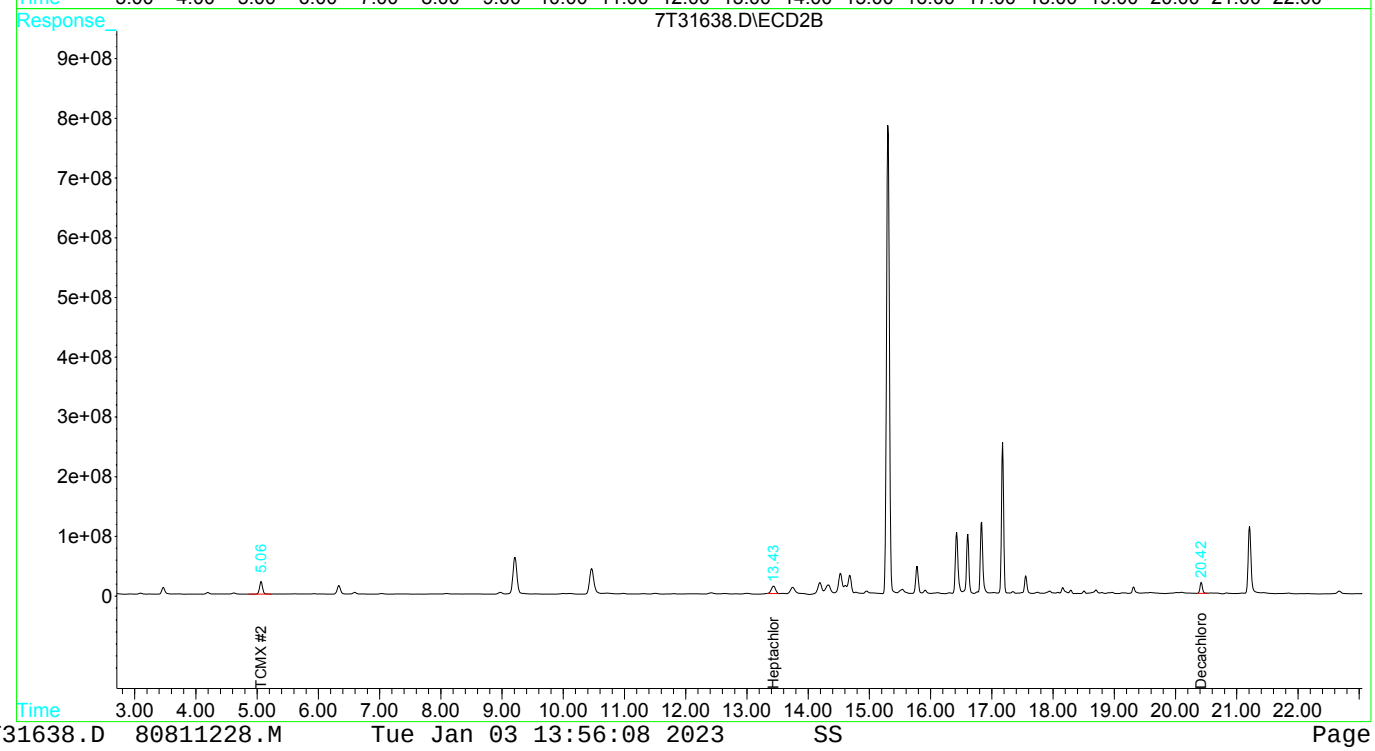
Quantitation Report (QT Reviewed)

Signal #1 : G:\HPCHEM\GCECD7\DATA\20221230\7T31638.D\ECD1A.CH Vial: 49
Signal #2 : G:\HPCHEM\GCECD7\DATA\20221230\7T31638.D\ECD2B.CH
Acq On : 31 Dec 2022 3:24 pm Operator: WD
Sample : 2120937-31 Inst : GCECD-7
Misc : Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Jan 3 13:44 2023 Quant Results File: 80811228.RES

Quant Method : G:\HPCHEM\G...\80811228.M (Chemstation Integrator)
Title : Pesticides by Method SW-846 8081B
Last Update : Tue Jan 03 13:40:33 2023
Response via : Multiple Level Calibration
DataAcq Meth : RUNPEST1.M

Volume Inj. : 2ul
Signal #1 Phase : RTx-50 Signal #2 Phase: RTx-CLPesticides II
Signal #1 Info : 30M x 0.53mm x 0. Signal #2 Info : 30M x 0.53mm x 0.42um





ANALYSIS DATA SHEET

Pesticides - SW 846 8081B

Client: **Dynamic Earth LLC**
Client Sample ID: **G-9-3-R**
Lab Sample ID: **2120937-32**
Project: **Old Orchard G.C.**
Work Order: **2120937**

Date Sampled:	12/21/22 10:38	Prep Date:	12/28/22 16:06	File ID:	7T31639.D
Init/Final Vol:	15 g / 10 mL	Prep Batch:	B2L2832	Analyzed:	12/31/22 15:50
Dilution:	1	Matrix:	Soil	Sequence:	SAA0020
Percent Solids:	84.57	Prep Method:	Microwave Extraction		

CAS NO.	COMPOUND	CONC. (mg/kg dry)	MDL	RL	Qual
1024-57-3	Heptachlor Epoxide [2C]	0.0147	0.000776	0.00154	

ND, U - Indicates compound analyzed for but not detected
J - Indicates estimated value
B - Indicates compound found in associated blank
E - Concentration exceeds highest calibration standard

D - Indicates result is based on a dilution
H - Indicates a Hold Time violation
P - Greater than 25% diff. between 2 GC columns.
MDL - Minimum detection limit, **RL** - Reporting limit

F-I

Quantitation Report (QT Reviewed)

Signal #1 : G:\HPCHEM\GCECD7\DATA\20221230\7T31639.D\ECD1A.CH Vial: 50
Signal #2 : G:\HPCHEM\GCECD7\DATA\20221230\7T31639.D\ECD2B.CH
Acq On : 31 Dec 2022 3:50 pm Operator: WD
Sample : 2120937-32 Inst : GCECD-7
Misc : Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Jan 3 13:45 2023 Quant Results File: 80811228.RES

Quant Method : G:\HPCHEM\G...\80811228.M (Chemstation Integrator)
Title : Pesticides by Method SW-846 8081B
Last Update : Tue Jan 03 13:40:33 2023
Response via : Initial Calibration
DataAcq Meth : RUNPEST1.M

Volume Inj. : 2ul
Signal #1 Phase : RTx-50 Signal #2 Phase: RTx-CLPesticides II
Signal #1 Info : 30M x 0.53mm x 0. Signal #2 Info : 30M x 0.53mm x 0.42um

Compound	RT#1	RT#2	Resp#1	Resp#2	ug/kg	ug/kg
System Monitoring Compounds						
1) S TCMX	4.12	5.07	1148.0E6	690.3E6	36.255	47.113 #
Spiked Amount 50.000	Range 43 - 129		Recovery =		72.51%	94.23%
21) S Decachlorobiphen	18.83	20.42	1369.2E6	595.5E6	48.989	54.678
Spiked Amount 50.000	Range 42 - 136		Recovery =		97.98%	109.36%
Target Compounds						
8) Heptachlor epoxi	10.34	13.43	825.7E6	346.6E6	18.711m	18.615m
Sum Chlordane (gamma)			0	0	N.D.	N.D.
Average Chlordane (gamma)					0.000	0.000
Sum Toxaphene (1)			0	0	N.D.	N.D.
Average Toxaphene (1)					0.000	0.000

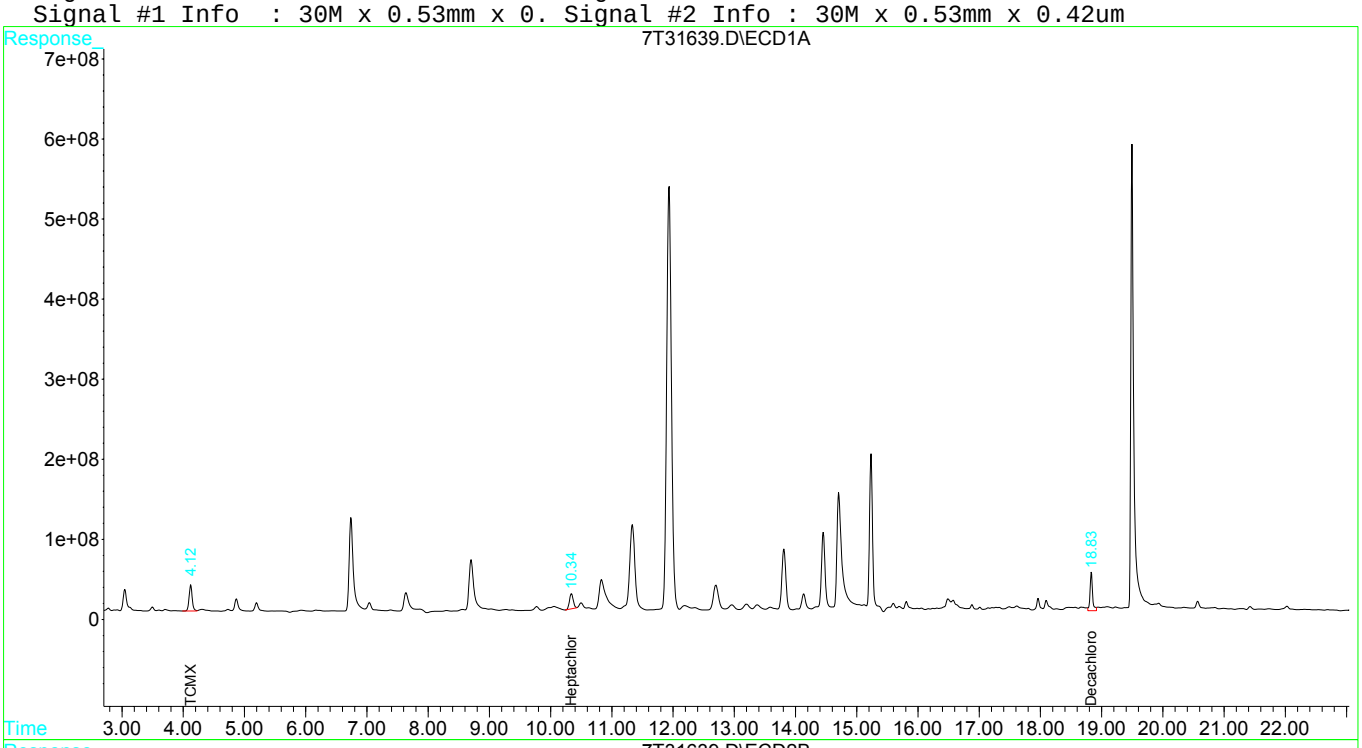
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.
7T31639.D 80811228.M Tue Jan 03 13:56:10 2023 SS

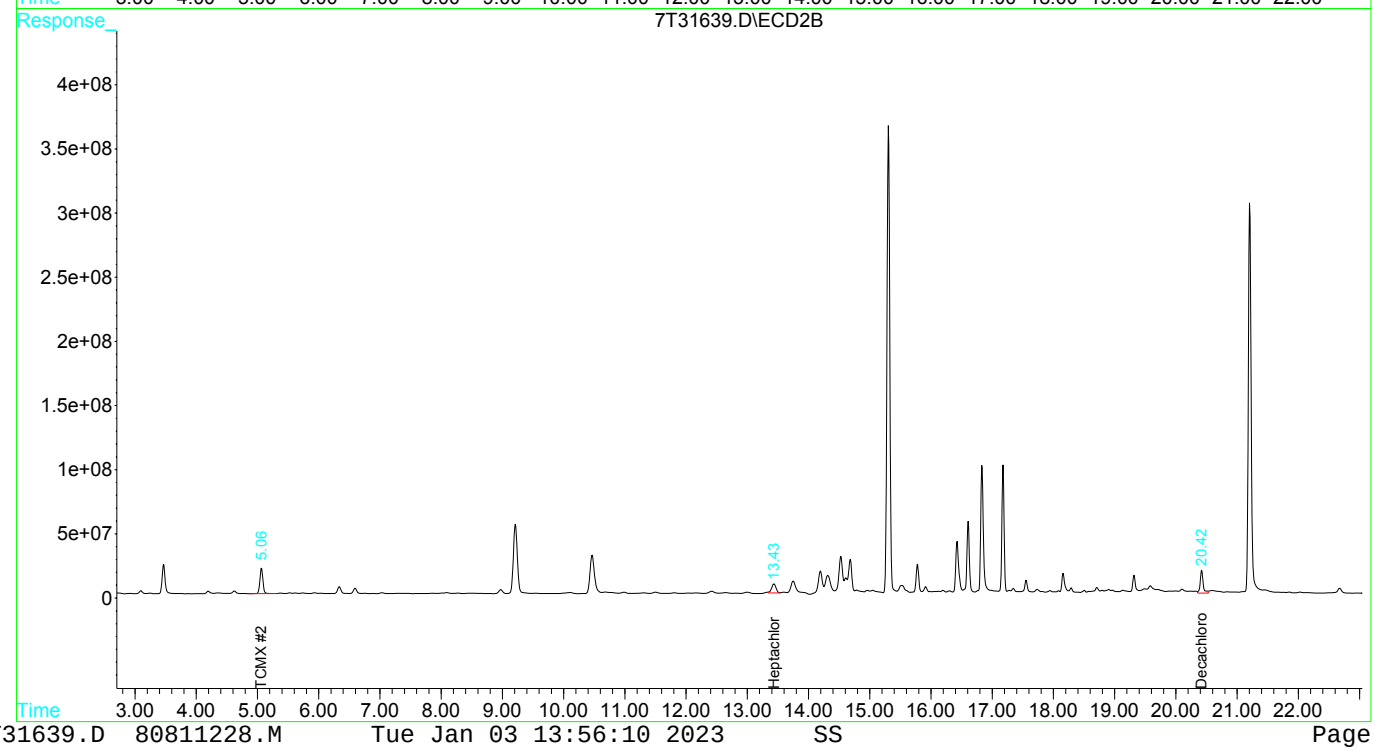
Quantitation Report (QT Reviewed)

Signal #1 : G:\HPCHEM\GCECD7\DATA\20221230\7T31639.D\ECD1A.CH Vial: 50
Signal #2 : G:\HPCHEM\GCECD7\DATA\20221230\7T31639.D\ECD2B.CH
Acq On : 31 Dec 2022 3:50 pm Operator: WD
Sample : 2120937-32 Inst : GCECD-7
Misc : Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Jan 3 13:45 2023 Quant Results File: 80811228.RES

Quant Method : G:\HPCHEM\G...\80811228.M (Chemstation Integrator)
Title : Pesticides by Method SW-846 8081B
Last Update : Tue Jan 03 13:40:33 2023
Response via : Multiple Level Calibration
DataAcq Meth : RUNPEST1.M

Volume Inj. : 2ul
Signal #1 Phase : RTx-50 Signal #2 Phase: RTx-CLPesticides II
Signal #1 Info : 30M x 0.53mm x 0. Signal #2 Info : 30M x 0.53mm x 0.42um





ANALYSIS DATA SHEET

Pesticides - SW 846 8081B

Client: **Dynamic Earth LLC**
Client Sample ID: **G-9-4-R**
Lab Sample ID: **2120937-33**
Project: **Old Orchard G.C.**
Work Order: **2120937**

Date Sampled:	12/21/22 10:42	Prep Date:	12/28/22 16:06	File ID:	7T31640.D
Init/Final Vol:	15 g / 10 mL	Prep Batch:	B2L2832	Analyzed:	12/31/22 16:15
Dilution:	1	Matrix:	Soil	Sequence:	SAA0020
Percent Solids:	82.94	Prep Method:	Microwave Extraction		

CAS NO.	COMPOUND	CONC. (mg/kg dry)	MDL	RL	Qual
1024-57-3	Heptachlor Epoxide [2C]	0.00976	0.000791	0.00157	

ND, U - Indicates compound analyzed for but not detected
J - Indicates estimated value
B - Indicates compound found in associated blank
E - Concentration exceeds highest calibration standard

D - Indicates result is based on a dilution
H - Indicates a Hold Time violation
P - Greater than 25% diff. between 2 GC columns.
MDL - Minimum detection limit, **RL** - Reporting limit

F-I

Quantitation Report (QT Reviewed)

Signal #1 : G:\HPCHEM\GCECD7\DATA\20221230\7T31640.D\ECD1A.CH Vial: 51
Signal #2 : G:\HPCHEM\GCECD7\DATA\20221230\7T31640.D\ECD2B.CH
Acq On : 31 Dec 2022 4:15 pm Operator: WD
Sample : 2120937-33 Inst : GCECD-7
Misc : Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Jan 3 13:45 2023 Quant Results File: 80811228.RES

Quant Method : G:\HPCHEM\G...\80811228.M (Chemstation Integrator)
Title : Pesticides by Method SW-846 8081B
Last Update : Tue Jan 03 13:40:33 2023
Response via : Initial Calibration
DataAcq Meth : RUNPEST1.M

Volume Inj. : 2ul
Signal #1 Phase : RTx-50 Signal #2 Phase: RTx-CLPesticides II
Signal #1 Info : 30M x 0.53mm x 0. Signal #2 Info : 30M x 0.53mm x 0.42um

Compound	RT#1	RT#2	Resp#1	Resp#2	ug/kg	ug/kg
System Monitoring Compounds						
1) S TCMX	4.12	5.07	1022.8E6	589.1E6	32.304	40.205
Spiked Amount 50.000	Range 43 - 129		Recovery =		64.61%	80.41%
21) S Decachlorobiphen	18.83	20.42	1082.2E6	405.2E6	38.720m	37.211m
Spiked Amount 50.000	Range 42 - 136		Recovery =		77.44%	74.42%
Target Compounds						
8) Heptachlor epoxi	10.34f	13.43	687.0E6	226.0E6	15.567	12.135m
Sum Chlordane (gamma)			0	0	N.D.	N.D.
Average Chlordane (gamma)					0.000	0.000
Sum Toxaphene (1)			0	0	N.D.	N.D.
Average Toxaphene (1)					0.000	0.000

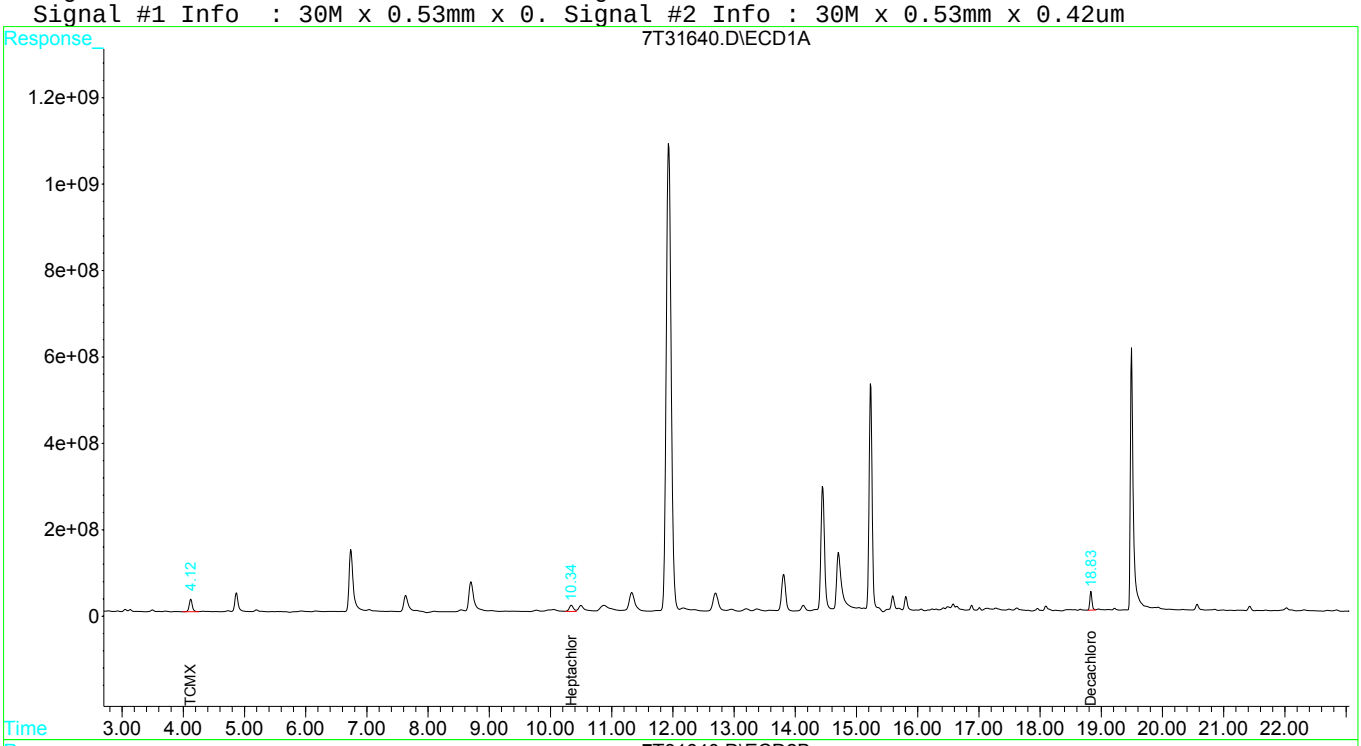
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.
7T31640.D 80811228.M Tue Jan 03 13:56:12 2023 SS

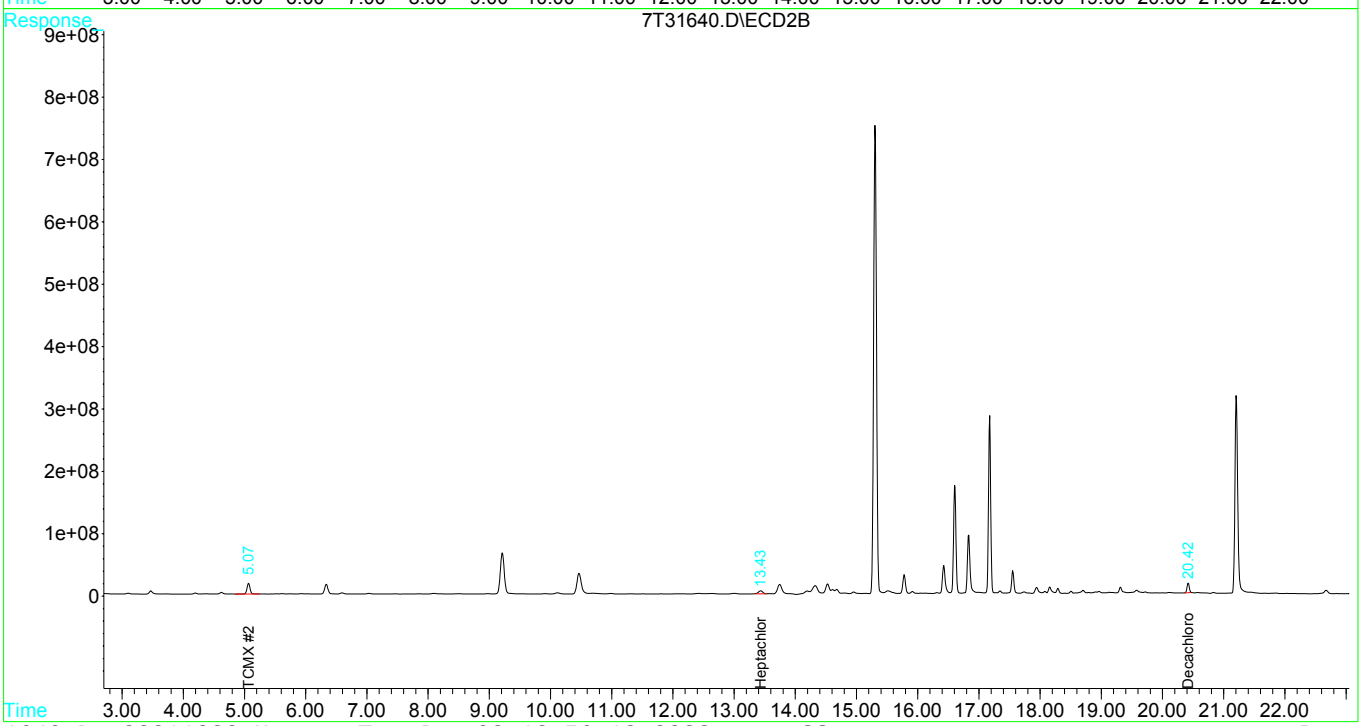
Quantitation Report (QT Reviewed)

Signal #1 : G:\HPCHEM\GCECD7\DATA\20221230\7T31640.D\ECD1A.CH Vial: 51
Signal #2 : G:\HPCHEM\GCECD7\DATA\20221230\7T31640.D\ECD2B.CH
Acq On : 31 Dec 2022 4:15 pm Operator: WD
Sample : 2120937-33 Inst : GCECD-7
Misc : Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Jan 3 13:45 2023 Quant Results File: 80811228.RES

Quant Method : G:\HPCHEM\G...\80811228.M (Chemstation Integrator)
Title : Pesticides by Method SW-846 8081B
Last Update : Tue Jan 03 13:40:33 2023
Response via : Multiple Level Calibration
DataAcq Meth : RUNPEST1.M

Volume Inj. : 2ul
Signal #1 Phase : RTx-50 Signal #2 Phase: RTx-CLPesticides II
Signal #1 Info : 30M x 0.53mm x 0. Signal #2 Info : 30M x 0.53mm x 0.42um





ANALYSIS DATA SHEET

SPLP Pesticides - SW 846 1312

Client: **Dynamic Earth LLC**
Client Sample ID: **G-6-R**
Lab Sample ID: **2120937-34**
Project: **Old Orchard G.C.**
Work Order: **2120937**

Date Sampled:	12/21/22 17:10	Prep Date:	12/29/22 17:37	File ID:	7T31596.D
Init/Final Vol:	500 mL / 10 mL	Prep Batch:	B2L2929	Analyzed:	12/30/22 21:38
Dilution:	1	Matrix:	Soil	Sequence:	SAA0020
Percent Solids:	88.88	Prep Method:	Sep Funnel TCLP/SPLP		

CAS NO.	COMPOUND	CONC. (ug/L)	MDL	RL	Qual
72-55-9	4,4'-DDE	0.146	0.000468	0.0400	

ND, U - Indicates compound analyzed for but not detected
J - Indicates estimated value
B - Indicates compound found in associated blank
E - Concentration exceeds highest calibration standard

D - Indicates result is based on a dilution
H - Indicates a Hold Time violation
P - Greater than 25% diff. between 2 GC columns.
MDL - Minimum detection limit, **RL** - Reporting limit

F-I

Quantitation Report (QT Reviewed)

Signal #1 : G:\HPCHEM\GCECD7\DATA\20221230\7T31596.D\ECD1A.CH Vial: 7
Signal #2 : G:\HPCHEM\GCECD7\DATA\20221230\7T31596.D\ECD2B.CH
Acq On : 30 Dec 2022 9:38 pm Operator: WD
Sample : 2120937-34 Inst : GCECD-7
Misc : SPLP Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Jan 3 12:04 2023 Quant Results File: 80811228.RES

Quant Method : G:\HPCHEM\G...\80811228.M (Chemstation Integrator)
Title : Pesticides by Method SW-846 8081B
Last Update : Tue Jan 03 10:57:11 2023
Response via : Initial Calibration
DataAcq Meth : RUNPEST1.M

Volume Inj. : 2ul
Signal #1 Phase : RTx-50 Signal #2 Phase: RTx-CLPesticides II
Signal #1 Info : 30M x 0.53mm x 0. Signal #2 Info : 30M x 0.53mm x 0.42um

Compound	RT#1	RT#2	Resp#1	Resp#2	ug/kg	ug/kg
System Monitoring Compounds						
1) S TCMX	4.08	5.02	1209.5E6	635.3E6	38.199	43.363
Spiked Amount 50.000	Range 43 - 129		Recovery =		76.40%	86.73%
21) S Decachlorobiphen	18.81	20.39	990.9E6	365.2E6	35.453	33.532
Spiked Amount 50.000	Range 42 - 136		Recovery =		70.91%	67.06%
Target Compounds						
10) 4,4'-DDE	11.87f	15.26	317.0E6	143.2E6	7.314m	9.451m#
Sum Chlordane (gamma)			0	0	N.D.	N.D.
Average Chlordane (gamma)					0.000	0.000
Sum Toxaphene (1)			0	0	N.D.	N.D.
Average Toxaphene (1)					0.000	0.000

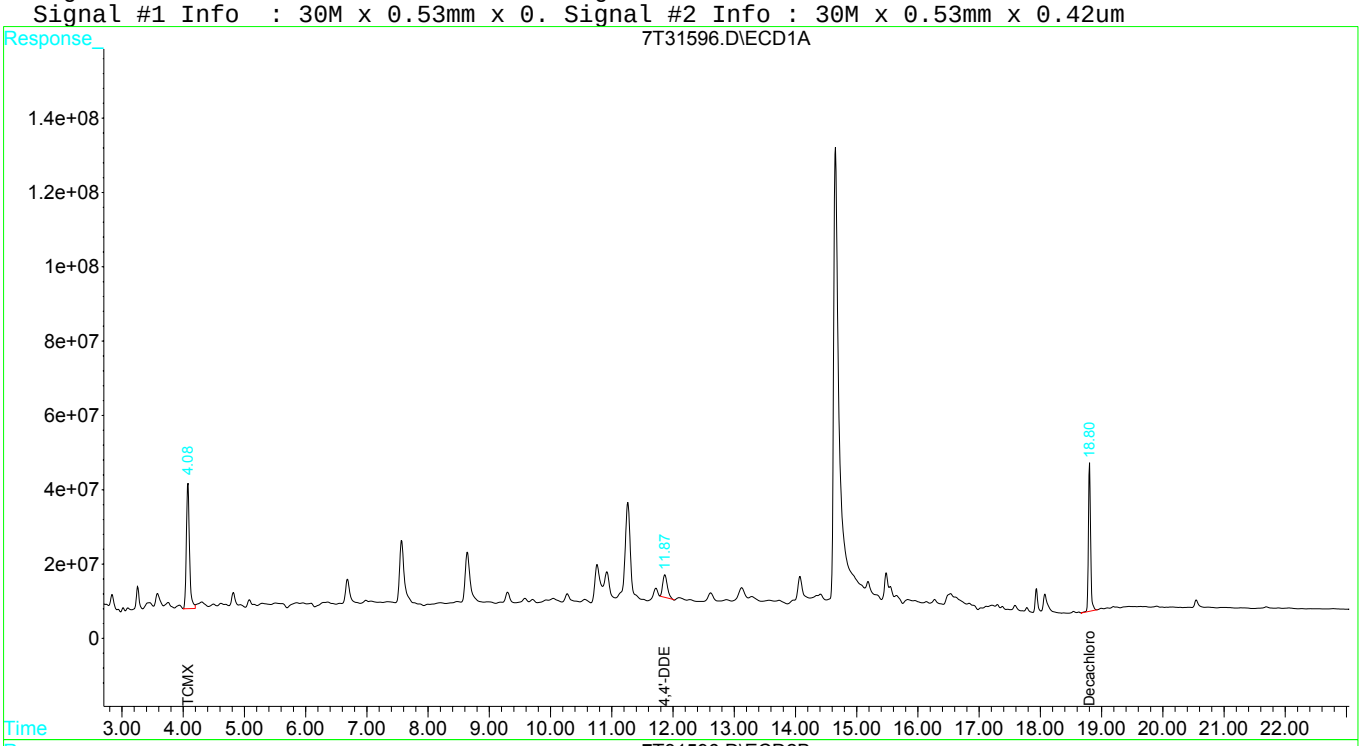
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.
7T31596.D 80811228.M Tue Jan 03 13:54:24 2023 SS

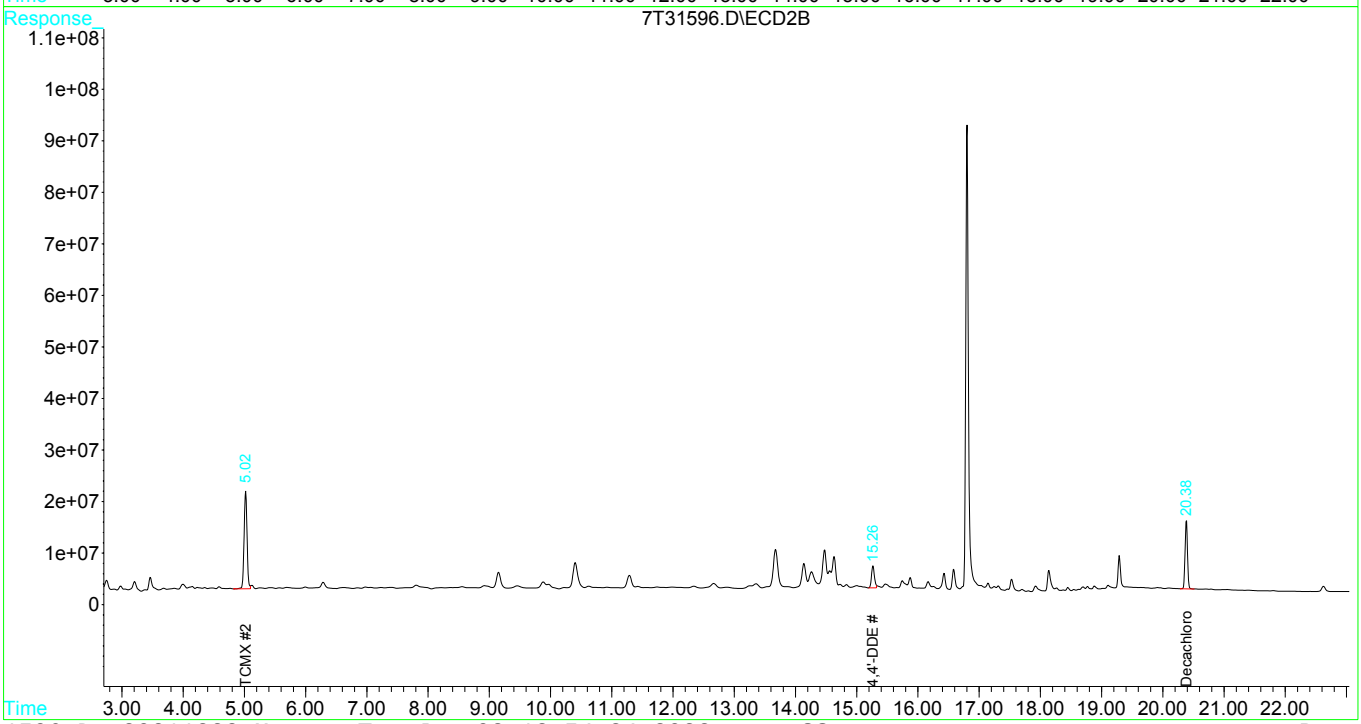
Quantitation Report (QT Reviewed)

Signal #1 : G:\HPCHEM\GCECD7\DATA\20221230\7T31596.D\ECD1A.CH Vial: 7
Signal #2 : G:\HPCHEM\GCECD7\DATA\20221230\7T31596.D\ECD2B.CH
Acq On : 30 Dec 2022 9:38 pm Operator: WD
Sample : 2120937-34 Inst : GCECD-7
Misc : SPLP Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Jan 3 12:04 2023 Quant Results File: 80811228.RES

Quant Method : G:\HPCHEM\G...\80811228.M (Chemstation Integrator)
Title : Pesticides by Method SW-846 8081B
Last Update : Tue Jan 03 10:57:11 2023
Response via : Multiple Level Calibration
DataAcq Meth : RUNPEST1.M

Volume Inj. : 2ul
Signal #1 Phase : RTx-50 Signal #2 Phase: RTx-CLPesticides II
Signal #1 Info : 30M x 0.53mm x 0. Signal #2 Info : 30M x 0.53mm x 0.42um





ANALYSIS DATA SHEET

Pesticides - SW 846 8081B

Client: **Dynamic Earth LLC**
Client Sample ID: **G-12A**
Lab Sample ID: **2120937-35**
Project: **Old Orchard G.C.**
Work Order: **2120937**

Date Sampled:	12/21/22 10:46	Prep Date:	12/28/22 16:06	File ID:	7T31641.D
Init/Final Vol:	15 g / 10 mL	Prep Batch:	B2L2832	Analyzed:	12/31/22 16:40
Dilution:	1	Matrix:	Soil	Sequence:	SAA0020
Percent Solids:	83.30	Prep Method:	Microwave Extraction		

CAS NO.	COMPOUND	CONC. (mg/kg dry)	MDL	RL	Qual
1024-57-3	Heptachlor Epoxide [2C]	0.0767	0.000788	0.00156	

ND, U - Indicates compound analyzed for but not detected
J - Indicates estimated value
B - Indicates compound found in associated blank
E - Concentration exceeds highest calibration standard

D - Indicates result is based on a dilution
H - Indicates a Hold Time violation
P - Greater than 25% diff. between 2 GC columns.
MDL - Minimum detection limit, **RL** - Reporting limit

F-I

Quantitation Report (QT Reviewed)

Signal #1 : G:\HPCHEM\GCECD7\DATA\20221230\7T31641.D\ECD1A.CH Vial: 52
Signal #2 : G:\HPCHEM\GCECD7\DATA\20221230\7T31641.D\ECD2B.CH
Acq On : 31 Dec 2022 4:40 pm Operator: WD
Sample : 2120937-35 Inst : GCECD-7
Misc : Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Jan 3 13:46 2023 Quant Results File: 80811228.RES

Quant Method : G:\HPCHEM\G...\80811228.M (Chemstation Integrator)
Title : Pesticides by Method SW-846 8081B
Last Update : Tue Jan 03 13:40:33 2023
Response via : Initial Calibration
DataAcq Meth : RUNPEST1.M

Volume Inj. : 2ul
Signal #1 Phase : RTx-50 Signal #2 Phase: RTx-CLPesticides II
Signal #1 Info : 30M x 0.53mm x 0. Signal #2 Info : 30M x 0.53mm x 0.42um

Compound	RT#1	RT#2	Resp#1	Resp#2	ug/kg	ug/kg
System Monitoring Compounds						
1) S TCMX	4.12	5.07	1035.2E6	605.8E6	32.693	41.346 #
Spiked Amount 50.000	Range 43 - 129		Recovery =		65.39%	82.69%
21) S Decachlorobiphen	18.83	20.42	1228.7E6	591.6E6	43.962m	54.319m
Spiked Amount 50.000	Range 42 - 136		Recovery =		87.92%	108.64%
Target Compounds						
8) Heptachlor epoxi	10.34	13.44f	4625.5E6	1784.0E6	104.814m	95.813m
Sum Chlordane (gamma)			0	0	N.D.	N.D.
Average Chlordane (gamma)					0.000	0.000
Sum Toxaphene (1)			0	0	N.D.	N.D.
Average Toxaphene (1)					0.000	0.000

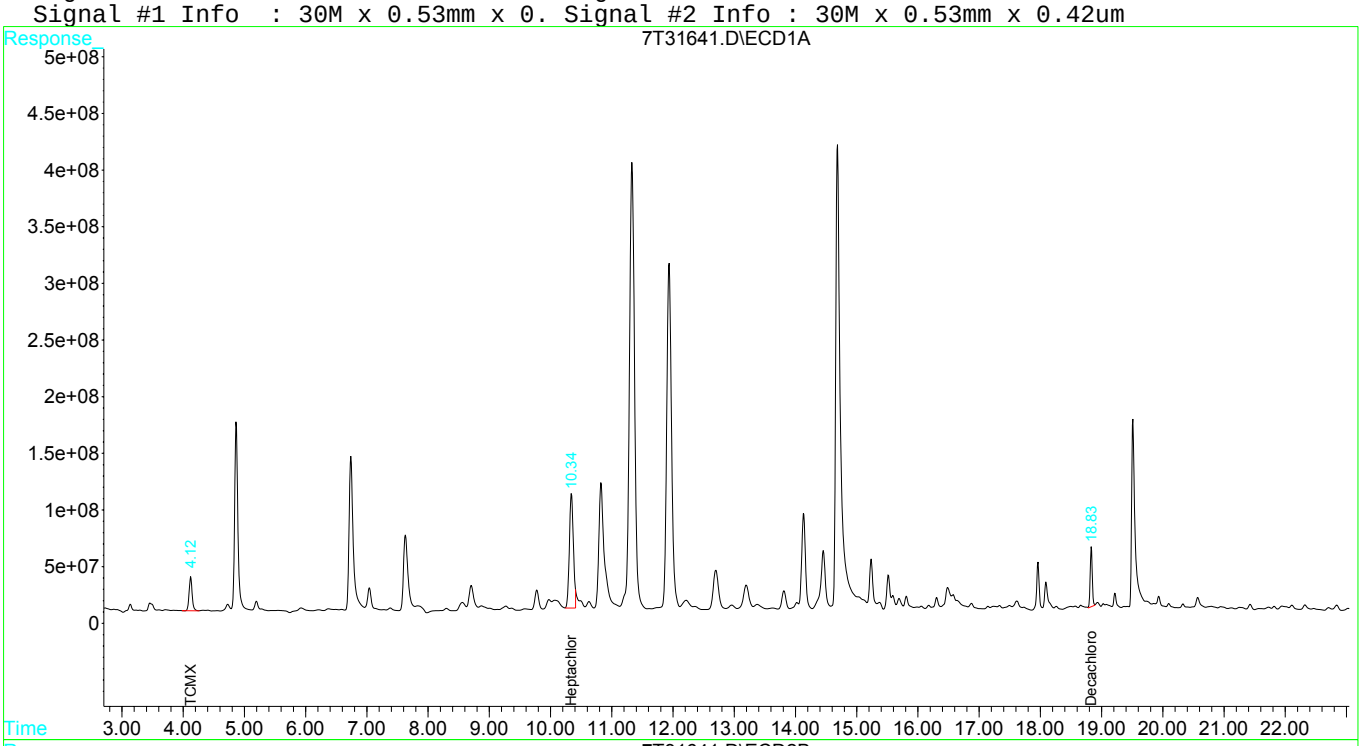
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.
7T31641.D 80811228.M Tue Jan 03 13:56:14 2023 SS

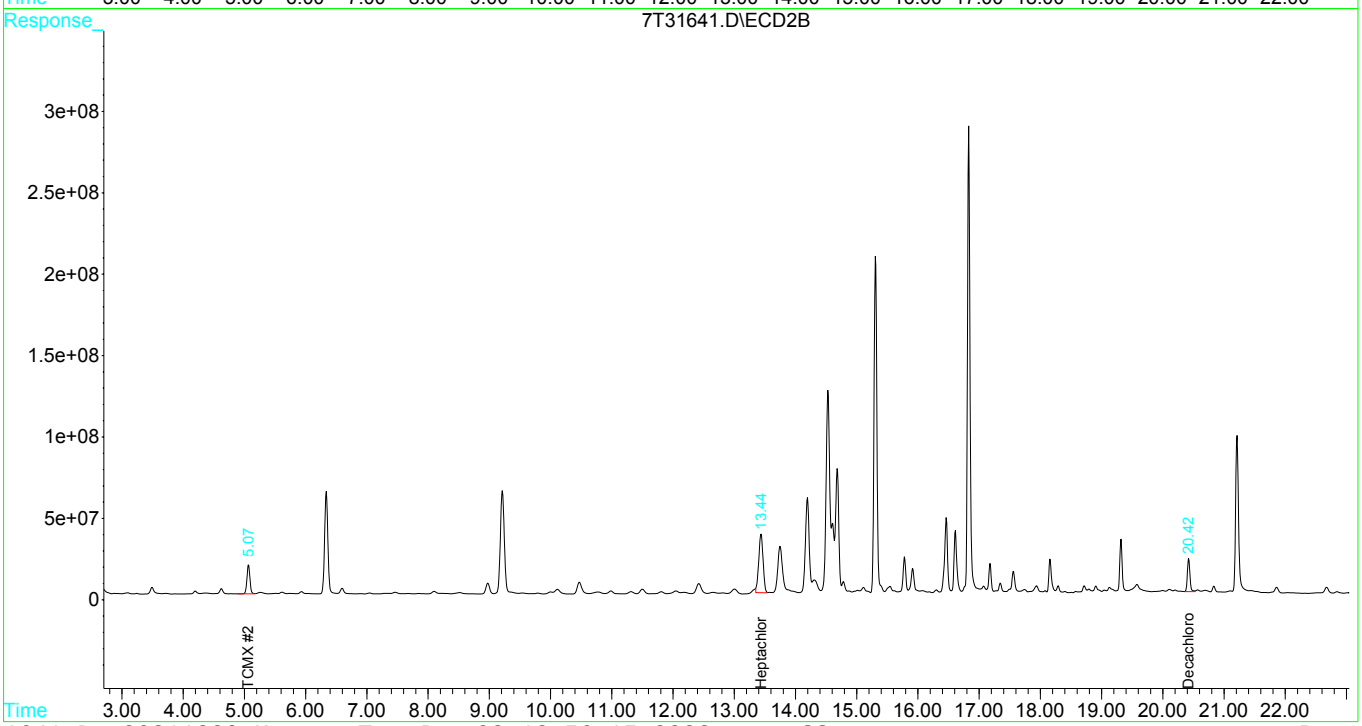
Quantitation Report (QT Reviewed)

Signal #1 : G:\HPCHEM\GCECD7\DATA\20221230\7T31641.D\ECD1A.CH Vial: 52
Signal #2 : G:\HPCHEM\GCECD7\DATA\20221230\7T31641.D\ECD2B.CH
Acq On : 31 Dec 2022 4:40 pm Operator: WD
Sample : 2120937-35 Inst : GCECD-7
Misc : Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Jan 3 13:46 2023 Quant Results File: 80811228.RES

Quant Method : G:\HPCHEM\G...\80811228.M (Chemstation Integrator)
Title : Pesticides by Method SW-846 8081B
Last Update : Tue Jan 03 13:40:33 2023
Response via : Multiple Level Calibration
DataAcq Meth : RUNPEST1.M

Volume Inj. : 2ul
Signal #1 Phase : RTx-50 Signal #2 Phase: RTx-CLPesticides II
Signal #1 Info : 30M x 0.53mm x 0. Signal #2 Info : 30M x 0.53mm x 0.42um





ANALYSIS DATA SHEET

Pesticides - SW 846 8081B

Client: **Dynamic Earth LLC**
Client Sample ID: **G-12-1**
Lab Sample ID: **2120937-36**
Project: **Old Orchard G.C.**
Work Order: **2120937**

Date Sampled:	12/21/22 10:52	Prep Date:	12/29/22 07:13	File ID:	7T31642.D
Init/Final Vol:	15 g / 10 mL	Prep Batch:	B2L2901	Analyzed:	12/31/22 17:06
Dilution:	1	Matrix:	Soil	Sequence:	SAA0020
Percent Solids:	86.49	Prep Method:	Microwave Extraction		

CAS NO.	COMPOUND	CONC. (mg/kg dry)	MDL	RL	Qual
1024-57-3	Heptachlor Epoxide [2C]	0.0467	0.000758	0.00150	

ND, U - Indicates compound analyzed for but not detected
J - Indicates estimated value
B - Indicates compound found in associated blank
E - Concentration exceeds highest calibration standard

D - Indicates result is based on a dilution
H - Indicates a Hold Time violation
P - Greater than 25% diff. between 2 GC columns.
MDL - Minimum detection limit, **RL** - Reporting limit

F-I

Quantitation Report (QT Reviewed)

Signal #1 : G:\HPCHEM\GCECD7\DATA\20221230\7T31642.D\ECD1A.CH Vial: 53
Signal #2 : G:\HPCHEM\GCECD7\DATA\20221230\7T31642.D\ECD2B.CH
Acq On : 31 Dec 2022 5:06 pm Operator: WD
Sample : 2120937-36 Inst : GCECD-7
Misc : Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Jan 3 13:46 2023 Quant Results File: 80811228.RES

Quant Method : G:\HPCHEM\G...\80811228.M (Chemstation Integrator)
Title : Pesticides by Method SW-846 8081B
Last Update : Tue Jan 03 13:40:33 2023
Response via : Initial Calibration
DataAcq Meth : RUNPEST1.M

Volume Inj. : 2ul
Signal #1 Phase : RTx-50 Signal #2 Phase: RTx-CLPesticides II
Signal #1 Info : 30M x 0.53mm x 0. Signal #2 Info : 30M x 0.53mm x 0.42um

Compound	RT#1	RT#2	Resp#1	Resp#2	ug/kg	ug/kg
System Monitoring Compounds						
1) S TCMX	4.13f	5.07	1427.4E6	866.1E6	45.081	59.115 #
Spiked Amount 50.000	Range 43 - 129		Recovery =		90.16%	118.23%
21) S Decachlorobiphen	18.83	20.42	1287.4E6	525.0E6	46.060m	48.209m
Spiked Amount 50.000	Range 42 - 136		Recovery =		92.12%	96.42%
Target Compounds						
8) Heptachlor epoxi	10.34	13.44f	2895.0E6	1127.6E6	65.602m	60.560m
Sum Chlordane (gamma)			0	0	N.D.	N.D.
Average Chlordane (gamma)					0.000	0.000
Sum Toxaphene (1)			0	0	N.D.	N.D.
Average Toxaphene (1)					0.000	0.000

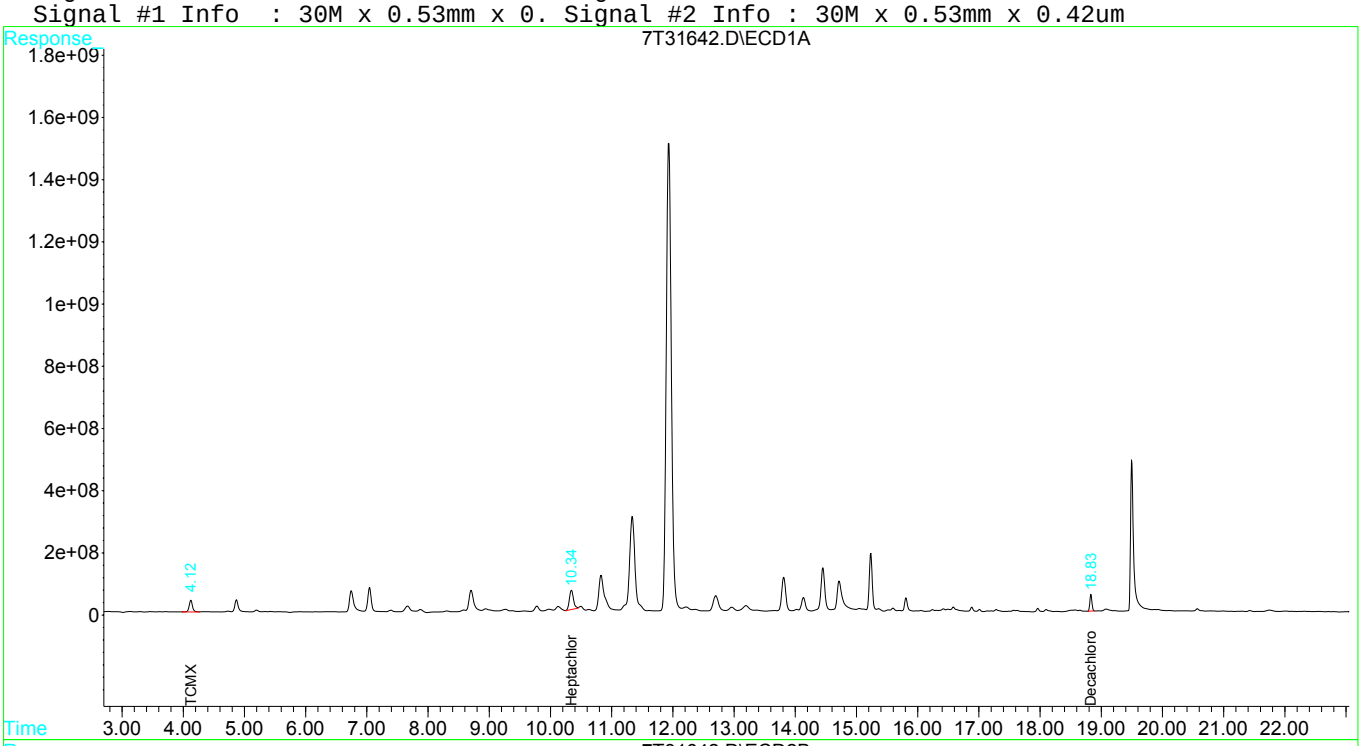
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.
7T31642.D 80811228.M Tue Jan 03 13:56:17 2023 SS

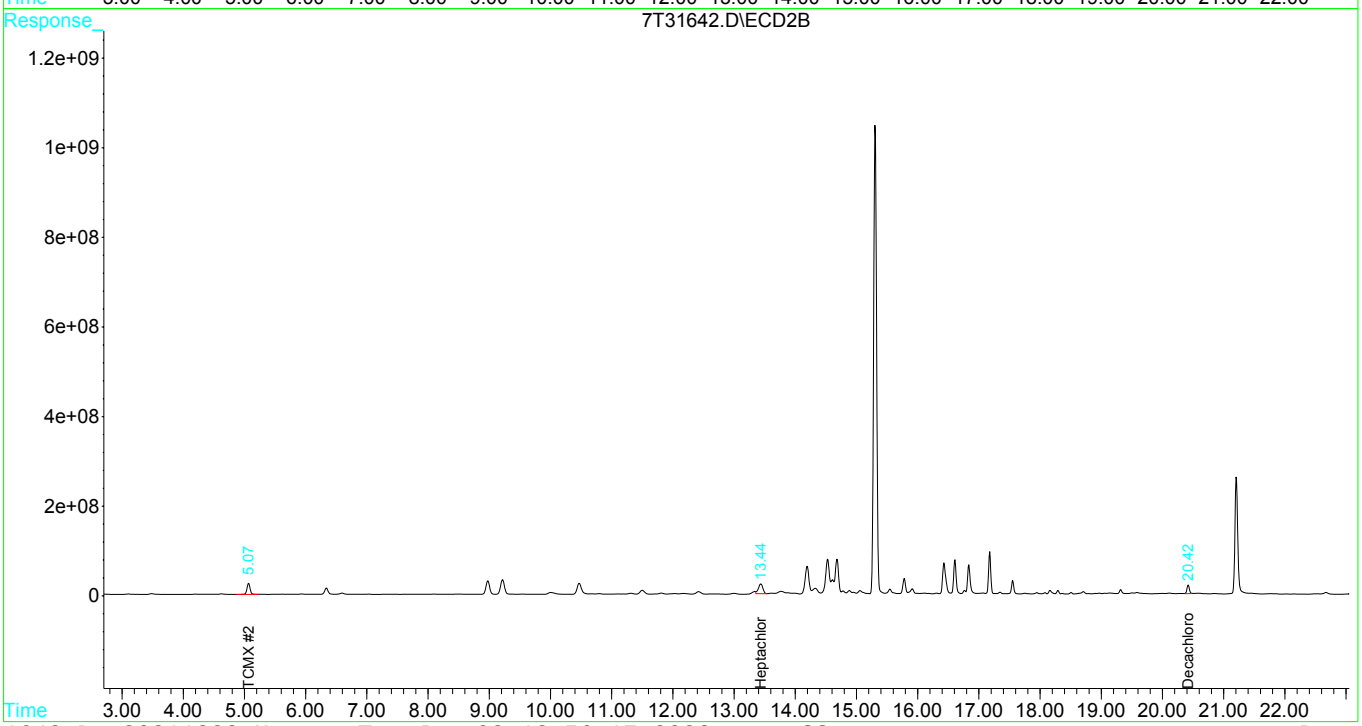
Quantitation Report (QT Reviewed)

Signal #1 : G:\HPCHEM\GCECD7\DATA\20221230\7T31642.D\ECD1A.CH Vial: 53
Signal #2 : G:\HPCHEM\GCECD7\DATA\20221230\7T31642.D\ECD2B.CH
Acq On : 31 Dec 2022 5:06 pm Operator: WD
Sample : 2120937-36 Inst : GCECD-7
Misc : Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Jan 3 13:46 2023 Quant Results File: 80811228.RES

Quant Method : G:\HPCHEM\G...\80811228.M (Chemstation Integrator)
Title : Pesticides by Method SW-846 8081B
Last Update : Tue Jan 03 13:40:33 2023
Response via : Multiple Level Calibration
DataAcq Meth : RUNPEST1.M

Volume Inj. : 2ul
Signal #1 Phase : RTx-50 Signal #2 Phase: RTx-CLPesticides II
Signal #1 Info : 30M x 0.53mm x 0. Signal #2 Info : 30M x 0.53mm x 0.42um





ANALYSIS DATA SHEET

Pesticides - SW 846 8081B

Client: **Dynamic Earth LLC**
Client Sample ID: **G-12-2**
Lab Sample ID: **2120937-37**
Project: **Old Orchard G.C.**
Work Order: **2120937**

Date Sampled:	12/21/22 10:56	Prep Date:	12/28/22 16:06	File ID:	7T31643.D
Init/Final Vol:	15 g / 10 mL	Prep Batch:	B2L2832	Analyzed:	12/31/22 17:31
Dilution:	1	Matrix:	Soil	Sequence:	SAA0020
Percent Solids:	85.08	Prep Method:	Microwave Extraction		

CAS NO.	COMPOUND	CONC. (mg/kg dry)	MDL	RL	Qual
1024-57-3	Heptachlor Epoxide [2C]	0.162	0.000771	0.00153	

ND, U - Indicates compound analyzed for but not detected
J - Indicates estimated value
B - Indicates compound found in associated blank
E - Concentration exceeds highest calibration standard

D - Indicates result is based on a dilution
H - Indicates a Hold Time violation
P - Greater than 25% diff. between 2 GC columns.
MDL - Minimum detection limit, **RL** - Reporting limit

F-I

Quantitation Report (QT Reviewed)

Signal #1 : G:\HPCHEM\GCECD7\DATA\20221230\7T31643.D\ECD1A.CH Vial: 54
Signal #2 : G:\HPCHEM\GCECD7\DATA\20221230\7T31643.D\ECD2B.CH
Acq On : 31 Dec 2022 5:31 pm Operator: WD
Sample : 2120937-37 Inst : GCECD-7
Misc : Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Jan 3 13:47 2023 Quant Results File: 80811228.RES

Quant Method : G:\HPCHEM\G...\80811228.M (Chemstation Integrator)
Title : Pesticides by Method SW-846 8081B
Last Update : Tue Jan 03 13:40:33 2023
Response via : Initial Calibration
DataAcq Meth : RUNPEST1.M

Volume Inj. : 2ul
Signal #1 Phase : RTx-50 Signal #2 Phase: RTx-CLPesticides II
Signal #1 Info : 30M x 0.53mm x 0. Signal #2 Info : 30M x 0.53mm x 0.42um

Compound	RT#1	RT#2	Resp#1	Resp#2	ug/kg	ug/kg
System Monitoring Compounds						
1) S TCMX	4.12	5.06	1106.0E6	651.5E6	34.930	44.466m#
Spiked Amount 50.000	Range 43 - 129		Recovery =		69.86%	88.93%
21) S Decachlorobiphen	18.83	20.42	1560.3E6	647.1E6	55.824m	59.419m
Spiked Amount 50.000	Range 42 - 136		Recovery =		111.65%	118.84%
Target Compounds						
8) Heptachlor epoxi	10.34	13.44f	12139.2E6	3859.8E6	275.077m	207.301m
Sum Chlordane (gamma)			0	0	N.D.	N.D.
Average Chlordane (gamma)					0.000	0.000
Sum Toxaphene (1)			0	0	N.D.	N.D.
Average Toxaphene (1)					0.000	0.000

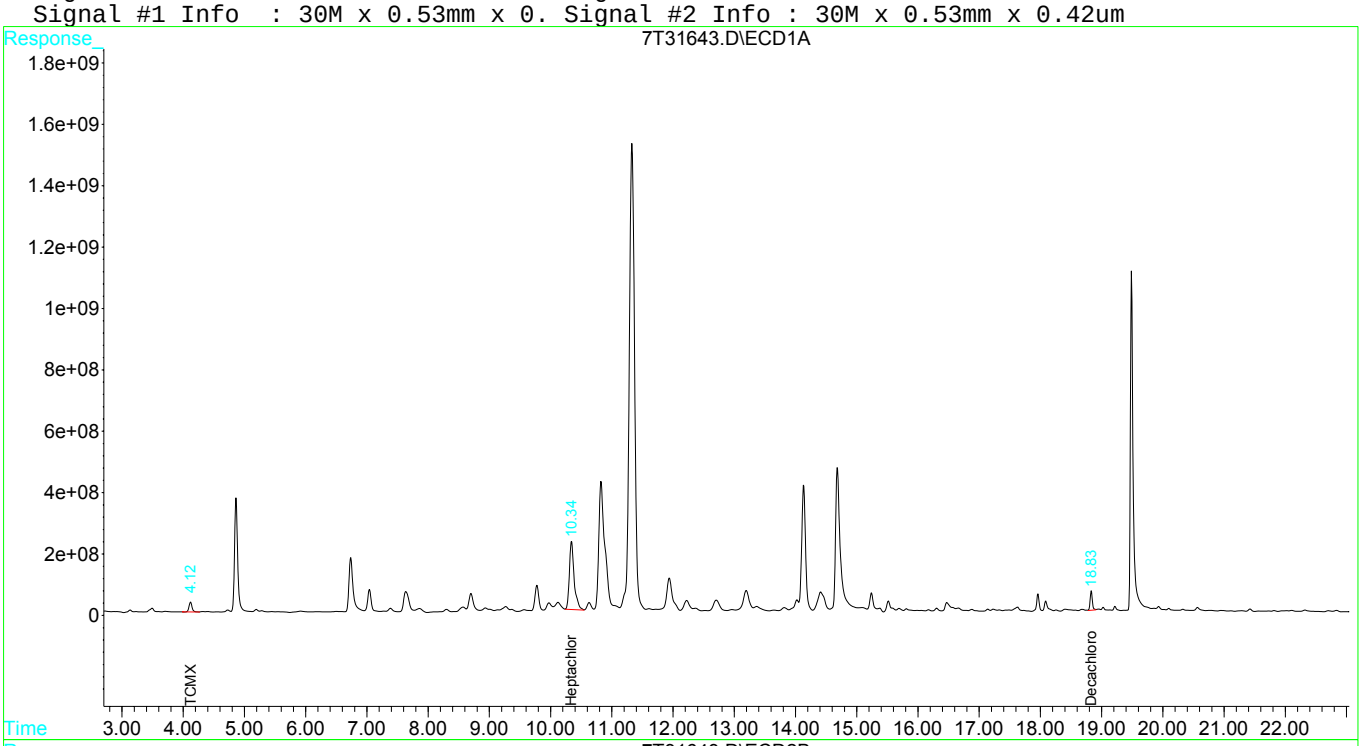
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.
7T31643.D 80811228.M Tue Jan 03 13:56:19 2023 SS

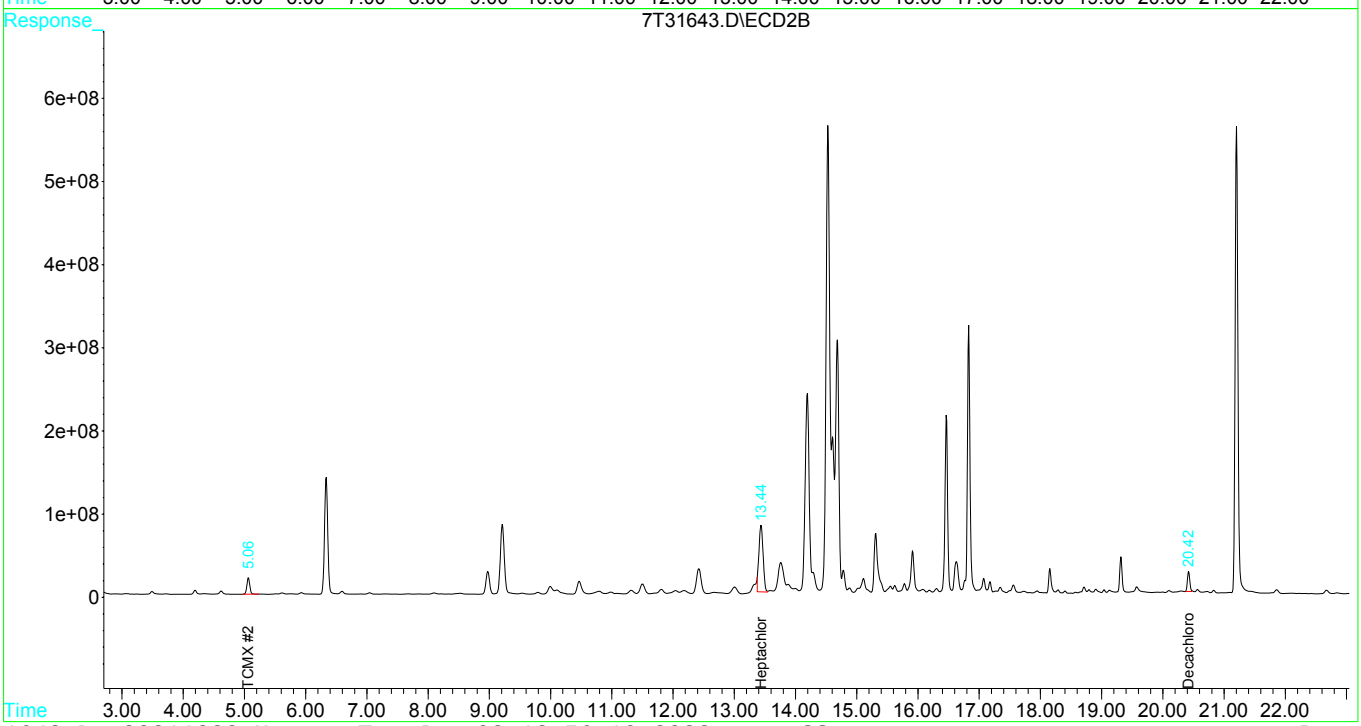
Quantitation Report (QT Reviewed)

Signal #1 : G:\HPCHEM\GCECD7\DATA\20221230\7T31643.D\ECD1A.CH Vial: 54
Signal #2 : G:\HPCHEM\GCECD7\DATA\20221230\7T31643.D\ECD2B.CH
Acq On : 31 Dec 2022 5:31 pm Operator: WD
Sample : 2120937-37 Inst : GCECD-7
Misc : Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Jan 3 13:47 2023 Quant Results File: 80811228.RES

Quant Method : G:\HPCHEM\G...\80811228.M (Chemstation Integrator)
Title : Pesticides by Method SW-846 8081B
Last Update : Tue Jan 03 13:40:33 2023
Response via : Multiple Level Calibration
DataAcq Meth : RUNPEST1.M

Volume Inj. : 2ul
Signal #1 Phase : RTx-50 Signal #2 Phase: RTx-CLPesticides II
Signal #1 Info : 30M x 0.53mm x 0. Signal #2 Info : 30M x 0.53mm x 0.42um





ANALYSIS DATA SHEET

Pesticides - SW 846 8081B

Client: **Dynamic Earth LLC**
Client Sample ID: **G-12-3**
Lab Sample ID: **2120937-38**
Project: **Old Orchard G.C.**
Work Order: **2120937**

Date Sampled:	12/21/22 11:00	Prep Date:	12/29/22 07:13	File ID:	7T31644.D
Init/Final Vol:	15 g / 10 mL	Prep Batch:	B2L2901	Analyzed:	12/31/22 17:57
Dilution:	1	Matrix:	Soil	Sequence:	SAA0020
Percent Solids:	83.15	Prep Method:	Microwave Extraction		

CAS NO.	COMPOUND	CONC. (mg/kg dry)	MDL	RL	Qual
1024-57-3	Heptachlor Epoxide [2C]	0.103	0.000789	0.00156	

ND, U - Indicates compound analyzed for but not detected
J - Indicates estimated value
B - Indicates compound found in associated blank
E - Concentration exceeds highest calibration standard

D - Indicates result is based on a dilution
H - Indicates a Hold Time violation
P - Greater than 25% diff. between 2 GC columns.
MDL - Minimum detection limit, **RL** - Reporting limit

F-I

Quantitation Report (QT Reviewed)

Signal #1 : G:\HPCHEM\GCECD7\DATA\20221230\7T31644.D\ECD1A.CH Vial: 55
Signal #2 : G:\HPCHEM\GCECD7\DATA\20221230\7T31644.D\ECD2B.CH
Acq On : 31 Dec 2022 5:57 pm Operator: WD
Sample : 2120937-38 Inst : GCECD-7
Misc : Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Jan 3 13:48 2023 Quant Results File: 80811228.RES

Quant Method : G:\HPCHEM\G...\80811228.M (Chemstation Integrator)
Title : Pesticides by Method SW-846 8081B
Last Update : Tue Jan 03 13:40:33 2023
Response via : Initial Calibration
DataAcq Meth : RUNPEST1.M

Volume Inj. : 2ul
Signal #1 Phase : RTx-50 Signal #2 Phase: RTx-CLPesticides II
Signal #1 Info : 30M x 0.53mm x 0. Signal #2 Info : 30M x 0.53mm x 0.42um

Compound	RT#1	RT#2	Resp#1	Resp#2	ug/kg	ug/kg
System Monitoring Compounds						
1) S TCMX	4.13	5.07	1519.5E6	863.7E6	47.989	58.949
Spiked Amount 50.000	Range 43 - 129		Recovery =		95.98%	117.90%
21) S Decachlorobiphen	18.83	20.42	1947.6E6	820.1E6	69.683m	75.306m
Spiked Amount 50.000	Range 42 - 136		Recovery =		139.37%#	150.61%#
Target Compounds						
8) Heptachlor epoxi	10.34	13.44f	6990.0E6	2399.5E6	158.395m	128.869m
Sum Chlordane (gamma)			0	0	N.D.	N.D.
Average Chlordane (gamma)					0.000	0.000
Sum Toxaphene (1)			0	0	N.D.	N.D.
Average Toxaphene (1)					0.000	0.000

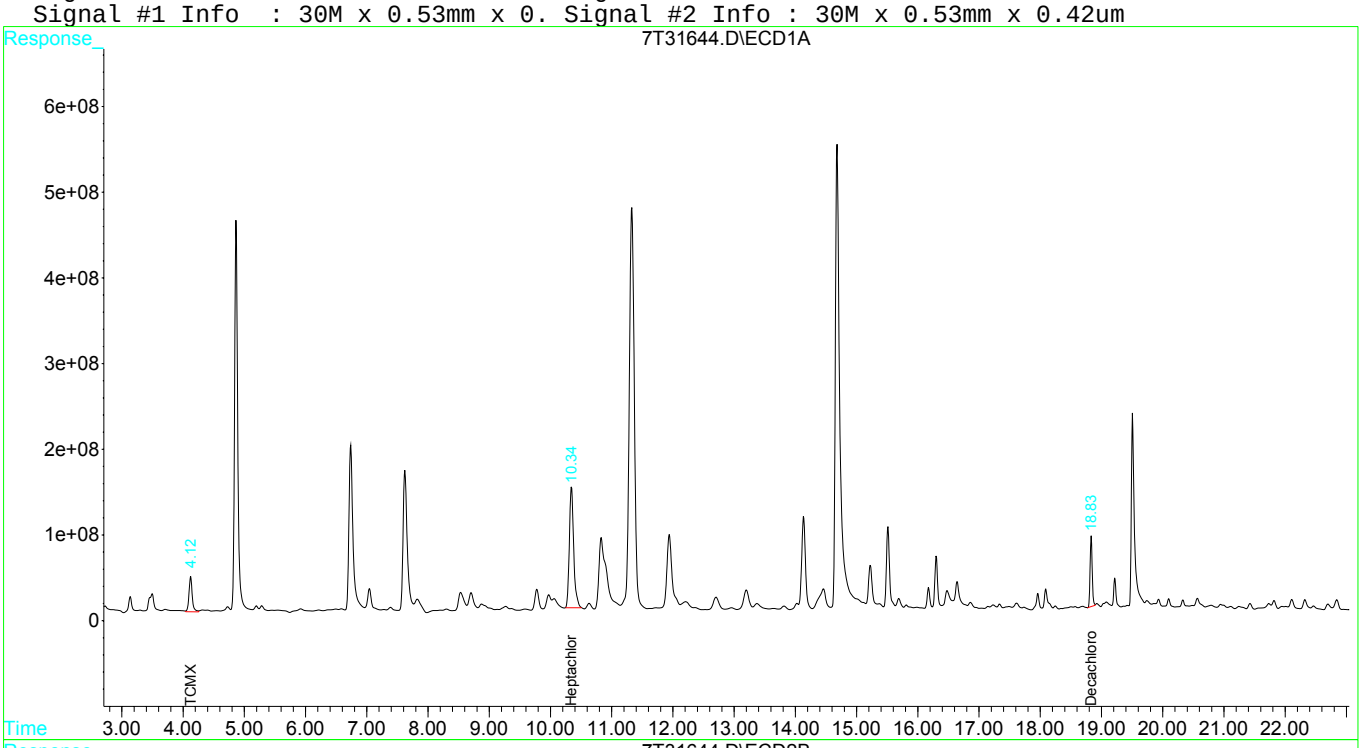
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.
7T31644.D 80811228.M Tue Jan 03 13:56:21 2023 SS

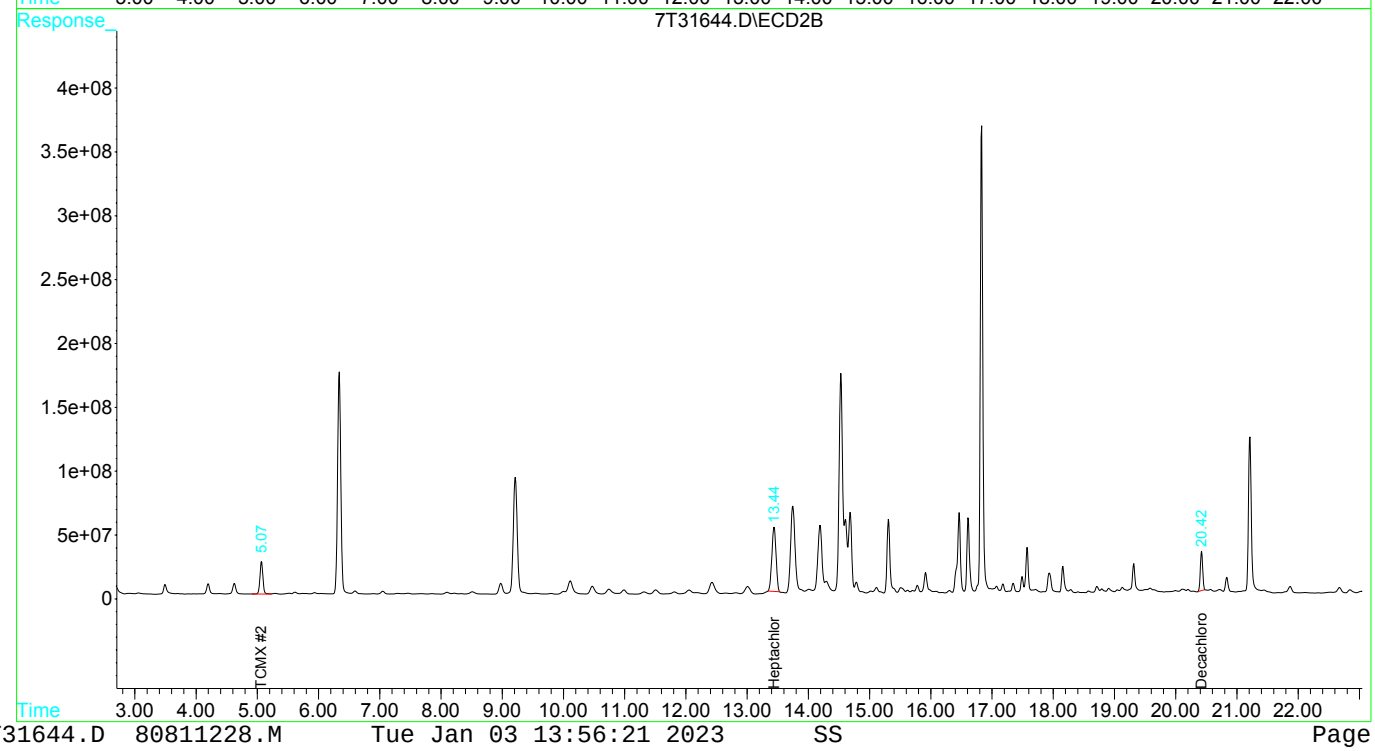
Quantitation Report (QT Reviewed)

Signal #1 : G:\HPCHEM\GCECD7\DATA\20221230\7T31644.D\ECD1A.CH Vial: 55
Signal #2 : G:\HPCHEM\GCECD7\DATA\20221230\7T31644.D\ECD2B.CH
Acq On : 31 Dec 2022 5:57 pm Operator: WD
Sample : 2120937-38 Inst : GCECD-7
Misc : Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Jan 3 13:48 2023 Quant Results File: 80811228.RES

Quant Method : G:\HPCHEM\G...\80811228.M (Chemstation Integrator)
Title : Pesticides by Method SW-846 8081B
Last Update : Tue Jan 03 13:40:33 2023
Response via : Multiple Level Calibration
DataAcq Meth : RUNPEST1.M

Volume Inj. : 2ul
Signal #1 Phase : RTx-50 Signal #2 Phase: RTx-CLPesticides II
Signal #1 Info : 30M x 0.53mm x 0. Signal #2 Info : 30M x 0.53mm x 0.42um





ANALYSIS DATA SHEET

Pesticides - SW 846 8081B

Client: **Dynamic Earth LLC**
Client Sample ID: **G-12-4**
Lab Sample ID: **2120937-39**
Project: **Old Orchard G.C.**
Work Order: **2120937**

Date Sampled:	12/21/22 11:04	Prep Date:	12/29/22 07:13	File ID:	7T31645.D
Init/Final Vol:	15 g / 10 mL	Prep Batch:	B2L2901	Analyzed:	12/31/22 18:22
Dilution:	1	Matrix:	Soil	Sequence:	SAA0020
Percent Solids:	88.26	Prep Method:	Microwave Extraction		

CAS NO.	COMPOUND	CONC. (mg/kg dry)	MDL	RL	Qual
1024-57-3	Heptachlor Epoxide [2C]	0.0344	0.000743	0.00147	

ND, U - Indicates compound analyzed for but not detected
J - Indicates estimated value
B - Indicates compound found in associated blank
E - Concentration exceeds highest calibration standard

D - Indicates result is based on a dilution
H - Indicates a Hold Time violation
P - Greater than 25% diff. between 2 GC columns.
MDL - Minimum detection limit, **RL** - Reporting limit

F-I

Quantitation Report (QT Reviewed)

Signal #1 : G:\HPCHEM\GCECD7\DATA\20221230\7T31645.D\ECD1A.CH Vial: 56
Signal #2 : G:\HPCHEM\GCECD7\DATA\20221230\7T31645.D\ECD2B.CH
Acq On : 31 Dec 2022 6:22 pm Operator: WD
Sample : 2120937-39 Inst : GCECD-7
Misc : Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Jan 3 13:48 2023 Quant Results File: 80811228.RES

Quant Method : G:\HPCHEM\G...\80811228.M (Chemstation Integrator)
Title : Pesticides by Method SW-846 8081B
Last Update : Tue Jan 03 13:40:33 2023
Response via : Initial Calibration
DataAcq Meth : RUNPEST1.M

Volume Inj. : 2ul
Signal #1 Phase : RTx-50 Signal #2 Phase: RTx-CLPesticides II
Signal #1 Info : 30M x 0.53mm x 0. Signal #2 Info : 30M x 0.53mm x 0.42um

Compound	RT#1	RT#2	Resp#1	Resp#2	ug/kg	ug/kg
System Monitoring Compounds						
1) S TCMX	4.12	5.07	1318.1E6	856.6E6	41.629	58.466 #
Spiked Amount 50.000	Range 43 - 129		Recovery =		83.26%	116.93%
21) S Decachlorobiphen	18.83	20.42	1497.5E6	619.0E6	53.580	56.841
Spiked Amount 50.000	Range 42 - 136		Recovery =		107.16%	113.68%
Target Compounds						
8) Heptachlor epoxi	10.34	13.44f	2325.3E6	848.1E6	52.692m	45.547m
Sum Chlordane (gamma)			0	0	N.D.	N.D.
Average Chlordane (gamma)					0.000	0.000
Sum Toxaphene (1)			0	0	N.D.	N.D.
Average Toxaphene (1)					0.000	0.000

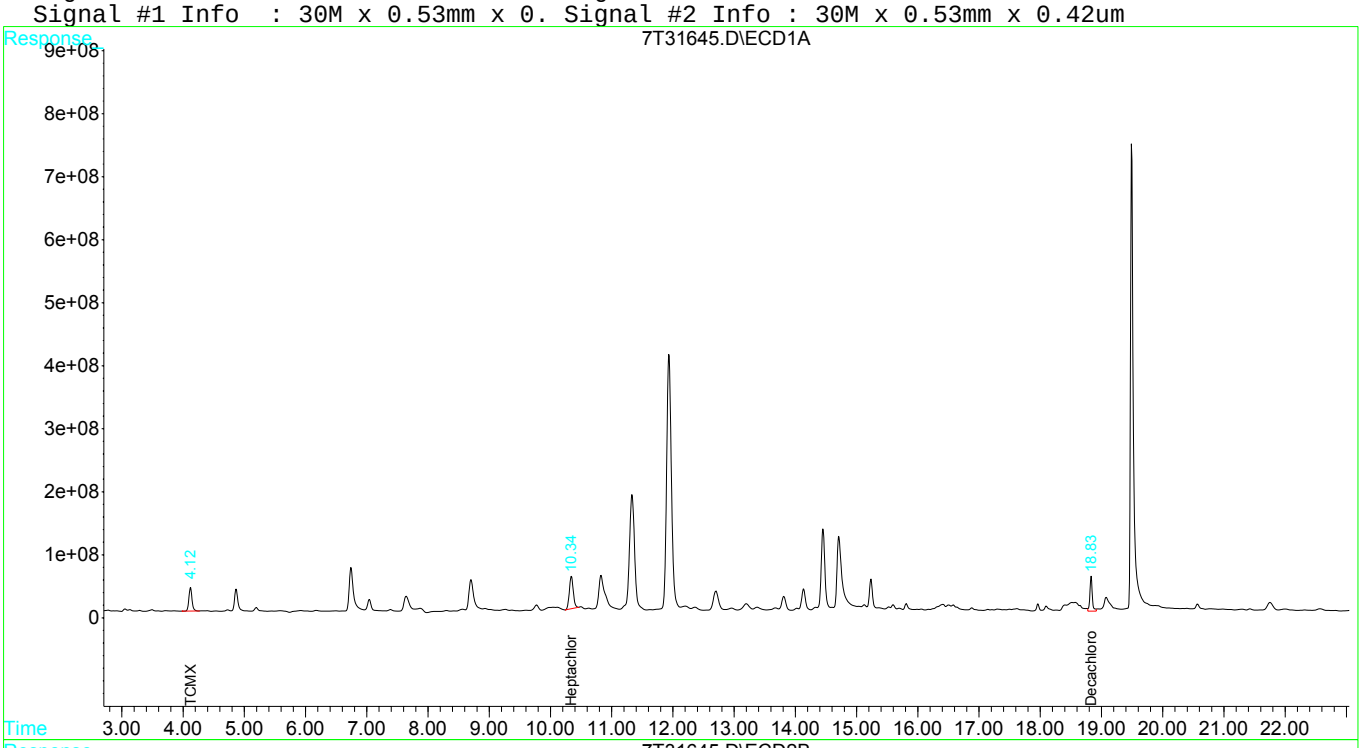
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.
7T31645.D 80811228.M Tue Jan 03 13:56:24 2023 SS

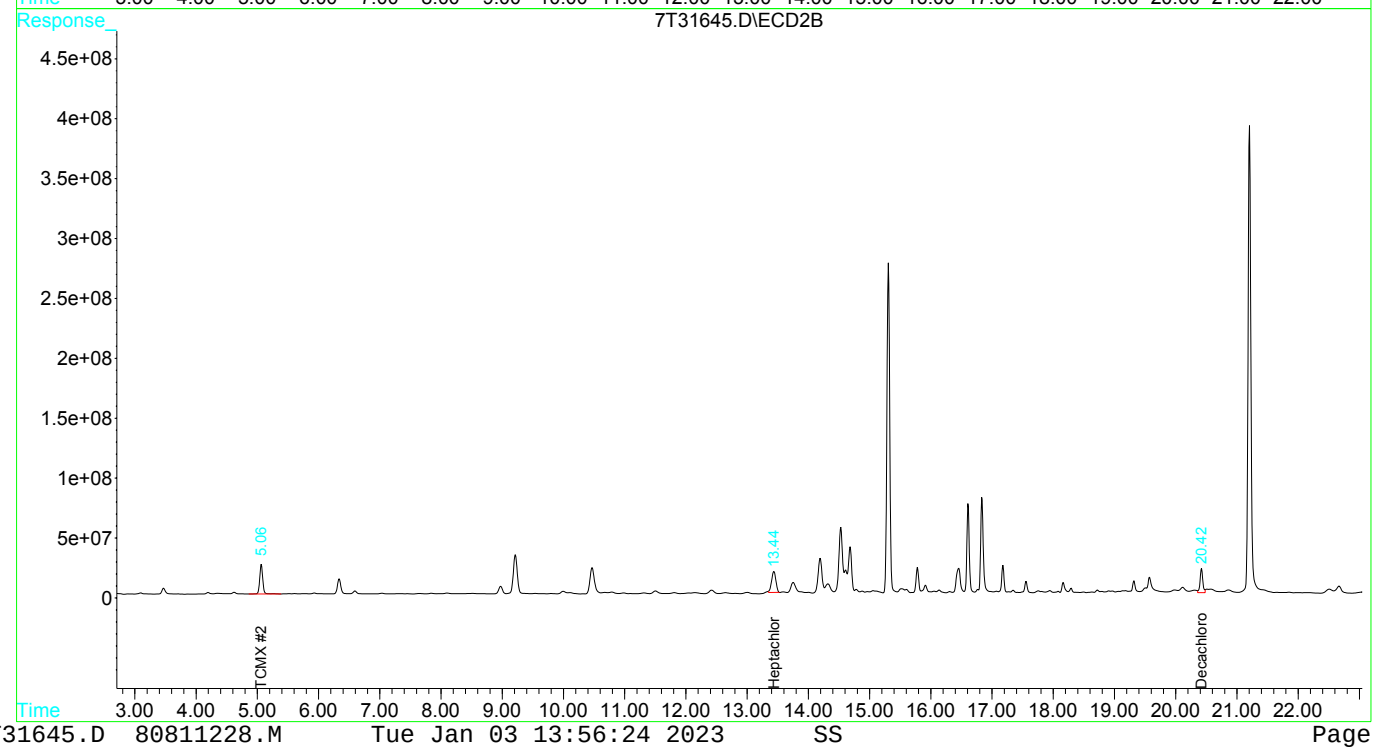
Quantitation Report (QT Reviewed)

Signal #1 : G:\HPCHEM\GCECD7\DATA\20221230\7T31645.D\ECD1A.CH Vial: 56
Signal #2 : G:\HPCHEM\GCECD7\DATA\20221230\7T31645.D\ECD2B.CH
Acq On : 31 Dec 2022 6:22 pm Operator: WD
Sample : 2120937-39 Inst : GCECD-7
Misc : Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Jan 3 13:48 2023 Quant Results File: 80811228.RES

Quant Method : G:\HPCHEM\G...\80811228.M (Chemstation Integrator)
Title : Pesticides by Method SW-846 8081B
Last Update : Tue Jan 03 13:40:33 2023
Response via : Multiple Level Calibration
DataAcq Meth : RUNPEST1.M

Volume Inj. : 2ul
Signal #1 Phase : RTx-50 Signal #2 Phase: RTx-CLPesticides II
Signal #1 Info : 30M x 0.53mm x 0. Signal #2 Info : 30M x 0.53mm x 0.42um





ANALYSIS DATA SHEET

Pesticides - SW 846 8081B

Client: **Dynamic Earth LLC**
Client Sample ID: **T-2B**
Lab Sample ID: **2120937-41**
Project: **Old Orchard G.C.**
Work Order: **2120937**

Date Sampled:	12/20/22 08:32	Prep Date:	01/11/23 15:05	File ID:	7T31841.D
Init/Final Vol:	15 g / 10 mL	Prep Batch:	BAA0335	Analyzed:	01/12/23 23:30
Dilution:	1	Matrix:	Soil	Sequence:	SAA0210
Percent Solids:	81.84	Prep Method:	Microwave Extraction		

CAS NO.	COMPOUND	CONC. (mg/kg dry)	MDL	RL	Qual
60-57-1	Dieldrin [2C]	0.00790	0.000831	0.00159	H

ND, U - Indicates compound analyzed for but not detected
J - Indicates estimated value
B - Indicates compound found in associated blank
E - Concentration exceeds highest calibration standard

D - Indicates result is based on a dilution
H - Indicates a Hold Time violation
P - Greater than 25% diff. between 2 GC columns.
MDL - Minimum detection limit, **RL** - Reporting limit

F-I

Quantitation Report (QT Reviewed)

Signal #1 : G:\HPCHEM\GCECD7\DATA\20230112\7T31841.D\ECD1A.CH Vial: 25
Signal #2 : G:\HPCHEM\GCECD7\DATA\20230112\7T31841.D\ECD2B.CH
Acq On : 12 Jan 2023 11:30 pm Operator: WD
Sample : 2120937-41 Inst : GCECD-7
Misc : Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Jan 13 14:49 2023 Quant Results File: 80811228.RES

Quant Method : G:\HPCHEM\G...\80811228.M (Chemstation Integrator)
Title : Pesticides by Method SW-846 8081B
Last Update : Fri Jan 13 12:01:01 2023
Response via : Initial Calibration
DataAcq Meth : RUNPEST1.M

Volume Inj. : 2ul
Signal #1 Phase : RTx-50 Signal #2 Phase: RTx-CLPesticides II
Signal #1 Info : 30M x 0.53mm x 0. Signal #2 Info : 30M x 0.53mm x 0.42um

Compound	RT#1	RT#2	Resp#1	Resp#2	ug/kg	ug/kg
System Monitoring Compounds						
1) S TCMX	4.48f	5.49f	1420.9E6	627.8E6	44.877	42.849
Spiked Amount 50.000	Range 43 - 129		Recovery =		89.75%	85.70%
21) S Decachlorobiphen	19.12	20.80	730.7E6	309.8E6	26.144	28.450
Spiked Amount 50.000	Range 42 - 136		Recovery =		52.29%	56.90%
Target Compounds						
11) M Dieldrin	13.71f	15.96	459.2E6	160.9E6	10.303	9.702
Sum Chlordane (gamma)			0	0	N.D.	N.D.
Average Chlordane (gamma)					0.000	0.000
Sum Toxaphene (1)			0	0	N.D.	N.D.
Average Toxaphene (1)					0.000	0.000

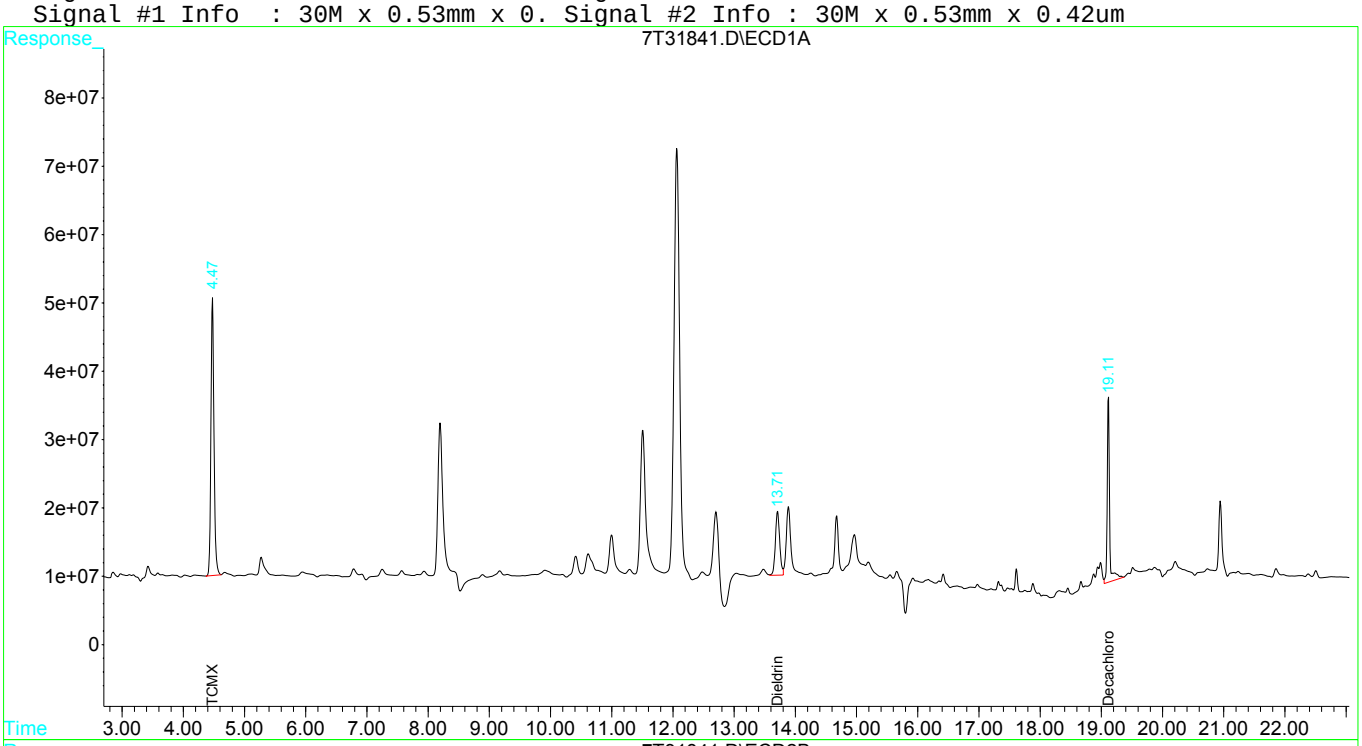
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.
7T31841.D 80811228.M Fri Jan 13 15:20:34 2023 SS

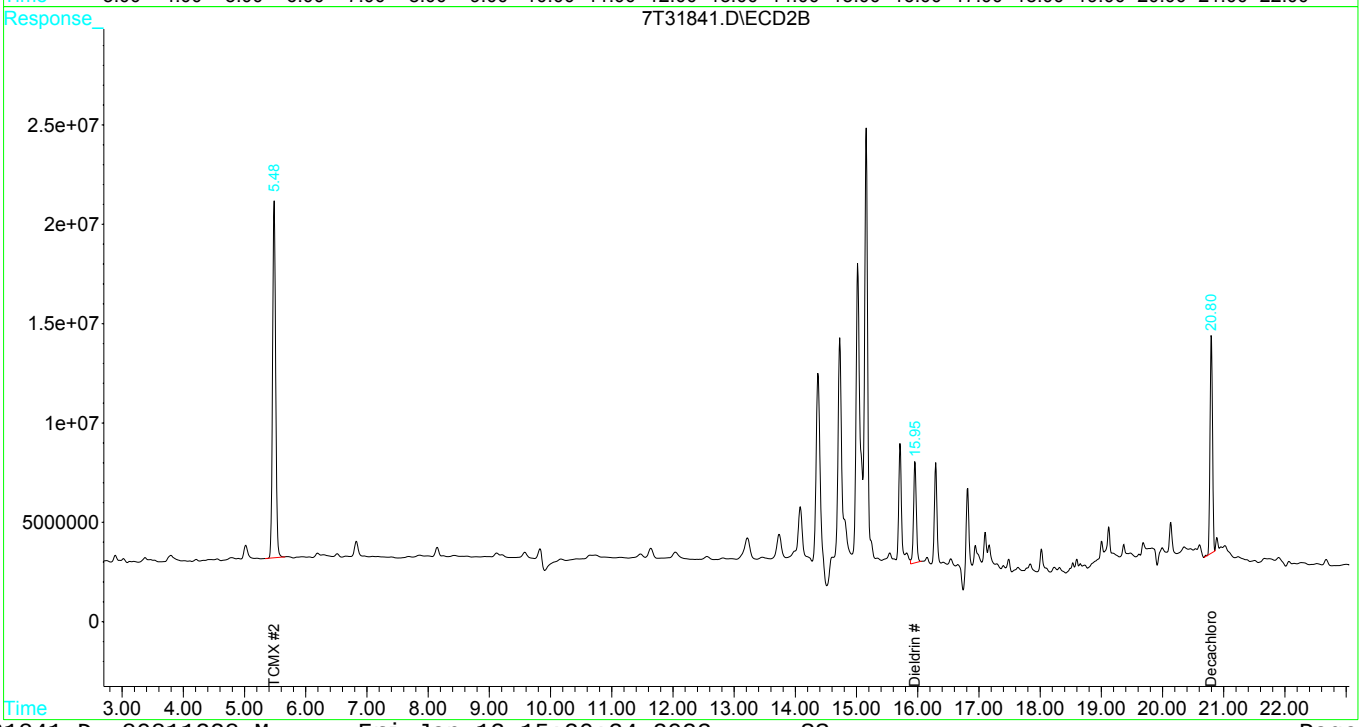
Quantitation Report (QT Reviewed)

Signal #1 : G:\HPCHEM\GCECD7\DATA\20230112\7T31841.D\ECD1A.CH Vial: 25
Signal #2 : G:\HPCHEM\GCECD7\DATA\20230112\7T31841.D\ECD2B.CH
Acq On : 12 Jan 2023 11:30 pm Operator: WD
Sample : 2120937-41 Inst : GCECD-7
Misc : Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Jan 13 14:49 2023 Quant Results File: 80811228.RES

Quant Method : G:\HPCHEM\G...\80811228.M (Chemstation Integrator)
Title : Pesticides by Method SW-846 8081B
Last Update : Fri Jan 13 12:01:01 2023
Response via : Multiple Level Calibration
DataAcq Meth : RUNPEST1.M

Volume Inj. : 2ul
Signal #1 Phase : RTx-50 Signal #2 Phase: RTx-CLPesticides II
Signal #1 Info : 30M x 0.53mm x 0. Signal #2 Info : 30M x 0.53mm x 0.42um





ANALYSIS DATA SHEET

Pesticides - SW 846 8081B

Client: **Dynamic Earth LLC**
Client Sample ID: **T-3-1A**
Lab Sample ID: **2120937-42RE1**
Project: **Old Orchard G.C.**
Work Order: **2120937**

Date Sampled:	12/20/22 09:00	Prep Date:	01/11/23 15:05	File ID:	7T31890.D
Init/Final Vol:	15 g / 10 mL	Prep Batch:	BAA0335	Analyzed:	01/14/23 05:06
Dilution:	10	Matrix:	Soil	Sequence:	SAA0233
Percent Solids:	88.72	Prep Method:	Microwave Extraction		

CAS NO.	COMPOUND	CONC. (mg/kg dry)	MDL	RL	Qual
60-57-1	Dieldrin [2C]	0.398	0.00766	0.0147	D, H

ND, U - Indicates compound analyzed for but not detected
J - Indicates estimated value
B - Indicates compound found in associated blank
E - Concentration exceeds highest calibration standard

D - Indicates result is based on a dilution
H - Indicates a Hold Time violation
P - Greater than 25% diff. between 2 GC columns.
MDL - Minimum detection limit, **RL** - Reporting limit

F-I

Quantitation Report (QT Reviewed)

Signal #1 : G:\HPCHEM\GCECD7\DATA\20230113\7T31890.D\ECD1A.CH Vial: 38
Signal #2 : G:\HPCHEM\GCECD7\DATA\20230113\7T31890.D\ECD2B.CH
Acq On : 14 Jan 2023 5:06 am Operator: WD
Sample : 2120937-42RE1 Inst : GCECD-7
Misc : 10X Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Jan 16 13:43 2023 Quant Results File: 80811228.RES

Quant Method : G:\HPCHEM\G...\80811228.M (Chemstation Integrator)
Title : Pesticides by Method SW-846 8081B
Last Update : Sat Jan 14 13:28:22 2023
Response via : Initial Calibration
DataAcq Meth : RUNPEST1.M

Volume Inj. : 2ul
Signal #1 Phase : RTx-50 Signal #2 Phase: RTx-CLPesticides II
Signal #1 Info : 30M x 0.53mm x 0. Signal #2 Info : 30M x 0.53mm x 0.42um

Compound	RT#1	RT#2	Resp#1	Resp#2	ug/kg	ug/kg
System Monitoring Compounds						
1) S TCMX	4.49	5.50	169.4E6	98790779	5.349m	6.743m#
Spiked Amount 50.000	Range 43 - 129		Recovery =		10.70%#	13.49%#
21) S Decachlorobiphen	19.13	20.82	161.0E6	75530678	5.760m	6.936m
Spiked Amount 50.000	Range 42 - 136		Recovery =		11.52%#	13.87%#
Target Compounds						
11) M Dieldrin	13.74f	15.98	2386.5E6	879.4E6	53.543	53.019
Sum Chlordane (gamma)			0	0	N.D.	N.D.
Average Chlordane (gamma)					0.000	0.000
Sum Toxaphene (1)			0	0	N.D.	N.D.
Average Toxaphene (1)					0.000	0.000

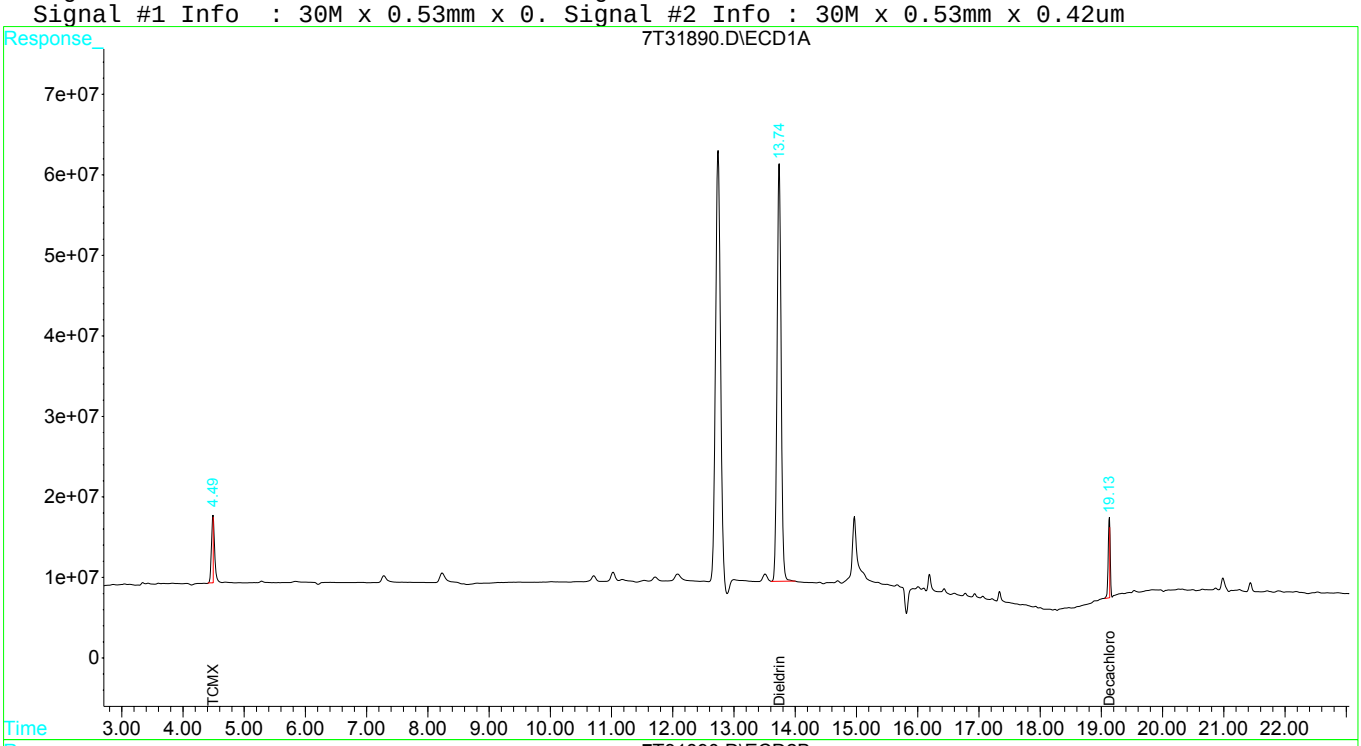
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.
7T31890.D 80811228.M Tue Jan 17 17:56:17 2023 SS Page 1

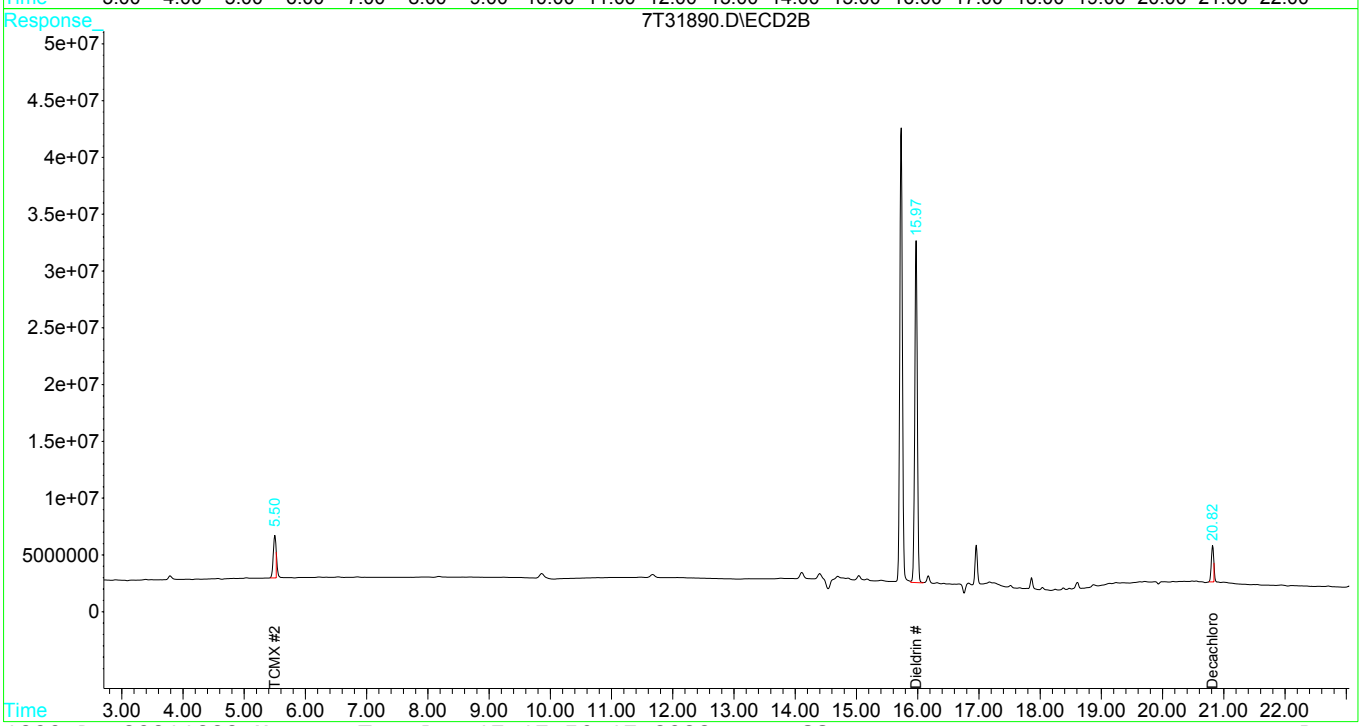
Quantitation Report (QT Reviewed)

Signal #1 : G:\HPCHEM\GCECD7\DATA\20230113\7T31890.D\ECD1A.CH Vial: 38
Signal #2 : G:\HPCHEM\GCECD7\DATA\20230113\7T31890.D\ECD2B.CH
Acq On : 14 Jan 2023 5:06 am Operator: WD
Sample : 2120937-42RE1 Inst : GCECD-7
Misc : 10X Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Jan 16 13:43 2023 Quant Results File: 80811228.RES

Quant Method : G:\HPCHEM\G...\80811228.M (Chemstation Integrator)
Title : Pesticides by Method SW-846 8081B
Last Update : Sat Jan 14 13:28:22 2023
Response via : Multiple Level Calibration
DataAcq Meth : RUNPEST1.M

Volume Inj. : 2ul
Signal #1 Phase : RTx-50 Signal #2 Phase: RTx-CLPesticides II
Signal #1 Info : 30M x 0.53mm x 0. Signal #2 Info : 30M x 0.53mm x 0.42um





ANALYSIS DATA SHEET

Pesticides - SW 846 8081B

Client: **Dynamic Earth LLC**
Client Sample ID: **T-3-2A**
Lab Sample ID: **2120937-43**
Project: **Old Orchard G.C.**
Work Order: **2120937**

Date Sampled:	12/20/22 09:04	Prep Date:	01/11/23 15:05	File ID:	7T31843.D
Init/Final Vol:	15 g / 10 mL	Prep Batch:	BAA0335	Analyzed:	01/13/23 00:21
Dilution:	1	Matrix:	Soil	Sequence:	SAA0210
Percent Solids:	87.41	Prep Method:	Microwave Extraction		

CAS NO.	COMPOUND	CONC. (mg/kg dry)	MDL	RL	Qual
60-57-1	Dieldrin	0.222	0.000778	0.00149	H

ND, U - Indicates compound analyzed for but not detected
J - Indicates estimated value
B - Indicates compound found in associated blank
E - Concentration exceeds highest calibration standard

D - Indicates result is based on a dilution
H - Indicates a Hold Time violation
P - Greater than 25% diff. between 2 GC columns.
MDL - Minimum detection limit, **RL** - Reporting limit

F-I

Quantitation Report (QT Reviewed)

Signal #1 : G:\HPCHEM\GCECD7\DATA\20230112\7T31843.D\ECD1A.CH Vial: 27
Signal #2 : G:\HPCHEM\GCECD7\DATA\20230112\7T31843.D\ECD2B.CH
Acq On : 13 Jan 2023 12:21 am Operator: WD
Sample : 2120937-43 Inst : GCECD-7
Misc : Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Jan 13 14:52 2023 Quant Results File: 80811228.RES

Quant Method : G:\HPCHEM\G...\80811228.M (Chemstation Integrator)
Title : Pesticides by Method SW-846 8081B
Last Update : Fri Jan 13 12:01:01 2023
Response via : Initial Calibration
DataAcq Meth : RUNPEST1.M

Volume Inj. : 2ul
Signal #1 Phase : RTx-50 Signal #2 Phase: RTx-CLPesticides II
Signal #1 Info : 30M x 0.53mm x 0. Signal #2 Info : 30M x 0.53mm x 0.42um

Compound	RT#1	RT#2	Resp#1	Resp#2	ug/kg	ug/kg
System Monitoring Compounds						
1) S TCMX	4.47	5.48f	1630.8E6	735.5E6	51.503	50.198
Spiked Amount 50.000	Range 43 - 129		Recovery =		103.01%	100.40%
21) S Decachlorobiphen	19.12	20.80	925.1E6	401.9E6	33.099	36.901
Spiked Amount 50.000	Range 42 - 136		Recovery =		66.20%	73.80%
Target Compounds						
11) M Dieldrin	13.71f	15.96	12971.3E6	4893.8E6	291.015	295.046
Sum Chlordane (gamma)			0	0	N.D.	N.D.
Average Chlordane (gamma)					0.000	0.000
Sum Toxaphene (1)			0	0	N.D.	N.D.
Average Toxaphene (1)					0.000	0.000

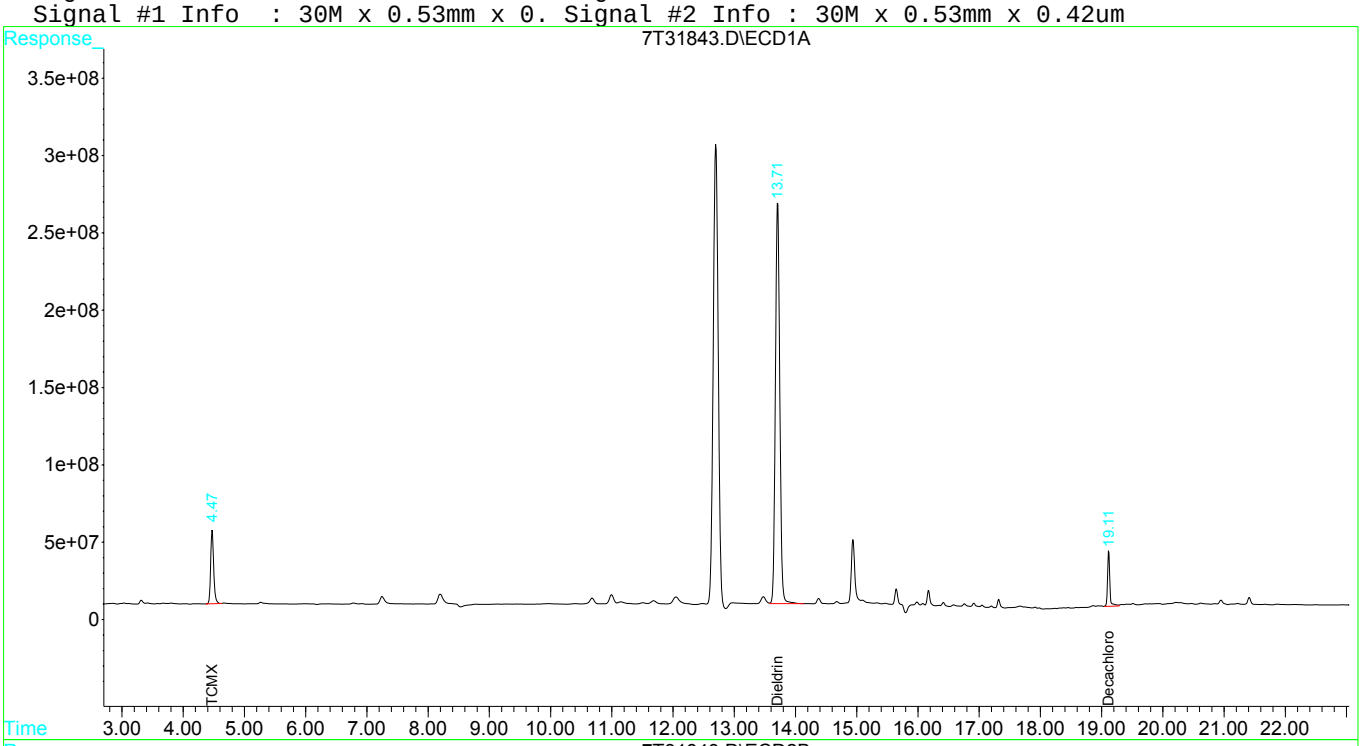
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.
7T31843.D 80811228.M Fri Jan 13 15:20:37 2023 SS

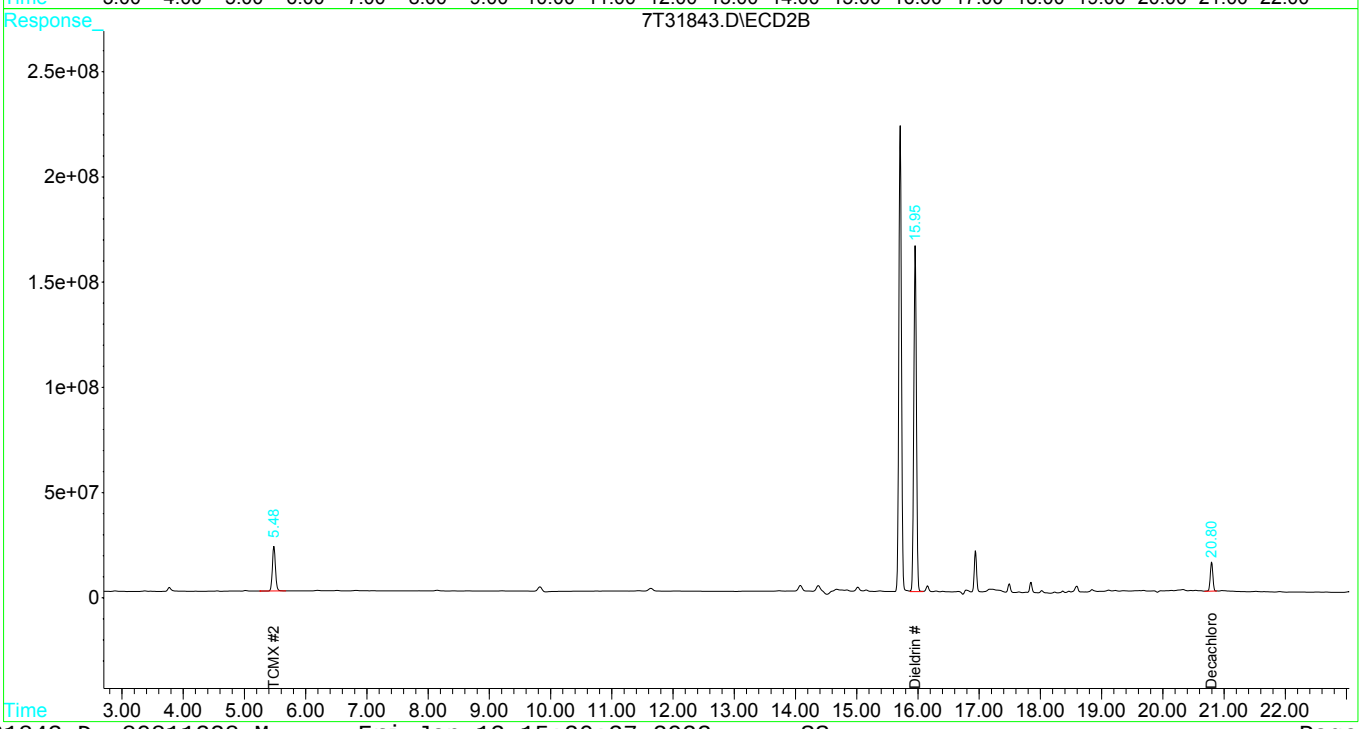
Quantitation Report (QT Reviewed)

Signal #1 : G:\HPCHEM\GCECD7\DATA\20230112\7T31843.D\ECD1A.CH Vial: 27
Signal #2 : G:\HPCHEM\GCECD7\DATA\20230112\7T31843.D\ECD2B.CH
Acq On : 13 Jan 2023 12:21 am Operator: WD
Sample : 2120937-43 Inst : GCECD-7
Misc : Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Jan 13 14:52 2023 Quant Results File: 80811228.RES

Quant Method : G:\HPCHEM\G...\80811228.M (Chemstation Integrator)
Title : Pesticides by Method SW-846 8081B
Last Update : Fri Jan 13 12:01:01 2023
Response via : Multiple Level Calibration
DataAcq Meth : RUNPEST1.M

Volume Inj. : 2ul
Signal #1 Phase : RTx-50 Signal #2 Phase: RTx-CLPesticides II
Signal #1 Info : 30M x 0.53mm x 0. Signal #2 Info : 30M x 0.53mm x 0.42um





ANALYSIS DATA SHEET

Pesticides - SW 846 8081B

Client: **Dynamic Earth LLC**
Client Sample ID: **T-3-3A**
Lab Sample ID: **2120937-44**
Project: **Old Orchard G.C.**
Work Order: **2120937**

Date Sampled:	12/20/22 09:08	Prep Date:	01/11/23 15:05	File ID:	7T31844.D
Init/Final Vol:	15 g / 10 mL	Prep Batch:	BAA0335	Analyzed:	01/13/23 00:46
Dilution:	1	Matrix:	Soil	Sequence:	SAA0210
Percent Solids:	88.84	Prep Method:	Microwave Extraction		

CAS NO.	COMPOUND	CONC. (mg/kg dry)	MDL	RL	Qual
60-57-1	Dieldrin [2C]	0.0329	0.000765	0.00146	H

ND, U - Indicates compound analyzed for but not detected
J - Indicates estimated value
B - Indicates compound found in associated blank
E - Concentration exceeds highest calibration standard
D - Indicates result is based on a dilution
H - Indicates a Hold Time violation
P - Greater than 25% diff. between 2 GC columns.
MDL - Minimum detection limit, **RL** - Reporting limit

F-I

Quantitation Report (QT Reviewed)

Signal #1 : G:\HPCHEM\GCECD7\DATA\20230112\7T31844.D\ECD1A.CH Vial: 28
Signal #2 : G:\HPCHEM\GCECD7\DATA\20230112\7T31844.D\ECD2B.CH
Acq On : 13 Jan 2023 12:46 am Operator: WD
Sample : 2120937-44 Inst : GCECD-7
Misc : Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Jan 13 14:53 2023 Quant Results File: 80811228.RES

Quant Method : G:\HPCHEM\G...\80811228.M (Chemstation Integrator)
Title : Pesticides by Method SW-846 8081B
Last Update : Fri Jan 13 12:01:01 2023
Response via : Initial Calibration
DataAcq Meth : RUNPEST1.M

Volume Inj. : 2ul
Signal #1 Phase : RTx-50 Signal #2 Phase: RTx-CLPesticides II
Signal #1 Info : 30M x 0.53mm x 0. Signal #2 Info : 30M x 0.53mm x 0.42um

Compound	RT#1	RT#2	Resp#1	Resp#2	ug/kg	ug/kg
System Monitoring Compounds						
1) S TCMX	4.48f	5.49f	1743.1E6	833.8E6	55.051	56.908
Spiked Amount 50.000	Range 43 - 129		Recovery =		110.10%	113.82%
21) S Decachlorobiphen	19.12	20.80	988.8E6	438.4E6	35.376	40.259
Spiked Amount 50.000	Range 42 - 136		Recovery =		70.75%	80.52%
Target Compounds						
11) M Dieldrin	13.71f	15.96	2064.7E6	726.8E6	46.322	43.819
Sum Chlordane (gamma)			0	0	N.D.	N.D.
Average Chlordane (gamma)					0.000	0.000
Sum Toxaphene (1)			0	0	N.D.	N.D.
Average Toxaphene (1)					0.000	0.000

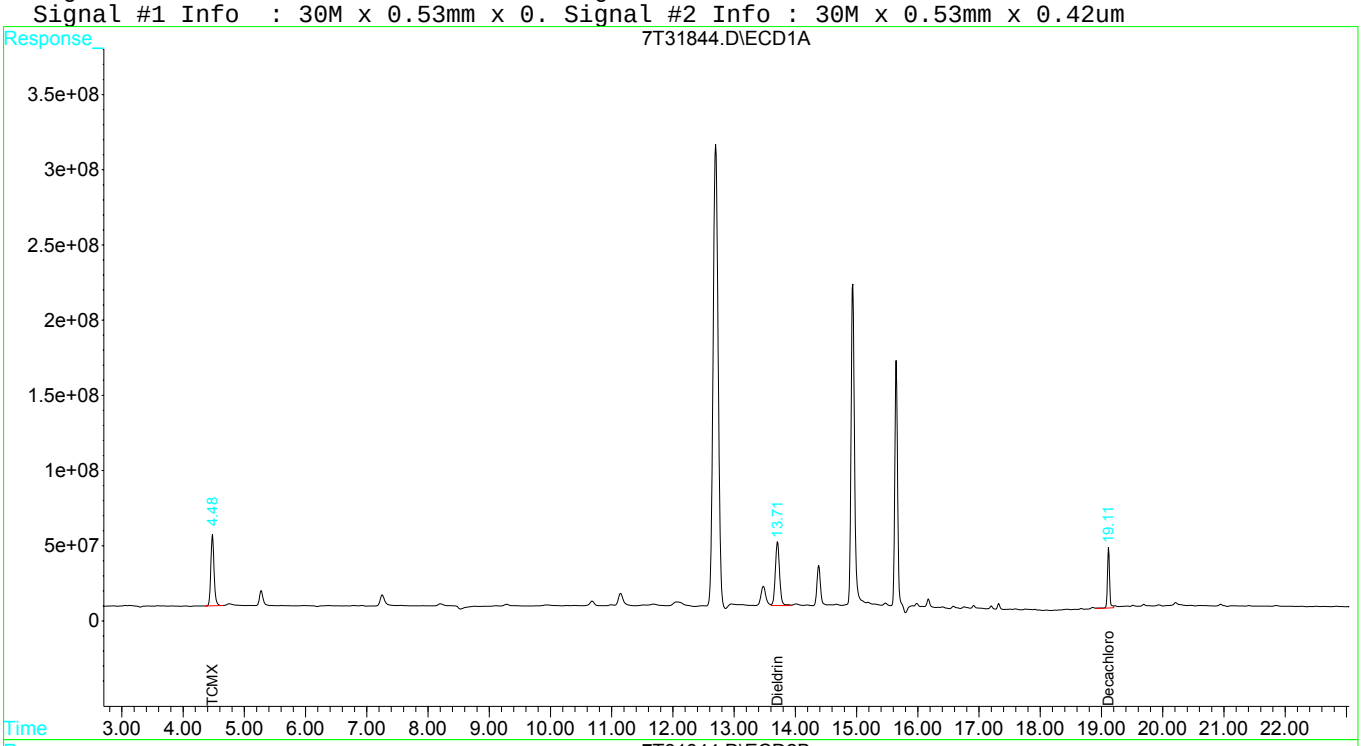
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.
7T31844.D 80811228.M Fri Jan 13 15:20:39 2023 SS

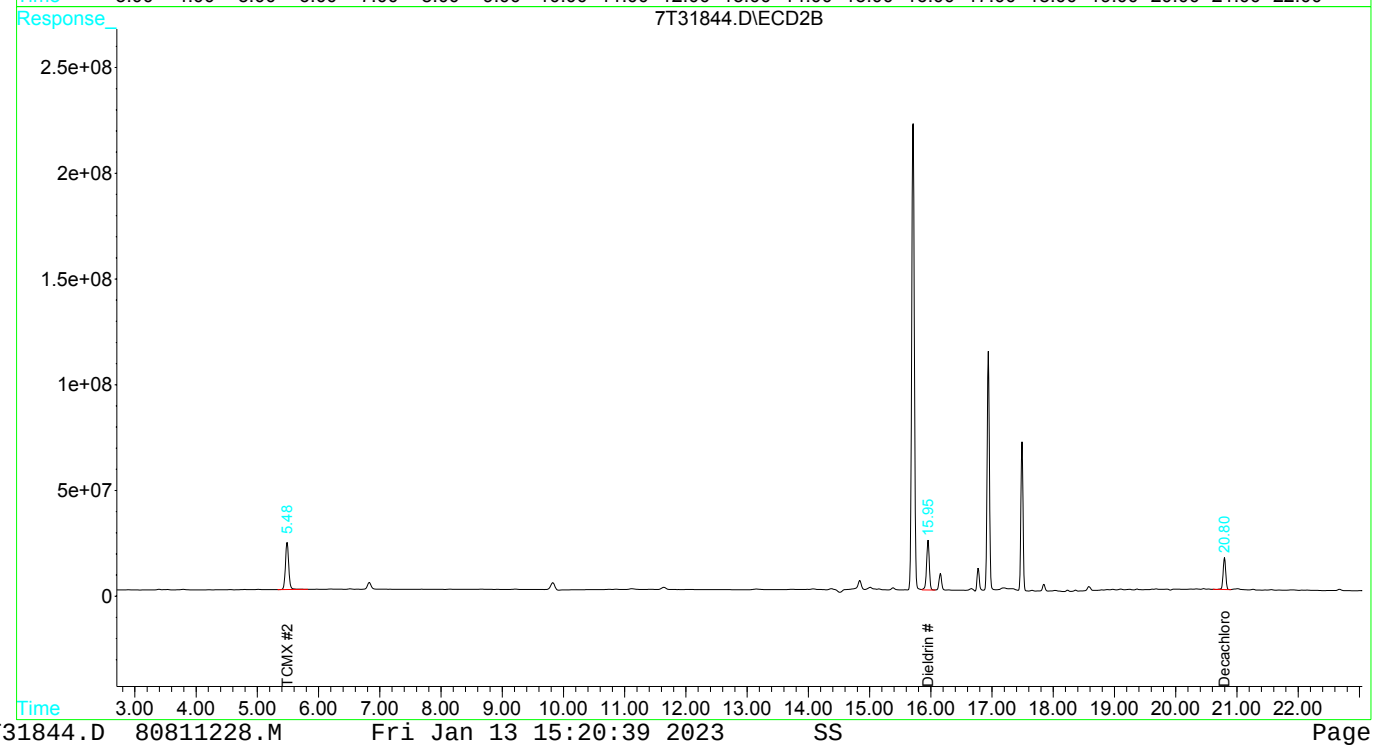
Quantitation Report (QT Reviewed)

Signal #1 : G:\HPCHEM\GCECD7\DATA\20230112\7T31844.D\ECD1A.CH Vial: 28
Signal #2 : G:\HPCHEM\GCECD7\DATA\20230112\7T31844.D\ECD2B.CH
Acq On : 13 Jan 2023 12:46 am Operator: WD
Sample : 2120937-44 Inst : GCECD-7
Misc : Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Jan 13 14:53 2023 Quant Results File: 80811228.RES

Quant Method : G:\HPCHEM\G...\80811228.M (Chemstation Integrator)
Title : Pesticides by Method SW-846 8081B
Last Update : Fri Jan 13 12:01:01 2023
Response via : Multiple Level Calibration
DataAcq Meth : RUNPEST1.M

Volume Inj. : 2ul
Signal #1 Phase : RTx-50 Signal #2 Phase: RTx-CLPesticides II
Signal #1 Info : 30M x 0.53mm x 0. Signal #2 Info : 30M x 0.53mm x 0.42um





ANALYSIS DATA SHEET

Pesticides - SW 846 8081B

Client: **Dynamic Earth LLC**
Client Sample ID: **T-3-4A**
Lab Sample ID: **2120937-45**
Project: **Old Orchard G.C.**
Work Order: **2120937**

Date Sampled:	12/20/22 09:12	Prep Date:	01/11/23 15:05	File ID:	7T31845.D
Init/Final Vol:	15 g / 10 mL	Prep Batch:	BAA0335	Analyzed:	01/13/23 01:12
Dilution:	1	Matrix:	Soil	Sequence:	SAA0210
Percent Solids:	89.06	Prep Method:	Microwave Extraction		

CAS NO.	COMPOUND	CONC. (mg/kg dry)	MDL	RL	Qual
60-57-1	Dieldrin [2C]	0.0331	0.000763	0.00146	H

ND, U - Indicates compound analyzed for but not detected
J - Indicates estimated value
B - Indicates compound found in associated blank
E - Concentration exceeds highest calibration standard

D - Indicates result is based on a dilution
H - Indicates a Hold Time violation
P - Greater than 25% diff. between 2 GC columns.
MDL - Minimum detection limit, **RL** - Reporting limit

F-I

Quantitation Report (QT Reviewed)

Signal #1 : G:\HPCHEM\GCECD7\DATA\20230112\7T31845.D\ECD1A.CH Vial: 29
Signal #2 : G:\HPCHEM\GCECD7\DATA\20230112\7T31845.D\ECD2B.CH
Acq On : 13 Jan 2023 1:12 am Operator: WD
Sample : 2120937-45 Inst : GCECD-7
Misc : Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Jan 13 14:53 2023 Quant Results File: 80811228.RES

Quant Method : G:\HPCHEM\G...\80811228.M (Chemstation Integrator)
Title : Pesticides by Method SW-846 8081B
Last Update : Fri Jan 13 12:01:01 2023
Response via : Initial Calibration
DataAcq Meth : RUNPEST1.M

Volume Inj. : 2ul
Signal #1 Phase : RTx-50 Signal #2 Phase: RTx-CLPesticides II
Signal #1 Info : 30M x 0.53mm x 0. Signal #2 Info : 30M x 0.53mm x 0.42um

Compound	RT#1	RT#2	Resp#1	Resp#2	ug/kg	ug/kg
System Monitoring Compounds						
1) S TCMX	4.47	5.48f	1634.5E6	775.9E6	51.623	52.953
Spiked Amount 50.000	Range 43 - 129		Recovery =		103.25%	105.91%
21) S Decachlorobiphen	19.12	20.80	950.9E6	433.7E6	34.023	39.829
Spiked Amount 50.000	Range 42 - 136		Recovery =		68.05%	79.66%
Target Compounds						
11) M Dieldrin	13.71f	15.96	2077.3E6	732.8E6	46.606	44.182
Sum Chlordane (gamma)			0	0	N.D.	N.D.
Average Chlordane (gamma)					0.000	0.000
Sum Toxaphene (1)			0	0	N.D.	N.D.
Average Toxaphene (1)					0.000	0.000

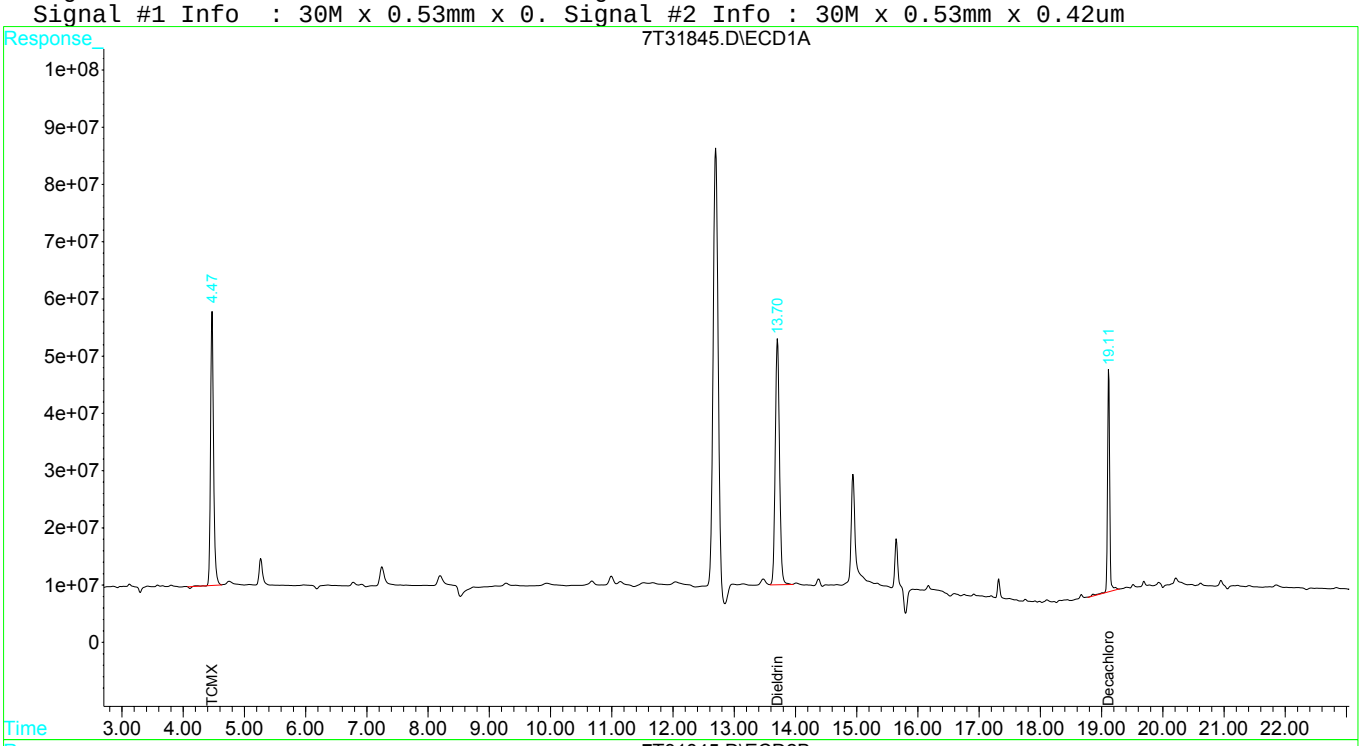
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.
7T31845.D 80811228.M Fri Jan 13 15:20:41 2023 SS Page 1

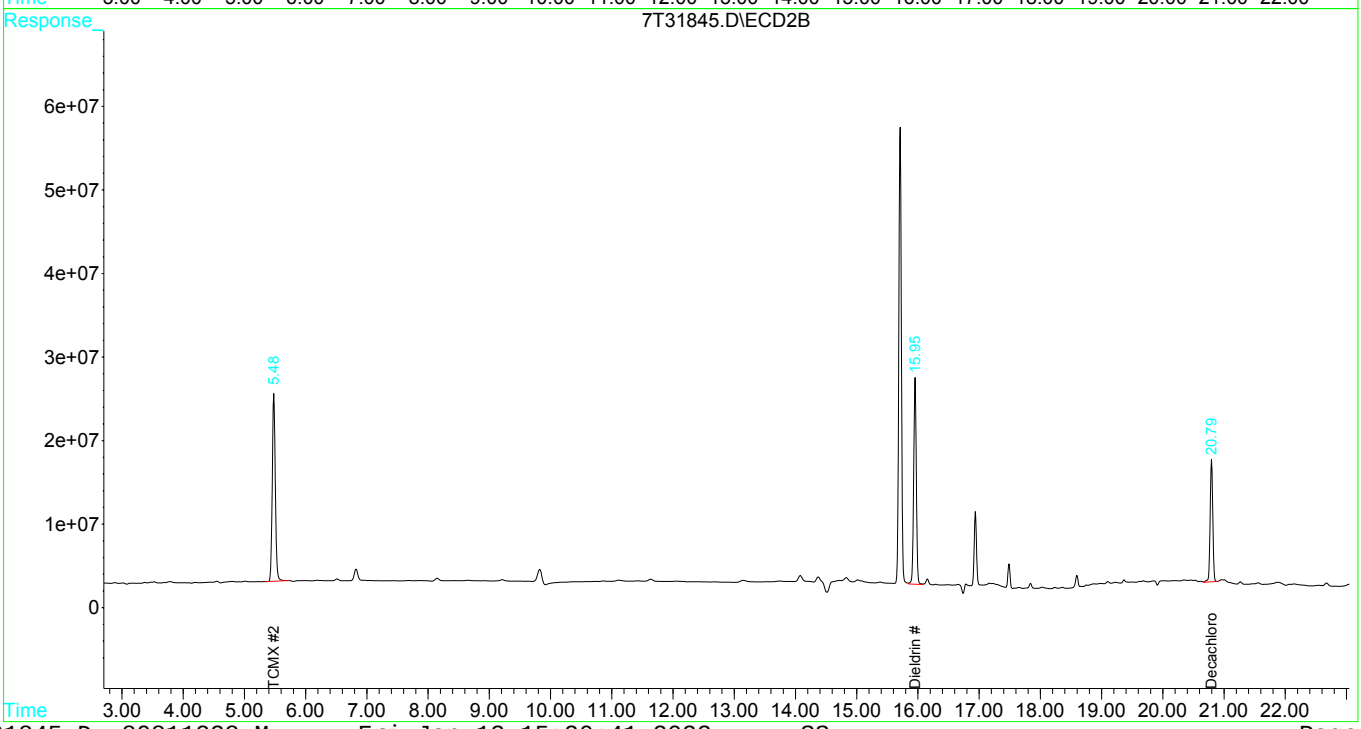
Quantitation Report (QT Reviewed)

Signal #1 : G:\HPCHEM\GCECD7\DATA\20230112\7T31845.D\ECD1A.CH Vial: 29
Signal #2 : G:\HPCHEM\GCECD7\DATA\20230112\7T31845.D\ECD2B.CH
Acq On : 13 Jan 2023 1:12 am Operator: WD
Sample : 2120937-45 Inst : GCECD-7
Misc : Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Jan 13 14:53 2023 Quant Results File: 80811228.RES

Quant Method : G:\HPCHEM\G...\80811228.M (Chemstation Integrator)
Title : Pesticides by Method SW-846 8081B
Last Update : Fri Jan 13 12:01:01 2023
Response via : Multiple Level Calibration
DataAcq Meth : RUNPEST1.M

Volume Inj. : 2ul
Signal #1 Phase : RTx-50 Signal #2 Phase: RTx-CLPesticides II
Signal #1 Info : 30M x 0.53mm x 0. Signal #2 Info : 30M x 0.53mm x 0.42um





ANALYSIS DATA SHEET

Pesticides - SW 846 8081B

Client: **Dynamic Earth LLC**
Client Sample ID: **T-12-1A**
Lab Sample ID: **2120937-46**
Project: **Old Orchard G.C.**
Work Order: **2120937**

Date Sampled:	12/20/22 09:44	Prep Date:	01/11/23 15:05	File ID:	7T31846.D
Init/Final Vol:	15 g / 10 mL	Prep Batch:	BAA0335	Analyzed:	01/13/23 01:37
Dilution:	1	Matrix:	Soil	Sequence:	SAA0210
Percent Solids:	86.44	Prep Method:	Microwave Extraction		

CAS NO.	COMPOUND	CONC. (mg/kg dry)	MDL	RL	Qual
60-57-1	Dieldrin	ND	0.000787	0.00150	U, H

ND, U - Indicates compound analyzed for but not detected
J - Indicates estimated value
B - Indicates compound found in associated blank
E - Concentration exceeds highest calibration standard

D - Indicates result is based on a dilution
H - Indicates a Hold Time violation
P - Greater than 25% diff. between 2 GC columns.
MDL - Minimum detection limit, **RL** - Reporting limit

F-I

Quantitation Report (QT Reviewed)

Signal #1 : G:\HPCHEM\GCECD7\DATA\20230112\7T31846.D\ECD1A.CH Vial: 30
Signal #2 : G:\HPCHEM\GCECD7\DATA\20230112\7T31846.D\ECD2B.CH
Acq On : 13 Jan 2023 1:37 am Operator: WD
Sample : 2120937-46 Inst : GCECD-7
Misc : Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Jan 13 14:54 2023 Quant Results File: 80811228.RES

Quant Method : G:\HPCHEM\G...\80811228.M (Chemstation Integrator)
Title : Pesticides by Method SW-846 8081B
Last Update : Fri Jan 13 12:01:01 2023
Response via : Initial Calibration
DataAcq Meth : RUNPEST1.M

Volume Inj. : 2ul
Signal #1 Phase : RTx-50 Signal #2 Phase: RTx-CLPesticides II
Signal #1 Info : 30M x 0.53mm x 0. Signal #2 Info : 30M x 0.53mm x 0.42um

Compound	RT#1	RT#2	Resp#1	Resp#2	ug/kg	ug/kg
System Monitoring Compounds						
1) S TCMX	4.47	5.48f	1745.6E6	792.5E6	55.131	54.088
Spiked Amount 50.000	Range 43 - 129		Recovery =		110.26%	108.18%
21) S Decachlorobiphen	19.12	20.80	958.7E6	446.5E6	34.301m	40.999
Spiked Amount 50.000	Range 42 - 136		Recovery =		68.60%	82.00%
Target Compounds						
11) M Dieldrin	13.71f	15.95	10423330	5270374	0.234m	0.318m#
Sum Chlordane (gamma)			0	0	N.D.	N.D.
Average Chlordane (gamma)					0.000	0.000
Sum Toxaphene (1)			0	0	N.D.	N.D.
Average Toxaphene (1)					0.000	0.000

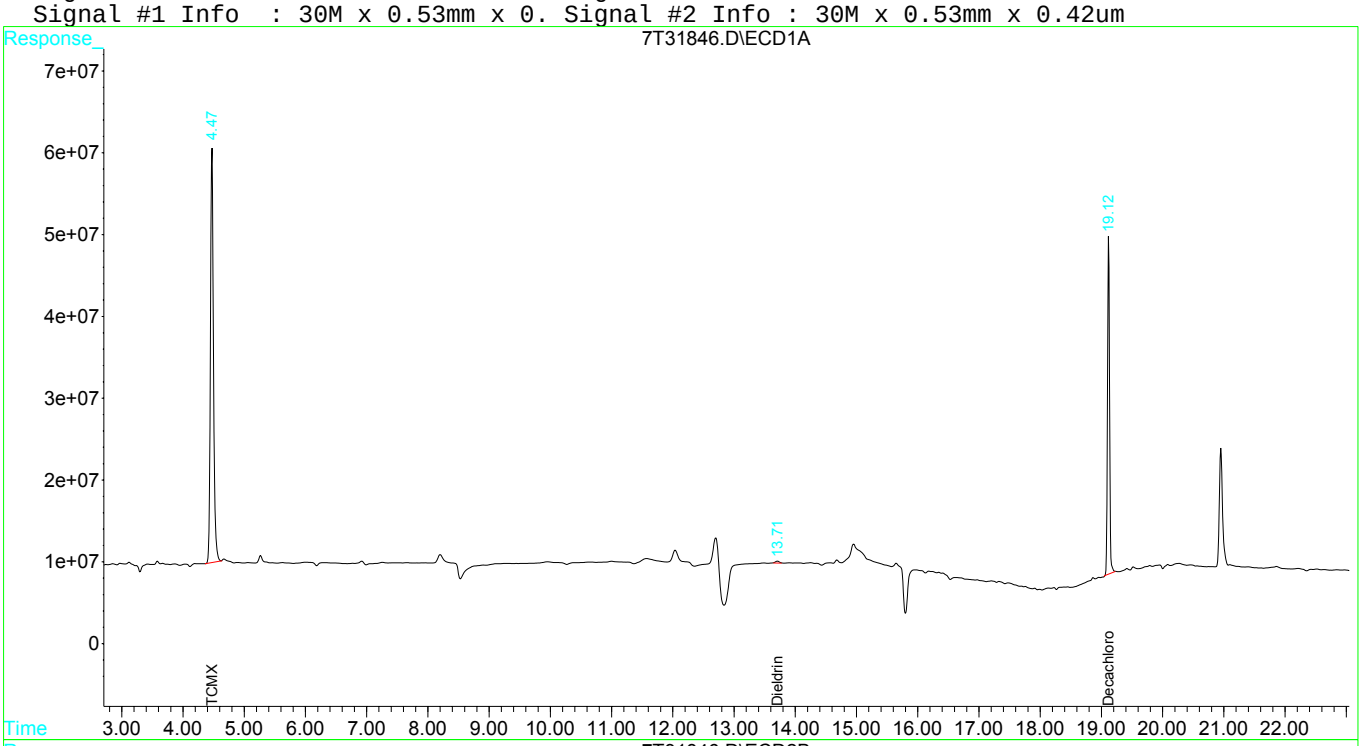
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.
7T31846.D 80811228.M Fri Jan 13 15:20:43 2023 SS

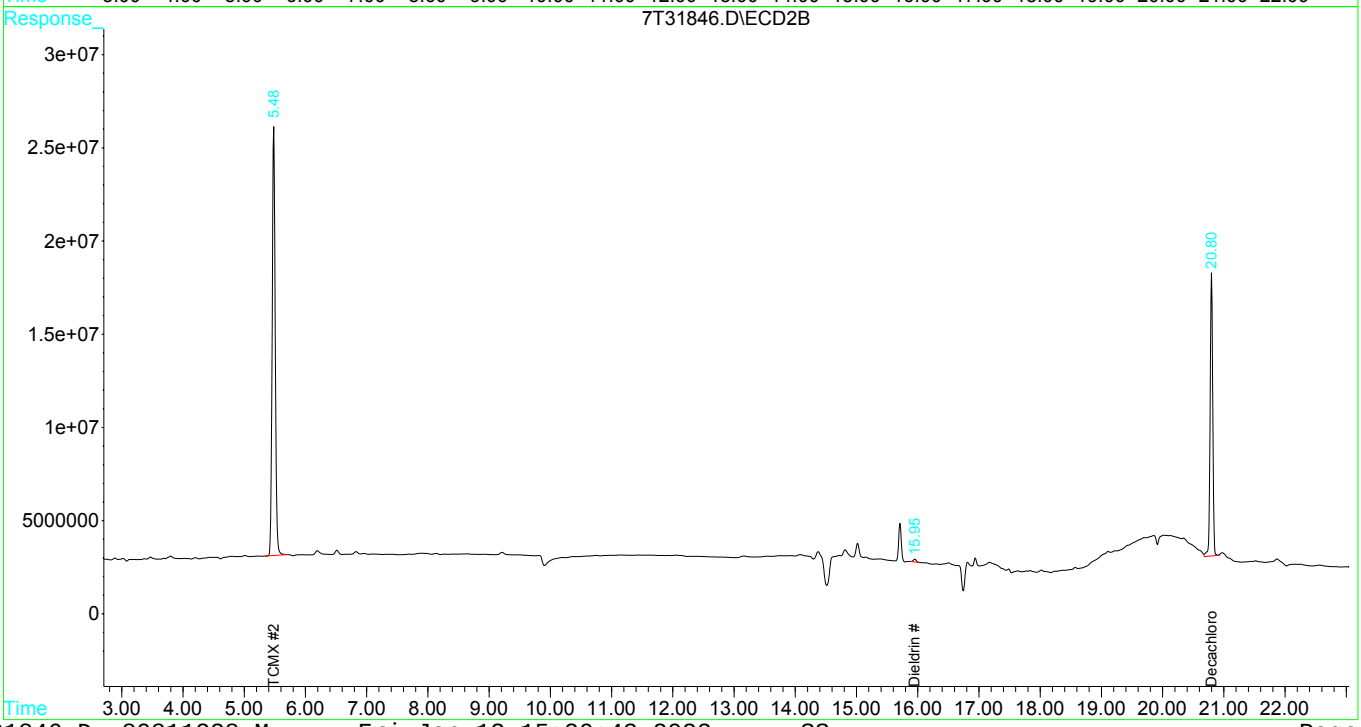
Quantitation Report (QT Reviewed)

Signal #1 : G:\HPCHEM\GCECD7\DATA\20230112\7T31846.D\ECD1A.CH Vial: 30
Signal #2 : G:\HPCHEM\GCECD7\DATA\20230112\7T31846.D\ECD2B.CH
Acq On : 13 Jan 2023 1:37 am Operator: WD
Sample : 2120937-46 Inst : GCECD-7
Misc : Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Jan 13 14:54 2023 Quant Results File: 80811228.RES

Quant Method : G:\HPCHEM\G...\80811228.M (Chemstation Integrator)
Title : Pesticides by Method SW-846 8081B
Last Update : Fri Jan 13 12:01:01 2023
Response via : Multiple Level Calibration
DataAcq Meth : RUNPEST1.M

Volume Inj. : 2ul
Signal #1 Phase : RTx-50 Signal #2 Phase: RTx-CLPesticides II
Signal #1 Info : 30M x 0.53mm x 0. Signal #2 Info : 30M x 0.53mm x 0.42um





ANALYSIS DATA SHEET

Pesticides - SW 846 8081B

Client: **Dynamic Earth LLC**
Client Sample ID: **T-12-3A**
Lab Sample ID: **2120937-47**
Project: **Old Orchard G.C.**
Work Order: **2120937**

Date Sampled:	12/20/22 09:52	Prep Date:	01/11/23 15:05	File ID:	7T31847.D
Init/Final Vol:	15 g / 10 mL	Prep Batch:	BAA0335	Analyzed:	01/13/23 02:02
Dilution:	1	Matrix:	Soil	Sequence:	SAA0210
Percent Solids:	86.13	Prep Method:	Microwave Extraction		

CAS NO.	COMPOUND	CONC. (mg/kg dry)	MDL	RL	Qual
60-57-1	Dieldrin [2C]	ND	0.000790	0.00151	U, H

ND, U - Indicates compound analyzed for but not detected
J - Indicates estimated value
B - Indicates compound found in associated blank
E - Concentration exceeds highest calibration standard

D - Indicates result is based on a dilution
H - Indicates a Hold Time violation
P - Greater than 25% diff. between 2 GC columns.
MDL - Minimum detection limit, **RL** - Reporting limit

F-I

Quantitation Report (QT Reviewed)

Signal #1 : G:\HPCHEM\GCECD7\DATA\20230112\7T31847.D\ECD1A.CH Vial: 31
Signal #2 : G:\HPCHEM\GCECD7\DATA\20230112\7T31847.D\ECD2B.CH
Acq On : 13 Jan 2023 2:02 am Operator: WD
Sample : 2120937-47 Inst : GCECD-7
Misc : Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Jan 13 14:56 2023 Quant Results File: 80811228.RES

Quant Method : G:\HPCHEM\G...\80811228.M (Chemstation Integrator)
Title : Pesticides by Method SW-846 8081B
Last Update : Fri Jan 13 12:01:01 2023
Response via : Initial Calibration
DataAcq Meth : RUNPEST1.M

Volume Inj. : 2ul
Signal #1 Phase : RTx-50 Signal #2 Phase: RTx-CLPesticides II
Signal #1 Info : 30M x 0.53mm x 0. Signal #2 Info : 30M x 0.53mm x 0.42um

Compound	RT#1	RT#2	Resp#1	Resp#2	ug/kg	ug/kg
System Monitoring Compounds						
1) S TCMX	4.47	5.48f	1799.1E6	815.5E6	56.819	55.656
Spiked Amount 50.000	Range 43 - 129		Recovery =		113.64%	111.31%
21) S Decachlorobiphen	19.11	20.80f	943.6E6	465.3E6	33.762m	42.727 #
Spiked Amount 50.000	Range 42 - 136		Recovery =		67.52%	85.45%
Target Compounds						
11) M Dieldrin	13.71f	15.95	38213568	11922034	0.857m	0.719m
Sum Chlordane (gamma)			0	0	N.D.	N.D.
Average Chlordane (gamma)					0.000	0.000
Sum Toxaphene (1)			0	0	N.D.	N.D.
Average Toxaphene (1)					0.000	0.000

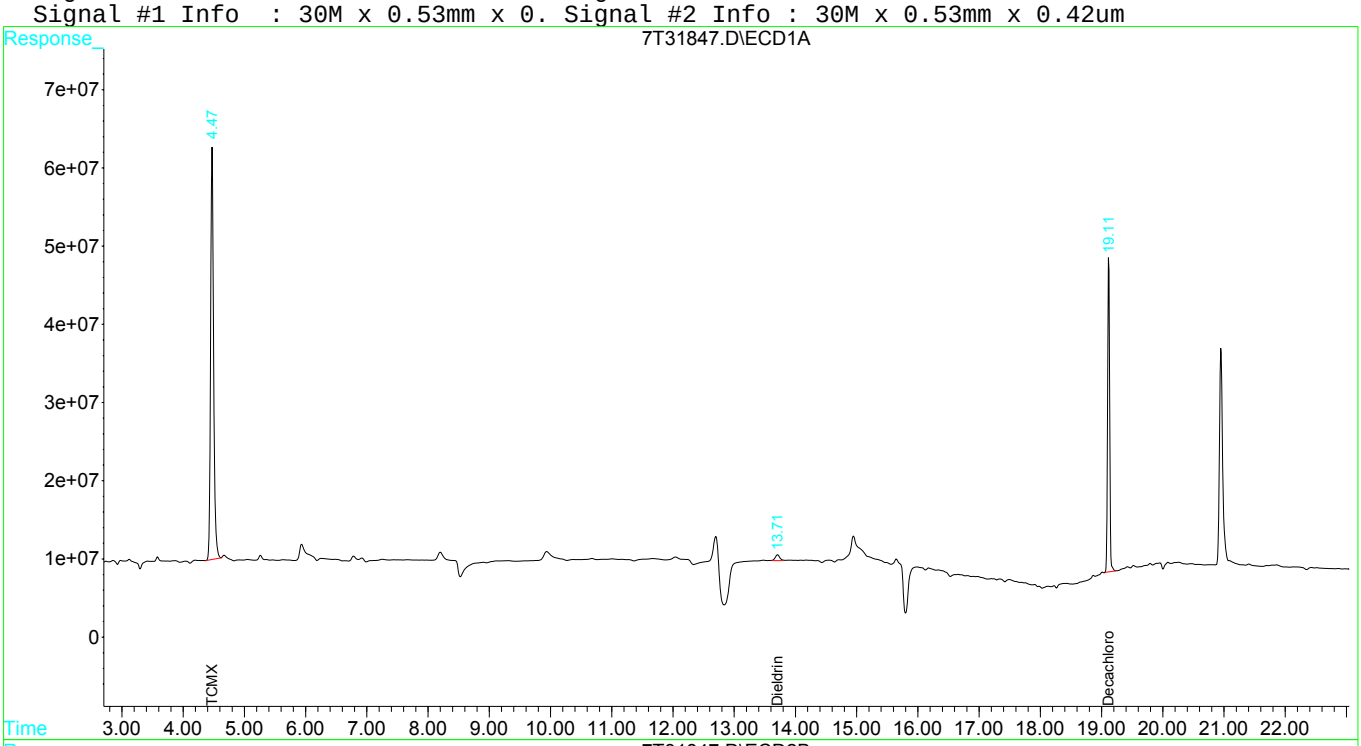
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.
7T31847.D 80811228.M Fri Jan 13 15:20:45 2023 SS

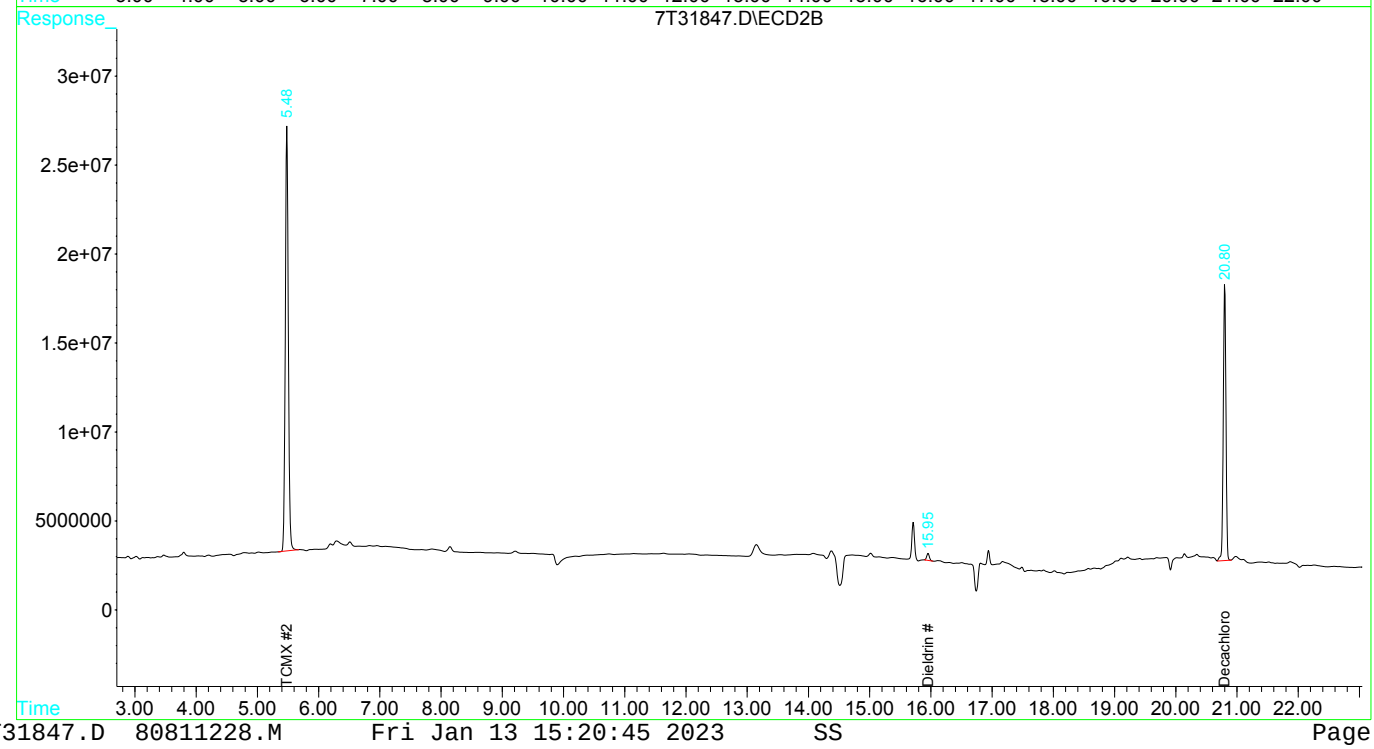
Quantitation Report (QT Reviewed)

Signal #1 : G:\HPCHEM\GCECD7\DATA\20230112\7T31847.D\ECD1A.CH Vial: 31
Signal #2 : G:\HPCHEM\GCECD7\DATA\20230112\7T31847.D\ECD2B.CH
Acq On : 13 Jan 2023 2:02 am Operator: WD
Sample : 2120937-47 Inst : GCECD-7
Misc : Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Jan 13 14:56 2023 Quant Results File: 80811228.RES

Quant Method : G:\HPCHEM\G...\80811228.M (Chemstation Integrator)
Title : Pesticides by Method SW-846 8081B
Last Update : Fri Jan 13 12:01:01 2023
Response via : Multiple Level Calibration
DataAcq Meth : RUNPEST1.M

Volume Inj. : 2ul
Signal #1 Phase : RTx-50 Signal #2 Phase: RTx-CLPesticides II
Signal #1 Info : 30M x 0.53mm x 0. Signal #2 Info : 30M x 0.53mm x 0.42um





ANALYSIS DATA SHEET

Pesticides - SW 846 8081B

Client: **Dynamic Earth LLC**
Client Sample ID: **T-14-4A**
Lab Sample ID: **2120937-48**
Project: **Old Orchard G.C.**
Work Order: **2120937**

Date Sampled:	12/20/22 10:48	Prep Date:	01/11/23 15:05	File ID:	7T31848.D
Init/Final Vol:	15 g / 10 mL	Prep Batch:	BAA0335	Analyzed:	01/13/23 02:28
Dilution:	1	Matrix:	Soil	Sequence:	SAA0210
Percent Solids:	90.26	Prep Method:	Microwave Extraction		

CAS NO.	COMPOUND	CONC. (mg/kg dry)	MDL	RL	Qual
60-57-1	Dieldrin	0.00328	0.000753	0.00144	H

ND, U - Indicates compound analyzed for but not detected
J - Indicates estimated value
B - Indicates compound found in associated blank
E - Concentration exceeds highest calibration standard
D - Indicates result is based on a dilution
H - Indicates a Hold Time violation
P - Greater than 25% diff. between 2 GC columns.
MDL - Minimum detection limit, **RL** - Reporting limit

F-I

Quantitation Report (QT Reviewed)

Signal #1 : G:\HPCHEM\GCECD7\DATA\20230112\7T31848.D\ECD1A.CH Vial: 32
Signal #2 : G:\HPCHEM\GCECD7\DATA\20230112\7T31848.D\ECD2B.CH
Acq On : 13 Jan 2023 2:28 am Operator: WD
Sample : 2120937-48 Inst : GCECD-7
Misc : Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Jan 13 14:56 2023 Quant Results File: 80811228.RES

Quant Method : G:\HPCHEM\G...\80811228.M (Chemstation Integrator)
Title : Pesticides by Method SW-846 8081B
Last Update : Fri Jan 13 12:01:01 2023
Response via : Initial Calibration
DataAcq Meth : RUNPEST1.M

Volume Inj. : 2ul
Signal #1 Phase : RTx-50 Signal #2 Phase: RTx-CLPesticides II
Signal #1 Info : 30M x 0.53mm x 0. Signal #2 Info : 30M x 0.53mm x 0.42um

Compound	RT#1	RT#2	Resp#1	Resp#2	ug/kg	ug/kg
System Monitoring Compounds						
1) S TCMX	4.47	5.48f	1663.2E6	771.4E6	52.527	52.651
Spiked Amount 50.000	Range 43 - 129		Recovery =		105.05%	105.30%
21) S Decachlorobiphen	19.12	20.80	1024.3E6	431.2E6	36.648	39.590
Spiked Amount 50.000	Range 42 - 136		Recovery =		73.30%	79.18%
Target Compounds						
11) M Dieldrin	13.71f	15.96	197.9E6	74764414	4.440	4.508
Sum Chlordane (gamma)			0	0	N.D.	N.D.
Average Chlordane (gamma)					0.000	0.000
Sum Toxaphene (1)			0	0	N.D.	N.D.
Average Toxaphene (1)					0.000	0.000

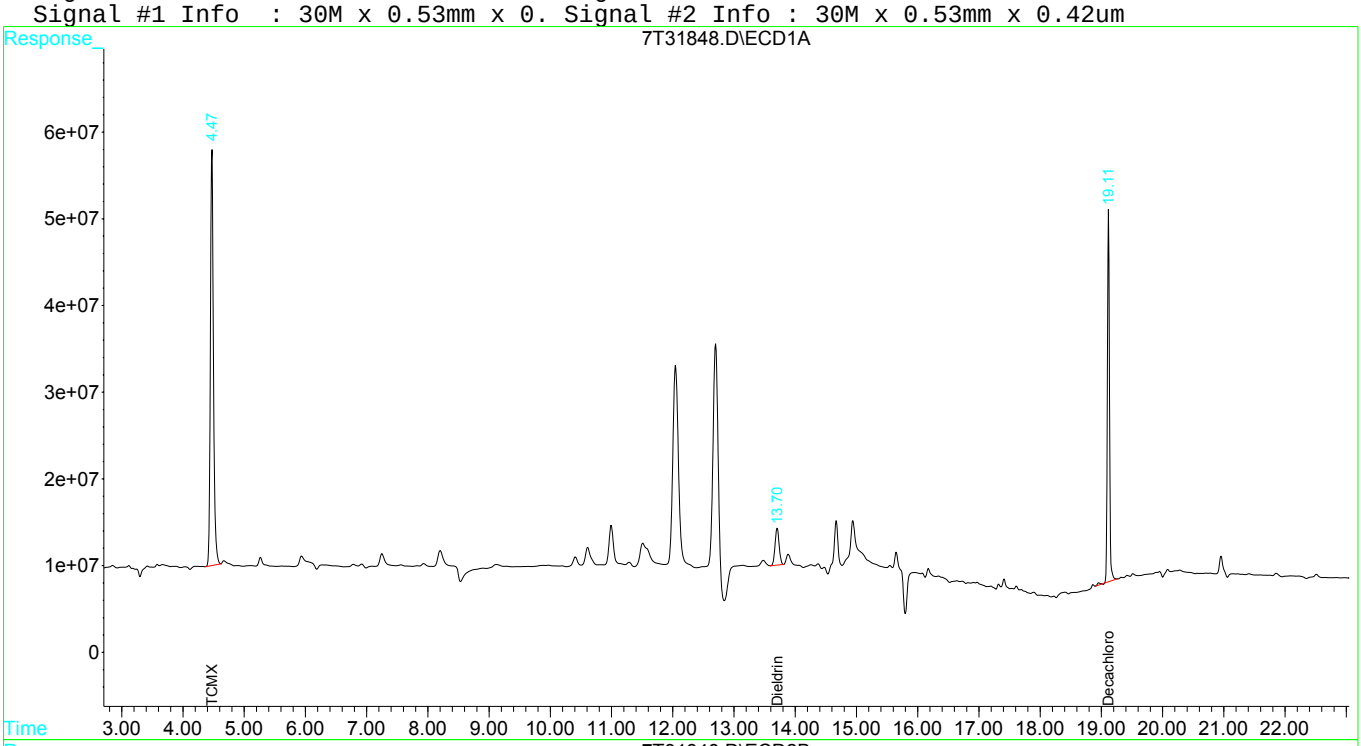
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.
7T31848.D 80811228.M Fri Jan 13 15:20:46 2023 SS

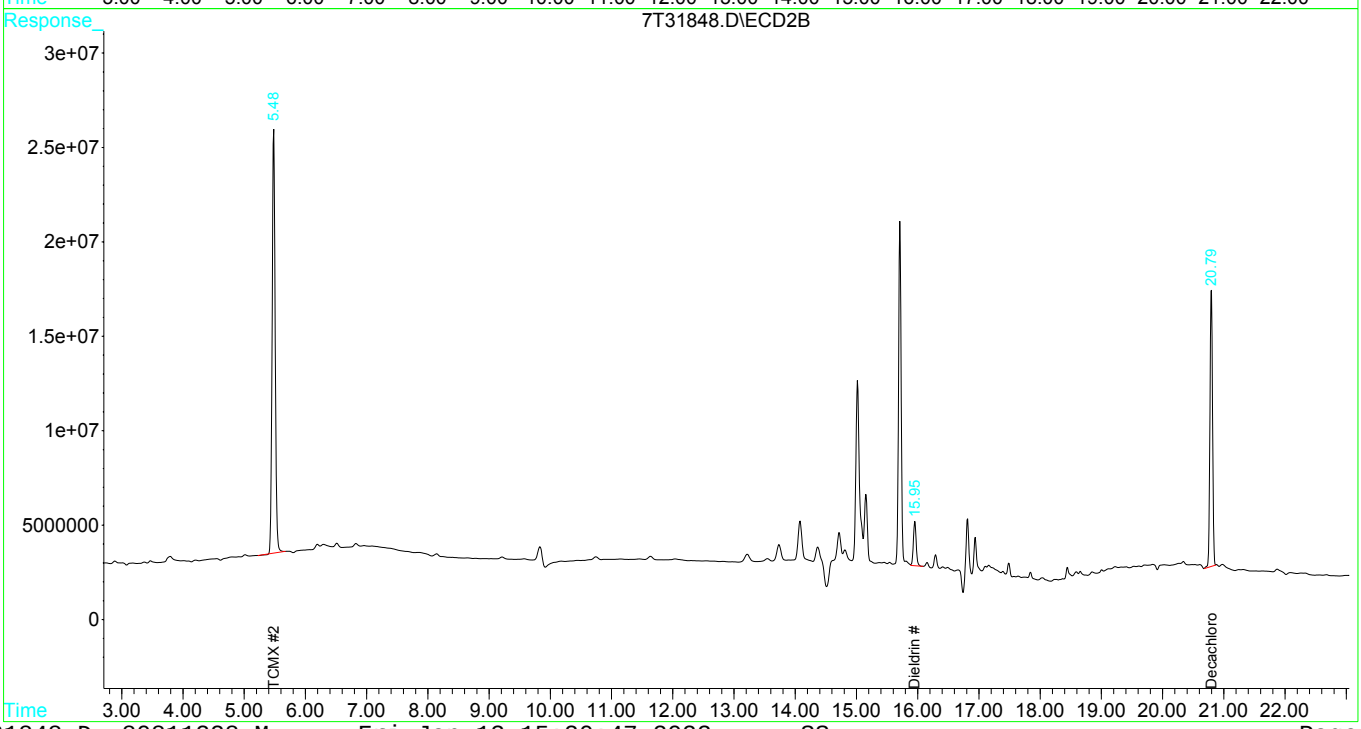
Quantitation Report (QT Reviewed)

Signal #1 : G:\HPCHEM\GCECD7\DATA\20230112\7T31848.D\ECD1A.CH Vial: 32
Signal #2 : G:\HPCHEM\GCECD7\DATA\20230112\7T31848.D\ECD2B.CH
Acq On : 13 Jan 2023 2:28 am Operator: WD
Sample : 2120937-48 Inst : GCECD-7
Misc : Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Jan 13 14:56 2023 Quant Results File: 80811228.RES

Quant Method : G:\HPCHEM\G...\80811228.M (Chemstation Integrator)
Title : Pesticides by Method SW-846 8081B
Last Update : Fri Jan 13 12:01:01 2023
Response via : Multiple Level Calibration
DataAcq Meth : RUNPEST1.M

Volume Inj. : 2ul
Signal #1 Phase : RTx-50 Signal #2 Phase: RTx-CLPesticides II
Signal #1 Info : 30M x 0.53mm x 0. Signal #2 Info : 30M x 0.53mm x 0.42um





ANALYSIS DATA SHEET

Pesticides - SW 846 8081B

Client: **Dynamic Earth LLC**
Client Sample ID: **G-12-2A**
Lab Sample ID: **2120937-49**
Project: **Old Orchard G.C.**
Work Order: **2120937**

Date Sampled:	12/21/22 10:58	Prep Date:	01/11/23 15:05	File ID:	7T31849.D
Init/Final Vol:	15 g / 10 mL	Prep Batch:	BAA0335	Analyzed:	01/13/23 02:53
Dilution:	1	Matrix:	Soil	Sequence:	SAA0210
Percent Solids:	91.73	Prep Method:	Microwave Extraction		

CAS NO.	COMPOUND	CONC. (mg/kg dry)	MDL	RL	Qual
1024-57-3	Heptachlor Epoxide [2C]	0.000814	0.000715	0.00142	J, H

ND, U - Indicates compound analyzed for but not detected
J - Indicates estimated value
B - Indicates compound found in associated blank
E - Concentration exceeds highest calibration standard

D - Indicates result is based on a dilution
H - Indicates a Hold Time violation
P - Greater than 25% diff. between 2 GC columns.
MDL - Minimum detection limit, **RL** - Reporting limit

F-I

Quantitation Report (QT Reviewed)

Signal #1 : G:\HPCHEM\GCECD7\DATA\20230112\7T31849.D\ECD1A.CH Vial: 33
Signal #2 : G:\HPCHEM\GCECD7\DATA\20230112\7T31849.D\ECD2B.CH
Acq On : 13 Jan 2023 2:53 am Operator: WD
Sample : 2120937-49 Inst : GCECD-7
Misc : Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Jan 13 14:57 2023 Quant Results File: 80811228.RES

Quant Method : G:\HPCHEM\G...\80811228.M (Chemstation Integrator)
Title : Pesticides by Method SW-846 8081B
Last Update : Fri Jan 13 12:01:01 2023
Response via : Initial Calibration
DataAcq Meth : RUNPEST1.M

Volume Inj. : 2ul
Signal #1 Phase : RTx-50 Signal #2 Phase: RTx-CLPesticides II
Signal #1 Info : 30M x 0.53mm x 0. Signal #2 Info : 30M x 0.53mm x 0.42um

Compound	RT#1	RT#2	Resp#1	Resp#2	ug/kg	ug/kg
System Monitoring Compounds						
1) S TCMX	4.47	5.48f	1789.4E6	810.9E6	56.514	55.343
Spiked Amount 50.000	Range 43 - 129		Recovery =		113.03%	110.69%
21) S Decachlorobiphen	19.12	20.80	1052.3E6	447.2E6	37.649m	41.065
Spiked Amount 50.000	Range 42 - 136		Recovery =		75.30%	82.13%
Target Compounds						
8) Heptachlor epoxi	10.99f	14.08f	50344554	20813619	1.141m	1.118m
Sum Chlordane (gamma)			0	0	N.D.	N.D.
Average Chlordane (gamma)					0.000	0.000
Sum Toxaphene (1)			0	0	N.D.	N.D.
Average Toxaphene (1)					0.000	0.000

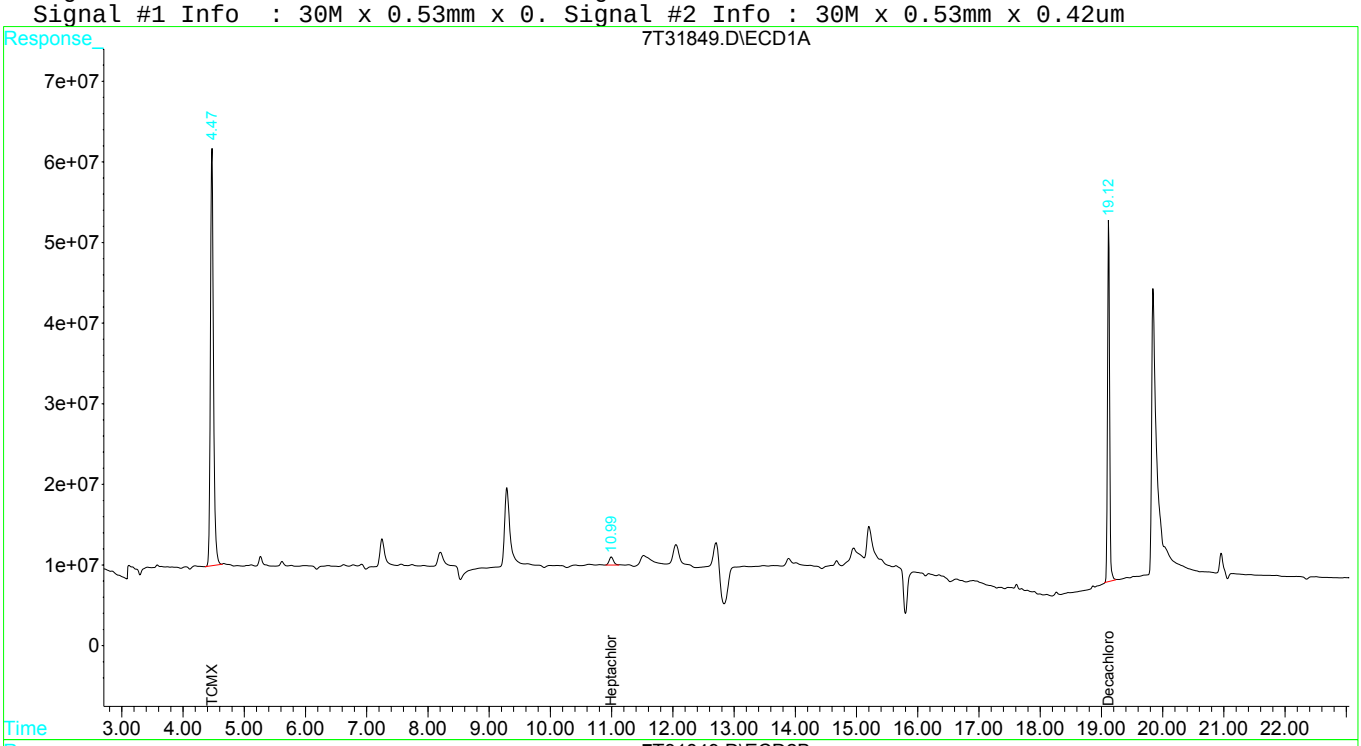
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7T31849.D 80811228.M Fri Jan 13 15:20:48 2023 SS

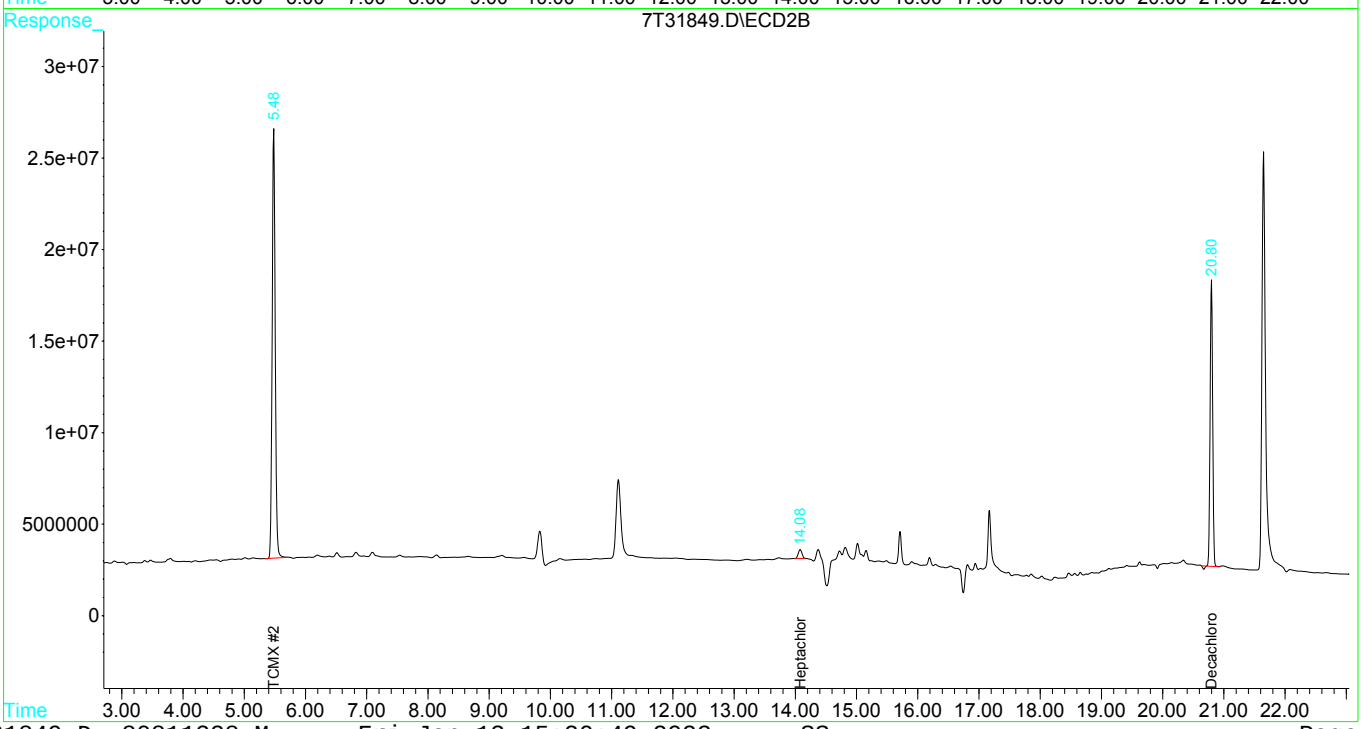
Quantitation Report (QT Reviewed)

Signal #1 : G:\HPCHEM\GCECD7\DATA\20230112\7T31849.D\ECD1A.CH Vial: 33
Signal #2 : G:\HPCHEM\GCECD7\DATA\20230112\7T31849.D\ECD2B.CH
Acq On : 13 Jan 2023 2:53 am Operator: WD
Sample : 2120937-49 Inst : GCECD-7
Misc : Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Jan 13 14:57 2023 Quant Results File: 80811228.RES

Quant Method : G:\HPCHEM\G...\80811228.M (Chemstation Integrator)
Title : Pesticides by Method SW-846 8081B
Last Update : Fri Jan 13 12:01:01 2023
Response via : Multiple Level Calibration
DataAcq Meth : RUNPEST1.M

Volume Inj. : 2ul
Signal #1 Phase : RTx-50 Signal #2 Phase: RTx-CLPesticides II
Signal #1 Info : 30M x 0.53mm x 0. Signal #2 Info : 30M x 0.53mm x 0.42um





ANALYSIS DATA SHEET

Pesticides - SW 846 8081B

Client: **Dynamic Earth LLC**
Client Sample ID: **G-12-3A**
Lab Sample ID: **2120937-50**
Project: **Old Orchard G.C.**
Work Order: **2120937**

Date Sampled:	12/21/22 11:02	Prep Date:	01/11/23 15:05	File ID:	7T31850.D
Init/Final Vol:	15 g / 10 mL	Prep Batch:	BAA0335	Analyzed:	01/13/23 03:19
Dilution:	1	Matrix:	Soil	Sequence:	SAA0210
Percent Solids:	90.98	Prep Method:	Microwave Extraction		

CAS NO.	COMPOUND	CONC. (mg/kg dry)	MDL	RL	Qual
1024-57-3	Heptachlor Epoxide	0.00382	0.000721	0.00143	H

ND, U - Indicates compound analyzed for but not detected
J - Indicates estimated value
B - Indicates compound found in associated blank
E - Concentration exceeds highest calibration standard

D - Indicates result is based on a dilution
H - Indicates a Hold Time violation
P - Greater than 25% diff. between 2 GC columns.
MDL - Minimum detection limit, **RL** - Reporting limit

F-I

Quantitation Report (QT Reviewed)

Signal #1 : G:\HPCHEM\GCECD7\DATA\20230112\7T31850.D\ECD1A.CH Vial: 34
Signal #2 : G:\HPCHEM\GCECD7\DATA\20230112\7T31850.D\ECD2B.CH
Acq On : 13 Jan 2023 3:19 am Operator: WD
Sample : 2120937-50 Inst : GCECD-7
Misc : Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Jan 13 14:57 2023 Quant Results File: 80811228.RES

Quant Method : G:\HPCHEM\G...\80811228.M (Chemstation Integrator)
Title : Pesticides by Method SW-846 8081B
Last Update : Fri Jan 13 12:01:01 2023
Response via : Initial Calibration
DataAcq Meth : RUNPEST1.M

Volume Inj. : 2ul
Signal #1 Phase : RTx-50 Signal #2 Phase: RTx-CLPesticides II
Signal #1 Info : 30M x 0.53mm x 0. Signal #2 Info : 30M x 0.53mm x 0.42um

Compound	RT#1	RT#2	Resp#1	Resp#2	ug/kg	ug/kg
System Monitoring Compounds						
1) S TCMX	4.48	5.48f	1772.3E6	814.1E6	55.975	55.563
Spiked Amount 50.000	Range 43 - 129		Recovery =		111.95%	111.13%
21) S Decachlorobiphen	19.12	20.80f	1037.1E6	460.2E6	37.106	42.257
Spiked Amount 50.000	Range 42 - 136		Recovery =		74.21%	84.51%
Target Compounds						
8) Heptachlor epoxi	11.00f	14.08f	230.3E6	98305630	5.218	5.280m
Sum Chlordane (gamma)			0	0	N.D.	N.D.
Average Chlordane (gamma)					0.000	0.000
Sum Toxaphene (1)			0	0	N.D.	N.D.
Average Toxaphene (1)					0.000	0.000

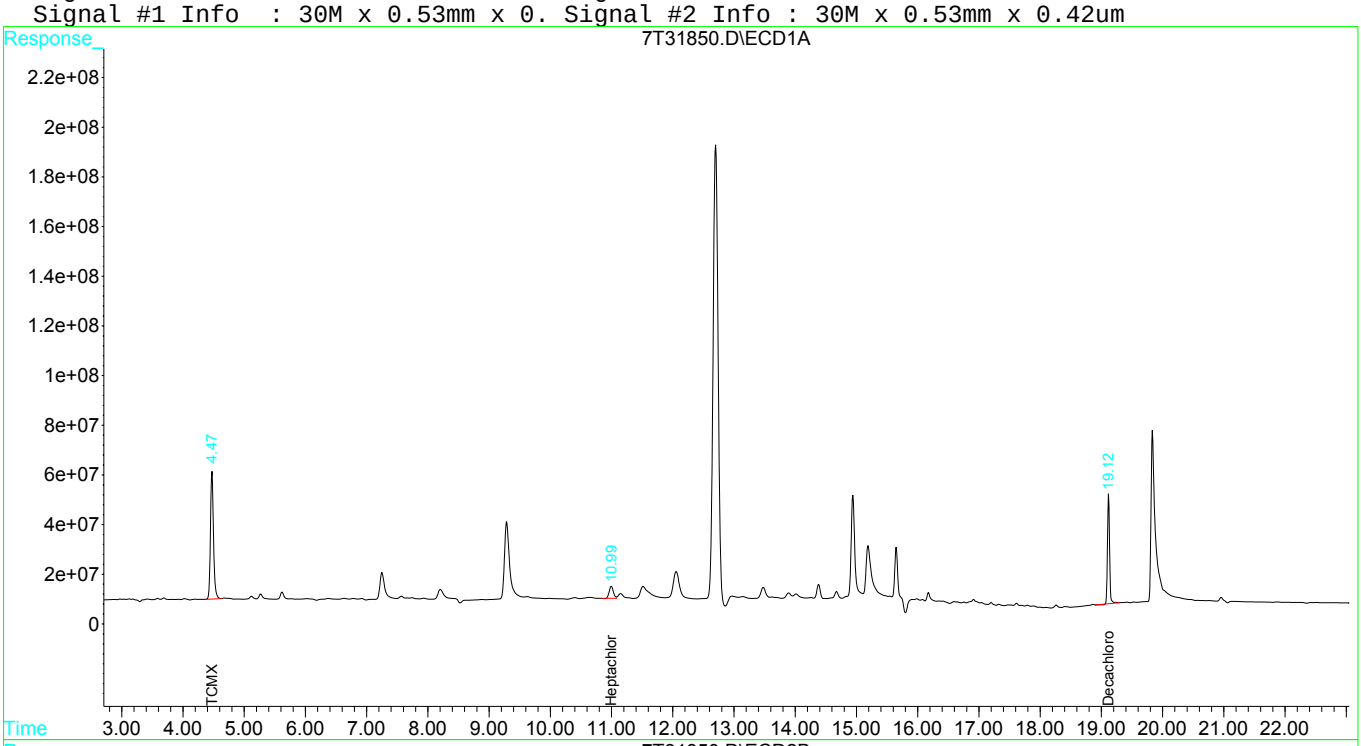
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.
7T31850.D 80811228.M Fri Jan 13 15:20:50 2023 SS

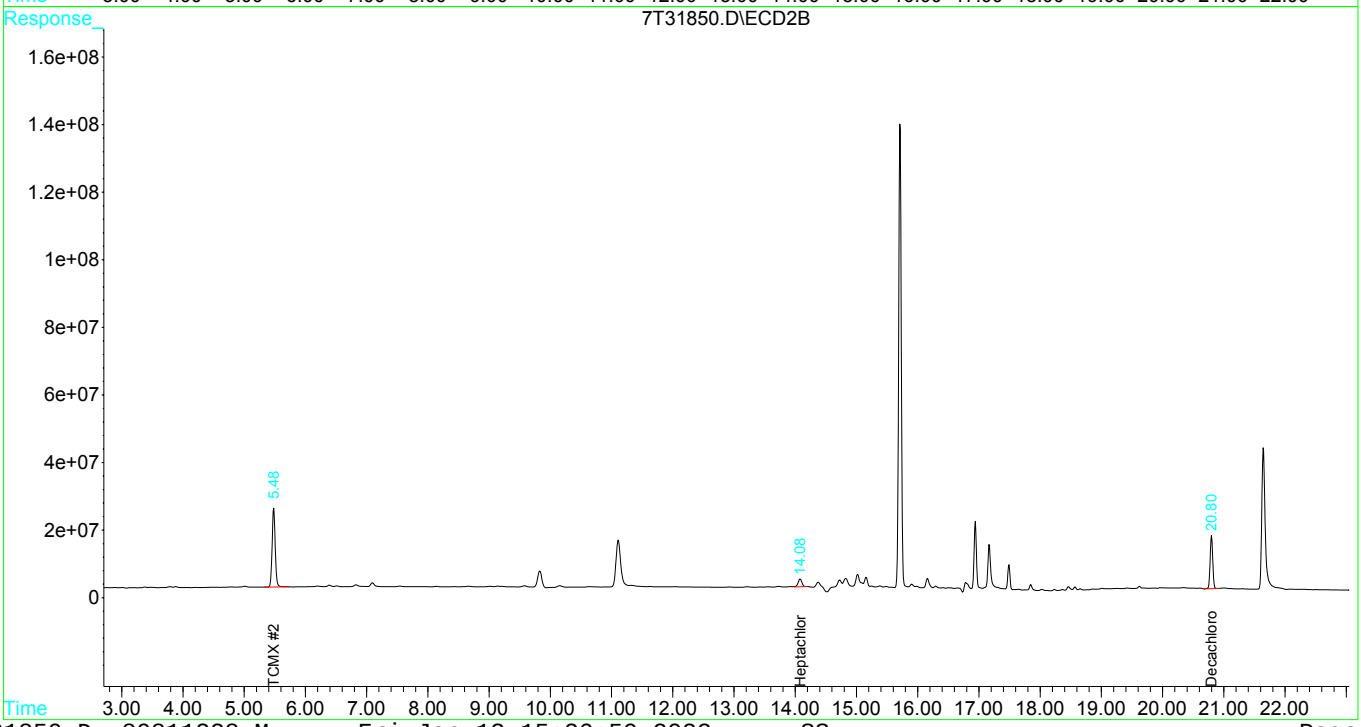
Quantitation Report (QT Reviewed)

Signal #1 : G:\HPCHEM\GCECD7\DATA\20230112\7T31850.D\ECD1A.CH Vial: 34
Signal #2 : G:\HPCHEM\GCECD7\DATA\20230112\7T31850.D\ECD2B.CH
Acq On : 13 Jan 2023 3:19 am Operator: WD
Sample : 2120937-50 Inst : GCECD-7
Misc : Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Jan 13 14:57 2023 Quant Results File: 80811228.RES

Quant Method : G:\HPCHEM\G...\80811228.M (Chemstation Integrator)
Title : Pesticides by Method SW-846 8081B
Last Update : Fri Jan 13 12:01:01 2023
Response via : Multiple Level Calibration
DataAcq Meth : RUNPEST1.M

Volume Inj. : 2ul
Signal #1 Phase : RTx-50 Signal #2 Phase: RTx-CLPesticides II
Signal #1 Info : 30M x 0.53mm x 0. Signal #2 Info : 30M x 0.53mm x 0.42um





SURROGATE RECOVERIES

Analysis Class: PESTICIDES

Matrix: Soil **Method:** SW 846 8081B

Pesticides

Lab Number	File ID	TCMX	DCB	TCMX[2C]	DCB[2C]
2120937-01	7T31570.D	51.9	52.7	67.3	56.0
2120937-02	7T31571.D	70.2	74.0	91.0	74.9
2120937-03	7T31572.D	46.4	45.7	60.1	50.3
2120937-04	7T31573.D	58.0	58.5	82.2	64.6
2120937-05	7T31574.D	54.4	57.2	78.7	60.6
2120937-06	7T31575.D	57.0	59.8	88.5	61.0
2120937-07	7T31576.D	66.4	75.6	105	82.7
2120937-08RE1	7T31661.D	95.2	106	95.8	93.0
2120937-09	7T31578.D	73.3	74.2	103	76.9
2120937-10	7T31579.D	51.0	51.4	74.4	54.5
2120937-11	7T31580.D	68.0	79.8	111	80.4
2120937-12	7T31581.D	65.0	73.4	104	82.4
2120937-13	7T31582.D	71.1	86.0	114	83.2
2120937-14	7T31583.D	72.7	75.8	111	74.6
2120937-15	7T31615.D	75.0	86.4	96.1	82.4
2120937-16	7T31616.D	81.1	90.9	114	89.8
2120937-17	7T31617.D	83.0	89.0	114	93.5
2120937-18	7T31618.D	80.0	80.8	100	88.1
2120937-19	7T31619.D	76.6	83.4	103	88.4
2120937-20	7T31620.D	68.3	74.5	90.8	74.2
2120937-21	7T31621.D	73.6	80.8	95.4	81.0
2120937-22	7T31622.D	77.1	82.8	101	83.0
2120937-23	7T31623.D	85.6	98.0	116	92.6
2120937-24	7T31624.D	72.3	84.5	99.7	84.1
2120937-25	7T31625.D	76.4	90.3	101	93.2
2120937-29	7T31636.D	74.5	89.0	100	79.2
2120937-30	7T31637.D	70.2	107	89.1	108
2120937-31	7T31638.D	76.2	84.2	97.2	95.0
2120937-32	7T31639.D	72.5	98.0	94.2	109
2120937-33	7T31640.D	64.6	77.4	80.4	74.4

Surrogate Limits

Acronym	Lo Limit	Hi Limit	Analyte
TCMX	41.8	136	Tetrachloro-m-xylene
DCB	43.1	129	Decachlorobiphenyl
TCMX[2C]	41.8	136	Tetrachloro-m-xylene [2C]
DCB[2C]	43.1	129	Decachlorobiphenyl [2C]

F-II

* - Outside of QC Limits

SURROGATE RECOVERIES

Analysis Class: PESTICIDES

Matrix: Soil **Method:** SW 846 8081B (Con't)

2120937-35	7T31641.D	65.4	87.9	82.7	109

Surrogate Limits

Acronym	Lo Limit	Hi Limit	Analyte
TCMX	41.8	136	Tetrachloro-m-xylene
DCB	43.1	129	Decachlorobiphenyl
TCMX[2C]	41.8	136	Tetrachloro-m-xylene [2C]
DCB[2C]	43.1	129	Decachlorobiphenyl [2C]

F-II

* - Outside of QC Limits

SURROGATE RECOVERIES

Analysis Class: PESTICIDES

Matrix: Soil **Method:** SW 846 8081B (Con't)

2120937-36	7T31642.D	90.2	92.1	118	96.4
2120937-37	7T31643.D	69.9	112	88.9	119
2120937-38	7T31644.D	96.0	139 *	118	151 *
2120937-39	7T31645.D	83.3	107	117	114
2120937-41	7T31841.D	89.8	52.3	85.7	56.9
2120937-42RE1	7T31890.D	107	115	135	139 *
2120937-43	7T31843.D	103	66.2	100	73.8
2120937-44	7T31844.D	110	70.8	114	80.5
2120937-45	7T31845.D	103	68.0	106	79.7
2120937-46	7T31846.D	110	68.6	108	82.0
2120937-47	7T31847.D	114	67.5	111	85.5
2120937-48	7T31848.D	105	73.3	105	79.2
2120937-49	7T31849.D	113	75.3	111	82.1
2120937-50	7T31850.D	112	74.2	111	84.5
B2L2804-BLK1	7T31533.D	66.2	87.4	99.0	84.2
B2L2804-BS1	7T31534.D	75.7	93.4	110	90.7
B2L2804-MS2	7T31691.D	45.2	123	50.0	370 *
B2L2804-MSD2	7T31692.D	45.0	161 *	49.5	389 *
B2L2832-BLK1	7T31549.D	66.7	90.8	97.6	85.9
B2L2832-BS1	7T31545.D	70.7	93.5	100	88.3
B2L2832-MS1	7T31585.D	70.2	72.4	106	74.0
B2L2832-MSD1	7T31586.D	72.1	75.0	109	73.6
B2L2901-BLK1	7T31568.D	86.7	84.2	121	95.3
B2L2901-BS1	7T31535.D	86.9	98.0	115	95.8
B2L2901-MS1	7T31566.D	78.2	77.3	99.4	84.3
B2L2901-MSD1	7T31567.D	78.9	79.6	104	112
BAA0335-BLK1	7T31822.D	111	88.0	109	94.3
BAA0335-BS1	7T31823.D	115	91.9	111	101
BAA0335-MS1	7T31957.D	74.3	50.9	75.9	78.5
BAA0335-MSD1	7T31958.D	67.2	52.6	68.7	74.1

Surrogate Limits

Acronym	Lo Limit	Hi Limit	Analyte
TCMX	41.8	136	Tetrachloro-m-xylene
DCB	43.1	129	Decachlorobiphenyl
TCMX[2C]	41.8	136	Tetrachloro-m-xylene [2C]
DCB[2C]	43.1	129	Decachlorobiphenyl [2C]

F-II

* - Outside of QC Limits

SURROGATE RECOVERIES

Analysis Class: PESTICIDES

Matrix: Water **Method:** SW 846 1312

SPLP Pesticides

Lab Number	File ID	TCMX	DCB	TCMX[2C]	DCB[2C]
2120937-27	7T31595.D	75.2	74.6	86.0	72.0
2120937-34	7T31596.D	76.4	70.9	86.7	67.1
B2L2929-BLK1	7T31593.D	55.0	75.5	76.6	72.6
B2L2929-BS1	7T31594.D	64.3	64.3	84.3	61.1

Surrogate Limits

Acronym	Lo Limit	Hi Limit	Analyte
TCMX	30	150	Tetrachloro-m-xylene
DCB	30	150	Decachlorobiphenyl
TCMX[2C]	30	150	Tetrachloro-m-xylene [2C]
DCB[2C]	30	150	Decachlorobiphenyl [2C]

F-II

* - Outside of QC Limits

Batch B2L2804 **Method: SW 846 8081B** **Prepared: 12/28/2022**

B2L2804-BS1 **Source:**

Analyte	Result	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Dieldrin	0.0361	mg/kg wet	0.0333		108	74.9-130		
Heptachlor Epoxide	0.0361	mg/kg wet	0.0333		108	75.2-127		

Batch B2L2804 (cont.) **Method: SW 846 8081B** **Prepared: 12/28/2022**

B2L2804-MS2 **Source:** 2120933-01

Analyte	Result	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Dieldrin	0.0225	mg/kg dry	0.0394	ND	57.2	55.1-122		
Heptachlor Epoxide	0.0207	mg/kg dry	0.0394	ND	52.6	49-121		

Batch B2L2804 (cont.) **Method: SW 846 8081B** **Prepared: 12/28/2022**

B2L2804-MSD2 **Source:** 2120933-01

Analyte	Result	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Dieldrin	0.0217	mg/kg dry	0.0394	ND	55.2	55.1-122	3.49	30
Heptachlor Epoxide	0.0203	mg/kg dry	0.0394	ND	51.7	49-121	1.76	30

Batch B2L2832 **Method: SW 846 8081B** **Prepared: 12/28/2022**

B2L2832-BS1 **Source:**

Analyte	Result	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Dieldrin	0.0351	mg/kg wet	0.0333		105	74.9-130		
Heptachlor Epoxide	0.0352	mg/kg wet	0.0333		106	75.2-127		

Batch B2L2832 (cont.) **Method: SW 846 8081B** **Prepared: 12/28/2022**

B2L2832-MS1 **Source:** 2120937-14

Analyte	Result	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Dieldrin	0.0373	mg/kg dry	0.0402	ND	92.7	55.1-122		
Heptachlor Epoxide	0.0374	mg/kg dry	0.0402	ND	93.0	49-121		

* - Outside of QC Limits J - Result is between the MDL and RL for an Analysis reported to an RL

F-III NC - Outside the recovery criteria but Spike Amount <1/4 amount found in Source Sample

Batch B2L2832 (cont.) **Method: SW 846 8081B** **Prepared: 12/28/2022**

B2L2832-MSD1 **Source:** 2120937-14

Analyte	Result	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Dieldrin	0.0381	mg/kg dry	0.0402	ND	94.6	55.1-122	2.07	30
Heptachlor Epoxide	0.0382	mg/kg dry	0.0402	ND	94.9	49-121	2.00	30

Batch B2L2901 **Method: SW 846 8081B** **Prepared: 12/29/2022**

B2L2901-BS1 **Source:**

Analyte	Result	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Dieldrin	0.0358	mg/kg wet	0.0333		108	74.9-130		
Heptachlor Epoxide	0.0361	mg/kg wet	0.0333		108	75.2-127		

Batch B2L2901 (cont.) **Method: SW 846 8081B** **Prepared: 12/29/2022**

B2L2901-MS1 **Source:** 2120932-01

Analyte	Result	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Dieldrin	0.0370	mg/kg dry	0.0397	0.00113	90.3	55.1-122		
Heptachlor Epoxide	0.0397	mg/kg dry	0.0397	ND	99.9	49-121		

Batch B2L2901 (cont.) **Method: SW 846 8081B** **Prepared: 12/29/2022**

B2L2901-MSD1 **Source:** 2120932-01

Analyte	Result	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Dieldrin	0.0372	mg/kg dry	0.0397	0.00113	90.8	55.1-122	0.578	30
Heptachlor Epoxide	0.0399	mg/kg dry	0.0397	ND	100	49-121	0.579	30

Batch BAA0335 **Method: SW 846 8081B** **Prepared: 01/11/2023**

BAA0335-BS1 **Source:**

Analyte	Result	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Dieldrin	0.0393	mg/kg wet	0.0333		118	74.9-130		
Heptachlor Epoxide	0.0401	mg/kg wet	0.0333		120	75.2-127		

* - Outside of QC Limits J - Result is between the MDL and RL for an Analysis reported to an RL

F-III NC - Outside the recovery criteria but Spike Amount <1/4 amount found in Source Sample

Batch BAA0335 (cont.) **Method: SW 846 8081B** **Prepared: 01/11/2023**

BAA0335-MS1 **Source:** 23A0364-02

Analyte	Result	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Dieldrin	0.0586	mg/kg dry	0.0651	ND	90.1	55.1-122		
Heptachlor Epoxide	0.0594	mg/kg dry	0.0651	ND	91.3	49-121		

Batch BAA0335 (cont.) **Method: SW 846 8081B** **Prepared: 01/11/2023**

BAA0335-MSD1 **Source:** 23A0364-02

Analyte	Result	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Dieldrin	0.0615	mg/kg dry	0.0651	ND	94.6	55.1-122	4.83	30
Heptachlor Epoxide	0.0597	mg/kg dry	0.0651	ND	91.7	49-121	0.525	30

* - Outside of QC Limits J - Result is between the MDL and RL for an Analysis reported to an RL

F-III NC - Outside the recovery criteria but Spike Amount <1/4 amount found in Source Sample

SPLP Pesticides - Quality Control

Aqua Pro-Tech Laboratories

Batch B2L2929 **Method: SW 846 1312** **Prepared: 12/29/2022**

B2L2929-BS1 **Source:**

Analyte	Result	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
4,4'-DDE	0.0418	ug/L	0.0500		83.6	55-144		
beta-BHC	0.0459	ug/L	0.0500		91.8	49-123		

* - Outside of QC Limits J - Result is between the MDL and RL for an Analysis reported to an RL

F-III NC - Outside the recovery criteria but Spike Amount <1/4 amount found in Source Sample

METHOD BLANK SUMMARY

Batch ID: **B2L2804**

Lab Number	Sample Id	Extraction Date	Analysis Date
B2L2804-BLK1	BLK1	12/28/2022	12/29/2022 18:18
B2L2804-BS1	BS1	12/28/2022	12/29/2022 18:44
B2L2804-MS2	MS2	12/28/2022	01/04/2023 05:08
B2L2804-MSD2	MSD2	12/28/2022	01/04/2023 05:34
2120937-01	T-2A	12/28/2022	12/30/2022 09:57
2120937-03	T-2-2	12/28/2022	12/30/2022 10:48
2120937-04	T-2-3	12/28/2022	12/30/2022 11:13
2120937-05	T-2-4	12/28/2022	12/30/2022 11:39
2120937-06	T-3A	12/28/2022	12/30/2022 12:04
2120937-07	T-3-1	12/28/2022	12/30/2022 12:29
2120937-08RE1	T-3-2	12/28/2022	01/03/2023 16:26
2120937-09	T-3-3	12/28/2022	12/30/2022 13:20
2120937-10	T-3-4	12/28/2022	12/30/2022 13:45
2120937-11	T-4A	12/28/2022	12/30/2022 14:11
2120937-12	T-4-1	12/28/2022	12/30/2022 14:36
2120937-13	T-4-2	12/28/2022	12/30/2022 15:02

Batch ID: **B2L2832**

Lab Number	Sample Id	Extraction Date	Analysis Date
B2L2832-BLK1	BLK1	12/28/2022	12/30/2022 01:04
B2L2832-BS1	BS1	12/28/2022	12/29/2022 23:23
B2L2832-MS1	MS1	12/28/2022	12/30/2022 16:18
B2L2832-MSD1	MSD1	12/28/2022	12/30/2022 16:43
2120937-14	T-4-3	12/28/2022	12/30/2022 15:27
2120937-15	T-4-4	12/28/2022	12/31/2022 05:41
2120937-16	T-12A	12/28/2022	12/31/2022 06:06
2120937-17	T-12-1	12/28/2022	12/31/2022 06:31
2120937-18	T-12-2	12/28/2022	12/31/2022 06:57
2120937-19	T-12-3	12/28/2022	12/31/2022 07:22
2120937-20	T-12-4	12/28/2022	12/31/2022 07:47
2120937-21	T-14A	12/28/2022	12/31/2022 08:13
2120937-22	T-14-1	12/28/2022	12/31/2022 08:38
2120937-23	T-14-2	12/28/2022	12/31/2022 09:04
2120937-24	T-14-3	12/28/2022	12/31/2022 09:29
2120937-25	T-14-4	12/28/2022	12/31/2022 09:54
2120937-29	G-9A-R	12/28/2022	12/31/2022 14:33
2120937-30	G-9-1-R	12/28/2022	12/31/2022 14:59
2120937-31	G-9-2-R	12/28/2022	12/31/2022 15:24
2120937-32	G-9-3-R	12/28/2022	12/31/2022 15:50
2120937-33	G-9-4-R	12/28/2022	12/31/2022 16:15

F-IV

METHOD BLANK SUMMARY

Batch ID: **B2L2832**

2120937-35	G-12A	12/28/2022	12/31/2022 16:40
2120937-37	G-12-2	12/28/2022	12/31/2022 17:31

Batch ID: **B2L2901**

Lab Number	Sample Id	Extraction Date	Analysis Date
B2L2901-BLK1	BLK1	12/29/2022	12/30/2022 09:06
B2L2901-BS1	BS1	12/29/2022	12/29/2022 19:09
B2L2901-MS1	MS1	12/29/2022	12/30/2022 08:15
B2L2901-MSD1	MSD1	12/29/2022	12/30/2022 08:41
2120937-02	T-2-1	12/29/2022	12/30/2022 10:22
2120937-36	G-12-1	12/29/2022	12/31/2022 17:06
2120937-38	G-12-3	12/29/2022	12/31/2022 17:57
2120937-39	G-12-4	12/29/2022	12/31/2022 18:22

Batch ID: **B2L2929**

Lab Number	Sample Id	Extraction Date	Analysis Date
B2L2929-BLK1	BLK1	12/29/2022	12/30/2022 20:22
B2L2929-BS1	BS1	12/29/2022	12/30/2022 20:48
2120937-27	WA-3R	12/29/2022	12/30/2022 21:13
2120937-34	G-6-R	12/29/2022	12/30/2022 21:38

Batch ID: **BAA0335**

Lab Number	Sample Id	Extraction Date	Analysis Date
BAA0335-BLK1	BLK1	01/11/2023	01/12/2023 15:28
BAA0335-BS1	BS1	01/11/2023	01/12/2023 15:53
BAA0335-MS1	MS1	01/11/2023	01/17/2023 05:25
BAA0335-MSD1	MSD1	01/11/2023	01/17/2023 05:51
2120937-41	T-2B	01/11/2023	01/12/2023 23:30
2120937-42RE1	T-3-1A	01/11/2023	01/14/2023 05:06
2120937-43	T-3-2A	01/11/2023	01/13/2023 00:21
2120937-44	T-3-3A	01/11/2023	01/13/2023 00:46
2120937-45	T-3-4A	01/11/2023	01/13/2023 01:12
2120937-46	T-12-1A	01/11/2023	01/13/2023 01:37
2120937-47	T-12-3A	01/11/2023	01/13/2023 02:02
2120937-48	T-14-4A	01/11/2023	01/13/2023 02:28
2120937-49	G-12-2A	01/11/2023	01/13/2023 02:53
2120937-50	G-12-3A	01/11/2023	01/13/2023 03:19

SURROGATE RT DRIFT REPORT

Analysis Class: PESTICIDES

Sequence : S2L3013

		TCMX			DCB			TCMX[2C]			DCB[2C]		
Lab Number	File ID	RT	Ref RT	Drift	RT	Ref RT	Drift	RT	Ref RT	Drift	RT	Ref RT	Drift
B2L2804-BLK1	7T31533.D	3.99	3.99	0.00	18.73	18.74	-0.01	4.91	4.92	-0.01	20.29	20.3	-0.01
B2L2804-BS1	7T31534.D	3.99	3.99	0.00	18.74	18.74	0.00	4.92	4.92	0.00	20.3	20.3	0.00
B2L2901-BS1	7T31535.D	3.99	3.99	0.00	18.74	18.74	0.00	4.92	4.92	0.00	20.3	20.3	0.00
B2L2832-BS1	7T31545.D	4	3.99	0.01	18.74	18.74	0.00	4.92	4.92	0.00	20.3	20.3	0.00
B2L2832-BLK1	7T31549.D	4	4	0.00	18.74	18.74	0.00	4.92	4.92	0.00	20.3	20.3	0.00
B2L2901-MS1	7T31566.D	4	4	0.00	18.75	18.74	0.01	4.93	4.92	0.01	20.31	20.3	0.01
B2L2901-MSD1	7T31567.D	4.01	4	0.01	18.74	18.74	0.00	4.94	4.92	0.02	20.31	20.3	0.01
B2L2901-BLK1	7T31568.D	4.01	4	0.01	18.74	18.74	0.00	4.94	4.92	0.02	20.31	20.3	0.01

Sequence : SAA0005

		TCMX			DCB			TCMX[2C]			DCB[2C]		
Lab Number	File ID	RT	Ref RT	Drift	RT	Ref RT	Drift	RT	Ref RT	Drift	RT	Ref RT	Drift
2120937-01	7T31570.D	4.01	4	0.01	18.74	18.74	0.00	4.93	4.94	-0.01	20.31	20.31	0.00
2120937-02	7T31571.D	4.01	4	0.01	18.74	18.74	0.00	4.93	4.94	-0.01	20.3	20.31	-0.01
2120937-03	7T31572.D	4	4	0.00	18.74	18.74	0.00	4.93	4.94	-0.01	20.31	20.31	0.00
2120937-04	7T31573.D	4.01	4	0.01	18.74	18.74	0.00	4.93	4.94	-0.01	20.3	20.31	-0.01
2120937-05	7T31574.D	4.01	4	0.01	18.74	18.74	0.00	4.93	4.94	-0.01	20.31	20.31	0.00
2120937-06	7T31575.D	4.01	4	0.01	18.74	18.74	0.00	4.93	4.94	-0.01	20.31	20.31	0.00
2120937-07	7T31576.D	4.01	4	0.01	18.74	18.74	0.00	4.93	4.94	-0.01	20.31	20.31	0.00
2120937-09	7T31578.D	4.01	4	0.01	18.74	18.74	0.00	4.93	4.94	-0.01	20.3	20.31	-0.01
2120937-10	7T31579.D	4	4	0.00	18.74	18.74	0.00	4.93	4.94	-0.01	20.31	20.31	0.00
2120937-11	7T31580.D	4.01	4	0.01	18.74	18.74	0.00	4.93	4.94	-0.01	20.31	20.31	0.00
2120937-12	7T31581.D	4	4	0.00	18.74	18.74	0.00	4.93	4.94	-0.01	20.31	20.31	0.00
2120937-13	7T31582.D	4.01	4	0.01	18.74	18.74	0.00	4.93	4.94	-0.01	20.31	20.31	0.00
2120937-14	7T31583.D	4.01	4	0.01	18.74	18.74	0.00	4.93	4.94	-0.01	20.31	20.31	0.00
B2L2832-MS1	7T31585.D	4	4	0.00	18.74	18.74	0.00	4.93	4.94	-0.01	20.3	20.31	-0.01
B2L2832-MSD1	7T31586.D	4.01	4	0.01	18.74	18.74	0.00	4.93	4.94	-0.01	20.31	20.31	0.00

Surrogate		Limit
TCMX	Tetrachloro-m-xylene	0.10
DCB	Decachlorobiphenyl	0.10
TCMX[2C]	Tetrachloro-m-xylene [2C]	0.10
DCB[2C]	Decachlorobiphenyl [2C]	0.10

DISS = Dissolved Analysis

F-V

SURROGATE RT DRIFT REPORT

Analysis Class: PESTICIDES

Sequence : SAA0020

		TCMX			DCB			TCMX[2C]			DCB[2C]		
Lab Number	File ID	RT	Ref RT	Drift	RT	Ref RT	Drift	RT	Ref RT	Drift	RT	Ref RT	Drift
B2L2929-BLK1	7T31593.D	4.07	4.06	0.01	18.8	18.79	0.01	5.01	5	0.01	20.38	20.37	0.01
B2L2929-BS1	7T31594.D	4.07	4.06	0.01	18.8	18.79	0.01	5.01	5	0.01	20.38	20.37	0.01
2120937-27	7T31595.D	4.07	4.06	0.01	18.8	18.79	0.01	5.01	5	0.01	20.38	20.37	0.01
2120937-34	7T31596.D	4.08	4.06	0.02	18.81	18.79	0.02	5.02	5	0.02	20.39	20.37	0.02
2120937-15	7T31615.D	4.08	4.08	0.00	18.8	18.81	-0.01	5.02	5.02	0.00	20.39	20.39	0.00
2120937-16	7T31616.D	4.08	4.08	0.00	18.81	18.81	0.00	5.02	5.02	0.00	20.39	20.39	0.00
2120937-17	7T31617.D	4.08	4.08	0.00	18.8	18.81	-0.01	5.02	5.02	0.00	20.39	20.39	0.00
2120937-18	7T31618.D	4.08	4.08	0.00	18.81	18.81	0.00	5.02	5.02	0.00	20.39	20.39	0.00
2120937-19	7T31619.D	4.08	4.08	0.00	18.8	18.81	-0.01	5.02	5.02	0.00	20.39	20.39	0.00
2120937-20	7T31620.D	4.08	4.08	0.00	18.81	18.81	0.00	5.02	5.02	0.00	20.39	20.39	0.00
2120937-21	7T31621.D	4.08	4.08	0.00	18.8	18.81	-0.01	5.02	5.02	0.00	20.38	20.39	-0.01
2120937-22	7T31622.D	4.08	4.08	0.00	18.81	18.81	0.00	5.02	5.02	0.00	20.39	20.39	0.00
2120937-23	7T31623.D	4.09	4.08	0.01	18.81	18.81	0.00	5.02	5.02	0.00	20.39	20.39	0.00
2120937-24	7T31624.D	4.09	4.08	0.01	18.81	18.81	0.00	5.03	5.02	0.01	20.4	20.39	0.01
2120937-25	7T31625.D	4.09	4.08	0.01	18.81	18.81	0.00	5.03	5.02	0.01	20.4	20.39	0.01
2120937-29	7T31636.D	4.12	4.1	0.02	18.83	18.83	0.00	5.06	5.05	0.01	20.42	20.41	0.01
2120937-30	7T31637.D	4.12	4.1	0.02	18.83	18.83	0.00	5.06	5.05	0.01	20.42	20.41	0.01
2120937-31	7T31638.D	4.12	4.1	0.02	18.83	18.83	0.00	5.07	5.05	0.02	20.42	20.41	0.01
2120937-32	7T31639.D	4.12	4.1	0.02	18.83	18.83	0.00	5.07	5.05	0.02	20.42	20.41	0.01
2120937-33	7T31640.D	4.12	4.1	0.02	18.83	18.83	0.00	5.07	5.05	0.02	20.42	20.41	0.01
2120937-35	7T31641.D	4.12	4.1	0.02	18.83	18.83	0.00	5.07	5.05	0.02	20.42	20.41	0.01
2120937-36	7T31642.D	4.13	4.1	0.03	18.83	18.83	0.00	5.07	5.05	0.02	20.42	20.41	0.01
2120937-37	7T31643.D	4.12	4.1	0.02	18.83	18.83	0.00	5.06	5.05	0.01	20.42	20.41	0.01
2120937-38	7T31644.D	4.13	4.1	0.03	18.83	18.83	0.00	5.07	5.05	0.02	20.42	20.41	0.01
2120937-39	7T31645.D	4.12	4.1	0.02	18.83	18.83	0.00	5.07	5.05	0.02	20.42	20.41	0.01

Sequence : SAA0029

		TCMX			DCB			TCMX[2C]			DCB[2C]		
Lab Number	File ID	RT	Ref RT	Drift	RT	Ref RT	Drift	RT	Ref RT	Drift	RT	Ref RT	Drift
2120937-08RE1	7T31661.D	4.16	4.15	0.01	18.86	18.86	0.00	5.11	5.1	0.01	20.46	20.46	0.00

Sequence : SAA0038

		TCMX			DCB			TCMX[2C]			DCB[2C]		
Lab Number	File ID	RT	Ref RT	Drift	RT	Ref RT	Drift	RT	Ref RT	Drift	RT	Ref RT	Drift
B2L2804-MS2	7T31691.D	4.21	4.19	0.02	18.9	18.89	0.01	5.17	5.15	0.02	20.5	20.5	0.00
B2L2804-MSD2	7T31692.D	4.21	4.19	0.02	18.9	18.89	0.01	5.17	5.15	0.02	20.51	20.5	0.01

Surrogate		Limit
TCMX	Tetrachloro-m-xylene	0.10
DCB	Decachlorobiphenyl	0.10
TCMX[2C]	Tetrachloro-m-xylene [2C]	0.10
DCB[2C]	Decachlorobiphenyl [2C]	0.10

DISS = Dissolved Analysis

F-V

SURROGATE RT DRIFT REPORT

Analysis Class: PESTICIDES

Sequence : SAA0209

		TCMX			DCB			TCMX[2C]			DCB[2C]		
Lab Number	File ID	RT	Ref RT	Drift	RT	Ref RT	Drift	RT	Ref RT	Drift	RT	Ref RT	Drift
BAA0335-BLK1	7T31822.D	4.46	4.45	0.01	19.1	19.1	0.00	5.46	5.46	0.00	20.78	20.78	0.00
BAA0335-BS1	7T31823.D	4.46	4.45	0.01	19.1	19.1	0.00	5.46	5.46	0.00	20.78	20.78	0.00

Sequence : SAA0210

		TCMX			DCB			TCMX[2C]			DCB[2C]		
Lab Number	File ID	RT	Ref RT	Drift	RT	Ref RT	Drift	RT	Ref RT	Drift	RT	Ref RT	Drift
2120937-41	7T31841.D	4.48	4.48	0.00	19.12	19.12	0.00	5.49	5.49	0.00	20.8	20.8	0.00
2120937-43	7T31843.D	4.47	4.48	-0.01	19.12	19.12	0.00	5.48	5.49	-0.01	20.8	20.8	0.00
2120937-44	7T31844.D	4.48	4.48	0.00	19.12	19.12	0.00	5.49	5.49	0.00	20.8	20.8	0.00
2120937-45	7T31845.D	4.47	4.48	-0.01	19.12	19.12	0.00	5.48	5.49	-0.01	20.8	20.8	0.00
2120937-46	7T31846.D	4.47	4.48	-0.01	19.12	19.12	0.00	5.48	5.49	-0.01	20.8	20.8	0.00
2120937-47	7T31847.D	4.47	4.48	-0.01	19.11	19.12	-0.01	5.48	5.49	-0.01	20.8	20.8	0.00
2120937-48	7T31848.D	4.47	4.48	-0.01	19.12	19.12	0.00	5.48	5.49	-0.01	20.8	20.8	0.00
2120937-49	7T31849.D	4.47	4.48	-0.01	19.12	19.12	0.00	5.48	5.49	-0.01	20.8	20.8	0.00
2120937-50	7T31850.D	4.48	4.48	0.00	19.12	19.12	0.00	5.48	5.49	-0.01	20.8	20.8	0.00

Sequence : SAA0233

		TCMX			DCB			TCMX[2C]			DCB[2C]		
Lab Number	File ID	RT	Ref RT	Drift	RT	Ref RT	Drift	RT	Ref RT	Drift	RT	Ref RT	Drift
2120937-42RE1	7T31890.D	4.49	4.49	0.00	19.13	19.13	0.00	5.5	5.5	0.00	20.82	20.82	0.00

Sequence : SAA0267

		TCMX			DCB			TCMX[2C]			DCB[2C]		
Lab Number	File ID	RT	Ref RT	Drift	RT	Ref RT	Drift	RT	Ref RT	Drift	RT	Ref RT	Drift
BAA0335-MS1	7T31957.D	4.53	4.52	0.01	19.16	19.15	0.01	5.55	5.54	0.01	20.85	20.85	0.00
BAA0335-MSD1	7T31958.D	4.53	4.52	0.01	19.16	19.15	0.01	5.55	5.54	0.01	20.85	20.85	0.00

Surrogate		Limit
TCMX	Tetrachloro-m-xylene	0.10
DCB	Decachlorobiphenyl	0.10
TCMX[2C]	Tetrachloro-m-xylene [2C]	0.10
DCB[2C]	Decachlorobiphenyl [2C]	0.10

DISS = Dissolved Analysis

F-V

Response Factor Report HP G1530A

Method : G:\HPCHEM\GCECD7\METHODS\80811228.M (Chemstation Integrator)
Title : Pesticides by Method SW-846 8081B
Last Update : Thu Dec 29 13:16:56 2022

Calibration Files
2 =7T31485.D 5 =7T31486.D 10 =7T31487.D
20 =7T31488.D 35 =7T31489.D 50 =7T31490.D

		Compound	2	5	10	20	35	50	Avg		%RSD
1)	S	TCMX	2.682	2.896	3.185	3.412	3.091	3.194	3.166	E7	7.07
2)		alpha-BHC	4.477	4.286	4.922	5.184	5.084	5.474	5.307	E7	11.82
3)	M	gamma-BHC (Lindane)	4.347	4.088	4.825	4.942	4.738	5.026	4.950	E7	9.55
4)	M	Heptachlor	4.946	4.580	5.181	5.182	4.890	5.111	5.041	E7	4.02
5)		beta-BHC	2.237	1.857	2.190	2.270	2.125	2.204	2.161	E7	5.74
6)		delta-BHC	4.398	3.702	4.552	4.721	4.598	4.945	4.893	E7	12.92
7)	M	Aldrin	4.542	4.095	4.844	4.731	4.541	4.801	4.716	E7	5.53
8)		Heptachlor epoxide	4.422	4.104	4.604	4.565	4.301	4.451	4.413	E7	3.36
9)		Endosulfan I	4.059	3.672	4.170	4.096	3.854	4.000	3.954	E7	4.11
10)		4,4'-DDE	4.177	3.569	4.217	4.277	4.139	4.338	4.335	E7	8.25
11)	M	Dieldrin	4.402	3.951	4.445	4.478	4.254	4.476	4.457	E7	4.96
12)	M	Endrin	3.995	3.721	4.156	4.290	4.038	4.222	4.171	E7	4.86
13)		4,4'-DDD	2.377	2.293	2.656	2.718	2.649	2.798	2.766	E7	10.45
14)		Endosulfan II	3.896	3.715	4.294	4.353	4.238	4.307	4.131	E7	5.37
15)	M	4,4'-DDT	3.250	2.892	3.236	3.339	3.278	3.455	3.411	E7	7.73
16)		Endrin aldehyde	2.791	2.681	3.010	3.163	2.970	3.029	2.955	E7	4.95
17)		Endosulfan sulfate	3.107	2.799	3.173	3.115	3.072	3.164	3.089	E7	3.62
18)		Methoxychlor	1.332	1.423	1.571	1.565	1.633	1.668	1.562	E7	6.89
19)		Mirex	2.850	2.616	2.940	2.772	2.607	2.644	2.669	E7	5.18
20)		Endrin ketone	3.237	2.939	3.367	3.399	3.175	3.286	3.275	E7	4.12
21)	S	Decachlorobiphenyl	2.920	2.710	3.085	2.934	2.698	2.742	2.795	E7	4.88
22)	L1	Chlordane (gamma)	4.148	4.005	4.467	4.578	4.337	4.553	4.528	E7	6.54
23)	L1	Chlordane (alpha)	4.619	4.183	4.720	4.647	4.350	4.540	4.588	E7	4.07
24)	L2	Toxaphene (1)							0.000	0	-1.00

Signal #2 Calibration Files
2 =7T31485.D 5 =7T31486.D 10 =7T31487.D
20 =7T31488.D 35 =7T31489.D 50 =7T31490.D

		Compound	2	5	10	20	35	50	Avg		%RSD
1)	S	TCMX	1.373	1.309	1.475	1.475	1.393	1.476	1.465	E7	5.62
2)		alpha-BHC	1.761	1.698	2.021	2.157	2.141	2.339	2.268	E7	16.73
3)	M	gamma-BHC (Lindane)	1.741	1.651	1.938	2.033	2.001	2.164	2.120	E7	14.30
4)	M	Heptachlor	2.115	1.950	2.204	2.224	2.119	2.243	2.229	E7	6.24
5)		beta-BHC	0.895	0.839	0.938	0.934	0.877	0.912	0.924	E7	5.16
6)		delta-BHC	1.680	1.558	1.819	1.912	1.889	2.060	2.044	E7	16.34
7)	M	Aldrin	1.742	1.636	1.865	1.909	1.860	1.986	1.958	E7	9.73
8)		Heptachlor epoxide	1.716	1.638	1.855	1.882	1.776	1.866	1.862	E7	6.53
9)		Endosulfan I	1.673	1.500	1.669	1.660	1.569	1.642	1.657	E7	4.38
10)		4,4'-DDE	1.239	1.189	1.424	1.477	1.438	1.542	1.516	E7	13.49
11)	M	Dieldrin	1.482	1.374	1.587	1.635	1.573	1.671	1.659	E7	9.78
12)	M	Endrin	1.261	1.209	1.400	1.440	1.385	1.474	1.457	E7	10.28
13)		4,4'-DDD	0.899	0.850	0.991	1.010	0.981	1.054	1.054	E7	12.92
14)		Endosulfan II	1.283	1.241	1.366	1.350	1.318	1.371	1.360	E7	5.16
15)	M	4,4'-DDT	0.733	0.792	1.024	1.058	1.048	1.126	1.092	E7	19.40
16)		Endrin aldehyde	1.486	1.061	1.241	1.156	1.054	1.042	1.136	E7	12.09
17)		Endosulfan sulfate	1.096	1.047	1.156	1.138	1.083	1.135	1.151	E7	6.01
18)		Methoxychlor	4.668	4.504	5.425	5.518	5.261	5.533	5.512	E6	11.11
19)		Mirex	1.073	0.907	0.942	0.912	0.841	0.858	0.902	E7	7.49
20)		Endrin ketone	1.094	1.070	1.178	1.190	1.151	1.213	1.217	E7	8.53
21)	S	Decachlorobiphenyl	1.111	1.092	1.160	1.125	1.043	1.062	1.089	E7	3.30
22)	L1	Chlordane (gamma)	1.730	1.613	1.819	1.827	1.762	1.862	1.870	E7	8.20
23)	L1	Chlordane (alpha)	1.605	1.519	1.725	1.726	1.658	1.744	1.747	E7	7.58
24)	L2	Toxaphene (1)							0.000	0	-1.00

(#) = Out of Range ### Number of calibration levels exceeded format ###

Compound List Report HP G1530A

Method : G:\HPCHEM\GCECD7\METHODS\80811228.M (Chemstation Integrator)
Title : Pesticides by Method SW-846 8081B
Last Update : Thu Dec 29 13:16:56 2022
Response via : Initial Calibration
Total Cpnds : 49

PK#	Type	Compound Name	Exp_RT	Rel_RT	Cal	A/H	ID
1	S	TCMX	3.97	1.000	A	A	B
2		alpha-BHC	5.04	1.000	A	A	B
3	M	gamma-BHC (Lindane)	5.79	1.000	A	A	B
4	M	Heptachlor	7.07	1.000	A	A	B
5		beta-BHC	6.04	1.000	A	A	B
6		delta-BHC	6.50	1.000	A	A	B
7	M	Aldrin	7.97	1.000	A	A	B
8		Heptachlor epoxide	10.09	1.000	A	A	B
9		Endosulfan I	11.57	1.000	A	A	B
10		4,4'-DDE	11.67	1.000	A	A	B
11	M	Dieldrin	12.65	1.000	A	A	B
12	M	Endrin	13.64	1.000	A	A	B
13		4,4'-DDD	14.26	1.000	A	A	B
14		Endosulfan II	14.44	1.000	A	A	B
15	M	4,4'-DDT	15.07	1.000	A	A	B
16		Endrin aldehyde	15.61	1.000	A	A	B
17		Endosulfan sulfate	16.54	1.000	A	A	B
18		Methoxychlor	16.33	1.000	A	A	B
19		Mirex	16.26	1.000	A	A	B
20		Endrin ketone	17.03	1.000	A	A	B
21	S	Decachlorobiphenyl	18.73	1.000	A	A	B
22	L1	Chlordane (gamma)	10.57	1.000	A	A	B
23	L1	Chlordane (alpha)	11.09	1.000	A	A	B
24	L2	Toxaphene (1)	16.34	1.000	A	A	R
25		Signal #2	35.00	1.000	A	A	B
26	S	TCMX #2	4.90	1.000	A	A	B
27		alpha-BHC #2	6.56	1.000	A	A	B
28	M	gamma-BHC (Lindane) #2	7.72	1.000	A	A	B
29	M	Heptachlor #2	9.29	1.000	A	A	B
30		beta-BHC #2	8.06	1.000	A	A	B
31		delta-BHC #2	9.12	1.000	A	A	B
32	M	Aldrin #2	10.51	1.000	A	A	B
33		Heptachlor epoxide #2	13.15	1.000	A	A	B
34		Endosulfan I #2	14.61	1.000	A	A	B
35		4,4'-DDE #2	15.15	1.000	A	A	B
36	M	Dieldrin #2	15.39	1.000	A	A	B
37	M	Endrin #2	16.09	1.000	A	A	B
38		4,4'-DDD #2	16.49	1.000	A	A	B
39		Endosulfan II #2	16.55	1.000	A	A	B
40	M	4,4'-DDT #2	17.06	1.000	A	A	B
41		Endrin aldehyde #2	17.20	1.000	A	A	B
42		Endosulfan sulfate #2	17.68	1.000	A	A	B
43		Methoxychlor #2	18.21	1.000	A	A	B
44		Mirex #2	18.40	1.000	A	A	B
45		Endrin ketone #2	18.48	1.000	A	A	B
46	S	Decachlorobiphenyl #2	20.29	1.000	A	A	B
47	L1	Chlordane (gamma) #2	13.98	1.000	A	A	B
48	L1	Chlordane (alpha) #2	14.49	1.000	A	A	B
49	L2	Toxaphene (1) #2	16.75	1.000	A	A	R

Cal A = Average L = Linear LO = Linear w/origin Q = Quad QO = Quad w/origin
A/H = Area or Height
ID R = R.T. B = R.T. & Q Q = Qvalue L = Largest A = All

80811228.M Thu Dec 29 13:36:04 2022 SS

CALIBRATION VERIFICATION SUMMARY

Client: **Dynamic Earth LLC**
Work Order: **2120937**

Lab Sample ID (50 pp):	S2L3013-CCV1(1)	Init. Calib. Date(s):	12/28/2022	12/29/2022
File ID:	7T31528.D	Date Analyzed:	12/29/2022 16:11	
Pesticides	Column 1	Matrix:	Soil	

Individual Mix Compound		RT WINDOW		$\overline{CF}$	CF	%D
		FROM	TO			
Dieldrin	12.67	12.57	12.77	44572680	46183420	3.60
Heptachlor Epoxide	10.11	10.01	10.21	44130120	45820740	3.80
Decachlorobiphenyl	18.74	18.64	18.84	27949750	28175060	0.80
Tetrachloro-m-xylene	03.99	03.89	04.09	31663030	31954060	0.90

* - Outside of QC limits

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CALIBRATION VERIFICATION SUMMARY

Client: **Dynamic Earth LLC**
Work Order: **2120937**

Lab Sample ID (50 pp):	S2L3013-CCV1(2)	Init. Calib. Date(s):	12/28/2022	12/29/2022
File ID:	7T31528.D	Date Analyzed:	12/29/2022 16:11	
Pesticides	Column 2	Matrix:	Soil	

Individual Mix Compound		RT WINDOW		$\overline{CF}$	CF	%D
		FROM	TO			
Dieldrin [2C]	15.40	15.30	15.50	16586560	17420600	5.00
Heptachlor Epoxide [2C]	13.18	13.08	13.28	18619540	19292450	3.60
Decachlorobiphenyl [2C]	20.30	20.20	20.40	10890370	11068380	1.60
Tetrachloro-m-xylene [2C]	04.92	04.82	05.02	14651820	15417470	5.20

* - Outside of QC limits

F-VII

Quantitation Report (QT Reviewed)

Signal #1 : G:\HPCHEM\GCECD7\DATA\20221229\7T31528.D\ECD1A.CH Vial: 3
Signal #2 : G:\HPCHEM\GCECD7\DATA\20221229\7T31528.D\ECD2B.CH
Acq On : 29 Dec 2022 4:11 pm Operator: WD
Sample : SEQ-CCV@50PPB Inst : GCECD-7
Misc : Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Dec 30 10:51 2022 Quant Results File: 80811228.RES

Quant Method : G:\HPCHEM\G...\80811228.M (Chemstation Integrator)
Title : Pesticides by Method SW-846 8081B
Last Update : Thu Dec 29 13:18:56 2022
Response via : Initial Calibration
DataAcq Meth : RUNPEST1.M

Volume Inj. : 2ul
Signal #1 Phase : RTx-50 Signal #2 Phase: RTx-CLPesticides II
Signal #1 Info : 30M x 0.53mm x 0. Signal #2 Info : 30M x 0.53mm x 0.42um

	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/kg	ug/kg
	System Monitoring Compounds						
1) S	TCMX	3.99	4.92	1597.7E6	770.9E6	50.460	52.613
Spiked Amount	50.000	Range	43 - 129	Recovery	=	100.92%	105.23%
21) S	Decachlorobiphen	18.74	20.30	1408.8E6	553.4E6	50.403	50.817
Spiked Amount	50.000	Range	42 - 136	Recovery	=	100.81%	101.63%
	Target Compounds						
2)	alpha-BHC	5.06	6.58	2829.7E6	1218.4E6	53.324	53.714
3) M	gamma-BHC (Linda	5.81	7.74	2596.4E6	1133.2E6	52.448	53.448
4) M	Heptachlor	7.09	9.31	2669.6E6	1174.3E6	52.957	52.678
5)	beta-BHC	6.06	8.08	1046.1E6	475.5E6	48.410	51.462
6)	delta-BHC	6.52	9.14	2559.2E6	1077.1E6	52.306	52.705
7) M	Aldrin	7.99	10.53	2471.4E6	1034.3E6	52.403	52.812
8)	Heptachlor epoxi	10.11	13.18	2291.0E6	964.6E6	51.915	51.807
9)	Endosulfan I	11.59	14.62	2058.5E6	858.4E6	52.060	51.799
10)	4,4'-DDE	11.69	15.16	2201.8E6	810.0E6	50.796	53.441
11) M	Dieldrin	12.67f	15.40	2309.2E6	871.0E6	51.807	52.514
12) M	Endrin	13.66	16.10	2237.3E6	780.7E6	53.644	53.564
13)	4,4'-DDD	14.28	16.50	1458.1E6	545.7E6	52.713	51.755
14)	Endosulfan II	14.46	16.56	2215.1E6	686.1E6	53.623	50.441
15) M	4,4'-DDT	15.08	17.07	1826.3E6	607.1E6	53.540m	55.583
16)	Endrin aldehyde	15.62	17.21	1550.3E6	536.1E6	52.470	47.207
17)	Endosulfan sulfa	16.55	17.68	1649.8E6	581.7E6	53.402	50.520
18)	Methoxychlor	16.34	18.22	852.9E6	289.4E6	54.613	52.497
19)	Mirex	16.27	18.40	1354.4E6	431.3E6	50.749	47.796
20)	Endrin ketone	17.04	18.48	1489.7E6	610.4E6	45.488	50.140
22) L1	Chlordane (gamma	10.59	13.99	2330.2E6	975.1E6	51.459	52.152
23) L1	Chlordane (alpha	11.11	14.51	2356.7E6	909.2E6	51.363	52.036
Sum	Chlordane (gamma)			4686.9E6	1884.3E6	102.822	104.188
Average	Chlordane (gamma)					51.411	52.094
Sum	Toxaphene (1)			0	0	N.D.	N.D.
Average	Toxaphene (1)					0.000	0.000

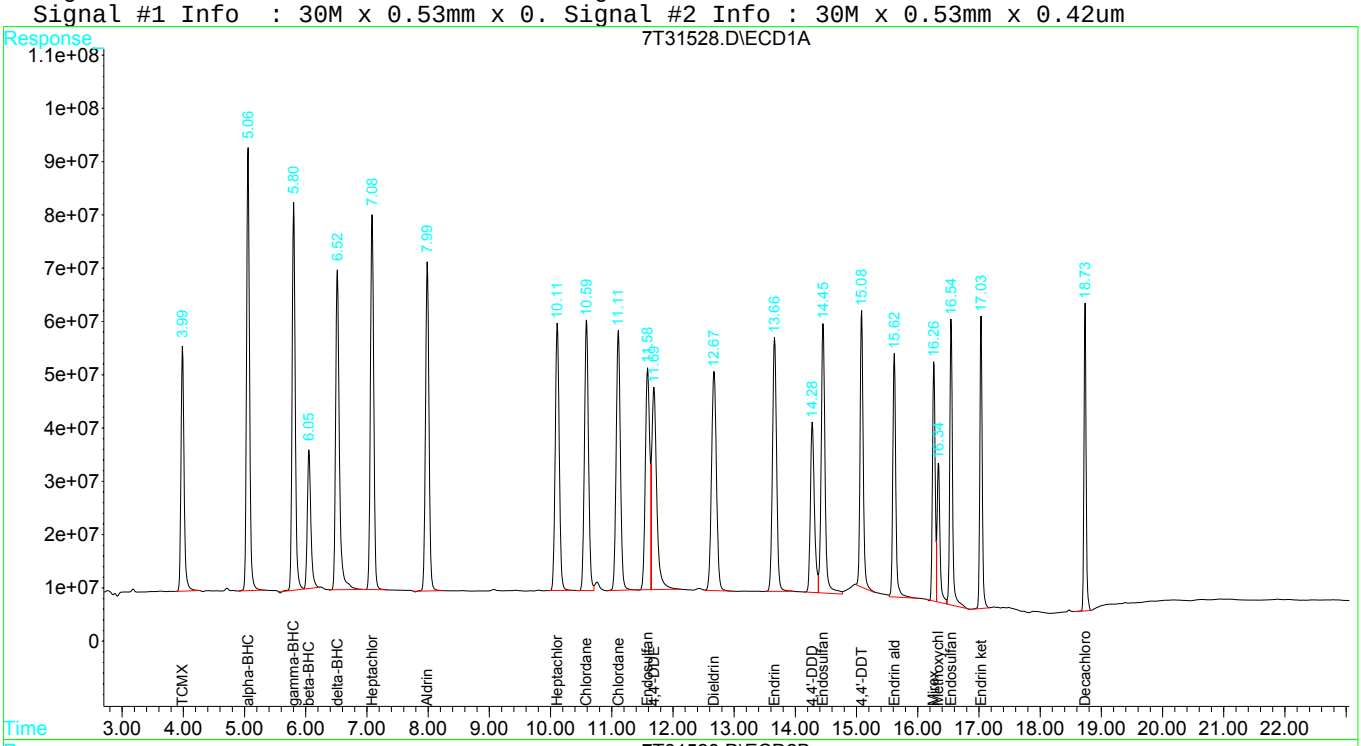
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

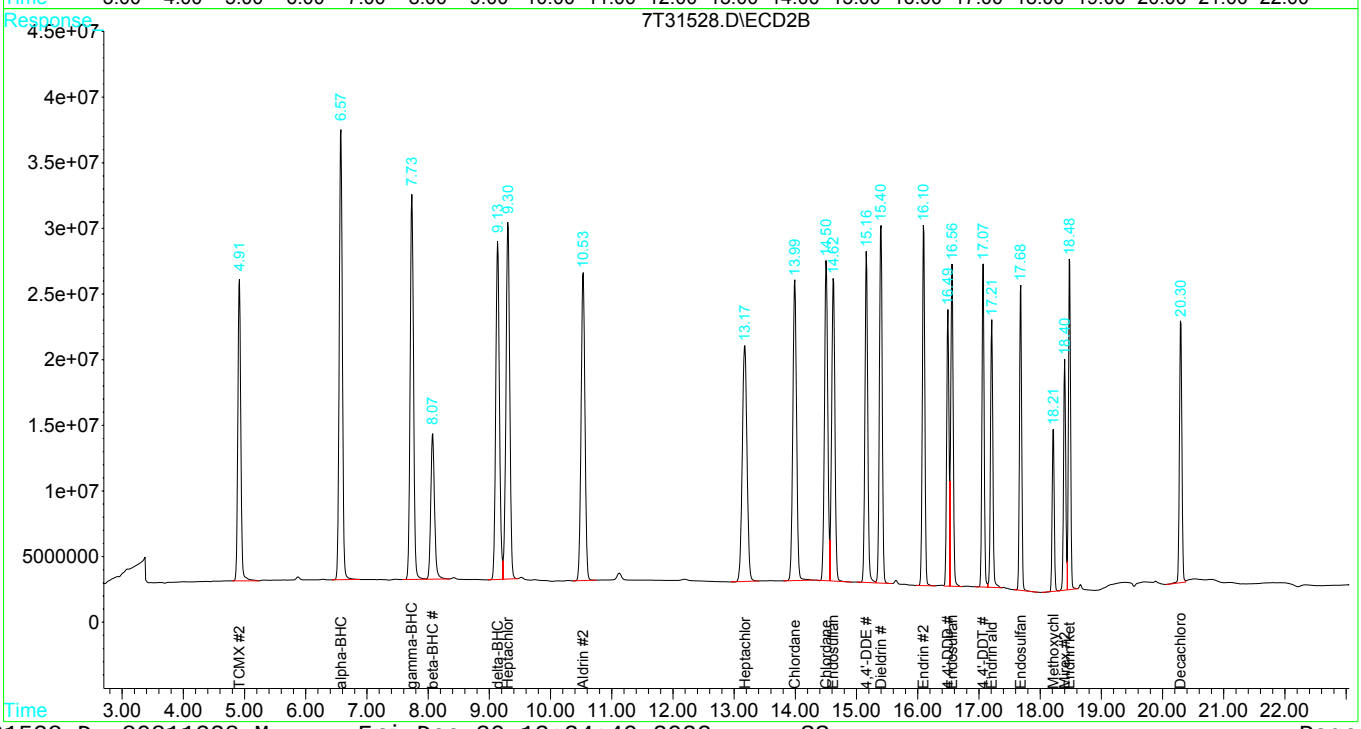
Quantitation Report (QT Reviewed)

Signal #1 : G:\HPCHEM\GCECD7\DATA\20221229\7T31528.D\ECD1A.CH Vial: 3
Signal #2 : G:\HPCHEM\GCECD7\DATA\20221229\7T31528.D\ECD2B.CH
Acq On : 29 Dec 2022 4:11 pm Operator: WD
Sample : SEQ-CCV@50PPB Inst : GCECD-7
Misc : Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Dec 30 10:51 2022 Quant Results File: 80811228.RES

Quant Method : G:\HPCHEM\G...\80811228.M (Chemstation Integrator)
Title : Pesticides by Method SW-846 8081B
Last Update : Thu Dec 29 13:18:56 2022
Response via : Multiple Level Calibration
DataAcq Meth : RUNPEST1.M

Volume Inj. : 2ul
Signal #1 Phase : RTx-50 Signal #2 Phase: RTx-CLPesticides II
Signal #1 Info : 30M x 0.53mm x 0. Signal #2 Info : 30M x 0.53mm x 0.42um





CALIBRATION VERIFICATION SUMMARY

Client: **Dynamic Earth LLC**
Work Order: **2120937**

Lab Sample ID (50):	S2L3013-CCV2(1)	Init. Calib. Date(s):	12/28/2022	12/29/2022
File ID:	7T31548.D	Date Analyzed:	12/30/2022 00:39	
Pesticides	Column 1	Matrix:	Soil	

Individual Mix Compound		RT WINDOW		$\overline{CF}$	CF	%D
		FROM	TO			
Dieldrin	12.69	12.59	12.79	44572680	49644480	11.40
Heptachlor Epoxide	10.12	10.02	10.22	44130120	49129640	11.30
Decachlorobiphenyl	18.74	18.64	18.84	27949750	33087140	18.40
Tetrachloro-m-xylene	04.00	03.90	04.10	31663030	33074120	4.50

* - Outside of QC limits

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CALIBRATION VERIFICATION SUMMARY

Client: **Dynamic Earth LLC**
Work Order: **2120937**

Lab Sample ID (50):	S2L3013-CCV2(2)	Init. Calib. Date(s):	12/28/2022	12/29/2022
File ID:	7T31548.D	Date Analyzed:	12/30/2022 00:39	
Pesticides	Column 2	Matrix:	Soil	

Individual Mix Compound		RT WINDOW		$\overline{CF}$	CF	%D
		FROM	TO			
Dieldrin [2C]	15.41	15.31	15.51	16586560	18763510	13.10
Heptachlor Epoxide [2C]	13.19	13.09	13.29	18619540	20581020	10.50
Decachlorobiphenyl [2C]	20.30	20.20	20.40	10890370	12032450	10.50
Tetrachloro-m-xylene [2C]	04.92	04.82	05.02	14651820	16782720	14.50

* - Outside of QC limits

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Quantitation Report (QT Reviewed)

Signal #1 : G:\HPCHEM\GCECD7\DATA\20221229\7T31548.D\ECD1A.CH Vial: 23
Signal #2 : G:\HPCHEM\GCECD7\DATA\20221229\7T31548.D\ECD2B.CH
Acq On : 30 Dec 2022 12:39 am Operator: WD
Sample : SEQ-CCV@50PPB Inst : GCECD-7
Misc : Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Dec 30 10:52 2022 Quant Results File: 80811228.RES

Quant Method : G:\HPCHEM\G...\80811228.M (Chemstation Integrator)
Title : Pesticides by Method SW-846 8081B
Last Update : Thu Dec 29 13:18:56 2022
Response via : Initial Calibration
DataAcq Meth : RUNPEST1.M

Volume Inj. : 2ul
Signal #1 Phase : RTx-50 Signal #2 Phase: RTx-CLPesticides II
Signal #1 Info : 30M x 0.53mm x 0. Signal #2 Info : 30M x 0.53mm x 0.42um

	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/kg	ug/kg
	System Monitoring Compounds						
1) S	TCMX	4.00	4.92	1653.7E6	839.1E6	52.228	57.272
	Spiked Amount 50.000	Range 43 - 129		Recovery =		104.46%	114.54%
21) S	Decachlorobiphen	18.74	20.30	1654.4E6	601.6E6	59.190	55.244
	Spiked Amount 50.000	Range 42 - 136		Recovery =		118.38%	110.49%
	Target Compounds						
2)	alpha-BHC	5.07	6.58f	3028.1E6	1312.8E6	57.063	57.875
3) M	gamma-BHC (Linda	5.81f	7.75f	2802.5E6	1226.3E6	56.612	57.837
4) M	Heptachlor	7.10f	9.32f	2797.2E6	1251.1E6	55.489	56.123
5)	beta-BHC	6.07f	8.09f	1241.5E6	511.6E6	57.451	55.360
6)	delta-BHC	6.53f	9.15f	2715.8E6	1153.9E6	55.507	56.460
7) M	Aldrin	8.00f	10.54f	2659.2E6	1121.8E6	56.385	57.283
8)	Heptachlor epoxi	10.12f	13.19f	2456.5E6	1029.1E6	55.665	55.267
9)	Endosulfan I	11.60f	14.63	2202.9E6	935.3E6	55.712	56.438
10)	4,4'-DDE	11.71f	15.17	2356.1E6	879.0E6	54.357	57.995
11) M	Dieldrin	12.69f	15.41	2482.2E6	938.2E6	55.689	56.562
12) M	Endrin	13.67f	16.10	2325.0E6	856.5E6	55.749	58.768
13)	4,4'-DDD	14.30f	16.50	1484.2E6	607.3E6	53.659	57.594
14)	Endosulfan II	14.47	16.57	2438.8E6	777.3E6	59.037	57.146
15) M	4,4'-DDT	15.09	17.08	1811.8E6	641.6E6	53.116m	58.742
16)	Endrin aldehyde	15.63	17.22	1657.6E6	603.6E6	56.102	53.149
17)	Endosulfan sulfa	16.55	17.69	1803.7E6	660.7E6	58.383m	57.384
18)	Methoxychlor	16.35	18.22	893.9E6	312.7E6	57.238	56.728
19)	Mirex	16.27	18.41	1516.8E6	495.6E6	56.834	54.926
20)	Endrin ketone	17.04	18.49	1922.8E6	696.8E6	58.714	57.245
22) L1	Chlordane (gamma	10.60f	14.00f	2369.6E6	1054.0E6	52.329	56.372
23) L1	Chlordane (alpha	11.12f	14.51	2525.7E6	993.0E6	55.045	56.836
	Sum Chlordane (gamma)			4895.3E6	2047.0E6	107.375	113.208
	Average Chlordane (gamma)					53.687	56.604
	Sum Toxaphene (1)			0	0	N.D.	N.D.
	Average Toxaphene (1)					0.000	0.000

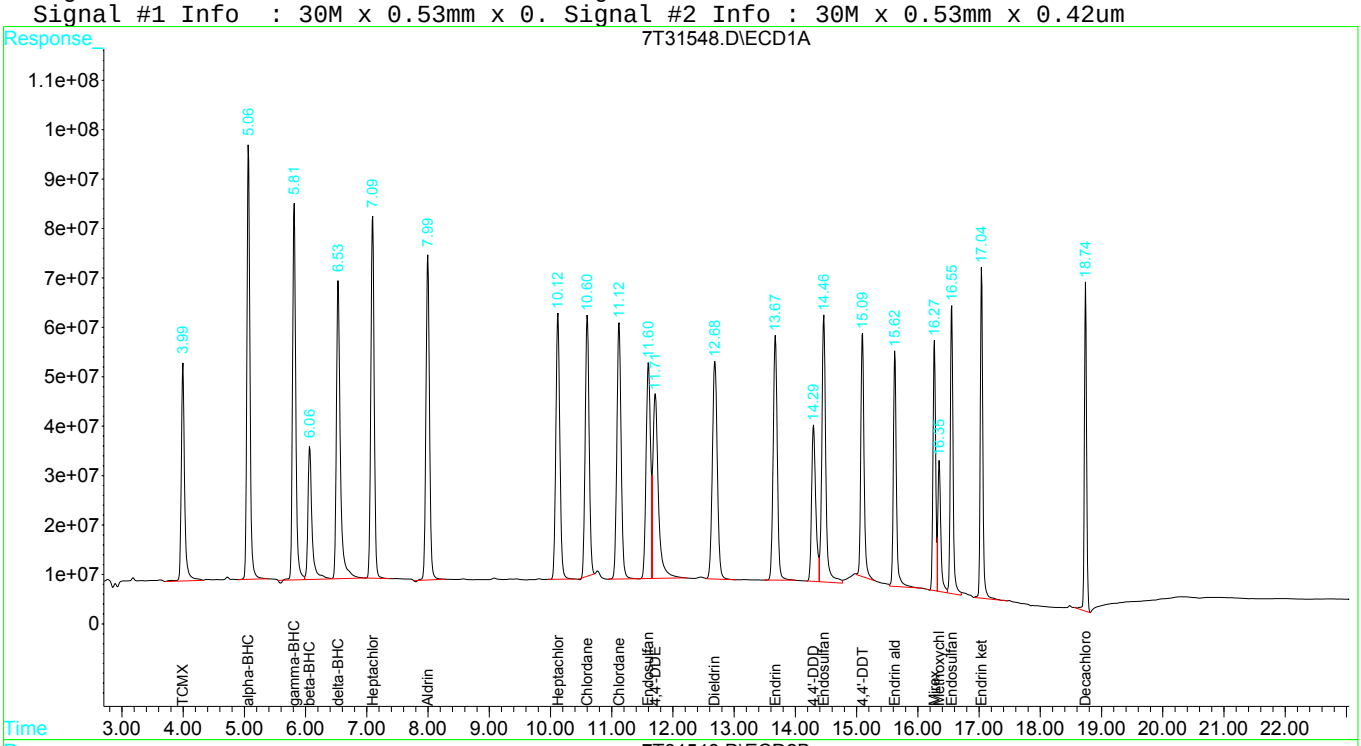
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

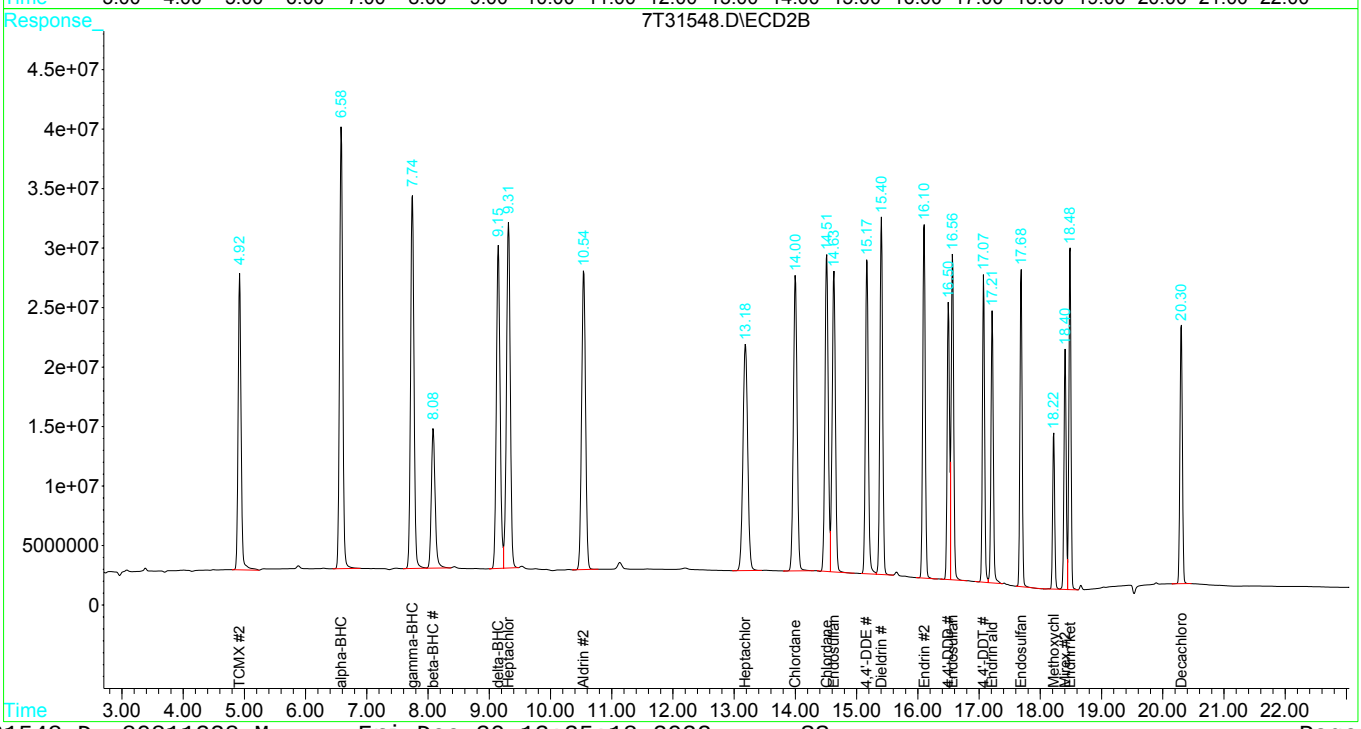
Quantitation Report (QT Reviewed)

Signal #1 : G:\HPCHEM\GCECD7\DATA\20221229\7T31548.D\ECD1A.CH Vial: 23
Signal #2 : G:\HPCHEM\GCECD7\DATA\20221229\7T31548.D\ECD2B.CH
Acq On : 30 Dec 2022 12:39 am Operator: WD
Sample : SEQ-CCV@50PPB Inst : GCECD-7
Misc : Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Dec 30 10:52 2022 Quant Results File: 80811228.RES

Quant Method : G:\HPCHEM\G...\80811228.M (Chemstation Integrator)
Title : Pesticides by Method SW-846 8081B
Last Update : Thu Dec 29 13:18:56 2022
Response via : Multiple Level Calibration
DataAcq Meth : RUNPEST1.M

Volume Inj. : 2ul
Signal #1 Phase : RTx-50 Signal #2 Phase: RTx-CLPesticides II
Signal #1 Info : 30M x 0.53mm x 0. Signal #2 Info : 30M x 0.53mm x 0.42um





CALIBRATION VERIFICATION SUMMARY

Client: **Dynamic Earth LLC**
Work Order: **2120937**

Lab Sample ID (50 pp):	SAA0005-CCV1(1)	Init. Calib. Date(s):	12/28/2022	12/29/2022
File ID:	7T31569c.D	Date Analyzed:	12/30/2022 09:32	
Pesticides	Column 1	Matrix:	Soil	

Individual Mix Compound		RT WINDOW		$\overline{CF}$	CF	%D
		FROM	TO			
Dieldrin	12.70	12.60	12.80	44572680	51653260	15.90
Heptachlor Epoxide	10.13	10.03	10.23	44130120	50924260	15.40
Decachlorobiphenyl	18.74	18.64	18.84	27949750	28075880	0.50
Tetrachloro-m-xylene	04.00	03.90	04.10	31663030	37191480	17.50

* - Outside of QC limits

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CALIBRATION VERIFICATION SUMMARY

Client: **Dynamic Earth LLC**
Work Order: **2120937**

Lab Sample ID (50 pp):	SAA0005-CCV1(2)	Init. Calib. Date(s):	12/28/2022	12/29/2022
File ID:	7T31569c.D	Date Analyzed:	12/30/2022 09:32	
Pesticides	Column 2	Matrix:	Soil	

Individual Mix Compound		RT WINDOW		$\overline{CF}$	CF	%D
		FROM	TO			
Dieldrin [2C]	15.41	15.31	15.51	16586560	19253870	16.10
Heptachlor Epoxide [2C]	13.20	13.10	13.30	18619540	21778720	17.00
Decachlorobiphenyl [2C]	20.31	20.21	20.41	10890370	11609350	6.60
Tetrachloro-m-xylene [2C]	04.94	04.84	05.04	14651820	17152610	17.10

* - Outside of QC limits

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Quantitation Report (QT Reviewed)

Signal #1 : G:\HPCHEM\GCECD7\DATA\20221229A\7T31569C.D\ECD1A.CH Vial: 44
Signal #2 : G:\HPCHEM\GCECD7\DATA\20221229A\7T31569C.D\ECD2B.CH
Acq On : 30 Dec 2022 9:32 Operator: WD
Sample : SEQ-CCV@50PPB Inst : GCECD-7
Misc : Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Dec 30 10:48 2022 Quant Results File: 80811228.RES

Quant Method : G:\HPCHEM\G...\80811228.M (Chemstation Integrator)
Title : Pesticides by Method SW-846 8081B
Last Update : Thu Dec 29 13:18:56 2022
Response via : Initial Calibration
DataAcq Meth : RUNPEST1.M

Volume Inj. : 2ul
Signal #1 Phase : RTx-50 Signal #2 Phase: RTx-CLPesticides II
Signal #1 Info : 30M x 0.53mm x 0. Signal #2 Info : 30M x 0.53mm x 0.42um

		Compound	RT#1	RT#2	Resp#1	Resp#2	ug/kg	ug/kg
		System Monitoring Compounds						
1)	S	TCMX	4.00f	4.94f	1859.6E6	857.6E6	58.730m	58.534
		Spiked Amount 50.000	Range 43 - 129		Recovery =		117.46%	117.07%
21)	S	Decachlorobiphen	18.74	20.31	1403.8E6	580.5E6	50.226	53.301
		Spiked Amount 50.000	Range 42 - 136		Recovery =		100.45%	106.60%
		Target Compounds						
2)		alpha-BHC	5.07f	6.60f	3157.3E6	1376.6E6	59.498m	60.688
3)	M	gamma-BHC (Linda	5.82f	7.76f	2866.9E6	1242.2E6	57.914	58.588
4)	M	Heptachlor	7.11f	9.33f	2442.3E6	1071.5E6	48.448	48.068
5)		beta-BHC	6.07f	8.10f	1190.7E6	531.4E6	55.099	57.504
6)		delta-BHC	6.53f	9.16f	2957.8E6	1247.0E6	60.453	61.017
7)	M	Aldrin	8.01f	10.56f	2735.5E6	1161.4E6	58.004	59.305
8)		Heptachlor epoxi	10.13f	13.20f	2546.2E6	1088.9E6	57.698	58.484
9)		Endosulfan I	11.61f	14.64f	2269.8E6	944.5E6	57.405	56.993
10)		4,4'-DDE	11.70f	15.17	2561.3E6	900.3E6	59.092	59.395
11)	M	Dieldrin	12.70f	15.41f	2582.7E6	962.7E6	57.943m	58.041
12)	M	Endrin	13.69f	16.11	2348.8E6	782.4E6	56.318	53.680
13)		4,4'-DDD	14.28	16.50	2483.0E6	889.7E6	89.766	84.375
14)		Endosulfan II	14.47f	16.57	2289.3E6	783.5E6	55.419	57.598
15)	M	4,4'-DDT	15.09	17.07	540.9E6	164.2E6	15.856m	15.035m
16)		Endrin aldehyde	15.63	17.22	1586.1E6	562.2E6	53.680	49.504
17)		Endosulfan sulfa	16.56	17.69	1586.5E6	608.7E6	51.352	52.861
18)		Methoxychlor	16.34	18.22	334.1E6	121.8E6	21.390	22.093
19)		Mirex	16.28	18.41	1374.3E6	474.3E6	51.496	52.563
20)		Endrin ketone	17.05	18.49	1455.7E6	605.3E6	44.450	49.724
22)	L1	Chlordane (gamma	10.61f	14.01f	2552.1E6	1078.6E6	56.360	57.685
23)	L1	Chlordane (alpha	11.13f	14.52f	2616.1E6	1011.3E6	57.015	57.880
		Sum Chlordane (gamma)			5168.2E6	2089.8E6	113.375	115.565
		Average Chlordane (gamma)					56.687	57.782
		Sum Toxaphene (1)			0	0	N.D.	N.D.
		Average Toxaphene (1)					0.000	0.000

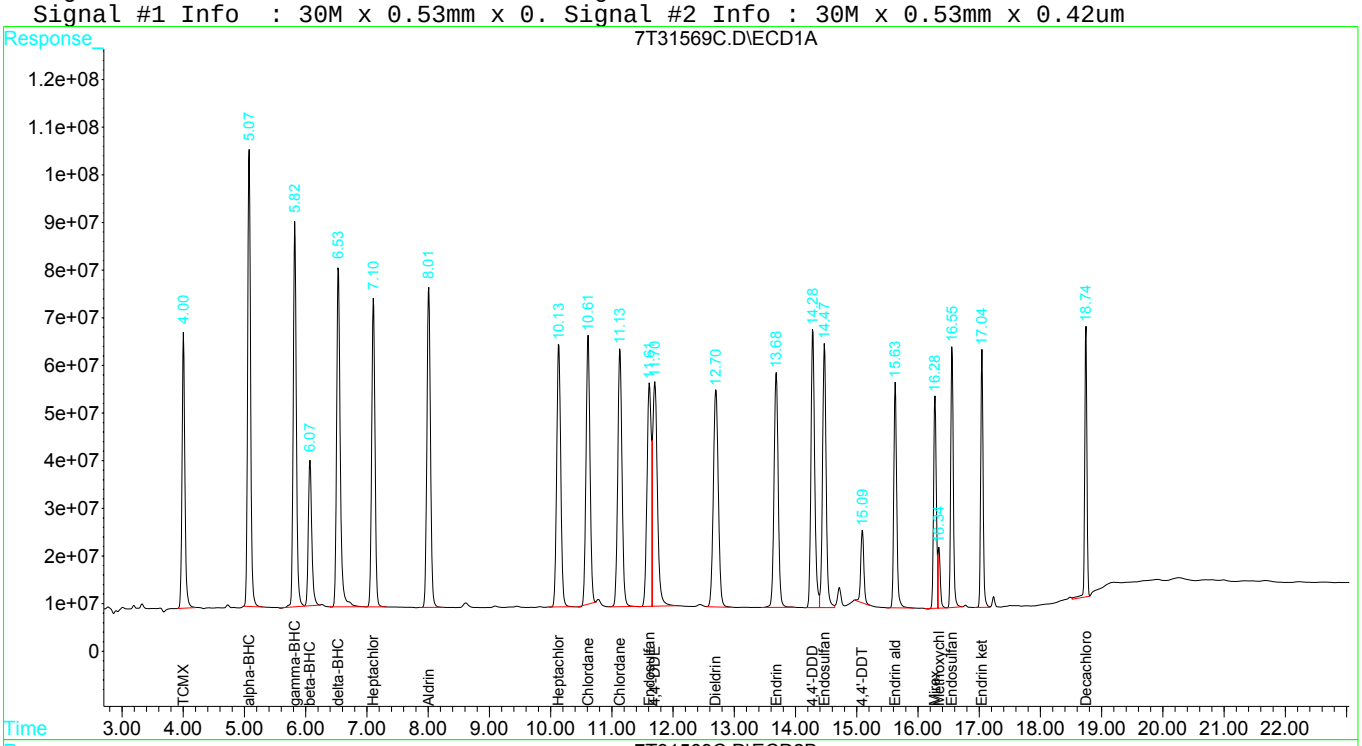
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

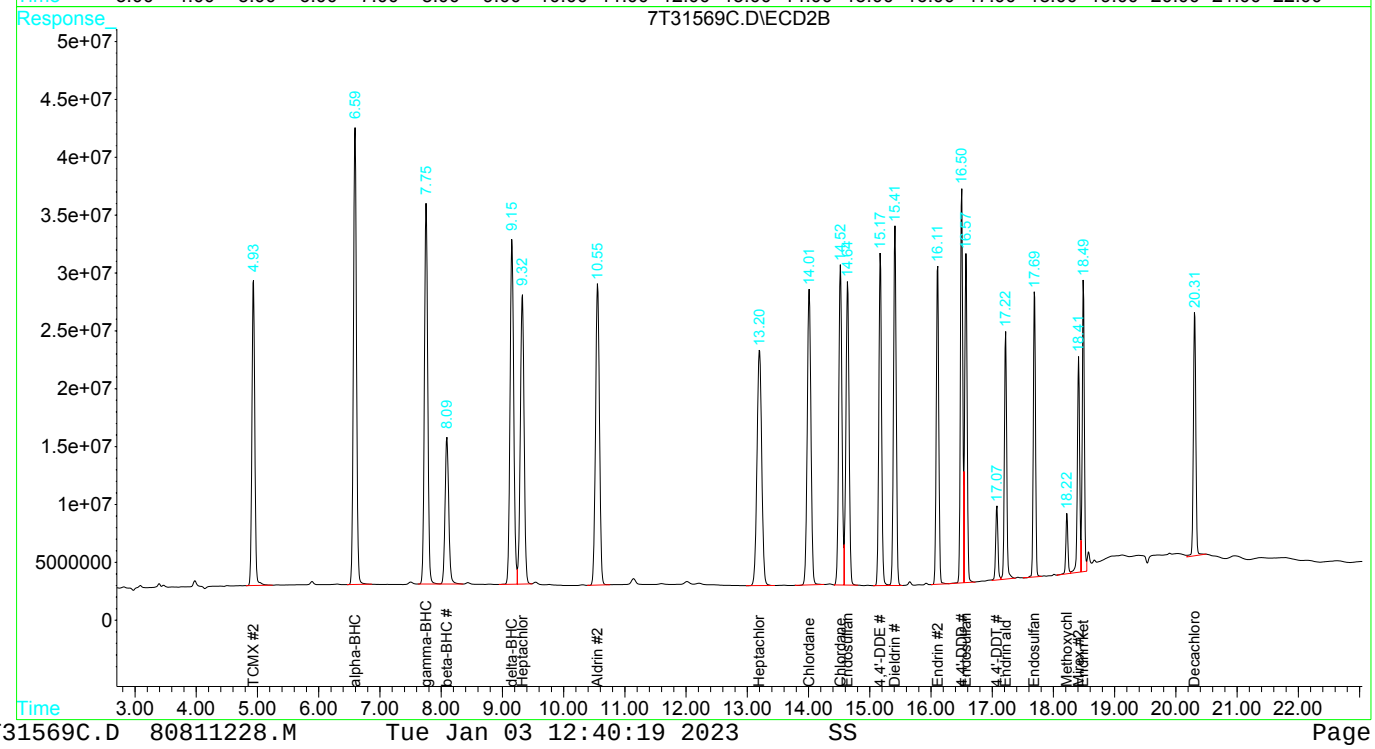
Quantitation Report (QT Reviewed)

Signal #1 : G:\HPCHEM\GCECD7\DATA\20221229A\7T31569C.D\ECD1A.CH Vial: 44
Signal #2 : G:\HPCHEM\GCECD7\DATA\20221229A\7T31569C.D\ECD2B.CH
Acq On : 30 Dec 2022 9:32 Operator: WD
Sample : SEQ-CCV@50PPB Inst : GCECD-7
Misc : Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Dec 30 10:48 2022 Quant Results File: 80811228.RES

Quant Method : G:\HPCHEM\G...\80811228.M (Chemstation Integrator)
Title : Pesticides by Method SW-846 8081B
Last Update : Thu Dec 29 13:18:56 2022
Response via : Multiple Level Calibration
DataAcq Meth : RUNPEST1.M

Volume Inj. : 2ul
Signal #1 Phase : RTx-50 Signal #2 Phase: RTx-CLPesticides II
Signal #1 Info : 30M x 0.53mm x 0. Signal #2 Info : 30M x 0.53mm x 0.42um





CALIBRATION VERIFICATION SUMMARY

Client: **Dynamic Earth LLC**
Work Order: **2120937**

Lab Sample ID (50 pp):	SAA0020-CCV1(1)	Init. Calib. Date(s):	12/28/2022	12/29/2022
File ID:	7T31592.D	Date Analyzed:	12/30/2022 19:57	
SPLP Pesticides	Column 1	Matrix:	Water	

Individual Mix Compound		RT WINDOW		$\overline{CF}$	CF	%D
		FROM	TO			
beta-BHC	06.15	-----	-----	21609980	23269360	7.70
4,4'-DDE	11.84	-----	-----	43345070	51679140	19.20
Decachlorobiphenyl	18.79	18.69	18.89	27949750	28049060	0.40
Tetrachloro-m-xylene	04.06	03.96	04.16	31663030	30951080	2.20

* - Outside of QC limits

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CALIBRATION VERIFICATION SUMMARY

Client: **Dynamic Earth LLC**
Work Order: **2120937**

Lab Sample ID (50 pp):	SAA0020-CCV1(2)	Init. Calib. Date(s):	12/28/2022	12/29/2022
File ID:	7T31592.D	Date Analyzed:	12/30/2022 19:57	
SPLP Pesticides	Column 2	Matrix:	Water	

Individual Mix Compound		RT WINDOW		$\overline{CF}$	CF	%D
		FROM	TO			
beta-BHC [2C]	08.19	-----	-----	9240612	9642904	4.40
4,4'-DDE [2C]	15.25	-----	-----	15157070	15766140	4.00
Decachlorobiphenyl [2C]	20.37	20.27	20.47	10890370	11068550	1.60
Tetrachloro-m-xylene [2C]	05.00	04.90	05.10	14651820	15119470	3.20

* - Outside of QC limits

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Quantitation Report (QT Reviewed)

Signal #1 : G:\HPCHEM\GCECD7\DATA\20221230\7T31592.D\ECD1A.CH Vial: 3
Signal #2 : G:\HPCHEM\GCECD7\DATA\20221230\7T31592.D\ECD2B.CH
Acq On : 30 Dec 2022 7:57 pm Operator: WD
Sample : SEQ-CCV@50PPB Inst : GCECD-7
Misc : Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Dec 31 17:15 2022 Quant Results File: 80811228.RES

Quant Method : G:\HPCHEM\G...\80811228.M (Chemstation Integrator)
Title : Pesticides by Method SW-846 8081B
Last Update : Sat Dec 31 17:11:18 2022
Response via : Initial Calibration
DataAcq Meth : RUNPEST1.M

Volume Inj. : 2ul
Signal #1 Phase : RTx-50 Signal #2 Phase: RTx-CLPesticides II
Signal #1 Info : 30M x 0.53mm x 0. Signal #2 Info : 30M x 0.53mm x 0.42um

		Compound	RT#1	RT#2	Resp#1	Resp#2	ug/kg	ug/kg
		System Monitoring Compounds						
1)	S	TCMX	4.06f	5.00f	1547.6E6	756.0E6	48.876m	51.596m
		Spiked Amount 50.000	Range 43 - 129		Recovery =		97.75%	103.19%
21)	S	Decachlorobiphen	18.79f	20.37f	1402.5E6	553.4E6	50.178m	50.818m
		Spiked Amount 50.000	Range 42 - 136		Recovery =		100.36%	101.64%
		Target Compounds						
2)		alpha-BHC	5.15f	6.68f	2787.6E6	1190.9E6	52.531m	52.500m
3)	M	gamma-BHC (Linda	5.90f	7.85f	2510.5E6	1086.1E6	50.714m	51.224m
4)	M	Heptachlor	7.20f	9.44f	2593.9E6	1148.0E6	51.455m	51.497m
5)		beta-BHC	6.15f	8.19f	1163.5E6	482.1E6	53.839m	52.177m
6)		delta-BHC	6.62f	9.26f	2539.9E6	1077.2E6	51.912m	52.705m
7)	M	Aldrin	8.11f	10.67f	2442.1E6	1016.1E6	51.783m	51.885m
8)		Heptachlor epoxi	10.25f	13.34f	2274.9E6	927.1E6	51.550m	49.790m
9)		Endosulfan I	11.74f	14.62	2310.5E6	893.6E6	58.433m	53.921
10)		4,4'-DDE	11.84f	15.25f	2584.0E6	788.3E6	59.614m	52.009m
11)	M	Dieldrin	12.85f	15.49f	2271.5E6	853.7E6	50.961m	51.468m
12)	M	Endrin	13.80f	16.18f	2144.3E6	768.2E6	51.415m	52.705m
13)		4,4'-DDD	14.38f	16.56f	1524.8E6	516.3E6	55.126m	48.963m
14)		Endosulfan II	14.56f	16.64f	2046.4E6	588.2E6	49.538m	43.239m
15)	M	4,4'-DDT	15.17f	17.13f	1679.1E6	599.1E6	49.225m	54.852m
16)		Endrin aldehyde	15.70f	17.28f	1513.7E6	537.6E6	51.232m	47.337m
17)		Endosulfan sulfa	16.62f	17.75f	1650.7E6	618.6E6	53.433m	53.723m
18)		Methoxychlor	16.41f	18.27f	871.1E6	320.5E6	55.775m	58.154m
19)		Mirex	16.34f	18.47f	1159.2E6	464.2E6	43.436m	51.441m
20)		Endrin ketone	17.10f	18.54f	1733.1E6	578.8E6	52.921m	47.551m
22)	L1	Chlordane (gamma	10.73f	14.12f	2299.3E6	971.7E6	50.777m	51.972m
23)	L1	Chlordane (alpha	11.25f	14.61f	2376.1E6	877.9E6	51.787m	50.248m
		Sum Chlordane (gamma)			4675.5E6	1849.7E6	102.563	102.220
		Average Chlordane (gamma)					51.282	51.110
		Sum Toxaphene (1)			0	0	N.D.	N.D.
		Average Toxaphene (1)					0.000	0.000

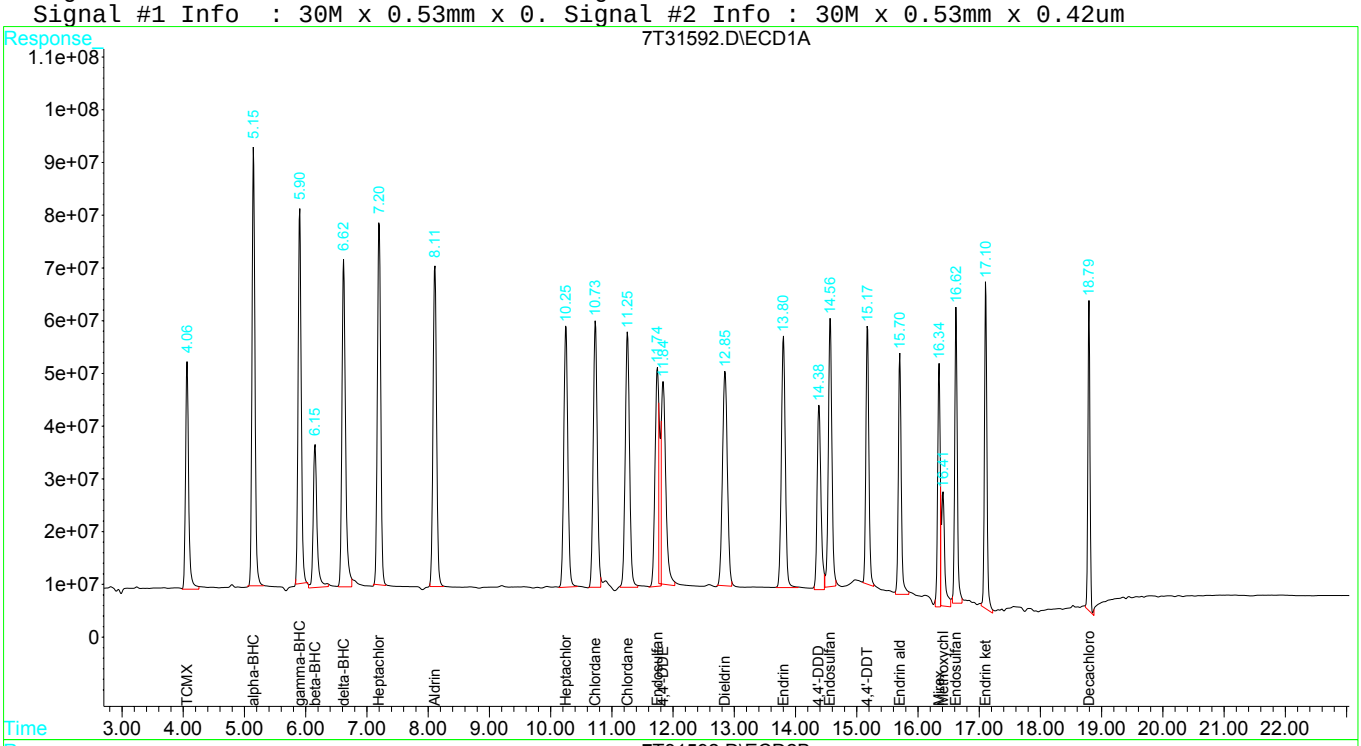
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.
7T31592.D 80811228.M Tue Jan 03 13:54:16 2023 SS

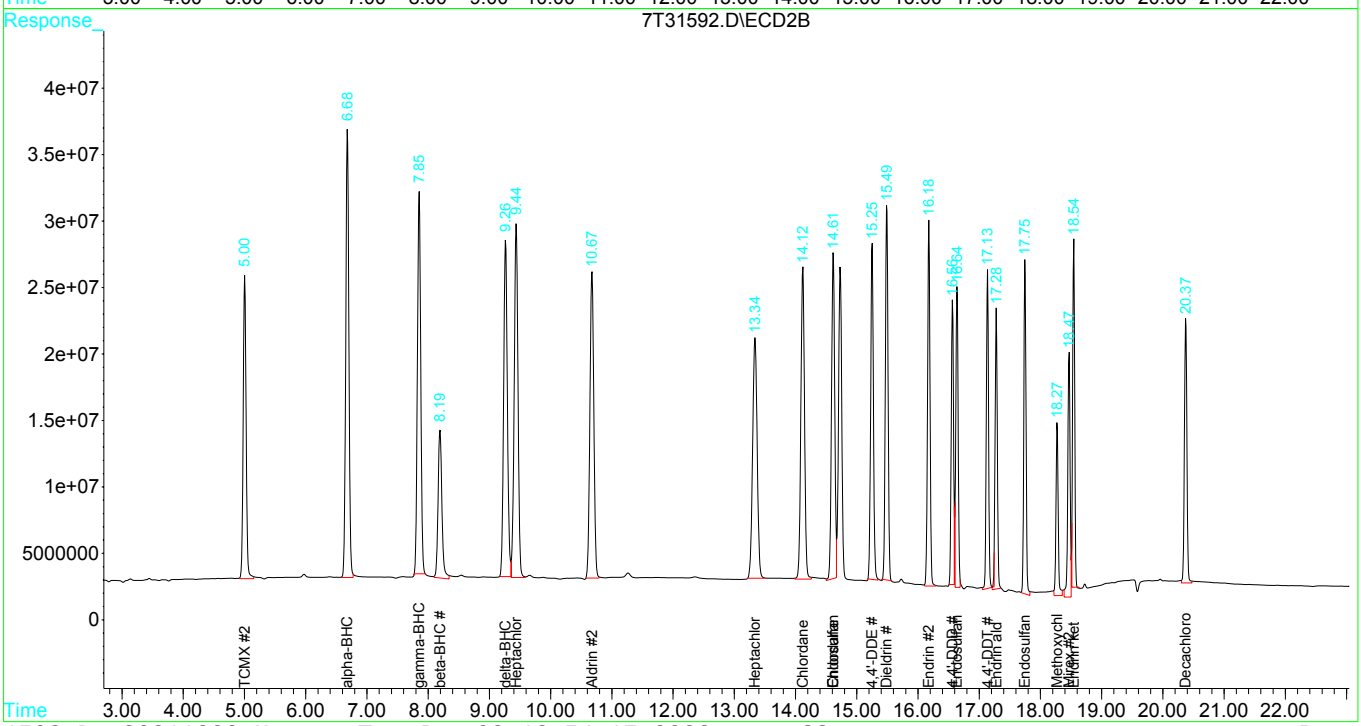
Quantitation Report (QT Reviewed)

Signal #1 : G:\HPCHEM\GCECD7\DATA\20221230\7T31592.D\ECD1A.CH Vial: 3
Signal #2 : G:\HPCHEM\GCECD7\DATA\20221230\7T31592.D\ECD2B.CH
Acq On : 30 Dec 2022 7:57 pm Operator: WD
Sample : SEQ-CCV@50PPB Inst : GCECD-7
Misc : Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Dec 31 17:15 2022 Quant Results File: 80811228.RES

Quant Method : G:\HPCHEM\G...\80811228.M (Chemstation Integrator)
Title : Pesticides by Method SW-846 8081B
Last Update : Sat Dec 31 17:11:18 2022
Response via : Multiple Level Calibration
DataAcq Meth : RUNPEST1.M

Volume Inj. : 2ul
Signal #1 Phase : RTx-50 Signal #2 Phase: RTx-CLPesticides II
Signal #1 Info : 30M x 0.53mm x 0. Signal #2 Info : 30M x 0.53mm x 0.42um





CALIBRATION VERIFICATION SUMMARY

Client: **Dynamic Earth LLC**
Work Order: **2120937**

Lab Sample ID (50):	SAA0020-CCV2(1)	Init. Calib. Date(s):	12/28/2022	12/29/2022
File ID:	7T31613.D	Date Analyzed:	12/31/2022 04:50	
Pesticides	Column 1	Matrix:	Water	

Individual Mix Compound		RT WINDOW		$\overline{CF}$	CF	%D
		FROM	TO			
Aldrin	08.13	08.03	08.23	47160890	54673080	15.90
alpha-BHC	05.16	05.06	05.26	53065430	62575540	17.90
alpha-Chlordane (cis)	11.28	11.18	11.38	45883450	52230420	13.80
beta-BHC	06.17	-----	-----	21609980	25589880	18.40
beta-BHC	06.17	06.07	06.27	21609980	25589880	18.40
delta-BHC	06.64	06.54	06.74	48927310	56809720	16.10
Dieldrin	12.88	12.78	12.98	44572680	51351900	15.20
Endosulfan I	11.77	11.67	11.87	39540850	45694720	15.60
Endosulfan II	14.59	14.49	14.69	41309610	48116440	16.50
Endosulfan sulfate	16.63	16.53	16.73	30893780	35642600	15.40
Endrin	13.83	13.73	13.93	41705440	46827780	12.30
Endrin aldehyde	15.72	15.62	15.82	29546590	33569920	13.60
Endrin ketone	17.12	17.02	17.22	32748990	40145600	22.60 *
gamma-Chlordane	10.75	10.65	10.85	45282670	51529740	13.80
gamma-BHC (Lindane)	05.92	05.82	06.02	49503550	58768500	18.70
4,4'-DDT	15.19	15.09	15.29	34111040	36085100	5.80
4,4'-DDE	11.87	11.77	11.97	43345070	49610220	14.50
4,4'-DDE	11.87	-----	-----	43345070	49610220	14.50
4,4'-DDD	14.41	14.31	14.51	27660840	33094000	19.60
Methoxychlor	16.43	16.33	16.53	15617680	17672240	13.20
Heptachlor Epoxide	10.27	10.17	10.37	44130120	50716060	14.90
Heptachlor	07.22	07.12	07.32	50410610	57121540	13.30
Chlordane	11.28	11.18	11.38	45583060	51880080	13.80
Decachlorobiphenyl	18.81	18.71	18.91	27949750	32683680	16.90
Decachlorobiphenyl	18.81	18.71	18.91	27949750	32683680	16.90
Tetrachloro-m-xylene	04.08	03.98	04.18	31663030	35082720	10.80
Tetrachloro-m-xylene	04.08	03.98	04.18	31663030	35082720	10.80

* - Outside of QC limits

F-VII

CALIBRATION VERIFICATION SUMMARY

Client: **Dynamic Earth LLC**
Work Order: **2120937**

Lab Sample ID (50):	SAA0020-CCV2(2)	Init. Calib. Date(s):	12/28/2022	12/29/2022
File ID:	7T31613.D	Date Analyzed:	12/31/2022 04:50	
Pesticides	Column 2	Matrix:	Water	

Individual Mix Compound		RT WINDOW		$\overline{CF}$	CF	%D
		FROM	TO			
Aldrin [2C]	10.70	10.60	10.80	19584280	22748160	16.20
alpha-BHC [2C]	06.70	06.60	06.80	22683710	26484900	16.80
alpha-Chlordane (cis) [2C]	14.63	14.53	14.73	17471800	20171960	15.50
beta-BHC [2C]	08.21	-----	-----	9240612	10327480	11.80
beta-BHC [2C]	08.21	08.11	08.31	9240612	10327480	11.80
delta-BHC [2C]	09.29	09.19	09.39	20437370	23586140	15.40
Dieldrin [2C]	15.51	15.41	15.61	16586560	19285610	16.30
Endosulfan I [2C]	14.63	14.53	14.73	16572580	19705740	18.90
Endosulfan II [2C]	16.65	16.55	16.75	13602510	15565470	14.40
Endosulfan sulfate [2C]	17.76	17.66	17.86	11514510	13408450	16.40
Endrin [2C]	16.19	16.09	16.29	14574770	16845990	15.60
Endrin aldehyde [2C]	17.29	17.19	17.39	11357280	12059400	6.20
Endrin ketone [2C]	18.56	18.46	18.66	12173110	14477140	18.90
gamma-Chlordane [2C]	14.14	14.04	14.24	18697510	21307940	14.00
gamma-BHC (Lindane) [2C]	07.87	07.77	07.97	21202440	24771760	16.80
4,4'-DDT [2C]	17.15	17.05	17.25	10922680	12718530	16.40
4,4'-DDE [2C]	15.27	15.17	15.37	15157070	17838570	17.70
4,4'-DDE [2C]	15.27	-----	-----	15157070	17838570	17.70
4,4'-DDD [2C]	16.58	16.48	16.68	10544580	12595000	19.40
Methoxychlor [2C]	18.29	18.19	18.39	5512007	6281352	14.00
Heptachlor Epoxide [2C]	13.36	13.26	13.46	18619540	20634280	10.80
Heptachlor [2C]	09.46	09.36	09.56	22291840	24728900	10.90
Chlordane [2C]	14.63	14.53	14.73	18084660	20739950	14.70
Decachlorobiphenyl [2C]	20.39	20.29	20.49	10890370	11952650	9.80
Decachlorobiphenyl [2C]	20.39	20.29	20.49	10890370	11952650	9.80
Tetrachloro-m-xylene [2C]	05.02	04.92	05.12	14651820	16877800	15.20
Tetrachloro-m-xylene [2C]	05.02	04.92	05.12	14651820	16877800	15.20

* - Outside of QC limits

F-VII

Quantitation Report (QT Reviewed)

Signal #1 : G:\HPCHEM\GCECD7\DATA\20221230\7T31613.D\ECD1A.CH Vial: 24
Signal #2 : G:\HPCHEM\GCECD7\DATA\20221230\7T31613.D\ECD2B.CH
Acq On : 31 Dec 2022 4:50 Operator: WD
Sample : SEQ-CCV@50PPB Inst : GCECD-7
Misc : Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Dec 31 17:21 2022 Quant Results File: 80811228.RES

Quant Method : G:\HPCHEM\G...\80811228.M (Chemstation Integrator)
Title : Pesticides by Method SW-846 8081B
Last Update : Sat Dec 31 17:16:59 2022
Response via : Initial Calibration
DataAcq Meth : RUNPEST1.M

Volume Inj. : 2ul
Signal #1 Phase : RTx-50 Signal #2 Phase: RTx-CLPesticides II
Signal #1 Info : 30M x 0.53mm x 0. Signal #2 Info : 30M x 0.53mm x 0.42um

		Compound	RT#1	RT#2	Resp#1	Resp#2	ug/kg	ug/kg
		System Monitoring Compounds						
1)	S	TCMX	4.08	5.02	1754.1E6	843.9E6	55.400	57.596
		Spiked Amount 50.000	Range 43 - 129		Recovery =		110.80%	115.19%
21)	S	Decachlorobiphen	18.81	20.39	1634.2E6	597.6E6	58.469	54.877
		Spiked Amount 50.000	Range 42 - 136		Recovery =		116.94%	109.75%
		Target Compounds						
2)		alpha-BHC	5.16	6.70	3128.8E6	1324.2E6	58.961	58.379
3)	M	gamma-BHC (Linda	5.92	7.87	2938.4E6	1238.6E6	59.358	58.417
4)	M	Heptachlor	7.22	9.46	2856.1E6	1236.4E6	56.656	55.466
5)		beta-BHC	6.17	8.21	1279.5E6	516.4E6	59.208	55.881
6)		delta-BHC	6.64f	9.29	2840.5E6	1179.3E6	58.055	57.703
7)	M	Aldrin	8.13	10.70	2733.7E6	1137.4E6	57.964	58.078
8)		Heptachlor epoxi	10.27	13.36	2535.8E6	1031.7E6	57.462	55.410
9)		Endosulfan I	11.77f	14.63	2284.7E6	985.3E6	57.782	59.453m
10)		4,4'-DDE	11.87f	15.27	2480.5E6	891.9E6	57.227	58.846
11)	M	Dieldrin	12.88f	15.51	2567.6E6	964.3E6	57.605	58.136
12)	M	Endrin	13.83	16.19	2341.4E6	842.3E6	56.141	57.792
13)		4,4'-DDD	14.41f	16.58	1654.7E6	629.7E6	59.821	59.723
14)		Endosulfan II	14.59	16.65	2405.8E6	778.3E6	58.239	57.215
15)	M	4,4'-DDT	15.19	17.15	1804.3E6	635.9E6	52.894m	58.221
16)		Endrin aldehyde	15.72	17.29	1678.5E6	603.0E6	56.808	53.091
17)		Endosulfan sulfa	16.63	17.76	1782.1E6	670.4E6	57.686m	58.224
18)		Methoxychlor	16.43	18.29	883.6E6	314.1E6	56.578	56.979
19)		Mirex	16.36	18.48	1536.7E6	509.2E6	57.582	56.434
20)		Endrin ketone	17.12	18.56	2007.3E6	723.9E6	61.293	59.464
22)	L1	Chlordane (gamma	10.75f	14.14	2576.5E6	1065.4E6	56.898	56.981
23)	L1	Chlordane (alpha	11.28f	14.63	2611.5E6	1008.6E6	56.916	57.727
		Sum Chlordane (gamma)			5188.0E6	2074.0E6	113.814	114.708
		Average Chlordane (gamma)					56.907	57.354
		Sum Toxaphene (1)			0	0	N.D.	N.D.
		Average Toxaphene (1)					0.000	0.000

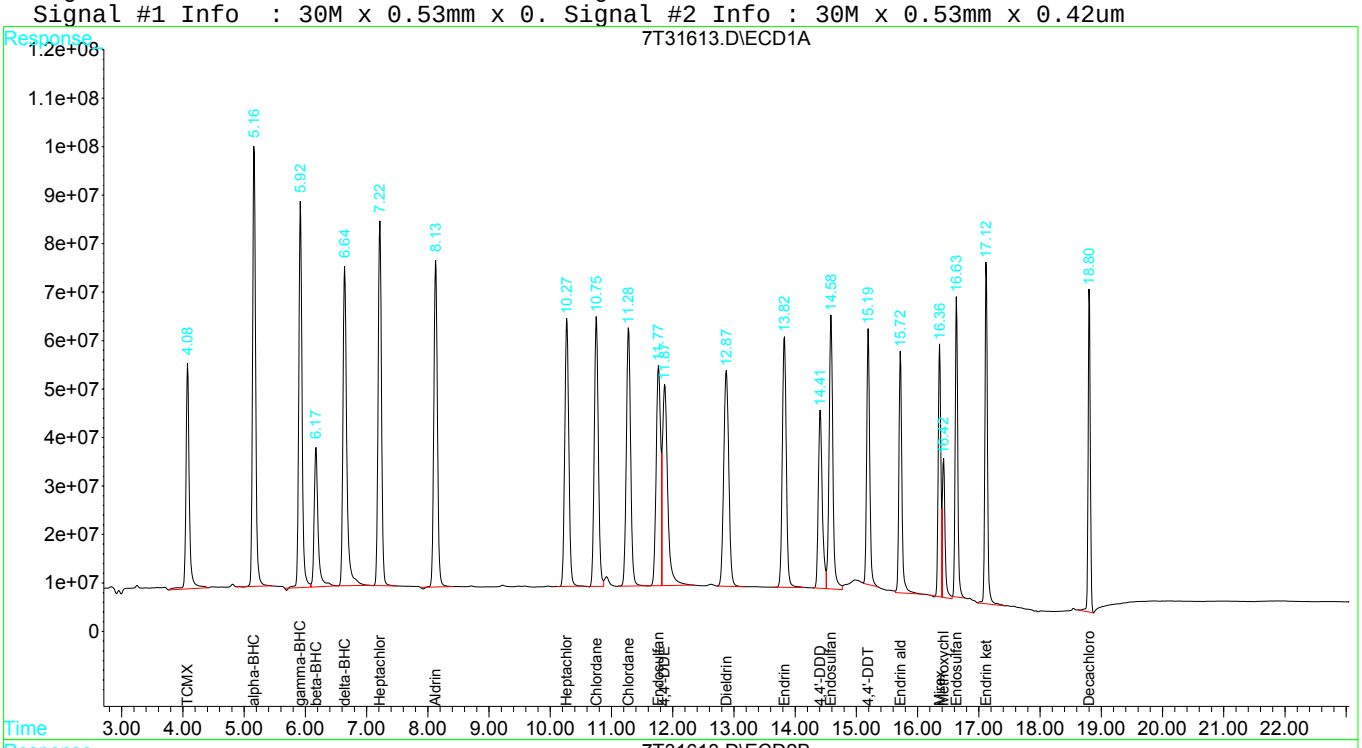
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7T31613.D 80811228.M Wed Jan 04 13:58:57 2023 SS

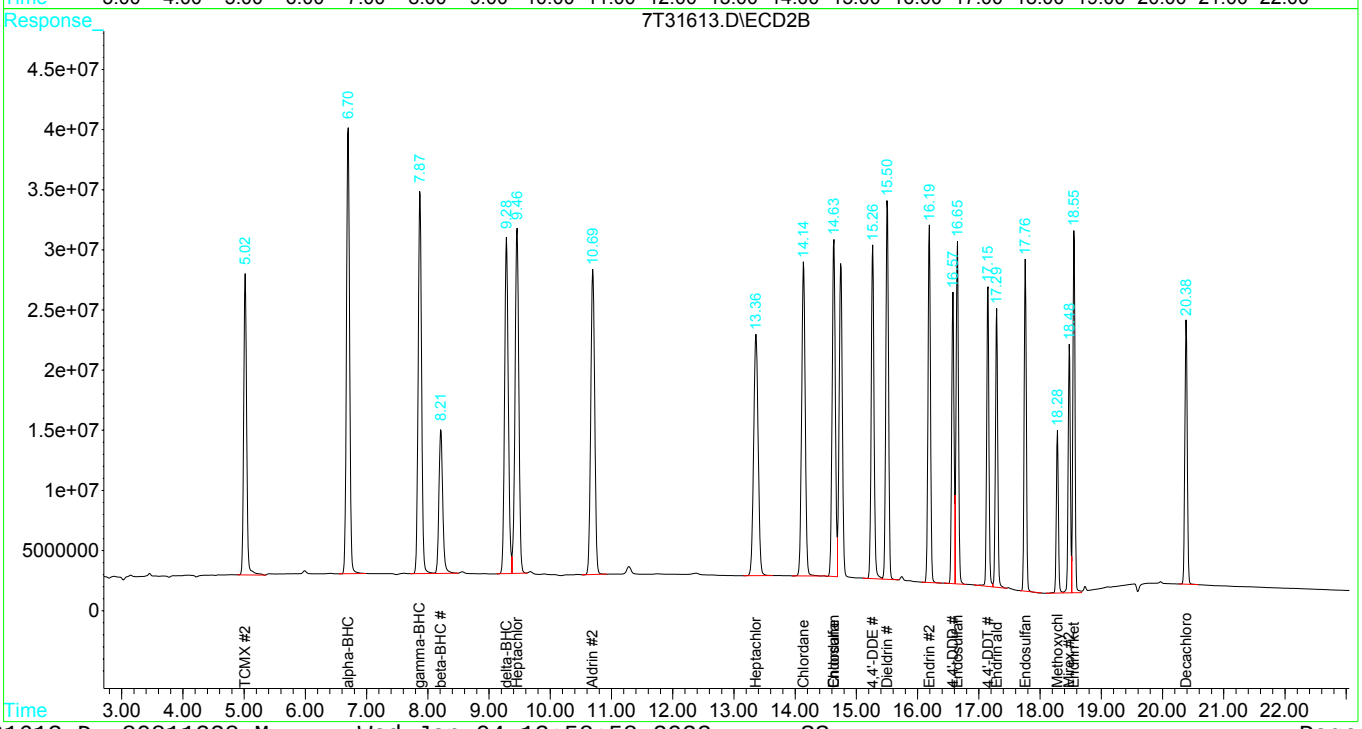
Quantitation Report (QT Reviewed)

Signal #1 : G:\HPCHEM\GCECD7\DATA\20221230\7T31613.D\ECD1A.CH Vial: 24
Signal #2 : G:\HPCHEM\GCECD7\DATA\20221230\7T31613.D\ECD2B.CH
Acq On : 31 Dec 2022 4:50 Operator: WD
Sample : SEQ-CCV@50PPB Inst : GCECD-7
Misc : Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Dec 31 17:21 2022 Quant Results File: 80811228.RES

Quant Method : G:\HPCHEM\G...\80811228.M (Chemstation Integrator)
Title : Pesticides by Method SW-846 8081B
Last Update : Sat Dec 31 17:16:59 2022
Response via : Multiple Level Calibration
DataAcq Meth : RUNPEST1.M

Volume Inj. : 2ul
Signal #1 Phase : RTx-50 Signal #2 Phase: RTx-CLPesticides II
Signal #1 Info : 30M x 0.53mm x 0. Signal #2 Info : 30M x 0.53mm x 0.42um





CALIBRATION VERIFICATION SUMMARY

Client: **Dynamic Earth LLC**
Work Order: **2120937**

Lab Sample ID (500):	SAA0020-CCV3(1)	Init. Calib. Date(s):	12/28/2022	12/29/2022
File ID:	7T31634.D	Date Analyzed:	12/31/2022 13:43	
Pesticides	Column 1	Matrix:	Water	

Individual Mix Compound		RT WINDOW		$\overline{CF}$	CF	%D
		FROM	TO			
Aldrin	08.17	08.07	08.27	47160890	57120620	21.10 *
alpha-BHC	05.20	05.10	05.30	53065430	64854060	22.20 *
alpha-Chlordane (cis)	11.33	11.23	11.43	45883450	53797420	17.20
beta-BHC	06.21	-----	-----	21609980	26765880	23.90 *
beta-BHC	06.21	06.11	06.31	21609980	26765880	23.90 *
delta-BHC	06.68	06.58	06.78	48927310	59255440	21.10 *
Dieldrin	12.93	12.83	13.03	44572680	53419280	19.80
Endosulfan I	11.82	11.72	11.92	39540850	47202520	19.40
Endosulfan II	14.62	14.52	14.72	41309610	49400000	19.60
Endosulfan sulfate	16.66	16.56	16.76	30893780	38413940	24.30 *
Endrin	13.87	13.77	13.97	41705440	47976880	15.00
Endrin aldehyde	15.75	15.65	15.85	29546590	33184340	12.30
Endrin ketone	17.15	17.05	17.25	32748990	39745120	21.40 *
gamma-Chlordane	10.80	10.70	10.90	45282670	51658520	14.10
gamma-BHC (Lindane)	05.95	05.85	06.05	49503550	61072100	23.40 *
4,4'-DDT	15.23	15.13	15.33	34111040	33794940	0.90
4,4'-DDE	11.92	11.82	12.02	43345070	51035780	17.70
4,4'-DDE	11.92	-----	-----	43345070	51035780	17.70
4,4'-DDD	14.45	14.35	14.55	27660840	37699200	36.30 *
Methoxychlor	16.45	16.35	16.55	15617680	16820710	7.70
Heptachlor Epoxide	10.32	10.22	10.42	44130120	52457780	18.90
Heptachlor	07.26	07.16	07.36	50410610	58681960	16.40
Chlordane	11.33	11.23	11.43	45583060	52727960	15.70
Decachlorobiphenyl	18.83	18.73	18.93	27949750	33278340	19.10
Decachlorobiphenyl	18.83	18.73	18.93	27949750	33278340	19.10
Tetrachloro-m-xylene	04.10	04.00	04.20	31663030	33218040	4.90
Tetrachloro-m-xylene	04.10	04.00	04.20	31663030	33218040	4.90

* - Outside of QC limits

F-VII

CALIBRATION VERIFICATION SUMMARY

Client: **Dynamic Earth LLC**
Work Order: **2120937**

Lab Sample ID (500):	SAA0020-CCV3(2)	Init. Calib. Date(s):	12/28/2022	12/29/2022
File ID:	7T31634.D	Date Analyzed:	12/31/2022 13:43	
Pesticides	Column 2	Matrix:	Water	

Individual Mix Compound		RT WINDOW		$\overline{CF}$	CF	%D
		FROM	TO			
Aldrin [2C]	10.74	10.64	10.84	19584280	23419680	19.60
alpha-BHC [2C]	06.73	06.63	06.83	22683710	27243340	20.10 *
alpha-Chlordane (cis) [2C]	14.67	14.57	14.77	17471800	20799660	19.00
beta-BHC [2C]	08.26	-----	-----	9240612	10681290	15.60
beta-BHC [2C]	08.26	08.16	08.36	9240612	10681290	15.60
delta-BHC [2C]	09.33	09.23	09.43	20437370	24502500	19.90
Dieldrin [2C]	15.53	15.43	15.63	16586560	19652600	18.50
Endosulfan I [2C]	14.67	14.57	14.77	16572580	20799660	25.50 *
Endosulfan II [2C]	16.67	16.57	16.77	13602510	16280740	19.70
Endosulfan sulfate [2C]	17.78	17.68	17.88	11514510	13681620	18.80
Endrin [2C]	16.22	16.12	16.32	14574770	17292030	18.60
Endrin aldehyde [2C]	17.31	17.21	17.41	11357280	12399830	9.20
Endrin ketone [2C]	18.58	18.48	18.68	12173110	14572090	19.70
gamma-Chlordane [2C]	14.18	14.08	14.28	18697510	21987420	17.60
gamma-BHC (Lindane) [2C]	07.91	07.81	08.01	21202440	25466260	20.10 *
4,4'-DDT [2C]	17.17	17.07	17.27	10922680	10774170	1.40
4,4'-DDE [2C]	15.30	15.20	15.40	15157070	18205330	20.10 *
4,4'-DDE [2C]	15.30	-----	-----	15157070	18205330	20.10 *
4,4'-DDD [2C]	16.60	16.50	16.70	10544580	14200920	34.70 *
Methoxychlor [2C]	18.30	18.20	18.40	5512007	5601428	1.60
Heptachlor Epoxide [2C]	13.41	13.31	13.51	18619540	21157100	13.60
Heptachlor [2C]	09.50	09.40	09.60	22291840	25327000	13.60
Chlordane [2C]	14.67	14.57	14.77	18084660	21393540	18.30
Decachlorobiphenyl [2C]	20.41	20.31	20.51	10890370	12667020	16.30
Decachlorobiphenyl [2C]	20.41	20.31	20.51	10890370	12667020	16.30
Tetrachloro-m-xylene [2C]	05.05	04.95	05.15	14651820	17324670	18.20
Tetrachloro-m-xylene [2C]	05.05	04.95	05.15	14651820	17324670	18.20

* - Outside of QC limits

F-VII

Quantitation Report (QT Reviewed)

Signal #1 : G:\HPCHEM\GCECD7\DATA\20221230\7T31634.D\ECD1A.CH Vial: 45
Signal #2 : G:\HPCHEM\GCECD7\DATA\20221230\7T31634.D\ECD2B.CH
Acq On : 31 Dec 2022 13:43 Operator: WD
Sample : SEQ-CCV@50PPB Inst : GCECD-7
Misc : Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Jan 3 13:38 2023 Quant Results File: 80811228.RES

Quant Method : G:\HPCHEM\G...\80811228.M (Chemstation Integrator)
Title : Pesticides by Method SW-846 8081B
Last Update : Tue Jan 03 11:35:45 2023
Response via : Initial Calibration
DataAcq Meth : RUNPEST1.M

Volume Inj. : 2ul
Signal #1 Phase : RTx-50 Signal #2 Phase: RTx-CLPesticides II
Signal #1 Info : 30M x 0.53mm x 0. Signal #2 Info : 30M x 0.53mm x 0.42um

		Compound	RT#1	RT#2	Resp#1	Resp#2	ug/kg	ug/kg
		System Monitoring Compounds						
1)	S	TCMX	4.10	5.05f	1660.9E6	866.2E6	52.456m	59.121
		Spiked Amount 50.000	Range 43 - 129		Recovery =		104.91%	118.24%
21)	S	Decachlorobiphen	18.83	20.41	1663.9E6	633.4E6	59.532	58.157
		Spiked Amount 50.000	Range 42 - 136		Recovery =		119.06%	116.31%
		Target Compounds						
2)		alpha-BHC	5.20f	6.73f	3242.7E6	1362.2E6	61.108	60.050
3)	M	gamma-BHC (Linda	5.95f	7.91f	3053.6E6	1273.3E6	61.685	60.055
4)	M	Heptachlor	7.26f	9.50f	2934.1E6	1266.3E6	58.204	56.808
5)		beta-BHC	6.21f	8.26f	1338.3E6	534.1E6	61.929	57.795
6)		delta-BHC	6.68f	9.33f	2962.8E6	1225.1E6	60.555	59.945
7)	M	Aldrin	8.17f	10.74f	2856.0E6	1171.0E6	60.559	59.792
8)		Heptachlor epoxi	10.32f	13.41f	2622.9E6	1057.9E6	59.435	56.814m
9)		Endosulfan I	11.82f	14.67f	2360.1E6	1040.0E6	59.688	62.753
10)		4,4'-DDE	11.92f	15.30f	2551.8E6	910.3E6	58.871m	60.056
11)	M	Dieldrin	12.93f	15.53f	2671.0E6	982.6E6	59.924m	59.243
12)	M	Endrin	13.87f	16.22f	2398.8E6	864.6E6	57.519	59.322
13)		4,4'-DDD	14.45f	16.60	1885.0E6	710.0E6	68.145	67.338
14)		Endosulfan II	14.62f	16.67	2470.0E6	814.0E6	59.792	59.845
15)	M	4,4'-DDT	15.23f	17.17	1689.7E6	538.7E6	49.537	49.320
16)		Endrin aldehyde	15.75f	17.31	1659.2E6	620.0E6	56.156	54.590
17)		Endosulfan sulfa	16.66f	17.78	1920.7E6	684.1E6	62.171	59.410
18)		Methoxychlor	16.45	18.30	841.0E6	280.1E6	53.851	50.811
19)		Mirex	16.39f	18.50	1587.1E6	514.2E6	59.469	56.989
20)		Endrin ketone	17.15	18.58	1987.3E6	728.6E6	60.681	59.854
22)	L1	Chlordane (gamma	10.80f	14.18f	2582.9E6	1099.4E6	57.040	58.798
23)	L1	Chlordane (alpha	11.33f	14.67f	2689.9E6	1040.0E6	58.624	59.524
		Sum Chlordane (gamma)			5272.8E6	2139.4E6	115.664	118.321
Average		Chlordane (gamma)					57.832	59.161
		Sum Toxaphene (1)			0	0	N.D.	N.D.
Average		Toxaphene (1)					0.000	0.000

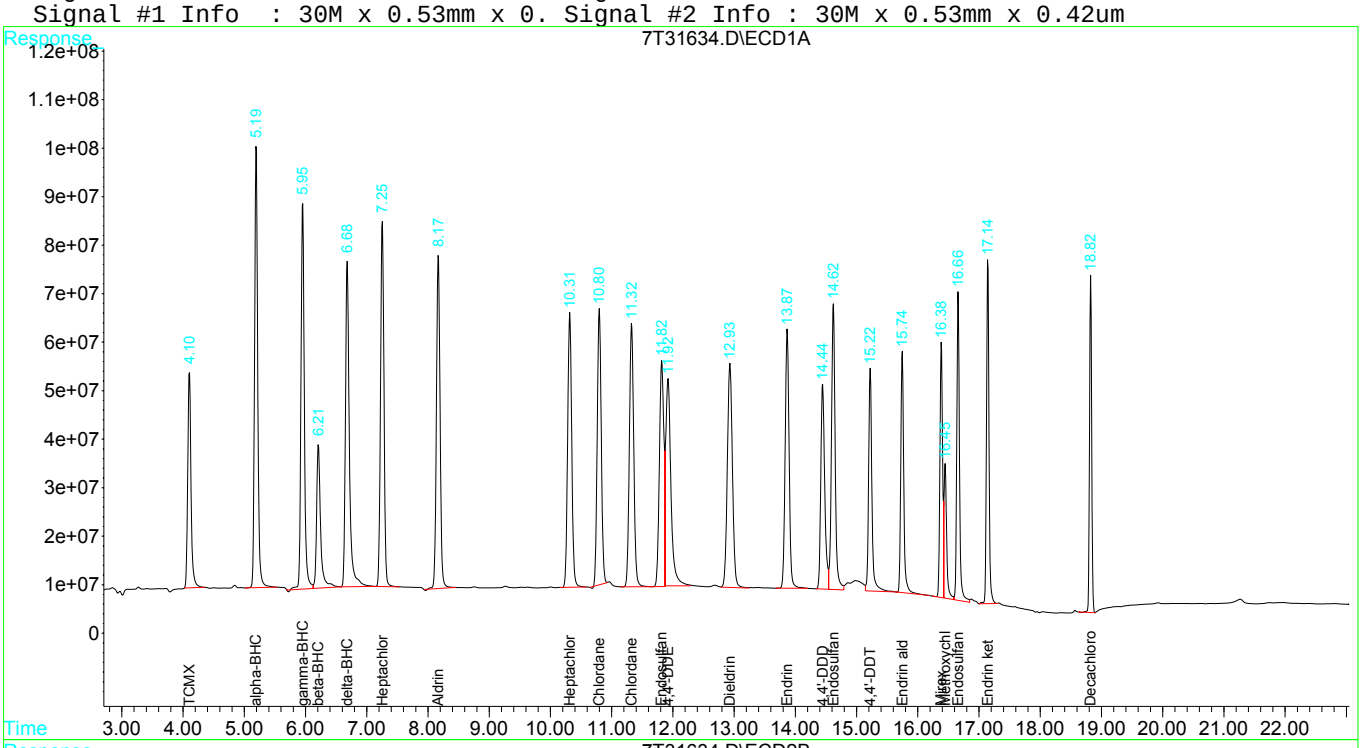
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7T31634.D 80811228.M Wed Jan 04 13:58:59 2023 SS

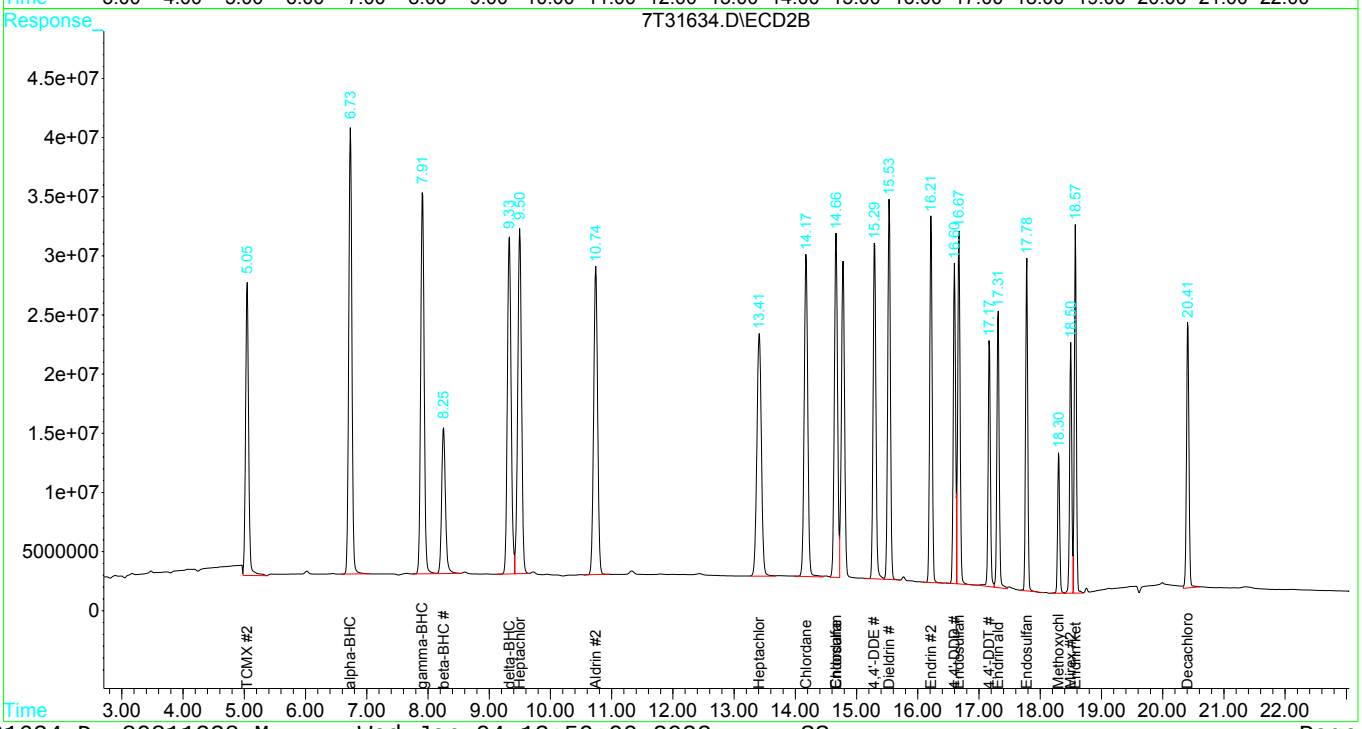
Quantitation Report (QT Reviewed)

Signal #1 : G:\HPCHEM\GCECD7\DATA\20221230\7T31634.D\ECD1A.CH Vial: 45
Signal #2 : G:\HPCHEM\GCECD7\DATA\20221230\7T31634.D\ECD2B.CH
Acq On : 31 Dec 2022 13:43 Operator: WD
Sample : SEQ-CCV@50PPB Inst : GCECD-7
Misc : Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Jan 3 13:38 2023 Quant Results File: 80811228.RES

Quant Method : G:\HPCHEM\G...\80811228.M (Chemstation Integrator)
Title : Pesticides by Method SW-846 8081B
Last Update : Tue Jan 03 11:35:45 2023
Response via : Multiple Level Calibration
DataAcq Meth : RUNPEST1.M

Volume Inj. : 2ul
Signal #1 Phase : RTx-50 Signal #2 Phase: RTx-CLPesticides II
Signal #1 Info : 30M x 0.53mm x 0. Signal #2 Info : 30M x 0.53mm x 0.42um





CALIBRATION VERIFICATION SUMMARY

Client: **Dynamic Earth LLC**
Work Order: **2120937**

Lab Sample ID (Calib):	SAA0020-CCV4(1)	Init. Calib. Date(s):	12/28/2022	12/29/2022
File ID:	7T31655.D	Date Analyzed:	12/31/2022 22:36	
Pesticides	Column 1	Matrix:	Water	

Individual Mix Compound		RT WINDOW		$\overline{CF}$	CF	%D
		FROM	TO			
Aldrin	08.20	08.10	08.30	47160890	58777340	24.60 *
alpha-BHC	05.22	05.12	05.32	53065430	68934300	29.90 *
alpha-Chlordane (cis)	11.36	11.26	11.46	45883450	55429440	20.80 *
beta-BHC	06.23	-----	-----	21609980	26416820	22.20 *
beta-BHC	06.23	06.13	06.33	21609980	26416820	22.20 *
delta-BHC	06.71	06.61	06.81	48927310	62504640	27.80 *
Dieldrin	12.98	12.88	13.08	44572680	55489700	24.50 *
Endosulfan I	11.86	11.76	11.96	39540850	48865320	23.60 *
Endosulfan II	14.65	14.55	14.75	41309610	48419900	17.20
Endosulfan sulfate	16.68	16.58	16.78	30893780	37614960	21.80 *
Endrin	13.90	13.80	14.00	41705440	47705500	14.40
Endrin aldehyde	15.77	15.67	15.87	29546590	35803000	21.20 *
Endrin ketone	17.16	17.06	17.26	32748990	23423680	28.50 *
gamma-Chlordane	10.83	10.73	10.93	45282670	53605380	18.40
gamma-BHC (Lindane)	05.98	05.88	06.08	49503550	58740280	18.70
4,4'-DDT	15.24	15.14	15.34	34111040	6712372	80.30 *
4,4'-DDE	11.96	11.86	12.06	43345070	54177480	25.00 *
4,4'-DDE	11.96	-----	-----	43345070	54177480	25.00 *
4,4'-DDD	14.47	14.37	14.57	27660840	52067440	88.20 *
Methoxychlor	16.41	16.31	16.51	15617680	34899320	123.00*
Heptachlor Epoxide	10.35	10.25	10.45	44130120	54301420	23.00 *
Heptachlor	07.28	07.18	07.38	50410610	39954380	20.70 *
Chlordane	11.36	11.26	11.46	45583060	54517410	19.60
Decachlorobiphenyl	18.84	18.74	18.94	27949750	32379460	15.80
Decachlorobiphenyl	18.84	18.74	18.94	27949750	32379460	15.80
Tetrachloro-m-xylene	04.12	04.02	04.22	31663030	40378080	27.50 *
Tetrachloro-m-xylene	04.12	04.02	04.22	31663030	40378080	27.50 *

* - Outside of QC limits

F-VII

CALIBRATION VERIFICATION SUMMARY

Client: **Dynamic Earth LLC**
Work Order: **2120937**

Lab Sample ID (Calib):	SAA0020-CCV4(2)	Init. Calib. Date(s):	12/28/2022 12/29/2022
File ID:	7T31655.D	Date Analyzed:	12/31/2022 22:36
Pesticides	Column 2	Matrix:	Water

Individual Mix Compound		RT WINDOW		$\overline{CF}$	CF	%D
		FROM	TO			
Aldrin [2C]	10.78	10.68	10.88	19584280	24337460	24.30 *
alpha-BHC [2C]	06.76	06.66	06.86	22683710	28908400	27.40 *
alpha-Chlordane (cis) [2C]	14.69	14.59	14.79	17471800	21053880	20.50 *
beta-BHC [2C]	08.28	-----	-----	9240612	10661320	15.40
beta-BHC [2C]	08.28	08.18	08.38	9240612	10661320	15.40
delta-BHC [2C]	09.36	09.26	09.46	20437370	25521580	24.90 *
Dieldrin [2C]	15.56	15.46	15.66	16586560	20178740	21.70 *
Endosulfan I [2C]	14.69	14.59	14.79	16572580	21053880	27.00 *
Endosulfan II [2C]	16.69	16.59	16.79	13602510	18971390	39.50 *
Endosulfan sulfate [2C]	17.80	17.70	17.90	11514510	13580860	17.90
Endrin [2C]	16.24	16.14	16.34	14574770	16283240	11.70
Endrin aldehyde [2C]	17.33	17.23	17.43	11357280	12394970	9.10
Endrin ketone [2C]	18.59	18.49	18.69	12173110	8702054	28.50 *
gamma-Chlordane [2C]	14.21	14.11	14.31	18697510	22434100	20.00
gamma-BHC (Lindane) [2C]	07.94	07.84	08.04	21202440	24655900	16.30
4,4'-DDT [2C]	17.18	17.08	17.28	10922680	1768151	83.80 *
4,4'-DDE [2C]	15.32	15.22	15.42	15157070	18611840	22.80 *
4,4'-DDE [2C]	15.32	-----	-----	15157070	18611840	22.80 *
4,4'-DDD [2C]	16.62	16.52	16.72	10544580	18999500	80.20 *
Methoxychlor [2C]	18.32	18.22	18.42	5512007	1529436	72.30 *
Heptachlor Epoxide [2C]	13.45	13.35	13.55	18619540	21876480	17.50
Heptachlor [2C]	09.53	09.43	09.63	22291840	16942280	24.00 *
Chlordane [2C]	14.69	14.59	14.79	18084660	21743990	20.20 *
Decachlorobiphenyl [2C]	20.43	20.33	20.53	10890370	12393170	13.80
Decachlorobiphenyl [2C]	20.43	20.33	20.53	10890370	12393170	13.80
Tetrachloro-m-xylene [2C]	05.07	04.97	05.17	14651820	17836420	21.70 *
Tetrachloro-m-xylene [2C]	05.07	04.97	05.17	14651820	17836420	21.70 *

* - Outside of QC limits

F-VII

Quantitation Report (QT Reviewed)

Signal #1 : G:\HPCHEM\GCECD7\DATA\20221230\7T31655.D\ECD1A.CH Vial: 66
Signal #2 : G:\HPCHEM\GCECD7\DATA\20221230\7T31655.D\ECD2B.CH
Acq On : 31 Dec 2022 10:36 pm Operator: WD
Sample : SEQ-CCV@50PPB Inst : GCECD-7
Misc : Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Jan 3 13:41 2023 Quant Results File: 80811228.RES

Quant Method : G:\HPCHEM\G...\80811228.M (Chemstation Integrator)
Title : Pesticides by Method SW-846 8081B
Last Update : Tue Jan 03 13:40:33 2023
Response via : Initial Calibration
DataAcq Meth : RUNPEST1.M

Volume Inj. : 2ul
Signal #1 Phase : RTx-50 Signal #2 Phase: RTx-CLPesticides II
Signal #1 Info : 30M x 0.53mm x 0. Signal #2 Info : 30M x 0.53mm x 0.42um

		Compound	RT#1	RT#2	Resp#1	Resp#2	ug/kg	ug/kg
		System Monitoring Compounds						
1)	S	TCMX	4.12	5.07	2018.9E6	891.8E6	63.762	60.868
		Spiked Amount 50.000	Range 43 - 129		Recovery =		127.52%	121.74%
21)	S	Decachlorobiphen	18.84	20.43	1619.0E6	619.7E6	57.924	56.900
		Spiked Amount 50.000	Range 42 - 136		Recovery =		115.85%	113.80%
		Target Compounds						
2)		alpha-BHC	5.22	6.76f	3446.7E6	1445.4E6	64.952	63.721
3)	M	gamma-BHC (Linda	5.98	7.94f	2937.0E6	1232.8E6	59.329	58.144
4)	M	Heptachlor	7.28f	9.53f	1997.7E6	847.1E6	39.629	38.001
5)		beta-BHC	6.23	8.28f	1320.8E6	533.1E6	61.122	57.687
6)		delta-BHC	6.71	9.36f	3125.2E6	1276.1E6	63.875	62.439
7)	M	Aldrin	8.20f	10.78f	2938.9E6	1216.9E6	62.316	62.135
8)		Heptachlor epoxi	10.35f	13.45f	2715.1E6	1093.8E6	61.524	58.746
9)		Endosulfan I	11.86f	14.69f	2443.3E6	1052.7E6	61.791	63.520
10)		4,4'-DDE	11.96f	15.32	2708.9E6	930.6E6	62.496	61.397
11)	M	Dieldrin	12.98f	15.56	2774.5E6	1008.9E6	62.246	60.829
12)	M	Endrin	13.90f	16.24	2385.3E6	814.2E6	57.193	55.861
13)		4,4'-DDD	14.47	16.62	2603.4E6	950.0E6	94.118	90.091
14)		Endosulfan II	14.65f	16.69	2421.0E6	948.6E6	58.606	69.735
15)	M	4,4'-DDT	15.24	17.18	335.6E6	88407541	9.839	8.094
16)		Endrin aldehyde	15.77	17.33	1790.1E6	619.7E6	60.587	54.568
17)		Endosulfan sulfa	16.68	17.80	1880.7E6	679.0E6	60.878	58.973
18)		Methoxychlor	16.41f	18.32	1745.0E6	76471800	111.730	13.874 #
19)		Mirex	16.41	18.52	1745.0E6	485.7E6	65.385	53.825
20)		Endrin ketone	17.16	18.59	1171.2E6	435.1E6	35.762	35.743
22)	L1	Chlordane (gamma	10.83f	14.21f	2680.3E6	1121.7E6	59.190	59.992
23)	L1	Chlordane (alpha	11.36f	14.69f	2771.5E6	1052.7E6	60.402	60.251
		Sum Chlordane (gamma)			5451.7E6	2174.4E6	119.592	120.243
		Average Chlordane (gamma)					59.796	60.122
		Sum Toxaphene (1)			0	0	N.D.	N.D.
		Average Toxaphene (1)					0.000	0.000

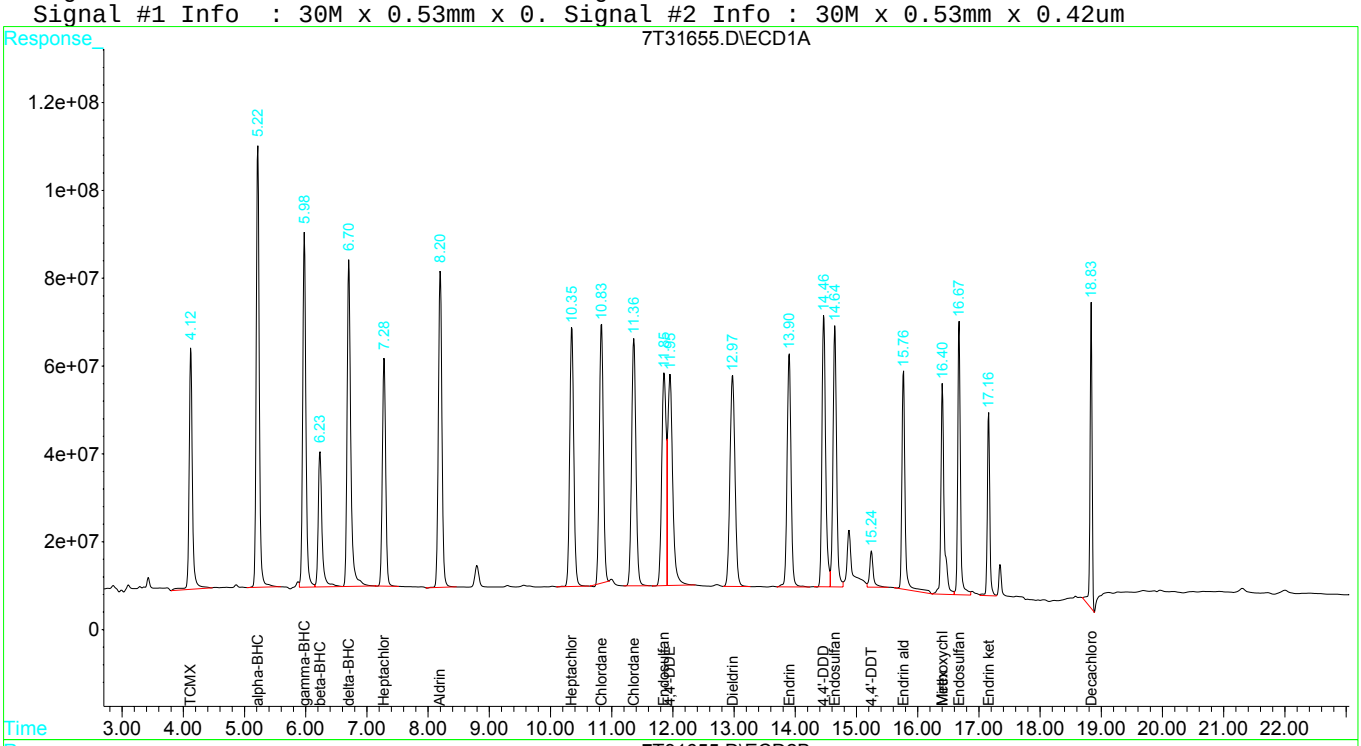
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.
7T31655.D 80811228.M Tue Jan 03 13:56:44 2023 SS

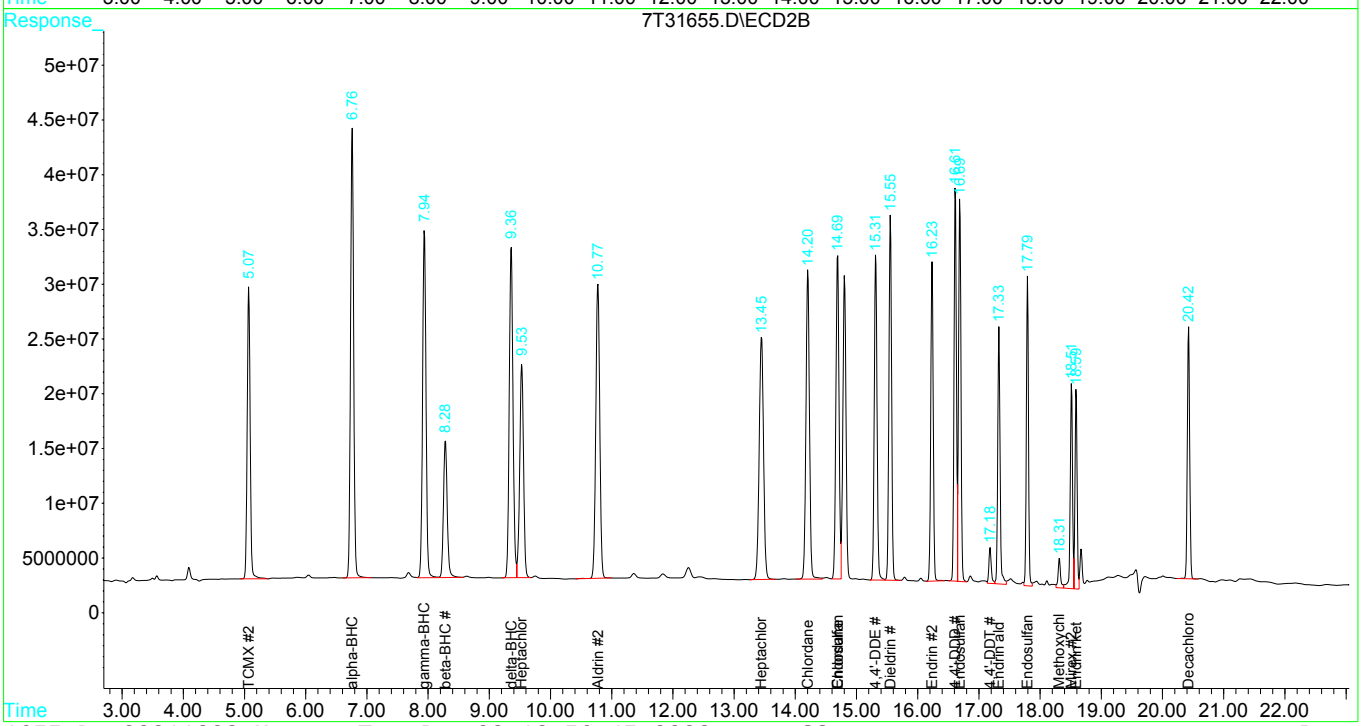
Quantitation Report (QT Reviewed)

Signal #1 : G:\HPCHEM\GCECD7\DATA\20221230\7T31655.D\ECD1A.CH Vial: 66
Signal #2 : G:\HPCHEM\GCECD7\DATA\20221230\7T31655.D\ECD2B.CH
Acq On : 31 Dec 2022 10:36 pm Operator: WD
Sample : SEQ-CCV@50PPB Inst : GCECD-7
Misc : Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Jan 3 13:41 2023 Quant Results File: 80811228.RES

Quant Method : G:\HPCHEM\G...\80811228.M (Chemstation Integrator)
Title : Pesticides by Method SW-846 8081B
Last Update : Tue Jan 03 13:40:33 2023
Response via : Multiple Level Calibration
DataAcq Meth : RUNPEST1.M

Volume Inj. : 2ul
Signal #1 Phase : RTx-50 Signal #2 Phase: RTx-CLPesticides II
Signal #1 Info : 30M x 0.53mm x 0. Signal #2 Info : 30M x 0.53mm x 0.42um





CALIBRATION VERIFICATION SUMMARY

Client: **Dynamic Earth LLC**
Work Order: **2120937**

Lab Sample ID (50 pp):	SAA0029-CCV1(1)	Init. Calib. Date(s):	12/28/2022	12/29/2022
File ID:	7T31658.D	Date Analyzed:	01/03/2023 15:10	
Pesticides	Column 1	Matrix:	Water	

Individual Mix Compound		RT WINDOW		$\overline{CF}$	CF	%D
		FROM	TO			
Aldrin	08.25	08.15	08.35	47160890	50571360	7.20
alpha-BHC	05.25	05.15	05.35	53065430	57937600	9.20
alpha-Chlordane (cis)	11.42	11.32	11.52	45883450	48234080	5.10
beta-BHC	06.27	06.17	06.37	21609980	21525740	0.40
delta-BHC	06.74	06.64	06.84	48927310	52704840	7.70
Dieldrin	13.05	12.95	13.15	44572680	47226340	6.00
Endosulfan I	11.92	11.82	12.02	39540850	42419360	7.30
Endosulfan II	14.69	14.59	14.79	41309610	43282760	4.80
Endosulfan sulfate	16.71	16.61	16.81	30893780	34158740	10.60
Endrin	13.95	13.85	14.05	41705440	45218900	8.40
Endrin aldehyde	15.80	15.70	15.90	29546590	30589280	3.50
Endrin ketone	17.19	17.09	17.29	32748990	38807620	18.50
gamma-Chlordane	10.89	10.79	10.99	45282670	48926120	8.00
gamma-BHC (Lindane)	06.01	05.91	06.11	49503550	52708860	6.50
4,4'-DDT	15.28	15.18	15.38	34111040	38855240	13.90
4,4'-DDE	12.02	11.92	12.12	43345070	46506200	7.30
4,4'-DDD	14.51	14.41	14.61	27660840	30866180	11.60
Methoxychlor	16.49	16.39	16.59	15617680	17669060	13.10
Heptachlor Epoxide	10.40	10.30	10.50	44130120	47084400	6.70
Heptachlor	07.33	07.23	07.43	50410610	54180980	7.50
Chlordane	11.42	11.32	11.52	45583060	48580100	6.60
Decachlorobiphenyl	18.86	18.76	18.96	27949750	30108400	7.70
Tetrachloro-m-xylene	04.15	04.05	04.25	31663030	34696000	9.60

* - Outside of QC limits

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CALIBRATION VERIFICATION SUMMARY

Client: **Dynamic Earth LLC**
Work Order: **2120937**

Lab Sample ID (50 pp):	SAA0029-CCV1(2)	Init. Calib. Date(s):	12/28/2022	12/29/2022
File ID:	7T31658.D	Date Analyzed:	01/03/2023 15:10	
Pesticides	Column 2	Matrix:	Water	

Individual Mix Compound		RT WINDOW		$\overline{CF}$	CF	%D
		FROM	TO			
Aldrin [2C]	10.83	10.73	10.93	19584280	20832400	6.40
alpha-BHC [2C]	06.80	06.70	06.90	22683710	24385800	7.50
alpha-Chlordane (cis) [2C]	14.74	14.64	14.84	17471800	18574290	6.30
beta-BHC [2C]	08.33	08.23	08.43	9240612	9462806	2.40
delta-BHC [2C]	09.41	09.31	09.51	20437370	21730040	6.30
Dieldrin [2C]	15.59	15.49	15.69	16586560	17803170	7.30
Endosulfan I [2C]	14.74	14.64	14.84	16572580	18574290	12.10
Endosulfan II [2C]	16.72	16.62	16.82	13602510	14456270	6.30
Endosulfan sulfate [2C]	17.82	17.72	17.92	11514510	12302380	6.80
Endrin [2C]	16.27	16.17	16.37	14574770	15992340	9.70
Endrin aldehyde [2C]	17.36	17.26	17.46	11357280	10844130	4.50
Endrin ketone [2C]	18.62	18.52	18.72	12173110	13095180	7.60
gamma-Chlordane [2C]	14.25	14.15	14.35	18697510	19603340	4.80
gamma-BHC (Lindane) [2C]	07.99	07.89	08.09	21202440	22580360	6.50
4,4'-DDT [2C]	17.21	17.11	17.31	10922680	12800520	17.20
4,4'-DDE [2C]	15.35	15.25	15.45	15157070	16560490	9.30
4,4'-DDD [2C]	16.65	16.55	16.75	10544580	11413610	8.20
Methoxychlor [2C]	18.34	18.24	18.44	5512007	6124426	11.10
Heptachlor Epoxide [2C]	13.51	13.41	13.61	18619540	19326250	3.80
Heptachlor [2C]	09.59	09.49	09.69	22291840	23412760	5.00
Chlordane [2C]	14.74	14.64	14.84	18084660	19088810	5.60
Decachlorobiphenyl [2C]	20.46	20.36	20.56	10890370	11094000	1.90
Tetrachloro-m-xylene [2C]	05.10	05.00	05.20	14651820	15128560	3.30

* - Outside of QC limits

F-VII

Quantitation Report (QT Reviewed)

Signal #1 : G:\HPCHEM\GCECD7\DATA\20230103\7T31658.D\ECD1A.CH Vial: 3
Signal #2 : G:\HPCHEM\GCECD7\DATA\20230103\7T31658.D\ECD2B.CH
Acq On : 3 Jan 2023 3:10 pm Operator: WD
Sample : SEQ-CCV@50PPB Inst : HP G1530A
Misc : Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Jan 3 16:46 2023 Quant Results File: 80811228.RES

Quant Method : G:\HPCHEM\G...\80811228.M (Chemstation Integrator)
Title : Pesticides by Method SW-846 8081B
Last Update : Tue Jan 03 16:46:04 2023
Response via : Initial Calibration
DataAcq Meth : RUNPEST1.M

Volume Inj. : 2ul
Signal #1 Phase : RTx-50 Signal #2 Phase: RTx-CLPesticides II
Signal #1 Info : 30M x 0.53mm x 0. Signal #2 Info : 30M x 0.53mm x 0.42um

	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/kg	ug/kg
	System Monitoring Compounds						
1) S	TCMX	4.15	5.10	1734.8E6	756.4E6	54.789	51.627
	Spiked Amount 50.000	Range 43 - 129		Recovery =		109.58%	103.25%
21) S	Decachlorobiphen	18.86	20.46	1505.4E6	554.7E6	53.862	50.935
	Spiked Amount 50.000	Range 42 - 136		Recovery =		107.72%	101.87%
	Target Compounds						
2)	alpha-BHC	5.25	6.80	2896.9E6	1219.3E6	54.591	53.752
3) M	gamma-BHC (Linda	6.01	7.99	2635.4E6	1129.0E6	53.237	53.249
4) M	Heptachlor	7.33	9.59	2709.0E6	1170.6E6	53.740	52.514
5)	beta-BHC	6.27	8.33	1076.3E6	473.1E6	49.805	51.202
6)	delta-BHC	6.74	9.41	2635.2E6	1086.5E6	53.860	53.163
7) M	Aldrin	8.25	10.83	2528.6E6	1041.6E6	53.616	53.187
8)	Heptachlor epoxi	10.40	13.51	2354.2E6	966.3E6	53.347	51.898
9)	Endosulfan I	11.92	14.74	2121.0E6	928.7E6	53.640	56.039
10)	4,4'-DDE	12.02	15.35	2325.3E6	828.0E6	53.646	54.630
11) M	Dieldrin	13.05	15.59	2361.3E6	890.2E6	52.977	53.667
12) M	Endrin	13.95	16.27	2260.9E6	799.6E6	54.212	54.863
13)	4,4'-DDD	14.51	16.65	1543.3E6	570.7E6	55.794	54.121
14)	Endosulfan II	14.69	16.72	2164.1E6	722.8E6	52.388	53.138
15) M	4,4'-DDT	15.28	17.21	1942.8E6	640.0E6	56.954	58.596
16)	Endrin aldehyde	15.80	17.36	1529.5E6	542.2E6	51.764	47.741
17)	Endosulfan sulfa	16.71	17.82	1707.9E6	615.1E6	55.284	53.421
18)	Methoxychlor	16.49	18.34	883.5E6	306.2E6	56.567	55.555
19)	Mirex	16.44	18.54	1407.4E6	459.1E6	52.738	50.885
20)	Endrin ketone	17.19	18.62	1940.4E6	654.8E6	59.250	53.787
22) L1	Chlordane (gamma	10.89	14.25	2446.3E6	980.2E6	54.023	52.422
23) L1	Chlordane (alpha	11.42	14.74	2411.7E6	928.7E6	52.562	53.155
	Sum Chlordane (gamma)			4858.0E6	1908.9E6	106.585	105.577
Average	Chlordane (gamma)					53.292	52.789
	Sum Toxaphene (1)			0	0	N.D.	N.D.
Average	Toxaphene (1)					0.000	0.000

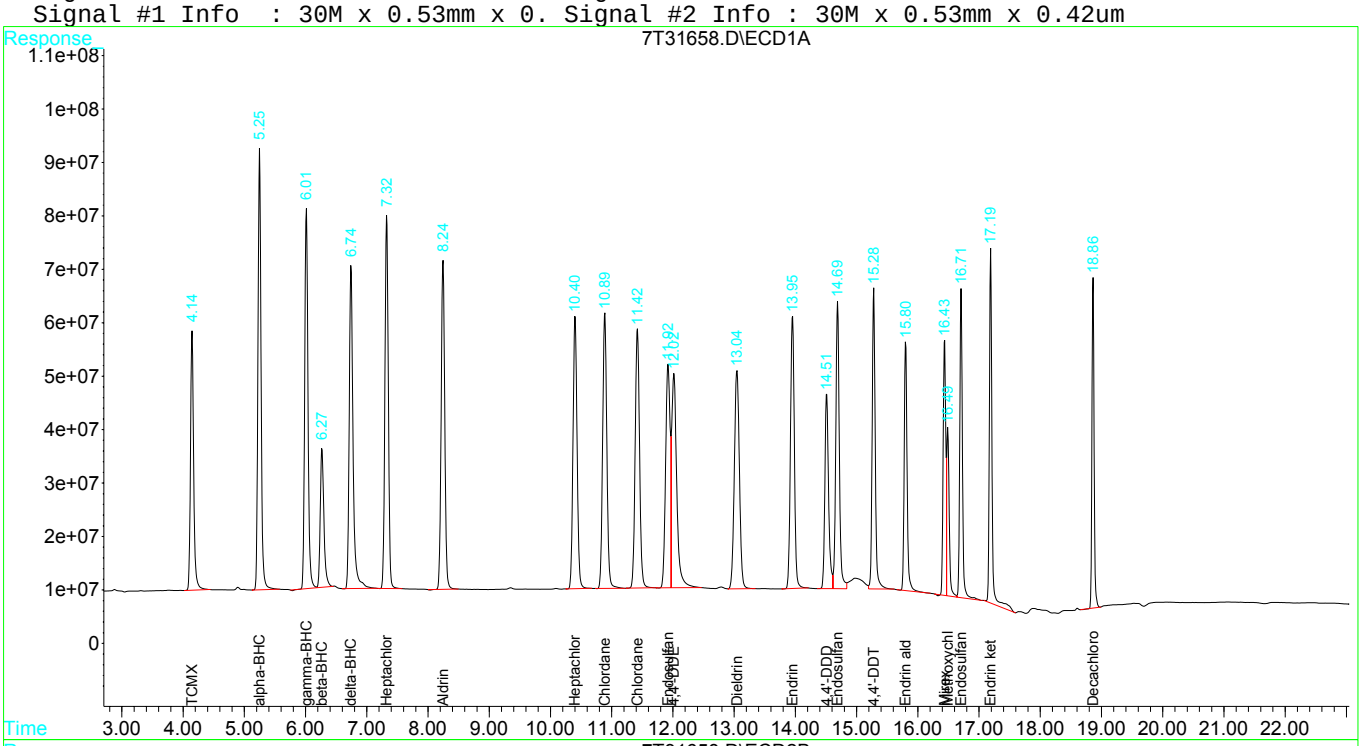
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

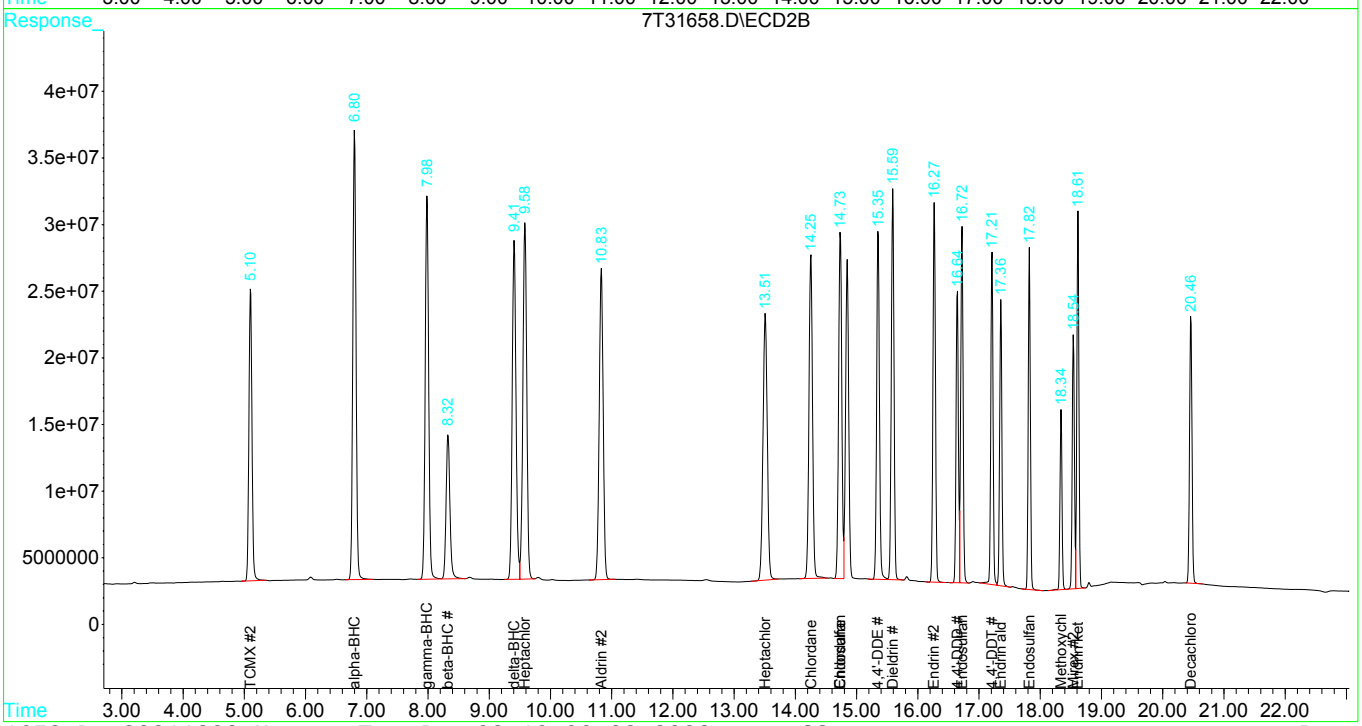
Quantitation Report (QT Reviewed)

Signal #1 : G:\HPCHEM\GCECD7\DATA\20230103\7T31658.D\ECD1A.CH Vial: 3
Signal #2 : G:\HPCHEM\GCECD7\DATA\20230103\7T31658.D\ECD2B.CH
Acq On : 3 Jan 2023 3:10 pm Operator: WD
Sample : SEQ-CCV@50PPB Inst : HP G1530A
Misc : Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Jan 3 16:46 2023 Quant Results File: 80811228.RES

Quant Method : G:\HPCHEM\G...\80811228.M (Chemstation Integrator)
Title : Pesticides by Method SW-846 8081B
Last Update : Tue Jan 03 16:46:04 2023
Response via : Multiple Level Calibration
DataAcq Meth : RUNPEST1.M

Volume Inj. : 2ul
Signal #1 Phase : RTx-50 Signal #2 Phase: RTx-CLPesticides II
Signal #1 Info : 30M x 0.53mm x 0. Signal #2 Info : 30M x 0.53mm x 0.42um





CALIBRATION VERIFICATION SUMMARY

Client: **Dynamic Earth LLC**
Work Order: **2120937**

Lab Sample ID (50):	SAA0038-CCV2(1)	Init. Calib. Date(s):	12/28/2022	12/29/2022
File ID:	7T31679.D	Date Analyzed:	01/04/2023 00:03	
Pesticides	Column 1	Matrix:	Water	

Individual Mix Compound		RT WINDOW		$\overline{CF}$	CF	%D
		FROM	TO			
Aldrin	08.31	08.21	08.41	47160890	53637820	13.70
alpha-BHC	05.30	05.20	05.40	53065430	61157220	15.20
alpha-Chlordane (cis)	11.50	11.40	11.60	45883450	51072280	11.30
beta-BHC	06.33	06.23	06.43	21609980	24735300	14.50
delta-BHC	06.81	06.71	06.91	48927310	56039420	14.50
Dieldrin	13.14	13.04	13.24	44572680	50299020	12.80
Endosulfan I	12.00	11.90	12.10	39540850	44826740	13.40
Endosulfan II	14.75	14.65	14.85	41309610	47737220	15.60
Endosulfan sulfate	16.75	16.65	16.85	30893780	37477980	21.30 *
Endrin	14.02	13.92	14.12	41705440	47601000	14.10
Endrin aldehyde	15.85	15.75	15.95	29546590	37622800	27.30 *
Endrin ketone	17.23	17.13	17.33	32748990	38411500	17.30
gamma-Chlordane	10.96	10.86	11.06	45282670	51962200	14.80
gamma-BHC (Lindane)	06.07	05.97	06.17	49503550	56357920	13.80
4,4'-DDT	15.33	15.23	15.43	34111040	44093260	29.30 *
4,4'-DDE	12.10	12.00	12.20	43345070	49046520	13.20
4,4'-DDD	14.57	14.47	14.67	27660840	32615320	17.90
Methoxychlor	16.53	16.43	16.63	15617680	18359720	17.60
Heptachlor Epoxide	10.47	10.37	10.57	44130120	49766060	12.80
Heptachlor	07.38	07.28	07.48	50410610	56539560	12.20
Chlordane	11.50	11.40	11.60	45583060	51517240	13.00
Decachlorobiphenyl	18.89	18.79	18.99	27949750	32730440	17.10
Tetrachloro-m-xylene	04.19	04.09	04.29	31663030	36796540	16.20

* - Outside of QC limits

F-VII

CALIBRATION VERIFICATION SUMMARY

Client: **Dynamic Earth LLC**
Work Order: **2120937**

Lab Sample ID (50):	SAA0038-CCV2(2)	Init. Calib. Date(s):	12/28/2022 12/29/2022
File ID:	7T31679.D	Date Analyzed:	01/04/2023 00:03
Pesticides	Column 2	Matrix:	Water

Individual Mix Compound		RT WINDOW		$\overline{CF}$	CF	%D
		FROM	TO			
Aldrin [2C]	10.90	10.80	11.00	19584280	22026940	12.50
alpha-BHC [2C]	06.86	06.76	06.96	22683710	25695000	13.30
alpha-Chlordane (cis) [2C]	14.79	14.69	14.89	17471800	19727220	12.90
beta-BHC [2C]	08.39	08.29	08.49	9240612	10015850	8.40
delta-BHC [2C]	09.48	09.38	09.58	20437370	22953180	12.30
Dieldrin [2C]	15.64	15.54	15.74	16586560	18878990	13.80
Endosulfan I [2C]	14.79	14.69	14.89	16572580	19727220	19.00
Endosulfan II [2C]	16.76	16.66	16.86	13602510	15849460	16.50
Endosulfan sulfate [2C]	17.86	17.76	17.96	11514510	13128780	14.00
Endrin [2C]	16.31	16.21	16.41	14574770	16736570	14.80
Endrin aldehyde [2C]	17.39	17.29	17.49	11357280	11734100	3.30
Endrin ketone [2C]	18.65	18.55	18.75	12173110	14075130	15.60
gamma-Chlordane [2C]	14.32	14.22	14.42	18697510	20773740	11.10
gamma-BHC (Lindane) [2C]	08.05	07.95	08.15	21202440	23781740	12.20
4,4'-DDT [2C]	17.25	17.15	17.35	10922680	13697170	25.40 *
4,4'-DDE [2C]	15.40	15.30	15.50	15157070	17498240	15.40
4,4'-DDD [2C]	16.68	16.58	16.78	10544580	12184340	15.60
Methoxychlor [2C]	18.37	18.27	18.47	5512007	6270058	13.80
Heptachlor Epoxide [2C]	13.58	13.48	13.68	18619540	20542440	10.30
Heptachlor [2C]	09.65	09.55	09.75	22291840	24462900	9.70
Chlordane [2C]	14.79	14.69	14.89	18084660	20250480	12.00
Decachlorobiphenyl [2C]	20.50	20.40	20.60	10890370	11907650	9.30
Tetrachloro-m-xylene [2C]	05.15	05.05	05.25	14651820	15885830	8.40

* - Outside of QC limits

F-VII

Quantitation Report (QT Reviewed)

Signal #1 : G:\HPCHEM\GCECD7\DATA\20230103\7T31679.D\ECD1A.CH Vial: 24
Signal #2 : G:\HPCHEM\GCECD7\DATA\20230103\7T31679.D\ECD2B.CH
Acq On : 4 Jan 2023 12:03 am Operator: WD
Sample : SEQ-CCV@50PPB Inst : HP G1530A
Misc : Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Jan 4 10:37 2023 Quant Results File: 80811228.RES

Quant Method : G:\HPCHEM\G...\80811228.M (Chemstation Integrator)
Title : Pesticides by Method SW-846 8081B
Last Update : Wed Jan 04 10:36:57 2023
Response via : Initial Calibration
DataAcq Meth : RUNPEST1.M

Volume Inj. : 2ul
Signal #1 Phase : RTx-50 Signal #2 Phase: RTx-CLPesticides II
Signal #1 Info : 30M x 0.53mm x 0. Signal #2 Info : 30M x 0.53mm x 0.42um

	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/kg	ug/kg
	System Monitoring Compounds						
1) S	TCMX	4.19	5.15	1839.8E6	794.3E6	58.106	54.211
Spiked Amount	50.000	Range	43 - 129	Recovery	=	116.21%	108.42%
21) S	Decachlorobiphen	18.89	20.50	1636.5E6	595.4E6	58.552	54.671
Spiked Amount	50.000	Range	42 - 136	Recovery	=	117.10%	109.34%
	Target Compounds						
2)	alpha-BHC	5.30	6.86	3057.9E6	1284.8E6	57.624	56.638
3) M	gamma-BHC (Linda	6.07	8.05	2817.9E6	1189.1E6	56.923	56.083
4) M	Heptachlor	7.38	9.65	2827.0E6	1223.1E6	56.079	54.870
5)	beta-BHC	6.33	8.39	1236.8E6	500.8E6	57.231	54.195
6)	delta-BHC	6.81	9.48	2802.0E6	1147.7E6	57.268	56.155
7) M	Aldrin	8.31	10.90	2681.9E6	1101.3E6	56.867	56.236
8)	Heptachlor epoxi	10.47	13.58	2488.3E6	1027.1E6	56.386	55.164
9)	Endosulfan I	12.00	14.79	2241.3E6	986.4E6	56.684	59.518
10)	4,4'-DDE	12.10	15.40	2452.3E6	874.9E6	56.577	57.723
11) M	Dieldrin	13.14	15.64	2515.0E6	943.9E6	56.424	56.911
12) M	Endrin	14.02	16.31	2380.1E6	836.8E6	57.068	57.416
13)	4,4'-DDD	14.57	16.68	1630.8E6	609.2E6	58.956	57.775
14)	Endosulfan II	14.75	16.76	2386.9E6	792.5E6	57.780	58.259
15) M	4,4'-DDT	15.33	17.25	2204.7E6	684.9E6	64.632	62.701
16)	Endrin aldehyde	15.85	17.39	1881.1E6	586.7E6	63.667	51.659
17)	Endosulfan sulfa	16.75	17.86	1873.9E6	656.4E6	60.656	57.010
18)	Methoxychlor	16.53	18.37	918.0E6	313.5E6	58.779	56.876
20)	Endrin ketone	17.23	18.65	1920.6E6	703.8E6	58.645	57.812
22) L1	Chlordane (gamma	10.96	14.32	2598.1E6	1038.7E6	57.375	55.552
23) L1	Chlordane (alpha	11.50	14.79	2553.6E6	986.4E6	55.654	56.454
Sum	Chlordane (gamma)			5151.7E6	2025.0E6	113.030	112.007
Average	Chlordane (gamma)					56.515	56.003
Sum	Toxaphene (1)				0	0	N.D. N.D.
Average	Toxaphene (1)					0.000	0.000

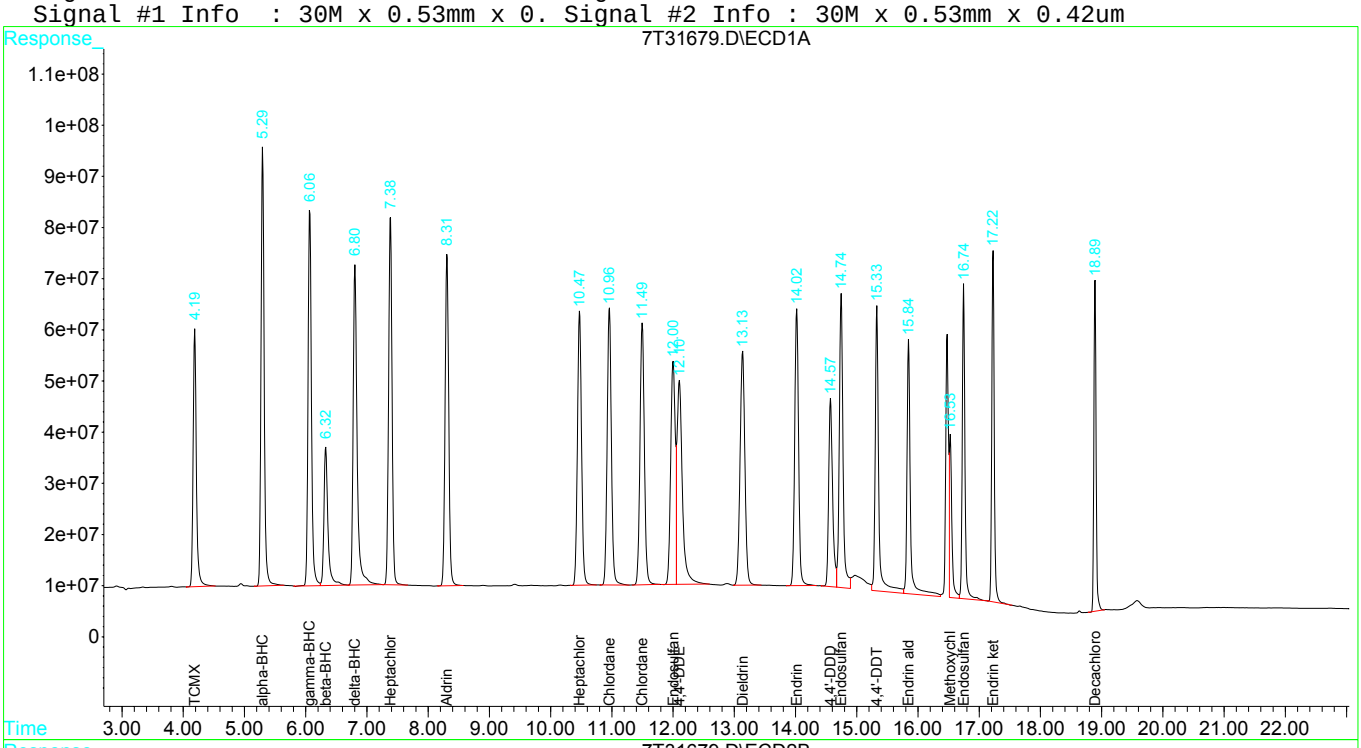
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7T31679.D 80811228.M Wed Jan 04 11:26:32 2023 SS

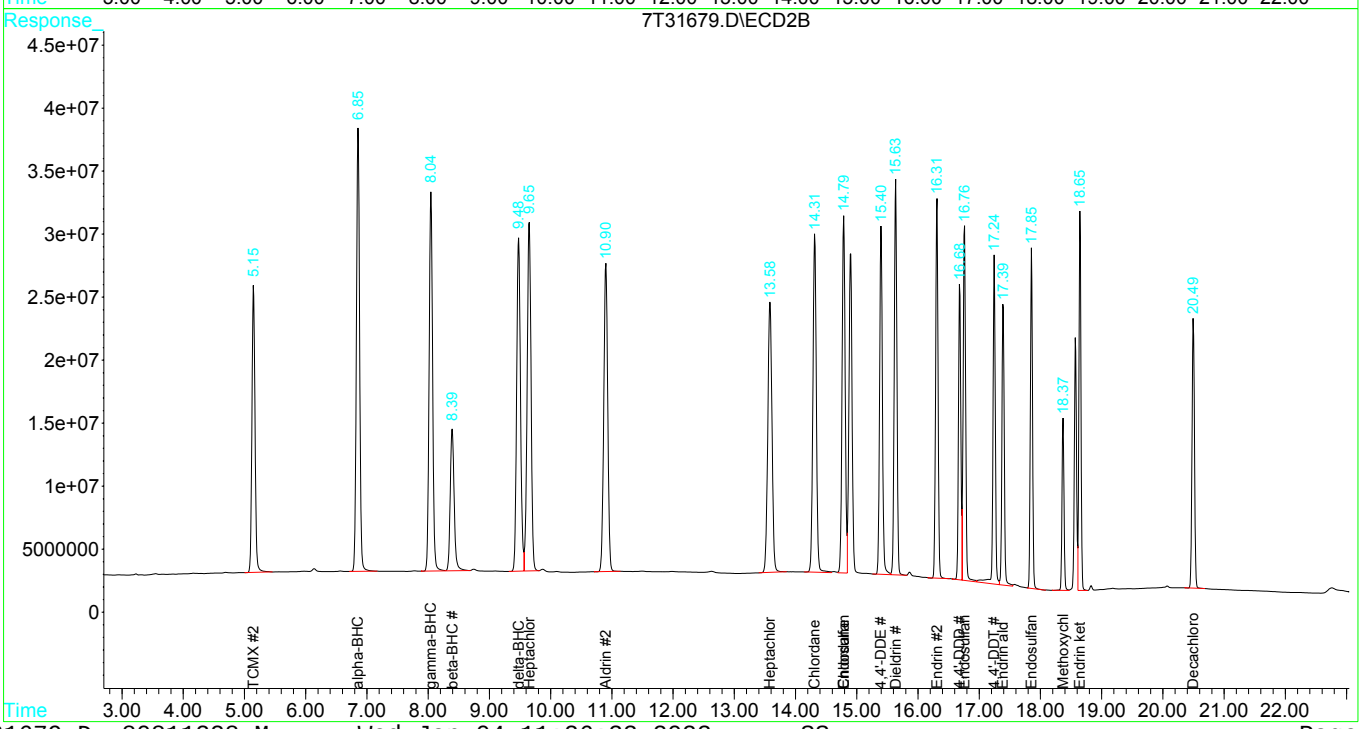
Quantitation Report (QT Reviewed)

Signal #1 : G:\HPCHEM\GCECD7\DATA\20230103\7T31679.D\ECD1A.CH Vial: 24
Signal #2 : G:\HPCHEM\GCECD7\DATA\20230103\7T31679.D\ECD2B.CH
Acq On : 4 Jan 2023 12:03 am Operator: WD
Sample : SEQ-CCV@50PPB Inst : HP G1530A
Misc : Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Jan 4 10:37 2023 Quant Results File: 80811228.RES

Quant Method : G:\HPCHEM\G...\80811228.M (Chemstation Integrator)
Title : Pesticides by Method SW-846 8081B
Last Update : Wed Jan 04 10:36:57 2023
Response via : Multiple Level Calibration
DataAcq Meth : RUNPEST1.M

Volume Inj. : 2ul
Signal #1 Phase : RTx-50 Signal #2 Phase: RTx-CLPesticides II
Signal #1 Info : 30M x 0.53mm x 0. Signal #2 Info : 30M x 0.53mm x 0.42um





CALIBRATION VERIFICATION SUMMARY

Client: **Dynamic Earth LLC**
Work Order: **2120937**

Lab Sample ID (500):	SAA0038-CCV3(1)	Init. Calib. Date(s):	12/28/2022	12/29/2022
File ID:	7T31693.D	Date Analyzed:	01/04/2023 05:59	
Pesticides	Column 1	Matrix:	Water	

Individual Mix Compound		RT WINDOW		$\overline{CF}$	CF	%D
		FROM	TO			
Aldrin	08.33	08.23	08.43	47160890	48880900	3.60
alpha-BHC	05.32	05.22	05.42	53065430	57918640	9.10
alpha-Chlordane (cis)	11.53	11.43	11.63	45883450	44952260	2.00
beta-BHC	06.34	06.24	06.44	21609980	21548780	0.30
delta-BHC	06.82	06.72	06.92	48927310	52648660	7.60
Dieldrin	13.17	13.07	13.27	44572680	44567540	0.00
Endosulfan I	12.04	11.94	12.14	39540850	39032060	1.30
Endosulfan II	14.77	14.67	14.87	41309610	34543500	16.40
Endosulfan sulfate	16.76	16.66	16.86	30893780	23731860	23.20 *
Endrin	14.04	13.94	14.14	41705440	38655900	7.30
Endrin aldehyde	15.86	15.76	15.96	29546590	27075140	8.40
Endrin ketone	17.24	17.14	17.34	32748990	21127700	35.50 *
gamma-Chlordane	10.99	10.89	11.09	45282670	46162040	1.90
gamma-BHC (Lindane)	06.09	05.99	06.19	49503550	51301020	3.60
4,4'-DDT	15.34	15.24	15.44	34111040	6641296	80.50 *
4,4'-DDE	12.11	12.01	12.21	43345070	45623120	5.30
4,4'-DDD	14.57	14.47	14.67	27660840	39176400	41.60 *
Methoxychlor	16.49	16.39	16.59	15617680	25420460	62.80 *
Heptachlor Epoxide	10.50	10.40	10.60	44130120	44326480	0.40
Heptachlor	07.41	07.31	07.51	50410610	43520080	13.70
Chlordane	11.53	11.43	11.63	45583060	45557160	0.10
Decachlorobiphenyl	18.90	18.80	19.00	27949750	44559860	59.40 *
Tetrachloro-m-xylene	04.21	04.11	04.31	31663030	35305100	11.50

* - Outside of QC limits

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CALIBRATION VERIFICATION SUMMARY

Client: **Dynamic Earth LLC**
Work Order: **2120937**

Lab Sample ID (500):	SAA0038-CCV3(2)	Init. Calib. Date(s):	12/28/2022	12/29/2022
File ID:	7T31693.D	Date Analyzed:	01/04/2023 05:59	
Pesticides	Column 2	Matrix:	Water	

Individual Mix Compound		RT WINDOW		$\overline{CF}$	CF	%D
		FROM	TO			
Aldrin [2C]	10.93	10.83	11.03	19584280	19866060	1.40
alpha-BHC [2C]	06.88	06.78	06.98	22683710	23826800	5.00
alpha-Chlordane (cis) [2C]	14.81	14.71	14.91	17471800	15714930	10.10
beta-BHC [2C]	08.41	08.31	08.51	9240612	8998648	2.60
delta-BHC [2C]	09.50	09.40	09.60	20437370	21212720	3.80
Dieldrin [2C]	15.65	15.55	15.75	16586560	14305770	13.80
Endosulfan I [2C]	14.81	14.71	14.91	16572580	15714930	5.20
Endosulfan II [2C]	16.77	16.67	16.87	13602510	14441920	6.20
Endosulfan sulfate [2C]	17.87	17.77	17.97	11514510	19007370	65.10 *
Endrin [2C]	16.33	16.23	16.43	14574770	13874060	4.80
Endrin aldehyde [2C]	17.40	17.30	17.50	11357280	16618380	46.30 *
Endrin ketone [2C]	18.66	18.56	18.76	12173110	12934450	6.30
gamma-Chlordane [2C]	14.34	14.24	14.44	18697510	19099300	2.10
gamma-BHC (Lindane) [2C]	08.07	07.97	08.17	21202440	20938280	1.20
4,4'-DDT [2C]	17.26	17.16	17.36	10922680	8194250	25.00 *
4,4'-DDE [2C]	15.41	15.31	15.51	15157070	13557130	10.60
4,4'-DDD [2C]	16.69	16.59	16.79	10544580	13079130	24.00 *
Methoxychlor [2C]	18.38	18.28	18.48	5512007	9485024	72.10 *
Heptachlor Epoxide [2C]	13.61	13.51	13.71	18619540	17879680	4.00
Heptachlor [2C]	09.68	09.58	09.78	22291840	18206060	18.30
Chlordane [2C]	14.81	14.71	14.91	18084660	17407120	3.70
Decachlorobiphenyl [2C]	20.52	20.42	20.62	10890370	14438840	32.60 *
Tetrachloro-m-xylene [2C]	05.17	05.07	05.27	14651820	15032440	2.60

* - Outside of QC limits

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Quantitation Report (QT Reviewed)

Signal #1 : G:\HPCHEM\GCECD7\DATA\20230103\7T31693.D\ECD1A.CH Vial: 38
Signal #2 : G:\HPCHEM\GCECD7\DATA\20230103\7T31693.D\ECD2B.CH
Acq On : 4 Jan 2023 5:59 am Operator: WD
Sample : SEQ-CCV@50PPB Inst : HP G1530A
Misc : Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Jan 4 11:25 2023 Quant Results File: 80811228.RES

Quant Method : G:\HPCHEM\G...\80811228.M (Chemstation Integrator)
Title : Pesticides by Method SW-846 8081B
Last Update : Wed Jan 04 10:41:07 2023
Response via : Initial Calibration
DataAcq Meth : RUNPEST1.M

Volume Inj. : 2ul
Signal #1 Phase : RTx-50 Signal #2 Phase: RTx-CLPesticides II
Signal #1 Info : 30M x 0.53mm x 0. Signal #2 Info : 30M x 0.53mm x 0.42um

	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/kg	ug/kg
	System Monitoring Compounds						
1) S	TCMX	4.21	5.17	1765.3E6	751.6E6	55.751	51.299
	Spiked Amount 50.000	Range 43 - 129		Recovery =		111.50%	102.60%
21) S	Decachlorobiphen	18.90	20.52	2228.0E6	721.9E6	79.714	66.292
	Spiked Amount 50.000	Range 42 - 136		Recovery =		159.43%#	132.58%
	Target Compounds						
2)	alpha-BHC	5.32	6.88	2895.9E6	1191.3E6	54.573	52.520
3) M	gamma-BHC (Linda	6.09	8.07	2565.1E6	1046.9E6	51.816	49.377
4) M	Heptachlor	7.41	9.68	2176.0E6	910.3E6	43.166	40.836
5)	beta-BHC	6.34	8.41	1077.4E6	449.9E6	49.858	48.691
6)	delta-BHC	6.82	9.50	2632.4E6	1060.6E6	53.803	51.897
7) M	Aldrin	8.33	10.93	2444.0E6	993.3E6	51.824	50.719
8)	Heptachlor epoxi	10.50	13.61	2216.3E6	894.0E6	50.222	48.013
9)	Endosulfan I	12.04f	14.81	1951.6E6	785.7E6	49.357	47.412
10)	4,4'-DDE	12.11	15.41	2281.2E6	677.9E6	52.628	44.722
11) M	Dieldrin	13.17	15.65	2228.4E6	715.3E6	49.994	43.125
12) M	Endrin	14.04	16.33	1932.8E6	693.7E6	46.344	47.596
13)	4,4'-DDD	14.57	16.69	1958.8E6	654.0E6	70.816	62.018m
14)	Endosulfan II	14.77	16.77	1727.2E6	722.1E6	41.810	53.086 #
15) M	4,4'-DDT	15.34	17.26	332.1E6	409.7E6	9.735	37.510 #
16)	Endrin aldehyde	15.86	17.40	1353.8E6	830.9E6	45.818	73.162 #
17)	Endosulfan sulfa	16.76	17.87	1186.6E6	950.4E6	38.409	82.537 #
18)	Methoxychlor	16.49f	18.38	1271.0E6	474.3E6	81.384	86.040
20)	Endrin ketone	17.24	18.66	1056.4E6	646.7E6	32.257	53.127 #
22) L1	Chlordane (gamma	10.99	14.34	2308.1E6	955.0E6	50.971	51.074
23) L1	Chlordane (alpha	11.53	14.81	2247.6E6	785.7E6	48.985	44.972
	Sum Chlordane (gamma)			4555.7E6	1740.7E6	99.956	96.047
Average	Chlordane (gamma)					49.978	48.023
	Sum Toxaphene (1)				0 0	N.D.	N.D.
Average	Toxaphene (1)					0.000	0.000

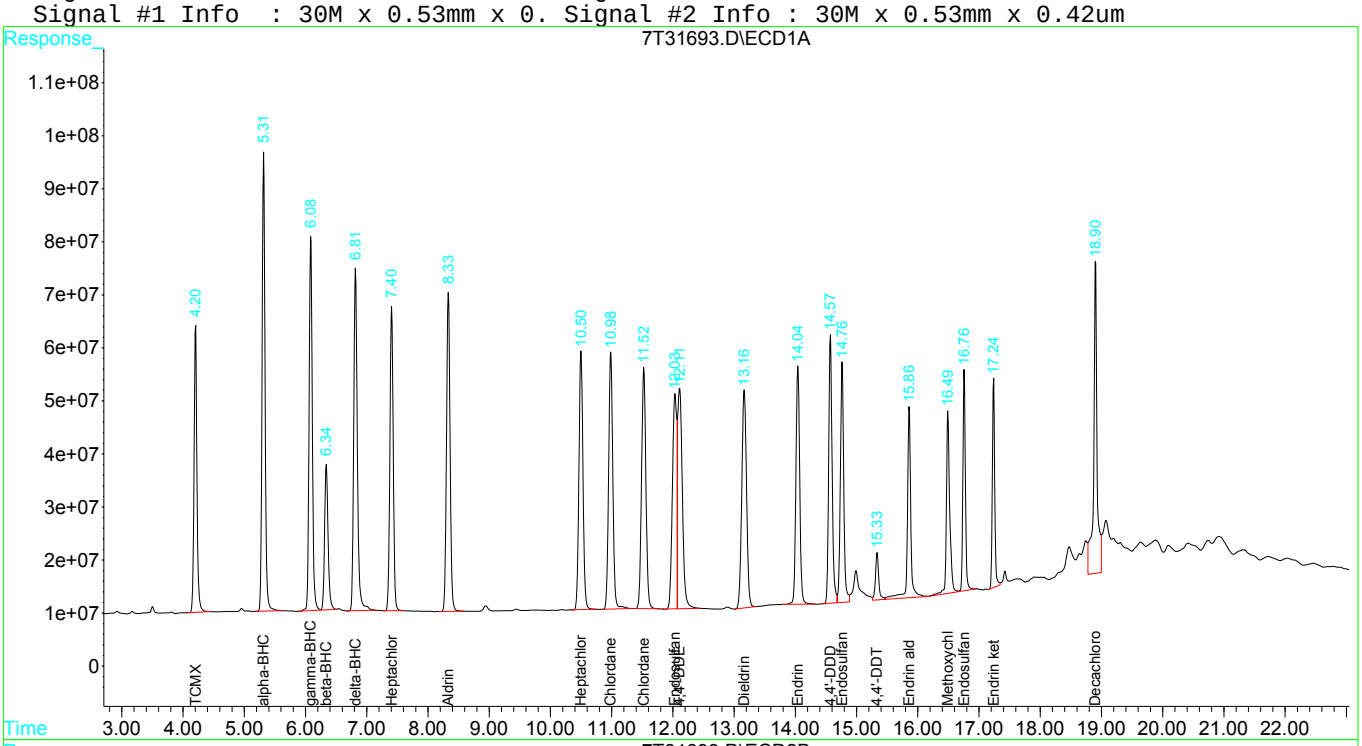
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

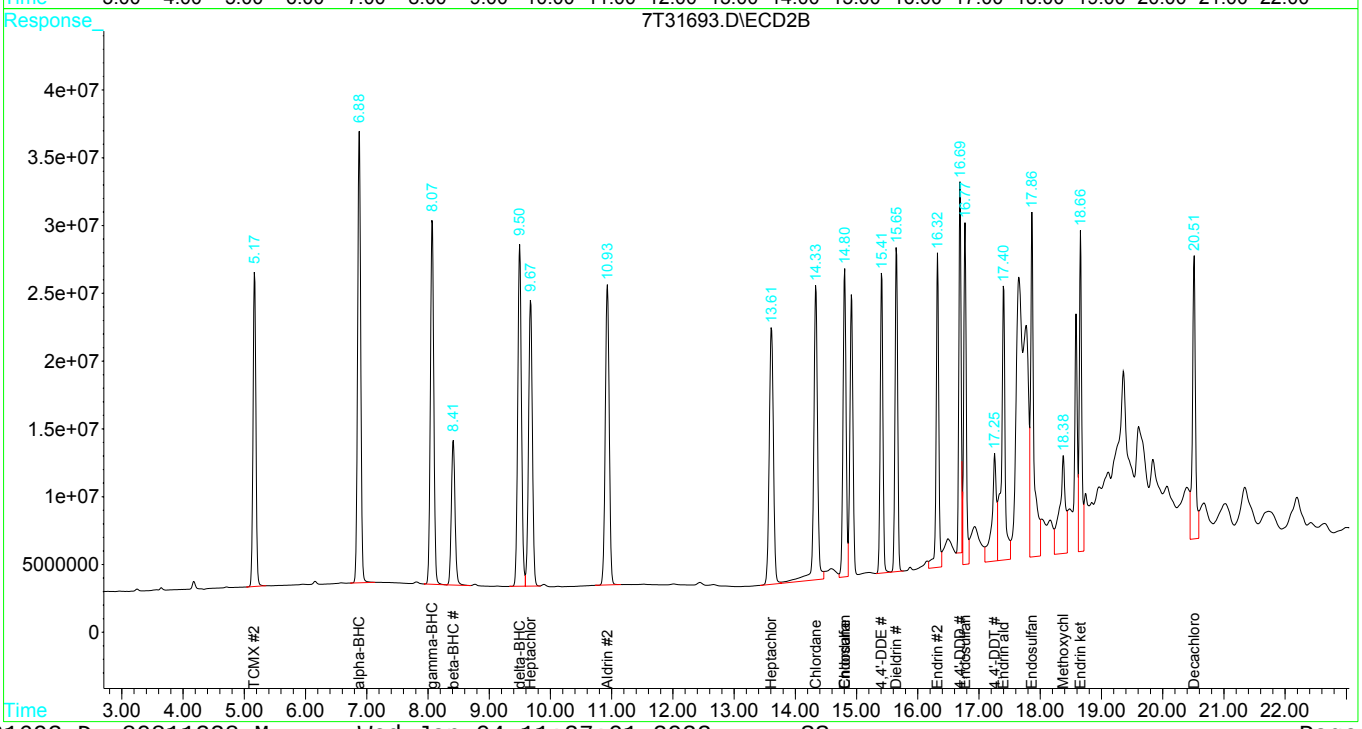
Quantitation Report (QT Reviewed)

Signal #1 : G:\HPCHEM\GCECD7\DATA\20230103\7T31693.D\ECD1A.CH Vial: 38
Signal #2 : G:\HPCHEM\GCECD7\DATA\20230103\7T31693.D\ECD2B.CH
Acq On : 4 Jan 2023 5:59 am Operator: WD
Sample : SEQ-CCV@50PPB Inst : HP G1530A
Misc : Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Jan 4 11:25 2023 Quant Results File: 80811228.RES

Quant Method : G:\HPCHEM\G...\80811228.M (Chemstation Integrator)
Title : Pesticides by Method SW-846 8081B
Last Update : Wed Jan 04 10:41:07 2023
Response via : Multiple Level Calibration
DataAcq Meth : RUNPEST1.M

Volume Inj. : 2ul
Signal #1 Phase : RTx-50 Signal #2 Phase: RTx-CLPesticides II
Signal #1 Info : 30M x 0.53mm x 0. Signal #2 Info : 30M x 0.53mm x 0.42um





CALIBRATION VERIFICATION SUMMARY

Client: **Dynamic Earth LLC**
Work Order: **2120937**

Lab Sample ID (50 pp):	SAA0209-CCV1(1)	Init. Calib. Date(s):	12/28/2022	12/29/2022
File ID:	7T31819.D	Date Analyzed:	01/12/2023 14:11	
Pesticides	Column 1	Matrix:	Soil	

Individual Mix Compound		RT WINDOW		$\overline{CF}$	CF	%D
		FROM	TO			
Dieldrin	13.67	13.57	13.77	44572680	47664160	6.90
Heptachlor Epoxide	10.96	10.86	11.06	44130120	46665880	5.70
Decachlorobiphenyl	19.10	19.00	19.20	27949750	28518060	2.00
Tetrachloro-m-xylene	04.45	04.35	04.55	31663030	33793040	6.70

* - Outside of QC limits

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CALIBRATION VERIFICATION SUMMARY

Client: **Dynamic Earth LLC**
Work Order: **2120937**

Lab Sample ID (50 pp):	SAA0209-CCV1(2)	Init. Calib. Date(s):	12/28/2022	12/29/2022
File ID:	7T31819.D	Date Analyzed:	01/12/2023 14:11	
Pesticides	Column 2	Matrix:	Soil	

Individual Mix Compound		RT WINDOW		$\overline{CF}$	CF	%D
		FROM	TO			
Dieldrin [2C]	15.94	15.84	16.04	16586560	17738180	6.90
Heptachlor Epoxide [2C]	14.05	13.95	14.15	18619540	20716220	11.30
Decachlorobiphenyl [2C]	20.78	20.68	20.88	10890370	11153850	2.40
Tetrachloro-m-xylene [2C]	05.46	05.36	05.56	14651820	15090990	3.00

* - Outside of QC limits

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Quantitation Report (QT Reviewed)

Signal #1 : G:\HPCHEM\GCECD7\DATA\20230112\7T31819.D\ECD1A.CH Vial: 3
Signal #2 : G:\HPCHEM\GCECD7\DATA\20230112\7T31819.D\ECD2B.CH
Acq On : 12 Jan 2023 2:11 pm Operator: WD
Sample : SEQ-CCV@50PPB Inst : HP G1530A
Misc : Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Jan 12 15:26 2023 Quant Results File: 80811228.RES

Quant Method : G:\HPCHEM\G...\80811228.M (Chemstation Integrator)
Title : Pesticides by Method SW-846 8081B
Last Update : Thu Jan 12 15:24:05 2023
Response via : Initial Calibration
DataAcq Meth : RUNPEST1.M

Volume Inj. : 2ul
Signal #1 Phase : RTx-50 Signal #2 Phase: RTx-CLPesticides II
Signal #1 Info : 30M x 0.53mm x 0. Signal #2 Info : 30M x 0.53mm x 0.42um

	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/kg	ug/kg
	System Monitoring Compounds						
1)	S TCMX	4.45f	5.46f	1689.7E6	754.5E6	53.364	51.499
	Spiked Amount 50.000	Range 43 - 129		Recovery =		106.73%	103.00%
21)	S Decachlorobiphen	19.10	20.78f	1425.9E6	557.7E6	51.017	51.210
	Spiked Amount 50.000	Range 42 - 136		Recovery =		102.03%	102.42%
	Target Compounds						
2)	alpha-BHC	5.61f	7.23f	2861.0E6	1220.2E6	53.914	53.793
3)	M gamma-BHC (Linda	6.41f	8.46f	2625.7E6	1135.1E6	53.040	53.537
4)	M Heptachlor	7.79f	9.92f	2688.8E6	1106.8E6	53.337	49.652
5)	beta-BHC	6.67f	8.81f	1092.5E6	481.2E6	50.554	52.079
6)	delta-BHC	7.17f	9.92f	2637.6E6	1106.8E6	53.909	54.158
7)	M Aldrin	8.74f	11.40f	2491.8E6	1017.9E6	52.836	51.975m
8)	Heptachlor epoxi	10.96f	14.05f	2333.3E6	1035.8E6	52.873m	55.630
9)	Endosulfan I	12.65f	15.13f	1930.7E6	917.7E6	48.829m	55.375
10)	4,4'-DDE	12.59	15.69f	2078.9E6	837.8E6	47.963	55.272
11)	M Dieldrin	13.67f	15.94f	2383.2E6	886.9E6	53.468m	53.472
12)	M Endrin	14.45f	16.58f	2200.0E6	761.7E6	52.752	52.262
13)	4,4'-DDD	14.91f	16.92	1636.7E6	568.4E6	59.170m	53.905
14)	Endosulfan II	15.10f	17.01f	2194.5E6	689.7E6	53.123	50.706
15)	M 4,4'-DDT	15.63f	17.48	1828.3E6	555.6E6	53.600	50.864
16)	Endrin aldehyde	16.14f	17.63	1622.0E6	522.4E6	54.895	45.995
17)	Endosulfan sulfa	16.76f	18.08	1312.6E6	599.0E6	42.488m	52.020
18)	Methoxychlor	16.76f	18.57	868.3E6	315.0E6	55.597m	57.156
19)	Mirex	16.76f	18.80	1394.4E6	434.7E6	52.251m	48.175
20)	Endrin ketone	17.48f	18.87	1762.2E6	638.5E6	53.809	52.454
22)	L1 Chlordane (gamma	11.46f	14.70f	2374.2E6	978.7E6	52.432m	52.345
23)	L1 Chlordane (alpha	12.03f	15.13f	2465.4E6	917.7E6	53.732m	52.525
	Sum Chlordane (gamma)			4839.7E6	1896.4E6	106.164	104.870
	Average Chlordane (gamma)					53.082	52.435
	Sum Toxaphene (1)			0	0	N.D.	N.D.
	Average Toxaphene (1)					0.000	0.000

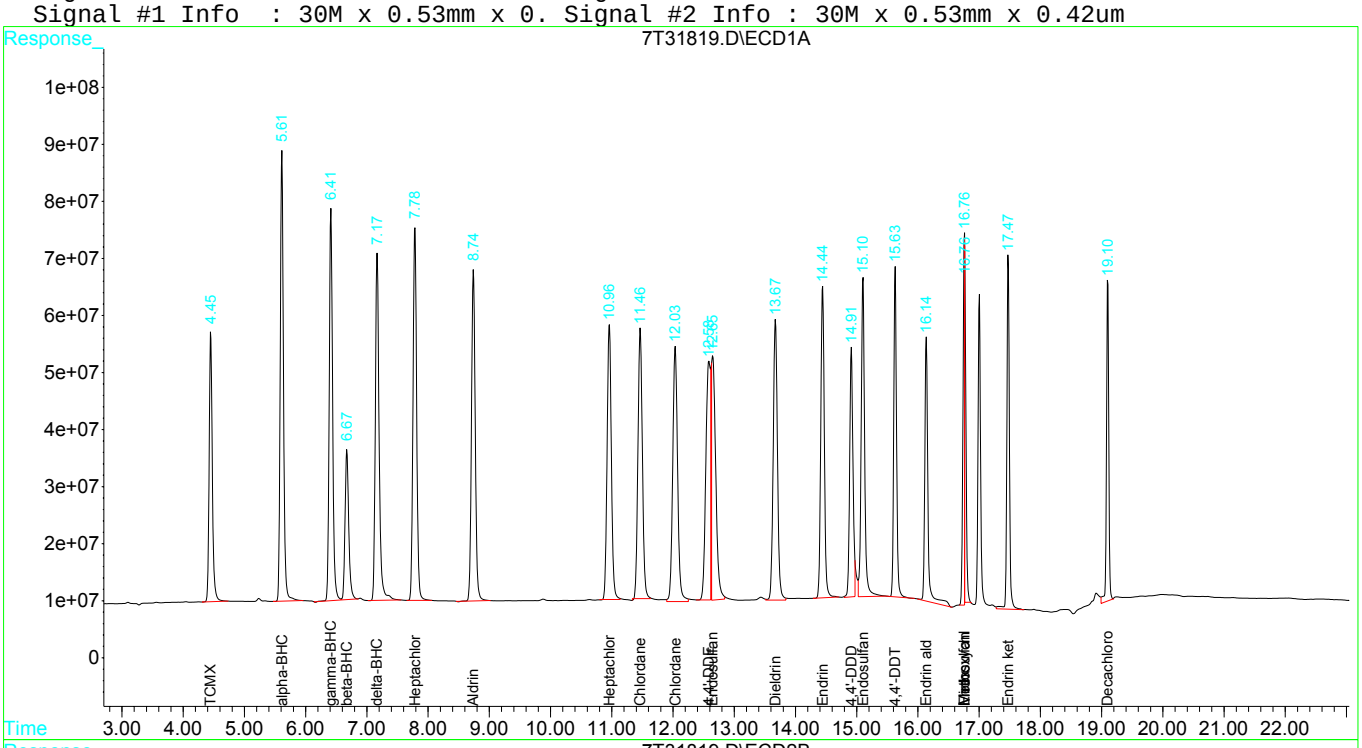
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7T31819.D 80811228.M Fri Jan 13 15:00:42 2023 SS

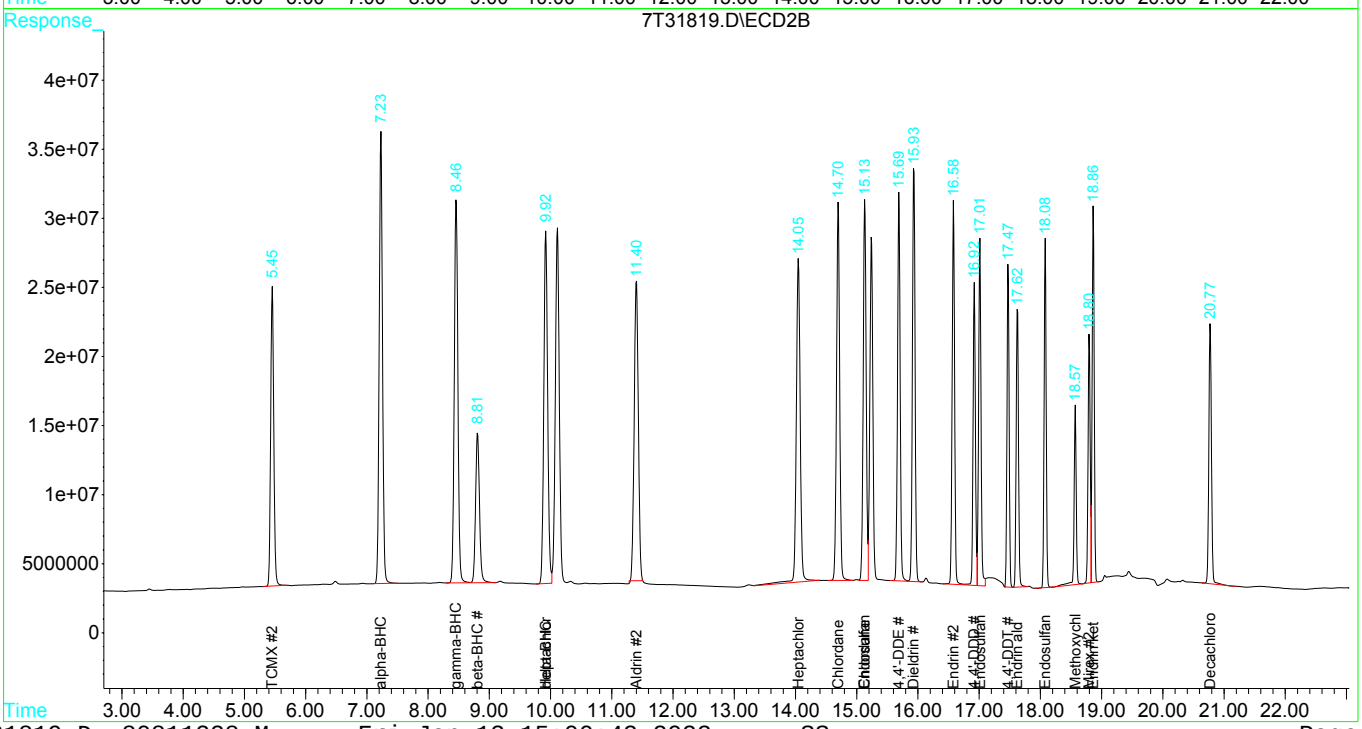
Quantitation Report (QT Reviewed)

Signal #1 : G:\HPCHEM\GCECD7\DATA\20230112\7T31819.D\ECD1A.CH Vial: 3
Signal #2 : G:\HPCHEM\GCECD7\DATA\20230112\7T31819.D\ECD2B.CH
Acq On : 12 Jan 2023 2:11 pm Operator: WD
Sample : SEQ-CCV@50PPB Inst : HP G1530A
Misc : Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Jan 12 15:26 2023 Quant Results File: 80811228.RES

Quant Method : G:\HPCHEM\G...\80811228.M (Chemstation Integrator)
Title : Pesticides by Method SW-846 8081B
Last Update : Thu Jan 12 15:24:05 2023
Response via : Multiple Level Calibration
DataAcq Meth : RUNPEST1.M

Volume Inj. : 2ul
Signal #1 Phase : RTx-50 Signal #2 Phase: RTx-CLPesticides II
Signal #1 Info : 30M x 0.53mm x 0. Signal #2 Info : 30M x 0.53mm x 0.42um





CALIBRATION VERIFICATION SUMMARY

Client: **Dynamic Earth LLC**
Work Order: **2120937**

Lab Sample ID (50 pp):	SAA0210-CCV1(1)	Init. Calib. Date(s):	12/28/2022	12/29/2022
File ID:	7T31839.D	Date Analyzed:	01/12/2023 22:39	
Pesticides	Column 1	Matrix:	Soil	

Individual Mix Compound		RT WINDOW		$\overline{CF}$	CF	%D
		FROM	TO			
Dieldrin	13.71	13.61	13.81	44572680	48914240	9.70
Heptachlor Epoxide	11.00	10.90	11.10	44130120	48669940	10.30
Decachlorobiphenyl	19.12	19.02	19.22	27949750	28216620	1.00
Tetrachloro-m-xylene	04.48	04.38	04.58	31663030	38210720	20.70 *

* - Outside of QC limits

F-VII

CALIBRATION VERIFICATION SUMMARY

Client: **Dynamic Earth LLC**
Work Order: **2120937**

Lab Sample ID (50 pp):	SAA0210-CCV1(2)	Init. Calib. Date(s):	12/28/2022	12/29/2022
File ID:	7T31839.D	Date Analyzed:	01/12/2023 22:39	
Pesticides	Column 2	Matrix:	Soil	

Individual Mix Compound		RT WINDOW		$\overline{CF}$	CF	%D
		FROM	TO			
Dieldrin [2C]	15.96	15.86	16.06	16586560	15806620	4.70
Heptachlor Epoxide [2C]	14.08	13.98	14.18	18619540	20024320	7.50
Decachlorobiphenyl [2C]	20.80	20.70	20.90	10890370	9765458	10.30
Tetrachloro-m-xylene [2C]	05.49	05.39	05.59	14651820	16291810	11.20

* - Outside of QC limits

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Quantitation Report (QT Reviewed)

Signal #1 : G:\HPCHEM\GCECD7\DATA\20230112\7T31839.D\ECD1A.CH Vial: 23
Signal #2 : G:\HPCHEM\GCECD7\DATA\20230112\7T31839.D\ECD2B.CH
Acq On : 12 Jan 2023 10:39 pm Operator: WD
Sample : SEQ-CCV@50PPB Inst : HP G1530A
Misc : Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Jan 13 12:11 2023 Quant Results File: 80811228.RES

Quant Method : G:\HPCHEM\G...\80811228.M (Chemstation Integrator)
Title : Pesticides by Method SW-846 8081B
Last Update : Fri Jan 13 12:01:01 2023
Response via : Initial Calibration
DataAcq Meth : RUNPEST1.M

Volume Inj. : 2ul
Signal #1 Phase : RTx-50 Signal #2 Phase: RTx-CLPesticides II
Signal #1 Info : 30M x 0.53mm x 0. Signal #2 Info : 30M x 0.53mm x 0.42um

	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/kg	ug/kg
	System Monitoring Compounds						
1) S	TCMX	4.48f	5.49f	1910.5E6	814.6E6	60.340	55.597
Spiked Amount	50.000	Range	43 - 129	Recovery	=	120.68%	111.19%
21) S	Decachlorobiphen	19.12	20.80	1410.8E6	488.3E6	50.477	44.835
Spiked Amount	50.000	Range	42 - 136	Recovery	=	100.95%	89.67%
	Target Compounds						
2)	alpha-BHC	5.65f	7.27f	3177.9E6	1309.5E6	59.887	57.729
3) M	gamma-BHC (Linda	6.45f	8.50f	2792.4E6	1145.8E6	56.409	54.042
4) M	Heptachlor	7.82f	9.97f	2341.0E6	1173.4E6	46.438	52.637
5)	beta-BHC	6.71f	8.85f	1184.6E6	500.6E6	54.819	54.178
6)	delta-BHC	7.21f	9.97f	2913.3E6	1173.4E6	59.543	57.413
7) M	Aldrin	8.78f	11.45f	2682.9E6	1098.3E6	56.889	56.078
8)	Heptachlor epoxi	11.00f	14.08f	2433.5E6	1001.2E6	55.144	53.772
9)	Endosulfan I	12.64	15.16f	1981.5E6	857.0E6	50.114	51.712
10)	4,4'-DDE	12.64f	15.71	1981.5E6	757.1E6	45.716	49.953
11) M	Dieldrin	13.71f	15.96	2445.7E6	790.3E6	54.870	47.649
12) M	Endrin	14.48f	16.60	2020.4E6	624.2E6	48.446	42.828
13)	4,4'-DDD	14.94f	16.94	2292.2E6	758.2E6	82.867	71.903
14)	Endosulfan II	15.13f	17.03	1872.7E6	707.0E6	45.333	51.974
15) M	4,4'-DDT	15.65	17.49	259.6E6	76076834	7.610	6.965
16)	Endrin aldehyde	16.16	17.65	1184.2E6	473.5E6	40.078	41.693
17)	Endosulfan sulfa	16.78	18.10	1261.9E6	511.4E6	40.846	44.417
18)	Methoxychlor	16.78	18.59	1261.9E6	84810505	80.798	15.387 #
19)	Mirex	16.78	18.82	1261.9E6	396.3E6	47.283	43.918
20)	Endrin ketone	17.50	18.88	1050.1E6	477.1E6	32.064	39.193
22) L1	Chlordane (gamma	11.51f	14.73f	2513.7E6	938.9E6	55.511	50.214
23) L1	Chlordane (alpha	12.08f	15.16f	2478.0E6	857.0E6	54.006	49.050
Sum	Chlordane (gamma)			4991.7E6	1795.9E6	109.517	99.264
Average	Chlordane (gamma)					54.759	49.632
Sum	Toxaphene (1)			0	0	N.D.	N.D.
Average	Toxaphene (1)					0.000	0.000

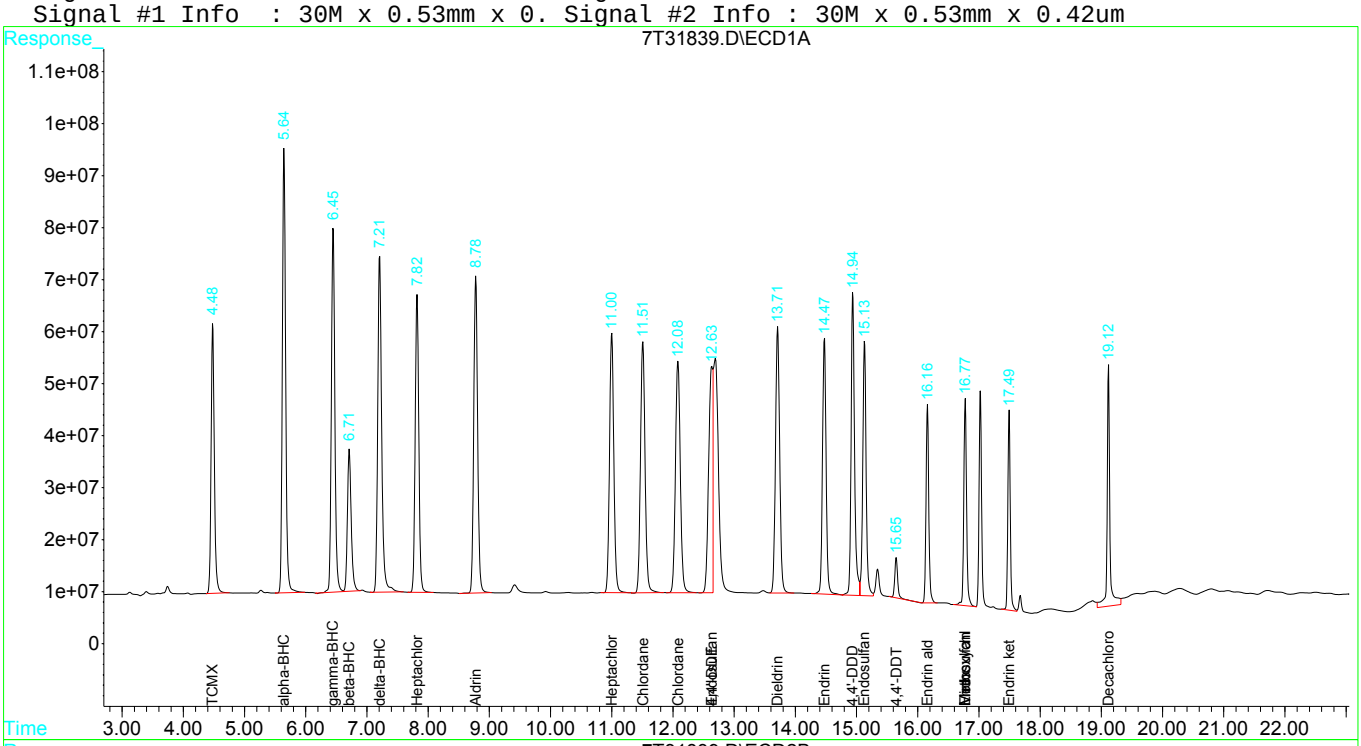
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.
7T31839.D 80811228.M Fri Jan 13 15:01:21 2023 SS

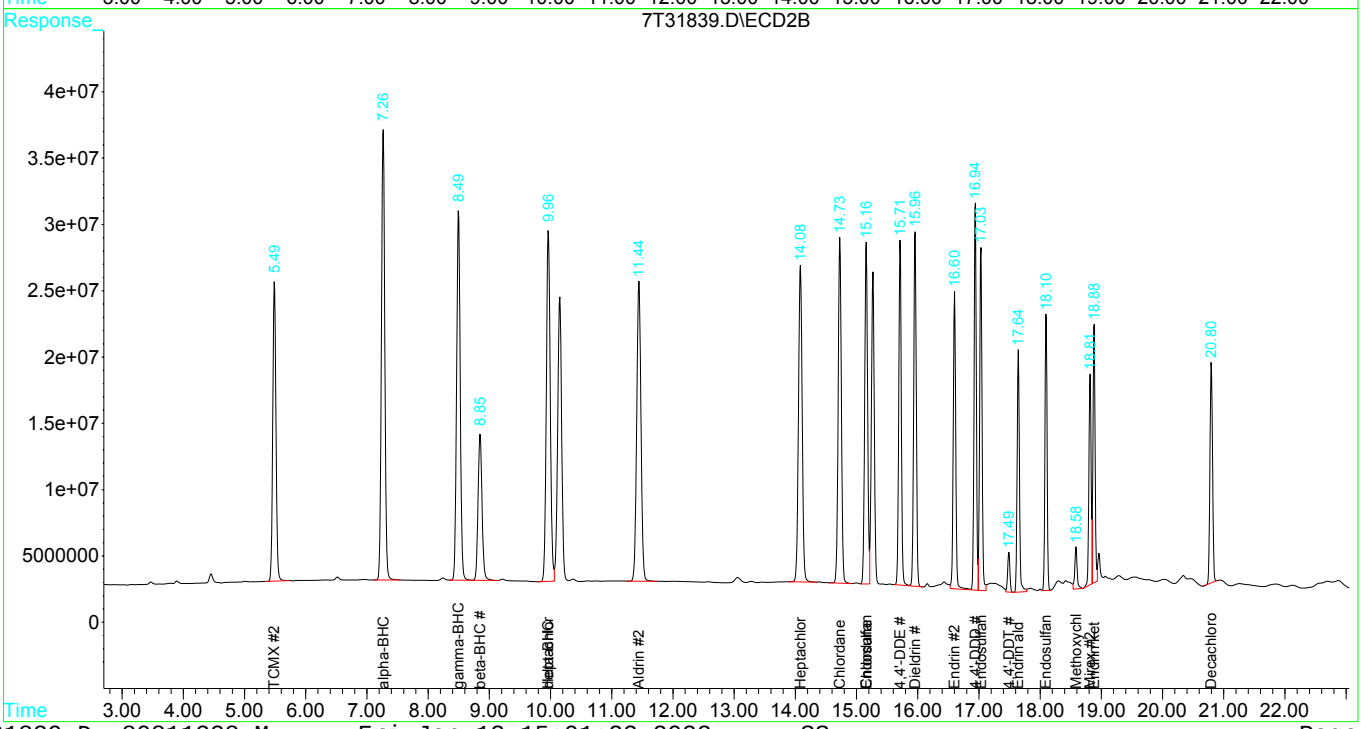
Quantitation Report (QT Reviewed)

Signal #1 : G:\HPCHEM\GCECD7\DATA\20230112\7T31839.D\ECD1A.CH Vial: 23
Signal #2 : G:\HPCHEM\GCECD7\DATA\20230112\7T31839.D\ECD2B.CH
Acq On : 12 Jan 2023 10:39 pm Operator: WD
Sample : SEQ-CCV@50PPB Inst : HP G1530A
Misc : Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Jan 13 12:11 2023 Quant Results File: 80811228.RES

Quant Method : G:\HPCHEM\G...\80811228.M (Chemstation Integrator)
Title : Pesticides by Method SW-846 8081B
Last Update : Fri Jan 13 12:01:01 2023
Response via : Multiple Level Calibration
DataAcq Meth : RUNPEST1.M

Volume Inj. : 2ul
Signal #1 Phase : RTx-50 Signal #2 Phase: RTx-CLPesticides II
Signal #1 Info : 30M x 0.53mm x 0. Signal #2 Info : 30M x 0.53mm x 0.42um





CALIBRATION VERIFICATION SUMMARY

Client: **Dynamic Earth LLC**
Work Order: **2120937**

Lab Sample ID (50):	SAA0233-CCV2(1)	Init. Calib. Date(s):	12/28/2022	12/29/2022
File ID:	7T31867.D	Date Analyzed:	01/13/2023 19:22	
Pesticides	Column 1	Matrix:	Water	

Individual Mix Compound		RT WINDOW		$\overline{CF}$	CF	%D
		FROM	TO			
Aldrin	08.79	08.69	08.89	47160890	53887260	14.30
alpha-BHC	05.65	05.55	05.75	53065430	62157100	17.10
alpha-Chlordane (cis)	12.10	12.00	12.20	45883450	51162540	11.50
beta-BHC	06.72	06.62	06.82	21609980	23141480	7.10
delta-BHC	07.22	07.12	07.32	48927310	56702600	15.90
Dieldrin	13.73	13.63	13.83	44572680	50301100	12.90
Endosulfan I	12.72	12.62	12.82	39540850	44877980	13.50
Endosulfan II	15.14	15.04	15.24	41309610	44800680	8.50
Endosulfan sulfate	16.79	16.69	16.89	30893780	28858880	6.60
Endrin	14.49	14.39	14.59	41705440	47078480	12.90
Endrin aldehyde	16.17	16.07	16.27	29546590	32884320	11.30
Endrin ketone	17.51	17.41	17.61	32748990	36036120	10.00
gamma-Chlordane	11.52	11.42	11.62	45282670	51811240	14.40
gamma-BHC (Lindane)	06.46	06.36	06.56	49503550	56178600	13.50
4,4'-DDT	15.67	15.57	15.77	34111040	39531760	15.90
4,4'-DDE	12.65	12.55	12.75	43345070	44288740	2.20
4,4'-DDD	14.96	14.86	15.06	27660840	32857120	18.80
Methoxychlor	16.80	16.70	16.90	15617680	18152730	16.20
Heptachlor Epoxide	11.02	10.92	11.12	44130120	50238680	13.80
Heptachlor	07.83	07.73	07.93	50410610	57601920	14.30
Chlordane	12.10	12.00	12.20	45583060	51486890	13.00
Decachlorobiphenyl	19.13	19.03	19.23	27949750	30264500	8.30
Tetrachloro-m-xylene	04.49	04.39	04.59	31663030	36617620	15.60

* - Outside of QC limits

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CALIBRATION VERIFICATION SUMMARY

Client: **Dynamic Earth LLC**
Work Order: **2120937**

Lab Sample ID (50):	SAA0233-CCV2(2)	Init. Calib. Date(s):	12/28/2022	12/29/2022
File ID:	7T31867.D	Date Analyzed:	01/13/2023 19:22	
Pesticides	Column 2	Matrix:	Water	

Individual Mix Compound		RT WINDOW		$\overline{CF}$	CF	%D
		FROM	TO			
Aldrin [2C]	11.46	11.36	11.56	19584280	22175400	13.20
alpha-BHC [2C]	07.28	07.18	07.38	22683710	25861480	14.00
alpha-Chlordane (cis) [2C]	15.17	15.07	15.27	17471800	19271430	10.30
beta-BHC [2C]	08.86	08.76	08.96	9240612	10145100	9.80
delta-BHC [2C]	09.98	09.88	10.08	20437370	23259660	13.80
Dieldrin [2C]	15.97	15.87	16.07	16586560	18500890	11.50
Endosulfan I [2C]	15.17	15.07	15.27	16572580	19271430	16.30
Endosulfan II [2C]	17.05	16.95	17.15	13602510	15969360	17.40
Endosulfan sulfate [2C]	18.11	18.01	18.21	11514510	12475570	8.30
Endrin [2C]	16.62	16.52	16.72	14574770	15216730	4.40
Endrin aldehyde [2C]	17.66	17.56	17.76	11357280	11127100	2.00
Endrin ketone [2C]	18.90	18.80	19.00	12173110	13189830	8.40
gamma-Chlordane [2C]	14.74	14.64	14.84	18697510	20562760	10.00
gamma-BHC (Lindane) [2C]	08.51	08.41	08.61	21202440	23948120	12.90
4,4'-DDT [2C]	17.51	17.41	17.61	10922680	11702350	7.10
4,4'-DDE [2C]	15.73	15.63	15.83	15157070	17300040	14.10
4,4'-DDD [2C]	16.96	16.86	17.06	10544580	11903870	12.90
Methoxychlor [2C]	18.60	18.50	18.70	5512007	5947092	7.90
Heptachlor Epoxide [2C]	14.10	14.00	14.20	18619540	20639600	10.80
Heptachlor [2C]	09.98	09.88	10.08	22291840	23259660	4.30
Chlordane [2C]	15.17	15.07	15.27	18084660	19917090	10.10
Decachlorobiphenyl [2C]	20.82	20.72	20.92	10890370	11813270	8.50
Tetrachloro-m-xylene [2C]	05.50	05.40	05.60	14651820	15990040	9.10

* - Outside of QC limits

F-VII

Quantitation Report (QT Reviewed)

Signal #1 : G:\HPCHEM\GCECD7\DATA\20230113\7T31867.D\ECD1A.CH Vial: 15
Signal #2 : G:\HPCHEM\GCECD7\DATA\20230113\7T31867.D\ECD2B.CH
Acq On : 13 Jan 2023 7:22 pm Operator: WD
Sample : SEQ-CCV@50PPB Inst : GCECD-7
Misc : Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Jan 14 13:31 2023 Quant Results File: 80811228.RES

Quant Method : G:\HPCHEM\G...\80811228.M (Chemstation Integrator)
Title : Pesticides by Method SW-846 8081B
Last Update : Sat Jan 14 13:28:22 2023
Response via : Initial Calibration
DataAcq Meth : RUNPEST1.M

Volume Inj. : 2ul
Signal #1 Phase : RTx-50 Signal #2 Phase: RTx-CLPesticides II
Signal #1 Info : 30M x 0.53mm x 0. Signal #2 Info : 30M x 0.53mm x 0.42um

	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/kg	ug/kg
	System Monitoring Compounds						
1) S	TCMX	4.49	5.50	1830.9E6	799.5E6	57.824	54.567
Spiked Amount	50.000	Range	43 - 129	Recovery	=	115.65%	109.13%
21) S	Decachlorobiphen	19.13	20.82	1513.2E6	590.7E6	54.141	54.237
Spiked Amount	50.000	Range	42 - 136	Recovery	=	108.28%	108.47%
	Target Compounds						
2)	alpha-BHC	5.65	7.28	3107.9E6	1293.1E6	58.566	57.005
3) M	gamma-BHC (Linda	6.46	8.51	2808.9E6	1197.4E6	56.742	56.475
4) M	Heptachlor	7.83	9.98	2880.1E6	1163.0E6	57.133	52.171
5)	beta-BHC	6.72	8.86	1157.1E6	507.3E6	53.543	54.894
6)	delta-BHC	7.22	9.98	2835.1E6	1163.0E6	57.946	56.905
7) M	Aldrin	8.79	11.46	2694.4E6	1108.8E6	57.131	56.615
8)	Heptachlor epoxi	11.02	14.10	2511.9E6	1032.0E6	56.921	55.425
9)	Endosulfan I	12.72f	15.17	2243.9E6	963.6E6	56.749m	58.143
10)	4,4'-DDE	12.65	15.73	2214.4E6	865.0E6	51.089	57.069
11) M	Dieldrin	13.73	15.97	2515.1E6	925.0E6	56.426	55.771
12) M	Endrin	14.49	16.62	2353.9E6	760.8E6	56.442	52.202
13)	4,4'-DDD	14.96	16.96	1642.9E6	595.2E6	59.393m	56.445
14)	Endosulfan II	15.14	17.05	2240.0E6	798.5E6	54.225m	58.700
15) M	4,4'-DDT	15.67	17.51	1976.6E6	585.1E6	57.946	53.569
16)	Endrin aldehyde	16.17	17.66	1644.2E6	556.4E6	55.648	48.987
17)	Endosulfan sulfa	16.79	18.11	1442.9E6	623.8E6	46.707m	54.173
18)	Methoxychlor	16.80	18.60	907.6E6	297.4E6	58.116m	53.947
20)	Endrin ketone	17.51	18.90	1801.8E6	659.5E6	55.019	54.176
22) L1	Chlordane (gamma	11.52	14.74	2590.6E6	1028.1E6	57.209	54.988
23) L1	Chlordane (alpha	12.10	15.17	2558.1E6	963.6E6	55.753	55.150
Sum	Chlordane (gamma)			5148.7E6	1991.7E6	112.961	110.138
Average	Chlordane (gamma)					56.481	55.069
Sum	Toxaphene (1)				0 0	N.D.	N.D.
Average	Toxaphene (1)					0.000	0.000

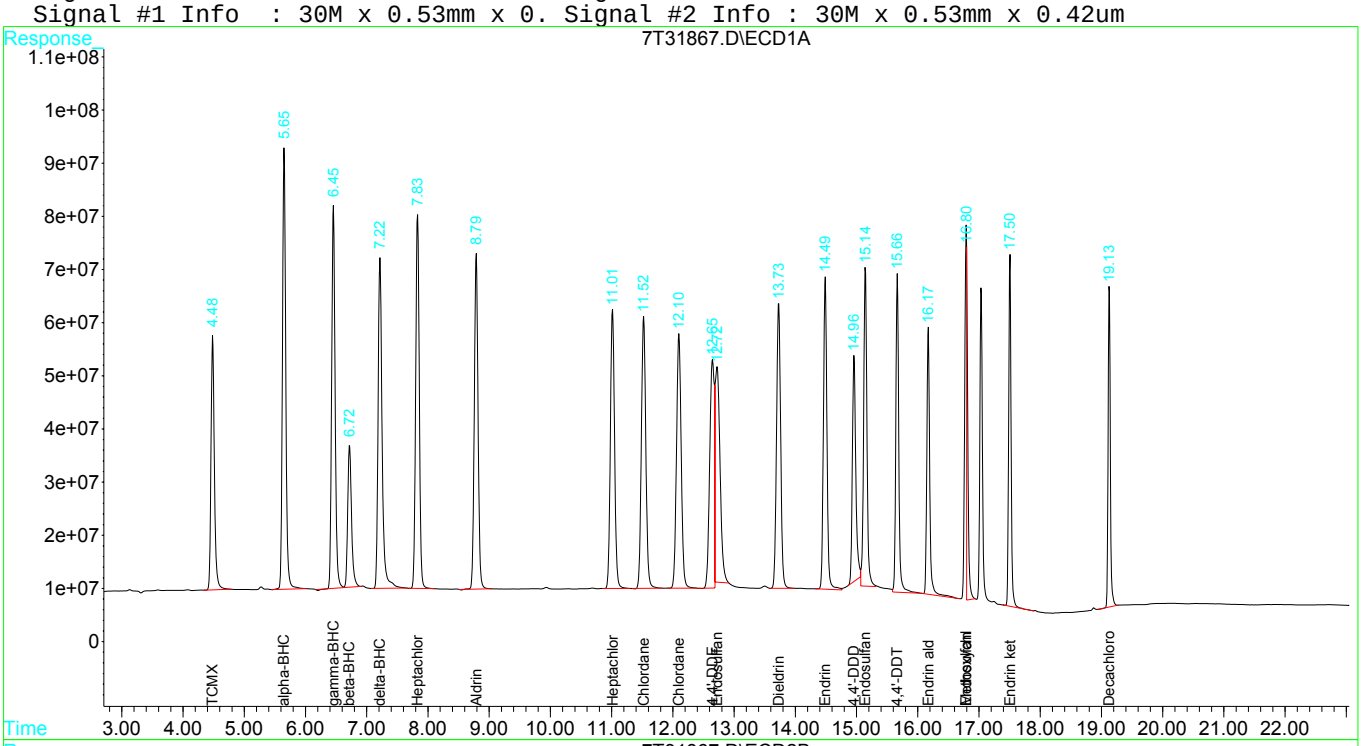
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7T31867.D 80811228.M Tue Jan 17 17:55:34 2023 SS

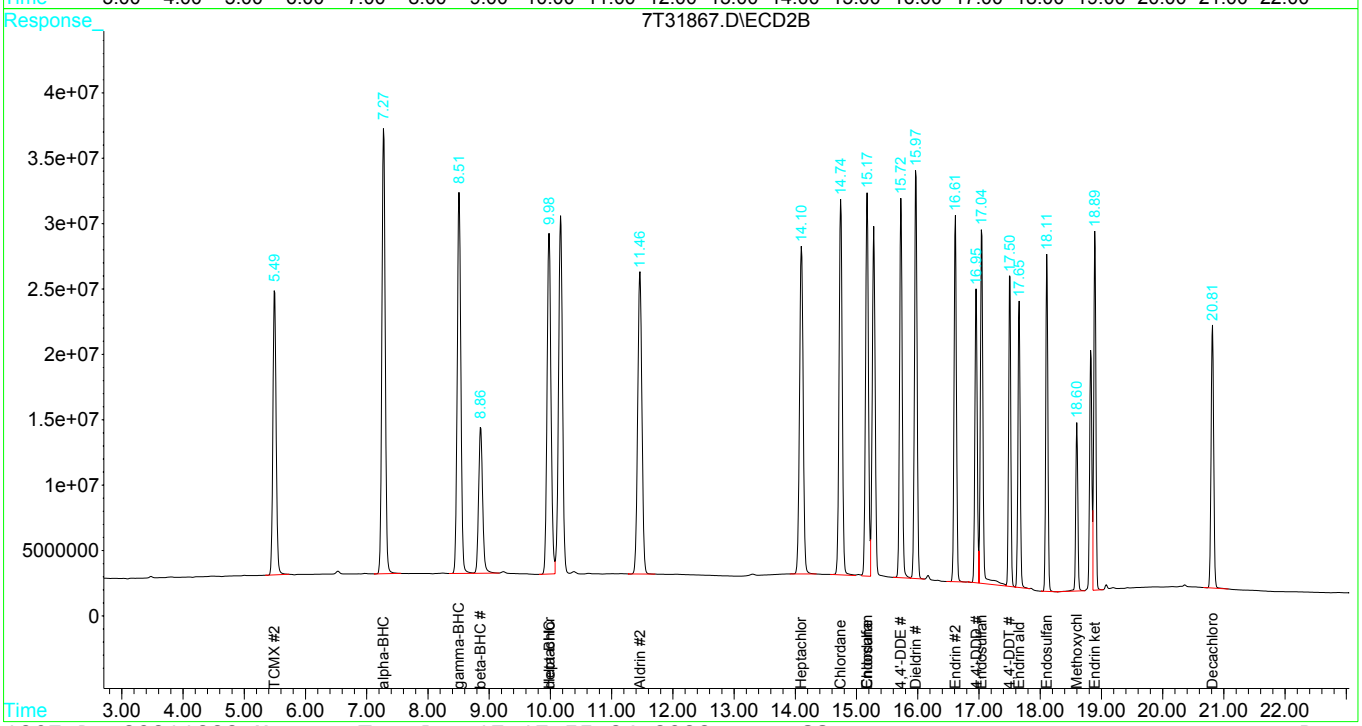
Quantitation Report (QT Reviewed)

Signal #1 : G:\HPCHEM\GCECD7\DATA\20230113\7T31867.D\ECD1A.CH Vial: 15
Signal #2 : G:\HPCHEM\GCECD7\DATA\20230113\7T31867.D\ECD2B.CH
Acq On : 13 Jan 2023 7:22 pm Operator: WD
Sample : SEQ-CCV@50PPB Inst : GCECD-7
Misc : Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Jan 14 13:31 2023 Quant Results File: 80811228.RES

Quant Method : G:\HPCHEM\G...\80811228.M (Chemstation Integrator)
Title : Pesticides by Method SW-846 8081B
Last Update : Sat Jan 14 13:28:22 2023
Response via : Multiple Level Calibration
DataAcq Meth : RUNPEST1.M

Volume Inj. : 2ul
Signal #1 Phase : RTx-50 Signal #2 Phase: RTx-CLPesticides II
Signal #1 Info : 30M x 0.53mm x 0. Signal #2 Info : 30M x 0.53mm x 0.42um





CALIBRATION VERIFICATION SUMMARY

Client: **Dynamic Earth LLC**
Work Order: **2120937**

Lab Sample ID (50):	SAA0267-CCV2(1)	Init. Calib. Date(s):	12/28/2022	12/29/2022
File ID:	7T31939.D	Date Analyzed:	01/16/2023 21:49	
Pesticides	Column 1	Matrix:	Ground Water	

Individual Mix Compound		RT WINDOW		$\overline{CF}$	CF	%D
		FROM	TO			
Aldrin	08.84	08.74	08.94	47160890	49946300	5.90
alpha-BHC	05.70	05.60	05.80	53065430	57368960	8.10
alpha-Chlordane (cis)	12.17	12.07	12.27	45883450	48376540	5.40
beta-BHC	06.77	06.67	06.87	21609980	21558480	0.20
delta-BHC	07.27	07.17	07.37	48927310	52438560	7.20
Dieldrin	13.79	13.69	13.89	44572680	46796920	5.00
Endosulfan I	12.80	12.70	12.90	39540850	45119180	14.10
Endosulfan II	15.19	15.09	15.29	41309610	41180260	0.30
Endosulfan sulfate	16.82	16.72	16.92	30893780	28704660	7.10
Endrin	14.54	14.44	14.64	41705440	43574160	4.50
Endrin aldehyde	16.21	16.11	16.31	29546590	30304300	2.60
Endrin ketone	17.54	17.44	17.64	32748990	35071460	7.10
gamma-Chlordane	11.59	11.49	11.69	45282670	48891140	8.00
gamma-BHC (Lindane)	06.50	06.40	06.60	49503550	52348220	5.70
4,4'-DDT	15.70	15.60	15.80	34111040	31917140	6.40
4,4'-DDE	12.72	12.62	12.82	43345070	42382240	2.20
4,4'-DDD	15.00	14.90	15.10	27660840	30541920	10.40
Methoxychlor	16.81	16.71	16.91	15617680	12676470	18.80
Heptachlor Epoxide	11.08	10.98	11.18	44130120	47096400	6.70
Heptachlor	07.88	07.78	07.98	50410610	52820760	4.80
Chlordane	12.17	12.07	12.27	45583060	48633840	6.70
Decachlorobiphenyl	19.15	19.05	19.25	27949750	30048060	7.50
Tetrachloro-m-xylene	04.52	04.42	04.62	31663030	35329340	11.60

* - Outside of QC limits

F-VII

CALIBRATION VERIFICATION SUMMARY

Client: **Dynamic Earth LLC**
Work Order: **2120937**

Lab Sample ID (50):	SAA0267-CCV2(2)	Init. Calib. Date(s):	12/28/2022	12/29/2022
File ID:	7T31939.D	Date Analyzed:	01/16/2023 21:49	
Pesticides	Column 2	Matrix:	Ground Water	

Individual Mix Compound		RT WINDOW		$\overline{CF}$	CF	%D
		FROM	TO			
Aldrin [2C]	11.53	11.43	11.63	19584280	21769160	11.20
alpha-BHC [2C]	07.33	07.23	07.43	22683710	25308280	11.60
alpha-Chlordane (cis) [2C]	15.21	15.11	15.31	17471800	18888040	8.10
beta-BHC [2C]	08.92	08.82	09.02	9240612	9967752	7.90
delta-BHC [2C]	10.04	09.94	10.14	20437370	22840800	11.80
Dieldrin [2C]	16.01	15.91	16.11	16586560	18153950	9.40
Endosulfan I [2C]	15.21	15.11	15.31	16572580	18888040	14.00
Endosulfan II [2C]	17.08	16.98	17.18	13602510	15424650	13.40
Endosulfan sulfate [2C]	18.14	18.04	18.24	11514510	12593840	9.40
Endrin [2C]	16.65	16.55	16.75	14574770	15378630	5.50
Endrin aldehyde [2C]	17.69	17.59	17.79	11357280	11085230	2.40
Endrin ketone [2C]	18.92	18.82	19.02	12173110	13471060	10.70
gamma-Chlordane [2C]	14.79	14.69	14.89	18697510	20058420	7.30
gamma-BHC (Lindane) [2C]	08.56	08.46	08.66	21202440	23403920	10.40
4,4'-DDT [2C]	17.53	17.43	17.63	10922680	10482130	4.00
4,4'-DDE [2C]	15.76	15.66	15.86	15157070	17055590	12.50
4,4'-DDD [2C]	16.98	16.88	17.08	10544580	12082500	14.60
Methoxychlor [2C]	18.62	18.52	18.72	5512007	5635464	2.20
Heptachlor Epoxide [2C]	14.15	14.05	14.25	18619540	20370660	9.40
Heptachlor [2C]	10.04	09.94	10.14	22291840	22840800	2.50
Chlordane [2C]	15.21	15.11	15.31	18084660	19473230	7.70
Decachlorobiphenyl [2C]	20.85	20.75	20.95	10890370	11929890	9.50
Tetrachloro-m-xylene [2C]	05.54	05.44	05.64	14651820	15456150	5.50

* - Outside of QC limits

F-VII

Quantitation Report (QT Reviewed)

Signal #1 : G:\HPCHEM\GCECD7\DATA\20230116\7T131939.D\ECD1A.CH Vial: 13
Signal #2 : G:\HPCHEM\GCECD7\DATA\20230116\7T131939.D\ECD2B.CH
Acq On : 16 Jan 2023 9:49 pm Operator: WD
Sample : SEQ-CCV@50PPB Inst : HP G1530A
Misc : Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Jan 17 14:08 2023 Quant Results File: 80811228.RES

Quant Method : G:\HPCHEM\G...\80811228.M (Chemstation Integrator)
Title : Pesticides by Method SW-846 8081B
Last Update : Tue Jan 17 12:59:08 2023
Response via : Initial Calibration
DataAcq Meth : RUNPEST1.M

Volume Inj. : 2ul
Signal #1 Phase : RTx-50 Signal #2 Phase: RTx-CLPesticides II
Signal #1 Info : 30M x 0.53mm x 0. Signal #2 Info : 30M x 0.53mm x 0.42um

		Compound	RT#1	RT#2	Resp#1	Resp#2	ug/kg	ug/kg
		System Monitoring Compounds						
1)	S	TCMX	4.52	5.54	1766.5E6	772.8E6	55.790	52.745
		Spiked Amount 50.000	Range 43 - 129		Recovery =		111.58%	105.49%
21)	S	Decachlorobiphen	19.15	20.85	1502.4E6	596.5E6	53.754m	54.773
		Spiked Amount 50.000	Range 42 - 136		Recovery =		107.51%	109.55%
		Target Compounds						
2)		alpha-BHC	5.70	7.33	2868.4E6	1265.4E6	54.055	55.785
3)	M	gamma-BHC (Linda	6.50	8.56	2617.4E6	1170.2E6	52.873	55.192
4)	M	Heptachlor	7.88	10.04	2641.0E6	1142.0E6	52.391	51.231
5)		beta-BHC	6.77	8.92	1077.9E6	498.4E6	49.881	53.934
6)		delta-BHC	7.27	10.04	2621.9E6	1142.0E6	53.588	55.880
7)	M	Aldrin	8.84	11.53	2497.3E6	1088.5E6	52.953	55.578
8)		Heptachlor epoxi	11.08	14.15	2354.8E6	1018.5E6	53.361	54.702
9)		Endosulfan I	12.80	15.21	2256.0E6	944.4E6	57.054	56.986
10)		4,4'-DDE	12.72	15.76	2119.1E6	852.8E6	48.889	56.263
11)	M	Dieldrin	13.79	16.01	2339.8E6	907.7E6	52.495	54.725
12)	M	Endrin	14.54	16.65	2178.7E6	768.9E6	52.240	52.758
13)		4,4'-DDD	15.00	16.98	1527.1E6	604.1E6	55.208m	57.292
14)		Endosulfan II	15.19	17.08	2059.0E6	771.2E6	49.843	56.698
15)	M	4,4'-DDT	15.70	17.53	1595.9E6	524.1E6	46.784	47.983
16)		Endrin aldehyde	16.21	17.69	1515.2E6	554.3E6	51.282	48.802
17)		Endosulfan sulfa	16.82	18.14	1435.2E6	629.7E6	46.457m	54.687
18)		Methoxychlor	16.81	18.62	633.8E6	281.8E6	40.584m	51.120 #
20)		Endrin ketone	17.54	18.92	1753.6E6	673.6E6	53.546	55.331
22)	L1	Chlordane (gamma	11.59	14.79	2444.6E6	1002.9E6	53.984	53.639
23)	L1	Chlordane (alpha	12.17	15.21	2418.8E6	944.4E6	52.717	54.053
		Sum Chlordane (gamma)			4863.4E6	1947.3E6	106.701	107.692
		Average Chlordane (gamma)					53.351	53.846
		Sum Toxaphene (1)				0 0	N.D.	N.D.
		Average Toxaphene (1)					0.000	0.000

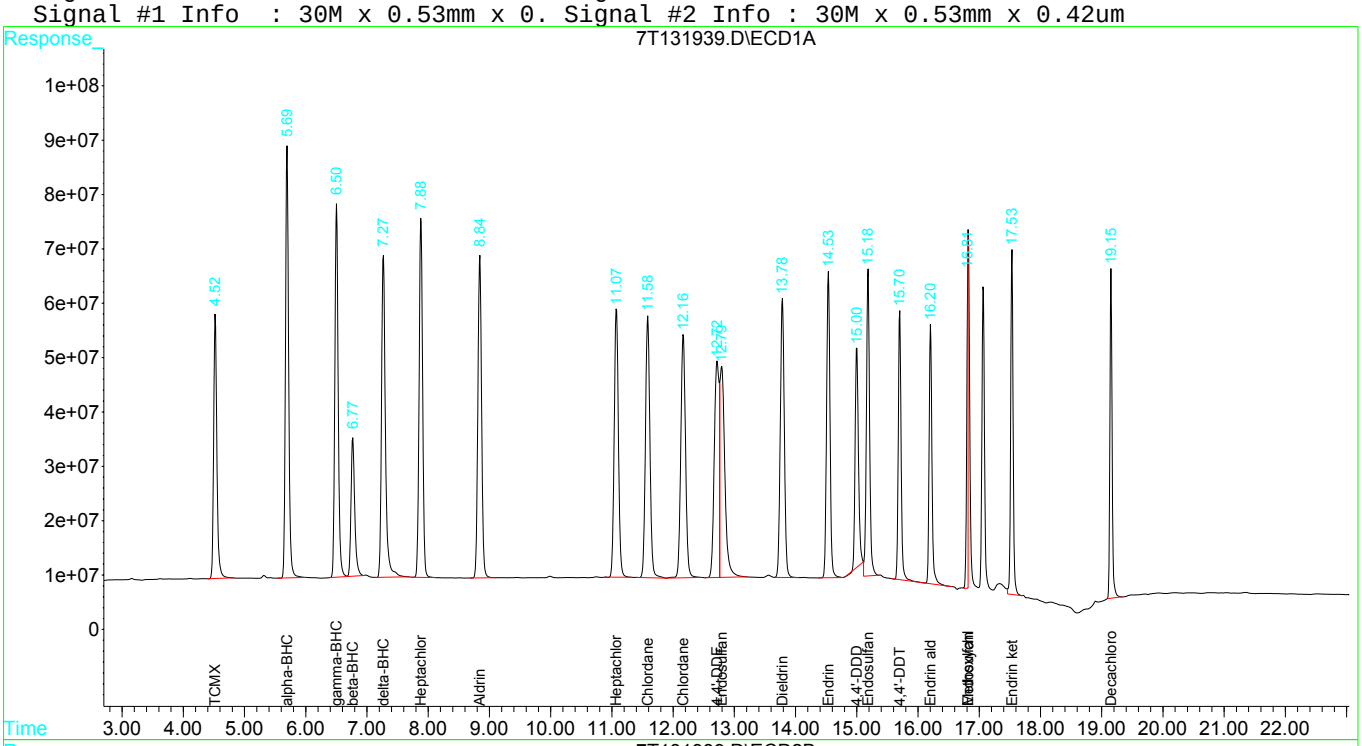
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7T131939.D 80811228.M Tue Jan 17 14:53:36 2023 SS Page 1

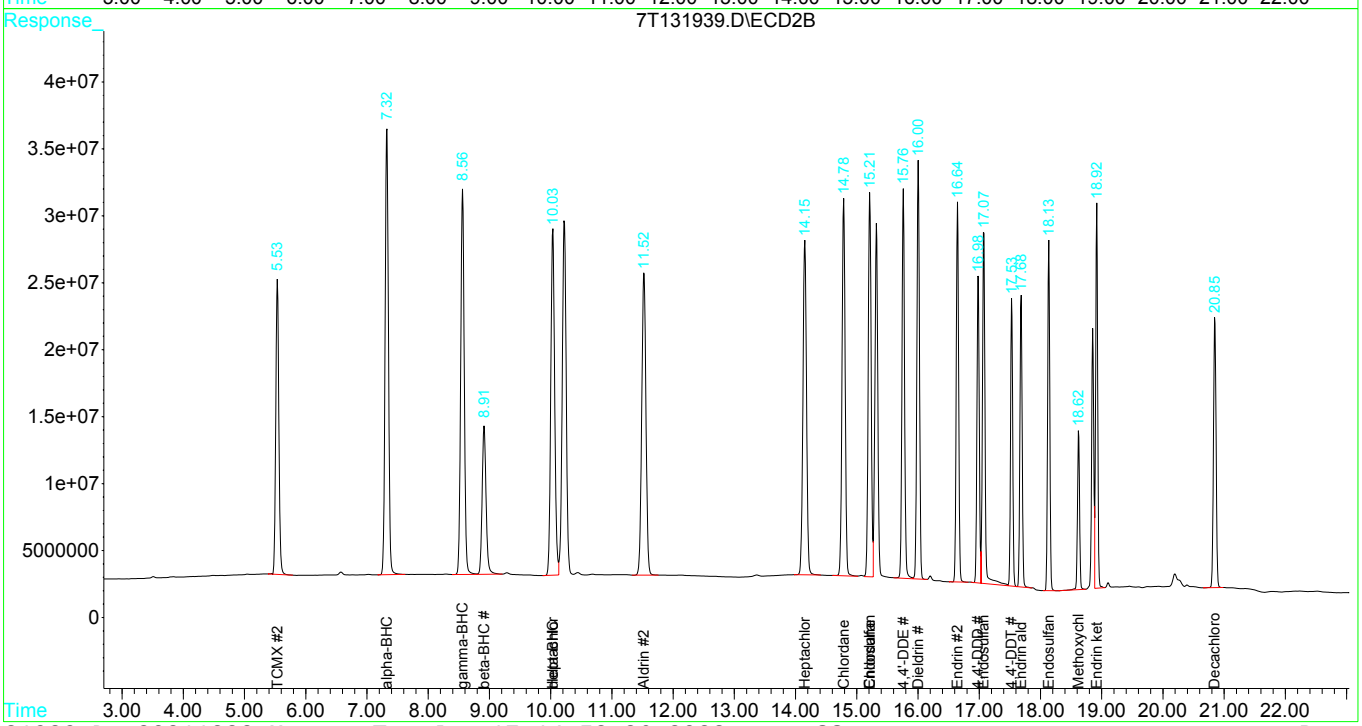
Quantitation Report (QT Reviewed)

Signal #1 : G:\HPCHEM\GCECD7\DATA\20230116\7T131939.D\ECD1A.CH Vial: 13
Signal #2 : G:\HPCHEM\GCECD7\DATA\20230116\7T131939.D\ECD2B.CH
Acq On : 16 Jan 2023 9:49 pm Operator: WD
Sample : SEQ-CCV@50PPB Inst : HP G1530A
Misc : Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Jan 17 14:08 2023 Quant Results File: 80811228.RES

Quant Method : G:\HPCHEM\G...\80811228.M (Chemstation Integrator)
Title : Pesticides by Method SW-846 8081B
Last Update : Tue Jan 17 12:59:08 2023
Response via : Multiple Level Calibration
DataAcq Meth : RUNPEST1.M

Volume Inj. : 2ul
Signal #1 Phase : RTx-50 Signal #2 Phase: RTx-CLPesticides II
Signal #1 Info : 30M x 0.53mm x 0. Signal #2 Info : 30M x 0.53mm x 0.42um





AQUA PRO-TECH LABORATORIES
Certified Environmental Testing

GENERAL CHEMISTRY

Dynamic Earth LLC

Work Order: 2120937

Project: Old Orchard G.C.

ANALYSIS DATA SHEET

General Chemistry

Client: Dynamic Earth LLC
Project: Old Orchard G.C.
Work Order: 2120937

General Chemistry

2120937-01 (Soil) - T-2A

Analyte	Units	Conc.	MDL	DF	Qual	Analyzed	Method
Percent Solids	%	86.6		1		12/27/22 11:23	Gravimetric

2120937-02 (Soil) - T-2-1

Analyte	Units	Conc.	MDL	DF	Qual	Analyzed	Method
Percent Solids	%	77.7		1		12/27/22 11:23	Gravimetric

2120937-03 (Soil) - T-2-2

Analyte	Units	Conc.	MDL	DF	Qual	Analyzed	Method
Percent Solids	%	83.2		1		12/27/22 11:23	Gravimetric

2120937-04 (Soil) - T-2-3

Analyte	Units	Conc.	MDL	DF	Qual	Analyzed	Method
Percent Solids	%	84.4		1		12/27/22 11:23	Gravimetric

2120937-05 (Soil) - T-2-4

Analyte	Units	Conc.	MDL	DF	Qual	Analyzed	Method
Percent Solids	%	82.8		1		12/27/22 11:23	Gravimetric

2120937-06 (Soil) - T-3A

Analyte	Units	Conc.	MDL	DF	Qual	Analyzed	Method
Percent Solids	%	89.7		1		12/27/22 11:23	Gravimetric

2120937-07 (Soil) - T-3-1

Analyte	Units	Conc.	MDL	DF	Qual	Analyzed	Method
Percent Solids	%	87.2		1		12/27/22 11:23	Gravimetric

2120937-08 (Soil) - T-3-2

Analyte	Units	Conc.	MDL	DF	Qual	Analyzed	Method
Percent Solids	%	86.7		1		12/27/22 11:23	Gravimetric

2120937-09 (Soil) - T-3-3

Analyte	Units	Conc.	MDL	DF	Qual	Analyzed	Method
Percent Solids	%	85.4		1		12/27/22 11:23	Gravimetric

2120937-10 (Soil) - T-3-4

Analyte	Units	Conc.	MDL	DF	Qual	Analyzed	Method
Percent Solids	%	84.4		1		12/27/22 11:23	Gravimetric

2120937-11 (Soil) - T-4A

Analyte	Units	Conc.	MDL	DF	Qual	Analyzed	Method
Percent Solids	%	88.8		1		12/27/22 11:23	Gravimetric

ND - Indicates compound analyzed for but not detected
J - Indicates estimated value
B - Indicates compound found in associated blank
E - Concentration exceeds highest calibration standard

D - Indicates result is based on a dilution
H - Indicates a Hold Time violation
P - Greater than 25% diff. between 2 GC columns.
MDL - Minimum detection limit, **RL** - Reporting limit

General Chemistry (Con't)

2120937-12 (Soil) - T-4-1

Analyte	Units	Conc.	MDL	DF	Qual	Analyzed	Method
Percent Solids	%	86.0		1		12/27/22 11:23	Gravimetric

2120937-13 (Soil) - T-4-2

Analyte	Units	Conc.	MDL	DF	Qual	Analyzed	Method
Percent Solids	%	85.3		1		12/27/22 11:23	Gravimetric

2120937-14 (Soil) - T-4-3

Analyte	Units	Conc.	MDL	DF	Qual	Analyzed	Method
Percent Solids	%	82.9		1		12/27/22 11:23	Gravimetric

2120937-15 (Soil) - T-4-4

Analyte	Units	Conc.	MDL	DF	Qual	Analyzed	Method
Percent Solids	%	88.2		1		12/27/22 11:23	Gravimetric

2120937-16 (Soil) - T-12A

Analyte	Units	Conc.	MDL	DF	Qual	Analyzed	Method
Percent Solids	%	85.3		1		12/27/22 11:23	Gravimetric

2120937-17 (Soil) - T-12-1

Analyte	Units	Conc.	MDL	DF	Qual	Analyzed	Method
Percent Solids	%	85.9		1		12/27/22 11:23	Gravimetric

2120937-18 (Soil) - T-12-2

Analyte	Units	Conc.	MDL	DF	Qual	Analyzed	Method
Percent Solids	%	86.1		1		12/27/22 11:23	Gravimetric

2120937-19 (Soil) - T-12-3

Analyte	Units	Conc.	MDL	DF	Qual	Analyzed	Method
Percent Solids	%	86.3		1		12/27/22 11:23	Gravimetric

2120937-20 (Soil) - T-12-4

Analyte	Units	Conc.	MDL	DF	Qual	Analyzed	Method
Percent Solids	%	86.2		1		12/27/22 11:23	Gravimetric

2120937-21 (Soil) - T-14A

Analyte	Units	Conc.	MDL	DF	Qual	Analyzed	Method
Percent Solids	%	86.6		1		12/27/22 11:23	Gravimetric

2120937-22 (Soil) - T-14-1

Analyte	Units	Conc.	MDL	DF	Qual	Analyzed	Method
Percent Solids	%	88.7		1		12/27/22 11:23	Gravimetric

2120937-23 (Soil) - T-14-2

Analyte	Units	Conc.	MDL	DF	Qual	Analyzed	Method
Percent Solids	%	86.6		1		12/27/22 11:23	Gravimetric

2120937-24 (Soil) - T-14-3

Analyte	Units	Conc.	MDL	DF	Qual	Analyzed	Method
Percent Solids	%	88.3		1		12/27/22 11:23	Gravimetric

2120937-25 (Soil) - T-14-4

Analyte	Units	Conc.	MDL	DF	Qual	Analyzed	Method
Percent Solids	%	89.9		1		12/27/22 11:23	Gravimetric

ND - Indicates compound analyzed for but not detected
J - Indicates estimated value
B - Indicates compound found in associated blank
E - Concentration exceeds highest calibration standard

D - Indicates result is based on a dilution
H - Indicates a Hold Time violation
P - Greater than 25% diff. between 2 GC columns.
MDL - Minimum detection limit, **RL** - Reporting limit

F-I

General Chemistry (Con't)

2120937-26 (Soil) - WA-2R

Analyte	Units	Conc.	RL	DF	Qual	Analyzed	Method
SPLP Leachate Volume	mL	2000		1		12/26/22 10:33	SW 846 1312
SPLP Leachate pH	pH Units	8.40	0.0100	1		12/26/22 10:33	SW 846 9040C
SPLP Soil Weight	g	93.2		1		12/26/22 10:33	Gravimetric
Percent Solids	%	93.2		1		12/27/22 11:23	Gravimetric

2120937-27 (Soil) - WA-3R

Analyte	Units	Conc.	RL	DF	Qual	Analyzed	Method
SPLP Leachate Volume	mL	2000		1		12/26/22 10:33	SW 846 1312
Percent Solids	%	92.5		1		12/27/22 11:23	Gravimetric
SPLP Soil Weight	g	92.5		1		12/26/22 10:33	Gravimetric
SPLP Leachate pH	pH Units	8.50	0.0100	1		12/29/22 10:41	SW 846 9040C

2120937-28 (Soil) - G-6-2R

Analyte	Units	Conc.	MDL	DF	Qual	Analyzed	Method
Percent Solids	%	84.8		1		12/27/22 11:23	Gravimetric
SPLP Leachate Volume	mL	2000		1		12/26/22 10:33	SW 846 1312
SPLP Soil Weight	g	84.8		1		12/26/22 10:33	Gravimetric
SPLP Leachate pH	pH Units	8.30	0.0100	1		12/29/22 10:41	SW 846 9040C

2120937-29 (Soil) - G-9A-R

Analyte	Units	Conc.	RL	DF	Qual	Analyzed	Method
SPLP Soil Weight	g	82.3		1		12/26/22 10:33	Gravimetric
SPLP Leachate pH	pH Units	8.20	0.0100	1		12/29/22 10:41	SW 846 9040C
Percent Solids	%	82.3		1		12/27/22 11:23	Gravimetric
SPLP Leachate Volume	mL	2000		1		12/26/22 10:33	SW 846 1312

2120937-30 (Soil) - G-9-1-R

Analyte	Units	Conc.	MDL	DF	Qual	Analyzed	Method
Percent Solids	%	79.6		1		12/27/22 11:23	Gravimetric

2120937-31 (Soil) - G-9-2-R

Analyte	Units	Conc.	MDL	DF	Qual	Analyzed	Method
Percent Solids	%	82.7		1		12/27/22 11:23	Gravimetric
SPLP Leachate pH	pH Units	8.10	0.0100	1		12/29/22 10:41	SW 846 9040C
SPLP Leachate Volume	mL	2000		1		12/26/22 10:33	SW 846 1312
SPLP Soil Weight	g	82.7		1		12/26/22 10:33	Gravimetric

2120937-32 (Soil) - G-9-3-R

Analyte	Units	Conc.	MDL	DF	Qual	Analyzed	Method
Percent Solids	%	84.6		1		12/27/22 11:23	Gravimetric

2120937-33 (Soil) - G-9-4-R

Analyte	Units	Conc.	MDL	DF	Qual	Analyzed	Method
Percent Solids	%	82.9		1		12/27/22 11:23	Gravimetric

2120937-34 (Soil) - G-6-R

Analyte	Units	Conc.	RL	DF	Qual	Analyzed	Method
SPLP Leachate pH	pH Units	5.02	0.0100	1		12/29/22 10:00	SW 846 9040C
SPLP Leachate Volume	mL	1000		1		12/29/22 10:00	SW 846 1312
SPLP Soil Weight	g	44.4		1		12/28/22 17:00	Gravimetric
Percent Solids	%	88.9		1		12/27/22 11:23	Gravimetric

2120937-35 (Soil) - G-12A

Analyte	Units	Conc.	MDL	DF	Qual	Analyzed	Method
Percent Solids	%	83.3		1		12/27/22 11:23	Gravimetric

ND - Indicates compound analyzed for but not detected
J - Indicates estimated value
B - Indicates compound found in associated blank
E - Concentration exceeds highest calibration standard
D - Indicates result is based on a dilution
H - Indicates a Hold Time violation
P - Greater than 25% diff. between 2 GC columns.
MDL - Minimum detection limit, **RL** - Reporting limit

F-I

General Chemistry (Con't)

2120937-36 (Soil) - G-12-1

Analyte	Units	Conc.	MDL	DF	Qual	Analyzed	Method
Percent Solids	%	86.5		1		12/27/22 11:23	Gravimetric

2120937-37 (Soil) - G-12-2

Analyte	Units	Conc.	MDL	DF	Qual	Analyzed	Method
Percent Solids	%	85.1		1		12/27/22 11:23	Gravimetric

2120937-38 (Soil) - G-12-3

Analyte	Units	Conc.	MDL	DF	Qual	Analyzed	Method
Percent Solids	%	83.2		1		12/27/22 11:23	Gravimetric

2120937-39 (Soil) - G-12-4

Analyte	Units	Conc.	MDL	DF	Qual	Analyzed	Method
Percent Solids	%	88.3		1		12/27/22 11:23	Gravimetric

2120937-41 (Soil) - T-2B

Analyte	Units	Conc.	MDL	DF	Qual	Analyzed	Method
Percent Solids	%	81.8		1		01/12/23 11:43	Gravimetric

2120937-42 (Soil) - T-3-1A

Analyte	Units	Conc.	MDL	DF	Qual	Analyzed	Method
Percent Solids	%	88.7		1		01/12/23 11:43	Gravimetric

2120937-43 (Soil) - T-3-2A

Analyte	Units	Conc.	MDL	DF	Qual	Analyzed	Method
Percent Solids	%	87.4		1		01/12/23 11:43	Gravimetric

2120937-44 (Soil) - T-3-3A

Analyte	Units	Conc.	MDL	DF	Qual	Analyzed	Method
Percent Solids	%	88.8		1		01/12/23 11:43	Gravimetric

2120937-45 (Soil) - T-3-4A

Analyte	Units	Conc.	MDL	DF	Qual	Analyzed	Method
Percent Solids	%	89.1		1		01/12/23 11:43	Gravimetric

2120937-46 (Soil) - T-12-1A

Analyte	Units	Conc.	MDL	DF	Qual	Analyzed	Method
Percent Solids	%	86.4		1		01/12/23 11:43	Gravimetric

2120937-47 (Soil) - T-12-3A

Analyte	Units	Conc.	MDL	DF	Qual	Analyzed	Method
Percent Solids	%	86.1		1		01/12/23 11:43	Gravimetric

2120937-48 (Soil) - T-14-4A

Analyte	Units	Conc.	MDL	DF	Qual	Analyzed	Method
Percent Solids	%	90.3		1		01/12/23 11:43	Gravimetric

2120937-49 (Soil) - G-12-2A

Analyte	Units	Conc.	MDL	DF	Qual	Analyzed	Method
Percent Solids	%	91.7		1		01/12/23 11:43	Gravimetric

2120937-50 (Soil) - G-12-3A

Analyte	Units	Conc.	MDL	DF	Qual	Analyzed	Method
Percent Solids	%	91.0		1		01/12/23 11:43	Gravimetric

ND - Indicates compound analyzed for but not detected
J - Indicates estimated value
B - Indicates compound found in associated blank
E - Concentration exceeds highest calibration standard

D - Indicates result is based on a dilution
H - Indicates a Hold Time violation
P - Greater than 25% diff. between 2 GC columns.
MDL - Minimum detection limit, **RL** - Reporting limit

General Chemistry (Con't)

2120937-51 (Soil) - T-2C

Analyte	Units	Conc.	MDL	DF	Qual	Analyzed	Method
Percent Solids	%	82.4		1		01/13/23 11:11	Gravimetric

ND - Indicates compound analyzed for but not detected
J - Indicates estimated value
B - Indicates compound found in associated blank
E - Concentration exceeds highest calibration standard

D - Indicates result is based on a dilution
H - Indicates a Hold Time violation
P - Greater than 25% diff. between 2 GC columns.
MDL - Minimum detection limit, **RL** - Reporting limit

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ANALYTICAL RESULTS

REDUCED DELIVERABLES FORMAT

APL Work Order Number: 2120938

Dynamic Earth LLC

Project: Old Orchard G.C.



Brian Wood
Laboratory Director

All Results meet the requirements of the National Environmental Laboratory Accreditation Conference and/or State specific certifications as applicable.

Report Date: Jan 23, 2023

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NELAC National Environmental Laboratory Accreditation Conference
NJDEP #07010 / NYDOH #11634 / PADEP #68-02903

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Sample Summary

Work Order: 2120938

Client: Dynamic Earth LLC

Project: Old Orchard G.C.

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
G-15A	2120938-01	Soil	12/21/2022 11:08	12/23/2022 12:00
G-15-1	2120938-02	Soil	12/21/2022 11:14	12/23/2022 12:00
G-15-2	2120938-03	Soil	12/21/2022 11:18	12/23/2022 12:00
G-15-3	2120938-04	Soil	12/21/2022 11:22	12/23/2022 12:00
G-15-4	2120938-05	Soil	12/21/2022 11:26	12/23/2022 12:00
G-16A	2120938-06	Soil	12/21/2022 11:30	12/23/2022 12:00
G-16-1	2120938-07	Soil	12/21/2022 11:36	12/23/2022 12:00
G-16-2	2120938-08	Soil	12/21/2022 11:40	12/23/2022 12:00
G-16-3	2120938-09	Soil	12/21/2022 11:44	12/23/2022 12:00
G-16-4	2120938-10	Soil	12/21/2022 11:48	12/23/2022 12:00
F-6A	2120938-11	Soil	12/20/2022 11:52	12/23/2022 12:00
F-6-1	2120938-12	Soil	12/20/2022 11:58	12/23/2022 12:00
F-6-2	2120938-13	Soil	12/20/2022 12:02	12/23/2022 12:00
F-6-3	2120938-14	Soil	12/20/2022 12:06	12/23/2022 12:00
F-6-4	2120938-15	Soil	12/20/2022 12:10	12/23/2022 12:00
F-11A	2120938-16	Soil	12/21/2022 12:14	12/23/2022 12:00
F-11-1	2120938-17	Soil	12/21/2022 12:20	12/23/2022 12:00
F-11-2	2120938-18	Soil	12/21/2022 12:24	12/23/2022 12:00
F-11-3	2120938-19	Soil	12/21/2022 12:28	12/23/2022 12:00
F-11-4	2120938-20	Soil	12/21/2022 12:32	12/23/2022 12:00
F-15A	2120938-21	Soil	12/21/2022 12:36	12/23/2022 12:00
F-15-1	2120938-22	Soil	12/21/2022 12:42	12/23/2022 12:00
F-15-3-R	2120938-23	Soil	12/21/2022 12:50	12/23/2022 12:00
F-15-6-R	2120938-24	Soil	12/21/2022 12:54	12/23/2022 12:00
F-15-7-R	2120938-25	Soil	12/21/2022 12:46	12/23/2022 12:00
F-17A	2120938-26	Soil	12/21/2022 12:50	12/23/2022 12:00
F-17-1	2120938-27	Soil	12/21/2022 12:56	12/23/2022 12:00
F-17-2	2120938-28	Soil	12/21/2022 13:00	12/23/2022 12:00
F-17-3	2120938-29	Soil	12/21/2022 13:10	12/23/2022 12:00
F-17-4	2120938-30	Soil	12/21/2022 13:14	12/23/2022 12:00
T-11R	2120938-31	Soil	12/21/2022 14:00	12/23/2022 12:00
G-9-GW	2120938-32	Ground Water	12/21/2022 14:55	12/23/2022 12:00
F-18R	2120938-33	Soil	12/21/2022 14:10	12/23/2022 12:00

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Sample Summary (con't)

Work Order: 2120938

Client: Dynamic Earth LLC

Project: Old Orchard G.C.

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
F-15R	2120938-34	Soil	12/21/2022 16:00	12/23/2022 12:00
G-16R	2120938-35	Soil	12/21/2022 16:10	12/23/2022 12:00
G-15R	2120938-36	Soil	12/21/2022 16:15	12/23/2022 12:00
G-11R	2120938-37	Soil	12/21/2022 16:20	12/23/2022 12:00
F-15-6A-R	2120938-39	Soil	12/21/2022 12:56	12/23/2022 12:00

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Low / Medium / High

Page 9 of 16

Client:	Dynamic Earth, LLC	Send Report To:	
Address:		Address:	
ne:		Phone:	
ail:		Send Invoice To:	
ect ne:		Address:	
Project Manager:		Sampling Location:	Eatontown, NJ
Project or PO #:		Sampled By:	Omar Mahmoud

SAME

Turn-Around Time
- [ ] APL Standard 2 Weeks
- [ ] Rush (Choose One Below)
- [ ] 1 Day [ ] 2 Days [ ] 3 Days
- [x] 1 Week [ ] Other (Specify Below)

Date and Time Required: _____
**May Need Lab Approval

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- [ ] Full: NJ DEP / NY ASP-B
- [ ] State Forms/E2 Reporting
- [x] Excel Summary
- [ ] EqUIS
- [ ] EnviroData
- [ ] Hazsite EDD

PWSID # _____ SRP# _____

Comments/Special Instructions:
* Hold sample

Cooler Temp: 4.0°C

Matrix Abbreviations:
DW - Drinking Water; GW - Groundwater; WW - Wastewater; SW - Surface Water; L - Lake; Pool; SPA; S - Soil; SD - Solid; SL - Sludge; C - Concrete; W - Wipes; O - Oil; PC - Paint Chips

APL Order # (APL Will Provide): 2120938

Sample #	Sample Source: Field ID	Collect Date	Collect Time	Matrix	Sample Type: Grab	Sample Type: Comp	No. of Bottles	Preservative	ANALYSIS REQUESTED: Heptachlor Epoxide
	G-12-4A *	12/21/22	1106	S	X				X
-01	G-15A		1108		X				X
	G-15B *		1110		X				X
	G-15C *		1112		X				X
-02	G-15-1		1114		X				X
	G-15-1A *		1116		X				X
-03	G-15-2		1118		X				X
	G-15-2A *		1120		X				X
-04	G-15-3		1122		X				X
	G-15-3A *		1124		X				X

RELINQUISHED BY:	Print: Omar Mahmoud	RECEIVED BY:	Print: Ryan Munson	Date: 12/23/22
	Sign:		Sign:	Time: 10:30
RELINQUISHED BY:	Print: Ryan Munson 12-23-22	RECEIVED BY:	Print: Rose Nap	Date: 12-23-22
	Sign: 12:00		Sign:	Time: 1200
RELINQUISHED BY:	Print:	RECEIVED BY:	Print:	Date:
	Sign:		Sign:	Time:

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PN: 2120938

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CHAIN OF CUSTODY

Client:	Dynamic Earth, LLC	Send Report To:	
Address:		Address:	
Phone:		Phone:	
E-Mail:		Send Invoice To:	
Project Name:	G	Address:	
Project Manager:		Sampling Location:	Eatontown, NJ
Project or PO #:		Sampled By:	Omar Mahmood

Turn-Around Time
- [ ] APL Standard 2 Weeks
- [ ] Rush (Choose One Below)
- [ ] 1 Day [ ] 2 Days [ ] 3 Days
- [x] 1 Week [ ] Other (Specify Below)

Date and Time Required: _____
**May Need Lab Approval

Report / Electronic Format
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- [ ] Full: NJ DEP / NY ASP-B
- [ ] State Forms/E2 Reporting
- [x] Excel Summary
- [ ] EqUIS
- [ ] EnviroData
- [ ] Hazsite EDD

PWSID # _____ SRP# _____

Contamination Level
- [ ] Low
- [ ] Medium
- [ ] High

Comments/Special Instructions:

* Hold Sample

Cooler Temp: 4.0°C

APL Order # (APL Will Provide): 2120938

Matrix Abbreviations:
DW - Drinking Water; GW - Groundwater; WW - Wastewater; SW - Surface Water; L - Lake; Pool; SPA; S - Soil; SD - Solid; SL - Sludge; C - Concrete; W - Wipes; O - Oil; PC - Paint Chips

ANALYSIS REQUESTED

Sample #	Sample Source: Field ID	Collect Date	Collect Time	Matrix	Sample Type: Grab	Sample Type: Comp	No. of Bottles	Preservative	Heptachlor Epoxide	Mercury SPLP									
-05	G-15-4	12/21/22	1126	S	X				X										
	G-15-4A *		1128		X				X										
-06	G-16A		1130		X				X	X									
	G-16B *		1132		X				X										
	G-16C *		1134		X				X										
-07	G-16-1		1136		X				X										
	G-16-1A *		1138		X				X										
-08	G-16-2		1140		X				X										
	G-16-2A *		1142		X				X										
-09	G-16-3		1144		X				X										

RELINQUISHED BY:	Print: Omar Mahmood	RECEIVED BY:	Print: Ryan Munson	Date: 12/23/22
	Sign:		Sign:	Time: 10:30
RELINQUISHED BY:	Print: Ryan Munson 12.23.22	RECEIVED BY:	Print: ROSE NAP	Date: 12-23-22
	Sign: 12:00		Sign:	Time: 1200
RELINQUISHED BY:	Print:	RECEIVED BY:	Print:	Date:
	Sign:		Sign:	Time:

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PN: 2120938

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Client:	Dynamic Earth, LLC	Send Report To:	
Address:		Address:	
Phone:		Phone:	
E-Mail:		Send Invoice To:	
Project Name:		Address:	
Project Manager:		Sampling Location:	Eatontown, NJ
Project or PO #:		Sampled By:	Omar Mahmoud

Turn-Around Time
- [ ] APL Standard 2 Weeks
- [ ] Rush (Choose One Below)
- [ ] 1 Day [ ] 2 Days [ ] 3 Days
- [x] 1 Week [ ] Other (Specify Below)

Date and Time Required: _____
**May Need Lab Approval

Report / Electronic Format
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- [ ] **Full:** NJ DEP / NY ASP-B
- [ ] State Forms/E2 Reporting
- [x] Excel Summary
- [ ] EqUIS
- [ ] EnviroData
- [ ] Hazsite EDD

PWSID # _____ SRP# _____

Contamination Level
- [ ] Low
- [ ] Medium
- [ ] High

Comments/Special Instructions:
* Hold sample

Cooler Temp: 4.0°C

APL Order # (APL Will Provide): 2120938

Matrix Abbreviations:
DW - Drinking Water; GW - Groundwater; WW - Wastewater; SW - Surface Water; L - Lake; Pool; SPA; S - Soil; SD - Solid; SL - Sludge; C - Concrete; W - Wipes; O - Oil; PC - Paint Chips

ANALYSIS REQUESTED

Sample #	Sample Source: Field ID	Collect Date	Collect Time	Matrix	Sample Type: Grab	Sample Type: Comp	No. of Bottles	Preservative	Heptachlor Epoxide	Arsenic
	G-16-3A *	12/21/22	1146	S	x				x	
-10	G-16-4		1148		x				x	
	G-16-4A *		1150		x				x	
-11	F-6A	12/20/22	1152		x					x
	F-6B *		1154		x					x
	F-6C *		1156		x					x
-12	F-6-1		1158		x					x
	F-6-1A *		1200		x					x
-13	F-6-2		1202		x					x
	F-6-2A *		1204		x					x

RELINQUISHED BY:	Print: Omar Mahmoud	RECEIVED BY:	Print: Ryan Munson	Date:	12/23/22
	Sign:		Sign:	Time:	10:30
RELINQUISHED BY:	Print: Ryan Munson 12.23.22	RECEIVED BY:	Print: RoseMap	Date:	12-23-23
	Sign 12:00		Sign:	Time:	1200
RELINQUISHED BY:	Print:	RECEIVED BY:	Print:	Date:	
	Sign:		Sign:	Time:	

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PN: 2120938

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Client:	Dynamic Earth, LLC	Send Report To:	
Address:		Address:	
Phone:		Phone:	
E-Mail:		Send Invoice To:	
Project Name:	S	Address:	
Project Manager:		Sampling Location:	Ecatontown, NJ
Project or PO #:		Sampled By:	Omar Mahmoud

Turn-Around Time
- [ ] APL Standard 2 Weeks
- [ ] Rush (Choose One Below)
- [ ] 1 Day [ ] 2 Days [ ] 3 Days
- [x] 1 Week [ ] Other (Specify Below)

Date and Time Required: _____
**May Need Lab Approval

Report / Electronic Format
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- [ ] State Forms/E2 Reporting
- [x] Excel Summary
- [ ] EqUIS
- [ ] EnviroData
- [ ] Hazsite EDD

PWSID # _____ SRP# _____

Contamination Level
- [ ] Low
- [ ] Medium
- [ ] High

Comments/Special Instructions:

* Hold sample

Cooler Temp: 4.0°C

APL Order # (APL Will Provide): 2120938

Matrix Abbreviations: DW - Drinking Water; GW - Groundwater; WW - Wastewater; SW - Surface Water; L - Lake; Pool; SPA; S - Soil; SD - Solid; SL - Sludge; C - Concrete; W - Wipes; O - Oil; PC - Paint Chips

Sample #	Sample Source: Field ID	Collect Date	Collect Time	Matrix	Sample Type: Grab	Sample Type: Comp	No. of Bottles	Preservative	ANALYSIS REQUESTED: Arsenic
-14	F-6-3	12/20/22	1206	S	X				X
	F-6-3A *		1208		X				X
-15	F-6-4		1210		X				X
	F-6-4A *		1212		X				X
-16	F-11A	12/21/22	1214		X				X
	F-11B *		1216		X				X
	F-11C *		1218		X				X
-17	F-11-1		1220		X				X
	F-11-1A *		1229		X				X
-18	F-11-2		1224		X				X

RELINQUISHED BY:	Print: Omar Mahmoud	RECEIVED BY:	Print: Ryan Munson	Date: 12/23/22
	Sign:		Sign:	Time: 10:30
RELINQUISHED BY:	Print: Ryan Munson 12.23.22	RECEIVED BY:	Print: ROSE NAP	Date: 12-23-22
	Sign: 12:00		Sign:	Time: 1200
RELINQUISHED BY:	Print:	RECEIVED BY:	Print:	Date:
	Sign:		Sign:	Time:

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Client:	Dynamic Earth, LLC	Send Report To:	
Address:		Address:	
Phone:		Phone:	
E-Mail:		Send Invoice To:	
Project Name:		Address:	
Project Manager:		Sampling Location:	Ecktonstown, NJ
Project or PO #:		Sampled By:	Omar Mahmoud

Turn-Around Time
- [ ] APL Standard 2 Weeks
- [ ] Rush (Choose One Below)
- [ ] 1 Day [ ] 2 Days [ ] 3 Days
- [x] 1 Week [ ] Other (Specify Below)

Date and Time Required: _____
**May Need Lab Approval

Report / Electronic Format
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- [x] Reduced: NJ DEP
- [ ] Full: NJ DEP / NY ASP-B
- [ ] State Forms/E2 Reporting
- [x] Excel Summary
- [ ] EqUIS
- [ ] EnviroData
- [ ] Hazsite EDD

PWSID # _____ SRP# _____

Contamination Level
- [ ] Low
- [ ] Medium
- [ ] High

Comments/Special Instructions:

* Hold sample

Cooler Temp: 4.0°

APL Order # (APL Will Provide): 2120938

Matrix Abbreviations: DW - Drinking Water; GW - Groundwater; WW - Wastewater; SW - Surface Water; L - Lake, Pool, SPA; S - Soil; SD - Solid; SL - Sludge; C - Concrete; W - Wipes; O - Oil; PC - Paint Chips

Sample #	Sample Source: Field ID	Collect Date	Collect Time	Matrix	Sample Type: Grab	Sample Type: Comp	No. of Bottles	Preservative	ANALYSIS REQUESTED: Arsenic
	F-11-2A *	12/21/22	1226	S	X				X
-19	F-11-3		1228		X				X
	F-11-3A *		1230		X				X
-20	F-11-4		1232		X				X
	F-11-4A *		1234		X				X
-21	F-15A		1236		X				X
	F-15B *		1238		X				X
	F-15C *		1240		X				X
-22	F-15-1		1242		X				X
	F-15-1A *		1246		X				X

RELINQUISHED BY:	Print: Omar Mahmoud	RECEIVED BY:	Print: Ryan Munson	Date:	12/23/22
	Sign:		Sign:	Time:	10:30
RELINQUISHED BY:	Print: Ryan Munson 12.23.22	RECEIVED BY:	Print: Rose Nap	Date:	12-23-22
	Sign 12:00		Sign:	Time:	1200
RELINQUISHED BY:	Print:	RECEIVED BY:	Print:	Date:	
	Sign:		Sign:	Time:	

CERTIFICATIONS: NELAP (National Environmental Accreditation Program) NJDEP #07010 PADEP #68-02903 NYDOH #11634

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PN: 2120938

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CHAIN OF CUSTODY

Client:	Dynamic Earth, LLC	Send Report To:	
Address:		Address:	
Phone:		Phone:	
E-Mail:		Send Invoice To:	
Project Name:		Address:	
Project Manager:		Sampling Location:	Eatontown, NJ
Project or PO #:		Sampled By:	Omar Mahmood

SAME

Turn-Around Time
- [ ] APL Standard 2 Weeks
- [ ] Rush (Choose One Below)
- [ ] 1 Day [ ] 2 Days [ ] 3 Days
- [x] 1 Week [ ] Other (Specify Below)

Date and Time Required: _____
**May Need Lab Approval

Report / Electronic Format
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- [x] Excel Summary
- [ ] EqUIS
- [ ] EnviroData
- [ ] Hazsite EDD

PWSID # _____ SRP# _____

Contamination Level
- [ ] Low
- [ ] Medium
- [ ] High

Comments/Special Instructions:

* Hold sample

Cooler Temp: 4.0 °C

APL Order # (APL Will Provide): 2120938

Matrix Abbreviations: DW - Drinking Water; GW - Groundwater; WW - Wastewater; SW - Surface Water; L - Lake, Pool, SPA; S - Soil; SD - Solid; SL - Sludge; C - Concrete; W - Wipes; O - Oil; PC - Paint Chips

ANALYSIS REQUESTED: Arsenic

Sample #	Sample Source: Field ID	Collect Date	Collect Time	Matrix	Sample Type: Grab	Sample Type: Comp	No. of Bottles	Preservative	Arsenic
-23	F-15-3-R	12/21/22	1250	S	X				X
	F-15-3A-R *		1252		X				X
-24	F-15-6-R		1254		X				X
	F-15-6A-R *		1256		X				X
-25	F-15-7-R		1246		X				X
	F-15-7A-R *		1248		X				X
-26	F-17A		1250		X				X
	F-17B *		1252		X				X
	F-17C *		1254		X				X
-27	F-17-1		1256		X				X

RELINQUISHED BY:	Print: Omar Mahmood	RECEIVED BY:	Print: Ryan Munson	Date: 12/23/22
	Sign:		Sign:	Time: 10:30
RELINQUISHED BY:	Print: Ryan Munson 12.23.22	RECEIVED BY:	Print: BOSE WAP	Date: 12-23-22
	Sign 12:00		Sign:	Time: 1200
RELINQUISHED BY:	Print:	RECEIVED BY:	Print:	Date:
	Sign:		Sign:	Time:

CERTIFICATIONS: NELAP (National Environmental Accreditation Program) NJDEP #07010 PADEP #68-02903 NYDOH #11634

By signing this Chain of Custody Agreement, customer expressly agrees to pay APL for all charges, reasonably incurred in connection with analysis and reporting for these samples.

PN: 2120938

APL

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1275 Bloomfield Avenue Building 6
Fairfield, NJ 07004

TEL: 973-227-0422
FAX: 973-227-2813

CHAIN OF CUSTODY

Client: Dynamic Earth, LLC	Send Report To:
Address:	Address:
Phone:	Phone:
E-Mail:	Send Invoice To:
Project Name:	Address:
Project Manager:	Sampling Location: Estaburn, NJ
Project or PO #:	Sampled By: Omar Mahmoud

Turn-Around Time
- [ ] APL Standard 2 Weeks
- [ ] Rush (Choose One Below)
- [ ] 1 Day [ ] 2 Days [ ] 3 Days
- [x] 1 Week [ ] Other (Specify Below)

Date and Time Required: _____
**May Need Lab Approval

Report / Electronic Format
- [ ] Results Only / NY ASP-A
- [x] Reduced: NJ DEP
- [ ] Full: NJ DEP / NY ASP-B
- [ ] State Forms/E2 Reporting
- [x] Excel Summary
- [ ] EqUIS
- [ ] EnviroData
- [ ] Hazsite EDD

PWSID # _____ SRP# _____

Contamination Level
- [ ] Low
- [ ] Medium
- [ ] High

Comments/Special Instructions:
* Hold sample
• Contingent analysis

Cooler Temp: 4.0°C

APL Order # (APL Will Provide): 2120938

Matrix Abbreviations: DW - Drinking Water; GW - Groundwater; WW - Wastewater; SW - Surface Water; L - Lake; Pool; SPA; S - Soil; SD - Solid; SL - Sludge; C - Concrete; W - Wipes; O - Oil; PC - Paint Chips

Sample #	Sample Source: Field ID	Collect Date	Collect Time	Matrix	Sample Type: Grab	Sample Type: Comp	No. of Bottles	Preservative	ANALYSIS REQUESTED: Arsenic	Dieldrin SPLP	Arsenic	Mercury	Lab Filtered Arsenic	Lab Filtered Mercury	Pesticides	Lab Filtered Pesticides			
	F-17-1A *	12/21/22	1258	S	X				X										
-28	F-17-2		1300		X				X										
	F-17-2A *		1305		X				X										
-29	F-17-3		1310		X				X										
	F-17-3A *		1312		X				X										
-30	F-17-4		1314		X				X										
	F-17-4A *		1316		X				X										
-31	T-11R		1400		X					X									
-32	G-9-GW		1455	GW	X						X	X	X	X	X	X			
-33	F-18R		1410							X									

RELINQUISHED BY: Print: Omar Mahmoud Sign:	RECEIVED BY: Print: Ryan Munson Sign:	Date: 12/23/22 Time: 10:30
RELINQUISHED BY: Print: Ryan Munson 12-23-22 Sign: 12:00	RECEIVED BY: Print: Rose Nap Sign:	Date: 12-23-22 Time: 1200
RELINQUISHED BY: Print: Sign:	RECEIVED BY: Print: Sign:	Date: Time:

CERTIFICATIONS: NELAP (National Environmental Accreditation Program) NJDEP #07010 PADEP #68-02903 NYDOH #11634

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PN: 2120938

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Fairfield, NJ 07004

TEL: 973-227-0422
FAX: 973-227-2813

CHAIN OF CUSTODY

Client:	Dynamic Earth, LLC	Send Report To:	
Address:		Address:	
Phone:		Phone:	
E-Mail:		Send Invoice To:	
Project Name:		Address:	
Project Manager:		Sampling Location:	Eatontown, NJ
Project or PO #:		Sampled By:	Omar Mahmood

Contamination Level
- [ ] Low
- [ ] Medium
- [ ] High

Turn-Around Time
- [ ] APL Standard 2 Weeks
- [ ] Rush (Choose One Below)
- [ ] 1 Day [ ] 2 Days [ ] 3 Days
- [x] 1 Week [ ] Other (Specify Below)

Date and Time Required: _____
**May Need Lab Approval

Report / Electronic Format
- [ ] **Results Only** / NY ASP-A
- [x] **Reduced:** NJ DEP
- [ ] **Full:** NJ DEP / NY ASP-B
- [ ] State Forms/E2 Reporting
- [x] Excel Summary
- [ ] EqUIS
- [ ] EnviroData
- [ ] Hazsite EDD

PWSID # _____ SRP# _____

Comments/Special Instructions:

Cooler Temp: 4.0°C

APL Order # (APL Will Provide): 2120938

Matrix Abbreviations: DW - Drinking Water; GW - Groundwater; WW - Wastewater; SW - Surface Water; L - Lake; Pool; SPA; S - Soil; SD - Solid; SL - Sludge; C - Concrete; W - Wipes; O - Oil; PC - Paint Chips

Sample #	Sample Source: Field ID	Collect Date	Collect Time	Matrix	Sample Type: Grab	Sample Type: Comp	No. of Bottles	Preservative	ANALYSIS REQUESTED: 4-4'-DDE SPLP	Lead SPLP	Mercury SPLP
-34	F-15 R	12/21/22	1600	S	x				x		
-35	G-16 R	↓	1610	↓	x				x		x
-36	G-15 R	↓	1615	↓	x					x	
-37	~~FB~~ G-11R		1620								x

RELINQUISHED BY:	Print: Omar Mahmood	RECEIVED BY:	Print: Ryan Munson	Date:	12/23/22
	Sign:		Sign:	Time:	10:30
RELINQUISHED BY:	Print: Ryan Munson 12-23-22	RECEIVED BY:	Print: ROSE NAP	Date:	12-23-22
	Sign 12:00		Sign:	Time:	1200
RELINQUISHED BY:	Print:	RECEIVED BY:	Print:	Date:	
	Sign:		Sign:	Time:	

CERTIFICATIONS: NELAP (National Environmental Accreditation Program) NJDEP #07010 PADEP #68-02903 NYDOH #11634

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APL 2120938

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- [ ] Low
- [ ] Medium
- [ ] High

CHAIN OF CUSTODY

Client:	Dynamic Earth, LLC	Send Report To:	
Address:		Address:	
Phone:		Phone:	
Email:		Send Invoice To:	
Project Name:		Address:	
Project Manager:		Sampling Location:	Eatontown, NJ
Project or PO #:		Sampled By:	Omar Mahmoud

SAME

Turn-Around Time

- [ ] APL Standard 2 Weeks
- [ ] Rush (Choose One Below)
- [ ] 1 Day [ ] 2 Days [ ] 3 Days
- [x] 1 Week [ ] Other (Specify Below)

Date and Time Required: _____

**May Need Lab Approval

Report / Electronic Format

- [ ] Results Only / NY ASP-A
- [x] Reduced: NJ DEP
- [ ] Full: NJ DEP / NY ASP-B
- [ ] State Forms/E2 Reporting
- [x] Excel Summary
- [ ] EqUIS
- [ ] EnviroData
- [ ] Hazsite EDD

PWSID # _____ SRP# _____

Comments/Special Instructions:

* Hold sample

Cooler Temp: 4.0°C

ANALYSIS REQUESTED

Heptachlor Epoxide

APL Order # (APL Will Provide): 2120938

Matrix Abbreviations: DW - Drinking Water; GW - Groundwater; WW - Wastewater; SW - Surface Water; L - Lake, Pool, SPA; S - Soil; SD - Solid; SL - Sludge; C - Concrete; W - Wipes; O - Oil; PC - Paint Chips

Sample #	Sample Source: Field ID	Collect Date	Collect Time	Matrix	Sample Type: Grab	Sample Type: Comp	No. of Bottles	Preservative	Heptachlor Epoxide
	G-12-4A *	12/21/22	1106	S	X				X
-01	G-15A		1108		X				X
	G-15B *		1110		X				X
	G-15C *		1112		X				X
-02	G-15-1		1114		X				X
	G-15-1A *		1116		X				X
-03	G-15-2		1118		X				X
	G-15-2A *		1120		X				X
-04	G-15-3		1122		X				X
	G-15-3A *	↓	1124	↓	X				X

RELINQUISHED BY:	Print: Omar Mahmoud	RECEIVED BY:	Print: Ryan Munson	Date:	12/23/22
	Sign:		Sign:	Time:	10:30
RELINQUISHED BY:	Print: Ryan Munson 12-23-22	RECEIVED BY:	Print: Rose Nap	Date:	12-23-22
	Sign: 12:00		Sign:	Time:	1200
RELINQUISHED BY:	Print:	RECEIVED BY:	Print:	Date:	
	Sign:		Sign:	Time:	

CERTIFICATIONS: NELAP (National Environmental Accreditation Program) NJDEP #07010 PADEP #68-02903 NYDOH #11634

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PN: 2120938

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TEL: 973-227-0422
FAX: 973-227-2813

CHAIN OF CUSTODY

Client:	Dynamic Earth, LLC	Send Report To:	
Address:		Address:	
Phone:		Phone:	
E-Mail:		Send Invoice To:	
Project Name:		Address:	
Project Manager:		Sampling Location:	Edgetown, NJ
Project or PO #:		Sampled By:	Omar Mahmoud

Turn-Around Time
- [ ] APL Standard 2 Weeks
- [ ] Rush (Choose One Below)
- [ ] 1 Day [ ] 2 Days [ ] 3 Days
- [x] 1 Week [ ] Other (Specify Below)

Date and Time Required: _____
**May Need Lab Approval

Report / Electronic Format
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- [ ] State Forms/E2 Reporting
- [x] Excel Summary
- [ ] EqUIS
- [ ] EnviroData
- [ ] Hazsite EDD

PWSID # _____ SRP# _____

Contamination Level
- [ ] Low
- [ ] Medium
- [ ] High

Comments/Special Instructions:
* Hold sample

Cooler Temp: 21.0°C

APL Order # (APL Will Provide): 2120938

Matrix Abbreviations: DW - Drinking Water; GW - Groundwater; WW - Wastewater; SW - Surface Water; L - Lake, Pool, SPA; S - Soil; SD - Solid; SL - Sludge; C - Concrete; W - Wipes; O - Oil; PC - Paint Chips

ANALYSIS REQUESTED: Heptachlor Epoxide; Mercury SPLP

Sample #	Sample Source: Field ID	Collect Date	Collect Time	Matrix	Sample Type: Grab	Sample Type: Comp	No. of Bottles	Preservative	Heptachlor Epoxide	Mercury SPLP
-05	G-15-4	12/21/22	1126	S	X				X	
	G-15-4A *		1128		X				X	
-06	G-16A		1130		X				X	X
	G-16B *		1132		X				X	
	G-16C *		1134		X				X	
-07	G-16-1		1136		X				X	
	G-16-1A *		1138		X				X	
-08	G-16-2		1140		X				X	
	G-16-2A *		1142		X				X	
-09	G-16-3		1144		X				X	

RELINQUISHED BY:	Print: Omar Mahmoud	RECEIVED BY:	Print: Ryan Munson	Date: 12/23/22	
	Sign:		Sign:	Time: 10:30	
RELINQUISHED BY:	Print: Ryan Munson 12.23.22	RECEIVED BY:	Print: ROSE NAP	Date: 12-23-22	
	Sign: 12:00		Sign:	Time: 1200	
RELINQUISHED BY:	Print:	RECEIVED BY:	Print:	Date:	
	Sign:		Sign:	Time:	

CERTIFICATIONS: NELAP (National Environmental Accreditation Program) NJDEP #07010 PADEP #68-02903 NYDOH #11634

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CHAIN OF CUSTODY

Client:	Dynamic Earth, LLC	Send Report To:	
Address:		Address:	
Phone:		Phone:	
E-Mail:		Send Invoice To:	
Project Name:		Address:	
Project Manager:		Sampling Location:	Eatontown, NJ
Project or PO #:		Sampled By:	Omar Mahmoud

Turn-Around Time
- [ ] APL Standard 2 Weeks
- [ ] Rush (Choose One Below)
- [ ] 1 Day [ ] 2 Days [ ] 3 Days
- [x] 1 Week [ ] Other (Specify Below)

Date and Time Required: _____
**May Need Lab Approval

Contamination Level
- [ ] Low
- [ ] Medium
- [ ] High

Report / Electronic Format
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- [x] Reduced: NJ DEP
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- [ ] State Forms/E2 Reporting
- [x] Excel Summary
- [ ] EqUIS
- [ ] EnviroData
- [ ] Hazsite EDD

PWSID # _____ SRP# _____

Comments/Special Instructions:
* Hold sample

Cooler Temp: 4.0°C

APL Order # (APL Will Provide): 2120938

Matrix Abbreviations: DW - Drinking Water; GW - Groundwater; WW - Wastewater; SW - Surface Water; L - Lake, Pool, SPA; S - Soil; SD - Solid; SL - Sludge; C - Concrete; W - Wipes; O - Oil; PC - Paint Chips

Sample #	Sample Source: Field ID	Collect Date	Collect Time	Matrix	Sample Type: Grab	Sample Type: Comp	No. of Bottles	Preservative	ANALYSIS REQUESTED: Heptachlor Epoxide	ANALYSIS REQUESTED: Arsenic
	G-16-3A *	12/21/22	1146	S	X				X	
-10	G-16-4		1148		X				X	
	G-16-4A *		1150		X				X	
-11	F-6A	12/20/22	1152		X					X
	F-6B *		1154		X					X
	F-6C *		1156		X					X
-12	F-6-1		1158		X					X
	F-6-1A *		1200		X					X
-13	F-6-2		1202		X					X
	F-6-2A *		1204		X					X

RELINQUISHED BY:	Print: Omar Mahmoud	RECEIVED BY:	Print: Ryan Munson
	Sign:		Sign:
			Date: 12/23/22
			Time: 10:30
RELINQUISHED BY:	Print: Ryan Munson 12.23.22	RECEIVED BY:	Print: Rose Nap
	Sign: 12:00		Sign:
			Date: 12-23-23
			Time: 1200
RELINQUISHED BY:	Print:	RECEIVED BY:	Print:
	Sign:		Sign:
			Date:
			Time:

CERTIFICATIONS: NELAP (National Environmental Accreditation Program) NJDEP #07010 PADEP #68-02903 NYDOH #11634

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PN: 2120938

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TEL: 973-227-0422
FAX: 973-227-2813

CHAIN OF CUSTODY

Client:	Dynamic Earth, LLC	Send Report To:	
Address:		Address:	
Phone:		Phone:	
E-Mail:		Send Invoice To:	
Project Name:		Address:	
Project Manager:		Sampling Location:	Exton town, NJ
Project or PO #:		Sampled By:	Omar Mahmoud

Turn-Around Time
- [ ] APL Standard 2 Weeks
- [ ] Rush (Choose One Below)
- [ ] 1 Day [ ] 2 Days [ ] 3 Days
- [x] 1 Week [ ] Other (Specify Below)

Date and Time Required: _____
**May Need Lab Approval

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- [x] Excel Summary
- [ ] EqUIS
- [ ] EnviroData
- [ ] Hazsite EDD

PWSID # _____ SRP# _____

Contamination Level
- [ ] Low
- [ ] Medium
- [ ] High

Comments/Special Instructions:

* Hold sample

Cooler Temp: 4.0°C

APL Order # (APL Will Provide): 2120938

Matrix Abbreviations: DW - Drinking Water; GW - Groundwater; WW - Wastewater; SW - Surface Water; L - Lake, Pool, SPA; S - Soil; SD - Solid; SL - Sludge; C - Concrete; W - Wipes; O - Oil; PC - Paint Chips

Sample #	Sample Source: Field ID	Collect Date	Collect Time	Matrix	Sample Type: Grab	Sample Type: Comp	No. of Bottles	Preservative	ANALYSIS REQUESTED: Arsenic
-14	F-6-3	12/20/22	1206	S	X				X
	F-6-3A *		1208		X				X
-15	F-6-4		1210		X				X
	F-6-4A *		1212		X				X
-16	F-11A	12/21/22	1214		X				X
	F-11B *		1216		X				X
	F-11C *		1218		X				X
-17	F-11-1		1220		X				X
	F-11-1A *		1229		X				X
-18	F-11-2		1224		X				X

RELINQUISHED BY:	Print: Omar Mahmoud	RECEIVED BY:	Print: Ryan Munson	Date: 12/23/22
	Sign:		Sign:	Time: 10:30
RELINQUISHED BY:	Print: Ryan Munson 12.23.22	RECEIVED BY:	Print: Rose Nagy	Date: 12-23-22
	Sign: 12:00		Sign:	Time: 1200
RELINQUISHED BY:	Print:	RECEIVED BY:	Print:	Date:
	Sign:		Sign:	Time:

CERTIFICATIONS: NELAP (National Environmental Accreditation Program) NJDEP #07010 PADEP #68-02903 NYDOH #11634

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CHAIN OF CUSTODY

Client:	Dynamic Earth, LLC	Send Report To:	
Address:		Address:	
Phone:		Phone:	
E-Mail:		Send Invoice To:	
Project Name:		Address:	
Project Manager:		Sampling Location:	Ecton town, NJ
Project or PO #:		Sampled By:	Omar Mahmoud

Turn-Around Time
- [ ] APL Standard 2 Weeks
- [ ] Rush (Choose One Below)
- [ ] 1 Day [ ] 2 Days [ ] 3 Days
- [x] 1 Week [ ] Other (Specify Below)

Date and Time Required: _____
**May Need Lab Approval

Contamination Level
- [ ] Low
- [ ] Medium
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Report / Electronic Format
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- [x] Excel Summary
- [ ] EqUIS
- [ ] EnviroData
- [ ] Hazsite EDD

PWSID # _____ SRP# _____

Comments/Special Instructions:
* Hold sample

Cooler Temp: 4.0°

APL Order # (APL Will Provide): 2120938

Matrix Abbreviations: DW - Drinking Water; GW - Groundwater; WW - Wastewater; SW - Surface Water; L - Lake, Pool, SPA; S - Soil; SD - Solid; SL - Sludge; C - Concrete; W - Wipes; O - Oil; PC - Paint Chips

Sample #	Sample Source: Field ID	Collect Date	Collect Time	Matrix	Sample Type: Grab	Sample Type: Comp	No. of Bottles	Preservative	ANALYSIS REQUESTED: Arsenic
	F-11-2A *	12/21/22	1226	S	X				X
-19	F-11-3		1228		X				X
	F-11-3A *		1230		X				X
-20	F-11-4		1232		X				X
	F-11-4A *		1234		X				X
-21	F-15A		1236		X				X
	F-15B *		1238		X				X
	F-15C *		1240		X				X
-22	F-15-1		1242		X				X
	F-15-1A *		1246		X				X

RELINQUISHED BY:	Print: Omar Mahmoud	RECEIVED BY:	Print: Ryan Munson	Date: 12/23/22
	Sign:		Sign:	Time: 10:30
RELINQUISHED BY:	Print: Ryan Munson 12.23.22	RECEIVED BY:	Print: Rose Nap	Date: 12-23-22
	Sign 12:00		Sign:	Time: 1200
RELINQUISHED BY:	Print:	RECEIVED BY:	Print:	Date:
	Sign:		Sign:	Time:

CERTIFICATIONS: NELAP (National Environmental Accreditation Program) NJDEP #07010 PADEP #68-02903 NYDOH #11634

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TEL: 973-227-0422
FAX: 973-227-2813

CHAIN OF CUSTODY

Client:	Dynamic Earth, LLC	Send Report To:	
Address:		Address:	
Phone:		Phone:	
E-Mail:		Send Invoice To:	
Project Name:		Address:	
Project Manager:		Sampling Location:	Eatontown, NJ
Project or PO #:		Sampled By:	Omar Mahmoud

Turn-Around Time
- [ ] APL Standard 2 Weeks
- [ ] Rush (Choose One Below)
- [ ] 1 Day [ ] 2 Days [ ] 3 Days
- [x] 1 Week [ ] Other (Specify Below)

Date and Time Required: _____
**May Need Lab Approval

Report / Electronic Format
- [ ] Results Only / NY ASP-A
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PWSID # _____ SRP# _____

Contamination Level
- [ ] Low
- [ ] Medium
- [ ] High

Comments/Special Instructions:
* Hold sample

Cooler Temp: 4.0°

APL Order # (APL Will Provide): 2120938

Matrix Abbreviations: DW - Drinking Water; GW - Groundwater; WW - Wastewater; SW - Surface Water; L - Lake, Pool, SPA; S - Soil; SD - Solid; SL - Sludge; C - Concrete; W - Wipes; O - Oil; PC - Paint Chips

Sample #	Sample Source: Field ID	Collect Date	Collect Time	Matrix	Sample Type: Grab	Sample Type: Comp	No. of Bottles	Preservative	ANALYSIS REQUESTED: Arsenic
-23	F-15-3-R	12/21/22	1250	S	X				X
	F-15-3A-R *		1252		X				X
-24	F-15-6-R		1254		X				X
-39	F-15-6A-R *		1256		X				X
-25	F-15-7-R		1246		X				X
	F-15-7A-R *		1248		X				X
-26	F-17A		1250		X				X
	F-17B *		1252		X				X
	F-17C *		1254		X				X
-27	F-17-1		1256		X				X

RELINQUISHED BY:	Print: Omar Mahmoud	RECEIVED BY:	Print: Ryan Munson	Date:	12/23/22
	Sign:		Sign:	Time:	10:30
RELINQUISHED BY:	Print: Ryan Munson 12.23.22	RECEIVED BY:	Print: ROSE NUP	Date:	12-23-22
	Sign: 12:00		Sign:	Time:	1200
RELINQUISHED BY:	Print:	RECEIVED BY:	Print:	Date:	
	Sign:		Sign:	Time:	

CERTIFICATIONS: NELAP (National Environmental Accreditation Program) NJDEP #07010 PADEP #68-02903 NYDOH #11634

By signing this Chain of Custody Agreement, customer expressly agrees to pay APL for all charges, reasonably incurred in connection with analysis and reporting for these samples.

APL

AQUA PRO-TECH LABORATORIES

www.aquaprotechlabs.com

1275 Bloomfield Avenue Building 6
Fairfield, NJ 07004

TEL: 973-227-0422
FAX: 973-227-2813

CHAIN OF CUSTODY

Client:	Dynamic Earth, LLC	Send Report To:	
Address:		Address:	
Phone:		Phone:	
E-Mail:		Send Invoice To:	
Project Name:		Address:	
Project Manager:		Sampling Location:	Edgerton, NJ
Project or PO #:		Sampled By:	Omar Mahmoud

SAME

Turn-Around Time
- [ ] APL Standard 2 Weeks
- [ ] Rush (Choose One Below)
- [ ] 1 Day [ ] 2 Days [ ] 3 Days
- [x] 1 Week [ ] Other (Specify Below)

Date and Time Required: _____
**May Need Lab Approval

Report / Electronic Format
- [ ] Results Only / NY ASP-A
- [x] Reduced: NJ DEP
- [ ] Full: NJ DEP / NY ASP-B
- [ ] State Forms/E2 Reporting
- [x] Excel Summary
- [ ] EqUIS
- [ ] EnviroData
- [ ] Hazsite EDD

PWSID # _____ SRP# _____

Contamination Level
- [ ] Low
- [ ] Medium
- [ ] High

Comments/Special Instructions:
* Hold sample
• Contingent analysis

Cooler Temp: 4.0°C

APL Order # (APL Will Provide): 2120938

Matrix Abbreviations:
DW - Drinking Water; GW - Groundwater; WW - Wastewater; SW - Surface Water; L - Lake; Pool; SPA; S - Soil; SD - Solid; SL - Sludge; C - Concrete; W - Wipes; O - Oil; PC - Paint Chips

ANALYSIS REQUESTED

Sample #	Sample Source: Field ID	Collect Date	Collect Time	Matrix	Sample Type: Grab	Sample Type: Comp	No. of Bottles	Preservative	Arsenic	Dieldrin SPLP	Arsenic	Mercury	Lab Filtered Arsenic •	Lab Filtered Mercury	Pesticides	Lab Filtered Pesticides •			
	F-17-1A *	12/21/22	1258	S	X				X										
-28	F-17-2		1300		X				X										
	F-17-2A *		1305		X				X										
-29	F-17-3		1310		X				X										
	F-17-3A *		1312		X				X										
-30	F-17-4		1314		X				X										
	F-17-4A *		1316		X				X										
-31	T-11R		1400		X					X									
-32	G-9-GW		1455	GW	X						X	X	X	X	X	X			
-33	F-18R		1410							X									

RELINQUISHED BY:	Print: Omar Mahmoud	RECEIVED BY:	Print: Ryan Munson
	Sign:		Sign:
			Date: 12/23/22
			Time: 10:30
RELINQUISHED BY:	Print: Ryan Munson 12-23-22	RECEIVED BY:	Print: Rose Nap
	Sign: 12:00		Sign:
			Date: 12-23-22
			Time: 1200
RELINQUISHED BY:	Print:	RECEIVED BY:	Print:
	Sign:		Sign:
			Date:
			Time:

CERTIFICATIONS: NELAP (National Environmental Accreditation Program) NJDEP #07010 PADEP #68-02903 NYDOH #11634

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PN: 2120938

APL

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1275 Bloomfield Avenue Building 6
Fairfield, NJ 07004
TEL: 973-227-0422
FAX: 973-227-2813

CHAIN OF CUSTODY

Client:	Dynamic Earth, LLC	Send Report To:	
Address:		Address:	
Phone:		Phone:	
E-Mail:		Send Invoice To:	
Project Name:		Address:	
Project Manager:		Sampling Location:	Eatontown, NJ
Project or PO #:		Sampled By:	Omar Mahmood

Turn-Around Time
- [ ] APL Standard 2 Weeks
- [ ] Rush (Choose One Below)
- [ ] 1 Day [ ] 2 Days [ ] 3 Days
- [x] 1 Week [ ] Other (Specify Below)

Date and Time Required: _____
**May Need Lab Approval

Report / Electronic Format
- [ ] Results Only / NY ASP-A
- [x] Reduced: NJ DEP
- [ ] Full: NJ DEP / NY ASP-B
- [ ] State Forms/E2 Reporting
- [x] Excel Summary
- [ ] EqUIS
- [ ] EnviroData
- [ ] Hazsite EDD

PWSID # _____ SRP# _____

Contamination Level
- [ ] Low
- [ ] Medium
- [ ] High

Comments/Special Instructions:

Cooler Temp: 4.0°C

Matrix Abbreviations: DW - Drinking Water; GW - Groundwater; WW - Wastewater; SW - Surface Water; L - Lake, Pool, SPA; S - Soil; SD - Solid; SL - Sludge; C - Concrete; W - Wipes; O - Oil; PC - Paint Chips

APL Order # (APL Will Provide): 2120938

Sample #	Sample Source: Field ID	Collect Date	Collect Time	Matrix	Sample Type: Grab	Sample Type: Comp	No. of Bottles	Preservative	ANALYSIS REQUESTED: 4-4'-DDE SPLP	Lead SPLP	Mercury SPLP
-34	F-15 R	12/21/22	1600	S	x				x		
-35	G-16 R	↓	1610	↓	x				x		x
-36	G-15 R	↓	1615	↓	x					x	
-37	~~DUP~~ G-11 R		1620								x

RELINQUISHED BY:	Print: Omar Mahmood	RECEIVED BY:	Print: Ryan Munson	Date:	12/23/22
	Sign:		Sign:	Time:	10:30
RELINQUISHED BY:	Print: Ryan Munson 12-23-22	RECEIVED BY:	Print: ROSE NAP	Date:	12-23-22
	Sign: 12:00		Sign:	Time:	1200
RELINQUISHED BY:	Print:	RECEIVED BY:	Print:	Date:	
	Sign:		Sign:	Time:	

CERTIFICATIONS: NELAP (National Environmental Accreditation Program) NJDEP #07010 PADEP #68-02903 NYDOH #11634

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Extractable Petroleum Hydrocarbons:

Gas Chromatography/Flame Ionization Detector

New Jersey Department of Environmental Protection Site Remediation Program Extractable Petroleum Hydrocarbons Methodology (Version 3.0).
USEPA SW-846 Test Methods for Evaluating Solid Waste Physical/Chemical Methods Update III, Method 8015B or NJDEP Office of Quality Assurance Quantitation of Semi-Volatile Petroleum Products in Water, Soil and Sediment OQA-QAM-025, Revision 6.

Metals:

Inductively-Coupled Plasma Atomic Emission Spectrometry or Inductively-Coupled Plasma Mass Spectroscopy

Wastewater and Groundwater Samples: USEPA Methods for the Analysis of Water and Wastes, Method 200.7, Method 200.8.
Soil Samples: USEPA Methods for Evaluating Solid Waste Physical/Chemical Methods Update III, Method 6010D.

Mercury:

Cold Vapor Atomic Absorption Spectrometry

Wastewater and Groundwater Samples: USEPA Methods for the Analysis of Water and Wastes, Method 245.1.
Soil Samples: USEPA SW-846 Test Methods for Evaluating Solid Waste Physical/Chemical Methods Update III, Method 7471B.

Volatile Organic Compounds:

Purge and Trap Gas Chromatography/Mass Spectroscopy

Drinking Water Samples: USEPA Methods for the Determination of Organic Compounds in Drinking Water, Method 524.2.
Wastewater Samples: USEPA Methods for the Analysis of Water and Wastes, Method 624.1, Method 8260C.
Soil and Groundwater Samples: USEPA SW-846 Test Methods for Evaluating Solid Waste Physical/Chemical Methods Update III, Method 8260C.

Semi-Volatile Organic Compounds:

Gas Chromatography/Mass Spectroscopy

Wastewater Samples: USEPA Methods for the Analysis of Water and Wastes, Method 625.1, Method 8270D.
Soil and Groundwater Samples: USEPA SW-846 Test Methods for Evaluating Solid Waste Physical/Chemical Methods Update III, Method 8270D.

PFAS Compounds:

Liquid Chromatography/Tandem Mass Spectroscopy

Drinking Water Samples: USEPA Methods for the Determination of Selected Perfluorinated Alkyl Acids in Drinking Water by Solid Phase Extraction and Liquid Chromatography/Tandem Mass Spectrometry (LC/MS/MS), Method 537.

Pesticides:

Gas Chromatography/Electron Capture Detector

Wastewater Samples: USEPA Methods for the Analysis of Water and Wastes, Method 608.3, Method 8081B.
Soil and Groundwater Samples: USEPA SW-846 Test Methods for Evaluating Solid Waste Physical/Chemical Methods Update III, Method 8081B.

Polychlorinated Biphenyls (PCBs):

Gas Chromatography/Electron Capture Detector

Wastewater Samples: USEPA Methods for the Analysis of Water and Wastes, Method 608.3, Method 8082A.
Soil and Groundwater Samples: USEPA SW-846 Test Methods for Evaluating Solid Waste Physical/Chemical Methods Update III, Method 8082A.

General Chemistry Methods:

Various general chemistry methods are taken from "Standard Methods for the Examination of Water and Wastewater, 19th Edition".

Specific method citations can be found on the Analytical Results Summary page of this report listed under 'Method'.

** A complete list of APL's certified Methods are accessible on the Standards And Docs page of the Results Retrieval System

MDL:

Method Detection Limit. The minimum reportable concentration of a substance that can be measured and reported with 99% confidence that the analyte concentration is greater than zero. The value is calculated from the analysis of seven replicates of a spike sample. On analytical reports this value is corrected for percent moisture and any concentration or dilution factors.

RL:

Reporting Limit. The Concentration of the lowest calibration standard that was included in the initial calibration of the instrument. On analytical reports this value is corrected for percent moisture and any concentration or dilution factors.

Concentration (Conc) / Result:

If the compound is detected, the measured concentration is reported. If this column is left blank, or contains a 'less than' (<) symbol, the compound was not detected.

Tentatively Identified Compound (TIC):

A TIC is a non-targeted compound, not included in the calibration, identified by a mass spectral library search.

Qualifiers:

- **U:** Indicates the compound was analyzed for but was not detected.
- **J:** Indicates an estimated value. All tentatively identified compounds (TICs) and results below the RL receive this qualifier.
- **B:** Indicates the analyte was found in the method blank as well as the sample.
- **N:** Used when reporting a specific tentatively identified compound.
- **E:** Indicates that the concentration of the compound exceeds the calibration range of the instrument. The results of a diluted analysis will also be reported. The results of the dilution should be used for those compounds exceeding the calibration range in the undiluted analysis.

DATA OF KNOWN QUALITY CONFORMANCE/NON-CONFORMANCE SUMMARY QUESTIONNAIRE

Laboratory Name: Aqua Pro-Tech Laboratories

Client: Dynamic Earth LLC

Project Location: Old Orchard G.C.

Project Number: 2120938

Laboratory Sample ID(s): 01-39

Sampling Date(s): December 20-21,2022

List DKQP Methods Used: SW 846 8081B;SW 846 1312/7470A;SW 846 1312;SW 846 9040C;Gravimetric

1	For each analytical method referenced in this laboratory report package, were all specified QA/QC performance criteria followed, including the requirement to explain any criteria falling outside of acceptable guidelines, as specified in the NJDEP Data of Known Quality performance standards?	☑ Yes ☐ No
1A	Were the method specified handling, preservation, and holding time requirements met?	☑ Yes ☐ No
1B	EPH Method: Was the EPH method conducted without significant modifications (see Section 11.3 of respective DKQ methods)	☐ Yes ☐ No ☑ N/A
2	Were all samples received by the laboratory in a condition consistent with that described on the associated chain-of-custody document(s)?	☑ Yes ☐ No
3	Were samples received at an appropriate temperature (4±2° C)?	☑ Yes ☐ No ☐ N/A
4	Were all QA/QC performance criteria specified in the NJDEP DKQP standards achieved?	☐ Yes ☑ No
5	Were reporting limits specified or referenced on the chain-of-custody or communicated to the laboratory prior to sample receipt? Were these reporting limits met?	☑ Yes ☐ No ☑ Yes ☐ No ☐ N/A
6	For each analytical method referenced in this laboratory report package, were results reported for all constituents identified in the method-specific analyte lists presented in the DKQP documents and/or site-specific QAPP?	☑ Yes ☐ No
7	Are project-specific matrix spikes and/or laboratory duplicates included in this data set?	☑ Yes ☐ No

Notes: For all questions to which the response was "No° (with the exception of question #7), additional information should be provided in an attached narrative. If the answer to question #1, #1A, or #1B is "No", the data package does not meet the requirements for Data of Known Quality.°

QUALITY CONTROL
Conformance/Non-Conformance Summary

ANALYSIS: INORGANICS [245.1/1312/7470A/200.8]

COMMENTS:
Method 200.8:
Batch B2L2810:
The matrix spike and matrix spike duplicate recovery for Arsenic was outside QC limits (low).

Batch B2L2913:
The matrix spike and matrix spike duplicate recovery for Arsenic was outside QC limits (low).

ANALYSIS: PESTICIDES [8081B]

COMMENTS:
The matrix spike and matrix spike duplicate recoveries for Heptachlor and Heptachlor Epoxide were outside QC limits (high).

Reviewed By: _____ (JM) 1/23/2023
Brian Wood - Laboratory Director — Date

For any questions about your Quality Control, please call us at 973-227-0422

Positive Results Only Summary

2120938-02 (Soil) Sample Name: **G-15-1**

SW 846 8081B - Pesticides

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed
Heptachlor Epoxide [2C]	0.0165		0.000756	0.00150	mg/kg dry	1	12/31/22 19:13

2120938-03 (Soil) Sample Name: **G-15-2**

SW 846 8081B - Pesticides

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed
Heptachlor Epoxide [2C]	0.0184		0.000791	0.00157	mg/kg dry	1	12/31/22 19:38

2120938-04 (Soil) Sample Name: **G-15-3**

SW 846 8081B - Pesticides

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed
Heptachlor Epoxide [2C]	0.0160		0.000759	0.00150	mg/kg dry	1	12/31/22 20:04

2120938-05 (Soil) Sample Name: **G-15-4**

SW 846 8081B - Pesticides

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed
Heptachlor Epoxide [2C]	0.00768		0.000748	0.00148	mg/kg dry	1	12/31/22 20:29

2120938-06 (Soil) Sample Name: **G-16A**

Gravimetric - General Chemistry

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed
SPLP Soil Weight	83.9				g	1	12/26/22 10:33

SW 846 1312 - General Chemistry

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed
SPLP Leachate Volume	2000				mL	1	12/29/22 10:38

SW 846 9040C - General Chemistry

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed
SPLP Leachate pH	8.30		0.0100	0.0100	pH Units	1	12/29/22 10:40

2120938-07 (Soil) Sample Name: **G-16-1**

SW 846 8081B - Pesticides

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed
Heptachlor Epoxide [2C]	0.0498		0.000773	0.00153	mg/kg dry	1	12/31/22 21:20

ND - Indicates compound analyzed for but not detected
J - Indicates estimated value
B - Indicates compound found in associated blank
E - Concentration exceeds highest calibration standard
D - Indicates result is based on a dilution
H - Indicates a Hold Time violation
P - Greater than 25% diff. between 2 GC columns.
MDL - Minimum detection limit, **RL** - Reporting limit

Positive Results Only Summary

2120938-08 (Soil) Sample Name: **G-16-2**

SW 846 8081B - Pesticides

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed
Heptachlor Epoxide [2C]	0.0248		0.000765	0.00152	mg/kg dry	1	12/31/22 21:45

2120938-09 (Soil) Sample Name: **G-16-3**

SW 846 8081B - Pesticides

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed
Heptachlor Epoxide	0.0100		0.000758	0.00150	mg/kg dry	1	12/31/22 22:11

2120938-10 (Soil) Sample Name: **G-16-4**

SW 846 8081B - Pesticides

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed
Heptachlor Epoxide	0.0195		0.000768	0.00152	mg/kg dry	1	12/30/22 15:53

2120938-11 (Soil) Sample Name: **F-6A**

SW 846 6010D - Total Metals

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed
Arsenic	2.93		0.105	1.47	mg/kg dry	1	1/4/23 8:40

2120938-12 (Soil) Sample Name: **F-6-1**

SW 846 6010D - Total Metals

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed
Arsenic	2.65		0.105	1.48	mg/kg dry	1	1/4/23 8:42

2120938-13 (Soil) Sample Name: **F-6-2**

SW 846 6010D - Total Metals

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed
Arsenic	6.70		0.103	1.44	mg/kg dry	1	1/4/23 8:45

2120938-14 (Soil) Sample Name: **F-6-3**

SW 846 6010D - Total Metals

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed
Arsenic	1.43		0.102	1.43	mg/kg dry	1	1/3/23 12:52

2120938-15 (Soil) Sample Name: **F-6-4**

ND - Indicates compound analyzed for but not detected
J - Indicates estimated value
B - Indicates compound found in associated blank
E - Concentration exceeds highest calibration standard
D - Indicates result is based on a dilution
H - Indicates a Hold Time violation
P - Greater than 25% diff. between 2 GC columns.
MDL - Minimum detection limit, **RL** - Reporting limit

Positive Results Only Summary

2120938-15 (Soil) Sample Name: **F-6-4**

SW 846 6010D - Total Metals

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed
Arsenic	4.79		0.104	1.45	mg/kg dry	1	1/3/23 12:54

2120938-16 (Soil) Sample Name: **F-11A**

SW 846 6010D - Total Metals

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed
Arsenic	3.33		0.101	1.41	mg/kg dry	1	1/3/23 12:57

2120938-20 (Soil) Sample Name: **F-11-4**

SW 846 6010D - Total Metals

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed
Arsenic	2.46		0.0997	1.40	mg/kg dry	1	1/3/23 13:07

2120938-21 (Soil) Sample Name: **F-15A**

SW 846 6010D - Total Metals

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed
Arsenic	9.22		0.103	1.45	mg/kg dry	1	1/3/23 13:10

2120938-22 (Soil) Sample Name: **F-15-1**

SW 846 6010D - Total Metals

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed
Arsenic	5.36		0.102	1.43	mg/kg dry	1	1/3/23 13:12

2120938-23 (Soil) Sample Name: **F-15-3-R**

SW 846 6010D - Total Metals

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed
Arsenic	6.64		0.0978	1.37	mg/kg dry	1	1/3/23 13:14

2120938-24 (Soil) Sample Name: **F-15-6-R**

SW 846 6010D - Total Metals

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed
Arsenic	47.4		0.0973	1.36	mg/kg dry	1	1/3/23 14:09

2120938-25 (Soil) Sample Name: **F-15-7-R**

ND - Indicates compound analyzed for but not detected
J - Indicates estimated value
B - Indicates compound found in associated blank
E - Concentration exceeds highest calibration standard
D - Indicates result is based on a dilution
H - Indicates a Hold Time violation
P - Greater than 25% diff. between 2 GC columns.
MDL - Minimum detection limit, **RL** - Reporting limit

Positive Results Only Summary

2120938-25 (Soil) Sample Name: **F-15-7-R**

SW 846 6010D - Total Metals

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed
Arsenic	14.7		0.103	1.44	mg/kg dry	1	1/3/23 14:12

2120938-26 (Soil) Sample Name: **F-17A**

SW 846 6010D - Total Metals

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed
Arsenic	5.71		0.101	1.42	mg/kg dry	1	1/3/23 14:14

2120938-27 (Soil) Sample Name: **F-17-1**

SW 846 6010D - Total Metals

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed
Arsenic	13.4		0.103	1.44	mg/kg dry	1	1/3/23 14:17

2120938-28 (Soil) Sample Name: **F-17-2**

SW 846 6010D - Total Metals

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed
Arsenic	8.37		0.104	1.45	mg/kg dry	1	1/3/23 14:19

2120938-29 (Soil) Sample Name: **F-17-3**

SW 846 6010D - Total Metals

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed
Arsenic	7.38		0.109	1.52	mg/kg dry	1	1/3/23 14:22

2120938-30 (Soil) Sample Name: **F-17-4**

SW 846 6010D - Total Metals

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed
Arsenic	5.79		0.109	1.53	mg/kg dry	1	1/3/23 14:24

2120938-31 (Soil) Sample Name: **T-11R**

Gravimetric - General Chemistry

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed
SPLP Soil Weight	86.3				g	1	12/28/22 17:00

ND - Indicates compound analyzed for but not detected
J - Indicates estimated value
B - Indicates compound found in associated blank
E - Concentration exceeds highest calibration standard
D - Indicates result is based on a dilution
H - Indicates a Hold Time violation
P - Greater than 25% diff. between 2 GC columns.
MDL - Minimum detection limit, **RL** - Reporting limit

Positive Results Only Summary

2120938-31 (Soil) Sample Name: T-11R

SW 846 1312 - General Chemistry

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed
SPLP Leachate Volume	2000				mL	1	12/29/22 10:00

SW 846 9040C - General Chemistry

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed
SPLP Leachate pH	4.07		0.0100	0.0100	pH Units	1	12/29/22 10:00

2120938-32 (Ground Water) Sample Name: G-9-GW

SW 846 8081B - Pesticides

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed
4,4'-DDE [2C]	0.00300	J	0.000234	0.0200	ug/L	1	12/29/22 21:42
Chlordane [2C]	0.0159	J	0.000327	0.0500	ug/L	1	12/29/22 21:42
Heptachlor Epoxide [2C]	0.130		0.000302	0.0200	ug/L	1	12/29/22 21:42

2120938-33 (Soil) Sample Name: F-18R

SW 846 1312 - SPLP Pesticides

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed
Dieldrin	0.00388	J	0.000277	0.0204	ug/L	1	12/30/22 22:29

Gravimetric - General Chemistry

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed
SPLP Soil Weight	86.5				g	1	12/28/22 17:00

SW 846 1312 - General Chemistry

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed
SPLP Leachate Volume	2000				mL	1	12/29/22 10:00

SW 846 9040C - General Chemistry

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed
SPLP Leachate pH	5.05		0.0100	0.0100	pH Units	1	12/29/22 10:00

2120938-34 (Soil) Sample Name: F-15R

SW 846 1312 - SPLP Pesticides

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed
4,4'-DDE	0.166		0.000254	0.0217	ug/L	1	12/30/22 22:55

Gravimetric - General Chemistry

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed

ND - Indicates compound analyzed for but not detected
J - Indicates estimated value
B - Indicates compound found in associated blank
E - Concentration exceeds highest calibration standard
D - Indicates result is based on a dilution
H - Indicates a Hold Time violation
P - Greater than 25% diff. between 2 GC columns.
MDL - Minimum detection limit, **RL** - Reporting limit

Positive Results Only Summary

2120938-34 (Soil) Sample Name: **F-15R**

Gravimetric - General Chemistry (con't)

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed
SPLP Soil Weight	85.2				g	1	12/28/22 17:00

SW 846 1312 - General Chemistry

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed
SPLP Leachate Volume	2000				mL	1	12/29/22 10:00

SW 846 9040C - General Chemistry

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed
SPLP Leachate pH	5.01		0.0100	0.0100	pH Units	1	12/29/22 10:00

2120938-35 (Soil) Sample Name: **G-16R**

Gravimetric - General Chemistry

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed
SPLP Soil Weight	84.6				g	1	12/28/22 18:00

SW 846 1312 - General Chemistry

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed
SPLP Leachate Volume	2000				mL	1	12/29/22 11:00

SW 846 9040C - General Chemistry

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed
SPLP Leachate pH	10.0		0.0100	0.0100	pH Units	1	12/29/22 11:00

2120938-36 (Soil) Sample Name: **G-15R**

SW 846 1312/200.8 - SPLP Metals

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed
Lead	0.0172		0.000338	0.00200	mg/L	1	12/30/22 11:15

Gravimetric - General Chemistry

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed
SPLP Soil Weight	85.7				g	1	12/26/22 10:33

SW 846 1312 - General Chemistry

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed
SPLP Leachate Volume	2000				mL	1	12/29/22 10:38

SW 846 9040C - General Chemistry

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed
SPLP Leachate pH	8.20		0.0100	0.0100	pH Units	1	12/29/22 10:40

ND - Indicates compound analyzed for but not detected
J - Indicates estimated value
B - Indicates compound found in associated blank
E - Concentration exceeds highest calibration standard
D - Indicates result is based on a dilution
H - Indicates a Hold Time violation
P - Greater than 25% diff. between 2 GC columns.
MDL - Minimum detection limit, **RL** - Reporting limit

Positive Results Only Summary

2120938-37 (Soil) Sample Name: **G-11R**

Gravimetric - General Chemistry

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed
SPLP Soil Weight	78.9				g	1	12/26/22 10:33

SW 846 1312 - General Chemistry

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed
SPLP Leachate Volume	2000				mL	1	12/29/22 10:38

SW 846 9040C - General Chemistry

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed
SPLP Leachate pH	8.10		0.0100	0.0100	pH Units	1	12/29/22 10:40

ND - Indicates compound analyzed for but not detected
J - Indicates estimated value
B - Indicates compound found in associated blank
E - Concentration exceeds highest calibration standard
D - Indicates result is based on a dilution
H - Indicates a Hold Time violation
P - Greater than 25% diff. between 2 GC columns.
MDL - Minimum detection limit, **RL** - Reporting limit

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All Results Summary

Client: Dynamic Earth LLC
Project: Old Orchard G.C.
Work Order: 2120938
Date to Lab: 12/23/2022 12:00:00PM

2120938-01 (Soil) Sample Name: **G-15A** Collected: **12/21/2022 11:08:00AM**

SW 846 8081B - Pesticides

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed
Heptachlor Epoxide	ND	U	0.000774	0.00153	mg/kg	1	12/31/22 18:47

Gravimetric - General Chemistry

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed
Percent Solids	**84.8**				**%**	**1**	**12/27/22 11:23**

2120938-02 (Soil) Sample Name: **G-15-1** Collected: **12/21/2022 11:14:00AM**

SW 846 8081B - Pesticides

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed
Heptachlor Epoxide [2C]	**0.0165**		**0.000756**	**0.00150**	**mg/kg**	**1**	**12/31/22 19:13**

Gravimetric - General Chemistry

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed
Percent Solids	**86.8**				**%**	**1**	**12/27/22 11:23**

2120938-03 (Soil) Sample Name: **G-15-2** Collected: **12/21/2022 11:18:00AM**

SW 846 8081B - Pesticides

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed
Heptachlor Epoxide [2C]	**0.0184**		**0.000791**	**0.00157**	**mg/kg**	**1**	**12/31/22 19:38**

Gravimetric - General Chemistry

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed
Percent Solids	**82.9**				**%**	**1**	**12/27/22 11:23**

ND, U - Indicates compound analyzed for but not detected
J - Indicates estimated value
B - Indicates compound found in associated blank
E - Concentration exceeds highest calibration standard
D - Indicates result is based on a dilution
H - Indicates a Hold Time violation
P - Greater than 25% diff. between 2 GC columns.
MDL - Minimum detection limit, **RL** - Reporting limit

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All Results Summary

Client: Dynamic Earth LLC
Project: Old Orchard G.C.
Work Order: 2120938
Date to Lab: 12/23/2022 12:00:00PM

2120938-04 (Soil) Sample Name: **G-15-3** Collected: **12/21/2022 11:22:00AM**

SW 846 8081B - Pesticides

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed
Heptachlor Epoxide [2C]	**0.0160**		**0.000759**	**0.00150**	**mg/kg**	**1**	**12/31/22 20:04**

Gravimetric - General Chemistry

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed
Percent Solids	**86.5**				**%**	**1**	**12/27/22 11:23**

2120938-05 (Soil) Sample Name: **G-15-4** Collected: **12/21/2022 11:26:00AM**

SW 846 8081B - Pesticides

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed
Heptachlor Epoxide [2C]	**0.00768**		**0.000748**	**0.00148**	**mg/kg**	**1**	**12/31/22 20:29**

Gravimetric - General Chemistry

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed
Percent Solids	**87.7**				**%**	**1**	**12/27/22 11:23**

2120938-06 (Soil) Sample Name: **G-16A** Collected: **12/21/2022 11:30:00AM**

SW 846 1312/7470A - SPLP Metals

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed
Mercury	ND	U	0.000296	0.00100	mg/L	1	12/30/22 12:44

SW 846 8081B - Pesticides

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed
Heptachlor Epoxide	ND	U	0.000782	0.00155	mg/kg	1	12/31/22 20:54

Gravimetric - General Chemistry

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed
Percent Solids	**83.9**				**%**	**1**	**12/27/22 11:23**
SPLP Soil Weight	**83.9**				**g**	**1**	**12/26/22 10:33**

SW 846 1312 - General Chemistry

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed
SPLP Leachate Volume	**2000**				**mL**	**1**	**12/29/22 10:38**

ND, U - Indicates compound analyzed for but not detected
J - Indicates estimated value
B - Indicates compound found in associated blank
E - Concentration exceeds highest calibration standard
D - Indicates result is based on a dilution
H - Indicates a Hold Time violation
P - Greater than 25% diff. between 2 GC columns.
MDL - Minimum detection limit, **RL** - Reporting limit

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All Results Summary

Client: Dynamic Earth LLC
Project: Old Orchard G.C.
Work Order: 2120938
Date to Lab: 12/23/2022 12:00:00PM

2120938-06 (Soil) Sample Name: **G-16A** Collected: **12/21/2022 11:30:00AM**

SW 846 9040C - General Chemistry

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed
SPLP Leachate pH	8.30		0.0100	0.0100	pH Units	1	12/29/22 10:40

2120938-07 (Soil) Sample Name: **G-16-1** Collected: **12/21/2022 11:36:00AM**

SW 846 8081B - Pesticides

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed
Heptachlor Epoxide [2C]	0.0498		0.000773	0.00153	mg/kg	1	12/31/22 21:20

Gravimetric - General Chemistry

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed
Percent Solids	84.9				%	1	12/27/22 11:23

2120938-08 (Soil) Sample Name: **G-16-2** Collected: **12/21/2022 11:40:00AM**

SW 846 8081B - Pesticides

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed
Heptachlor Epoxide [2C]	0.0248		0.000765	0.00152	mg/kg	1	12/31/22 21:45

Gravimetric - General Chemistry

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed
Percent Solids	85.7				%	1	12/27/22 11:23

2120938-09 (Soil) Sample Name: **G-16-3** Collected: **12/21/2022 11:44:00AM**

SW 846 8081B - Pesticides

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed
Heptachlor Epoxide	0.0100		0.000758	0.00150	mg/kg	1	12/31/22 22:11

Gravimetric - General Chemistry

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed
Percent Solids	86.6				%	1	12/27/22 11:23

ND, U - Indicates compound analyzed for but not detected
J - Indicates estimated value
B - Indicates compound found in associated blank
E - Concentration exceeds highest calibration standard
D - Indicates result is based on a dilution
H - Indicates a Hold Time violation
P - Greater than 25% diff. between 2 GC columns.
MDL - Minimum detection limit, **RL** - Reporting limit

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All Results Summary

Client: Dynamic Earth LLC
Project: Old Orchard G.C.

Work Order: 2120938
Date to Lab: 12/23/2022 12:00:00PM

2120938-10 (Soil) Sample Name: **G-16-4** Collected: **12/21/2022 11:48:00AM**

SW 846 8081B - Pesticides

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed
Heptachlor Epoxide	0.0195		0.000768	0.00152	mg/kg	1	12/30/22 15:53

Gravimetric - General Chemistry

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed
Percent Solids	85.4				%	1	12/27/22 11:23

2120938-11 (Soil) Sample Name: **F-6A** Collected: **12/20/2022 11:52:00AM**

SW 846 6010D - Total Metals

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed
Arsenic	2.93		0.105	1.47	mg/kg	1	1/4/23 8:40

Gravimetric - General Chemistry

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed
Percent Solids	86.1				%	1	12/27/22 11:23

2120938-12 (Soil) Sample Name: **F-6-1** Collected: **12/20/2022 11:58:00AM**

SW 846 6010D - Total Metals

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed
Arsenic	2.65		0.105	1.48	mg/kg	1	1/4/23 8:42

Gravimetric - General Chemistry

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed
Percent Solids	83.5				%	1	12/27/22 11:23

ND, U - Indicates compound analyzed for but not detected
J - Indicates estimated value
B - Indicates compound found in associated blank
E - Concentration exceeds highest calibration standard
D - Indicates result is based on a dilution
H - Indicates a Hold Time violation
P - Greater than 25% diff. between 2 GC columns.
MDL - Minimum detection limit, **RL** - Reporting limit

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All Results Summary

Client: Dynamic Earth LLC
Project: Old Orchard G.C.

Work Order: 2120938
Date to Lab: 12/23/2022 12:00:00PM

2120938-13 (Soil) Sample Name: **F-6-2** Collected: **12/20/2022 12:02:00PM**

SW 846 6010D - Total Metals

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed
Arsenic	6.70		0.103	1.44	mg/kg	1	1/4/23 8:45

Gravimetric - General Chemistry

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed
Percent Solids	86.5				%	1	12/27/22 11:23

2120938-14 (Soil) Sample Name: **F-6-3** Collected: **12/20/2022 12:06:00PM**

SW 846 6010D - Total Metals

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed
Arsenic	1.43		0.102	1.43	mg/kg	1	1/3/23 12:52

Gravimetric - General Chemistry

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed
Percent Solids	86.3				%	1	12/27/22 11:23

2120938-15 (Soil) Sample Name: **F-6-4** Collected: **12/20/2022 12:10:00PM**

SW 846 6010D - Total Metals

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed
Arsenic	4.79		0.104	1.45	mg/kg	1	1/3/23 12:54

Gravimetric - General Chemistry

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed
Percent Solids	86.1				%	1	12/27/22 11:23

ND, U - Indicates compound analyzed for but not detected
J - Indicates estimated value
B - Indicates compound found in associated blank
E - Concentration exceeds highest calibration standard
D - Indicates result is based on a dilution
H - Indicates a Hold Time violation
P - Greater than 25% diff. between 2 GC columns.
MDL - Minimum detection limit, **RL** - Reporting limit

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All Results Summary

Client: Dynamic Earth LLC
Project: Old Orchard G.C.
Work Order: 2120938
Date to Lab: 12/23/2022 12:00:00PM

2120938-16 (Soil) Sample Name: **F-11A** Collected: **12/21/2022 12:14:00PM**

SW 846 6010D - Total Metals

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed
Arsenic	**3.33**		**0.101**	**1.41**	**mg/kg**	**1**	**1/3/23 12:57**

Gravimetric - General Chemistry

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed
Percent Solids	**86.8**				**%**	**1**	**12/27/22 11:23**

2120938-17 (Soil) Sample Name: **F-11-1** Collected: **12/21/2022 12:20:00PM**

SW 846 6010D - Total Metals

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed
Arsenic	ND	U	0.102	1.44	mg/kg	1	1/3/23 12:59

Gravimetric - General Chemistry

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed
Percent Solids	**85.0**				**%**	**1**	**12/27/22 11:23**

2120938-18 (Soil) Sample Name: **F-11-2** Collected: **12/21/2022 12:24:00PM**

SW 846 6010D - Total Metals

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed
Arsenic	ND	U	0.101	1.42	mg/kg	1	1/3/23 13:02

Gravimetric - General Chemistry

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed
Percent Solids	**86.7**				**%**	**1**	**12/27/22 11:23**

ND, U - Indicates compound analyzed for but not detected
J - Indicates estimated value
B - Indicates compound found in associated blank
E - Concentration exceeds highest calibration standard
D - Indicates result is based on a dilution
H - Indicates a Hold Time violation
P - Greater than 25% diff. between 2 GC columns.
MDL - Minimum detection limit, **RL** - Reporting limit

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All Results Summary

Client: Dynamic Earth LLC
Project: Old Orchard G.C.
Work Order: 2120938
Date to Lab: 12/23/2022 12:00:00PM

2120938-19 (Soil) Sample Name: **F-11-3** Collected: **12/21/2022 12:28:00PM**

SW 846 6010D - Total Metals

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed
Arsenic	ND	U	0.105	1.47	mg/kg	1	1/3/23 13:05

Gravimetric - General Chemistry

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed
Percent Solids	**82.0**				**%**	**1**	**12/27/22 11:23**

2120938-20 (Soil) Sample Name: **F-11-4** Collected: **12/21/2022 12:32:00PM**

SW 846 6010D - Total Metals

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed
Arsenic	**2.46**		**0.0997**	**1.40**	**mg/kg**	**1**	**1/3/23 13:07**

Gravimetric - General Chemistry

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed
Percent Solids	**86.9**				**%**	**1**	**12/27/22 11:23**

2120938-21 (Soil) Sample Name: **F-15A** Collected: **12/21/2022 12:36:00PM**

SW 846 6010D - Total Metals

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed
Arsenic	**9.22**		**0.103**	**1.45**	**mg/kg**	**1**	**1/3/23 13:10**

Gravimetric - General Chemistry

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed
Percent Solids	**86.0**				**%**	**1**	**12/27/22 11:23**

ND, U - Indicates compound analyzed for but not detected
J - Indicates estimated value
B - Indicates compound found in associated blank
E - Concentration exceeds highest calibration standard
D - Indicates result is based on a dilution
H - Indicates a Hold Time violation
P - Greater than 25% diff. between 2 GC columns.
MDL - Minimum detection limit, **RL** - Reporting limit

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Certified Environmental Testing

All Results Summary

Client: Dynamic Earth LLC
Project: Old Orchard G.C.

Work Order: 2120938
Date to Lab: 12/23/2022 12:00:00PM

2120938-22 (Soil) Sample Name: **F-15-1** Collected: **12/21/2022 12:42:00PM**

SW 846 6010D - Total Metals

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed
Arsenic	5.36		0.102	1.43	mg/kg	1	1/3/23 13:12

Gravimetric - General Chemistry

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed
Percent Solids	86.4				%	1	12/27/22 11:23

2120938-23 (Soil) Sample Name: **F-15-3-R** Collected: **12/21/2022 12:50:00PM**

SW 846 6010D - Total Metals

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed
Arsenic	6.64		0.0978	1.37	mg/kg	1	1/3/23 13:14

Gravimetric - General Chemistry

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed
Percent Solids	88.1				%	1	12/27/22 11:23

2120938-24 (Soil) Sample Name: **F-15-6-R** Collected: **12/21/2022 12:54:00PM**

SW 846 6010D - Total Metals

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed
Arsenic	47.4		0.0973	1.36	mg/kg	1	1/3/23 14:09

Gravimetric - General Chemistry

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed
Percent Solids	87.7				%	1	12/27/22 11:23

ND, U - Indicates compound analyzed for but not detected
J - Indicates estimated value
B - Indicates compound found in associated blank
E - Concentration exceeds highest calibration standard
D - Indicates result is based on a dilution
H - Indicates a Hold Time violation
P - Greater than 25% diff. between 2 GC columns.
MDL - Minimum detection limit, **RL** - Reporting limit

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All Results Summary

Client: Dynamic Earth LLC
Project: Old Orchard G.C.

Work Order: 2120938
Date to Lab: 12/23/2022 12:00:00PM

2120938-25 (Soil) Sample Name: **F-15-7-R** Collected: **12/21/2022 12:46:00PM**

SW 846 6010D - Total Metals

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed
Arsenic	14.7		0.103	1.44	mg/kg	1	1/3/23 14:12

Gravimetric - General Chemistry

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed
Percent Solids	86.1				%	1	12/27/22 11:23

2120938-26 (Soil) Sample Name: **F-17A** Collected: **12/21/2022 12:50:00PM**

SW 846 6010D - Total Metals

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed
Arsenic	5.71		0.101	1.42	mg/kg	1	1/3/23 14:14

Gravimetric - General Chemistry

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed
Percent Solids	88.0				%	1	12/27/22 11:23

2120938-27 (Soil) Sample Name: **F-17-1** Collected: **12/21/2022 12:56:00PM**

SW 846 6010D - Total Metals

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed
Arsenic	13.4		0.103	1.44	mg/kg	1	1/3/23 14:17

Gravimetric - General Chemistry

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed
Percent Solids	84.8				%	1	12/27/22 11:23

ND, U - Indicates compound analyzed for but not detected
J - Indicates estimated value
B - Indicates compound found in associated blank
E - Concentration exceeds highest calibration standard
D - Indicates result is based on a dilution
H - Indicates a Hold Time violation
P - Greater than 25% diff. between 2 GC columns.
MDL - Minimum detection limit, **RL** - Reporting limit

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All Results Summary

Client: Dynamic Earth LLC
Project: Old Orchard G.C.
Work Order: 2120938
Date to Lab: 12/23/2022 12:00:00PM

2120938-28 (Soil) Sample Name: **F-17-2** Collected: **12/21/2022 1:00:00PM**

SW 846 6010D - Total Metals

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed
Arsenic	8.37		0.104	1.45	mg/kg	1	1/3/23 14:19

Gravimetric - General Chemistry

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed
Percent Solids	85.5				%	1	12/27/22 11:23

2120938-29 (Soil) Sample Name: **F-17-3** Collected: **12/21/2022 1:10:00PM**

SW 846 6010D - Total Metals

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed
Arsenic	7.38		0.109	1.52	mg/kg	1	1/3/23 14:22

Gravimetric - General Chemistry

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed
Percent Solids	82.4				%	1	12/27/22 11:23

2120938-30 (Soil) Sample Name: **F-17-4** Collected: **12/21/2022 1:14:00PM**

SW 846 6010D - Total Metals

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed
Arsenic	5.79		0.109	1.53	mg/kg	1	1/3/23 14:24

Gravimetric - General Chemistry

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed
Percent Solids	82.9				%	1	12/27/22 11:23

ND, U - Indicates compound analyzed for but not detected
J - Indicates estimated value
B - Indicates compound found in associated blank
E - Concentration exceeds highest calibration standard
D - Indicates result is based on a dilution
H - Indicates a Hold Time violation
P - Greater than 25% diff. between 2 GC columns.
MDL - Minimum detection limit, **RL** - Reporting limit

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All Results Summary

Client: Dynamic Earth LLC
Project: Old Orchard G.C.

Work Order: 2120938
Date to Lab: 12/23/2022 12:00:00PM

2120938-31 (Soil) Sample Name: T-11R Collected: 12/21/2022 2:00:00PM

SW 846 1312 - SPLP Pesticides

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed
Dieldrin	ND	U	0.000282	0.0208	ug/L	1	12/30/22 22:04

Gravimetric - General Chemistry

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed
Percent Solids	**86.3**				**%**	**1**	**12/27/22 11:23**
SPLP Soil Weight	**86.3**				**g**	**1**	**12/28/22 17:00**

SW 846 1312 - General Chemistry

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed
SPLP Leachate Volume	**2000**				**mL**	**1**	**12/29/22 10:00**

SW 846 9040C - General Chemistry

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed
SPLP Leachate pH	**4.07**		**0.0100**	**0.0100**	**pH Units**	**1**	**12/29/22 10:00**

2120938-32 (Ground Water) Sample Name: G-9-GW Collected: 12/21/2022 2:55:00PM

EPA 245.1 - Total Metals

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed
Mercury	ND	U	0.000148	0.000500	mg/L	1	12/29/22 14:00

EPA 200.8 - Total Metals

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed
Arsenic	ND	U	0.000272	0.00200	mg/L	1	12/30/22 10:26

SW 846 8081B - Pesticides

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed
4,4'-DDD	ND	U	0.000378	0.0200	ug/L	1	12/29/22 21:42
4,4'-DDE [2C]	**0.00300**	J	**0.000234**	**0.0200**	**ug/L**	**1**	**12/29/22 21:42**
4,4'-DDT	ND	U	0.000319	0.0200	ug/L	1	12/29/22 21:42
Aldrin	ND	U	0.000527	0.0200	ug/L	1	12/29/22 21:42
alpha-BHC	ND	U	0.000255	0.0200	ug/L	1	12/29/22 21:42
beta-BHC	ND	U	0.000371	0.0200	ug/L	1	12/29/22 21:42
Chlordane [2C]	**0.0159**	J	**0.000327**	**0.0500**	**ug/L**	**1**	**12/29/22 21:42**
delta-BHC	ND	U	0.000320	0.0200	ug/L	1	12/29/22 21:42
Dieldrin	ND	U	0.000271	0.0200	ug/L	1	12/29/22 21:42
Endosulfan I	ND	U	0.000380	0.0200	ug/L	1	12/29/22 21:42
Endosulfan II	ND	U	0.000254	0.0200	ug/L	1	12/29/22 21:42

ND, U - Indicates compound analyzed for but not detected
J - Indicates estimated value
B - Indicates compound found in associated blank
E - Concentration exceeds highest calibration standard
D - Indicates result is based on a dilution
H - Indicates a Hold Time violation
P - Greater than 25% diff. between 2 GC columns.
MDL - Minimum detection limit, **RL** - Reporting limit

APL
AQUA PRO-TECH LABORATORIES
Certified Environmental Testing

All Results Summary

Client: Dynamic Earth LLC
Project: Old Orchard G.C.

Work Order: 2120938
Date to Lab: 12/23/2022 12:00:00PM

2120938-32 (Ground Water) Sample Name: **G-9-GW** Collected: **12/21/2022 2:55:00PM**

SW 846 8081B - Pesticides (con't)

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed
Endosulfan sulfate	ND	U	0.000138	0.0200	ug/L	1	12/29/22 21:42
Endrin	ND	U	0.000229	0.0200	ug/L	1	12/29/22 21:42
Endrin aldehyde	ND	U	0.000318	0.0200	ug/L	1	12/29/22 21:42
Endrin ketone	ND	U	0.000203	0.0200	ug/L	1	12/29/22 21:42
gamma-BHC (Lindane)	ND	U	0.000241	0.0200	ug/L	1	12/29/22 21:42
Heptachlor	ND	U	0.000563	0.0200	ug/L	1	12/29/22 21:42
Heptachlor Epoxide [2C]	**0.130**		**0.000302**	**0.0200**	**ug/L**	**1**	**12/29/22 21:42**
Methoxychlor	ND	U	0.000343	0.0200	ug/L	1	12/29/22 21:42
Toxaphene	ND	U	0.0237	0.200	ug/L	1	12/29/22 21:42

2120938-33 (Soil) Sample Name: **F-18R** Collected: **12/21/2022 2:10:00PM**

SW 846 1312 - SPLP Pesticides

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed
Dieldrin	**0.00388**	J	**0.000277**	**0.0204**	**ug/L**	**1**	**12/30/22 22:29**

Gravimetric - General Chemistry

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed
Percent Solids	**86.5**				**%**	**1**	**12/27/22 11:23**
SPLP Soil Weight	**86.5**				**g**	**1**	**12/28/22 17:00**

SW 846 1312 - General Chemistry

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed
SPLP Leachate Volume	**2000**				**mL**	**1**	**12/29/22 10:00**

SW 846 9040C - General Chemistry

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed
SPLP Leachate pH	**5.05**		**0.0100**	**0.0100**	**pH Units**	**1**	**12/29/22 10:00**

ND, U - Indicates compound analyzed for but not detected
J - Indicates estimated value
B - Indicates compound found in associated blank
E - Concentration exceeds highest calibration standard
D - Indicates result is based on a dilution
H - Indicates a Hold Time violation
P - Greater than 25% diff. between 2 GC columns.
MDL - Minimum detection limit, **RL** - Reporting limit

APL
AQUA PRO-TECH LABORATORIES
Certified Environmental Testing

All Results Summary

Client: Dynamic Earth LLC
Project: Old Orchard G.C.
Work Order: 2120938
Date to Lab: 12/23/2022 12:00:00PM

2120938-34 (Soil) Sample Name: **F-15R** Collected: **12/21/2022 4:00:00PM**

SW 846 1312 - SPLP Pesticides

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed
4,4'-DDE	**0.166**		**0.000254**	**0.0217**	**ug/L**	**1**	**12/30/22 22:55**

Gravimetric - General Chemistry

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed
Percent Solids	**85.2**				**%**	**1**	**12/27/22 11:23**
SPLP Soil Weight	**85.2**				**g**	**1**	**12/28/22 17:00**

SW 846 1312 - General Chemistry

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed
SPLP Leachate Volume	**2000**				**mL**	**1**	**12/29/22 10:00**

SW 846 9040C - General Chemistry

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed
SPLP Leachate pH	**5.01**		**0.0100**	**0.0100**	**pH Units**	**1**	**12/29/22 10:00**

2120938-35 (Soil) Sample Name: **G-16R** Collected: **12/21/2022 4:10:00PM**

SW 846 1312/7470A - SPLP Metals

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed
Mercury	ND	U	0.000296	0.00100	mg/L	1	12/30/22 12:48

SW 846 1312 - SPLP Pesticides

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed
4,4'-DDE	ND	U	0.000241	0.0206	ug/L	1	12/30/22 23:20

Gravimetric - General Chemistry

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed
Percent Solids	**84.6**				**%**	**1**	**12/27/22 11:23**
SPLP Soil Weight	**84.6**				**g**	**1**	**12/28/22 18:00**

SW 846 1312 - General Chemistry

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed
SPLP Leachate Volume	**2000**				**mL**	**1**	**12/29/22 11:00**

ND, U - Indicates compound analyzed for but not detected
J - Indicates estimated value
B - Indicates compound found in associated blank
E - Concentration exceeds highest calibration standard
D - Indicates result is based on a dilution
H - Indicates a Hold Time violation
P - Greater than 25% diff. between 2 GC columns.
MDL - Minimum detection limit, **RL** - Reporting limit

APL
AQUA PRO-TECH LABORATORIES
Certified Environmental Testing

All Results Summary

Client: Dynamic Earth LLC
Project: Old Orchard G.C.

Work Order: 2120938
Date to Lab: 12/23/2022 12:00:00PM

2120938-35 (Soil) Sample Name: G-16R Collected: 12/21/2022 4:10:00PM

SW 846 9040C - General Chemistry

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed
SPLP Leachate pH	10.0		0.0100	0.0100	pH Units	1	12/29/22 11:00

2120938-36 (Soil) Sample Name: G-15R Collected: 12/21/2022 4:15:00PM

SW 846 1312/200.8 - SPLP Metals

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed
Lead	0.0172		0.000338	0.00200	mg/L	1	12/30/22 11:15

Gravimetric - General Chemistry

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed
Percent Solids	85.7				%	1	12/27/22 11:23
SPLP Soil Weight	85.7				g	1	12/26/22 10:33

SW 846 1312 - General Chemistry

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed
SPLP Leachate Volume	2000				mL	1	12/29/22 10:38

SW 846 9040C - General Chemistry

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed
SPLP Leachate pH	8.20		0.0100	0.0100	pH Units	1	12/29/22 10:40

2120938-37 (Soil) Sample Name: G-11R Collected: 12/21/2022 4:20:00PM

SW 846 1312/7470A - SPLP Metals

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed
Mercury	ND	U	0.000296	0.00100	mg/L	1	12/30/22 13:02

Gravimetric - General Chemistry

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed
Percent Solids	78.9				%	1	12/27/22 11:23
SPLP Soil Weight	78.9				g	1	12/26/22 10:33

ND, U - Indicates compound analyzed for but not detected
J - Indicates estimated value
B - Indicates compound found in associated blank
E - Concentration exceeds highest calibration standard
D - Indicates result is based on a dilution
H - Indicates a Hold Time violation
P - Greater than 25% diff. between 2 GC columns.
MDL - Minimum detection limit, **RL** - Reporting limit

APL
AQUA PRO-TECH LABORATORIES
Certified Environmental Testing

All Results Summary

Client: Dynamic Earth LLC
Project: Old Orchard G.C.

Work Order: 2120938
Date to Lab: 12/23/2022 12:00:00PM

2120938-37 (Soil) Sample Name: **G-11R** Collected: **12/21/2022 4:20:00PM**

SW 846 1312 - General Chemistry

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed
SPLP Leachate Volume	**2000**				**mL**	**1**	**12/29/22 10:38**

SW 846 9040C - General Chemistry

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed
SPLP Leachate pH	**8.10**		**0.0100**	**0.0100**	**pH Units**	**1**	**12/29/22 10:40**

2120938-39 (Soil) Sample Name: **F-15-6A-R** Collected: **12/21/2022 12:56:00PM**

SW 846 6010D - Total Metals

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed
Arsenic	ND	U	0.104	1.45	mg/kg	1	1/18/23 14:40

Gravimetric - General Chemistry

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed
Percent Solids	**87.0**				**%**	**1**	**1/12/23 11:43**

ND, U - Indicates compound analyzed for but not detected
J - Indicates estimated value
B - Indicates compound found in associated blank
E - Concentration exceeds highest calibration standard
D - Indicates result is based on a dilution
H - Indicates a Hold Time violation
P - Greater than 25% diff. between 2 GC columns.
MDL - Minimum detection limit, **RL** - Reporting limit

MERCURY

Dynamic Earth LLC

Work Order: 2120938

Project: Old Orchard G.C.

ANALYSIS DATA SHEET

Mercury

Client: Dynamic Earth LLC
Project: Old Orchard G.C.
Work Order: 2120938

SPLP Metals - Aqueous (SW 846 1312/7470A)

Lab Number	Analyte	Extract	Concentration	Units	RL	DF	Analyst	Analyzed
B2L3017-BLK1	Mercury	40 mL / 40 mL	ND	mg/L	0.00100	1	SG	12/30/2022 11:17
S2L3008-CCB1	Mercury	N/A	ND	ug/L	1.00	1	SG	12/30/2022 12:09
S2L3008-CCB2	Mercury	N/A	ND	ug/L	1.00	1	SG	12/30/2022 12:58
S2L3008-CCB3	Mercury	N/A	ND	ug/L	1.00	1	SG	12/30/2022 13:10
S2L3008-ICB1	Mercury	N/A	ND	ug/L	1.00	1	SG	12/30/2022 11:06

Total Metals - Aqueous (EPA 245.1)

Lab Number	Analyte	Extract	Concentration	Units	RL	DF	Analyst	Analyzed
B2L2920-BLK1	Mercury	40 mL / 40 mL	ND	mg/L	0.000500	1	SG	12/29/2022 12:46
S2L2917-CCB1	Mercury	N/A	ND	ug/L	0.500	1	SG	12/29/2022 13:35
S2L2917-CCB2	Mercury	N/A	ND	ug/L	0.500	1	SG	12/29/2022 14:09
S2L2917-ICB1	Mercury	N/A	ND	ug/L	0.500	1	SG	12/29/2022 12:14

ND - Indicates compound analyzed for but not detected

RL - Reporting limit
DF - Dilution Factor

F-I

ANALYSIS DATA SHEET

Mercury

Client: Dynamic Earth LLC
Project: Old Orchard G.C.
Work Order: 2120938

SPLP Metals - Aqueous (SW 846 1312/7470A)

Lab Number	Analyte	Extract	Conc.	Units	RL	DF	Qual	Analyst	Analyzed
2120938-06	Mercury	40 / 40	ND	mg/L	0.00100	1	U	SG	12/30/22 12:44
2120938-35	Mercury	40 / 40	ND	mg/L	0.00100	1	U	SG	12/30/22 12:48
2120938-37	Mercury	40 / 40	ND	mg/L	0.00100	1	U	SG	12/30/22 13:02

Total Metals - Aqueous (EPA 245.1)

Lab Number	Analyte	Extract	Conc.	Units	RL	DF	Qual	Analyst	Analyzed
2120938-32	Mercury	40 / 40	ND	mg/L	0.000500	1	U	SG	12/29/22 14:00

ND, U - Indicates compound analyzed for but not detected
D - Indicates result is based on a dilution
E - Concentration exceeds highest calibration standard
H - Indicates a Hold Time violation

RL - Reporting limit
DF - Dilution Factor

B - Indicates compound found in associated blank

F-I

Batch B2L2920 **Method: EPA 245.1** **Prepared: 12/29/2022**

B2L2920-BS1 **Source:**

Analyte	Result	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Mercury	0.0102	mg/L	0.0100		102	85-115		

Batch B2L2920 (cont.) **Method: EPA 245.1** **Prepared: 12/29/2022**

B2L2920-DUP1 **Source:** 2120795-01

Analyte	Result	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Mercury	ND	mg/L		ND				20

Batch B2L2920 (cont.) **Method: EPA 245.1** **Prepared: 12/29/2022**

B2L2920-MS1 **Source:** 2120795-01

Analyte	Result	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Mercury	0.00979	mg/L	0.0100	0.000196 J	95.9	70-130		

Batch B2L2920 (cont.) **Method: EPA 245.1** **Prepared: 12/29/2022**

B2L2920-MSD1 **Source:** 2120795-01

Analyte	Result	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Mercury	0.00998	mg/L	0.0100	0.000196 J	97.9	70-130	1.97	20

* - Outside of QC Limits J - Result is between the MDL and RL for an Analysis reported to an RL

F-III NC - Outside the recovery criteria but Spike Amount <1/4 amount found in Source Sample

Batch B2L3017 **Method: SW 846 1312/7470A** **Prepared: 12/30/2022**

B2L3017-BS1 **Source:**

Analyte	Result	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Mercury	0.00986	mg/L	0.0100		98.6	80-120		

Batch B2L3017 (cont.) **Method: SW 846 1312/7470A** **Prepared: 12/30/2022**

B2L3017-DUP1 **Source:** 2120936-01

Analyte	Result	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Mercury	ND	mg/L		ND				20

Batch B2L3017 (cont.) **Method: SW 846 1312/7470A** **Prepared: 12/30/2022**

B2L3017-MS1 **Source:** 2120936-01

Analyte	Result	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Mercury	0.00973	mg/L	0.0100	ND	97.3	80-120		

Batch B2L3017 (cont.) **Method: SW 846 1312/7470A** **Prepared: 12/30/2022**

B2L3017-MSD1 **Source:** 2120936-01

Analyte	Result	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Mercury	0.00977	mg/L	0.0100	ND	97.7	80-120	0.336	20

* - Outside of QC Limits J - Result is between the MDL and RL for an Analysis reported to an RL

F-III NC - Outside the recovery criteria but Spike Amount <1/4 amount found in Source Sample

METHOD BLANK SUMMARY

Batch ID: **B2L2920**

Lab Number	Sample Id	Extraction Date	Analysis Date
B2L2920-BLK1	BLK1	12/29/2022	12/29/2022 12:46
B2L2920-BS1	BS1	12/29/2022	12/29/2022 12:51
B2L2920-DUP1	DUP1	12/29/2022	12/29/2022 13:01
B2L2920-MS1	MS1	12/29/2022	12/29/2022 13:06
B2L2920-MSD1	MSD1	12/29/2022	12/29/2022 13:11
2120938-32	G-9-GW	12/29/2022	12/29/2022 14:00

Batch ID: **B2L3017**

Lab Number	Sample Id	Extraction Date	Analysis Date
B2L3017-BLK1	BLK1	12/30/2022	12/30/2022 11:17
B2L3017-BS1	BS1	12/30/2022	12/30/2022 11:21
B2L3017-DUP1	DUP1	12/30/2022	12/30/2022 11:30
B2L3017-MS1	MS1	12/30/2022	12/30/2022 11:34
B2L3017-MSD1	MSD1	12/30/2022	12/30/2022 11:38
2120938-06	G-16A	12/30/2022	12/30/2022 12:44
2120938-35	G-16R	12/30/2022	12/30/2022 12:48
2120938-37	G-11R	12/30/2022	12/30/2022 13:02

ANALYSIS SEQUENCE SUMMARY

Laboratory:	Aqua Pro-Tech Laboratories	Work Order:	2120938
Client:	Dynamic Earth LLC	Project:	Old Orchard G.C.
Sequence:	S2L2917	Instrument:	Mercury Analyzer

Sample Name	Lab Sample ID	FileID	Analysis Date/Time
Initial Cal Check	S2L2917-ICV1	2022-12-29-a.csv-015	12/29/22 12:09
Initial Cal Blank	S2L2917-ICB1	2022-12-29-a.csv-016	12/29/22 12:14
Instrument RL Check	S2L2917-CRL1	2022-12-29-a.csv-022	12/29/22 12:41
Blank	B2L2920-BLK1	2022-12-29-a.csv-023	12/29/22 12:46
LCS	B2L2920-BS1	2022-12-29-a.csv-024	12/29/22 12:51
Duplicate	B2L2920-DUP1	2022-12-29-a.csv-026	12/29/22 13:01
Matrix Spike	B2L2920-MS1	2022-12-29-a.csv-027	12/29/22 13:06
Matrix Spike Dup	B2L2920-MSD1	2022-12-29-a.csv-028	12/29/22 13:11
Calibration Check	S2L2917-CCV1	2022-12-29-a.csv-032	12/29/22 13:30
Calibration Blank	S2L2917-CCB1	2022-12-29-a.csv-033	12/29/22 13:35
G-9-GW	2120938-32	2022-12-29-a.csv-038	12/29/22 14:00
Calibration Check	S2L2917-CCV2	2022-12-29-a.csv-039	12/29/22 14:04
Calibration Blank	S2L2917-CCB2	2022-12-29-a.csv-040	12/29/22 14:09

ANALYSIS SEQUENCE SUMMARY

Laboratory:	Aqua Pro-Tech Laboratories	Work Order:	2120938
Client:	Dynamic Earth LLC	Project:	Old Orchard G.C.
Sequence:	S2L3008	Instrument:	Mercury Analyzer

Sample Name	Lab Sample ID	FileID	Analysis Date/Time
Initial Cal Check	S2L3008-ICV1	2022-12-30-a.csv-010	12/30/22 11:01
Initial Cal Blank	S2L3008-ICB1	2022-12-30-a.csv-011	12/30/22 11:06
Instrument RL Check	S2L3008-CRL1	2022-12-30-a.csv-012	12/30/22 11:10
Blank	B2L3017-BLK1	2022-12-30-a.csv-013	12/30/22 11:17
LCS	B2L3017-BS1	2022-12-30-a.csv-014	12/30/22 11:21
Duplicate	B2L3017-DUP1	2022-12-30-a.csv-017	12/30/22 11:30
Matrix Spike	B2L3017-MS1	2022-12-30-a.csv-018	12/30/22 11:34
Matrix Spike Dup	B2L3017-MSD1	2022-12-30-a.csv-019	12/30/22 11:38
Calibration Check	S2L3008-CCV1	2022-12-30-a.csv-023	12/30/22 12:04
Calibration Blank	S2L3008-CCB1	2022-12-30-a.csv-024	12/30/22 12:09
G-16A	2120938-06	2022-12-30-a.csv-033	12/30/22 12:44
G-16R	2120938-35	2022-12-30-a.csv-034	12/30/22 12:48

F-V

ANALYSIS SEQUENCE SUMMARY

Laboratory:	Aqua Pro-Tech Laboratories	Work Order:	2120938
Client:	Dynamic Earth LLC	Project:	Old Orchard G.C.
Sequence:	S2L3008	Instrument:	Mercury Analyzer

Sample Name	Lab Sample ID	FileID	Analysis Date/Time
Calibration Check	S2L3008-CCV2	2022-12-30-a.csv-035	12/30/22 12:54
Calibration Blank	S2L3008-CCB2	2022-12-30-a.csv-036	12/30/22 12:58
G-11R	2120938-37	2022-12-30-a.csv-037	12/30/22 13:02
Calibration Check	S2L3008-CCV3	2022-12-30-a.csv-038	12/30/22 13:06
Calibration Blank	S2L3008-CCB3	2022-12-30-a.csv-039	12/30/22 13:10

F-V

SEQUENCE CALIBRATION CHECKS

EPA 245.1

Client: **Dynamic Earth LLC**
Project: **Old Orchard G.C.**
Work Order: **2120938**

Sequence: S2L2917
Instrument: Mercury Analyzer

Lab Sample ID	Analyte	True	Found	%R	Units	Control Limit
S2L2917-ICV1	Mercury	10.0	9.81	98.1	ug/L	95-105
S2L2917-CCV1	Mercury	10.0	10.1	101	ug/L	90-110
S2L2917-CCV2	Mercury	10.0	10.3	103	ug/L	90-110

ICV = Initial Cal Verification CCV = Continuing Cal Verification IFB = Interference Check Standard B
SCV = Second Source Cal Verification LCV = Low Cal Check

SEQUENCE CALIBRATION CHECKS

SW 846 1312/7470A

Client: **Dynamic Earth LLC**
Project: **Old Orchard G.C.**
Work Order: **2120938**

Sequence: S2L3008
Instrument: Mercury Analyzer

Lab Sample ID	Analyte	True	Found	%R	Units	Control Limit
S2L3008-ICV1	Mercury	10.0	9.78	97.8	ug/L	90-110
S2L3008-CCV1	Mercury	10.0	9.29	92.9	ug/L	80-120
S2L3008-CCV2	Mercury	10.0	9.13	91.3	ug/L	80-120
S2L3008-CCV3	Mercury	10.0	10.0	100	ug/L	80-120

ICV = Initial Cal Verification CCV = Continuing Cal Verification IFB = Interference Check Standard B
SCV = Second Source Cal Verification LCV = Low Cal Check

METALS

Dynamic Earth LLC

Work Order: 2120938

Project: Old Orchard G.C.

ANALYSIS DATA SHEET

Client: **Dynamic Earth LLC**
Client Sample ID: **Blank**
Lab Sample ID: **B2L2810-BLK1**
Project: **Old Orchard G.C.**
Work Order: **2120938**

Init/Final Vol:	50 mL / 50 mL	Prep Date:	12/28/2022 9:59:00AM
Matrix:	Water	Prep Method:	Hot Block ICPMS

Total Metals - Aqueous (EPA 200.8)

CAS NO.	Analyte	Analyzed	Concentration	Units	RL	DF	Analyst	Sequence/Batch
7440-38-2	Arsenic	12/30/2022 09:34	ND	mg/L	0.00200	1	RS	S2L3018/B2L2810

ND - Indicates compound analyzed for but not detected

RL - Reporting limit
DF - Dilution Factor

F-I

ANALYSIS DATA SHEET

Client: **Dynamic Earth LLC**
Client Sample ID: **Blank**
Lab Sample ID: **B2L2913-BLK1**
Project: **Old Orchard G.C.**
Work Order: **2120938**

Init/Final Vol:	2 g / 50 mL	Prep Date:	12/29/2022 10:04:00AM
Matrix:	Soil	Prep Method:	Hot Block ICP Soil

Total Metals - Soil (SW 846 6010D)

CAS NO.	Analyte	Analyzed	Concentration	Units	RL	DF	Analyst	Sequence/Batch
7440-38-2	Arsenic	01/02/2023 11:20	ND	mg/kg wet	1.25	1	MS	SAA0015/B2L2913

ND - Indicates compound analyzed for but not detected

RL - Reporting limit
DF - Dilution Factor

F-I

ANALYSIS DATA SHEET

Client: Dynamic Earth LLC
Client Sample ID: Blank
Lab Sample ID: B2L3006-BLK1
Project: Old Orchard G.C.
Work Order: 2120938

Init/Final Vol:	50 mL / 50 mL	Prep Date:	12/30/2022 7:52:00AM
Matrix:	Soil	Prep Method:	Hot Block ICPMS SPLP

SPLP Metals - Aqueous (SW 846 1312/200.8)

CAS NO.	Analyte	Analyzed	Concentration	Units	RL	DF	Analyst	Sequence/Batch
7439-92-1	Lead	12/30/2022 10:48	ND	mg/L	0.00200	1	RS	S2L3020/B2L3006

ND - Indicates compound analyzed for but not detected

RL - Reporting limit
DF - Dilution Factor

F-I

ANALYSIS DATA SHEET

Client: **Dynamic Earth LLC**
Client Sample ID: **Blank**
Lab Sample ID: **BAA0459-BLK1**
Project: **Old Orchard G.C.**
Work Order: **2120938**

Init/Final Vol:	2 g / 50 mL	Prep Date:	1/16/2023 9:36:00AM
Matrix:	Soil	Prep Method:	Hot Block ICP Soil

Total Metals - Soil (SW 846 6010D)

CAS NO.	Analyte	Analyzed	Concentration	Units	RL	DF	Analyst	Sequence/Batch
7440-38-2	Arsenic	01/18/2023 14:26	ND	mg/kg wet	1.25	1	MS	SAA0286/BAA0459

ND - Indicates compound analyzed for but not detected

RL - Reporting limit
DF - Dilution Factor

F-I

ANALYSIS DATA SHEET

Client: **Dynamic Earth LLC**
Client Sample ID: **Calibration Blank**
Lab Sample ID: **S2L3018-CCB1**
Project: **Old Orchard G.C.**
Work Order: **2120938**

Init/Final Vol:	N/A	Prep Date:	12/30/2022 7:00:31AM
Matrix:	Water	Prep Method:	

Total Metals - Aqueous (EPA 200.8)

CAS NO.	Analyte	Analyzed	Concentration	Units	RL	DF	Analyst	Sequence/Batch
7440-38-2	Arsenic	12/30/2022 10:01	ND	ug/L	2.00	1	RS	S2L3018/S2L3018

ND - Indicates compound analyzed for but not detected

RL - Reporting limit
DF - Dilution Factor

F-I

ANALYSIS DATA SHEET

Client: Dynamic Earth LLC
Client Sample ID: Calibration Blank
Lab Sample ID: S2L3018-CCB2
Project: Old Orchard G.C.
Work Order: 2120938

Init/Final Vol:	N/A	Prep Date:	12/30/2022 7:00:31AM
Matrix:	Water	Prep Method:	

Total Metals - Aqueous (EPA 200.8)

CAS NO.	Analyte	Analyzed	Concentration	Units	RL	DF	Analyst	Sequence/Batch
7440-38-2	Arsenic	12/30/2022 10:31	ND	ug/L	2.00	1	RS	S2L3018/S2L3018

ND - Indicates compound analyzed for but not detected

RL - Reporting limit
DF - Dilution Factor

F-I

ANALYSIS DATA SHEET

Client: **Dynamic Earth LLC**
Client Sample ID: **Calibration Blank**
Lab Sample ID: **S2L3018-CCB3**
Project: **Old Orchard G.C.**
Work Order: **2120938**

Init/Final Vol:	N/A	Prep Date:	12/30/2022 7:00:31AM
Matrix:	Water	Prep Method:	

Total Metals - Aqueous (EPA 200.8)

CAS NO.	Analyte	Analyzed	Concentration	Units	RL	DF	Analyst	Sequence/Batch
7440-38-2	Arsenic	12/30/2022 11:01	ND	ug/L	2.00	1	RS	S2L3018/S2L3018

ND - Indicates compound analyzed for but not detected

RL - Reporting limit
DF - Dilution Factor

F-I

ANALYSIS DATA SHEET

Client: **Dynamic Earth LLC**
Client Sample ID: **Initial Cal Blank**
Lab Sample ID: **S2L3018-ICB1**
Project: **Old Orchard G.C.**
Work Order: **2120938**

Init/Final Vol:	N/A	Prep Date:	12/30/2022 7:00:31AM
Matrix:	Water	Prep Method:	

Total Metals - Aqueous (EPA 200.8)

CAS NO.	Analyte	Analyzed	Concentration	Units	RL	DF	Analyst	Sequence/Batch
7440-38-2	Arsenic	12/30/2022 08:48	ND	ug/L	2.00	1	RS	S2L3018/S2L3018

ND - Indicates compound analyzed for but not detected

RL - Reporting limit
DF - Dilution Factor

F-I

ANALYSIS DATA SHEET

Client: **Dynamic Earth LLC**
Client Sample ID: **Calibration Blank**
Lab Sample ID: **S2L3020-CCB3**
Project: **Old Orchard G.C.**
Work Order: **2120938**

Init/Final Vol:	N/A	Prep Date:	12/30/2022 7:00:48AM
Matrix:	Water	Prep Method:	

SPLP Metals - Aqueous (SW 846 1312/200.8)

CAS NO.	Analyte	Analyzed	Concentration	Units	RL	DF	Analyst	Sequence/Batch
7439-92-1	Lead	12/30/2022 11:01	ND	ug/L	2.00	1	RS	S2L3020/S2L3020

ND - Indicates compound analyzed for but not detected

RL - Reporting limit
DF - Dilution Factor

F-I

ANALYSIS DATA SHEET

Client: **Dynamic Earth LLC**
Client Sample ID: **Calibration Blank**
Lab Sample ID: **S2L3020-CCB4**
Project: **Old Orchard G.C.**
Work Order: **2120938**

Init/Final Vol:	N/A	Prep Date:	12/30/2022 7:00:48AM
Matrix:	Water	Prep Method:	

SPLP Metals - Aqueous (SW 846 1312/200.8)

CAS NO.	Analyte	Analyzed	Concentration	Units	RL	DF	Analyst	Sequence/Batch
7439-92-1	Lead	12/30/2022 11:30	ND	ug/L	2.00	1	RS	S2L3020/S2L3020

ND - Indicates compound analyzed for but not detected

RL - Reporting limit
DF - Dilution Factor

F-I

ANALYSIS DATA SHEET

Client: **Dynamic Earth LLC**
Client Sample ID: **Initial Cal Blank**
Lab Sample ID: **S2L3020-ICB1**
Project: **Old Orchard G.C.**
Work Order: **2120938**

Init/Final Vol:	N/A	Prep Date:	12/30/2022 7:00:48AM
Matrix:	Water	Prep Method:	

SPLP Metals - Aqueous (SW 846 1312/200.8)

CAS NO.	Analyte	Analyzed	Concentration	Units	RL	DF	Analyst	Sequence/Batch
7439-92-1	Lead	12/30/2022 08:48	ND	ug/L	2.00	1	RS	S2L3020/S2L3020

ND - Indicates compound analyzed for but not detected

RL - Reporting limit
DF - Dilution Factor

F-I

ANALYSIS DATA SHEET

Client: Dynamic Earth LLC
Client Sample ID: Calibration Blank
Lab Sample ID: SAA0015-CCB2
Project: Old Orchard G.C.
Work Order: 2120938

Init/Final Vol:	N/A	Prep Date:	1/2/2023 7:00:33AM
Matrix:	Soil	Prep Method:	

Total Metals - Aqueous (SW 846 6010D)

CAS NO.	Analyte	Analyzed	Concentration	Units	RL	DF	Analyst	Sequence/Batch
7440-38-2	Arsenic	01/02/2023 11:18	ND	mg/L	0.0500	1	MS	SAA0015/SAA0015

ND - Indicates compound analyzed for but not detected

RL - Reporting limit
DF - Dilution Factor

F-I

ANALYSIS DATA SHEET

Client: Dynamic Earth LLC
Client Sample ID: Calibration Blank
Lab Sample ID: SAA0015-CCB3
Project: Old Orchard G.C.
Work Order: 2120938

Init/Final Vol:	N/A	Prep Date:	1/2/2023 7:00:33AM
Matrix:	Soil	Prep Method:	

Total Metals - Aqueous (SW 846 6010D)

CAS NO.	Analyte	Analyzed	Concentration	Units	RL	DF	Analyst	Sequence/Batch
7440-38-2	Arsenic	01/02/2023 11:48	ND	mg/L	0.0500	1	MS	SAA0015/SAA0015

ND - Indicates compound analyzed for but not detected

RL - Reporting limit
DF - Dilution Factor

F-I

ANALYSIS DATA SHEET

Client: Dynamic Earth LLC
Client Sample ID: Initial Cal Blank
Lab Sample ID: SAA0015-ICB1
Project: Old Orchard G.C.
Work Order: 2120938

Init/Final Vol:	N/A	Prep Date:	1/2/2023 7:00:33AM
Matrix:	Soil	Prep Method:	

Total Metals - Aqueous (SW 846 6010D)

CAS NO.	Analyte	Analyzed	Concentration	Units	RL	DF	Analyst	Sequence/Batch
7440-38-2	Arsenic	01/02/2023 09:05	ND	mg/L	0.0500	1	MS	SAA0015/SAA0015

ND - Indicates compound analyzed for but not detected

RL - Reporting limit
DF - Dilution Factor

F-I

ANALYSIS DATA SHEET

Client: Dynamic Earth LLC
Client Sample ID: Calibration Blank
Lab Sample ID: SAA0023-CCB1
Project: Old Orchard G.C.
Work Order: 2120938

Init/Final Vol:	N/A	Prep Date:	1/3/2023 7:01:09AM
Matrix:	Soil	Prep Method:	

Total Metals - Aqueous (SW 846 6010D)

CAS NO.	Analyte	Analyzed	Concentration	Units	RL	DF	Analyst	Sequence/Batch
7440-38-2	Arsenic	01/03/2023 13:24	ND	mg/L	0.0500	1	MS	SAA0023/SAA0023

ND - Indicates compound analyzed for but not detected

RL - Reporting limit
DF - Dilution Factor

F-I

ANALYSIS DATA SHEET

Client: Dynamic Earth LLC
Client Sample ID: Calibration Blank
Lab Sample ID: SAA0023-CCB2
Project: Old Orchard G.C.
Work Order: 2120938

Init/Final Vol:	N/A	Prep Date:	1/3/2023 7:01:09AM
Matrix:	Soil	Prep Method:	

Total Metals - Aqueous (SW 846 6010D)

CAS NO.	Analyte	Analyzed	Concentration	Units	RL	DF	Analyst	Sequence/Batch
7440-38-2	Arsenic	01/03/2023 14:33	ND	mg/L	0.0500	1	MS	SAA0023/SAA0023

ND - Indicates compound analyzed for but not detected

RL - Reporting limit
DF - Dilution Factor

F-I

ANALYSIS DATA SHEET

Client: Dynamic Earth LLC
Client Sample ID: Initial Cal Blank
Lab Sample ID: SAA0023-ICB1
Project: Old Orchard G.C.
Work Order: 2120938

Init/Final Vol:	N/A	Prep Date:	1/3/2023 7:01:09AM
Matrix:	Soil	Prep Method:	

Total Metals - Aqueous (SW 846 6010D)

CAS NO.	Analyte	Analyzed	Concentration	Units	RL	DF	Analyst	Sequence/Batch
7440-38-2	Arsenic	01/03/2023 09:20	ND	mg/L	0.0500	1	MS	SAA0023/SAA0023

10 10.1.

ND - Indicates compound analyzed for but not detected

RL - Reporting limit
DF - Dilution Factor

F-I

ANALYSIS DATA SHEET

Client: Dynamic Earth LLC
Client Sample ID: Calibration Blank
Lab Sample ID: SAA0030-CCB1
Project: Old Orchard G.C.
Work Order: 2120938

Init/Final Vol:	N/A	Prep Date:	1/3/2023 8:27:36AM
Matrix:	Soil	Prep Method:	

Total Metals - Aqueous (SW 846 6010D)

CAS NO.	Analyte	Analyzed	Concentration	Units	RL	DF	Analyst	Sequence/Batch
7440-38-2	Arsenic	01/03/2023 16:06	ND	mg/L	0.0500	1	MS	SAA0030/SAA0030

10 10.1.

ND - Indicates compound analyzed for but not detected

RL - Reporting limit
DF - Dilution Factor

F-I

ANALYSIS DATA SHEET

Client: **Dynamic Earth LLC**
Client Sample ID: **Initial Cal Blank**
Lab Sample ID: **SAA0030-ICB1**
Project: **Old Orchard G.C.**
Work Order: **2120938**

Init/Final Vol:	N/A	Prep Date:	1/3/2023 8:27:36AM
Matrix:	Soil	Prep Method:	

Total Metals - Aqueous (SW 846 6010D)

CAS NO.	Analyte	Analyzed	Concentration	Units	RL	DF	Analyst	Sequence/Batch
7440-38-2	Arsenic	01/03/2023 09:20	ND	mg/L	0.0500	1	MS	SAA0030/SAA0030

10 10.1.

ND - Indicates compound analyzed for but not detected

RL - Reporting limit
DF - Dilution Factor

F-I

ANALYSIS DATA SHEET

Client: Dynamic Earth LLC
Client Sample ID: Calibration Blank
Lab Sample ID: SAA0286-CCB1
Project: Old Orchard G.C.
Work Order: 2120938

Init/Final Vol:	N/A	Prep Date:	1/18/2023 7:48:58AM
Matrix:	Soil	Prep Method:	

Total Metals - Aqueous (SW 846 6010D)

CAS NO.	Analyte	Analyzed	Concentration	Units	RL	DF	Analyst	Sequence/Batch
7440-38-2	Arsenic	01/18/2023 12:46	ND	mg/L	0.0500	1	MS	SAA0286/SAA0286

ND - Indicates compound analyzed for but not detected

RL - Reporting limit
DF - Dilution Factor

F-I

ANALYSIS DATA SHEET

Client: Dynamic Earth LLC
Client Sample ID: Calibration Blank
Lab Sample ID: SAA0286-CCB2
Project: Old Orchard G.C.
Work Order: 2120938

Init/Final Vol:	N/A	Prep Date:	1/18/2023 7:48:58AM
Matrix:	Soil	Prep Method:	

Total Metals - Aqueous (SW 846 6010D)

CAS NO.	Analyte	Analyzed	Concentration	Units	RL	DF	Analyst	Sequence/Batch
7440-38-2	Arsenic	01/18/2023 14:47	ND	mg/L	0.0500	1	MS	SAA0286/SAA0286

10 10.1.

ND - Indicates compound analyzed for but not detected

RL - Reporting limit
DF - Dilution Factor

F-I

ANALYSIS DATA SHEET

Client: Dynamic Earth LLC
Client Sample ID: Initial Cal Blank
Lab Sample ID: SAA0286-ICB1
Project: Old Orchard G.C.
Work Order: 2120938

Init/Final Vol:	N/A	Prep Date:	1/18/2023 7:48:58AM
Matrix:	Soil	Prep Method:	

Total Metals - Aqueous (SW 846 6010D)

CAS NO.	Analyte	Analyzed	Concentration	Units	RL	DF	Analyst	Sequence/Batch
7440-38-2	Arsenic	01/18/2023 09:07	ND	mg/L	0.0500	1	MS	SAA0286/SAA0286

10 10.1.

ND - Indicates compound analyzed for but not detected

RL - Reporting limit
DF - Dilution Factor

F-I

ANALYSIS DATA SHEET

Client: **Dynamic Earth LLC**
Client Sample ID: **F-6A**
Lab Sample ID: **2120938-11**
Project: **Old Orchard G.C.**
Work Order: **2120938**

Date Sampled:	12/20/22 11:52	Prep Date:	12/29/22 10:04
Init/Final Vol:	1.98 g / 50 mL	Prep Method:	Hot Block ICP Soil
Matrix:	Soil		
Percent Solids:	86.15		

Total Metals - Soil (SW 846 6010D)

CAS NO.	Analyte	Analyzed	Conc.	Units	RL	DF	Qual	Analyst	Sequence/Batch
7440-38-2	Arsenic	01/04/23 08:40	2.93	mg/kg dry	1.47	1		MS	SAA0030/B2L2913

10 10.2.

ND, U - Indicates compound analyzed for but not detected
D - Indicates result is based on a dilution
E - Concentration exceeds highest calibration standard
H - Indicates a Hold Time violation

RL - Reporting limit
DF - Dilution Factor

B - Indicates compound found in associated blank

F-I

ANALYSIS DATA SHEET

Client: **Dynamic Earth LLC**
Client Sample ID: **F-6-1**
Lab Sample ID: **2120938-12**
Project: **Old Orchard G.C.**
Work Order: **2120938**

Date Sampled:	12/20/22 11:58	Prep Date:	12/29/22 10:04
Init/Final Vol:	2.03 g / 50 mL	Prep Method:	Hot Block ICP Soil
Matrix:	Soil		
Percent Solids:	83.45		

Total Metals - Soil (SW 846 6010D)

CAS NO.	Analyte	Analyzed	Conc.	Units	RL	DF	Qual	Analyst	Sequence/Batch
7440-38-2	Arsenic	01/04/23 08:42	2.65	mg/kg dry	1.48	1		MS	SAA0030/B2L2913

10 10.2.

ND, U - Indicates compound analyzed for but not detected
D - Indicates result is based on a dilution
E - Concentration exceeds highest calibration standard
H - Indicates a Hold Time violation

RL - Reporting limit
DF - Dilution Factor

B - Indicates compound found in associated blank

F-I

ANALYSIS DATA SHEET

Client: **Dynamic Earth LLC**
Client Sample ID: **F-6-2**
Lab Sample ID: **2120938-13**
Project: **Old Orchard G.C.**
Work Order: **2120938**

Date Sampled:	12/20/22 12:02	Prep Date:	12/29/22 10:04
Init/Final Vol:	2.01 g / 50 mL	Prep Method:	Hot Block ICP Soil
Matrix:	Soil		
Percent Solids:	86.54		

Total Metals - Soil (SW 846 6010D)

CAS NO.	Analyte	Analyzed	Conc.	Units	RL	DF	Qual	Analyst	Sequence/Batch
7440-38-2	Arsenic	01/04/23 08:45	6.70	mg/kg dry	1.44	1		MS	SAA0030/B2L2913

10 10.2.

ND, U - Indicates compound analyzed for but not detected
D - Indicates result is based on a dilution
E - Concentration exceeds highest calibration standard
H - Indicates a Hold Time violation

RL - Reporting limit
DF - Dilution Factor

B - Indicates compound found in associated blank

F-I

ANALYSIS DATA SHEET

Client: **Dynamic Earth LLC**
Client Sample ID: **F-6-3**
Lab Sample ID: **2120938-14**
Project: **Old Orchard G.C.**
Work Order: **2120938**

Date Sampled:	12/20/22 12:06	Prep Date:	12/29/22 10:04
Init/Final Vol:	2.02 g / 50 mL	Prep Method:	Hot Block ICP Soil
Matrix:	Soil		
Percent Solids:	86.31		

Total Metals - Soil (SW 846 6010D)

CAS NO.	Analyte	Analyzed	Conc.	Units	RL	DF	Qual	Analyst	Sequence/Batch
7440-38-2	Arsenic	01/03/23 12:52	1.43	mg/kg dry	1.43	1		MS	SAA0023/B2L2913

10 10.2.

ND, U - Indicates compound analyzed for but not detected
D - Indicates result is based on a dilution
E - Concentration exceeds highest calibration standard
H - Indicates a Hold Time violation

RL - Reporting limit
DF - Dilution Factor

B - Indicates compound found in associated blank

F-I

ANALYSIS DATA SHEET

Client: **Dynamic Earth LLC**
Client Sample ID: **F-6-4**
Lab Sample ID: **2120938-15**
Project: **Old Orchard G.C.**
Work Order: **2120938**

Date Sampled:	12/20/22 12:10	Prep Date:	12/29/22 10:04
Init/Final Vol:	2 g / 50 mL	Prep Method:	Hot Block ICP Soil
Matrix:	Soil		
Percent Solids:	86.11		

Total Metals - Soil (SW 846 6010D)

CAS NO.	Analyte	Analyzed	Conc.	Units	RL	DF	Qual	Analyst	Sequence/Batch
7440-38-2	Arsenic	01/03/23 12:54	4.79	mg/kg dry	1.45	1		MS	SAA0023/B2L2913

10 10.2.

ND, U - Indicates compound analyzed for but not detected
D - Indicates result is based on a dilution
E - Concentration exceeds highest calibration standard
H - Indicates a Hold Time violation

RL - Reporting limit
DF - Dilution Factor

B - Indicates compound found in associated blank

F-I

ANALYSIS DATA SHEET

Client: **Dynamic Earth LLC**
Client Sample ID: **F-11A**
Lab Sample ID: **2120938-16**
Project: **Old Orchard G.C.**
Work Order: **2120938**

Date Sampled:	12/21/22 12:14	Prep Date:	12/29/22 10:04
Init/Final Vol:	2.04 g / 50 mL	Prep Method:	Hot Block ICP Soil
Matrix:	Soil		
Percent Solids:	86.82		

Total Metals - Soil (SW 846 6010D)

CAS NO.	Analyte	Analyzed	Conc.	Units	RL	DF	Qual	Analyst	Sequence/Batch
7440-38-2	Arsenic	01/03/23 12:57	3.33	mg/kg dry	1.41	1		MS	SAA0023/B2L2913

10 10.2.

ND, U - Indicates compound analyzed for but not detected
D - Indicates result is based on a dilution
E - Concentration exceeds highest calibration standard
H - Indicates a Hold Time violation

RL - Reporting limit
DF - Dilution Factor

B - Indicates compound found in associated blank

F-I

ANALYSIS DATA SHEET

Client: **Dynamic Earth LLC**
Client Sample ID: **F-11-1**
Lab Sample ID: **2120938-17**
Project: **Old Orchard G.C.**
Work Order: **2120938**

Date Sampled:	12/21/22 12:20	Prep Date:	12/29/22 10:04
Init/Final Vol:	2.05 g / 50 mL	Prep Method:	Hot Block ICP Soil
Matrix:	Soil		
Percent Solids:	84.98		

Total Metals - Soil (SW 846 6010D)

CAS NO.	Analyte	Analyzed	Conc.	Units	RL	DF	Qual	Analyst	Sequence/Batch
7440-38-2	Arsenic	01/03/23 12:59	ND	mg/kg dry	1.44	1	U	MS	SAA0023/B2L2913

10 10.2.

ND, U - Indicates compound analyzed for but not detected
D - Indicates result is based on a dilution
E - Concentration exceeds highest calibration standard
H - Indicates a Hold Time violation

RL - Reporting limit
DF - Dilution Factor

B - Indicates compound found in associated blank

F-I

ANALYSIS DATA SHEET

Client: **Dynamic Earth LLC**
Client Sample ID: **F-11-2**
Lab Sample ID: **2120938-18**
Project: **Old Orchard G.C.**
Work Order: **2120938**

Date Sampled:	12/21/22 12:24	Prep Date:	12/29/22 10:04
Init/Final Vol:	2.03 g / 50 mL	Prep Method:	Hot Block ICP Soil
Matrix:	Soil		
Percent Solids:	86.75		

Total Metals - Soil (SW 846 6010D)

CAS NO.	Analyte	Analyzed	Conc.	Units	RL	DF	Qual	Analyst	Sequence/Batch
7440-38-2	Arsenic	01/03/23 13:02	ND	mg/kg dry	1.42	1	U	MS	SAA0023/B2L2913

10 10.2.

ND, U - Indicates compound analyzed for but not detected
D - Indicates result is based on a dilution
E - Concentration exceeds highest calibration standard
H - Indicates a Hold Time violation

RL - Reporting limit
DF - Dilution Factor

B - Indicates compound found in associated blank

F-I

ANALYSIS DATA SHEET

Client: **Dynamic Earth LLC**
Client Sample ID: **F-11-3**
Lab Sample ID: **2120938-19**
Project: **Old Orchard G.C.**
Work Order: **2120938**

Date Sampled:	12/21/22 12:28	Prep Date:	12/29/22 10:04
Init/Final Vol:	2.07 g / 50 mL	Prep Method:	Hot Block ICP Soil
Matrix:	Soil		
Percent Solids:	82.02		

Total Metals - Soil (SW 846 6010D)

CAS NO.	Analyte	Analyzed	Conc.	Units	RL	DF	Qual	Analyst	Sequence/Batch
7440-38-2	Arsenic	01/03/23 13:05	ND	mg/kg dry	1.47	1	U	MS	SAA0023/B2L2913

ND, U - Indicates compound analyzed for but not detected
D - Indicates result is based on a dilution
E - Concentration exceeds highest calibration standard
H - Indicates a Hold Time violation

RL - Reporting limit
DF - Dilution Factor

B - Indicates compound found in associated blank

F-I

ANALYSIS DATA SHEET

Client: **Dynamic Earth LLC**
Client Sample ID: **F-11-4**
Lab Sample ID: **2120938-20**
Project: **Old Orchard G.C.**
Work Order: **2120938**

Date Sampled:	12/21/22 12:32	Prep Date:	12/29/22 10:04
Init/Final Vol:	2.06 g / 50 mL	Prep Method:	Hot Block ICP Soil
Matrix:	Soil		
Percent Solids:	86.89		

Total Metals - Soil (SW 846 6010D)

CAS NO.	Analyte	Analyzed	Conc.	Units	RL	DF	Qual	Analyst	Sequence/Batch
7440-38-2	Arsenic	01/03/23 13:07	2.46	mg/kg dry	1.40	1		MS	SAA0023/B2L2913

10 10.2.

ND, U - Indicates compound analyzed for but not detected
D - Indicates result is based on a dilution
E - Concentration exceeds highest calibration standard
H - Indicates a Hold Time violation

RL - Reporting limit
DF - Dilution Factor

B - Indicates compound found in associated blank

F-I

ANALYSIS DATA SHEET

Client: **Dynamic Earth LLC**
Client Sample ID: **F-15A**
Lab Sample ID: **2120938-21**
Project: **Old Orchard G.C.**
Work Order: **2120938**

Date Sampled:	12/21/22 12:36	Prep Date:	12/29/22 10:04
Init/Final Vol:	2.01 g / 50 mL	Prep Method:	Hot Block ICP Soil
Matrix:	Soil		
Percent Solids:	86.02		

Total Metals - Soil (SW 846 6010D)

CAS NO.	Analyte	Analyzed	Conc.	Units	RL	DF	Qual	Analyst	Sequence/Batch
7440-38-2	Arsenic	01/03/23 13:10	9.22	mg/kg dry	1.45	1		MS	SAA0023/B2L2913

10 10.2.

ND, U - Indicates compound analyzed for but not detected
D - Indicates result is based on a dilution
E - Concentration exceeds highest calibration standard
H - Indicates a Hold Time violation

RL - Reporting limit
DF - Dilution Factor

B - Indicates compound found in associated blank

F-I

ANALYSIS DATA SHEET

Client: **Dynamic Earth LLC**
Client Sample ID: **F-15-1**
Lab Sample ID: **2120938-22**
Project: **Old Orchard G.C.**
Work Order: **2120938**

Date Sampled:	12/21/22 12:42	Prep Date:	12/29/22 10:04
Init/Final Vol:	2.03 g / 50 mL	Prep Method:	Hot Block ICP Soil
Matrix:	Soil		
Percent Solids:	86.41		

Total Metals - Soil (SW 846 6010D)

CAS NO.	Analyte	Analyzed	Conc.	Units	RL	DF	Qual	Analyst	Sequence/Batch
7440-38-2	Arsenic	01/03/23 13:12	5.36	mg/kg dry	1.43	1		MS	SAA0023/B2L2913

10 10.2.

ND, U - Indicates compound analyzed for but not detected
D - Indicates result is based on a dilution
E - Concentration exceeds highest calibration standard
H - Indicates a Hold Time violation

RL - Reporting limit
DF - Dilution Factor

B - Indicates compound found in associated blank

F-I

ANALYSIS DATA SHEET

Client: **Dynamic Earth LLC**
Client Sample ID: **F-15-3-R**
Lab Sample ID: **2120938-23**
Project: **Old Orchard G.C.**
Work Order: **2120938**

Date Sampled:	12/21/22 12:50	Prep Date:	12/29/22 10:04
Init/Final Vol:	2.07 g / 50 mL	Prep Method:	Hot Block ICP Soil
Matrix:	Soil		
Percent Solids:	88.06		

Total Metals - Soil (SW 846 6010D)

CAS NO.	Analyte	Analyzed	Conc.	Units	RL	DF	Qual	Analyst	Sequence/Batch
7440-38-2	Arsenic	01/03/23 13:14	6.64	mg/kg dry	1.37	1		MS	SAA0023/B2L2913

10 10.2.

ND, U - Indicates compound analyzed for but not detected
D - Indicates result is based on a dilution
E - Concentration exceeds highest calibration standard
H - Indicates a Hold Time violation

RL - Reporting limit
DF - Dilution Factor

B - Indicates compound found in associated blank

F-I

ANALYSIS DATA SHEET

Client: **Dynamic Earth LLC**
Client Sample ID: **F-15-6-R**
Lab Sample ID: **2120938-24**
Project: **Old Orchard G.C.**
Work Order: **2120938**

Date Sampled:	12/21/22 12:54	Prep Date:	12/29/22 10:04
Init/Final Vol:	2.09 g / 50 mL	Prep Method:	Hot Block ICP Soil
Matrix:	Soil		
Percent Solids:	87.74		

Total Metals - Soil (SW 846 6010D)

CAS NO.	Analyte	Analyzed	Conc.	Units	RL	DF	Qual	Analyst	Sequence/Batch
7440-38-2	Arsenic	01/03/23 14:09	47.4	mg/kg dry	1.36	1		MS	SAA0023/B2L2913

10 10.2.

ND, U - Indicates compound analyzed for but not detected
D - Indicates result is based on a dilution
E - Concentration exceeds highest calibration standard
H - Indicates a Hold Time violation

RL - Reporting limit
DF - Dilution Factor

B - Indicates compound found in associated blank

F-I

ANALYSIS DATA SHEET

Client: **Dynamic Earth LLC**
Client Sample ID: **F-15-7-R**
Lab Sample ID: **2120938-25**
Project: **Old Orchard G.C.**
Work Order: **2120938**

Date Sampled:	12/21/22 12:46	Prep Date:	12/29/22 10:04
Init/Final Vol:	2.02 g / 50 mL	Prep Method:	Hot Block ICP Soil
Matrix:	Soil		
Percent Solids:	86.10		

Total Metals - Soil (SW 846 6010D)

CAS NO.	Analyte	Analyzed	Conc.	Units	RL	DF	Qual	Analyst	Sequence/Batch
7440-38-2	Arsenic	01/03/23 14:12	14.7	mg/kg dry	1.44	1		MS	SAA0023/B2L2913

10 10.2.

ND, U - Indicates compound analyzed for but not detected
D - Indicates result is based on a dilution
E - Concentration exceeds highest calibration standard
H - Indicates a Hold Time violation

RL - Reporting limit
DF - Dilution Factor

B - Indicates compound found in associated blank

F-I

ANALYSIS DATA SHEET

Client: **Dynamic Earth LLC**
Client Sample ID: **F-17A**
Lab Sample ID: **2120938-26**
Project: **Old Orchard G.C.**
Work Order: **2120938**

Date Sampled:	12/21/22 12:50	Prep Date:	12/29/22 10:04
Init/Final Vol:	2 g / 50 mL	Prep Method:	Hot Block ICP Soil
Matrix:	Soil		
Percent Solids:	87.96		

Total Metals - Soil (SW 846 6010D)

CAS NO.	Analyte	Analyzed	Conc.	Units	RL	DF	Qual	Analyst	Sequence/Batch
7440-38-2	Arsenic	01/03/23 14:14	5.71	mg/kg dry	1.42	1		MS	SAA0023/B2L2913

10 10.2.

ND, U - Indicates compound analyzed for but not detected
D - Indicates result is based on a dilution
E - Concentration exceeds highest calibration standard
H - Indicates a Hold Time violation

RL - Reporting limit
DF - Dilution Factor

B - Indicates compound found in associated blank

F-I

ANALYSIS DATA SHEET

Client: **Dynamic Earth LLC**
Client Sample ID: **F-17-1**
Lab Sample ID: **2120938-27**
Project: **Old Orchard G.C.**
Work Order: **2120938**

Date Sampled:	12/21/22 12:56	Prep Date:	12/29/22 10:04
Init/Final Vol:	2.04 g / 50 mL	Prep Method:	Hot Block ICP Soil
Matrix:	Soil		
Percent Solids:	84.82		

Total Metals - Soil (SW 846 6010D)

CAS NO.	Analyte	Analyzed	Conc.	Units	RL	DF	Qual	Analyst	Sequence/Batch
7440-38-2	Arsenic	01/03/23 14:17	13.4	mg/kg dry	1.44	1		MS	SAA0023/B2L2913

10 10.2.

ND, U - Indicates compound analyzed for but not detected
D - Indicates result is based on a dilution
E - Concentration exceeds highest calibration standard
H - Indicates a Hold Time violation

RL - Reporting limit
DF - Dilution Factor

B - Indicates compound found in associated blank

F-I

ANALYSIS DATA SHEET

Client: **Dynamic Earth LLC**
Client Sample ID: **F-17-2**
Lab Sample ID: **2120938-28**
Project: **Old Orchard G.C.**
Work Order: **2120938**

Date Sampled:	12/21/22 13:00	Prep Date:	12/29/22 10:04
Init/Final Vol:	2.01 g / 50 mL	Prep Method:	Hot Block ICP Soil
Matrix:	Soil		
Percent Solids:	85.54		

Total Metals - Soil (SW 846 6010D)

CAS NO.	Analyte	Analyzed	Conc.	Units	RL	DF	Qual	Analyst	Sequence/Batch
7440-38-2	Arsenic	01/03/23 14:19	8.37	mg/kg dry	1.45	1		MS	SAA0023/B2L2913

10 10.2.

ND, U - Indicates compound analyzed for but not detected
D - Indicates result is based on a dilution
E - Concentration exceeds highest calibration standard
H - Indicates a Hold Time violation

RL - Reporting limit
DF - Dilution Factor

B - Indicates compound found in associated blank

F-I

ANALYSIS DATA SHEET

Client: **Dynamic Earth LLC**
Client Sample ID: **F-17-3**
Lab Sample ID: **2120938-29**
Project: **Old Orchard G.C.**
Work Order: **2120938**

Date Sampled:	12/21/22 13:10	Prep Date:	12/29/22 10:04
Init/Final Vol:	1.99 g / 50 mL	Prep Method:	Hot Block ICP Soil
Matrix:	Soil		
Percent Solids:	82.43		

Total Metals - Soil (SW 846 6010D)

CAS NO.	Analyte	Analyzed	Conc.	Units	RL	DF	Qual	Analyst	Sequence/Batch
7440-38-2	Arsenic	01/03/23 14:22	7.38	mg/kg dry	1.52	1		MS	SAA0023/B2L2913

10 10.2.

ND, U - Indicates compound analyzed for but not detected
D - Indicates result is based on a dilution
E - Concentration exceeds highest calibration standard
H - Indicates a Hold Time violation

RL - Reporting limit
DF - Dilution Factor

B - Indicates compound found in associated blank

F-I

ANALYSIS DATA SHEET

Client: **Dynamic Earth LLC**
Client Sample ID: **F-17-4**
Lab Sample ID: **2120938-30**
Project: **Old Orchard G.C.**
Work Order: **2120938**

Date Sampled:	12/21/22 13:14	Prep Date:	12/29/22 10:04
Init/Final Vol:	1.97 g / 50 mL	Prep Method:	Hot Block ICP Soil
Matrix:	Soil		
Percent Solids:	82.92		

Total Metals - Soil (SW 846 6010D)

CAS NO.	Analyte	Analyzed	Conc.	Units	RL	DF	Qual	Analyst	Sequence/Batch
7440-38-2	Arsenic	01/03/23 14:24	5.79	mg/kg dry	1.53	1		MS	SAA0023/B2L2913

10 10.2.

ND, U - Indicates compound analyzed for but not detected
D - Indicates result is based on a dilution
E - Concentration exceeds highest calibration standard
H - Indicates a Hold Time violation

RL - Reporting limit
DF - Dilution Factor

B - Indicates compound found in associated blank

F-I

ANALYSIS DATA SHEET

Client: **Dynamic Earth LLC**
Client Sample ID: **G-9-GW**
Lab Sample ID: **2120938-32**
Project: **Old Orchard G.C.**
Work Order: **2120938**

Date Sampled:	12/21/22 14:55	Prep Date:	12/28/22 09:59
Init/Final Vol:	50 mL / 50 mL	Prep Method:	Hot Block ICPMS
Matrix:	Ground Water		

Total Metals - Aqueous (EPA 200.8)

CAS NO.	Analyte	Analyzed	Conc.	Units	RL	DF	Qual	Analyst	Sequence/Batch
7440-38-2	Arsenic	12/30/22 10:26	ND	mg/L	0.00200	1	U	RS	S2L3018/B2L2810

10 10.2.

ND, U - Indicates compound analyzed for but not detected
D - Indicates result is based on a dilution
E - Concentration exceeds highest calibration standard
H - Indicates a Hold Time violation

RL - Reporting limit
DF - Dilution Factor

B - Indicates compound found in associated blank

F-I

ANALYSIS DATA SHEET

Client: **Dynamic Earth LLC**
Client Sample ID: **G-15R**
Lab Sample ID: **2120938-36**
Project: **Old Orchard G.C.**
Work Order: **2120938**

Date Sampled:	12/21/22 16:15	Prep Date:	12/30/22 07:52
Init/Final Vol:	50 mL / 50 mL	Prep Method:	Hot Block ICPMS SPLP
Matrix:	Soil		
Percent Solids:	85.70		

SPLP Metals - Aqueous (SW 846 1312/200.8)

CAS NO.	Analyte	Analyzed	Conc.	Units	RL	DF	Qual	Analyst	Sequence/Batch
7439-92-1	Lead	12/30/22 11:15	0.0172	mg/L	0.00200	1		RS	S2L3020/B2L3006

10 10.2.

ND, U - Indicates compound analyzed for but not detected
D - Indicates result is based on a dilution
E - Concentration exceeds highest calibration standard
H - Indicates a Hold Time violation

RL - Reporting limit
DF - Dilution Factor

B - Indicates compound found in associated blank

F-I

ANALYSIS DATA SHEET

Client: **Dynamic Earth LLC**
Client Sample ID: **F-15-6A-R**
Lab Sample ID: **2120938-39**
Project: **Old Orchard G.C.**
Work Order: **2120938**

Date Sampled:	12/21/22 12:56	Prep Date:	01/16/23 09:36
Init/Final Vol:	1.98 g / 50 mL	Prep Method:	Hot Block ICP Soil
Matrix:	Soil		
Percent Solids:	86.98		

Total Metals - Soil (SW 846 6010D)

CAS NO.	Analyte	Analyzed	Conc.	Units	RL	DF	Qual	Analyst	Sequence/Batch
7440-38-2	Arsenic	01/18/23 14:40	ND	mg/kg dry	1.45	1	U	MS	SAA0286/BAA0459

10 10.2.

ND, U - Indicates compound analyzed for but not detected
D - Indicates result is based on a dilution
E - Concentration exceeds highest calibration standard
H - Indicates a Hold Time violation

RL - Reporting limit
DF - Dilution Factor

B - Indicates compound found in associated blank

F-I

Batch B2L2810 **Method: EPA 200.8** **Prepared: 12/28/2022**

B2L2810-BS1 **Source:**

Analyte	Result	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Arsenic	0.0976	mg/L	0.100		97.6	85-115		

Batch B2L2810 (cont.) **Method: EPA 200.8** **Prepared: 12/28/2022**

B2L2810-DUP1 **Source:** 2120948-01

Analyte	Result	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Arsenic	ND	mg/L		ND				20

Batch B2L2810 (cont.) **Method: EPA 200.8** **Prepared: 12/28/2022**

B2L2810-MS1 **Source:** 2120948-01

Analyte	Result	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Arsenic	0.0284	mg/L	0.100	0.000753 J	27.6*	70-130		

Batch B2L2810 (cont.) **Method: EPA 200.8** **Prepared: 12/28/2022**

B2L2810-MSD1 **Source:** 2120948-01

Analyte	Result	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Arsenic	0.0319	mg/L	0.100	0.000753 J	31.1*	70-130	11.7	20

Batch B2L2913 **Method: SW 846 6010D** **Prepared: 12/29/2022**

B2L2913-BS1 **Source:**

Analyte	Result	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Arsenic	10.9	mg/kg wet	12.4		87.9	80-120		

Batch B2L2913 (cont.) **Method: SW 846 6010D** **Prepared: 12/29/2022**

B2L2913-DUP1 **Source:** 2120934-01

Analyte	Result	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Arsenic	13.5	mg/kg dry		13.5			0.225	20

Batch B2L2913 (cont.) **Method: SW 846 6010D** **Prepared: 12/29/2022**

B2L2913-MS1 **Source:** 2120934-01

Analyte	Result	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Arsenic	15.1	mg/kg dry	15.1	13.5	10.5*	75-125		

* - Outside of QC Limits J - Result is between the MDL and RL for an Analysis reported to an RL

NC - Outside the recovery criteria but Spike Amount <1/4 amount found in Source Sample

F-III

Batch B2L2913 (cont.) **Method: SW 846 6010D** **Prepared: 12/29/2022**

B2L2913-MSD1 **Source:** 2120934-01

Analyte	Result	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Arsenic	17.4	mg/kg dry	15.1	13.5	26.4*	75-125	14.7	20

Batch B2L2913 (cont.) **Method: SW 846 6010D** **Prepared: 12/29/2022**

B2L2913-PS1 **Source:** 2120934-01

Analyte	Result	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Arsenic	0.825	mg/L	0.497	0.445 J	76.5	75-125		

Batch BAA0459 **Method: SW 846 6010D** **Prepared: 01/16/2023**

BAA0459-BS1 **Source:**

Analyte	Result	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Arsenic	11.0	mg/kg wet	12.4		88.1	80-120		

Batch BAA0459 (cont.) **Method: SW 846 6010D** **Prepared: 01/16/2023**

BAA0459-DUP1 **Source:** 23A0390-01

Analyte	Result	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Arsenic	3.95	mg/kg dry		ND				20

Batch BAA0459 (cont.) **Method: SW 846 6010D** **Prepared: 01/16/2023**

BAA0459-MS1 **Source:** 23A0390-01

Analyte	Result	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Arsenic	14.8	mg/kg dry	16.9	1.58 J	78.4	75-125		

Batch BAA0459 (cont.) **Method: SW 846 6010D** **Prepared: 01/16/2023**

BAA0459-MSD1 **Source:** 23A0390-01

Analyte	Result	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Arsenic	16.3	mg/kg dry	16.9	1.58 J	87.2	75-125	9.61	20

* - Outside of QC Limits J - Result is between the MDL and RL for an Analysis reported to an RL

NC - Outside the recovery criteria but Spike Amount <1/4 amount found in Source Sample

Batch BAA0459 (cont.) **Method: SW 846 6010D** **Prepared: 01/16/2023**

BAA0459-PS1 **Source:** 23A0390-01

Analyte	Result	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Arsenic	0.485	mg/L	0.497	ND	88.2	75-125		

Sequence S2L3018 **Method: EPA 200.8** **Prepared: 12/28/2022**

S2L3018-SRD1 **Source:** 2120948-01

Analyte	Result	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Arsenic	ND	mg/L		ND				10

Sequence SAA0015 **Method: SW 846 6010D** **Prepared: 12/29/2022**

SAA0015-SRD1 **Source:** 2120934-01

Analyte	Result	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Arsenic	15.6	mg/kg dry		13.5			14.6	20

Sequence SAA0030 **Method: SW 846 6010D** **Prepared: 12/29/2022**

SAA0030-SRD1 **Source:** 2120975-01

Analyte	Result	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Arsenic	ND	mg/kg dry		2.27				20

* - Outside of QC Limits J - Result is between the MDL and RL for an Analysis reported to an RL

F-III NC - Outside the recovery criteria but Spike Amount <1/4 amount found in Source Sample

SPLP Metals - Quality Control

Aqua Pro-Tech Laboratories

Batch B2L3006 **Method: SW 846 1312/200.8** **Prepared: 12/30/2022**

B2L3006-BS1 **Source:**

Analyte	Result	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Lead	0.0961	mg/L	0.100		96.1	85-115		

Batch B2L3006 (cont.) **Method: SW 846 1312/200.8** **Prepared: 12/30/2022**

B2L3006-DUP1 **Source:** 2120937-26

Analyte	Result	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Lead	0.0653	mg/L		0.0585			11.0	20

Batch B2L3006 (cont.) **Method: SW 846 1312/200.8** **Prepared: 12/30/2022**

B2L3006-MS1 **Source:** 2120937-26

Analyte	Result	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Lead	0.151	mg/L	0.100	0.0585	92.5	70-130		

Batch B2L3006 (cont.) **Method: SW 846 1312/200.8** **Prepared: 12/30/2022**

B2L3006-MSD1 **Source:** 2120937-26

Analyte	Result	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Lead	0.166	mg/L	0.100	0.0585	108	70-130	9.61	20

Sequence S2L3020 **Method: SW 846 1312/200.8** **Prepared: 12/30/2022**

S2L3020-SRD1 **Source:** 2120937-26

Analyte	Result	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Lead	0.0767	mg/L		0.0585			27.0*	10

* - Outside of QC Limits J - Result is between the MDL and RL for an Analysis reported to an RL

F-III NC - Outside the recovery criteria but Spike Amount <1/4 amount found in Source Sample

METHOD BLANK SUMMARY

Batch ID: **B2L2810**

Lab Number	Sample Id	Extraction Date	Analysis Date
B2L2810-BLK1	BLK1	12/28/2022	12/30/2022 09:34
B2L2810-BS1	BS1	12/28/2022	12/30/2022 09:36
B2L2810-DUP1	DUP1	12/28/2022	12/30/2022 09:41
B2L2810-MS1	MS1	12/28/2022	12/30/2022 09:44
B2L2810-MSD1	MSD1	12/28/2022	12/30/2022 09:46
2120938-32	G-9-GW	12/28/2022	12/30/2022 10:26

Batch ID: **B2L2913**

Lab Number	Sample Id	Extraction Date	Analysis Date
B2L2913-BLK1	BLK1	12/29/2022	01/02/2023 11:20
B2L2913-BS1	BS1	12/29/2022	01/02/2023 11:22
B2L2913-DUP1	DUP1	12/29/2022	01/03/2023 15:24
B2L2913-MS1	MS1	12/29/2022	01/03/2023 15:26
B2L2913-MSD1	MSD1	12/29/2022	01/03/2023 15:29
B2L2913-PS1	PS1	12/29/2022	01/03/2023 15:31
2120938-11	F-6A	12/29/2022	01/04/2023 08:40
2120938-12	F-6-1	12/29/2022	01/04/2023 08:42
2120938-13	F-6-2	12/29/2022	01/04/2023 08:45
2120938-14	F-6-3	12/29/2022	01/03/2023 12:52
2120938-15	F-6-4	12/29/2022	01/03/2023 12:54
2120938-16	F-11A	12/29/2022	01/03/2023 12:57
2120938-17	F-11-1	12/29/2022	01/03/2023 12:59
2120938-18	F-11-2	12/29/2022	01/03/2023 13:02
2120938-19	F-11-3	12/29/2022	01/03/2023 13:05
2120938-20	F-11-4	12/29/2022	01/03/2023 13:07
2120938-21	F-15A	12/29/2022	01/03/2023 13:10
2120938-22	F-15-1	12/29/2022	01/03/2023 13:12
2120938-23	F-15-3-R	12/29/2022	01/03/2023 13:14
2120938-24	F-15-6-R	12/29/2022	01/03/2023 14:09
2120938-25	F-15-7-R	12/29/2022	01/03/2023 14:12
2120938-26	F-17A	12/29/2022	01/03/2023 14:14
2120938-27	F-17-1	12/29/2022	01/03/2023 14:17
2120938-28	F-17-2	12/29/2022	01/03/2023 14:19
2120938-29	F-17-3	12/29/2022	01/03/2023 14:22
2120938-30	F-17-4	12/29/2022	01/03/2023 14:24

METHOD BLANK SUMMARY

Batch ID: **B2L3006**

Lab Number	Sample Id	Extraction Date	Analysis Date
B2L3006-BLK1	BLK1	12/30/2022	12/30/2022 10:48
B2L3006-BS1	BS1	12/30/2022	12/30/2022 10:51
B2L3006-DUP1	DUP1	12/30/2022	12/30/2022 10:56
B2L3006-MS1	MS1	12/30/2022	12/30/2022 11:03
B2L3006-MSD1	MSD1	12/30/2022	12/30/2022 11:05
2120938-36	G-15R	12/30/2022	12/30/2022 11:15

Batch ID: **BAA0459**

Lab Number	Sample Id	Extraction Date	Analysis Date
BAA0459-BLK1	BLK1	01/16/2023	01/18/2023 14:26
BAA0459-BS1	BS1	01/16/2023	01/18/2023 14:28
BAA0459-DUP1	DUP1	01/16/2023	01/18/2023 14:30
BAA0459-MS1	MS1	01/16/2023	01/18/2023 14:33
BAA0459-MSD1	MSD1	01/16/2023	01/18/2023 14:35
BAA0459-PS1	PS1	01/16/2023	01/18/2023 14:38
2120938-39	F-15-6A-R	01/16/2023	01/18/2023 14:40

ANALYSIS SEQUENCE SUMMARY

Laboratory:	Aqua Pro-Tech Laboratories	Work Order:	2120938
Client:	Dynamic Earth LLC	Project:	Old Orchard G.C.
Sequence:	S2L3018	Instrument:	ICP/MS-3

Sample Name	Lab Sample ID	FileID	Analysis Date/Time
Initial Cal Check	S2L3018-ICV1	2022-12-30-a-005	12/30/22 08:46
Initial Cal Blank	S2L3018-ICB1	2022-12-30-a-006	12/30/22 08:48
Instrument RL Check	S2L3018-CRL3	2022-12-30-a-009	12/30/22 08:56
Instrument RL Check	S2L3018-CRL4	2022-12-30-a-010	12/30/22 08:58
Blank	B2L2810-BLK1	2022-12-30-a-011	12/30/22 09:34
LCS	B2L2810-BS1	2022-12-30-a-012	12/30/22 09:36
Duplicate	B2L2810-DUP1	2022-12-30-a-014	12/30/22 09:41
Matrix Spike	B2L2810-MS1	2022-12-30-a-015	12/30/22 09:44
Matrix Spike Dup	B2L2810-MSD1	2022-12-30-a-016	12/30/22 09:46
Serial Dilution	S2L3018-SRD1	2022-12-30-a-017	12/30/22 09:49
Calibration Check	S2L3018-CCV1	2022-12-30-a-019	12/30/22 09:59
Calibration Blank	S2L3018-CCB1	2022-12-30-a-020	12/30/22 10:01
G-9-GW	2120938-32	2022-12-30-a-030	12/30/22 10:26
Calibration Check	S2L3018-CCV2	2022-12-30-a-031	12/30/22 10:28
Calibration Blank	S2L3018-CCB2	2022-12-30-a-032	12/30/22 10:31
Calibration Check	S2L3018-CCV3	2022-12-30-a-043	12/30/22 10:58
Calibration Blank	S2L3018-CCB3	2022-12-30-a-044	12/30/22 11:01

ANALYSIS SEQUENCE SUMMARY

Laboratory:	Aqua Pro-Tech Laboratories	Work Order:	2120938
Client:	Dynamic Earth LLC	Project:	Old Orchard G.C.
Sequence:	S2L3020	Instrument:	ICP/MS-3

Sample Name	Lab Sample ID	FileID	Analysis Date/Time
Initial Cal Check	S2L3020-ICV1	2022-12-30-a-005	12/30/22 08:46
Initial Cal Blank	S2L3020-ICB1	2022-12-30-a-006	12/30/22 08:48
Instrument RL Check	S2L3020-CRL3	2022-12-30-a-009	12/30/22 08:56
Instrument RL Check	S2L3020-CRL4	2022-12-30-a-010	12/30/22 08:58
Blank	B2L3006-BLK1	2022-12-30-a-039	12/30/22 10:48
LCS	B2L3006-BS1	2022-12-30-a-040	12/30/22 10:51
Duplicate	B2L3006-DUP1	2022-12-30-a-042	12/30/22 10:56
Calibration Check	S2L3020-CCV3	2022-12-30-a-043	12/30/22 10:58

F-V

ANALYSIS SEQUENCE SUMMARY

Laboratory:	Aqua Pro-Tech Laboratories	Work Order:	2120938
Client:	Dynamic Earth LLC	Project:	Old Orchard G.C.
Sequence:	S2L3020	Instrument:	ICP/MS-3

Sample Name	Lab Sample ID	FileID	Analysis Date/Time
Calibration Blank	S2L3020-CCB3	2022-12-30-a-044	12/30/22 11:01
Matrix Spike	B2L3006-MS1	2022-12-30-a-045	12/30/22 11:03
Matrix Spike Dup	B2L3006-MSD1	2022-12-30-a-046	12/30/22 11:05
Serial Dilution	S2L3020-SRD1	2022-12-30-a-047	12/30/22 11:08
G-15R	2120938-36	2022-12-30-a-050	12/30/22 11:15
Calibration Check	S2L3020-CCV4	2022-12-30-a-051	12/30/22 11:28
Calibration Blank	S2L3020-CCB4	2022-12-30-a-052	12/30/22 11:30

ANALYSIS SEQUENCE SUMMARY

Laboratory:	Aqua Pro-Tech Laboratories	Work Order:	2120938
Client:	Dynamic Earth LLC	Project:	Old Orchard G.C.
Sequence:	SAA0015	Instrument:	ICP OES-1

Sample Name	Lab Sample ID	FileID	Analysis Date/Time
Secondary Cal Check	SAA0015-SCV1	APL-METHOD_IEC-2023-01-02	01/02/23 08:54
Initial Cal Blank	SAA0015-ICB1	APL-METHOD_IEC-2023-01-02	01/02/23 09:05
Interference Check A	SAA0015-IFA1	APL-METHOD_IEC-2023-01-02	01/02/23 09:25
Interference Check B	SAA0015-IFB1	APL-METHOD_IEC-2023-01-02	01/02/23 09:28
Serial Dilution	SAA0015-SRD1	APL-METHOD_IEC-2023-01-02	01/02/23 10:44
Calibration Check	SAA0015-CCV3	APL-METHOD_IEC-2023-01-02	01/02/23 11:13
Calibration Blank	SAA0015-CCB2	APL-METHOD_IEC-2023-01-02	01/02/23 11:18
Blank	B2L2913-BLK1	APL-METHOD_IEC-2023-01-02	01/02/23 11:20
LCS	B2L2913-BS1	APL-METHOD_IEC-2023-01-02	01/02/23 11:22
Calibration Check	SAA0015-CCV5	APL-METHOD_IEC-2023-01-02	01/02/23 11:41
Calibration Blank	SAA0015-CCB3	APL-METHOD_IEC-2023-01-02	01/02/23 11:48

ANALYSIS SEQUENCE SUMMARY

F-V

ANALYSIS SEQUENCE SUMMARY

Laboratory:	Aqua Pro-Tech Laboratories	Work Order:	2120938
Client:	Dynamic Earth LLC	Project:	Old Orchard G.C.
Sequence:	SAA0023	Instrument:	ICP OES-1

Sample Name	Lab Sample ID	FileID	Analysis Date/Time
Secondary Cal Check	SAA0023-SCV1	APL-METHOD_IEC-2023-01-03	01/03/23 09:10
Initial Cal Blank	SAA0023-ICB1	APL-METHOD_IEC-2023-01-03	01/03/23 09:20
Interference Check A	SAA0023-IFA1	APL-METHOD_IEC-2023-01-03	01/03/23 09:30
Interference Check B	SAA0023-IFB1	APL-METHOD_IEC-2023-01-03	01/03/23 09:33
F-6-3	2120938-14	APL-METHOD_IEC-2023-01-03	01/03/23 12:52
F-6-4	2120938-15	APL-METHOD_IEC-2023-01-03	01/03/23 12:54
F-11A	2120938-16	APL-METHOD_IEC-2023-01-03	01/03/23 12:57
F-11-1	2120938-17	APL-METHOD_IEC-2023-01-03	01/03/23 12:59
F-11-2	2120938-18	APL-METHOD_IEC-2023-01-03	01/03/23 13:02
F-11-3	2120938-19	APL-METHOD_IEC-2023-01-03	01/03/23 13:05
F-11-4	2120938-20	APL-METHOD_IEC-2023-01-03	01/03/23 13:07
F-15A	2120938-21	APL-METHOD_IEC-2023-01-03	01/03/23 13:10
F-15-1	2120938-22	APL-METHOD_IEC-2023-01-03	01/03/23 13:12
F-15-3-R	2120938-23	APL-METHOD_IEC-2023-01-03	01/03/23 13:14
Calibration Blank	SAA0023-CCB1	APL-METHOD_IEC-2023-01-03	01/03/23 13:24
F-15-6-R	2120938-24	APL-METHOD_IEC-2023-01-03	01/03/23 14:09
F-15-7-R	2120938-25	APL-METHOD_IEC-2023-01-03	01/03/23 14:12
F-17A	2120938-26	APL-METHOD_IEC-2023-01-03	01/03/23 14:14
F-17-1	2120938-27	APL-METHOD_IEC-2023-01-03	01/03/23 14:17
F-17-2	2120938-28	APL-METHOD_IEC-2023-01-03	01/03/23 14:19
F-17-3	2120938-29	APL-METHOD_IEC-2023-01-03	01/03/23 14:22
F-17-4	2120938-30	APL-METHOD_IEC-2023-01-03	01/03/23 14:24
Calibration Check	SAA0023-CCV3	APL-METHOD_IEC-2023-01-03	01/03/23 14:27
Calibration Blank	SAA0023-CCB2	APL-METHOD_IEC-2023-01-03	01/03/23 14:33
Calibration Check	SAA0023-CCV1		01/03/23 15:03

ANALYSIS SEQUENCE SUMMARY

Laboratory:	Aqua Pro-Tech Laboratories	Work Order:	2120938
Client:	Dynamic Earth LLC	Project:	Old Orchard G.C.
Sequence:	SAA0030	Instrument:	ICP OES-1

Sample Name	Lab Sample ID	FileID	Analysis Date/Time

F-V

ANALYSIS SEQUENCE SUMMARY

Laboratory:	Aqua Pro-Tech Laboratories	Work Order:	2120938
Client:	Dynamic Earth LLC	Project:	Old Orchard G.C.
Sequence:	SAA0030	Instrument:	ICP OES-1

Sample Name	Lab Sample ID	FileID	Analysis Date/Time
Secondary Cal Check	SAA0030-SCV1	APL-METHOD_IEC-2023-01-03	01/03/23 09:10
Initial Cal Blank	SAA0030-ICB1	APL-METHOD_IEC-2023-01-03	01/03/23 09:20
Interference Check A	SAA0030-IFA1	APL-METHOD_IEC-2023-01-03	01/03/23 09:30
Interference Check B	SAA0030-IFB1	APL-METHOD_IEC-2023-01-03	01/03/23 09:33
Duplicate	B2L2913-DUP1	APL-METHOD_IEC-2023-01-03	01/03/23 15:24
Matrix Spike	B2L2913-MS1	APL-METHOD_IEC-2023-01-03	01/03/23 15:26
Matrix Spike Dup	B2L2913-MSD1	APL-METHOD_IEC-2023-01-03	01/03/23 15:29
Post Spike	B2L2913-PS1	APL-METHOD_IEC-2023-01-03	01/03/23 15:31
Serial Dilution	SAA0030-SRD1	APL-METHOD_IEC-2023-01-03	01/03/23 15:44
Calibration Check	SAA0030-CCV1	APL-METHOD_IEC-2023-01-03	01/03/23 16:00
Calibration Blank	SAA0030-CCB1	APL-METHOD_IEC-2023-01-03	01/03/23 16:06
F-6A	2120938-11	APL-METHOD_IEC-2023-01-03	01/04/23 08:40
F-6-1	2120938-12	APL-METHOD_IEC-2023-01-03	01/04/23 08:42
F-6-2	2120938-13	APL-METHOD_IEC-2023-01-03	01/04/23 08:45

ANALYSIS SEQUENCE SUMMARY

Laboratory:	Aqua Pro-Tech Laboratories	Work Order:	2120938
Client:	Dynamic Earth LLC	Project:	Old Orchard G.C.
Sequence:	SAA0286	Instrument:	ICP OES-1

Sample Name	Lab Sample ID	FileID	Analysis Date/Time
Secondary Cal Check	SAA0286-SCV1	APL-METHOD_IEC-2023-01-18	01/18/23 08:58
Initial Cal Blank	SAA0286-ICB1	APL-METHOD_IEC-2023-01-18	01/18/23 09:07
Interference Check A	SAA0286-IFA1	APL-METHOD_IEC-2023-01-18	01/18/23 09:31
Interference Check B	SAA0286-IFB1	APL-METHOD_IEC-2023-01-18	01/18/23 09:34
Calibration Check	SAA0286-CCV1	APL-METHOD_IEC-2023-01-18	01/18/23 12:42
Calibration Blank	SAA0286-CCB1	APL-METHOD_IEC-2023-01-18	01/18/23 12:46
Blank	BAA0459-BLK1	APL-METHOD_IEC-2023-01-18	01/18/23 14:26
LCS	BAA0459-BS1	APL-METHOD_IEC-2023-01-18	01/18/23 14:28
Duplicate	BAA0459-DUP1	APL-METHOD_IEC-2023-01-18	01/18/23 14:30
Matrix Spike	BAA0459-MS1	APL-METHOD_IEC-2023-01-18	01/18/23 14:33
Matrix Spike Dup	BAA0459-MSD1	APL-METHOD_IEC-2023-01-18	01/18/23 14:35

F-V

ANALYSIS SEQUENCE SUMMARY

Laboratory:	Aqua Pro-Tech Laboratories	Work Order:	2120938
Client:	Dynamic Earth LLC	Project:	Old Orchard G.C.
Sequence:	SAA0286	Instrument:	ICP OES-1

Sample Name	Lab Sample ID	FileID	Analysis Date/Time
Post Spike	BAA0459-PS1	APL-METHOD_IEC-2023-01-18.	01/18/23 14:38
F-15-6A-R	2120938-39	APL-METHOD_IEC-2023-01-18.	01/18/23 14:40
Calibration Check	SAA0286-CCV3	APL-METHOD_IEC-2023-01-18.	01/18/23 14:43
Calibration Blank	SAA0286-CCB2	APL-METHOD_IEC-2023-01-18.	01/18/23 14:47

F-V

SEQUENCE CALIBRATION CHECKS

EPA 200.8

Client: **Dynamic Earth LLC**
Project: **Old Orchard G.C.**
Work Order: **2120938**

Sequence: S2L3018
Instrument: ICP/MS-3

Lab Sample ID	Analyte	True	Found	%R	Units	Control Limit
S2L3018-ICV1	Arsenic	100	97.4	97.4	ug/L	90-110
S2L3018-CCV1	Arsenic	100	110	110	ug/L	85-115
S2L3018-CCV2	Arsenic	100	104	104	ug/L	85-115
S2L3018-CCV3	Arsenic	100	94.1	94.1	ug/L	85-115

ICV = Initial Cal Verification CCV = Continuing Cal Verification IFB = Interference Check Standard B
SCV = Second Source Cal Verification LCV = Low Cal Check

SEQUENCE CALIBRATION CHECKS

SW 846 1312/200.8

Client: **Dynamic Earth LLC**
Project: **Old Orchard G.C.** **Sequence:** S2L3020
Work Order: **2120938** **Instrument:** ICP/MS-3

Lab Sample ID	Analyte	True	Found	%R	Units	Control Limit
S2L3020-ICV1	Lead	100	98.2	98.2	ug/L	90-110
S2L3020-CCV3	Lead	100	98.2	98.2	ug/L	85-115
S2L3020-CCV4	Lead	100	114	114	ug/L	85-115

ICV = Initial Cal Verification CCV = Continuing Cal Verification IFB = Interference Check Standard B
SCV = Second Source Cal Verification LCV = Low Cal Check

SEQUENCE CALIBRATION CHECKS

SW 846 6010D

Client: **Dynamic Earth LLC**
Project: **Old Orchard G.C.**
Work Order: **2120938**

Sequence: SAA0015
Instrument: ICP OES-1

Lab Sample ID	Analyte	True	Found	%R	Units	Control Limit
SAA0015-SCV1	Arsenic	1.00	1.03	103	mg/L	90-110
SAA0015-IFB1	Arsenic	1.00	1.01	101	mg/L	80-120
SAA0015-CCV3	Arsenic	1.00	1.04	104	mg/L	90-110
SAA0015-CCV5	Arsenic	1.00	1.05	105	mg/L	90-110

ICV = Initial Cal Verification CCV = Continuing Cal Verification IFB = Interference Check Standard B
SCV = Second Source Cal Verification LCV = Low Cal Check

SEQUENCE CALIBRATION CHECKS

SW 846 6010D

Client: **Dynamic Earth LLC**
Project: **Old Orchard G.C.**
Work Order: **2120938**

Sequence: SAA0023
Instrument: ICP OES-1

Lab Sample ID	Analyte	True	Found	%R	Units	Control Limit
SAA0023-CCV1	Arsenic	1.00	1.05	105	mg/L	90-110
SAA0023-SCV1	Arsenic	1.00	0.965	96.5	mg/L	90-110
SAA0023-IFB1	Arsenic	1.00	0.965	96.5	mg/L	80-120
SAA0023-CCV3	Arsenic	1.00	1.06	106	mg/L	90-110

ICV = Initial Cal Verification CCV = Continuing Cal Verification IFB = Interference Check Standard B
SCV = Second Source Cal Verification LCV = Low Cal Check

SEQUENCE CALIBRATION CHECKS

SW 846 6010D

Client: **Dynamic Earth LLC**
Project: **Old Orchard G.C.**
Work Order: **2120938**

Sequence: SAA0030
Instrument: ICP OES-1

Lab Sample ID	Analyte	True	Found	%R	Units	Control Limit
SAA0030-SCV1	Arsenic	1.00	0.965	96.5	mg/L	90-110
SAA0030-IFB1	Arsenic	1.00	0.965	96.5	mg/L	80-120
SAA0030-CCV1	Arsenic	1.00	1.05	105	mg/L	90-110

ICV = Initial Cal Verification CCV = Continuing Cal Verification IFB = Interference Check Standard B
SCV = Second Source Cal Verification LCV = Low Cal Check

SEQUENCE CALIBRATION CHECKS

SW 846 6010D

Client: **Dynamic Earth LLC**
Project: **Old Orchard G.C.**
Work Order: **2120938**

Sequence: SAA0286
Instrument: ICP OES-1

Lab Sample ID	Analyte	True	Found	%R	Units	Control Limit
SAA0286-SCV1	Arsenic	1.00	1.01	101	mg/L	90-110
SAA0286-IFB1	Arsenic	1.00	0.981	98.1	mg/L	80-120
SAA0286-CCV1	Arsenic	1.00	1.09	109	mg/L	90-110
SAA0286-CCV3	Arsenic	1.00	1.06	106	mg/L	90-110

ICV = Initial Cal Verification CCV = Continuing Cal Verification IFB = Interference Check Standard B
SCV = Second Source Cal Verification LCV = Low Cal Check

AQUA PRO-TECH LABORATORIES
Certified Environmental Testing

PESTICIDES

Dynamic Earth LLC

Work Order: 2120938

Project: Old Orchard G.C.

ANALYSIS DATA SHEET

Pesticides - SW 846 8081B

Client:	**Dynamic Earth LLC**	**Project:**	**Old Orchard G.C.**
Client Sample ID:	**Blank**	**Work Order:**	**2120938**
Lab Sample ID:	**B2L2742-BLK1**		

Init/Final Vol:	1000 mL / 10 mL	Prep Date:	12/27/2022 12:58	File ID:	7T31531.D
		Prep Batch:	B2L2742	Analyzed:	12/29/2022 17:28
		Matrix:	Ground Water	Sequence:	S2L3013
		Prep Method:	Sep Funnel GC 8000		

CAS NO.	COMPOUND	CONC. (ug/L)	MDL	RL	Qual
72-54-8	4,4'-DDD	ND	0.000378	0.0200	U
72-55-9	4,4'-DDE	ND	0.000234	0.0200	U
50-29-3	4,4'-DDT	ND	0.000319	0.0200	U
309-00-2	Aldrin	ND	0.000527	0.0200	U
319-84-6	alpha-BHC	ND	0.000255	0.0200	U
319-85-7	beta-BHC	ND	0.000371	0.0200	U
57-74-9	Chlordane	ND	0.000327	0.0500	U
319-86-8	delta-BHC	ND	0.000320	0.0200	U
60-57-1	Dieldrin	ND	0.000271	0.0200	U
959-98-8	Endosulfan I	ND	0.000380	0.0200	U
33213-65-9	Endosulfan II	ND	0.000254	0.0200	U
1031-07-8	Endosulfan sulfate	ND	0.000138	0.0200	U
72-20-8	Endrin	ND	0.000229	0.0200	U
7421-93-4	Endrin aldehyde	ND	0.000318	0.0200	U
53494-70-5	Endrin ketone	ND	0.000203	0.0200	U
58-89-9	gamma-BHC (Lindane)	ND	0.000241	0.0200	U
76-44-8	Heptachlor	ND	0.000563	0.0200	U
1024-57-3	Heptachlor Epoxide	ND	0.000302	0.0200	U
72-43-5	Methoxychlor	ND	0.000343	0.0200	U
8001-35-2	Toxaphene	ND	0.0237	0.200	U

F-I

Quantitation Report (QT Reviewed)

Signal #1 : G:\HPCHEM\GCECD7\DATA\20221229\7T31531.D\ECD1A.CH Vial: 6
Signal #2 : G:\HPCHEM\GCECD7\DATA\20221229\7T31531.D\ECD2B.CH
Acq On : 29 Dec 2022 5:28 pm Operator: WD
Sample : B2L2742-BLK1 Inst : GCECD-7
Misc : Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Dec 30 10:54 2022 Quant Results File: 80811228.RES

Quant Method : G:\HPCHEM\G...\80811228.M (Chemstation Integrator)
Title : Pesticides by Method SW-846 8081B
Last Update : Fri Dec 30 10:52:46 2022
Response via : Initial Calibration
DataAcq Meth : RUNPEST1.M

Volume Inj. : 2ul
Signal #1 Phase : RTx-50 Signal #2 Phase: RTx-CLPesticides II
Signal #1 Info : 30M x 0.53mm x 0. Signal #2 Info : 30M x 0.53mm x 0.42um

Compound	RT#1	RT#2	Resp#1	Resp#2	ug/kg	ug/kg
System Monitoring Compounds						
1) S TCMX	3.99	4.92	950.9E6	570.7E6	30.032	38.953 #
Spiked Amount 50.000	Range 43 - 129		Recovery =		60.06%	77.91%
21) S Decachlorobiphen	18.74	20.30	1074.8E6	404.4E6	38.455	37.133
Spiked Amount 50.000	Range 42 - 136		Recovery =		76.91%	74.27%
Target Compounds						
Sum Chlordane (gamma)			0	0	N.D.	N.D.
Average Chlordane (gamma)					0.000	0.000
Sum Toxaphene (1)			0	0	N.D.	N.D.
Average Toxaphene (1)					0.000	0.000

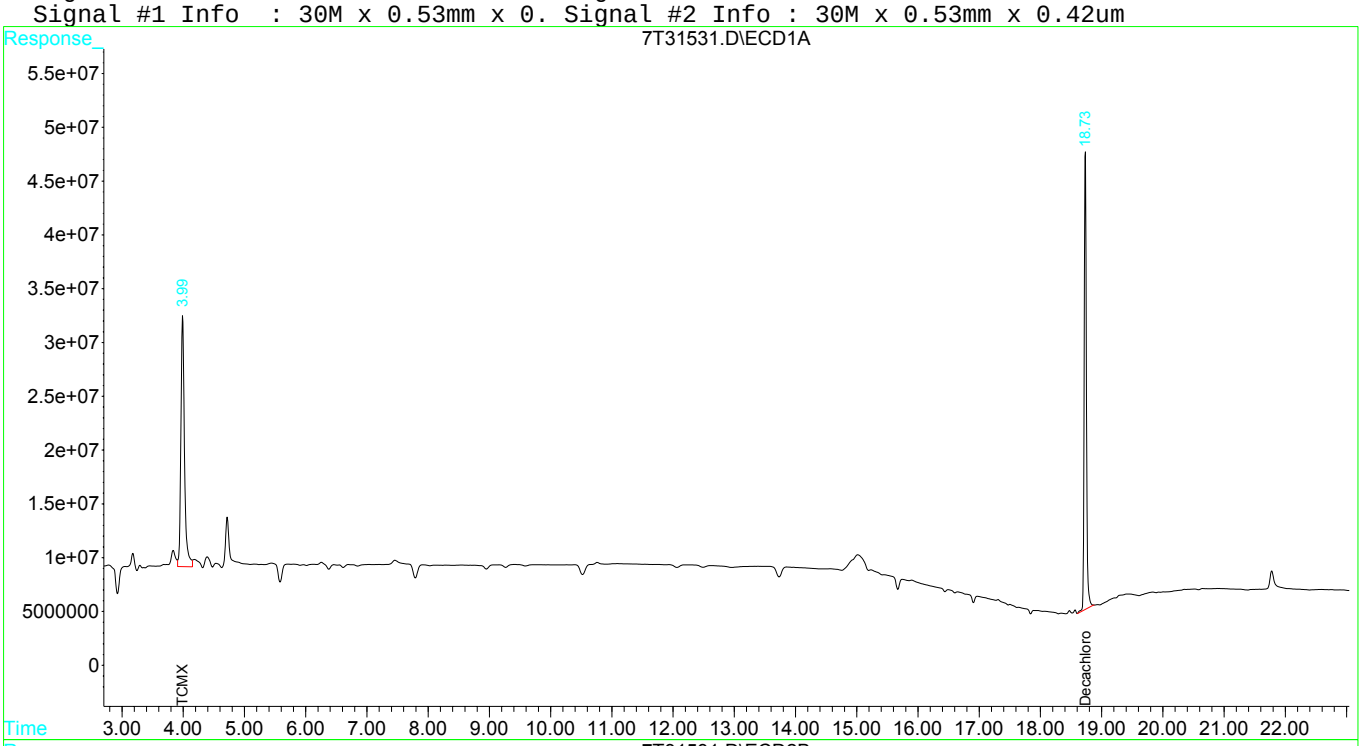
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.
7T31531.D 80811228.M Fri Dec 30 13:34:45 2022 SS

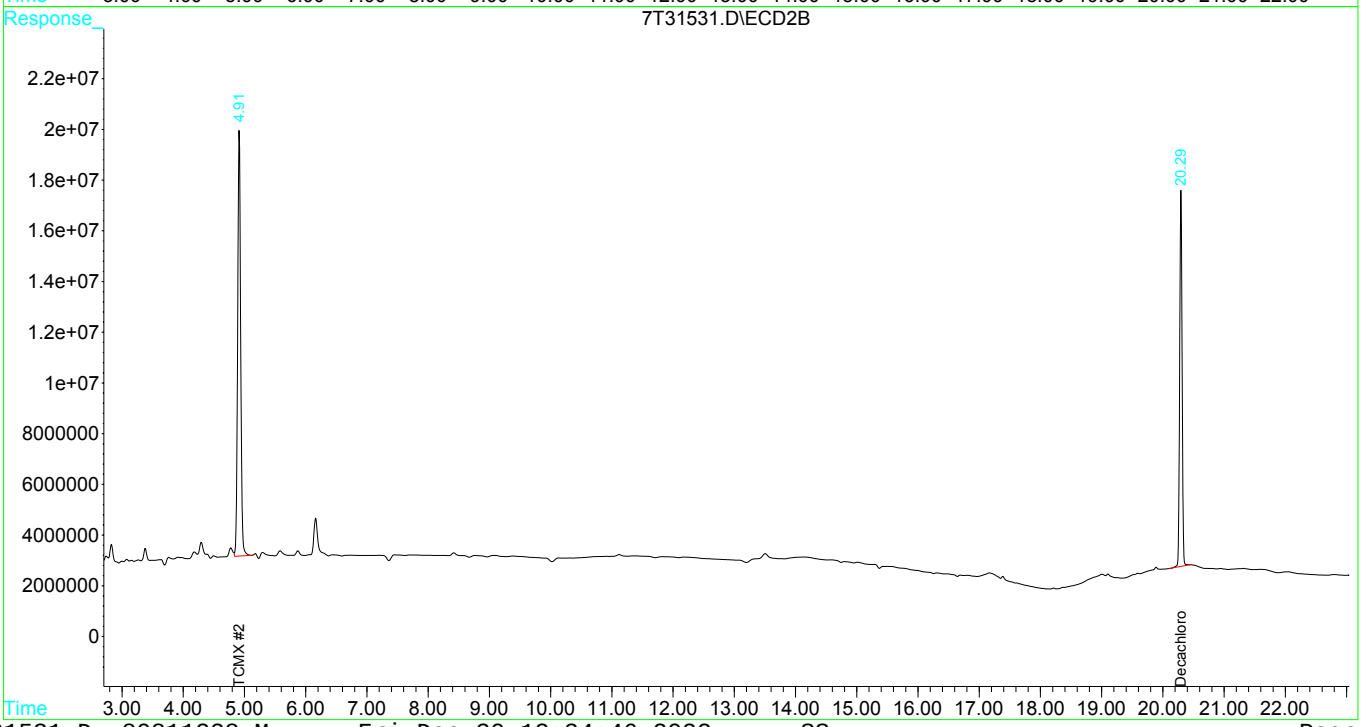
Quantitation Report (QT Reviewed)

Signal #1 : G:\HPCHEM\GCECD7\DATA\20221229\7T31531.D\ECD1A.CH Vial: 6
Signal #2 : G:\HPCHEM\GCECD7\DATA\20221229\7T31531.D\ECD2B.CH
Acq On : 29 Dec 2022 5:28 pm Operator: WD
Sample : B2L2742-BLK1 Inst : GCECD-7
Misc : Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Dec 30 10:54 2022 Quant Results File: 80811228.RES

Quant Method : G:\HPCHEM\G...\80811228.M (Chemstation Integrator)
Title : Pesticides by Method SW-846 8081B
Last Update : Fri Dec 30 10:52:46 2022
Response via : Multiple Level Calibration
DataAcq Meth : RUNPEST1.M

Volume Inj. : 2ul
Signal #1 Phase : RTx-50 Signal #2 Phase: RTx-CLPesticides II
Signal #1 Info : 30M x 0.53mm x 0. Signal #2 Info : 30M x 0.53mm x 0.42um





ANALYSIS DATA SHEET

Pesticides - SW 846 8081B

Client:	**Dynamic Earth LLC**	**Project:**	**Old Orchard G.C.**
Client Sample ID:	**Blank**	**Work Order:**	**2120938**
Lab Sample ID:	**B2L2901-BLK1**		

Init/Final Vol:	15 g / 10 mL	Prep Date:	12/29/2022 07:13	File ID:	7T31568.D
		Prep Batch:	B2L2901	Analyzed:	12/30/2022 09:06
		Matrix:	Soil	Sequence:	S2L3013
		Prep Method:	Microwave Extraction		

CAS NO.	COMPOUND	CONC. (mg/kg wet)	MDL	RL	Qual
1024-57-3	Heptachlor Epoxide	ND	0.000656	0.00130	U

F-I

Quantitation Report (QT Reviewed)

Signal #1 : G:\HPCHEM\GCECD7\DATA\20221229\7T31568.D\ECD1A.CH Vial: 43
Signal #2 : G:\HPCHEM\GCECD7\DATA\20221229\7T31568.D\ECD2B.CH
Acq On : 30 Dec 2022 9:06 am Operator: WD
Sample : B2L2901-BLK1 Inst : GCECD-7
Misc : Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Dec 30 13:27 2022 Quant Results File: 80811228.RES

Quant Method : G:\HPCHEM\G...\80811228.M (Chemstation Integrator)
Title : Pesticides by Method SW-846 8081B
Last Update : Fri Dec 30 10:52:46 2022
Response via : Initial Calibration
DataAcq Meth : RUNPEST1.M

Volume Inj. : 2ul
Signal #1 Phase : RTx-50 Signal #2 Phase: RTx-CLPesticides II
Signal #1 Info : 30M x 0.53mm x 0. Signal #2 Info : 30M x 0.53mm x 0.42um

Compound	RT#1	RT#2	Resp#1	Resp#2	ug/kg	ug/kg
System Monitoring Compounds						
1) S TCMX	4.01	4.94	1372.4E6	887.2E6	43.344	60.556 #
Spiked Amount 50.000	Range 43 - 129		Recovery =		86.69%	121.11%
21) S Decachlorobiphen	18.74	20.31	1176.7E6	519.1E6	42.101m	47.663
Spiked Amount 50.000	Range 42 - 136		Recovery =		84.20%	95.33%
Target Compounds						
Sum Chlordane (gamma)			0	0	N.D.	N.D.
Average Chlordane (gamma)					0.000	0.000
Sum Toxaphene (1)			0	0	N.D.	N.D.
Average Toxaphene (1)					0.000	0.000

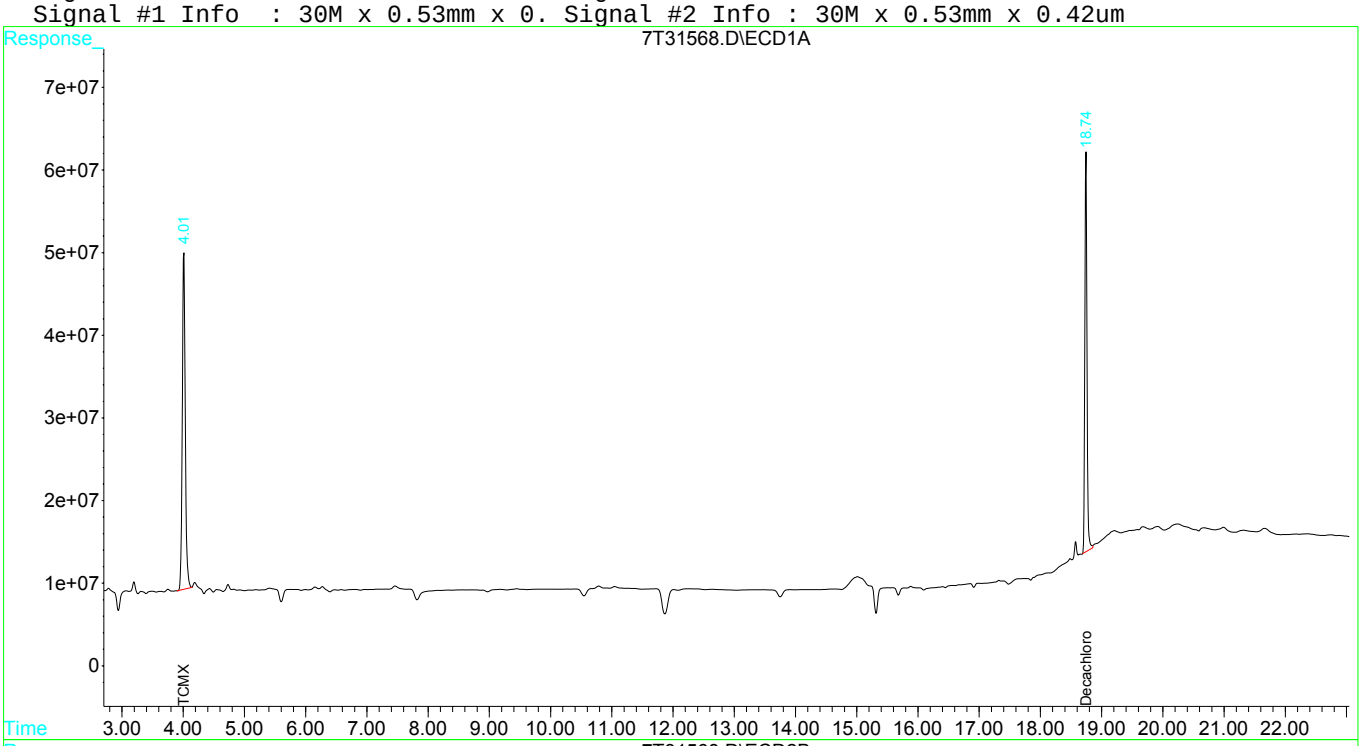
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.
7T31568.D 80811228.M Fri Dec 30 13:35:52 2022 SS

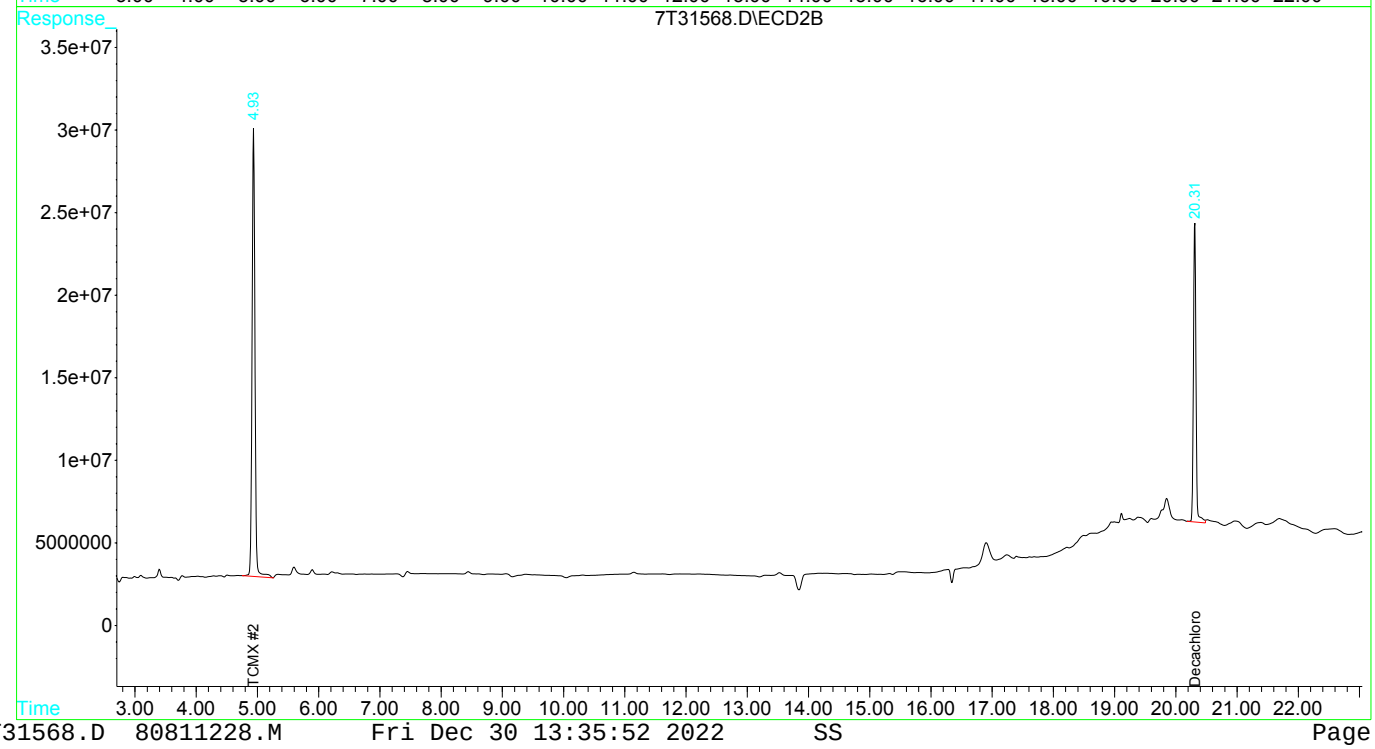
Quantitation Report (QT Reviewed)

Signal #1 : G:\HPCHEM\GCECD7\DATA\20221229\7T31568.D\ECD1A.CH Vial: 43
Signal #2 : G:\HPCHEM\GCECD7\DATA\20221229\7T31568.D\ECD2B.CH
Acq On : 30 Dec 2022 9:06 am Operator: WD
Sample : B2L2901-BLK1 Inst : GCECD-7
Misc : Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Dec 30 13:27 2022 Quant Results File: 80811228.RES

Quant Method : G:\HPCHEM\G...\80811228.M (Chemstation Integrator)
Title : Pesticides by Method SW-846 8081B
Last Update : Fri Dec 30 10:52:46 2022
Response via : Multiple Level Calibration
DataAcq Meth : RUNPEST1.M

Volume Inj. : 2ul
Signal #1 Phase : RTx-50 Signal #2 Phase: RTx-CLPesticides II
Signal #1 Info : 30M x 0.53mm x 0. Signal #2 Info : 30M x 0.53mm x 0.42um





ANALYSIS DATA SHEET

SPLP Pesticides - SW 846 1312

Client:	**Dynamic Earth LLC**	**Project:**	**Old Orchard G.C.**
Client Sample ID:	**Blank**	**Work Order:**	**2120938**
Lab Sample ID:	**B2L2929-BLK1**		

		Prep Date:	12/29/2022 17:37	File ID:	7T31593.D
Init/Final Vol:	1000 mL / 10 mL	Prep Batch:	B2L2929	Analyzed:	12/30/2022 20:22
		Matrix:	Water	Sequence:	SAA0020
		Prep Method:	Sep Funnel TCLP/SPLP		

CAS NO.	COMPOUND	CONC. (ug/L)	MDL	RL	Qual
72-55-9	4,4'-DDE	ND	0.000234	0.0200	U
60-57-1	Dieldrin	ND	0.000271	0.0200	U

F-I

Quantitation Report (QT Reviewed)

Signal #1 : G:\HPCHEM\GCECD7\DATA\20221230\7T31593.D\ECD1A.CH Vial: 4
Signal #2 : G:\HPCHEM\GCECD7\DATA\20221230\7T31593.D\ECD2B.CH
Acq On : 30 Dec 2022 8:22 pm Operator: WD
Sample : B2L2929-BLK1 Inst : GCECD-7
Misc : Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Jan 3 11:53 2023 Quant Results File: 80811228.RES

Quant Method : G:\HPCHEM\G...\80811228.M (Chemstation Integrator)
Title : Pesticides by Method SW-846 8081B
Last Update : Tue Jan 03 10:57:11 2023
Response via : Initial Calibration
DataAcq Meth : RUNPEST1.M

Volume Inj. : 2ul
Signal #1 Phase : RTx-50 Signal #2 Phase: RTx-CLPesticides II
Signal #1 Info : 30M x 0.53mm x 0. Signal #2 Info : 30M x 0.53mm x 0.42um

Compound	RT#1	RT#2	Resp#1	Resp#2	ug/kg	ug/kg
System Monitoring Compounds						
1) S TCMX	4.07	5.01	870.0E6	561.3E6	27.477m	38.310 #
Spiked Amount 50.000	Range 43 - 129		Recovery =		54.95%	76.62%
21) S Decachlorobiphen	18.80	20.38	1054.8E6	395.1E6	37.741m	36.282m
Spiked Amount 50.000	Range 42 - 136		Recovery =		75.48%	72.56%
Target Compounds						
Sum Chlordane (gamma)			0	0	N.D.	N.D.
Average Chlordane (gamma)					0.000	0.000
Sum Toxaphene (1)			0	0	N.D.	N.D.
Average Toxaphene (1)					0.000	0.000

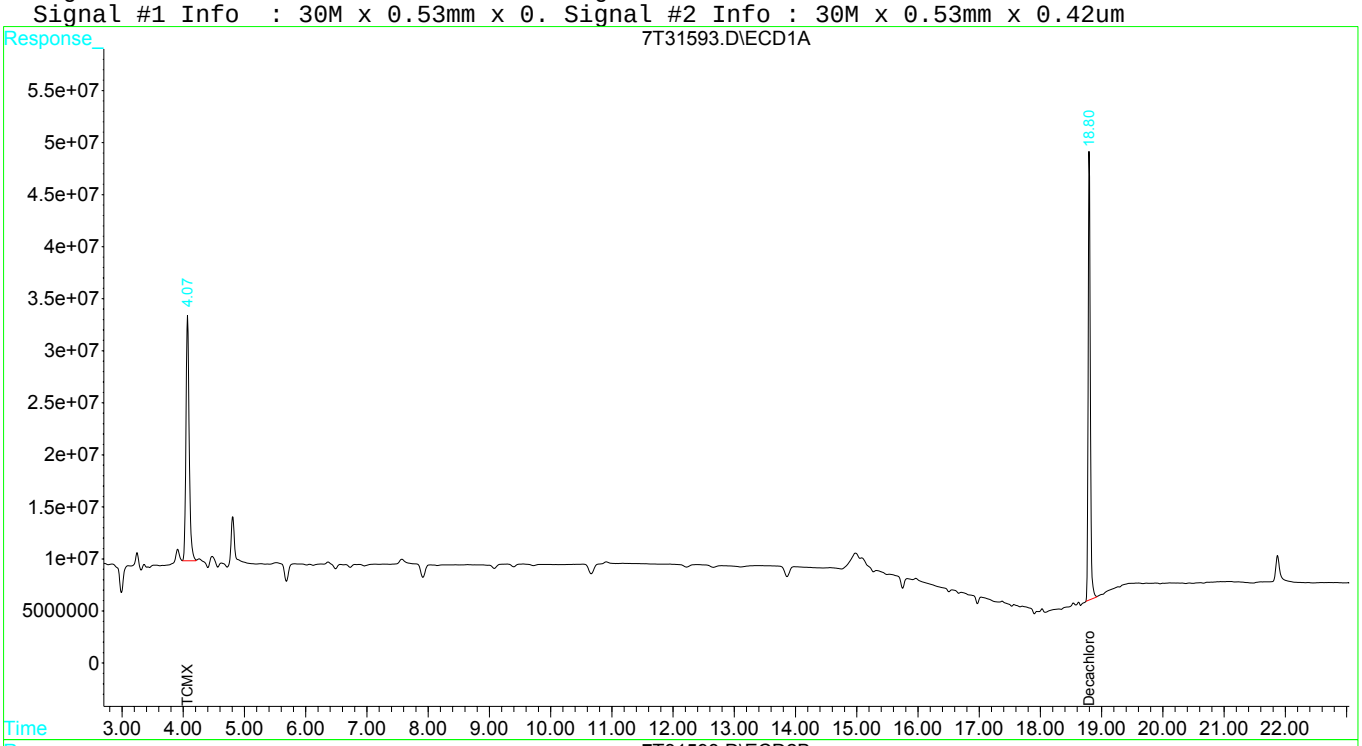
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.
7T31593.D 80811228.M Tue Jan 03 13:54:18 2023 SS

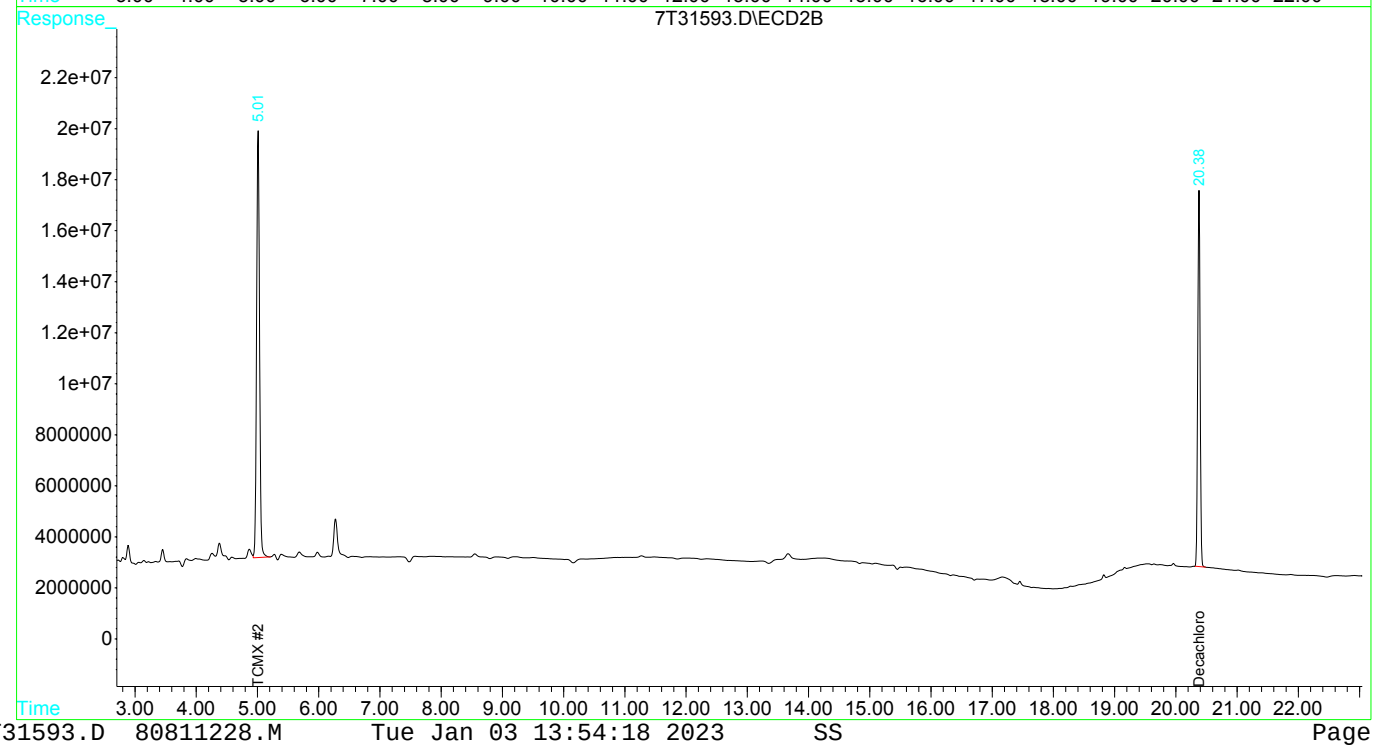
Quantitation Report (QT Reviewed)

Signal #1 : G:\HPCHEM\GCECD7\DATA\20221230\7T31593.D\ECD1A.CH Vial: 4
Signal #2 : G:\HPCHEM\GCECD7\DATA\20221230\7T31593.D\ECD2B.CH
Acq On : 30 Dec 2022 8:22 pm Operator: WD
Sample : B2L2929-BLK1 Inst : GCECD-7
Misc : Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Jan 3 11:53 2023 Quant Results File: 80811228.RES

Quant Method : G:\HPCHEM\G...\80811228.M (Chemstation Integrator)
Title : Pesticides by Method SW-846 8081B
Last Update : Tue Jan 03 10:57:11 2023
Response via : Multiple Level Calibration
DataAcq Meth : RUNPEST1.M

Volume Inj. : 2ul
Signal #1 Phase : RTx-50 Signal #2 Phase: RTx-CLPesticides II
Signal #1 Info : 30M x 0.53mm x 0. Signal #2 Info : 30M x 0.53mm x 0.42um





ANALYSIS DATA SHEET

SPLP Pesticides - SW 846 1312

Client:	**Dynamic Earth LLC**	**Project:**	**Old Orchard G.C.**
Client Sample ID:	**Blank**	**Work Order:**	**2120938**
Lab Sample ID:	**B2L2929-BLK2**		

		Prep Date:	01/13/2023 18:46	File ID:	7T31896.D
Init/Final Vol:	1000 mL / 10 mL	Prep Batch:	B2L2929	Analyzed:	01/14/2023 14:37
		Matrix:	Water	Sequence:	SAA0243
		Prep Method:	Sep Funnel TCLP/SPLP		

CAS NO.	COMPOUND	CONC. (ug/L)	MDL	RL	Qual
72-55-9	4,4'-DDE	ND	0.000234	0.0200	U
60-57-1	Dieldrin	ND	0.000271	0.0200	U

F-I

Quantitation Report (QT Reviewed)

Signal #1 : G:\HPCHEM\GCECD7\DATA\20230114\7T31896.D\ECD1A.CH Vial: 4
Signal #2 : G:\HPCHEM\GCECD7\DATA\20230114\7T31896.D\ECD2B.CH
Acq On : 14 Jan 2023 14:37 Operator: WD
Sample : B2L2929-BLK2 Inst : GCECD-7
Misc : Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Jan 16 15:53 2023 Quant Results File: 80811228.RES

Quant Method : G:\HPCHEM\G...\80811228.M (Chemstation Integrator)
Title : Pesticides by Method SW-846 8081B
Last Update : Mon Jan 16 15:52:48 2023
Response via : Initial Calibration
DataAcq Meth : RUNPEST1.M

Volume Inj. : 2ul
Signal #1 Phase : RTx-50 Signal #2 Phase: RTx-CLPesticides II
Signal #1 Info : 30M x 0.53mm x 0. Signal #2 Info : 30M x 0.53mm x 0.42um

Compound	RT#1	RT#2	Resp#1	Resp#2	ug/kg	ug/kg
System Monitoring Compounds						
1) S TCMX	4.50	5.51	1564.3E6	708.3E6	49.405	48.340
Spiked Amount 50.000	Range 43 - 129		Recovery =		98.81%	96.68%
21) S Decachlorobiphen	19.14	20.83	958.0E6	381.5E6	34.274	35.034
Spiked Amount 50.000	Range 42 - 136		Recovery =		68.55%	70.07%
Target Compounds						
Sum Chlordane (gamma)			0	0	N.D.	N.D.
Average Chlordane (gamma)					0.000	0.000
Sum Toxaphene (1)			0	0	N.D.	N.D.
Average Toxaphene (1)					0.000	0.000

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.
7T31896.D 80811228.M Fri Jan 20 14:09:37 2023 SS

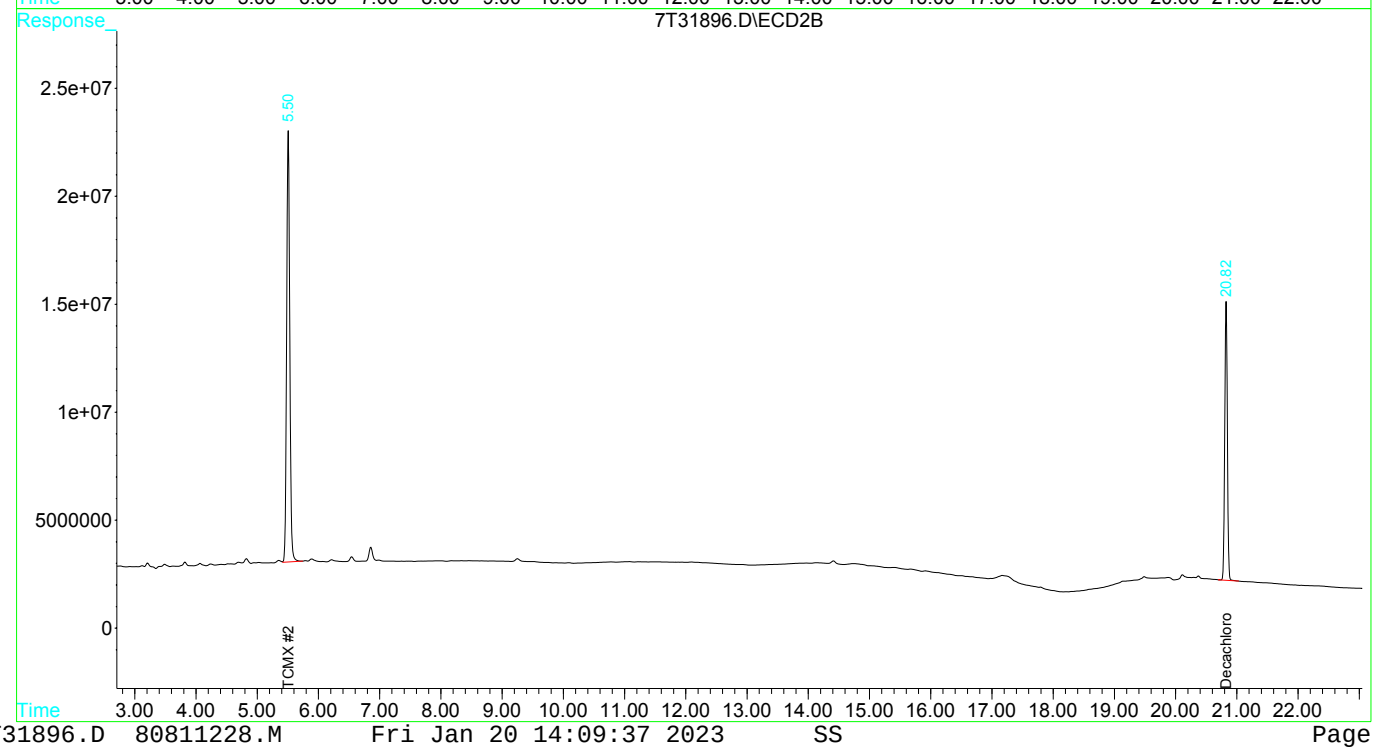
Quantitation Report (QT Reviewed)

Signal #1 : G:\HPCHEM\GCECD7\DATA\20230114\7T31896.D\ECD1A.CH Vial: 4
Signal #2 : G:\HPCHEM\GCECD7\DATA\20230114\7T31896.D\ECD2B.CH
Acq On : 14 Jan 2023 14:37 Operator: WD
Sample : B2L2929-BLK2 Inst : GCECD-7
Misc : Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Jan 16 15:53 2023 Quant Results File: 80811228.RES

Quant Method : G:\HPCHEM\G...\80811228.M (Chemstation Integrator)
Title : Pesticides by Method SW-846 8081B
Last Update : Mon Jan 16 15:52:48 2023
Response via : Multiple Level Calibration
DataAcq Meth : RUNPEST1.M

Volume Inj. : 2ul
Signal #1 Phase : RTx-50 Signal #2 Phase: RTx-CLPesticides II
Signal #1 Info : 30M x 0.53mm x 0. Signal #2 Info : 30M x 0.53mm x 0.42um





ANALYSIS DATA SHEET

Pesticides - SW 846 8081B

Client: **Dynamic Earth LLC**
Client Sample ID: **G-15A**
Lab Sample ID: **2120938-01**
Project: **Old Orchard G.C.**
Work Order: **2120938**

Date Sampled:	12/21/22 11:08	Prep Date:	12/29/22 07:13	File ID:	7T31646.D
Init/Final Vol:	15 g / 10 mL	Prep Batch:	B2L2901	Analyzed:	12/31/22 18:47
Dilution:	1	Matrix:	Soil	Sequence:	SAA0020
Percent Solids:	84.80	Prep Method:	Microwave Extraction		

CAS NO.	COMPOUND	CONC. (mg/kg dry)	MDL	RL	Qual
1024-57-3	Heptachlor Epoxide	ND	0.000774	0.00153	U

11 11.2.

ND, U - Indicates compound analyzed for but not detected
J - Indicates estimated value
B - Indicates compound found in associated blank
E - Concentration exceeds highest calibration standard

D - Indicates result is based on a dilution
H - Indicates a Hold Time violation
P - Greater than 25% diff. between 2 GC columns.
MDL - Minimum detection limit, **RL** - Reporting limit

F-I

Quantitation Report (QT Reviewed)

Signal #1 : G:\HPCHEM\GCECD7\DATA\20221230\7T31646.D\ECD1A.CH Vial: 57
Signal #2 : G:\HPCHEM\GCECD7\DATA\20221230\7T31646.D\ECD2B.CH
Acq On : 31 Dec 2022 6:47 pm Operator: WD
Sample : 2120938-01 Inst : GCECD-7
Misc : Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Jan 3 13:48 2023 Quant Results File: 80811228.RES

Quant Method : G:\HPCHEM\G...\80811228.M (Chemstation Integrator)
Title : Pesticides by Method SW-846 8081B
Last Update : Tue Jan 03 13:40:33 2023
Response via : Initial Calibration
DataAcq Meth : RUNPEST1.M

Volume Inj. : 2ul
Signal #1 Phase : RTx-50 Signal #2 Phase: RTx-CLPesticides II
Signal #1 Info : 30M x 0.53mm x 0. Signal #2 Info : 30M x 0.53mm x 0.42um

Compound	RT#1	RT#2	Resp#1	Resp#2	ug/kg	ug/kg
System Monitoring Compounds						
1) S TCMX	4.13f	5.07	1143.9E6	698.6E6	36.126	47.678 #
Spiked Amount 50.000	Range 43 - 129		Recovery =		72.25%	95.36%
21) S Decachlorobiphen	18.84	20.43	1114.0E6	573.3E6	39.857	52.647 #
Spiked Amount 50.000	Range 42 - 136		Recovery =		79.71%	105.29%
Target Compounds						
Sum Chlordane (gamma)			0	0	N.D.	N.D.
Average Chlordane (gamma)					0.000	0.000
Sum Toxaphene (1)			0	0	N.D.	N.D.
Average Toxaphene (1)					0.000	0.000

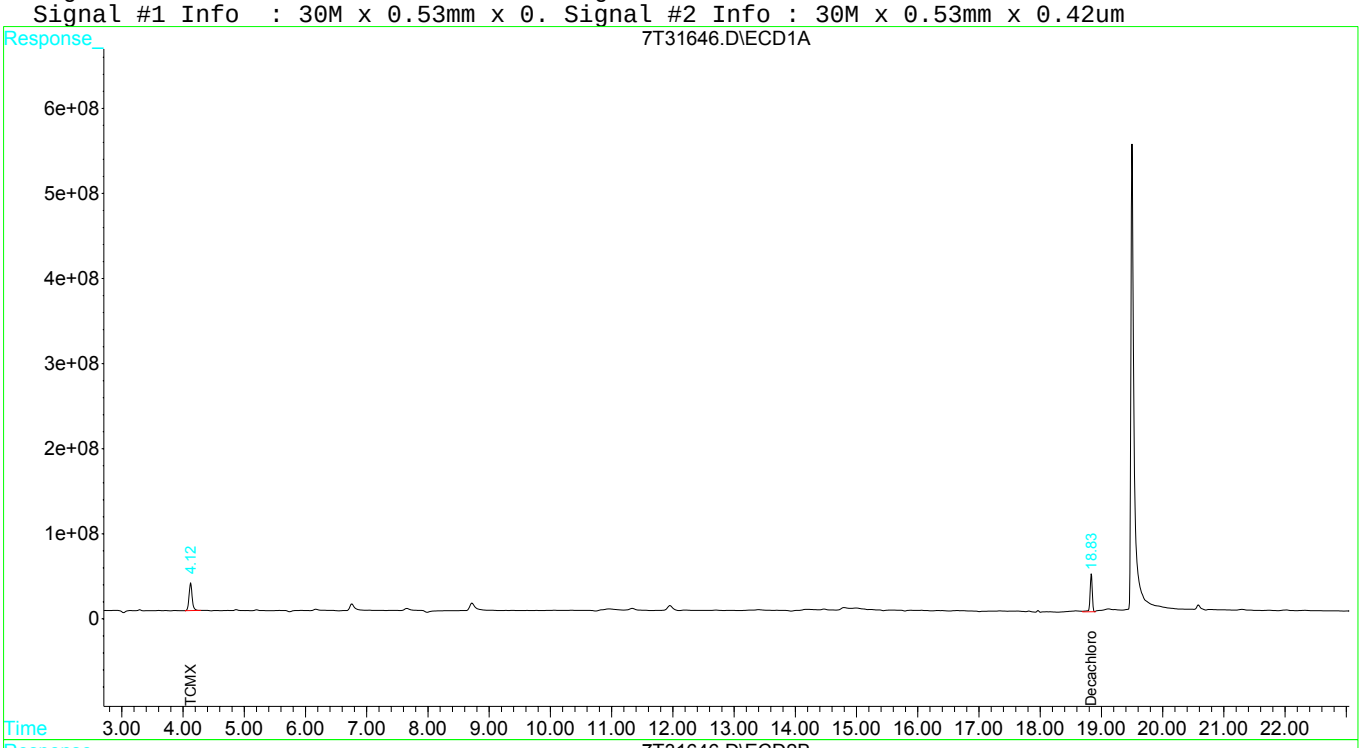
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.
7T31646.D 80811228.M Tue Jan 03 13:56:26 2023 SS

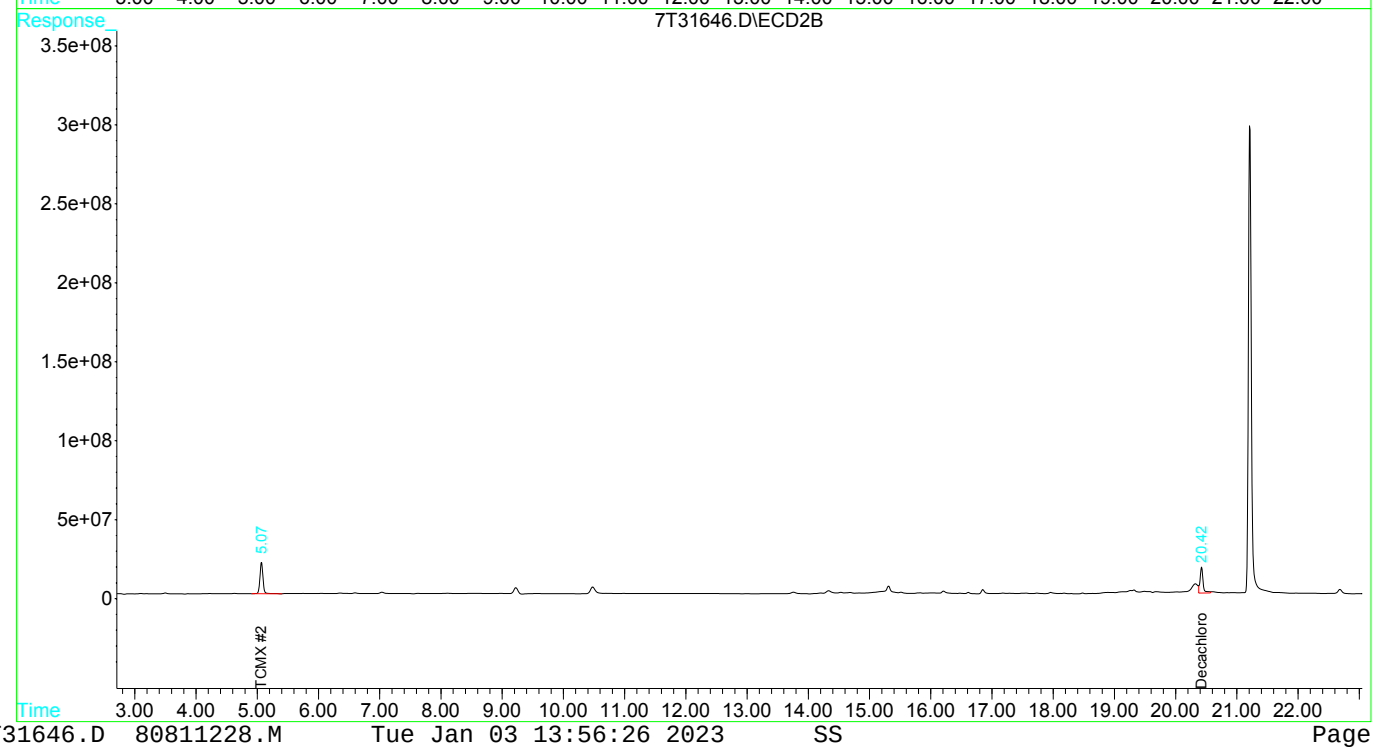
Quantitation Report (QT Reviewed)

Signal #1 : G:\HPCHEM\GCECD7\DATA\20221230\7T31646.D\ECD1A.CH Vial: 57
Signal #2 : G:\HPCHEM\GCECD7\DATA\20221230\7T31646.D\ECD2B.CH
Acq On : 31 Dec 2022 6:47 pm Operator: WD
Sample : 2120938-01 Inst : GCECD-7
Misc : Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Jan 3 13:48 2023 Quant Results File: 80811228.RES

Quant Method : G:\HPCHEM\G...\80811228.M (Chemstation Integrator)
Title : Pesticides by Method SW-846 8081B
Last Update : Tue Jan 03 13:40:33 2023
Response via : Multiple Level Calibration
DataAcq Meth : RUNPEST1.M

Volume Inj. : 2ul
Signal #1 Phase : RTx-50 Signal #2 Phase: RTx-CLPesticides II
Signal #1 Info : 30M x 0.53mm x 0. Signal #2 Info : 30M x 0.53mm x 0.42um





ANALYSIS DATA SHEET

Pesticides - SW 846 8081B

Client: **Dynamic Earth LLC**
Client Sample ID: **G-15-1**
Lab Sample ID: **2120938-02**
Project: **Old Orchard G.C.**
Work Order: **2120938**

Date Sampled:	12/21/22 11:14	Prep Date:	12/29/22 07:13	File ID:	7T31647.D
Init/Final Vol:	15 g / 10 mL	Prep Batch:	B2L2901	Analyzed:	12/31/22 19:13
Dilution:	1	Matrix:	Soil	Sequence:	SAA0020
Percent Solids:	86.80	Prep Method:	Microwave Extraction		

CAS NO.	COMPOUND	CONC. (mg/kg dry)	MDL	RL	Qual
1024-57-3	Heptachlor Epoxide [2C]	0.0165	0.000756	0.00150	

ND, U - Indicates compound analyzed for but not detected
J - Indicates estimated value
B - Indicates compound found in associated blank
E - Concentration exceeds highest calibration standard

D - Indicates result is based on a dilution
H - Indicates a Hold Time violation
P - Greater than 25% diff. between 2 GC columns.
MDL - Minimum detection limit, **RL** - Reporting limit

F-I

Quantitation Report (QT Reviewed)

Signal #1 : G:\HPCHEM\GCECD7\DATA\20221230\7T31647.D\ECD1A.CH Vial: 58
Signal #2 : G:\HPCHEM\GCECD7\DATA\20221230\7T31647.D\ECD2B.CH
Acq On : 31 Dec 2022 7:13 pm Operator: WD
Sample : 2120938-02 Inst : GCECD-7
Misc : Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Jan 3 13:49 2023 Quant Results File: 80811228.RES

Quant Method : G:\HPCHEM\G...\80811228.M (Chemstation Integrator)
Title : Pesticides by Method SW-846 8081B
Last Update : Tue Jan 03 13:40:33 2023
Response via : Initial Calibration
DataAcq Meth : RUNPEST1.M

Volume Inj. : 2ul
Signal #1 Phase : RTx-50 Signal #2 Phase: RTx-CLPesticides II
Signal #1 Info : 30M x 0.53mm x 0. Signal #2 Info : 30M x 0.53mm x 0.42um

Compound	RT#1	RT#2	Resp#1	Resp#2	ug/kg	ug/kg
System Monitoring Compounds						
1) S TCMX	4.13f	5.07	1265.5E6	781.6E6	39.967	53.345 #
Spiked Amount 50.000	Range 43 - 129		Recovery =		79.93%	106.69%
21) S Decachlorobiphen	18.84	20.42	1330.4E6	497.2E6	47.600	45.652m
Spiked Amount 50.000	Range 42 - 136		Recovery =		95.20%	91.30%
Target Compounds						
8) Heptachlor epoxi	10.35f	13.44f	1047.1E6	400.0E6	23.727m	21.482m
Sum Chlordane (gamma)			0	0	N.D.	N.D.
Average Chlordane (gamma)					0.000	0.000
Sum Toxaphene (1)			0	0	N.D.	N.D.
Average Toxaphene (1)					0.000	0.000

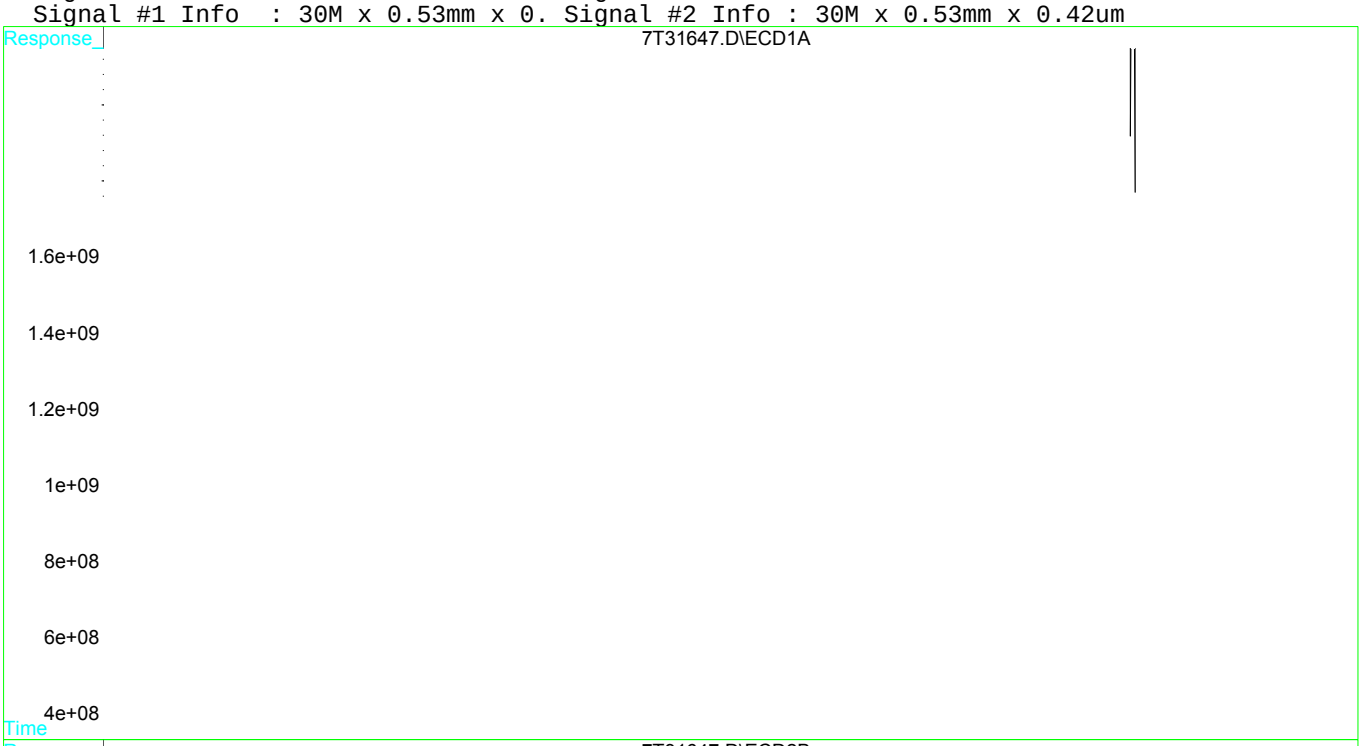
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.
7T31647.D 80811228.M Tue Jan 03 13:56:28 2023 SS

Quantitation Report (QT Reviewed)

Signal #1 : G:\HPCHEM\GCECD7\DATA\20221230\7T31647.D\ECD1A.CH Vial: 58
Signal #2 : G:\HPCHEM\GCECD7\DATA\20221230\7T31647.D\ECD2B.CH
Acq On : 31 Dec 2022 7:13 pm Operator: WD
Sample : 2120938-02 Inst : GCECD-7
Misc : Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Jan 3 13:49 2023 Quant Results File: 80811228.RES

Quant Method : G:\HPCHEM\G...\80811228.M (Chemstation Integrator)
Title : Pesticides by Method SW-846 8081B
Last Update : Tue Jan 03 13:40:33 2023
Response via : Multiple Level Calibration
DataAcq Meth : RUNPEST1.M

Volume Inj. : 2ul
Signal #1 Phase : RTx-50 Signal #2 Phase: RTx-CLPesticides II
Signal #1 Info : 30M x 0.53mm x 0. Signal #2 Info : 30M x 0.53mm x 0.42um





ANALYSIS DATA SHEET

Pesticides - SW 846 8081B

Client: **Dynamic Earth LLC**
Client Sample ID: **G-15-2**
Lab Sample ID: **2120938-03**
Project: **Old Orchard G.C.**
Work Order: **2120938**

Date Sampled:	12/21/22 11:18	Prep Date:	12/29/22 07:13	File ID:	7T31648.D
Init/Final Vol:	15 g / 10 mL	Prep Batch:	B2L2901	Analyzed:	12/31/22 19:38
Dilution:	1	Matrix:	Soil	Sequence:	SAA0020
Percent Solids:	82.91	Prep Method:	Microwave Extraction		

CAS NO.	COMPOUND	CONC. (mg/kg dry)	MDL	RL	Qual
1024-57-3	Heptachlor Epoxide [2C]	0.0184	0.000791	0.00157	

ND, U - Indicates compound analyzed for but not detected
J - Indicates estimated value
B - Indicates compound found in associated blank
E - Concentration exceeds highest calibration standard

D - Indicates result is based on a dilution
H - Indicates a Hold Time violation
P - Greater than 25% diff. between 2 GC columns.
MDL - Minimum detection limit, **RL** - Reporting limit

F-I

Quantitation Report (QT Reviewed)

Signal #1 : G:\HPCHEM\GCECD7\DATA\20221230\7T31648.D\ECD1A.CH Vial: 59
Signal #2 : G:\HPCHEM\GCECD7\DATA\20221230\7T31648.D\ECD2B.CH
Acq On : 31 Dec 2022 7:38 pm Operator: WD
Sample : 2120938-03 Inst : GCECD-7
Misc : Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Jan 3 13:49 2023 Quant Results File: 80811228.RES

Quant Method : G:\HPCHEM\G...\80811228.M (Chemstation Integrator)
Title : Pesticides by Method SW-846 8081B
Last Update : Tue Jan 03 13:40:33 2023
Response via : Initial Calibration
DataAcq Meth : RUNPEST1.M

Volume Inj. : 2ul
Signal #1 Phase : RTx-50 Signal #2 Phase: RTx-CLPesticides II
Signal #1 Info : 30M x 0.53mm x 0. Signal #2 Info : 30M x 0.53mm x 0.42um

Compound	RT#1	RT#2	Resp#1	Resp#2	ug/kg	ug/kg
System Monitoring Compounds						
1) S TCMX	4.13	5.07	1387.9E6	854.8E6	43.833	58.341 #
Spiked Amount 50.000	Range 43 - 129		Recovery =		87.67%	116.68%
21) S Decachlorobiphen	18.83	20.42	1375.7E6	592.2E6	49.221	54.379
Spiked Amount 50.000	Range 42 - 136		Recovery =		98.44%	108.76%
Target Compounds						
8) Heptachlor epoxi	10.34	13.44f	1101.9E6	425.9E6	24.969m	22.876m
Sum Chlordane (gamma)			0	0	N.D.	N.D.
Average Chlordane (gamma)					0.000	0.000
Sum Toxaphene (1)			0	0	N.D.	N.D.
Average Toxaphene (1)					0.000	0.000

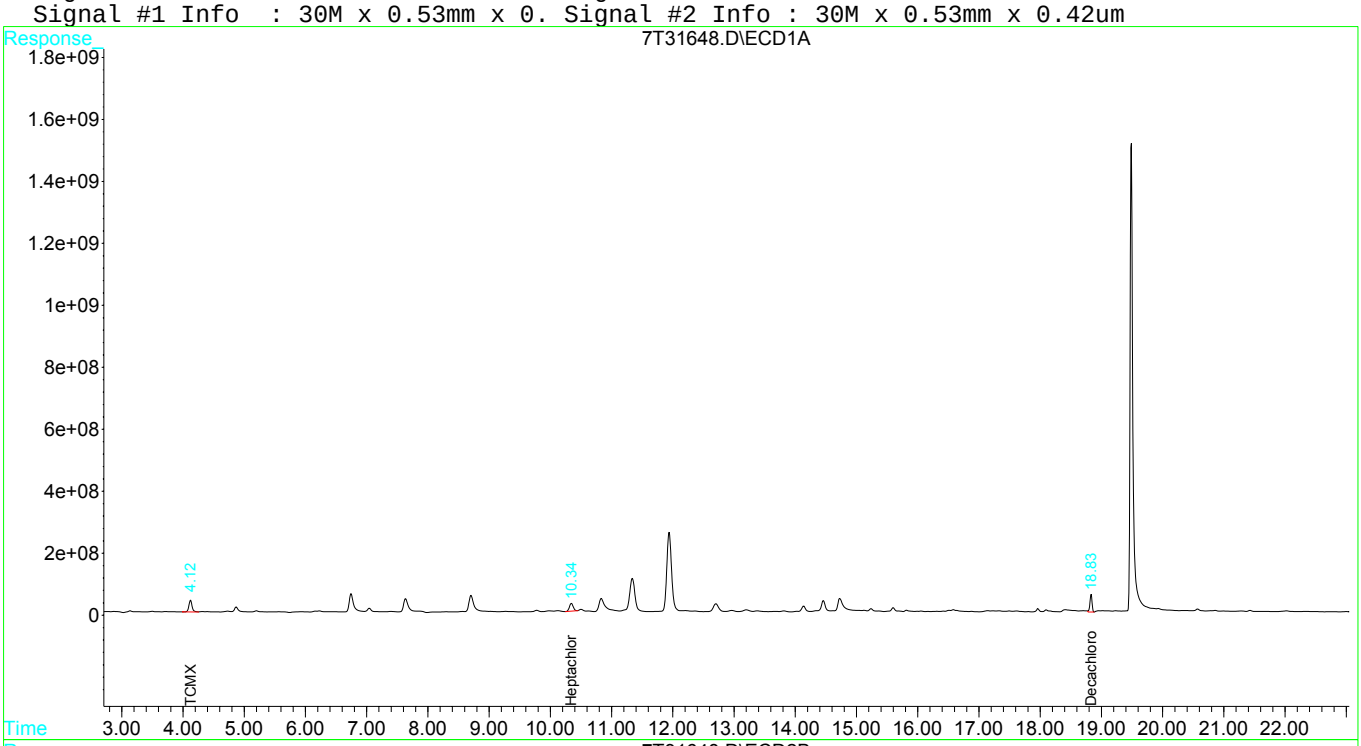
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.
7T31648.D 80811228.M Tue Jan 03 13:56:30 2023 SS

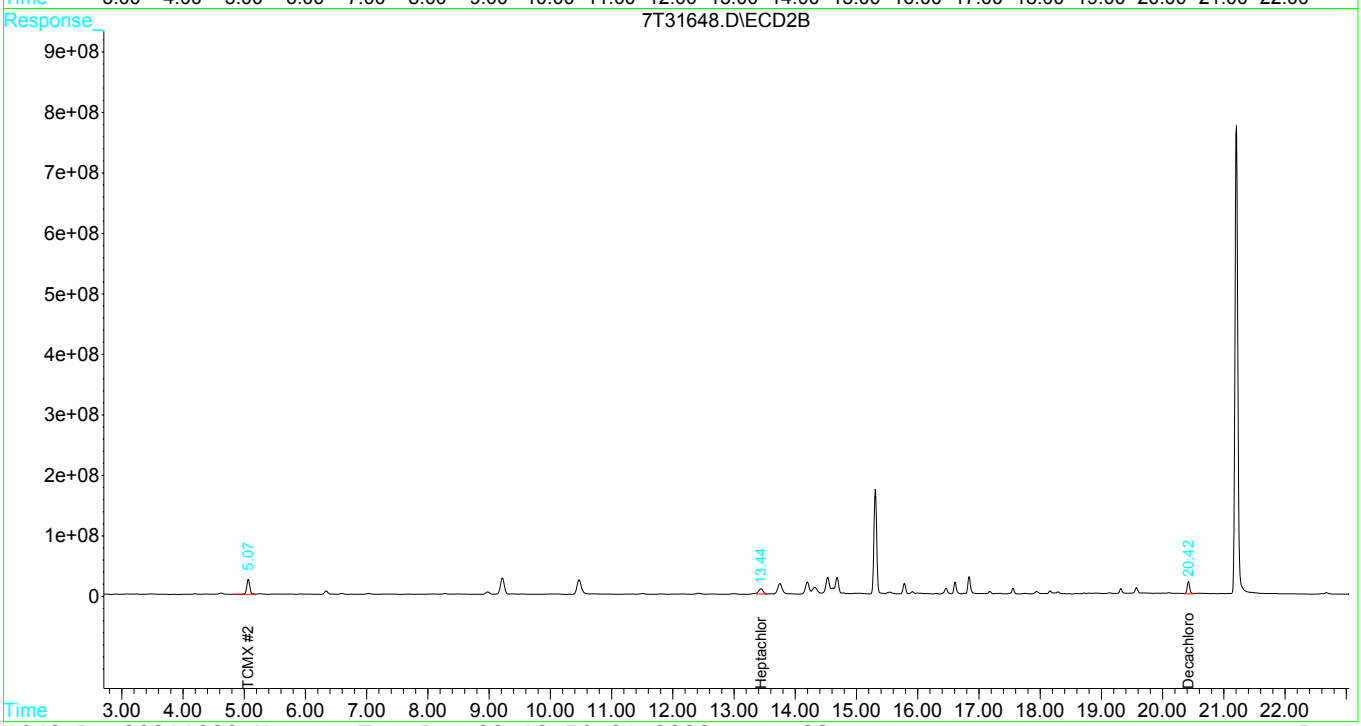
Quantitation Report (QT Reviewed)

Signal #1 : G:\HPCHEM\GCECD7\DATA\20221230\7T31648.D\ECD1A.CH Vial: 59
Signal #2 : G:\HPCHEM\GCECD7\DATA\20221230\7T31648.D\ECD2B.CH
Acq On : 31 Dec 2022 7:38 pm Operator: WD
Sample : 2120938-03 Inst : GCECD-7
Misc : Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Jan 3 13:49 2023 Quant Results File: 80811228.RES

Quant Method : G:\HPCHEM\G...\80811228.M (Chemstation Integrator)
Title : Pesticides by Method SW-846 8081B
Last Update : Tue Jan 03 13:40:33 2023
Response via : Multiple Level Calibration
DataAcq Meth : RUNPEST1.M

Volume Inj. : 2ul
Signal #1 Phase : RTx-50 Signal #2 Phase: RTx-CLPesticides II
Signal #1 Info : 30M x 0.53mm x 0. Signal #2 Info : 30M x 0.53mm x 0.42um





ANALYSIS DATA SHEET

Pesticides - SW 846 8081B

Client: **Dynamic Earth LLC**
Client Sample ID: **G-15-3**
Lab Sample ID: **2120938-04**
Project: **Old Orchard G.C.**
Work Order: **2120938**

Date Sampled:	12/21/22 11:22	Prep Date:	12/29/22 07:13	File ID:	7T31649.D
Init/Final Vol:	15 g / 10 mL	Prep Batch:	B2L2901	Analyzed:	12/31/22 20:04
Dilution:	1	Matrix:	Soil	Sequence:	SAA0020
Percent Solids:	86.46	Prep Method:	Microwave Extraction		

CAS NO.	COMPOUND	CONC. (mg/kg dry)	MDL	RL	Qual
1024-57-3	Heptachlor Epoxide [2C]	0.0160	0.000759	0.00150	

ND, U - Indicates compound analyzed for but not detected
J - Indicates estimated value
B - Indicates compound found in associated blank
E - Concentration exceeds highest calibration standard

D - Indicates result is based on a dilution
H - Indicates a Hold Time violation
P - Greater than 25% diff. between 2 GC columns.
MDL - Minimum detection limit, **RL** - Reporting limit

F-I

Quantitation Report (QT Reviewed)

Signal #1 : G:\HPCHEM\GCECD7\DATA\20221230\7T31649.D\ECD1A.CH Vial: 60
Signal #2 : G:\HPCHEM\GCECD7\DATA\20221230\7T31649.D\ECD2B.CH
Acq On : 31 Dec 2022 8:04 pm Operator: WD
Sample : 2120938-04 Inst : GCECD-7
Misc : Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Jan 3 13:50 2023 Quant Results File: 80811228.RES

Quant Method : G:\HPCHEM\G...\80811228.M (Chemstation Integrator)
Title : Pesticides by Method SW-846 8081B
Last Update : Tue Jan 03 13:40:33 2023
Response via : Initial Calibration
DataAcq Meth : RUNPEST1.M

Volume Inj. : 2ul
Signal #1 Phase : RTx-50 Signal #2 Phase: RTx-CLPesticides II
Signal #1 Info : 30M x 0.53mm x 0. Signal #2 Info : 30M x 0.53mm x 0.42um

Compound	RT#1	RT#2	Resp#1	Resp#2	ug/kg	ug/kg
System Monitoring Compounds						
1) S TCMX	4.13f	5.07	1281.0E6	791.2E6	40.458	54.002 #
Spiked Amount 50.000	Range 43 - 129		Recovery =		80.92%	108.00%
21) S Decachlorobiphen	18.84	20.42	1293.9E6	613.6E6	46.296	56.342
Spiked Amount 50.000	Range 42 - 136		Recovery =		92.59%	112.68%
Target Compounds						
8) Heptachlor epoxi	10.34	13.44f	1034.9E6	387.5E6	23.450m	20.809m
Sum Chlordane (gamma)			0	0	N.D.	N.D.
Average Chlordane (gamma)					0.000	0.000
Sum Toxaphene (1)			0	0	N.D.	N.D.
Average Toxaphene (1)					0.000	0.000

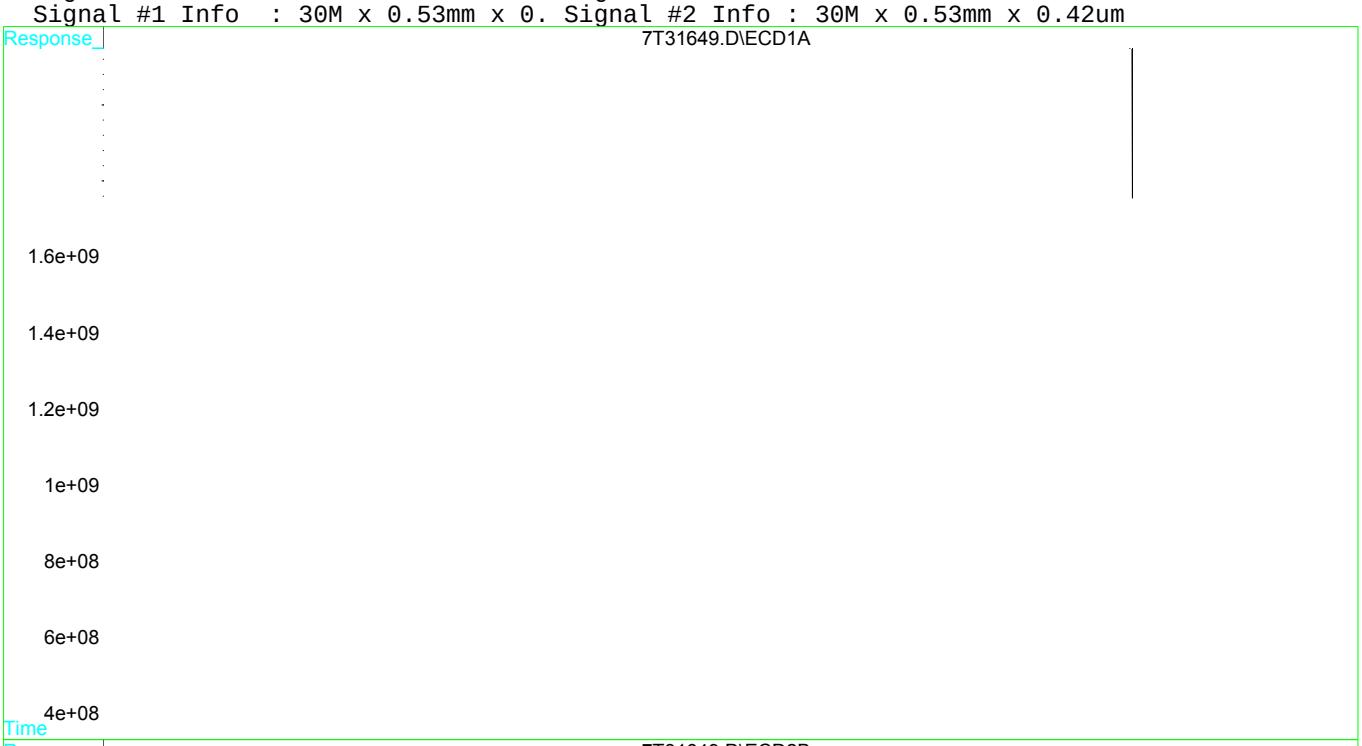
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.
7T31649.D 80811228.M Tue Jan 03 13:56:32 2023 SS

Quantitation Report (QT Reviewed)

Signal #1 : G:\HPCHEM\GCECD7\DATA\20221230\7T31649.D\ECD1A.CH Vial: 60
Signal #2 : G:\HPCHEM\GCECD7\DATA\20221230\7T31649.D\ECD2B.CH
Acq On : 31 Dec 2022 8:04 pm Operator: WD
Sample : 2120938-04 Inst : GCECD-7
Misc : Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Jan 3 13:50 2023 Quant Results File: 80811228.RES

Quant Method : G:\HPCHEM\G...\80811228.M (Chemstation Integrator)
Title : Pesticides by Method SW-846 8081B
Last Update : Tue Jan 03 13:40:33 2023
Response via : Multiple Level Calibration
DataAcq Meth : RUNPEST1.M

Volume Inj. : 2ul
Signal #1 Phase : RTx-50 Signal #2 Phase: RTx-CLPesticides II
Signal #1 Info : 30M x 0.53mm x 0. Signal #2 Info : 30M x 0.53mm x 0.42um





ANALYSIS DATA SHEET

Pesticides - SW 846 8081B

Client: **Dynamic Earth LLC**
Client Sample ID: **G-15-4**
Lab Sample ID: **2120938-05**
Project: **Old Orchard G.C.**
Work Order: **2120938**

Date Sampled:	12/21/22 11:26	Prep Date:	12/29/22 07:13	File ID:	7T31650.D
Init/Final Vol:	15 g / 10 mL	Prep Batch:	B2L2901	Analyzed:	12/31/22 20:29
Dilution:	1	Matrix:	Soil	Sequence:	SAA0020
Percent Solids:	87.71	Prep Method:	Microwave Extraction		

CAS NO.	COMPOUND	CONC. (mg/kg dry)	MDL	RL	Qual
1024-57-3	Heptachlor Epoxide [2C]	0.00768	0.000748	0.00148	

ND, U - Indicates compound analyzed for but not detected
J - Indicates estimated value
B - Indicates compound found in associated blank
E - Concentration exceeds highest calibration standard

D - Indicates result is based on a dilution
H - Indicates a Hold Time violation
P - Greater than 25% diff. between 2 GC columns.
MDL - Minimum detection limit, **RL** - Reporting limit

F-I

Quantitation Report (QT Reviewed)

Signal #1 : G:\HPCHEM\GCECD7\DATA\20221230\7T31650.D\ECD1A.CH Vial: 61
Signal #2 : G:\HPCHEM\GCECD7\DATA\20221230\7T31650.D\ECD2B.CH
Acq On : 31 Dec 2022 8:29 pm Operator: WD
Sample : 2120938-05 Inst : GCECD-7
Misc : Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Jan 3 13:51 2023 Quant Results File: 80811228.RES

Quant Method : G:\HPCHEM\G...\80811228.M (Chemstation Integrator)
Title : Pesticides by Method SW-846 8081B
Last Update : Tue Jan 03 13:40:33 2023
Response via : Initial Calibration
DataAcq Meth : RUNPEST1.M

Volume Inj. : 2ul
Signal #1 Phase : RTx-50 Signal #2 Phase: RTx-CLPesticides II
Signal #1 Info : 30M x 0.53mm x 0. Signal #2 Info : 30M x 0.53mm x 0.42um

Compound	RT#1	RT#2	Resp#1	Resp#2	ug/kg	ug/kg
System Monitoring Compounds						
1) S TCMX	4.12	5.07	1498.6E6	917.2E6	47.330	62.602m#
Spiked Amount 50.000	Range 43 - 129		Recovery =		94.66%	125.20%
21) S Decachlorobiphen	18.83	20.42	1316.3E6	627.3E6	47.097m	57.604
Spiked Amount 50.000	Range 42 - 136		Recovery =		94.19%	115.21%
Target Compounds						
8) Heptachlor epoxi	10.34	13.43f	559.6E6	188.0E6	12.681m	10.095m
Sum Chlordane (gamma)			0	0	N.D.	N.D.
Average Chlordane (gamma)					0.000	0.000
Sum Toxaphene (1)			0	0	N.D.	N.D.
Average Toxaphene (1)					0.000	0.000

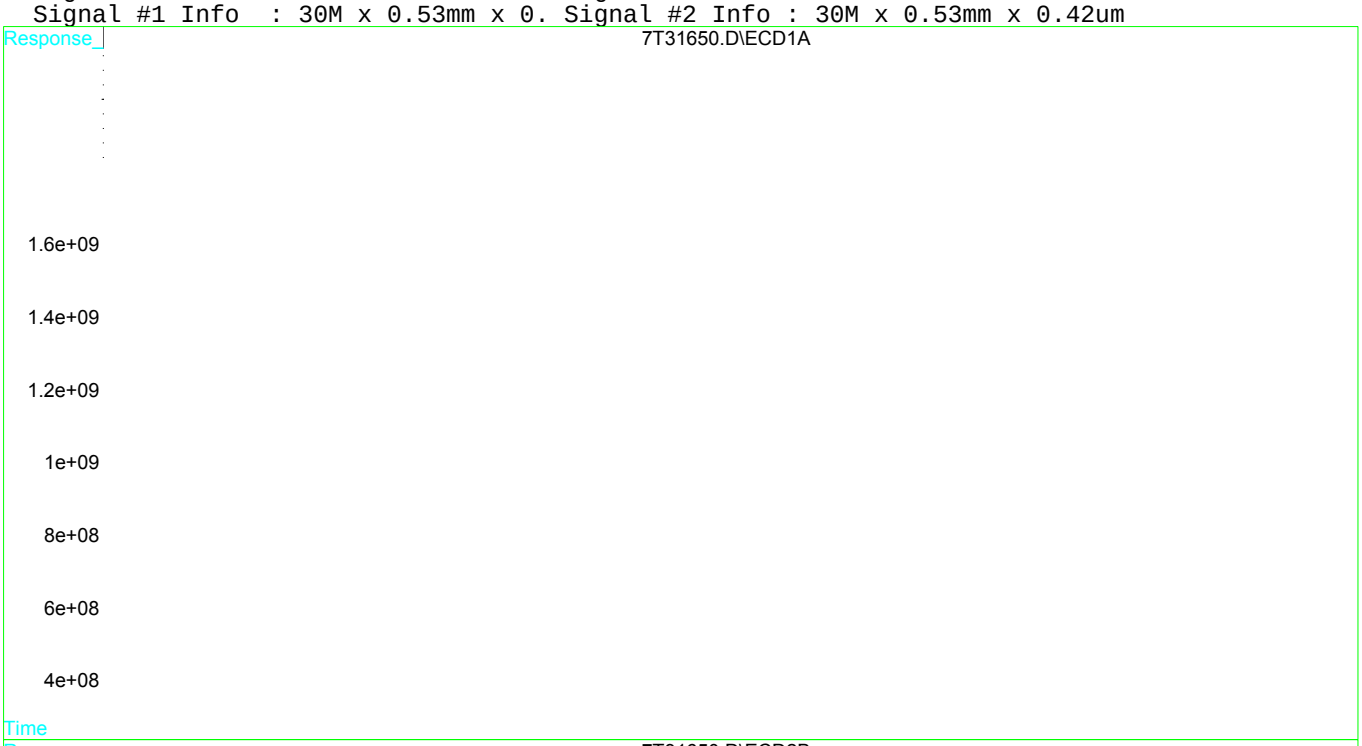
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7T31650.D 80811228.M Tue Jan 03 13:56:34 2023 SS

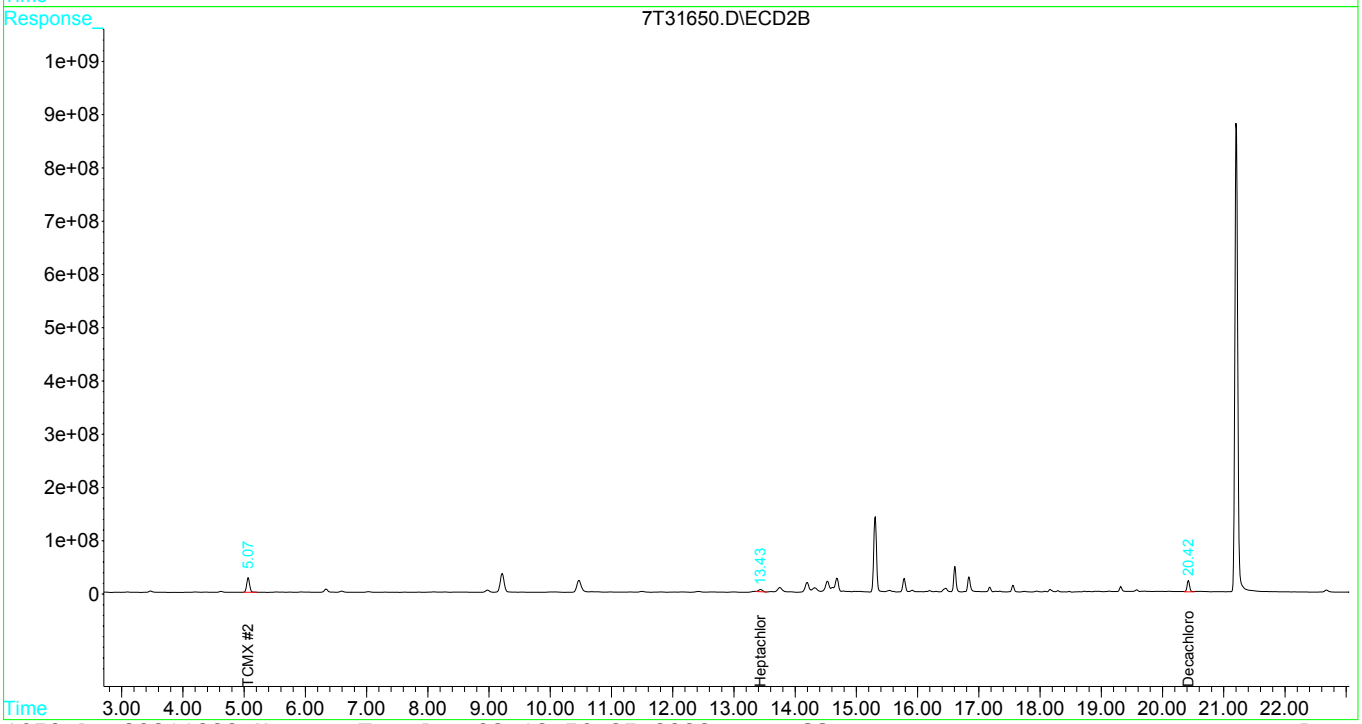
Quantitation Report (QT Reviewed)

Signal #1 : G:\HPCHEM\GCECD7\DATA\20221230\7T31650.D\ECD1A.CH Vial: 61
Signal #2 : G:\HPCHEM\GCECD7\DATA\20221230\7T31650.D\ECD2B.CH
Acq On : 31 Dec 2022 8:29 pm Operator: WD
Sample : 2120938-05 Inst : GCECD-7
Misc : Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Jan 3 13:51 2023 Quant Results File: 80811228.RES

Quant Method : G:\HPCHEM\G...\80811228.M (Chemstation Integrator)
Title : Pesticides by Method SW-846 8081B
Last Update : Tue Jan 03 13:40:33 2023
Response via : Multiple Level Calibration
DataAcq Meth : RUNPEST1.M

Volume Inj. : 2ul
Signal #1 Phase : RTx-50 Signal #2 Phase: RTx-CLPesticides II
Signal #1 Info : 30M x 0.53mm x 0. Signal #2 Info : 30M x 0.53mm x 0.42um





7T31650.D 80811228.M Tue Jan 03 13:56:35 2023 SS Page 2

ANALYSIS DATA SHEET

Pesticides - SW 846 8081B

Client: **Dynamic Earth LLC**
Client Sample ID: **G-16A**
Lab Sample ID: **2120938-06**
Project: **Old Orchard G.C.**
Work Order: **2120938**

Date Sampled:	12/21/22 11:30	Prep Date:	12/29/22 07:13	File ID:	7T31651.D
Init/Final Vol:	15 g / 10 mL	Prep Batch:	B2L2901	Analyzed:	12/31/22 20:54
Dilution:	1	Matrix:	Soil	Sequence:	SAA0020
Percent Solids:	83.86	Prep Method:	Microwave Extraction		

CAS NO.	COMPOUND	CONC. (mg/kg dry)	MDL	RL	Qual
1024-57-3	Heptachlor Epoxide	ND	0.000782	0.00155	U

ND, U - Indicates compound analyzed for but not detected
J - Indicates estimated value
B - Indicates compound found in associated blank
E - Concentration exceeds highest calibration standard

D - Indicates result is based on a dilution
H - Indicates a Hold Time violation
P - Greater than 25% diff. between 2 GC columns.
MDL - Minimum detection limit, **RL** - Reporting limit

F-I

Quantitation Report (QT Reviewed)

Signal #1 : G:\HPCHEM\GCECD7\DATA\20221230\7T31651.D\ECD1A.CH Vial: 62
Signal #2 : G:\HPCHEM\GCECD7\DATA\20221230\7T31651.D\ECD2B.CH
Acq On : 31 Dec 2022 8:54 pm Operator: WD
Sample : 2120938-06 Inst : GCECD-7
Misc : Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Jan 3 13:51 2023 Quant Results File: 80811228.RES

Quant Method : G:\HPCHEM\G...\80811228.M (Chemstation Integrator)
Title : Pesticides by Method SW-846 8081B
Last Update : Tue Jan 03 13:40:33 2023
Response via : Initial Calibration
DataAcq Meth : RUNPEST1.M

Volume Inj. : 2ul
Signal #1 Phase : RTx-50 Signal #2 Phase: RTx-CLPesticides II
Signal #1 Info : 30M x 0.53mm x 0. Signal #2 Info : 30M x 0.53mm x 0.42um

Compound	RT#1	RT#2	Resp#1	Resp#2	ug/kg	ug/kg
System Monitoring Compounds						
1) S TCMX	4.13	5.07	1207.3E6	725.5E6	38.131	49.513m#
Spiked Amount 50.000	Range 43 - 129		Recovery =		76.26%	99.03%
21) S Decachlorobiphen	18.83	20.42	1124.9E6	446.8E6	40.247m	41.025m
Spiked Amount 50.000	Range 42 - 136		Recovery =		80.49%	82.05%
Target Compounds						
Sum Chlordane (gamma)			0	0	N.D.	N.D.
Average Chlordane (gamma)					0.000	0.000
Sum Toxaphene (1)			0	0	N.D.	N.D.
Average Toxaphene (1)					0.000	0.000

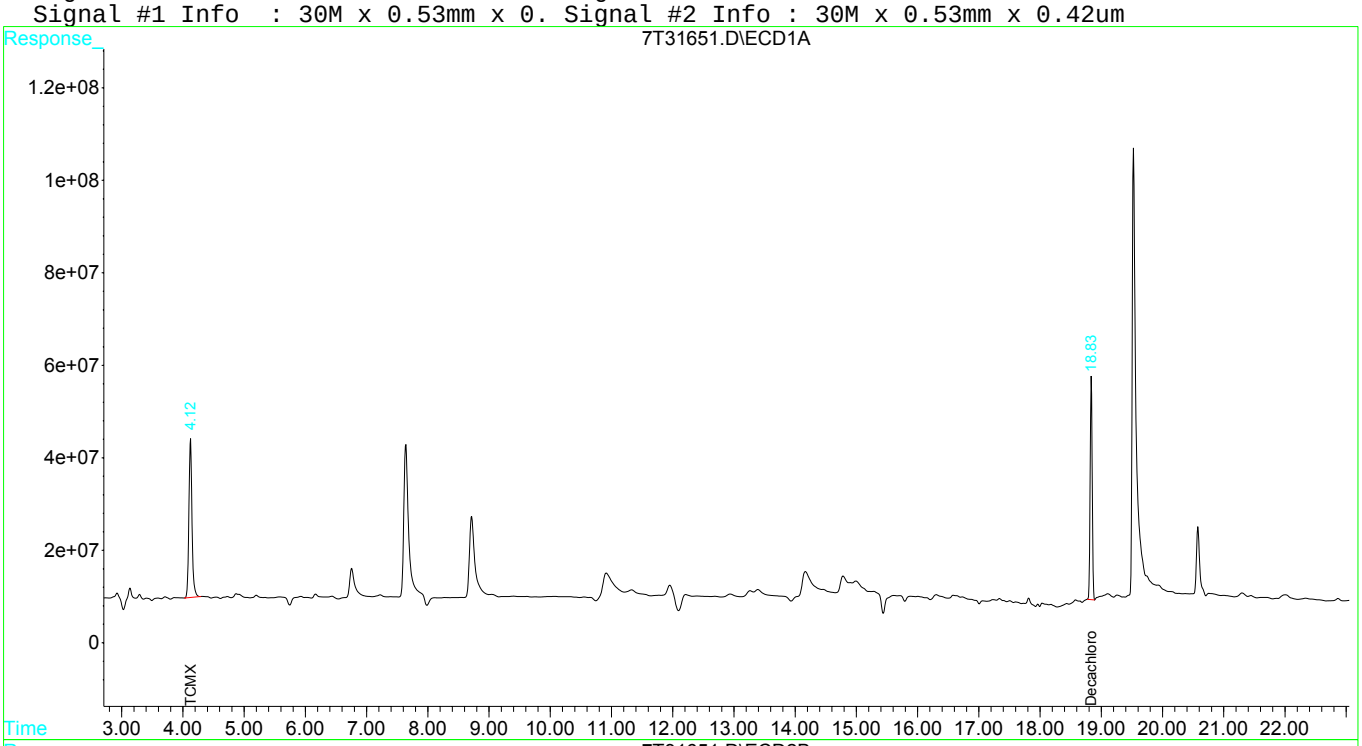
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.
7T31651.D 80811228.M Tue Jan 03 13:56:36 2023 SS

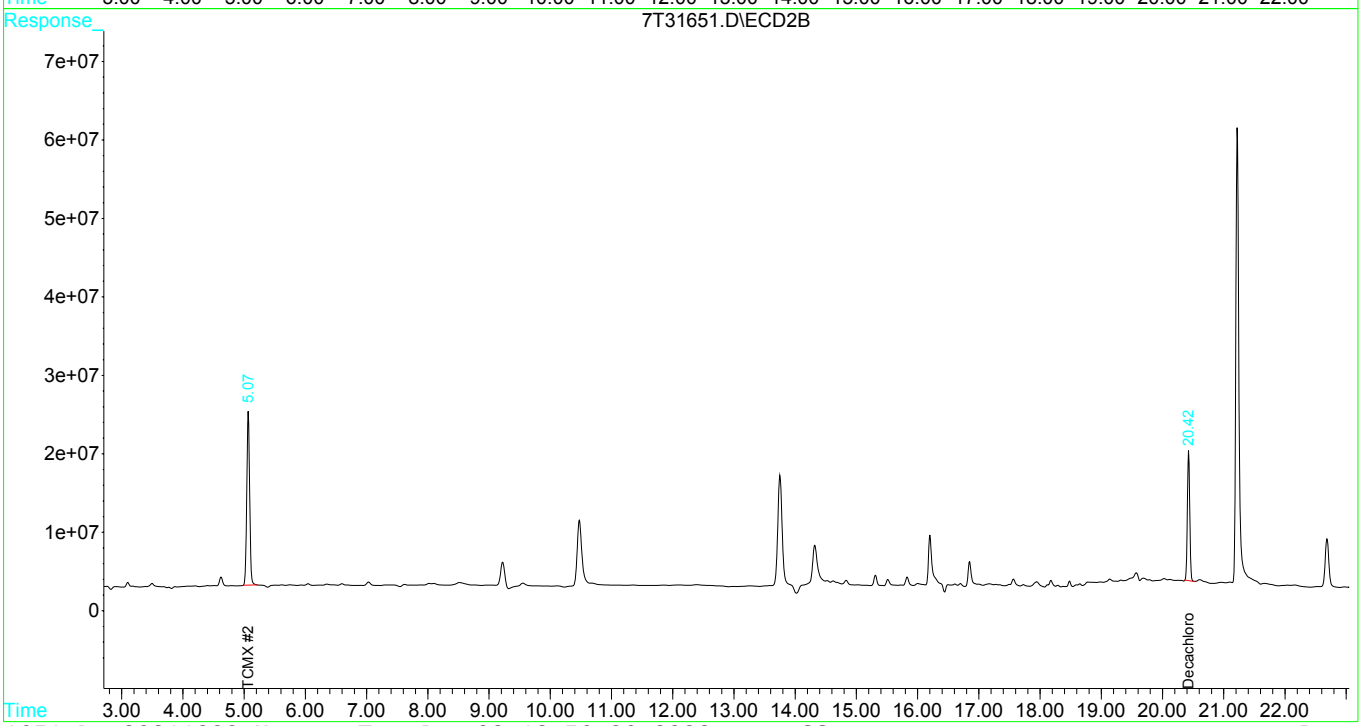
Quantitation Report (QT Reviewed)

Signal #1 : G:\HPCHEM\GCECD7\DATA\20221230\7T31651.D\ECD1A.CH Vial: 62
Signal #2 : G:\HPCHEM\GCECD7\DATA\20221230\7T31651.D\ECD2B.CH
Acq On : 31 Dec 2022 8:54 pm Operator: WD
Sample : 2120938-06 Inst : GCECD-7
Misc : Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Jan 3 13:51 2023 Quant Results File: 80811228.RES

Quant Method : G:\HPCHEM\G...\80811228.M (Chemstation Integrator)
Title : Pesticides by Method SW-846 8081B
Last Update : Tue Jan 03 13:40:33 2023
Response via : Multiple Level Calibration
DataAcq Meth : RUNPEST1.M

Volume Inj. : 2ul
Signal #1 Phase : RTx-50 Signal #2 Phase: RTx-CLPesticides II
Signal #1 Info : 30M x 0.53mm x 0. Signal #2 Info : 30M x 0.53mm x 0.42um





ANALYSIS DATA SHEET

Pesticides - SW 846 8081B

Client: **Dynamic Earth LLC**
Client Sample ID: **G-16-1**
Lab Sample ID: **2120938-07**
Project: **Old Orchard G.C.**
Work Order: **2120938**

Date Sampled:	12/21/22 11:36	Prep Date:	12/29/22 07:13	File ID:	7T31652.D
Init/Final Vol:	15 g / 10 mL	Prep Batch:	B2L2901	Analyzed:	12/31/22 21:20
Dilution:	1	Matrix:	Soil	Sequence:	SAA0020
Percent Solids:	84.92	Prep Method:	Microwave Extraction		

CAS NO.	COMPOUND	CONC. (mg/kg dry)	MDL	RL	Qual
1024-57-3	Heptachlor Epoxide [2C]	0.0498	0.000773	0.00153	

ND, U - Indicates compound analyzed for but not detected
J - Indicates estimated value
B - Indicates compound found in associated blank
E - Concentration exceeds highest calibration standard

D - Indicates result is based on a dilution
H - Indicates a Hold Time violation
P - Greater than 25% diff. between 2 GC columns.
MDL - Minimum detection limit, **RL** - Reporting limit

F-I

Quantitation Report (QT Reviewed)

Signal #1 : G:\HPCHEM\GCECD7\DATA\20221230\7T31652.D\ECD1A.CH Vial: 63
Signal #2 : G:\HPCHEM\GCECD7\DATA\20221230\7T31652.D\ECD2B.CH
Acq On : 31 Dec 2022 9:20 pm Operator: WD
Sample : 2120938-07 Inst : GCECD-7
Misc : Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Jan 3 13:52 2023 Quant Results File: 80811228.RES

Quant Method : G:\HPCHEM\G...\80811228.M (Chemstation Integrator)
Title : Pesticides by Method SW-846 8081B
Last Update : Tue Jan 03 13:40:33 2023
Response via : Initial Calibration
DataAcq Meth : RUNPEST1.M

Volume Inj. : 2ul
Signal #1 Phase : RTx-50 Signal #2 Phase: RTx-CLPesticides II
Signal #1 Info : 30M x 0.53mm x 0. Signal #2 Info : 30M x 0.53mm x 0.42um

Compound	RT#1	RT#2	Resp#1	Resp#2	ug/kg	ug/kg
System Monitoring Compounds						
1) S TCMX	4.13f	5.08f	1339.3E6	804.3E6	42.299	54.894 #
Spiked Amount 50.000	Range 43 - 129		Recovery =		84.60%	109.79%
21) S Decachlorobiphen	18.84	20.43	1331.3E6	623.3E6	47.632	57.235
Spiked Amount 50.000	Range 42 - 136		Recovery =		95.26%	114.47%
Target Compounds						
8) Heptachlor epoxi	10.35f	13.44f	3343.3E6	1180.2E6	75.760m	63.388m
Sum Chlordane (gamma)			0	0	N.D.	N.D.
Average Chlordane (gamma)					0.000	0.000
Sum Toxaphene (1)			0	0	N.D.	N.D.
Average Toxaphene (1)					0.000	0.000

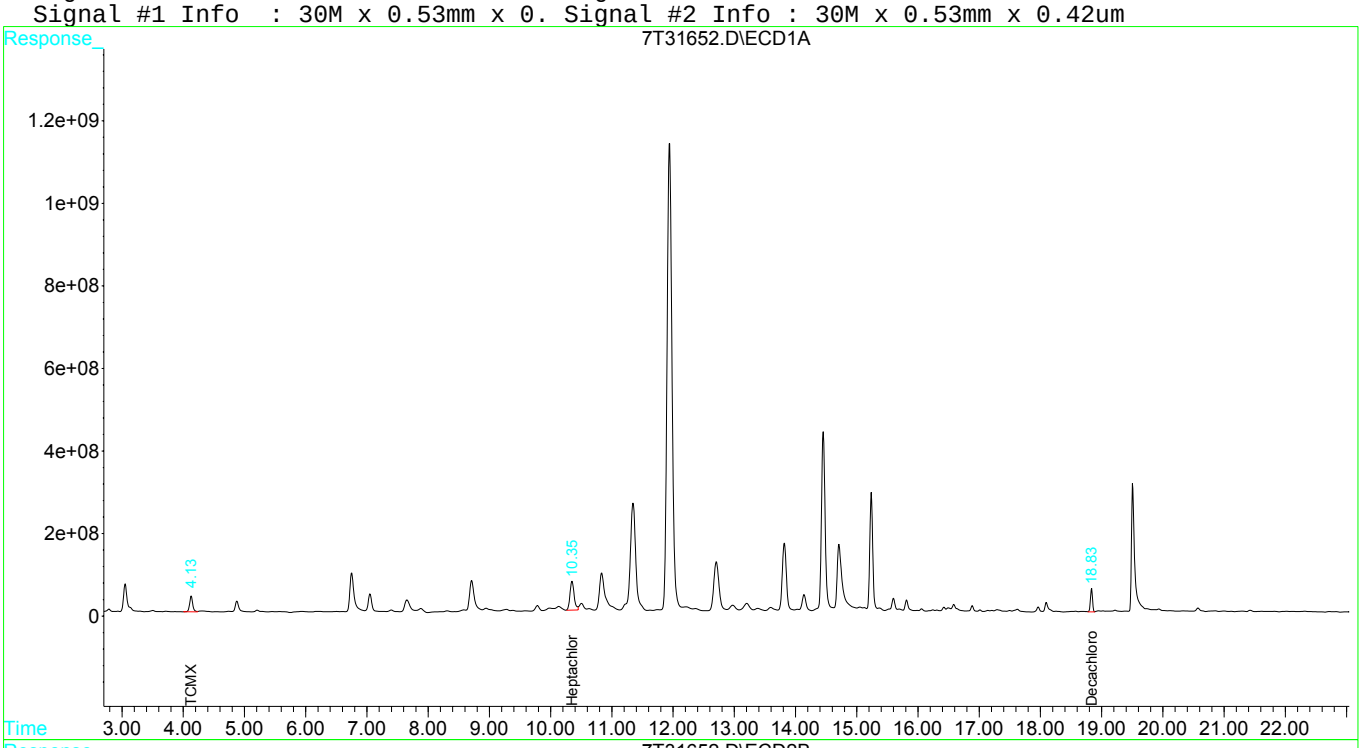
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.
7T31652.D 80811228.M Tue Jan 03 13:56:38 2023 SS

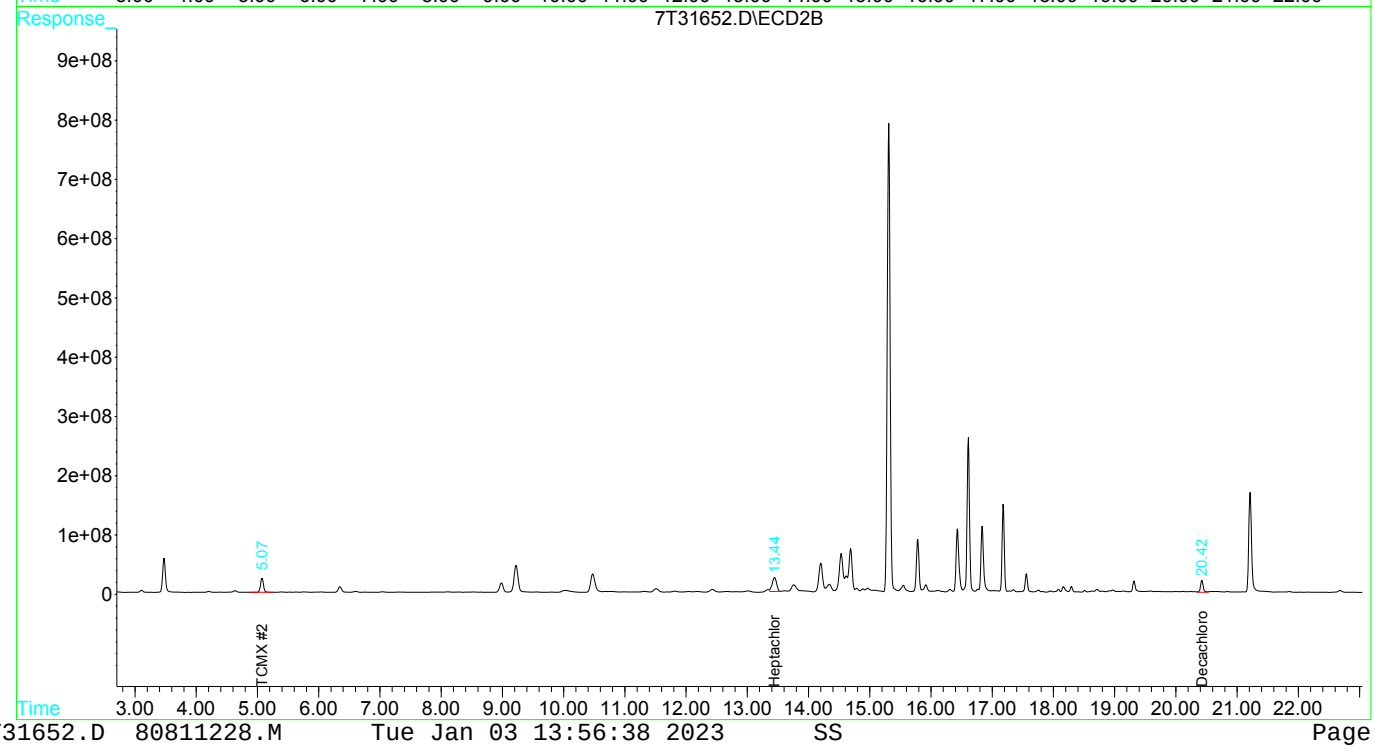
Quantitation Report (QT Reviewed)

Signal #1 : G:\HPCHEM\GCECD7\DATA\20221230\7T31652.D\ECD1A.CH Vial: 63
Signal #2 : G:\HPCHEM\GCECD7\DATA\20221230\7T31652.D\ECD2B.CH
Acq On : 31 Dec 2022 9:20 pm Operator: WD
Sample : 2120938-07 Inst : GCECD-7
Misc : Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Jan 3 13:52 2023 Quant Results File: 80811228.RES

Quant Method : G:\HPCHEM\G...\80811228.M (Chemstation Integrator)
Title : Pesticides by Method SW-846 8081B
Last Update : Tue Jan 03 13:40:33 2023
Response via : Multiple Level Calibration
DataAcq Meth : RUNPEST1.M

Volume Inj. : 2ul
Signal #1 Phase : RTx-50 Signal #2 Phase: RTx-CLPesticides II
Signal #1 Info : 30M x 0.53mm x 0. Signal #2 Info : 30M x 0.53mm x 0.42um





ANALYSIS DATA SHEET

Pesticides - SW 846 8081B

Client: **Dynamic Earth LLC**
Client Sample ID: **G-16-2**
Lab Sample ID: **2120938-08**
Project: **Old Orchard G.C.**
Work Order: **2120938**

Date Sampled:	12/21/22 11:40	Prep Date:	12/29/22 07:13	File ID:	7T31653.D
Init/Final Vol:	15 g / 10 mL	Prep Batch:	B2L2901	Analyzed:	12/31/22 21:45
Dilution:	1	Matrix:	Soil	Sequence:	SAA0020
Percent Solids:	85.73	Prep Method:	Microwave Extraction		

CAS NO.	COMPOUND	CONC. (mg/kg dry)	MDL	RL	Qual
1024-57-3	Heptachlor Epoxide [2C]	0.0248	0.000765	0.00152	

ND, U - Indicates compound analyzed for but not detected
J - Indicates estimated value
B - Indicates compound found in associated blank
E - Concentration exceeds highest calibration standard

D - Indicates result is based on a dilution
H - Indicates a Hold Time violation
P - Greater than 25% diff. between 2 GC columns.
MDL - Minimum detection limit, **RL** - Reporting limit

F-I

Quantitation Report (QT Reviewed)

Signal #1 : G:\HPCHEM\GCECD7\DATA\20221230\7T31653.D\ECD1A.CH Vial: 64
Signal #2 : G:\HPCHEM\GCECD7\DATA\20221230\7T31653.D\ECD2B.CH
Acq On : 31 Dec 2022 9:45 pm Operator: WD
Sample : 2120938-08 Inst : GCECD-7
Misc : Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Jan 3 13:53 2023 Quant Results File: 80811228.RES

Quant Method : G:\HPCHEM\G...\80811228.M (Chemstation Integrator)
Title : Pesticides by Method SW-846 8081B
Last Update : Tue Jan 03 13:40:33 2023
Response via : Initial Calibration
DataAcq Meth : RUNPEST1.M

Volume Inj. : 2ul
Signal #1 Phase : RTx-50 Signal #2 Phase: RTx-CLPesticides II
Signal #1 Info : 30M x 0.53mm x 0. Signal #2 Info : 30M x 0.53mm x 0.42um

Compound	RT#1	RT#2	Resp#1	Resp#2	ug/kg	ug/kg
System Monitoring Compounds						
1) S TCMX	4.13	5.07	1026.6E6	619.3E6	32.421m	42.271m#
Spiked Amount 50.000	Range 43 - 129		Recovery =		64.84%	84.54%
21) S Decachlorobiphen	18.83	20.43	1016.6E6	453.3E6	36.372m	41.620
Spiked Amount 50.000	Range 42 - 136		Recovery =		72.74%	83.24%
Target Compounds						
8) Heptachlor epoxi	10.35f	13.44f	1849.2E6	593.0E6	41.903m	31.850m
Sum Chlordane (gamma)			0	0	N.D.	N.D.
Average Chlordane (gamma)					0.000	0.000
Sum Toxaphene (1)			0	0	N.D.	N.D.
Average Toxaphene (1)					0.000	0.000

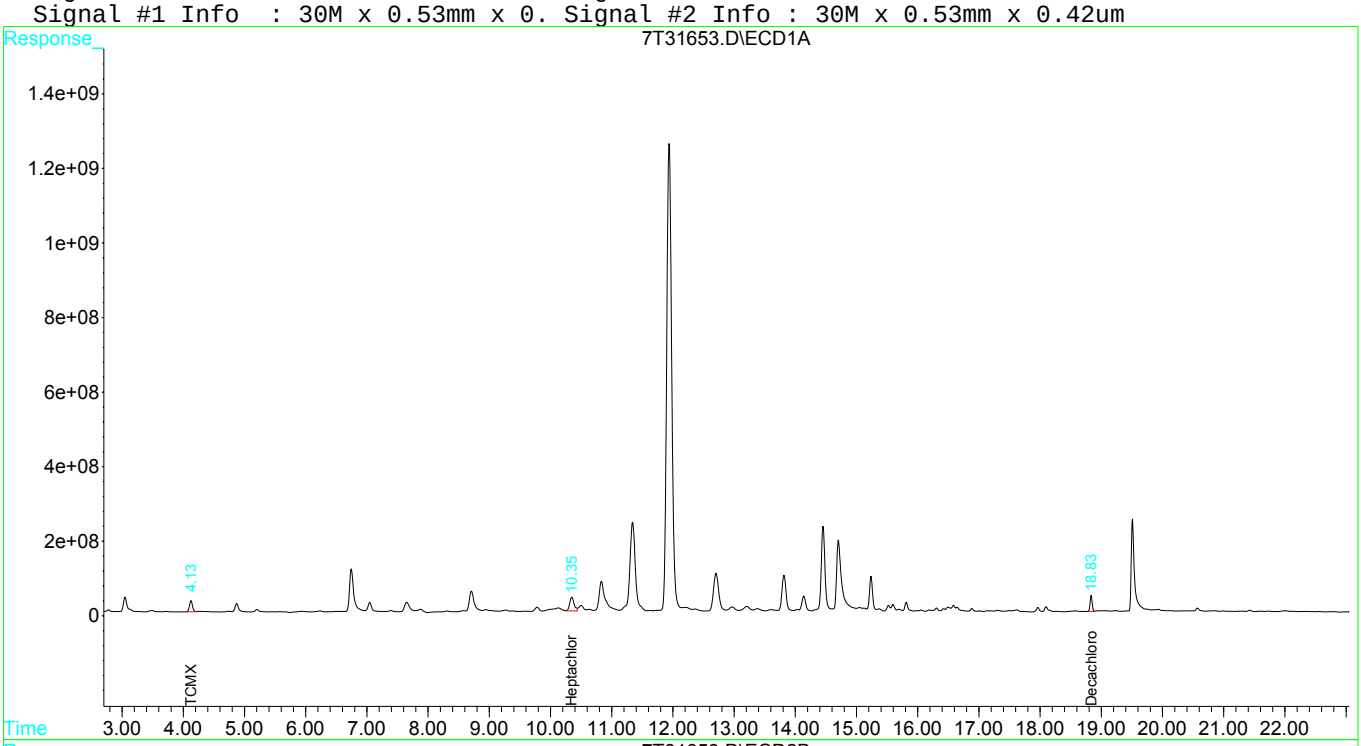
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.
7T31653.D 80811228.M Tue Jan 03 13:56:40 2023 SS

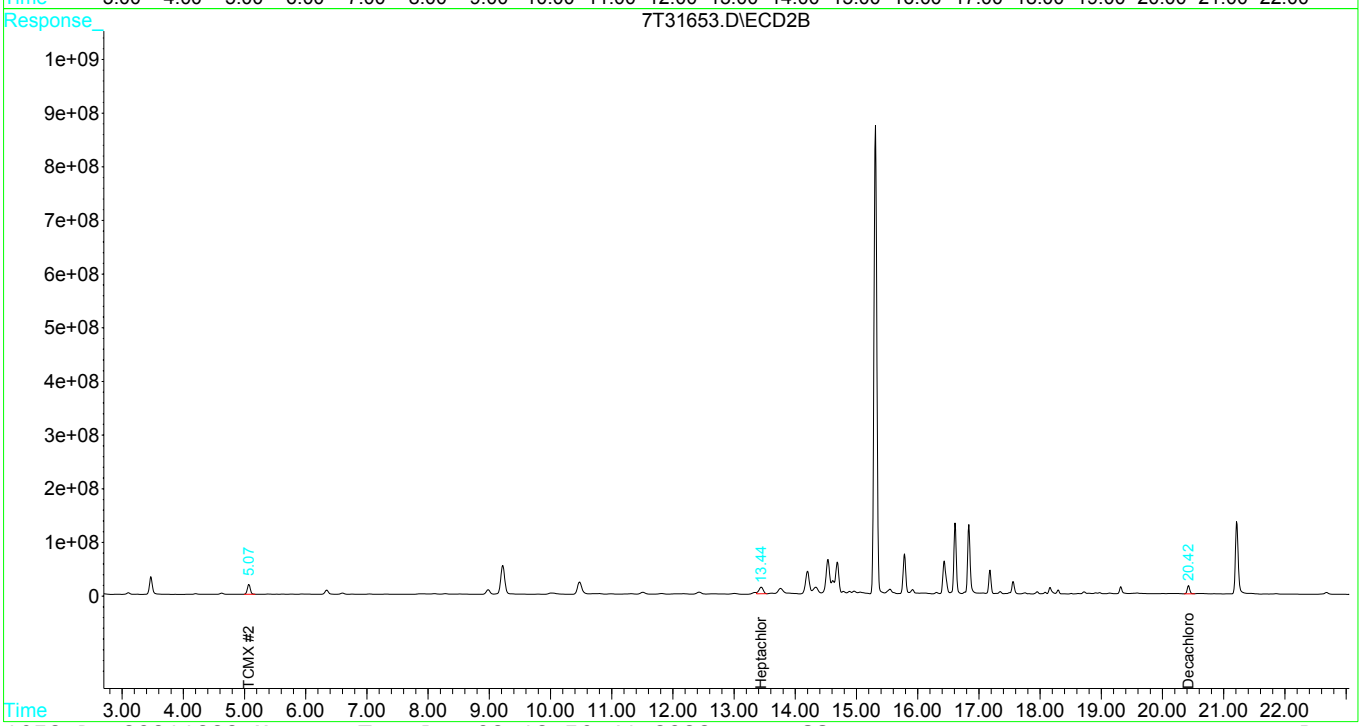
Quantitation Report (QT Reviewed)

Signal #1 : G:\HPCHEM\GCECD7\DATA\20221230\7T31653.D\ECD1A.CH Vial: 64
Signal #2 : G:\HPCHEM\GCECD7\DATA\20221230\7T31653.D\ECD2B.CH
Acq On : 31 Dec 2022 9:45 pm Operator: WD
Sample : 2120938-08 Inst : GCECD-7
Misc : Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Jan 3 13:53 2023 Quant Results File: 80811228.RES

Quant Method : G:\HPCHEM\G...\80811228.M (Chemstation Integrator)
Title : Pesticides by Method SW-846 8081B
Last Update : Tue Jan 03 13:40:33 2023
Response via : Multiple Level Calibration
DataAcq Meth : RUNPEST1.M

Volume Inj. : 2ul
Signal #1 Phase : RTx-50 Signal #2 Phase: RTx-CLPesticides II
Signal #1 Info : 30M x 0.53mm x 0. Signal #2 Info : 30M x 0.53mm x 0.42um





ANALYSIS DATA SHEET

Pesticides - SW 846 8081B

Client: **Dynamic Earth LLC**
Client Sample ID: **G-16-3**
Lab Sample ID: **2120938-09**
Project: **Old Orchard G.C.**
Work Order: **2120938**

Date Sampled:	12/21/22 11:44	Prep Date:	12/29/22 07:13	File ID:	7T31654.D
Init/Final Vol:	15 g / 10 mL	Prep Batch:	B2L2901	Analyzed:	12/31/22 22:11
Dilution:	1	Matrix:	Soil	Sequence:	SAA0020
Percent Solids:	86.59	Prep Method:	Microwave Extraction		

CAS NO.	COMPOUND	CONC. (mg/kg dry)	MDL	RL	Qual
1024-57-3	Heptachlor Epoxide	0.0100	0.000758	0.00150	

ND, U - Indicates compound analyzed for but not detected
J - Indicates estimated value
B - Indicates compound found in associated blank
E - Concentration exceeds highest calibration standard

D - Indicates result is based on a dilution
H - Indicates a Hold Time violation
P - Greater than 25% diff. between 2 GC columns.
MDL - Minimum detection limit, **RL** - Reporting limit

F-I

Quantitation Report (QT Reviewed)

Signal #1 : G:\HPCHEM\GCECD7\DATA\20221230\7T31654.D\ECD1A.CH Vial: 65
Signal #2 : G:\HPCHEM\GCECD7\DATA\20221230\7T31654.D\ECD2B.CH
Acq On : 31 Dec 2022 10:11 pm Operator: WD
Sample : 2120938-09 Inst : GCECD-7
Misc : Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Jan 3 13:53 2023 Quant Results File: 80811228.RES

Quant Method : G:\HPCHEM\G...\80811228.M (Chemstation Integrator)
Title : Pesticides by Method SW-846 8081B
Last Update : Tue Jan 03 13:40:33 2023
Response via : Initial Calibration
DataAcq Meth : RUNPEST1.M

Volume Inj. : 2ul
Signal #1 Phase : RTx-50 Signal #2 Phase: RTx-CLPesticides II
Signal #1 Info : 30M x 0.53mm x 0. Signal #2 Info : 30M x 0.53mm x 0.42um

Compound	RT#1	RT#2	Resp#1	Resp#2	ug/kg	ug/kg
System Monitoring Compounds						
1) S TCMX	4.13f	5.07f	1310.2E6	786.2E6	41.380	53.660 #
Spiked Amount 50.000	Range 43 - 129		Recovery =		82.76%	107.32%
21) S Decachlorobiphen	18.84	20.43	1199.7E6	500.5E6	42.924m	45.957m
Spiked Amount 50.000	Range 42 - 136		Recovery =		85.85%	91.91%
Target Compounds						
8) Heptachlor epoxi	10.35f	13.45f	573.1E6	243.2E6	12.986	13.064
Sum Chlordane (gamma)			0	0	N.D.	N.D.
Average Chlordane (gamma)					0.000	0.000
Sum Toxaphene (1)			0	0	N.D.	N.D.
Average Toxaphene (1)					0.000	0.000

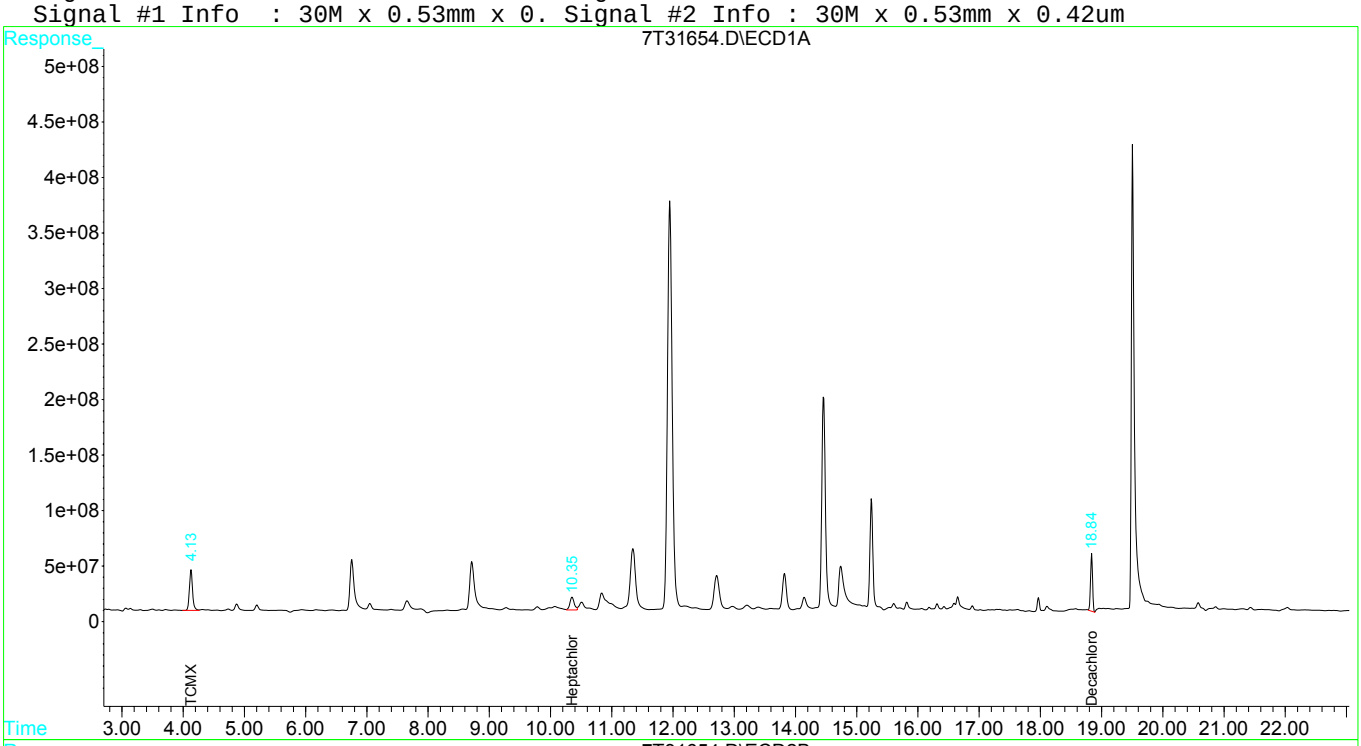
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.
7T31654.D 80811228.M Tue Jan 03 13:56:42 2023 SS

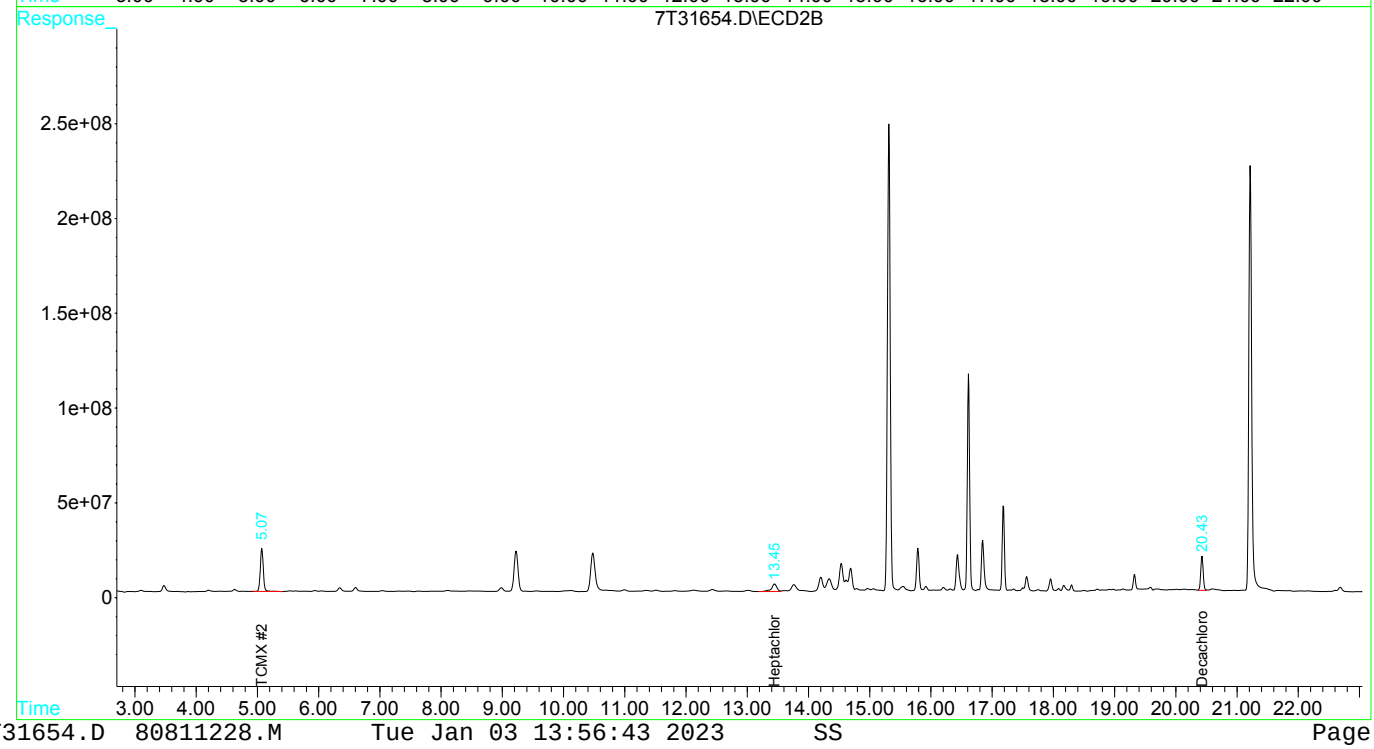
Quantitation Report (QT Reviewed)

Signal #1 : G:\HPCHEM\GCECD7\DATA\20221230\7T31654.D\ECD1A.CH Vial: 65
Signal #2 : G:\HPCHEM\GCECD7\DATA\20221230\7T31654.D\ECD2B.CH
Acq On : 31 Dec 2022 10:11 pm Operator: WD
Sample : 2120938-09 Inst : GCECD-7
Misc : Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Jan 3 13:53 2023 Quant Results File: 80811228.RES

Quant Method : G:\HPCHEM\G...\80811228.M (Chemstation Integrator)
Title : Pesticides by Method SW-846 8081B
Last Update : Tue Jan 03 13:40:33 2023
Response via : Multiple Level Calibration
DataAcq Meth : RUNPEST1.M

Volume Inj. : 2ul
Signal #1 Phase : RTx-50 Signal #2 Phase: RTx-CLPesticides II
Signal #1 Info : 30M x 0.53mm x 0. Signal #2 Info : 30M x 0.53mm x 0.42um





ANALYSIS DATA SHEET

Pesticides - SW 846 8081B

Client: **Dynamic Earth LLC**
Client Sample ID: **G-16-4**
Lab Sample ID: **2120938-10**
Project: **Old Orchard G.C.**
Work Order: **2120938**

Date Sampled:	12/21/22 11:48	Prep Date:	12/29/22 07:13	File ID:	7T31584.D
Init/Final Vol:	15 g / 10 mL	Prep Batch:	B2L2901	Analyzed:	12/30/22 15:53
Dilution:	1	Matrix:	Soil	Sequence:	SAA0005
Percent Solids:	85.42	Prep Method:	Microwave Extraction		

CAS NO.	COMPOUND	CONC. (mg/kg dry)	MDL	RL	Qual
1024-57-3	Heptachlor Epoxide	0.0195	0.000768	0.00152	

ND, U - Indicates compound analyzed for but not detected
J - Indicates estimated value
B - Indicates compound found in associated blank
E - Concentration exceeds highest calibration standard

D - Indicates result is based on a dilution
H - Indicates a Hold Time violation
P - Greater than 25% diff. between 2 GC columns.
MDL - Minimum detection limit, **RL** - Reporting limit

F-I

Quantitation Report (QT Reviewed)

Signal #1 : G:\HPCHEM\GCECD7\DATA\20221229A\7T31584.D\ECD1A.CH Vial: 62
Signal #2 : G:\HPCHEM\GCECD7\DATA\20221229A\7T31584.D\ECD2B.CH
Acq On : 30 Dec 2022 15:53 Operator: WD
Sample : 2120938-10 Inst : GCECD-7
Misc : Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Jan 3 12:15 2023 Quant Results File: 80811228.RES

Quant Method : G:\HPCHEM\G...\80811228.M (Chemstation Integrator)
Title : Pesticides by Method SW-846 8081B
Last Update : Fri Dec 30 10:52:46 2022
Response via : Initial Calibration
DataAcq Meth : RUNPEST1.M

Volume Inj. : 2ul
Signal #1 Phase : RTx-50 Signal #2 Phase: RTx-CLPesticides II
Signal #1 Info : 30M x 0.53mm x 0. Signal #2 Info : 30M x 0.53mm x 0.42um

	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/kg	ug/kg
	System Monitoring Compounds						
1) S	TCMX	4.00	4.93	748.3E6	435.4E6	23.634	29.717 #
Spiked Amount	50.000	Range 43 - 129		Recovery =		47.27%	59.43%
21) S	Decachlorobiphen	18.74	20.31	704.9E6	267.9E6	25.219	24.600
Spiked Amount	50.000	Range 42 - 136		Recovery =		50.44%	49.20%
	Target Compounds						
8)	Heptachlor epoxi	10.13	13.20	1100.6E6	489.8E6	24.941	26.307
10)	4,4'-DDE	11.70	15.17	36277.7E6	15025.3E6	836.952	991.308
11) M	Dieldrin	12.70	15.41	529.3E6	184.1E6	11.876	11.100m
13)	4,4'-DDD	14.28	16.50	13875.4E6	5431.9E6	501.625	515.135
15) M	4,4'-DDT	15.09	17.08	5728.8E6	2018.1E6	167.947	184.763
22) L1	Chlordane (gamma	10.61	14.01	2551.1E6	908.7E6	56.338	48.601
23) L1	Chlordane (alpha	11.11	14.52	9070.1E6	1181.5E6	197.677	67.622 #
Sum	Chlordane (gamma)			11621.3E6	2090.2E6	254.016	116.223
Average	Chlordane (gamma)					127.008	58.112
Sum	Toxaphene (1)			0	0	N.D.	N.D.
Average	Toxaphene (1)					0.000	0.000

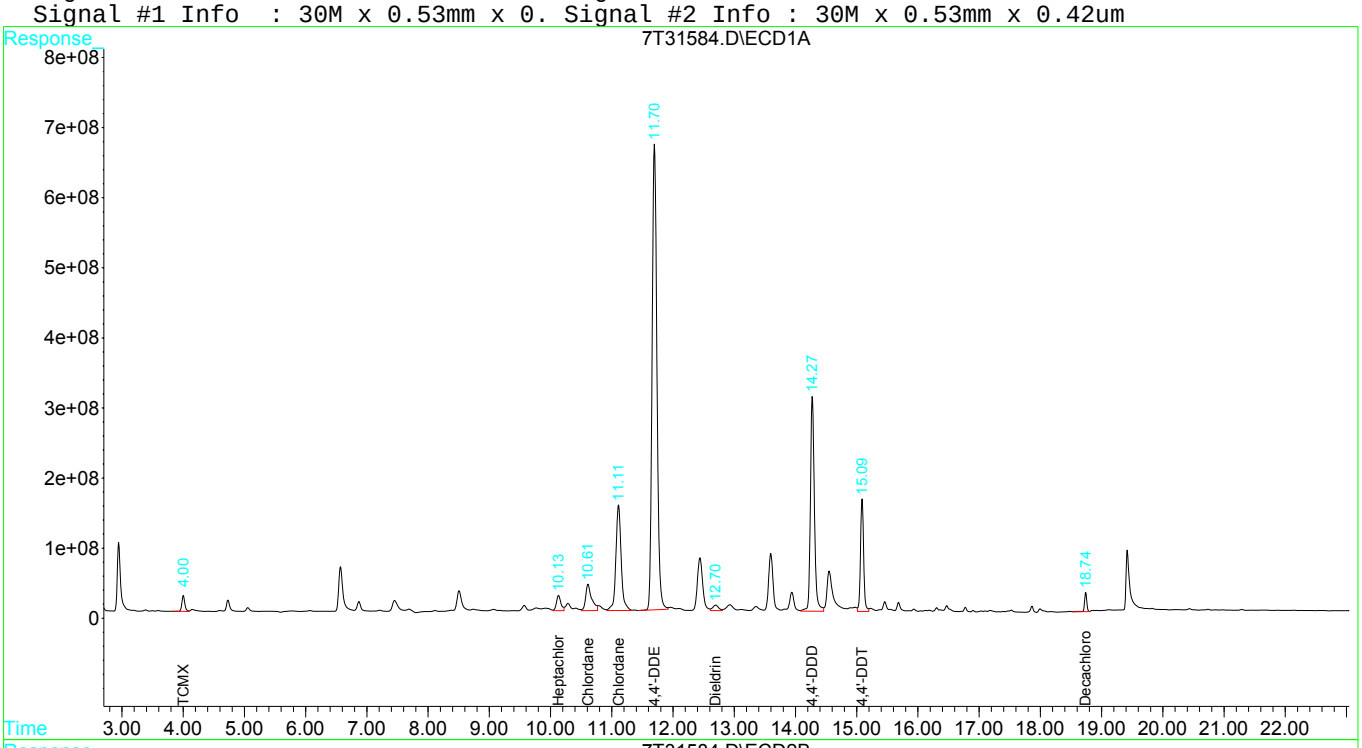
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.
7T31584.D 80811228.M Tue Jan 03 12:40:49 2023 SS

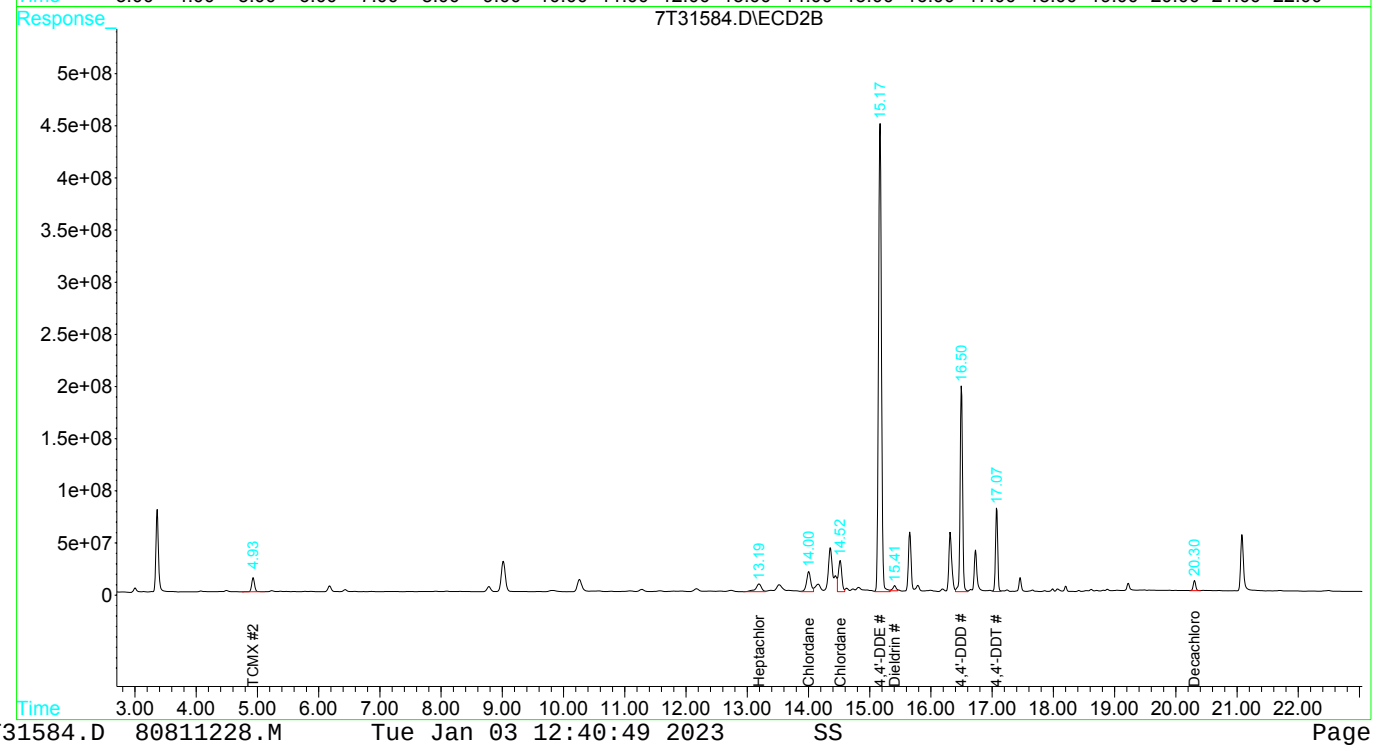
Quantitation Report (QT Reviewed)

Signal #1 : G:\HPCHEM\GCECD7\DATA\20221229A\7T31584.D\ECD1A.CH Vial: 62
Signal #2 : G:\HPCHEM\GCECD7\DATA\20221229A\7T31584.D\ECD2B.CH
Acq On : 30 Dec 2022 15:53 Operator: WD
Sample : 2120938-10 Inst : GCECD-7
Misc : Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Jan 3 12:15 2023 Quant Results File: 80811228.RES

Quant Method : G:\HPCHEM\G...\80811228.M (Chemstation Integrator)
Title : Pesticides by Method SW-846 8081B
Last Update : Fri Dec 30 10:52:46 2022
Response via : Multiple Level Calibration
DataAcq Meth : RUNPEST1.M

Volume Inj. : 2ul
Signal #1 Phase : RTx-50 Signal #2 Phase: RTx-CLPesticides II
Signal #1 Info : 30M x 0.53mm x 0. Signal #2 Info : 30M x 0.53mm x 0.42um





ANALYSIS DATA SHEET

SPLP Pesticides - SW 846 1312

Client: **Dynamic Earth LLC**
Client Sample ID: **T-11R**
Lab Sample ID: **2120938-31**
Project: **Old Orchard G.C.**
Work Order: **2120938**

Date Sampled:	12/21/22 14:00	Prep Date:	12/29/22 17:37	File ID:	7T31597.D
Init/Final Vol:	960 mL / 10 mL	Prep Batch:	B2L2929	Analyzed:	12/30/22 22:04
Dilution:	1	Matrix:	Soil	Sequence:	SAA0020
Percent Solids:	86.27	Prep Method:	Sep Funnel TCLP/SPLP		

CAS NO.	COMPOUND	CONC. (ug/L)	MDL	RL	Qual
60-57-1	Dieldrin	ND	0.000282	0.0208	U

11 11.2.

ND, U - Indicates compound analyzed for but not detected
J - Indicates estimated value
B - Indicates compound found in associated blank
E - Concentration exceeds highest calibration standard

D - Indicates result is based on a dilution
H - Indicates a Hold Time violation
P - Greater than 25% diff. between 2 GC columns.
MDL - Minimum detection limit, **RL** - Reporting limit

F-I

Quantitation Report (QT Reviewed)

Signal #1 : G:\HPCHEM\GCECD7\DATA\20221230\7T31597.D\ECD1A.CH Vial: 8
Signal #2 : G:\HPCHEM\GCECD7\DATA\20221230\7T31597.D\ECD2B.CH
Acq On : 30 Dec 2022 10:04 pm Operator: WD
Sample : 2120938-31 Inst : GCECD-7
Misc : SPLP Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Jan 3 12:26 2023 Quant Results File: 80811228.RES

Quant Method : G:\HPCHEM\G...\80811228.M (Chemstation Integrator)
Title : Pesticides by Method SW-846 8081B
Last Update : Tue Jan 03 10:57:11 2023
Response via : Initial Calibration
DataAcq Meth : RUNPEST1.M

Volume Inj. : 2ul
Signal #1 Phase : RTx-50 Signal #2 Phase: RTx-CLPesticides II
Signal #1 Info : 30M x 0.53mm x 0. Signal #2 Info : 30M x 0.53mm x 0.42um

Compound	RT#1	RT#2	Resp#1	Resp#2	ug/kg	ug/kg
System Monitoring Compounds						
1) S TCMX	4.08	5.02	1179.8E6	671.4E6	37.262	45.822
Spiked Amount 50.000	Range 43 - 129		Recovery =		74.52%	91.64%
21) S Decachlorobiphen	18.81	20.39	1222.8E6	448.4E6	43.749	41.170
Spiked Amount 50.000	Range 42 - 136		Recovery =		87.50%	82.34%
Target Compounds						
Sum Chlordane (gamma)			0	0	N.D.	N.D.
Average Chlordane (gamma)					0.000	0.000
Sum Toxaphene (1)			0	0	N.D.	N.D.
Average Toxaphene (1)					0.000	0.000

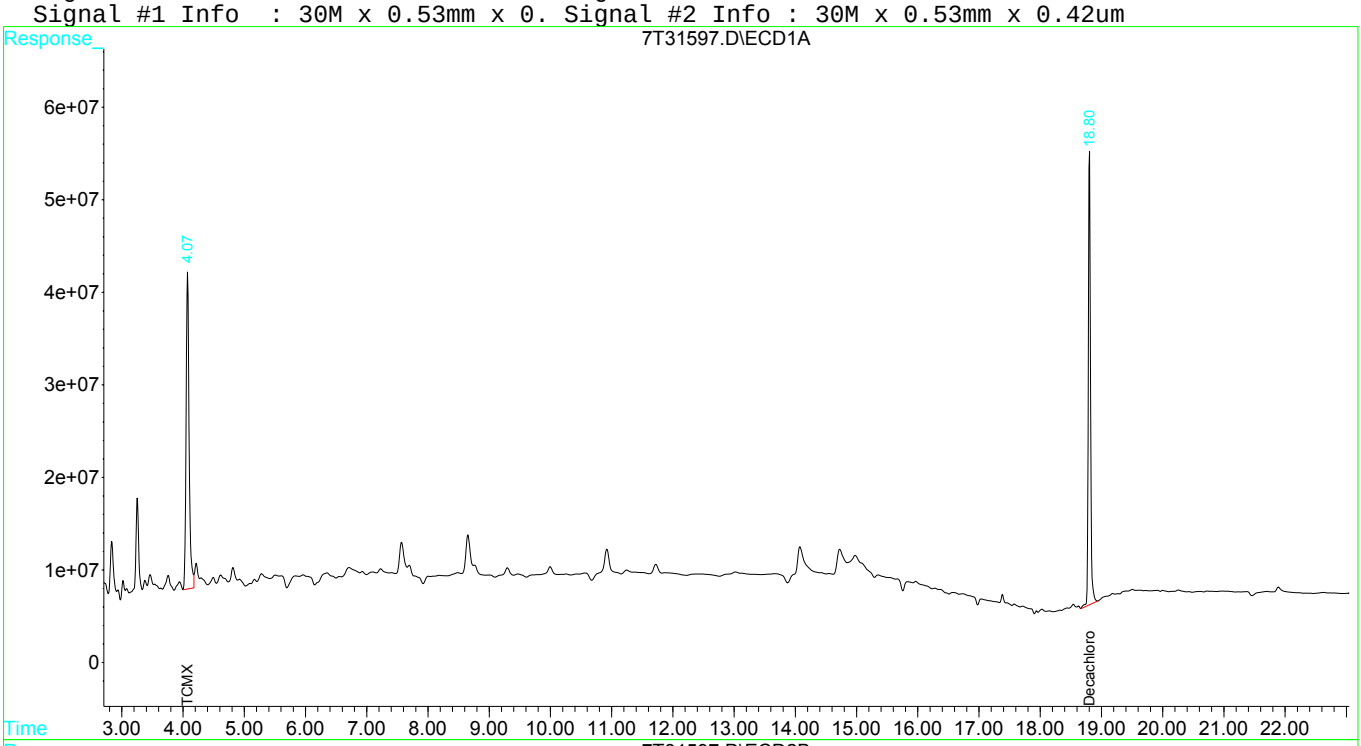
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.
7T31597.D 80811228.M Tue Jan 03 13:54:25 2023 SS

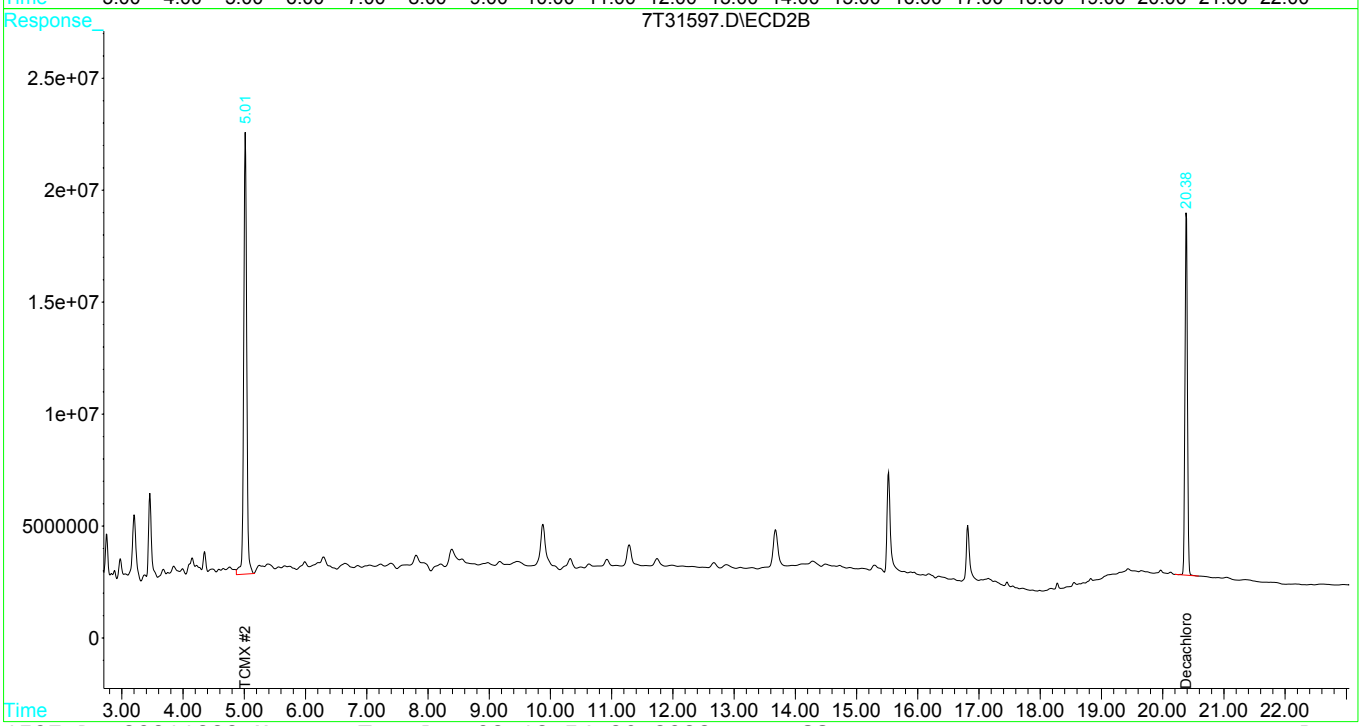
Quantitation Report (QT Reviewed)

Signal #1 : G:\HPCHEM\GCECD7\DATA\20221230\7T31597.D\ECD1A.CH Vial: 8
Signal #2 : G:\HPCHEM\GCECD7\DATA\20221230\7T31597.D\ECD2B.CH
Acq On : 30 Dec 2022 10:04 pm Operator: WD
Sample : 2120938-31 Inst : GCECD-7
Misc : SPLP Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Jan 3 12:26 2023 Quant Results File: 80811228.RES

Quant Method : G:\HPCHEM\G...\80811228.M (Chemstation Integrator)
Title : Pesticides by Method SW-846 8081B
Last Update : Tue Jan 03 10:57:11 2023
Response via : Multiple Level Calibration
DataAcq Meth : RUNPEST1.M

Volume Inj. : 2ul
Signal #1 Phase : RTx-50 Signal #2 Phase: RTx-CLPesticides II
Signal #1 Info : 30M x 0.53mm x 0. Signal #2 Info : 30M x 0.53mm x 0.42um





ANALYSIS DATA SHEET

Pesticides - SW 846 8081B

Client: **Dynamic Earth LLC**
Client Sample ID: **G-9-GW**
Lab Sample ID: **2120938-32**
Project: **Old Orchard G.C.**
Work Order: **2120938**

Date Sampled:	12/21/22 14:55	Prep Date:	12/27/22 12:58	File ID:	7T31541.D
Init/Final Vol:	1000 mL / 10 m	Prep Batch:	B2L2742	Analyzed:	12/29/22 21:42
Dilution:	1	Matrix:	Ground Water	Sequence:	S2L3013
		Prep Method:	Sep Funnel GC 8000		

CAS NO.	COMPOUND	CONC. (ug/L)	MDL	RL	Qual
72-54-8	4,4'-DDD	ND	0.000378	0.0200	U
72-55-9	4,4'-DDE [2C]	0.00300	0.000234	0.0200	J
50-29-3	4,4'-DDT	ND	0.000319	0.0200	U
309-00-2	Aldrin	ND	0.000527	0.0200	U
319-84-6	alpha-BHC	ND	0.000255	0.0200	U
319-85-7	beta-BHC	ND	0.000371	0.0200	U
57-74-9	Chlordane [2C]	0.0159	0.000327	0.0500	J
319-86-8	delta-BHC	ND	0.000320	0.0200	U
60-57-1	Dieldrin	ND	0.000271	0.0200	U
959-98-8	Endosulfan I	ND	0.000380	0.0200	U
33213-65-9	Endosulfan II	ND	0.000254	0.0200	U
1031-07-8	Endosulfan sulfate	ND	0.000138	0.0200	U
72-20-8	Endrin	ND	0.000229	0.0200	U
7421-93-4	Endrin aldehyde	ND	0.000318	0.0200	U
53494-70-5	Endrin ketone	ND	0.000203	0.0200	U
58-89-9	gamma-BHC (Lindane)	ND	0.000241	0.0200	U
76-44-8	Heptachlor	ND	0.000563	0.0200	U
1024-57-3	Heptachlor Epoxide [2C]	0.130	0.000302	0.0200	
72-43-5	Methoxychlor	ND	0.000343	0.0200	U
8001-35-2	Toxaphene	ND	0.0237	0.200	U

ND, U - Indicates compound analyzed for but not detected
J - Indicates estimated value
B - Indicates compound found in associated blank
E - Concentration exceeds highest calibration standard
D - Indicates result is based on a dilution
H - Indicates a Hold Time violation
P - Greater than 25% diff. between 2 GC columns.
MDL - Minimum detection limit, **RL** - Reporting limit

F-I

Quantitation Report (QT Reviewed)

Signal #1 : G:\HPCHEM\GCECD7\DATA\20221229\7T31541.D\ECD1A.CH Vial: 16
Signal #2 : G:\HPCHEM\GCECD7\DATA\20221229\7T31541.D\ECD2B.CH
Acq On : 29 Dec 2022 9:42 pm Operator: WD
Sample : 2120938-32 Inst : GCECD-7
Misc : Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Dec 30 12:18 2022 Quant Results File: 80811228.RES

Quant Method : G:\HPCHEM\G...\80811228.M (Chemstation Integrator)
Title : Pesticides by Method SW-846 8081B
Last Update : Fri Dec 30 10:52:46 2022
Response via : Initial Calibration
DataAcq Meth : RUNPEST1.M

Volume Inj. : 2ul
Signal #1 Phase : RTx-50 Signal #2 Phase: RTx-CLPesticides II
Signal #1 Info : 30M x 0.53mm x 0. Signal #2 Info : 30M x 0.53mm x 0.42um

Compound	RT#1	RT#2	Resp#1	Resp#2	ug/kg	ug/kg
System Monitoring Compounds						
1) S TCMX	4.00	4.92	968.9E6	630.2E6	30.602	43.014 #
Spiked Amount 50.000	Range 43 - 129		Recovery =		61.20%	86.03%
21) S Decachlorobiphen	18.74	20.30	1097.3E6	411.1E6	39.260	37.751
Spiked Amount 50.000	Range 42 - 136		Recovery =		78.52%	75.50%
Target Compounds						
8) Heptachlor epoxi	10.12	13.18	613.2E6	241.4E6	13.895	12.965
10) 4,4'-DDE	11.72	15.16	16126325	4619997	0.372m	0.305m
22) L1 Chlordane (gamma	10.60	14.00	79012784	18647018	1.745m	0.997 #
23) L1 Chlordane (alpha	11.10	14.51	54114027	10252499	1.179m	0.587m#
Sum Chlordane (gamma)			133.1E6	28899517	2.924	1.584
Average Chlordane (gamma)					1.462	0.792
Sum Toxaphene (1)			0	0	N.D.	N.D.
Average Toxaphene (1)					0.000	0.000

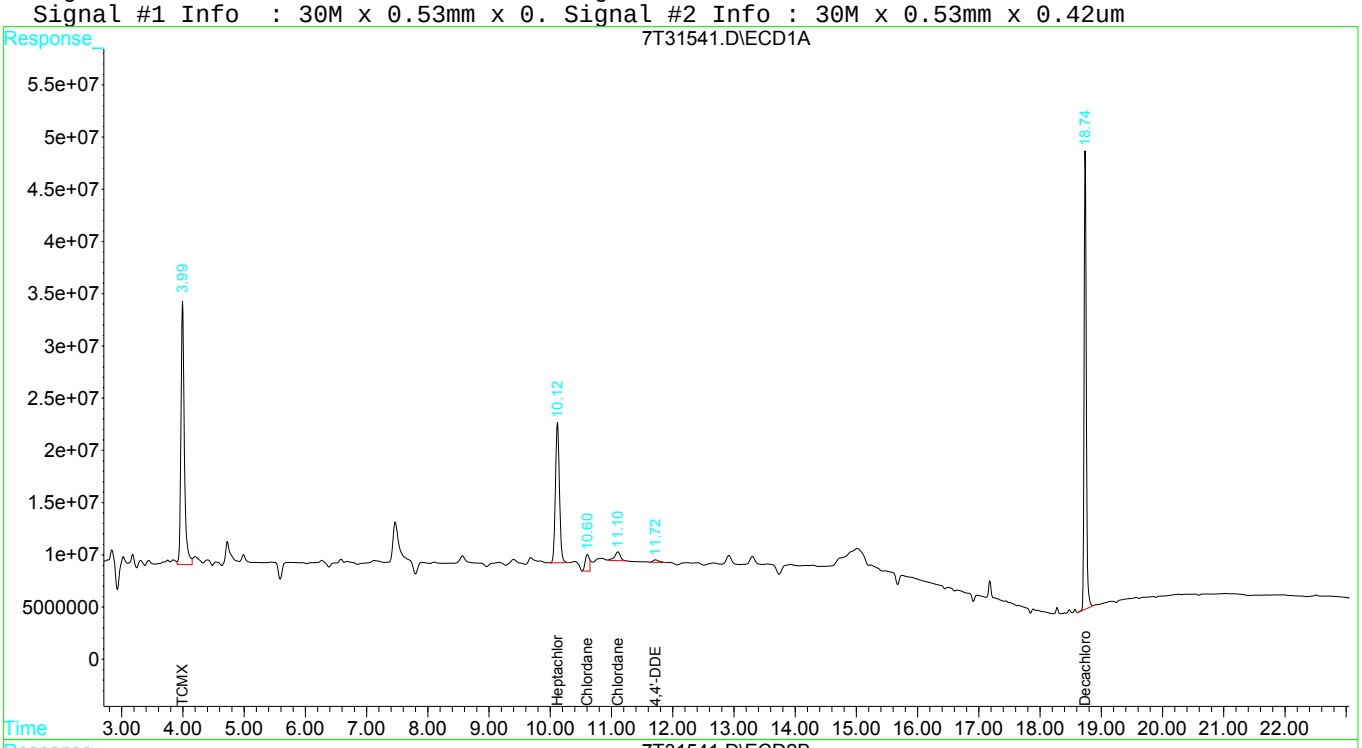
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7T31541.D 80811228.M Fri Dec 30 13:35:04 2022 SS Page 1

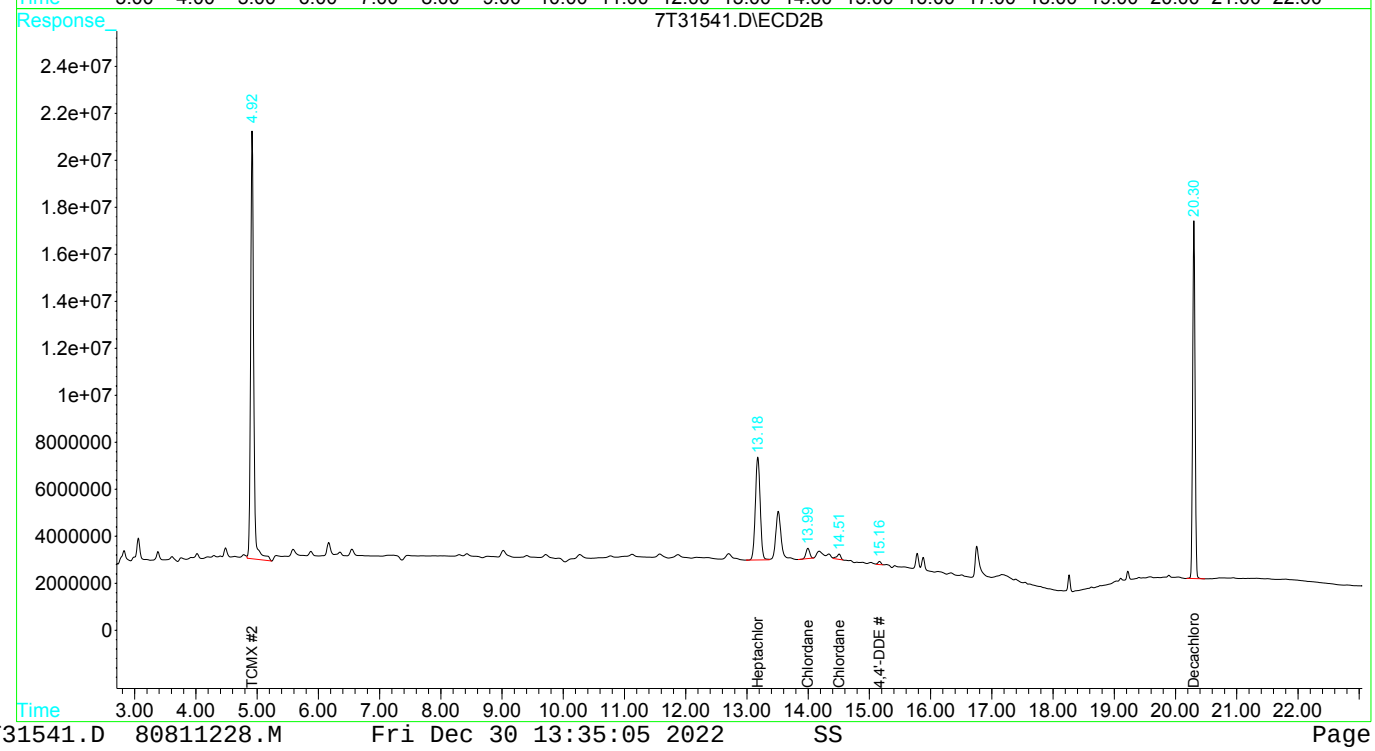
Quantitation Report (QT Reviewed)

Signal #1 : G:\HPCHEM\GCECD7\DATA\20221229\7T31541.D\ECD1A.CH Vial: 16
Signal #2 : G:\HPCHEM\GCECD7\DATA\20221229\7T31541.D\ECD2B.CH
Acq On : 29 Dec 2022 9:42 pm Operator: WD
Sample : 2120938-32 Inst : GCECD-7
Misc : Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Dec 30 12:18 2022 Quant Results File: 80811228.RES

Quant Method : G:\HPCHEM\G...\80811228.M (Chemstation Integrator)
Title : Pesticides by Method SW-846 8081B
Last Update : Fri Dec 30 10:52:46 2022
Response via : Multiple Level Calibration
DataAcq Meth : RUNPEST1.M

Volume Inj. : 2ul
Signal #1 Phase : RTx-50 Signal #2 Phase: RTx-CLPesticides II
Signal #1 Info : 30M x 0.53mm x 0. Signal #2 Info : 30M x 0.53mm x 0.42um





ANALYSIS DATA SHEET

SPLP Pesticides - SW 846 1312

Client: **Dynamic Earth LLC**
Client Sample ID: **F-18R**
Lab Sample ID: **2120938-33**
Project: **Old Orchard G.C.**
Work Order: **2120938**

Date Sampled:	12/21/22 14:10	Prep Date:	12/29/22 17:37	File ID:	7T31598.D
Init/Final Vol:	980 mL / 10 mL	Prep Batch:	B2L2929	Analyzed:	12/30/22 22:29
Dilution:	1	Matrix:	Soil	Sequence:	SAA0020
Percent Solids:	86.45	Prep Method:	Sep Funnel TCLP/SPLP		

CAS NO.	COMPOUND	CONC. (ug/L)	MDL	RL	Qual
60-57-1	Dieldrin	0.00388	0.000277	0.0204	J

11 11.2.

ND, U - Indicates compound analyzed for but not detected
J - Indicates estimated value
B - Indicates compound found in associated blank
E - Concentration exceeds highest calibration standard

D - Indicates result is based on a dilution
H - Indicates a Hold Time violation
P - Greater than 25% diff. between 2 GC columns.
MDL - Minimum detection limit, **RL** - Reporting limit

F-I

Quantitation Report (QT Reviewed)

Signal #1 : G:\HPCHEM\GCECD7\DATA\20221230\7T31598.D\ECD1A.CH Vial: 9
Signal #2 : G:\HPCHEM\GCECD7\DATA\20221230\7T31598.D\ECD2B.CH
Acq On : 30 Dec 2022 10:29 pm Operator: WD
Sample : 2120938-33 Inst : GCECD-7
Misc : SPLP Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Jan 3 12:27 2023 Quant Results File: 80811228.RES

Quant Method : G:\HPCHEM\G...\80811228.M (Chemstation Integrator)
Title : Pesticides by Method SW-846 8081B
Last Update : Tue Jan 03 10:57:11 2023
Response via : Initial Calibration
DataAcq Meth : RUNPEST1.M

Volume Inj. : 2ul
Signal #1 Phase : RTx-50 Signal #2 Phase: RTx-CLPesticides II
Signal #1 Info : 30M x 0.53mm x 0. Signal #2 Info : 30M x 0.53mm x 0.42um

Compound	RT#1	RT#2	Resp#1	Resp#2	ug/kg	ug/kg
System Monitoring Compounds						
1) S TCMX	4.08	5.02	1211.5E6	742.8E6	38.263	50.699 #
Spiked Amount 50.000	Range 43 - 129		Recovery =		76.53%	101.40%
21) S Decachlorobiphen	18.81	20.39	1280.5E6	471.9E6	45.814	43.328
Spiked Amount 50.000	Range 42 - 136		Recovery =		91.63%	86.66%
Target Compounds						
11) M Dieldrin	12.87	15.51	16992541	8167340	0.381m	0.492m#
Sum Chlordane (gamma)			0	0	N.D.	N.D.
Average Chlordane (gamma)					0.000	0.000
Sum Toxaphene (1)			0	0	N.D.	N.D.
Average Toxaphene (1)					0.000	0.000

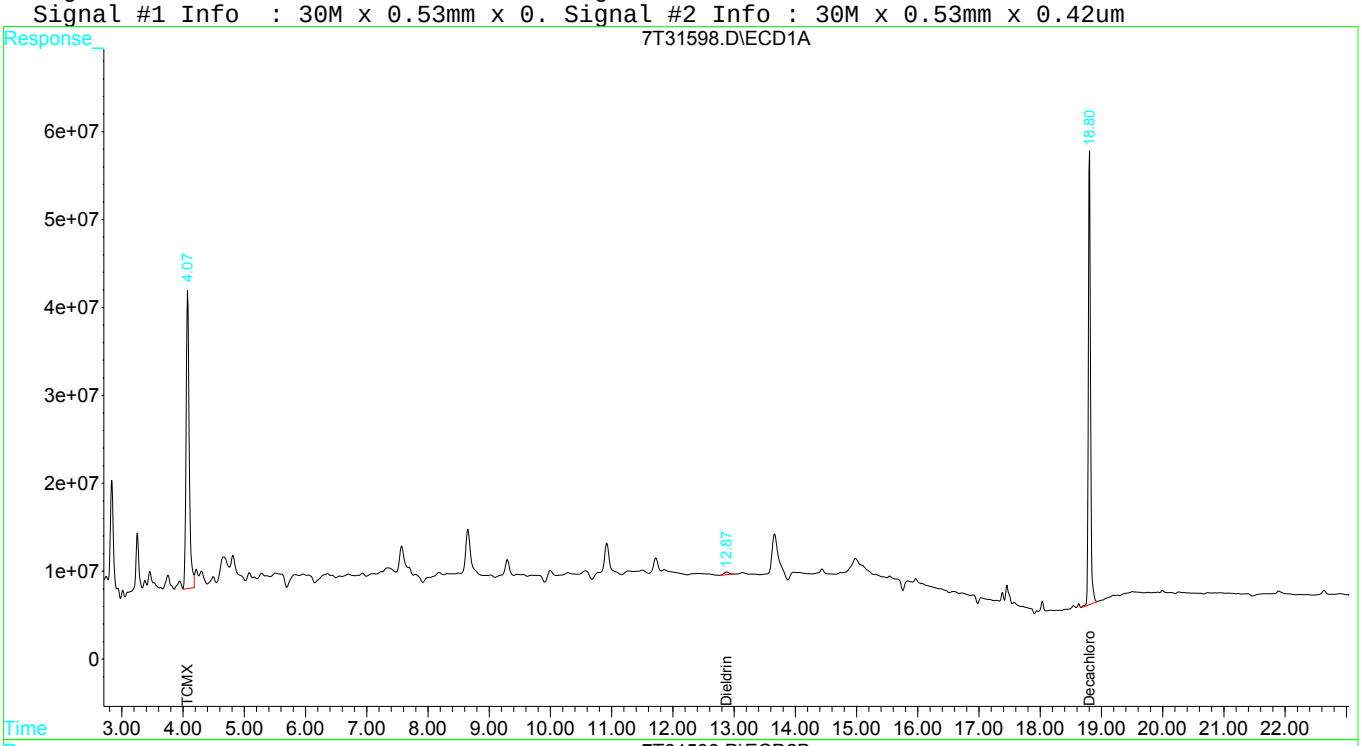
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7T31598.D 80811228.M Tue Jan 03 13:54:27 2023 SS

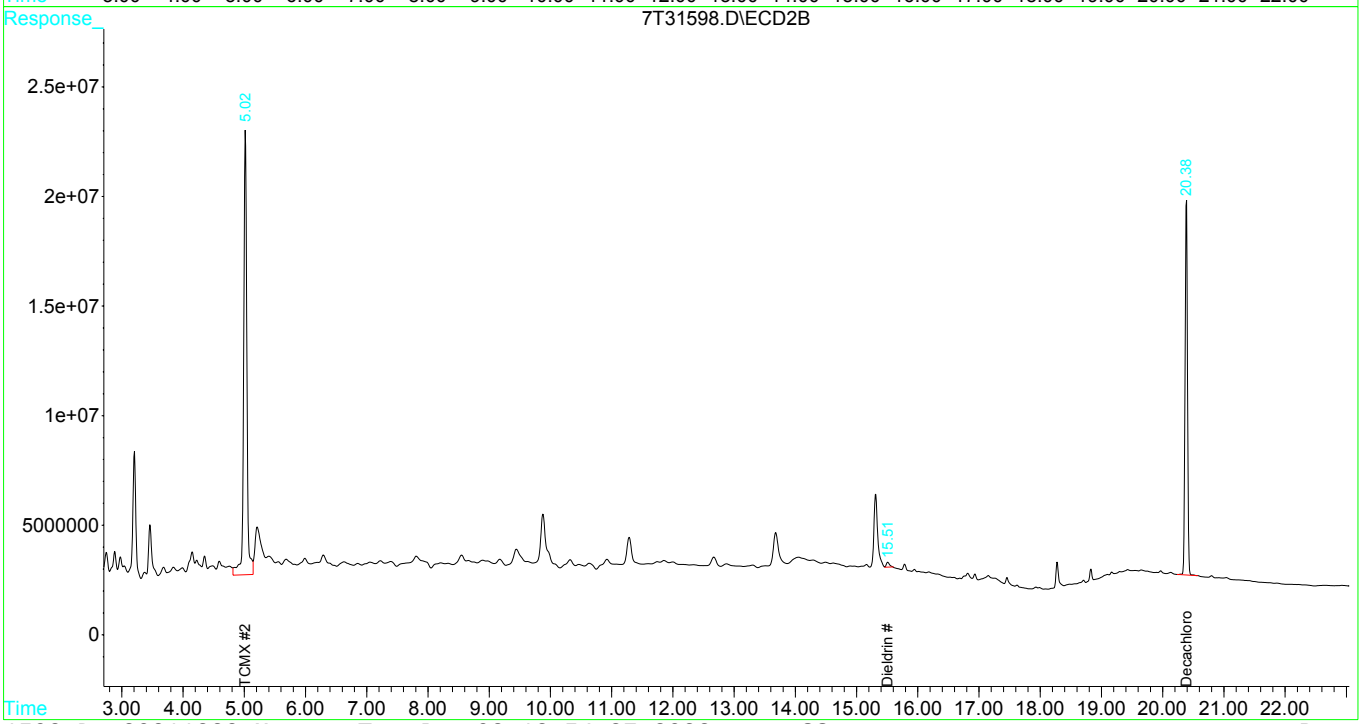
Quantitation Report (QT Reviewed)

Signal #1 : G:\HPCHEM\GCECD7\DATA\20221230\7T31598.D\ECD1A.CH Vial: 9
Signal #2 : G:\HPCHEM\GCECD7\DATA\20221230\7T31598.D\ECD2B.CH
Acq On : 30 Dec 2022 10:29 pm Operator: WD
Sample : 2120938-33 Inst : GCECD-7
Misc : SPLP Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Jan 3 12:27 2023 Quant Results File: 80811228.RES

Quant Method : G:\HPCHEM\G...\80811228.M (Chemstation Integrator)
Title : Pesticides by Method SW-846 8081B
Last Update : Tue Jan 03 10:57:11 2023
Response via : Multiple Level Calibration
DataAcq Meth : RUNPEST1.M

Volume Inj. : 2ul
Signal #1 Phase : RTx-50 Signal #2 Phase: RTx-CLPesticides II
Signal #1 Info : 30M x 0.53mm x 0. Signal #2 Info : 30M x 0.53mm x 0.42um





ANALYSIS DATA SHEET

SPLP Pesticides - SW 846 1312

Client: **Dynamic Earth LLC**
Client Sample ID: **F-15R**
Lab Sample ID: **2120938-34**
Project: **Old Orchard G.C.**
Work Order: **2120938**

Date Sampled:	12/21/22 16:00	Prep Date:	12/29/22 17:37	File ID:	7T31599.D
Init/Final Vol:	920 mL / 10 mL	Prep Batch:	B2L2929	Analyzed:	12/30/22 22:55
Dilution:	1	Matrix:	Soil	Sequence:	SAA0020
Percent Solids:	85.20	Prep Method:	Sep Funnel TCLP/SPLP		

CAS NO.	COMPOUND	CONC. (ug/L)	MDL	RL	Qual
72-55-9	4,4'-DDE	0.166	0.000254	0.0217	

ND, U - Indicates compound analyzed for but not detected
J - Indicates estimated value
B - Indicates compound found in associated blank
E - Concentration exceeds highest calibration standard

D - Indicates result is based on a dilution
H - Indicates a Hold Time violation
P - Greater than 25% diff. between 2 GC columns.
MDL - Minimum detection limit, **RL** - Reporting limit

F-I

Quantitation Report (QT Reviewed)

Signal #1 : G:\HPCHEM\GCECD7\DATA\20221230\7T31599.D\ECD1A.CH Vial: 10
Signal #2 : G:\HPCHEM\GCECD7\DATA\20221230\7T31599.D\ECD2B.CH
Acq On : 30 Dec 2022 10:55 pm Operator: WD
Sample : 2120938-34 Inst : GCECD-7
Misc : SPLP Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Jan 3 12:27 2023 Quant Results File: 80811228.RES

Quant Method : G:\HPCHEM\G...\80811228.M (Chemstation Integrator)
Title : Pesticides by Method SW-846 8081B
Last Update : Tue Jan 03 10:57:11 2023
Response via : Initial Calibration
DataAcq Meth : RUNPEST1.M

Volume Inj. : 2ul
Signal #1 Phase : RTx-50 Signal #2 Phase: RTx-CLPesticides II
Signal #1 Info : 30M x 0.53mm x 0. Signal #2 Info : 30M x 0.53mm x 0.42um

Compound	RT#1	RT#2	Resp#1	Resp#2	ug/kg	ug/kg
System Monitoring Compounds						
1) S TCMX	4.08	5.02	1053.3E6	537.2E6	33.265	36.666
Spiked Amount 50.000	Range 43 - 129		Recovery =		66.53%	73.33%
21) S Decachlorobiphen	18.81	20.39	1086.5E6	393.2E6	38.874	36.107
Spiked Amount 50.000	Range 42 - 136		Recovery =		77.75%	72.21%
Target Compounds						
10) 4,4'-DDE	11.87f	15.27	660.9E6	254.6E6	15.247	16.797
Sum Chlordane (gamma)			0	0	N.D.	N.D.
Average Chlordane (gamma)					0.000	0.000
Sum Toxaphene (1)			0	0	N.D.	N.D.
Average Toxaphene (1)					0.000	0.000

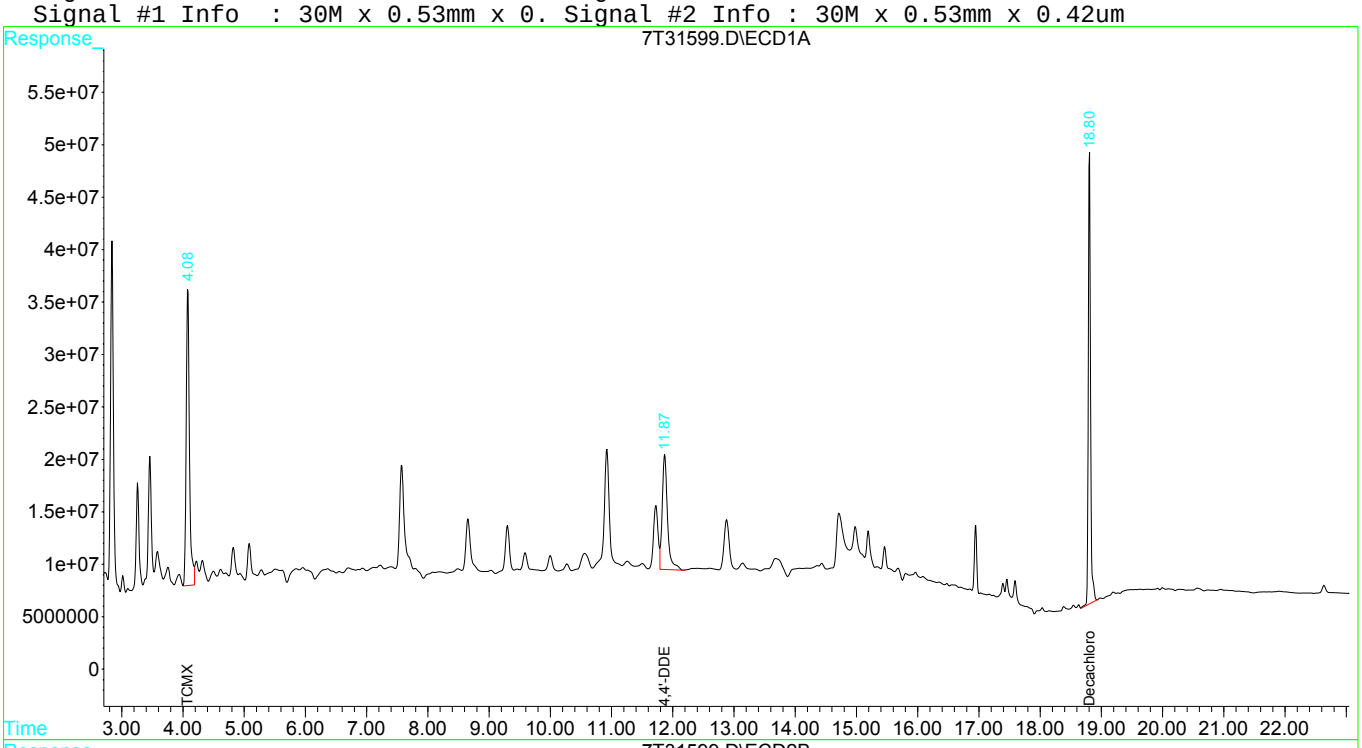
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.
7T31599.D 80811228.M Tue Jan 03 13:54:28 2023 SS

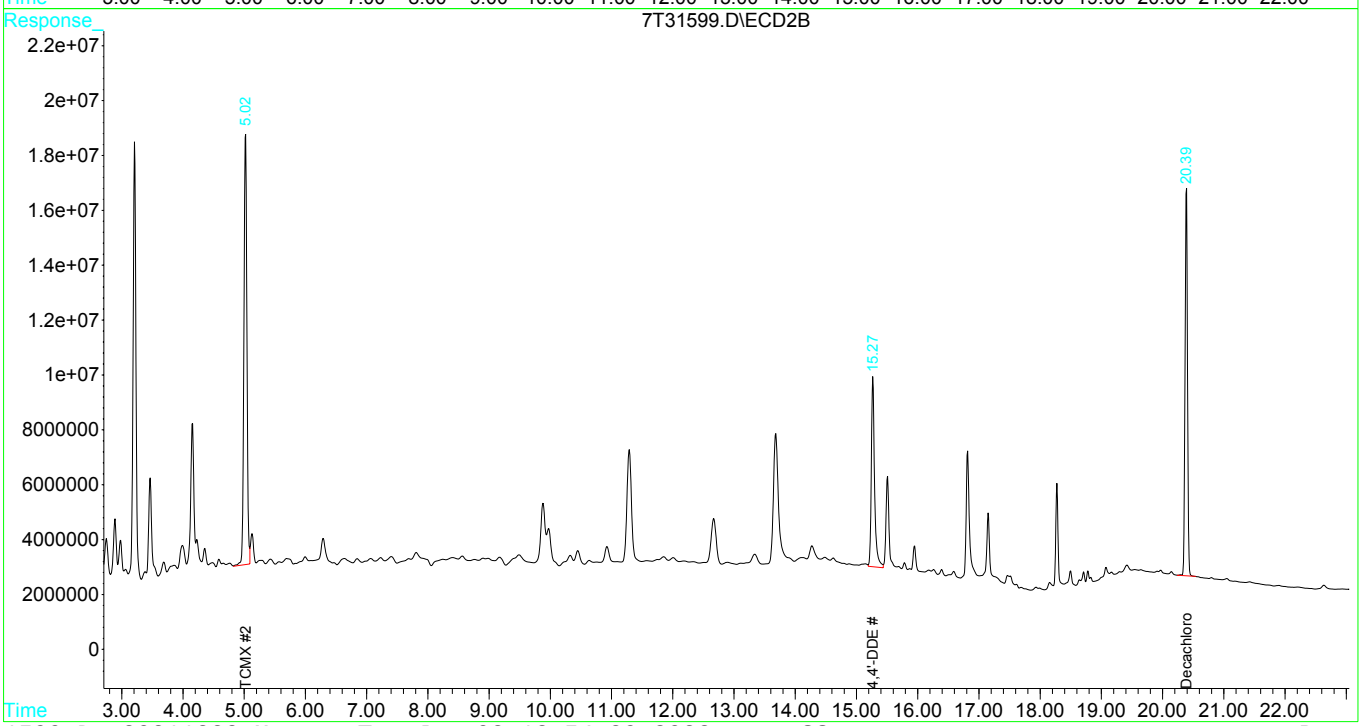
Quantitation Report (QT Reviewed)

Signal #1 : G:\HPCHEM\GCECD7\DATA\20221230\7T31599.D\ECD1A.CH Vial: 10
Signal #2 : G:\HPCHEM\GCECD7\DATA\20221230\7T31599.D\ECD2B.CH
Acq On : 30 Dec 2022 10:55 pm Operator: WD
Sample : 2120938-34 Inst : GCECD-7
Misc : SPLP Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Jan 3 12:27 2023 Quant Results File: 80811228.RES

Quant Method : G:\HPCHEM\G...\80811228.M (Chemstation Integrator)
Title : Pesticides by Method SW-846 8081B
Last Update : Tue Jan 03 10:57:11 2023
Response via : Multiple Level Calibration
DataAcq Meth : RUNPEST1.M

Volume Inj. : 2ul
Signal #1 Phase : RTx-50 Signal #2 Phase: RTx-CLPesticides II
Signal #1 Info : 30M x 0.53mm x 0. Signal #2 Info : 30M x 0.53mm x 0.42um





ANALYSIS DATA SHEET

SPLP Pesticides - SW 846 1312

Client: **Dynamic Earth LLC**
Client Sample ID: **G-16R**
Lab Sample ID: **2120938-35**
Project: **Old Orchard G.C.**
Work Order: **2120938**

Date Sampled:	12/21/22 16:10	Prep Date:	12/29/22 17:37	File ID:	7T31600.D
Init/Final Vol:	970 mL / 10 mL	Prep Batch:	B2L2929	Analyzed:	12/30/22 23:20
Dilution:	1	Matrix:	Soil	Sequence:	SAA0020
Percent Solids:	84.58	Prep Method:	Sep Funnel TCLP/SPLP		

CAS NO.	COMPOUND	CONC. (ug/L)	MDL	RL	Qual
72-55-9	4,4'-DDE	ND	0.000241	0.0206	U

ND, U - Indicates compound analyzed for but not detected
J - Indicates estimated value
B - Indicates compound found in associated blank
E - Concentration exceeds highest calibration standard

D - Indicates result is based on a dilution
H - Indicates a Hold Time violation
P - Greater than 25% diff. between 2 GC columns.
MDL - Minimum detection limit, **RL** - Reporting limit

F-I

Quantitation Report (QT Reviewed)

Signal #1 : G:\HPCHEM\GCECD7\DATA\20221230\7T31600.D\ECD1A.CH Vial: 11
Signal #2 : G:\HPCHEM\GCECD7\DATA\20221230\7T31600.D\ECD2B.CH
Acq On : 30 Dec 2022 11:20 pm Operator: WD
Sample : 2120938-35 Inst : GCECD-7
Misc : SPLP Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Jan 3 12:27 2023 Quant Results File: 80811228.RES

Quant Method : G:\HPCHEM\G...\80811228.M (Chemstation Integrator)
Title : Pesticides by Method SW-846 8081B
Last Update : Tue Jan 03 10:57:11 2023
Response via : Initial Calibration
DataAcq Meth : RUNPEST1.M

Volume Inj. : 2ul
Signal #1 Phase : RTx-50 Signal #2 Phase: RTx-CLPesticides II
Signal #1 Info : 30M x 0.53mm x 0. Signal #2 Info : 30M x 0.53mm x 0.42um

Compound	RT#1	RT#2	Resp#1	Resp#2	ug/kg	ug/kg
System Monitoring Compounds						
1) S TCMX	4.08	5.02	1232.4E6	614.2E6	38.921	41.920
Spiked Amount 50.000	Range 43 - 129		Recovery =		77.84%	83.84%
21) S Decachlorobiphen	18.81	20.39	1134.9E6	425.0E6	40.607	39.023
Spiked Amount 50.000	Range 42 - 136		Recovery =		81.21%	78.05%
Target Compounds						
Sum Chlordane (gamma)			0	0	N.D.	N.D.
Average Chlordane (gamma)					0.000	0.000
Sum Toxaphene (1)			0	0	N.D.	N.D.
Average Toxaphene (1)					0.000	0.000

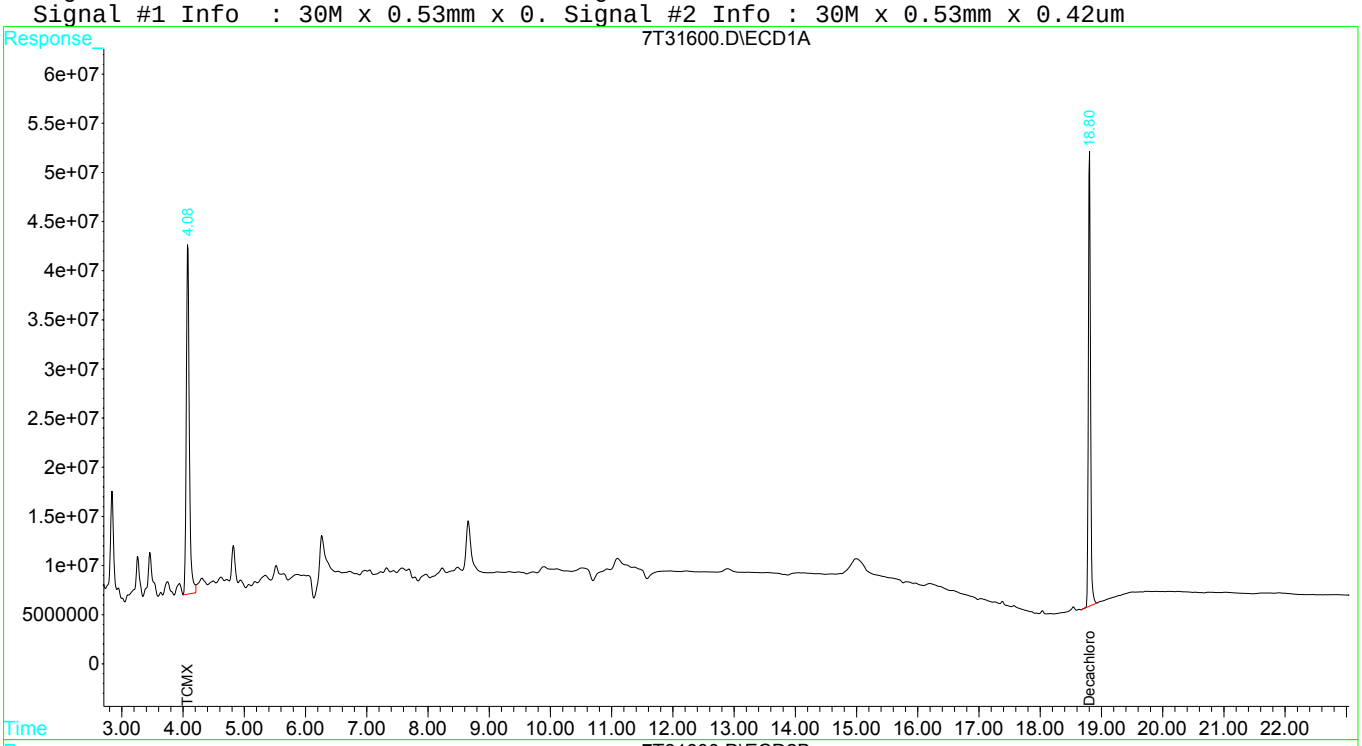
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.
7T31600.D 80811228.M Tue Jan 03 13:54:30 2023 SS

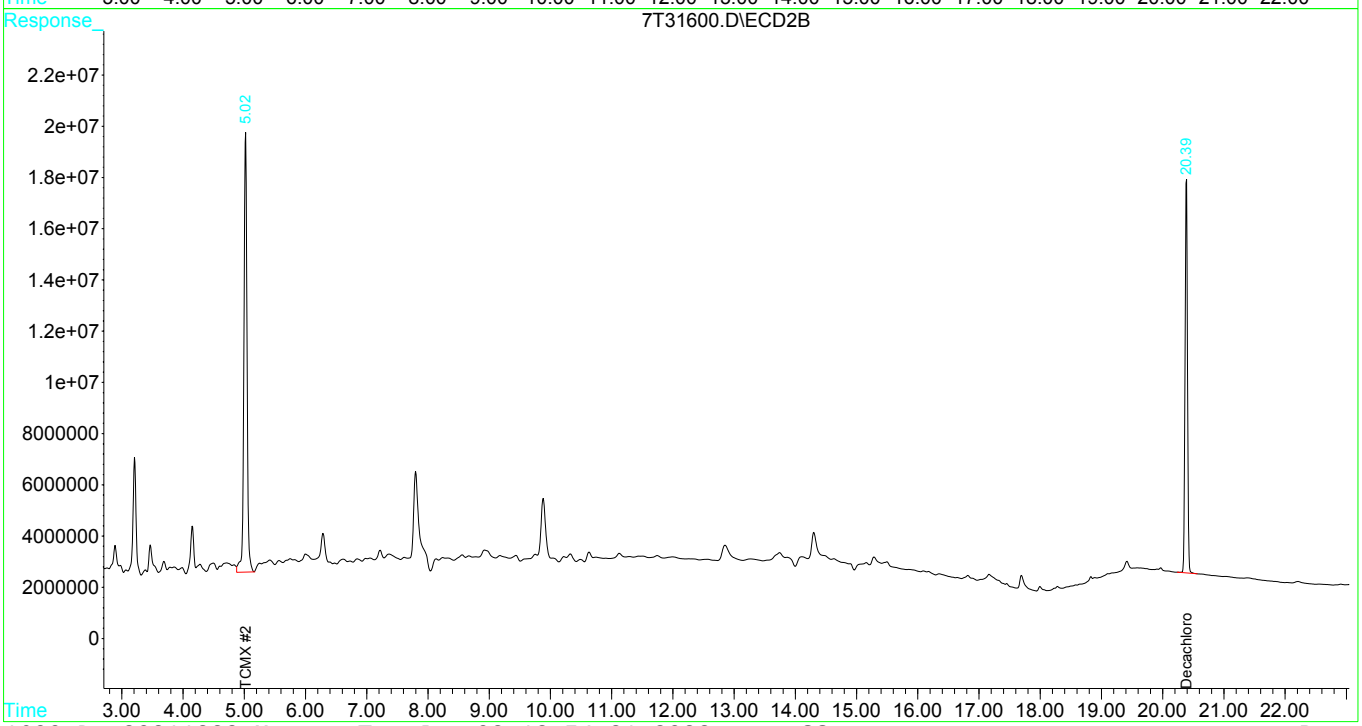
Quantitation Report (QT Reviewed)

Signal #1 : G:\HPCHEM\GCECD7\DATA\20221230\7T31600.D\ECD1A.CH Vial: 11
Signal #2 : G:\HPCHEM\GCECD7\DATA\20221230\7T31600.D\ECD2B.CH
Acq On : 30 Dec 2022 11:20 pm Operator: WD
Sample : 2120938-35 Inst : GCECD-7
Misc : SPLP Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Jan 3 12:27 2023 Quant Results File: 80811228.RES

Quant Method : G:\HPCHEM\G...\80811228.M (Chemstation Integrator)
Title : Pesticides by Method SW-846 8081B
Last Update : Tue Jan 03 10:57:11 2023
Response via : Multiple Level Calibration
DataAcq Meth : RUNPEST1.M

Volume Inj. : 2ul
Signal #1 Phase : RTx-50 Signal #2 Phase: RTx-CLPesticides II
Signal #1 Info : 30M x 0.53mm x 0. Signal #2 Info : 30M x 0.53mm x 0.42um





SURROGATE RECOVERIES

Analysis Class: PESTICIDES

Matrix: Ground Water **Method:** SW 846 8081B

Pesticides

Lab Number	File ID	TCMX	DCB	TCMX[2C]	DCB[2C]
2120938-32	7T31541.D	61.2	78.5	86.0	75.5
B2L2742-BLK1	7T31531.D	60.1	76.9	77.9	74.3
B2L2742-BS1	7T31532.D	63.9	64.2	88.9	60.9
B2L2742-MS1	7T31542.D	62.3	75.2	75.2	72.2
B2L2742-MSD1	7T31543.D	62.8	76.4	76.2	72.3

Surrogate Limits

Acronym	Lo Limit	Hi Limit	Analyte
TCMX	30	150	Tetrachloro-m-xylene
DCB	30	150	Decachlorobiphenyl
TCMX[2C]	30	150	Tetrachloro-m-xylene [2C]
DCB[2C]	30	150	Decachlorobiphenyl [2C]

F-II

* - Outside of QC Limits

SURROGATE RECOVERIES

Analysis Class: PESTICIDES

Matrix: Soil **Method:** SW 846 8081B

Pesticides

Lab Number	File ID	TCMX	DCB	TCMX[2C]	DCB[2C]
2120938-01	7T31646.D	72.3	79.7	95.4	105
2120938-02	7T31647.D	79.9	95.2	107	91.3
2120938-03	7T31648.D	87.7	98.4	117	109
2120938-04	7T31649.D	80.9	92.6	108	113
2120938-05	7T31650.D	94.7	94.2	125	115
2120938-06	7T31651.D	76.3	80.5	99.0	82.0
2120938-07	7T31652.D	84.6	95.3	110	114
2120938-08	7T31653.D	64.8	72.7	84.5	83.2
2120938-09	7T31654.D	82.8	85.8	107	91.9
2120938-10	7T31584.D	47.3	50.4	59.4	49.2
B2L2901-BLK1	7T31568.D	86.7	84.2	121	95.3
B2L2901-BS1	7T31535.D	86.9	98.0	115	95.8
B2L2901-MS1	7T31566.D	78.2	77.3	99.4	84.3
B2L2901-MSD1	7T31567.D	78.9	79.6	104	112

Surrogate Limits

Acronym	Lo Limit	Hi Limit	Analyte
TCMX	41.8	136	Tetrachloro-m-xylene
DCB	43.1	129	Decachlorobiphenyl
TCMX[2C]	41.8	136	Tetrachloro-m-xylene [2C]
DCB[2C]	43.1	129	Decachlorobiphenyl [2C]

F-II

* - Outside of QC Limits

SURROGATE RECOVERIES

Analysis Class: PESTICIDES

Matrix: Water **Method:** SW 846 1312

SPLP Pesticides

Lab Number	File ID	TCMX	DCB	TCMX[2C]	DCB[2C]
2120938-31	7T31597.D	74.5	87.5	91.6	82.3
2120938-33	7T31598.D	76.5	91.6	101	86.7
2120938-34	7T31599.D	66.5	77.7	73.3	72.2
2120938-35	7T31600.D	77.8	81.2	83.8	78.0
B2L2929-BLK1	7T31593.D	55.0	75.5	76.6	72.6
B2L2929-BLK2	7T31896.D	98.8	68.5	96.7	70.1
B2L2929-BS1	7T31594.D	64.3	64.3	84.3	61.1

Surrogate Limits

Acronym	Lo Limit	Hi Limit	Analyte
TCMX	30	150	Tetrachloro-m-xylene
DCB	30	150	Decachlorobiphenyl
TCMX[2C]	30	150	Tetrachloro-m-xylene [2C]
DCB[2C]	30	150	Decachlorobiphenyl [2C]

F-II

* - Outside of QC Limits

Batch B2L2742 **Method: SW 846 8081B** **Prepared: 12/27/2022**

B2L2742-BS1 **Source:**

Analyte	Result	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
4,4'-DDD	0.0412	ug/L	0.0500		82.4	66-143		
4,4'-DDE	0.0387	ug/L	0.0500		77.4	55-144		
4,4'-DDT	0.0558	ug/L	0.0500		112	60-137		
Alachlor	ND	ug/L				70-130		
Aldrin	0.0427	ug/L	0.0500		85.4	55-127		
alpha-BHC	0.0408	ug/L	0.0500		81.6	46-121		
alpha-Chlordane (cis)	0.0470	ug/L	0.0500		94.0	70-130		
beta-BHC	0.0516	ug/L	0.0500		103	49-123		
Chlordane	0.0851	ug/L	0.100		85.1	70-130		
delta-BHC	0.0416	ug/L	0.0500		83.2	71-124		
Dieldrin	0.0480	ug/L	0.0500		96.0	53-134		
Endosulfan I	0.0493	ug/L	0.0500		98.6	72-131		
Endosulfan II	0.0427	ug/L	0.0500		85.4	62-131		
Endosulfan sulfate	0.0419	ug/L	0.0500		83.8	81-132		
Endrin	0.0468	ug/L	0.0500		93.6	77-133		
Endrin aldehyde	0.0431	ug/L	0.0500		86.2	72-132		
Endrin ketone	0.0385	ug/L	0.0500		77.0	62-144		
gamma-BHC (Lindane)	0.0425	ug/L	0.0500		85.0	60-145		
gamma-Chlordane	0.0381	ug/L	0.0500		76.2	70-130		
Heptachlor	0.0460	ug/L	0.0500		92.0	58-131		
Heptachlor Epoxide	0.0491	ug/L	0.0500		98.2	67-136		
Methoxychlor	0.0496	ug/L	0.0500		99.2	60-136		
Metolachlor	ND	ug/L				70-130		

Batch B2L2742 (cont.) **Method: SW 846 8081B** **Prepared: 12/27/2022**

B2L2742-MS1 **Source:** 2120938-32

Analyte	Result	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
4,4'-DDD	0.0457	ug/L	0.0500	ND	91.4	60-140		
4,4'-DDE	0.0441	ug/L	0.0500	0.00370	80.8	60-140		
4,4'-DDT	0.0634	ug/L	0.0500	ND	127	60-140		
Alachlor	ND	ug/L		ND		60-140		
Aldrin	0.0500	ug/L	0.0500	ND	100	60-140		
alpha-BHC	0.0457	ug/L	0.0500	ND	91.4	60-140		
alpha-Chlordane (cis)	0.0598	ug/L	0.0500	0.0118	96.0	60-140		
beta-BHC	0.0467	ug/L	0.0500	ND	93.4	60-140		
Chlordane	0.114	ug/L	0.100	0.0292	84.5	60-140		
delta-BHC	0.0626	ug/L	0.0500	ND	125	60-140		
Dieldrin	0.0478	ug/L	0.0500	ND	95.6	60-140		
Endosulfan I	0.0490	ug/L	0.0500	ND	98.0	60-140		
Endosulfan II	0.0391	ug/L	0.0500	ND	78.2	60-140		
Endosulfan sulfate	0.0536	ug/L	0.0500	ND	107	60-140		
Endrin	0.0469	ug/L	0.0500	ND	93.8	60-140		
Endrin aldehyde	0.0486	ug/L	0.0500	ND	97.2	60-140		
Endrin ketone	0.0409	ug/L	0.0500	ND	81.8	60-140		
gamma-BHC (Lindane)	0.0420	ug/L	0.0500	ND	84.0	60-140		
gamma-Chlordane	0.0539	ug/L	0.0500	0.0174	73.0	60-140		
Heptachlor	0.0755	ug/L	0.0500	ND	151*	60-140		
Heptachlor Epoxide	0.224	ug/L	0.0500	0.139	171*	60-140		
Methoxychlor	0.0572	ug/L	0.0500	ND	114	60-140		
Metolachlor	ND	ug/L		ND		60-140		

* - Outside of QC Limits J - Result is between the MDL and RL for an Analysis reported to an RL

F-III NC - Outside the recovery criteria but Spike Amount <1/4 amount found in Source Sample

Batch B2L2742 (cont.) **Method: SW 846 8081B** **Prepared: 12/27/2022**

B2L2742-MSD1 **Source:** 2120938-32

Analyte	Result	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
4,4'-DDD	0.0461	ug/L	0.0500	ND	92.2	60-140	0.871	25
4,4'-DDE	0.0443	ug/L	0.0500	0.00370	81.2	60-140	0.452	25
4,4'-DDT	0.0647	ug/L	0.0500	ND	129	60-140	2.03	25
Aldrin	0.0452	ug/L	0.0500	ND	90.4	60-140	10.1	25
alpha-BHC	0.0465	ug/L	0.0500	ND	93.0	60-140	1.74	25
alpha-Chlordane (cis)	0.0604	ug/L	0.0500	0.0118	97.2	60-140	0.998	25
beta-BHC	0.0471	ug/L	0.0500	ND	94.2	60-140	0.853	25
Chlordane	0.115	ug/L	0.100	0.0292	85.8	60-140	1.14	25
delta-BHC	0.0377	ug/L	0.0500	ND	75.4	60-140	49.7*	25
Dieldrin	0.0479	ug/L	0.0500	ND	95.8	60-140	0.209	25
Endosulfan I	0.0495	ug/L	0.0500	ND	99.0	60-140	1.02	25
Endosulfan II	0.0417	ug/L	0.0500	ND	83.4	60-140	6.44	25
Endosulfan sulfate	0.0541	ug/L	0.0500	ND	108	60-140	0.929	25
Endrin	0.0478	ug/L	0.0500	ND	95.6	60-140	1.90	25
Endrin aldehyde	0.0498	ug/L	0.0500	ND	99.6	60-140	2.44	25
Endrin ketone	0.0453	ug/L	0.0500	ND	90.6	60-140	10.2	25
gamma-BHC (Lindane)	0.0413	ug/L	0.0500	ND	82.6	60-140	1.68	25
gamma-Chlordane	0.0546	ug/L	0.0500	0.0174	74.4	60-140	1.29	25
Heptachlor	0.0759	ug/L	0.0500	ND	152*	60-140	0.528	25
Heptachlor Epoxide	0.225	ug/L	0.0500	0.139	172*	60-140	0.0890	25
Methoxychlor	0.0571	ug/L	0.0500	ND	114	60-140	0.175	25

Batch B2L2901 **Method: SW 846 8081B** **Prepared: 12/29/2022**

B2L2901-BS1 **Source:**

Analyte	Result	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Heptachlor Epoxide	0.0361	mg/kg wet	0.0333		108	75.2-127		

Batch B2L2901 (cont.) **Method: SW 846 8081B** **Prepared: 12/29/2022**

B2L2901-MS1 **Source:** 2120932-01

Analyte	Result	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Heptachlor Epoxide	0.0397	mg/kg dry	0.0397	ND	99.9	49-121		

Batch B2L2901 (cont.) **Method: SW 846 8081B** **Prepared: 12/29/2022**

B2L2901-MSD1 **Source:** 2120932-01

Analyte	Result	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Heptachlor Epoxide	0.0399	mg/kg dry	0.0397	ND	100	49-121	0.579	30

* - Outside of QC Limits J - Result is between the MDL and RL for an Analysis reported to an RL

NC - Outside the recovery criteria but Spike Amount <1/4 amount found in Source Sample

SPLP Pesticides - Quality Control

Aqua Pro-Tech Laboratories

Batch B2L2929 **Method: SW 846 1312** **Prepared: 12/29/2022**

B2L2929-BS1 **Source:**

Analyte	Result	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
4,4'-DDE	0.0418	ug/L	0.0500		83.6	55-144		
Dieldrin	0.0489	ug/L	0.0500		97.8	53-134		

* - Outside of QC Limits J - Result is between the MDL and RL for an Analysis reported to an RL

F-III NC - Outside the recovery criteria but Spike Amount <1/4 amount found in Source Sample

METHOD BLANK SUMMARY

Batch ID: **B2L2742**

Lab Number	Sample Id	Extraction Date	Analysis Date
B2L2742-BLK1	BLK1	12/27/2022	12/29/2022 17:28
B2L2742-BS1	BS1	12/27/2022	12/29/2022 17:53
B2L2742-MS1	MS1	12/27/2022	12/29/2022 22:07
B2L2742-MSD1	MSD1	12/27/2022	12/29/2022 22:32
2120938-32	G-9-GW	12/27/2022	12/29/2022 21:42

Batch ID: **B2L2901**

Lab Number	Sample Id	Extraction Date	Analysis Date
B2L2901-BLK1	BLK1	12/29/2022	12/30/2022 09:06
B2L2901-BS1	BS1	12/29/2022	12/29/2022 19:09
B2L2901-MS1	MS1	12/29/2022	12/30/2022 08:15
B2L2901-MSD1	MSD1	12/29/2022	12/30/2022 08:41
2120938-01	G-15A	12/29/2022	12/31/2022 18:47
2120938-02	G-15-1	12/29/2022	12/31/2022 19:13
2120938-03	G-15-2	12/29/2022	12/31/2022 19:38
2120938-04	G-15-3	12/29/2022	12/31/2022 20:04
2120938-05	G-15-4	12/29/2022	12/31/2022 20:29
2120938-06	G-16A	12/29/2022	12/31/2022 20:54
2120938-07	G-16-1	12/29/2022	12/31/2022 21:20
2120938-08	G-16-2	12/29/2022	12/31/2022 21:45
2120938-09	G-16-3	12/29/2022	12/31/2022 22:11
2120938-10	G-16-4	12/29/2022	12/30/2022 15:53

Batch ID: **B2L2929**

Lab Number	Sample Id	Extraction Date	Analysis Date
B2L2929-BLK1	BLK1	12/29/2022	12/30/2022 20:22
B2L2929-BS1	BS1	12/29/2022	12/30/2022 20:48
2120938-31	T-11R	12/29/2022	12/30/2022 22:04
2120938-33	F-18R	12/29/2022	12/30/2022 22:29
2120938-34	F-15R	12/29/2022	12/30/2022 22:55
2120938-35	G-16R	12/29/2022	12/30/2022 23:20

Lab Number	Sample Id	Extraction Date	Analysis Date
B2L2929-BLK2	BLK2	01/13/2023	01/14/2023 14:37

SURROGATE RT DRIFT REPORT

Analysis Class: PESTICIDES

Sequence : S2L3013

		TCMX			DCB			TCMX[2C]			DCB[2C]		
Lab Number	File ID	RT	Ref RT	Drift	RT	Ref RT	Drift	RT	Ref RT	Drift	RT	Ref RT	Drift
B2L2742-BLK1	7T31531.D	3.99	3.99	0.00	18.74	18.74	0.00	4.92	4.92	0.00	20.3	20.3	0.00
B2L2742-BS1	7T31532.D	3.99	3.99	0.00	18.74	18.74	0.00	4.91	4.92	-0.01	20.3	20.3	0.00
B2L2901-BS1	7T31535.D	3.99	3.99	0.00	18.74	18.74	0.00	4.92	4.92	0.00	20.3	20.3	0.00
2120938-32	7T31541.D	4	3.99	0.01	18.74	18.74	0.00	4.92	4.92	0.00	20.3	20.3	0.00
B2L2742-MS1	7T31542.D	4	3.99	0.01	18.74	18.74	0.00	4.92	4.92	0.00	20.3	20.3	0.00
B2L2742-MSD1	7T31543.D	4	3.99	0.01	18.74	18.74	0.00	4.92	4.92	0.00	20.3	20.3	0.00
B2L2901-MS1	7T31566.D	4	4	0.00	18.75	18.74	0.01	4.93	4.92	0.01	20.31	20.3	0.01
B2L2901-MSD1	7T31567.D	4.01	4	0.01	18.74	18.74	0.00	4.94	4.92	0.02	20.31	20.3	0.01
B2L2901-BLK1	7T31568.D	4.01	4	0.01	18.74	18.74	0.00	4.94	4.92	0.02	20.31	20.3	0.01

Sequence : SAA0005

		TCMX			DCB			TCMX[2C]			DCB[2C]		
Lab Number	File ID	RT	Ref RT	Drift	RT	Ref RT	Drift	RT	Ref RT	Drift	RT	Ref RT	Drift
2120938-10	7T31584.D	4	4	0.00	18.74	18.74	0.00	4.93	4.94	-0.01	20.31	20.31	0.00

Sequence : SAA0020

		TCMX			DCB			TCMX[2C]			DCB[2C]		
Lab Number	File ID	RT	Ref RT	Drift	RT	Ref RT	Drift	RT	Ref RT	Drift	RT	Ref RT	Drift
B2L2929-BLK1	7T31593.D	4.07	4.06	0.01	18.8	18.79	0.01	5.01	5	0.01	20.38	20.37	0.01
B2L2929-BS1	7T31594.D	4.07	4.06	0.01	18.8	18.79	0.01	5.01	5	0.01	20.38	20.37	0.01
2120938-31	7T31597.D	4.08	4.06	0.02	18.81	18.79	0.02	5.02	5	0.02	20.39	20.37	0.02
2120938-33	7T31598.D	4.08	4.06	0.02	18.81	18.79	0.02	5.02	5	0.02	20.39	20.37	0.02
2120938-34	7T31599.D	4.08	4.06	0.02	18.81	18.79	0.02	5.02	5	0.02	20.39	20.37	0.02
2120938-35	7T31600.D	4.08	4.06	0.02	18.81	18.79	0.02	5.02	5	0.02	20.39	20.37	0.02
2120938-01	7T31646.D	4.13	4.1	0.03	18.84	18.83	0.01	5.07	5.05	0.02	20.43	20.41	0.02
2120938-02	7T31647.D	4.13	4.1	0.03	18.84	18.83	0.01	5.07	5.05	0.02	20.42	20.41	0.01
2120938-03	7T31648.D	4.13	4.1	0.03	18.83	18.83	0.00	5.07	5.05	0.02	20.42	20.41	0.01
2120938-04	7T31649.D	4.13	4.1	0.03	18.84	18.83	0.01	5.07	5.05	0.02	20.42	20.41	0.01
2120938-05	7T31650.D	4.12	4.1	0.02	18.83	18.83	0.00	5.07	5.05	0.02	20.42	20.41	0.01
2120938-06	7T31651.D	4.13	4.1	0.03	18.83	18.83	0.00	5.07	5.05	0.02	20.42	20.41	0.01
2120938-07	7T31652.D	4.13	4.1	0.03	18.84	18.83	0.01	5.08	5.05	0.03	20.43	20.41	0.02
2120938-08	7T31653.D	4.13	4.1	0.03	18.83	18.83	0.00	5.07	5.05	0.02	20.43	20.41	0.02
2120938-09	7T31654.D	4.13	4.1	0.03	18.84	18.83	0.01	5.07	5.05	0.02	20.43	20.41	0.02

Surrogate		Limit
TCMX	Tetrachloro-m-xylene	0.10
DCB	Decachlorobiphenyl	0.10
TCMX[2C]	Tetrachloro-m-xylene [2C]	0.10
DCB[2C]	Decachlorobiphenyl [2C]	0.10

DISS = Dissolved Analysis

F-V

SURROGATE RT DRIFT REPORT

Analysis Class: PESTICIDES

Sequence : SAA0243

		TCMX			DCB			TCMX[2C]			DCB[2C]		
Lab Number	File ID	RT	Ref RT	Drift	RT	Ref RT	Drift	RT	Ref RT	Drift	RT	Ref RT	Drift
B2L2929-BLK2	7T31896.D	4.5	4.5	0.00	19.14	19.14	0.00	5.51	5.51	0.00	20.83	20.83	0.00

Surrogate		Limit
TCMX	Tetrachloro-m-xylene	0.10
DCB	Decachlorobiphenyl	0.10
TCMX[2C]	Tetrachloro-m-xylene [2C]	0.10
DCB[2C]	Decachlorobiphenyl [2C]	0.10

DISS = Dissolved Analysis

F-V

Response Factor Report HP G1530A

Method : G:\HPCHEM\GCECD7\METHODS\80811228.M (Chemstation Integrator)
Title : Pesticides by Method SW-846 8081B
Last Update : Thu Dec 29 13:16:56 2022

Calibration Files
2 =7T31485.D 5 =7T31486.D 10 =7T31487.D
20 =7T31488.D 35 =7T31489.D 50 =7T31490.D

		Compound	2	5	10	20	35	50	Avg		%RSD
1)	S	TCMX	2.682	2.896	3.185	3.412	3.091	3.194	3.166	E7	7.07
2)		alpha-BHC	4.477	4.286	4.922	5.184	5.084	5.474	5.307	E7	11.82
3)	M	gamma-BHC (Lindane)	4.347	4.088	4.825	4.942	4.738	5.026	4.950	E7	9.55
4)	M	Heptachlor	4.946	4.580	5.181	5.182	4.890	5.111	5.041	E7	4.02
5)		beta-BHC	2.237	1.857	2.190	2.270	2.125	2.204	2.161	E7	5.74
6)		delta-BHC	4.398	3.702	4.552	4.721	4.598	4.945	4.893	E7	12.92
7)	M	Aldrin	4.542	4.095	4.844	4.731	4.541	4.801	4.716	E7	5.53
8)		Heptachlor epoxide	4.422	4.104	4.604	4.565	4.301	4.451	4.413	E7	3.36
9)		Endosulfan I	4.059	3.672	4.170	4.096	3.854	4.000	3.954	E7	4.11
10)		4,4'-DDE	4.177	3.569	4.217	4.277	4.139	4.338	4.335	E7	8.25
11)	M	Dieldrin	4.402	3.951	4.445	4.478	4.254	4.476	4.457	E7	4.96
12)	M	Endrin	3.995	3.721	4.156	4.290	4.038	4.222	4.171	E7	4.86
13)		4,4'-DDD	2.377	2.293	2.656	2.718	2.649	2.798	2.766	E7	10.45
14)		Endosulfan II	3.896	3.715	4.294	4.353	4.238	4.307	4.131	E7	5.37
15)	M	4,4'-DDT	3.250	2.892	3.236	3.339	3.278	3.455	3.411	E7	7.73
16)		Endrin aldehyde	2.791	2.681	3.010	3.163	2.970	3.029	2.955	E7	4.95
17)		Endosulfan sulfate	3.107	2.799	3.173	3.115	3.072	3.164	3.089	E7	3.62
18)		Methoxychlor	1.332	1.423	1.571	1.565	1.633	1.668	1.562	E7	6.89
19)		Mirex	2.850	2.616	2.940	2.772	2.607	2.644	2.669	E7	5.18
20)		Endrin ketone	3.237	2.939	3.367	3.399	3.175	3.286	3.275	E7	4.12
21)	S	Decachlorobiphenyl	2.920	2.710	3.085	2.934	2.698	2.742	2.795	E7	4.88
22)	L1	Chlordane (gamma)	4.148	4.005	4.467	4.578	4.337	4.553	4.528	E7	6.54
23)	L1	Chlordane (alpha)	4.619	4.183	4.720	4.647	4.350	4.540	4.588	E7	4.07
24)	L2	Toxaphene (1)							0.000	0	-1.00

Signal #2 Calibration Files
2 =7T31485.D 5 =7T31486.D 10 =7T31487.D
20 =7T31488.D 35 =7T31489.D 50 =7T31490.D

		Compound	2	5	10	20	35	50	Avg		%RSD
1)	S	TCMX	1.373	1.309	1.475	1.475	1.393	1.476	1.465	E7	5.62
2)		alpha-BHC	1.761	1.698	2.021	2.157	2.141	2.339	2.268	E7	16.73
3)	M	gamma-BHC (Lindane)	1.741	1.651	1.938	2.033	2.001	2.164	2.120	E7	14.30
4)	M	Heptachlor	2.115	1.950	2.204	2.224	2.119	2.243	2.229	E7	6.24
5)		beta-BHC	0.895	0.839	0.938	0.934	0.877	0.912	0.924	E7	5.16
6)		delta-BHC	1.680	1.558	1.819	1.912	1.889	2.060	2.044	E7	16.34
7)	M	Aldrin	1.742	1.636	1.865	1.909	1.860	1.986	1.958	E7	9.73
8)		Heptachlor epoxide	1.716	1.638	1.855	1.882	1.776	1.866	1.862	E7	6.53
9)		Endosulfan I	1.673	1.500	1.669	1.660	1.569	1.642	1.657	E7	4.38
10)		4,4'-DDE	1.239	1.189	1.424	1.477	1.438	1.542	1.516	E7	13.49
11)	M	Dieldrin	1.482	1.374	1.587	1.635	1.573	1.671	1.659	E7	9.78
12)	M	Endrin	1.261	1.209	1.400	1.440	1.385	1.474	1.457	E7	10.28
13)		4,4'-DDD	0.899	0.850	0.991	1.010	0.981	1.054	1.054	E7	12.92
14)		Endosulfan II	1.283	1.241	1.366	1.350	1.318	1.371	1.360	E7	5.16
15)	M	4,4'-DDT	0.733	0.792	1.024	1.058	1.048	1.126	1.092	E7	19.40
16)		Endrin aldehyde	1.486	1.061	1.241	1.156	1.054	1.042	1.136	E7	12.09
17)		Endosulfan sulfate	1.096	1.047	1.156	1.138	1.083	1.135	1.151	E7	6.01
18)		Methoxychlor	4.668	4.504	5.425	5.518	5.261	5.533	5.512	E6	11.11
19)		Mirex	1.073	0.907	0.942	0.912	0.841	0.858	0.902	E7	7.49
20)		Endrin ketone	1.094	1.070	1.178	1.190	1.151	1.213	1.217	E7	8.53
21)	S	Decachlorobiphenyl	1.111	1.092	1.160	1.125	1.043	1.062	1.089	E7	3.30
22)	L1	Chlordane (gamma)	1.730	1.613	1.819	1.827	1.762	1.862	1.870	E7	8.20
23)	L1	Chlordane (alpha)	1.605	1.519	1.725	1.726	1.658	1.744	1.747	E7	7.58
24)	L2	Toxaphene (1)							0.000	0	-1.00

(#) = Out of Range ### Number of calibration levels exceeded format ###

Compound List Report HP G1530A

Method : G:\HPCHEM\GCECD7\METHODS\80811228.M (Chemstation Integrator)
Title : Pesticides by Method SW-846 8081B
Last Update : Thu Dec 29 13:16:56 2022
Response via : Initial Calibration
Total Cpnds : 49

PK#	Type	Compound Name	Exp_RT	Rel_RT	Cal	A/H	ID
1	S	TCMX	3.97	1.000	A	A	B
2		alpha-BHC	5.04	1.000	A	A	B
3	M	gamma-BHC (Lindane)	5.79	1.000	A	A	B
4	M	Heptachlor	7.07	1.000	A	A	B
5		beta-BHC	6.04	1.000	A	A	B
6		delta-BHC	6.50	1.000	A	A	B
7	M	Aldrin	7.97	1.000	A	A	B
8		Heptachlor epoxide	10.09	1.000	A	A	B
9		Endosulfan I	11.57	1.000	A	A	B
10		4,4'-DDE	11.67	1.000	A	A	B
11	M	Dieldrin	12.65	1.000	A	A	B
12	M	Endrin	13.64	1.000	A	A	B
13		4,4'-DDD	14.26	1.000	A	A	B
14		Endosulfan II	14.44	1.000	A	A	B
15	M	4,4'-DDT	15.07	1.000	A	A	B
16		Endrin aldehyde	15.61	1.000	A	A	B
17		Endosulfan sulfate	16.54	1.000	A	A	B
18		Methoxychlor	16.33	1.000	A	A	B
19		Mirex	16.26	1.000	A	A	B
20		Endrin ketone	17.03	1.000	A	A	B
21	S	Decachlorobiphenyl	18.73	1.000	A	A	B
22	L1	Chlordane (gamma)	10.57	1.000	A	A	B
23	L1	Chlordane (alpha)	11.09	1.000	A	A	B
24	L2	Toxaphene (1)	16.34	1.000	A	A	R
25		Signal #2	35.00	1.000	A	A	B
26	S	TCMX #2	4.90	1.000	A	A	B
27		alpha-BHC #2	6.56	1.000	A	A	B
28	M	gamma-BHC (Lindane) #2	7.72	1.000	A	A	B
29	M	Heptachlor #2	9.29	1.000	A	A	B
30		beta-BHC #2	8.06	1.000	A	A	B
31		delta-BHC #2	9.12	1.000	A	A	B
32	M	Aldrin #2	10.51	1.000	A	A	B
33		Heptachlor epoxide #2	13.15	1.000	A	A	B
34		Endosulfan I #2	14.61	1.000	A	A	B
35		4,4'-DDE #2	15.15	1.000	A	A	B
36	M	Dieldrin #2	15.39	1.000	A	A	B
37	M	Endrin #2	16.09	1.000	A	A	B
38		4,4'-DDD #2	16.49	1.000	A	A	B
39		Endosulfan II #2	16.55	1.000	A	A	B
40	M	4,4'-DDT #2	17.06	1.000	A	A	B
41		Endrin aldehyde #2	17.20	1.000	A	A	B
42		Endosulfan sulfate #2	17.68	1.000	A	A	B
43		Methoxychlor #2	18.21	1.000	A	A	B
44		Mirex #2	18.40	1.000	A	A	B
45		Endrin ketone #2	18.48	1.000	A	A	B
46	S	Decachlorobiphenyl #2	20.29	1.000	A	A	B
47	L1	Chlordane (gamma) #2	13.98	1.000	A	A	B
48	L1	Chlordane (alpha) #2	14.49	1.000	A	A	B
49	L2	Toxaphene (1) #2	16.75	1.000	A	A	R

Cal A = Average L = Linear LO = Linear w/origin Q = Quad QO = Quad w/origin
A/H = Area or Height
ID R = R.T. B = R.T. & Q Q = Qvalue L = Largest A = All

80811228.M Thu Dec 29 13:36:04 2022 SS

CALIBRATION VERIFICATION SUMMARY

Client: **Dynamic Earth LLC**
Work Order: **2120938**

Lab Sample ID (50 pp):	S2L3013-CCV1(1)	Init. Calib. Date(s):	12/28/2022	12/29/2022
File ID:	7T31528.D	Date Analyzed:	12/29/2022 16:11	
Pesticides	Column 1	Matrix:	Soil	

Individual Mix Compound		RT WINDOW		$\overline{CF}$	CF	%D
		FROM	TO			
Heptachlor Epoxide	10.11	10.01	10.21	44130120	45820740	3.80
Decachlorobiphenyl	18.74	18.64	18.84	27949750	28175060	0.80
Tetrachloro-m-xylene	03.99	03.89	04.09	31663030	31954060	0.90

* - Outside of QC limits

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CALIBRATION VERIFICATION SUMMARY

Client: **Dynamic Earth LLC**
Work Order: **2120938**

Lab Sample ID (50 pp):	S2L3013-CCV1(2)	Init. Calib. Date(s):	12/28/2022	12/29/2022
File ID:	7T31528.D	Date Analyzed:	12/29/2022 16:11	
Pesticides	Column 2	Matrix:	Soil	

Individual Mix Compound		RT WINDOW		$\overline{CF}$	CF	%D
		FROM	TO			
Heptachlor Epoxide [2C]	13.18	13.08	13.28	18619540	19292450	3.60
Decachlorobiphenyl [2C]	20.30	20.20	20.40	10890370	11068380	1.60
Tetrachloro-m-xylene [2C]	04.92	04.82	05.02	14651820	15417470	5.20

* - Outside of QC limits

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Quantitation Report (QT Reviewed)

Signal #1 : G:\HPCHEM\GCECD7\DATA\20221229\7T31528.D\ECD1A.CH Vial: 3
Signal #2 : G:\HPCHEM\GCECD7\DATA\20221229\7T31528.D\ECD2B.CH
Acq On : 29 Dec 2022 4:11 pm Operator: WD
Sample : SEQ-CCV@50PPB Inst : GCECD-7
Misc : Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Dec 30 10:51 2022 Quant Results File: 80811228.RES

Quant Method : G:\HPCHEM\G...\80811228.M (Chemstation Integrator)
Title : Pesticides by Method SW-846 8081B
Last Update : Thu Dec 29 13:18:56 2022
Response via : Initial Calibration
DataAcq Meth : RUNPEST1.M

Volume Inj. : 2ul
Signal #1 Phase : RTx-50 Signal #2 Phase: RTx-CLPesticides II
Signal #1 Info : 30M x 0.53mm x 0. Signal #2 Info : 30M x 0.53mm x 0.42um

	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/kg	ug/kg
	System Monitoring Compounds						
1) S	TCMX	3.99	4.92	1597.7E6	770.9E6	50.460	52.613
	Spiked Amount 50.000	Range 43 - 129		Recovery =		100.92%	105.23%
21) S	Decachlorobiphen	18.74	20.30	1408.8E6	553.4E6	50.403	50.817
	Spiked Amount 50.000	Range 42 - 136		Recovery =		100.81%	101.63%
	Target Compounds						
2)	alpha-BHC	5.06	6.58	2829.7E6	1218.4E6	53.324	53.714
3) M	gamma-BHC (Linda	5.81	7.74	2596.4E6	1133.2E6	52.448	53.448
4) M	Heptachlor	7.09	9.31	2669.6E6	1174.3E6	52.957	52.678
5)	beta-BHC	6.06	8.08	1046.1E6	475.5E6	48.410	51.462
6)	delta-BHC	6.52	9.14	2559.2E6	1077.1E6	52.306	52.705
7) M	Aldrin	7.99	10.53	2471.4E6	1034.3E6	52.403	52.812
8)	Heptachlor epoxi	10.11	13.18	2291.0E6	964.6E6	51.915	51.807
9)	Endosulfan I	11.59	14.62	2058.5E6	858.4E6	52.060	51.799
10)	4,4'-DDE	11.69	15.16	2201.8E6	810.0E6	50.796	53.441
11) M	Dieldrin	12.67f	15.40	2309.2E6	871.0E6	51.807	52.514
12) M	Endrin	13.66	16.10	2237.3E6	780.7E6	53.644	53.564
13)	4,4'-DDD	14.28	16.50	1458.1E6	545.7E6	52.713	51.755
14)	Endosulfan II	14.46	16.56	2215.1E6	686.1E6	53.623	50.441
15) M	4,4'-DDT	15.08	17.07	1826.3E6	607.1E6	53.540m	55.583
16)	Endrin aldehyde	15.62	17.21	1550.3E6	536.1E6	52.470	47.207
17)	Endosulfan sulfa	16.55	17.68	1649.8E6	581.7E6	53.402	50.520
18)	Methoxychlor	16.34	18.22	852.9E6	289.4E6	54.613	52.497
19)	Mirex	16.27	18.40	1354.4E6	431.3E6	50.749	47.796
20)	Endrin ketone	17.04	18.48	1489.7E6	610.4E6	45.488	50.140
22) L1	Chlordane (gamma	10.59	13.99	2330.2E6	975.1E6	51.459	52.152
23) L1	Chlordane (alpha	11.11	14.51	2356.7E6	909.2E6	51.363	52.036
	Sum Chlordane (gamma)			4686.9E6	1884.3E6	102.822	104.188
	Average Chlordane (gamma)					51.411	52.094
	Sum Toxaphene (1)			0	0	N.D.	N.D.
	Average Toxaphene (1)					0.000	0.000

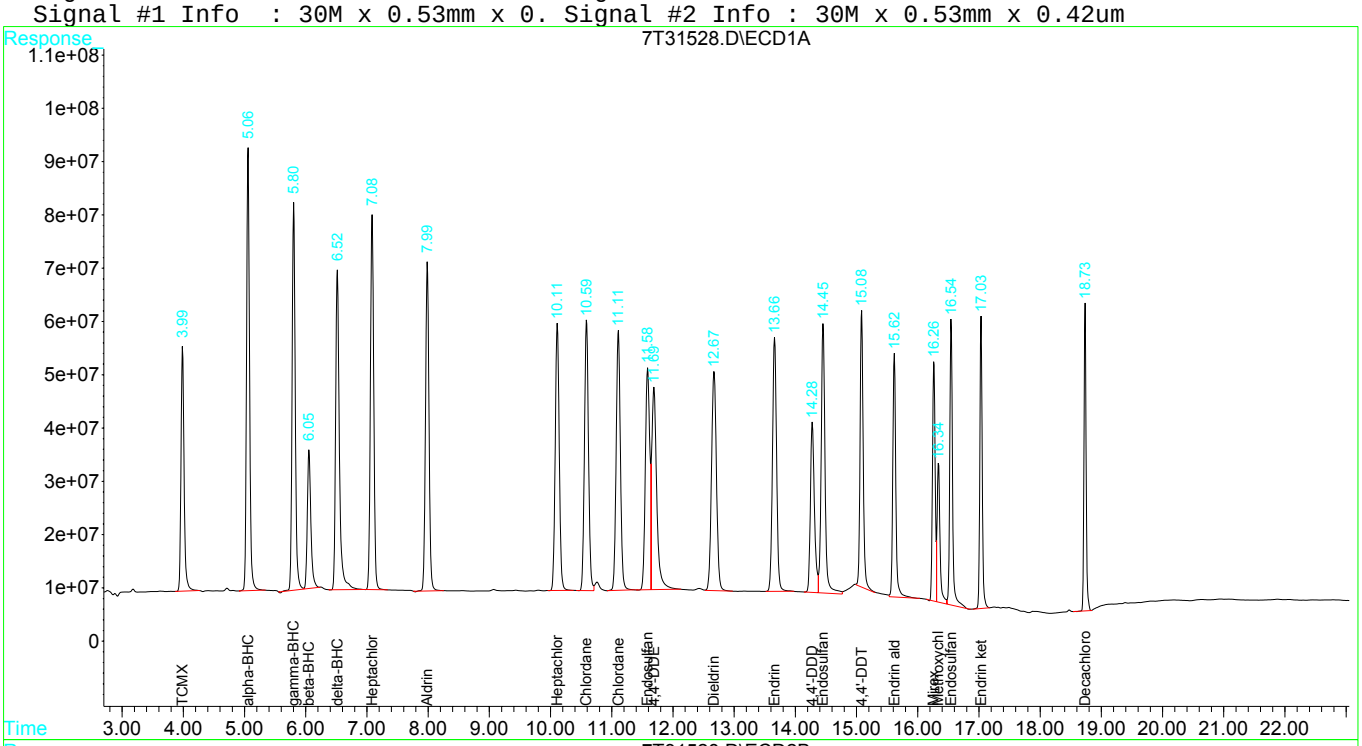
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

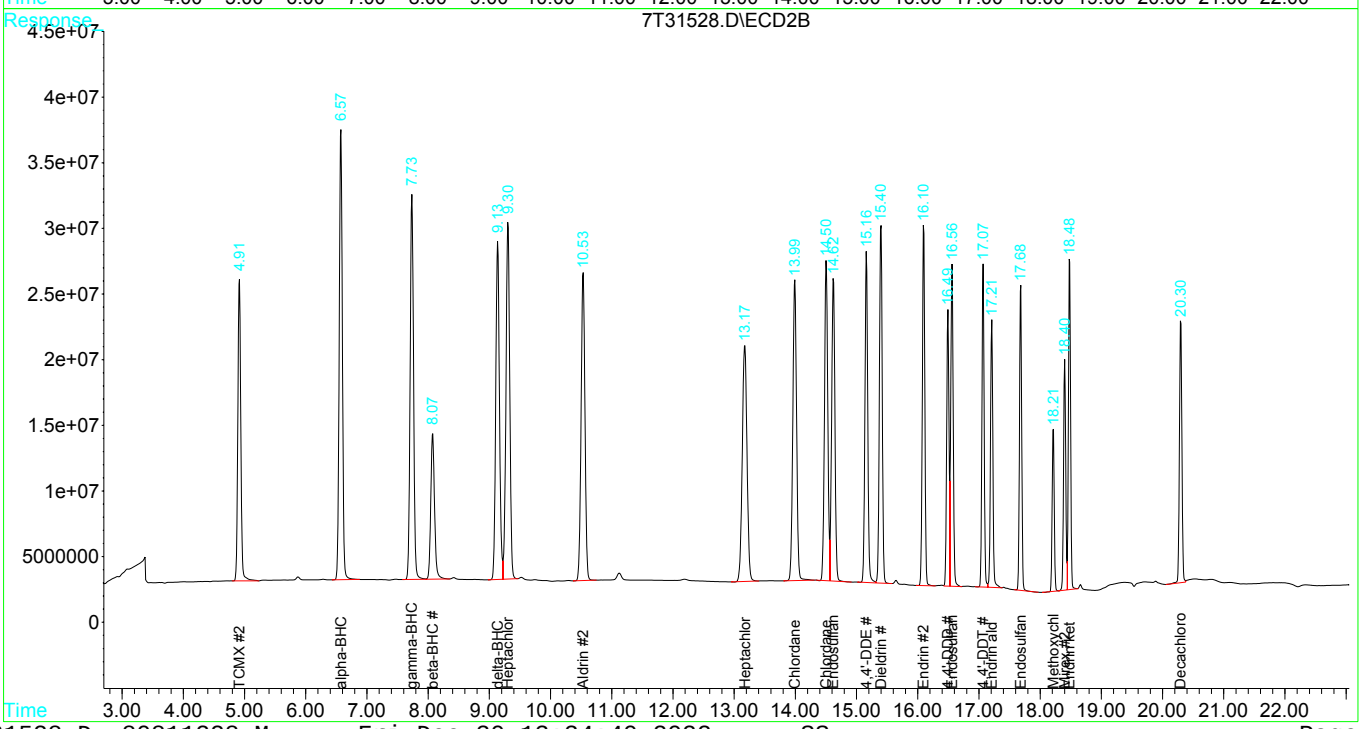
Quantitation Report (QT Reviewed)

Signal #1 : G:\HPCHEM\GCECD7\DATA\20221229\7T31528.D\ECD1A.CH Vial: 3
Signal #2 : G:\HPCHEM\GCECD7\DATA\20221229\7T31528.D\ECD2B.CH
Acq On : 29 Dec 2022 4:11 pm Operator: WD
Sample : SEQ-CCV@50PPB Inst : GCECD-7
Misc : Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Dec 30 10:51 2022 Quant Results File: 80811228.RES

Quant Method : G:\HPCHEM\G...\80811228.M (Chemstation Integrator)
Title : Pesticides by Method SW-846 8081B
Last Update : Thu Dec 29 13:18:56 2022
Response via : Multiple Level Calibration
DataAcq Meth : RUNPEST1.M

Volume Inj. : 2ul
Signal #1 Phase : RTx-50 Signal #2 Phase: RTx-CLPesticides II
Signal #1 Info : 30M x 0.53mm x 0. Signal #2 Info : 30M x 0.53mm x 0.42um





CALIBRATION VERIFICATION SUMMARY

Client: **Dynamic Earth LLC**
Work Order: **2120938**

Lab Sample ID (50):	S2L3013-CCV2(1)	Init. Calib. Date(s):	12/28/2022	12/29/2022
File ID:	7T31548.D	Date Analyzed:	12/30/2022 00:39	
Pesticides	Column 1	Matrix:	Soil	

Individual Mix Compound		RT WINDOW		$\overline{CF}$	CF	%D
		FROM	TO			
Heptachlor Epoxide	10.12	10.02	10.22	44130120	49129640	11.30
Decachlorobiphenyl	18.74	18.64	18.84	27949750	33087140	18.40
Tetrachloro-m-xylene	04.00	03.90	04.10	31663030	33074120	4.50

* - Outside of QC limits

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CALIBRATION VERIFICATION SUMMARY

Client: **Dynamic Earth LLC**
Work Order: **2120938**

Lab Sample ID (50):	S2L3013-CCV2(2)	Init. Calib. Date(s):	12/28/2022	12/29/2022
File ID:	7T31548.D	Date Analyzed:	12/30/2022 00:39	
Pesticides	Column 2	Matrix:	Soil	

Individual Mix Compound		RT WINDOW		$\overline{CF}$	CF	%D
		FROM	TO			
Heptachlor Epoxide [2C]	13.19	13.09	13.29	18619540	20581020	10.50
Decachlorobiphenyl [2C]	20.30	20.20	20.40	10890370	12032450	10.50
Tetrachloro-m-xylene [2C]	04.92	04.82	05.02	14651820	16782720	14.50

* - Outside of QC limits

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Quantitation Report (QT Reviewed)

Signal #1 : G:\HPCHEM\GCECD7\DATA\20221229\7T31548.D\ECD1A.CH Vial: 23
Signal #2 : G:\HPCHEM\GCECD7\DATA\20221229\7T31548.D\ECD2B.CH
Acq On : 30 Dec 2022 12:39 am Operator: WD
Sample : SEQ-CCV@50PPB Inst : GCECD-7
Misc : Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Dec 30 10:52 2022 Quant Results File: 80811228.RES

Quant Method : G:\HPCHEM\G...\80811228.M (Chemstation Integrator)
Title : Pesticides by Method SW-846 8081B
Last Update : Thu Dec 29 13:18:56 2022
Response via : Initial Calibration
DataAcq Meth : RUNPEST1.M

Volume Inj. : 2ul
Signal #1 Phase : RTx-50 Signal #2 Phase: RTx-CLPesticides II
Signal #1 Info : 30M x 0.53mm x 0. Signal #2 Info : 30M x 0.53mm x 0.42um

	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/kg	ug/kg
	System Monitoring Compounds						
1) S	TCMX	4.00	4.92	1653.7E6	839.1E6	52.228	57.272
Spiked Amount	50.000	Range	43 - 129	Recovery	=	104.46%	114.54%
21) S	Decachlorobiphen	18.74	20.30	1654.4E6	601.6E6	59.190	55.244
Spiked Amount	50.000	Range	42 - 136	Recovery	=	118.38%	110.49%
	Target Compounds						
2)	alpha-BHC	5.07	6.58f	3028.1E6	1312.8E6	57.063	57.875
3) M	gamma-BHC (Linda	5.81f	7.75f	2802.5E6	1226.3E6	56.612	57.837
4) M	Heptachlor	7.10f	9.32f	2797.2E6	1251.1E6	55.489	56.123
5)	beta-BHC	6.07f	8.09f	1241.5E6	511.6E6	57.451	55.360
6)	delta-BHC	6.53f	9.15f	2715.8E6	1153.9E6	55.507	56.460
7) M	Aldrin	8.00f	10.54f	2659.2E6	1121.8E6	56.385	57.283
8)	Heptachlor epoxi	10.12f	13.19f	2456.5E6	1029.1E6	55.665	55.267
9)	Endosulfan I	11.60f	14.63	2202.9E6	935.3E6	55.712	56.438
10)	4,4'-DDE	11.71f	15.17	2356.1E6	879.0E6	54.357	57.995
11) M	Dieldrin	12.69f	15.41	2482.2E6	938.2E6	55.689	56.562
12) M	Endrin	13.67f	16.10	2325.0E6	856.5E6	55.749	58.768
13)	4,4'-DDD	14.30f	16.50	1484.2E6	607.3E6	53.659	57.594
14)	Endosulfan II	14.47	16.57	2438.8E6	777.3E6	59.037	57.146
15) M	4,4'-DDT	15.09	17.08	1811.8E6	641.6E6	53.116m	58.742
16)	Endrin aldehyde	15.63	17.22	1657.6E6	603.6E6	56.102	53.149
17)	Endosulfan sulfa	16.55	17.69	1803.7E6	660.7E6	58.383m	57.384
18)	Methoxychlor	16.35	18.22	893.9E6	312.7E6	57.238	56.728
19)	Mirex	16.27	18.41	1516.8E6	495.6E6	56.834	54.926
20)	Endrin ketone	17.04	18.49	1922.8E6	696.8E6	58.714	57.245
22) L1	Chlordane (gamma	10.60f	14.00f	2369.6E6	1054.0E6	52.329	56.372
23) L1	Chlordane (alpha	11.12f	14.51	2525.7E6	993.0E6	55.045	56.836
Sum	Chlordane (gamma)			4895.3E6	2047.0E6	107.375	113.208
Average	Chlordane (gamma)					53.687	56.604
Sum	Toxaphene (1)			0	0	N.D.	N.D.
Average	Toxaphene (1)					0.000	0.000

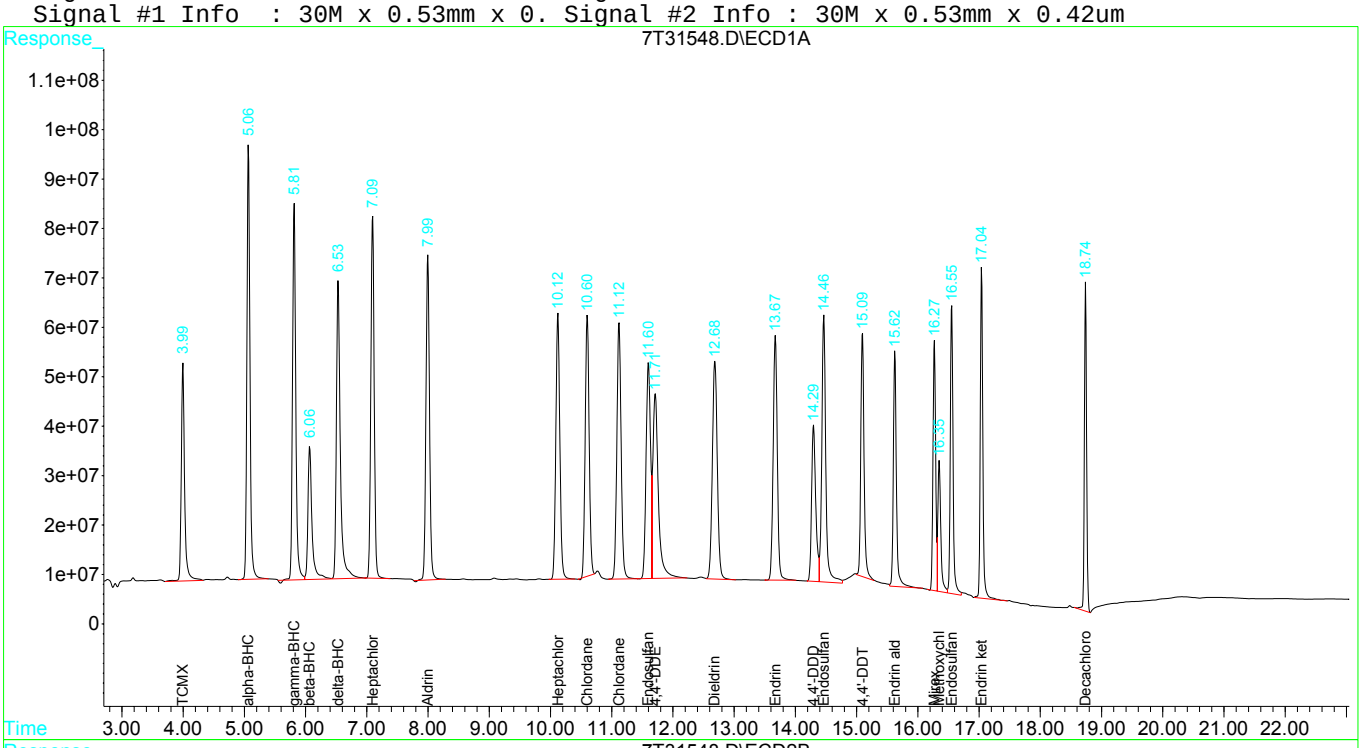
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

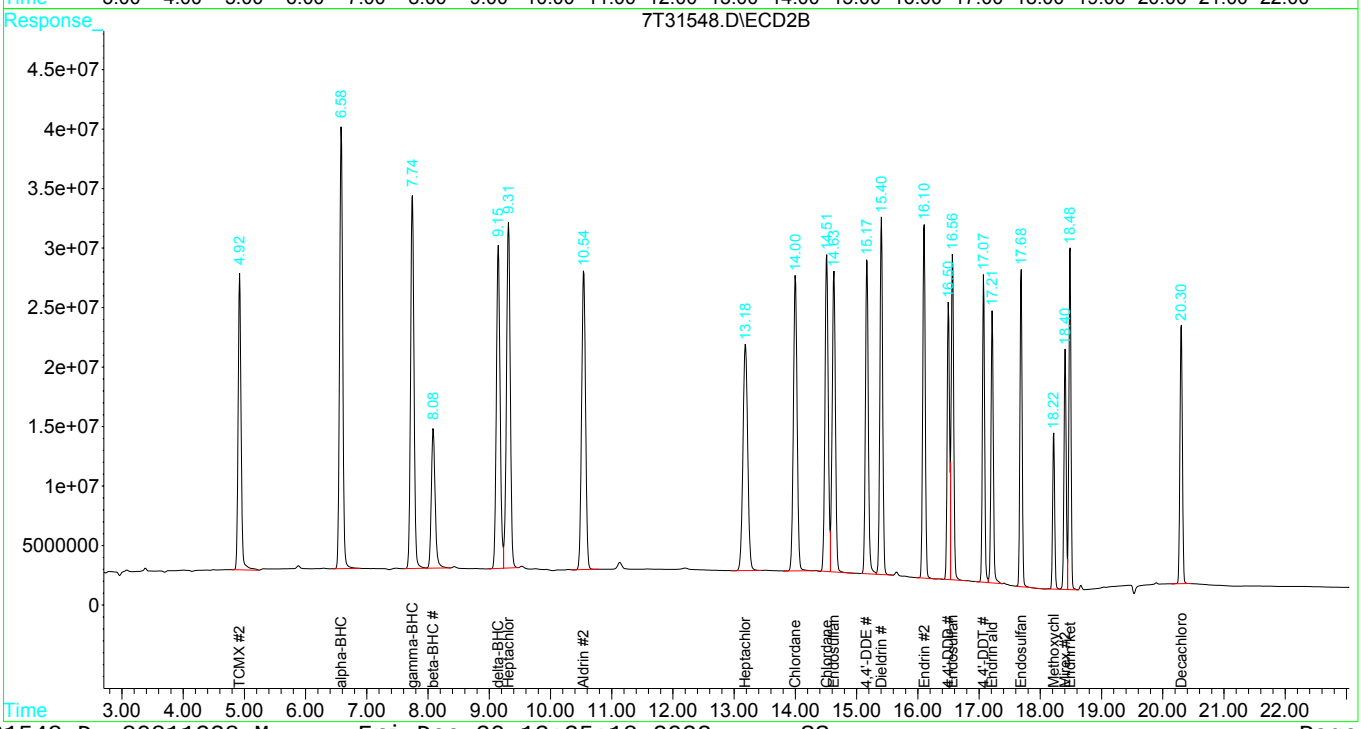
Quantitation Report (QT Reviewed)

Signal #1 : G:\HPCHEM\GCECD7\DATA\20221229\7T31548.D\ECD1A.CH Vial: 23
Signal #2 : G:\HPCHEM\GCECD7\DATA\20221229\7T31548.D\ECD2B.CH
Acq On : 30 Dec 2022 12:39 am Operator: WD
Sample : SEQ-CCV@50PPB Inst : GCECD-7
Misc : Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Dec 30 10:52 2022 Quant Results File: 80811228.RES

Quant Method : G:\HPCHEM\G...\80811228.M (Chemstation Integrator)
Title : Pesticides by Method SW-846 8081B
Last Update : Thu Dec 29 13:18:56 2022
Response via : Multiple Level Calibration
DataAcq Meth : RUNPEST1.M

Volume Inj. : 2ul
Signal #1 Phase : RTx-50 Signal #2 Phase: RTx-CLPesticides II
Signal #1 Info : 30M x 0.53mm x 0. Signal #2 Info : 30M x 0.53mm x 0.42um





CALIBRATION VERIFICATION SUMMARY

Client: **Dynamic Earth LLC**
Work Order: **2120938**

Lab Sample ID (50 pp):	SAA0005-CCV1(1)	Init. Calib. Date(s):	12/28/2022	12/29/2022
File ID:	7T31569c.D	Date Analyzed:	12/30/2022 09:32	
Pesticides	Column 1	Matrix:	Soil	

Individual Mix Compound		RT WINDOW		$\overline{CF}$	CF	%D
		FROM	TO			
Heptachlor Epoxide	10.13	10.03	10.23	44130120	50924260	15.40
Decachlorobiphenyl	18.74	18.64	18.84	27949750	28075880	0.50
Tetrachloro-m-xylene	04.00	03.90	04.10	31663030	37191480	17.50

* - Outside of QC limits

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CALIBRATION VERIFICATION SUMMARY

Client: **Dynamic Earth LLC**
Work Order: **2120938**

Lab Sample ID (50 pp):	SAA0005-CCV1(2)	Init. Calib. Date(s):	12/28/2022	12/29/2022
File ID:	7T31569c.D	Date Analyzed:	12/30/2022 09:32	
Pesticides	Column 2	Matrix:	Soil	

Individual Mix Compound		RT WINDOW		$\overline{CF}$	CF	%D
		FROM	TO			
Heptachlor Epoxide [2C]	13.20	13.10	13.30	18619540	21778720	17.00
Decachlorobiphenyl [2C]	20.31	20.21	20.41	10890370	11609350	6.60
Tetrachloro-m-xylene [2C]	04.94	04.84	05.04	14651820	17152610	17.10

* - Outside of QC limits

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Quantitation Report (QT Reviewed)

Signal #1 : G:\HPCHEM\GCECD7\DATA\20221229A\7T31569C.D\ECD1A.CH Vial: 44
Signal #2 : G:\HPCHEM\GCECD7\DATA\20221229A\7T31569C.D\ECD2B.CH
Acq On : 30 Dec 2022 9:32 Operator: WD
Sample : SEQ-CCV@50PPB Inst : GCECD-7
Misc : Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Dec 30 10:48 2022 Quant Results File: 80811228.RES

Quant Method : G:\HPCHEM\G...\80811228.M (Chemstation Integrator)
Title : Pesticides by Method SW-846 8081B
Last Update : Thu Dec 29 13:18:56 2022
Response via : Initial Calibration
DataAcq Meth : RUNPEST1.M

Volume Inj. : 2ul
Signal #1 Phase : RTx-50 Signal #2 Phase: RTx-CLPesticides II
Signal #1 Info : 30M x 0.53mm x 0. Signal #2 Info : 30M x 0.53mm x 0.42um

	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/kg	ug/kg
	System Monitoring Compounds						
1) S	TCMX	4.00f	4.94f	1859.6E6	857.6E6	58.730m	58.534
	Spiked Amount 50.000	Range 43 - 129		Recovery =		117.46%	117.07%
21) S	Decachlorobiphen	18.74	20.31	1403.8E6	580.5E6	50.226	53.301
	Spiked Amount 50.000	Range 42 - 136		Recovery =		100.45%	106.60%
	Target Compounds						
2)	alpha-BHC	5.07f	6.60f	3157.3E6	1376.6E6	59.498m	60.688
3) M	gamma-BHC (Linda	5.82f	7.76f	2866.9E6	1242.2E6	57.914	58.588
4) M	Heptachlor	7.11f	9.33f	2442.3E6	1071.5E6	48.448	48.068
5)	beta-BHC	6.07f	8.10f	1190.7E6	531.4E6	55.099	57.504
6)	delta-BHC	6.53f	9.16f	2957.8E6	1247.0E6	60.453	61.017
7) M	Aldrin	8.01f	10.56f	2735.5E6	1161.4E6	58.004	59.305
8)	Heptachlor epoxi	10.13f	13.20f	2546.2E6	1088.9E6	57.698	58.484
9)	Endosulfan I	11.61f	14.64f	2269.8E6	944.5E6	57.405	56.993
10)	4,4'-DDE	11.70f	15.17	2561.3E6	900.3E6	59.092	59.395
11) M	Dieldrin	12.70f	15.41f	2582.7E6	962.7E6	57.943m	58.041
12) M	Endrin	13.69f	16.11	2348.8E6	782.4E6	56.318	53.680
13)	4,4'-DDD	14.28	16.50	2483.0E6	889.7E6	89.766	84.375
14)	Endosulfan II	14.47f	16.57	2289.3E6	783.5E6	55.419	57.598
15) M	4,4'-DDT	15.09	17.07	540.9E6	164.2E6	15.856m	15.035m
16)	Endrin aldehyde	15.63	17.22	1586.1E6	562.2E6	53.680	49.504
17)	Endosulfan sulfa	16.56	17.69	1586.5E6	608.7E6	51.352	52.861
18)	Methoxychlor	16.34	18.22	334.1E6	121.8E6	21.390	22.093
19)	Mirex	16.28	18.41	1374.3E6	474.3E6	51.496	52.563
20)	Endrin ketone	17.05	18.49	1455.7E6	605.3E6	44.450	49.724
22) L1	Chlordane (gamma	10.61f	14.01f	2552.1E6	1078.6E6	56.360	57.685
23) L1	Chlordane (alpha	11.13f	14.52f	2616.1E6	1011.3E6	57.015	57.880
	Sum Chlordane (gamma)			5168.2E6	2089.8E6	113.375	115.565
Average	Chlordane (gamma)					56.687	57.782
	Sum Toxaphene (1)			0	0	N.D.	N.D.
Average	Toxaphene (1)					0.000	0.000

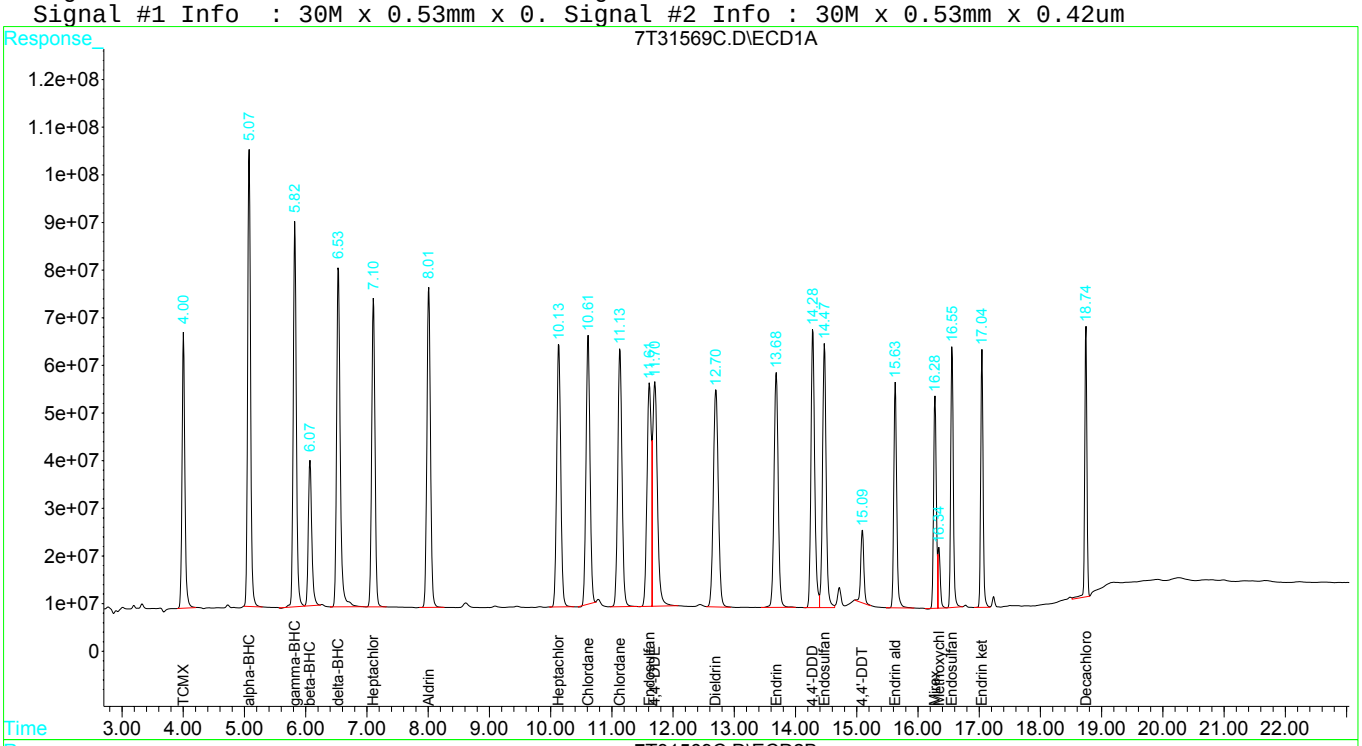
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7T31569C.D 80811228.M Tue Jan 03 12:40:19 2023 SS

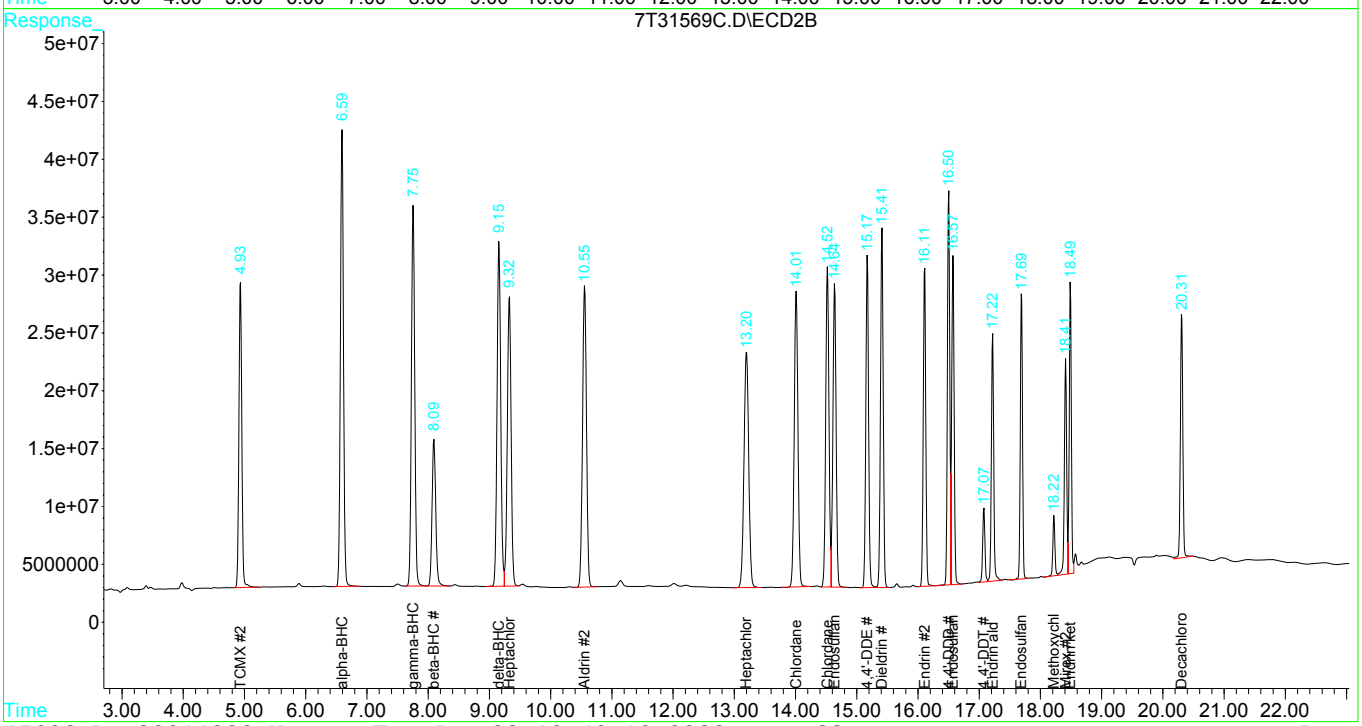
Quantitation Report (QT Reviewed)

Signal #1 : G:\HPCHEM\GCECD7\DATA\20221229A\7T31569C.D\ECD1A.CH Vial: 44
Signal #2 : G:\HPCHEM\GCECD7\DATA\20221229A\7T31569C.D\ECD2B.CH
Acq On : 30 Dec 2022 9:32 Operator: WD
Sample : SEQ-CCV@50PPB Inst : GCECD-7
Misc : Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Dec 30 10:48 2022 Quant Results File: 80811228.RES

Quant Method : G:\HPCHEM\G...\80811228.M (Chemstation Integrator)
Title : Pesticides by Method SW-846 8081B
Last Update : Thu Dec 29 13:18:56 2022
Response via : Multiple Level Calibration
DataAcq Meth : RUNPEST1.M

Volume Inj. : 2ul
Signal #1 Phase : RTx-50 Signal #2 Phase: RTx-CLPesticides II
Signal #1 Info : 30M x 0.53mm x 0. Signal #2 Info : 30M x 0.53mm x 0.42um





CALIBRATION VERIFICATION SUMMARY

Client: **Dynamic Earth LLC**
Work Order: **2120938**

Lab Sample ID (50 pp):	SAA0020-CCV1(1)	Init. Calib. Date(s):	12/28/2022	12/29/2022
File ID:	7T31592.D	Date Analyzed:	12/30/2022 19:57	
SPLP Pesticides	Column 1	Matrix:	Water	

Individual Mix Compound		RT WINDOW		$\overline{CF}$	CF	%D
		FROM	TO			
Dieldrin	12.85	-----	-----	44572680	45429360	1.90
4,4'-DDE	11.84	-----	-----	43345070	51679140	19.20
Decachlorobiphenyl	18.79	18.69	18.89	27949750	28049060	0.40
Tetrachloro-m-xylene	04.06	03.96	04.16	31663030	30951080	2.20

* - Outside of QC limits

F-VII

CALIBRATION VERIFICATION SUMMARY

Client: **Dynamic Earth LLC**
Work Order: **2120938**

Lab Sample ID (50 pp):	SAA0020-CCV1(2)	Init. Calib. Date(s):	12/28/2022	12/29/2022
File ID:	7T31592.D	Date Analyzed:	12/30/2022 19:57	
SPLP Pesticides	Column 2	Matrix:	Water	

Individual Mix Compound		RT WINDOW		$\overline{CF}$	CF	%D
		FROM	TO			
Dieldrin [2C]	15.49	-----	-----	16586560	17073410	2.90
4,4'-DDE [2C]	15.25	-----	-----	15157070	15766140	4.00
Decachlorobiphenyl [2C]	20.37	20.27	20.47	10890370	11068550	1.60
Tetrachloro-m-xylene [2C]	05.00	04.90	05.10	14651820	15119470	3.20

* - Outside of QC limits

F-VII

Quantitation Report (QT Reviewed)

Signal #1 : G:\HPCHEM\GCECD7\DATA\20221230\7T31592.D\ECD1A.CH Vial: 3
Signal #2 : G:\HPCHEM\GCECD7\DATA\20221230\7T31592.D\ECD2B.CH
Acq On : 30 Dec 2022 7:57 pm Operator: WD
Sample : SEQ-CCV@50PPB Inst : GCECD-7
Misc : Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Dec 31 17:15 2022 Quant Results File: 80811228.RES

Quant Method : G:\HPCHEM\G...\80811228.M (Chemstation Integrator)
Title : Pesticides by Method SW-846 8081B
Last Update : Sat Dec 31 17:11:18 2022
Response via : Initial Calibration
DataAcq Meth : RUNPEST1.M

Volume Inj. : 2ul
Signal #1 Phase : RTx-50 Signal #2 Phase: RTx-CLPesticides II
Signal #1 Info : 30M x 0.53mm x 0. Signal #2 Info : 30M x 0.53mm x 0.42um

	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/kg	ug/kg
	System Monitoring Compounds						
1) S	TCMX	4.06f	5.00f	1547.6E6	756.0E6	48.876m	51.596m
	Spiked Amount 50.000	Range 43 - 129		Recovery =		97.75%	103.19%
21) S	Decachlorobiphen	18.79f	20.37f	1402.5E6	553.4E6	50.178m	50.818m
	Spiked Amount 50.000	Range 42 - 136		Recovery =		100.36%	101.64%
	Target Compounds						
2)	alpha-BHC	5.15f	6.68f	2787.6E6	1190.9E6	52.531m	52.500m
3) M	gamma-BHC (Linda	5.90f	7.85f	2510.5E6	1086.1E6	50.714m	51.224m
4) M	Heptachlor	7.20f	9.44f	2593.9E6	1148.0E6	51.455m	51.497m
5)	beta-BHC	6.15f	8.19f	1163.5E6	482.1E6	53.839m	52.177m
6)	delta-BHC	6.62f	9.26f	2539.9E6	1077.2E6	51.912m	52.705m
7) M	Aldrin	8.11f	10.67f	2442.1E6	1016.1E6	51.783m	51.885m
8)	Heptachlor epoxi	10.25f	13.34f	2274.9E6	927.1E6	51.550m	49.790m
9)	Endosulfan I	11.74f	14.62	2310.5E6	893.6E6	58.433m	53.921
10)	4,4'-DDE	11.84f	15.25f	2584.0E6	788.3E6	59.614m	52.009m
11) M	Dieldrin	12.85f	15.49f	2271.5E6	853.7E6	50.961m	51.468m
12) M	Endrin	13.80f	16.18f	2144.3E6	768.2E6	51.415m	52.705m
13)	4,4'-DDD	14.38f	16.56f	1524.8E6	516.3E6	55.126m	48.963m
14)	Endosulfan II	14.56f	16.64f	2046.4E6	588.2E6	49.538m	43.239m
15) M	4,4'-DDT	15.17f	17.13f	1679.1E6	599.1E6	49.225m	54.852m
16)	Endrin aldehyde	15.70f	17.28f	1513.7E6	537.6E6	51.232m	47.337m
17)	Endosulfan sulfa	16.62f	17.75f	1650.7E6	618.6E6	53.433m	53.723m
18)	Methoxychlor	16.41f	18.27f	871.1E6	320.5E6	55.775m	58.154m
19)	Mirex	16.34f	18.47f	1159.2E6	464.2E6	43.436m	51.441m
20)	Endrin ketone	17.10f	18.54f	1733.1E6	578.8E6	52.921m	47.551m
22) L1	Chlordane (gamma	10.73f	14.12f	2299.3E6	971.7E6	50.777m	51.972m
23) L1	Chlordane (alpha	11.25f	14.61f	2376.1E6	877.9E6	51.787m	50.248m
	Sum Chlordane (gamma)			4675.5E6	1849.7E6	102.563	102.220
	Average Chlordane (gamma)					51.282	51.110
	Sum Toxaphene (1)			0	0	N.D.	N.D.
	Average Toxaphene (1)					0.000	0.000

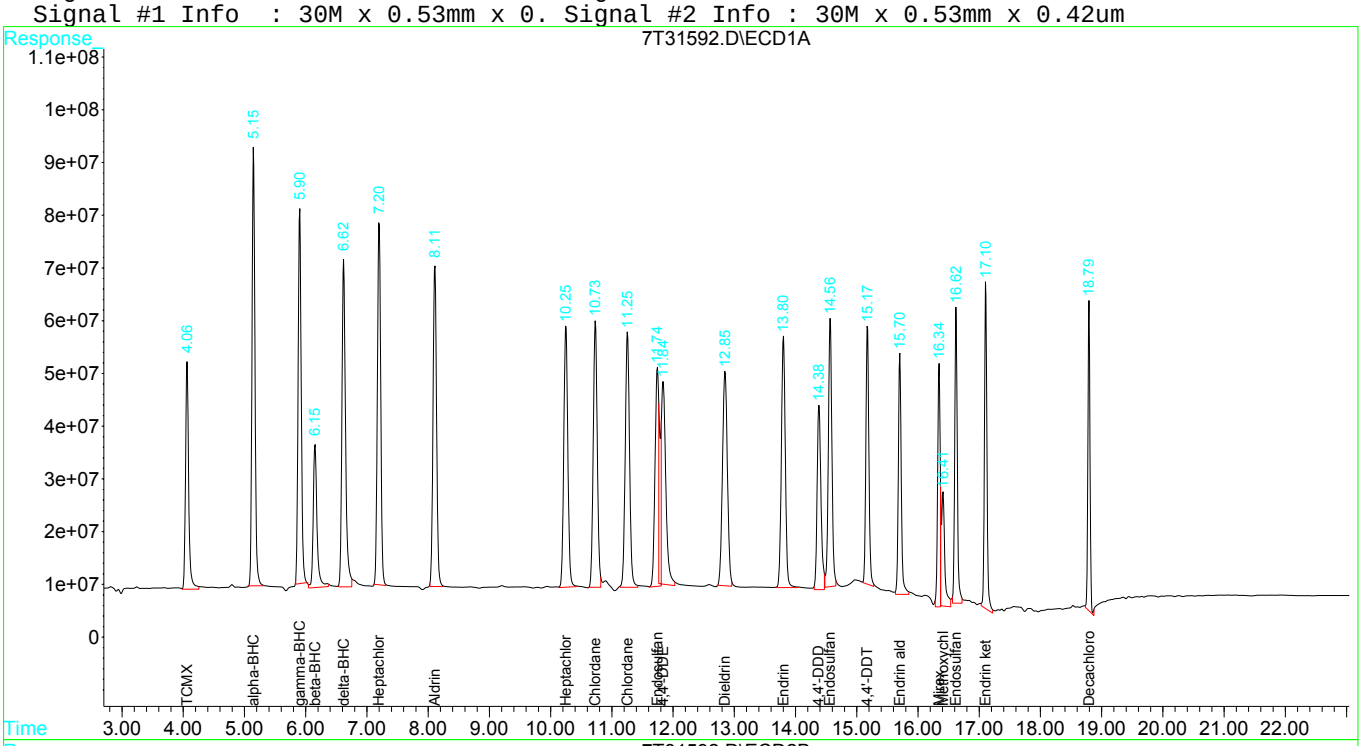
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7T31592.D 80811228.M Tue Jan 03 13:54:16 2023 SS

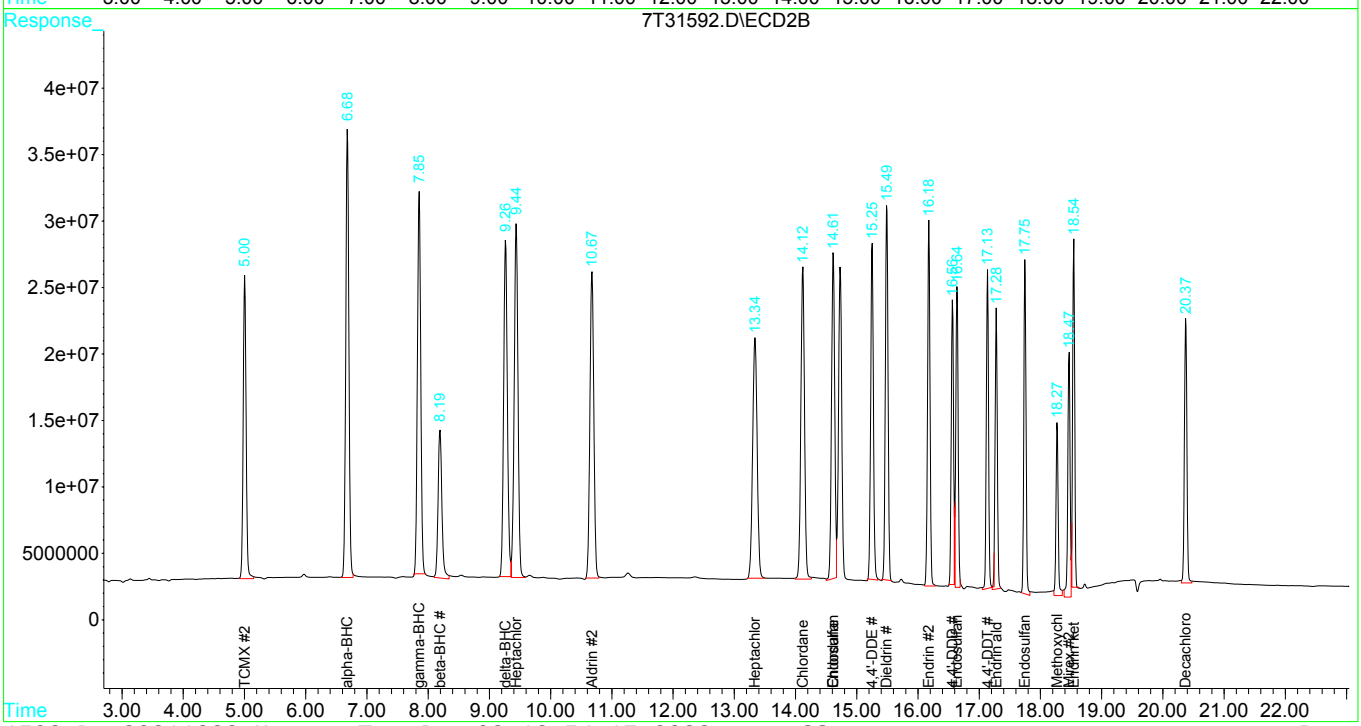
Quantitation Report (QT Reviewed)

Signal #1 : G:\HPCHEM\GCECD7\DATA\20221230\7T31592.D\ECD1A.CH Vial: 3
Signal #2 : G:\HPCHEM\GCECD7\DATA\20221230\7T31592.D\ECD2B.CH
Acq On : 30 Dec 2022 7:57 pm Operator: WD
Sample : SEQ-CCV@50PPB Inst : GCECD-7
Misc : Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Dec 31 17:15 2022 Quant Results File: 80811228.RES

Quant Method : G:\HPCHEM\G...\80811228.M (Chemstation Integrator)
Title : Pesticides by Method SW-846 8081B
Last Update : Sat Dec 31 17:11:18 2022
Response via : Multiple Level Calibration
DataAcq Meth : RUNPEST1.M

Volume Inj. : 2ul
Signal #1 Phase : RTx-50 Signal #2 Phase: RTx-CLPesticides II
Signal #1 Info : 30M x 0.53mm x 0. Signal #2 Info : 30M x 0.53mm x 0.42um





CALIBRATION VERIFICATION SUMMARY

Client: **Dynamic Earth LLC**
Work Order: **2120938**

Lab Sample ID (50):	SAA0020-CCV2(1)	Init. Calib. Date(s):	12/28/2022	12/29/2022
File ID:	7T31613.D	Date Analyzed:	12/31/2022 04:50	
Pesticides	Column 1	Matrix:	Water	

Individual Mix Compound		RT WINDOW		$\overline{CF}$	CF	%D
		FROM	TO			
Aldrin	08.13	08.03	08.23	47160890	54673080	15.90
alpha-BHC	05.16	05.06	05.26	53065430	62575540	17.90
alpha-Chlordane (cis)	11.28	11.18	11.38	45883450	52230420	13.80
beta-BHC	06.17	06.07	06.27	21609980	25589880	18.40
delta-BHC	06.64	06.54	06.74	48927310	56809720	16.10
Dieldrin	12.88	-----	-----	44572680	51351900	15.20
Dieldrin	12.88	12.78	12.98	44572680	51351900	15.20
Endosulfan I	11.77	11.67	11.87	39540850	45694720	15.60
Endosulfan II	14.59	14.49	14.69	41309610	48116440	16.50
Endosulfan sulfate	16.63	16.53	16.73	30893780	35642600	15.40
Endrin	13.83	13.73	13.93	41705440	46827780	12.30
Endrin aldehyde	15.72	15.62	15.82	29546590	33569920	13.60
Endrin ketone	17.12	17.02	17.22	32748990	40145600	22.60 *
gamma-Chlordane	10.75	10.65	10.85	45282670	51529740	13.80
gamma-BHC (Lindane)	05.92	05.82	06.02	49503550	58768500	18.70
4,4'-DDT	15.19	15.09	15.29	34111040	36085100	5.80
4,4'-DDE	11.87	11.77	11.97	43345070	49610220	14.50
4,4'-DDE	11.87	-----	-----	43345070	49610220	14.50
4,4'-DDD	14.41	14.31	14.51	27660840	33094000	19.60
Methoxychlor	16.43	16.33	16.53	15617680	17672240	13.20
Heptachlor Epoxide	10.27	10.17	10.37	44130120	50716060	14.90
Heptachlor	07.22	07.12	07.32	50410610	57121540	13.30
Chlordane	11.28	11.18	11.38	45583060	51880080	13.80
Decachlorobiphenyl	18.81	18.71	18.91	27949750	32683680	16.90
Decachlorobiphenyl	18.81	18.71	18.91	27949750	32683680	16.90
Tetrachloro-m-xylene	04.08	03.98	04.18	31663030	35082720	10.80
Tetrachloro-m-xylene	04.08	03.98	04.18	31663030	35082720	10.80

* - Outside of QC limits

F-VII

CALIBRATION VERIFICATION SUMMARY

Client: **Dynamic Earth LLC**
Work Order: **2120938**

Lab Sample ID (50):	SAA0020-CCV2(2)	Init. Calib. Date(s):	12/28/2022	12/29/2022
File ID:	7T31613.D	Date Analyzed:	12/31/2022 04:50	
Pesticides	Column 2	Matrix:	Water	

Individual Mix Compound		RT WINDOW		$\overline{CF}$	CF	%D
		FROM	TO			
Aldrin [2C]	10.70	10.60	10.80	19584280	22748160	16.20
alpha-BHC [2C]	06.70	06.60	06.80	22683710	26484900	16.80
alpha-Chlordane (cis) [2C]	14.63	14.53	14.73	17471800	20171960	15.50
beta-BHC [2C]	08.21	08.11	08.31	9240612	10327480	11.80
delta-BHC [2C]	09.29	09.19	09.39	20437370	23586140	15.40
Dieldrin [2C]	15.51	-----	-----	16586560	19285610	16.30
Dieldrin [2C]	15.51	15.41	15.61	16586560	19285610	16.30
Endosulfan I [2C]	14.63	14.53	14.73	16572580	19705740	18.90
Endosulfan II [2C]	16.65	16.55	16.75	13602510	15565470	14.40
Endosulfan sulfate [2C]	17.76	17.66	17.86	11514510	13408450	16.40
Endrin [2C]	16.19	16.09	16.29	14574770	16845990	15.60
Endrin aldehyde [2C]	17.29	17.19	17.39	11357280	12059400	6.20
Endrin ketone [2C]	18.56	18.46	18.66	12173110	14477140	18.90
gamma-Chlordane [2C]	14.14	14.04	14.24	18697510	21307940	14.00
gamma-BHC (Lindane) [2C]	07.87	07.77	07.97	21202440	24771760	16.80
4,4'-DDT [2C]	17.15	17.05	17.25	10922680	12718530	16.40
4,4'-DDE [2C]	15.27	-----	-----	15157070	17838570	17.70
4,4'-DDE [2C]	15.27	15.17	15.37	15157070	17838570	17.70
4,4'-DDD [2C]	16.58	16.48	16.68	10544580	12595000	19.40
Methoxychlor [2C]	18.29	18.19	18.39	5512007	6281352	14.00
Heptachlor Epoxide [2C]	13.36	13.26	13.46	18619540	20634280	10.80
Heptachlor [2C]	09.46	09.36	09.56	22291840	24728900	10.90
Chlordane [2C]	14.63	14.53	14.73	18084660	20739950	14.70
Decachlorobiphenyl [2C]	20.39	20.29	20.49	10890370	11952650	9.80
Decachlorobiphenyl [2C]	20.39	20.29	20.49	10890370	11952650	9.80
Tetrachloro-m-xylene [2C]	05.02	04.92	05.12	14651820	16877800	15.20
Tetrachloro-m-xylene [2C]	05.02	04.92	05.12	14651820	16877800	15.20

* - Outside of QC limits

F-VII

Quantitation Report (QT Reviewed)

Signal #1 : G:\HPCHEM\GCECD7\DATA\20221230\7T31613.D\ECD1A.CH Vial: 24
Signal #2 : G:\HPCHEM\GCECD7\DATA\20221230\7T31613.D\ECD2B.CH
Acq On : 31 Dec 2022 4:50 Operator: WD
Sample : SEQ-CCV@50PPB Inst : GCECD-7
Misc : Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Dec 31 17:21 2022 Quant Results File: 80811228.RES

Quant Method : G:\HPCHEM\G...\80811228.M (Chemstation Integrator)
Title : Pesticides by Method SW-846 8081B
Last Update : Sat Dec 31 17:16:59 2022
Response via : Initial Calibration
DataAcq Meth : RUNPEST1.M

Volume Inj. : 2ul
Signal #1 Phase : RTx-50 Signal #2 Phase: RTx-CLPesticides II
Signal #1 Info : 30M x 0.53mm x 0. Signal #2 Info : 30M x 0.53mm x 0.42um

		Compound	RT#1	RT#2	Resp#1	Resp#2	ug/kg	ug/kg
		System Monitoring Compounds						
1)	S	TCMX	4.08	5.02	1754.1E6	843.9E6	55.400	57.596
		Spiked Amount 50.000	Range 43 - 129		Recovery =		110.80%	115.19%
21)	S	Decachlorobiphen	18.81	20.39	1634.2E6	597.6E6	58.469	54.877
		Spiked Amount 50.000	Range 42 - 136		Recovery =		116.94%	109.75%
		Target Compounds						
2)		alpha-BHC	5.16	6.70	3128.8E6	1324.2E6	58.961	58.379
3)	M	gamma-BHC (Linda	5.92	7.87	2938.4E6	1238.6E6	59.358	58.417
4)	M	Heptachlor	7.22	9.46	2856.1E6	1236.4E6	56.656	55.466
5)		beta-BHC	6.17	8.21	1279.5E6	516.4E6	59.208	55.881
6)		delta-BHC	6.64f	9.29	2840.5E6	1179.3E6	58.055	57.703
7)	M	Aldrin	8.13	10.70	2733.7E6	1137.4E6	57.964	58.078
8)		Heptachlor epoxi	10.27	13.36	2535.8E6	1031.7E6	57.462	55.410
9)		Endosulfan I	11.77f	14.63	2284.7E6	985.3E6	57.782	59.453m
10)		4,4'-DDE	11.87f	15.27	2480.5E6	891.9E6	57.227	58.846
11)	M	Dieldrin	12.88f	15.51	2567.6E6	964.3E6	57.605	58.136
12)	M	Endrin	13.83	16.19	2341.4E6	842.3E6	56.141	57.792
13)		4,4'-DDD	14.41f	16.58	1654.7E6	629.7E6	59.821	59.723
14)		Endosulfan II	14.59	16.65	2405.8E6	778.3E6	58.239	57.215
15)	M	4,4'-DDT	15.19	17.15	1804.3E6	635.9E6	52.894m	58.221
16)		Endrin aldehyde	15.72	17.29	1678.5E6	603.0E6	56.808	53.091
17)		Endosulfan sulfa	16.63	17.76	1782.1E6	670.4E6	57.686m	58.224
18)		Methoxychlor	16.43	18.29	883.6E6	314.1E6	56.578	56.979
19)		Mirex	16.36	18.48	1536.7E6	509.2E6	57.582	56.434
20)		Endrin ketone	17.12	18.56	2007.3E6	723.9E6	61.293	59.464
22)	L1	Chlordane (gamma	10.75f	14.14	2576.5E6	1065.4E6	56.898	56.981
23)	L1	Chlordane (alpha	11.28f	14.63	2611.5E6	1008.6E6	56.916	57.727
		Sum Chlordane (gamma)			5188.0E6	2074.0E6	113.814	114.708
		Average Chlordane (gamma)					56.907	57.354
		Sum Toxaphene (1)			0	0	N.D.	N.D.
		Average Toxaphene (1)					0.000	0.000

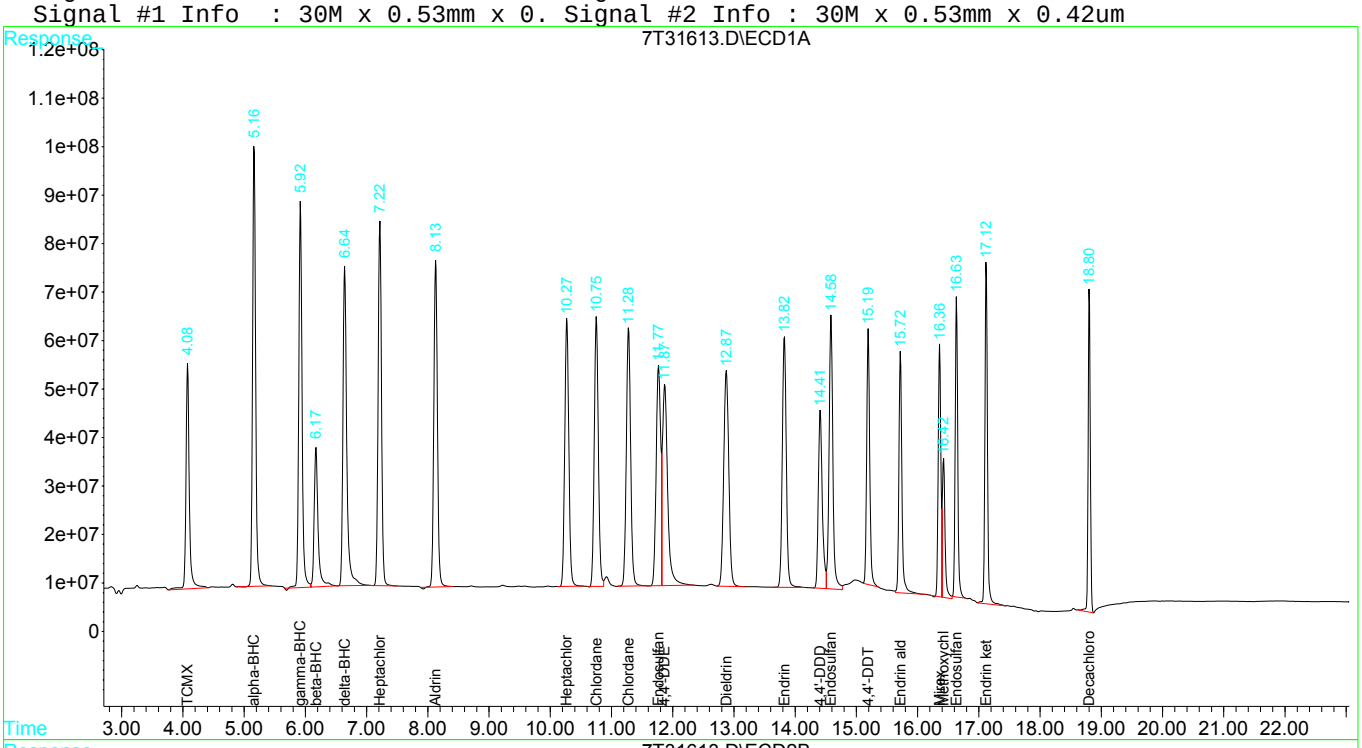
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7T31613.D 80811228.M Wed Jan 04 13:58:57 2023 SS

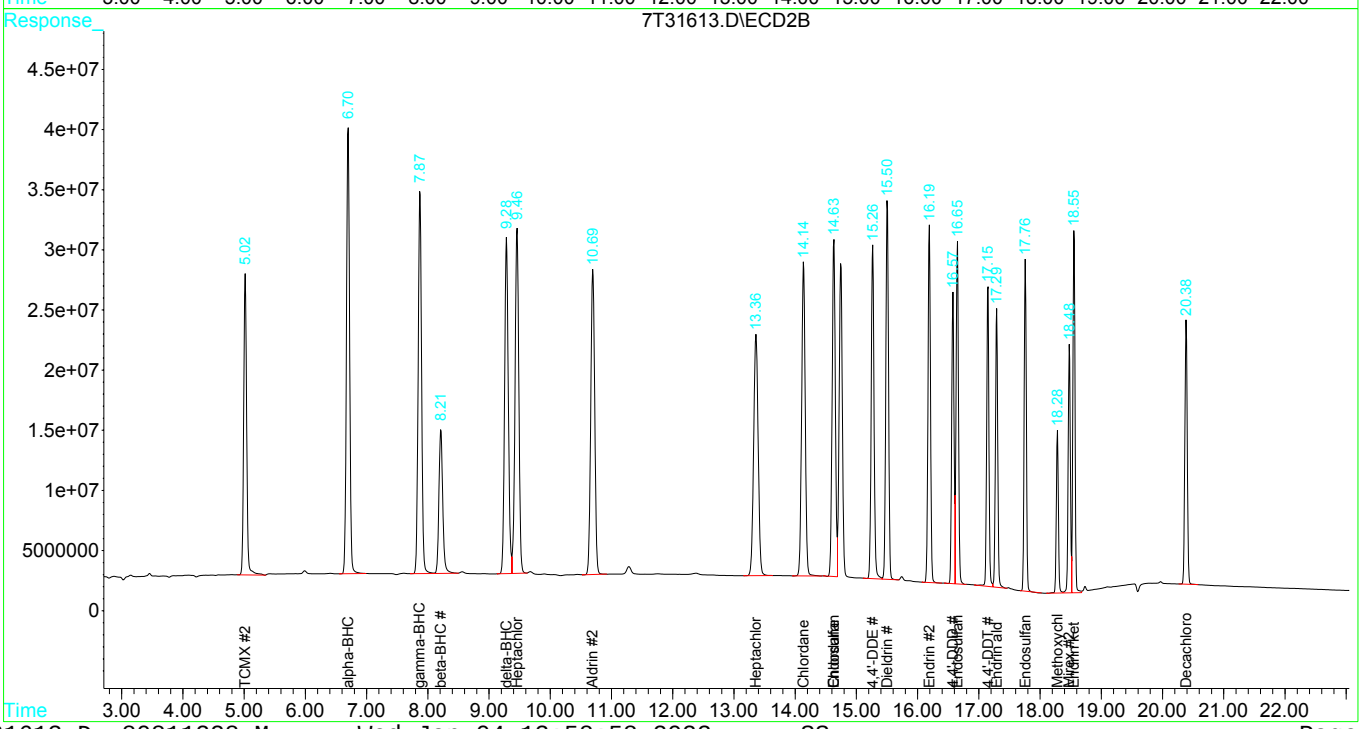
Quantitation Report (QT Reviewed)

Signal #1 : G:\HPCHEM\GCECD7\DATA\20221230\7T31613.D\ECD1A.CH Vial: 24
Signal #2 : G:\HPCHEM\GCECD7\DATA\20221230\7T31613.D\ECD2B.CH
Acq On : 31 Dec 2022 4:50 Operator: WD
Sample : SEQ-CCV@50PPB Inst : GCECD-7
Misc : Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Dec 31 17:21 2022 Quant Results File: 80811228.RES

Quant Method : G:\HPCHEM\G...\80811228.M (Chemstation Integrator)
Title : Pesticides by Method SW-846 8081B
Last Update : Sat Dec 31 17:16:59 2022
Response via : Multiple Level Calibration
DataAcq Meth : RUNPEST1.M

Volume Inj. : 2ul
Signal #1 Phase : RTx-50 Signal #2 Phase: RTx-CLPesticides II
Signal #1 Info : 30M x 0.53mm x 0. Signal #2 Info : 30M x 0.53mm x 0.42um





CALIBRATION VERIFICATION SUMMARY

Client: **Dynamic Earth LLC**
Work Order: **2120938**

Lab Sample ID (500):	SAA0020-CCV3(1)	Init. Calib. Date(s):	12/28/2022	12/29/2022
File ID:	7T31634.D	Date Analyzed:	12/31/2022 13:43	
SPLP Pesticides	Column 1	Matrix:	Water	

Individual Mix Compound		RT WINDOW		$\overline{CF}$	CF	%D
		FROM	TO			
Dieldrin	12.93	-----	-----	44572680	53419280	19.80
4,4'-DDE	11.92	-----	-----	43345070	51035780	17.70
Decachlorobiphenyl	18.83	18.73	18.93	27949750	33278340	19.10
Tetrachloro-m-xylene	04.10	04.00	04.20	31663030	33218040	4.90

* - Outside of QC limits

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CALIBRATION VERIFICATION SUMMARY

Client: **Dynamic Earth LLC**
Work Order: **2120938**

Lab Sample ID (500):	SAA0020-CCV3(2)	Init. Calib. Date(s):	12/28/2022	12/29/2022
File ID:	7T31634.D	Date Analyzed:	12/31/2022 13:43	
SPLP Pesticides	Column 2	Matrix:	Water	

Individual Mix Compound		RT WINDOW		$\overline{CF}$	CF	%D
		FROM	TO			
Dieldrin [2C]	15.53	-----	-----	16586560	19652600	18.50
4,4'-DDE [2C]	15.30	-----	-----	15157070	18205330	20.10 *
Decachlorobiphenyl [2C]	20.41	20.31	20.51	10890370	12667020	16.30
Tetrachloro-m-xylene [2C]	05.05	04.95	05.15	14651820	17324670	18.20

* - Outside of QC limits

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Quantitation Report (QT Reviewed)

Signal #1 : G:\HPCHEM\GCECD7\DATA\20221230\7T31634.D\ECD1A.CH Vial: 45
Signal #2 : G:\HPCHEM\GCECD7\DATA\20221230\7T31634.D\ECD2B.CH
Acq On : 31 Dec 2022 13:43 Operator: WD
Sample : SEQ-CCV@50PPB Inst : GCECD-7
Misc : Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Jan 3 13:38 2023 Quant Results File: 80811228.RES

Quant Method : G:\HPCHEM\G...\80811228.M (Chemstation Integrator)
Title : Pesticides by Method SW-846 8081B
Last Update : Tue Jan 03 11:35:45 2023
Response via : Initial Calibration
DataAcq Meth : RUNPEST1.M

Volume Inj. : 2ul
Signal #1 Phase : RTx-50 Signal #2 Phase: RTx-CLPesticides II
Signal #1 Info : 30M x 0.53mm x 0. Signal #2 Info : 30M x 0.53mm x 0.42um

	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/kg	ug/kg
	System Monitoring Compounds						
1) S	TCMX	4.10	5.05f	1660.9E6	866.2E6	52.456m	59.121
	Spiked Amount 50.000	Range 43 - 129		Recovery =		104.91%	118.24%
21) S	Decachlorobiphen	18.83	20.41	1663.9E6	633.4E6	59.532	58.157
	Spiked Amount 50.000	Range 42 - 136		Recovery =		119.06%	116.31%
	Target Compounds						
2)	alpha-BHC	5.20f	6.73f	3242.7E6	1362.2E6	61.108	60.050
3) M	gamma-BHC (Linda	5.95f	7.91f	3053.6E6	1273.3E6	61.685	60.055
4) M	Heptachlor	7.26f	9.50f	2934.1E6	1266.3E6	58.204	56.808
5)	beta-BHC	6.21f	8.26f	1338.3E6	534.1E6	61.929	57.795
6)	delta-BHC	6.68f	9.33f	2962.8E6	1225.1E6	60.555	59.945
7) M	Aldrin	8.17f	10.74f	2856.0E6	1171.0E6	60.559	59.792
8)	Heptachlor epoxi	10.32f	13.41f	2622.9E6	1057.9E6	59.435	56.814m
9)	Endosulfan I	11.82f	14.67f	2360.1E6	1040.0E6	59.688	62.753
10)	4,4'-DDE	11.92f	15.30f	2551.8E6	910.3E6	58.871m	60.056
11) M	Dieldrin	12.93f	15.53f	2671.0E6	982.6E6	59.924m	59.243
12) M	Endrin	13.87f	16.22f	2398.8E6	864.6E6	57.519	59.322
13)	4,4'-DDD	14.45f	16.60	1885.0E6	710.0E6	68.145	67.338
14)	Endosulfan II	14.62f	16.67	2470.0E6	814.0E6	59.792	59.845
15) M	4,4'-DDT	15.23f	17.17	1689.7E6	538.7E6	49.537	49.320
16)	Endrin aldehyde	15.75f	17.31	1659.2E6	620.0E6	56.156	54.590
17)	Endosulfan sulfa	16.66f	17.78	1920.7E6	684.1E6	62.171	59.410
18)	Methoxychlor	16.45	18.30	841.0E6	280.1E6	53.851	50.811
19)	Mirex	16.39f	18.50	1587.1E6	514.2E6	59.469	56.989
20)	Endrin ketone	17.15	18.58	1987.3E6	728.6E6	60.681	59.854
22) L1	Chlordane (gamma	10.80f	14.18f	2582.9E6	1099.4E6	57.040	58.798
23) L1	Chlordane (alpha	11.33f	14.67f	2689.9E6	1040.0E6	58.624	59.524
	Sum Chlordane (gamma)			5272.8E6	2139.4E6	115.664	118.321
Average	Chlordane (gamma)					57.832	59.161
	Sum Toxaphene (1)			0	0	N.D.	N.D.
Average	Toxaphene (1)					0.000	0.000

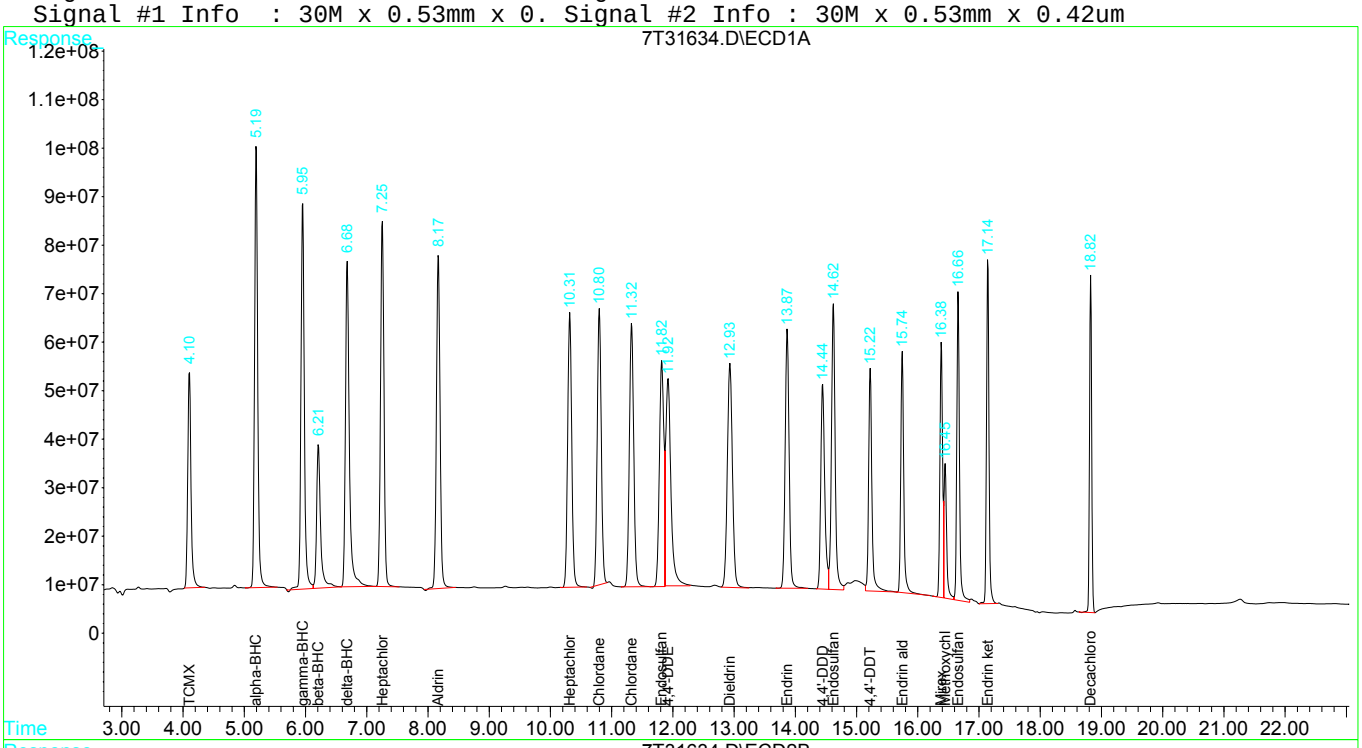
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.
7T31634.D 80811228.M Wed Jan 04 13:58:59 2023 SS

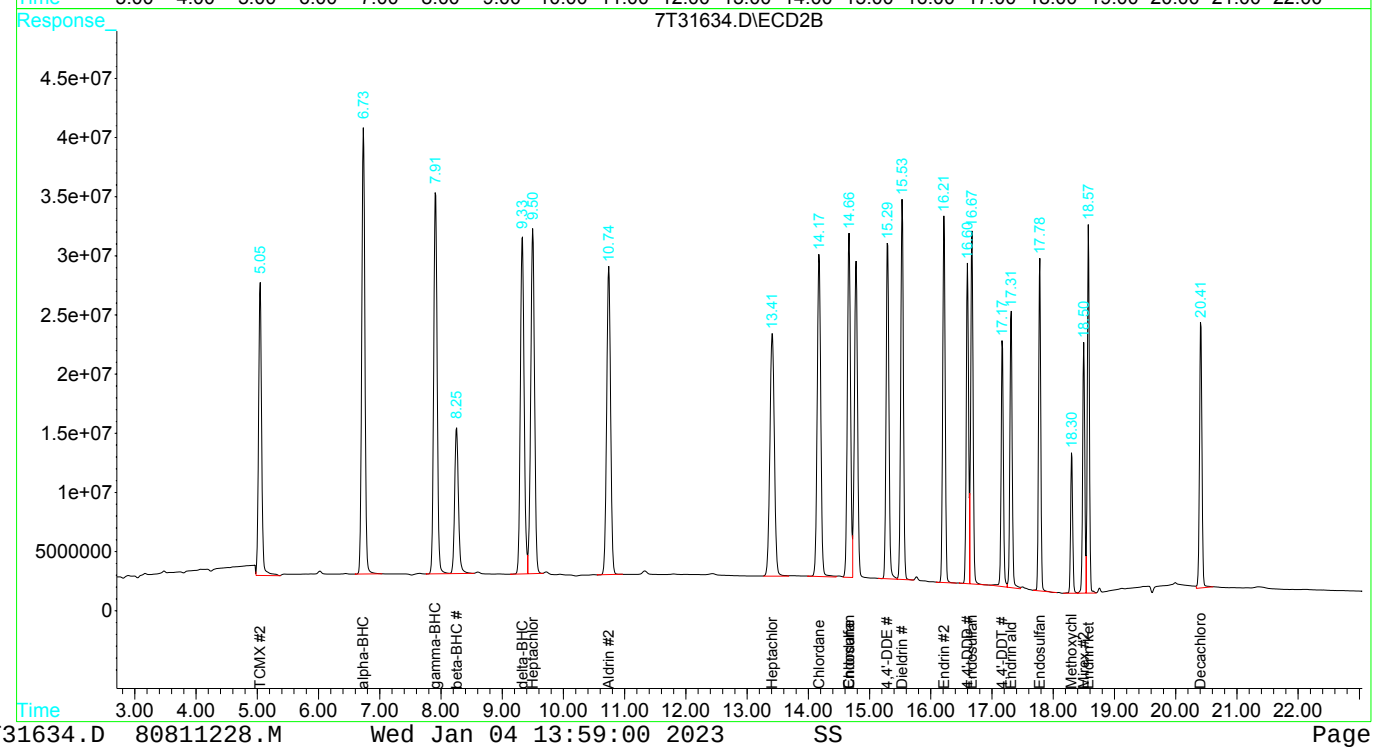
Quantitation Report (QT Reviewed)

Signal #1 : G:\HPCHEM\GCECD7\DATA\20221230\7T31634.D\ECD1A.CH Vial: 45
Signal #2 : G:\HPCHEM\GCECD7\DATA\20221230\7T31634.D\ECD2B.CH
Acq On : 31 Dec 2022 13:43 Operator: WD
Sample : SEQ-CCV@50PPB Inst : GCECD-7
Misc : Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Jan 3 13:38 2023 Quant Results File: 80811228.RES

Quant Method : G:\HPCHEM\G...\80811228.M (Chemstation Integrator)
Title : Pesticides by Method SW-846 8081B
Last Update : Tue Jan 03 11:35:45 2023
Response via : Multiple Level Calibration
DataAcq Meth : RUNPEST1.M

Volume Inj. : 2ul
Signal #1 Phase : RTx-50 Signal #2 Phase: RTx-CLPesticides II
Signal #1 Info : 30M x 0.53mm x 0. Signal #2 Info : 30M x 0.53mm x 0.42um





CALIBRATION VERIFICATION SUMMARY

Client: **Dynamic Earth LLC**
Work Order: **2120938**

Lab Sample ID (Calib):	SAA0020-CCV4(1)	Init. Calib. Date(s):	12/28/2022	12/29/2022
File ID:	7T31655.D	Date Analyzed:	12/31/2022 22:36	
Pesticides	Column 1	Matrix:	Water	

Individual Mix Compound		RT WINDOW		$\overline{CF}$	CF	%D
		FROM	TO			
Aldrin	08.20	08.10	08.30	47160890	58777340	24.60 *
alpha-BHC	05.22	05.12	05.32	53065430	68934300	29.90 *
alpha-Chlordane (cis)	11.36	11.26	11.46	45883450	55429440	20.80 *
beta-BHC	06.23	06.13	06.33	21609980	26416820	22.20 *
delta-BHC	06.71	06.61	06.81	48927310	62504640	27.80 *
Dieldrin	12.98	12.88	13.08	44572680	55489700	24.50 *
Dieldrin	12.98	-----	-----	44572680	55489700	24.50 *
Endosulfan I	11.86	11.76	11.96	39540850	48865320	23.60 *
Endosulfan II	14.65	14.55	14.75	41309610	48419900	17.20
Endosulfan sulfate	16.68	16.58	16.78	30893780	37614960	21.80 *
Endrin	13.90	13.80	14.00	41705440	47705500	14.40
Endrin aldehyde	15.77	15.67	15.87	29546590	35803000	21.20 *
Endrin ketone	17.16	17.06	17.26	32748990	23423680	28.50 *
gamma-Chlordane	10.83	10.73	10.93	45282670	53605380	18.40
gamma-BHC (Lindane)	05.98	05.88	06.08	49503550	58740280	18.70
4,4'-DDT	15.24	15.14	15.34	34111040	6712372	80.30 *
4,4'-DDE	11.96	-----	-----	43345070	54177480	25.00 *
4,4'-DDE	11.96	11.86	12.06	43345070	54177480	25.00 *
4,4'-DDD	14.47	14.37	14.57	27660840	52067440	88.20 *
Methoxychlor	16.41	16.31	16.51	15617680	34899320	123.00*
Heptachlor Epoxide	10.35	10.25	10.45	44130120	54301420	23.00 *
Heptachlor	07.28	07.18	07.38	50410610	39954380	20.70 *
Chlordane	11.36	11.26	11.46	45583060	54517410	19.60
Decachlorobiphenyl	18.84	18.74	18.94	27949750	32379460	15.80
Decachlorobiphenyl	18.84	18.74	18.94	27949750	32379460	15.80
Tetrachloro-m-xylene	04.12	04.02	04.22	31663030	40378080	27.50 *
Tetrachloro-m-xylene	04.12	04.02	04.22	31663030	40378080	27.50 *

* - Outside of QC limits

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CALIBRATION VERIFICATION SUMMARY

Client: **Dynamic Earth LLC**
Work Order: **2120938**

Lab Sample ID (Calib):	SAA0020-CCV4(2)	Init. Calib. Date(s):	12/28/2022	12/29/2022
File ID:	7T31655.D	Date Analyzed:	12/31/2022 22:36	
Pesticides	Column 2	Matrix:	Water	

Individual Mix Compound		RT WINDOW		$\overline{CF}$	CF	%D
		FROM	TO			
Aldrin [2C]	10.78	10.68	10.88	19584280	24337460	24.30 *
alpha-BHC [2C]	06.76	06.66	06.86	22683710	28908400	27.40 *
alpha-Chlordane (cis) [2C]	14.69	14.59	14.79	17471800	21053880	20.50 *
beta-BHC [2C]	08.28	08.18	08.38	9240612	10661320	15.40
delta-BHC [2C]	09.36	09.26	09.46	20437370	25521580	24.90 *
Dieldrin [2C]	15.56	15.46	15.66	16586560	20178740	21.70 *
Dieldrin [2C]	15.56	-----	-----	16586560	20178740	21.70 *
Endosulfan I [2C]	14.69	14.59	14.79	16572580	21053880	27.00 *
Endosulfan II [2C]	16.69	16.59	16.79	13602510	18971390	39.50 *
Endosulfan sulfate [2C]	17.80	17.70	17.90	11514510	13580860	17.90
Endrin [2C]	16.24	16.14	16.34	14574770	16283240	11.70
Endrin aldehyde [2C]	17.33	17.23	17.43	11357280	12394970	9.10
Endrin ketone [2C]	18.59	18.49	18.69	12173110	8702054	28.50 *
gamma-Chlordane [2C]	14.21	14.11	14.31	18697510	22434100	20.00
gamma-BHC (Lindane) [2C]	07.94	07.84	08.04	21202440	24655900	16.30
4,4'-DDT [2C]	17.18	17.08	17.28	10922680	1768151	83.80 *
4,4'-DDE [2C]	15.32	-----	-----	15157070	18611840	22.80 *
4,4'-DDE [2C]	15.32	15.22	15.42	15157070	18611840	22.80 *
4,4'-DDD [2C]	16.62	16.52	16.72	10544580	18999500	80.20 *
Methoxychlor [2C]	18.32	18.22	18.42	5512007	1529436	72.30 *
Heptachlor Epoxide [2C]	13.45	13.35	13.55	18619540	21876480	17.50
Heptachlor [2C]	09.53	09.43	09.63	22291840	16942280	24.00 *
Chlordane [2C]	14.69	14.59	14.79	18084660	21743990	20.20 *
Decachlorobiphenyl [2C]	20.43	20.33	20.53	10890370	12393170	13.80
Decachlorobiphenyl [2C]	20.43	20.33	20.53	10890370	12393170	13.80
Tetrachloro-m-xylene [2C]	05.07	04.97	05.17	14651820	17836420	21.70 *
Tetrachloro-m-xylene [2C]	05.07	04.97	05.17	14651820	17836420	21.70 *

* - Outside of QC limits

F-VII

Quantitation Report (QT Reviewed)

Signal #1 : G:\HPCHEM\GCECD7\DATA\20221230\7T31655.D\ECD1A.CH Vial: 66
Signal #2 : G:\HPCHEM\GCECD7\DATA\20221230\7T31655.D\ECD2B.CH
Acq On : 31 Dec 2022 10:36 pm Operator: WD
Sample : SEQ-CCV@50PPB Inst : GCECD-7
Misc : Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Jan 3 13:41 2023 Quant Results File: 80811228.RES

Quant Method : G:\HPCHEM\G...\80811228.M (Chemstation Integrator)
Title : Pesticides by Method SW-846 8081B
Last Update : Tue Jan 03 13:40:33 2023
Response via : Initial Calibration
DataAcq Meth : RUNPEST1.M

Volume Inj. : 2ul
Signal #1 Phase : RTx-50 Signal #2 Phase: RTx-CLPesticides II
Signal #1 Info : 30M x 0.53mm x 0. Signal #2 Info : 30M x 0.53mm x 0.42um

	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/kg	ug/kg
	System Monitoring Compounds						
1) S	TCMX	4.12	5.07	2018.9E6	891.8E6	63.762	60.868
	Spiked Amount 50.000	Range 43 - 129		Recovery =		127.52%	121.74%
21) S	Decachlorobiphen	18.84	20.43	1619.0E6	619.7E6	57.924	56.900
	Spiked Amount 50.000	Range 42 - 136		Recovery =		115.85%	113.80%
	Target Compounds						
2)	alpha-BHC	5.22	6.76f	3446.7E6	1445.4E6	64.952	63.721
3) M	gamma-BHC (Linda	5.98	7.94f	2937.0E6	1232.8E6	59.329	58.144
4) M	Heptachlor	7.28f	9.53f	1997.7E6	847.1E6	39.629	38.001
5)	beta-BHC	6.23	8.28f	1320.8E6	533.1E6	61.122	57.687
6)	delta-BHC	6.71	9.36f	3125.2E6	1276.1E6	63.875	62.439
7) M	Aldrin	8.20f	10.78f	2938.9E6	1216.9E6	62.316	62.135
8)	Heptachlor epoxi	10.35f	13.45f	2715.1E6	1093.8E6	61.524	58.746
9)	Endosulfan I	11.86f	14.69f	2443.3E6	1052.7E6	61.791	63.520
10)	4,4'-DDE	11.96f	15.32	2708.9E6	930.6E6	62.496	61.397
11) M	Dieldrin	12.98f	15.56	2774.5E6	1008.9E6	62.246	60.829
12) M	Endrin	13.90f	16.24	2385.3E6	814.2E6	57.193	55.861
13)	4,4'-DDD	14.47	16.62	2603.4E6	950.0E6	94.118	90.091
14)	Endosulfan II	14.65f	16.69	2421.0E6	948.6E6	58.606	69.735
15) M	4,4'-DDT	15.24	17.18	335.6E6	88407541	9.839	8.094
16)	Endrin aldehyde	15.77	17.33	1790.1E6	619.7E6	60.587	54.568
17)	Endosulfan sulfa	16.68	17.80	1880.7E6	679.0E6	60.878	58.973
18)	Methoxychlor	16.41f	18.32	1745.0E6	76471800	111.730	13.874 #
19)	Mirex	16.41	18.52	1745.0E6	485.7E6	65.385	53.825
20)	Endrin ketone	17.16	18.59	1171.2E6	435.1E6	35.762	35.743
22) L1	Chlordane (gamma	10.83f	14.21f	2680.3E6	1121.7E6	59.190	59.992
23) L1	Chlordane (alpha	11.36f	14.69f	2771.5E6	1052.7E6	60.402	60.251
	Sum Chlordane (gamma)			5451.7E6	2174.4E6	119.592	120.243
	Average Chlordane (gamma)					59.796	60.122
	Sum Toxaphene (1)			0	0	N.D.	N.D.
	Average Toxaphene (1)					0.000	0.000

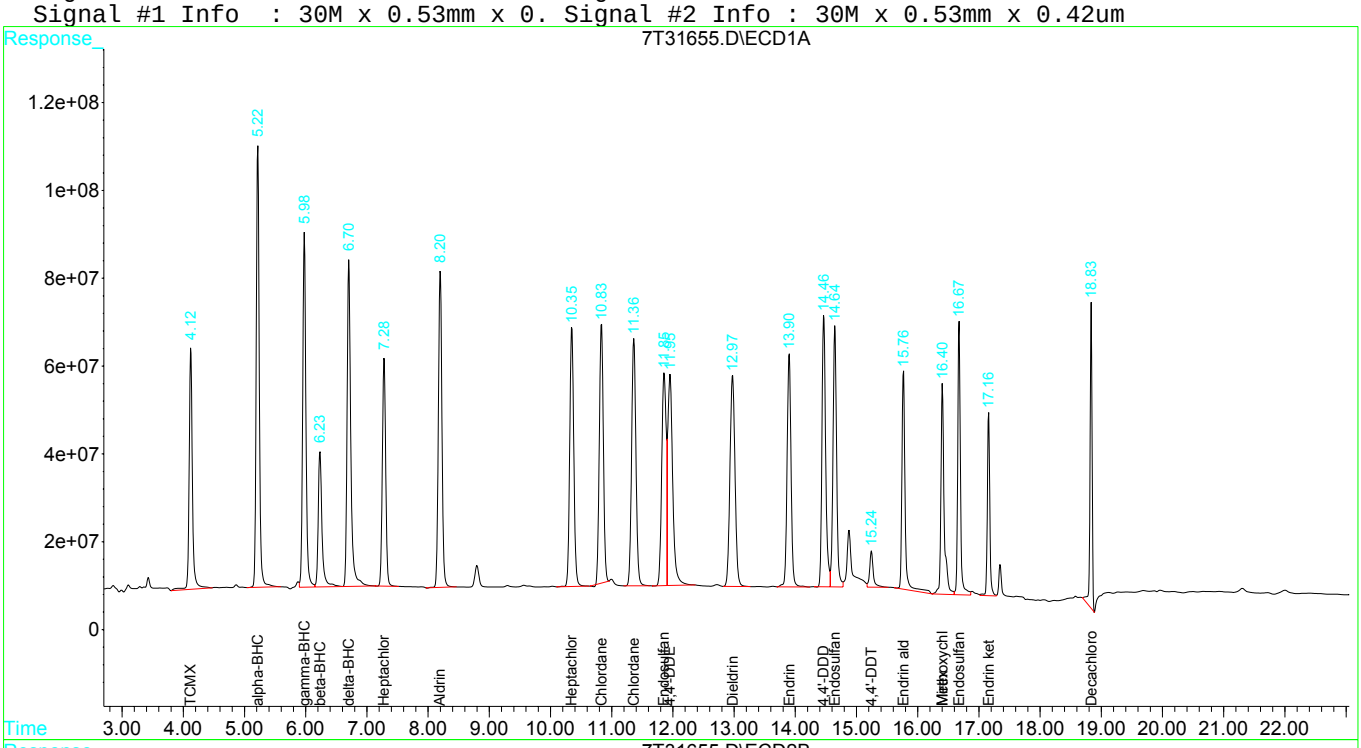
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

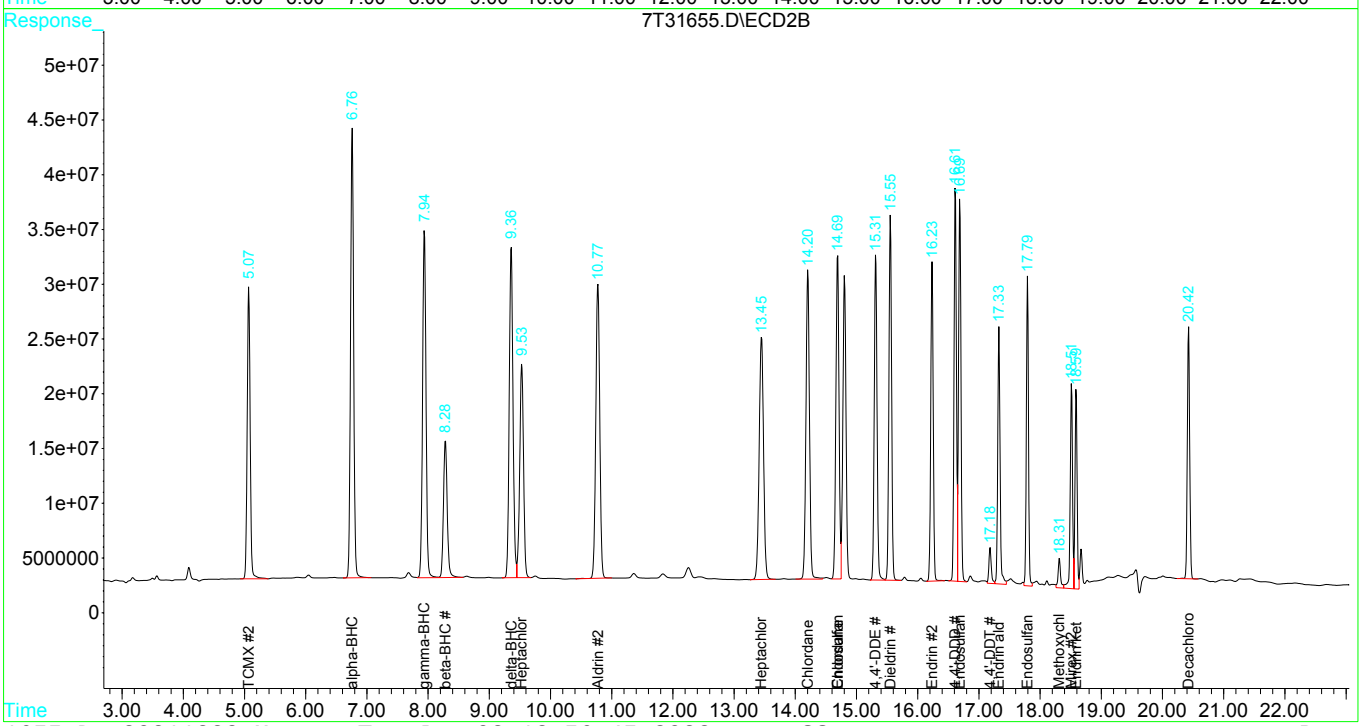
Quantitation Report (QT Reviewed)

Signal #1 : G:\HPCHEM\GCECD7\DATA\20221230\7T31655.D\ECD1A.CH Vial: 66
Signal #2 : G:\HPCHEM\GCECD7\DATA\20221230\7T31655.D\ECD2B.CH
Acq On : 31 Dec 2022 10:36 pm Operator: WD
Sample : SEQ-CCV@50PPB Inst : GCECD-7
Misc : Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Jan 3 13:41 2023 Quant Results File: 80811228.RES

Quant Method : G:\HPCHEM\G...\80811228.M (Chemstation Integrator)
Title : Pesticides by Method SW-846 8081B
Last Update : Tue Jan 03 13:40:33 2023
Response via : Multiple Level Calibration
DataAcq Meth : RUNPEST1.M

Volume Inj. : 2ul
Signal #1 Phase : RTx-50 Signal #2 Phase: RTx-CLPesticides II
Signal #1 Info : 30M x 0.53mm x 0. Signal #2 Info : 30M x 0.53mm x 0.42um





CALIBRATION VERIFICATION SUMMARY

Client: **Dynamic Earth LLC**
Work Order: **2120938**

Lab Sample ID (50 pp):	SAA0243-CCV1(1)	Init. Calib. Date(s):	12/28/2022	12/29/2022
File ID:	7T31895.D	Date Analyzed:	01/14/2023 14:12	
SPLP Pesticides	Column 1	Matrix:	Soil	

Individual Mix Compound		RT WINDOW		$\overline{CF}$	CF	%D
		FROM	TO			
Aldrin	08.81	-----	-----	47160890	48995600	3.90
alpha-BHC	05.67	-----	-----	53065430	55474460	4.50
beta-BHC	06.74	-----	-----	21609980	21082200	2.40
delta-BHC	07.23	-----	-----	48927310	50817260	3.90
Dieldrin	13.75	-----	-----	44572680	46033540	3.30
Endosulfan I	12.74	-----	-----	39540850	44120240	11.60
Endosulfan II	15.16	-----	-----	41309610	42566820	3.00
Endosulfan sulfate	16.80	-----	-----	30893780	33307200	7.80
Endrin	14.51	-----	-----	41705440	43400880	4.10
Endrin aldehyde	16.18	-----	-----	29546590	29582080	0.10
Endrin ketone	17.52	-----	-----	32748990	34282480	4.70
gamma-BHC (Lindane)	06.47	-----	-----	49503550	51100280	3.20
4,4'-DDT	15.68	-----	-----	34111040	35216080	3.20
4,4'-DDE	12.68	-----	-----	43345070	41582440	4.10
4,4'-DDD	14.97	-----	-----	27660840	32723120	18.30
Methoxychlor	16.81	-----	-----	15617680	17184710	10.00
Heptachlor Epoxide	11.04	-----	-----	44130120	46065240	4.40
Heptachlor	07.85	-----	-----	50410610	52210460	3.60
Chlordane	12.12	-----	-----	45583060	47444050	4.10
Decachlorobiphenyl	19.14	19.04	19.24	27949750	28959100	3.60
Tetrachloro-m-xylene	04.50	04.40	04.60	31663030	33341720	5.30

* - Outside of QC limits

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CALIBRATION VERIFICATION SUMMARY

Client: **Dynamic Earth LLC**
Work Order: **2120938**

Lab Sample ID (50 pp):	SAA0243-CCV1(2)	Init. Calib. Date(s):	12/28/2022	12/29/2022
File ID:	7T31895.D	Date Analyzed:	01/14/2023 14:12	
SPLP Pesticides	Column 2	Matrix:	Soil	

Individual Mix Compound		RT WINDOW		$\overline{CF}$	CF	%D
		FROM	TO			
Aldrin [2C]	11.49	-----	-----	19584280	21185540	8.20
alpha-BHC [2C]	07.29	-----	-----	22683710	24555900	8.30
beta-BHC [2C]	08.88	-----	-----	9240612	9664752	4.60
delta-BHC [2C]	10.00	-----	-----	20437370	22060080	7.90
Dieldrin [2C]	15.98	-----	-----	16586560	17865010	7.70
Endosulfan I [2C]	15.19	-----	-----	16572580	18561570	12.00
Endosulfan II [2C]	17.06	-----	-----	13602510	13414610	1.40
Endosulfan sulfate [2C]	18.12	-----	-----	11514510	12308100	6.90
Endrin [2C]	16.63	-----	-----	14574770	14977820	2.80
Endrin aldehyde [2C]	17.67	-----	-----	11357280	10821220	4.70
Endrin ketone [2C]	18.90	-----	-----	12173110	13034750	7.10
gamma-BHC (Lindane) [2C]	08.53	-----	-----	21202440	22726000	7.20
4,4'-DDT [2C]	17.51	-----	-----	10922680	11533270	5.60
4,4'-DDE [2C]	15.74	-----	-----	15157070	16663680	9.90
4,4'-DDD [2C]	16.97	-----	-----	10544580	11074820	5.00
Methoxychlor [2C]	18.61	-----	-----	5512007	6010556	9.00
Heptachlor Epoxide [2C]	14.12	-----	-----	18619540	19845540	6.60
Heptachlor [2C]	10.00	-----	-----	22291840	22060080	1.00
Chlordane [2C]	15.19	-----	-----	18084660	19166550	6.00
Decachlorobiphenyl [2C]	20.83	20.73	20.93	10890370	11688570	7.30
Tetrachloro-m-xylene [2C]	05.51	05.41	05.61	14651820	15175080	3.60

* - Outside of QC limits

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Quantitation Report (QT Reviewed)

Signal #1 : G:\HPCHEM\GCECD7\DATA\20230114\7T31895.D\ECD1A.CH Vial: 3
Signal #2 : G:\HPCHEM\GCECD7\DATA\20230114\7T31895.D\ECD2B.CH
Acq On : 14 Jan 2023 14:12 Operator: WD
Sample : SEQ-CCV@50PPB Inst : GCECD-7
Misc : Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Jan 14 14:40 2023 Quant Results File: 80811228.RES

Quant Method : G:\HPCHEM\G...\80811228.M (Chemstation Integrator)
Title : Pesticides by Method SW-846 8081B
Last Update : Sat Jan 14 14:38:29 2023
Response via : Initial Calibration
DataAcq Meth : RUNPEST1.M

Volume Inj. : 2ul
Signal #1 Phase : RTx-50 Signal #2 Phase: RTx-CLPesticides II
Signal #1 Info : 30M x 0.53mm x 0. Signal #2 Info : 30M x 0.53mm x 0.42um

	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/kg	ug/kg
	System Monitoring Compounds						
1) S	TCMX	4.50	5.51	1667.1E6	758.8E6	52.651	51.786
Spiked Amount	50.000	Range 43 - 129		Recovery =		105.30%	103.57%
21) S	Decachlorobiphen	19.14	20.83	1448.0E6	584.4E6	51.806	53.665
Spiked Amount	50.000	Range 42 - 136		Recovery =		103.61%	107.33%
	Target Compounds						
2)	alpha-BHC	5.67	7.29	2773.7E6	1227.8E6	52.270	54.127
3) M	gamma-BHC (Linda	6.47	8.53	2555.0E6	1136.3E6	51.613	53.593
4) M	Heptachlor	7.85	10.00	2610.5E6	1103.0E6	51.785	49.480
5)	beta-BHC	6.74	8.88	1054.1E6	483.2E6	48.779	52.295
6)	delta-BHC	7.23	10.00	2540.9E6	1103.0E6	51.931	53.970
7) M	Aldrin	8.81	11.49	2449.8E6	1059.3E6	51.945	54.088
8)	Heptachlor epoxi	11.04	14.12	2303.3E6	992.3E6	52.193	53.292
9)	Endosulfan I	12.74f	15.19	2206.0E6	928.1E6	55.791m	56.001
10)	4,4'-DDE	12.68	15.74	2079.1E6	833.2E6	47.967	54.970
11) M	Dieldrin	13.75	15.98	2301.7E6	893.3E6	51.639	53.854
12) M	Endrin	14.51	16.63	2170.0E6	748.9E6	52.033	51.383
13)	4,4'-DDD	14.97	16.97	1636.2E6	553.7E6	59.151m	52.514
14)	Endosulfan II	15.16	17.06	2128.3E6	670.7E6	51.522	49.309
15) M	4,4'-DDT	15.68	17.51	1760.8E6	576.7E6	51.620	52.795
16)	Endrin aldehyde	16.18	17.67	1479.1E6	541.1E6	50.060	47.640
17)	Endosulfan sulfa	16.80	18.12	1665.4E6	615.4E6	53.906m	53.446
18)	Methoxychlor	16.81	18.61	859.2E6	300.5E6	55.017m	54.522
20)	Endrin ketone	17.52	18.90	1714.1E6	651.7E6	52.341	53.539
22) L1	Chlordane (gamma	11.55	14.76	2381.6E6	988.6E6	52.595	52.872
23) L1	Chlordane (alpha	12.12	15.19	2362.8E6	928.1E6	51.495	53.119
Sum	Chlordane (gamma)			4744.4E6	1916.7E6	104.090	105.991
Average	Chlordane (gamma)					52.045	52.995
Sum	Toxaphene (1)			0	0	N.D.	N.D.
Average	Toxaphene (1)					0.000	0.000

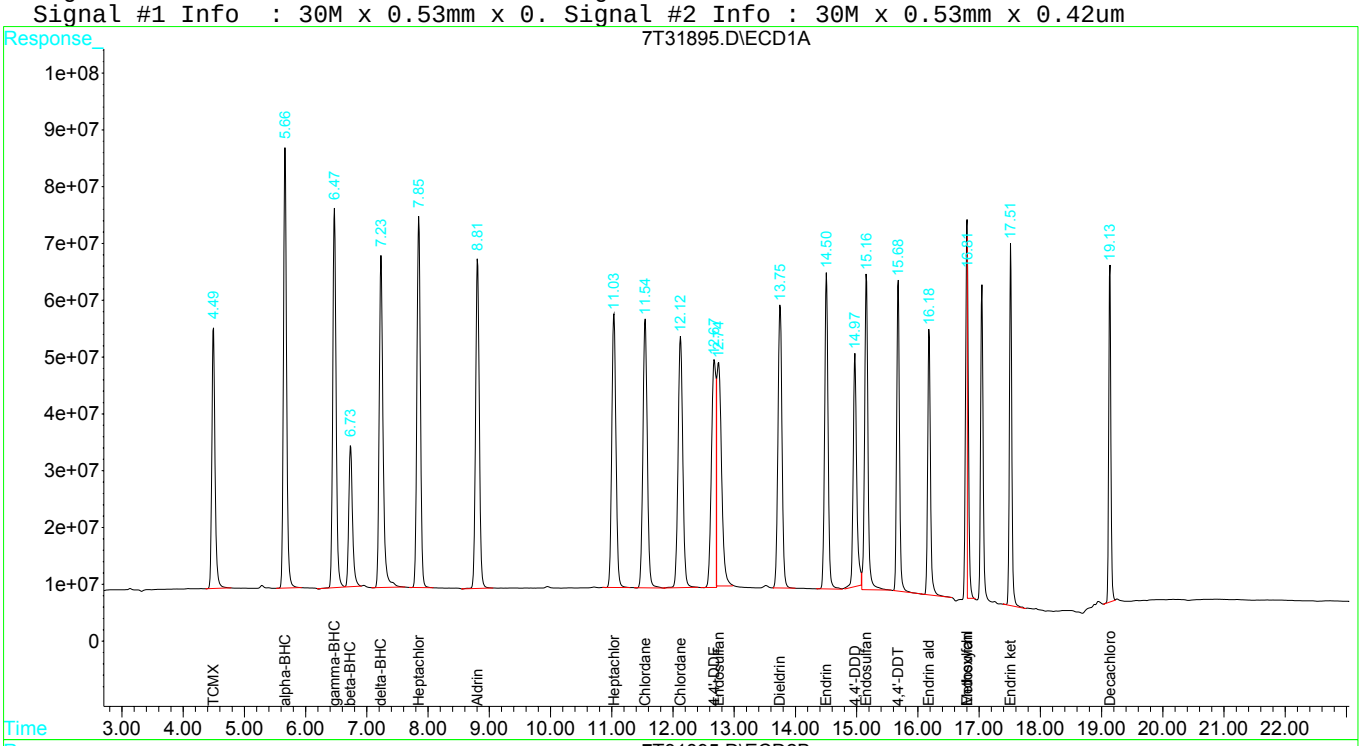
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7T31895.D 80811228.M Fri Jan 20 14:08:49 2023 SS

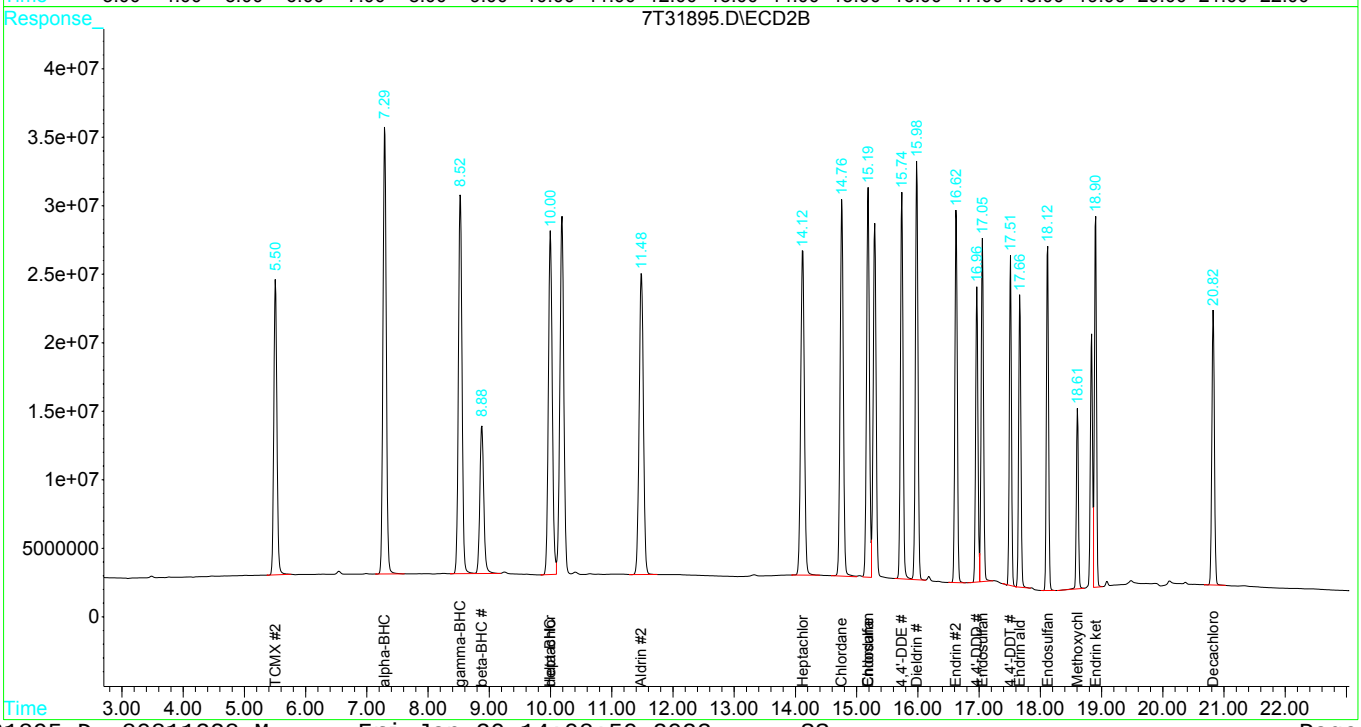
Quantitation Report (QT Reviewed)

Signal #1 : G:\HPCHEM\GCECD7\DATA\20230114\7T31895.D\ECD1A.CH Vial: 3
Signal #2 : G:\HPCHEM\GCECD7\DATA\20230114\7T31895.D\ECD2B.CH
Acq On : 14 Jan 2023 14:12 Operator: WD
Sample : SEQ-CCV@50PPB Inst : GCECD-7
Misc : Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Jan 14 14:40 2023 Quant Results File: 80811228.RES

Quant Method : G:\HPCHEM\G...\80811228.M (Chemstation Integrator)
Title : Pesticides by Method SW-846 8081B
Last Update : Sat Jan 14 14:38:29 2023
Response via : Multiple Level Calibration
DataAcq Meth : RUNPEST1.M

Volume Inj. : 2ul
Signal #1 Phase : RTx-50 Signal #2 Phase: RTx-CLPesticides II
Signal #1 Info : 30M x 0.53mm x 0. Signal #2 Info : 30M x 0.53mm x 0.42um





CALIBRATION VERIFICATION SUMMARY

Client: **Dynamic Earth LLC**
Work Order: **2120938**

Lab Sample ID (50):	SAA0243-CCV2(1)	Init. Calib. Date(s):	12/28/2022	12/29/2022
File ID:	7T31907.D	Date Analyzed:	01/14/2023 19:16	
SPLP Pesticides	Column 1	Matrix:	Soil	

Individual Mix Compound		RT WINDOW		$\overline{CF}$	CF	%D
		FROM	TO			
Aldrin	08.82	-----	-----	47160890	50596340	7.30
alpha-BHC	05.68	-----	-----	53065430	57688800	8.70
beta-BHC	06.75	-----	-----	21609980	21646520	0.20
delta-BHC	07.25	-----	-----	48927310	52602380	7.50
Dieldrin	13.77	-----	-----	44572680	47850360	7.40
Endosulfan I	12.77	-----	-----	39540850	44978960	13.80
Endosulfan II	15.17	-----	-----	41309610	44411620	7.50
Endosulfan sulfate	16.81	-----	-----	30893780	30207280	2.20
Endrin	14.52	-----	-----	41705440	41989220	0.70
Endrin aldehyde	16.19	-----	-----	29546590	33478680	13.30
Endrin ketone	17.52	-----	-----	32748990	36584840	11.70
gamma-BHC (Lindane)	06.48	-----	-----	49503550	52770120	6.60
4,4'-DDT	15.69	-----	-----	34111040	35440260	3.90
4,4'-DDE	12.69	-----	-----	43345070	43630440	0.70
4,4'-DDD	14.98	-----	-----	27660840	32596180	17.80
Methoxychlor	16.82	-----	-----	15617680	16941840	8.50
Heptachlor Epoxide	11.05	-----	-----	44130120	47696520	8.10
Heptachlor	07.86	-----	-----	50410610	53238400	5.60
Chlordane	12.14	-----	-----	45583060	49434340	8.40
Decachlorobiphenyl	19.14	19.04	19.24	27949750	31472800	12.60
Tetrachloro-m-xylene	04.51	04.41	04.61	31663030	35099860	10.90

* - Outside of QC limits

F-VII

CALIBRATION VERIFICATION SUMMARY

Client: **Dynamic Earth LLC**
Work Order: **2120938**

Lab Sample ID (50):	SAA0243-CCV2(2)	Init. Calib. Date(s):	12/28/2022 12/29/2022
File ID:	7T31907.D	Date Analyzed:	01/14/2023 19:16
SPLP Pesticides	Column 2	Matrix:	Soil

Individual Mix Compound		RT WINDOW		$\overline{CF}$	CF	%D
		FROM	TO			
Aldrin [2C]	11.50	-----	-----	19584280	21915540	11.90
alpha-BHC [2C]	07.31	-----	-----	22683710	25307940	11.60
beta-BHC [2C]	08.89	-----	-----	9240612	9991170	8.10
delta-BHC [2C]	10.02	-----	-----	20437370	22782600	11.50
Dieldrin [2C]	15.99	-----	-----	16586560	18457090	11.30
Endosulfan I [2C]	15.20	-----	-----	16572580	19228910	16.00
Endosulfan II [2C]	17.06	-----	-----	13602510	15610720	14.80
Endosulfan sulfate [2C]	18.13	-----	-----	11514510	12768830	10.90
Endrin [2C]	16.63	-----	-----	14574770	14425940	1.00
Endrin aldehyde [2C]	17.67	-----	-----	11357280	11553630	1.70
Endrin ketone [2C]	18.91	-----	-----	12173110	13842760	13.70
gamma-BHC (Lindane) [2C]	08.54	-----	-----	21202440	23447540	10.60
4,4'-DDT [2C]	17.52	-----	-----	10922680	11396810	4.30
4,4'-DDE [2C]	15.75	-----	-----	15157070	17219150	13.60
4,4'-DDD [2C]	16.97	-----	-----	10544580	11522690	9.30
Methoxychlor [2C]	18.61	-----	-----	5512007	5898182	7.00
Heptachlor Epoxide [2C]	14.13	-----	-----	18619540	20543460	10.30
Heptachlor [2C]	10.02	-----	-----	22291840	22782600	2.20
Chlordane [2C]	15.20	-----	-----	18084660	19824930	9.60
Decachlorobiphenyl [2C]	20.84	20.74	20.94	10890370	12250550	12.50
Tetrachloro-m-xylene [2C]	05.52	05.42	05.62	14651820	15656600	6.90

* - Outside of QC limits

F-VII

Quantitation Report (QT Reviewed)

Signal #1 : G:\HPCHEM\GCECD7\DATA\20230114\7T31907.D\ECD1A.CH Vial: 15
Signal #2 : G:\HPCHEM\GCECD7\DATA\20230114\7T31907.D\ECD2B.CH
Acq On : 14 Jan 2023 19:16 Operator: WD
Sample : SEQ-CCV@50PPB Inst : GCECD-7
Misc : Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Jan 16 13:28 2023 Quant Results File: 80811228.RES

Quant Method : G:\HPCHEM\G...\80811228.M (Chemstation Integrator)
Title : Pesticides by Method SW-846 8081B
Last Update : Mon Jan 16 13:27:03 2023
Response via : Initial Calibration
DataAcq Meth : RUNPEST1.M

Volume Inj. : 2ul
Signal #1 Phase : RTx-50 Signal #2 Phase: RTx-CLPesticides II
Signal #1 Info : 30M x 0.53mm x 0. Signal #2 Info : 30M x 0.53mm x 0.42um

	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/kg	ug/kg
	System Monitoring Compounds						
1) S	TCMX	4.51	5.52	1755.0E6	782.8E6	55.427	53.429
	Spiked Amount 50.000	Range 43 - 129		Recovery =		110.85%	106.86%
21) S	Decachlorobiphen	19.14	20.84	1573.6E6	612.5E6	56.302	56.245
	Spiked Amount 50.000	Range 42 - 136		Recovery =		112.60%	112.49%
	Target Compounds						
2)	alpha-BHC	5.68	7.31	2884.4E6	1265.4E6	54.356	55.784
3) M	gamma-BHC (Linda	6.48	8.54	2638.5E6	1172.4E6	53.299	55.294
4) M	Heptachlor	7.86	10.02	2661.9E6	1139.1E6	52.805	51.101
5)	beta-BHC	6.75	8.89	1082.3E6	499.6E6	50.085	54.061
6)	delta-BHC	7.25	10.02	2630.1E6	1139.1E6	53.756	55.738
7) M	Aldrin	8.82	11.50	2529.8E6	1095.8E6	53.642	55.952
8)	Heptachlor epoxi	11.05	14.13	2384.8E6	1027.2E6	54.041	55.166
9)	Endosulfan I	12.77f	15.20	2248.9E6	961.4E6	56.877	58.014
10)	4,4'-DDE	12.69	15.75	2181.5E6	861.0E6	50.329	56.802
11) M	Dieldrin	13.77	15.99	2392.5E6	922.9E6	53.677	55.639
12) M	Endrin	14.52	16.63	2099.5E6	721.3E6	50.340	49.489
13)	4,4'-DDD	14.98	16.97	1629.8E6	576.1E6	58.921m	54.638
14)	Endosulfan II	15.17	17.06	2220.6E6	780.5E6	53.755	57.382
15) M	4,4'-DDT	15.69	17.52	1772.0E6	569.8E6	51.948	52.170
16)	Endrin aldehyde	16.19	17.67	1673.9E6	577.7E6	56.654	50.864
17)	Endosulfan sulfa	16.81	18.13	1510.4E6	638.4E6	48.889m	55.447
18)	Methoxychlor	16.82	18.61	847.1E6	294.9E6	54.239m	53.503
20)	Endrin ketone	17.52	18.91	1829.2E6	692.1E6	55.856	56.858
22) L1	Chlordane (gamma	11.56	14.77	2484.3E6	1021.0E6	54.863	54.609
23) L1	Chlordane (alpha	12.14	15.20	2459.1E6	961.4E6	53.595	55.028
	Sum Chlordane (gamma)			4943.4E6	1982.5E6	108.457	109.637
Average	Chlordane (gamma)					54.229	54.819
	Sum Toxaphene (1)			0	0	N.D.	N.D.
Average	Toxaphene (1)					0.000	0.000

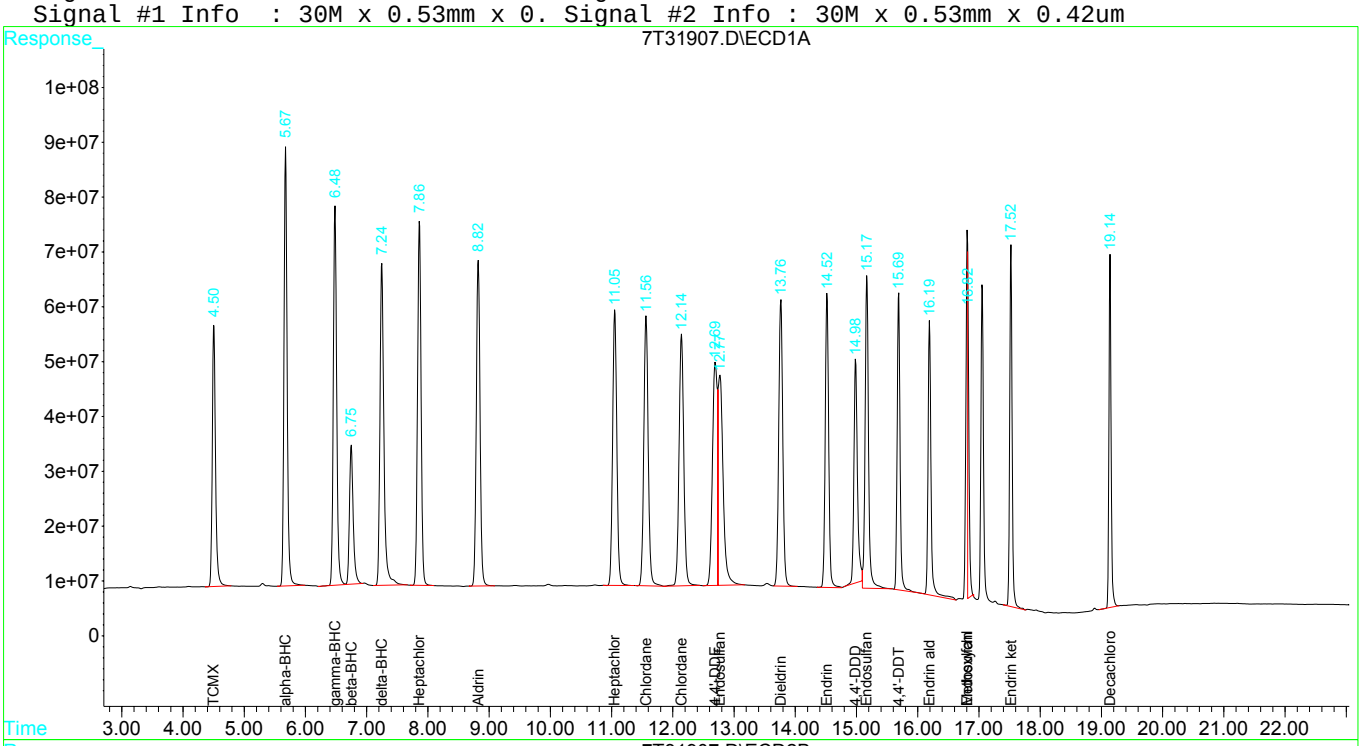
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.
7T31907.D 80811228.M Fri Jan 20 14:09:05 2023 SS

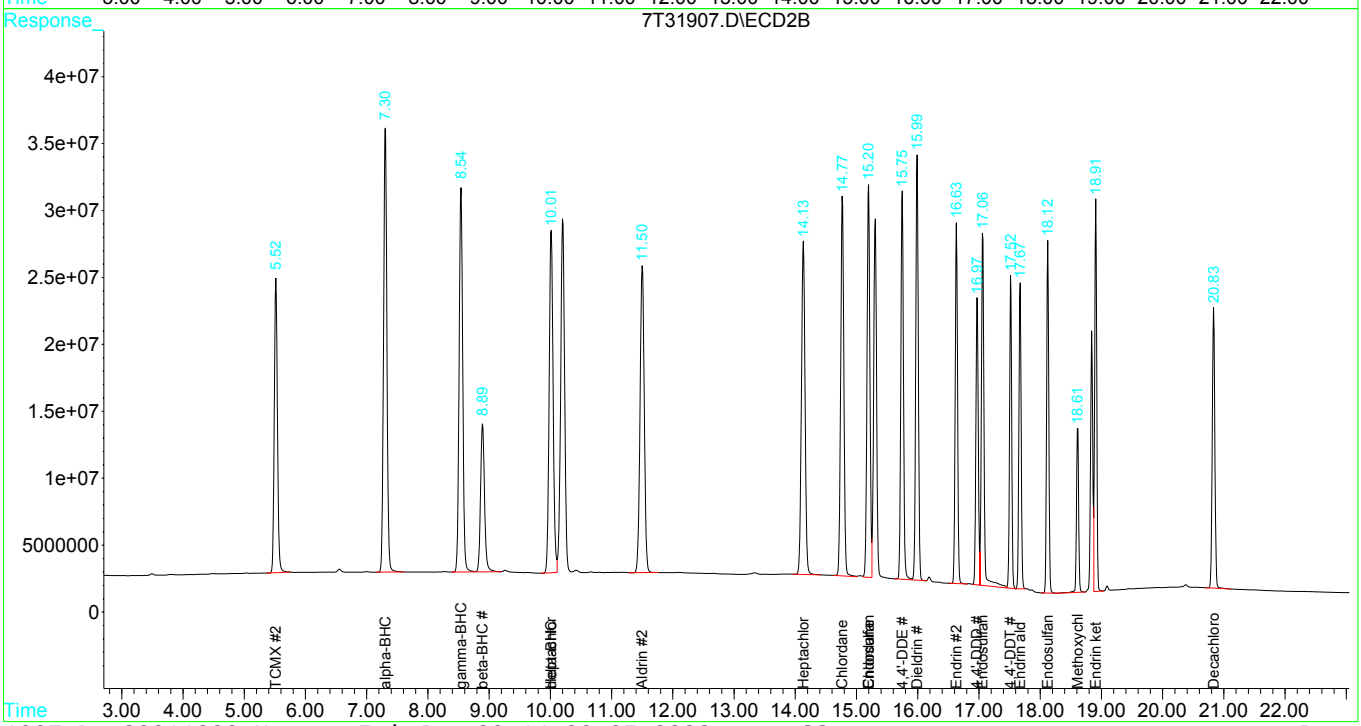
Quantitation Report (QT Reviewed)

Signal #1 : G:\HPCHEM\GCECD7\DATA\20230114\7T31907.D\ECD1A.CH Vial: 15
Signal #2 : G:\HPCHEM\GCECD7\DATA\20230114\7T31907.D\ECD2B.CH
Acq On : 14 Jan 2023 19:16 Operator: WD
Sample : SEQ-CCV@50PPB Inst : GCECD-7
Misc : Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Jan 16 13:28 2023 Quant Results File: 80811228.RES

Quant Method : G:\HPCHEM\G...\80811228.M (Chemstation Integrator)
Title : Pesticides by Method SW-846 8081B
Last Update : Mon Jan 16 13:27:03 2023
Response via : Multiple Level Calibration
DataAcq Meth : RUNPEST1.M

Volume Inj. : 2ul
Signal #1 Phase : RTx-50 Signal #2 Phase: RTx-CLPesticides II
Signal #1 Info : 30M x 0.53mm x 0. Signal #2 Info : 30M x 0.53mm x 0.42um





AQUA PRO-TECH LABORATORIES
Certified Environmental Testing

GENERAL CHEMISTRY

Dynamic Earth LLC

Work Order: 2120938

Project: Old Orchard G.C.

ANALYSIS DATA SHEET

General Chemistry

Client: Dynamic Earth LLC
Project: Old Orchard G.C.
Work Order: 2120938

General Chemistry

2120938-01 (Soil) - G-15A

Analyte	Units	Conc.	MDL	DF	Qual	Analyzed	Method
Percent Solids	%	84.8		1		12/27/22 11:23	Gravimetric

2120938-02 (Soil) - G-15-1

Analyte	Units	Conc.	MDL	DF	Qual	Analyzed	Method
Percent Solids	%	86.8		1		12/27/22 11:23	Gravimetric

2120938-03 (Soil) - G-15-2

Analyte	Units	Conc.	MDL	DF	Qual	Analyzed	Method
Percent Solids	%	82.9		1		12/27/22 11:23	Gravimetric

2120938-04 (Soil) - G-15-3

Analyte	Units	Conc.	MDL	DF	Qual	Analyzed	Method
Percent Solids	%	86.5		1		12/27/22 11:23	Gravimetric

2120938-05 (Soil) - G-15-4

Analyte	Units	Conc.	MDL	DF	Qual	Analyzed	Method
Percent Solids	%	87.7		1		12/27/22 11:23	Gravimetric

2120938-06 (Soil) - G-16A

Analyte	Units	Conc.	MDL	DF	Qual	Analyzed	Method
Percent Solids	%	83.9		1		12/27/22 11:23	Gravimetric
SPLP Leachate pH	pH Units	8.30	0.0100	1		12/29/22 10:40	SW 846 9040C
SPLP Leachate Volume	mL	2000		1		12/29/22 10:38	SW 846 1312
SPLP Soil Weight	g	83.9		1		12/26/22 10:33	Gravimetric

2120938-07 (Soil) - G-16-1

Analyte	Units	Conc.	MDL	DF	Qual	Analyzed	Method
Percent Solids	%	84.9		1		12/27/22 11:23	Gravimetric

2120938-08 (Soil) - G-16-2

Analyte	Units	Conc.	MDL	DF	Qual	Analyzed	Method
Percent Solids	%	85.7		1		12/27/22 11:23	Gravimetric

2120938-09 (Soil) - G-16-3

Analyte	Units	Conc.	MDL	DF	Qual	Analyzed	Method
Percent Solids	%	86.6		1		12/27/22 11:23	Gravimetric

2120938-10 (Soil) - G-16-4

Analyte	Units	Conc.	MDL	DF	Qual	Analyzed	Method
Percent Solids	%	85.4		1		12/27/22 11:23	Gravimetric

2120938-11 (Soil) - F-6A

Analyte	Units	Conc.	MDL	DF	Qual	Analyzed	Method
Percent Solids	%	86.1		1		12/27/22 11:23	Gravimetric

ND - Indicates compound analyzed for but not detected
J - Indicates estimated value
B - Indicates compound found in associated blank
E - Concentration exceeds highest calibration standard
D - Indicates result is based on a dilution
H - Indicates a Hold Time violation
P - Greater than 25% diff. between 2 GC columns.
MDL - Minimum detection limit, **RL** - Reporting limit

F-I

General Chemistry (Con't)

2120938-12 (Soil) - F-6-1

Analyte	Units	Conc.	MDL	DF	Qual	Analyzed	Method
Percent Solids	%	83.5		1		12/27/22 11:23	Gravimetric

2120938-13 (Soil) - F-6-2

Analyte	Units	Conc.	MDL	DF	Qual	Analyzed	Method
Percent Solids	%	86.5		1		12/27/22 11:23	Gravimetric

2120938-14 (Soil) - F-6-3

Analyte	Units	Conc.	MDL	DF	Qual	Analyzed	Method
Percent Solids	%	86.3		1		12/27/22 11:23	Gravimetric

2120938-15 (Soil) - F-6-4

Analyte	Units	Conc.	MDL	DF	Qual	Analyzed	Method
Percent Solids	%	86.1		1		12/27/22 11:23	Gravimetric

2120938-16 (Soil) - F-11A

Analyte	Units	Conc.	MDL	DF	Qual	Analyzed	Method
Percent Solids	%	86.8		1		12/27/22 11:23	Gravimetric

2120938-17 (Soil) - F-11-1

Analyte	Units	Conc.	MDL	DF	Qual	Analyzed	Method
Percent Solids	%	85.0		1		12/27/22 11:23	Gravimetric

2120938-18 (Soil) - F-11-2

Analyte	Units	Conc.	MDL	DF	Qual	Analyzed	Method
Percent Solids	%	86.7		1		12/27/22 11:23	Gravimetric

2120938-19 (Soil) - F-11-3

Analyte	Units	Conc.	MDL	DF	Qual	Analyzed	Method
Percent Solids	%	82.0		1		12/27/22 11:23	Gravimetric

2120938-20 (Soil) - F-11-4

Analyte	Units	Conc.	MDL	DF	Qual	Analyzed	Method
Percent Solids	%	86.9		1		12/27/22 11:23	Gravimetric

2120938-21 (Soil) - F-15A

Analyte	Units	Conc.	MDL	DF	Qual	Analyzed	Method
Percent Solids	%	86.0		1		12/27/22 11:23	Gravimetric

2120938-22 (Soil) - F-15-1

Analyte	Units	Conc.	MDL	DF	Qual	Analyzed	Method
Percent Solids	%	86.4		1		12/27/22 11:23	Gravimetric

2120938-23 (Soil) - F-15-3-R

Analyte	Units	Conc.	MDL	DF	Qual	Analyzed	Method
Percent Solids	%	88.1		1		12/27/22 11:23	Gravimetric

2120938-24 (Soil) - F-15-6-R

Analyte	Units	Conc.	MDL	DF	Qual	Analyzed	Method
Percent Solids	%	87.7		1		12/27/22 11:23	Gravimetric

2120938-25 (Soil) - F-15-7-R

Analyte	Units	Conc.	MDL	DF	Qual	Analyzed	Method
Percent Solids	%	86.1		1		12/27/22 11:23	Gravimetric

ND - Indicates compound analyzed for but not detected
J - Indicates estimated value
B - Indicates compound found in associated blank
E - Concentration exceeds highest calibration standard
D - Indicates result is based on a dilution
H - Indicates a Hold Time violation
P - Greater than 25% diff. between 2 GC columns.
MDL - Minimum detection limit, **RL** - Reporting limit

General Chemistry (Con't)

2120938-26 (Soil) - F-17A

Analyte	Units	Conc.	MDL	DF	Qual	Analyzed	Method
Percent Solids	%	88.0		1		12/27/22 11:23	Gravimetric

2120938-27 (Soil) - F-17-1

Analyte	Units	Conc.	MDL	DF	Qual	Analyzed	Method
Percent Solids	%	84.8		1		12/27/22 11:23	Gravimetric

2120938-28 (Soil) - F-17-2

Analyte	Units	Conc.	MDL	DF	Qual	Analyzed	Method
Percent Solids	%	85.5		1		12/27/22 11:23	Gravimetric

2120938-29 (Soil) - F-17-3

Analyte	Units	Conc.	MDL	DF	Qual	Analyzed	Method
Percent Solids	%	82.4		1		12/27/22 11:23	Gravimetric

2120938-30 (Soil) - F-17-4

Analyte	Units	Conc.	MDL	DF	Qual	Analyzed	Method
Percent Solids	%	82.9		1		12/27/22 11:23	Gravimetric

2120938-31 (Soil) - T-11R

Analyte	Units	Conc.	RL	DF	Qual	Analyzed	Method
SPLP Leachate pH	pH Units	4.07	0.0100	1		12/29/22 10:00	SW 846 9040C
SPLP Leachate Volume	mL	2000		1		12/29/22 10:00	SW 846 1312
Percent Solids	%	86.3		1		12/27/22 11:23	Gravimetric
SPLP Soil Weight	g	86.3		1		12/28/22 17:00	Gravimetric

2120938-33 (Soil) - F-18R

Analyte	Units	Conc.	RL	DF	Qual	Analyzed	Method
SPLP Soil Weight	g	86.5		1		12/28/22 17:00	Gravimetric
SPLP Leachate Volume	mL	2000		1		12/29/22 10:00	SW 846 1312
Percent Solids	%	86.5		1		12/27/22 11:23	Gravimetric
SPLP Leachate pH	pH Units	5.05	0.0100	1		12/29/22 10:00	SW 846 9040C

2120938-34 (Soil) - F-15R

Analyte	Units	Conc.	RL	DF	Qual	Analyzed	Method
SPLP Soil Weight	g	85.2		1		12/28/22 17:00	Gravimetric
SPLP Leachate Volume	mL	2000		1		12/29/22 10:00	SW 846 1312
SPLP Leachate pH	pH Units	5.01	0.0100	1		12/29/22 10:00	SW 846 9040C
Percent Solids	%	85.2		1		12/27/22 11:23	Gravimetric

2120938-35 (Soil) - G-16R

Analyte	Units	Conc.	RL	DF	Qual	Analyzed	Method
SPLP Soil Weight	g	84.6		1		12/28/22 18:00	Gravimetric
SPLP Leachate pH	pH Units	10.0	0.0100	1		12/29/22 11:00	SW 846 9040C
SPLP Leachate Volume	mL	2000		1		12/29/22 11:00	SW 846 1312
Percent Solids	%	84.6		1		12/27/22 11:23	Gravimetric

2120938-36 (Soil) - G-15R

Analyte	Units	Conc.	MDL	DF	Qual	Analyzed	Method
Percent Solids	%	85.7		1		12/27/22 11:23	Gravimetric
SPLP Leachate Volume	mL	2000		1		12/29/22 10:38	SW 846 1312
SPLP Soil Weight	g	85.7		1		12/26/22 10:33	Gravimetric
SPLP Leachate pH	pH Units	8.20	0.0100	1		12/29/22 10:40	SW 846 9040C

ND - Indicates compound analyzed for but not detected
J - Indicates estimated value
B - Indicates compound found in associated blank
E - Concentration exceeds highest calibration standard
D - Indicates result is based on a dilution
H - Indicates a Hold Time violation
P - Greater than 25% diff. between 2 GC columns.
MDL - Minimum detection limit, **RL** - Reporting limit

General Chemistry (Con't)

2120938-37 (Soil) - G-11R

Analyte	Units	Conc.	RL	DF	Qual	Analyzed	Method
SPLP Soil Weight	g	78.9		1		12/26/22 10:33	Gravimetric
SPLP Leachate Volume	mL	2000		1		12/29/22 10:38	SW 846 1312
SPLP Leachate pH	pH Units	8.10	0.0100	1		12/29/22 10:40	SW 846 9040C
Percent Solids	%	78.9		1		12/27/22 11:23	Gravimetric

2120938-39 (Soil) - F-15-6A-R

Analyte	Units	Conc.	MDL	DF	Qual	Analyzed	Method
Percent Solids	%	87.0		1		01/12/23 11:43	Gravimetric

ND - Indicates compound analyzed for but not detected
J - Indicates estimated value
B - Indicates compound found in associated blank
E - Concentration exceeds highest calibration standard

D - Indicates result is based on a dilution
H - Indicates a Hold Time violation
P - Greater than 25% diff. between 2 GC columns.
MDL - Minimum detection limit, **RL** - Reporting limit

TerraSense

45H Commerce Way, Totowa, NJ 07512
973.812.1818
terrasenselab.com

6/22/23
TerraSense Project Number: 23008097A

Paul Maide
Executive Vice President
Aqua Pro-Tech Laboratories
1275 Bloomfield Avenue, Building 6
Fairfield, NJ 07004

Dear Mr. Maide:

Re: Laboratory Test Results for 23E1424

The purpose of this letter is to present the results of the laboratory tests performed on the samples delivered to the TerraSense laboratory on 6/2/23. Testing was performed based on your assignment dated 6/1/23.

Test Results
Test results are reported on the accompanying test pages.

Test Comments
Testing was performed in general accordance to the ASTM or other methods as listed on the test pages. Deviations from the test standards are noted on these pages.

Limitations
Our professional services for this project have been performed in accordance with generally accepted engineering practices; no other warranty, expressed or implied, is made.

Sample Disposition
If we do not receive other instructions from you within thirty days, this material will be disposed of.
If you have any questions concerning the test results reported in this letter, please call us.
Sincerely,

Carolynn Jordan
Project Manager

Enclosure:

Please Update Analysis

Pace®

Pace® Analytical Services
Aqua Pro-Tech, a Pace® Analytical Laboratory
1275 Bloomfield Avenue, Fairfield, NJ 07004 (973) 227-0422

SUBCONTRACT ORDER

230080097A-7932

SENDING LABORATORY:

Aqua Pro-Tech Laboratories
1275 Bloomfield Ave, Bldg 6
Fairfield, NJ 07004
Phone: (973) 227-0422
Fax: (973) 227-2183

Project Mgr: Paul Maide
Email: paul.maide@pacelabs.com
Send Invoice to: FAIR.AP@pacelabs.com
Send Report to: FAIR.Reporting@pacelabs.com

RECEIVING LABORATORY:

Terra Sense
45 H Commerce Way
Totowa, NJ 07512
Phone: (973) 812-1818
Fax: (973) 812-8640

Turn-Around Time

- [ ] APL Standard 2 Weeks
- [ ] Rush (Choose One Below)
  - [ ] 24 Hr.
  - [ ] 48 Hr.
  - [ ] 72 Hr.
  - [ ] 1 Week
  - [ ] **Other (provide Date/Time)

Date _____ Time _____

**May Need Lab Approval

Report / Electronic Format

- [ ] Results Only
- [ ] NJ DEP Reduced
- [ ] NJ DEP Full
- [ ] State Forms/E2 Reporting
- [ ] Email Delivery
- [ ] Hazsite EDD
- [ ] Excel

PWSID # _____ SRP# _____

APL Order ID: 23E1424

Laboratory ID	APL Lab ID	Sampled	SampleType	Matrix	Analysis Requested	[Comments]
	23E1424-02	05/30/2023 11:30	Grab	S	Sieve Hydrometer Particle Size	
	Sample Name/Location: SED-1				*Containers Supplied:* Glass Jar, 16 oz. (B)	
	Comments:					
	23E1424-04	05/30/2023 11:50	Grab	S	Sieve Hydrometer Particle Size	
	Sample Name/Location: SED-2				*Containers Supplied:* Glass Jar, 16 oz. (B)	
	Comments:					
	23E1424-06	05/30/2023 12:05	Grab	S	Sieve Hydrometer Particle Size	
	Sample Name/Location: SED-3				*Containers Supplied:* Glass Jar, 16 oz. (B)	
	Comments:					

Released By	Drew McMahon	Date / Time	6/1/23	Received By	AJ	Date / Time	6/2/23
Released By		Date / Time		Received By		Date / Time	

Pace®
Pace® Analytical Services
Aqua Pro-Tech, a Pace® Analytical Laboratory
1275 Bloomfield Avenue, Fairfield, NJ 07004 (973) 227-0422

SUBCONTRACT ORDER

APL Order ID: 23E1424

Laboratory ID	APL Lab ID	Sampled	SampleType	Matrix	Analysis Requested	[Comments]
	23E1424-08	05/30/2023 12:30	Grab	S	Sieve Hydrometer Particle Size	
	Sample Name/Location: SED-4				*Containers Supplied:* Glass Jar, 16 oz. (B)	
	Comments:					
	23E1424-10	05/30/2023 12:45	Grab	S	Sieve Hydrometer Particle Size	
	Sample Name/Location: SED-5				*Containers Supplied:* Glass Jar, 16 oz. (B)	
	Comments:					
	23E1424-12	05/30/2023 13:05	Grab	S	Sieve Hydrometer Particle Size	
	Sample Name/Location: SED-6				*Containers Supplied:* Glass Jar, 16 oz. (B)	
	Comments:					
	23E1424-14	05/30/2023 13:20	Grab	S	Sieve Hydrometer Particle Size	
	Sample Name/Location: SED-7				*Containers Supplied:* Glass Jar, 16 oz. (B)	
	Comments:					

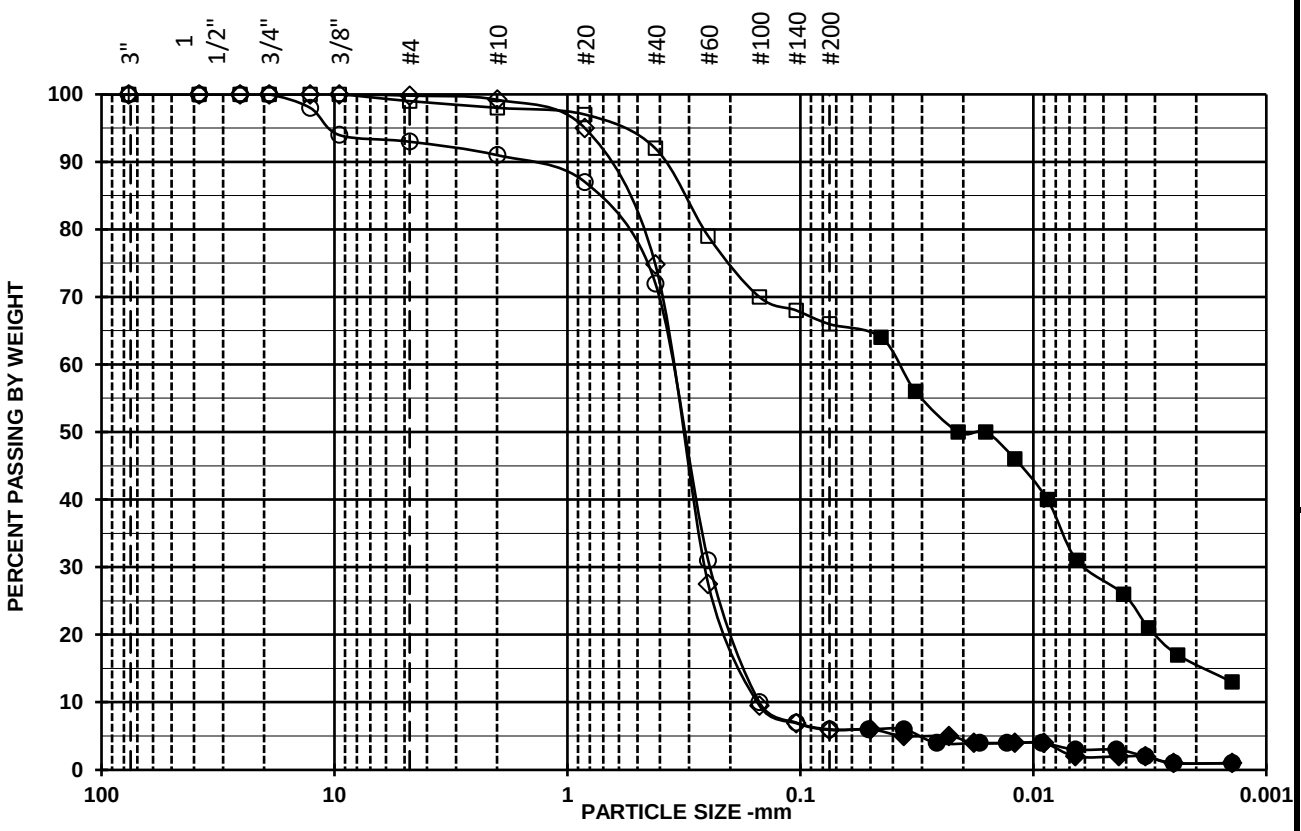
Released By	Date / Time	Received By	Date / Time
Released By	Date / Time	Received By	Date / Time

APL #23E1424

LABORATORY TESTING DATA SUMMARY

SAMPLE SOURCE: FIELD ID		Client ID	IDENTIFICATION TESTS				REMARKS
			D2216 WATER CONTENT (%)	D2488 USCS SYMB. (1)	D6913 & D7928 SIEVE MINUS NO. 200 (%)	D6913 & D7928 HYDROMETER % MINUS 2 μm (%)	
23E1424	02	SED-1		CL	66	16	
23E1424	04	SED-2		SP-SM	5.9	1	
23E1424	06	SED-3		SP-SM	6	1	
23E1424	08	SED-4		SP	1	0	
23E1424	010	SED-5		SP-SM	5.5	2	
23E1424	012	SED-6		SM	19	5	
23E1424	014	SED-7		SP	1	0	

Note: (1) USCS symbol based on visual observation and Sieve reported.



Open Symbols: Sieve analysis by ASTM D6913
Filled symbols: Hydrometer analysis by ASTM D7928 corrected for complete sample

SYMBOL	w (%)	LL	PL	PI	USCS	AASHTO	USCS DESCRIPTION AND REMARKS	DATE
□					CL		Brown, Sandy lean clay organic mat'l noted	06/16/23
◇					SP-SM		Brown, Poorly graded sand with silt	06/16/23
○					SP-SM		Gray, Poorly graded sand with silt, Insufficient sample size	06/16/23

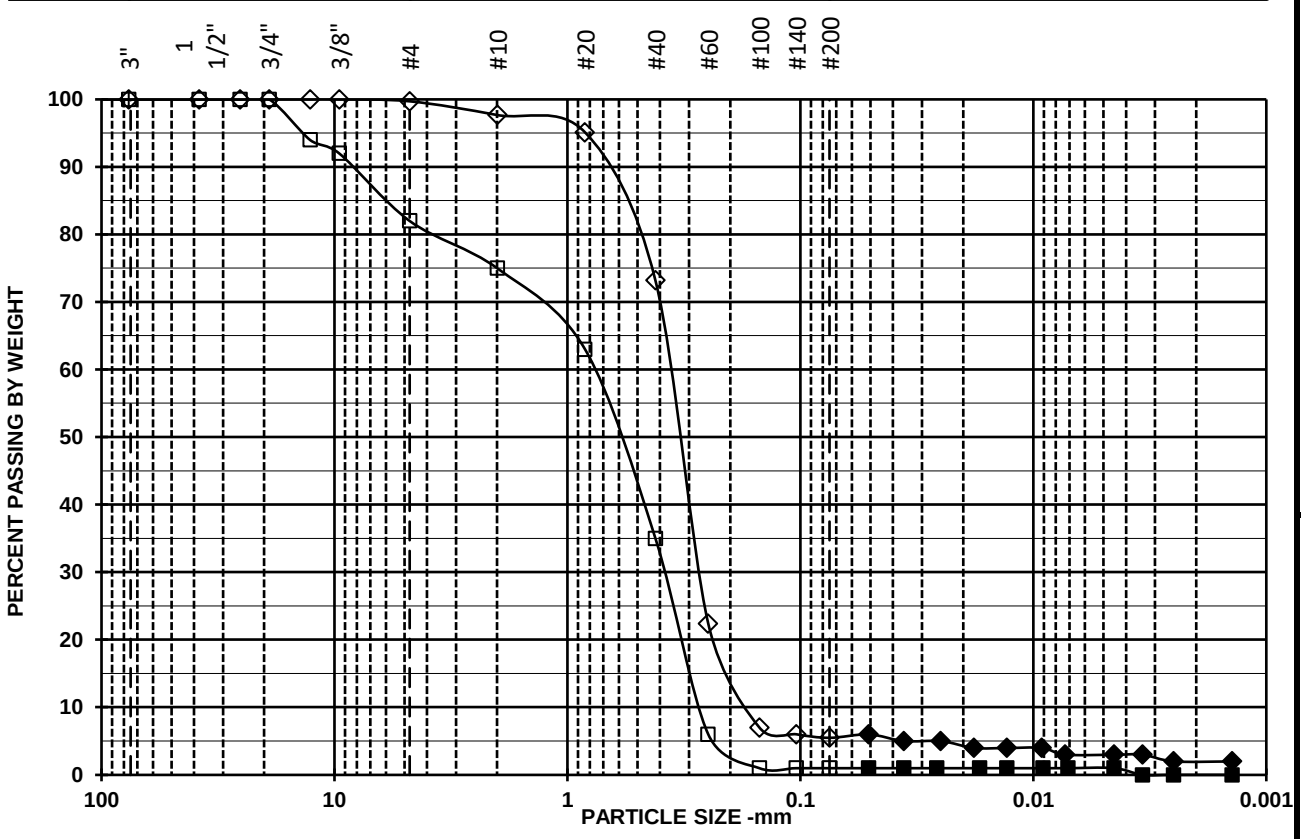
APL #23E1424

TerraSense #23008097A

Symbol	□	◇	○
Group	23E1424	23E1424	23E1424
ID#	02	04	06
Sample	SED-1	SED-2	SED-3
% +3"	0	0	0
% Gravel	1	0.2	7
% SAND	33	93.9	87
%C SAND	1	0.6	2
%M SAND	6	24.4	19
%F SAND	26	68.9	66
% FINES	66	5.9	6
D_{100} (mm)	9.53	9.53	19.1
D_{60} (mm)	0.038	0.356	0.36
D_{30} (mm)	0.006	0.26	0.24
D_{10} (mm)		0.15	0.15
Cc		1.3	1.1
Cu		2.4	2.4

Sieve Size/ID #	Percent Finer Data		
6"	100	100.0	100
4"	100	100.0	100
3"	100	100.0	100
1 1/2"	100	100.0	100
1"	100	100.0	100
3/4"	100	100.0	100
1/2"	100	100.0	98
3/8"	100	100.0	94
#4	99	99.8	93
#10	98	99.2	91
#20	97	95.0	87
#40	92	74.8	72
#60	79	27.5	31
#100	70	9.5	10
#140	68	6.9	7
#200	66	5.9	6
5μ m	28	2	3
2μ m	16	1	1
1μ m	11	1	1

PARTICLE SIZE DISTRIBUTION
ASTM D6913 & ASTM D7928



Open Symbols: Sieve analysis by ASTM D6913
Filled symbols: Hydrometer analysis by ASTM D7928 corrected for complete sample

SYMBOL	w (%)	LL	PL	PI	USCS	AASHTO	USCS DESCRIPTION AND REMARKS	DATE
□					SP		Brown, Poorly graded sand with gravel, Insufficient sample size	06/16/23
◇					SP-SM		Brown, Poorly graded sand with silt wood & organic mat'l noted	06/16/23
○								

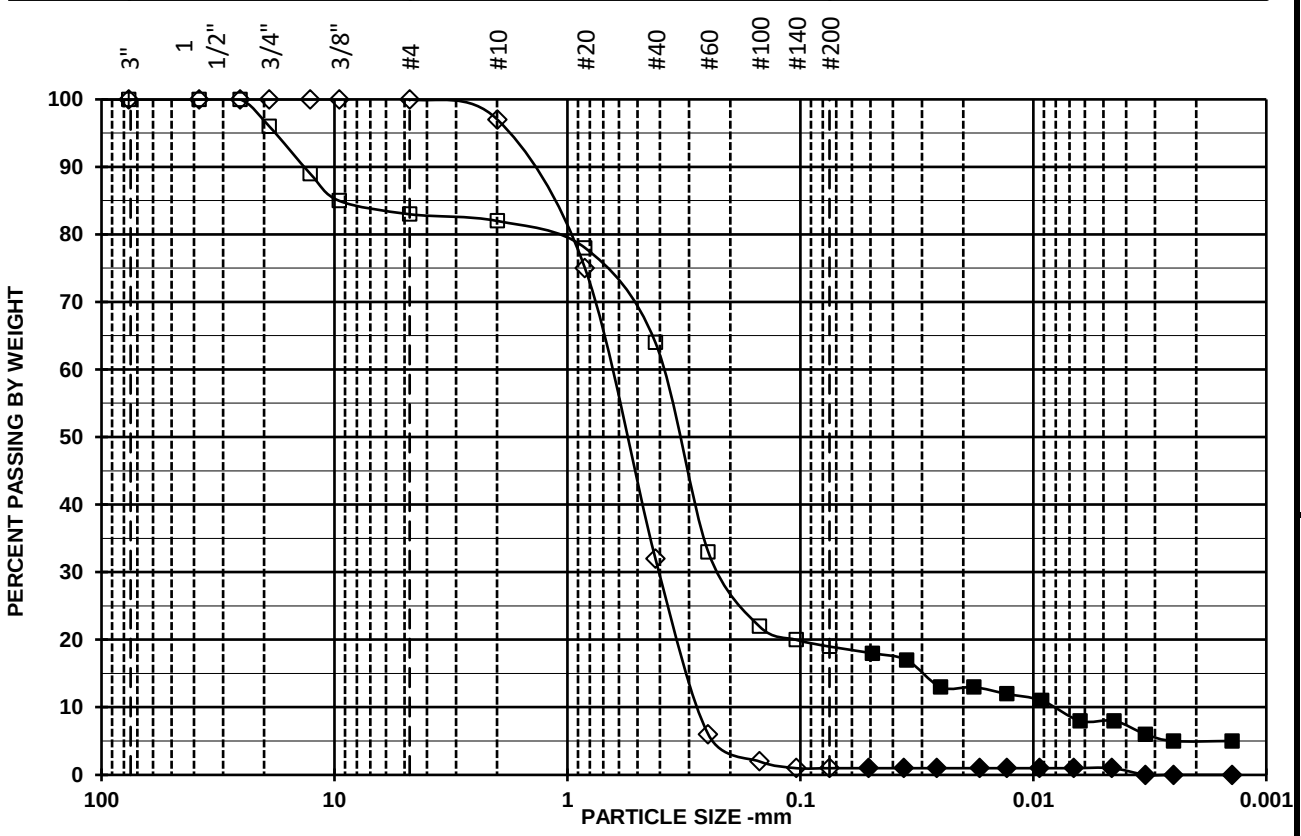
APL #23E1424

TerraSense #23008097A

Symbol	□	◇	○
Group	23E1424	23E1424	
ID#	08	010	
Sample	SED-4	SED-5	
% +3"	0	0	
% Gravel	18	0.3	
% SAND	81	94.2	
%C SAND	7	2	
%M SAND	40	24.5	
%F SAND	34	67.7	
% FINES	1	5.5	
D_{100} (mm)	19.1	9.53	
D_{60} (mm)	0.78	0.366	
D_{30} (mm)	0.38	0.27	
D_{10} (mm)	0.27	0.17	
Cc	0.7	1.2	
Cu	2.9	2.2	

Sieve Size/ID #	Percent Finer Data		
6"	100	100.0	
4"	100	100.0	
3"	100	100.0	
1 1/2"	100	100.0	
1"	100	100.0	
3/4"	100	100.0	
1/2"	94	100.0	
3/8"	92	100.0	
#4	82	99.7	
#10	75	97.7	
#20	63	95.1	
#40	35	73.2	
#60	6	22.4	
#100	1	7.0	
#140	1	6.0	
#200	1	5.5	
5μ m	1	3	
2μ m	0	2	
1μ m	0	2	

PARTICLE SIZE DISTRIBUTION
ASTM D6913 & ASTM D7928



Open Symbols: Sieve analysis by ASTM D6913
Filled symbols: Hydrometer analysis by ASTM D7928 corrected for complete sample

SYMBOL	w (%)	LL	PL	PI	USCS	AASHTO	USCS DESCRIPTION AND REMARKS	DATE
□					SM		Gray, Silty sand with gravel, Insufficient sample size	06/16/23
◇					SP		Brown, Poorly graded sand	06/16/23
○								

APL #23E1424

TerraSense #23008097A

Symbol	□	◇	○
Group	23E1424	23E1424	
ID#	012	014	
Sample	SED-6	SED-7	
% +3"	0	0	
% Gravel	17	0	
% SAND	64	99	
%C SAND	1	3	
%M SAND	18	65	
%F SAND	45	31	
% FINES	19	1	
D_{100} (mm)	25.4	19.1	
D_{60} (mm)	0.392	0.659	
D_{30} (mm)	0.22	0.4	
D_{10} (mm)	0.008	0.27	
Cc	15.2	0.9	
Cu	48.4	2.4	

Sieve Size/ID #	Percent Finer Data	
6"	100	100
4"	100	100
3"	100	100
1 1/2"	100	100
1"	100	100
3/4"	96	100
1/2"	89	100
3/8"	85	100
#4	83	100
#10	82	97
#20	78	75
#40	64	32
#60	33	6
#100	22	2
#140	20	1
#200	19	1
5μ m	8	1
2μ m	5	0
1μ m	5	0

PARTICLE SIZE DISTRIBUTION
ASTM D6913 & ASTM D7928

TerraSense

45H Commerce Way, Totowa, NJ 07512
973.812.1818
terrasenselab.com

6/30/23
TerraSense Project Number: 23008097A-2

Paul Maide
Executive Vice President
Aqua Pro-Tech Laboratories
1275 Bloomfield Avenue, Building 6
Fairfield, NJ 07004

Dear Mr. Maide:

Re: Laboratory Test Results for 23E1424

The purpose of this letter is to present the results of the laboratory tests performed on the samples delivered to the TerraSense laboratory on 6/13/23. Testing was performed based on your assignment dated 6/13/23.

Test Results
Test results are reported on the accompanying test pages.

Test Comments
Testing was performed in general accordance to the ASTM or other methods as listed on the test pages. Deviations from the test standards are noted on these pages.

Limitations
Our professional services for this project have been performed in accordance with generally accepted engineering practices; no other warranty, expressed or implied, is made.

Sample Disposition
If we do not receive other instructions from you within thirty days, this material will be disposed of.
If you have any questions concerning the test results reported in this letter, please call us.
Sincerely,

Carolynn Jordan
Project Manager

Enclosure:

Pace®
Pace® Analytical Services
Aqua Pro-Tech, a Pace® Analytical Laboratory
1275 Bloomfield Avenue, Fairfield, NJ 07004 (973) 227-0422

SUBCONTRACT ORDER

230080097A-7932 (2)

APL Order ID: 23E1424

Laboratory ID	APL Lab ID	Sampled	SampleType	Matrix	Analysis Requested	[Comments]
	23E1424-10	05/30/2023 12:45	Grab	S	Sieve Hydrometer	
	Sample Name/Location: SED-5				*Containers Supplied:* Glass Jar, 16 oz. (B)	
	Comments:					
	23E1424-12	05/30/2023 13:05	Grab	S	Sieve Hydrometer	
	Sample Name/Location: SED-6				*Containers Supplied:* Glass Jar, 16 oz. (B)	
	Comments:					
	23E1424-14	05/30/2023 13:20	Grab	S	Sieve Hydrometer	
	Sample Name/Location: SED-7				*Containers Supplied:* Glass Jar, 16 oz. (B)	
	Comments:					
	23E1424-16	05/30/2023 11:35	Grab	S	Sieve Hydrometer [RL 6/12]	
	Sample Name/Location: SED-1A				*Containers Supplied:* Glass Jar, 16 oz. (B)	
	Comments:					
	23E1424-17	05/30/2023 12:35	Grab	S	Sieve Hydrometer [RL 6/12]	
	Sample Name/Location: SED-4A				*Containers Supplied:* Glass Jar, 16 oz. (B)	
	Comments:					
	23E1424-18	05/30/2023 13:05	Grab	S	Sieve Hydrometer [RL 6/12]	
	Sample Name/Location: SED-6A				*Containers Supplied:* Glass Jar, 16 oz. (B)	
	Comments:					

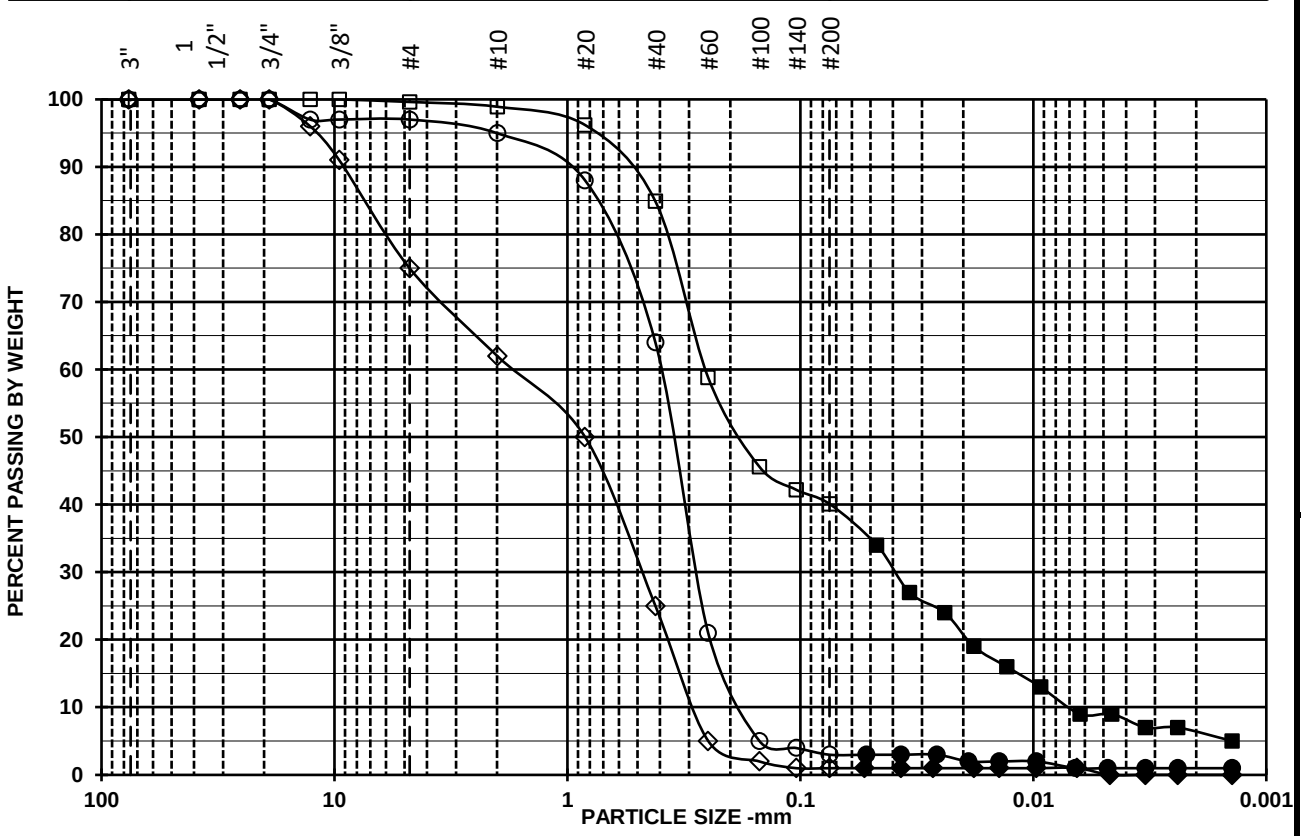
Released By	Drew McMahon	Date / Time 6/13/23	Received By	AJ	Date / Time 6/13/23
Released By		Date / Time	Received By		Date / Time

APL #23E1424

LABORATORY TESTING DATA SUMMARY

SAMPLE SOURCE: FIELD ID		Client ID	IDENTIFICATION TESTS				REMARKS
			D2216 WATER CONTENT (%)	D2488 USCS SYMB. (1)	D6913 & D7928 SIEVE MINUS NO. 200 (%)	D6913 & D7928 HYDROMETER % MINUS 2 μm (%)	
23E1424	16	SED-1A		SM	40.1	6	
23E1424	17	SED-4A		SP	1	0	
23E1424	18	SED-6A		SP	3	1	

Note: (1) USCS symbol based on visual observation and Sieve reported.



Open Symbols: Sieve analysis by ASTM D6913
Filled symbols: Hydrometer analysis by ASTM D7928 corrected for complete sample

SYMBOL	w (%)	LL	PL	PI	USCS	AASHTO	USCS DESCRIPTION AND REMARKS	DATE
□					SM		Brownish gray, Silty sand organic mat'l noted	06/26/23
◇					SP		Brown, Poorly graded sand with gravel, Insufficient sample size	06/26/23
○					SP		Brownish gray, Poorly graded sand organic mat'l noted, Insufficient sample size	06/26/23

APL #23E1424

TerraSense #23008097A

Symbol	□	◇	○
Group	23E1424	23E1424	23E1424
ID#	16	17	18
Sample	SED-1A	SED-4A	SED-6A
% +3"	0	0	0
% Gravel	0.4	25	3
% SAND	59.5	74	94
%C SAND	0.7	13	2
%M SAND	14	37	31
%F SAND	44.8	24	61
% FINES	40.1	1	3
D_{100} (mm)	9.53	19.1	19.1
D_{60} (mm)	0.255	1.73	0.399
D_{30} (mm)	0.039	0.48	0.28
D_{10} (mm)	0.007	0.28	0.18
Cc	0.9	0.5	1.1
Cu	37	6.2	2.2

Sieve Size/ID #	Percent Finer Data		
6"	100.0	100	100
4"	100.0	100	100
3"	100.0	100	100
1 1/2"	100.0	100	100
1"	100.0	100	100
3/4"	100.0	100	100
1/2"	100.0	96	97
3/8"	100.0	91	97
#4	99.6	75	97
#10	98.9	62	95
#20	96.2	50	88
#40	84.9	25	64
#60	58.8	5	21
#100	45.6	2	5
#140	42.2	1	4
#200	40.1	1	3
5μ m	9	0	1
2μ m	6	0	1
1μ m	4	0	1

PARTICLE SIZE DISTRIBUTION
ASTM D6913 & ASTM D7928

ANALYTICAL REPORT

Lab Number:	L2333497
Client:	Aqua Pro-Tech Laboratories 1275 Bloomfield Ave Bldg 6 Fairfield, NJ 07004
ATTN:	Reporting Department
Phone:	(973) 227-0422
Project Name:	23E1424
Project Number:	23E1424
Report Date:	06/27/23

The original project report/data package is held by Alpha Analytical. This report/data package is paginated and should be reproduced only in its entirety. Alpha Analytical holds no responsibility for results and/or data that are not consistent with the original.

Certifications & Approvals: MA (M-MA030), NH NELAP (2062), CT (PH-0825), DoD (L2474), FL (E87814), IL (200081), IN (C-MA-04), KY (KY98046), LA (85084), ME (MA00030), MD (350), MI (99110) , NJ (MA015), NY (11627), NC (685), OH (CL106), OR (MA-0262), PA (68-02089), RI (LAO00299), TX (T104704419), VT (VT-0015), VA (460194), WA (C954), US Army Corps of Engineers, USDA (Permit #525-23-107-88708), USFWS (Permit #206964).

320 Forbes Boulevard, Mansfield, MA 02048-1806
508-822-9300 (Fax) 508-822-3288 800-624-9220 - www.alphalab.com

Project Name: 23E1424
Project Number: 23E1424

Lab Number: L2333497
Report Date: 06/27/23

Alpha Sample ID	Client ID	Matrix	Sample Location	Collection Date/Time	Receive Date
L2333497-01	23E1424-02	SOIL	Not Specified	05/30/23 11:30	06/13/23
L2333497-02	23E1424-04	SOIL	Not Specified	05/30/23 11:50	06/13/23
L2333497-03	23E1424-06	SOIL	Not Specified	05/30/23 12:05	06/13/23
L2333497-04	23E1424-08	SOIL	Not Specified	05/30/23 12:30	06/13/23
L2333497-05	23E1424-10	SOIL	Not Specified	05/30/23 12:45	06/13/23
L2333497-06	23E1424-12	SOIL	Not Specified	05/30/23 13:05	06/13/23
L2333497-07	23E1424-14	SOIL	Not Specified	05/30/23 13:20	06/13/23
L2333497-08	23E1424-16	SOIL	Not Specified	05/30/23 11:35	06/13/23
L2333497-09	23E1424-17	SOIL	Not Specified	05/30/23 12:35	06/13/23
L2333497-10	23E1424-18	SOIL	Not Specified	05/30/23 13:05	06/13/23

Project Name:	23E1424	**Lab Number:**	L2333497
Project Number:	23E1424	**Report Date:**	06/27/23

Case Narrative

The samples were received in accordance with the Chain of Custody and no significant deviations were encountered during the preparation or analysis unless otherwise noted. Sample Receipt, Container Information, and the Chain of Custody are located at the back of the report.

Results contained within this report relate only to the samples submitted under this Alpha Lab Number and meet NELAP requirements for all NELAP accredited parameters unless otherwise noted in the following narrative. The data presented in this report is organized by parameter (i.e. VOC, SVOC, etc.). Sample specific Quality Control data (i.e. Surrogate Spike Recovery) is reported at the end of the target analyte list for each individual sample, followed by the Laboratory Batch Quality Control at the end of each parameter. Tentatively Identified Compounds (TICs), if requested, are reported for compounds identified to be present and are not part of the method/program Target Compound List, even if only a subset of the TCL are being reported. If a sample was re-analyzed or re-extracted due to a required quality control corrective action and if both sets of data are reported, the Laboratory ID of the re-analysis or re-extraction is designated with an "R" or "RE", respectively.

When multiple Batch Quality Control elements are reported (e.g. more than one LCS), the associated samples for each element are noted in the grey shaded header line of each data table. Any Laboratory Batch, Sample Specific % recovery or RPD value that is outside the listed Acceptance Criteria is bolded in the report. In reference to questions H (CAM) or 4 (RCP) when "NO" is checked, the performance criteria for CAM and RCP methods allow for some quality control failures to occur and still be within method compliance. In these instances, the specific failure is not narrated but noted in the associated QC Outlier Summary Report, located directly after the Case Narrative. QC information is also incorporated in the Data Usability Assessment table (Format 11) of our Data Merger tool, where it can be reviewed in conjunction with the sample result, associated regulatory criteria and any associated data usability implications.

Soil/sediments, solids and tissues are reported on a dry weight basis unless otherwise noted. Definitions of all data qualifiers and acronyms used in this report are provided in the Glossary located at the back of the report.

HOLD POLICY - For samples submitted on hold, Alpha's policy is to hold samples (with the exception of Air canisters) free of charge for 21 calendar days from the date the project is completed. After 21 calendar days, we will dispose of all samples submitted including those put on hold unless you have contacted your Alpha Project Manager and made arrangements for Alpha to continue to hold the samples. Air canisters will be disposed after 3 business days from the date the project is completed.

Please contact Project Management at 800-624-9220 with any questions.

Project Name:	23E1424	**Lab Number:**	L2333497
Project Number:	23E1424	**Report Date:**	06/27/23

Case Narrative (continued)

Report Submission

All non-detect (ND) or estimated concentrations (J-qualified) have been quantitated to the limit noted in the MDL column.

Total Organic Carbon

L2333497-01 through 10: The sample was analyzed with the method required holding time exceeded.

L2333497-07: The Sample Replicate RPD for is outside the acceptance criteria of 30%. A double-burn re-analysis was performed with a confirming result. The results of the original analysis are reported. The elevated RPD has been attributed to the non-homogeneous nature of the sample.

WG1794439-1: The required batch QC was prepared; however, the native sample required a different reporting method; therefore, the associated QC results could not be reported.

The WG1795877-3 Laboratory Duplicate RPD for total organic carbon (rep1) (26%), performed on L2333497-10, is outside the acceptance criteria of 25%. The elevated RPD has been attributed to the non-homogeneous nature of the native sample.

The WG1795877-4 MS recoveries for total organic carbon (rep1) (132%) performed on L2333497-10, do not apply because the sample concentrations are greater than four times the spike amounts added.

I, the undersigned, attest under the pains and penalties of perjury that, to the best of my knowledge and belief and based upon my personal inquiry of those responsible for providing the information contained in this analytical report, such information is accurate and complete. This certificate of analysis is not complete unless this page accompanies any and all pages of this report.

Authorized Signature: Ashaley Moynihan

Title: Technical Director/Representative Date: 06/27/23

INORGANICS
&
MISCELLANEOUS

Project Name: 23E1424
Project Number: 23E1424

Lab Number: L2333497
Report Date: 06/27/23

SAMPLE RESULTS

Lab ID: L2333497-01
Client ID: 23E1424-02
Sample Location: Not Specified

Date Collected: 05/30/23 11:30
Date Received: 06/13/23
Field Prep: Not Specified

Sample Depth:
Matrix: Soil

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Total Organic Carbon - Mansfield Lab										
Total Organic Carbon (Rep1)	19600		mg/kg	500	500.	1	-	06/20/23 11:10	13,-	SPP
Total Organic Carbon (Rep2)	23000		mg/kg	500	500.	1	-	06/20/23 11:10	13,-	SPP
Total Organic Carbon (Average)	21300		mg/kg	500	500.	1	-	06/20/23 11:10	13,-	SPP

Project Name: 23E1424
Project Number: 23E1424

Lab Number: L2333497
Report Date: 06/27/23

SAMPLE RESULTS

Lab ID: L2333497-02
Client ID: 23E1424-04
Sample Location: Not Specified

Date Collected: 05/30/23 11:50
Date Received: 06/13/23
Field Prep: Not Specified

Sample Depth:
Matrix: Soil

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Total Organic Carbon - Mansfield Lab										
Total Organic Carbon (Rep1)	21800		mg/kg	500	500.	1	-	06/20/23 11:10	13,-	SPP
Total Organic Carbon (Rep2)	24200		mg/kg	500	500.	1	-	06/20/23 11:10	13,-	SPP
Total Organic Carbon (Average)	23000		mg/kg	500	500.	1	-	06/20/23 11:10	13,-	SPP

Project Name: 23E1424
Project Number: 23E1424

Lab Number: L2333497
Report Date: 06/27/23

SAMPLE RESULTS

Lab ID: L2333497-03
Client ID: 23E1424-06
Sample Location: Not Specified

Date Collected: 05/30/23 12:05
Date Received: 06/13/23
Field Prep: Not Specified

Sample Depth:
Matrix: Soil

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Total Organic Carbon - Mansfield Lab										
Total Organic Carbon (Rep1)	13300		mg/kg	500	500.	1	-	06/20/23 11:10	13,-	SPP
Total Organic Carbon (Rep2)	14000		mg/kg	500	500.	1	-	06/20/23 11:10	13,-	SPP
Total Organic Carbon (Average)	13600		mg/kg	500	500.	1	-	06/20/23 11:10	13,-	SPP

Project Name: 23E1424
Project Number: 23E1424

Lab Number: L2333497
Report Date: 06/27/23

SAMPLE RESULTS

Lab ID: L2333497-04
Client ID: 23E1424-08
Sample Location: Not Specified

Date Collected: 05/30/23 12:30
Date Received: 06/13/23
Field Prep: Not Specified

Sample Depth:
Matrix: Soil

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Total Organic Carbon - Mansfield Lab										
Total Organic Carbon (Rep1)	3600		mg/kg	500	500.	1	-	06/20/23 11:10	13,-	SPP
Total Organic Carbon (Rep2)	3800		mg/kg	500	500.	1	-	06/20/23 11:10	13,-	SPP
Total Organic Carbon (Average)	3700		mg/kg	500	500.	1	-	06/20/23 11:10	13,-	SPP

Project Name: 23E1424
Project Number: 23E1424

Lab Number: L2333497
Report Date: 06/27/23

SAMPLE RESULTS

Lab ID: L2333497-05
Client ID: 23E1424-10
Sample Location: Not Specified

Date Collected: 05/30/23 12:45
Date Received: 06/13/23
Field Prep: Not Specified

Sample Depth:
Matrix: Soil

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Total Organic Carbon - Mansfield Lab										
Total Organic Carbon (Rep1)	14500		mg/kg	500	500.	1	-	06/20/23 11:10	13,-	SPP
Total Organic Carbon (Rep2)	14600		mg/kg	500	500.	1	-	06/20/23 11:10	13,-	SPP
Total Organic Carbon (Average)	14600		mg/kg	500	500.	1	-	06/20/23 11:10	13,-	SPP

Project Name: 23E1424
Project Number: 23E1424

Lab Number: L2333497
Report Date: 06/27/23

SAMPLE RESULTS

Lab ID: L2333497-06
Client ID: 23E1424-12
Sample Location: Not Specified

Date Collected: 05/30/23 13:05
Date Received: 06/13/23
Field Prep: Not Specified

Sample Depth:
Matrix: Soil

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Total Organic Carbon - Mansfield Lab										
Total Organic Carbon (Rep1)	50600		mg/kg	500	500.	1	-	06/20/23 11:10	13,-	SPP
Total Organic Carbon (Rep2)	58000		mg/kg	500	500.	1	-	06/20/23 11:10	13,-	SPP
Total Organic Carbon (Average)	54300		mg/kg	500	500.	1	-	06/20/23 11:10	13,-	SPP

Project Name: 23E1424
Project Number: 23E1424

Lab Number: L2333497
Report Date: 06/27/23

SAMPLE RESULTS

Lab ID: L2333497-07
Client ID: 23E1424-14
Sample Location: Not Specified

Date Collected: 05/30/23 13:20
Date Received: 06/13/23
Field Prep: Not Specified

Sample Depth:
Matrix: Soil

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Total Organic Carbon - Mansfield Lab										
Total Organic Carbon (Rep1)	5780		mg/kg	500	500.	1	-	06/20/23 11:10	13,-	SPP
Total Organic Carbon (Rep2)	3930		mg/kg	500	500.	1	-	06/20/23 11:10	13,-	SPP
Total Organic Carbon (Average)	4860		mg/kg	500	500.	1	-	06/20/23 11:10	13,-	SPP

Project Name: 23E1424
Project Number: 23E1424

Lab Number: L2333497
Report Date: 06/27/23

SAMPLE RESULTS

Lab ID: L2333497-08
Client ID: 23E1424-16
Sample Location: Not Specified

Date Collected: 05/30/23 11:35
Date Received: 06/13/23
Field Prep: Not Specified

Sample Depth:
Matrix: Soil

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Total Organic Carbon - Mansfield Lab										
Total Organic Carbon (Rep1)	8130		mg/kg	500	500.	1	-	06/20/23 11:10	13,-	SPP
Total Organic Carbon (Rep2)	9780		mg/kg	500	500.	1	-	06/20/23 11:10	13,-	SPP
Total Organic Carbon (Average)	8960		mg/kg	500	500.	1	-	06/20/23 11:10	13,-	SPP

Project Name: 23E1424
Project Number: 23E1424

Lab Number: L2333497
Report Date: 06/27/23

SAMPLE RESULTS

Lab ID: L2333497-09
Client ID: 23E1424-17
Sample Location: Not Specified

Date Collected: 05/30/23 12:35
Date Received: 06/13/23
Field Prep: Not Specified

Sample Depth:
Matrix: Soil

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Total Organic Carbon - Mansfield Lab										
Total Organic Carbon (Rep1)	2010		mg/kg	500	500.	1	-	06/20/23 11:10	13,-	SPP
Total Organic Carbon (Rep2)	1380		mg/kg	500	500.	1	-	06/20/23 11:10	13,-	SPP
Total Organic Carbon (Average)	1700		mg/kg	500	500.	1	-	06/20/23 11:10	13,-	SPP

Project Name: 23E1424
Project Number: 23E1424

Lab Number: L2333497
Report Date: 06/27/23

SAMPLE RESULTS

Lab ID: L2333497-10
Client ID: 23E1424-18
Sample Location: Not Specified

Date Collected: 05/30/23 13:05
Date Received: 06/13/23
Field Prep: Not Specified

Sample Depth:
Matrix: Soil

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Total Organic Carbon - Mansfield Lab										
Total Organic Carbon (Rep1)	45600		mg/kg	500	500.	1	-	06/21/23 18:46	13,-	SPP
Total Organic Carbon (Rep2)	42500		mg/kg	500	500.	1	-	06/21/23 18:46	13,-	SPP
Total Organic Carbon (Average)	44000		mg/kg	500	500.	1	-	06/21/23 18:46	13,-	SPP

Project Name: 23E1424 **Lab Number:** L2333497

Project Number: 23E1424 **Report Date:** 06/27/23

Method Blank Analysis
Batch Quality Control

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Total Organic Carbon - Mansfield Lab for sample(s): 01-09 Batch: WG1794439-1										
Total Organic Carbon (Rep1)	ND		mg/kg	500	500.	1	-	06/20/23 11:10	13,-	SPP
Total Organic Carbon (Rep2)	ND		mg/kg	500	500.	1	-	06/20/23 11:10	13,-	SPP
Total Organic Carbon (Average)	ND		mg/kg	500	500.	1	-	06/20/23 11:10	13,-	SPP
Total Organic Carbon - Mansfield Lab for sample(s): 10 Batch: WG1795877-1										
Total Organic Carbon (Rep1)	ND		mg/kg	500	500.	1	-	06/21/23 18:46	13,-	SPP
Total Organic Carbon (Rep2)	ND		mg/kg	500	500.	1	-	06/21/23 18:46	13,-	SPP
Total Organic Carbon (Average)	ND		mg/kg	500	500.	1	-	06/21/23 18:46	13,-	SPP

Lab Control Sample Analysis

Batch Quality Control

Project Name: 23E1424

Project Number: 23E1424

Lab Number: L2333497

Report Date: 06/27/23

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Total Organic Carbon - Mansfield Lab Associated sample(s): 01-09 Batch: WG1794439-2								
Total Organic Carbon (Rep1)	104		-		75-125	-		25
Total Organic Carbon (Rep2)	110		-		75-125	-		25
Total Organic Carbon (Average)	107		-		75-125	-		25
Total Organic Carbon - Mansfield Lab Associated sample(s): 10 Batch: WG1795877-2								
Total Organic Carbon (Rep1)	113		-		75-125	-		25
Total Organic Carbon (Rep2)	112		-		75-125	-		25
Total Organic Carbon (Average)	112		-		75-125	-		25

Matrix Spike Analysis
Batch Quality Control

Project Name: 23E1424
Project Number: 23E1424

Lab Number: L2333497
Report Date: 06/27/23

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	Qual	MSD Found	MSD %Recovery	Qual	Recovery Limits	RPD	Qual	RPD Limits
Total Organic Carbon - Mansfield Lab Associated sample(s): 10 QC Batch ID: WG1795877-4 QC Sample: L2333497-10 Client ID: 23E1424-18												
Total Organic Carbon (Rep1)	45600	11000	60200	**132**	Q	-	-		75-125	-		25
Total Organic Carbon (Rep2)	42500	10300	54900	120		-	-		75-125	-		25

Lab Duplicate Analysis

Batch Quality Control

Project Name: 23E1424

Project Number: 23E1424

Lab Number: L2333497

Report Date: 06/27/23

Parameter	Native Sample	Duplicate Sample	Units	RPD	Qual	RPD Limits
Total Organic Carbon - Mansfield Lab Associated sample(s): 10 QC Batch ID: WG1795877-3 QC Sample: L2333497-10 Client ID: 23E1424-18						
Total Organic Carbon (Rep1)	45600	35000	mg/kg	**26**	Q	25
Total Organic Carbon (Rep2)	42500	41300	mg/kg	3		25
Total Organic Carbon (Average)	44000	38200	mg/kg	14		25

Project Name: 23E1424
Project Number: 23E1424

Lab Number: L2333497
Report Date: 06/27/23

Sample Receipt and Container Information

Were project specific reporting limits specified? NO

Cooler Information

Cooler	Custody Seal
A	Absent

Container Information

Container ID	Container Type	Cooler	Initial pH	Final pH	Temp deg C	Pres	Seal	Frozen Date/Time	Analysis(*)
L2333497-01A	Glass 120ml/4oz unpreserved	A	NA		3.5	Y	Absent		A2-TOC-LK-2REPS-PPM(14)
L2333497-02A	Glass 120ml/4oz unpreserved	A	NA		3.5	Y	Absent		A2-TOC-LK-2REPS-PPM(14)
L2333497-03A	Glass 120ml/4oz unpreserved	A	NA		3.5	Y	Absent		A2-TOC-LK-2REPS-PPM(14)
L2333497-04A	Glass 120ml/4oz unpreserved	A	NA		3.5	Y	Absent		A2-TOC-LK-2REPS-PPM(14)
L2333497-05A	Glass 120ml/4oz unpreserved	A	NA		3.5	Y	Absent		A2-TOC-LK-2REPS-PPM(14)
L2333497-06A	Glass 120ml/4oz unpreserved	A	NA		3.5	Y	Absent		A2-TOC-LK-2REPS-PPM(14)
L2333497-07A	Glass 120ml/4oz unpreserved	A	NA		3.5	Y	Absent		A2-TOC-LK-2REPS-PPM(14)
L2333497-08A	Glass 120ml/4oz unpreserved	A	NA		3.5	Y	Absent		A2-TOC-LK-2REPS-PPM(14)
L2333497-09A	Glass 120ml/4oz unpreserved	A	NA		3.5	Y	Absent		A2-TOC-LK-2REPS-PPM(14)
L2333497-10A	Glass 120ml/4oz unpreserved	A	NA		3.5	Y	Absent		A2-TOC-LK-2REPS-PPM(14)

*Values in parentheses indicate holding time in days

Project Name:	23E1424	**Lab Number:**	L2333497
Project Number:	23E1424	**Report Date:**	06/27/23

GLOSSARY

Acronyms

DL	- Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the limit of quantitation (LOQ). The DL includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)
EDL	- Estimated Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The EDL includes any adjustments from dilutions, concentrations or moisture content, where applicable. The use of EDLs is specific to the analysis of PAHs using Solid-Phase Microextraction (SPME).
EMPC	- Estimated Maximum Possible Concentration: The concentration that results from the signal present at the retention time of an analyte when the ions meet all of the identification criteria except the ion abundance ratio criteria. An EMPC is a worst-case estimate of the concentration.
EPA	- Environmental Protection Agency.
LCS	- Laboratory Control Sample: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.
LCSD	- Laboratory Control Sample Duplicate: Refer to LCS.
LFB	- Laboratory Fortified Blank: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.
LOD	- Limit of Detection: This value represents the level to which a target analyte can reliably be detected for a specific analyte in a specific matrix by a specific method. The LOD includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)
LOQ	- Limit of Quantitation: The value at which an instrument can accurately measure an analyte at a specific concentration. The LOQ includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.) Limit of Quantitation: The value at which an instrument can accurately measure an analyte at a specific concentration. The LOQ includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)
MDL	- Method Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The MDL includes any adjustments from dilutions, concentrations or moisture content, where applicable.
MS	- Matrix Spike Sample: A sample prepared by adding a known mass of target analyte to a specified amount of matrix sample for which an independent estimate of target analyte concentration is available. For Method 332.0, the spike recovery is calculated using the native concentration, including estimated values.
MSD	- Matrix Spike Sample Duplicate: Refer to MS.
NA	- Not Applicable.
NC	- Not Calculated: Term is utilized when one or more of the results utilized in the calculation are non-detect at the parameter's reporting unit.
NDPA/DPA	- N-Nitrosodiphenylamine/Diphenylamine.
NI	- Not Ignitable.
NP	- Non-Plastic: Term is utilized for the analysis of Atterberg Limits in soil.
NR	- No Results: Term is utilized when 'No Target Compounds Requested' is reported for the analysis of Volatile or Semivolatile Organic TIC only requests.
RL	- Reporting Limit: The value at which an instrument can accurately measure an analyte at a specific concentration. The RL includes any adjustments from dilutions, concentrations or moisture content, where applicable.
RPD	- Relative Percent Difference: The results from matrix and/or matrix spike duplicates are primarily designed to assess the precision of analytical results in a given matrix and are expressed as relative percent difference (RPD). Values which are less than five times the reporting limit for any individual parameter are evaluated by utilizing the absolute difference between the values; although the RPD value will be provided in the report.
SRM	- Standard Reference Material: A reference sample of a known or certified value that is of the same or similar matrix as the associated field samples.
STLP	- Semi-dynamic Tank Leaching Procedure per EPA Method 1315.
TEF	- Toxic Equivalency Factors: The values assigned to each dioxin and furan to evaluate their toxicity relative to 2,3,7,8-TCDD.
TEQ	- Toxic Equivalent: The measure of a sample's toxicity derived by multiplying each dioxin and furan by its corresponding TEF and then summing the resulting values.
TIC	- Tentatively Identified Compound: A compound that has been identified to be present and is not part of the target compound list (TCL) for the method and/or program. All TICs are qualitatively identified and reported as estimated concentrations.

Report Format: DU Report with 'J' Qualifiers

Project Name:	23E1424	**Lab Number:**	L2333497
Project Number:	23E1424	**Report Date:**	06/27/23

Footnotes

1 - The reference for this analyte should be considered modified since this analyte is absent from the target analyte list of the original method.

Terms

Analytical Method: Both the document from which the method originates and the analytical reference method. (Example: EPA 8260B is shown as 1,8260B.) The codes for the reference method documents are provided in the References section of the Addendum.

Chlordane: The target compound Chlordane (CAS No. 57-74-9) is reported for GC ECD analyses. Per EPA,this compound "refers to a mixture of chlordane isomers, other chlorinated hydrocarbons and numerous other components." (Reference: USEPA Toxicological Review of Chlordane, In Support of Summary Information on the Integrated Risk Information System (IRIS), December 1997.)

Difference: With respect to Total Oxidizable Precursor (TOP) Assay analysis, the difference is defined as the Post-Treatment value minus the Pre-Treatment value.

Final pH: As it pertains to Sample Receipt & Container Information section of the report, Final pH reflects pH of container determined after adjustment at the laboratory, if applicable. If no adjustment required, value reflects Initial pH.

Frozen Date/Time: With respect to Volatile Organics in soil, Frozen Date/Time reflects the date/time at which associated Reagent Water-preserved vials were initially frozen. Note: If frozen date/time is beyond 48 hours from sample collection, value will be reflected in 'bold'.

Gasoline Range Organics (GRO): Gasoline Range Organics (GRO) results include all chromatographic peaks eluting from Methyl tert butyl ether through Naphthalene, with the exception of GRO analysis in support of State of Ohio programs, which includes all chromatographic peaks eluting from Hexane through Dodecane.

Initial pH: As it pertains to Sample Receipt & Container Information section of the report, Initial pH reflects pH of container determined upon receipt, if applicable.

PAH Total: With respect to Alkylated PAH analyses, the 'PAHs, Total' result is defined as the summation of results for all or a subset of the following compounds: Naphthalene, C1-C4 Naphthalenes, 2-Methylnaphthalene, 1-Methylnaphthalene, Biphenyl, Acenaphthylene, Acenaphthene, Fluorene, C1-C3 Fluorenes, Phenanthrene, C1-C4 Phenanthrenes/Anthracenes, Anthracene, Fluoranthene, Pyrene, C1-C4 Fluoranthenes/Pyrenes, Benz(a)anthracene, Chrysene, C1-C4 Chrysenes, Benzo(b)fluoranthene, Benzo(j)+(k)fluoranthene, Benzo(e)pyrene, Benzo(a)pyrene, Perylene, Indeno(1,2,3-cd)pyrene, Dibenz(ah)+(ac)anthracene, Benzo(g,h,i)perylene. If a 'Total' result is requested, the results of its individual components will also be reported.

PFAS Total: With respect to PFAS analyses, the 'PFAS, Total (5)' result is defined as the summation of results for: PFHpA, PFHxS, PFOA, PFNA and PFOS. In addition, the 'PFAS, Total (6)' result is defined as the summation of results for: PFHpA, PFHxS, PFOA, PFNA, PFDA and PFOS. For MassDEP DW compliance analysis only, the 'PFAS, Total (6)' result is defined as the summation of results at or above the RL. Note: If a 'Total' result is requested, the results of its individual components will also be reported.

Total: With respect to Organic analyses, a 'Total' result is defined as the summation of results for individual isomers or Aroclors. If a 'Total' result is requested, the results of its individual components will also be reported. This is applicable to 'Total' results for methods 8260, 8081 and 8082.

Data Qualifiers

A - Spectra identified as "Aldol Condensates" are byproducts of the extraction/concentration procedures when acetone is introduced in the process.

B - The analyte was detected above the reporting limit in the associated method blank. Flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank. For MCP-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank. For DOD-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank AND the analyte was detected above one-half the reporting limit (or above the reporting limit for common lab contaminants) in the associated method blank. For NJ-Air-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte above the reporting limit. For NJ-related projects (excluding Air), flag only applies to associated field samples that have detectable concentrations of the analyte, which was detected above the reporting limit in the associated method blank or above five times the reporting limit for common lab contaminants (Phthalates, Acetone, Methylene Chloride, 2-Butanone).

C - Co-elution: The target analyte co-elutes with a known lab standard (i.e. surrogate, internal standards, etc.) for co-extracted analyses.

D - Concentration of analyte was quantified from diluted analysis. Flag only applies to field samples that have detectable concentrations of the analyte.

E - Concentration of analyte exceeds the range of the calibration curve and/or linear range of the instrument.

F - The ratio of quantifier ion response to qualifier ion response falls outside of the laboratory criteria. Results are considered to be an estimated maximum concentration.

G - The concentration may be biased high due to matrix interferences (i.e, co-elution) with non-target compound(s). The result should be considered estimated.

H - The analysis of pH was performed beyond the regulatory-required holding time of 15 minutes from the time of sample collection.

I - The lower value for the two columns has been reported due to obvious interference.

J - Estimated value. The Target analyte concentration is below the quantitation limit (RL), but above the Method Detection Limit (MDL) or Estimated Detection Limit (EDL) for SPME-related analyses. This represents an estimated concentration for Tentatively

Report Format: DU Report with 'J' Qualifiers

Project Name:	23E1424	**Lab Number:**	L2333497
Project Number:	23E1424	**Report Date:**	06/27/23

Data Qualifiers

Identified Compounds (TICs).

M - Reporting Limit (RL) exceeds the MCP CAM Reporting Limit for this analyte.

ND - Not detected at the method detection limit (MDL) for the sample, or estimated detection limit (EDL) for SPME-related analyses.

NJ - Presumptive evidence of compound. This represents an estimated concentration for Tentatively Identified Compounds (TICs), where the identification is based on a mass spectral library search.

P - The RPD between the results for the two columns exceeds the method-specified criteria.

Q - The quality control sample exceeds the associated acceptance criteria. For DOD-related projects, LCS and/or Continuing Calibration Standard exceedences are also qualified on all associated sample results. Note: This flag is not applicable for matrix spike recoveries when the sample concentration is greater than 4x the spike added or for batch duplicate RPD when the sample concentrations are less than 5x the RL. (Metals only.)

R - Analytical results are from sample re-analysis.

RE - Analytical results are from sample re-extraction.

S - Analytical results are from modified screening analysis.

V - The surrogate associated with this target analyte has a recovery outside the QC acceptance limits. (Applicable to MassDEP DW Compliance samples only.)

Z - The batch matrix spike and/or duplicate associated with this target analyte has a recovery/RPD outside the QC acceptance limits. (Applicable to MassDEP DW Compliance samples only.)

Report Format: DU Report with 'J' Qualifiers

REFERENCES

13 Determination of Total Organic Carbon in Sediment. U.S. EPA, Region II. July 27, 1988.

LIMITATION OF LIABILITIES

Alpha Analytical performs services with reasonable care and diligence normal to the analytical testing laboratory industry. In the event of an error, the sole and exclusive responsibility of Alpha Analytical shall be to re-perform the work at it's own expense. In no event shall Alpha Analytical be held liable for any incidental, consequential or special damages, including but not limited to, damages in any way connected with the use of, interpretation of, information or analysis provided by Alpha Analytical.

We strongly urge our clients to comply with EPA protocol regarding sample volume, preservation, cooling, containers, sampling procedures, holding time and splitting of samples in the field.

Certification Information

The following analytes are not included in our Primary NELAP Scope of Accreditation:

Westborough Facility
EPA 624.1: m/p-xylene, o-xylene, Naphthalene
EPA 625.1: alpha-Terpineol
EPA 8260D: NPW: 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene, Azobenzene; SCM: Iodomethane (methyl iodide), 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene.
EPA 8270E: NPW: Dimethylnaphthalene,1,4-Diphenylhydrazine, alpha-Terpineol; SCM: Dimethylnaphthalene,1,4-Diphenylhydrazine.
SM4500: NPW: Amenable Cyanide; SCM: Total Phosphorus, TKN, NO2, NO3.

Mansfield Facility
SM 2540D: TSS.
EPA TO-15: Halothane, 2,4,4-Trimethyl-2-pentene, 2,4,4-Trimethyl-1-pentene, Thiophene, 2-Methylthiophene, 3-Methylthiophene, 2-Ethylthiophene, 1,2,3-Trimethylbenzene, Indan, Indene, 1,2,4,5-Tetramethylbenzene, Benzothiophene, 1-Methylnaphthalene.
Biological Tissue Matrix: EPA 3050B

The following analytes are included in our Massachusetts DEP Scope of Accreditation

Westborough Facility:

Drinking Water
EPA 300.0: Chloride, Nitrate-N, Fluoride, Sulfate; **EPA 353.2**: Nitrate-N, Nitrite-N; **SM4500NO3-F**: Nitrate-N, Nitrite-N; **SM4500F-C, SM4500CN-CE, EPA 180.1, SM2130B, SM4500Cl-D, SM2320B, SM2540C, SM4500H-B, SM4500NO2-B**
EPA 524.2: THMs and VOCs; **EPA 504.1:** EDB, DBCP.
Microbiology: **SM9215B; SM9223-P/A, SM9223B-Colilert-QT,SM9222D**.

Non-Potable Water
SM4500H,B, EPA 120.1, SM2510B, SM2540C, SM2320B, SM4500CL-E, SM4500F-BC, SM4500NH3-BH: Ammonia-N and Kjeldahl-N, **EPA 350.1**: Ammonia-N, **LACHAT 10-107-06-1-B**: Ammonia-N, **EPA 351.1, SM4500NO3-F, EPA 353.2**: Nitrate-N**, SM4500P-E, SM4500P-B, E, SM4500SO4-E, SM5220D, EPA 410.4, SM5210B, SM5310C, SM4500CL-D, EPA 1664, EPA 420.1, SM4500-CN-CE, SM2540D, EPA 300: Chloride, Sulfate, Nitrate.**
EPA 624.1: Volatile Halocarbons & Aromatics,
EPA 608.3: Chlordane, Toxaphene, Aldrin, alpha-BHC, beta-BHC, gamma-BHC, delta-BHC, Dieldrin, DDD, DDE, DDT, Endosulfan I, Endosulfan II, Endosulfan sulfate, Endrin, Endrin Aldehyde, Heptachlor, Heptachlor Epoxide, PCBs
EPA 625.1: SVOC (Acid/Base/Neutral Extractables).
Microbiology: **SM9223B-Colilert-QT; Enterolert-QT, SM9221E, EPA 1600, EPA 1603, SM9222D.**

Mansfield Facility:

Drinking Water
EPA 200.7: Al, Ba, Cd, Cr, Cu, Fe, Mn, Ni, Na, Ag, Ca, Zn. **EPA 200.8:** Al, Sb, As, Ba, Be, Cd, Cr, Cu, Pb, Mn, Ni, Se, Ag, TL, Zn. **EPA 245.1** Hg.
EPA 522, EPA 537.1.

Non-Potable Water
EPA 200.7: Al, Sb, As, Be, Cd, Ca, Cr, Co, Cu, Fe, Pb, Mg, Mn, Mo, Ni, K, Se, Ag, Na, Sr, TL, Ti, V, Zn.
EPA 200.8: Al, Sb**,** As, Be, Cd, Cr, Cu, Fe, Pb, Mn, Ni, K, Se, Ag, Na, TL, Zn.
EPA 245.1 Hg.
SM2340B

For a complete listing of analytes and methods, please contact your Alpha Project Manager.

6/14/23

Pace
Pace® Analytical Services
Aqua Pro-Tech, A Pace® Analytical Laboratory
1275 Bloomfield Avenue, Fairfield, NJ 07004 (973) 227-0422

SUBCONTRACT ORDER

L2333497

SENDING LABORATORY:

Aqua Pro-Tech Laboratories
1275 Bloomfield Ave, Bldg 6
Fairfield, NJ 07004
Phone: (973) 227-0422
Fax: (973) 227-2183

Project Mgr: Paul Maide
Email: paul.maide@pacelabs.com
Send Invoice to: FAIR.AP@pacelabs.com
Send Report to: FAIR.Reporting@pacelabs.com

RECEIVING LABORATORY:

Alpha Analytical- Mahwah Service Cente
35 Whitney Road, Suite 5
Mahwah, NJ 07430
Phone: (201) 847-9100
Fax:

Turn-Around Time
- [ ] APL Standard 2 Weeks
- [ ] Rush (Choose One Below)
  - [ ] 24 Hr.
  - [ ] 48 Hr.
  - [ ] 72 Hr.
  - [x] 1 Week
  - [ ] **Other (provide Date/Time)

Date _____ Time _____
**May Need Lab Approval

Report / Electronic Format
- [ ] Results Only
- [x] NJ DEP Reduced
- [ ] NJ DEP Full
- [ ] State Forms/E2 Reporting
- [ ] Email Delivery
- [ ] Hasta EDD
- [ ] Excel

PWSID # _____ SRP# _____

APL Order ID: 23E1424

Laboratory ID	APL Lab ID	Sampled	SampleType	Matrix	Analysis Requested	[Comments]
-01	23E1424-02	05/30/2023 11:30	Grab	S	TOC - Sub (TOC)	
	Sample Name/Location: SED-1				*Containers Supplied:* Glass Jar, 4 oz. (C)	
	Comments:					
-02	23E1424-04	05/30/2023 11:50	Grab	S	TOC - Sub (TOC)	
	Sample Name/Location: SED-2				*Containers Supplied:* Glass Jar, 4 oz. (C)	
	Comments:					
-03	23E1424-06	05/30/2023 12:05	Grab	S	TOC - Sub (TOC)	
	Sample Name/Location: SED-3				*Containers Supplied:* Glass Jar, 4 oz. (C)	
	Comments:					
-04	23E1424-08	05/30/2023 12:30	Grab	S	TOC - Sub (TOC)	
	Sample Name/Location: SED-4				*Containers Supplied:* Glass Jar, 4 oz. (C)	
	Comments:					

Released By		Date / Time 6/13/23 1718	Received By	(APL)	Date / Time 6/13/23 1718
Released By	(APL)	Date / Time 6/13/23 1815	Received By		Date / Time 6/13/23 18.30

6/13/23 2115

6/14/23 0700

6/14/23 0700

6/14/23 0800

6/14/23 0800

Serial_No:06272312:26

6/14/23

L2333497

Pace

Pace® Analytical Services
Green Pro-Tech, a Pace® Analytical Laboratory
1275 Bloomfield Avenue, Fairfield, NJ 07004 | (973) 227-9122

SUBCONTRACT ORDER

APL Order ID: 23E1424

Laboratory ID	APL Lab ID	Sampled	SampleType	Matrix	Analysis Requested	[Comments]
-05	23E1424-10	05/30/2023 12:45	Grab	S	TOC - Sub (TOC)	
	Sample Name/Location: SED-5				*Containers Supplied:* Glass Jar, 4 oz. (C)	
	Comments:					
-06	23E1424-12	05/30/2023 13:05	Grab	S	TOC - Sub (TOC)	
	Sample Name/Location: SED-6				*Containers Supplied:* Glass Jar, 4 oz. (C)	
	Comments:					
-07	23E1424-14	05/30/2023 13:20	Grab	S	TOC - Sub (TOC)	
	Sample Name/Location: SED-7				*Containers Supplied:* Glass Jar, 4 oz. (C)	
	Comments:					
-08	23E1424-16	05/30/2023 11:35	Grab	S	TOC - Sub (TOC) [RL 6/12]	
	Sample Name/Location: SED-1A				*Containers Supplied:* Glass Jar, 4 oz. (C)	
	Comments:					
-09	23E1424-17	05/30/2023 12:35	Grab	S	TOC - Sub (TOC) [RL 6/12]	
	Sample Name/Location: SED-4A				*Containers Supplied:* Glass Jar, 4 oz. (C)	
	Comments:					
-10	23E1424-18	05/30/2023 13:05	Grab	S	TOC - Sub (TOC) [RL 6/12]	
	Sample Name/Location: SED-6A				*Containers Supplied:* Glass Jar, 4 oz. (C)	
	Comments:					

Released By _____ Date / Time 6/13/23 1718 Received By _____ (AAL) Date / Time 6/13/23 1718

Released By _____ (AAL) Date / Time 6/13/23 1915 Received By _____ Date / Time 6/13/23 18:30

6/13/23 2215

6/14/23 AAL 6/14/23 0000

6/14/23 0000

6/14/23 0700

R. Mendoza AAL 6/14/23 0700

DYNAMIC EARTH

Appendix F
Health and Safety Plan

SITE-SPECIFIC
HEALTH AND SAFETY PLAN

Old Orchard Country Club
54 Monmouth Road
Block 2701, Lots 2, 53, 60, 66 & 69
Borough of Eatontown, Monmouth County, New Jersey
Block 68, Lot 6
Borough of West Long Branch, Monmouth County, New Jersey

Prepared for:
Surrey Equities, LLC
38 Corbett Way
Eatontown, New Jersey 07724

Prepared By:

DYNAMIC EARTH
1904 Main Street
Lake Como, New Jersey 07719

Project #: 3272-98-005EC

June 24, 2024

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1.0 HEALTH AND SAFETY PROGRAM

This plan will be used to administer health and safety measures for activities performed by Dynamic Earth, LLC (Dynamic Earth at the Old Orchard Country Club located at 54 Monmouth Road, in the borough of Eatontown and West Long Branch, Monmouth County, New Jersey. (hereinafter referred to as the "Site"). A copy of this plan will be on-Site and will be available for inspection and review during field activities.

The Health and Safety Plan (HASP) establishes policies and procedures to protect workers and the public from potential hazards posed by field work. All project activities will be conducted in a manner that minimizes the probability of injury or accident.

This HASP is based on the information available at the time of preparation. Unexpected conditions that may arise during the project will require a reassessment of the procedures. It is important that the need for personal protective measures be thoroughly assessed by the Project Manager and/or Health and Safety Officer prior to and during the planned field activities. Unplanned activities or changes in the hazard status in the field will initiate a review of and, when appropriate, alterations to this plan.

Any amendments to this plan must be approved in writing by the Project Manager or the Health and Safety Officer prior to implementation.

Dynamic Earth cannot guarantee the health and/or safety of all personnel entering the Site. It is not possible to evaluate and provide protection for all possible hazards that may be encountered. Adherence to the HASP will reduce, but cannot totally eliminate, the possibility for worker injuries and illness to occur.

Field personnel working at the Site will be briefed on the contents of the HASP and the potential hazards of the job before work begins and daily throughout the duration of field activities. In addition, field personnel are required to read the HASP before work begins.

2.0 SITE CHARACTERIZATION AND ANALYSIS

Site characterization provides the information needed to identify hazards and to select the procedures and equipment required to perform the work safely and protect the workers.

A Site-Specific Contingency Plan is prepared for field activities, and is part of the HASP, which will be on-Site and available for review.

2.1 SITE DESCRIPTION

Project Name:	Old Orchard Country Club
Project Number	3272-98-005EC
Site Location:	54 Monmouth Road Block 2701, Lots 2, 53, 60, 66 & 69 Borough of Eatontown, Monmouth County, New Jersey Block 68, Lot 6, Borough of West Long Branch, Monmouth County, New Jersey
Site Access:	Contact Robert, Site Manager, for access to the Site. (732-542-7666)
Site Description:	The Site is currently developed with the Old Orchard Country Club including an 18-hole golf course, two-story club house, one-story equipment rental building, one-story equipment/storage building, and associated sheds. The Turtle Mill Brook bisects the Site from west to east. The remaining portions of the Site include asphalt and gravel driveway and parking areas.

A Site Location Map and Existing Conditions and AOC Location Plan included as Figures 1 and 2.

2.2 DESCRIPTION OF TASKS/WORK PLAN

Dynamic Earth personnel may perform the following tasks during this project:

- Contractor Oversight
- Hand Auger Soil Boring Installation
- Soil Sample Collection
- Temporary Well Installation
- Groundwater Sampling
- Sediment/Surface Water Sampling
- Soil Excavation
- Post Excavation Soil Sampling
- Soil Stockpiling
- Cap Construction

2.3 DESCRIPTION OF CONTRACTORS AND RESPONSIBILITIES

The contractor(s) shall be responsible for the health and safety of their employees, subcontractors, suppliers and other parties that are performing work under the direction of the contractor. This HASP cannot be used by the contractor(s) unless authorized by the Project Manager.

The contractor shall have programs, policies and procedures in-place that satisfy the requirements of all current federal, state, and local statutes, regulations and ordinances regarding health and safety. Contractors shall supply all the necessary safety equipment for their crews. Dynamic Earth reserves the right to audit its contractors for federal, state and local regulatory compliance.

The following contractors will provide services at the Site during the project:

Service	Contractor Information
Driller	High Rock Environmental 1 Spring Hill Lane Great Meadows, NJ 07838 Mike Varina 908-799-3317 info@highrockenviro.com
Subconsultant	AWT 32 Birch Street Old Bridge, NJ 08875 732-613-1660 jpostorino@awtenv.com

2.4 PROJECT ORGANIZATION/KEY PERSONNEL

Project Manager:	Spencer Spurlock, LSRP Senior Principal 732-280-0830 sspurlock@dynamic-earth.com
Health and Safety Officer:	Spencer Spurlock, LSRP Senior Principal 732-280-0830 sspurlock@dynamic-earth.com
Senior Technical Manager:	Omar Mahmoud Environmental Scientist 732-280-0830 omahmoud@dynamic-earth.com
Field/Site Manager:	Omar Mahmoud Environmental Scientist 732-280-0830 omahmoud@dynamic-earth.com

The responsibility for health and safety is shared by all members of the team. Each team member is responsible to safely complete the tasks required to fulfill the planned work activities, comply with the HASP and notify the Project Manager or Health and Safety Officer of any unsafe acts or conditions at the Site.

2.5 HAZARD EVALUATION

In general, potential hazards for a project can be classified into physical, chemical, biological and radiological hazards.

Based upon information collected during characterization and analysis of Site conditions, the following classes of hazards may be present during certain phases of the project. Detailed job hazard analyses (JHA) will be created, as appropriate, and updated to accommodate Site-specific hazards. Common hazards and control measures are shown below.

All work practices at the Site must comply with and conform to OSHA Safety and Health Procedures included in 29 CFR 1910, 29 CFR 1926 and pertinent state and local regulations.

2.5.1 Physical/Safety Hazards and Controls

PHYSICAL (SAFETY) HAZARDS AND CONTROLS		
Present	**Hazard**	**Control Measure(s)***
N	Flying debris/objects	Provide shielding and PPE
Y	Sustained loud noise	Noise protection and monitoring required
N	Steep terrain/unstable surface	Brace and shore equipment
N	Buildup of flammable /explosive gases	Provide fire extinguisher and ventilation. No spark sources within 50 ft of an excavation, heavy equipment or UST removal. Ground as appropriate.
N	Poisonous Plants (poison ivy, poison oak, poison sumac).	Avoid contact with these plants. Wear long pants and long sleeves
N	Gas cylinders	Make sure gas cylinders are properly anchored and chained. Keep cylinders away from ignition sources.
N	High pressure hose rupture	Check to see that fitting and pressure lines are in good condition/repair before using.
N	Electrical shock	Make sure third wire is properly grounded. Do not tamper with electrical wiring unless qualified to do so.
N	Vehicle Traffic	Work in busy areas during off-peak hours; wear traffic safety vest with reflector stripe; use cones and flags to mark work areas; and contact police department if interrupting flow of traffic
Y	Moving heavy vehicles or equipment	Back up alarm required for heavy equipment. Observer remains in contact with operator and signals safe back up. Personnel to remain outside of turning radius.
N	Overhead electrical wires	Heavy equipment to remain at least 15 ft from overhead power line for power lines of 50 kV or less. For each kV > 50 increase distance 1/2 foot.
Y	Buried utilities, drums, and tanks**	To be identified and controlled by others.
Y	Slip/trip/fall hazards due to muddy work areas	Use wood pallets or similar devices in muddy work areas.
Y	Back injuries	Use proper lifting techniques, or provide mechanical lifting aids.
N	Oxygen deficiency (confined space)	Dynamic personnel are not to enter confined spaces for any reason unless in compliance with confined space entry regulations.
Y	Trenches/excavations	Dynamic personnel are not to enter excavation greater than 4-foot depth at any time, for any reason unless in compliance with trenching regulations.
N	Protruding objects	Flag visible objects.
Y	Holes/ditches	Restrict access by tape or other visible means.

OTHER:

* For more detailed descriptions of the appropriate controls, consult OSHA Standards.
** For Underground Utilities: Follow state/local utility mark out requirements. If necessary, use a contractor to mark out work areas (e.g., ground penetrating radar and line tracing).

2.5.2 Chemical Hazards

Based on information gathered during the characterization of the Site, the following substances are suspected to be present on-Site. Refer to the representative Safety Data Sheets (SDS) for additional information regarding exposure to typical contaminants (Appendix A).

POTENTIAL CHEMICALS OF CONCERN				
CHEMICAL	**OSHA PEL[1]**	**ACGIH TLV[2]**	**IDLH[3]**	**EXPOSURE ROUTE**
Chlordane	200 ppm	200 ppm	200 ppm	Inh, Ing
Dieldrin	0.25 ppm	0.25 ppm	0.1 ppm	Ing, Abs, Con
Heptachlor epoxide	NA[4]	NA[4]	NA[4]	Inh, Ing, Abs, Con
Arsenic	10,000 ppm	0.01 ppm	5 ppm	Inh, Ing, Abs, Con
Mercury	0.1 ppm	0.025 ppm	10 ppm	Inh, Ing, Abs, Con
Lead	0.05 ppm	0.05 ppm	100 ppm	Inh, Ing, Abs, Con

1. OSHA personal exposure limit based on an eight-hour time weighted average.
2. American Conference of Governmental Industrial Hygienists threshold limit value based on an eight hour-time weighted average.
3. Immediately Dangerous to Life or Health concentration based on the maximum concentration one could escape within 30 minutes without experiencing permanent or irreversible health effects.
4. NA- Information not available.

2.5.3 Toxicity

Potential hazards, proper handling precautions, signs and symptoms of over-exposure and recommended personal protective equipment (PPE) are described in the SDS. Available SDSs for potential chemicals of concern are included in Appendix A. These SDSs should be reviewed prior to conducting work at the Site.

2.5.4 Heat Stress

The Health and Safety Officer or designee shall evaluate the potential effect of heat stress on all workers at the Site prior to the start of the work day. Overexposure to temperature extremes can represent risks to personnel if simple precautions are not observed. Control measures designed to prevent heat stress include dressing properly (light weight, light colored clothing), blocking out sun or other direct heat sources and drinking plenty of water. Workers should be familiar with the following serious effects of overexposure to hot environments:

- Heat stress
- Heat exhaustion
- Heat stroke

2.5.5 Cold Stress

The Health and Safety Officer or designee shall evaluate the potential effects of cold stress on all workers at the Site prior to the start of the work day. Overexposure to temperature extremes can represent risks to personnel if simple precautions are not observed. Control measures designed to prevent cold stress include dressing properly (dry, layered clothing), the protection of feet, hands and

head, taking frequent breaks in warm areas and drinking plenty of water. Workers should be familiar with the following serious effects of overexposure to cold environments:

- Hypothermia
- Frost bite

Field staff must coordinate with the Project Manager and monitor changing weather patterns to limit and control exposure in extreme winter conditions. As appropriate, the Project Manager will evaluate necessary changes to outer wear, PPE and Site maintenance (such as snow removal and treatment of icy conditions) on a project-by-project basis, and document any changes.

3.0 SITE CONTROL

3.1 SAFE WORK PRACTICES

1. Eating, drinking, chewing gum or tobacco, smoking or any practices that increases the probability of hand-to-mouth transfer and ingestion of material are forbidden at the Site.

2. Hands and face must be thoroughly washed upon leaving the work area. Individuals will shower as soon as possible after leaving the Site at the end of the day.

3. Contact with contaminated surfaces or surfaces suspected of being contaminated should be avoided while the worker is unprotected. Avoid walking through puddles, pools, mud, etc. Whenever possible, avoid kneeling, leaning or sitting on the ground. In the event that protective clothing is ripped or torn, work is to stop and the protective clothing removed and replaced. In the event of direct skin contact, the affected area is to be washed immediately with soap and water.

4. If respirators are deemed necessary, facial hair that interferes with the fit of a respirator will not be permitted. Respirators are only to be worn by authorized staff.

5. Medicine and alcohol can intensify the effects from exposure to many chemicals. Use of medications must be reported to the Project Manager or the Health and Safety Officer. Intake of alcoholic beverages during scheduled work periods is prohibited.

6. All personnel must be familiar with relevant task-specific standard operating procedures, as well as all instructions and information contained in the HASP.

7. Use of contact lenses is prohibited at the Site unless chemical goggles are worn during any operations involving potential eye contact with chemicals.

8. Personnel will receive training covering the contents of SDSs for all Site-specific contaminants, with particular emphasis on the signs and symptoms of exposure.

9. The buddy system should be employed at all times.

10. All personal protective equipment must be inspected for worn or deteriorated parts prior to use.

11. Site work will be performed during daylight hours whenever possible. Any work conducted during hours of darkness will comply with 29 CFR 1310.120(m).

3.2 COMMUNICATIONS SYSTEM

Communication between the Project Manager, Health and Safety Officer and field personnel will be through the use of mobile telephones. Mobile telephone numbers are included in Section 2.4.

4.0 EMPLOYEE EDUCATION AND TRAINING

All personnel working at the Site must have received Health and Safety Training for Hazardous Waste Operations (HAZWOPER) or have the equivalent training and experience as required under OSHA 29 CFR 1910.120(e).

It is the responsibility of each contractor to determine the level of training required for their employees to satisfy the requirements of HAZWOPER. If necessary, Dynamic Earth will review training records for contractors and will maintain copies of these records with the HASP.

In the event unanticipated special hazards are encountered or if there are client specific requirements, additional training will be provided to employees on an as-needed basis.

At the start of the project and weekly thereafter, the Site Manager will hold a safety briefing to include the following:

- Discuss the project status.
- Review conditions at the Site including potential hazards.
- Identify safety concerns and review corrective action measures.
- Reiterate HASP requirements and PPE levels for the Site.
- Review evacuation routes and assembly areas.

The Site Manager will document the safety briefing in the field log. Notes should include the time of the briefing, list of attendees and key information that was reviewed.

5.0 MEDICAL SURVEILLANCE PROGRAM

If deemed necessary, Dynamic Earth will implement a medical surveillance program. The need for such a program will continue to be evaluated based on the nature of the work performed by Dynamic Earth employees.

A medical surveillance program shall be instituted for the following conditions as required by 29 CFR Part 1910.120:

- Employees are or may be exposed to hazardous substances or health hazards at or above the permissible exposure limits or above the published exposure levels for these substances, without regard to the use of respirators, for 30 days or more a year.
- Employees who wear a respirator for 30 days or more a year.
- Employees who are injured, become ill or develop signs or symptoms due to possible overexposure involving hazardous substances or health hazards from an emergency response or hazardous waste operation.
- Members of HAZMAT teams.

If a medical surveillance program is deemed necessary, medical examinations and consultations shall be made available to each covered employee on the following schedule:

- Prior to assignment and once every twelve months hereafter.
- At termination of employment or reassignment (if the employee has not had an examination within the last six months).
- Upon notification that the employee developed signs or symptoms indicating possible overexposure to hazardous substances or health hazards, or the employee has been injured or exposed above the permissible exposure limits or published exposure levels.
- If a physician determines that an increased frequency of examination is medically necessary.

In the event Site-specific contaminants of concern are encountered, they will be added to the surveillance program on a case-by-case basis.

The following special requirements are needed for this Site:

- No special monitoring needed.

6.0 PERSONAL PROTECTIVE EQUIPMENT

The purpose of PPE is to protect employees against potential chemical, physical, and biological hazards. Careful selection and use of PPE will reduce and maintain employee chemical exposures at or below Permissible Exposure Limits and protect against physical and biological hazards.

The PPE required for this Site is LEVEL D.

LEVEL D PROTECTION	
Required	**Description**
Y	Hard Hat
Y	Safety Vest (Class II or III)
N	Safety Glasses
N	Chemical Goggles
Y	Steel-Toed/Shank/Chemical Resistant Boots
N	Chemical Resistant Outer Boots
Y	Hearing Protection
Y	Vinyl or Nitrile Gloves
N	Leather Gloves (where potential for cuts and scrapes)
N	Coveralls

The Health and Safety Officer and/or Project Manager must be notified immediately if any action levels identified in Section 2.5.2 are exceeded.

The protective equipment used and protection level assigned will be reevaluated periodically by the Health and Safety Officer and/or Project Manager as more information about the Site conditions becomes available, and as field personnel are required to perform different tasks.

Personnel will upgrade or downgrade their level of protection only with concurrence of the Health and Safety Officer and/or Project Manager.

7.0 DECONTAMINATION PROCEDURES

The procedures for decontamination of equipment and personnel are essential to:

- Reduce personnel exposure to chemical hazards by removing or neutralizing contaminants.
- Prevent cross-contamination of areas at the Site.
- Prevent accidental transport of contaminated materials off site.

The following decontamination procedures shall be followed:

- Reusable field equipment and PPE will be decontaminated in accordance with standard operating procedures using a brush to remove any loose material. The equipment will be cleaned using a detergent (Alconox™ or equivalent) with a final rinse of analyte-free water. Wastes generated by decontamination activities will be disposed of properly.
- Disposable protective equipment such as nitrile gloves will be placed in heavy duty trash bags and disposed of properly.
- Heavy equipment decontamination is the responsibility of the contractor. The location of the decontamination station, as well as the decontamination procedures, will be designated by the Project Manager based on the chemical hazards and type of equipment to be cleaned.

8.0 EMERGENCY CONTINGENCY PLAN

An emergency contingency plan sets forth policies and procedures for responding to emergencies at the Site. Common causes of emergencies may be worker related or material/Site related.

Should an emergency occur, the Project Manager has overall responsibility for implementation of, and control over, the emergency response.

The following planning should be carried out prior to starting field activities:

- Identify, locate and ensure proper operation of on-Site communications (e.g., mobile telephone, two-way portable radios, etc.).
- Review any changes in conditions or on-Site operation.
- Ensure that a copy of the HASP is available on-Site.
- Check emergency equipment and supplies.
- Verify local emergency contacts, hospital routes, evacuation routes and assembly points.

8.1 NOTIFICATION/REPORTING PROCEDURES

DIAL 9-1-1 IN THE EVENT OF A MEDICAL OR OTHER EMERGENCY

Injured workers will not attempt to drive themselves to an emergency facility.

As soon as possible, the Project Manager shall be notified as to the nature of the incident (spill, injury, details of event, etc.). The Project Manager is responsible for notifying Dynamic Earth's senior management and the client (if required).

The Project Manager and/or the client is responsible for making any required notifications to the applicable regulatory agencies.

Field personnel will be responsible for documenting the incident. The Project Manager will be responsible for evaluating the root cause of the incident and will identify/implement the appropriate corrective actions.

8.2 SPILL CONTAINMENT PROCEDURES

While a spill or leak of a hazardous material is unlikely to occur based on the nature of the work, it is necessary to implement a containment procedure.

In the event of a spill or leak, the area will be cordoned off by field staff. Containment and cleanup should only be performed by properly trained personnel or contractors. All wastes generated from cleanup activities will be disposed of in a proper manner.

8.3 UNDERGROUND UTILITIES

In the event that an underground utility is damaged, notifications must be made in the appropriate order. Emergency responders will provide additional instructions. All equipment should be shut down and all personnel must evacuate to the assembly area.

Natural Gas (IN ORDER)

- 9 1 1
- NJ One-Call (8 1 1 or 800-727-1000)
- Project Manager and/or Health and Safety Officer

Electric, Communications, Water and Sewer (IN ORDER)

- The operator of the applicable utility (as noted on the mark-out tickets)
- NJ One-Call (8 1 1 or 800-727-1000)
- Project Manager and/or Health and Safety Officer

8.4 SAFETY EQUIPMENT LIST

The following safety equipment shall be radially available during field work. Field staff are responsible for inspecting and maintaining the safety equipment.

SAFETY EQUIPMENT	
Required	**Description**
Y	First Aid Kit
N	TYPE ABC Fire Extinguisher
N	Spill Kit (absorbent pads, socks, etc.)
Y	Reflective Safety Cones
Y	Photoionization Detector (PID)

8.5 EMERGENCY CONTACTS

EMERGENCY CONTACTS		
Agency/Personnel	**Phone Number**	**Contact**
Fire Department	9 1 1 732-389-7620 (non-emergency)	Eatontown Fire Department
Local Police Department	9 1 1 732-542-0100 (non-emergency)	Eatontown Police Department
State Police Department	9 1 1 609-777-4949 (non-emergency)	New Jersey State Police Department
Hospital	732-222-5200 (non-emergency)	RWJ Barnabas Health Monmouth Medical Center
State Environmental Agency	1-877-927-6337 (emergency hot line)	NJDEP
National Response Center	1-800-424-8802	USEPA
Project Manager	732-280-0830	Spencer Spurlock
Health and Safety Officer	732-280-0830	Spencer Spurlock
Field Supervisor	732-280-0830	Omar Mahmoud

8.6 HOSPITAL ROUTE

The route to the nearby hospital for non-emergencies is included in Appendix B.

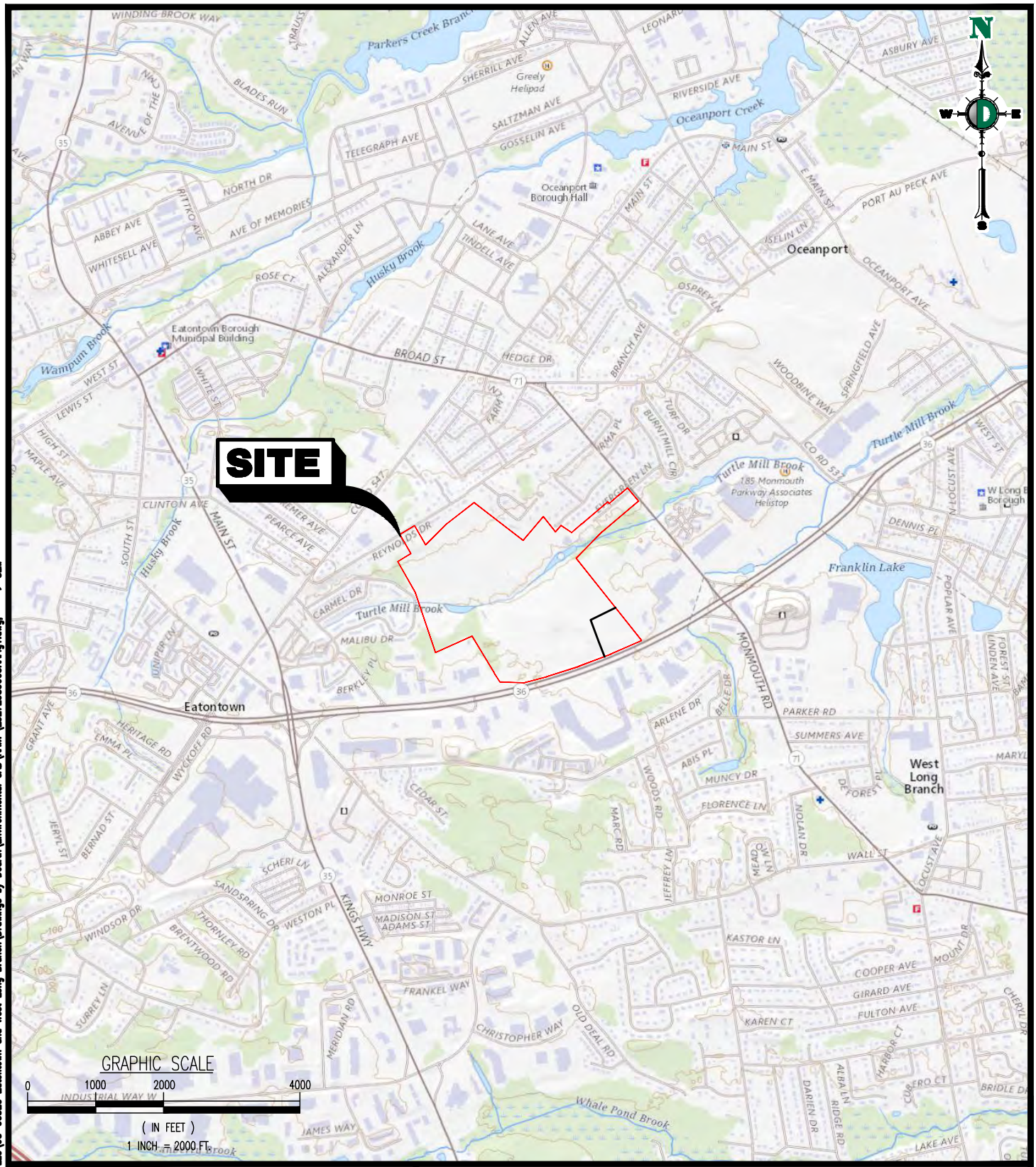
9.0 AUTHORIZATION

This Site-Specific Health and Safety Plan has been completed, reviewed and approved by the following Dynamic Earth staff.

Omar Mahmoud	June 24, 2024
Preparer	Date
Spencer Spurlock	June 24, 2024
Project Manager	Date
Spencer Spurlock	June 24, 2024
Health and Safety Officer	Date

All staff are required to review the HASP prior to the commencement of field work. After reviewing the plan, staff must sign the acknowledgement form included in Appendix C.

FIGURES



DYNAMIC EARTH, LLC
1904 Main Street - Lake Como, NJ 07719
T: 732.280.0830 - F: 732.974.3521
www.dynamic-earth.com

TITLE: **FIGURE 1: SITE LOCATION MAP**

PROJECT: **SURREY EQUITIES**
OLD ORCHARD COUNTRY CLUB
BLOCK 2701, LOT 2, 53, 60, 66, 69; BLOCK 68, LOT 6
54 MONMOUTH ROAD
TOWNSHIP OF EATONTOWN, MONMOUTH COUNTY, NEW JERSEY

SCALE: (H) 1"=2000'
(V)

JOB No:
3272-98-005EC

Plotted: 09/11/23 - 11:40 AM, By: jdefisher, - Product Ver: 24.2a (LMS Tech)
File: C:\EARTH Projects\3272 Surrey Equities LLC\98-005EC Eatontown and West Long Branch\Drawings by Dearth\Environmental CAD\RAMP\E3272989005RAFig1.dwg, ---> SLM

APPENDIX A

Safety Data Sheets

SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006
Version 5.0 Revision Date 29.10.2012
Print Date 19.04.2017
GENERIC EU MSDS - NO COUNTRY SPECIFIC DATA - NO OEL DATA

1. IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

1.1 Product identifiers

Product name : Arsenic

Product Number : 267961
Brand : Aldrich
Index-No. : 033-001-00-X
CAS-No. : 7440-38-2

1.2 Relevant identified uses of the substance or mixture and uses advised against

Identified uses : Laboratory chemicals, Manufacture of substances

1.3 Details of the supplier of the safety data sheet

Company : Sigma-Aldrich Israel Ltd.
3 PARK RABIN, PLAUT
7670603 REHOVOT
ISRAEL

Telephone : +972 8948-4222
Fax : +972 8948-4200

1.4 Emergency telephone number

Emergency Phone # : +972 (8) 948-4222

2. HAZARDS IDENTIFICATION

2.1 Classification of the substance or mixture

Classification according to Regulation (EC) No 1272/2008 [EU-GHS/CLP]
Acute aquatic toxicity (Category 1)
Chronic aquatic toxicity (Category 1)
Acute toxicity, Inhalation (Category 3)
Acute toxicity, Oral (Category 3)

Classification according to EU Directives 67/548/EEC or 1999/45/EC
Toxic by inhalation and if swallowed. Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

2.2 Label elements

Labelling according Regulation (EC) No 1272/2008 [CLP]
Pictogram



Signal word Danger

Hazard statement(s)
H301 Toxic if swallowed.
H331 Toxic if inhaled.
H410 Very toxic to aquatic life with long lasting effects.

Precautionary statement(s)
P261 Avoid breathing dust/ fume/ gas/ mist/ vapours/ spray.
P273 Avoid release to the environment.
P301 + P310 IF SWALLOWED: Immediately call a POISON CENTER or doctor/

	physician.
P311	Call a POISON CENTER or doctor/ physician.
P501	Dispose of contents/ container to an approved waste disposal plant.
Supplemental Hazard Statements	none

According to European Directive 67/548/EEC as amended.

Hazard symbol(s)



R-phrase(s)

R23/25	Toxic by inhalation and if swallowed.
R50/53	Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

S-phrase(s)

S20/21	When using do not eat, drink or smoke.
S28	After contact with skin, wash immediately with plenty of soap and water.
S45	In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).
S60	This material and its container must be disposed of as hazardous waste.
S61	Avoid release to the environment. Refer to special instructions/ Safety data sheets.

2.3 Other hazards - none

3. COMPOSITION/INFORMATION ON INGREDIENTS

3.1 Substances

Formula : As
Molecular Weight : 74,92 g/mol

Component		Concentration
Arsenic		
CAS-No.	7440-38-2	-
EC-No.	231-148-6	
Index-No.	033-001-00-X	

4. FIRST AID MEASURES

4.1 Description of first aid measures

General advice
Consult a physician. Show this safety data sheet to the doctor in attendance.

If inhaled
If breathed in, move person into fresh air. If not breathing, give artificial respiration. Consult a physician.

In case of skin contact
Wash off with soap and plenty of water. Take victim immediately to hospital. Consult a physician.

In case of eye contact
Flush eyes with water as a precaution.

If swallowed
Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician.

4.2 Most important symptoms and effects, both acute and delayed
Absorption into the body leads to the formation of methemoglobin which in sufficient concentration causes cyanosis. Onset may be delayed 2 to 4 hours or longer.

4.3 Indication of any immediate medical attention and special treatment needed
no data available

5. FIREFIGHTING MEASURES

5.1 Extinguishing media

Suitable extinguishing media
Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

5.2 Special hazards arising from the substance or mixture
Arsenic oxides

5.3 Advice for firefighters
Wear self contained breathing apparatus for fire fighting if necessary.

5.4 Further information
no data available

6. ACCIDENTAL RELEASE MEASURES

6.1 Personal precautions, protective equipment and emergency procedures
Wear respiratory protection. Avoid dust formation. Avoid breathing vapors, mist or gas. Ensure adequate ventilation. Evacuate personnel to safe areas. Avoid breathing dust.

6.2 Environmental precautions
Prevent further leakage or spillage if safe to do so. Do not let product enter drains. Discharge into the environment must be avoided.

6.3 Methods and materials for containment and cleaning up
Pick up and arrange disposal without creating dust. Sweep up and shovel. Keep in suitable, closed containers for disposal.

6.4 Reference to other sections
For disposal see section 13.

7. HANDLING AND STORAGE

7.1 Precautions for safe handling
Avoid contact with skin and eyes. Avoid formation of dust and aerosols.
Provide appropriate exhaust ventilation at places where dust is formed.

7.2 Conditions for safe storage, including any incompatibilities
Store in cool place. Keep container tightly closed in a dry and well-ventilated place.

7.3 Specific end uses
no data available

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1 Control parameters

Components with workplace control parameters

8.2 Exposure controls

Appropriate engineering controls
Avoid contact with skin, eyes and clothing. Wash hands before breaks and immediately after handling the product.

Personal protective equipment

Eye/face protection
Face shield and safety glasses Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).

Skin protection
Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands.

The selected protective gloves have to satisfy the specifications of EU Directive 89/686/EEC and the standard EN 374 derived from it.

Immersion protection
Material: Nitrile rubber
Minimum layer thickness: 0,11 mm
Break through time: > 480 min
Material tested:Dermatril® (Aldrich Z677272, Size M)

Splash protection
Material: Nitrile rubber
Minimum layer thickness: 0,11 mm
Break through time: > 30 min
Material tested:Dermatril® (Aldrich Z677272, Size M)

data source: KCL GmbH, D-36124 Eichenzell, phone +49 (0)6659 873000, e-mail sales@kcl.de, test method: EN374
If used in solution, or mixed with other substances, and under conditions which differ from EN 374, contact the supplier of the CE approved gloves. This recommendation is advisory only and must be evaluated by an Industrial Hygienist familiar with the specific situation of anticipated use by our customers. It should not be construed as offering an approval for any specific use scenario.

Body Protection
Complete suit protecting against chemicals, The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

Respiratory protection
Where risk assessment shows air-purifying respirators are appropriate use a full-face particle respirator type N99 (US) or type P2 (EN 143) respirator cartridges as a backup to engineering controls. If the respirator is the sole means of protection, use a full-face supplied air respirator. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

9. PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties

a)	Appearance	Form: powder Colour: grey
b)	Odour	no data available
c)	Odour Threshold	no data available
d)	pH	no data available
e)	Melting point/freezing point	Melting point/range: 817 °C - lit.
f)	Initial boiling point and boiling range	613 °C - lit.
g)	Flash point	not applicable
h)	Evaporation rate	no data available
i)	Flammability (solid, gas)	no data available
j)	Upper/lower flammability or explosive limits	no data available
k)	Vapour pressure	no data available
l)	Vapour density	no data available
m)	Relative density	5,727 g/mL at 25 °C
n)	Water solubility	no data available
o)	Partition coefficient: n-octanol/water	no data available

p)	Autoignition temperature	no data available
q)	Decomposition temperature	no data available
r)	Viscosity	no data available
s)	Explosive properties	no data available
t)	Oxidizing properties	no data available

9.2 Other safety information
no data available

10. STABILITY AND REACTIVITY

10.1 Reactivity
no data available

10.2 Chemical stability
no data available

10.3 Possibility of hazardous reactions
no data available

10.4 Conditions to avoid
Heat. Exposure to air may affect product quality.

10.5 Incompatible materials
Oxidizing agents, Halogens, Palladium undergoes a violent reaction with arsenic, Zinc, Platinum oxide, Nitrogen trichloride, Bromine azide

10.6 Hazardous decomposition products
Other decomposition products - no data available

11. TOXICOLOGICAL INFORMATION

11.1 Information on toxicological effects

Acute toxicity
LD50 Oral - rat - 763 mg/kg
Remarks: Behavioral:Ataxia. Diarrhoea

LD50 Oral - mouse - 145 mg/kg
Remarks: Behavioral:Ataxia. Diarrhoea

Inhalation: no data available

Skin corrosion/irritation
no data available

Serious eye damage/eye irritation
no data available

Respiratory or skin sensitization
no data available

Germ cell mutagenicity
no data available

Carcinogenicity

This is or contains a component that has been reported to be carcinogenic based on its IARC, OSHA, ACGIH, NTP, or EPA classification.

IARC: 1 - Group 1: Carcinogenic to humans (Arsenic)

Reproductive toxicity
no data available

Specific target organ toxicity - single exposure
no data available

Specific target organ toxicity - repeated exposure
no data available

Aspiration hazard
no data available

Potential health effects

Inhalation	Toxic if inhaled. May cause respiratory tract irritation.
Ingestion	Harmful if swallowed.
Skin	May be harmful if absorbed through skin. May cause skin irritation.
Eyes	May cause eye irritation.

Signs and Symptoms of Exposure
Absorption into the body leads to the formation of methemoglobin which in sufficient concentration causes cyanosis. Onset may be delayed 2 to 4 hours or longer.

Additional Information
RTECS: CG0525000

12. ECOLOGICAL INFORMATION

12.1 Toxicity

Toxicity to fish	LC50 - Pimephales promelas (fathead minnow) - 9,9 mg/l - 96,0 h
Toxicity to daphnia and other aquatic invertebrates	EC50 - Daphnia magna (Water flea) - 3,8 mg/l - 48 h

12.2 Persistence and degradability
no data available

12.3 Bioaccumulative potential
no data available

12.4 Mobility in soil
no data available

12.5 Results of PBT and vPvB assessment
no data available

12.6 Other adverse effects
Very toxic to aquatic life with long lasting effects.

13. DISPOSAL CONSIDERATIONS

13.1 Waste treatment methods

Product
Offer surplus and non-recyclable solutions to a licensed disposal company. Dissolve or mix the material with a combustible solvent and burn in a chemical incinerator equipped with an afterburner and scrubber.

Contaminated packaging
Dispose of as unused product.

14. TRANSPORT INFORMATION

14.1 UN number
ADR/RID: 1558 IMDG: 1558 IATA: 1558

14.2 UN proper shipping name
ADR/RID: ARSENIC
IMDG: ARSENIC
IATA: Arsenic

14.3 Transport hazard class(es)

ADR/RID: 6.1	IMDG: 6.1	IATA: 6.1

14.4 Packaging group

ADR/RID: II	IMDG: II	IATA: II

14.5 Environmental hazards

ADR/RID: yes	IMDG Marine pollutant: yes	IATA: no

14.6 Special precautions for user

no data available

15. REGULATORY INFORMATION

This safety datasheet complies with the requirements of Regulation (EC) No. 1907/2006.

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture

no data available

15.2 Chemical Safety Assessment

no data available

16. OTHER INFORMATION

Further information

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The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. The information in this document is based on the present state of our knowledge and is applicable to the product with regard to appropriate safety precautions. It does not represent any guarantee of the properties of the product. Sigma-Aldrich Corporation and its Affiliates shall not be held liable for any damage resulting from handling or from contact with the above product. See www.sigma-aldrich.com and/or the reverse side of invoice or packing slip for additional terms and conditions of sale.

SAFETY DATA SHEET

1. PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NAME	:	Chlordane
NAME OF MANUFACTURER	:	GL Sciences Inc.
ADDRESS	:	22-1 Nishishinjuku 6-chome Shinjuku-ku Tokyo 163-1130, Japan
CHARGE SECTION	:	International Sales Section
TELEPHONE No.	:	+81-3-5323-6620
FACSIMILE No.	:	+81-3-5323-6621
PRODUCT No.	:	1021-34060
SDS No.	:	1021-34060

Research use only.

2. HAZARDS IDENTIFICATION

GHS CLASSIFICATION :

Acute toxicity - oral	: Category 4
Acute toxicity – dermal	: Category 3
Skin corrosion/irritation	: Category 2
Serious eye damage/eye irritation	: Category 2
Germ cell mutagenicity	: Category 2
Carcinogenicity	: Category 2
Reproductive toxicity-effects on or via lactation	: Category 2
Reproductive toxicity-effects on or via lactation	: effects on or via lactation
Specific target organ toxicity (single exposure)	: Category 1 <nervous system>
Specific target organ toxicity (repeated exposure)	: Category 1 <nervous system, liver, blood>
Hazardous to the aquatic environment –acute hazard	: Category 1
Hazardous to the aquatic environment –chronic hazard	: Category 1

HAZARDS SYMBOL :



SIGNAL WORD : Danger

HAZARD STATEMENT :

H302	Harmful if swallowed
H311	Toxic in contact with skin
H315	Causes skin irritation
H319	Causes serious eye irritation
H341	Suspected of causing genetic defects
H351	Suspected of causing cancer
H361	Suspected of damaging fertility or the unborn child
H362	May cause harm to breast-fed children
H370	Causes damage to organs<nervous system>
H372	Causes damage to organs throug h prolonged or repeated exposure < nervous system, liver, blood>
H400	Very toxic to aquatic life
H410	Very toxic to aquatic life with long lasting effects

PRECAUTIONARY STATEMENTS :

P202	Do not handle until all safety precautions have been read and understood.
P264	Wash hands thoroughly after handling.
P270	Do not eat, drink or smoke when using this product.

P280	Wear protective gloves/eye protection.
P260	Do not breathing gas/mist/vapours.
P263	Avoid contact during pregnancy and while nursing.
P273	Avoid release to the environment.
P301+P312	IF SWALLOWED: Call a POISON CENTER or doctor if you feel unwell.
P330	Rinse mouth.
P302+P352	IF ON SKIN: Wash with plenty of water.
P312	Call a POISON CENTER or doctor if you feel unwell.
P361+P364	Take off immediately all contaminated clothing and wash it before reuse.
P332+P313	IF skin irritation occurs: Get medical advice/attention.
P305+P351+P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P337+P313	IF eye irritation persists: Get medical advice/attention.
P308+P313	IF exposed or concerned: Get medical advice/attention.
P314	Get medical attention if you feel unwell.
P391	Collect spillage.
P405	Store locked up.
P501	Dispose of contents/container in accordance with all applicable regulations.

3. COMPOSITION/INFORMATION ON INGREDIENTS

CHEMICAL IDENTITY	:	Chlordane
SYNONYMS	:	1,2,4,5,6,7,8,8-Octachlor-2,3,3a,4,7,7a-hexahydro-4,7-metha-1H-indene
CHEMICAL FOMULA	:	$C_{10}H_6Cl_8$
CONTENT	:	> 98 %
CAS No.	:	57-74-9
TSCA INVENTRY	:	Listed
EINECS No.	:	200-349-0
EC INDEX No.	:	602-047-00-8

4. FIRST AID MEASURES

GENERAL ADVICE	:	Wash off immediately with soap and plenty of water. In the case of respirable dust and/or fumes, use self-contained breathing apparatus and dust impervious protective suit. Use personal protective equipment.
INHALATION	:	Move victim to fresh air. If breathing is difficult, give oxygen. If irritation persists, consult a physician.
SKIN CONTACT	:	Remove contaminated clothes and shoes, rinse skin with plenty of water or shower. Use soap to help assure removal. If irritation persists, consult a physician.
EYE CONTACT	:	Remove any contact lenses at once. Flush eyes well with flooding large amounts of running water for at least 15 minutes. Assure adequate flushing by separating the eyelids with sterile fingers. If irritation persists, consult a physician.
INGESTION	:	Rinse mouth. Never give anything by mouth to an unconscious person. Consult a physician immediately.

5. FIRE FIGHTING MEASURES

EXTINGUISHING MEDIA	:	Carbon dioxide, dry chemical powder, foam, water spray
FIRE & EXPLOSION HAZARDS	:	Toxic, irritating dust, fumes or smoke may be emitted.
SPECIAL PROTECTIVE EQUIPMENT FOR FIRE FIGHTERS		
	:	Fireman should wear normal protective equipment(full bunker gear) and positive-pressure self-contained breathing apparatus.

6. ACCIDENTAL RELEASE MEASURES

PERSONAL PRECAUTIONS	:	Remove ignition sources and ventilate the area. In case of insufficient ventilation, wear suitable respiratory equipment. Avoid raising dust and avoid contact with skin and eyes.
ENVIROMENTAL PRECATIONS	:	Prevent spills from entering sewers, watercourses or low areas.
METHODS FOR CLEAN UP	:	Do not touch spilled material without suitable protection. After material is completely picked up, wash the spill site with soap and water and ventilate the area. Pull all wastes in a plastic bag for disposal and seal it tightly. Remove, clean, or dispose contaminated clothing.

7. HANDLING AND STORAGE

HANDLING	:	Avoid contact with eyes, skin, and clothing. Avoid prolonged or repeated exposure. Handle material with suitable protection. After this product, dispose of contents/container in accordance with all applicable regulations and appropriate ways.
STORAGE	:	Store away from sunlight in well-ventilated place at 2 – 10℃. Keep container tightly closed.
INCOMOPATIBLE PRODUCTS	:	Bases

8. EXPOSURE CONTROL/PERSONAL PROTECTION

ENGINEERING MEASURES	:	Use exhaust ventilation to keep airborne concentrations below exposure limits. Use only with adequate ventilation.
VENTILATION	:	Local Exhaust ; Necessary, Mechanical(General) ; Recommended
PERSONAL PROTECTION		
RESPIRATORY PROTECTION	:	Use respirators approved under appropriate government standards and follow all regulations.
HAND PROTECTION	:	Chemical resistant gloves
EYE PROTECTION	:	Safety glasses(goggles)
SKIN PROTECTION	:	Protective clothing
CONTROL PARAMETERS		
OSHA	:	0.5mg/m3(skin)
NIOSH REL	:	0.5mg/m3(skin)
ACGIH	:	0.5mg/m3(skin)

9. PHYSICAL AND CHEMICAL PROPERTIES

APPEARANCE	:	White
SHAPE	:	Solid
ODOR	:	Irritating odor
pH	:	No data available
BOILING POINT	:	175℃(1mmHg)
MELTING POINT	:	106℃
FLASH POINT	:	56℃(CC)
FLAMMABILITY	:	lower:0.7% upper:5%
AUTOIGNITION TEMPERATURE	:	No data available
VAPOR PRESSURE	:	No data available
VAPOR DENCITY	:	14(Air=1)
DENCITY	:	1.60g/cm3(25℃)
SOLUBILITY IN		
WATER	:	slightly insoluble
Organic solvent	:	very soluble
DECOMPOSITION TEMPERATURE		
	:	No data available

10. STABILITY AND REACTIVITY

REACTIVITY	:	Stable under recommended storage conditions.
CHEMICAL STABILITY	:	Very toxic and corrosive gases are emitted by heating. Reacts with oxidizers, acids, bases.
CONDITION TO AVOID	:	Heat, contact with incompatible materials.
INCOMPATIBILE MATERIALS	:	Bases
HAZARDOUS DECOMPOSITION PRODUCTS		
	:	CO, CO_2, Hydrogen chloride, Chlorine, Phosgene

11. TOXICOLOGICAL INFORMATION

ACUTE TOXICITY (oral)	:	Rat LD50= 83 ～ 590 mg/kg (ATSDR(1994),EHC 34(1984),IARC vol.79 (2001),JMPR 180(1970),ACGIH(2001))
ACUTE TOXICITY (dermal)	:	Rat LD50= 205～590-840mg/kg Rabbit LD50= 205～1100-1200 mg/kg (EHC 34(1984), ACGIH(2001))
SKIN CORROSION/IRRITATION	:	Human: contact with skin may cause skin irritation.(ASTDR(1994), EHC 34(1984))
EYE DAMAGE/EYE IRRITATION	:	Human: Industry worker, eye, skin, mucosa irritation.(ATSDR(1994), EHC 34(1984))

GERM CELL MUTAGENICITY	:	Mouse: Positive (EHC 34(1984),IARC 79(2001),ATSDR(1994))
CARCINOGENICITY	:	Classified at, IARC: 2B(2001), ACGIH: A3(1996)
REPRODUCTIVE TOXICITY	:	Rat: increasing the loss rate of baby, neurobehavioral consequences.(EHC 34(1984),ATSDR (1994)),IRIS(2002))
SPECIFIC TARGET ORGAN TOXICITY-single exposure		
	:	Human: appear nervous symptoms after inhalation.(IARC79(2001), EHC 34 (1984),PIMs(2000))
SPECIFIC TARGET ORGAN TOXICITY-repeated exposure		
	:	Rat, mouse, human: appear nervous symptoms, liver damage, hematological damage. (IARC 79(2001),EHC 34(1984)),IRIS(1997))
ASPIRATION TOXICITY	:	No data available

12. ECOLOGICAL INFORMATION

ECOTOXICITY	:	Crustacea (shrimp pink): LC50=0.4μg/L/96hr (EHC 34,1984)
BIODEGRADABILITY	:	BOD: 0%, BCF=13,900-27,900(3μg/L), 13,000-26,100(0.3μg/L)
BIOACCUMULATION POTENTIAL	:	log Pow=6.16
MOBILITY IN SOIL	:	No data available
OTHER ADVERSE EFFECTS	:	Not listed in Montreal Protocol list.

13. DISPOSAL INFORMATION

Dispose in a hazardous-waste site in accordance with all applicable regulations. Any disposal practice must be in compliance with country, local, state, and federal laws and regulations (contact country, local or state environment agency for specific rules).

14. TRANSPORT INFORMATION

IATA

UN NUMBER	:	UN 2761
UN PROPER SHIPPING NAME	:	Organochlorine pesticides, solid, toxic. (Chlordane)
CLASS or DIVISION	:	Toxic (Class 6.1)
PACKING GROUP	:	Ⅲ

DOT

IDENTIFICATION NUMBER	:	UN 2761
PROPER SHIPPING NAME	:	Organochlorine pesticides, solid, toxic. (Chlordane)
HAZARD CLASS	:	Toxic (Class 6.1)
MARINE POLLUTANT	:	Yes

15. REGULATORY INFORMATION

US REGULATIONS	:	Labeling according to US regulations; See section 2
EU REGURATIONS	:	Labeling according to EC Directives; See section 2

16. OTHER INFORMATION

NOTICE:

The information contained in the SDS description is applicable exclusively to the chemical substance identified herein and for its intended use as an analytical reference standard or reagent and to the unit quantity intended for that purpose. The information does not relate to, and may not be appropriate for, any application or larger quantity of the substance described. Our products are intended for the use by individuals possessing sufficient technical skill and qualification on use the material potential hazardous chemical. Accordingly, no representation or warranty, express or implied, with respect to merchantability and fitness for a particular purpose is made with respect to the information contained herein.

Attention:

This product in terms of chemical identity and the unit amount provide is intended for use in chemical analysis and not for human consumption, nor any other purpose.

SAFETY DATA SHEET

Version 6.3
Revision Date 09/14/2021
Print Date 10/03/2022

SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1 Product identifiers

Product name : Dieldrin

Product Number : 291218
Brand : Aldrich
Index-No. : 602-049-00-9
CAS-No. : 60-57-1

1.2 Relevant identified uses of the substance or mixture and uses advised against

Identified uses : Laboratory chemicals, Synthesis of substances

1.3 Details of the supplier of the safety data sheet

Company : Sigma-Aldrich Inc.
3050 SPRUCE ST
ST. LOUIS MO 63103
UNITED STATES

Telephone : +1 314 771-5765
Fax : +1 800 325-5052

1.4 Emergency telephone

Emergency Phone # : 800-424-9300 CHEMTREC (USA) +1-703-527-3887 CHEMTREC (International) 24 Hours/day; 7 Days/week

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

GHS Classification in accordance with 29 CFR 1910 (OSHA HCS)

Acute toxicity, Oral (Category 2), H300
Acute toxicity, Dermal (Category 1), H310
Carcinogenicity (Category 2), H351
Specific target organ toxicity - repeated exposure, Oral (Category 1), H372
Short-term (acute) aquatic hazard (Category 1), H400
Long-term (chronic) aquatic hazard (Category 1), H410

For the full text of the H-Statements mentioned in this Section, see Section 16.

2.2 GHS Label elements, including precautionary statements

Pictogram



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Signal word	Danger
Hazard statement(s)	
H300 + H310	Fatal if swallowed or in contact with skin.
H351	Suspected of causing cancer.
H372	Causes damage to organs through prolonged or repeated exposure if swallowed.
H410	Very toxic to aquatic life with long lasting effects.
Precautionary statement(s)	
P201	Obtain special instructions before use.
P202	Do not handle until all safety precautions have been read and understood.
P260	Do not breathe dust/ fume/ gas/ mist/ vapors/ spray.
P262	Do not get in eyes, on skin, or on clothing.
P264	Wash skin thoroughly after handling.
P270	Do not eat, drink or smoke when using this product.
P273	Avoid release to the environment.
P280	Wear protective gloves/ protective clothing/ eye protection/ face protection.
P301 + P310 + P330	IF SWALLOWED: Immediately call a POISON CENTER/ doctor. Rinse mouth.
P302 + P350 + P310	IF ON SKIN: Gently wash with plenty of soap and water. Immediately call a POISON CENTER or doctor/ physician.
P308 + P313	IF exposed or concerned: Get medical advice/ attention.
P362	Take off contaminated clothing and wash before reuse.
P391	Collect spillage.
P405	Store locked up.
P501	Dispose of contents/ container to an approved waste disposal plant.

2.3 Hazards not otherwise classified (HNOC) or not covered by GHS - none

SECTION 3: Composition/information on ingredients

3.1 Substances

Synonyms	:	1,2,3,4,10,10-Hexachloro-1,4,4a,5,6,7,8,8a-octahydro-6,7-epoxy-1,4:5,8-dimethanonaphthalene
Formula	:	$C_{12}H_8Cl_6O$
Molecular weight	:	380.91 g/mol
CAS-No.	:	60-57-1
EC-No.	:	200-484-5
Index-No.	:	602-049-00-9

Component	Classification	Concentration
Dieldrin		
	Acute Tox. 2; Acute Tox. 1; Carc. 2; STOT RE 1; Aquatic Acute 1; Aquatic Chronic 1; H300, H310, H351, H372, H400, H410 M-Factor - Aquatic Acute: 100	<= 100 %

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	M-Factor - Aquatic Chronic: 100	

For the full text of the H-Statements mentioned in this Section, see Section 16.

SECTION 4: First aid measures

4.1 Description of first-aid measures

General advice
Consult a physician. Show this material safety data sheet to the doctor in attendance.Move out of dangerous area.

If inhaled
If breathed in, move person into fresh air. If not breathing, give artificial respiration. Consult a physician.

In case of skin contact
Wash off with soap and plenty of water. Take victim immediately to hospital. Consult a physician.

In case of eye contact
Flush eyes with water as a precaution.

If swallowed
Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician.

4.2 Most important symptoms and effects, both acute and delayed
The most important known symptoms and effects are described in the labelling (see section 2.2) and/or in section 11

4.3 Indication of any immediate medical attention and special treatment needed
No data available

SECTION 5: Firefighting measures

5.1 Extinguishing media

Suitable extinguishing media
Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

5.2 Special hazards arising from the substance or mixture
Carbon oxides
Hydrogen chloride gas

5.3 Advice for firefighters
Wear self-contained breathing apparatus for firefighting if necessary.

5.4 Further information
No data available

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SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

Wear respiratory protection. Avoid dust formation. Avoid breathing vapors, mist or gas. Ensure adequate ventilation. Evacuate personnel to safe areas. Avoid breathing dust. For personal protection see section 8.

6.2 Environmental precautions

Prevent further leakage or spillage if safe to do so. Do not let product enter drains. Discharge into the environment must be avoided.

6.3 Methods and materials for containment and cleaning up

Pick up and arrange disposal without creating dust. Sweep up and shovel. Keep in suitable, closed containers for disposal.

6.4 Reference to other sections

For disposal see section 13.

SECTION 7: Handling and storage

7.1 Precautions for safe handling

Advice on safe handling

Avoid contact with skin and eyes. Avoid formation of dust and aerosols.**Advice on safe handling**

Further processing of solid materials may result in the formation of combustible dusts. The potential for combustible dust formation should be taken into consideration before additional processing occurs.

Advice on protection against fire and explosion

Provide appropriate exhaust ventilation at places where dust is formed.

Hygiene measures

Avoid contact with skin, eyes and clothing. Wash hands before breaks and immediately after handling the product.
For precautions see section 2.2.

7.2 Conditions for safe storage, including any incompatibilities

Storage conditions

Keep container tightly closed in a dry and well-ventilated place.

Storage class

Storage class (TRGS 510): 6.1B: Non-combustible, acute toxic Cat. 1 and 2 / very toxic hazardous materials

7.3 Specific end use(s)

Apart from the uses mentioned in section 1.2 no other specific uses are stipulated

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

Ingredients with workplace control parameters

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Component	CAS-No.	Value	Control parameters	Basis
Dieldrin	60-57-1	TWA	0.1 mg/m3	USA. ACGIH Threshold Limit Values (TLV)
	Remarks	Confirmed animal carcinogen with unknown relevance to humans Danger of cutaneous absorption		
		TWA	0.25 mg/m3	USA. NIOSH Recommended Exposure Limits
		Potential Occupational Carcinogen Potential for dermal absorption		
		TWA	0.25 mg/m3	USA. Occupational Exposure Limits (OSHA) - Table Z-1 Limits for Air Contaminants
		Skin designation		
		TWA	0.25 mg/m3	USA. OSHA - TABLE Z-1 Limits for Air Contaminants - 1910.1000
		Skin notation		
		PEL	0.25 mg/m3	California permissible exposure limits for chemical contaminants (Title 8, Article 107)
		Skin		

8.2 Exposure controls

Appropriate engineering controls

Avoid contact with skin, eyes and clothing. Wash hands before breaks and immediately after handling the product.

Personal protective equipment

Eye/face protection

Face shield and safety glasses Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).

Skin protection

Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands.

Full contact
Material: Nitrile rubber
Minimum layer thickness: 0.11 mm
Break through time: 480 min
Material tested:Dermatril® (KCL 740 / Aldrich Z677272, Size M)

Splash contact
Material: Nitrile rubber
Minimum layer thickness: 0.11 mm
Break through time: 480 min
Material tested:Dermatril® (KCL 740 / Aldrich Z677272, Size M)

data source: KCL GmbH, D-36124 Eichenzell, phone +49 (0)6659 87300, e-mail sales@kcl.de, test method: EN374

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If used in solution, or mixed with other substances, and under conditions which differ from EN 374, contact the supplier of the EC approved gloves. This recommendation is advisory only and must be evaluated by an industrial hygienist and safety officer familiar with the specific situation of anticipated use by our customers. It should not be construed as offering an approval for any specific use scenario.

Body Protection
Complete suit protecting against chemicals, The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

Respiratory protection
Where risk assessment shows air-purifying respirators are appropriate use a full-face particle respirator type N100 (US) or type P3 (EN 143) respirator cartridges as a backup to engineering controls. If the respirator is the sole means of protection, use a full-face supplied air respirator. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

Control of environmental exposure
Prevent further leakage or spillage if safe to do so. Do not let product enter drains. Discharge into the environment must be avoided.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

a)	Appearance	Form: solid
b)	Odor	No data available
c)	Odor Threshold	No data available
d)	pH	No data available
e)	Melting point/freezing point	Melting point/range: 143 - 144 °C (289 - 291 °F)
f)	Initial boiling point and boiling range	No data available
g)	Flash point	()No data available
h)	Evaporation rate	No data available
i)	Flammability (solid, gas)	No data available
j)	Upper/lower flammability or explosive limits	No data available
k)	Vapor pressure	No data available
l)	Vapor density	No data available
m)	Density	No data available
	Relative density	No data available
n)	Water solubility	No data available
o)	Partition coefficient: n-octanol/water	No data available

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p)	Autoignition temperature	No data available
q)	Decomposition temperature	No data available
r)	Viscosity	No data available
s)	Explosive properties	No data available
t)	Oxidizing properties	No data available

9.2 Other safety information
No data available

SECTION 10: Stability and reactivity

10.1 Reactivity
No data available

10.2 Chemical stability
Stable under recommended storage conditions.

10.3 Possibility of hazardous reactions
No data available

10.4 Conditions to avoid
No data available

10.5 Incompatible materials
Strong oxidizing agents

10.6 Hazardous decomposition products
In the event of fire: see section 5

SECTION 11: Toxicological information

11.1 Information on toxicological effects

Acute toxicity
LD50 Oral - Rat - 38.3 mg/kg
Inhalation: No data available
Dermal: No data available
LD50 Dermal - 5 mg/kg
No data available

Skin corrosion/irritation
No data available

Serious eye damage/eye irritation
No data available

Respiratory or skin sensitization
No data available

Germ cell mutagenicity
No data available

Carcinogenicity

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This product is or contains a component that is not classifiable as to its carcinogenicity based on its IARC, ACGIH, NTP, or EPA classification.
Limited evidence of carcinogenicity in animal studies

IARC: No ingredient of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.

NTP: No ingredient of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.

OSHA: No component of this product present at levels greater than or equal to 0.1% is on OSHA's list of regulated carcinogens.

Reproductive toxicity
No data available
No data available

Specific target organ toxicity - single exposure
No data available

Specific target organ toxicity - repeated exposure
Ingestion - Causes damage to organs through prolonged or repeated exposure.**Aspiration hazard**
No data available

11.2 Additional Information

RTECS: IO1750000
Discomfort, Headache, Nausea, Vomiting, Dizziness, Tremors, tonic convulsions, clonic spasms, Coma., respiratory failure, To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.

Blood - Irregularities - Based on Human Evidence

Blood - Irregularities - Based on Human Evidence

SECTION 12: Ecological information

12.1 Toxicity

Toxicity to fish	mortality LC50 - Carassius auratus (goldfish) - 1.6 µg/l - 96.0 h
Toxicity to daphnia and other aquatic invertebrates	Immobilization EC50 - Daphnia magna (Water flea) - 79.5 µg/l - 48 h

12.2 Persistence and degradability
No data available

12.3 Bioaccumulative potential
No data available

12.4 Mobility in soil
No data available

12.5 Results of PBT and vPvB assessment
PBT/vPvB assessment not available as chemical safety assessment not required/not conducted

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12.6 Other adverse effects

An environmental hazard cannot be excluded in the event of unprofessional handling or disposal.
Very toxic to aquatic life with long lasting effects.

SECTION 13: Disposal considerations

13.1 Waste treatment methods

Product
Offer surplus and non-recyclable solutions to a licensed disposal company. Contact a licensed professional waste disposal service to dispose of this material. Dissolve or mix the material with a combustible solvent and burn in a chemical incinerator equipped with an afterburner and scrubber.

Contaminated packaging
Dispose of as unused product.

SECTION 14: Transport information

DOT (US)
UN number: 2811 Class: 6.1 Packing group: I
Proper shipping name: Toxic solids, organic, n.o.s. (Dieldrin)
Reportable Quantity (RQ): 1 lbs
1) Marine pollutant: yesPoison Inhalation Hazard: No

IMDG
UN number: 2811 Class: 6.1 Packing group: I EMS-No: F-A, S-A
Proper shipping name: TOXIC SOLID, ORGANIC, N.O.S. (Dieldrin)
Marine pollutant : yes

IATA
UN number: 2811 Class: 6.1 Packing group: I
Proper shipping name: Toxic solid, organic, n.o.s. (Dieldrin)
IATA Passenger: Not permitted for transport

SECTION 15: Regulatory information

SARA 302 Components
No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.

SARA 313 Components
This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.

SARA 311/312 Hazards
Acute Health Hazard, Chronic Health Hazard

Massachusetts Right To Know Components
No components are subject to the Massachusetts Right to Know Act.

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Pennsylvania Right To Know Components

	CAS-No.	Revision Date
Dieldrin	60-57-1	1993-02-16

SECTION 16: Other information

Further information

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The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. The information in this document is based on the present state of our knowledge and is applicable to the product with regard to appropriate safety precautions. It does not represent any guarantee of the properties of the product. Sigma-Aldrich Corporation and its Affiliates shall not be held liable for any damage resulting from handling or from contact with the above product. See www.sigma-aldrich.com and/or the reverse side of invoice or packing slip for additional terms and conditions of sale.

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Version: 6.3 Revision Date: 09/14/2021 Print Date: 10/03/2022

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SAFETY DATA SHEET

Creation Date 20-Aug-2014 **Revision Date** 17-Jan-2018 **Revision Number** 3

1. Identification

Product Name **Mercury (Certified ACS)**

Cat No. : **M141-1LB; M141-6LB**

Synonyms Colloidal mercury; Hydrargyrum; Metallic mercury

Recommended Use Laboratory chemicals.
Uses advised against Not for food, drug, pesticide or biocidal product use

Details of the supplier of the safety data sheet

Company
Fisher Scientific
One Reagent Lane
Fair Lawn, NJ 07410
Tel: (201) 796-7100

Emergency Telephone Number
CHEMTREC®, Inside the USA: 800-424-9300
CHEMTREC®, Outside the USA: 001-703-527-3887

2. Hazard(s) identification

Classification
This chemical is considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200)

Corrosive to metals	Category 1
Acute Inhalation Toxicity - Vapors	Category 2
Reproductive Toxicity	Category 1B
Specific target organ toxicity - (repeated exposure)	Category 1
Target Organs - Central nervous system (CNS), Kidney.	

Label Elements

Signal Word
Danger

Hazard Statements
May be corrosive to metals
Fatal if inhaled
May damage the unborn child
Causes damage to organs through prolonged or repeated exposure



Precautionary Statements
Prevention
Obtain special instructions before use
Do not handle until all safety precautions have been read and understood
Use personal protective equipment as required
Do not get in eyes, on skin, or on clothing
Wash face, hands and any exposed skin thoroughly after handling
Do not eat, drink or smoke when using this product
Do not breathe dust/fume/gas/mist/vapors/spray
Use only outdoors or in a well-ventilated area
Wear respiratory protection
Response
IF exposed or concerned: Get medical attention/advice
Inhalation
IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing
Immediately call a POISON CENTER or doctor/physician
Skin
Immediately call a POISON CENTER or doctor/physician
IF ON SKIN: Gently wash with plenty of soap and water
Remove/Take off immediately all contaminated clothing
Wash contaminated clothing before reuse
Storage
Store locked up
Store in a well-ventilated place. Keep container tightly closed
Disposal
Dispose of contents/container to an approved waste disposal plant
Hazards not otherwise classified (HNOC)
Very toxic to aquatic life with long lasting effects
WARNING. Reproductive Harm - https://www.p65warnings.ca.gov/.

3. Composition/Information on Ingredients

Component	CAS-No	Weight %
Mercury	7439-97-6	100

4. First-aid measures

Eye Contact Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Immediate medical attention is required.

Skin Contact Wash off immediately with soap and plenty of water while removing all contaminated clothes and shoes. Immediate medical attention is required.

Inhalation Move to fresh air. If breathing is difficult, give oxygen. Do not use mouth-to-mouth method if victim ingested or inhaled the substance; give artificial respiration with the aid of a pocket mask equipped with a one-way valve or other proper respiratory medical device. Immediate medical attention is required.

Ingestion Do not induce vomiting. Call a physician or Poison Control Center immediately.

Most important symptoms and effects No information available.

Notes to Physician Treat symptomatically

5. Fire-fighting measures

Suitable Extinguishing Media Substance is nonflammable; use agent most appropriate to extinguish surrounding fire.

Unsuitable Extinguishing Media No information available

Flash Point No information available
Method - No information available

Autoignition Temperature No information available

Explosion Limits
Upper No data available
Lower No data available
Sensitivity to Mechanical Impact No information available
Sensitivity to Static Discharge No information available

Specific Hazards Arising from the Chemical
Very toxic. Non-combustible, substance itself does not burn but may decompose upon heating to produce corrosive and/or toxic fumes. Keep product and empty container away from heat and sources of ignition.

Hazardous Combustion Products
Mercury oxide Highly toxic fumes
Protective Equipment and Precautions for Firefighters
As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

NFPA

Health	Flammability	Instability	Physical hazards
4	0	0	N/A

6. Accidental release measures

Personal Precautions Wear self-contained breathing apparatus and protective suit. Evacuate personnel to safe areas. Ensure adequate ventilation. Do not get in eyes, on skin, or on clothing.

Environmental Precautions Should not be released into the environment. See Section 12 for additional ecological information.

Methods for Containment and Clean Up Wear self-contained breathing apparatus and protective suit. Soak up with inert absorbent material. Keep in suitable, closed containers for disposal.

7. Handling and storage

Handling Use only under a chemical fume hood. Wear personal protective equipment. Do not get in eyes, on skin, or on clothing. Do not breathe vapors or spray mist. Do not ingest.

Storage Keep containers tightly closed in a dry, cool and well-ventilated place. Corrosives area.

8. Exposure controls / personal protection

Exposure Guidelines

Component	ACGIH TLV	OSHA PEL	NIOSH IDLH	Mexico OEL (TWA)
Mercury	TWA: 0.025 mg/m³ Skin	(Vacated) TWA: 0.05 mg/m³ Ceiling: 0.1 mg/m³ (Vacated) STEL: 0.03 mg/m³ Skin (Vacated) Ceiling: 0.1 mg/m³	IDLH: 10 mg/m³ TWA: 0.05 mg/m³ Ceiling: 0.1 mg/m³	TWA: 0.05 mg/m³

Legend

ACGIH - American Conference of Governmental Industrial Hygienists
OSHA - Occupational Safety and Health Administration
NIOSH IDLH: The National Institute for Occupational Safety and Health Immediately Dangerous to Life or Health

Engineering Measures Use only under a chemical fume hood. Ensure adequate ventilation, especially in confined areas. Ensure that eyewash stations and safety showers are close to the workstation location.

Personal Protective Equipment

Eye/face Protection Wear appropriate protective eyeglasses or chemical safety goggles as described by OSHA's eye and face protection regulations in 29 CFR 1910.133 or European Standard EN166.

Skin and body protection Wear appropriate protective gloves and clothing to prevent skin exposure.

Respiratory Protection Follow the OSHA respirator regulations found in 29 CFR 1910.134 or European Standard EN 149. Use a NIOSH/MSHA or European Standard EN 149 approved respirator if exposure limits are exceeded or if irritation or other symptoms are experienced.

Hygiene Measures Handle in accordance with good industrial hygiene and safety practice.

9. Physical and chemical properties

Physical State	Liquid
Appearance	Silver
Odor	Odorless
Odor Threshold	No information available
pH	No information available
Melting Point/Range	-38.87 °C / -38 °F
Boiling Point/Range	356.72 °C / 674.1 °F
Flash Point	No information available
Evaporation Rate	No information available
Flammability (solid,gas)	No information available
Flammability or explosive limits	
Upper	No data available
Lower	No data available
Vapor Pressure	0.002 mmHg @ 25 °C
Vapor Density	7.0
Specific Gravity	13.59 (H2O=1)
Solubility	Insoluble in water
Partition coefficient; n-octanol/water	No data available
Autoignition Temperature	No information available
Decomposition Temperature	No information available
Viscosity	No information available
Molecular Formula	Hg
Molecular Weight	200.59

10. Stability and reactivity

Reactive Hazard None known, based on information available

Stability Stable under normal conditions.

Conditions to Avoid Incompatible products. Excess heat.

Incompatible Materials Strong oxidizing agents, Ammonia, Metals, Halogens

Hazardous Decomposition Products Mercury oxide, Highly toxic fumes

Hazardous Polymerization Hazardous polymerization does not occur.

Hazardous Reactions None under normal processing.

11. Toxicological information

Acute Toxicity

Product Information No acute toxicity information is available for this product

Component Information

Toxicologically Synergistic Products No information available

Delayed and immediate effects as well as chronic effects from short and long-term exposure

Irritation No information available

Sensitization No information available

Carcinogenicity The table below indicates whether each agency has listed any ingredient as a carcinogen.

Component	CAS-No	IARC	NTP	ACGIH	OSHA	Mexico
Mercury	7439-97-6	Not listed	Not listed	Not listed	Not listed	Not listed

Mutagenic Effects No information available

Reproductive Effects No information available.

Developmental Effects May cause harm to the unborn child.

Teratogenicity No information available.

STOT - single exposure None known

STOT - repeated exposure Central nervous system (CNS) Kidney

Aspiration hazard No information available

Symptoms / effects,both acute and delayed No information available

Endocrine Disruptor Information No information available

Other Adverse Effects The toxicological properties have not been fully investigated.

12. Ecological information

Ecotoxicity

This product contains the following substance(s) which are hazardous for the environment.

Component	Freshwater Algae	Freshwater Fish	Microtox	Water Flea
Mercury	Not listed	0.9 mg/L LC50 96h 0.18 mg/L LC50 96h 0.16 mg/L LC50 96h 0.5 mg/L LC50 96h	Not listed	EC50: = 5.0 µg/L, 96h (water flea)

Persistence and Degradability No information available

Bioaccumulation/ Accumulation No information available.

Mobility No information available.

13. Disposal considerations

Waste Disposal Methods Chemical waste generators must determine whether a discarded chemical is classified as a hazardous waste. Chemical waste generators must also consult local, regional, and national hazardous waste regulations to ensure complete and accurate classification.

Component	RCRA - U Series Wastes	RCRA - P Series Wastes
Mercury - 7439-97-6	U151	-

14. Transport information

DOT

UN-No	UN2809
Proper Shipping Name	MERCURY
Hazard Class	8
Subsidiary Hazard Class	6.1
Packing Group	III

TDG

UN-No	UN2809
Proper Shipping Name	MERCURY
Hazard Class	8
Subsidiary Hazard Class	6.1
Packing Group	III

IATA

UN-No	UN2809
Proper Shipping Name	MERCURY
Hazard Class	8
Subsidiary Hazard Class	6.1
Packing Group	III

IMDG/IMO

UN-No	UN2809
Proper Shipping Name	MERCURY
Hazard Class	8
Subsidiary Hazard Class	6.1
Packing Group	III

15. Regulatory information

International Inventories

Component	TSCA	DSL	NDSL	EINECS	ELINCS	NLP	PICCS	ENCS	AICS	IECSC	KECL
Mercury	X	X	-	231-106-7	-		X	-	X	X	X

Legend:
X - Listed
E - Indicates a substance that is the subject of a Section 5(e) Consent order under TSCA.
F - Indicates a substance that is the subject of a Section 5(f) Rule under TSCA.
N - Indicates a polymeric substance containing no free-radical initiator in its inventory name but is considered to cover the designated polymer made with any free-radical initiator regardless of the amount used.
P - Indicates a commenced PMN substance
R - Indicates a substance that is the subject of a Section 6 risk management rule under TSCA.
S - Indicates a substance that is identified in a proposed or final Significant New Use Rule
T - Indicates a substance that is the subject of a Section 4 test rule under TSCA.
XU - Indicates a substance exempt from reporting under the Inventory Update Rule, i.e. Partial Updating of the TSCA Inventory Data Base Production and Site Reports (40 CFR 710(B).
Y1 - Indicates an exempt polymer that has a number-average molecular weight of 1,000 or greater.
Y2 - Indicates an exempt polymer that is a polyester and is made only from reactants included in a specified list of low concern reactants that comprises one of the eligibility criteria for the exemption rule.

U.S. Federal Regulations

TSCA 12(b)

Component	TSCA 12(b)
Mercury	Section 5

SARA 313

Component	CAS-No	Weight %	SARA 313 - Threshold Values %
Mercury	7439-97-6	100	1.0

SARA 311/312 Hazard Categories See section 2 for more information

CWA (Clean Water Act)

Component	CWA - Hazardous Substances	CWA - Reportable Quantities	CWA - Toxic Pollutants	CWA - Priority Pollutants
Mercury	-	-	X	X

Clean Air Act

Component	HAPS Data	Class 1 Ozone Depletors	Class 2 Ozone Depletors
Mercury	X		-

OSHA Occupational Safety and Health Administration
Not applicable

CERCLA This material, as supplied, contains one or more substances regulated as a hazardous substance under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302)

Component	Hazardous Substances RQs	CERCLA EHS RQs
Mercury	1 lb	-

California Proposition 65 This product contains the following proposition 65 chemicals

Component	CAS-No	California Prop. 65	Prop 65 NSRL	Category
Mercury	7439-97-6	Developmental	-	Developmental

U.S. State Right-to-Know Regulations

Component	Massachusetts	New Jersey	Pennsylvania	Illinois	Rhode Island
Mercury	X	X	X	X	X

U.S. Department of Transportation

Reportable Quantity (RQ): N
DOT Marine Pollutant N
DOT Severe Marine Pollutant N

U.S. Department of Homeland Security
This product does not contain any DHS chemicals.

Other International Regulations

Mexico - Grade No information available

16. Other information

Prepared By Regulatory Affairs
Thermo Fisher Scientific
Email: EMSDS.RA@thermofisher.com

Creation Date 20-Aug-2014
Revision Date 17-Jan-2018
Print Date 17-Jan-2018
Revision Summary This document has been updated to comply with the US OSHA HazCom 2012 Standard replacing the current legislation under 29 CFR 1910.1200 to align with the Globally Harmonized System of Classification and Labeling of Chemicals (GHS).

Disclaimer

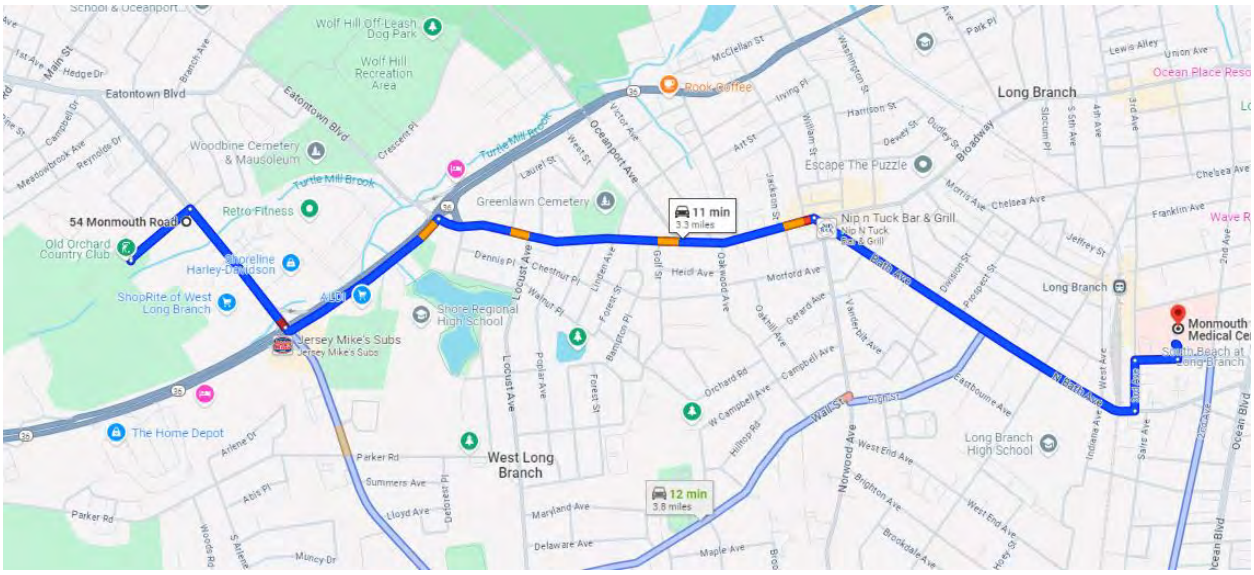
The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text

End of SDS

APPENDIX B
Hospital Route

Direction to Hospital from Site:

1.	Turn right on to Monmouth Road	0.4 mi
2.	Turn left onto NJ-36E	0.5 mi
3.	Turn right onto Broadway	1.0 mi
4.	Turn right onto Bath Avenue	1.0 mi
5.	Turn left onto 3rd Avenue	1.0 mi
6.	Turn right onto Lowden Court	0.1 mi
7.	Turn left	223 ft
8.	Destination will be on the right	



APPENDIX C

HASP Acknowledgement Form

Health & Safety Plan Acknowledgement Form

I have been informed and understand the procedures set forth in the Health & Safety Plan

Name	Signature	Company Name	Date
_____	_____	_____	_____
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_____	_____	_____	_____
_____	_____	_____	_____

DYNAMIC EARTH

Appendix G
Quality Assurance Project Plan

Quality Assurance Project Plan

Old Orchard Country Club
54 Monmouth Road
Block 2701, Lots 2, 53, 60, 66 & 69
Borough of Eatontown, Monmouth County, New Jersey
Block 68, Lot 6
Borough of West Long Branch, Monmouth County, New Jersey

Prepared for:
Surrey Equities, LLC
38 Corbett Way
Eatontown, New Jersey 07724

Prepared By:

DYNAMIC EARTH
1904 Main Street
Lake Como, New Jersey 07719

Project #: 3272-98-005EC

October 2024

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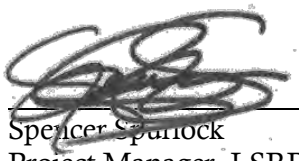
TABLE 1 Sampling and Analyses Summary

ATTACHMENTS

APPENDIX A Resumes
APPENDIX B Laboratory Certification
APPENDIX C Sample Forms
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SIGNATURE SHEET

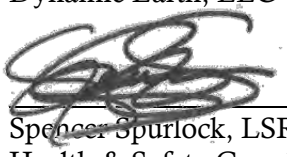
This Quality Assurance Project Plan (QAPP) has been reviewed and approved by the following Project Manager, Technical Advisor/QA Officer, and Health & Safety Coordinator:



Spencer Spurlock — October 2024
Project Manager, LSRP — Date
Dynamic Earth, LLC



Omar Mahmoud — October 2024
Technical Advisor/QA Officer — Date
Dynamic Earth, LLC



Spencer Spurlock, LSRP — October 2024
Health & Safety Coordinator — Date
Dynamic Earth, LLC

INTRODUCTION AND BACKGROUND

The following Quality Assurance Project Plan (QAPP) has been prepared by Dynamic Earth, LLC (Dynamic Earth) for the proposed Remedial Investigation (RI) and Remedial Action (RA) activities scheduled for the Old Orchard Country Club located at 54 Monmouth Road in the Boroughs of Eatontown and West Long Branch, Monmouth County, New Jersey (hereafter referred to as "the Site"). The Site is also identified as Block 2701, Lots 2, 53, 60, 66 and 69 and Block 68, Lot 6.

The RI activities will be conducted to evaluate soil impacts from golf course operations at the Site. Specifically, Dynamic Earth will evaluate pesticides in soil, groundwater, sediments and surface waters at the Site. The RA activities will excavate all areas with identified contamination and a cap will be installed on specific areas of the Site. Post excavation samples will be collected to confirm the contamination soils have been fully removed.

The purpose of this QAPP is to define Site-specific project and data quality objectives, sample design and rationale, names and contact information for project-specific personnel, a sample summary table, sampling methodologies, standard operation procedures, sample handling and transport procedures, analytical methods, measurement of performance criteria, laboratory data deliverable formats, procedures for reviewing data, implementing corrective action procedures, QA/QC procedures, and data and records management. This QAPP has been prepared in general accordance with Section 7:26E-2.2 of New Jersey Department of Environmental Protection's (NJDEP's) *Technical Requirements for Site Remediation*.

1.0 SITE DESCRIPTION

The specific tasks covered by this QAPP include:

- Collection of soil samples using pneumatic tools and hand sampling techniques;
- Logging, screening, and sampling of soils;
- Collection of sediment samples;
- Collection of surface water samples;
- Collection of post excavation soil samples.

2.0 SITE SPECIFIC PROJECT & DATA QUALITY OBJECTIVES

Samples to be collected for analyses are identified in Table 1. Sample data will be used to evaluate soil contaminant conditions relative to New Jersey Department of Environmental Protection's Soil Remediation Standards (SRS).

Data quality objectives are provided as follows:

Sample Matrix	Objective
Soil	NJDEP SRS
Sediment	NJDEP ESC
Surface Water	NJDEP ESC

3.0 SAMPLE DESIGN & RATIONALE

All sampling activities conducted during Dynamic Earth's RI activities will be collected in accordance with the techniques outlined in NJDEP's *Field Sampling Procedures Manual* (FSPM) dated August 2005 including preparation of field and trip blanks.

All sample analyses will be conducted in accordance with USEPA's *Test Methods for Evaluating Solid Waste* (SW-846), USEPA's *Handbook for Analytical Quality Control in Water and Wastewater Laboratories* (EPA 600/4-79-019) and applicable New Jersey protocols. The soil samples collected during the RI activities will be analyzed for lead, and arsenic by USEPA Method 6010; mercury by USEPA Method 7471; and pesticides by USEPA Method 8081. The sediment samples collected during RI properties will be analyzed for lead, and arsenic by USEPA Method 6010; mercury by USEPA Method 7471; pesticides by USEPA Method 8081; total organic carbon (TOC) by Lloyd Kahn analysis; oxidation reduction potential (ORP) by USEPA Method; and particle grain size by sieve analyses. The surface water samples will be analyzed for lead, and arsenic by USEPA Method 200.7; mercury by USEPA Method 245.1; pesticides by USEPA Method 608; pH by USEPA Method SM 4500-H B-00; and hardness by USEPA Method 200.7.

4.0 PROJECT SPECIFIC PERSONNEL

The following project specific personnel will be associated with the Site:

- **Project Manager:** Spencer Spurlock, LSRP
- **Technical Advisor/QA Officer:** Omar Mahmoud
- **Health & Safety Coordinator:** Spencer Spurlock, LSRP

Resumes for project specific personnel are provided in Appendix A.
The Quality Assurance Officer (QAO) is responsible for:

- Assuring senior management that the facilities, equipment, personnel, methods, records, and controls utilized by Dynamic Earth for sample collection and analysis are consistent with the project objectives;
- Ensuring that all QA/QC policies and procedures are available to and understood by project personnel;
- Approving, enforcing and overseeing field implementation of the QA/QC and Sampling Plans;
- Appointing, training, and supervising field sampling technicians;
- Enforcing sampling equipment calibration and maintenance procedures;
- Requesting corrective action by way of reports to senior management;
- Taking corrective action for any QA-related problems and communicating action in writing to senior management and/or Owner/Engineer/Government representatives;
- Sample and sample data traceability;
- Conducting or supervising system audits of laboratory and field sampling activities;
- Examining data books, calibration of field records, forms, and other hard copy data;
- Documenting any deviation from established sampling protocol
- Interfacing with the analytical laboratory to make requests and resolve problems;
- Interfacing with the data validator and developing project-specific data usability reports;
- Reporting audit findings to senior management and the Department's representative; and
- Final data review.

The QAO will be assisted, as necessary, by qualified field sampling technicians.

4.1 Analytical Laboratories

Samples will be sent to the following laboratories for analyses:

Pace Analytical
1275 Bloomfield Avenue, Suite 37D
Fairfield, NJ 07004

Contact: Paul Maide
Phone: 973-227-0422
e-Mail: Paul.Maide @pacelabs.com

The identified laboratories are New Jersey-certified and copies of the laboratory certifications are provided in Appendix B. The Laboratory's QA/QC Plan is on file at Dynamic Earth's and the Laboratory's offices and is available for review upon request.

5.0 SAMPLING SUMMARY PROTOCOL

A sample summary table is provided as Table 1. The location and description of all sampling activities will be recorded prior to laboratory submission. Samples will be individually tagged with unique identifiers including a sample identification number, date, time, and location of the sample; designation of the sample as a grab or composite; and the type of sample for preservation.

Samples will be individually labeled with regard to sample matrix and number as follows:

1. **Sample Matrix.** A letter will be used to denote the sample matrix. The sample matrix codes to be used for this project are as follows.

Sample Type	Codes
Soil Sample	S-#
Sediment Sample	SED-#
Surface Water Sample	SW-#

2. **Sample Number Identification.** Samples will be numbered sequentially according to the soil boring identification number.

6.0 SAMPLING METHODOLIGIES & STANDARD OPERATING PROCEDURES

6.1 Sample Collection/Equipment – Soil Samples

Equipment required for the collection of soil samples consists of:

- Disposable nitrile gloves,
- Appropriate sampling device (see Table 1),
- Appropriate sample containers, labels, and seals,
- Chains-of-custody, and
- Appropriate personal safety equipment.

Soil samples will be collected as follows.

- Record area to be sampled for reference.
- Use a new pair of disposable nitrile gloves.
- Collect sample as described in Table 1.
- Transfer soil samples that will be analyzed for VOCs directly from the sampler to approved containers. As necessary, homogenize soil samples for all other analyses in a stainless steel bowl prior to placement in approved sample containers.
- Cap the sample container, attach the label and custody seal, record all pertinent data in the field log book, and complete the sampling analysis request form and chain-of-custody record

before taking the next sample.
- Preserve and/or place on ice as required.
- Deliver sample to the Laboratory for analysis within 24 hours of the day of collection.

The sampling device must be decontaminated between sampling events (see Section 6.7).

6.2 Sample Collection/Equipment – Sediment Samples

Equipment required for the collection of sediment samples consists of:
- Disposable nitrile gloves,
- Appropriate sampling device (see Table 1),
- Appropriate sample containers, labels, and seals,
- Chains-of-custody, and
- Appropriate personal safety equipment.

Sediment samples will be collected as follows.
- Record area to be sampled for reference.
- Use a new pair of disposable nitrile gloves.
- Collect sample as described in Table 1.
- Transfer sediment samples that will be analyzed for VOCs directly from the sampler to approved containers. As necessary, homogenize soil samples for all other analyses in a stainless steel bowl prior to placement in approved sample containers.
- Cap the sample container, attach the label and custody seal, record all pertinent data in the field log book, and complete the sampling analysis request form and chain-of-custody record before taking the next sample.
- Preserve and/or place on ice as required.
- Deliver sample to the Laboratory for analysis within 24 hours of the day of collection.

The sampling device must be decontaminated between sampling events (see Section 6.7).

6.2 Sample Collection/Equipment – Aqueous Samples

Equipment required for the collection of surface water samples consists of:
- Disposable nitrile gloves,
- Appropriate sampling device (see Table 1),
- Appropriate sample containers, labels, and seals,
- Chains-of-custody, and
- Appropriate personal safety equipment.

Surface water samples will be collected as follows.
- Record area to be sampled for reference.
- Use a new pair of disposable nitrile gloves.

- Collect sample as described in Table 1.
- Transfer surface water samples directly from the sampler to approved containers.
- Cap the sample container, attach the label and custody seal, record all pertinent data in the field log book, and complete the sampling analysis request form and chain-of-custody record before taking the next sample.
- Preserve and/or place on ice as required.
- Deliver sample to the Laboratory for analysis within 24 hours of the day of collection.

The sampling device must be decontaminated between sampling events (see Section 6.7).

6.3 Sample Handling

Protocol for container preparation and cleaning; containerization; preservation; handling; and sampling equipment decontamination is presented below:

6.4 Container Preparation & Cleaning Procedures

All sample bottles and containers will be supplied and precleaned by the Subcontract Laboratory in accordance with USEPA and applicable NJDEP requirements. Samples bottles will be shipped from the Subcontract Laboratory to the field under custody procedures.

6.5 Containerization

Individual samples will be transferred from the field collection equipment/containers to the appropriate precleaned bottles and containers (see Table 1) for shipment to the laboratory. Filled sample containers will be marked with a permanent marker to indicate the level of material in the container. After collection, all sample containers will be placed in shipping containers.

6.6 Preservation & Holding Times

Sample preservation techniques and holding times will be as stated in Table 1.

6.7 Sampling Equipment Decontamination

All non-disposable tools which come into contact with the sample material will be decontaminated after each sampling event and before demobilization from the project site. All sampling equipment will be steam cleaned or decontaminated in the following manner:

- Wash and scrub with low phosphate detergent (Alconox or equivalent).
- Tap water rinse.
- Repeat.
- Air Dry.

Wastewater runoff will be collected and stored pending proper off-site disposal. Any major equipment (e.g., drill rigs) used in support of sampling efforts will be decontaminated between sampling events.

7.0 FIELD DOCUMENTATION PROCEDURES

After collection and identification, the samples will be maintained under the chain-of-custody procedures outlined below.
Each person involved with the samples must understand these procedures. Samples in one's possession must be traceable from the time of collection through ultimate disposition. To maintain and document sample possession, these chain-of-custody procedures must be followed.

A sample is under custody if:

- It is in your actual possession;
- It is in your view after being in your physical possession;
- It was in your physical possession and you locked it up to prevent tampering; or
- It is in your designated and secure area.

The QA Officer (or his designated representative) will be responsible for monitoring all chain-of-custody activities and for collecting legally admissible copies of chain-of-custody documentation for the permanent project file. The QA Officer (or his designated representative) will:

- Conduct an initial review of sample labels or tags, closure tapes, and chain-of-custody record and sample split forms provided by the laboratory. The QA Officer (or his designated representative) will document this review for the project file.
- Review methodologies to be used for accomplishing chain-of-custody and ensure all chain-of-custody forms and record documents are properly completed.
- Monitor implementation of chain-of-custody procedures.

7.1 Preparation

The laboratory, with guidance or direction from the QA Officer (or his designated representative), will prepare labels or tags for pre-cleaned sample containers (i.e., jars, bottles, vials) prior to the transfer of these containers to the field. Labels will be made of materials which will adhere to glass containers even when wet. Tags will be designed to attach to vials or any other small container to which a label

cannot easily be attached. Labels and tags (hereinafter referred to as labels) should provide space for the following information:

- Collector's name or initials,
- Sample number,
- Sampling location,
- Sampling depth (if applicable),
- Date of sampling, and
- Time of sampling.

Labels also should provide space for remarks regarding sample preservation and analyses to be performed, should samples be separated into portions in the field for different chemical analyses. Under certain circumstances, some of the information listed above may be omitted from sample labels for purposes of confidentiality. Omitted information must nevertheless be recorded in field sampler's logbooks.

The QA Officer (or his designated representative) will fill out all portions of sample labels when or if possible, prior to the time samples are taken. At the time of sampling, the QA Officer (or his designated representative) will record sample information in the logbooks and on the chain-of-custody form, noting on each any difficulties encountered during sampling. All label, logbook, and chain-of-custody form entries will be made in waterproof ink. The sample information recorded in the logbooks should be at least as detailed as that recorded on labels, and should indicate sample matrix (i.e., soil, water), preservation techniques, and sampling location in sufficient detail to allow resampling at the same location.

After containers are filled, the QA Officer (or his designated representative) will place the sample labels on the containers, and will put the filled containers in cartons or ice chests. The QA Officer (or his designated representative) will maintain custody of all samples until they can be transferred to the off-site laboratory.

Prior to the transfer of samples from the field to the laboratory, the QA Officer (or his designated representative) will check samples and forms for correspondence, documenting any discrepancies in the custody logbook. The QA Officer (or his designated representative) also will prepare the samples for transport by ensuring that the potential damage to sample containers via leakage or breakage and closure tapes is minimized.

7.2 Records

Sampling logbooks, the custody logbook, all chain-of-custody records, all sample split receipts, all laboratory project specific logbooks, and any other notes or records prepared by the field custodian, transporters, or laboratory personnel will become part of the project file.

8.0 FIELD INSTRUMENTATION

Dynamic Earth will utilize a MiniRae photoionization detector (PID) during the RI activities. The manufacturer proper use, calibration instructions, and data recording instructions for this unit is included as Attachment D (*Field Equipment Operation and Maintenance Manuals*).

9.0 FIELD INSTRUMENT OPERATING PROCEDURES

Where appropriate, sampling equipment will be calibrated in the manner and at the intervals specified by the manufacturer and/or NJDEP (or more frequently as field conditions dictate). A record of the instrument calibration will be maintained by the QA Officer (or his designated representative). These records will be subject to audit by management.

The manufacturer proper use, calibration instructions, and data recording instructions for this unit is included as Appendix D.

9.1 Preventative Maintenance

Preventative maintenance procedures for field equipment and laboratory instruments are discussed in the following subsections.

9.2 Field Equipment

Equipment, instruments, tools, gauges, and other items requiring preventative maintenance will be serviced in accordance with manufacturer's specified recommendations and written procedures developed by the operators.

Preventative maintenance for all equipment includes inspection before use, necessary cleaning during use, and thorough cleaning and inspection after use. Rechargeable batteries will be checked before use and recharged after use. Equipment using disposable batteries will have replacement batteries stocked at all times. Equipment failures will be repaired in the field, if possible, or returned to the manufacturer.

9.3 Schedule

Manufacturer's procedures identify the schedule for servicing critical items in order to minimize downtime of the measurement system. It will be the responsibility of the operator to adhere to this maintenance schedule and to arrange any necessary and prompt services as required. Service to the equipment, instruments, tools, gauges, etc. will be performed by qualified personnel.

In the absence of any manufacturer's recommended maintenance criteria, a maintenance procedure will be developed by the operator based upon experience and previous use of the equipment.

9.4 Records

Logs will be established to record maintenance and service procedures and schedules. Preventative maintenance procedures and service logs will be filed in the Dynamic Earth's field office. These records will be included in the final evidence file. All maintenance records will be documented and traceable to the specific equipment, instruments, tools, and gauges.

Records produced for laboratory instruments will be reviewed, maintained, and filed by the operators at the laboratories and by field personnel for equipment, instruments, tools, and gauges which are used at the site. The QA Officer (or his designated representative) will audit these records to verify complete adherence to these procedures.

9.5 Spare Parts

A list of critical spare parts will be requested from the manufacturer and identified by the operator. These spare parts will be stored for availability and use in order to reduce equipment downtime.

9.6 Laboratory Instruments

Laboratory instrument maintenance will be conducted as discussed in the Subcontract Laboratory's QA/QC Manual.

9.7 Calibration Procedures and Frequencies

Instruments and equipment used to gather, generate, or measure environmental data will be calibrated with sufficient frequency and in such a manner that accuracy and reproducibility of results are consistent with the manufacturer's specifications.

10.0 SAMPLE HANDLING & CHAIN OF CUSTODY PROCEDURES

The collected sample and its container represent a potential pathway of personnel and environmental exposure. Precautions will be taken to ensure that all the samples removed from the site are within the sample container and that no residue is on the outside of the container.

The procedure for handling samples will be as follows:

- Identify and document sample collection points.
- Complete logbook entries, sample labels, and any field record sheets with sample identification point, date, time, and names or initials of all persons handling the sample in the field.
- Place identification labels on sample containers.
- Avoid contact with the lid of the jar when filling.
- Provide sample preservation when required.
- Secure the lid on each sample.
- Carry sealed sample containers to the packaging area.
- Clean the outer surface of glass as necessary.
- Securely close the lid to the sample container; and attach properly designated label.
- Carefully pack samples for off-site analyses in coolers/packages. Custody-seal the shipping package.
- Ship to the laboratory as appropriate.

A designated laboratory custodian will receive the samples at the laboratory. Both the laboratory custodian and the transporter will sign and date the chain-of-custody forms. It will be the responsibility of the QC Supervisor (or his designated representative) to collect all chain-of-custody forms (or photocopies or microfilms of the forms) retained by transporters for inclusion in the permanent project file. The laboratory will destroy copies of the chain-of-custody forms only with the written permission of Dynamic Earth's project manager.

Upon receipt, the laboratory custodian will examine sample containers for breakage and/or broken closure tapes. The custodian will document any findings in a project-specific logbook and on the relevant chain-of-custody forms. The laboratory custodian also will verify that the information on the sample labels matches that on the forms. Again, any discrepancies will be noted on the chain-of-custody form and verbally reported to Dynamic Earth's QA Officer (or his/her designated representative) as soon as possible within the next 24 hours.

10.1 Chain of Custody Form

A sample chain-of custody form is provided in Appendix C.

11.0 FIELD STORAGE & TRANSPORT PROCEDURES

The QA Officer (or his designated representative) or other designated individual will arrange transport of the samples to the laboratory following applicable regulatory procedures and regulations within the time frame specified in the Subcontract Laboratory's QA/QC Plan. Samples will be packaged in approved shipping containers (coolers) capable of maintaining the 4° C preservation and will be shipped from the site to the laboratory. Samples will be received by the laboratory within 24 hours of collection.

12.0 SAMPLE CONTAINER/PRESERVATION/HOLDING TIME TABLE

Sample container/preservation/holding time requirements are provided in Table 1.

13.0 ANALYTICAL METHODS

Analytical method requirements are provided in Table 1.

All sample analyses will be conducted in accordance with USEPA's *Test Methods for Evaluating Solid Waste* (SW-846), USEPA's *Handbook for Analytical Quality Control in Water and Wastewater Laboratories* (EPA 600/4-79-019) and applicable New Jersey protocols. The soil samples collected during the RI activities will be analyzed for lead, and arsenic by USEPA Method 6010; mercury by USEPA Method 7471; and pesticides by USEPA Method 8081. The sediment samples collected during RI properties will be analyzed for lead, and arsenic by USEPA Method 6010; mercury by USEPA Method 7471; pesticides by USEPA Method 8081; total organic carbon (TOC) by Lloyd Kahn analysis; oxidation reduction potential (ORP) by USEPA Method; and particle grain size by sieve analyses. The surface water samples will be analyzed for lead, and arsenic by USEPA Method 200.7; mercury by USEPA Method 245.1; pesticides by USEPA Method 608; pH by USEPA Method SM 4500-H B-00; and hardness by USEPA Method 200.7.

14.0 PROJECT COMPOUNDS SUMMARY

A project compounds summary is provided in Table 1.

15.0 MEASUREMENT PERFORMANCE CRITERIA & QUALITY CONTROL SAMPLES

Quantitative (accuracy, precision, completeness, detection limits) and qualitative (representativeness and comparability) QA objectives will be as specified in USEPA SW-846, Current Edition.

The case narrative accompanying each laboratory report will summarize any QA/QC indicators outside the acceptance windows specified for the particular matrix. These summaries will be reviewed by the QA Officer to determine final disposition of the samples.

If all QC criteria are met, the corresponding results will be used as reported. Laboratory results which are not within acceptable QC ranges may be resampled and reanalyzed depending on the specific deficiency.

16.0 QUALITY ASSURANCE/QUALITY CONTROL REQUIREMENTS FOR ANALYSES

QA/QC samples will be collected by matrix at the frequency required by NJDEP's *Technical Requirements for Site Remediation*.

All analytical data will be reviewed to assess the quality of the analytical data. Where all criteria are met, data are deemed acceptable without qualification. Where precision and accuracy goals are not met, the sample set shall be analyzed or reported with qualification in the case narrative. Some of the factors affecting this final sample disposition include:

- Project-specific QA/QC requirements,
- Availability of sufficient sample for re-analysis,
- Holding time considerations, and
- Regulatory action limits.

Laboratory Responsibilities. The Subcontract Laboratory will validate analytical data in accordance with its QA/QC Plan.

Dynamic Earth Responsibilities. The QA Officer or approved designee will review the laboratory data upon receipt, and indicate the meaning, extent, and effect of any laboratory-applied qualifiers, dilutions, reporting limits in excess of cleanup goals, or previously established limits; and any other issues affecting the usability of the data for its intended purpose. This review will be conducted in "real time", that is, this will be performed prior to or concurrently with Dynamic Earth's submission of laboratory data to the Owner's Representative and/or involved regulatory agencies.

16.1 Analytical Data Reporting

The laboratory will supply a hard copy of the analytical results, including applicable QA/QC results within the holding (turn-around) time of the sample (see Table 1). The holding time of the sample will be based on the number of days (or hours) from the verified time of sample receipt.

17.0 LABORATORY DATA DELIVERABLE FORMATS TO BE USED

Data reduction is performed by individual analysts within the Subcontract Laboratory and consists of calculating concentrations in samples from the raw data obtained from the measuring instruments. The complexity of the data reduction will be dependent on the specific analytical method used and the number of discrete operations (extractions, dilutions, and concentrations) involved in obtaining a sample that can be measured.

For those methods utilizing a calibration curve, sample response will be applied to the linear regression line to obtain an initial raw result which then is factored into equations to obtain the estimate of the concentration in the original sample. Rounding will not be performed until after the final result is obtained to minimize rounding errors. Results normally will not be expressed in more than two significant figures.

Copies of all raw data and calculations used to generate the final results will be retained on file to allow reconstruction of the data reduction process at a later date.

18.0 VERIFICATION & USABILITY PROCEDURES

The objectives for data usability are:

- To demonstrate traceability of standards to USEPA sources;
- To use standard methodology;
- To report results from similar matrices in consistent units; and
- To apply appropriate levels of quality control within the context of Subcontract Laboratory's QA/QC Manual.

19.0 CORRECTIVE ACTIONS

When a significant condition adverse to quality is noted at the project site or the laboratory, the cause of the condition will be determined and corrective action taken to preclude repetition. Condition identification, cause, reference documents, and corrective action planned to be taken will be documented and reported to the project manager, QAO, and involved subcontractor management. Implementation of corrective action will be verified by documented follow-up action. All project personnel have the responsibility, as part of their normal work duties, to promptly identify, solicit approved correction, and report conditions adverse to quality.
Corrective actions shall be initiated as a minimum:

- When predetermined acceptance standards are not attained (objectives for precision, accuracy, and completeness);

- When procedures or data compiled are determined to be faulty;
- When equipment or instrumentation is found faulty;
- When samples and test results cannot be traced with certainty;
- When QA requirements have been violated;
- When designated approvals have been circumvented;
- As a result of system and performance audits;
- As a result of a management assessment; or
- As a result of laboratory/inter-laboratory comparison studies.

Proposed corrective actions will be provided to project management and the Owner/Engineer/Department.

19.1 Field Corrective Action Procedures

Project management and staff including the QAO, field sampling technicians, safety personnel, and document control personnel will monitor ongoing work performance in the normal course of daily responsibilities.

Project Management will audit work at the site. Items, activities, or documents ascertained to be in noncompliance with Contract requirements will be documented and corrective actions mandated through the audit report. Corrective actions will be logged, maintained, and controlled by the Project Manager.

Following identification of an adverse condition or QA problem, notification of the deficiency will be made to the Owner/Engineer/Department and the senior individual in charge of the activity found to be deficient along with recommendations for correction. A record of this notification will be attached to the audit report. Following implementation of corrective action, the senior individual in charge will report actions taken and results to the Project Manager. The Project Manager will notify the Owner/Engineer/Department when conditions adverse to quality have been corrected. A record of action taken and results also will be attached to the audit report. The original corrective action/response and audit findings/response will be maintained in the Project Final Evidence File. Copies also will be submitted to the Owner/Engineer/Department to insure timely notification.

20.0 LABORATORY QA/QC PROCEDURES

QA non-compliance situations and QC indicators will be handled as detailed in the Subcontract Laboratory's QA/QC Manual. The case narrative accompanying each laboratory report shall summarize any QA/QC indicators outside the acceptance windows specified for the particular matrix. These summaries will be reviewed by the QAO to determine final disposition of the samples. If all QC criteria are met, the corresponding results will be used as reported. Laboratory results that are not within acceptable QC ranges will be resampled and reanalyzed.

TABLE 1
Sampling, Analyses, Container, Preservation, Hold Time Summary

Matrix Type	Location, # of samples, frequency	Analytical Parameters	Analytical Method	Container Requirements	Sample Preservation	Holding Times	Turn Around Time
Soil	To Be Determined	Lead, Arsenic, Mercury, Pesticides	6020, 7471A, 8081	8oz. Jars	None	6 Months, 14 Days	7 Days
Sediments	To Be Determined	Lead, Arsenic, Mercury, Pesticides, TOC, ORP, Particle Grain Size	6020, 7471A, 8081, SM531B, Sieve Analyses	16 oz. Jars	None	6 Months, 14 Days	7 Days
Surface Water	To Be Determined	Arsenic, Lead, Mercury, Pesticides, pH, Hardness	200.7, 245.1, 608, SM4500-H B-00,	100ml plastic bottle, 1 liter glass bottle, 25 ml plastic bottle, 200ml glass bottle	HNO_3	6 Months, 15 Minutes	7 Days

APPENDIX A
Resumes

Omar Mahmoud

Environmental Scientist



Mr. Mahmoud has three years of experience in environmental investigation, research, and document compilation, and is well versed in the historical and regulatory requirements of the ASTM E1527 and ASTM E1528 Standards for real estate transactions.

Omar is experienced in the coordination and performance of environmental due diligence investigations including Phase I Environmental Site Assessments (ESAs); Phase II Site Investigations; Preliminary Assessments; wetlands investigation, delineation, and permitting.

Mr. Mahmoud has coordinated and performed hundreds of environmental due diligence projects for industrial and manufacturing companies, engineers, realtors, attorneys, and public agencies.

Education:

- B.S., Environmental Sustainability, William Patterson University, 2018

Certificates/Special Training:

- 40-Hour OSHA Hazardous Waste Operations Training
- 10-Hour OSHA Construction Certification
- Transportation Worker Identification Credential (TWIC)

Areas of Expertise:

- Environmental Regulatory Compliance
- NJDEP Regulatory Programs and Reporting
- Preliminary Assessments and Remedial Investigations
- Phase I Environmental Site Assessments
- Phase II Site Investigations
- UST Removal / Closure
- Remedial Action Design and Implementation
- Environmental Document Reviews
- Data Collection and Assessment
- Permitting
- Report Generation and Proposal Compilation

Employment History:

Performing due diligence investigations (Phase I ESAs, Phase II Site Investigations, and Remedial Investigations for retail, commercial, industrial, and municipal properties throughout New Jersey.

Conducting PA/SI, RI and RA activities at properties throughout New Jersey Site Characterization Reports, and Final Remedial Investigation and Remedial Action Completion Reports.

Consulting with clients throughout the due diligence/remediation processes to effectively and efficiently reach their redevelopment/cleanup goals.

Supervising Geoprobe sampling programs to facilitate soil and groundwater sampling and analyses at commercial, industrial, municipal, and proposed residential sites.

Successfully managed numerous projects in New Jersey in support of regulatory closure under the Statewide Health Standard.

Successfully managed multiple industrial site programs in Carteret, Perth Amboy, and Bayonne, New Jersey including the installation of total fluids pumping systems and LNAPL skimming systems which yielded over twenty-thousand gallons of product removed from groundwater.

Oversaw and managed removal and regulatory closure of multiple USTs at a proposed commercial property in New Jersey. Remedial activities included removal of impacted soil and confirmatory soil sampling, following by completion of a Final Report for the project.

- 2021 – Present – Dynamic Earth, LLC – Environmental Scientist
- 2021 – 2021 – Groundwater and Environmental Services, Inc. – Environmental Scientist
- 2020 – 2021 – New Jersey Department of Labor – Environmental Specialist
- 2020 – 2020 – Greenstart Environmental Solutions LLC – Project Geologist
- 2018 – 2019 – Whitestone Associates, Inc. – Environmental Scientist

Spencer Spurlock

Principal
Environmental Specialist



Spencer Spurlock is a Licensed Site Remediation Professional (#585413) with over 17 years of consulting experience in environmental site assessments, site evaluations, remedial design, remediation services, regulatory compliance, environmental funding, waste management, surveys, and environmental management. Mr. Spurlock joined Dynamic Earth in October 2013.

Experience Summary:

Mr. Spurlock is a Licensed Site Remediation Professional (LSRP) in the State of New Jersey. He has applied his expertise to projects ranging from industrial and manufacturing companies, banks, engineering and environmental consulting firms, realtors, attorneys, major oil companies, national retail and restaurant chains, developers, emergency response contractors, residential consultation and environmental groups in addition Mr. Spurlock has consulted with a variety of public entities including local municipalities, County Freeholders, and State emergency response and management groups.

Education:

- B.A., Franklin & Marshall College, 2003

Certificates/Licenses:

- New Jersey Licensed Site Remediation Professional (LSRP #585413)
- 40-Hour OSHA Hazardous Waste Operations Training
- NJDEP Certified: Subsurface Evaluator
- NJDEP Unregulated Heating Oil Tank Certified

Professional Affiliations:

- Geological Society of America
- New Jersey Licensed Site Remediation Professional Association

Employment History:

Designated as Field Manager for remediation activities associated with the redevelopment of a portion of the city of East Orange into Cicely Tyson School for the Performing Arts. Tasks included underground storage tank closures, monitoring well installations, and soil and groundwater delineation and remediation. Prepared all reports associated with the fieldwork submitted to the NJDEP.

Served as Project Manager and LSRP of Record for a Preliminary Assessment (PA) of an ISRA applicable industrial establishment due to anticipated ISRA trigger of cessation of operations. Designed and implemented a Site Investigation of the property based on the findings of the PA. Identified the presence of petroleum impacts on property line likely due to off-site source.

Completed a Preliminary Assessment (PA) of a former farmstead property and redevelopment into a national chain owned commercial/retail establishment. Designed and implemented a Site Investigation, Remedial Investigation, and Remedial Action of the property and ultimate issuance of Response Action Outcome (RAO). Identified the presence of petroleum impacts in septic system and historically applied pesticide impacts that were able to be remediated via compliance.

Served as a Project Manager and LSRP of Record for due diligence investigations (Phase I ESA and Phase II SI) of a former automobile dealership property and redevelopment into a national chain owned retail and gasoline sales establishment. Designed and implemented a Site Investigation and Remedial Investigation ultimate issuance of Response Action Outcome (RAO). Established the Site as a class III-A groundwater aquitard due to encountered geologic conditions and soil characteristics.

Designed and provided project oversight of removal of a 10,000-gallon underground storage tank and installation of new state-of-the-art fiberglass reinforced plastic underground storage tank system at Monmouth University.

- 2022 – Present – Dynamic Earth, LLC - Principal
- 2013 – 2022 – Dynamic Earth, LLC – Senior Project Manager
- 2013 – 2013 – Whitman Inc. – Project Manager
- 2003 – 2013 – Birdsall Services Group, Inc. – Project Manager

APPENDIX B
Laboratory Certifications

State of New Jersey

Department of Environmental Protection

Certifies That

AQUA PRO-TECH LABORATORIES

Laboratory Certification ID #07010

is hereby approved as a

Nationally Accredited Environmental Laboratory

to perform the analyses as indicated on the Annual Certified Parameter List which must accompany this certificate to be valid

having duly met the requirements of the

Regulations Governing the Certification of Laboratories and Environmental Measurements N.J.A.C. 7:18 et. seq.

and

having been found compliant with the 2016 TNI Standard approved by the

The NELAC Institute

Expires June 30, 2024

Michele M. Potter
Manager

NJDEP is a NELAP Recognized Accreditation Body

This certificate is to be conspicuously displayed at the laboratory with the annual certified parameter list in a location on the premises visible to the public. Consumers are urged to verify the laboratory's current accreditation status with the State of NJ, NELAP.

New Jersey Department of Environment Protection
Environmental Laboratory Certification Program

Annual Certified Parameter List and Current Status

Effective as of 07/01/2023 until 6/30/2024

Laboratory Name: AQUA PRO-TECH LABORATORIES Laboratory Number: 07010 Activity ID: NLC 230001
1275 BLOOMFIELD AVE
FAIRFIELD NJ 07004

Category: DW01 --Microbiology

Status	Eligible to Report NJ Data	Code	Parameter	Technique	Approved Methods	Primary State
Certified	Yes	DW01.00350	Heterotrophic bacteria	Pour Plate	SM 9215 B	NJ
Certified	Yes	DW01.00500	Total coliform / E. coli	ONPG-MUG (Colilert/Colilert-18) (P-A)	SM 9223 B	NJ
Certified	Yes	DW01.00550	Total coliform / E. coli	ONPG-MUG (Colilert/Colilert-18), Enumeration	SM 9223 B, Multi-well Procedure	NJ
Certified	Yes	DW01.01250	Total coliform / E. coli	Membrane Filter (MF) Technique (P-A)	SM 9222 B plus 9221 F	NJ

Category: DW03 --Inorganic Parameters

Status	Eligible to Report NJ Data	Code	Parameter	Technique	Approved Methods	Primary State
Certified	Yes	DW03.00050	Alkalinity	Electrometric Titration	SM 2320 B	NJ
Certified	Yes	DW03.01800	Chloride	Ion Chromatography	EPA 300.0	NJ
Certified	Yes	DW03.02550	Color	Platinum-Cobalt	SM 2120 B	NJ
Certified	Yes	DW03.02700	Conductivity	Conductance	SM 2510 B	NJ
Certified	Yes	DW03.03050	Cyanide	Spectrophotometric, Distill, Manual	SM 4500-CN C, E	NJ
Certified	Yes	DW03.03350	Dissolved organic carbon (DOC)	Persulfate-UV, Filtration	SM 5310 C	NJ
Certified	Yes	DW03.03750	Fluoride	Ion Chromatography	EPA 300.0	NJ
Certified	Yes	DW03.03950	Foaming agents	Methylene Blue	SM 5540 C	NJ
Certified	Yes	DW03.04350	Nitrate	Automated Cadmium Reduction	SM 4500-NO3 F	NJ
Certified	Yes	DW03.04600	Nitrate	Ion Chromatography	EPA 300.0	NJ
Certified	Yes	DW03.05350	Nitrite	Automated Cadmium Reduction	SM 4500-NO3 F	NJ
Certified	Yes	DW03.05450	Nitrite	Ion Chromatography	EPA 300.0	NJ
Certified	Yes	DW03.05850	Odor	Consistent Series	SM 2150 B	NJ
Certified	Yes	DW03.05950	Orthophosphate	Colorimetric	SM 4500-P E	NJ
Certified	Yes	DW03.06900	Sulfate	Ion Chromatography	EPA 300.0	NJ
Certified	Yes	DW03.07050	Sulfate	Turbidity, Spectrophotometric	ASTM D516	NJ
Certified	Yes	DW03.07150	Total dissolved solids (TDS)	Gravimetric At 180	SM 2540 C	NJ

New Jersey Department of Environment Protection
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FAIRFIELD NJ 07004

Category: DW03 --Inorganic Parameters

Status	Eligible to Report NJ Data	Code	Parameter	Technique	Approved Methods	Primary State
Certified	Yes	DW03.07550	Total organic carbon (TOC)	Persulfate-UV	SM 5310 C	NJ
Certified	Yes	DW03.07800	Turbidity	Nephelometric	EPA 180.1	NJ

Category: DW04 --Analyze Immed, Cont Monitor and/or PWTA

Status	Eligible to Report NJ Data	Code	Parameter	Technique	Approved Methods	Primary State
Certified	Yes	DW04.00300	Chlorine - total, free or combined	DPD, Colorimetric	SM 4500-Cl G	NJ
Certified	Yes	DW04.01050	pH	Electrometric	SM 4500-H B	NJ
Certified	Yes	DW04.01200	Temperature	Thermometric	SM 2550 B	NJ

Category: DW06 --Metals

Status	Eligible to Report NJ Data	Code	Parameter	Technique	Approved Methods	Primary State
Certified	Yes	DW06.01500	Mercury	Manual Cold Vapor	EPA 245.1	NJ
Applied	No	DW06.03350	Silica	Molybdosilicate	SM 4500-Si D (18th/19th Ed.)	NJ

Category: DW07 --Metals - ICP, ICP/MS and DCP

Status	Eligible to Report NJ Data	Code	Parameter	Technique	Approved Methods	Primary State
Certified	Yes	DW07.00950	Aluminum	ICP	EPA 200.7	NJ
Certified	Yes	DW07.01000	Barium	ICP	EPA 200.7	NJ
Certified	Yes	DW07.01050	Beryllium	ICP	EPA 200.7	NJ

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1275 BLOOMFIELD AVE
FAIRFIELD NJ 07004

Category: DW07 --Metals - ICP, ICP/MS and DCP

Status	Eligible to Report NJ Data	Code	Parameter	Technique	Approved Methods	Primary State
Certified	Yes	DW07.01150	Cadmium	ICP	EPA 200.7	NJ
Certified	Yes	DW07.01200	Calcium	ICP	EPA 200.7	NJ
Certified	Yes	DW07.01250	Chromium	ICP	EPA 200.7	NJ
Certified	Yes	DW07.01350	Copper	ICP	EPA 200.7	NJ
Certified	Yes	DW07.01400	Iron	ICP	EPA 200.7	NJ
Certified	Yes	DW07.01500	Magnesium	ICP	EPA 200.7	NJ
Certified	Yes	DW07.01550	Manganese	ICP	EPA 200.7	NJ
Certified	Yes	DW07.01650	Nickel	ICP	EPA 200.7	NJ
Certified	Yes	DW07.01800	Silver	ICP	EPA 200.7	NJ
Certified	Yes	DW07.01850	Sodium	ICP	EPA 200.7	NJ
Certified	Yes	DW07.02100	Zinc	ICP	EPA 200.7	NJ
Certified	Yes	DW07.02150	Aluminum	ICP/MS	EPA 200.8	NJ
Certified	Yes	DW07.02200	Antimony	ICP/MS	EPA 200.8	NJ
Certified	Yes	DW07.02250	Arsenic	ICP/MS	EPA 200.8	NJ
Certified	Yes	DW07.02300	Barium	ICP/MS	EPA 200.8	NJ
Certified	Yes	DW07.02350	Beryllium	ICP/MS	EPA 200.8	NJ
Certified	Yes	DW07.02400	Cadmium	ICP/MS	EPA 200.8	NJ
Certified	Yes	DW07.02450	Chromium	ICP/MS	EPA 200.8	NJ
Certified	Yes	DW07.02550	Copper	ICP/MS	EPA 200.8	NJ
Certified	Yes	DW07.02600	Lead	ICP/MS	EPA 200.8	NJ
Certified	Yes	DW07.02650	Manganese	ICP/MS	EPA 200.8	NJ
Certified	Yes	DW07.02800	Nickel	ICP/MS	EPA 200.8	NJ
Certified	Yes	DW07.02850	Selenium	ICP/MS	EPA 200.8	NJ
Certified	Yes	DW07.02900	Silver	ICP/MS	EPA 200.8	NJ
Certified	Yes	DW07.02950	Thallium	ICP/MS	EPA 200.8	NJ
Certified	Yes	DW07.03000	Uranium	ICP/MS	EPA 200.8	NJ
Certified	Yes	DW07.03100	Zinc	ICP/MS	EPA 200.8	NJ

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1275 BLOOMFIELD AVE
FAIRFIELD NJ 07004

Category: DW07 --Metals - ICP, ICP/MS and DCP

Status	Eligible to Report NJ Data	Code	Parameter	Technique	Approved Methods	Primary State
Certified	Yes	DW07.03200	Total hardness	Hardness By Calculation, ICP	SM 2340 B	NJ

Category: DW08 --Organic Parameters - Chromatography

Status	Eligible to Report NJ Data	Code	Parameter	Technique	Approved Methods	Primary State
Certified	Yes	DW08.03550	Dibromo-3-chloropropane (1,2-)	Solvent Extract, GC	EPA 504.1	NJ
Certified	Yes	DW08.03600	Dibromoethane (1,2-) (EDB)	Solvent Extract, GC	EPA 504.1	NJ
Certified	Yes	DW08.03650	Trichloropropane (1,2,3-)	Solvent Extract, GC	EPA 504.1	NJ
Certified	Yes	DW08.17550	Bromochloroacetic acid	Liquid/Liquid Extraction/GC	EPA 552.2	NJ
Certified	Yes	DW08.17750	Dibromoacetic acid	Liquid/Liquid Extraction/GC	EPA 552.2	NJ
Certified	Yes	DW08.17800	Dichloroacetic acid	Liquid/Liquid Extraction/GC	EPA 552.2	NJ
Certified	Yes	DW08.17850	Monobromoacetic acid (MBAA)	Liquid/Liquid Extraction/GC	EPA 552.2	NJ
Certified	Yes	DW08.17900	Monochloroacetic acid (MCAA)	Liquid/Liquid Extraction/GC	EPA 552.2	NJ
Certified	Yes	DW08.18000	Trichloroacetic acid	Liquid/Liquid Extraction/GC	EPA 552.2	NJ

Category: DW09 --Organic Parameters - Chromatography/MS

Status	Eligible to Report NJ Data	Code	Parameter	Technique	Approved Methods	Primary State
Applied	No	DW09.11400	Dioxane (1,4-)	SPE, GC/MS/SIM	EPA 522	NJ
Certified	Yes	DW09.11450	Acetone	GC/MS, P & T	EPA 524.2	NJ
Certified	Yes	DW09.11500	Acrylonitrile	GC/MS, P & T	EPA 524.2	NJ
Certified	Yes	DW09.11550	Allyl chloride	GC/MS, P & T	EPA 524.2	NJ
Certified	Yes	DW09.11600	Benzene	GC/MS, P & T	EPA 524.2	NJ
Certified	Yes	DW09.11650	Bromobenzene	GC/MS, P & T	EPA 524.2	NJ

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Laboratory Name: AQUA PRO-TECH LABORATORIES Laboratory Number: 07010 Activity ID: NLC 230001
1275 BLOOMFIELD AVE
FAIRFIELD NJ 07004

Category: DW09 --Organic Parameters - Chromatography/MS

Status	Eligible to Report NJ Data	Code	Parameter	Technique	Approved Methods	Primary State
Certified	Yes	DW09.11700	Bromochloromethane	GC/MS, P & T	EPA 524.2	NJ
Certified	Yes	DW09.11750	Bromodichloromethane	GC/MS, P & T	EPA 524.2	NJ
Certified	Yes	DW09.11800	Bromoform	GC/MS, P & T	EPA 524.2	NJ
Certified	Yes	DW09.11850	Bromomethane	GC/MS, P & T	EPA 524.2	NJ
Certified	Yes	DW09.11900	Butanone (2-) (Methyl ethyl ketone)	GC/MS, P & T	EPA 524.2	NJ
Certified	Yes	DW09.11950	Butylbenzene (n-)	GC/MS, P & T	EPA 524.2	NJ
Certified	Yes	DW09.12000	Carbon disulfide	GC/MS, P & T	EPA 524.2	NJ
Certified	Yes	DW09.12050	Carbon tetrachloride	GC/MS, P & T	EPA 524.2	NJ
Certified	Yes	DW09.12100	Chloroacetonitrile	GC/MS, P & T	EPA 524.2	NJ
Certified	Yes	DW09.12150	Chlorobenzene	GC/MS, P & T	EPA 524.2	NJ
Certified	Yes	DW09.12200	Chlorobutane (1-)	GC/MS, P & T	EPA 524.2	NJ
Certified	Yes	DW09.12250	Chloroethane	GC/MS, P & T	EPA 524.2	NJ
Certified	Yes	DW09.12300	Chloroform	GC/MS, P & T	EPA 524.2	NJ
Certified	Yes	DW09.12350	Chloromethane	GC/MS, P & T	EPA 524.2	NJ
Certified	Yes	DW09.12400	Chlorotoluene (2-)	GC/MS, P & T	EPA 524.2	NJ
Certified	Yes	DW09.12450	Chlorotoluene (4-)	GC/MS, P & T	EPA 524.2	NJ
Certified	Yes	DW09.12500	Dibromo-3-chloropropane (1,2-)	GC/MS, P & T	EPA 524.2	NJ
Certified	Yes	DW09.12550	Dibromochloromethane	GC/MS, P & T	EPA 524.2	NJ
Certified	Yes	DW09.12600	Dibromoethane (1,2-) (EDB)	GC/MS, P & T	EPA 524.2	NJ
Certified	Yes	DW09.12650	Dibromomethane	GC/MS, P & T	EPA 524.2	NJ
Certified	Yes	DW09.12700	Dichloro-2-butene (trans-1,4-)	GC/MS, P & T	EPA 524.2	NJ
Certified	Yes	DW09.12750	Dichlorobenzene (1,2-)	GC/MS, P & T	EPA 524.2	NJ
Certified	Yes	DW09.12800	Dichlorobenzene (1,3-)	GC/MS, P & T	EPA 524.2	NJ
Certified	Yes	DW09.12850	Dichlorobenzene (1,4-)	GC/MS, P & T	EPA 524.2	NJ
Certified	Yes	DW09.12900	Dichlorodifluoromethane	GC/MS, P & T	EPA 524.2	NJ
Certified	Yes	DW09.12950	Dichloroethane (1,1-)	GC/MS, P & T	EPA 524.2	NJ
Certified	Yes	DW09.13000	Dichloroethane (1,2-)	GC/MS, P & T	EPA 524.2	NJ

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1275 BLOOMFIELD AVE
FAIRFIELD NJ 07004

Category: DW09 --Organic Parameters - Chromatography/MS

Status	Eligible to Report NJ Data	Code	Parameter	Technique	Approved Methods	Primary State
Certified	Yes	DW09.13050	Dichloroethene (1,1-)	GC/MS, P & T	EPA 524.2	NJ
Certified	Yes	DW09.13100	Dichloroethene (cis-1,2-)	GC/MS, P & T	EPA 524.2	NJ
Certified	Yes	DW09.13150	Dichloroethene (trans-1,2-)	GC/MS, P & T	EPA 524.2	NJ
Certified	Yes	DW09.13200	Dichloropropane (1,2-)	GC/MS, P & T	EPA 524.2	NJ
Certified	Yes	DW09.13250	Dichloropropane (1,3-)	GC/MS, P & T	EPA 524.2	NJ
Certified	Yes	DW09.13300	Dichloropropane (2,2-)	GC/MS, P & T	EPA 524.2	NJ
Certified	Yes	DW09.13350	Dichloropropanone (1,1-)	GC/MS, P & T	EPA 524.2	NJ
Certified	Yes	DW09.13400	Dichloropropene (1,1-)	GC/MS, P & T	EPA 524.2	NJ
Certified	Yes	DW09.13450	Dichloropropene (cis-1,3-)	GC/MS, P & T	EPA 524.2	NJ
Certified	Yes	DW09.13500	Dichloropropene (trans-1,3-)	GC/MS, P & T	EPA 524.2	NJ
Certified	Yes	DW09.13550	Diethyl ether (Ethyl ether)	GC/MS, P & T	EPA 524.2	NJ
Certified	Yes	DW09.13650	Ethyl methacrylate	GC/MS, P & T	EPA 524.2	NJ
Certified	Yes	DW09.13700	Ethylbenzene	GC/MS, P & T	EPA 524.2	NJ
Certified	Yes	DW09.13800	Hexachlorobutadiene (1,3-)	GC/MS, P & T	EPA 524.2	NJ
Certified	Yes	DW09.13850	Hexachloroethane	GC/MS, P & T	EPA 524.2	NJ
Certified	Yes	DW09.13950	Hexanone (2-)	GC/MS, P & T	EPA 524.2	NJ
Certified	Yes	DW09.14000	Isopropylbenzene	GC/MS, P & T	EPA 524.2	NJ
Certified	Yes	DW09.14050	Isopropyltoluene (4-)	GC/MS, P & T	EPA 524.2	NJ
Certified	Yes	DW09.14100	Methacrylonitrile	GC/MS, P & T	EPA 524.2	NJ
Certified	Yes	DW09.14150	Methyl acrylate	GC/MS, P & T	EPA 524.2	NJ
Certified	Yes	DW09.14200	Methyl iodide	GC/MS, P & T	EPA 524.2	NJ
Certified	Yes	DW09.14250	Methyl methacrylate	GC/MS, P & T	EPA 524.2	NJ
Certified	Yes	DW09.14300	Methyl tert-butyl ether	GC/MS, P & T	EPA 524.2	NJ
Certified	Yes	DW09.14350	Methylene chloride (Dichloromethane)	GC/MS, P & T	EPA 524.2	NJ
Certified	Yes	DW09.14400	Naphthalene	GC/MS, P & T	EPA 524.2	NJ
Certified	Yes	DW09.14450	Nitrobenzene	GC/MS, P & T	EPA 524.2	NJ
Certified	Yes	DW09.14500	Nitropropane (2-)	GC/MS, P & T	EPA 524.2	NJ

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Laboratory Name: AQUA PRO-TECH LABORATORIES Laboratory Number: 07010 Activity ID: NLC 230001
1275 BLOOMFIELD AVE
FAIRFIELD NJ 07004

Category: DW09 --Organic Parameters - Chromatography/MS

Status	Eligible to Report NJ Data	Code	Parameter	Technique	Approved Methods	Primary State
Certified	Yes	DW09.14550	Pentachloroethane	GC/MS, P & T	EPA 524.2	NJ
Certified	Yes	DW09.14600	Pentanone (4-methyl-2-) (MIBK)	GC/MS, P & T	EPA 524.2	NJ
Certified	Yes	DW09.14650	Propionitrile	GC/MS, P & T	EPA 524.2	NJ
Certified	Yes	DW09.14700	Propylbenzene (n-)	GC/MS, P & T	EPA 524.2	NJ
Certified	Yes	DW09.14750	Sec-butylbenzene	GC/MS, P & T	EPA 524.2	NJ
Certified	Yes	DW09.14800	Styrene	GC/MS, P & T	EPA 524.2	NJ
Certified	Yes	DW09.14900	Tert-butyl alcohol	GC/MS, P & T	EPA 524.2	NJ
Certified	Yes	DW09.14950	Tert-butylbenzene	GC/MS, P & T	EPA 524.2	NJ
Certified	Yes	DW09.15000	Tetrachloroethane (1,1,1,2-)	GC/MS, P & T	EPA 524.2	NJ
Certified	Yes	DW09.15050	Tetrachloroethane (1,1,2,2-)	GC/MS, P & T	EPA 524.2	NJ
Certified	Yes	DW09.15100	Tetrachloroethene	GC/MS, P & T	EPA 524.2	NJ
Certified	Yes	DW09.15150	Tetrahydrofuran	GC/MS, P & T	EPA 524.2	NJ
Certified	Yes	DW09.15200	Toluene	GC/MS, P & T	EPA 524.2	NJ
Certified	Yes	DW09.15250	Trichlorobenzene (1,2,3-)	GC/MS, P & T	EPA 524.2	NJ
Certified	Yes	DW09.15300	Trichlorobenzene (1,2,4-)	GC/MS, P & T	EPA 524.2	NJ
Certified	Yes	DW09.15350	Trichlorobenzene (1,3,5-)	GC/MS, P & T	EPA 524.2	NJ
Certified	Yes	DW09.15400	Trichloroethane (1,1,1-)	GC/MS, P & T	EPA 524.2	NJ
Certified	Yes	DW09.15450	Trichloroethane (1,1,2-)	GC/MS, P & T	EPA 524.2	NJ
Certified	Yes	DW09.15500	Trichloroethene	GC/MS, P & T	EPA 524.2	NJ
Certified	Yes	DW09.15550	Trichlorofluoromethane	GC/MS, P & T	EPA 524.2	NJ
Certified	Yes	DW09.16000	Trichloropropane (1,2,3-)	GC/MS, P & T	EPA 524.2	NJ
Certified	Yes	DW09.16050	Trimethylbenzene (1,2,4-)	GC/MS, P & T	EPA 524.2	NJ
Certified	Yes	DW09.16100	Trimethylbenzene (1,3,5-)	GC/MS, P & T	EPA 524.2	NJ
Certified	Yes	DW09.16150	Vinyl chloride	GC/MS, P & T	EPA 524.2	NJ
Certified	Yes	DW09.16300	Xylenes (total)	GC/MS, P & T	EPA 524.2	NJ
Certified	Yes	DW09.28900	11-chloroeicosafluoro-3-oxaundecane-1-sulfonic acid	LC MS/MS, Electrospray Ionization, Isotope Dilution	EPA 533	NJ

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Certified	Yes	DW09.28950	1H, 1H, 2H, 2H-Perfluorodecanesulfonic acid	LC MS/MS, Electrospray Ionization, Isotope Dilution	EPA 533	NJ
Certified	Yes	DW09.29000	1H, 1H, 2H, 2H-Perfluorohexanesulfonic acid	LC MS/MS, Electrospray Ionization, Isotope Dilution	EPA 533	NJ
Certified	Yes	DW09.29050	1H, 1H, 2H, 2H-Perfluorooctanesulfonic acid	LC MS/MS, Electrospray Ionization, Isotope Dilution	EPA 533	NJ
Certified	Yes	DW09.29100	4,8-dioxa-3H-perfluorononanoic acid	LC MS/MS, Electrospray Ionization, Isotope Dilution	EPA 533	NJ
Certified	Yes	DW09.29150	9-chlorohexadecafluoro-3-oxanonane-1-sulfonic acid	LC MS/MS, Electrospray Ionization, Isotope Dilution	EPA 533	NJ
Certified	Yes	DW09.29200	Hexafluoropropylene oxide dimer acid	LC MS/MS, Electrospray Ionization, Isotope Dilution	EPA 533	NJ
Certified	Yes	DW09.29250	Nonafluoro-3,6-dioxaheptanoic acid	LC MS/MS, Electrospray Ionization, Isotope Dilution	EPA 533	NJ
Certified	Yes	DW09.29300	Perfluoro(2-ethoxyethane)sulfonic acid	LC MS/MS, Electrospray Ionization, Isotope Dilution	EPA 533	NJ
Certified	Yes	DW09.29350	Perfluoro-3-methoxypropanoic acid	LC MS/MS, Electrospray Ionization, Isotope Dilution	EPA 533	NJ
Certified	Yes	DW09.29400	Perfluoro-4-methoxybutanoic acid	LC MS/MS, Electrospray Ionization, Isotope Dilution	EPA 533	NJ
Certified	Yes	DW09.29450	Perfluorobutanesulfonic acid	LC MS/MS, Electrospray Ionization, Isotope Dilution	EPA 533	NJ
Certified	Yes	DW09.29500	Perfluorobutanoic acid	LC MS/MS, Electrospray Ionization, Isotope Dilution	EPA 533	NJ
Certified	Yes	DW09.29550	Perfluorodecanoic acid	LC MS/MS, Electrospray Ionization, Isotope Dilution	EPA 533	NJ
Certified	Yes	DW09.29600	Perfluorododecanoic acid	LC MS/MS, Electrospray Ionization, Isotope Dilution	EPA 533	NJ
Certified	Yes	DW09.29650	Perfluoroheptanesulfonic acid	LC MS/MS, Electrospray Ionization, Isotope Dilution	EPA 533	NJ
Certified	Yes	DW09.29700	Perfluoroheptanoic acid	LC MS/MS, Electrospray Ionization, Isotope Dilution	EPA 533	NJ
Certified	Yes	DW09.29750	Perfluorohexanesulfonic acid	LC MS/MS, Electrospray Ionization, Isotope Dilution	EPA 533	NJ
Certified	Yes	DW09.29800	Perfluorohexanoic acid	LC MS/MS, Electrospray Ionization, Isotope Dilution	EPA 533	NJ
Certified	Yes	DW09.29850	Perfluorononanoic acid	LC MS/MS, Electrospray Ionization, Isotope Dilution	EPA 533	NJ
Certified	Yes	DW09.29900	Perfluorooctanesulfonic acid (PFOS)	LC MS/MS, Electrospray Ionization, Isotope Dilution	EPA 533	NJ
Certified	Yes	DW09.29950	Perfluorooctanoic acid (PFOA)	LC MS/MS, Electrospray Ionization, Isotope Dilution	EPA 533	NJ
Certified	Yes	DW09.30000	Perfluoropentanesulfonic acid	LC MS/MS, Electrospray Ionization, Isotope Dilution	EPA 533	NJ
Certified	Yes	DW09.30050	Perfluoropentanoic acid	LC MS/MS, Electrospray Ionization, Isotope Dilution	EPA 533	NJ
Certified	Yes	DW09.30100	Perfluoroundecanoic acid	LC MS/MS, Electrospray Ionization, Isotope Dilution	EPA 533	NJ

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Status	Eligible to Report NJ Data	Code	Parameter	Technique	Approved Methods	Primary State
Certified	Yes	DW09.30150	N-ethylperfluorooctanesulfonamidoacetic acid	LC MS/MS, Electrospray Ionization	EPA 537	NJ
Certified	Yes	DW09.30200	N-methylperfluorooctanesulfonamidoacetic acid	LC MS/MS, Electrospray Ionization	EPA 537	NJ
Certified	Yes	DW09.30250	Perfluorobutanesulfonic acid	LC MS/MS, Electrospray Ionization	EPA 537	NJ
Certified	Yes	DW09.30300	Perfluorodecanoic acid	LC MS/MS, Electrospray Ionization	EPA 537	NJ
Certified	Yes	DW09.30350	Perfluorododecanoic acid	LC MS/MS, Electrospray Ionization	EPA 537	NJ
Certified	Yes	DW09.30400	Perfluoroheptanoic acid	LC MS/MS, Electrospray Ionization	EPA 537	NJ
Certified	Yes	DW09.30450	Perfluorohexanesulfonic acid	LC MS/MS, Electrospray Ionization	EPA 537	NJ
Certified	Yes	DW09.30500	Perfluorohexanoic acid	LC MS/MS, Electrospray Ionization	EPA 537	NJ
Certified	Yes	DW09.30550	Perfluorononanoic acid	LC MS/MS, Electrospray Ionization	EPA 537	NJ
Certified	Yes	DW09.30600	Perfluorooctanesulfonic acid (PFOS)	LC MS/MS, Electrospray Ionization	EPA 537	NJ
Certified	Yes	DW09.30650	Perfluorooctanoic acid (PFOA)	LC MS/MS, Electrospray Ionization	EPA 537	NJ
Certified	Yes	DW09.30700	Perfluorotetradecanoic acid	LC MS/MS, Electrospray Ionization	EPA 537	NJ
Certified	Yes	DW09.30750	Perfluorotridecanoic acid	LC MS/MS, Electrospray Ionization	EPA 537	NJ
Certified	Yes	DW09.30800	Perfluoroundecanoic acid	LC MS/MS, Electrospray Ionization	EPA 537	NJ
Applied	No	DW09.30850	N-ethylperfluorooctanesulfonamidoacetic acid	LC MS/MS, Electrospray Ionization	EPA 537.1	NJ
Applied	No	DW09.30900	N-methylperfluorooctanesulfonamidoacetic acid	LC MS/MS, Electrospray Ionization	EPA 537.1	NJ
Applied	No	DW09.30950	Perfluorobutanesulfonic acid	LC MS/MS, Electrospray Ionization	EPA 537.1	NJ
Applied	No	DW09.31000	Perfluorodecanoic acid	LC MS/MS, Electrospray Ionization	EPA 537.1	NJ
Applied	No	DW09.31050	Perfluorododecanoic acid	LC MS/MS, Electrospray Ionization	EPA 537.1	NJ
Applied	No	DW09.31100	Perfluoroheptanoic acid	LC MS/MS, Electrospray Ionization	EPA 537.1	NJ
Applied	No	DW09.31200	Perfluorohexanoic acid	LC MS/MS, Electrospray Ionization	EPA 537.1	NJ
Applied	No	DW09.31250	Perfluorononanoic acid	LC MS/MS, Electrospray Ionization	EPA 537.1	NJ
Applied	No	DW09.31300	Perfluorooctanesulfonic acid (PFOS)	LC MS/MS, Electrospray Ionization	EPA 537.1	NJ
Applied	No	DW09.31350	Perfluorooctanoic acid (PFOA)	LC MS/MS, Electrospray Ionization	EPA 537.1	NJ

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Category: DW09 --Organic Parameters - Chromatography/MS

Status	Eligible to Report NJ Data	Code	Parameter	Technique	Approved Methods	Primary State
Applied	No	DW09.31400	Perfluorotetradecanoic acid	LC MS/MS, Electrospray Ionization	EPA 537.1	NJ
Applied	No	DW09.31450	Perfluorotridecanoic acid	LC MS/MS, Electrospray Ionization	EPA 537.1	NJ
Applied	No	DW09.31500	Perfluoroundecanoic acid	LC MS/MS, Electrospray Ionization	EPA 537.1	NJ
Applied	No	DW09.31550	Perfluorohexanesulfonic acid	LC MS/MS, Electrospray Ionization	EPA 537.1	NJ
Applied	No	DW09.31600	Hexafluoropropylene oxide dimer acid	LC MS/MS, Electrospray Ionization	EPA 537.1	NJ
Applied	No	DW09.31650	11-chloroeicosafluoro-3-oxaundecane-1-sulfonic acid	LC MS/MS, Electrospray Ionization	EPA 537.1	NJ
Applied	No	DW09.31700	9-chlorohexadecafluoro-3-oxanonane-1-sulfonic acid	LC MS/MS, Electrospray Ionization	EPA 537.1	NJ
Applied	No	DW09.31750	4,8-dioxa-3H-perfluorononanoic acid	LC MS/MS, Electrospray Ionization	EPA 537.1	NJ

Category: DW12 --Drinking Water Sample Collection

Status	Eligible to Report NJ Data	Code	Parameter	Technique	Approved Methods	Primary State
Certified	Yes	DW12.00001	PWTA Sampling Parameters	All Categories Sample Handling Procedures	Other N.J.A.C. 7:18-6 & 9	NJ

Category: NPW01--Microbiology

Status	Eligible to Report NJ Data	Code	Parameter	Technique	Approved Methods	Primary State
Certified	Yes	NPW01.00850	Escherichia coli (E coli)	MPN/Multiple Tube/Multiple Well	Other Colilert 18	NJ
Certified	Yes	NPW01.01300	Fecal coliform	Multiple Tube/Mutiple Well	Other Colilert 18	NJ
Certified	Yes	NPW01.01650	Fecal coliform	Membrane Filter (MF), Single Step	SM 9222 D-15	NJ
Certified	Yes	NPW01.01850	Fecal streptococci	Membrane Filter	SM 9230 C-13	NJ
Certified	Yes	NPW01.02100	Heterotrophic plate count	Pour Plate	SM 9215 B-04	NJ
Applied	No	NPW01.02300	Pseudomonas aeruginosa	Multiple Well or P-A	Other Pseudalert	NJ

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Category: NPW01--Microbiology

Status	Eligible to Report NJ Data	Code	Parameter	Technique	Approved Methods	Primary State
Certified	Yes	NPW01.02350	Pseudomonas aeruginosa	Membrane Filter	SM 9213 E	NJ
Certified	Yes	NPW01.02800	Total coliform	MF Single Step or Two Step	SM 9222 B-15	NJ

Category: NPW03--Inorganic Parameters

Status	Eligible to Report NJ Data	Code	Parameter	Technique	Approved Methods	Primary State
Certified	Yes	NPW03.00350	Alkalinity as CaCO3	Electrometric Titration	SM 2320 B-11	NJ
Certified	Yes	NPW03.00850	Ammonia	Distillation, Electrode	SM 4500-NH3 B plus D-11	NJ
Certified	Yes	NPW03.01550	Biochemical oxygen demand	Dissolved Oxygen Depletion - Membrane Electrode	SM 5210 B-16	NJ
Certified	Yes	NPW03.02900	Carbonaceous BOD (CBOD)	Diss. Oxygen Depl., Nitrif. Inhib. - Membrane Electrode	SM 5210 B-16	NJ
Certified	Yes	NPW03.03600	Chemical oxygen demand	Spectrophotometric Manual/Auto	SM 5220 D-11	NJ
Applied	No	NPW03.04550	Chloride	Colorimetric, Automated (Ferricyanide)	SM 4500-Cl E-11	NJ
Certified	Yes	NPW03.04900	Chloride	Ion Chromatography	EPA 300.0	NJ
Certified	Yes	NPW03.05100	Chloride	Ion Chromatography	SW-846 9056A	NJ
Certified	Yes	NPW03.06000	Color	Colorimetric (Platinum-Cobalt)	SM 2120 B-11	NJ
Certified	Yes	NPW03.06300	Cyanide	Titrimetric/Manual Spectrophotometric	SW-846 9014	NJ
Certified	Yes	NPW03.06450	Cyanide	Distillation, Spectrophotometric (Manual)	SM 4500-CN C-16 plus E-16	NJ
Certified	Yes	NPW03.07200	Cyanide	Distillation	SW-846 9010C	NJ
Certified	Yes	NPW03.07350	Cyanide - amenable to Cl2	Manual Distillation, Titrimetr/Spectro	SM 4500-CN C-16 plus G-16	NJ
Certified	Yes	NPW03.07750	Dissolved organic carbon (DOC)	Filtration and Persulfate/UV	SM 5310 C-14	NJ
Certified	Yes	NPW03.08500	Fluoride	Ion Chromatography	EPA 300.0	NJ
Certified	Yes	NPW03.08700	Fluoride	Ion Chromatography	SW-846 9056A	NJ
Certified	Yes	NPW03.10100	Kjeldahl nitrogen - total	Digestion, Distillation, Electrode	SM 4500-N Org C plus NH3 B plus NH3 D-11	NJ
Certified	Yes	NPW03.11050	Nitrate	Ion Chromatography	EPA 300.0	NJ
Certified	Yes	NPW03.11250	Nitrate	Ion Chromatography	SW-846 9056A	NJ

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Status	Eligible to Report NJ Data	Code	Parameter	Technique	Approved Methods	Primary State
Certified	Yes	NPW03.12000	Nitrate - nitrite	Cadmium Reduction, Automated	SM 4500-NO3 F-16	NJ
Certified	Yes	NPW03.13150	Nitrite	Auto, bypass Cd reduction	SM 4500-NO3 F-16	NJ
Certified	Yes	NPW03.13650	Nitrite	Ion Chromatography	EPA 300.0	NJ
Certified	Yes	NPW03.13900	Nitrite	Ion Chromatography	SW-846 9056A	NJ
Certified	Yes	NPW03.14100	Oil & grease - hem-LL	Gravimetric, Hexane Extractable Material-LL	EPA 1664A	NJ
Certified	Yes	NPW03.14150	Oil & grease - hem-LL	Gravimetric, Hexane Extractable Material-LL	EPA 1664B	NJ
Certified	Yes	NPW03.14300	Oil & grease - hem-SPE	Gravimetric, Hexane Extractable Material-SPE	EPA 1664B	NJ
Certified	Yes	NPW03.14450	Oil & grease - sgt-non polar	Gravimetric, Silica Gel Treated-Hem-SPE	EPA 1664B	NJ
Certified	Yes	NPW03.14600	Oil & grease - sgt-non polar	Gravimetric, Silica Gel Treated-Hem-LL	EPA 1664B	NJ
Certified	Yes	NPW03.14650	Oil & grease - sgt-non polar	Gravimetric, Silica Gel Treated-Hem-LL	EPA 1664A	NJ
Certified	Yes	NPW03.14750	Organic nitrogen	Total Kjeldahl-N Minus Ammonia-N	SM TKN - NH3 method references	NJ
Certified	Yes	NPW03.15350	Orthophosphate	Ascorbic Acid, Manual Single Reagent	SM 4500-P E-11	NJ
Certified	Yes	NPW03.16600	Phenols	Manual Distillation, Colorimetric 4AAP, Manual	EPA 420.1	NJ
Certified	Yes	NPW03.16700	Phenols	Manual Distillation, Colorimetric 4AAP, Manual	SW-846 9065	NJ
Certified	Yes	NPW03.17150	Phosphorus (total)	Persulfate Digestion + Manual	SM 4500-P B5-11 plus E-11	NJ
Certified	Yes	NPW03.17850	Residue - filterable (TDS)	Gravimetric, 180 Degrees C	SM 2540 C-15	NJ
Certified	Yes	NPW03.18000	Residue - nonfilterable (TSS)	Gravimetric, 103-105 Degrees C, Post Washing	SM 2540 D-15	NJ
Certified	Yes	NPW03.18100	Residue - settleable	Volumetric (Imhoff Cone) or Gravimetric	SM 2540 F-15	NJ
Certified	Yes	NPW03.18150	Residue - total	Gravimetric, 103-105 Degrees C	SM 2540 B-15	NJ
Applied	No	NPW03.18250	Residue - volatile	Gravimetric, 550 Degrees C	EPA 160.4	NJ
Certified	Yes	NPW03.18800	Specific conductance	Wheatstone Bridge	SM 2510 B-11	NJ
Certified	Yes	NPW03.19400	Sulfate	Turbidimetric	ASTM D516-16	NJ
Certified	Yes	NPW03.19850	Sulfate	Ion Chromatography	EPA 300.0	NJ
Certified	Yes	NPW03.20050	Sulfate	Ion Chromatography	SW-846 9056A	NJ
Certified	Yes	NPW03.20500	Sulfides	Colorimetric (Methylene Blue)	SM 4500-S B, C plus D-11	NJ
Certified	Yes	NPW03.20750	Surfactants	Colorimetric (Methylene Blue)	SM 5540 C-11	NJ

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Category: NPW03--Inorganic Parameters

Status	Eligible to Report NJ Data	Code	Parameter	Technique	Approved Methods	Primary State
Certified	Yes	NPW03.21300	Total organic carbon (TOC)	Heated or UV	SM 5310 C-14	NJ
Certified	Yes	NPW03.21850	Total, fixed, and volatile solids (SQAR)	Gravimetric, 500 Degrees C	SM 2540 G SM 18th Ed.	NJ
Certified	Yes	NPW03.22150	Turbidity	Nephelometric	SM 2130 B-11	NJ

Category: NPW04--Analyze Immed, Cont Monitor and/or PWTA

Status	Eligible to Report NJ Data	Code	Parameter	Technique	Approved Methods	Primary State
Certified	Yes	NPW04.00400	Chlorine	Spectrophotometric, DPD	SM 4500-Cl G-11	NJ
Certified	Yes	NPW04.00950	Oxygen (dissolved)	Membrane Electrode	SM 4500-O G-16	NJ
Certified	Yes	NPW04.01300	Oxygen (dissolved)	Winkler, Azide Modification	SM 4500-O C-16	NJ
Certified	Yes	NPW04.01650	pH	Electrometric	SM 4500-H B-11	NJ
Certified	Yes	NPW04.01750	pH (corrosivity)	Aqueous, Electrometric	SW-846 9040C	NJ
Certified	Yes	NPW04.01950	Temperature	Thermometric	SM 2550 B-10	NJ

Category: NPW06--Metals - NPW Preparation Methods

Status	Eligible to Report NJ Data	Code	Parameter	Technique	Approved Methods	Primary State
Certified	Yes	NPW06.00050	Metals	TCLP, Toxicity Procedure, Shaker	SW-846 1311	NJ
Certified	Yes	NPW06.00200	Metals, Total Rec and Dissolved	Acid Digestion/Surface and Groundwater	SW-846 3005A	NJ
Certified	Yes	NPW06.00250	Metals, Total	Acid Digestion/Aqueous Samples	SW-846 3010A	NJ

Category: NPW07--Metals

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Status	Eligible to Report NJ Data	Code	Parameter	Technique	Approved Methods	Primary State
Certified	Yes	NPW07.03350	Mercury	Manual Cold Vapor	EPA 245.1	NJ
Certified	Yes	NPW07.08650	Chromium (VI)	0.45u Filter, Colorimetric DPC	SM 3500-Cr B-11	NJ
Certified	Yes	NPW07.11950	Chromium (VI)	Colorimetric	SW-846 7196A	NJ
Certified	Yes	NPW07.12150	Mercury - liquid waste	AA, Manual Cold Vapor	SW-846 7470A	NJ

Category: NPW08--Metals - ICP, ICP/MS and DCP

Status	Eligible to Report NJ Data	Code	Parameter	Technique	Approved Methods	Primary State
Certified	Yes	NPW08.04150	Aluminum	Digestion, ICP	EPA 200.7	NJ
Certified	Yes	NPW08.04200	Antimony	Digestion, ICP	EPA 200.7	NJ
Certified	Yes	NPW08.04250	Arsenic	Digestion, ICP	EPA 200.7	NJ
Certified	Yes	NPW08.04300	Barium	Digestion, ICP	EPA 200.7	NJ
Certified	Yes	NPW08.04350	Beryllium	Digestion, ICP	EPA 200.7	NJ
Certified	Yes	NPW08.04400	Boron	ICP	EPA 200.7	NJ
Certified	Yes	NPW08.04450	Cadmium	Digestion, ICP	EPA 200.7	NJ
Certified	Yes	NPW08.04500	Calcium	Digestion, ICP	EPA 200.7	NJ
Certified	Yes	NPW08.04550	Chromium	Digestion, ICP	EPA 200.7	NJ
Certified	Yes	NPW08.04600	Cobalt	Digestion, ICP	EPA 200.7	NJ
Certified	Yes	NPW08.04650	Copper	Digestion, ICP	EPA 200.7	NJ
Certified	Yes	NPW08.04700	Iron	Digestion, ICP	EPA 200.7	NJ
Certified	Yes	NPW08.04750	Lead	Digestion, ICP	EPA 200.7	NJ
Certified	Yes	NPW08.04850	Magnesium	Digestion, ICP	EPA 200.7	NJ
Certified	Yes	NPW08.04900	Manganese	Digestion, ICP	EPA 200.7	NJ
Certified	Yes	NPW08.04950	Molybdenum	Digestion, ICP	EPA 200.7	NJ
Certified	Yes	NPW08.05000	Nickel	Digestion, ICP	EPA 200.7	NJ
Certified	Yes	NPW08.05100	Potassium	Digestion, ICP	EPA 200.7	NJ
Certified	Yes	NPW08.05150	Selenium	Digestion, ICP	EPA 200.7	NJ

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Category: NPW08--Metals - ICP, ICP/MS and DCP

Status	Eligible to Report NJ Data	Code	Parameter	Technique	Approved Methods	Primary State
Certified	Yes	NPW08.05250	Silver	Digestion, ICP	EPA 200.7	NJ
Certified	Yes	NPW08.05300	Sodium	Digestion, ICP	EPA 200.7	NJ
Certified	Yes	NPW08.05400	Thallium	Digestion, ICP	EPA 200.7	NJ
Certified	Yes	NPW08.05550	Vanadium	Digestion, ICP	EPA 200.7	NJ
Certified	Yes	NPW08.05600	Zinc	Digestion, ICP	EPA 200.7	NJ
Certified	Yes	NPW08.05650	Aluminum	Digestion, ICP/MS	EPA 200.8	NJ
Certified	Yes	NPW08.05700	Antimony	Digestion, ICP/MS	EPA 200.8	NJ
Certified	Yes	NPW08.05750	Arsenic	Digestion, ICP/MS	EPA 200.8	NJ
Certified	Yes	NPW08.05800	Barium	Digestion, ICP/MS	EPA 200.8	NJ
Certified	Yes	NPW08.05850	Beryllium	Digestion, ICP/MS	EPA 200.8	NJ
Certified	Yes	NPW08.05950	Cadmium	Digestion, ICP/MS	EPA 200.8	NJ
Certified	Yes	NPW08.06050	Chromium	Digestion, ICP/MS	EPA 200.8	NJ
Certified	Yes	NPW08.06100	Cobalt	Digestion, ICP/MS	EPA 200.8	NJ
Certified	Yes	NPW08.06150	Copper	Digestion, ICP/MS	EPA 200.8	NJ
Certified	Yes	NPW08.06300	Lead	Digestion, ICP/MS	EPA 200.8	NJ
Certified	Yes	NPW08.06400	Manganese	Digestion, ICP/MS	EPA 200.8	NJ
Certified	Yes	NPW08.06450	Molybdenum	Digestion, ICP/MS	EPA 200.8	NJ
Certified	Yes	NPW08.06500	Nickel	Digestion, ICP/MS	EPA 200.8	NJ
Certified	Yes	NPW08.06600	Selenium	Digestion, ICP/MS	EPA 200.8	NJ
Certified	Yes	NPW08.06700	Silver	Digestion, ICP/MS	EPA 200.8	NJ
Certified	Yes	NPW08.06850	Thallium	Digestion, ICP/MS	EPA 200.8	NJ
Applied	No	NPW08.07000	Titanium	Digestion, ICP/MS	EPA 200.8	NJ
Certified	Yes	NPW08.07150	Vanadium	Digestion, ICP/MS	EPA 200.8	NJ
Certified	Yes	NPW08.07200	Zinc	Digestion, ICP/MS	EPA 200.8	NJ
Certified	Yes	NPW08.09800	Hardness - total as CaCO3	Ca + Mg Carbonates, ICP	SM 2340 B-11	NJ
Certified	Yes	NPW08.12800	Aluminum	ICP	SW-846 6010D	NJ
Certified	Yes	NPW08.12850	Antimony	ICP	SW-846 6010D	NJ

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Laboratory Name: AQUA PRO-TECH LABORATORIES Laboratory Number: 07010 Activity ID: NLC 230001
1275 BLOOMFIELD AVE
FAIRFIELD NJ 07004

Category: NPW08--Metals - ICP, ICP/MS and DCP

Status	Eligible to Report NJ Data	Code	Parameter	Technique	Approved Methods	Primary State
Certified	Yes	NPW08.12900	Arsenic	ICP	SW-846 6010D	NJ
Certified	Yes	NPW08.12950	Barium	ICP	SW-846 6010D	NJ
Certified	Yes	NPW08.13000	Beryllium	ICP	SW-846 6010D	NJ
Certified	Yes	NPW08.13100	Cadmium	ICP	SW-846 6010D	NJ
Certified	Yes	NPW08.13150	Calcium	ICP	SW-846 6010D	NJ
Certified	Yes	NPW08.13200	Chromium	ICP	SW-846 6010D	NJ
Certified	Yes	NPW08.13250	Cobalt	ICP	SW-846 6010D	NJ
Certified	Yes	NPW08.13300	Copper	ICP	SW-846 6010D	NJ
Certified	Yes	NPW08.13350	Iron	ICP	SW-846 6010D	NJ
Certified	Yes	NPW08.13400	Lead	ICP	SW-846 6010D	NJ
Certified	Yes	NPW08.13450	Lithium	ICP	SW-846 6010D	NJ
Certified	Yes	NPW08.13500	Magnesium	ICP	SW-846 6010D	NJ
Certified	Yes	NPW08.13550	Manganese	ICP	SW-846 6010D	NJ
Certified	Yes	NPW08.13600	Molybdenum	ICP	SW-846 6010D	NJ
Certified	Yes	NPW08.13650	Nickel	ICP	SW-846 6010D	NJ
Certified	Yes	NPW08.13750	Potassium	ICP	SW-846 6010D	NJ
Certified	Yes	NPW08.13800	Selenium	ICP	SW-846 6010D	NJ
Certified	Yes	NPW08.13850	Silver	ICP	SW-846 6010D	NJ
Certified	Yes	NPW08.13900	Sodium	ICP	SW-846 6010D	NJ
Applied	No	NPW08.13950	Strontium	ICP	SW-846 6010D	NJ
Certified	Yes	NPW08.14000	Thallium	ICP	SW-846 6010D	NJ
Certified	Yes	NPW08.14100	Tin	ICP	SW-846 6010D	NJ
Certified	Yes	NPW08.14250	Vanadium	ICP	SW-846 6010D	NJ
Certified	Yes	NPW08.14300	Zinc	ICP	SW-846 6010D	NJ

Category: NPW09--Organics - NPW Preparation Methods

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Laboratory Name: AQUA PRO-TECH LABORATORIES Laboratory Number: 07010 Activity ID: NLC 230001
1275 BLOOMFIELD AVE
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Status	Eligible to Report NJ Data	Code	Parameter	Technique	Approved Methods	Primary State
Certified	Yes	NPW09.00250	Organics	Synthetic PPT Leachate Procedure	SW-846 1312	NJ
Certified	Yes	NPW09.00450	Semivolatile organics	TCLP, Toxicity Procedure, Shaker	SW-846 1311	NJ
Certified	Yes	NPW09.00500	Semivolatile organics	Separatory Funnel Extraction	SW-846 3510C	NJ
Certified	Yes	NPW09.00700	Semivolatile organics	Microwave Extraction	SW-846 3546	NJ
Certified	Yes	NPW09.01350	Volatile organics	TCLP, Toxicity Procedure, ZHE	SW-846 1311	NJ
Certified	Yes	NPW09.01550	Volatile organics	Purge & Trap Aqueous	SW-846 5030C	NJ

Category: NPW10--Organic Parameters - Chromatography

Status	Eligible to Report NJ Data	Code	Parameter	Technique	Approved Methods	Primary State
Certified	Yes	NPW10.19150	Aldrin	Extract/GC (ECD)	EPA 608.3	NJ
Certified	Yes	NPW10.19200	Alpha BHC	Extract/GC (ECD)	EPA 608.3	NJ
Certified	Yes	NPW10.19300	Beta BHC	Extract/GC (ECD)	EPA 608.3	NJ
Certified	Yes	NPW10.19650	Chlordane	Extract/GC (ECD)	EPA 608.3	NJ
Certified	Yes	NPW10.20050	DDD (4,4'-)	Extract/GC (ECD)	EPA 608.3	NJ
Certified	Yes	NPW10.20100	DDE (4,4'-)	Extract/GC (ECD)	EPA 608.3	NJ
Certified	Yes	NPW10.20150	DDT (4,4'-)	Extract/GC (ECD)	EPA 608.3	NJ
Certified	Yes	NPW10.20200	Delta BHC	Extract/GC (ECD)	EPA 608.3	NJ
Certified	Yes	NPW10.20350	Dieldrin	Extract/GC (ECD)	EPA 608.3	NJ
Certified	Yes	NPW10.20400	Endosulfan I	Extract/GC (ECD)	EPA 608.3	NJ
Certified	Yes	NPW10.20450	Endosulfan II	Extract/GC (ECD)	EPA 608.3	NJ
Certified	Yes	NPW10.20500	Endosulfan sulfate	Extract/GC (ECD)	EPA 608.3	NJ
Certified	Yes	NPW10.20550	Endrin	Extract/GC (ECD)	EPA 608.3	NJ
Certified	Yes	NPW10.20600	Endrin aldehyde	Extract/GC (ECD)	EPA 608.3	NJ
Certified	Yes	NPW10.20650	Endrin ketone	Extract/GC (ECD)	EPA 608.3	NJ
Certified	Yes	NPW10.20800	Heptachlor	Extract/GC (ECD)	EPA 608.3	NJ
Certified	Yes	NPW10.20850	Heptachlor epoxide	Extract/GC (ECD)	EPA 608.3	NJ

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1275 BLOOMFIELD AVE
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Category: NPW10--Organic Parameters - Chromatography

Status	Eligible to Report NJ Data	Code	Parameter	Technique	Approved Methods	Primary State
Certified	Yes	NPW10.21000	Lindane (gamma BHC)	Extract/GC (ECD)	EPA 608.3	NJ
Certified	Yes	NPW10.21050	Methoxychlor	Extract/GC (ECD)	EPA 608.3	NJ
Applied	No	NPW10.21200	Mirex	Extract/GC (ECD)	EPA 608.3	NJ
Certified	Yes	NPW10.21800	Toxaphene	Extract/GC (ECD)	EPA 608.3	NJ
Certified	Yes	NPW10.21900	PCB 1016	Extract/GC (ECD)	EPA 608.3	NJ
Certified	Yes	NPW10.21950	PCB 1221	Extract/GC (ECD)	EPA 608.3	NJ
Certified	Yes	NPW10.22000	PCB 1232	Extract/GC (ECD)	EPA 608.3	NJ
Certified	Yes	NPW10.22050	PCB 1242	Extract/GC (ECD)	EPA 608.3	NJ
Certified	Yes	NPW10.22100	PCB 1248	Extract/GC (ECD)	EPA 608.3	NJ
Certified	Yes	NPW10.22150	PCB 1254	Extract/GC (ECD)	EPA 608.3	NJ
Certified	Yes	NPW10.22200	PCB 1260	Extract/GC (ECD)	EPA 608.3	NJ
Certified	Yes	NPW10.31400	Ethane	GC, Headspace, FID	Other J. Chrom. Sci. RSK-175	NJ
Certified	Yes	NPW10.31450	Ethene	GC, Headspace, FID	Other J. Chrom. Sci. RSK-175	NJ
Certified	Yes	NPW10.31550	Methane	GC, Headspace, FID	Other J. Chrom. Sci. RSK-175	NJ
Certified	Yes	NPW10.31650	Extractable Petroleum Hydrocarbons	Extraction, GC, FID	Other NJDEP EPH 10/08, Rev. 3	NJ
Certified	Yes	NPW10.37350	Mirex	Extract/GC (ECD)	SM 6630 B-07	NJ
Certified	Yes	NPW10.38750	Mirex	Extract/GC (ECD)	SM 6630 C-07	NJ
Certified	Yes	NPW10.44600	Aldrin	GC, Extraction, ECD or HECD, Capillary	SW-846 8081B	NJ
Certified	Yes	NPW10.44650	Alpha BHC	GC, Extraction, ECD or HECD, Capillary	SW-846 8081B	NJ
Certified	Yes	NPW10.44750	Beta BHC	GC, Extraction, ECD or HECD, Capillary	SW-846 8081B	NJ
Applied	No	NPW10.44800	Chlordane (alpha) (cis-)	GC, Extraction, ECD or HECD, Capillary	SW-846 8081B	NJ
Applied	No	NPW10.44850	Chlordane (gamma) (trans-)	GC, Extraction, ECD or HECD, Capillary	SW-846 8081B	NJ
Certified	Yes	NPW10.44900	Chlordane (technical)	GC, Extraction, ECD or HECD, Capillary	SW-846 8081B	NJ
Certified	Yes	NPW10.45250	DDD (4,4'-)	GC, Extraction, ECD or HECD, Capillary	SW-846 8081B	NJ
Certified	Yes	NPW10.45300	DDE (4,4'-)	GC, Extraction, ECD or HECD, Capillary	SW-846 8081B	NJ
Certified	Yes	NPW10.45350	DDT (4,4'-)	GC, Extraction, ECD or HECD, Capillary	SW-846 8081B	NJ
Certified	Yes	NPW10.45400	Delta BHC	GC, Extraction, ECD or HECD, Capillary	SW-846 8081B	NJ

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Category: NPW10--Organic Parameters - Chromatography

Status	Eligible to Report NJ Data	Code	Parameter	Technique	Approved Methods	Primary State
Certified	Yes	NPW10.45450	Dieldrin	GC, Extraction, ECD or HECD, Capillary	SW-846 8081B	NJ
Certified	Yes	NPW10.45500	Endosulfan I	GC, Extraction, ECD or HECD, Capillary	SW-846 8081B	NJ
Certified	Yes	NPW10.45550	Endosulfan II	GC, Extraction, ECD or HECD, Capillary	SW-846 8081B	NJ
Certified	Yes	NPW10.45600	Endosulfan sulfate	GC, Extraction, ECD or HECD, Capillary	SW-846 8081B	NJ
Certified	Yes	NPW10.45650	Endrin	GC, Extraction, ECD or HECD, Capillary	SW-846 8081B	NJ
Certified	Yes	NPW10.45700	Endrin aldehyde	GC, Extraction, ECD or HECD, Capillary	SW-846 8081B	NJ
Certified	Yes	NPW10.45750	Endrin ketone	GC, Extraction, ECD or HECD, Capillary	SW-846 8081B	NJ
Certified	Yes	NPW10.45850	Heptachlor	GC, Extraction, ECD or HECD, Capillary	SW-846 8081B	NJ
Certified	Yes	NPW10.45900	Heptachlor epoxide	GC, Extraction, ECD or HECD, Capillary	SW-846 8081B	NJ
Certified	Yes	NPW10.46050	Lindane (gamma BHC)	GC, Extraction, ECD or HECD, Capillary	SW-846 8081B	NJ
Certified	Yes	NPW10.46100	Methoxychlor	GC, Extraction, ECD or HECD, Capillary	SW-846 8081B	NJ
Certified	Yes	NPW10.46450	Toxaphene	GC, Extraction, ECD or HECD, Capillary	SW-846 8081B	NJ
Certified	Yes	NPW10.47600	PCB 1016	GC, Extraction, ECD or HECD, Capillary	SW-846 8082A	NJ
Certified	Yes	NPW10.47650	PCB 1221	GC, Extraction, ECD or HECD, Capillary	SW-846 8082A	NJ
Certified	Yes	NPW10.47700	PCB 1232	GC, Extraction, ECD or HECD, Capillary	SW-846 8082A	NJ
Certified	Yes	NPW10.47750	PCB 1242	GC, Extraction, ECD or HECD, Capillary	SW-846 8082A	NJ
Certified	Yes	NPW10.47800	PCB 1248	GC, Extraction, ECD or HECD, Capillary	SW-846 8082A	NJ
Certified	Yes	NPW10.47850	PCB 1254	GC, Extraction, ECD or HECD, Capillary	SW-846 8082A	NJ
Certified	Yes	NPW10.47900	PCB 1260	GC, Extraction, ECD or HECD, Capillary	SW-846 8082A	NJ

Category: NPW11--Organic Parameters - Chromatography/MS

Status	Eligible to Report NJ Data	Code	Parameter	Technique	Approved Methods	Primary State
Certified	Yes	NPW11.38400	Acetone	GC/MS, P & T, Capillary Column	EPA 624.1	NJ
Certified	Yes	NPW11.38500	Acrolein	GC/MS, P & T, Capillary Column	EPA 624.1	NJ
Certified	Yes	NPW11.38550	Acrylonitrile	GC/MS, P & T, Capillary Column	EPA 624.1	NJ

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1275 BLOOMFIELD AVE
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Category: NPW11--Organic Parameters - Chromatography/MS

Status	Eligible to Report NJ Data	Code	Parameter	Technique	Approved Methods	Primary State
Certified	Yes	NPW11.38650	Amyl acetate (n-)	GC/MS, P & T, Capillary Column	EPA 624.1	NJ
Certified	Yes	NPW11.38750	Benzene	GC/MS, P & T, Capillary Column	EPA 624.1	NJ
Certified	Yes	NPW11.38800	Bromobenzene	GC/MS, P & T, Capillary Column	EPA 624.1	NJ
Certified	Yes	NPW11.38850	Bromochloromethane	GC/MS, P & T, Capillary Column	EPA 624.1	NJ
Certified	Yes	NPW11.38900	Bromodichloromethane	GC/MS, P & T, Capillary Column	EPA 624.1	NJ
Certified	Yes	NPW11.39000	Bromoform	GC/MS, P & T, Capillary Column	EPA 624.1	NJ
Certified	Yes	NPW11.39050	Bromomethane	GC/MS, P & T, Capillary Column	EPA 624.1	NJ
Certified	Yes	NPW11.39200	Butanone (2-) (Methyl ethyl ketone)	GC/MS, P & T, Capillary Column	EPA 624.1	NJ
Certified	Yes	NPW11.39250	Butyl acetate (n-)	GC/MS, P & T, Capillary Column	EPA 624.1	NJ
Certified	Yes	NPW11.39400	Butylbenzene (n-)	GC/MS, P & T, Capillary Column	EPA 624.1	NJ
Certified	Yes	NPW11.39450	Carbon disulfide	GC/MS, P & T, Capillary Column	EPA 624.1	NJ
Certified	Yes	NPW11.39500	Carbon tetrachloride	GC/MS, P & T, Capillary Column	EPA 624.1	NJ
Certified	Yes	NPW11.39550	Chlorobenzene	GC/MS, P & T, Capillary Column	EPA 624.1	NJ
Certified	Yes	NPW11.39600	Chloroethane	GC/MS, P & T, Capillary Column	EPA 624.1	NJ
Certified	Yes	NPW11.39650	Chloroethyl vinyl ether (2-)	GC/MS, P & T, Capillary Column	EPA 624.1	NJ
Certified	Yes	NPW11.39700	Chloroform	GC/MS, P & T, Capillary Column	EPA 624.1	NJ
Certified	Yes	NPW11.39750	Chloromethane	GC/MS, P & T, Capillary Column	EPA 624.1	NJ
Certified	Yes	NPW11.39800	Chlorotoluene (2-)	GC/MS, P & T, Capillary Column	EPA 624.1	NJ
Certified	Yes	NPW11.39850	Chlorotoluene (4-)	GC/MS, P & T, Capillary Column	EPA 624.1	NJ
Certified	Yes	NPW11.39950	Cyclohexane	GC/MS, P & T, Capillary Column	EPA 624.1	NJ
Certified	Yes	NPW11.40050	Dibromo-3-chloropropane (1,2-)	GC/MS, P & T, Capillary Column	EPA 624.1	NJ
Certified	Yes	NPW11.40100	Dibromochloromethane	GC/MS, P & T, Capillary Column	EPA 624.1	NJ
Certified	Yes	NPW11.40105	Dibromoethane (1,2-) (EDB)	GC/MS, P & T, Capillary Column	EPA 624.1	NJ
Certified	Yes	NPW11.40200	Dibromomethane	GC/MS, P & T, Capillary Column	EPA 624.1	NJ
Certified	Yes	NPW11.40350	Dichlorobenzene (1,2-)	GC/MS, P & T, Capillary Column	EPA 624.1	NJ
Certified	Yes	NPW11.40400	Dichlorobenzene (1,3-)	GC/MS, P & T, Capillary Column	EPA 624.1	NJ
Certified	Yes	NPW11.40450	Dichlorobenzene (1,4-)	GC/MS, P & T, Capillary Column	EPA 624.1	NJ

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1275 BLOOMFIELD AVE
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Category: NPW11--Organic Parameters - Chromatography/MS

Status	Eligible to Report NJ Data	Code	Parameter	Technique	Approved Methods	Primary State
Certified	Yes	NPW11.40500	Dichlorodifluoromethane	GC/MS, P & T, Capillary Column	EPA 624.1	NJ
Certified	Yes	NPW11.40550	Dichloroethane (1,1-)	GC/MS, P & T, Capillary Column	EPA 624.1	NJ
Certified	Yes	NPW11.40600	Dichloroethane (1,2-)	GC/MS, P & T, Capillary Column	EPA 624.1	NJ
Certified	Yes	NPW11.40650	Dichloroethene (1,1-)	GC/MS, P & T, Capillary Column	EPA 624.1	NJ
Certified	Yes	NPW11.40700	Dichloroethene (cis-1,2-)	GC/MS, P & T, Capillary Column	EPA 624.1	NJ
Certified	Yes	NPW11.40750	Dichloroethene (trans-1,2-)	GC/MS, P & T, Capillary Column	EPA 624.1	NJ
Certified	Yes	NPW11.40800	Dichloropropane (1,2-)	GC/MS, P & T, Capillary Column	EPA 624.1	NJ
Certified	Yes	NPW11.40850	Dichloropropane (1,3-)	GC/MS, P & T, Capillary Column	EPA 624.1	NJ
Certified	Yes	NPW11.40900	Dichloropropane (2,2-)	GC/MS, P & T, Capillary Column	EPA 624.1	NJ
Certified	Yes	NPW11.41000	Dichloropropene (cis-1,3-)	GC/MS, P & T, Capillary Column	EPA 624.1	NJ
Certified	Yes	NPW11.41200	Dioxane (1,4-)	GC/MS, P & T, Capillary Column	EPA 624.1	NJ
Certified	Yes	NPW11.41350	Ethyl acetate	GC/MS, P & T, Capillary Column	EPA 624.1	NJ
Certified	Yes	NPW11.41450	Ethylbenzene	GC/MS, P & T, Capillary Column	EPA 624.1	NJ
Certified	Yes	NPW11.41600	Hexachlorobutadiene (1,3-)	GC/MS, P & T, Capillary Column	EPA 624.1	NJ
Certified	Yes	NPW11.41700	Hexanone (2-)	GC/MS, P & T, Capillary Column	EPA 624.1	NJ
Certified	Yes	NPW11.41900	Isopropyl acetate	GC/MS, P & T, Capillary Column	EPA 624.1	NJ
Certified	Yes	NPW11.42000	Isopropylbenzene	GC/MS, P & T, Capillary Column	EPA 624.1	NJ
Certified	Yes	NPW11.42050	Isopropyltoluene (4-)	GC/MS, P & T, Capillary Column	EPA 624.1	NJ
Certified	Yes	NPW11.42150	Methyl acetate	GC/MS, P & T, Capillary Column	EPA 624.1	NJ
Certified	Yes	NPW11.42350	Methyl isobutyl ketone (MIBK)	GC/MS, P & T, Capillary Column	EPA 624.1	NJ
Certified	Yes	NPW11.42450	Methyl tert-butyl ether	GC/MS, P & T, Capillary Column	EPA 624.1	NJ
Certified	Yes	NPW11.42500	Methylcyclohexane	GC/MS, P & T, Capillary Column	EPA 624.1	NJ
Certified	Yes	NPW11.42550	Methylene chloride (Dichloromethane)	GC/MS, P & T, Capillary Column	EPA 624.1	NJ
Certified	Yes	NPW11.42600	Naphthalene	GC/MS, P & T, Capillary Column	EPA 624.1	NJ
Certified	Yes	NPW11.42900	Propylbenzene (n-)	GC/MS, P & T, Capillary Column	EPA 624.1	NJ
Certified	Yes	NPW11.42950	Sec-butylbenzene	GC/MS, P & T, Capillary Column	EPA 624.1	NJ
Certified	Yes	NPW11.43000	Styrene	GC/MS, P & T, Capillary Column	EPA 624.1	NJ

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Category: NPW11--Organic Parameters - Chromatography/MS

Status	Eligible to Report NJ Data	Code	Parameter	Technique	Approved Methods	Primary State
Certified	Yes	NPW11.43150	Tert-butyl alcohol	GC/MS, P & T, Capillary Column	EPA 624.1	NJ
Certified	Yes	NPW11.43200	Tert-butylbenzene	GC/MS, P & T, Capillary Column	EPA 624.1	NJ
Certified	Yes	NPW11.43250	Tetrachloroethane (1,1,1,2-)	GC/MS, P & T, Capillary Column	EPA 624.1	NJ
Certified	Yes	NPW11.43300	Tetrachloroethane (1,1,2,2-)	GC/MS, P & T, Capillary Column	EPA 624.1	NJ
Certified	Yes	NPW11.43350	Tetrachloroethene	GC/MS, P & T, Capillary Column	EPA 624.1	NJ
Certified	Yes	NPW11.43450	Toluene	GC/MS, P & T, Capillary Column	EPA 624.1	NJ
Certified	Yes	NPW11.43500	Trichloro (1,1,2-) trifluoroethane (1,2,2-)	GC/MS, P & T, Capillary Column	EPA 624.1	NJ
Certified	Yes	NPW11.43550	Trichlorobenzene (1,2,3-)	GC/MS, P & T, Capillary Column	EPA 624.1	NJ
Certified	Yes	NPW11.43600	Trichlorobenzene (1,2,4-)	GC/MS, P & T, Capillary Column	EPA 624.1	NJ
Certified	Yes	NPW11.43650	Trichloroethane (1,1,1-)	GC/MS, P & T, Capillary Column	EPA 624.1	NJ
Certified	Yes	NPW11.43700	Trichloroethane (1,1,2-)	GC/MS, P & T, Capillary Column	EPA 624.1	NJ
Certified	Yes	NPW11.43750	Trichloroethene	GC/MS, P & T, Capillary Column	EPA 624.1	NJ
Certified	Yes	NPW11.43800	Trichlorofluoromethane	GC/MS, P & T, Capillary Column	EPA 624.1	NJ
Certified	Yes	NPW11.43850	Trichloropropane (1,2,3-)	GC/MS, P & T, Capillary Column	EPA 624.1	NJ
Certified	Yes	NPW11.43950	Trimethylbenzene (1,2,4-)	GC/MS, P & T, Capillary Column	EPA 624.1	NJ
Certified	Yes	NPW11.44000	Trimethylbenzene (1,3,5-)	GC/MS, P & T, Capillary Column	EPA 624.1	NJ
Certified	Yes	NPW11.44050	Vinyl acetate	GC/MS, P & T, Capillary Column	EPA 624.1	NJ
Certified	Yes	NPW11.44100	Vinyl chloride	GC/MS, P & T, Capillary Column	EPA 624.1	NJ
Certified	Yes	NPW11.44150	Xylene (m- + p-)	GC/MS, P & T, Capillary Column	EPA 624.1	NJ
Certified	Yes	NPW11.44250	Xylene (o-)	GC/MS, P & T, Capillary Column	EPA 624.1	NJ
Certified	Yes	NPW11.44350	Xylenes (total)	GC/MS, P & T, Capillary Column	EPA 624.1	NJ
Certified	Yes	NPW11.44400	Acenaphthene	Extract, GC/MS	EPA 625.1	NJ
Certified	Yes	NPW11.44450	Acenaphthylene	Extract, GC/MS	EPA 625.1	NJ
Certified	Yes	NPW11.44800	Aniline	Extract, GC/MS	EPA 625.1	NJ
Certified	Yes	NPW11.44850	Anthracene	Extract, GC/MS	EPA 625.1	NJ
Certified	Yes	NPW11.45200	Benzidine	Extract, GC/MS	EPA 625.1	NJ
Certified	Yes	NPW11.45250	Benzo(a)anthracene	Extract, GC/MS	EPA 625.1	NJ

New Jersey Department of Environment Protection
Environmental Laboratory Certification Program

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Laboratory Name: AQUA PRO-TECH LABORATORIES Laboratory Number: 07010 Activity ID: NLC 230001
1275 BLOOMFIELD AVE
FAIRFIELD NJ 07004

Category: NPW11--Organic Parameters - Chromatography/MS

Status	Eligible to Report NJ Data	Code	Parameter	Technique	Approved Methods	Primary State
Certified	Yes	NPW11.45300	Benzo(a)pyrene	Extract, GC/MS	EPA 625.1	NJ
Certified	Yes	NPW11.45350	Benzo(b)fluoranthene	Extract, GC/MS	EPA 625.1	NJ
Certified	Yes	NPW11.45400	Benzo(ghi)perylene	Extract, GC/MS	EPA 625.1	NJ
Certified	Yes	NPW11.45500	Benzo(k)fluoranthene	Extract, GC/MS	EPA 625.1	NJ
Certified	Yes	NPW11.45550	Benzoic acid	Extract, GC/MS	EPA 625.1	NJ
Certified	Yes	NPW11.45700	Bis (2-chloroethoxy) methane	Extract, GC/MS	EPA 625.1	NJ
Certified	Yes	NPW11.45750	Bis (2-chloroethyl) ether	Extract, GC/MS	EPA 625.1	NJ
Certified	Yes	NPW11.45800	Bis(2-chloroisopropyl)ether|2,2'-oxybis(1-chloropropane)	Extract, GC/MS	EPA 625.1	NJ
Certified	Yes	NPW11.45850	Bis (2-ethylhexyl) phthalate	Extract, GC/MS	EPA 625.1	NJ
Certified	Yes	NPW11.46000	Bromophenyl-phenyl ether (4-)	Extract, GC/MS	EPA 625.1	NJ
Certified	Yes	NPW11.46050	Butylbenzylphthalate	Extract, GC/MS	EPA 625.1	NJ
Certified	Yes	NPW11.46250	Carbazole	Extract, GC/MS	EPA 625.1	NJ
Certified	Yes	NPW11.46400	Chloroaniline (4-)	Extract, GC/MS	EPA 625.1	NJ
Certified	Yes	NPW11.46550	Chloronaphthalene (2-)	Extract, GC/MS	EPA 625.1	NJ
Certified	Yes	NPW11.46650	Chlorophenol (2-)	Extract, GC/MS	EPA 625.1	NJ
Certified	Yes	NPW11.46700	Chlorophenyl-phenyl ether (4-)	Extract, GC/MS	EPA 625.1	NJ
Certified	Yes	NPW11.46900	Chrysene	Extract, GC/MS	EPA 625.1	NJ
Certified	Yes	NPW11.47500	Dibenzo(a,h)anthracene	Extract, GC/MS	EPA 625.1	NJ
Certified	Yes	NPW11.47650	Dibenzofuran	Extract, GC/MS	EPA 625.1	NJ
Certified	Yes	NPW11.47750	Dichlorobenzidine (3,3'-)	Extract, GC/MS	EPA 625.1	NJ
Certified	Yes	NPW11.47800	Dichlorophenol (2,4-)	Extract, GC/MS	EPA 625.1	NJ
Certified	Yes	NPW11.47850	Dichlorophenol (2,6-)	Extract, GC/MS	EPA 625.1	NJ
Certified	Yes	NPW11.47950	Diethyl phthalate	Extract, GC/MS	EPA 625.1	NJ
Certified	Yes	NPW11.48100	Dimethyl phthalate	Extract, GC/MS	EPA 625.1	NJ
Certified	Yes	NPW11.48250	Dimethylphenol (2,4-)	Extract, GC/MS	EPA 625.1	NJ
Certified	Yes	NPW11.48300	Di-n-butyl phthalate	Extract, GC/MS	EPA 625.1	NJ
Certified	Yes	NPW11.48400	Dinitrophenol (2,4-)	Extract, GC/MS	EPA 625.1	NJ

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Category: NPW11--Organic Parameters - Chromatography/MS

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Certified	Yes	NPW11.48450	Dinitrophenol (2-methyl-4,6-)	Extract, GC/MS	EPA 625.1	NJ
Certified	Yes	NPW11.48500	Dinitrotoluene (2,4-)	Extract, GC/MS	EPA 625.1	NJ
Certified	Yes	NPW11.48550	Dinitrotoluene (2,6-)	Extract, GC/MS	EPA 625.1	NJ
Certified	Yes	NPW11.48600	Di-n-octyl phthalate	Extract, GC/MS	EPA 625.1	NJ
Certified	Yes	NPW11.48700	Diphenylhydrazine / Azobenzene	Extract, GC/MS	EPA 625.1	NJ
Certified	Yes	NPW11.49250	Fluoranthene	Extract, GC/MS	EPA 625.1	NJ
Certified	Yes	NPW11.49300	Fluorene	Extract, GC/MS	EPA 625.1	NJ
Certified	Yes	NPW11.49350	Hexachlorobenzene	Extract, GC/MS	EPA 625.1	NJ
Certified	Yes	NPW11.49400	Hexachlorobutadiene (1,3-)	Extract, GC/MS	EPA 625.1	NJ
Certified	Yes	NPW11.49450	Hexachlorocyclopentadiene	Extract, GC/MS	EPA 625.1	NJ
Certified	Yes	NPW11.49500	Hexachloroethane	Extract, GC/MS	EPA 625.1	NJ
Certified	Yes	NPW11.49700	Indeno(1,2,3-cd)pyrene	Extract, GC/MS	EPA 625.1	NJ
Certified	Yes	NPW11.49800	Isophorone	Extract, GC/MS	EPA 625.1	NJ
Certified	Yes	NPW11.50350	Methyl phenol (4-chloro-3-)	Extract, GC/MS	EPA 625.1	NJ
Certified	Yes	NPW11.50450	Methylnaphthalene (2-)	Extract, GC/MS	EPA 625.1	NJ
Certified	Yes	NPW11.50550	Methylphenol (2-)	Extract, GC/MS	EPA 625.1	NJ
Certified	Yes	NPW11.50650	Methylphenol (4-)	Extract, GC/MS	EPA 625.1	NJ
Certified	Yes	NPW11.50950	Naphthalene	Extract, GC/MS	EPA 625.1	NJ
Certified	Yes	NPW11.51150	Nitroaniline (2-)	Extract, GC/MS	EPA 625.1	NJ
Certified	Yes	NPW11.51200	Nitroaniline (3-)	Extract, GC/MS	EPA 625.1	NJ
Certified	Yes	NPW11.51250	Nitroaniline (4-)	Extract, GC/MS	EPA 625.1	NJ
Certified	Yes	NPW11.51300	Nitrobenzene	Extract, GC/MS	EPA 625.1	NJ
Certified	Yes	NPW11.51350	Nitrophenol (2-)	Extract, GC/MS	EPA 625.1	NJ
Certified	Yes	NPW11.51400	Nitrophenol (4-)	Extract, GC/MS	EPA 625.1	NJ
Certified	Yes	NPW11.51450	N-Nitrosodiethylamine	Extract, GC/MS	EPA 625.1	NJ
Certified	Yes	NPW11.51500	N-Nitrosodimethylamine	Extract, GC/MS	EPA 625.1	NJ
Certified	Yes	NPW11.51530	N-Nitroso-di-n-butylamine	Extract, GC/MS	EPA 625.1	NJ

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FAIRFIELD NJ 07004

Category: NPW11--Organic Parameters - Chromatography/MS

Status	Eligible to Report NJ Data	Code	Parameter	Technique	Approved Methods	Primary State
Certified	Yes	NPW11.51550	N-Nitroso-di-n-propylamine	Extract, GC/MS	EPA 625.1	NJ
Certified	Yes	NPW11.51600	N-Nitrosodiphenylamine / Diphenylamine	Extract, GC/MS	EPA 625.1	NJ
Certified	Yes	NPW11.51800	N-Nitrosopyrrolidine	Extract, GC/MS	EPA 625.1	NJ
Certified	Yes	NPW11.52300	Parathion ethyl (Parathion)	Extract, GC/MS	EPA 625.1	NJ
Certified	Yes	NPW11.52400	Pentachlorobenzene	Extract, GC/MS	EPA 625.1	NJ
Certified	Yes	NPW11.52550	Pentachlorophenol	Extract, GC/MS	EPA 625.1	NJ
Certified	Yes	NPW11.52700	Phenanthrene	Extract, GC/MS	EPA 625.1	NJ
Certified	Yes	NPW11.52750	Phenol	Extract, GC/MS	EPA 625.1	NJ
Certified	Yes	NPW11.53400	Pyrene	Extract, GC/MS	EPA 625.1	NJ
Certified	Yes	NPW11.55100	Tetrachlorobenzene (1,2,4,5-)	Extract, GC/MS	EPA 625.1	NJ
Certified	Yes	NPW11.55400	Trichlorobenzene (1,2,4-)	Extract, GC/MS	EPA 625.1	NJ
Certified	Yes	NPW11.55500	Trichlorophenol (2,4,5-)	Extract, GC/MS	EPA 625.1	NJ
Certified	Yes	NPW11.55550	Trichlorophenol (2,4,6-)	Extract, GC/MS	EPA 625.1	NJ
Applied	No	NPW11.56650	TCDD (2,3,7,8-)	GC/MS	EPA 625.1 (screen only)	NJ
Certified	Yes	NPW11.68750	Acetone	GC/MS, P & T or Direct Injection, Capillary	SW-846 8260D	NJ
Certified	Yes	NPW11.68850	Acrolein	GC/MS, P & T or Direct Injection, Capillary	SW-846 8260D	NJ
Certified	Yes	NPW11.68900	Acrylonitrile	GC/MS, P & T or Direct Injection, Capillary	SW-846 8260D	NJ
Certified	Yes	NPW11.69100	Benzene	GC/MS, P & T or Direct Injection, Capillary	SW-846 8260D	NJ
Certified	Yes	NPW11.69200	Bromobenzene	GC/MS, P & T or Direct Injection, Capillary	SW-846 8260D	NJ
Certified	Yes	NPW11.69250	Bromochloromethane	GC/MS, P & T or Direct Injection, Capillary	SW-846 8260D	NJ
Certified	Yes	NPW11.69300	Bromodichloromethane	GC/MS, P & T or Direct Injection, Capillary	SW-846 8260D	NJ
Certified	Yes	NPW11.69400	Bromoform	GC/MS, P & T or Direct Injection, Capillary	SW-846 8260D	NJ
Certified	Yes	NPW11.69450	Bromomethane	GC/MS, P & T or Direct Injection, Capillary	SW-846 8260D	NJ
Certified	Yes	NPW11.69650	Butanone (2-) (Methyl ethyl ketone)	GC/MS, P & T or Direct Injection, Capillary	SW-846 8260D	NJ
Certified	Yes	NPW11.69850	Butylbenzene (n-)	GC/MS, P & T or Direct Injection, Capillary	SW-846 8260D	NJ
Certified	Yes	NPW11.69900	Carbon disulfide	GC/MS, P & T or Direct Injection, Capillary	SW-846 8260D	NJ
Certified	Yes	NPW11.69950	Carbon tetrachloride	GC/MS, P & T or Direct Injection, Capillary	SW-846 8260D	NJ

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1275 BLOOMFIELD AVE
FAIRFIELD NJ 07004

Category: NPW11--Organic Parameters - Chromatography/MS

Status	Eligible to Report NJ Data	Code	Parameter	Technique	Approved Methods	Primary State
Certified	Yes	NPW11.70000	Chlorobenzene	GC/MS, P & T or Direct Injection, Capillary	SW-846 8260D	NJ
Certified	Yes	NPW11.70050	Chloroethane	GC/MS, P & T or Direct Injection, Capillary	SW-846 8260D	NJ
Certified	Yes	NPW11.70100	Chloroethyl vinyl ether (2-)	GC/MS, P & T or Direct Injection, Capillary	SW-846 8260D	NJ
Certified	Yes	NPW11.70150	Chloroform	GC/MS, P & T or Direct Injection, Capillary	SW-846 8260D	NJ
Certified	Yes	NPW11.70200	Chloromethane	GC/MS, P & T or Direct Injection, Capillary	SW-846 8260D	NJ
Certified	Yes	NPW11.70250	Chlorotoluene (2-)	GC/MS, P & T or Direct Injection, Capillary	SW-846 8260D	NJ
Certified	Yes	NPW11.70300	Chlorotoluene (4-)	GC/MS, P & T or Direct Injection, Capillary	SW-846 8260D	NJ
Certified	Yes	NPW11.70400	Cyclohexane	GC/MS, P & T or Direct Injection, Capillary	SW-846 8260D	NJ
Certified	Yes	NPW11.70500	Dibromo-3-chloropropane (1,2-)	GC/MS, P & T or Direct Injection, Capillary	SW-846 8260D	NJ
Certified	Yes	NPW11.70550	Dibromochloromethane	GC/MS, P & T or Direct Injection, Capillary	SW-846 8260D	NJ
Certified	Yes	NPW11.70600	Dibromoethane (1,2-) (EDB)	GC/MS, P & T or Direct Injection, Capillary	SW-846 8260D	NJ
Certified	Yes	NPW11.70650	Dibromomethane	GC/MS, P & T or Direct Injection, Capillary	SW-846 8260D	NJ
Certified	Yes	NPW11.70800	Dichlorobenzene (1,2-)	GC/MS, P & T or Direct Injection, Capillary	SW-846 8260D	NJ
Certified	Yes	NPW11.70850	Dichlorobenzene (1,3-)	GC/MS, P & T or Direct Injection, Capillary	SW-846 8260D	NJ
Certified	Yes	NPW11.70900	Dichlorobenzene (1,4-)	GC/MS, P & T or Direct Injection, Capillary	SW-846 8260D	NJ
Certified	Yes	NPW11.70950	Dichlorodifluoromethane	GC/MS, P & T or Direct Injection, Capillary	SW-846 8260D	NJ
Certified	Yes	NPW11.71000	Dichloroethane (1,1-)	GC/MS, P & T or Direct Injection, Capillary	SW-846 8260D	NJ
Certified	Yes	NPW11.71050	Dichloroethane (1,2-)	GC/MS, P & T or Direct Injection, Capillary	SW-846 8260D	NJ
Certified	Yes	NPW11.71100	Dichloroethene (1,1-)	GC/MS, P & T or Direct Injection, Capillary	SW-846 8260D	NJ
Certified	Yes	NPW11.71150	Dichloroethene (cis-1,2-)	GC/MS, P & T or Direct Injection, Capillary	SW-846 8260D	NJ
Certified	Yes	NPW11.71200	Dichloroethene (trans-1,2-)	GC/MS, P & T or Direct Injection, Capillary	SW-846 8260D	NJ
Certified	Yes	NPW11.71250	Dichloropropane (1,2-)	GC/MS, P & T or Direct Injection, Capillary	SW-846 8260D	NJ
Certified	Yes	NPW11.71300	Dichloropropane (1,3-)	GC/MS, P & T or Direct Injection, Capillary	SW-846 8260D	NJ
Certified	Yes	NPW11.71450	Dichloropropene (cis-1,3-)	GC/MS, P & T or Direct Injection, Capillary	SW-846 8260D	NJ
Certified	Yes	NPW11.71500	Dichloropropene (trans-1,3-)	GC/MS, P & T or Direct Injection, Capillary	SW-846 8260D	NJ
Certified	Yes	NPW11.71900	Ethylbenzene	GC/MS, P & T or Direct Injection, Capillary	SW-846 8260D	NJ
Certified	Yes	NPW11.72050	Hexachlorobutadiene (1,3-)	GC/MS, P & T or Direct Injection, Capillary	SW-846 8260D	NJ

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Laboratory Name: AQUA PRO-TECH LABORATORIES Laboratory Number: 07010 Activity ID: NLC 230001
1275 BLOOMFIELD AVE
FAIRFIELD NJ 07004

Category: NPW11--Organic Parameters - Chromatography/MS

Status	Eligible to Report NJ Data	Code	Parameter	Technique	Approved Methods	Primary State
Certified	Yes	NPW11.72200	Hexanone (2-)	GC/MS, P & T or Direct Injection, Capillary	SW-846 8260D	NJ
Certified	Yes	NPW11.72400	Isopropylbenzene	GC/MS, P & T or Direct Injection, Capillary	SW-846 8260D	NJ
Certified	Yes	NPW11.72450	Isopropyltoluene (4-)	GC/MS, P & T or Direct Injection, Capillary	SW-846 8260D	NJ
Certified	Yes	NPW11.72600	Methyl acrylate	GC/MS, P & T or Direct Injection, Capillary	SW-846 8260D	NJ
Certified	Yes	NPW11.72750	Methyl tert-butyl ether	GC/MS, P & T or Direct Injection, Capillary	SW-846 8260D	NJ
Certified	Yes	NPW11.72800	Methylcyclohexane	GC/MS, P & T or Direct Injection, Capillary	SW-846 8260D	NJ
Certified	Yes	NPW11.72850	Methylene chloride (Dichloromethane)	GC/MS, P & T or Direct Injection, Capillary	SW-846 8260D	NJ
Certified	Yes	NPW11.73000	Naphthalene	GC/MS, P & T or Direct Injection, Capillary	SW-846 8260D	NJ
Certified	Yes	NPW11.73350	Pentanone (4-methyl-2-) (MIBK)	GC/MS, P & T or Direct Injection, Capillary	SW-846 8260D	NJ
Certified	Yes	NPW11.73450	Propylbenzene (n-)	GC/MS, P & T or Direct Injection, Capillary	SW-846 8260D	NJ
Certified	Yes	NPW11.73500	Sec-butylbenzene	GC/MS, P & T or Direct Injection, Capillary	SW-846 8260D	NJ
Certified	Yes	NPW11.73550	Styrene	GC/MS, P & T or Direct Injection, Capillary	SW-846 8260D	NJ
Certified	Yes	NPW11.73700	Tert-butyl alcohol	GC/MS, P & T or Direct Injection, Capillary	SW-846 8260D	NJ
Certified	Yes	NPW11.73750	Tert-butylbenzene	GC/MS, P & T or Direct Injection, Capillary	SW-846 8260D	NJ
Certified	Yes	NPW11.73800	Tetrachloroethane (1,1,1,2-)	GC/MS, P & T or Direct Injection, Capillary	SW-846 8260D	NJ
Certified	Yes	NPW11.73850	Tetrachloroethane (1,1,2,2-)	GC/MS, P & T or Direct Injection, Capillary	SW-846 8260D	NJ
Certified	Yes	NPW11.73900	Tetrachloroethene	GC/MS, P & T or Direct Injection, Capillary	SW-846 8260D	NJ
Certified	Yes	NPW11.74000	Toluene	GC/MS, P & T or Direct Injection, Capillary	SW-846 8260D	NJ
Certified	Yes	NPW11.74100	Trichloro (1,1,2-) trifluoroethane (1,2,2-)	GC/MS, P & T or Direct Injection, Capillary	SW-846 8260D	NJ
Certified	Yes	NPW11.74150	Trichlorobenzene (1,2,3-)	GC/MS, P & T or Direct Injection, Capillary	SW-846 8260D	NJ
Certified	Yes	NPW11.74200	Trichlorobenzene (1,2,4-)	GC/MS, P & T or Direct Injection, Capillary	SW-846 8260D	NJ
Certified	Yes	NPW11.74250	Trichloroethane (1,1,1-)	GC/MS, P & T or Direct Injection, Capillary	SW-846 8260D	NJ
Certified	Yes	NPW11.74300	Trichloroethane (1,1,2-)	GC/MS, P & T or Direct Injection, Capillary	SW-846 8260D	NJ
Certified	Yes	NPW11.74350	Trichloroethene	GC/MS, P & T or Direct Injection, Capillary	SW-846 8260D	NJ
Certified	Yes	NPW11.74400	Trichlorofluoromethane	GC/MS, P & T or Direct Injection, Capillary	SW-846 8260D	NJ
Certified	Yes	NPW11.74450	Trichloropropane (1,2,3-)	GC/MS, P & T or Direct Injection, Capillary	SW-846 8260D	NJ
Certified	Yes	NPW11.74550	Trimethylbenzene (1,2,4-)	GC/MS, P & T or Direct Injection, Capillary	SW-846 8260D	NJ

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Certified	Yes	NPW11.74600	Trimethylbenzene (1,3,5-)	GC/MS, P & T or Direct Injection, Capillary	SW-846 8260D	NJ
Certified	Yes	NPW11.74750	Vinyl chloride	GC/MS, P & T or Direct Injection, Capillary	SW-846 8260D	NJ
Certified	Yes	NPW11.74950	Xylenes (total)	GC/MS, P & T or Direct Injection, Capillary	SW-846 8260D	NJ
Certified	Yes	NPW11.75150	Acenaphthene	GC/MS, Extract or Dir Inj, Capillary	SW-846 8270E	NJ
Certified	Yes	NPW11.75200	Acenaphthylene	GC/MS, Extract or Dir Inj, Capillary	SW-846 8270E	NJ
Certified	Yes	NPW11.75250	Acetophenone	GC/MS, Extract or Dir Inj, Capillary	SW-846 8270E	NJ
Certified	Yes	NPW11.75600	Aniline	GC/MS, Extract or Dir Inj, Capillary	SW-846 8270E	NJ
Certified	Yes	NPW11.75650	Anthracene	GC/MS, Extract or Dir Inj, Capillary	SW-846 8270E	NJ
Certified	Yes	NPW11.75750	Atrazine	GC/MS, Extract or Dir Inj, Capillary	SW-846 8270E	NJ
Certified	Yes	NPW11.75850	Benzaldehyde	GC/MS, Extract or Dir Inj, Capillary	SW-846 8270E	NJ
Certified	Yes	NPW11.75950	Benzidine	GC/MS, Extract or Dir Inj, Capillary	SW-846 8270E	NJ
Certified	Yes	NPW11.76000	Benzo(a)anthracene	GC/MS, Extract or Dir Inj, Capillary	SW-846 8270E	NJ
Certified	Yes	NPW11.76050	Benzo(a)pyrene	GC/MS, Extract or Dir Inj, Capillary	SW-846 8270E	NJ
Certified	Yes	NPW11.76100	Benzo(b)fluoranthene	GC/MS, Extract or Dir Inj, Capillary	SW-846 8270E	NJ
Certified	Yes	NPW11.76150	Benzo(ghi)perylene	GC/MS, Extract or Dir Inj, Capillary	SW-846 8270E	NJ
Certified	Yes	NPW11.76250	Benzo(k)fluoranthene	GC/MS, Extract or Dir Inj, Capillary	SW-846 8270E	NJ
Certified	Yes	NPW11.76300	Benzoic acid	GC/MS, Extract or Dir Inj, Capillary	SW-846 8270E	NJ
Certified	Yes	NPW11.76400	Benzyl alcohol	GC/MS, Extract or Dir Inj, Capillary	SW-846 8270E	NJ
Certified	Yes	NPW11.76550	Biphenyl (1,1'-)	GC/MS, Extract or Dir Inj, Capillary	SW-846 8270E	NJ
Certified	Yes	NPW11.76600	Bis (2-chloroethoxy) methane	GC/MS, Extract or Dir Inj, Capillary	SW-846 8270E	NJ
Certified	Yes	NPW11.76650	Bis (2-chloroethyl) ether	GC/MS, Extract or Dir Inj, Capillary	SW-846 8270E	NJ
Certified	Yes	NPW11.76700	Bis(2-chloroisopropyl)ether|2,2'-oxybis(1-chloropropane)	GC/MS, Extract or Dir Inj, Capillary	SW-846 8270E	NJ
Certified	Yes	NPW11.76750	Bis (2-ethylhexyl) phthalate	GC/MS, Extract or Dir Inj, Capillary	SW-846 8270E	NJ
Certified	Yes	NPW11.76800	Bromophenyl-phenyl ether (4-)	GC/MS, Extract or Dir Inj, Capillary	SW-846 8270E	NJ
Certified	Yes	NPW11.76850	Butylbenzylphthalate	GC/MS, Extract or Dir Inj, Capillary	SW-846 8270E	NJ
Certified	Yes	NPW11.76900	Caprolactam	GC/MS, Extract or Dir Inj, Capillary	SW-846 8270E	NJ
Certified	Yes	NPW11.76950	Carbazole	GC/MS, Extract or Dir Inj, Capillary	SW-846 8270E	NJ

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Laboratory Name: AQUA PRO-TECH LABORATORIES Laboratory Number: 07010 Activity ID: NLC 230001
1275 BLOOMFIELD AVE
FAIRFIELD NJ 07004

Category: NPW11--Organic Parameters - Chromatography/MS

Status	Eligible to Report NJ Data	Code	Parameter	Technique	Approved Methods	Primary State
Certified	Yes	NPW11.77150	Chloroaniline (4-)	GC/MS, Extract or Dir Inj, Capillary	SW-846 8270E	NJ
Certified	Yes	NPW11.77300	Chloronaphthalene (2-)	GC/MS, Extract or Dir Inj, Capillary	SW-846 8270E	NJ
Certified	Yes	NPW11.77350	Chlorophenol (2-)	GC/MS, Extract or Dir Inj, Capillary	SW-846 8270E	NJ
Certified	Yes	NPW11.77400	Chlorophenyl-phenyl ether (4-)	GC/MS, Extract or Dir Inj, Capillary	SW-846 8270E	NJ
Certified	Yes	NPW11.77450	Chrysene	GC/MS, Extract or Dir Inj, Capillary	SW-846 8270E	NJ
Certified	Yes	NPW11.78000	Dibenzo(a,h)anthracene	GC/MS, Extract or Dir Inj, Capillary	SW-846 8270E	NJ
Certified	Yes	NPW11.78200	Dibenzofuran	GC/MS, Extract or Dir Inj, Capillary	SW-846 8270E	NJ
Certified	Yes	NPW11.78250	Dichlorobenzene (1,2-)	GC/MS, Extract or Dir Inj, Capillary	SW-846 8270E	NJ
Certified	Yes	NPW11.78300	Dichlorobenzene (1,3-)	GC/MS, Extract or Dir Inj, Capillary	SW-846 8270E	NJ
Certified	Yes	NPW11.78350	Dichlorobenzene (1,4-)	GC/MS, Extract or Dir Inj, Capillary	SW-846 8270E	NJ
Certified	Yes	NPW11.78400	Dichlorobenzidine (3,3'-)	GC/MS, Extract or Dir Inj, Capillary	SW-846 8270E	NJ
Certified	Yes	NPW11.78450	Dichlorophenol (2,4-)	GC/MS, Extract or Dir Inj, Capillary	SW-846 8270E	NJ
Certified	Yes	NPW11.78600	Diethyl phthalate	GC/MS, Extract or Dir Inj, Capillary	SW-846 8270E	NJ
Certified	Yes	NPW11.78750	Dimethyl phthalate	GC/MS, Extract or Dir Inj, Capillary	SW-846 8270E	NJ
Certified	Yes	NPW11.79100	Dimethylphenol (2,4-)	GC/MS, Extract or Dir Inj, Capillary	SW-846 8270E	NJ
Certified	Yes	NPW11.79150	Di-n-butyl phthalate	GC/MS, Extract or Dir Inj, Capillary	SW-846 8270E	NJ
Certified	Yes	NPW11.79300	Dinitrophenol (2,4-)	GC/MS, Extract or Dir Inj, Capillary	SW-846 8270E	NJ
Certified	Yes	NPW11.79350	Dinitrophenol (2-methyl-4,6-)	GC/MS, Extract or Dir Inj, Capillary	SW-846 8270E	NJ
Certified	Yes	NPW11.79400	Dinitrotoluene (2,4-)	GC/MS, Extract or Dir Inj, Capillary	SW-846 8270E	NJ
Certified	Yes	NPW11.79450	Dinitrotoluene (2,6-)	GC/MS, Extract or Dir Inj, Capillary	SW-846 8270E	NJ
Certified	Yes	NPW11.79500	Di-n-octyl phthalate	GC/MS, Extract or Dir Inj, Capillary	SW-846 8270E	NJ
Certified	Yes	NPW11.79650	Diphenylhydrazine / Azobenzene	GC/MS, Extract or Dir Inj, Capillary	SW-846 8270E	NJ
Certified	Yes	NPW11.80150	Fluoranthene	GC/MS, Extract or Dir Inj, Capillary	SW-846 8270E	NJ
Certified	Yes	NPW11.80200	Fluorene	GC/MS, Extract or Dir Inj, Capillary	SW-846 8270E	NJ
Certified	Yes	NPW11.80350	Hexachlorobenzene	GC/MS, Extract or Dir Inj, Capillary	SW-846 8270E	NJ
Certified	Yes	NPW11.80400	Hexachlorobutadiene (1,3-)	GC/MS, Extract or Dir Inj, Capillary	SW-846 8270E	NJ
Certified	Yes	NPW11.80450	Hexachlorocyclopentadiene	GC/MS, Extract or Dir Inj, Capillary	SW-846 8270E	NJ

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1275 BLOOMFIELD AVE
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Category: NPW11--Organic Parameters - Chromatography/MS

Status	Eligible to Report NJ Data	Code	Parameter	Technique	Approved Methods	Primary State
Certified	Yes	NPW11.80500	Hexachloroethane	GC/MS, Extract or Dir Inj, Capillary	SW-846 8270E	NJ
Certified	Yes	NPW11.80750	Indeno(1,2,3-cd)pyrene	GC/MS, Extract or Dir Inj, Capillary	SW-846 8270E	NJ
Certified	Yes	NPW11.80850	Isophorone	GC/MS, Extract or Dir Inj, Capillary	SW-846 8270E	NJ
Certified	Yes	NPW11.81300	Methyl phenol (4-chloro-3-)	GC/MS, Extract or Dir Inj, Capillary	SW-846 8270E	NJ
Certified	Yes	NPW11.81450	Methylnaphthalene (2-)	GC/MS, Extract or Dir Inj, Capillary	SW-846 8270E	NJ
Certified	Yes	NPW11.81500	Methylphenol (2-)	GC/MS, Extract or Dir Inj, Capillary	SW-846 8270E	NJ
Certified	Yes	NPW11.81550	Methylphenol (3-)	GC/MS, Extract or Dir Inj, Capillary	SW-846 8270E	NJ
Certified	Yes	NPW11.81600	Methylphenol (4-)	GC/MS, Extract or Dir Inj, Capillary	SW-846 8270E	NJ
Certified	Yes	NPW11.81650	Naphthalene	GC/MS, Extract or Dir Inj, Capillary	SW-846 8270E	NJ
Certified	Yes	NPW11.81850	Nitroaniline (2-)	GC/MS, Extract or Dir Inj, Capillary	SW-846 8270E	NJ
Certified	Yes	NPW11.81900	Nitroaniline (3-)	GC/MS, Extract or Dir Inj, Capillary	SW-846 8270E	NJ
Certified	Yes	NPW11.81950	Nitroaniline (4-)	GC/MS, Extract or Dir Inj, Capillary	SW-846 8270E	NJ
Certified	Yes	NPW11.82000	Nitrobenzene	GC/MS, Extract or Dir Inj, Capillary	SW-846 8270E	NJ
Certified	Yes	NPW11.82100	Nitrophenol (2-)	GC/MS, Extract or Dir Inj, Capillary	SW-846 8270E	NJ
Certified	Yes	NPW11.82150	Nitrophenol (4-)	GC/MS, Extract or Dir Inj, Capillary	SW-846 8270E	NJ
Certified	Yes	NPW11.82250	N-Nitrosodimethylamine	GC/MS, Extract or Dir Inj, Capillary	SW-846 8270E	NJ
Certified	Yes	NPW11.82350	N-Nitroso-di-n-propylamine	GC/MS, Extract or Dir Inj, Capillary	SW-846 8270E	NJ
Certified	Yes	NPW11.82400	N-Nitrosodiphenylamine / Diphenylamine	GC/MS, Extract or Dir Inj, Capillary	SW-846 8270E	NJ
Certified	Yes	NPW11.83300	Pentachlorophenol	GC/MS, Extract or Dir Inj, Capillary	SW-846 8270E	NJ
Certified	Yes	NPW11.83400	Phenanthrene	GC/MS, Extract or Dir Inj, Capillary	SW-846 8270E	NJ
Certified	Yes	NPW11.83450	Phenol	GC/MS, Extract or Dir Inj, Capillary	SW-846 8270E	NJ
Certified	Yes	NPW11.83850	Pyrene	GC/MS, Extract or Dir Inj, Capillary	SW-846 8270E	NJ
Certified	Yes	NPW11.83900	Pyridine	GC/MS, Extract or Dir Inj, Capillary	SW-846 8270E	NJ
Applied	No	NPW11.84350	Tetrachlorobenzene (1,2,4,5-)	GC/MS, Extract or Dir Inj, Capillary	SW-846 8270E	NJ
Certified	Yes	NPW11.84650	Trichlorobenzene (1,2,4-)	GC/MS, Extract or Dir Inj, Capillary	SW-846 8270E	NJ
Certified	Yes	NPW11.84700	Trichlorophenol (2,4,5-)	GC/MS, Extract or Dir Inj, Capillary	SW-846 8270E	NJ
Certified	Yes	NPW11.84750	Trichlorophenol (2,4,6-)	GC/MS, Extract or Dir Inj, Capillary	SW-846 8270E	NJ

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FAIRFIELD NJ 07004

Category: NPW11--Organic Parameters - Chromatography/MS

Status	Eligible to Report NJ Data	Code	Parameter	Technique	Approved Methods	Primary State
Applied	No	NPW11.85050	Benzo(a)anthracene	GC/MS/SIM, Extract or Dir Inj, Capillary	SW-846 8270E	NJ
Certified	Yes	NPW11.85100	Benzo(a)pyrene	GC/MS/SIM, Extract or Dir Inj, Capillary	SW-846 8270E	NJ
Certified	Yes	NPW11.85150	Benzo(b)fluoranthene	GC/MS/SIM, Extract or Dir Inj, Capillary	SW-846 8270E	NJ
Certified	Yes	NPW11.85250	Benzo(k)fluoranthene	GC/MS/SIM, Extract or Dir Inj, Capillary	SW-846 8270E	NJ
Certified	Yes	NPW11.85350	Dibenzo(a,h)anthracene	GC/MS/SIM, Extract or Dir Inj, Capillary	SW-846 8270E	NJ
Certified	Yes	NPW11.85550	Dioxane (1,4-)	GC/MS/SIM, Extract or Dir Inj, Capillary	SW-846 8270E	NJ
Certified	Yes	NPW11.85700	Hexachlorobenzene	GC/MS/SIM, Extract or Dir Inj, Capillary	SW-846 8270E	NJ
Certified	Yes	NPW11.85850	Indeno(1,2,3-cd)pyrene	GC/MS/SIM, Extract or Dir Inj, Capillary	SW-846 8270E	NJ
Certified	Yes	NPW11.86100	N-Nitrosodimethylamine	GC/MS/SIM, Extract or Dir Inj, Capillary	SW-846 8270E	NJ
Certified	Yes	NPW11.86150	Pentachlorophenol	GC/MS/SIM, Extract or Dir Inj, Capillary	SW-846 8270E	NJ

Category: NPW16--NPW - Lab Developed/Non-Std Methods

Status	Eligible to Report NJ Data	Code	Parameter	Technique	Approved Methods	Primary State
Certified	Yes	NPW16.05000	11-chloroeicosafluoro-3-oxaundecane-1-sulfonic acid	LC MS/MS, Electrospray Ionization, Isotope Dilution	User Defined SOP Mod 533 Rev 2.1 Eff 6/21	NJ
Certified	Yes	NPW16.05200	4,8-dioxa-3H-perfluorononanoic acid	LC MS/MS, Electrospray Ionization, Isotope Dilution	User Defined SOP Mod 533 Rev 2.1 Eff 6/21	NJ
Certified	Yes	NPW16.05250	9-chlorohexadecafluoro-3-oxanonane-1-sulfonic acid	LC MS/MS, Electrospray Ionization, Isotope Dilution	User Defined SOP Mod 533 Rev 2.1 Eff 6/21	NJ
Certified	Yes	NPW16.05300	Hexafluoropropylene oxide dimer acid	LC MS/MS, Electrospray Ionization, Isotope Dilution	User Defined SOP Mod 533 Rev 2.1 Eff 6/21	NJ
Certified	Yes	NPW16.05350	Perfluorobutanesulfonic acid	LC MS/MS, Electrospray Ionization, Isotope Dilution	User Defined SOP Mod 533 Rev 2.1 Eff 6/21	NJ
Certified	Yes	NPW16.05450	Perfluorodecanoic acid	LC MS/MS, Electrospray Ionization, Isotope Dilution	User Defined SOP Mod 533 Rev 2.1 Eff 6/21	NJ
Certified	Yes	NPW16.05500	Perfluorododecanoic acid	LC MS/MS, Electrospray Ionization, Isotope Dilution	User Defined SOP Mod 533 Rev 2.1 Eff 6/21	NJ

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Category: NPW16--NPW - Lab Developed/Non-Std Methods

Status	Eligible to Report NJ Data	Code	Parameter	Technique	Approved Methods	Primary State
Certified	Yes	NPW16.05600	Perfluoroheptanoic acid	LC MS/MS, Electrospray Ionization, Isotope Dilution	User Defined SOP Mod 533 Rev 2.1 Eff 6/21	NJ
Certified	Yes	NPW16.05700	Perfluorohexanesulfonic acid	LC MS/MS, Electrospray Ionization, Isotope Dilution	User Defined SOP Mod 533 Rev 2.1 Eff 6/21	NJ
Certified	Yes	NPW16.05750	Perfluorohexanoic acid	LC MS/MS, Electrospray Ionization, Isotope Dilution	User Defined SOP Mod 533 Rev 2.1 Eff 6/21	NJ
Certified	Yes	NPW16.05800	Perfluorooctanesulfonic acid (PFOS)	LC MS/MS, Electrospray Ionization, Isotope Dilution	User Defined SOP Mod 533 Rev 2.1 Eff 6/21	NJ
Certified	Yes	NPW16.05850	Perfluorononanoic acid	LC MS/MS, Electrospray Ionization, Isotope Dilution	User Defined SOP Mod 533 Rev 2.1 Eff 6/21	NJ
Certified	Yes	NPW16.05950	Perfluorooctanoic acid (PFOA)	LC MS/MS, Electrospray Ionization, Isotope Dilution	User Defined SOP Mod 533 Rev 2.1 Eff 6/21	NJ
Certified	Yes	NPW16.06150	Perfluoroundecanoic acid	LC MS/MS, Electrospray Ionization, Isotope Dilution	User Defined SOP Mod 533 Rev 2.1 Eff 6/21	NJ
Certified	Yes	NPW16.06200	Perfluorotetradecanoic acid	LC MS/MS, Electrospray Ionization, Isotope Dilution	User Defined SOP Mod 533 Rev 2.1 Eff 6/21	NJ
Certified	Yes	NPW16.06300	N-ethylperfluorooctanesulfonamidoacetic acid	LC MS/MS, Electrospray Ionization, Isotope Dilution	User Defined SOP Mod 533 Rev 2.1 Eff 6/21	NJ
Certified	Yes	NPW16.06350	N-methylperfluorooctanesulfonamidoacetic acid	LC MS/MS, Electrospray Ionization, Isotope Dilution	User Defined SOP Mod 533 Rev 2.1 Eff 6/21	NJ

Category: SCM02--Characteristics of Hazardous Waste

Status	Eligible to Report NJ Data	Code	Parameter	Technique	Approved Methods	Primary State
Certified	Yes	SCM02.00450	Free liquid	Flow-Through Paint Filter, Observation	SW-846 9095B	NJ
Certified	Yes	SCM02.00560	Flash Point	Pensky-Martens	SW-846 1010B	NJ
Certified	Yes	SCM02.00800	pH - soil and waste	Mix with Water or Calcium Chlorides	SW-846 9045D	NJ

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Category: SCM03--Inorganic Parameters and Preparation

Status	Eligible to Report NJ Data	Code	Parameter	Technique	Approved Methods	Primary State
Certified	Yes	SCM03.00900	Chloride	Ion Chromatography	SW-846 9056A	NJ
Certified	Yes	SCM03.01150	Cyanide	Distillation	SW-846 9010C	NJ
Certified	Yes	SCM03.01500	Cyanide	Titrimetric/Manual Spectrophotometric	SW-846 9014	NJ
Certified	Yes	SCM03.01950	Fluoride	Ion Chromatography	SW-846 9056A	NJ
Certified	Yes	SCM03.02700	Nitrate	Ion Chromatography	SW-846 9056A	NJ
Certified	Yes	SCM03.03100	Nitrite	Ion Chromatography	SW-846 9056A	NJ
Certified	Yes	SCM03.03200	Oil & grease - sludge-hem	Extraction & Gravimetric	SW-846 9071B	NJ
Certified	Yes	SCM03.04200	Sulfate	Ion Chromatography	SW-846 9056A	NJ
Certified	Yes	SCM03.04250	Sulfate	Turbidimetric	SW-846 9038	NJ

Category: SCM05--Metals - SCM Preparation Methods

Status	Eligible to Report NJ Data	Code	Parameter	Technique	Approved Methods	Primary State
Certified	Yes	SCM05.00050	Metals	Acid Digestion, Soil Sediment & Sludge	SW-846 3050B	NJ
Certified	Yes	SCM05.00100	Metals	Chromium VI Digestion	SW-846 3060A	NJ
Certified	Yes	SCM05.00600	Metals	TCLP, Toxicity Procedure, Shaker	SW-846 1311	NJ

Category: SCM06--Metals

Status	Eligible to Report NJ Data	Code	Parameter	Technique	Approved Methods	Primary State
Certified	Yes	SCM06.02600	Chromium (VI)	Colorimetric	SW-846 7196A	NJ
Certified	Yes	SCM06.02800	Mercury - solid waste	AA, Manual Cold Vapor	SW-846 7471B	NJ
Certified	Yes	SCM06.02850	Mercury - solid waste	AA, Thermal Decomposition, Amalgamation	SW-846 7473	NJ

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Category: SCM07--Metals - ICP, ICP/MS and DCP

Status	Eligible to Report NJ Data	Code	Parameter	Technique	Approved Methods	Primary State
Certified	Yes	SCM07.00001	Aluminum	ICP	SW-846 6010D	NJ
Certified	Yes	SCM07.00050	Antimony	ICP	SW-846 6010D	NJ
Certified	Yes	SCM07.00100	Arsenic	ICP	SW-846 6010D	NJ
Certified	Yes	SCM07.00150	Barium	ICP	SW-846 6010D	NJ
Certified	Yes	SCM07.00200	Beryllium	ICP	SW-846 6010D	NJ
Certified	Yes	SCM07.00300	Cadmium	ICP	SW-846 6010D	NJ
Certified	Yes	SCM07.00350	Calcium	ICP	SW-846 6010D	NJ
Certified	Yes	SCM07.00400	Chromium	ICP	SW-846 6010D	NJ
Certified	Yes	SCM07.00450	Cobalt	ICP	SW-846 6010D	NJ
Certified	Yes	SCM07.00500	Copper	ICP	SW-846 6010D	NJ
Certified	Yes	SCM07.00550	Iron	ICP	SW-846 6010D	NJ
Certified	Yes	SCM07.00600	Lead	ICP	SW-846 6010D	NJ
Certified	Yes	SCM07.00700	Magnesium	ICP	SW-846 6010D	NJ
Certified	Yes	SCM07.00750	Manganese	ICP	SW-846 6010D	NJ
Certified	Yes	SCM07.00800	Molybdenum	ICP	SW-846 6010D	NJ
Certified	Yes	SCM07.00850	Nickel	ICP	SW-846 6010D	NJ
Certified	Yes	SCM07.00950	Potassium	ICP	SW-846 6010D	NJ
Certified	Yes	SCM07.01000	Selenium	ICP	SW-846 6010D	NJ
Certified	Yes	SCM07.01050	Silver	ICP	SW-846 6010D	NJ
Certified	Yes	SCM07.01100	Sodium	ICP	SW-846 6010D	NJ
Certified	Yes	SCM07.01150	Strontium	ICP	SW-846 6010D	NJ
Certified	Yes	SCM07.01200	Thallium	ICP	SW-846 6010D	NJ
Certified	Yes	SCM07.01450	Vanadium	ICP	SW-846 6010D	NJ
Certified	Yes	SCM07.01500	Zinc	ICP	SW-846 6010D	NJ

Category: SCM08--Organics - SCM Prep. / Screening Methods

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Status	Eligible to Report NJ Data	Code	Parameter	Technique	Approved Methods	Primary State
Certified	Yes	SCM08.00400	Organics	Synthetic PPT Leachate Procedure	SW-846 1312	NJ
Certified	Yes	SCM08.00500	Organics	Waste Dilution	SW-846 3580A	NJ
Certified	Yes	SCM08.00700	Semivolatile organics	TCLP, Toxicity Procedure, Shaker	SW-846 1311	NJ
Certified	Yes	SCM08.00900	Semivolatile organics	Microwave Extraction	SW-846 3546	NJ
Certified	Yes	SCM08.00950	Semivolatile organics	Ultrasonic Extraction	SW-846 3550C	NJ
Certified	Yes	SCM08.01350	Semivolatile organics	Cleanup-Florisil	SW-846 3620C	NJ
Dropped	No	SCM08.01450	Semivolatile organics	Cleanup-Gel Permeation	SW-846 3640A	NJ
Certified	Yes	SCM08.01550	Semivolatile organics	Cleanup-Sulfur Removal	SW-846 3660B	NJ
Certified	Yes	SCM08.01600	Semivolatile organics	Cleanup-Sulfuric Acid/KMnO4	SW-846 3665A	NJ
Certified	Yes	SCM08.01850	Volatile organics	TCLP, Toxicity Procedure, ZHE	SW-846 1311	NJ
Certified	Yes	SCM08.02050	Volatile organics - high conc.	Methanol Extract, Closed System P & T	SW-846 5035A	NJ
Certified	Yes	SCM08.02100	Volatile organics - low conc.	Closed System Purge & Trap	SW-846 5035A	NJ

Category: SCM09–Organic Parameters - Chromatography

Status	Eligible to Report NJ Data	Code	Parameter	Technique	Approved Methods	Primary State
Certified	Yes	SCM09.00150	Extractable Petroleum Hydrocarbons	Extraction, GC, FID	Other NJDEP EPH 10/08, Rev. 3	NJ
Certified	Yes	SCM09.00450	Diesel range organic	Extraction, GC, FID	SW-846 8015D	NJ
Certified	Yes	SCM09.00500	Gasoline range organic	GC P&T, FID	SW-846 8015D	NJ
Certified	Yes	SCM09.05650	Aldrin	GC, Extraction, ECD or HECD, Capillary	SW-846 8081B	NJ
Certified	Yes	SCM09.05700	Alpha BHC	GC, Extraction, ECD or HECD, Capillary	SW-846 8081B	NJ
Certified	Yes	SCM09.05800	Beta BHC	GC, Extraction, ECD or HECD, Capillary	SW-846 8081B	NJ
Applied	No	SCM09.05850	Chlordane (alpha) (cis-)	GC, Extraction, ECD or HECD, Capillary	SW-846 8081B	NJ
Applied	No	SCM09.05900	Chlordane (gamma) (trans-)	GC, Extraction, ECD or HECD, Capillary	SW-846 8081B	NJ
Certified	Yes	SCM09.05950	Chlordane (technical)	GC, Extraction, ECD or HECD, Capillary	SW-846 8081B	NJ
Certified	Yes	SCM09.06300	DDD (4,4'-)	GC, Extraction, ECD or HECD, Capillary	SW-846 8081B	NJ
Certified	Yes	SCM09.06350	DDE (4,4'-)	GC, Extraction, ECD or HECD, Capillary	SW-846 8081B	NJ

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Category: SCM09--Organic Parameters - Chromatography

Status	Eligible to Report NJ Data	Code	Parameter	Technique	Approved Methods	Primary State
Certified	Yes	SCM09.06400	DDT (4,4'-)	GC, Extraction, ECD or HECD, Capillary	SW-846 8081B	NJ
Certified	Yes	SCM09.06450	Delta BHC	GC, Extraction, ECD or HECD, Capillary	SW-846 8081B	NJ
Certified	Yes	SCM09.06500	Dieldrin	GC, Extraction, ECD or HECD, Capillary	SW-846 8081B	NJ
Certified	Yes	SCM09.06550	Endosulfan I	GC, Extraction, ECD or HECD, Capillary	SW-846 8081B	NJ
Certified	Yes	SCM09.06600	Endosulfan II	GC, Extraction, ECD or HECD, Capillary	SW-846 8081B	NJ
Certified	Yes	SCM09.06650	Endosulfan sulfate	GC, Extraction, ECD or HECD, Capillary	SW-846 8081B	NJ
Certified	Yes	SCM09.06700	Endrin	GC, Extraction, ECD or HECD, Capillary	SW-846 8081B	NJ
Certified	Yes	SCM09.06750	Endrin aldehyde	GC, Extraction, ECD or HECD, Capillary	SW-846 8081B	NJ
Certified	Yes	SCM09.06800	Endrin ketone	GC, Extraction, ECD or HECD, Capillary	SW-846 8081B	NJ
Certified	Yes	SCM09.06900	Heptachlor	GC, Extraction, ECD or HECD, Capillary	SW-846 8081B	NJ
Certified	Yes	SCM09.06950	Heptachlor epoxide	GC, Extraction, ECD or HECD, Capillary	SW-846 8081B	NJ
Certified	Yes	SCM09.07100	Lindane (gamma BHC)	GC, Extraction, ECD or HECD, Capillary	SW-846 8081B	NJ
Certified	Yes	SCM09.07150	Methoxychlor	GC, Extraction, ECD or HECD, Capillary	SW-846 8081B	NJ
Certified	Yes	SCM09.07500	Toxaphene	GC, Extraction, ECD or HECD, Capillary	SW-846 8081B	NJ
Certified	Yes	SCM09.08700	PCB 1016	GC, Extraction, ECD or HECD, Capillary	SW-846 8082A	NJ
Certified	Yes	SCM09.08750	PCB 1221	GC, Extraction, ECD or HECD, Capillary	SW-846 8082A	NJ
Certified	Yes	SCM09.08800	PCB 1232	GC, Extraction, ECD or HECD, Capillary	SW-846 8082A	NJ
Certified	Yes	SCM09.08850	PCB 1242	GC, Extraction, ECD or HECD, Capillary	SW-846 8082A	NJ
Certified	Yes	SCM09.08900	PCB 1248	GC, Extraction, ECD or HECD, Capillary	SW-846 8082A	NJ
Certified	Yes	SCM09.08950	PCB 1254	GC, Extraction, ECD or HECD, Capillary	SW-846 8082A	NJ
Certified	Yes	SCM09.09000	PCB 1260	GC, Extraction, ECD or HECD, Capillary	SW-846 8082A	NJ
Certified	Yes	SCM09.09050	PCB 1262	GC, Extraction, ECD or HECD, Capillary	SW-846 8082A	NJ
Certified	Yes	SCM09.09100	PCB 1268	GC, Extraction, ECD or HECD, Capillary	SW-846 8082A	NJ
Certified	Yes	SCM09.15400	D (2,4-)	GC, Extraction, ECD, Capillary	SW-846 8151A	NJ
Certified	Yes	SCM09.16550	TP (2,4,5-) (Silvex)	GC, Extraction, ECD, Capillary	SW-846 8151A	NJ

New Jersey Department of Environment Protection
Environmental Laboratory Certification Program

Annual Certified Parameter List and Current Status

Effective as of 07/01/2023 until 6/30/2024

Laboratory Name: AQUA PRO-TECH LABORATORIES Laboratory Number: 07010 Activity ID: NLC 230001
1275 BLOOMFIELD AVE
FAIRFIELD NJ 07004

Category: SCM10--Organic Parameters - Chromatography/MS

Status	Eligible to Report NJ Data	Code	Parameter	Technique	Approved Methods	Primary State
Certified	Yes	SCM10.22900	Acetone	GC/MS, P & T or Direct Injection, Capillary	SW-846 8260D	NJ
Certified	Yes	SCM10.23000	Acrolein	GC/MS, P & T or Direct Injection, Capillary	SW-846 8260D	NJ
Certified	Yes	SCM10.23050	Acrylonitrile	GC/MS, P & T or Direct Injection, Capillary	SW-846 8260D	NJ
Certified	Yes	SCM10.23200	Benzene	GC/MS, P & T or Direct Injection, Capillary	SW-846 8260D	NJ
Certified	Yes	SCM10.23300	Bromobenzene	GC/MS, P & T or Direct Injection, Capillary	SW-846 8260D	NJ
Certified	Yes	SCM10.23350	Bromochloromethane	GC/MS, P & T or Direct Injection, Capillary	SW-846 8260D	NJ
Certified	Yes	SCM10.23400	Bromodichloromethane	GC/MS, P & T or Direct Injection, Capillary	SW-846 8260D	NJ
Certified	Yes	SCM10.23500	Bromoform	GC/MS, P & T or Direct Injection, Capillary	SW-846 8260D	NJ
Certified	Yes	SCM10.23550	Bromomethane	GC/MS, P & T or Direct Injection, Capillary	SW-846 8260D	NJ
Certified	Yes	SCM10.23650	Butanone (2-) (Methyl ethyl ketone)	GC/MS, P & T or Direct Injection, Capillary	SW-846 8260D	NJ
Certified	Yes	SCM10.23800	Butylbenzene (n-)	GC/MS, P & T or Direct Injection, Capillary	SW-846 8260D	NJ
Certified	Yes	SCM10.23850	Carbon disulfide	GC/MS, P & T or Direct Injection, Capillary	SW-846 8260D	NJ
Certified	Yes	SCM10.23900	Carbon tetrachloride	GC/MS, P & T or Direct Injection, Capillary	SW-846 8260D	NJ
Certified	Yes	SCM10.23950	Chlorobenzene	GC/MS, P & T or Direct Injection, Capillary	SW-846 8260D	NJ
Certified	Yes	SCM10.24000	Chloroethane	GC/MS, P & T or Direct Injection, Capillary	SW-846 8260D	NJ
Certified	Yes	SCM10.24050	Chloroethyl vinyl ether (2-)	GC/MS, P & T or Direct Injection, Capillary	SW-846 8260D	NJ
Certified	Yes	SCM10.24100	Chloroform	GC/MS, P & T or Direct Injection, Capillary	SW-846 8260D	NJ
Certified	Yes	SCM10.24150	Chloromethane	GC/MS, P & T or Direct Injection, Capillary	SW-846 8260D	NJ
Certified	Yes	SCM10.24200	Chlorotoluene (2-)	GC/MS, P & T or Direct Injection, Capillary	SW-846 8260D	NJ
Certified	Yes	SCM10.24250	Chlorotoluene (4-)	GC/MS, P & T or Direct Injection, Capillary	SW-846 8260D	NJ
Certified	Yes	SCM10.24330	Cyclohexane	GC/MS, P & T, or Direct Injection, Capillary	SW-846 8260D	NJ
Certified	Yes	SCM10.24400	Dibromo-3-chloropropane (1,2-)	GC/MS, P & T or Direct Injection, Capillary	SW-846 8260D	NJ
Certified	Yes	SCM10.24450	Dibromochloromethane	GC/MS, P & T or Direct Injection, Capillary	SW-846 8260D	NJ
Certified	Yes	SCM10.24500	Dibromoethane (1,2-) (EDB)	GC/MS, P & T or Direct Injection, Capillary	SW-846 8260D	NJ
Certified	Yes	SCM10.24550	Dibromomethane	GC/MS, P & T or Direct Injection, Capillary	SW-846 8260D	NJ
Certified	Yes	SCM10.24700	Dichlorobenzene (1,2-)	GC/MS, P & T or Direct Injection, Capillary	SW-846 8260D	NJ
Certified	Yes	SCM10.24750	Dichlorobenzene (1,3-)	GC/MS, P & T or Direct Injection, Capillary	SW-846 8260D	NJ

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Laboratory Name: AQUA PRO-TECH LABORATORIES Laboratory Number: 07010 Activity ID: NLC 230001
1275 BLOOMFIELD AVE
FAIRFIELD NJ 07004

Category: SCM10–Organic Parameters - Chromatography/MS

Status	Eligible to Report NJ Data	Code	Parameter	Technique	Approved Methods	Primary State
Certified	Yes	SCM10.24800	Dichlorobenzene (1,4-)	GC/MS, P & T or Direct Injection, Capillary	SW-846 8260D	NJ
Certified	Yes	SCM10.24850	Dichlorodifluoromethane	GC/MS, P & T or Direct Injection, Capillary	SW-846 8260D	NJ
Certified	Yes	SCM10.24900	Dichloroethane (1,1-)	GC/MS, P & T or Direct Injection, Capillary	SW-846 8260D	NJ
Certified	Yes	SCM10.24950	Dichloroethane (1,2-)	GC/MS, P & T or Direct Injection, Capillary	SW-846 8260D	NJ
Certified	Yes	SCM10.25000	Dichloroethene (1,1-)	GC/MS, P & T or Direct Injection, Capillary	SW-846 8260D	NJ
Certified	Yes	SCM10.25050	Dichloroethene (cis-1,2-)	GC/MS, P & T or Direct Injection, Capillary	SW-846 8260D	NJ
Certified	Yes	SCM10.25100	Dichloroethene (trans-1,2-)	GC/MS, P & T or Direct Injection, Capillary	SW-846 8260D	NJ
Certified	Yes	SCM10.25150	Dichloropropane (1,2-)	GC/MS, P & T or Direct Injection, Capillary	SW-846 8260D	NJ
Certified	Yes	SCM10.25200	Dichloropropane (1,3-)	GC/MS, P & T or Direct Injection, Capillary	SW-846 8260D	NJ
Certified	Yes	SCM10.25350	Dichloropropene (cis-1,3-)	GC/MS, P & T or Direct Injection, Capillary	SW-846 8260D	NJ
Certified	Yes	SCM10.25400	Dichloropropene (trans-1,3-)	GC/MS, P & T or Direct Injection, Capillary	SW-846 8260D	NJ
Certified	Yes	SCM10.25750	Ethylbenzene	GC/MS, P & T or Direct Injection, Capillary	SW-846 8260D	NJ
Certified	Yes	SCM10.25850	Hexachlorobutadiene (1,3-)	GC/MS, P & T or Direct Injection, Capillary	SW-846 8260D	NJ
Certified	Yes	SCM10.25950	Hexanone (2-)	GC/MS, P & T or Direct Injection, Capillary	SW-846 8260D	NJ
Certified	Yes	SCM10.26150	Isopropylbenzene	GC/MS, P & T or Direct Injection, Capillary	SW-846 8260D	NJ
Certified	Yes	SCM10.26200	Isopropyltoluene (4-)	GC/MS, P & T or Direct Injection, Capillary	SW-846 8260D	NJ
Certified	Yes	SCM10.26300	Methyl acrylate	GC/MS, P & T or Direct Injection, Capillary	SW-846 8260D	NJ
Certified	Yes	SCM10.26330	Methylcyclohexane	GC/MS, P & T, or Direct Injection, Capillary	SW-846 8260D	NJ
Certified	Yes	SCM10.26450	Methyl tert-butyl ether	GC/MS, P & T or Direct Injection, Capillary	SW-846 8260D	NJ
Certified	Yes	SCM10.26500	Methylene chloride (Dichloromethane)	GC/MS, P & T or Direct Injection, Capillary	SW-846 8260D	NJ
Certified	Yes	SCM10.26650	Naphthalene	GC/MS, P & T or Direct Injection, Capillary	SW-846 8260D	NJ
Certified	Yes	SCM10.26850	Pentanone (4-methyl-2-) (MIBK)	GC/MS, P & T or Direct Injection, Capillary	SW-846 8260D	NJ
Certified	Yes	SCM10.26950	Propylbenzene (n-)	GC/MS, P & T or Direct Injection, Capillary	SW-846 8260D	NJ
Certified	Yes	SCM10.27000	Sec-butylbenzene	GC/MS, P & T or Direct Injection, Capillary	SW-846 8260D	NJ
Certified	Yes	SCM10.27050	Styrene	GC/MS, P & T or Direct Injection, Capillary	SW-846 8260D	NJ
Certified	Yes	SCM10.27200	Tert-butyl alcohol	GC/MS, P & T or Direct Injection, Capillary	SW-846 8260D	NJ
Certified	Yes	SCM10.27250	Tert-butylbenzene	GC/MS, P & T or Direct Injection, Capillary	SW-846 8260D	NJ

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1275 BLOOMFIELD AVE
FAIRFIELD NJ 07004

Category: SCM10–Organic Parameters - Chromatography/MS

Status	Eligible to Report NJ Data	Code	Parameter	Technique	Approved Methods	Primary State
Certified	Yes	SCM10.27300	Tetrachloroethane (1,1,1,2-)	GC/MS, P & T or Direct Injection, Capillary	SW-846 8260D	NJ
Certified	Yes	SCM10.27350	Tetrachloroethane (1,1,2,2-)	GC/MS, P & T or Direct Injection, Capillary	SW-846 8260D	NJ
Certified	Yes	SCM10.27400	Tetrachloroethene	GC/MS, P & T or Direct Injection, Capillary	SW-846 8260D	NJ
Certified	Yes	SCM10.27500	Toluene	GC/MS, P & T or Direct Injection, Capillary	SW-846 8260D	NJ
Certified	Yes	SCM10.27600	Trichloro (1,1,2-) trifluoroethane (1,2,2-)	GC/MS, P & T or Direct Injection, Capillary	SW-846 8260D	NJ
Certified	Yes	SCM10.27650	Trichlorobenzene (1,2,3-)	GC/MS, P & T or Direct Injection, Capillary	SW-846 8260D	NJ
Certified	Yes	SCM10.27700	Trichlorobenzene (1,2,4-)	GC/MS, P & T or Direct Injection, Capillary	SW-846 8260D	NJ
Certified	Yes	SCM10.27750	Trichloroethane (1,1,1-)	GC/MS, P & T or Direct Injection, Capillary	SW-846 8260D	NJ
Certified	Yes	SCM10.27800	Trichloroethane (1,1,2-)	GC/MS, P & T or Direct Injection, Capillary	SW-846 8260D	NJ
Certified	Yes	SCM10.27850	Trichloroethene	GC/MS, P & T or Direct Injection, Capillary	SW-846 8260D	NJ
Certified	Yes	SCM10.27900	Trichlorofluoromethane	GC/MS, P & T or Direct Injection, Capillary	SW-846 8260D	NJ
Certified	Yes	SCM10.27950	Trichloropropane (1,2,3-)	GC/MS, P & T or Direct Injection, Capillary	SW-846 8260D	NJ
Certified	Yes	SCM10.28000	Trimethylbenzene (1,2,4-)	GC/MS, P & T or Direct Injection, Capillary	SW-846 8260D	NJ
Certified	Yes	SCM10.28050	Trimethylbenzene (1,3,5-)	GC/MS, P & T or Direct Injection, Capillary	SW-846 8260D	NJ
Certified	Yes	SCM10.28200	Vinyl chloride	GC/MS, P & T or Direct Injection, Capillary	SW-846 8260D	NJ
Certified	Yes	SCM10.28400	Xylenes (total)	GC/MS, P & T or Direct Injection, Capillary	SW-846 8260D	NJ
Certified	Yes	SCM10.28900	Acenaphthene	GC/MS, Extract or Dir Inj, Capillary	SW-846 8270E	NJ
Certified	Yes	SCM10.28950	Acenaphthylene	GC/MS, Extract or Dir Inj, Capillary	SW-846 8270E	NJ
Certified	Yes	SCM10.29000	Acetophenone	GC/MS, Extract or Dir Inj, Capillary	SW-846 8270E	NJ
Certified	Yes	SCM10.29350	Aniline	GC/MS, Extract or Dir Inj, Capillary	SW-846 8270E	NJ
Certified	Yes	SCM10.29450	Anthracene	GC/MS, Extract or Dir Inj, Capillary	SW-846 8270E	NJ
Certified	Yes	SCM10.29550	Atrazine	GC/MS, Extract or Dir Inj, Capillary	SW-846 8270E	NJ
Certified	Yes	SCM10.29650	Benzaldehyde	GC/MS, Extract or Dir Inj, Capillary	SW-846 8270E	NJ
Certified	Yes	SCM10.29750	Benzidine	GC/MS, Extract or Dir Inj, Capillary	SW-846 8270E	NJ
Certified	Yes	SCM10.29800	Benzo(a)anthracene	GC/MS, Extract or Dir Inj, Capillary	SW-846 8270E	NJ
Certified	Yes	SCM10.29850	Benzo(a)pyrene	GC/MS, Extract or Dir Inj, Capillary	SW-846 8270E	NJ
Certified	Yes	SCM10.29900	Benzo(b)fluoranthene	GC/MS, Extract or Dir Inj, Capillary	SW-846 8270E	NJ

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Laboratory Name: AQUA PRO-TECH LABORATORIES Laboratory Number: 07010 Activity ID: NLC 230001
1275 BLOOMFIELD AVE
FAIRFIELD NJ 07004

Category: SCM10--Organic Parameters - Chromatography/MS

Status	Eligible to Report NJ Data	Code	Parameter	Technique	Approved Methods	Primary State
Certified	Yes	SCM10.29950	Benzo(ghi)perylene	GC/MS, Extract or Dir Inj, Capillary	SW-846 8270E	NJ
Certified	Yes	SCM10.30050	Benzo(k)fluoranthene	GC/MS, Extract or Dir Inj, Capillary	SW-846 8270E	NJ
Certified	Yes	SCM10.30100	Benzoic acid	GC/MS, Extract or Dir Inj, Capillary	SW-846 8270E	NJ
Certified	Yes	SCM10.30200	Benzyl alcohol	GC/MS, Extract or Dir Inj, Capillary	SW-846 8270E	NJ
Certified	Yes	SCM10.30350	Biphenyl (1,1'-)	GC/MS, Extract or Dir Inj, Capillary	SW-846 8270E	NJ
Certified	Yes	SCM10.30400	Bis (2-chloroethoxy) methane	GC/MS, Extract or Dir Inj, Capillary	SW-846 8270E	NJ
Certified	Yes	SCM10.30450	Bis (2-chloroethyl) ether	GC/MS, Extract or Dir Inj, Capillary	SW-846 8270E	NJ
Certified	Yes	SCM10.30500	Bis(2-chloroisopropyl)ether|2,2'-oxybis(1-chloropropane)	GC/MS, Extract or Dir Inj, Capillary	SW-846 8270E	NJ
Certified	Yes	SCM10.30550	Bis (2-ethylhexyl) phthalate	GC/MS, Extract or Dir Inj, Capillary	SW-846 8270E	NJ
Certified	Yes	SCM10.30600	Bromophenyl-phenyl ether (4-)	GC/MS, Extract or Dir Inj, Capillary	SW-846 8270E	NJ
Certified	Yes	SCM10.30650	Butylbenzylphthalate	GC/MS, Extract or Dir Inj, Capillary	SW-846 8270E	NJ
Certified	Yes	SCM10.30700	Caprolactam	GC/MS, Extract or Dir Inj, Capillary	SW-846 8270E	NJ
Certified	Yes	SCM10.30750	Carbazole	GC/MS, Extract or Dir Inj, Capillary	SW-846 8270E	NJ
Certified	Yes	SCM10.30950	Chloroaniline (4-)	GC/MS, Extract or Dir Inj, Capillary	SW-846 8270E	NJ
Certified	Yes	SCM10.31100	Chloronaphthalene (2-)	GC/MS, Extract or Dir Inj, Capillary	SW-846 8270E	NJ
Certified	Yes	SCM10.31150	Chlorophenol (2-)	GC/MS, Extract or Dir Inj, Capillary	SW-846 8270E	NJ
Certified	Yes	SCM10.31200	Chlorophenyl-phenyl ether (4-)	GC/MS, Extract or Dir Inj, Capillary	SW-846 8270E	NJ
Certified	Yes	SCM10.31250	Chrysene	GC/MS, Extract or Dir Inj, Capillary	SW-846 8270E	NJ
Certified	Yes	SCM10.31800	Dibenzo(a,h)anthracene	GC/MS, Extract or Dir Inj, Capillary	SW-846 8270E	NJ
Certified	Yes	SCM10.32000	Dibenzofuran	GC/MS, Extract or Dir Inj, Capillary	SW-846 8270E	NJ
Certified	Yes	SCM10.32050	Dichlorobenzene (1,2-)	GC/MS, Extract or Dir Inj, Capillary	SW-846 8270E	NJ
Certified	Yes	SCM10.32100	Dichlorobenzene (1,3-)	GC/MS, Extract or Dir Inj, Capillary	SW-846 8270E	NJ
Certified	Yes	SCM10.32150	Dichlorobenzene (1,4-)	GC/MS, Extract or Dir Inj, Capillary	SW-846 8270E	NJ
Certified	Yes	SCM10.32200	Dichlorobenzidine (3,3'-)	GC/MS, Extract or Dir Inj, Capillary	SW-846 8270E	NJ
Certified	Yes	SCM10.32250	Dichlorophenol (2,4-)	GC/MS, Extract or Dir Inj, Capillary	SW-846 8270E	NJ
Certified	Yes	SCM10.32400	Diethyl phthalate	GC/MS, Extract or Dir Inj, Capillary	SW-846 8270E	NJ
Certified	Yes	SCM10.32550	Dimethyl phthalate	GC/MS, Extract or Dir Inj, Capillary	SW-846 8270E	NJ

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1275 BLOOMFIELD AVE
FAIRFIELD NJ 07004

Category: SCM10--Organic Parameters - Chromatography/MS

Status	Eligible to Report NJ Data	Code	Parameter	Technique	Approved Methods	Primary State
Certified	Yes	SCM10.32900	Dimethylphenol (2,4-)	GC/MS, Extract or Dir Inj, Capillary	SW-846 8270E	NJ
Certified	Yes	SCM10.32950	Di-n-butyl phthalate	GC/MS, Extract or Dir Inj, Capillary	SW-846 8270E	NJ
Certified	Yes	SCM10.33100	Dinitrophenol (2,4-)	GC/MS, Extract or Dir Inj, Capillary	SW-846 8270E	NJ
Certified	Yes	SCM10.33150	Dinitrophenol (2-methyl-4,6-)	GC/MS, Extract or Dir Inj, Capillary	SW-846 8270E	NJ
Certified	Yes	SCM10.33200	Dinitrotoluene (2,4-)	GC/MS, Extract or Dir Inj, Capillary	SW-846 8270E	NJ
Certified	Yes	SCM10.33250	Dinitrotoluene (2,6-)	GC/MS, Extract or Dir Inj, Capillary	SW-846 8270E	NJ
Certified	Yes	SCM10.33300	Di-n-octyl phthalate	GC/MS, Extract or Dir Inj, Capillary	SW-846 8270E	NJ
Certified	Yes	SCM10.33400	Dioxane (1,4-)	GC/MS, Extract or Dir Inj, Capillary	SW-846 8270E	NJ
Certified	Yes	SCM10.33450	Diphenylhydrazine / Azobenzene	GC/MS, Extract or Dir Inj, Capillary	SW-846 8270E	NJ
Certified	Yes	SCM10.33950	Fluoranthene	GC/MS, Extract or Dir Inj, Capillary	SW-846 8270E	NJ
Certified	Yes	SCM10.34000	Fluorene	GC/MS, Extract or Dir Inj, Capillary	SW-846 8270E	NJ
Certified	Yes	SCM10.34150	Hexachlorobenzene	GC/MS, Extract or Dir Inj, Capillary	SW-846 8270E	NJ
Certified	Yes	SCM10.34200	Hexachlorobutadiene (1,3-)	GC/MS, Extract or Dir Inj, Capillary	SW-846 8270E	NJ
Certified	Yes	SCM10.34250	Hexachlorocyclopentadiene	GC/MS, Extract or Dir Inj, Capillary	SW-846 8270E	NJ
Certified	Yes	SCM10.34300	Hexachloroethane	GC/MS, Extract or Dir Inj, Capillary	SW-846 8270E	NJ
Certified	Yes	SCM10.34550	Indeno(1,2,3-cd)pyrene	GC/MS, Extract or Dir Inj, Capillary	SW-846 8270E	NJ
Certified	Yes	SCM10.34650	Isophorone	GC/MS, Extract or Dir Inj, Capillary	SW-846 8270E	NJ
Certified	Yes	SCM10.35100	Methyl phenol (4-chloro-3-)	GC/MS, Extract or Dir Inj, Capillary	SW-846 8270E	NJ
Certified	Yes	SCM10.35250	Methylnaphthalene (2-)	GC/MS, Extract or Dir Inj, Capillary	SW-846 8270E	NJ
Certified	Yes	SCM10.35300	Methylphenol (2-)	GC/MS, Extract or Dir Inj, Capillary	SW-846 8270E	NJ
Certified	Yes	SCM10.35350	Methylphenol (3-)	GC/MS, Extract or Dir Inj, Capillary	SW-846 8270E	NJ
Certified	Yes	SCM10.35400	Methylphenol (4-)	GC/MS, Extract or Dir Inj, Capillary	SW-846 8270E	NJ
Certified	Yes	SCM10.35450	Naphthalene	GC/MS, Extract or Dir Inj, Capillary	SW-846 8270E	NJ
Certified	Yes	SCM10.35650	Nitroaniline (2-)	GC/MS, Extract or Dir Inj, Capillary	SW-846 8270E	NJ
Certified	Yes	SCM10.35700	Nitroaniline (3-)	GC/MS, Extract or Dir Inj, Capillary	SW-846 8270E	NJ
Certified	Yes	SCM10.35750	Nitroaniline (4-)	GC/MS, Extract or Dir Inj, Capillary	SW-846 8270E	NJ
Certified	Yes	SCM10.35800	Nitrobenzene	GC/MS, Extract or Dir Inj, Capillary	SW-846 8270E	NJ

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1275 BLOOMFIELD AVE
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Category: SCM10--Organic Parameters - Chromatography/MS

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Certified	Yes	SCM10.35900	Nitrophenol (2-)	GC/MS, Extract or Dir Inj, Capillary	SW-846 8270E	NJ
Certified	Yes	SCM10.35950	Nitrophenol (4-)	GC/MS, Extract or Dir Inj, Capillary	SW-846 8270E	NJ
Certified	Yes	SCM10.36050	N-Nitrosodimethylamine	GC/MS, Extract or Dir Inj, Capillary	SW-846 8270E	NJ
Certified	Yes	SCM10.36150	N-Nitroso-di-n-propylamine	GC/MS, Extract or Dir Inj, Capillary	SW-846 8270E	NJ
Certified	Yes	SCM10.36200	N-Nitrosodiphenylamine / Diphenylamine	GC/MS, Extract or Dir Inj, Capillary	SW-846 8270E	NJ
Certified	Yes	SCM10.37100	Pentachlorophenol	GC/MS, Extract or Dir Inj, Capillary	SW-846 8270E	NJ
Certified	Yes	SCM10.37200	Phenanthrene	GC/MS, Extract or Dir Inj, Capillary	SW-846 8270E	NJ
Certified	Yes	SCM10.37250	Phenol	GC/MS, Extract or Dir Inj, Capillary	SW-846 8270E	NJ
Certified	Yes	SCM10.37650	Pyrene	GC/MS, Extract or Dir Inj, Capillary	SW-846 8270E	NJ
Certified	Yes	SCM10.37700	Pyridine	GC/MS, Extract or Dir Inj, Capillary	SW-846 8270E	NJ
Applied	No	SCM10.38150	Tetrachlorobenzene (1,2,4,5-)	GC/MS, Extract or Dir Inj, Capillary	SW-846 8270E	NJ
Certified	Yes	SCM10.38450	Trichlorobenzene (1,2,4-)	GC/MS, Extract or Dir Inj, Capillary	SW-846 8270E	NJ
Certified	Yes	SCM10.38500	Trichlorophenol (2,4,5-)	GC/MS, Extract or Dir Inj, Capillary	SW-846 8270E	NJ
Certified	Yes	SCM10.38550	Trichlorophenol (2,4,6-)	GC/MS, Extract or Dir Inj, Capillary	SW-846 8270E	NJ

Michele M. Potter, Manager

KEY: AE = Air and Emissions, BT = Biological Tissues, DW = Drinking Water, NPW = Non-Potable Water, SCM = Solid and Chemical Materials

State of New Jersey

Department of Environmental Protection

Certifies That

PACE ANALYTICAL SERVICES, LLC-FAIRFIELD

Laboratory Certification ID #07010

is hereby approved as a

Nationally Accredited Environmental Laboratory

to perform the analyses as indicated on the Annual Certified Parameter List which must accompany this certificate to be valid

having duly met the requirements of the

Regulations Governing the Certification of Laboratories and Environmental Measurements N.J.A.C. 7:18 et. seq.

and

having been found compliant with the 2016 TNI Standard approved by the

The NELAC Institute

Expires June 30, 2024

Robert Doyce for M.P.

Michele M. Potter
Manager

NJDEP is a NELAP Recognized Accreditation Body

This certificate is to be conspicuously displayed at the laboratory with the annual certified parameter list in a location on the premises visible to the public. Consumers are urged to verify the laboratory's current accreditation status with the State of NJ, NELAP.

New Jersey Department of Environment Protection
Environmental Laboratory Certification Program

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Laboratory Name: PACE ANALYTICAL SERVICES, LLC-FAIRFIELD Laboratory Number: 07010 Activity ID: NLC 230009
1275 BLOOMFIELD AVE
FAIRFIELD NJ 07004

Category: DW01 --Microbiology

Status	Eligible to Report NJ Data	Code	Parameter	Technique	Approved Methods	Primary State
Certified	Yes	DW01.00350	Heterotrophic bacteria	Pour Plate	SM 9215 B	NJ
Certified	Yes	DW01.00500	Total coliform / E. coli	ONPG-MUG (Colilert/Colilert-18) (P-A)	SM 9223 B	NJ
Certified	Yes	DW01.00550	Total coliform / E. coli	ONPG-MUG (Colilert/Colilert-18), Enumeration	SM 9223 B, Multi-well Procedure	NJ
Certified	Yes	DW01.01250	Total coliform / E. coli	Membrane Filter (MF) Technique (P-A)	SM 9222 B plus 9221 F	NJ

Category: DW03 --Inorganic Parameters

Status	Eligible to Report NJ Data	Code	Parameter	Technique	Approved Methods	Primary State
Certified	Yes	DW03.00050	Alkalinity	Electrometric Titration	SM 2320 B	NJ
Certified	Yes	DW03.01800	Chloride	Ion Chromatography	EPA 300.0	NJ
Certified	Yes	DW03.02550	Color	Platinum-Cobalt	SM 2120 B	NJ
Certified	Yes	DW03.02700	Conductivity	Conductance	SM 2510 B	NJ
Certified	Yes	DW03.03050	Cyanide	Spectrophotometric, Distill, Manual	SM 4500-CN C, E	NJ
Certified	Yes	DW03.03350	Dissolved organic carbon (DOC)	Persulfate-UV, Filtration	SM 5310 C	NJ
Certified	Yes	DW03.03750	Fluoride	Ion Chromatography	EPA 300.0	NJ
Certified	Yes	DW03.03950	Foaming agents	Methylene Blue	SM 5540 C	NJ
Certified	Yes	DW03.04350	Nitrate	Automated Cadmium Reduction	SM 4500-NO3 F	NJ
Applied	No	DW03.04600	Nitrate	Ion Chromatography	EPA 300.0	NJ
Certified	Yes	DW03.05350	Nitrite	Auto, Bypass Cadmium Reduction	SM 4500-NO3 F	NJ
Certified	Yes	DW03.05450	Nitrite	Ion Chromatography	EPA 300.0	NJ
Certified	Yes	DW03.05850	Odor	Consistent Series	SM 2150 B	NJ
Certified	Yes	DW03.05950	Orthophosphate	Colorimetric	SM 4500-P E	NJ
Certified	Yes	DW03.06900	Sulfate	Ion Chromatography	EPA 300.0	NJ
Applied	No	DW03.07050	Sulfate	Turbidity, Spectrophotometric	ASTM D516	NJ
Certified	Yes	DW03.07150	Total dissolved solids (TDS)	Gravimetric At 180	SM 2540 C	NJ

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Category: DW03 --Inorganic Parameters

Status	Eligible to Report NJ Data	Code	Parameter	Technique	Approved Methods	Primary State
Certified	Yes	DW03.07550	Total organic carbon (TOC)	Persulfate-UV	SM 5310 C	NJ
Certified	Yes	DW03.07800	Turbidity	Nephelometric	EPA 180.1	NJ

Category: DW04 --Analyze Immed, Cont Monitor and/or PWTA

Status	Eligible to Report NJ Data	Code	Parameter	Technique	Approved Methods	Primary State
Certified	Yes	DW04.00300	Chlorine - total, free or combined	DPD, Colorimetric	SM 4500-Cl G	NJ
Certified	Yes	DW04.01050	pH	Electrometric	SM 4500-H B	NJ
Certified	Yes	DW04.01200	Temperature	Thermometric	SM 2550 B	NJ

Category: DW06 --Metals

Status	Eligible to Report NJ Data	Code	Parameter	Technique	Approved Methods	Primary State
Certified	Yes	DW06.01500	Mercury	Manual Cold Vapor	EPA 245.1	NJ
Applied	No	DW06.03350	Silica	Molybdosilicate	SM 4500-Si D (18th/19th Ed.)	NJ

Category: DW07 --Metals - ICP, ICP/MS and DCP

Status	Eligible to Report NJ Data	Code	Parameter	Technique	Approved Methods	Primary State
Certified	Yes	DW07.00950	Aluminum	ICP	EPA 200.7	NJ
Certified	Yes	DW07.01000	Barium	ICP	EPA 200.7	NJ
Certified	Yes	DW07.01050	Beryllium	ICP	EPA 200.7	NJ

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Category: DW07 --Metals - ICP, ICP/MS and DCP

Status	Eligible to Report NJ Data	Code	Parameter	Technique	Approved Methods	Primary State
Certified	Yes	DW07.01150	Cadmium	ICP	EPA 200.7	NJ
Certified	Yes	DW07.01200	Calcium	ICP	EPA 200.7	NJ
Certified	Yes	DW07.01250	Chromium	ICP	EPA 200.7	NJ
Certified	Yes	DW07.01350	Copper	ICP	EPA 200.7	NJ
Certified	Yes	DW07.01400	Iron	ICP	EPA 200.7	NJ
Certified	Yes	DW07.01500	Magnesium	ICP	EPA 200.7	NJ
Certified	Yes	DW07.01550	Manganese	ICP	EPA 200.7	NJ
Certified	Yes	DW07.01650	Nickel	ICP	EPA 200.7	NJ
Certified	Yes	DW07.01800	Silver	ICP	EPA 200.7	NJ
Certified	Yes	DW07.01850	Sodium	ICP	EPA 200.7	NJ
Certified	Yes	DW07.02100	Zinc	ICP	EPA 200.7	NJ
Certified	Yes	DW07.02150	Aluminum	ICP/MS	EPA 200.8	NJ
Certified	Yes	DW07.02200	Antimony	ICP/MS	EPA 200.8	NJ
Certified	Yes	DW07.02250	Arsenic	ICP/MS	EPA 200.8	NJ
Certified	Yes	DW07.02300	Barium	ICP/MS	EPA 200.8	NJ
Certified	Yes	DW07.02350	Beryllium	ICP/MS	EPA 200.8	NJ
Certified	Yes	DW07.02400	Cadmium	ICP/MS	EPA 200.8	NJ
Certified	Yes	DW07.02450	Chromium	ICP/MS	EPA 200.8	NJ
Certified	Yes	DW07.02550	Copper	ICP/MS	EPA 200.8	NJ
Certified	Yes	DW07.02600	Lead	ICP/MS	EPA 200.8	NJ
Certified	Yes	DW07.02650	Manganese	ICP/MS	EPA 200.8	NJ
Certified	Yes	DW07.02800	Nickel	ICP/MS	EPA 200.8	NJ
Certified	Yes	DW07.02850	Selenium	ICP/MS	EPA 200.8	NJ
Certified	Yes	DW07.02900	Silver	ICP/MS	EPA 200.8	NJ
Certified	Yes	DW07.02950	Thallium	ICP/MS	EPA 200.8	NJ
Certified	Yes	DW07.03000	Uranium	ICP/MS	EPA 200.8	NJ
Certified	Yes	DW07.03100	Zinc	ICP/MS	EPA 200.8	NJ

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Category: DW07 --Metals - ICP, ICP/MS and DCP

Status	Eligible to Report NJ Data	Code	Parameter	Technique	Approved Methods	Primary State
Certified	Yes	DW07.03200	Total hardness	Hardness By Calculation, ICP	SM 2340 B	NJ

Category: DW08 --Organic Parameters - Chromatography

Status	Eligible to Report NJ Data	Code	Parameter	Technique	Approved Methods	Primary State
Certified	Yes	DW08.03550	Dibromo-3-chloropropane (1,2-)	Solvent Extract, GC	EPA 504.1	NJ
Certified	Yes	DW08.03600	Dibromoethane (1,2-) (EDB)	Solvent Extract, GC	EPA 504.1	NJ
Certified	Yes	DW08.03650	Trichloropropane (1,2,3-)	Solvent Extract, GC	EPA 504.1	NJ
Certified	Yes	DW08.17550	Bromochloroacetic acid	Liquid/Liquid Extraction/GC	EPA 552.2	NJ
Certified	Yes	DW08.17750	Dibromoacetic acid	Liquid/Liquid Extraction/GC	EPA 552.2	NJ
Certified	Yes	DW08.17800	Dichloroacetic acid	Liquid/Liquid Extraction/GC	EPA 552.2	NJ
Certified	Yes	DW08.17850	Monobromoacetic acid (MBAA)	Liquid/Liquid Extraction/GC	EPA 552.2	NJ
Certified	Yes	DW08.17900	Monochloroacetic acid (MCAA)	Liquid/Liquid Extraction/GC	EPA 552.2	NJ
Certified	Yes	DW08.18000	Trichloroacetic acid	Liquid/Liquid Extraction/GC	EPA 552.2	NJ

Category: DW09 --Organic Parameters - Chromatography/MS

Status	Eligible to Report NJ Data	Code	Parameter	Technique	Approved Methods	Primary State
Applied	No	DW09.11400	Dioxane (1,4-)	SPE, GC/MS/SIM	EPA 522	NJ
Certified	Yes	DW09.11450	Acetone	GC/MS, P & T	EPA 524.2	NJ
Certified	Yes	DW09.11500	Acrylonitrile	GC/MS, P & T	EPA 524.2	NJ
Certified	Yes	DW09.11550	Allyl chloride	GC/MS, P & T	EPA 524.2	NJ
Certified	Yes	DW09.11600	Benzene	GC/MS, P & T	EPA 524.2	NJ
Certified	Yes	DW09.11650	Bromobenzene	GC/MS, P & T	EPA 524.2	NJ

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Category: DW09 --Organic Parameters - Chromatography/MS

Status	Eligible to Report NJ Data	Code	Parameter	Technique	Approved Methods	Primary State
Certified	Yes	DW09.11700	Bromochloromethane	GC/MS, P & T	EPA 524.2	NJ
Certified	Yes	DW09.11750	Bromodichloromethane	GC/MS, P & T	EPA 524.2	NJ
Certified	Yes	DW09.11800	Bromoform	GC/MS, P & T	EPA 524.2	NJ
Certified	Yes	DW09.11850	Bromomethane	GC/MS, P & T	EPA 524.2	NJ
Certified	Yes	DW09.11900	Butanone (2-) (Methyl ethyl ketone)	GC/MS, P & T	EPA 524.2	NJ
Certified	Yes	DW09.11950	Butylbenzene (n-)	GC/MS, P & T	EPA 524.2	NJ
Certified	Yes	DW09.12000	Carbon disulfide	GC/MS, P & T	EPA 524.2	NJ
Certified	Yes	DW09.12050	Carbon tetrachloride	GC/MS, P & T	EPA 524.2	NJ
Certified	Yes	DW09.12100	Chloroacetonitrile	GC/MS, P & T	EPA 524.2	NJ
Certified	Yes	DW09.12150	Chlorobenzene	GC/MS, P & T	EPA 524.2	NJ
Certified	Yes	DW09.12200	Chlorobutane (1-)	GC/MS, P & T	EPA 524.2	NJ
Certified	Yes	DW09.12250	Chloroethane	GC/MS, P & T	EPA 524.2	NJ
Certified	Yes	DW09.12300	Chloroform	GC/MS, P & T	EPA 524.2	NJ
Certified	Yes	DW09.12350	Chloromethane	GC/MS, P & T	EPA 524.2	NJ
Certified	Yes	DW09.12400	Chlorotoluene (2-)	GC/MS, P & T	EPA 524.2	NJ
Certified	Yes	DW09.12450	Chlorotoluene (4-)	GC/MS, P & T	EPA 524.2	NJ
Certified	Yes	DW09.12500	Dibromo-3-chloropropane (1,2-)	GC/MS, P & T	EPA 524.2	NJ
Certified	Yes	DW09.12550	Dibromochloromethane	GC/MS, P & T	EPA 524.2	NJ
Certified	Yes	DW09.12600	Dibromoethane (1,2-) (EDB)	GC/MS, P & T	EPA 524.2	NJ
Certified	Yes	DW09.12650	Dibromomethane	GC/MS, P & T	EPA 524.2	NJ
Certified	Yes	DW09.12700	Dichloro-2-butene (trans-1,4-)	GC/MS, P & T	EPA 524.2	NJ
Certified	Yes	DW09.12750	Dichlorobenzene (1,2-)	GC/MS, P & T	EPA 524.2	NJ
Certified	Yes	DW09.12800	Dichlorobenzene (1,3-)	GC/MS, P & T	EPA 524.2	NJ
Certified	Yes	DW09.12850	Dichlorobenzene (1,4-)	GC/MS, P & T	EPA 524.2	NJ
Certified	Yes	DW09.12900	Dichlorodifluoromethane	GC/MS, P & T	EPA 524.2	NJ
Certified	Yes	DW09.12950	Dichloroethane (1,1-)	GC/MS, P & T	EPA 524.2	NJ
Certified	Yes	DW09.13000	Dichloroethane (1,2-)	GC/MS, P & T	EPA 524.2	NJ

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FAIRFIELD NJ 07004

Category: DW09 --Organic Parameters - Chromatography/MS

Status	Eligible to Report NJ Data	Code	Parameter	Technique	Approved Methods	Primary State
Certified	Yes	DW09.13050	Dichloroethene (1,1-)	GC/MS, P & T	EPA 524.2	NJ
Certified	Yes	DW09.13100	Dichloroethene (cis-1,2-)	GC/MS, P & T	EPA 524.2	NJ
Certified	Yes	DW09.13150	Dichloroethene (trans-1,2-)	GC/MS, P & T	EPA 524.2	NJ
Certified	Yes	DW09.13200	Dichloropropane (1,2-)	GC/MS, P & T	EPA 524.2	NJ
Certified	Yes	DW09.13250	Dichloropropane (1,3-)	GC/MS, P & T	EPA 524.2	NJ
Certified	Yes	DW09.13300	Dichloropropane (2,2-)	GC/MS, P & T	EPA 524.2	NJ
Certified	Yes	DW09.13350	Dichloropropanone (1,1-)	GC/MS, P & T	EPA 524.2	NJ
Certified	Yes	DW09.13400	Dichloropropene (1,1-)	GC/MS, P & T	EPA 524.2	NJ
Certified	Yes	DW09.13450	Dichloropropene (cis-1,3-)	GC/MS, P & T	EPA 524.2	NJ
Certified	Yes	DW09.13500	Dichloropropene (trans-1,3-)	GC/MS, P & T	EPA 524.2	NJ
Certified	Yes	DW09.13550	Diethyl ether (Ethyl ether)	GC/MS, P & T	EPA 524.2	NJ
Certified	Yes	DW09.13650	Ethyl methacrylate	GC/MS, P & T	EPA 524.2	NJ
Certified	Yes	DW09.13700	Ethylbenzene	GC/MS, P & T	EPA 524.2	NJ
Certified	Yes	DW09.13800	Hexachlorobutadiene (1,3-)	GC/MS, P & T	EPA 524.2	NJ
Certified	Yes	DW09.13850	Hexachloroethane	GC/MS, P & T	EPA 524.2	NJ
Certified	Yes	DW09.13950	Hexanone (2-)	GC/MS, P & T	EPA 524.2	NJ
Certified	Yes	DW09.14000	Isopropylbenzene	GC/MS, P & T	EPA 524.2	NJ
Certified	Yes	DW09.14050	Isopropyltoluene (4-)	GC/MS, P & T	EPA 524.2	NJ
Certified	Yes	DW09.14100	Methacrylonitrile	GC/MS, P & T	EPA 524.2	NJ
Certified	Yes	DW09.14150	Methyl acrylate	GC/MS, P & T	EPA 524.2	NJ
Certified	Yes	DW09.14200	Methyl iodide	GC/MS, P & T	EPA 524.2	NJ
Certified	Yes	DW09.14250	Methyl methacrylate	GC/MS, P & T	EPA 524.2	NJ
Certified	Yes	DW09.14300	Methyl tert-butyl ether	GC/MS, P & T	EPA 524.2	NJ
Certified	Yes	DW09.14350	Methylene chloride (Dichloromethane)	GC/MS, P & T	EPA 524.2	NJ
Certified	Yes	DW09.14400	Naphthalene	GC/MS, P & T	EPA 524.2	NJ
Certified	Yes	DW09.14450	Nitrobenzene	GC/MS, P & T	EPA 524.2	NJ
Certified	Yes	DW09.14500	Nitropropane (2-)	GC/MS, P & T	EPA 524.2	NJ

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Category: DW09 --Organic Parameters - Chromatography/MS

Status	Eligible to Report NJ Data	Code	Parameter	Technique	Approved Methods	Primary State
Certified	Yes	DW09.14550	Pentachloroethane	GC/MS, P & T	EPA 524.2	NJ
Certified	Yes	DW09.14600	Pentanone (4-methyl-2-) (MIBK)	GC/MS, P & T	EPA 524.2	NJ
Certified	Yes	DW09.14650	Propionitrile	GC/MS, P & T	EPA 524.2	NJ
Certified	Yes	DW09.14700	Propylbenzene (n-)	GC/MS, P & T	EPA 524.2	NJ
Certified	Yes	DW09.14750	Sec-butylbenzene	GC/MS, P & T	EPA 524.2	NJ
Certified	Yes	DW09.14800	Styrene	GC/MS, P & T	EPA 524.2	NJ
Certified	Yes	DW09.14900	Tert-butyl alcohol	GC/MS, P & T	EPA 524.2	NJ
Certified	Yes	DW09.14950	Tert-butylbenzene	GC/MS, P & T	EPA 524.2	NJ
Certified	Yes	DW09.15000	Tetrachloroethane (1,1,1,2-)	GC/MS, P & T	EPA 524.2	NJ
Certified	Yes	DW09.15050	Tetrachloroethane (1,1,2,2-)	GC/MS, P & T	EPA 524.2	NJ
Certified	Yes	DW09.15100	Tetrachloroethene	GC/MS, P & T	EPA 524.2	NJ
Certified	Yes	DW09.15150	Tetrahydrofuran	GC/MS, P & T	EPA 524.2	NJ
Certified	Yes	DW09.15200	Toluene	GC/MS, P & T	EPA 524.2	NJ
Certified	Yes	DW09.15250	Trichlorobenzene (1,2,3-)	GC/MS, P & T	EPA 524.2	NJ
Certified	Yes	DW09.15300	Trichlorobenzene (1,2,4-)	GC/MS, P & T	EPA 524.2	NJ
Certified	Yes	DW09.15350	Trichlorobenzene (1,3,5-)	GC/MS, P & T	EPA 524.2	NJ
Certified	Yes	DW09.15400	Trichloroethane (1,1,1-)	GC/MS, P & T	EPA 524.2	NJ
Certified	Yes	DW09.15450	Trichloroethane (1,1,2-)	GC/MS, P & T	EPA 524.2	NJ
Certified	Yes	DW09.15500	Trichloroethene	GC/MS, P & T	EPA 524.2	NJ
Certified	Yes	DW09.15550	Trichlorofluoromethane	GC/MS, P & T	EPA 524.2	NJ
Certified	Yes	DW09.16000	Trichloropropane (1,2,3-)	GC/MS, P & T	EPA 524.2	NJ
Certified	Yes	DW09.16050	Trimethylbenzene (1,2,4-)	GC/MS, P & T	EPA 524.2	NJ
Certified	Yes	DW09.16100	Trimethylbenzene (1,3,5-)	GC/MS, P & T	EPA 524.2	NJ
Certified	Yes	DW09.16150	Vinyl chloride	GC/MS, P & T	EPA 524.2	NJ
Certified	Yes	DW09.16300	Xylenes (total)	GC/MS, P & T	EPA 524.2	NJ
Certified	Yes	DW09.28900	11-chloroeicosafluoro-3-oxaundecane-1-sulfonic acid	LC MS/MS, Electrospray Ionization, Isotope Dilution	EPA 533	NJ

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Category: DW09 --Organic Parameters - Chromatography/MS

Status	Eligible to Report NJ Data	Code	Parameter	Technique	Approved Methods	Primary State
Certified	Yes	DW09.28950	1H, 1H, 2H, 2H-Perfluorodecanesulfonic acid	LC MS/MS, Electrospray Ionization, Isotope Dilution	EPA 533	NJ
Certified	Yes	DW09.29000	1H, 1H, 2H, 2H-Perfluorohexanesulfonic acid	LC MS/MS, Electrospray Ionization, Isotope Dilution	EPA 533	NJ
Certified	Yes	DW09.29050	1H, 1H, 2H, 2H-Perfluorooctanesulfonic acid	LC MS/MS, Electrospray Ionization, Isotope Dilution	EPA 533	NJ
Certified	Yes	DW09.29100	4,8-dioxa-3H-perfluorononanoic acid	LC MS/MS, Electrospray Ionization, Isotope Dilution	EPA 533	NJ
Certified	Yes	DW09.29150	9-chlorohexadecafluoro-3-oxanonane-1-sulfonic acid	LC MS/MS, Electrospray Ionization, Isotope Dilution	EPA 533	NJ
Certified	Yes	DW09.29200	Hexafluoropropylene oxide dimer acid	LC MS/MS, Electrospray Ionization, Isotope Dilution	EPA 533	NJ
Certified	Yes	DW09.29250	Nonafluoro-3,6-dioxaheptanoic acid	LC MS/MS, Electrospray Ionization, Isotope Dilution	EPA 533	NJ
Certified	Yes	DW09.29300	Perfluoro(2-ethoxyethane)sulfonic acid	LC MS/MS, Electrospray Ionization, Isotope Dilution	EPA 533	NJ
Certified	Yes	DW09.29350	Perfluoro-3-methoxypropanoic acid	LC MS/MS, Electrospray Ionization, Isotope Dilution	EPA 533	NJ
Certified	Yes	DW09.29400	Perfluoro-4-methoxybutanoic acid	LC MS/MS, Electrospray Ionization, Isotope Dilution	EPA 533	NJ
Certified	Yes	DW09.29450	Perfluorobutanesulfonic acid	LC MS/MS, Electrospray Ionization, Isotope Dilution	EPA 533	NJ
Certified	Yes	DW09.29500	Perfluorobutanoic acid	LC MS/MS, Electrospray Ionization, Isotope Dilution	EPA 533	NJ
Certified	Yes	DW09.29550	Perfluorodecanoic acid	LC MS/MS, Electrospray Ionization, Isotope Dilution	EPA 533	NJ
Certified	Yes	DW09.29600	Perfluorododecanoic acid	LC MS/MS, Electrospray Ionization, Isotope Dilution	EPA 533	NJ
Certified	Yes	DW09.29650	Perfluoroheptanesulfonic acid	LC MS/MS, Electrospray Ionization, Isotope Dilution	EPA 533	NJ
Certified	Yes	DW09.29700	Perfluoroheptanoic acid	LC MS/MS, Electrospray Ionization, Isotope Dilution	EPA 533	NJ
Certified	Yes	DW09.29750	Perfluorohexanesulfonic acid	LC MS/MS, Electrospray Ionization, Isotope Dilution	EPA 533	NJ
Certified	Yes	DW09.29800	Perfluorohexanoic acid	LC MS/MS, Electrospray Ionization, Isotope Dilution	EPA 533	NJ
Certified	Yes	DW09.29850	Perfluorononanoic acid	LC MS/MS, Electrospray Ionization, Isotope Dilution	EPA 533	NJ
Certified	Yes	DW09.29900	Perfluorooctanesulfonic acid (PFOS)	LC MS/MS, Electrospray Ionization, Isotope Dilution	EPA 533	NJ
Certified	Yes	DW09.29950	Perfluorooctanoic acid (PFOA)	LC MS/MS, Electrospray Ionization, Isotope Dilution	EPA 533	NJ
Certified	Yes	DW09.30000	Perfluoropentanesulfonic acid	LC MS/MS, Electrospray Ionization, Isotope Dilution	EPA 533	NJ
Certified	Yes	DW09.30050	Perfluoropentanoic acid	LC MS/MS, Electrospray Ionization, Isotope Dilution	EPA 533	NJ
Certified	Yes	DW09.30100	Perfluoroundecanoic acid	LC MS/MS, Electrospray Ionization, Isotope Dilution	EPA 533	NJ

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Category: DW09 --Organic Parameters - Chromatography/MS

Status	Eligible to Report NJ Data	Code	Parameter	Technique	Approved Methods	Primary State
Certified	Yes	DW09.30150	N-ethylperfluorooctanesulfonamidoacetic acid	LC MS/MS, Electrospray Ionization	EPA 537	NJ
Certified	Yes	DW09.30200	N-methylperfluorooctanesulfonamidoacetic acid	LC MS/MS, Electrospray Ionization	EPA 537	NJ
Certified	Yes	DW09.30250	Perfluorobutanesulfonic acid	LC MS/MS, Electrospray Ionization	EPA 537	NJ
Certified	Yes	DW09.30300	Perfluorodecanoic acid	LC MS/MS, Electrospray Ionization	EPA 537	NJ
Certified	Yes	DW09.30350	Perfluorododecanoic acid	LC MS/MS, Electrospray Ionization	EPA 537	NJ
Certified	Yes	DW09.30400	Perfluoroheptanoic acid	LC MS/MS, Electrospray Ionization	EPA 537	NJ
Certified	Yes	DW09.30450	Perfluorohexanesulfonic acid	LC MS/MS, Electrospray Ionization	EPA 537	NJ
Certified	Yes	DW09.30500	Perfluorohexanoic acid	LC MS/MS, Electrospray Ionization	EPA 537	NJ
Certified	Yes	DW09.30550	Perfluorononanoic acid	LC MS/MS, Electrospray Ionization	EPA 537	NJ
Certified	Yes	DW09.30600	Perfluorooctanesulfonic acid (PFOS)	LC MS/MS, Electrospray Ionization	EPA 537	NJ
Certified	Yes	DW09.30650	Perfluorooctanoic acid (PFOA)	LC MS/MS, Electrospray Ionization	EPA 537	NJ
Certified	Yes	DW09.30700	Perfluorotetradecanoic acid	LC MS/MS, Electrospray Ionization	EPA 537	NJ
Certified	Yes	DW09.30750	Perfluorotridecanoic acid	LC MS/MS, Electrospray Ionization	EPA 537	NJ
Certified	Yes	DW09.30800	Perfluoroundecanoic acid	LC MS/MS, Electrospray Ionization	EPA 537	NJ
Certified	Yes	DW09.30850	N-ethylperfluorooctanesulfonamidoacetic acid	LC MS/MS, Electrospray Ionization	EPA 537.1	NJ
Certified	Yes	DW09.30900	N-methylperfluorooctanesulfonamidoacetic acid	LC MS/MS, Electrospray Ionization	EPA 537.1	NJ
Certified	Yes	DW09.30950	Perfluorobutanesulfonic acid	LC MS/MS, Electrospray Ionization	EPA 537.1	NJ
Certified	Yes	DW09.31000	Perfluorodecanoic acid	LC MS/MS, Electrospray Ionization	EPA 537.1	NJ
Certified	Yes	DW09.31050	Perfluorododecanoic acid	LC MS/MS, Electrospray Ionization	EPA 537.1	NJ
Certified	Yes	DW09.31100	Perfluoroheptanoic acid	LC MS/MS, Electrospray Ionization	EPA 537.1	NJ
Certified	Yes	DW09.31200	Perfluorohexanoic acid	LC MS/MS, Electrospray Ionization	EPA 537.1	NJ
Certified	Yes	DW09.31250	Perfluorononanoic acid	LC MS/MS, Electrospray Ionization	EPA 537.1	NJ
Certified	Yes	DW09.31300	Perfluorooctanesulfonic acid (PFOS)	LC MS/MS, Electrospray Ionization	EPA 537.1	NJ
Certified	Yes	DW09.31350	Perfluorooctanoic acid (PFOA)	LC MS/MS, Electrospray Ionization	EPA 537.1	NJ

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Category: DW09 --Organic Parameters - Chromatography/MS

Status	Eligible to Report NJ Data	Code	Parameter	Technique	Approved Methods	Primary State
Certified	Yes	DW09.31400	Perfluorotetradecanoic acid	LC MS/MS, Electrospray Ionization	EPA 537.1	NJ
Certified	Yes	DW09.31450	Perfluorotridecanoic acid	LC MS/MS, Electrospray Ionization	EPA 537.1	NJ
Certified	Yes	DW09.31500	Perfluoroundecanoic acid	LC MS/MS, Electrospray Ionization	EPA 537.1	NJ
Certified	Yes	DW09.31550	Perfluorohexanesulfonic acid	LC MS/MS, Electrospray Ionization	EPA 537.1	NJ
Certified	Yes	DW09.31600	Hexafluoropropylene oxide dimer acid	LC MS/MS, Electrospray Ionization	EPA 537.1	NJ
Certified	Yes	DW09.31650	11-chloroeicosafluoro-3-oxaundecane-1-sulfonic acid	LC MS/MS, Electrospray Ionization	EPA 537.1	NJ
Certified	Yes	DW09.31700	9-chlorohexadecafluoro-3-oxanonane-1-sulfonic acid	LC MS/MS, Electrospray Ionization	EPA 537.1	NJ
Certified	Yes	DW09.31750	4,8-dioxa-3H-perfluorononanoic acid	LC MS/MS, Electrospray Ionization	EPA 537.1	NJ

Category: DW12 --Drinking Water Sample Collection

Status	Eligible to Report NJ Data	Code	Parameter	Technique	Approved Methods	Primary State
Certified	Yes	DW12.00001	PWTA Sampling Parameters	All Categories Sample Handling Procedures	Other N.J.A.C. 7:18-6 & 9	NJ

Category: NPW01--Microbiology

Status	Eligible to Report NJ Data	Code	Parameter	Technique	Approved Methods	Primary State
Certified	Yes	NPW01.00850	Escherichia coli (E coli)	MPN/Multiple Tube/Multiple Well	Other Colilert 18	NJ
Certified	Yes	NPW01.01300	Fecal coliform	Multiple Tube/Mutiple Well	Other Colilert 18	NJ
Certified	Yes	NPW01.01650	Fecal coliform	Membrane Filter (MF), Single Step	SM 9222 D-15	NJ
Certified	Yes	NPW01.01850	Fecal streptococci	Membrane Filter	SM 9230 C-13	NJ
Certified	Yes	NPW01.02100	Heterotrophic plate count	Pour Plate	SM 9215 B-04	NJ
Applied	No	NPW01.02300	Pseudomonas aeruginosa	Multiple Well or P-A	Other Pseudalert	NJ

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Category: NPW01--Microbiology

Status	Eligible to Report NJ Data	Code	Parameter	Technique	Approved Methods	Primary State
Certified	Yes	NPW01.02350	Pseudomonas aeruginosa	Membrane Filter	SM 9213 E	NJ
Certified	Yes	NPW01.02800	Total coliform	MF Single Step or Two Step	SM 9222 B-15	NJ

Category: NPW03--Inorganic Parameters

Status	Eligible to Report NJ Data	Code	Parameter	Technique	Approved Methods	Primary State
Certified	Yes	NPW03.00350	Alkalinity as CaCO3	Electrometric Titration	SM 2320 B-11	NJ
Certified	Yes	NPW03.00850	Ammonia	Distillation, Electrode	SM 4500-NH3 B plus D-11	NJ
Certified	Yes	NPW03.01550	Biochemical oxygen demand	Dissolved Oxygen Depletion - Membrane Electrode	SM 5210 B-16	NJ
Certified	Yes	NPW03.02900	Carbonaceous BOD (CBOD)	Diss. Oxygen Depl., Nitrif. Inhib. - Membrane Electrode	SM 5210 B-16	NJ
Certified	Yes	NPW03.03600	Chemical oxygen demand	Spectrophotometric Manual/Auto	SM 5220 D-11	NJ
Applied	No	NPW03.04550	Chloride	Colorimetric, Automated (Ferricyanide)	SM 4500-Cl E-11	NJ
Certified	Yes	NPW03.04900	Chloride	Ion Chromatography	EPA 300.0	NJ
Certified	Yes	NPW03.05100	Chloride	Ion Chromatography	SW-846 9056A	NJ
Certified	Yes	NPW03.06000	Color	Colorimetric (Platinum-Cobalt)	SM 2120 B-11	NJ
Certified	Yes	NPW03.06300	Cyanide	Titrimetric/Manual Spectrophotometric	SW-846 9014	NJ
Certified	Yes	NPW03.06450	Cyanide	Distillation, Spectrophotometric (Manual)	SM 4500-CN C-16 plus E-16	NJ
Certified	Yes	NPW03.07200	Cyanide	Distillation	SW-846 9010C	NJ
Certified	Yes	NPW03.07350	Cyanide - amenable to Cl2	Manual Distillation, Titrimetr/Spectro	SM 4500-CN C-16 plus G-16	NJ
Certified	Yes	NPW03.07750	Dissolved organic carbon (DOC)	Filtration and Persulfate/UV	SM 5310 C-14	NJ
Certified	Yes	NPW03.08500	Fluoride	Ion Chromatography	EPA 300.0	NJ
Certified	Yes	NPW03.08700	Fluoride	Ion Chromatography	SW-846 9056A	NJ
Certified	Yes	NPW03.10100	Kjeldahl nitrogen - total	Digestion, Distillation, Electrode	SM 4500-N Org C plus NH3 B plus NH3 D-11	NJ
Certified	Yes	NPW03.11050	Nitrate	Ion Chromatography	EPA 300.0	NJ
Certified	Yes	NPW03.11250	Nitrate	Ion Chromatography	SW-846 9056A	NJ

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Category: NPW03--Inorganic Parameters

Status	Eligible to Report NJ Data	Code	Parameter	Technique	Approved Methods	Primary State
Certified	Yes	NPW03.12000	Nitrate - nitrite	Cadmium Reduction, Automated	SM 4500-NO3 F-16	NJ
Certified	Yes	NPW03.13150	Nitrite	Auto, bypass Cd reduction	SM 4500-NO3 F-16	NJ
Certified	Yes	NPW03.13650	Nitrite	Ion Chromatography	EPA 300.0	NJ
Certified	Yes	NPW03.13900	Nitrite	Ion Chromatography	SW-846 9056A	NJ
Certified	Yes	NPW03.14100	Oil & grease - hem-LL	Gravimetric, Hexane Extractable Material-LL	EPA 1664A	NJ
Certified	Yes	NPW03.14150	Oil & grease - hem-LL	Gravimetric, Hexane Extractable Material-LL	EPA 1664B	NJ
Certified	Yes	NPW03.14300	Oil & grease - hem-SPE	Gravimetric, Hexane Extractable Material-SPE	EPA 1664B	NJ
Certified	Yes	NPW03.14450	Oil & grease - sgt-non polar	Gravimetric, Silica Gel Treated-Hem-SPE	EPA 1664B	NJ
Certified	Yes	NPW03.14600	Oil & grease - sgt-non polar	Gravimetric, Silica Gel Treated-Hem-LL	EPA 1664B	NJ
Certified	Yes	NPW03.14650	Oil & grease - sgt-non polar	Gravimetric, Silica Gel Treated-Hem-LL	EPA 1664A	NJ
Certified	Yes	NPW03.14750	Organic nitrogen	Total Kjeldahl-N Minus Ammonia-N	SM TKN - NH3 method references	NJ
Certified	Yes	NPW03.15350	Orthophosphate	Ascorbic Acid, Manual Single Reagent	SM 4500-P E-11	NJ
Certified	Yes	NPW03.16600	Phenols	Manual Distillation, Colorimetric 4AAP, Manual	EPA 420.1	NJ
Certified	Yes	NPW03.16700	Phenols	Manual Distillation, Colorimetric 4AAP, Manual	SW-846 9065	NJ
Certified	Yes	NPW03.17150	Phosphorus (total)	Persulfate Digestion + Manual	SM 4500-P B5-11 plus E-11	NJ
Certified	Yes	NPW03.17850	Residue - filterable (TDS)	Gravimetric, 180 Degrees C	SM 2540 C-15	NJ
Certified	Yes	NPW03.18000	Residue - nonfilterable (TSS)	Gravimetric, 103-105 Degrees C, Post Washing	SM 2540 D-15	NJ
Certified	Yes	NPW03.18100	Residue - settleable	Volumetric (Imhoff Cone) or Gravimetric	SM 2540 F-15	NJ
Certified	Yes	NPW03.18150	Residue - total	Gravimetric, 103-105 Degrees C	SM 2540 B-15	NJ
Applied	No	NPW03.18250	Residue - volatile	Gravimetric, 550 Degrees C	EPA 160.4	NJ
Certified	Yes	NPW03.18800	Specific conductance	Wheatstone Bridge	SM 2510 B-11	NJ
Applied	No	NPW03.19400	Sulfate	Turbidimetric	ASTM D516-16	NJ
Certified	Yes	NPW03.19850	Sulfate	Ion Chromatography	EPA 300.0	NJ
Certified	Yes	NPW03.20050	Sulfate	Ion Chromatography	SW-846 9056A	NJ
Certified	Yes	NPW03.20500	Sulfides	Colorimetric (Methylene Blue)	SM 4500-S B, C plus D-11	NJ
Certified	Yes	NPW03.20750	Surfactants	Colorimetric (Methylene Blue)	SM 5540 C-11	NJ

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Category: NPW03--Inorganic Parameters

Status	Eligible to Report NJ Data	Code	Parameter	Technique	Approved Methods	Primary State
Certified	Yes	NPW03.21300	Total organic carbon (TOC)	Heated or UV	SM 5310 C-14	NJ
Certified	Yes	NPW03.21850	Total, fixed, and volatile solids (SQAR)	Gravimetric, 500 Degrees C	SM 2540 G SM 18th Ed.	NJ
Certified	Yes	NPW03.22150	Turbidity	Nephelometric	SM 2130 B-11	NJ

Category: NPW04--Analyze Immed, Cont Monitor and/or PWTA

Status	Eligible to Report NJ Data	Code	Parameter	Technique	Approved Methods	Primary State
Certified	Yes	NPW04.00400	Chlorine	Spectrophotometric, DPD	SM 4500-Cl G-11	NJ
Certified	Yes	NPW04.00950	Oxygen (dissolved)	Membrane Electrode	SM 4500-O G-16	NJ
Certified	Yes	NPW04.01300	Oxygen (dissolved)	Winkler, Azide Modification	SM 4500-O C-16	NJ
Certified	Yes	NPW04.01650	pH	Electrometric	SM 4500-H B-11	NJ
Certified	Yes	NPW04.01750	pH (corrosivity)	Aqueous, Electrometric	SW-846 9040C	NJ
Certified	Yes	NPW04.01950	Temperature	Thermometric	SM 2550 B-10	NJ

Category: NPW06--Metals - NPW Preparation Methods

Status	Eligible to Report NJ Data	Code	Parameter	Technique	Approved Methods	Primary State
Certified	Yes	NPW06.00050	Metals	TCLP, Toxicity Procedure, Shaker	SW-846 1311	NJ
Certified	Yes	NPW06.00200	Metals, Total Rec and Dissolved	Acid Digestion/Surface and Groundwater	SW-846 3005A	NJ
Certified	Yes	NPW06.00250	Metals, Total	Acid Digestion/Aqueous Samples	SW-846 3010A	NJ

Category: NPW07--Metals

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Status	Eligible to Report NJ Data	Code	Parameter	Technique	Approved Methods	Primary State
Certified	Yes	NPW07.03350	Mercury	Manual Cold Vapor	EPA 245.1	NJ
Certified	Yes	NPW07.08650	Chromium (VI)	0.45u Filter, Colorimetric DPC	SM 3500-Cr B-11	NJ
Certified	Yes	NPW07.11950	Chromium (VI)	Colorimetric	SW-846 7196A	NJ
Certified	Yes	NPW07.12150	Mercury - liquid waste	AA, Manual Cold Vapor	SW-846 7470A	NJ

Category: NPW08--Metals - ICP, ICP/MS and DCP

Status	Eligible to Report NJ Data	Code	Parameter	Technique	Approved Methods	Primary State
Certified	Yes	NPW08.04150	Aluminum	Digestion, ICP	EPA 200.7	NJ
Certified	Yes	NPW08.04200	Antimony	Digestion, ICP	EPA 200.7	NJ
Certified	Yes	NPW08.04250	Arsenic	Digestion, ICP	EPA 200.7	NJ
Certified	Yes	NPW08.04300	Barium	Digestion, ICP	EPA 200.7	NJ
Certified	Yes	NPW08.04350	Beryllium	Digestion, ICP	EPA 200.7	NJ
Certified	Yes	NPW08.04400	Boron	ICP	EPA 200.7	NJ
Certified	Yes	NPW08.04450	Cadmium	Digestion, ICP	EPA 200.7	NJ
Certified	Yes	NPW08.04500	Calcium	Digestion, ICP	EPA 200.7	NJ
Certified	Yes	NPW08.04550	Chromium	Digestion, ICP	EPA 200.7	NJ
Certified	Yes	NPW08.04600	Cobalt	Digestion, ICP	EPA 200.7	NJ
Certified	Yes	NPW08.04650	Copper	Digestion, ICP	EPA 200.7	NJ
Certified	Yes	NPW08.04700	Iron	Digestion, ICP	EPA 200.7	NJ
Certified	Yes	NPW08.04750	Lead	Digestion, ICP	EPA 200.7	NJ
Certified	Yes	NPW08.04850	Magnesium	Digestion, ICP	EPA 200.7	NJ
Certified	Yes	NPW08.04900	Manganese	Digestion, ICP	EPA 200.7	NJ
Certified	Yes	NPW08.04950	Molybdenum	Digestion, ICP	EPA 200.7	NJ
Certified	Yes	NPW08.05000	Nickel	Digestion, ICP	EPA 200.7	NJ
Certified	Yes	NPW08.05100	Potassium	Digestion, ICP	EPA 200.7	NJ
Certified	Yes	NPW08.05150	Selenium	Digestion, ICP	EPA 200.7	NJ

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Category: NPW08--Metals - ICP, ICP/MS and DCP

Status	Eligible to Report NJ Data	Code	Parameter	Technique	Approved Methods	Primary State
Certified	Yes	NPW08.05250	Silver	Digestion, ICP	EPA 200.7	NJ
Certified	Yes	NPW08.05300	Sodium	Digestion, ICP	EPA 200.7	NJ
Certified	Yes	NPW08.05400	Thallium	Digestion, ICP	EPA 200.7	NJ
Certified	Yes	NPW08.05550	Vanadium	Digestion, ICP	EPA 200.7	NJ
Certified	Yes	NPW08.05600	Zinc	Digestion, ICP	EPA 200.7	NJ
Certified	Yes	NPW08.05650	Aluminum	Digestion, ICP/MS	EPA 200.8	NJ
Certified	Yes	NPW08.05700	Antimony	Digestion, ICP/MS	EPA 200.8	NJ
Certified	Yes	NPW08.05750	Arsenic	Digestion, ICP/MS	EPA 200.8	NJ
Certified	Yes	NPW08.05800	Barium	Digestion, ICP/MS	EPA 200.8	NJ
Certified	Yes	NPW08.05850	Beryllium	Digestion, ICP/MS	EPA 200.8	NJ
Certified	Yes	NPW08.05950	Cadmium	Digestion, ICP/MS	EPA 200.8	NJ
Certified	Yes	NPW08.06050	Chromium	Digestion, ICP/MS	EPA 200.8	NJ
Certified	Yes	NPW08.06100	Cobalt	Digestion, ICP/MS	EPA 200.8	NJ
Certified	Yes	NPW08.06150	Copper	Digestion, ICP/MS	EPA 200.8	NJ
Certified	Yes	NPW08.06300	Lead	Digestion, ICP/MS	EPA 200.8	NJ
Certified	Yes	NPW08.06400	Manganese	Digestion, ICP/MS	EPA 200.8	NJ
Certified	Yes	NPW08.06450	Molybdenum	Digestion, ICP/MS	EPA 200.8	NJ
Certified	Yes	NPW08.06500	Nickel	Digestion, ICP/MS	EPA 200.8	NJ
Certified	Yes	NPW08.06600	Selenium	Digestion, ICP/MS	EPA 200.8	NJ
Certified	Yes	NPW08.06700	Silver	Digestion, ICP/MS	EPA 200.8	NJ
Certified	Yes	NPW08.06850	Thallium	Digestion, ICP/MS	EPA 200.8	NJ
Applied	No	NPW08.07000	Titanium	Digestion, ICP/MS	EPA 200.8	NJ
Certified	Yes	NPW08.07150	Vanadium	Digestion, ICP/MS	EPA 200.8	NJ
Certified	Yes	NPW08.07200	Zinc	Digestion, ICP/MS	EPA 200.8	NJ
Certified	Yes	NPW08.09800	Hardness - total as CaCO3	Ca + Mg Carbonates, ICP	SM 2340 B-11	NJ
Certified	Yes	NPW08.12800	Aluminum	ICP	SW-846 6010D	NJ
Certified	Yes	NPW08.12850	Antimony	ICP	SW-846 6010D	NJ

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Category: NPW08--Metals - ICP, ICP/MS and DCP

Status	Eligible to Report NJ Data	Code	Parameter	Technique	Approved Methods	Primary State
Certified	Yes	NPW08.12900	Arsenic	ICP	SW-846 6010D	NJ
Certified	Yes	NPW08.12950	Barium	ICP	SW-846 6010D	NJ
Certified	Yes	NPW08.13000	Beryllium	ICP	SW-846 6010D	NJ
Certified	Yes	NPW08.13100	Cadmium	ICP	SW-846 6010D	NJ
Certified	Yes	NPW08.13150	Calcium	ICP	SW-846 6010D	NJ
Certified	Yes	NPW08.13200	Chromium	ICP	SW-846 6010D	NJ
Certified	Yes	NPW08.13250	Cobalt	ICP	SW-846 6010D	NJ
Certified	Yes	NPW08.13300	Copper	ICP	SW-846 6010D	NJ
Certified	Yes	NPW08.13350	Iron	ICP	SW-846 6010D	NJ
Certified	Yes	NPW08.13400	Lead	ICP	SW-846 6010D	NJ
Certified	Yes	NPW08.13450	Lithium	ICP	SW-846 6010D	NJ
Certified	Yes	NPW08.13500	Magnesium	ICP	SW-846 6010D	NJ
Certified	Yes	NPW08.13550	Manganese	ICP	SW-846 6010D	NJ
Certified	Yes	NPW08.13600	Molybdenum	ICP	SW-846 6010D	NJ
Certified	Yes	NPW08.13650	Nickel	ICP	SW-846 6010D	NJ
Certified	Yes	NPW08.13750	Potassium	ICP	SW-846 6010D	NJ
Certified	Yes	NPW08.13800	Selenium	ICP	SW-846 6010D	NJ
Certified	Yes	NPW08.13850	Silver	ICP	SW-846 6010D	NJ
Certified	Yes	NPW08.13900	Sodium	ICP	SW-846 6010D	NJ
Applied	No	NPW08.13950	Strontium	ICP	SW-846 6010D	NJ
Certified	Yes	NPW08.14000	Thallium	ICP	SW-846 6010D	NJ
Certified	Yes	NPW08.14100	Tin	ICP	SW-846 6010D	NJ
Certified	Yes	NPW08.14250	Vanadium	ICP	SW-846 6010D	NJ
Certified	Yes	NPW08.14300	Zinc	ICP	SW-846 6010D	NJ

Category: NPW09--Organics - NPW Preparation Methods

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Status	Eligible to Report NJ Data	Code	Parameter	Technique	Approved Methods	Primary State
Certified	Yes	NPW09.00250	Organics	Synthetic PPT Leachate Procedure	SW-846 1312	NJ
Certified	Yes	NPW09.00450	Semivolatile organics	TCLP, Toxicity Procedure, Shaker	SW-846 1311	NJ
Certified	Yes	NPW09.00500	Semivolatile organics	Separatory Funnel Extraction	SW-846 3510C	NJ
Certified	Yes	NPW09.00700	Semivolatile organics	Microwave Extraction	SW-846 3546	NJ
Certified	Yes	NPW09.01350	Volatile organics	TCLP, Toxicity Procedure, ZHE	SW-846 1311	NJ
Certified	Yes	NPW09.01550	Volatile organics	Purge & Trap Aqueous	SW-846 5030C	NJ

Category: NPW10--Organic Parameters - Chromatography

Status	Eligible to Report NJ Data	Code	Parameter	Technique	Approved Methods	Primary State
Certified	Yes	NPW10.19150	Aldrin	Extract/GC (ECD)	EPA 608.3	NJ
Certified	Yes	NPW10.19200	Alpha BHC	Extract/GC (ECD)	EPA 608.3	NJ
Certified	Yes	NPW10.19300	Beta BHC	Extract/GC (ECD)	EPA 608.3	NJ
Certified	Yes	NPW10.19650	Chlordane	Extract/GC (ECD)	EPA 608.3	NJ
Certified	Yes	NPW10.20050	DDD (4,4'-)	Extract/GC (ECD)	EPA 608.3	NJ
Certified	Yes	NPW10.20100	DDE (4,4'-)	Extract/GC (ECD)	EPA 608.3	NJ
Certified	Yes	NPW10.20150	DDT (4,4'-)	Extract/GC (ECD)	EPA 608.3	NJ
Certified	Yes	NPW10.20200	Delta BHC	Extract/GC (ECD)	EPA 608.3	NJ
Certified	Yes	NPW10.20350	Dieldrin	Extract/GC (ECD)	EPA 608.3	NJ
Certified	Yes	NPW10.20400	Endosulfan I	Extract/GC (ECD)	EPA 608.3	NJ
Certified	Yes	NPW10.20450	Endosulfan II	Extract/GC (ECD)	EPA 608.3	NJ
Certified	Yes	NPW10.20500	Endosulfan sulfate	Extract/GC (ECD)	EPA 608.3	NJ
Certified	Yes	NPW10.20550	Endrin	Extract/GC (ECD)	EPA 608.3	NJ
Certified	Yes	NPW10.20600	Endrin aldehyde	Extract/GC (ECD)	EPA 608.3	NJ
Certified	Yes	NPW10.20650	Endrin ketone	Extract/GC (ECD)	EPA 608.3	NJ
Certified	Yes	NPW10.20800	Heptachlor	Extract/GC (ECD)	EPA 608.3	NJ
Certified	Yes	NPW10.20850	Heptachlor epoxide	Extract/GC (ECD)	EPA 608.3	NJ

New Jersey Department of Environment Protection
Environmental Laboratory Certification Program

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Laboratory Name: PACE ANALYTICAL SERVICES, LLC-FAIRFIELD Laboratory Number: 07010 Activity ID: NLC 230009
1275 BLOOMFIELD AVE
FAIRFIELD NJ 07004

Category: NPW10--Organic Parameters - Chromatography

Status	Eligible to Report NJ Data	Code	Parameter	Technique	Approved Methods	Primary State
Certified	Yes	NPW10.21000	Lindane (gamma BHC)	Extract/GC (ECD)	EPA 608.3	NJ
Certified	Yes	NPW10.21050	Methoxychlor	Extract/GC (ECD)	EPA 608.3	NJ
Certified	Yes	NPW10.21200	Mirex	Extract/GC (ECD)	EPA 608.3	NJ
Certified	Yes	NPW10.21800	Toxaphene	Extract/GC (ECD)	EPA 608.3	NJ
Certified	Yes	NPW10.21900	PCB 1016	Extract/GC (ECD)	EPA 608.3	NJ
Certified	Yes	NPW10.21950	PCB 1221	Extract/GC (ECD)	EPA 608.3	NJ
Certified	Yes	NPW10.22000	PCB 1232	Extract/GC (ECD)	EPA 608.3	NJ
Certified	Yes	NPW10.22050	PCB 1242	Extract/GC (ECD)	EPA 608.3	NJ
Certified	Yes	NPW10.22100	PCB 1248	Extract/GC (ECD)	EPA 608.3	NJ
Certified	Yes	NPW10.22150	PCB 1254	Extract/GC (ECD)	EPA 608.3	NJ
Certified	Yes	NPW10.22200	PCB 1260	Extract/GC (ECD)	EPA 608.3	NJ
Certified	Yes	NPW10.31400	Ethane	GC, Headspace, FID	Other J. Chrom. Sci. RSK-175	NJ
Certified	Yes	NPW10.31450	Ethene	GC, Headspace, FID	Other J. Chrom. Sci. RSK-175	NJ
Certified	Yes	NPW10.31550	Methane	GC, Headspace, FID	Other J. Chrom. Sci. RSK-175	NJ
Certified	Yes	NPW10.31650	Extractable Petroleum Hydrocarbons	Extraction, GC, FID	Other NJDEP EPH 10/08, Rev. 3	NJ
Certified	Yes	NPW10.37350	Mirex	Extract/GC (ECD)	SM 6630 B-07	NJ
Certified	Yes	NPW10.38750	Mirex	Extract/GC (ECD)	SM 6630 C-07	NJ
Certified	Yes	NPW10.44600	Aldrin	GC, Extraction, ECD or HECD, Capillary	SW-846 8081B	NJ
Certified	Yes	NPW10.44650	Alpha BHC	GC, Extraction, ECD or HECD, Capillary	SW-846 8081B	NJ
Certified	Yes	NPW10.44750	Beta BHC	GC, Extraction, ECD or HECD, Capillary	SW-846 8081B	NJ
Applied	No	NPW10.44800	Chlordane (alpha) (cis-)	GC, Extraction, ECD or HECD, Capillary	SW-846 8081B	NJ
Applied	No	NPW10.44850	Chlordane (gamma) (trans-)	GC, Extraction, ECD or HECD, Capillary	SW-846 8081B	NJ
Certified	Yes	NPW10.44900	Chlordane (technical)	GC, Extraction, ECD or HECD, Capillary	SW-846 8081B	NJ
Certified	Yes	NPW10.45250	DDD (4,4'-)	GC, Extraction, ECD or HECD, Capillary	SW-846 8081B	NJ
Certified	Yes	NPW10.45300	DDE (4,4'-)	GC, Extraction, ECD or HECD, Capillary	SW-846 8081B	NJ
Certified	Yes	NPW10.45350	DDT (4,4'-)	GC, Extraction, ECD or HECD, Capillary	SW-846 8081B	NJ
Certified	Yes	NPW10.45400	Delta BHC	GC, Extraction, ECD or HECD, Capillary	SW-846 8081B	NJ

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Category: NPW10--Organic Parameters - Chromatography

Status	Eligible to Report NJ Data	Code	Parameter	Technique	Approved Methods	Primary State
Certified	Yes	NPW10.45450	Dieldrin	GC, Extraction, ECD or HECD, Capillary	SW-846 8081B	NJ
Certified	Yes	NPW10.45500	Endosulfan I	GC, Extraction, ECD or HECD, Capillary	SW-846 8081B	NJ
Certified	Yes	NPW10.45550	Endosulfan II	GC, Extraction, ECD or HECD, Capillary	SW-846 8081B	NJ
Certified	Yes	NPW10.45600	Endosulfan sulfate	GC, Extraction, ECD or HECD, Capillary	SW-846 8081B	NJ
Certified	Yes	NPW10.45650	Endrin	GC, Extraction, ECD or HECD, Capillary	SW-846 8081B	NJ
Certified	Yes	NPW10.45700	Endrin aldehyde	GC, Extraction, ECD or HECD, Capillary	SW-846 8081B	NJ
Certified	Yes	NPW10.45750	Endrin ketone	GC, Extraction, ECD or HECD, Capillary	SW-846 8081B	NJ
Certified	Yes	NPW10.45850	Heptachlor	GC, Extraction, ECD or HECD, Capillary	SW-846 8081B	NJ
Certified	Yes	NPW10.45900	Heptachlor epoxide	GC, Extraction, ECD or HECD, Capillary	SW-846 8081B	NJ
Certified	Yes	NPW10.46050	Lindane (gamma BHC)	GC, Extraction, ECD or HECD, Capillary	SW-846 8081B	NJ
Certified	Yes	NPW10.46100	Methoxychlor	GC, Extraction, ECD or HECD, Capillary	SW-846 8081B	NJ
Certified	Yes	NPW10.46250	Mirex	GC, Extraction, ECD or HECD, Capillary	SW-846 8081B	NJ
Certified	Yes	NPW10.46450	Toxaphene	GC, Extraction, ECD or HECD, Capillary	SW-846 8081B	NJ
Certified	Yes	NPW10.47600	PCB 1016	GC, Extraction, ECD or HECD, Capillary	SW-846 8082A	NJ
Certified	Yes	NPW10.47650	PCB 1221	GC, Extraction, ECD or HECD, Capillary	SW-846 8082A	NJ
Certified	Yes	NPW10.47700	PCB 1232	GC, Extraction, ECD or HECD, Capillary	SW-846 8082A	NJ
Certified	Yes	NPW10.47750	PCB 1242	GC, Extraction, ECD or HECD, Capillary	SW-846 8082A	NJ
Certified	Yes	NPW10.47800	PCB 1248	GC, Extraction, ECD or HECD, Capillary	SW-846 8082A	NJ
Certified	Yes	NPW10.47850	PCB 1254	GC, Extraction, ECD or HECD, Capillary	SW-846 8082A	NJ
Certified	Yes	NPW10.47900	PCB 1260	GC, Extraction, ECD or HECD, Capillary	SW-846 8082A	NJ

Category: NPW11--Organic Parameters - Chromatography/MS

Status	Eligible to Report NJ Data	Code	Parameter	Technique	Approved Methods	Primary State
Certified	Yes	NPW11.38400	Acetone	GC/MS, P & T, Capillary Column	EPA 624.1	NJ
Certified	Yes	NPW11.38500	Acrolein	GC/MS, P & T, Capillary Column	EPA 624.1	NJ

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FAIRFIELD NJ 07004

Category: NPW11--Organic Parameters - Chromatography/MS

Status	Eligible to Report NJ Data	Code	Parameter	Technique	Approved Methods	Primary State
Certified	Yes	NPW11.38550	Acrylonitrile	GC/MS, P & T, Capillary Column	EPA 624.1	NJ
Certified	Yes	NPW11.38650	Amyl acetate (n-)	GC/MS, P & T, Capillary Column	EPA 624.1	NJ
Certified	Yes	NPW11.38750	Benzene	GC/MS, P & T, Capillary Column	EPA 624.1	NJ
Certified	Yes	NPW11.38800	Bromobenzene	GC/MS, P & T, Capillary Column	EPA 624.1	NJ
Certified	Yes	NPW11.38850	Bromochloromethane	GC/MS, P & T, Capillary Column	EPA 624.1	NJ
Certified	Yes	NPW11.38900	Bromodichloromethane	GC/MS, P & T, Capillary Column	EPA 624.1	NJ
Certified	Yes	NPW11.39000	Bromoform	GC/MS, P & T, Capillary Column	EPA 624.1	NJ
Certified	Yes	NPW11.39050	Bromomethane	GC/MS, P & T, Capillary Column	EPA 624.1	NJ
Certified	Yes	NPW11.39200	Butanone (2-) (Methyl ethyl ketone)	GC/MS, P & T, Capillary Column	EPA 624.1	NJ
Certified	Yes	NPW11.39250	Butyl acetate (n-)	GC/MS, P & T, Capillary Column	EPA 624.1	NJ
Certified	Yes	NPW11.39400	Butylbenzene (n-)	GC/MS, P & T, Capillary Column	EPA 624.1	NJ
Certified	Yes	NPW11.39450	Carbon disulfide	GC/MS, P & T, Capillary Column	EPA 624.1	NJ
Certified	Yes	NPW11.39500	Carbon tetrachloride	GC/MS, P & T, Capillary Column	EPA 624.1	NJ
Certified	Yes	NPW11.39550	Chlorobenzene	GC/MS, P & T, Capillary Column	EPA 624.1	NJ
Certified	Yes	NPW11.39600	Chloroethane	GC/MS, P & T, Capillary Column	EPA 624.1	NJ
Certified	Yes	NPW11.39650	Chloroethyl vinyl ether (2-)	GC/MS, P & T, Capillary Column	EPA 624.1	NJ
Certified	Yes	NPW11.39700	Chloroform	GC/MS, P & T, Capillary Column	EPA 624.1	NJ
Certified	Yes	NPW11.39750	Chloromethane	GC/MS, P & T, Capillary Column	EPA 624.1	NJ
Certified	Yes	NPW11.39800	Chlorotoluene (2-)	GC/MS, P & T, Capillary Column	EPA 624.1	NJ
Certified	Yes	NPW11.39850	Chlorotoluene (4-)	GC/MS, P & T, Capillary Column	EPA 624.1	NJ
Certified	Yes	NPW11.39950	Cyclohexane	GC/MS, P & T, Capillary Column	EPA 624.1	NJ
Certified	Yes	NPW11.40050	Dibromo-3-chloropropane (1,2-)	GC/MS, P & T, Capillary Column	EPA 624.1	NJ
Certified	Yes	NPW11.40100	Dibromochloromethane	GC/MS, P & T, Capillary Column	EPA 624.1	NJ
Certified	Yes	NPW11.40105	Dibromoethane (1,2-) (EDB)	GC/MS, P & T, Capillary Column	EPA 624.1	NJ
Certified	Yes	NPW11.40200	Dibromomethane	GC/MS, P & T, Capillary Column	EPA 624.1	NJ
Certified	Yes	NPW11.40350	Dichlorobenzene (1,2-)	GC/MS, P & T, Capillary Column	EPA 624.1	NJ
Certified	Yes	NPW11.40400	Dichlorobenzene (1,3-)	GC/MS, P & T, Capillary Column	EPA 624.1	NJ

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1275 BLOOMFIELD AVE
FAIRFIELD NJ 07004

Category: NPW11–Organic Parameters - Chromatography/MS

Status	Eligible to Report NJ Data	Code	Parameter	Technique	Approved Methods	Primary State
Certified	Yes	NPW11.40450	Dichlorobenzene (1,4-)	GC/MS, P & T, Capillary Column	EPA 624.1	NJ
Certified	Yes	NPW11.40500	Dichlorodifluoromethane	GC/MS, P & T, Capillary Column	EPA 624.1	NJ
Certified	Yes	NPW11.40550	Dichloroethane (1,1-)	GC/MS, P & T, Capillary Column	EPA 624.1	NJ
Certified	Yes	NPW11.40600	Dichloroethane (1,2-)	GC/MS, P & T, Capillary Column	EPA 624.1	NJ
Certified	Yes	NPW11.40650	Dichloroethene (1,1-)	GC/MS, P & T, Capillary Column	EPA 624.1	NJ
Certified	Yes	NPW11.40700	Dichloroethene (cis-1,2-)	GC/MS, P & T, Capillary Column	EPA 624.1	NJ
Certified	Yes	NPW11.40750	Dichloroethene (trans-1,2-)	GC/MS, P & T, Capillary Column	EPA 624.1	NJ
Certified	Yes	NPW11.40800	Dichloropropane (1,2-)	GC/MS, P & T, Capillary Column	EPA 624.1	NJ
Certified	Yes	NPW11.40850	Dichloropropane (1,3-)	GC/MS, P & T, Capillary Column	EPA 624.1	NJ
Certified	Yes	NPW11.40900	Dichloropropane (2,2-)	GC/MS, P & T, Capillary Column	EPA 624.1	NJ
Certified	Yes	NPW11.41000	Dichloropropene (cis-1,3-)	GC/MS, P & T, Capillary Column	EPA 624.1	NJ
Certified	Yes	NPW11.41200	Dioxane (1,4-)	GC/MS, P & T, Capillary Column	EPA 624.1	NJ
Certified	Yes	NPW11.41350	Ethyl acetate	GC/MS, P & T, Capillary Column	EPA 624.1	NJ
Certified	Yes	NPW11.41450	Ethylbenzene	GC/MS, P & T, Capillary Column	EPA 624.1	NJ
Certified	Yes	NPW11.41600	Hexachlorobutadiene (1,3-)	GC/MS, P & T, Capillary Column	EPA 624.1	NJ
Certified	Yes	NPW11.41700	Hexanone (2-)	GC/MS, P & T, Capillary Column	EPA 624.1	NJ
Certified	Yes	NPW11.41900	Isopropyl acetate	GC/MS, P & T, Capillary Column	EPA 624.1	NJ
Certified	Yes	NPW11.42000	Isopropylbenzene	GC/MS, P & T, Capillary Column	EPA 624.1	NJ
Certified	Yes	NPW11.42050	Isopropyltoluene (4-)	GC/MS, P & T, Capillary Column	EPA 624.1	NJ
Certified	Yes	NPW11.42150	Methyl acetate	GC/MS, P & T, Capillary Column	EPA 624.1	NJ
Certified	Yes	NPW11.42350	Methyl isobutyl ketone (MIBK)	GC/MS, P & T, Capillary Column	EPA 624.1	NJ
Certified	Yes	NPW11.42450	Methyl tert-butyl ether	GC/MS, P & T, Capillary Column	EPA 624.1	NJ
Certified	Yes	NPW11.42500	Methylcyclohexane	GC/MS, P & T, Capillary Column	EPA 624.1	NJ
Certified	Yes	NPW11.42550	Methylene chloride (Dichloromethane)	GC/MS, P & T, Capillary Column	EPA 624.1	NJ
Certified	Yes	NPW11.42600	Naphthalene	GC/MS, P & T, Capillary Column	EPA 624.1	NJ
Certified	Yes	NPW11.42900	Propylbenzene (n-)	GC/MS, P & T, Capillary Column	EPA 624.1	NJ
Certified	Yes	NPW11.42950	Sec-butylbenzene	GC/MS, P & T, Capillary Column	EPA 624.1	NJ

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1275 BLOOMFIELD AVE
FAIRFIELD NJ 07004

Category: NPW11--Organic Parameters - Chromatography/MS

Status	Eligible to Report NJ Data	Code	Parameter	Technique	Approved Methods	Primary State
Certified	Yes	NPW11.43000	Styrene	GC/MS, P & T, Capillary Column	EPA 624.1	NJ
Certified	Yes	NPW11.43150	Tert-butyl alcohol	GC/MS, P & T, Capillary Column	EPA 624.1	NJ
Certified	Yes	NPW11.43200	Tert-butylbenzene	GC/MS, P & T, Capillary Column	EPA 624.1	NJ
Certified	Yes	NPW11.43250	Tetrachloroethane (1,1,1,2-)	GC/MS, P & T, Capillary Column	EPA 624.1	NJ
Certified	Yes	NPW11.43300	Tetrachloroethane (1,1,2,2-)	GC/MS, P & T, Capillary Column	EPA 624.1	NJ
Certified	Yes	NPW11.43350	Tetrachloroethene	GC/MS, P & T, Capillary Column	EPA 624.1	NJ
Certified	Yes	NPW11.43450	Toluene	GC/MS, P & T, Capillary Column	EPA 624.1	NJ
Certified	Yes	NPW11.43500	Trichloro (1,1,2-) trifluoroethane (1,2,2-)	GC/MS, P & T, Capillary Column	EPA 624.1	NJ
Certified	Yes	NPW11.43550	Trichlorobenzene (1,2,3-)	GC/MS, P & T, Capillary Column	EPA 624.1	NJ
Certified	Yes	NPW11.43600	Trichlorobenzene (1,2,4-)	GC/MS, P & T, Capillary Column	EPA 624.1	NJ
Certified	Yes	NPW11.43650	Trichloroethane (1,1,1-)	GC/MS, P & T, Capillary Column	EPA 624.1	NJ
Certified	Yes	NPW11.43700	Trichloroethane (1,1,2-)	GC/MS, P & T, Capillary Column	EPA 624.1	NJ
Certified	Yes	NPW11.43750	Trichloroethene	GC/MS, P & T, Capillary Column	EPA 624.1	NJ
Certified	Yes	NPW11.43800	Trichlorofluoromethane	GC/MS, P & T, Capillary Column	EPA 624.1	NJ
Certified	Yes	NPW11.43850	Trichloropropane (1,2,3-)	GC/MS, P & T, Capillary Column	EPA 624.1	NJ
Certified	Yes	NPW11.43950	Trimethylbenzene (1,2,4-)	GC/MS, P & T, Capillary Column	EPA 624.1	NJ
Certified	Yes	NPW11.44000	Trimethylbenzene (1,3,5-)	GC/MS, P & T, Capillary Column	EPA 624.1	NJ
Certified	Yes	NPW11.44050	Vinyl acetate	GC/MS, P & T, Capillary Column	EPA 624.1	NJ
Certified	Yes	NPW11.44100	Vinyl chloride	GC/MS, P & T, Capillary Column	EPA 624.1	NJ
Certified	Yes	NPW11.44150	Xylene (m- + p-)	GC/MS, P & T, Capillary Column	EPA 624.1	NJ
Certified	Yes	NPW11.44250	Xylene (o-)	GC/MS, P & T, Capillary Column	EPA 624.1	NJ
Certified	Yes	NPW11.44350	Xylenes (total)	GC/MS, P & T, Capillary Column	EPA 624.1	NJ
Certified	Yes	NPW11.44400	Acenaphthene	Extract, GC/MS	EPA 625.1	NJ
Certified	Yes	NPW11.44450	Acenaphthylene	Extract, GC/MS	EPA 625.1	NJ
Certified	Yes	NPW11.44800	Aniline	Extract, GC/MS	EPA 625.1	NJ
Certified	Yes	NPW11.44850	Anthracene	Extract, GC/MS	EPA 625.1	NJ
Certified	Yes	NPW11.45200	Benzidine	Extract, GC/MS	EPA 625.1	NJ

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Category: NPW11--Organic Parameters - Chromatography/MS

Status	Eligible to Report NJ Data	Code	Parameter	Technique	Approved Methods	Primary State
Certified	Yes	NPW11.45250	Benzo(a)anthracene	Extract, GC/MS	EPA 625.1	NJ
Certified	Yes	NPW11.45300	Benzo(a)pyrene	Extract, GC/MS	EPA 625.1	NJ
Certified	Yes	NPW11.45350	Benzo(b)fluoranthene	Extract, GC/MS	EPA 625.1	NJ
Certified	Yes	NPW11.45400	Benzo(ghi)perylene	Extract, GC/MS	EPA 625.1	NJ
Certified	Yes	NPW11.45500	Benzo(k)fluoranthene	Extract, GC/MS	EPA 625.1	NJ
Certified	Yes	NPW11.45550	Benzoic acid	Extract, GC/MS	EPA 625.1	NJ
Certified	Yes	NPW11.45700	Bis (2-chloroethoxy) methane	Extract, GC/MS	EPA 625.1	NJ
Certified	Yes	NPW11.45750	Bis (2-chloroethyl) ether	Extract, GC/MS	EPA 625.1	NJ
Certified	Yes	NPW11.45800	Bis(2-chloroisopropyl)ether|2,2'-oxybis(1-chloropropane)	Extract, GC/MS	EPA 625.1	NJ
Certified	Yes	NPW11.45850	Bis (2-ethylhexyl) phthalate	Extract, GC/MS	EPA 625.1	NJ
Certified	Yes	NPW11.46000	Bromophenyl-phenyl ether (4-)	Extract, GC/MS	EPA 625.1	NJ
Certified	Yes	NPW11.46050	Butylbenzylphthalate	Extract, GC/MS	EPA 625.1	NJ
Certified	Yes	NPW11.46250	Carbazole	Extract, GC/MS	EPA 625.1	NJ
Certified	Yes	NPW11.46400	Chloroaniline (4-)	Extract, GC/MS	EPA 625.1	NJ
Certified	Yes	NPW11.46550	Chloronaphthalene (2-)	Extract, GC/MS	EPA 625.1	NJ
Certified	Yes	NPW11.46650	Chlorophenol (2-)	Extract, GC/MS	EPA 625.1	NJ
Certified	Yes	NPW11.46700	Chlorophenyl-phenyl ether (4-)	Extract, GC/MS	EPA 625.1	NJ
Certified	Yes	NPW11.46900	Chrysene	Extract, GC/MS	EPA 625.1	NJ
Certified	Yes	NPW11.47500	Dibenzo(a,h)anthracene	Extract, GC/MS	EPA 625.1	NJ
Certified	Yes	NPW11.47650	Dibenzofuran	Extract, GC/MS	EPA 625.1	NJ
Certified	Yes	NPW11.47750	Dichlorobenzidine (3,3'-)	Extract, GC/MS	EPA 625.1	NJ
Certified	Yes	NPW11.47800	Dichlorophenol (2,4-)	Extract, GC/MS	EPA 625.1	NJ
Certified	Yes	NPW11.47850	Dichlorophenol (2,6-)	Extract, GC/MS	EPA 625.1	NJ
Certified	Yes	NPW11.47950	Diethyl phthalate	Extract, GC/MS	EPA 625.1	NJ
Certified	Yes	NPW11.48100	Dimethyl phthalate	Extract, GC/MS	EPA 625.1	NJ
Certified	Yes	NPW11.48250	Dimethylphenol (2,4-)	Extract, GC/MS	EPA 625.1	NJ
Certified	Yes	NPW11.48300	Di-n-butyl phthalate	Extract, GC/MS	EPA 625.1	NJ

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Status	Eligible to Report NJ Data	Code	Parameter	Technique	Approved Methods	Primary State
Certified	Yes	NPW11.48400	Dinitrophenol (2,4-)	Extract, GC/MS	EPA 625.1	NJ
Certified	Yes	NPW11.48450	Dinitrophenol (2-methyl-4,6-)	Extract, GC/MS	EPA 625.1	NJ
Certified	Yes	NPW11.48500	Dinitrotoluene (2,4-)	Extract, GC/MS	EPA 625.1	NJ
Certified	Yes	NPW11.48550	Dinitrotoluene (2,6-)	Extract, GC/MS	EPA 625.1	NJ
Certified	Yes	NPW11.48600	Di-n-octyl phthalate	Extract, GC/MS	EPA 625.1	NJ
Certified	Yes	NPW11.48700	Diphenylhydrazine / Azobenzene	Extract, GC/MS	EPA 625.1	NJ
Certified	Yes	NPW11.49250	Fluoranthene	Extract, GC/MS	EPA 625.1	NJ
Certified	Yes	NPW11.49300	Fluorene	Extract, GC/MS	EPA 625.1	NJ
Certified	Yes	NPW11.49350	Hexachlorobenzene	Extract, GC/MS	EPA 625.1	NJ
Certified	Yes	NPW11.49400	Hexachlorobutadiene (1,3-)	Extract, GC/MS	EPA 625.1	NJ
Certified	Yes	NPW11.49450	Hexachlorocyclopentadiene	Extract, GC/MS	EPA 625.1	NJ
Certified	Yes	NPW11.49500	Hexachloroethane	Extract, GC/MS	EPA 625.1	NJ
Certified	Yes	NPW11.49700	Indeno(1,2,3-cd)pyrene	Extract, GC/MS	EPA 625.1	NJ
Certified	Yes	NPW11.49800	Isophorone	Extract, GC/MS	EPA 625.1	NJ
Certified	Yes	NPW11.50350	Methyl phenol (4-chloro-3-)	Extract, GC/MS	EPA 625.1	NJ
Certified	Yes	NPW11.50450	Methylnaphthalene (2-)	Extract, GC/MS	EPA 625.1	NJ
Certified	Yes	NPW11.50550	Methylphenol (2-)	Extract, GC/MS	EPA 625.1	NJ
Certified	Yes	NPW11.50650	Methylphenol (4-)	Extract, GC/MS	EPA 625.1	NJ
Certified	Yes	NPW11.50950	Naphthalene	Extract, GC/MS	EPA 625.1	NJ
Certified	Yes	NPW11.51150	Nitroaniline (2-)	Extract, GC/MS	EPA 625.1	NJ
Certified	Yes	NPW11.51200	Nitroaniline (3-)	Extract, GC/MS	EPA 625.1	NJ
Certified	Yes	NPW11.51250	Nitroaniline (4-)	Extract, GC/MS	EPA 625.1	NJ
Certified	Yes	NPW11.51300	Nitrobenzene	Extract, GC/MS	EPA 625.1	NJ
Certified	Yes	NPW11.51350	Nitrophenol (2-)	Extract, GC/MS	EPA 625.1	NJ
Certified	Yes	NPW11.51400	Nitrophenol (4-)	Extract, GC/MS	EPA 625.1	NJ
Certified	Yes	NPW11.51450	N-Nitrosodiethylamine	Extract, GC/MS	EPA 625.1	NJ
Certified	Yes	NPW11.51500	N-Nitrosodimethylamine	Extract, GC/MS	EPA 625.1	NJ

New Jersey Department of Environment Protection
Environmental Laboratory Certification Program

Annual Certified Parameter List and Current Status

Effective as of 3/04/2024 until 6/30/2024

Laboratory Name: PACE ANALYTICAL SERVICES, LLC-FAIRFIELD Laboratory Number: 07010 Activity ID: NLC 230009
1275 BLOOMFIELD AVE
FAIRFIELD NJ 07004

Category: NPW11--Organic Parameters - Chromatography/MS

Status	Eligible to Report NJ Data	Code	Parameter	Technique	Approved Methods	Primary State
Certified	Yes	NPW11.51530	N-Nitroso-di-n-butylamine	Extract, GC/MS	EPA 625.1	NJ
Certified	Yes	NPW11.51550	N-Nitroso-di-n-propylamine	Extract, GC/MS	EPA 625.1	NJ
Certified	Yes	NPW11.51600	N-Nitrosodiphenylamine / Diphenylamine	Extract, GC/MS	EPA 625.1	NJ
Certified	Yes	NPW11.51800	N-Nitrosopyrrolidine	Extract, GC/MS	EPA 625.1	NJ
Certified	Yes	NPW11.52300	Parathion ethyl (Parathion)	Extract, GC/MS	EPA 625.1	NJ
Certified	Yes	NPW11.52400	Pentachlorobenzene	Extract, GC/MS	EPA 625.1	NJ
Certified	Yes	NPW11.52550	Pentachlorophenol	Extract, GC/MS	EPA 625.1	NJ
Certified	Yes	NPW11.52700	Phenanthrene	Extract, GC/MS	EPA 625.1	NJ
Certified	Yes	NPW11.52750	Phenol	Extract, GC/MS	EPA 625.1	NJ
Certified	Yes	NPW11.53400	Pyrene	Extract, GC/MS	EPA 625.1	NJ
Certified	Yes	NPW11.55100	Tetrachlorobenzene (1,2,4,5-)	Extract, GC/MS	EPA 625.1	NJ
Certified	Yes	NPW11.55400	Trichlorobenzene (1,2,4-)	Extract, GC/MS	EPA 625.1	NJ
Certified	Yes	NPW11.55500	Trichlorophenol (2,4,5-)	Extract, GC/MS	EPA 625.1	NJ
Certified	Yes	NPW11.55550	Trichlorophenol (2,4,6-)	Extract, GC/MS	EPA 625.1	NJ
Certified	Yes	NPW11.56650	TCDD (2,3,7,8-)	GC/MS	EPA 625.1 (screen only)	NJ
Certified	Yes	NPW11.68750	Acetone	GC/MS, P & T or Direct Injection, Capillary	SW-846 8260D	NJ
Certified	Yes	NPW11.68850	Acrolein	GC/MS, P & T or Direct Injection, Capillary	SW-846 8260D	NJ
Certified	Yes	NPW11.68900	Acrylonitrile	GC/MS, P & T or Direct Injection, Capillary	SW-846 8260D	NJ
Certified	Yes	NPW11.69100	Benzene	GC/MS, P & T or Direct Injection, Capillary	SW-846 8260D	NJ
Certified	Yes	NPW11.69200	Bromobenzene	GC/MS, P & T or Direct Injection, Capillary	SW-846 8260D	NJ
Certified	Yes	NPW11.69250	Bromochloromethane	GC/MS, P & T or Direct Injection, Capillary	SW-846 8260D	NJ
Certified	Yes	NPW11.69300	Bromodichloromethane	GC/MS, P & T or Direct Injection, Capillary	SW-846 8260D	NJ
Certified	Yes	NPW11.69400	Bromoform	GC/MS, P & T or Direct Injection, Capillary	SW-846 8260D	NJ
Certified	Yes	NPW11.69450	Bromomethane	GC/MS, P & T or Direct Injection, Capillary	SW-846 8260D	NJ
Certified	Yes	NPW11.69650	Butanone (2-) (Methyl ethyl ketone)	GC/MS, P & T or Direct Injection, Capillary	SW-846 8260D	NJ
Certified	Yes	NPW11.69850	Butylbenzene (n-)	GC/MS, P & T or Direct Injection, Capillary	SW-846 8260D	NJ
Certified	Yes	NPW11.69900	Carbon disulfide	GC/MS, P & T or Direct Injection, Capillary	SW-846 8260D	NJ

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1275 BLOOMFIELD AVE
FAIRFIELD NJ 07004

Category: NPW11--Organic Parameters - Chromatography/MS

Status	Eligible to Report NJ Data	Code	Parameter	Technique	Approved Methods	Primary State
Certified	Yes	NPW11.69950	Carbon tetrachloride	GC/MS, P & T or Direct Injection, Capillary	SW-846 8260D	NJ
Certified	Yes	NPW11.70000	Chlorobenzene	GC/MS, P & T or Direct Injection, Capillary	SW-846 8260D	NJ
Certified	Yes	NPW11.70050	Chloroethane	GC/MS, P & T or Direct Injection, Capillary	SW-846 8260D	NJ
Certified	Yes	NPW11.70100	Chloroethyl vinyl ether (2-)	GC/MS, P & T or Direct Injection, Capillary	SW-846 8260D	NJ
Certified	Yes	NPW11.70150	Chloroform	GC/MS, P & T or Direct Injection, Capillary	SW-846 8260D	NJ
Certified	Yes	NPW11.70200	Chloromethane	GC/MS, P & T or Direct Injection, Capillary	SW-846 8260D	NJ
Certified	Yes	NPW11.70250	Chlorotoluene (2-)	GC/MS, P & T or Direct Injection, Capillary	SW-846 8260D	NJ
Certified	Yes	NPW11.70300	Chlorotoluene (4-)	GC/MS, P & T or Direct Injection, Capillary	SW-846 8260D	NJ
Certified	Yes	NPW11.70400	Cyclohexane	GC/MS, P & T or Direct Injection, Capillary	SW-846 8260D	NJ
Certified	Yes	NPW11.70500	Dibromo-3-chloropropane (1,2-)	GC/MS, P & T or Direct Injection, Capillary	SW-846 8260D	NJ
Certified	Yes	NPW11.70550	Dibromochloromethane	GC/MS, P & T or Direct Injection, Capillary	SW-846 8260D	NJ
Certified	Yes	NPW11.70600	Dibromoethane (1,2-) (EDB)	GC/MS, P & T or Direct Injection, Capillary	SW-846 8260D	NJ
Certified	Yes	NPW11.70650	Dibromomethane	GC/MS, P & T or Direct Injection, Capillary	SW-846 8260D	NJ
Certified	Yes	NPW11.70800	Dichlorobenzene (1,2-)	GC/MS, P & T or Direct Injection, Capillary	SW-846 8260D	NJ
Certified	Yes	NPW11.70850	Dichlorobenzene (1,3-)	GC/MS, P & T or Direct Injection, Capillary	SW-846 8260D	NJ
Certified	Yes	NPW11.70900	Dichlorobenzene (1,4-)	GC/MS, P & T or Direct Injection, Capillary	SW-846 8260D	NJ
Certified	Yes	NPW11.70950	Dichlorodifluoromethane	GC/MS, P & T or Direct Injection, Capillary	SW-846 8260D	NJ
Certified	Yes	NPW11.71000	Dichloroethane (1,1-)	GC/MS, P & T or Direct Injection, Capillary	SW-846 8260D	NJ
Certified	Yes	NPW11.71050	Dichloroethane (1,2-)	GC/MS, P & T or Direct Injection, Capillary	SW-846 8260D	NJ
Certified	Yes	NPW11.71100	Dichloroethene (1,1-)	GC/MS, P & T or Direct Injection, Capillary	SW-846 8260D	NJ
Certified	Yes	NPW11.71150	Dichloroethene (cis-1,2-)	GC/MS, P & T or Direct Injection, Capillary	SW-846 8260D	NJ
Certified	Yes	NPW11.71200	Dichloroethene (trans-1,2-)	GC/MS, P & T or Direct Injection, Capillary	SW-846 8260D	NJ
Certified	Yes	NPW11.71250	Dichloropropane (1,2-)	GC/MS, P & T or Direct Injection, Capillary	SW-846 8260D	NJ
Certified	Yes	NPW11.71300	Dichloropropane (1,3-)	GC/MS, P & T or Direct Injection, Capillary	SW-846 8260D	NJ
Certified	Yes	NPW11.71450	Dichloropropene (cis-1,3-)	GC/MS, P & T or Direct Injection, Capillary	SW-846 8260D	NJ
Certified	Yes	NPW11.71500	Dichloropropene (trans-1,3-)	GC/MS, P & T or Direct Injection, Capillary	SW-846 8260D	NJ
Certified	Yes	NPW11.71900	Ethylbenzene	GC/MS, P & T or Direct Injection, Capillary	SW-846 8260D	NJ

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1275 BLOOMFIELD AVE
FAIRFIELD NJ 07004

Category: NPW11--Organic Parameters - Chromatography/MS

Status	Eligible to Report NJ Data	Code	Parameter	Technique	Approved Methods	Primary State
Certified	Yes	NPW11.72050	Hexachlorobutadiene (1,3-)	GC/MS, P & T or Direct Injection, Capillary	SW-846 8260D	NJ
Certified	Yes	NPW11.72200	Hexanone (2-)	GC/MS, P & T or Direct Injection, Capillary	SW-846 8260D	NJ
Certified	Yes	NPW11.72400	Isopropylbenzene	GC/MS, P & T or Direct Injection, Capillary	SW-846 8260D	NJ
Certified	Yes	NPW11.72450	Isopropyltoluene (4-)	GC/MS, P & T or Direct Injection, Capillary	SW-846 8260D	NJ
Certified	Yes	NPW11.72600	Methyl acrylate	GC/MS, P & T or Direct Injection, Capillary	SW-846 8260D	NJ
Certified	Yes	NPW11.72750	Methyl tert-butyl ether	GC/MS, P & T or Direct Injection, Capillary	SW-846 8260D	NJ
Certified	Yes	NPW11.72800	Methylcyclohexane	GC/MS, P & T or Direct Injection, Capillary	SW-846 8260D	NJ
Certified	Yes	NPW11.72850	Methylene chloride (Dichloromethane)	GC/MS, P & T or Direct Injection, Capillary	SW-846 8260D	NJ
Certified	Yes	NPW11.73000	Naphthalene	GC/MS, P & T or Direct Injection, Capillary	SW-846 8260D	NJ
Certified	Yes	NPW11.73350	Pentanone (4-methyl-2-) (MIBK)	GC/MS, P & T or Direct Injection, Capillary	SW-846 8260D	NJ
Certified	Yes	NPW11.73450	Propylbenzene (n-)	GC/MS, P & T or Direct Injection, Capillary	SW-846 8260D	NJ
Certified	Yes	NPW11.73500	Sec-butylbenzene	GC/MS, P & T or Direct Injection, Capillary	SW-846 8260D	NJ
Certified	Yes	NPW11.73550	Styrene	GC/MS, P & T or Direct Injection, Capillary	SW-846 8260D	NJ
Certified	Yes	NPW11.73700	Tert-butyl alcohol	GC/MS, P & T or Direct Injection, Capillary	SW-846 8260D	NJ
Certified	Yes	NPW11.73750	Tert-butylbenzene	GC/MS, P & T or Direct Injection, Capillary	SW-846 8260D	NJ
Certified	Yes	NPW11.73800	Tetrachloroethane (1,1,1,2-)	GC/MS, P & T or Direct Injection, Capillary	SW-846 8260D	NJ
Certified	Yes	NPW11.73850	Tetrachloroethane (1,1,2,2-)	GC/MS, P & T or Direct Injection, Capillary	SW-846 8260D	NJ
Certified	Yes	NPW11.73900	Tetrachloroethene	GC/MS, P & T or Direct Injection, Capillary	SW-846 8260D	NJ
Certified	Yes	NPW11.74000	Toluene	GC/MS, P & T or Direct Injection, Capillary	SW-846 8260D	NJ
Certified	Yes	NPW11.74100	Trichloro (1,1,2-) trifluoroethane (1,2,2-)	GC/MS, P & T or Direct Injection, Capillary	SW-846 8260D	NJ
Certified	Yes	NPW11.74150	Trichlorobenzene (1,2,3-)	GC/MS, P & T or Direct Injection, Capillary	SW-846 8260D	NJ
Certified	Yes	NPW11.74200	Trichlorobenzene (1,2,4-)	GC/MS, P & T or Direct Injection, Capillary	SW-846 8260D	NJ
Certified	Yes	NPW11.74250	Trichloroethane (1,1,1-)	GC/MS, P & T or Direct Injection, Capillary	SW-846 8260D	NJ
Certified	Yes	NPW11.74300	Trichloroethane (1,1,2-)	GC/MS, P & T or Direct Injection, Capillary	SW-846 8260D	NJ
Certified	Yes	NPW11.74350	Trichloroethene	GC/MS, P & T or Direct Injection, Capillary	SW-846 8260D	NJ
Certified	Yes	NPW11.74400	Trichlorofluoromethane	GC/MS, P & T or Direct Injection, Capillary	SW-846 8260D	NJ
Certified	Yes	NPW11.74450	Trichloropropane (1,2,3-)	GC/MS, P & T or Direct Injection, Capillary	SW-846 8260D	NJ

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1275 BLOOMFIELD AVE
FAIRFIELD NJ 07004

Category: NPW11--Organic Parameters - Chromatography/MS

Status	Eligible to Report NJ Data	Code	Parameter	Technique	Approved Methods	Primary State
Certified	Yes	NPW11.74550	Trimethylbenzene (1,2,4-)	GC/MS, P & T or Direct Injection, Capillary	SW-846 8260D	NJ
Certified	Yes	NPW11.74600	Trimethylbenzene (1,3,5-)	GC/MS, P & T or Direct Injection, Capillary	SW-846 8260D	NJ
Certified	Yes	NPW11.74750	Vinyl chloride	GC/MS, P & T or Direct Injection, Capillary	SW-846 8260D	NJ
Certified	Yes	NPW11.74950	Xylenes (total)	GC/MS, P & T or Direct Injection, Capillary	SW-846 8260D	NJ
Certified	Yes	NPW11.75150	Acenaphthene	GC/MS, Extract or Dir Inj, Capillary	SW-846 8270E	NJ
Certified	Yes	NPW11.75200	Acenaphthylene	GC/MS, Extract or Dir Inj, Capillary	SW-846 8270E	NJ
Certified	Yes	NPW11.75250	Acetophenone	GC/MS, Extract or Dir Inj, Capillary	SW-846 8270E	NJ
Certified	Yes	NPW11.75600	Aniline	GC/MS, Extract or Dir Inj, Capillary	SW-846 8270E	NJ
Certified	Yes	NPW11.75650	Anthracene	GC/MS, Extract or Dir Inj, Capillary	SW-846 8270E	NJ
Certified	Yes	NPW11.75750	Atrazine	GC/MS, Extract or Dir Inj, Capillary	SW-846 8270E	NJ
Certified	Yes	NPW11.75850	Benzaldehyde	GC/MS, Extract or Dir Inj, Capillary	SW-846 8270E	NJ
Certified	Yes	NPW11.75950	Benzidine	GC/MS, Extract or Dir Inj, Capillary	SW-846 8270E	NJ
Certified	Yes	NPW11.76000	Benzo(a)anthracene	GC/MS, Extract or Dir Inj, Capillary	SW-846 8270E	NJ
Certified	Yes	NPW11.76050	Benzo(a)pyrene	GC/MS, Extract or Dir Inj, Capillary	SW-846 8270E	NJ
Certified	Yes	NPW11.76100	Benzo(b)fluoranthene	GC/MS, Extract or Dir Inj, Capillary	SW-846 8270E	NJ
Certified	Yes	NPW11.76150	Benzo(ghi)perylene	GC/MS, Extract or Dir Inj, Capillary	SW-846 8270E	NJ
Certified	Yes	NPW11.76250	Benzo(k)fluoranthene	GC/MS, Extract or Dir Inj, Capillary	SW-846 8270E	NJ
Certified	Yes	NPW11.76300	Benzoic acid	GC/MS, Extract or Dir Inj, Capillary	SW-846 8270E	NJ
Certified	Yes	NPW11.76400	Benzyl alcohol	GC/MS, Extract or Dir Inj, Capillary	SW-846 8270E	NJ
Certified	Yes	NPW11.76550	Biphenyl (1,1'-)	GC/MS, Extract or Dir Inj, Capillary	SW-846 8270E	NJ
Certified	Yes	NPW11.76600	Bis (2-chloroethoxy) methane	GC/MS, Extract or Dir Inj, Capillary	SW-846 8270E	NJ
Certified	Yes	NPW11.76650	Bis (2-chloroethyl) ether	GC/MS, Extract or Dir Inj, Capillary	SW-846 8270E	NJ
Certified	Yes	NPW11.76700	Bis(2-chloroisopropyl)ether|2,2'-oxybis(1-chloropropane)	GC/MS, Extract or Dir Inj, Capillary	SW-846 8270E	NJ
Certified	Yes	NPW11.76750	Bis (2-ethylhexyl) phthalate	GC/MS, Extract or Dir Inj, Capillary	SW-846 8270E	NJ
Certified	Yes	NPW11.76800	Bromophenyl-phenyl ether (4-)	GC/MS, Extract or Dir Inj, Capillary	SW-846 8270E	NJ
Certified	Yes	NPW11.76850	Butylbenzylphthalate	GC/MS, Extract or Dir Inj, Capillary	SW-846 8270E	NJ
Certified	Yes	NPW11.76900	Caprolactam	GC/MS, Extract or Dir Inj, Capillary	SW-846 8270E	NJ

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1275 BLOOMFIELD AVE
FAIRFIELD NJ 07004

Category: NPW11--Organic Parameters - Chromatography/MS

Status	Eligible to Report NJ Data	Code	Parameter	Technique	Approved Methods	Primary State
Certified	Yes	NPW11.76950	Carbazole	GC/MS, Extract or Dir Inj, Capillary	SW-846 8270E	NJ
Certified	Yes	NPW11.77150	Chloroaniline (4-)	GC/MS, Extract or Dir Inj, Capillary	SW-846 8270E	NJ
Certified	Yes	NPW11.77300	Chloronaphthalene (2-)	GC/MS, Extract or Dir Inj, Capillary	SW-846 8270E	NJ
Certified	Yes	NPW11.77350	Chlorophenol (2-)	GC/MS, Extract or Dir Inj, Capillary	SW-846 8270E	NJ
Certified	Yes	NPW11.77400	Chlorophenyl-phenyl ether (4-)	GC/MS, Extract or Dir Inj, Capillary	SW-846 8270E	NJ
Certified	Yes	NPW11.77450	Chrysene	GC/MS, Extract or Dir Inj, Capillary	SW-846 8270E	NJ
Certified	Yes	NPW11.78000	Dibenzo(a,h)anthracene	GC/MS, Extract or Dir Inj, Capillary	SW-846 8270E	NJ
Certified	Yes	NPW11.78200	Dibenzofuran	GC/MS, Extract or Dir Inj, Capillary	SW-846 8270E	NJ
Certified	Yes	NPW11.78250	Dichlorobenzene (1,2-)	GC/MS, Extract or Dir Inj, Capillary	SW-846 8270E	NJ
Certified	Yes	NPW11.78300	Dichlorobenzene (1,3-)	GC/MS, Extract or Dir Inj, Capillary	SW-846 8270E	NJ
Certified	Yes	NPW11.78350	Dichlorobenzene (1,4-)	GC/MS, Extract or Dir Inj, Capillary	SW-846 8270E	NJ
Certified	Yes	NPW11.78400	Dichlorobenzidine (3,3'-)	GC/MS, Extract or Dir Inj, Capillary	SW-846 8270E	NJ
Certified	Yes	NPW11.78450	Dichlorophenol (2,4-)	GC/MS, Extract or Dir Inj, Capillary	SW-846 8270E	NJ
Certified	Yes	NPW11.78600	Diethyl phthalate	GC/MS, Extract or Dir Inj, Capillary	SW-846 8270E	NJ
Certified	Yes	NPW11.78750	Dimethyl phthalate	GC/MS, Extract or Dir Inj, Capillary	SW-846 8270E	NJ
Certified	Yes	NPW11.79100	Dimethylphenol (2,4-)	GC/MS, Extract or Dir Inj, Capillary	SW-846 8270E	NJ
Certified	Yes	NPW11.79150	Di-n-butyl phthalate	GC/MS, Extract or Dir Inj, Capillary	SW-846 8270E	NJ
Certified	Yes	NPW11.79300	Dinitrophenol (2,4-)	GC/MS, Extract or Dir Inj, Capillary	SW-846 8270E	NJ
Certified	Yes	NPW11.79350	Dinitrophenol (2-methyl-4,6-)	GC/MS, Extract or Dir Inj, Capillary	SW-846 8270E	NJ
Certified	Yes	NPW11.79400	Dinitrotoluene (2,4-)	GC/MS, Extract or Dir Inj, Capillary	SW-846 8270E	NJ
Certified	Yes	NPW11.79450	Dinitrotoluene (2,6-)	GC/MS, Extract or Dir Inj, Capillary	SW-846 8270E	NJ
Certified	Yes	NPW11.79500	Di-n-octyl phthalate	GC/MS, Extract or Dir Inj, Capillary	SW-846 8270E	NJ
Certified	Yes	NPW11.79650	Diphenylhydrazine / Azobenzene	GC/MS, Extract or Dir Inj, Capillary	SW-846 8270E	NJ
Certified	Yes	NPW11.80150	Fluoranthene	GC/MS, Extract or Dir Inj, Capillary	SW-846 8270E	NJ
Certified	Yes	NPW11.80200	Fluorene	GC/MS, Extract or Dir Inj, Capillary	SW-846 8270E	NJ
Certified	Yes	NPW11.80350	Hexachlorobenzene	GC/MS, Extract or Dir Inj, Capillary	SW-846 8270E	NJ
Certified	Yes	NPW11.80400	Hexachlorobutadiene (1,3-)	GC/MS, Extract or Dir Inj, Capillary	SW-846 8270E	NJ

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Status	Eligible to Report NJ Data	Code	Parameter	Technique	Approved Methods	Primary State
Certified	Yes	NPW11.80450	Hexachlorocyclopentadiene	GC/MS, Extract or Dir Inj, Capillary	SW-846 8270E	NJ
Certified	Yes	NPW11.80500	Hexachloroethane	GC/MS, Extract or Dir Inj, Capillary	SW-846 8270E	NJ
Certified	Yes	NPW11.80750	Indeno(1,2,3-cd)pyrene	GC/MS, Extract or Dir Inj, Capillary	SW-846 8270E	NJ
Certified	Yes	NPW11.80850	Isophorone	GC/MS, Extract or Dir Inj, Capillary	SW-846 8270E	NJ
Certified	Yes	NPW11.81300	Methyl phenol (4-chloro-3-)	GC/MS, Extract or Dir Inj, Capillary	SW-846 8270E	NJ
Certified	Yes	NPW11.81450	Methylnaphthalene (2-)	GC/MS, Extract or Dir Inj, Capillary	SW-846 8270E	NJ
Certified	Yes	NPW11.81500	Methylphenol (2-)	GC/MS, Extract or Dir Inj, Capillary	SW-846 8270E	NJ
Certified	Yes	NPW11.81550	Methylphenol (3-)	GC/MS, Extract or Dir Inj, Capillary	SW-846 8270E	NJ
Certified	Yes	NPW11.81600	Methylphenol (4-)	GC/MS, Extract or Dir Inj, Capillary	SW-846 8270E	NJ
Certified	Yes	NPW11.81650	Naphthalene	GC/MS, Extract or Dir Inj, Capillary	SW-846 8270E	NJ
Certified	Yes	NPW11.81850	Nitroaniline (2-)	GC/MS, Extract or Dir Inj, Capillary	SW-846 8270E	NJ
Certified	Yes	NPW11.81900	Nitroaniline (3-)	GC/MS, Extract or Dir Inj, Capillary	SW-846 8270E	NJ
Certified	Yes	NPW11.81950	Nitroaniline (4-)	GC/MS, Extract or Dir Inj, Capillary	SW-846 8270E	NJ
Certified	Yes	NPW11.82000	Nitrobenzene	GC/MS, Extract or Dir Inj, Capillary	SW-846 8270E	NJ
Certified	Yes	NPW11.82100	Nitrophenol (2-)	GC/MS, Extract or Dir Inj, Capillary	SW-846 8270E	NJ
Certified	Yes	NPW11.82150	Nitrophenol (4-)	GC/MS, Extract or Dir Inj, Capillary	SW-846 8270E	NJ
Certified	Yes	NPW11.82250	N-Nitrosodimethylamine	GC/MS, Extract or Dir Inj, Capillary	SW-846 8270E	NJ
Certified	Yes	NPW11.82350	N-Nitroso-di-n-propylamine	GC/MS, Extract or Dir Inj, Capillary	SW-846 8270E	NJ
Certified	Yes	NPW11.82400	N-Nitrosodiphenylamine / Diphenylamine	GC/MS, Extract or Dir Inj, Capillary	SW-846 8270E	NJ
Certified	Yes	NPW11.83300	Pentachlorophenol	GC/MS, Extract or Dir Inj, Capillary	SW-846 8270E	NJ
Certified	Yes	NPW11.83400	Phenanthrene	GC/MS, Extract or Dir Inj, Capillary	SW-846 8270E	NJ
Certified	Yes	NPW11.83450	Phenol	GC/MS, Extract or Dir Inj, Capillary	SW-846 8270E	NJ
Certified	Yes	NPW11.83850	Pyrene	GC/MS, Extract or Dir Inj, Capillary	SW-846 8270E	NJ
Certified	Yes	NPW11.83900	Pyridine	GC/MS, Extract or Dir Inj, Capillary	SW-846 8270E	NJ
Applied	No	NPW11.84350	Tetrachlorobenzene (1,2,4,5-)	GC/MS, Extract or Dir Inj, Capillary	SW-846 8270E	NJ
Certified	Yes	NPW11.84650	Trichlorobenzene (1,2,4-)	GC/MS, Extract or Dir Inj, Capillary	SW-846 8270E	NJ
Certified	Yes	NPW11.84700	Trichlorophenol (2,4,5-)	GC/MS, Extract or Dir Inj, Capillary	SW-846 8270E	NJ

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Category: NPW11--Organic Parameters - Chromatography/MS

Status	Eligible to Report NJ Data	Code	Parameter	Technique	Approved Methods	Primary State
Certified	Yes	NPW11.84750	Trichlorophenol (2,4,6-)	GC/MS, Extract or Dir Inj, Capillary	SW-846 8270E	NJ
Certified	Yes	NPW11.85050	Benzo(a)anthracene	GC/MS/SIM, Extract or Dir Inj, Capillary	SW-846 8270E	NJ
Certified	Yes	NPW11.85100	Benzo(a)pyrene	GC/MS/SIM, Extract or Dir Inj, Capillary	SW-846 8270E	NJ
Certified	Yes	NPW11.85150	Benzo(b)fluoranthene	GC/MS/SIM, Extract or Dir Inj, Capillary	SW-846 8270E	NJ
Certified	Yes	NPW11.85250	Benzo(k)fluoranthene	GC/MS/SIM, Extract or Dir Inj, Capillary	SW-846 8270E	NJ
Certified	Yes	NPW11.85350	Dibenzo(a,h)anthracene	GC/MS/SIM, Extract or Dir Inj, Capillary	SW-846 8270E	NJ
Certified	Yes	NPW11.85550	Dioxane (1,4-)	GC/MS/SIM, Extract or Dir Inj, Capillary	SW-846 8270E	NJ
Certified	Yes	NPW11.85700	Hexachlorobenzene	GC/MS/SIM, Extract or Dir Inj, Capillary	SW-846 8270E	NJ
Certified	Yes	NPW11.85850	Indeno(1,2,3-cd)pyrene	GC/MS/SIM, Extract or Dir Inj, Capillary	SW-846 8270E	NJ
Certified	Yes	NPW11.86100	N-Nitrosodimethylamine	GC/MS/SIM, Extract or Dir Inj, Capillary	SW-846 8270E	NJ
Certified	Yes	NPW11.86150	Pentachlorophenol	GC/MS/SIM, Extract or Dir Inj, Capillary	SW-846 8270E	NJ

Category: NPW16--NPW - Lab Developed/Non-Std Methods

Status	Eligible to Report NJ Data	Code	Parameter	Technique	Approved Methods	Primary State
Certified	Yes	NPW16.05000	11-chloroeicosafluoro-3-oxaundecane-1-sulfonic acid	LC MS/MS, Electrospray Ionization, Isotope Dilution	User Defined SOP Mod 533 Rev 2.1 Eff 6/21	NJ
Certified	Yes	NPW16.05200	4,8-dioxa-3H-perfluorononanoic acid	LC MS/MS, Electrospray Ionization, Isotope Dilution	User Defined SOP Mod 533 Rev 2.1 Eff 6/21	NJ
Certified	Yes	NPW16.05250	9-chlorohexadecafluoro-3-oxanonane-1-sulfonic acid	LC MS/MS, Electrospray Ionization, Isotope Dilution	User Defined SOP Mod 533 Rev 2.1 Eff 6/21	NJ
Certified	Yes	NPW16.05300	Hexafluoropropylene oxide dimer acid	LC MS/MS, Electrospray Ionization, Isotope Dilution	User Defined SOP Mod 533 Rev 2.1 Eff 6/21	NJ
Certified	Yes	NPW16.05350	Perfluorobutanesulfonic acid	LC MS/MS, Electrospray Ionization, Isotope Dilution	User Defined SOP Mod 533 Rev 2.1 Eff 6/21	NJ
Certified	Yes	NPW16.05450	Perfluorodecanoic acid	LC MS/MS, Electrospray Ionization, Isotope Dilution	User Defined SOP Mod 533 Rev 2.1 Eff 6/21	NJ

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Category: NPW16--NPW - Lab Developed/Non-Std Methods

Status	Eligible to Report NJ Data	Code	Parameter	Technique	Approved Methods	Primary State
Certified	Yes	NPW16.05500	Perfluorododecanoic acid	LC MS/MS, Electrospray Ionization, Isotope Dilution	User Defined SOP Mod 533 Rev 2.1 Eff 6/21	NJ
Certified	Yes	NPW16.05600	Perfluoroheptanoic acid	LC MS/MS, Electrospray Ionization, Isotope Dilution	User Defined SOP Mod 533 Rev 2.1 Eff 6/21	NJ
Certified	Yes	NPW16.05700	Perfluorohexanesulfonic acid	LC MS/MS, Electrospray Ionization, Isotope Dilution	User Defined SOP Mod 533 Rev 2.1 Eff 6/21	NJ
Certified	Yes	NPW16.05750	Perfluorohexanoic acid	LC MS/MS, Electrospray Ionization, Isotope Dilution	User Defined SOP Mod 533 Rev 2.1 Eff 6/21	NJ
Certified	Yes	NPW16.05800	Perfluorooctanesulfonic acid (PFOS)	LC MS/MS, Electrospray Ionization, Isotope Dilution	User Defined SOP Mod 533 Rev 2.1 Eff 6/21	NJ
Certified	Yes	NPW16.05850	Perfluorononanoic acid	LC MS/MS, Electrospray Ionization, Isotope Dilution	User Defined SOP Mod 533 Rev 2.1 Eff 6/21	NJ
Certified	Yes	NPW16.05950	Perfluorooctanoic acid (PFOA)	LC MS/MS, Electrospray Ionization, Isotope Dilution	User Defined SOP Mod 533 Rev 2.1 Eff 6/21	NJ
Certified	Yes	NPW16.06150	Perfluoroundecanoic acid	LC MS/MS, Electrospray Ionization, Isotope Dilution	User Defined SOP Mod 533 Rev 2.1 Eff 6/21	NJ
Certified	Yes	NPW16.06200	Perfluorotetradecanoic acid	LC MS/MS, Electrospray Ionization, Isotope Dilution	User Defined SOP Mod 533 Rev 2.1 Eff 6/21	NJ
Certified	Yes	NPW16.06300	N-ethylperfluorooctanesulfonamidoacetic acid	LC MS/MS, Electrospray Ionization, Isotope Dilution	User Defined SOP Mod 533 Rev 2.1 Eff 6/21	NJ
Certified	Yes	NPW16.06350	N-methylperfluorooctanesulfonamidoacetic acid	LC MS/MS, Electrospray Ionization, Isotope Dilution	User Defined SOP Mod 533 Rev 2.1 Eff 6/21	NJ

Category: SCM02--Characteristics of Hazardous Waste

Status	Eligible to Report NJ Data	Code	Parameter	Technique	Approved Methods	Primary State
Certified	Yes	SCM02.00450	Free liquid	Flow-Through Paint Filter, Observation	SW-846 9095B	NJ
Certified	Yes	SCM02.00560	Flash Point	Pensky-Martens	SW-846 1010B	NJ
Certified	Yes	SCM02.00800	pH - soil and waste	Mix with Water or Calcium Chlorides	SW-846 9045D	NJ

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Category: SCM03--Inorganic Parameters and Preparation

Status	Eligible to Report NJ Data	Code	Parameter	Technique	Approved Methods	Primary State
Certified	Yes	SCM03.00900	Chloride	Ion Chromatography	SW-846 9056A	NJ
Certified	Yes	SCM03.01150	Cyanide	Distillation	SW-846 9010C	NJ
Certified	Yes	SCM03.01500	Cyanide	Titrimetric/Manual Spectrophotometric	SW-846 9014	NJ
Certified	Yes	SCM03.01950	Fluoride	Ion Chromatography	SW-846 9056A	NJ
Certified	Yes	SCM03.02700	Nitrate	Ion Chromatography	SW-846 9056A	NJ
Certified	Yes	SCM03.03100	Nitrite	Ion Chromatography	SW-846 9056A	NJ
Certified	Yes	SCM03.03200	Oil & grease - sludge-hem	Extraction & Gravimetric	SW-846 9071B	NJ
Certified	Yes	SCM03.04200	Sulfate	Ion Chromatography	SW-846 9056A	NJ
Applied	No	SCM03.04250	Sulfate	Turbidimetric	SW-846 9038	NJ

Category: SCM05--Metals - SCM Preparation Methods

Status	Eligible to Report NJ Data	Code	Parameter	Technique	Approved Methods	Primary State
Certified	Yes	SCM05.00050	Metals	Acid Digestion, Soil Sediment & Sludge	SW-846 3050B	NJ
Certified	Yes	SCM05.00100	Metals	Chromium VI Digestion	SW-846 3060A	NJ
Certified	Yes	SCM05.00600	Metals	TCLP, Toxicity Procedure, Shaker	SW-846 1311	NJ

Category: SCM06--Metals

Status	Eligible to Report NJ Data	Code	Parameter	Technique	Approved Methods	Primary State
Certified	Yes	SCM06.02600	Chromium (VI)	Colorimetric	SW-846 7196A	NJ
Certified	Yes	SCM06.02800	Mercury - solid waste	AA, Manual Cold Vapor	SW-846 7471B	NJ
Certified	Yes	SCM06.02850	Mercury - solid waste	AA, Thermal Decomposition, Amalgamation	SW-846 7473	NJ

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Category: SCM07--Metals - ICP, ICP/MS and DCP

Status	Eligible to Report NJ Data	Code	Parameter	Technique	Approved Methods	Primary State
Certified	Yes	SCM07.00001	Aluminum	ICP	SW-846 6010D	NJ
Certified	Yes	SCM07.00050	Antimony	ICP	SW-846 6010D	NJ
Certified	Yes	SCM07.00100	Arsenic	ICP	SW-846 6010D	NJ
Certified	Yes	SCM07.00150	Barium	ICP	SW-846 6010D	NJ
Certified	Yes	SCM07.00200	Beryllium	ICP	SW-846 6010D	NJ
Certified	Yes	SCM07.00300	Cadmium	ICP	SW-846 6010D	NJ
Certified	Yes	SCM07.00350	Calcium	ICP	SW-846 6010D	NJ
Certified	Yes	SCM07.00400	Chromium	ICP	SW-846 6010D	NJ
Certified	Yes	SCM07.00450	Cobalt	ICP	SW-846 6010D	NJ
Certified	Yes	SCM07.00500	Copper	ICP	SW-846 6010D	NJ
Certified	Yes	SCM07.00550	Iron	ICP	SW-846 6010D	NJ
Certified	Yes	SCM07.00600	Lead	ICP	SW-846 6010D	NJ
Certified	Yes	SCM07.00700	Magnesium	ICP	SW-846 6010D	NJ
Certified	Yes	SCM07.00750	Manganese	ICP	SW-846 6010D	NJ
Certified	Yes	SCM07.00800	Molybdenum	ICP	SW-846 6010D	NJ
Certified	Yes	SCM07.00850	Nickel	ICP	SW-846 6010D	NJ
Certified	Yes	SCM07.00950	Potassium	ICP	SW-846 6010D	NJ
Certified	Yes	SCM07.01000	Selenium	ICP	SW-846 6010D	NJ
Certified	Yes	SCM07.01050	Silver	ICP	SW-846 6010D	NJ
Certified	Yes	SCM07.01100	Sodium	ICP	SW-846 6010D	NJ
Certified	Yes	SCM07.01150	Strontium	ICP	SW-846 6010D	NJ
Certified	Yes	SCM07.01200	Thallium	ICP	SW-846 6010D	NJ
Certified	Yes	SCM07.01450	Vanadium	ICP	SW-846 6010D	NJ
Certified	Yes	SCM07.01500	Zinc	ICP	SW-846 6010D	NJ

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Category: SCM08--Organics - SCM Prep. / Screening Methods

Status	Eligible to Report NJ Data	Code	Parameter	Technique	Approved Methods	Primary State
Certified	Yes	SCM08.00400	Organics	Synthetic PPT Leachate Procedure	SW-846 1312	NJ
Certified	Yes	SCM08.00500	Organics	Waste Dilution	SW-846 3580A	NJ
Certified	Yes	SCM08.00700	Semivolatile organics	TCLP, Toxicity Procedure, Shaker	SW-846 1311	NJ
Certified	Yes	SCM08.00900	Semivolatile organics	Microwave Extraction	SW-846 3546	NJ
Certified	Yes	SCM08.00950	Semivolatile organics	Ultrasonic Extraction	SW-846 3550C	NJ
Certified	Yes	SCM08.01350	Semivolatile organics	Cleanup-Florisil	SW-846 3620C	NJ
Certified	Yes	SCM08.01550	Semivolatile organics	Cleanup-Sulfur Removal	SW-846 3660B	NJ
Certified	Yes	SCM08.01600	Semivolatile organics	Cleanup-Sulfuric Acid/KMnO4	SW-846 3665A	NJ
Certified	Yes	SCM08.01850	Volatile organics	TCLP, Toxicity Procedure, ZHE	SW-846 1311	NJ
Certified	Yes	SCM08.02050	Volatile organics - high conc.	Methanol Extract, Closed System P & T	SW-846 5035A	NJ
Certified	Yes	SCM08.02100	Volatile organics - low conc.	Closed System Purge & Trap	SW-846 5035A	NJ

Category: SCM09--Organic Parameters - Chromatography

Status	Eligible to Report NJ Data	Code	Parameter	Technique	Approved Methods	Primary State
Certified	Yes	SCM09.00150	Extractable Petroleum Hydrocarbons	Extraction, GC, FID	Other NJDEP EPH 10/08, Rev. 3	NJ
Certified	Yes	SCM09.00450	Diesel range organic	Extraction, GC, FID	SW-846 8015D	NJ
Certified	Yes	SCM09.00500	Gasoline range organic	GC P&T, FID	SW-846 8015D	NJ
Certified	Yes	SCM09.05650	Aldrin	GC, Extraction, ECD or HECD, Capillary	SW-846 8081B	NJ
Certified	Yes	SCM09.05700	Alpha BHC	GC, Extraction, ECD or HECD, Capillary	SW-846 8081B	NJ
Certified	Yes	SCM09.05800	Beta BHC	GC, Extraction, ECD or HECD, Capillary	SW-846 8081B	NJ
Applied	No	SCM09.05850	Chlordane (alpha) (cis-)	GC, Extraction, ECD or HECD, Capillary	SW-846 8081B	NJ
Applied	No	SCM09.05900	Chlordane (gamma) (trans-)	GC, Extraction, ECD or HECD, Capillary	SW-846 8081B	NJ
Certified	Yes	SCM09.05950	Chlordane (technical)	GC, Extraction, ECD or HECD, Capillary	SW-846 8081B	NJ
Certified	Yes	SCM09.06300	DDD (4,4'-)	GC, Extraction, ECD or HECD, Capillary	SW-846 8081B	NJ

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Category: SCM09--Organic Parameters - Chromatography

Status	Eligible to Report NJ Data	Code	Parameter	Technique	Approved Methods	Primary State
Certified	Yes	SCM09.06350	DDE (4,4'-)	GC, Extraction, ECD or HECD, Capillary	SW-846 8081B	NJ
Certified	Yes	SCM09.06400	DDT (4,4'-)	GC, Extraction, ECD or HECD, Capillary	SW-846 8081B	NJ
Certified	Yes	SCM09.06450	Delta BHC	GC, Extraction, ECD or HECD, Capillary	SW-846 8081B	NJ
Certified	Yes	SCM09.06500	Dieldrin	GC, Extraction, ECD or HECD, Capillary	SW-846 8081B	NJ
Certified	Yes	SCM09.06550	Endosulfan I	GC, Extraction, ECD or HECD, Capillary	SW-846 8081B	NJ
Certified	Yes	SCM09.06600	Endosulfan II	GC, Extraction, ECD or HECD, Capillary	SW-846 8081B	NJ
Certified	Yes	SCM09.06650	Endosulfan sulfate	GC, Extraction, ECD or HECD, Capillary	SW-846 8081B	NJ
Certified	Yes	SCM09.06700	Endrin	GC, Extraction, ECD or HECD, Capillary	SW-846 8081B	NJ
Certified	Yes	SCM09.06750	Endrin aldehyde	GC, Extraction, ECD or HECD, Capillary	SW-846 8081B	NJ
Certified	Yes	SCM09.06800	Endrin ketone	GC, Extraction, ECD or HECD, Capillary	SW-846 8081B	NJ
Certified	Yes	SCM09.06900	Heptachlor	GC, Extraction, ECD or HECD, Capillary	SW-846 8081B	NJ
Certified	Yes	SCM09.06950	Heptachlor epoxide	GC, Extraction, ECD or HECD, Capillary	SW-846 8081B	NJ
Certified	Yes	SCM09.07100	Lindane (gamma BHC)	GC, Extraction, ECD or HECD, Capillary	SW-846 8081B	NJ
Certified	Yes	SCM09.07150	Methoxychlor	GC, Extraction, ECD or HECD, Capillary	SW-846 8081B	NJ
Certified	Yes	SCM09.07500	Toxaphene	GC, Extraction, ECD or HECD, Capillary	SW-846 8081B	NJ
Certified	Yes	SCM09.08700	PCB 1016	GC, Extraction, ECD or HECD, Capillary	SW-846 8082A	NJ
Certified	Yes	SCM09.08750	PCB 1221	GC, Extraction, ECD or HECD, Capillary	SW-846 8082A	NJ
Certified	Yes	SCM09.08800	PCB 1232	GC, Extraction, ECD or HECD, Capillary	SW-846 8082A	NJ
Certified	Yes	SCM09.08850	PCB 1242	GC, Extraction, ECD or HECD, Capillary	SW-846 8082A	NJ
Certified	Yes	SCM09.08900	PCB 1248	GC, Extraction, ECD or HECD, Capillary	SW-846 8082A	NJ
Certified	Yes	SCM09.08950	PCB 1254	GC, Extraction, ECD or HECD, Capillary	SW-846 8082A	NJ
Certified	Yes	SCM09.09000	PCB 1260	GC, Extraction, ECD or HECD, Capillary	SW-846 8082A	NJ
Certified	Yes	SCM09.09050	PCB 1262	GC, Extraction, ECD or HECD, Capillary	SW-846 8082A	NJ
Certified	Yes	SCM09.09100	PCB 1268	GC, Extraction, ECD or HECD, Capillary	SW-846 8082A	NJ
Certified	Yes	SCM09.15400	D (2,4-)	GC, Extraction, ECD, Capillary	SW-846 8151A	NJ
Certified	Yes	SCM09.16550	TP (2,4,5-) (Silvex)	GC, Extraction, ECD, Capillary	SW-846 8151A	NJ

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Category: SCM10--Organic Parameters - Chromatography/MS

Status	Eligible to Report NJ Data	Code	Parameter	Technique	Approved Methods	Primary State
Certified	Yes	SCM10.22900	Acetone	GC/MS, P & T or Direct Injection, Capillary	SW-846 8260D	NJ
Certified	Yes	SCM10.23000	Acrolein	GC/MS, P & T or Direct Injection, Capillary	SW-846 8260D	NJ
Certified	Yes	SCM10.23050	Acrylonitrile	GC/MS, P & T or Direct Injection, Capillary	SW-846 8260D	NJ
Certified	Yes	SCM10.23200	Benzene	GC/MS, P & T or Direct Injection, Capillary	SW-846 8260D	NJ
Certified	Yes	SCM10.23300	Bromobenzene	GC/MS, P & T or Direct Injection, Capillary	SW-846 8260D	NJ
Certified	Yes	SCM10.23350	Bromochloromethane	GC/MS, P & T or Direct Injection, Capillary	SW-846 8260D	NJ
Certified	Yes	SCM10.23400	Bromodichloromethane	GC/MS, P & T or Direct Injection, Capillary	SW-846 8260D	NJ
Certified	Yes	SCM10.23500	Bromoform	GC/MS, P & T or Direct Injection, Capillary	SW-846 8260D	NJ
Certified	Yes	SCM10.23550	Bromomethane	GC/MS, P & T or Direct Injection, Capillary	SW-846 8260D	NJ
Certified	Yes	SCM10.23650	Butanone (2-) (Methyl ethyl ketone)	GC/MS, P & T or Direct Injection, Capillary	SW-846 8260D	NJ
Certified	Yes	SCM10.23800	Butylbenzene (n-)	GC/MS, P & T or Direct Injection, Capillary	SW-846 8260D	NJ
Certified	Yes	SCM10.23850	Carbon disulfide	GC/MS, P & T or Direct Injection, Capillary	SW-846 8260D	NJ
Certified	Yes	SCM10.23900	Carbon tetrachloride	GC/MS, P & T or Direct Injection, Capillary	SW-846 8260D	NJ
Certified	Yes	SCM10.23950	Chlorobenzene	GC/MS, P & T or Direct Injection, Capillary	SW-846 8260D	NJ
Certified	Yes	SCM10.24000	Chloroethane	GC/MS, P & T or Direct Injection, Capillary	SW-846 8260D	NJ
Certified	Yes	SCM10.24050	Chloroethyl vinyl ether (2-)	GC/MS, P & T or Direct Injection, Capillary	SW-846 8260D	NJ
Certified	Yes	SCM10.24100	Chloroform	GC/MS, P & T or Direct Injection, Capillary	SW-846 8260D	NJ
Certified	Yes	SCM10.24150	Chloromethane	GC/MS, P & T or Direct Injection, Capillary	SW-846 8260D	NJ
Certified	Yes	SCM10.24200	Chlorotoluene (2-)	GC/MS, P & T or Direct Injection, Capillary	SW-846 8260D	NJ
Certified	Yes	SCM10.24250	Chlorotoluene (4-)	GC/MS, P & T or Direct Injection, Capillary	SW-846 8260D	NJ
Certified	Yes	SCM10.24330	Cyclohexane	GC/MS, P & T, or Direct Injection, Capillary	SW-846 8260D	NJ
Certified	Yes	SCM10.24400	Dibromo-3-chloropropane (1,2-)	GC/MS, P & T or Direct Injection, Capillary	SW-846 8260D	NJ
Certified	Yes	SCM10.24450	Dibromochloromethane	GC/MS, P & T or Direct Injection, Capillary	SW-846 8260D	NJ
Certified	Yes	SCM10.24500	Dibromoethane (1,2-) (EDB)	GC/MS, P & T or Direct Injection, Capillary	SW-846 8260D	NJ
Certified	Yes	SCM10.24550	Dibromomethane	GC/MS, P & T or Direct Injection, Capillary	SW-846 8260D	NJ
Certified	Yes	SCM10.24700	Dichlorobenzene (1,2-)	GC/MS, P & T or Direct Injection, Capillary	SW-846 8260D	NJ
Certified	Yes	SCM10.24750	Dichlorobenzene (1,3-)	GC/MS, P & T or Direct Injection, Capillary	SW-846 8260D	NJ

New Jersey Department of Environment Protection
Environmental Laboratory Certification Program

Annual Certified Parameter List and Current Status

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Laboratory Name: PACE ANALYTICAL SERVICES, LLC-FAIRFIELD Laboratory Number: 07010 Activity ID: NLC 230009
1275 BLOOMFIELD AVE
FAIRFIELD NJ 07004

Category: SCM10--Organic Parameters - Chromatography/MS

Status	Eligible to Report NJ Data	Code	Parameter	Technique	Approved Methods	Primary State
Certified	Yes	SCM10.24800	Dichlorobenzene (1,4-)	GC/MS, P & T or Direct Injection, Capillary	SW-846 8260D	NJ
Certified	Yes	SCM10.24850	Dichlorodifluoromethane	GC/MS, P & T or Direct Injection, Capillary	SW-846 8260D	NJ
Certified	Yes	SCM10.24900	Dichloroethane (1,1-)	GC/MS, P & T or Direct Injection, Capillary	SW-846 8260D	NJ
Certified	Yes	SCM10.24950	Dichloroethane (1,2-)	GC/MS, P & T or Direct Injection, Capillary	SW-846 8260D	NJ
Certified	Yes	SCM10.25000	Dichloroethene (1,1-)	GC/MS, P & T or Direct Injection, Capillary	SW-846 8260D	NJ
Certified	Yes	SCM10.25050	Dichloroethene (cis-1,2-)	GC/MS, P & T or Direct Injection, Capillary	SW-846 8260D	NJ
Certified	Yes	SCM10.25100	Dichloroethene (trans-1,2-)	GC/MS, P & T or Direct Injection, Capillary	SW-846 8260D	NJ
Certified	Yes	SCM10.25150	Dichloropropane (1,2-)	GC/MS, P & T or Direct Injection, Capillary	SW-846 8260D	NJ
Certified	Yes	SCM10.25200	Dichloropropane (1,3-)	GC/MS, P & T or Direct Injection, Capillary	SW-846 8260D	NJ
Certified	Yes	SCM10.25350	Dichloropropene (cis-1,3-)	GC/MS, P & T or Direct Injection, Capillary	SW-846 8260D	NJ
Certified	Yes	SCM10.25400	Dichloropropene (trans-1,3-)	GC/MS, P & T or Direct Injection, Capillary	SW-846 8260D	NJ
Certified	Yes	SCM10.25750	Ethylbenzene	GC/MS, P & T or Direct Injection, Capillary	SW-846 8260D	NJ
Certified	Yes	SCM10.25850	Hexachlorobutadiene (1,3-)	GC/MS, P & T or Direct Injection, Capillary	SW-846 8260D	NJ
Certified	Yes	SCM10.25950	Hexanone (2-)	GC/MS, P & T or Direct Injection, Capillary	SW-846 8260D	NJ
Certified	Yes	SCM10.26150	Isopropylbenzene	GC/MS, P & T or Direct Injection, Capillary	SW-846 8260D	NJ
Certified	Yes	SCM10.26200	Isopropyltoluene (4-)	GC/MS, P & T or Direct Injection, Capillary	SW-846 8260D	NJ
Certified	Yes	SCM10.26300	Methyl acrylate	GC/MS, P & T or Direct Injection, Capillary	SW-846 8260D	NJ
Certified	Yes	SCM10.26330	Methylcyclohexane	GC/MS, P & T, or Direct Injection, Capillary	SW-846 8260D	NJ
Certified	Yes	SCM10.26450	Methyl tert-butyl ether	GC/MS, P & T or Direct Injection, Capillary	SW-846 8260D	NJ
Certified	Yes	SCM10.26500	Methylene chloride (Dichloromethane)	GC/MS, P & T or Direct Injection, Capillary	SW-846 8260D	NJ
Certified	Yes	SCM10.26650	Naphthalene	GC/MS, P & T or Direct Injection, Capillary	SW-846 8260D	NJ
Certified	Yes	SCM10.26850	Pentanone (4-methyl-2-) (MIBK)	GC/MS, P & T or Direct Injection, Capillary	SW-846 8260D	NJ
Certified	Yes	SCM10.26950	Propylbenzene (n-)	GC/MS, P & T or Direct Injection, Capillary	SW-846 8260D	NJ
Certified	Yes	SCM10.27000	Sec-butylbenzene	GC/MS, P & T or Direct Injection, Capillary	SW-846 8260D	NJ
Certified	Yes	SCM10.27050	Styrene	GC/MS, P & T or Direct Injection, Capillary	SW-846 8260D	NJ
Certified	Yes	SCM10.27200	Tert-butyl alcohol	GC/MS, P & T or Direct Injection, Capillary	SW-846 8260D	NJ
Certified	Yes	SCM10.27250	Tert-butylbenzene	GC/MS, P & T or Direct Injection, Capillary	SW-846 8260D	NJ

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1275 BLOOMFIELD AVE
FAIRFIELD NJ 07004

Category: SCM10--Organic Parameters - Chromatography/MS

Status	Eligible to Report NJ Data	Code	Parameter	Technique	Approved Methods	Primary State
Certified	Yes	SCM10.27300	Tetrachloroethane (1,1,1,2-)	GC/MS, P & T or Direct Injection, Capillary	SW-846 8260D	NJ
Certified	Yes	SCM10.27350	Tetrachloroethane (1,1,2,2-)	GC/MS, P & T or Direct Injection, Capillary	SW-846 8260D	NJ
Certified	Yes	SCM10.27400	Tetrachloroethene	GC/MS, P & T or Direct Injection, Capillary	SW-846 8260D	NJ
Certified	Yes	SCM10.27500	Toluene	GC/MS, P & T or Direct Injection, Capillary	SW-846 8260D	NJ
Certified	Yes	SCM10.27600	Trichloro (1,1,2-) trifluoroethane (1,2,2-)	GC/MS, P & T or Direct Injection, Capillary	SW-846 8260D	NJ
Certified	Yes	SCM10.27650	Trichlorobenzene (1,2,3-)	GC/MS, P & T or Direct Injection, Capillary	SW-846 8260D	NJ
Certified	Yes	SCM10.27700	Trichlorobenzene (1,2,4-)	GC/MS, P & T or Direct Injection, Capillary	SW-846 8260D	NJ
Certified	Yes	SCM10.27750	Trichloroethane (1,1,1-)	GC/MS, P & T or Direct Injection, Capillary	SW-846 8260D	NJ
Certified	Yes	SCM10.27800	Trichloroethane (1,1,2-)	GC/MS, P & T or Direct Injection, Capillary	SW-846 8260D	NJ
Certified	Yes	SCM10.27850	Trichloroethene	GC/MS, P & T or Direct Injection, Capillary	SW-846 8260D	NJ
Certified	Yes	SCM10.27900	Trichlorofluoromethane	GC/MS, P & T or Direct Injection, Capillary	SW-846 8260D	NJ
Certified	Yes	SCM10.27950	Trichloropropane (1,2,3-)	GC/MS, P & T or Direct Injection, Capillary	SW-846 8260D	NJ
Certified	Yes	SCM10.28000	Trimethylbenzene (1,2,4-)	GC/MS, P & T or Direct Injection, Capillary	SW-846 8260D	NJ
Certified	Yes	SCM10.28050	Trimethylbenzene (1,3,5-)	GC/MS, P & T or Direct Injection, Capillary	SW-846 8260D	NJ
Certified	Yes	SCM10.28200	Vinyl chloride	GC/MS, P & T or Direct Injection, Capillary	SW-846 8260D	NJ
Certified	Yes	SCM10.28400	Xylenes (total)	GC/MS, P & T or Direct Injection, Capillary	SW-846 8260D	NJ
Certified	Yes	SCM10.28900	Acenaphthene	GC/MS, Extract or Dir Inj, Capillary	SW-846 8270E	NJ
Certified	Yes	SCM10.28950	Acenaphthylene	GC/MS, Extract or Dir Inj, Capillary	SW-846 8270E	NJ
Certified	Yes	SCM10.29000	Acetophenone	GC/MS, Extract or Dir Inj, Capillary	SW-846 8270E	NJ
Certified	Yes	SCM10.29350	Aniline	GC/MS, Extract or Dir Inj, Capillary	SW-846 8270E	NJ
Certified	Yes	SCM10.29450	Anthracene	GC/MS, Extract or Dir Inj, Capillary	SW-846 8270E	NJ
Certified	Yes	SCM10.29550	Atrazine	GC/MS, Extract or Dir Inj, Capillary	SW-846 8270E	NJ
Certified	Yes	SCM10.29650	Benzaldehyde	GC/MS, Extract or Dir Inj, Capillary	SW-846 8270E	NJ
Certified	Yes	SCM10.29750	Benzidine	GC/MS, Extract or Dir Inj, Capillary	SW-846 8270E	NJ
Certified	Yes	SCM10.29800	Benzo(a)anthracene	GC/MS, Extract or Dir Inj, Capillary	SW-846 8270E	NJ
Certified	Yes	SCM10.29850	Benzo(a)pyrene	GC/MS, Extract or Dir Inj, Capillary	SW-846 8270E	NJ
Certified	Yes	SCM10.29900	Benzo(b)fluoranthene	GC/MS, Extract or Dir Inj, Capillary	SW-846 8270E	NJ

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1275 BLOOMFIELD AVE
FAIRFIELD NJ 07004

Category: SCM10--Organic Parameters - Chromatography/MS

Status	Eligible to Report NJ Data	Code	Parameter	Technique	Approved Methods	Primary State
Certified	Yes	SCM10.29950	Benzo(ghi)perylene	GC/MS, Extract or Dir Inj, Capillary	SW-846 8270E	NJ
Certified	Yes	SCM10.30050	Benzo(k)fluoranthene	GC/MS, Extract or Dir Inj, Capillary	SW-846 8270E	NJ
Certified	Yes	SCM10.30100	Benzoic acid	GC/MS, Extract or Dir Inj, Capillary	SW-846 8270E	NJ
Certified	Yes	SCM10.30200	Benzyl alcohol	GC/MS, Extract or Dir Inj, Capillary	SW-846 8270E	NJ
Certified	Yes	SCM10.30350	Biphenyl (1,1'-)	GC/MS, Extract or Dir Inj, Capillary	SW-846 8270E	NJ
Certified	Yes	SCM10.30400	Bis (2-chloroethoxy) methane	GC/MS, Extract or Dir Inj, Capillary	SW-846 8270E	NJ
Certified	Yes	SCM10.30450	Bis (2-chloroethyl) ether	GC/MS, Extract or Dir Inj, Capillary	SW-846 8270E	NJ
Certified	Yes	SCM10.30500	Bis(2-chloroisopropyl)ether|2,2'-oxybis(1-chloropropane)	GC/MS, Extract or Dir Inj, Capillary	SW-846 8270E	NJ
Certified	Yes	SCM10.30550	Bis (2-ethylhexyl) phthalate	GC/MS, Extract or Dir Inj, Capillary	SW-846 8270E	NJ
Certified	Yes	SCM10.30600	Bromophenyl-phenyl ether (4-)	GC/MS, Extract or Dir Inj, Capillary	SW-846 8270E	NJ
Certified	Yes	SCM10.30650	Butylbenzylphthalate	GC/MS, Extract or Dir Inj, Capillary	SW-846 8270E	NJ
Certified	Yes	SCM10.30700	Caprolactam	GC/MS, Extract or Dir Inj, Capillary	SW-846 8270E	NJ
Certified	Yes	SCM10.30750	Carbazole	GC/MS, Extract or Dir Inj, Capillary	SW-846 8270E	NJ
Certified	Yes	SCM10.30950	Chloroaniline (4-)	GC/MS, Extract or Dir Inj, Capillary	SW-846 8270E	NJ
Certified	Yes	SCM10.31100	Chloronaphthalene (2-)	GC/MS, Extract or Dir Inj, Capillary	SW-846 8270E	NJ
Certified	Yes	SCM10.31150	Chlorophenol (2-)	GC/MS, Extract or Dir Inj, Capillary	SW-846 8270E	NJ
Certified	Yes	SCM10.31200	Chlorophenyl-phenyl ether (4-)	GC/MS, Extract or Dir Inj, Capillary	SW-846 8270E	NJ
Certified	Yes	SCM10.31250	Chrysene	GC/MS, Extract or Dir Inj, Capillary	SW-846 8270E	NJ
Certified	Yes	SCM10.31800	Dibenzo(a,h)anthracene	GC/MS, Extract or Dir Inj, Capillary	SW-846 8270E	NJ
Certified	Yes	SCM10.32000	Dibenzofuran	GC/MS, Extract or Dir Inj, Capillary	SW-846 8270E	NJ
Certified	Yes	SCM10.32050	Dichlorobenzene (1,2-)	GC/MS, Extract or Dir Inj, Capillary	SW-846 8270E	NJ
Certified	Yes	SCM10.32100	Dichlorobenzene (1,3-)	GC/MS, Extract or Dir Inj, Capillary	SW-846 8270E	NJ
Certified	Yes	SCM10.32150	Dichlorobenzene (1,4-)	GC/MS, Extract or Dir Inj, Capillary	SW-846 8270E	NJ
Certified	Yes	SCM10.32200	Dichlorobenzidine (3,3'-)	GC/MS, Extract or Dir Inj, Capillary	SW-846 8270E	NJ
Certified	Yes	SCM10.32250	Dichlorophenol (2,4-)	GC/MS, Extract or Dir Inj, Capillary	SW-846 8270E	NJ
Certified	Yes	SCM10.32400	Diethyl phthalate	GC/MS, Extract or Dir Inj, Capillary	SW-846 8270E	NJ
Certified	Yes	SCM10.32550	Dimethyl phthalate	GC/MS, Extract or Dir Inj, Capillary	SW-846 8270E	NJ

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1275 BLOOMFIELD AVE
FAIRFIELD NJ 07004

Category: SCM10--Organic Parameters - Chromatography/MS

Status	Eligible to Report NJ Data	Code	Parameter	Technique	Approved Methods	Primary State
Certified	Yes	SCM10.32900	Dimethylphenol (2,4-)	GC/MS, Extract or Dir Inj, Capillary	SW-846 8270E	NJ
Certified	Yes	SCM10.32950	Di-n-butyl phthalate	GC/MS, Extract or Dir Inj, Capillary	SW-846 8270E	NJ
Certified	Yes	SCM10.33100	Dinitrophenol (2,4-)	GC/MS, Extract or Dir Inj, Capillary	SW-846 8270E	NJ
Certified	Yes	SCM10.33150	Dinitrophenol (2-methyl-4,6-)	GC/MS, Extract or Dir Inj, Capillary	SW-846 8270E	NJ
Certified	Yes	SCM10.33200	Dinitrotoluene (2,4-)	GC/MS, Extract or Dir Inj, Capillary	SW-846 8270E	NJ
Certified	Yes	SCM10.33250	Dinitrotoluene (2,6-)	GC/MS, Extract or Dir Inj, Capillary	SW-846 8270E	NJ
Certified	Yes	SCM10.33300	Di-n-octyl phthalate	GC/MS, Extract or Dir Inj, Capillary	SW-846 8270E	NJ
Certified	Yes	SCM10.33400	Dioxane (1,4-)	GC/MS, Extract or Dir Inj, Capillary	SW-846 8270E	NJ
Certified	Yes	SCM10.33450	Diphenylhydrazine / Azobenzene	GC/MS, Extract or Dir Inj, Capillary	SW-846 8270E	NJ
Certified	Yes	SCM10.33950	Fluoranthene	GC/MS, Extract or Dir Inj, Capillary	SW-846 8270E	NJ
Certified	Yes	SCM10.34000	Fluorene	GC/MS, Extract or Dir Inj, Capillary	SW-846 8270E	NJ
Certified	Yes	SCM10.34150	Hexachlorobenzene	GC/MS, Extract or Dir Inj, Capillary	SW-846 8270E	NJ
Certified	Yes	SCM10.34200	Hexachlorobutadiene (1,3-)	GC/MS, Extract or Dir Inj, Capillary	SW-846 8270E	NJ
Certified	Yes	SCM10.34250	Hexachlorocyclopentadiene	GC/MS, Extract or Dir Inj, Capillary	SW-846 8270E	NJ
Certified	Yes	SCM10.34300	Hexachloroethane	GC/MS, Extract or Dir Inj, Capillary	SW-846 8270E	NJ
Certified	Yes	SCM10.34550	Indeno(1,2,3-cd)pyrene	GC/MS, Extract or Dir Inj, Capillary	SW-846 8270E	NJ
Certified	Yes	SCM10.34650	Isophorone	GC/MS, Extract or Dir Inj, Capillary	SW-846 8270E	NJ
Certified	Yes	SCM10.35100	Methyl phenol (4-chloro-3-)	GC/MS, Extract or Dir Inj, Capillary	SW-846 8270E	NJ
Certified	Yes	SCM10.35250	Methylnaphthalene (2-)	GC/MS, Extract or Dir Inj, Capillary	SW-846 8270E	NJ
Certified	Yes	SCM10.35300	Methylphenol (2-)	GC/MS, Extract or Dir Inj, Capillary	SW-846 8270E	NJ
Certified	Yes	SCM10.35350	Methylphenol (3-)	GC/MS, Extract or Dir Inj, Capillary	SW-846 8270E	NJ
Certified	Yes	SCM10.35400	Methylphenol (4-)	GC/MS, Extract or Dir Inj, Capillary	SW-846 8270E	NJ
Certified	Yes	SCM10.35450	Naphthalene	GC/MS, Extract or Dir Inj, Capillary	SW-846 8270E	NJ
Certified	Yes	SCM10.35650	Nitroaniline (2-)	GC/MS, Extract or Dir Inj, Capillary	SW-846 8270E	NJ
Certified	Yes	SCM10.35700	Nitroaniline (3-)	GC/MS, Extract or Dir Inj, Capillary	SW-846 8270E	NJ
Certified	Yes	SCM10.35750	Nitroaniline (4-)	GC/MS, Extract or Dir Inj, Capillary	SW-846 8270E	NJ
Certified	Yes	SCM10.35800	Nitrobenzene	GC/MS, Extract or Dir Inj, Capillary	SW-846 8270E	NJ

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FAIRFIELD NJ 07004

Category: SCM10--Organic Parameters - Chromatography/MS

Status	Eligible to Report NJ Data	Code	Parameter	Technique	Approved Methods	Primary State
Certified	Yes	SCM10.35900	Nitrophenol (2-)	GC/MS, Extract or Dir Inj, Capillary	SW-846 8270E	NJ
Certified	Yes	SCM10.35950	Nitrophenol (4-)	GC/MS, Extract or Dir Inj, Capillary	SW-846 8270E	NJ
Certified	Yes	SCM10.36050	N-Nitrosodimethylamine	GC/MS, Extract or Dir Inj, Capillary	SW-846 8270E	NJ
Certified	Yes	SCM10.36150	N-Nitroso-di-n-propylamine	GC/MS, Extract or Dir Inj, Capillary	SW-846 8270E	NJ
Certified	Yes	SCM10.36200	N-Nitrosodiphenylamine / Diphenylamine	GC/MS, Extract or Dir Inj, Capillary	SW-846 8270E	NJ
Certified	Yes	SCM10.37100	Pentachlorophenol	GC/MS, Extract or Dir Inj, Capillary	SW-846 8270E	NJ
Certified	Yes	SCM10.37200	Phenanthrene	GC/MS, Extract or Dir Inj, Capillary	SW-846 8270E	NJ
Certified	Yes	SCM10.37250	Phenol	GC/MS, Extract or Dir Inj, Capillary	SW-846 8270E	NJ
Certified	Yes	SCM10.37650	Pyrene	GC/MS, Extract or Dir Inj, Capillary	SW-846 8270E	NJ
Certified	Yes	SCM10.37700	Pyridine	GC/MS, Extract or Dir Inj, Capillary	SW-846 8270E	NJ
Applied	No	SCM10.38150	Tetrachlorobenzene (1,2,4,5-)	GC/MS, Extract or Dir Inj, Capillary	SW-846 8270E	NJ
Certified	Yes	SCM10.38450	Trichlorobenzene (1,2,4-)	GC/MS, Extract or Dir Inj, Capillary	SW-846 8270E	NJ
Certified	Yes	SCM10.38500	Trichlorophenol (2,4,5-)	GC/MS, Extract or Dir Inj, Capillary	SW-846 8270E	NJ
Certified	Yes	SCM10.38550	Trichlorophenol (2,4,6-)	GC/MS, Extract or Dir Inj, Capillary	SW-846 8270E	NJ

Michele M. Potter, Manager

APPENDIX C
Sample Forms

Pace® Location Requested (City/State):

CHAIN-OF-CUSTODY Analytical Request Document

Chain-of-Custody is a LEGAL DOCUMENT - Complete all relevant fields

LAB USE ONLY- Affix Workorder/Login Label Here

Scan QR Code for instructions

Company Name:	Contact/Report To:
Street Address:	Phone #:
	E-Mail:
	Cc E-Mail:
Customer Project #:	Invoice to:
Project Name:	Invoice E-mail:
Site Collection Info/Facility ID (as applicable):	Purchase Order # (if applicable):
	Quote #:
Time Zone Collected: [ ] AK [ ] PT [ ] MT [ ] CT [ ] ET	County / State origin of sample(s):
Data Deliverables: [ ] Level II [ ] Level III [ ] Level IV [ ] EQUIS [ ] Other_____	Regulatory Program (DW, RCRA, etc.) as applicable: Reportable [ ] Yes [ ] No
Rush (Pre-approval required): [ ] Same Day [ ] 1 Day [ ] 2 Day [ ] 3 Day Other _____ **Date Results Requested:**	DW PWSID # or WW Permit # as applicable: Field Filtered (if applicable): [ ] Yes [ ] No Analysis:

Specify Container Size **

Identify Container Preservative Type***

Analysis Requested

**Container Size: (1) 1L, (2) 500mL, (3) 250mL, (4) 125mL, (5) 100mL, (6) 40mL vial, (7) EnCore, (8) TerraCore, (9) 90mL, (10) Other

*** Preservative Types: (1) None, (2) HNO3, (3) H2SO4, (4) HCl, (5) NaOH, (6) Zn Acetate, (7) NaHSO4, (8) Sod. Thiosulfate, (9) Ascorbic Acid, (10) MeOH, (11) Other

Lab Use Only: Proj. Mgr: / AcctNum / Client ID: / Table #: / Profile / Template: / Prelog / Bottle Ord. ID:

Preservation non-conformance identified for sample.

* Matrix Codes (Insert in Matrix box below): Drinking Water (DW), Ground Water (GW), Wastewater (WW), Product (P), Soil/Solid (SS), Oil (OL), Wipe (WP), Tissue (TS), Bioassay (B), Vapor (V), Surface Water (SW),Sediment (SED), Sludge (SL), Caulk (CK), Leachate (LL), Biosolid (BS), Other (OT)

Customer Sample ID	Matrix *	Comp / Grab	Composite Start Date	Composite Start Time	Collected or Composite End Date	Collected or Composite End Time	# Cont.	Residual Chlorine Result	Residual Chlorine Units	Sample Comment

Additional Instructions from Pace® :

Collected By:
Printed Name
Signature

Customer Remarks / Special Conditions / Possible Hazards:

# Coolers:	Thermometer ID:	Correction Factor (°C):	Obs. Temp. (°C):	Corrected Temp. (°C):	[ ] On Ice

Relinquished by/Company: (Signature)	Date/Time:	Received by/Company: (Signature)	Date/Time:
Relinquished by/Company: (Signature)	Date/Time:	Received by/Company: (Signature)	Date/Time:
Relinquished by/Company: (Signature)	Date/Time:	Received by/Company: (Signature)	Date/Time:
Relinquished by/Company: (Signature)	Date/Time:	Received by/Company: (Signature)	Date/Time:

Tracking Number:

Delivered by: [ ] In- Person [ ] Courier [ ] FedEx [ ] UPS [ ] Other

Submitting a sample via this chain of custody constitutes acknowledgment and acceptance of the Pace® Terms and Conditions found at https://info.pacelabs.com/hubfs/pas-standard-terms.pdf.

Chain of Custody Instructions

***Pace Location Requested**: City and State of Pace Laboratory testing is to be performed at.
***Company Name**: Client's company name
***Street Address**: Client's mailing address
***City, State, Zip**: Client's city, state and zip code for mailing
***Contact/ Report to**: Person to receive results
Customer Project # and Project Name: Client's reference to the project or work involved with these samples.
Site Collection Info/ Facility ID: Client's location of project
Time Zone: Check time zone of sample to ensure proper hold times are met.
Purchase Order #: Client specific number to be listed on project invoice for client billing purposes.
Invoice To: Client contact the project invoice needs to be emailed to.
Invoice Email: Email address that project invoice will need to be emailed to
***Phone #**: Client's contact phone number
E-mail: Client's e-mail for correspondence and final report
Regulatory Program: List the program that is guiding the work to ensure proper regulations are followed: DW, RCRA, etc.
Data Deliverable: Please select or enter required deliverables.
***County/State Origin of Samples**: Enter the county to ensure proper handling of regulated soils. State required to ensure proper reporting.
Field Filtered: Indicate if samples have been filtered in the field. If samples are required to be field filtered and filtering is not indicated, a qualifier will be added to all associated data.

***Customer Sample ID**: The unique sample ID you want to appear on the analytical report
***Collected Date**: Date sample was collected. For composite samples, please fill in both beginning and end date.
***Collected Time**: Time sample was collected. For composite samples, please fill in both beginning and end time.
***Comp/Grab**: Please denote "GRAB" if the sample was collected at one time from one specific location. Please denote "COMP" if the sample is a composite of samples collected at one or more times or locations and combined to make one sample.
***Matrix**: Select from list provided list. If prepopulated chain is provided for you matrix codes may vary.
***Number and Type of Containers**: Total number of containers per container type submitted for the samples
***Container Size:** Specify container size from list.
***Container Preservation Type**: Specify sample preservation from provided list.
***Analysis Requested**: Write the analysis name (or an abbreviation), the name of a group of tests, or the method number you would like us to perform. Examples are BOD, TCLP Metals, PCBs, Method 624, etc. Place a check mark in the small boxes that correspond to the sample(s) on which you want these tests performed.

Sample Comment: List any notes or important information about the individual sample here. Please identify in the sample comment if a sample should be used for MS/MSD.

Customer Remarks/Special Conditions/Possible Hazards: List special instructions about the sample here. If the sample is known or suspected to be hazardous indicate that here and attach SDS if possible. This space can also be used for listing additional analyses, or to request an extra copy of the report to be sent to an alternate person/address, etc.

Rush request: If faster than standard turnaround time results are needed. Circle one of the rush options and note the day the results are requested by. All rush requests require preapproval by the laboratory. Surcharges will apply for non- standard turnaround times. Results will be due by the end of business on the date due based on standard turnaround time unless other arrangements have been made with your Project Manager.

Summarized Sample Acceptance Policy Requirements:

- Proper, full and completed chain-of-custody documentation
- Readable unique sample container identification written in indelible ink
- Appropriate sample container
- Sufficient sample volume to perform requested tests
- Received within required holding time
- Received within temperature preservation requirements
- Sample containers received in good condition (not leaking or broken)
- Any custody seal intact
- Properly preserved
- No headspace in volatile water samples
- **Note:** When sample specific Quality Control is required (e.g. MS/MSD) please ensure necessary sample containers and sample volume is provided.

A data qualifier and/or case narrative will be added to the final test report when the above sample acceptance requirements are not met.

Location Specific Sample Acceptance Policy available from your Project Manager

***Collected By**: Printed name of sample collector
***Collected By Signature**: Signature of sample collector

***Relinquished By/Received By:** This form **must be signed** each time the sample(s) changes hands. Custody seals are available upon request if needed.

***Required field**: Failure to fill in a required field may result in a sample(s) being put on hold until information can be obtained. This may result in a delay in receiving results.

APPENDIX D
Field Equipment Operation and Maintenance Manuals

MiniRAE 3000
User's Guide



RAE SYSTEMS by Honeywell

Rev. D
April 2014
P/N 059-4020-000

FCC Information

Contains FCC ID: PI4411B

The enclosed device complies with part 15 of the FCC rules. Operation is subject to the following conditions: (1) This device may not cause harmful interference, and (2) This device must accept any interference received, including interference that may cause undesired operation.

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Read Before Operating

This manual must be carefully read by all individuals who have or will have the responsibility of using, maintaining, or servicing this product. The product will perform as designed only if it is used, maintained, and serviced in accordance with the manufacturer's instructions. The user should understand how to set the correct parameters and interpret the obtained results.

CAUTION!

To reduce the risk of electric shock, turn the power off before removing the instrument cover. Disconnect the battery before removing sensor module for service. Never operate the instrument when the cover is removed. Remove instrument cover and sensor module only in an area known to be non-hazardous.

Special Notes



When the instrument is taken out of the transport case and turned on for the first time, there may be some residual organic or inorganic vapor trapped inside the detector chamber. The initial PID sensor reading may indicate a few ppm. Enter an area known to be free of any organic vapor and turn on the instrument. After running for several minutes, the residual vapor in the detector chamber will be cleared and the reading should return to zero.



The battery of the instrument discharges slowly even if it is turned off. If the instrument has not been charged for 5 to 7 days, the battery voltage will be low. Therefore, it is a good practice to always charge the instrument before using it. It is also recommended to fully charge the instrument for *at least 10 hours* before first use. Refer to this User Guide's section on battery charging for more information on battery charging and replacement.

WARNINGS

STATIC HAZARD: Clean only with damp cloth.

For safety reasons, this equipment must be operated and serviced by qualified personnel only. Read and understand instruction manual completely before operating or servicing.

Use only RAE Systems battery packs, part numbers 059-3051-000, 059-3052-000, and 059-3054-000. This instrument has not been tested in an explosive gas/air atmosphere having an oxygen concentration greater than 21%. Substitution of components may impair intrinsic safety. Recharge batteries only in non-hazardous locations.

Do not mix old and new batteries or batteries from different manufacturers.

The calibration of all newly purchased RAE Systems instruments should be tested by exposing the sensor(s) to known concentration calibration gas before the instrument is put into service.

For maximum safety, the accuracy of the instrument should be checked by exposing it to a known concentration calibration gas before each day's use.

Do not use USB/PC communication in hazardous locations.

AVERTISSEMENT

DANGER RISQUE D'ORIGINE ELECTROSTATIQUE: Nettoyer uniquement avec un chiffon humide.

Pour des raisons de sécurité, cet équipment doit être utilisé, entretenu et réparé uniquement par un personnel qualifié. Étudier le manuel d'instructions en entier avant d'utiliser, d'entretenir ou de réparer l'équipement.

Utiliser seulement l'ensemble de batterie RAE Systems, la reference 059-3051-000 au 059-3052-000 au 059-3054-000. Cet instrument n'a pas été essayé dans une atmosphère de gaz/air explosive ayant une concentration d'oxygène plus élevée que 21%. La substitution de composants peut compromettre la sécurité intrinsique. Ne charger les batteries que dans emplacements désignés non-dangereuse.

Ne pas melanger les anciennes et les nouvelles batteries, ou bien encore les batteries de differents fabriquants.

La calibration de toute instruments de RAE Systems doivent être testé en exposant l'instrument a une concentration de gaz connue par une procédure diétalonnage avant de mettre en service l'instrument pour la première fois.

Pour une securite maximale, la sensibilité du l'instrument doit être verifier en exposant l'instrument a une concentration de gaz connue par une procédure diétalonnage avant chaque utilisation journalière.

Ne pas utiliser de connection USB/PC en zone dangereuse.

Standard Contents

Instrument
Calibration Kit
Charging Cradle
AC/DC Adapter
Alkaline Battery Adapter
Data Cable
CD-ROM With User's Guide, Quick Start Guide, and related materials

General Information

The compact instrument is designed as a broadband VOC gas monitor and datalogger for work in hazardous environments. It monitors Volatile Organic Compounds (VOC) using a photoionization detector (PID) with a 9.8 eV, 10.6 eV, or 11.7 eV gas-discharge lamp. Features are:

Lightweight and Compact

- Compact, lightweight, rugged design
- Built-in sample draw pump

Dependable and Accurate

- Up to 16 hours of continuous monitoring with rechargeable battery pack
- Designed to continuously monitor VOC vapor at parts-per-million (ppm) levels

User-friendly

- Preset alarm thresholds for STEL, TWA, low- and high-level peak values.
- Audio buzzer and flashing LED display are activated when the limits are exceeded.

Datalogging Capabilities

- 260,000-point datalogging storage capacity for data download to PC

The instrument consists of a PID with associated microcomputer and electronic circuit. The unit is housed in a rugged case with a backlit LCD and 3 keys to provide easy user interface. It also has a built-in flashlight for operational ease in dark locations.

Physical Description

The main components of the portable VOC monitoring instrument include:

- Three keys for user to interact with the instrument: 3 operation/programming keys for normal operation or programming
- LCD display with back light for direct readout and calculated measurements
- Built-in flashlight for illuminating testing points in dark environments
- Buzzer and red LEDs for alarm signaling whenever exposures exceed preset limits
- Charge contacts for plugging directly to its charging station
- Gas entry and exit ports
- USB communication port for PC interface
- Protective rubber cover

Specifications

Size:	9.25" L x 3.6" W x 2.9" H
Weight:	28 oz with battery pack
Detector:	Photoionization sensor with 9.8, 10.6, or 11.7 eV UV lamp
Battery:	A 3.7V rechargeable Lithium-Ion battery pack (snap in, field replaceable, at non-hazardous location only)
	Alkaline battery holder (for 4 AA batteries)
Battery Charging:	Less than 8 hours to full charge
Operating Hours:	Up to16 hours continuous operation
Display:	Large dot matrix screen with backlight

Measurement range & resolution

Lamp	Range	Resolution
10.6 eV	0.1 ppm to 15,000 ppm	0.1 ppm
9.8 eV	0.1 ppm to 5,000 ppm	0.1 ppm
11.7 eV	0.1 ppm to 2,000 ppm	0.1 ppm

Response time (T_{90}): 2 seconds

Accuracy (Isobutylene): 10 to 2000 ppm: ±3% at calibration point.

PID Detector: Easy access to lamp and sensor for cleaning and replacement

Correction Factors: Over 200 VOC gases built in (based on RAE Systems Technical Note TN-106)

Calibration: Two-point field calibration of zero and standard reference gases

Calibration Reference: Store up to 8 sets of calibration data, alarm limits and span values

Inlet Probe: Flexible 5" tubing

Radio module: Bluetooth (2.4GHz)

Keypad: 1 operation key and 2 programming keys; 1 flashlight switch

Direct Readout: Instantaneous, average, STEL, TWA and peak value, and battery voltage

Intrinsic Safety: US and Canada: Class I, Division 1, Groups A, B, C, D

Europe: ATEX (0575 Ex II 2G Ex ia IIC/IIB T4 Gb)
KEMA 07 ATEX 0127
Complies with EN60079-0:2009, EN60079-11:2007

	IECEx CSA 10.0005 Ex ia IIC/IIB T4 Gb Complies with IEC 60079-0:2007, IEC 60079-11:2006 (IIC: 059-3051-000 Li-ion bat pack or 059-3054-000 NiMH bat pack; IIB: 059-3052-000 alkaline bat pack)
EM Interference:	Highly resistant to EMI/RFI. Compliant with EMC R&TTE (RF Modules)
Alarm Setting:	Separate alarm limit settings for Low, High, STEL and TWA alarm
Operating Mode:	Hygiene or Search mode
Alarm:	Buzzer 95dB at 30cm and flashing red LEDs to indicate exceeded preset limits, low battery voltage, or sensor failure
Alarm Type:	Latching or automatic reset
Real-time Clock:	Automatic date and time stamps on datalogged information
Datalogging:	260,000 points with time stamp, serial number, user ID, site ID, etc.
Communication:	Upload data to PC and download instrument setup from PC via USB on charging station.
Sampling Pump:	Internally integrated. Flow rate: 450 to 550 cc/min.
Temperature:	-20º C to 50º C (-4º to 122º F)
Humidity:	0% to 95% relative humidity (non-condensing)
Housing (including rubber boot):	Polycarbonate, splashproof and dustproof Battery can be changed without removing rubber boot.

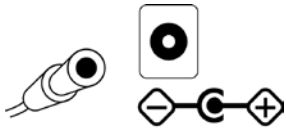
Charging The Battery

Always fully charge the battery before using the instrument. The instrument's Li-ion battery is charged by placing the instrument in its cradle. Contacts on the bottom of the instrument meet the cradle's contacts, transferring power without other connections.

Note: Before setting the instrument into its charging cradle, visually inspect the contacts to make sure they are clean. If they are not, wipe them with a soft cloth. Do not use solvents or cleaners.

Follow this procedure to charge the instrument:

1. Plug the AC/DC adapter's barrel connector into the instrument's cradle.



2. Plug the AC/DC adapter into the wall outlet.
3. Place the instrument into the cradle, press down, and lean it back. It locks in place and the LED in the cradle glow

The instrument begins charging automatically. The "Primary" LED in the cradle blinks green to indicate charging. During charging, the diagonal lines in the battery icon on the instrument's display are animated and you see the message "Charging..."

When the instrument's battery is fully charged, the battery icon is no longer animated and shows a full battery. The message "Fully charged!" is shown. The cradle's LED glows continuously green.



Note: If you see the "Battery Charging Error" icon (a battery outline with an exclamation mark inside), check that the instrument or rechargeable battery has been set into the cradle



properly. If you still receive the message, check the Troubleshooting section of this guide.

Note: If the instrument or battery has been in the cradle for more than 10 hours and you see the "Battery Charging Error" icon and a message that says, "Charging Too Long," this indicates that the battery is not reaching a full charge. Try changing the battery and make sure the contacts between the instrument (or battery) are meeting the cradle. If the message is still shown, consult your distributor or RAE Systems Technical Services.

Charging A Spare Rechargeable Battery

A rechargeable Li-ion battery can be charged when it is not inside the monitor. The charging cradle is designed to accommodate both types of charging. Contacts on the bottom of the battery meet the contacts on the cradle, transferring power without other connections, and a spring-loaded capture holds the battery in place during charging.

1. Plug the AC/DC adapter into the monitor's cradle.
2. Place the battery into the cradle, with the gold-plated contacts on top of the six matching charging pins.
3. Plug the AC/DC adapter into the wall outlet.

The battery begins charging automatically. During charging, the Secondary LED in the cradle blinks green. When charging is complete, it glows steady green.

Release the battery from the cradle by pulling it back toward the rear of the cradle and tilting it out of its slot.

Note: If you need to replace the Li-ion battery pack, replacements are available from RAE Systems. The part number is 059-3051-000.

Note: An Alkaline Battery Adapter (part number 059-3052-000), which uses four AA alkaline batteries (Duracell MN1500), may be substituted for the Li-Ion battery.

WARNING!

To reduce the risk of ignition of hazardous atmospheres, recharge and replace batteries only in areas known to be non-hazardous. Remove and replace batteries only in areas known to be non-hazardous.

Low Voltage Warning



When the battery's charge falls below a preset voltage, the instrument warns you by beeping once and flashing once every minute, and the "empty battery" icon blinks on and off once per second. You should turn off the instrument within 10 minutes and either recharge the battery by placing the instrument in its cradle, or replace the battery with a fresh one with a full charge.

Clock Battery

An internal clock battery is mounted on one of the instrument's printed circuit boards. This long-life battery keeps settings in memory from being lost whenever the Li-ion battery or alkaline batteries are removed. This backup battery should last approximately five years, and must be replaced by an authorized RAE Systems service technician. It is not user-replaceable.

Data Protection While Power Is Off

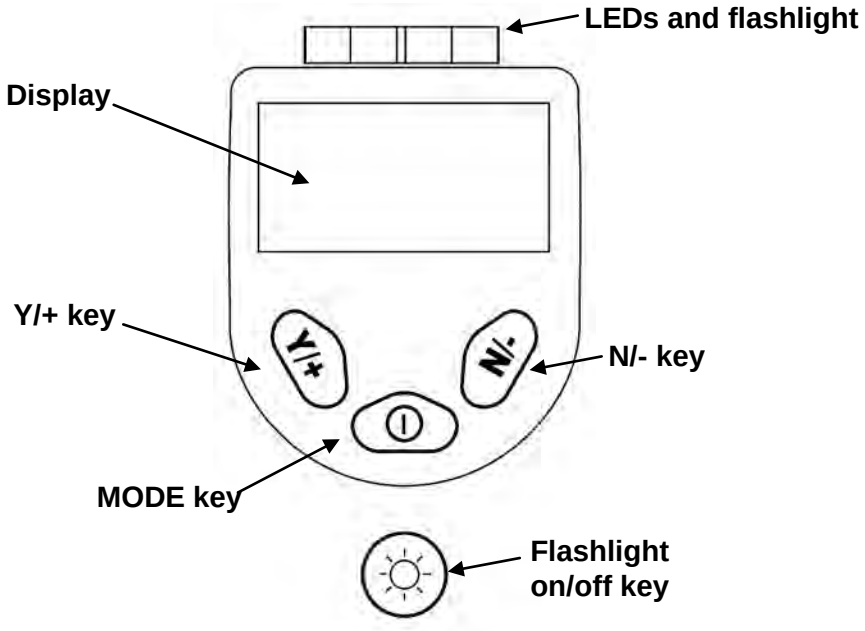
When the instrument is turned off, all the current real-time data including last measured values are erased. However, the datalog data is preserved in non-volatile memory. Even if the battery is disconnected, the datalog data will not be lost.

User Interface

The instrument's user interface consists of the display, LEDs, an alarm transducer, and four keys. The keys are:

Y/+
MODE
N/-
Flashlight on/off

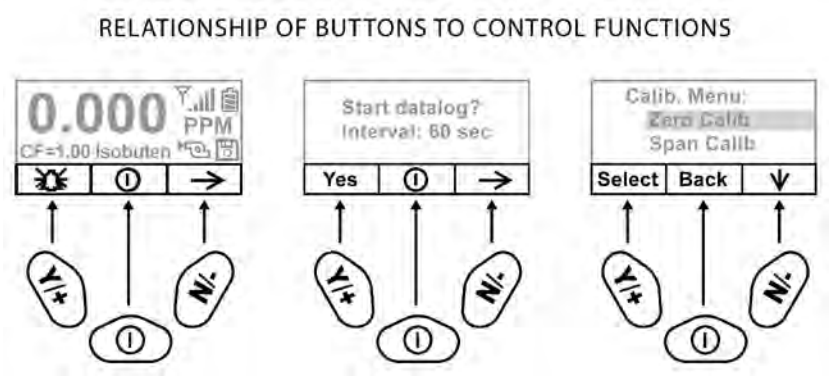
The LCD display provides visual feedback that includes the reading, time, battery condition, and other functions.



In addition to their labeled functions, the keys labeled Y/+, MODE, and N/- act as "soft keys" that control different parameters and make different selections within the instrument's menus. From menu to

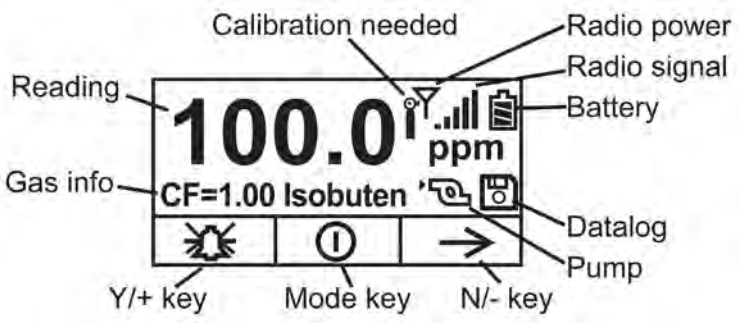
menu, each key controls a different parameter or makes a different selection.

Three panes along the bottom of the display are "mapped" to the keys. These change as menus change, but at all times the left pane corresponds to the [Y/+] key, the center pane corresponds to the [MODE] key, and the right pane corresponds to the [N/-] key. Here are three examples of different menus with the relationships of the keys clearly shown:



Display

The display shows the following information:



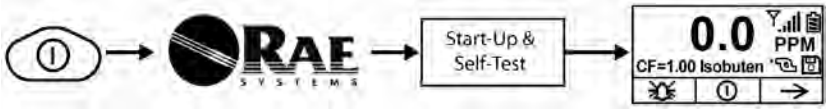
Graph	Graphic representation of concentration plotted over time
Gas info	Tells the Correction Factor and type of calibration gas
Reading	Concentration of gas as measured by the instrument
Calibration needed	Indicates that calibration should be performed
Radio power	Indicates whether radio (wireless Bluetooth) connection is on or off
Radio signal	Indicates signal strength in 5-bar bargraph
Battery	Indicates battery level in 3 bars
Pump	Indicates that pump is working
Datalog	Indicates whether datalog is on or off
Y/+	Y/+ key's function for this screen
MODE	MODE key's function for this screen
N/-	N/- key's function for this screen

Operating The Instrument

The instrument is designed as a broadband VOC gas monitor and datalogger for work in hazardous environments. It gives real-time measurements and activates alarm signals whenever the exposure exceeds preset limits. Prior to factory shipment, the instrument is preset with default alarm limits and the sensor is pre-calibrated with standard calibration gas. However, you should test the instrument and verify the calibration before the first use. After the instrument is fully charged and calibrated, it is ready for immediate operation.

Turning The Instrument On

1. With the instrument turned off, press and hold [MODE].
2. When the display turns on, release the [MODE] key.



The RAE Systems logo should appear first. (If the logo does not appear, there is likely a problem and you should contact your distributor or RAE Systems Technical Support.) The instrument is now operating and performs self tests. If any tests (including sensor and memory tests fail), refer to the Troubleshooting section of this guide.

Once the startup procedure is complete, the instrument shows a numerical reading screen with icons. This indicates that the instrument is fully functional and ready to use.

Turning The Instrument Off

1. Press and hold the Mode key for 3 seconds. A 5-second countdown to shutoff begins.
2. Once the countdown stops, the instrument is off. Release the Mode key.
3. When you see "Unit off..." release your finger from the [MODE] key. The instrument is now off.

Note: You must hold your finger on the key for the entire shutoff process. If you remove your finger from the key during the countdown, the shutoff operation is canceled and the instrument continues normal operation.

Operating The Built-In Flashlight

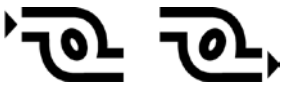
The instrument has a built-in flashlight that helps you point the probe in dark places. Press the flashlight key to turn it on. Press it again to turn it off.

Note: Using the flashlight for extended periods shortens the battery's operating time before it needs recharging.

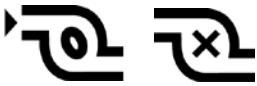
Pump Status

IMPORTANT!

During operation, make sure the probe inlet and the gas outlet are free of obstructions. Obstructions can cause premature wear on the pump, false readings, or pump stalling. During normal operation, the pump icon alternately shows inflow and outflow as shown here:



During duty cycling (PID lamp cleaning), the display shows these icons in alternation:



If there is a pump failure or obstruction that disrupts the pump, you will see this icon blinking on and off:



If you see this blinking icon, consult the Troubleshooting section of this guide.

Calibration Status

The instrument displays this icon if it requires calibration:



Calibration is required (and indicated by this icon) if:

- The lamp type has been changed (for example, from 10.6 eV to 9.8 eV).
- The sensor has been replaced.
- It has been 30 days or more since the instrument was last calibrated.
- If you have changed the calibration gas type without recalibrating the instrument.

Operating Modes

Your instrument operates in different modes, depending on the model and its factory default settings. In some cases, you can change modes using a password and using the instrument's navigation. In other cases, you must use ProRAE Studio software.

The default setting for your instrument is:

User Mode: Basic
Operation Mode: Hygiene

This is outlined in detail on page 74.

The other options, covered later in this guide, are:

User Mode: Advanced (page 78)
Operation Mode: Hygiene

User Mode: Advanced (page 82)
Operation Mode: Search

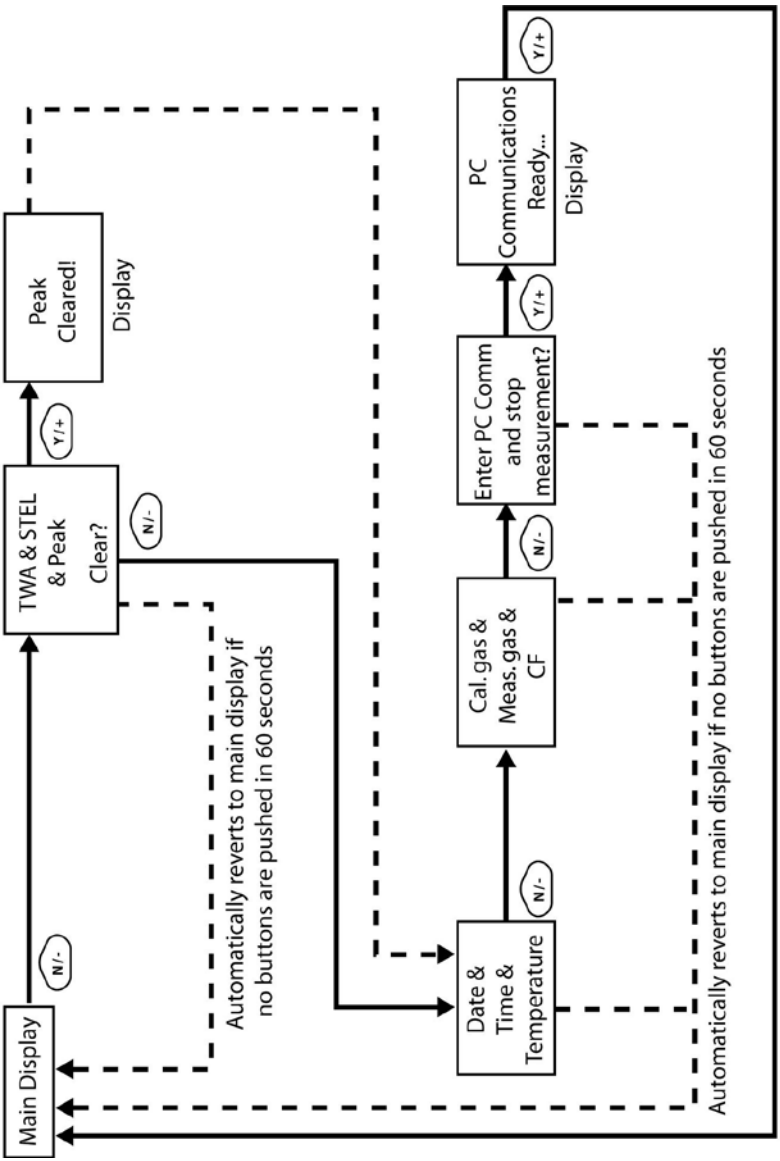
Using ProRAE Studio allows access to other options. In addition, Diagnostic Mode (page 83) is available for service technicians.

Basic User Level/Hygiene Mode (Default Settings)

The instrument is programmed to operate in Basic User Level/Hygiene Mode as its default. This gives you the most commonly needed features while requiring the fewest parameter adjustments.

Pressing [N/-] steps you from one screen to the next, and eventually return to the main display. If you do not press a key within 60 seconds after entering a display, the instrument reverts to its main display.

Note: While viewing any of these screens, you can shut off your instrument by pressing [MODE].



Note: Dashed line indicates automatic progression.

After the instrument is turned on, it runs through the start-up menu. Then the message "**Please apply zero gas…**" is displayed.

At this point, you can perform a zero air (fresh air) calibration. If the ambient air is clean, you can use that. Otherwise, use a cylinder of zero air. Refer to Zero Calibration on page 37 for a more detailed description of zero calibration.

Start zero calibration by pressing Start. You see the message "Zeroing…" followed by a 30-second countdown.

Note: You can press [MODE] to quit, bypassing the zero air calibration.

When zero calibration is complete, you see the message:

Zeroing is done!

Reading = 0.0 ppm

The instrument is now sampling and collecting data.

Note: At the Average & Peak, Date & Time & Temperature, Calibration Gas & Measurement Gas & Correction Factor, and PC Communications screens, the instrument automatically goes to the main display after 60 seconds if you do not push a key to make a selection.

Alarm Signals

During each measurement period, the gas concentration is compared with the programmed alarm limits (gas concentration alarm limit settings). If the concentration exceeds any of the preset limits, the loud buzzer and red flashing LED are activated immediately to warn you of the alarm condition.

In addition, the instrument alarms if one of the following conditions occurs: battery voltage falls below a preset voltage level, failure of the UV lamp, or pump stall.

Alarm Signal Summary

Message	Condition	Alarm Signal
HIGH	Gas exceeds "High Alarm" limit	3 beeps/flashes per second*
OVR	Gas exceeds measurement range	3 beeps/flashes per second*
MAX	Gas exceeds electronics' maximum range	3 beeps/flashes per second*
LOW	Gas exceeds "Low Alarm" limit	2 beeps/flashes per second*
TWA	Gas exceeds "TWA" limit	1 Beep/flash per second*
STEL	Gas exceeds "STEL" limit	1 Beep/flash per second*
Pump icon flashes	Pump failure	3 beeps/flashes per second
Lamp	PID lamp failure	3 beeps/flashes per second plus "Lamp" message on display
Battery icon flashes	Low battery	1 flash, 1 beep per minute plus battery icon flashes on display
CAL	Calibration failed, or needs calibration	1 beep/flash per second
NEG	Gas reading measures less than number stored in calibration	1 beep/flash per second

* Hygiene mode only. In Search mode, the number of beeps per second (1 to 7) depends upon the concentration of the sampled gas. Faster rates indicate higher concentrations.

Preset Alarm Limits & Calibration

The instrument is factory calibrated with standard calibration gas, and is programmed with default alarm limits.

Cal Gas (Isobutylene)	Cal Span	unit	Low	High	TWA	STEL
MiniRAE 3000	100	ppm	50	100	10	25

Testing The Alarm

You can test the alarm whenever the main (Reading) display is shown. Press [Y/+], and the audible and visible alarms are tested.

Integrated Sampling Pump

The instrument includes an integrated sampling pump. This diaphragm-type pump that provides a 450 to 550 cc per minute flow rate. Connecting a Teflon or metal tubing with 1/8" inside diameter to the gas inlet port of the instrument, this pump can pull in air samples from 100' (30 m) away horizontally or vertically.

Note: In Search Mode, the pump turns on when a sample measurement is started, and turns off when the sample is manually stopped.

If liquid or other objects are pulled into the inlet port filter, the instrument detects the obstruction and immediately shuts down the pump. The alarm is activated and a flashing pump icon is displayed.

You should acknowledge the pump shutoff condition by clearing the obstruction and pressing the [Y/+] key while in the main reading display to restart the pump.

Backlight

The LCD display is equipped with an LED backlight to assist in reading the display under poor lighting conditions.

Datalogging

During datalogging, the instrument displays a disk icon to indicate that datalogging is enabled. The instrument stores the measured gas concentration at the end of every sample period (when data logging is enabled). In addition, the following information is stored: user ID, site ID, serial number, last calibration date, and alarm limits. All data are retained (even after the unit is turned off) in non-volatile memory so that it can be down- loaded at a later time to a PC.

Datalogging event

When Datalogging is enabled, measurement readings are being saved. These data are stored in "groups" or "events." A new event is created and stored each time the instrument is turned on and is set to automatic datalogging, or a configuration parameter is changed, or datalogging is interrupted. The maximum time for one event is 24 hours or 28,800 points. If an event exceeds 24 hours, a new event is automatically created. Information, such as start time, user ID, site ID, gas name, serial number, last calibration date, and alarm limits are recorded.

Datalogging sample

After an event is recorded, the unit records a shorter form of the data. When transferred to a PC running ProRAE Studio, this data is arranged with a sample number, time, date, gas concentration, and other related information.

Auto/Manual/Snapshot Datalogging

The instrument has three datalog types:

Auto	Default mode. Collects datalog information when the instrument is sampling.
Manual	Datalogging occurs only when the instrument's datalogging is manually started (see page 63 for details).
Snapshot	Datalogs only during snapshot (single-event capture, initiated by pressing [MODE]) sampling. See page 65 for details.

Note: You can only choose one datalog type to be active at a time.

Accessories

The following accessories are included with the instrument:

- An AC Adapter (Battery Charger)
- Alkaline battery adapter
- External Filter
- Organic Vapor Zeroing kit

Hard-case kits also include these accessories:

- Calibration adapter
- Calibration regulator and Flow controller

Standard Kit & Accessories

AC Adapter (Battery Charger)

WARNING

To reduce the risk of ignition of hazardous atmospheres, recharge battery only in area known to be non-hazardous. Remove and replace battery only in area known to be non-hazardous.

Ne charger les batteries que dans emplacements designés non-dangereuses.

A battery charging circuit is built into the instrument cradle. It only needs a regular AC to 12 VDC adapter (wall-mount transformer, part number 500-0114-000) to charge the instrument.

To charge the battery inside the instrument:

1. Power off the instrument.
2. Connect the AC adapter to the DC jack on the instrument's cradle. If the instrument is off, it automatically turns on.
3. While charging, the display message shows "Charging." The Primary LED on the cradle flashes green when charging.
4. When the battery is fully charged, the LED changes to glowing green continuously, and the message "Fully charged" appears on the

display. If there is a charging error, the LED glows red continuously.

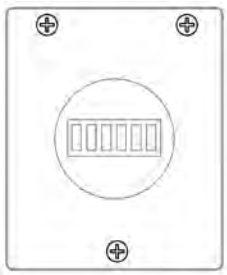
A completely discharged instrument can be charged to full capacity within 8 hours. Batteries drain slowly even if an instrument is off. Therefore, if the instrument has been in storage or has not been charged for several days or longer, check the charge before using it.

The factory-supplied battery is designed to last for 16 hours of normal operation (no alarm), for a new battery under the optimum circumstances. As the battery becomes older or is subject to adverse conditions (such as cold ambient temperature), its capacity will be significantly reduced.

Alkaline Battery Adapter

An alkaline battery adapter is supplied with each instrument. The adapter (part number 059-3052-000) accepts four AA alkaline batteries (use only Duracell MN1500) and provides approximately 12 hours of operation. The adapter is intended to be used in emergency situations when there is no time to charge the Li-ion battery pack.

To insert batteries into the adapter:



1. Remove the three Philips-head screws to open the compartment in the adapter.
2. Insert four fresh AA batteries as indicated by the polarity (+/-) markings.
3. Replace the cover. Replace the three screws.

To install the adapter in the instrument:

1. Remove the Li-ion battery pack from the instrument by sliding the tab and tilting out the battery.
2. Replace it with the alkaline battery adapter
3. Slide the tab back into place to secure the battery adapter.

IMPORTANT!

Alkaline batteries cannot be recharged. The instrument's internal circuit detects alkaline batteries and will not allow recharging. If you place the instrument in its cradle, the alkaline battery will not be recharged. The

internal charging circuit is designed to prevent damage to alkaline batteries and the charging circuit when alkaline batteries are installed inside the instrument. If you try to charge an alkaline batteries installed in the instrument, the instrument's display will say, "Alkaline Battery," indicating that it will not charge the alkaline batteries.

Note: When replacing alkaline batteries, dispose of old ones properly.

WARNING!

To reduce the risk of ignition of hazardous atmospheres, recharge the battery only in areas known to be non-hazardous. Remove and replace the battery only in areas known to be non-hazardous.

External Filter

The external filter is made of PTFE (Teflon®) membrane with a 0.45 micron pore size to prevent dust or other particles from being sucked into the sensor manifold, which would cause extensive damage to the instrument. It prolongs the operating life of the sensor. To install the external filter, simply connect it to the instrument's inlet tube.

Optional Accessories

Calibration Adapter

The calibration adapter for the instrument is a simple 6-inch Tygon tubing with a metal adapter on one end. During calibration, simply insert the metal adapter into the regular gas inlet probe of the instrument and the tubing to the gas regulator on the gas bottle.

Calibration Regulator

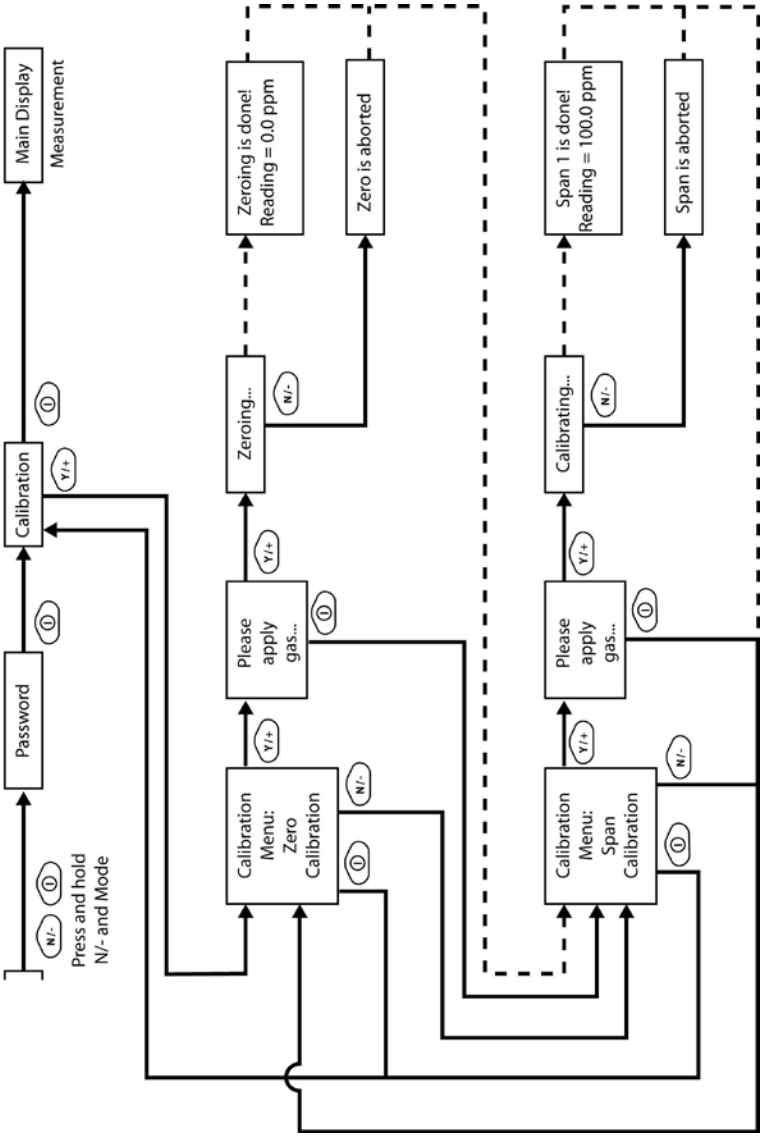
The Calibration Regulator is used in the calibration process. It regulates the gas flow rate from the Span gas cylinder into the gas inlet of the instrument during calibration process. The maximum flow rate allowed by the flow controller is about 0.5L/min (500 cc per min.). Alternatively, a demand-flow regulator or a Tedlar gas bag may be used to match the pump flow precisely.

Organic Vapor Zeroing Kit

The Organic Vapor Zeroing Kit is used for filtering organic air contaminants that may affect the zero calibration reading. To use the Organic Vapor Zeroing Kit, simply connect the filter to the inlet port of the instrument.

Standard Two-Point Calibration (Zero & Span)

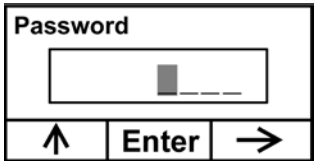
The following diagram shows the instrument's calibrations in Basic/Hygiene mode.



Note: Dashed line indicates automatic progression.

Entering Calibration

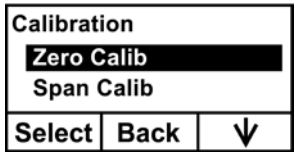
1. Press and hold [MODE] and [N/-] until you see the Password screen.



2. In Basic User Level, you do not need a password to perform calibrations. Instead of inputting a password, enter calibration by pressing [MODE].

   Note: If you inadvertently press [Y/+] and change any of the numbers, simply press [MODE] and you will be directed to the calibration menu.

The Calibration screen is now visible with Zero Calibration highlighted.



These are your options:

- Press [Y/+] to select the highlighted calibration (Zero Calib or Span Calib).
- Press [MODE] to exit calibration and return to the main display and resume measurement.
- Press [N/-] to toggle the highlighted calibration type.

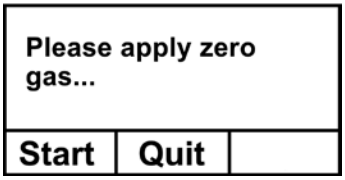
Zero (Fresh Air) Calibration

This procedure determines the zero point of the sensor calibration curve. To perform a fresh air calibration, use the calibration adapter to connect the instrument to a "fresh" air source such as from a cylinder or Tedlar bag (optional accessory). The "fresh" air is clean, dry air without organic impurities and an oxygen value of 20.9%. If such an air cylinder is not available, any clean ambient air without detectable contaminants or a charcoal filter can be used.

At the Zero Calibration menu, you can proceed to perform a Zero calibration or bypass Zero calibration and perform a Span calibration. You may also go back to the initial Calibration menu if you want to exit calibration.

- Press [Y/+] to start calibration.
- Press [MODE] to quit and return to the main calibration display.

If you have pressed [Y/+] to enter Zero calibration, then you will see this message:



1. Turn on your Zero calibration gas.
2. Press [Y/+] to start calibration.

   Note: At this point, you may press [MODE] if you decide that you do not want to initiate calibration. This will take you directly to the Calibration menu, highlighted for Span calibration.

3. Zero calibration starts a 30-second countdown and displays this message:

   Zeroing...

During the zeroing process, the instrument performs the Zero calibration automatically and does not require any action on your part.

Note: To abort the zeroing process at any time and proceed to Span calibration, press [N/-] at any time while zeroing is being performed. You will see a confirmation message that says "Zero aborted!" and then the Span calibration menu appears.

When Zero calibration is complete, you see this message:

Zeroing is done!
Reading = 0.0 ppm

The instrument will then show the Calibration menu on its display, with Span Calib highlighted.

Span Calibration

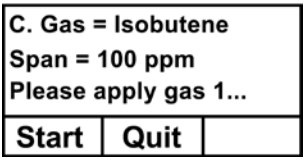
This procedure determines the second point of the sensor calibration curve for the sensor. A cylinder of standard reference gas (span gas) fitted with a 500 cc/min. flow-limiting regulator or a flow-matching regulator is the simplest way to perform this procedure. Choose the 500 cc/min. regulator only if the flow rate matches or slightly exceeds the flow rate of the instrument pump. Alternatively, the span gas can first be filled into a Tedlar bag or delivered through a demand-flow regulator. Connect the calibration adapter to the inlet port of the instrument, and connect the tubing to the regulator or Tedlar bag.

Another alternative is to use a regulator with >500 cc/min flow but allow the excess flow to escape through a T or an open tube. In the latter method, the span gas flows out through an open tube slightly wider than the probe, and the probe is inserted into the calibration tube.

At the Span Calibration menu, you perform a Span calibration. You may also go back to the Zero calibration menu or to the initial Calibration menu if you want to exit calibration.

- Press [Y/+] to enter Span calibration.
- Press [N/-] to skip Span calibration and return to Zero calibration.
- Press [MODE] to exit Span calibration and return to the top calibration menu.

If you have pressed [Y/+] to enter Span calibration, then you will see the name of your Span gas (the default is isobutylene) and the span value in parts per million (ppm). You will also see this message that prompts you:



1. Turn on your span calibration gas.
2. Press [Y/+] to initiate calibration.

Note: You may press [MODE] if you decide that you do not want to initiate calibration. This will abort the span calibration and take you directly to the Calibration menu for Zero calibration.

3. Span calibration starts and displays this message:

   Calibrating...

During the Span calibration process, there is a 30-second countdown and the instrument performs the Span calibration automatically. It requires no actions on your part.

Note: If you want to abort the Span calibration process, press [N/-] at any time during the process. You will see a confirmation message that says "Span is aborted!" and then the Zero calibration menu appears. You can then proceed to perform a Zero calibration, perform a Span calibration, or exit to the topmost Calibration menu.

When Span calibration is complete, you see a message similar to this (the value is an example only):

Span 1 is done!
Reading = 100.0 ppm

The instrument then exits Span calibration and shows the Zero calibration menu on its display.

Note: The reading should be very close to the span gas value.

Exiting Two-Point Calibration In Basic User Level

When you are done performing calibrations, press [MODE], which corresponds with "Back" on the display. You will see the following message:

Updating settings…

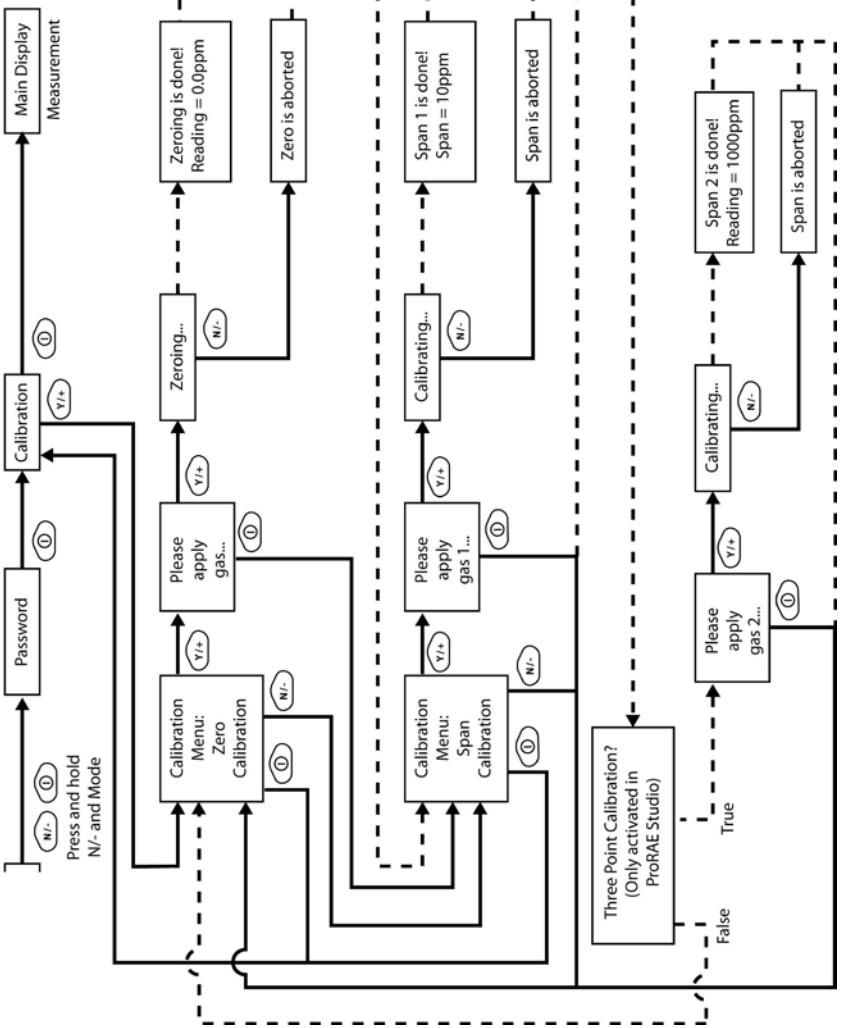
The instrument updates its settings and then returns to the main display. It begins or resumes monitoring.

Three-Point Calibration

For enhanced accuracy, it is possible to perform a second Span calibration in addition to the Zero and Span calibrations outlined in the previous section. Your instrument first must be set to allow this third calibration. This requires using ProRAE Studio software and a PC, as well as a higher concentration of calibration gas.

Note: Once the third calibration is set, you do not need to use ProRAE Studio to allow future 3-point calibrations. Also, you can only disable 3-point calibration capability by using ProRAE Studio again.

Perform the Zero and Span calibrations. After the first Span calibration (Span 1) is completed, the display a second Span calibration (Span 2) can be performed. The process is identical to the first calibration. As in the Span 1 calibration, you may exit and return to the Zero calibration screen if you choose not to perform this calibration or to abort it.



Note: Dashed line indicates automatic progression.

Span 2 Calibration

A cylinder of standard reference gas (span gas) fitted with a 500 cc/min. flow-limiting regulator or a flow-matching regulator is the simplest way to perform this procedure.

Note: This gas should be of a higher concentration than the gas used for Span 1 calibration.

Choose the 500 cc/min. regulator only if the flow rate matches or slightly exceeds the flow rate of the instrument pump. Alternatively, the span gas can first be filled into a Tedlar bag or delivered through a demand-flow regulator. Connect the calibration adapter to the inlet port of the instrument, and connect the tubing to the regulator or Tedlar bag.

Another alternative is to use a regulator with >500 cc/min flow but allow the excess flow to escape through a T or an open tube. In the latter method, the span gas flows out through an open tube slightly wider than the probe, and the probe is inserted into the calibration tube.

At the Span Calibration menu, you perform a Span calibration. You may also go back to the Zero calibration menu or to the initial Calibration menu if you want to exit calibration.

- Press [Y/+] to enter Span 2 calibration.
- Press [N/-] to skip Span calibration and return to Zero calibration.
- Press [MODE] to exit Span calibration and return to the top calibration menu.

If you have pressed [Y/+] to enter Span calibration, then you will see the name of your Span gas (the default is isobutylene) and the span value in parts per million (ppm). You will also see this message that prompts you:

Please apply gas...

4. Turn on your span calibration gas.
5. Press [Y/+] to initiate calibration.

Note: You may press [MODE] if you decide that you do not want to initiate calibration. This will take you directly to the Calibration menu for Zero calibration.

6. Span calibration starts a 30-second countdown and displays this message:

   Calibrating...

During the Span calibration process, the instrument performs the Span calibration automatically and does not require any action on your part.

Note: If you want to abort the Span calibration process, press [N/-] at any time during the process. You will see a confirmation message that says "Span is aborted!" and then the Zero calibration menu will appear. You can then proceed to perform a Zero calibration, perform a Span calibration, or exit to the topmost Calibration menu.

When Span calibration is complete, you will see a message similar to this (the value shown here is for example only):

Span 2 is done!
Reading = 1000 ppm

The instrument then exits Span calibration and shows the Zero calibration menu on its display.

Note: The reading should be very close to the span gas value.

Exiting Three-Point Calibration

When you are done performing calibrations, press [MODE], which corresponds with "Back" on the display. You will see the following message:

Updating settings…

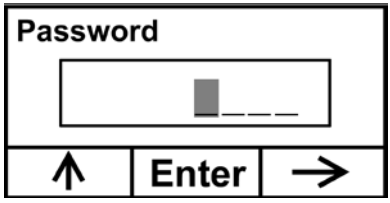
The instrument updates its settings and then returns to the main display. It begins or resumes monitoring.

Programming Mode

Programming Mode can be entered from either Hygiene Mode or Search Mode. If the current user mode is Basic, you must provide a 4-digit password to enter.

Entering Programming Mode

1. Press and hold [MODE] and [N/-] until you see the Password screen.



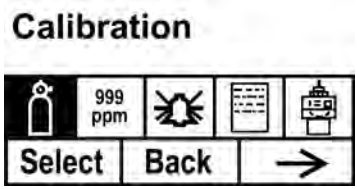
2. Input the 4-digit password:

- Increase the number from 0 through 9 by pressing [Y/+].
- Step from digit to digit using [N/-].
- Press [MODE] when you are done.

If you make a mistake, you can cycle through the digits by pressing [N/-] and then using [Y/+] to change the number in each position.

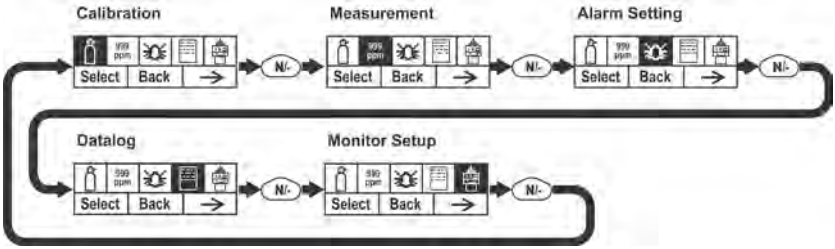
Note: The default password is 0000.

When you have successfully entered Programming Mode, you see this screen:



Note: The password can only be changed by connecting the instrument to a PC running ProRAE Studio software. Follow the instructions in ProRAE Studio to change it.

The Calibration label is shown and its icon is highlighted, but you can press [N/-] to step from one programming menu to the next, with the name of the menu shown at the top of the display and the corresponding icon highlighted. As you repeatedly press [N/-], the selection moves from left to right, and you see these screens:



Note: When you reach Monitor Setup and press [N/-], the menu cycles back to Calibration.

Programming Mode Menus

The Programming Mode allows anyone with the password to change the instrument's settings, calibrate the instrument, modify the sensor configuration, enter user information, etc. Programming Mode has five menus. Each menu includes several sub-menus to perform additional programming functions.

This table shows the menus and sub-menus:

				
Calibration	**Measurement**	**Alarm Setting**	**Datalog**	**Monitor Setup**
Zero Calibration	Meas. Gas	High Alarm	Clear Datalog	Radio Power
Span Calibration	Meas. Unit	Low Alarm	Interval	Op Mode
		STEL Alarm	Data Selection	Site ID
		TWA Alarm	Datalog Type	User ID
		Alarm Type		User Mode
		Buzzer & Light		Date
				Time
				Pump Duty Cycle
				Pump Speed
				Temperature Unit
				Language
				Real Time Protocol
				Power On Zero
				Unit ID
				LCD Contrast

Once you enter Programming Mode, the LCD displays the first menu, Calibration. Each subsequent menu is accessed by pressing [N/-]

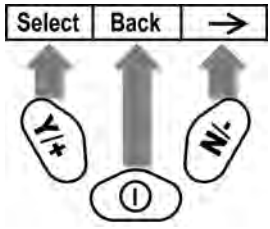
repeatedly until the desired menu is displayed. To enter a sub-menu of a menu, press [Y/+].

Exiting Programming Mode

To exit Programming Mode and return to normal operation, press [MODE] once at any of the programming menu displays. You will see "Updating Settings…" as changes are registered and the mode changes.

Navigating Programming Mode Menus

Navigating through the Programming Mode menus is easy and consistent, using a single interface format of "Select," "Back" and "Next" at the top level. The three control buttons correspond to these choices as shown:



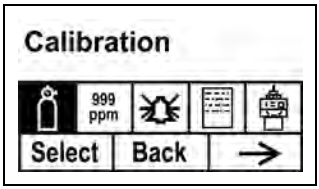
Note: Pressing [MODE] in the Programming Mode's top level causes the instrument to exit Programming Mode and return to monitoring.

The three keys perform the following functions in Programming Mode:

Key	Function in Programming Mode
[MODE]:	Exit menu when pressed momentarily or exit data entry mode
[Y/+]:	Increase alphanumerical value for data entry or confirm (yes) for a question
[N/-]:	Provides a "no" response to a question

Calibration

Two types of calibration are available: Zero (fresh air) and Span.



Select Zero or Span Calibration by pressing [N/+]. Once your choice is highlighted, press [Y/+].

Zero Calibration

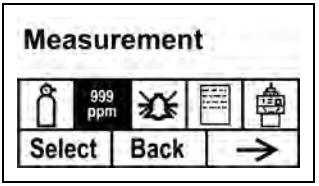
The procedure for performing a zero calibration is covered on page 35.

Span Calibration

The procedure for performing a basic span calibration is covered on page 35.

Measurement

The sub-menus for Measurement are Measurement Gas and Measurement Unit.



Meas. Gas

Measurement gases are organized in four lists:

- My List is a customized list of gases that you create. It contains a maximum of 10 gases and can only be built in ProRAE Studio on a PC and transferred to the instrument. **Note:** The first gas in the list is always isobutylene (it cannot be removed from the list).
- Last Ten is a list of the last ten gases used by your instrument. The list is built automatically and is only updated if the gas selected from Custom Gases or Library is not already in the Last Ten. This ensures that there is no repetition.
- Gas Library is a library that consists of all the gases found in RAE Systems' Technical Note TN-106 (available online at www.raesystems.com).
- Custom Gases are gases with user-modified parameters. Using ProRAE Studio, all parameters defining a gas can be modified, including the name, span value(s), correction factor, and default alarm limits.

1. Scroll through each list by pressing [N/-].
2. Press [Y/+] to select one (My List, Last Ten, Gas Library, or Custom Gases).

3. Once you are in one of the categories, press [N/-] to scroll through its list of options and [Y/+] to select one. (If you press [MODE], you exit to the next submenu.)
4. Press [Y/+] to save your choice or [N/-] to undo your selection.

Leave the sub-menu and return to the Programming Mode menus by pressing [MODE].

Meas. Unit

Standard available measurement units include:

Abbreviation	Unit	MiniRAE 3000
ppm	parts per million	Yes
ppb	parts per billion	
mg/m3	milligrams per cubic meter	Yes
ug/m3	micrograms per cubic meter	

- Scroll through the list by pressing [N/-].
- Select by pressing [Y/+].
- Save your selection by pressing [Y/+] or undo your selection by pressing [N/-].

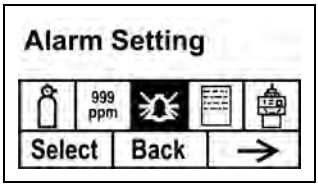
Leave the sub-menu and return to the Programming Mode menus by pressing [MODE].

Alarm Setting

During each measurement period, the gas concentration is compared with the programmed alarm limits (gas concentration alarm limit settings: Low, High, TWA and STEL). If the concentration exceeds any of the preset limits, the loud buzzer and red flashing LED are activated immediately to warn of the alarm condition.

An alarm signal summary is shown on page 27.

In this menu, you can change the High and Low alarm limits, the STEL limit, and the TWA. Press [Y/+] to to enter the Alarm Setting menu. **Note:** All settings are shown in ppb (parts per billion), or µg/m^3 (micrograms per cubic meter), depending on your setting.



1. Scroll through the Alarm Limit sub-menu using the [N/-] key until the display shows the desired limit to be changed (High Alarm, Low Alarm, STEL Alarm, and TWA Alarm)
2. Press [Y/+] to select one of the alarm types. The display shows a flashing cursor on the left-most digit of the previously stored alarm limit.
3. Press [Y/+] to increase each digit's value.
4. Press [N/-] to advance to the next digit.
5. Again, use [Y/+] to increase the number.

Repeat this process until all numbers are entered.

Press [MODE] when you are done.

- Press [Y/+] to save the changes.
- Press [N/-] to undo the changes and revert to the previous settings.

When all alarm types have been changed or bypassed, press [MODE] to exit to the Programming Menu.

High Alarm

You can change the High Alarm limit value. The value is typically set by the instrument to match the value for the current calibration gas. It is expressed in parts per billion (ppb). **Note:** The default value depends on the measurement gas.

To change the High Alarm value:

1. Press [Y/+] to increase each digit's value.
2. Press [N/-] to advance to the next digit.
3. Again, use [Y/+] to increase the number.

Repeat this process until all numbers are entered.
When you have completed your selections, press [MODE]. You will see two choices: Save and Undo. You have the opportunity to register the new settings or to change your mind and revert to your previous settings.

Press [Y/+] to save the changes.
Press [N/-] to undo the changes and revert to the previous settings.

Low Alarm

You can change the Low Alarm limit value. The value is typically set by the instrument to match the value for the current calibration gas. It is expressed in parts per billion (ppb). **Note:** The default value depends on the measurement gas.

To change the Low Alarm value:

1. Press [Y/+] to increase each digit's value.
2. Press [N/-] to advance to the next digit.
3. Again, use [Y/+] to increase the number.

Repeat this process until all numbers are entered.

When you have completed your selections, press [MODE]. You will see two choices: Save and Undo. You have the opportunity to register the new settings or to change your mind and revert to your previous settings.

- Press [Y/+] to save the changes.
- Press [N/-] to undo the changes and revert to the previous settings.

STEL Alarm

You can change the STEL Alarm limit value. The value is typically set by the instrument to match the value for the calibration gas. It is expressed in parts per billion (ppb). **Note:** The default value depends on the measurement gas.

To change the STEL Alarm value:

1. Press [Y/+] to increase each digit's value.
2. Press [N/-] to advance to the next digit.
3. Again, use [Y/+] to increase the number.

Repeat this process until all numbers are entered.

When you have completed your selections, press [MODE]. You will see two choices: Save and Undo. You have the opportunity to register the new settings or to change your mind and revert to your previous settings.

- Press [Y/+] to save the changes.
- Press [N/-] to undo the changes and revert to the previous settings.

TWA Alarm

You can change the TWA (time-weighted average) Alarm limit value. The value is typically set by the instrument to match the value for the calibration gas. It is expressed in parts per billion (ppb). **Note:** The default value depends on the measurement gas.

To change the TWA Alarm value:

1. Press [Y/+] to increase each digit's value.
2. Press [N/-] to advance to the next digit.
3. Again, use [Y/+] to increase the number.

Repeat this process until all numbers are entered.

When you have completed your selections, press [MODE]. You will see two choices:

- Save
- Undo

You have the opportunity to register the new settings or to change your mind and revert to your previous settings.

- Press [Y/+] to save the changes.
- Press [N/-] to undo the changes and revert to the previous settings.

Alarm Type

There are two selectable alarm types:

Latched — When the alarm is triggered, you can manually stop the alarm.
The latched setting only controls alarms for High Alarm, Low Alarm, STEL Alarm, and TWA alarm.

Note: To clear an alarm when the instrument is set to "Latched," press [Y/+] when the main (Reading) display is shown.

Automatic Reset — When the alarm condition is no longer present, the alarm stops and resets itself.

1. Press **[N/-]** to step from one alarm type to the other.
2. Press **[Y/+]** to select an alarm type.

When you have completed your selections, press [MODE].

You will see two choices: Save and Undo. You have the opportunity to register the new settings or to change your mind and revert to your previous settings.

- Press [Y/+] to save the changes.
- Press [N/-] to undo the changes and revert to the previous settings.

Buzzer & Light

The buzzer and light alarms can be programmed to be on or off individually or in combination. Your choices are:

- Both on
- Light only
- Buzzer only
- Both off

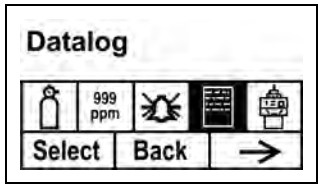
1. Press [N/-] to step from one option to the next.
2. Press [Y/+] to make your selection (the dark circle in the "radio button" indicates your selection).
3. When you have completed your selections, press [MODE].

   You will see two choices: Save and Undo. You have the opportunity to register the new settings or to change your mind and revert to your previous settings.

   - Press [Y/+] to save the changes.
   - Press [N/-] to undo the changes and revert to the previous settings.

Datalog

The instrument calculates and stores the concentration and ID of each sample taken. In the datalog sub-menu, a user can perform the tasks and functions shown below.



1. Scroll through the Datalog sub-menu using the [N/-] key until the display shows the desired parameter to be changed:

   Clear Datalog
   Interval
   Data Selection
   Datalog Type

2. Press [Y/+] to make your selection. Exit by pressing [MODE] for Back.

Clear Datalog

This erases all the data stored in the datalog.

Note: Once the datalog is cleared, the data cannot be recovered.

Press [Y/+] to clear the datalog. The display asks, "Are you sure?"

- Press [Y/+] if you want to clear the datalog. When it has been cleared, the display shows "Datalog Cleared!"
- Press [N/-] if you do not want to clear the datalog.

The display changes, and you are taken to the next sub-menu, Interval.

Interval

Intervals are shown in seconds. The default value is 60 seconds. The maximum interval is 3600 seconds.

1. Press [Y/+] to increase each digit's value.
2. Press [N/-] to advance to the next digit.
3. Again, use [Y/+] to increase the number.

Repeat this process until all numbers are entered.

When you have completed your selections, press [MODE].

You will see two choices: Save and Undo. You have the opportunity to register the new settings or to change your mind and revert to your previous settings.

- Press [Y/+] to save the changes.
- Press [N/-] to undo the changes and revert to the previous settings.

Data Selection

Data Selection allows you to select which types of data are stored and made available when you offload your datalog to a computer via ProRAE Studio software.

You can choose any or all of three types of data (you must choose at least one):

- Average
- Maximum
- Minimum

1. Press [N/-] to step from one option to the next. The highlighter indicates your choice.
2. Press [Y/+] to toggle your selection on or off (the check box indicates "on" with an "X").
3. When you have completed your selections, press [MODE].

You will see two choices: Save and Undo. You have the opportunity to register the new settings or to change your mind and revert to your previous settings.

- Press [Y/+] to save the changes.
- Press [N/-] to undo the changes and revert to the previous settings.

Datalog Type

The instrument has three datalog types:

Auto	Default mode. Collects datalog information when the instrument is sampling.
Manual	Datalogging occurs only when the instrument's datalogging is manually started (see below for details).
Snapshot	Datalogs only during single-event capture sampling.

Note: You can only choose one datalog type to be active at a time.

1. Press [N/-] to step from one option to the next.
2. Press [Y/+] to make your selection (the dark circle in the "radio button" indicates "on").
3. When you have completed your selection, press [MODE].

You will see two choices: Save and Undo. You have the opportunity to register the new settings or to change your mind and revert to your previous settings.

- Press [Y/+] to save the changes.

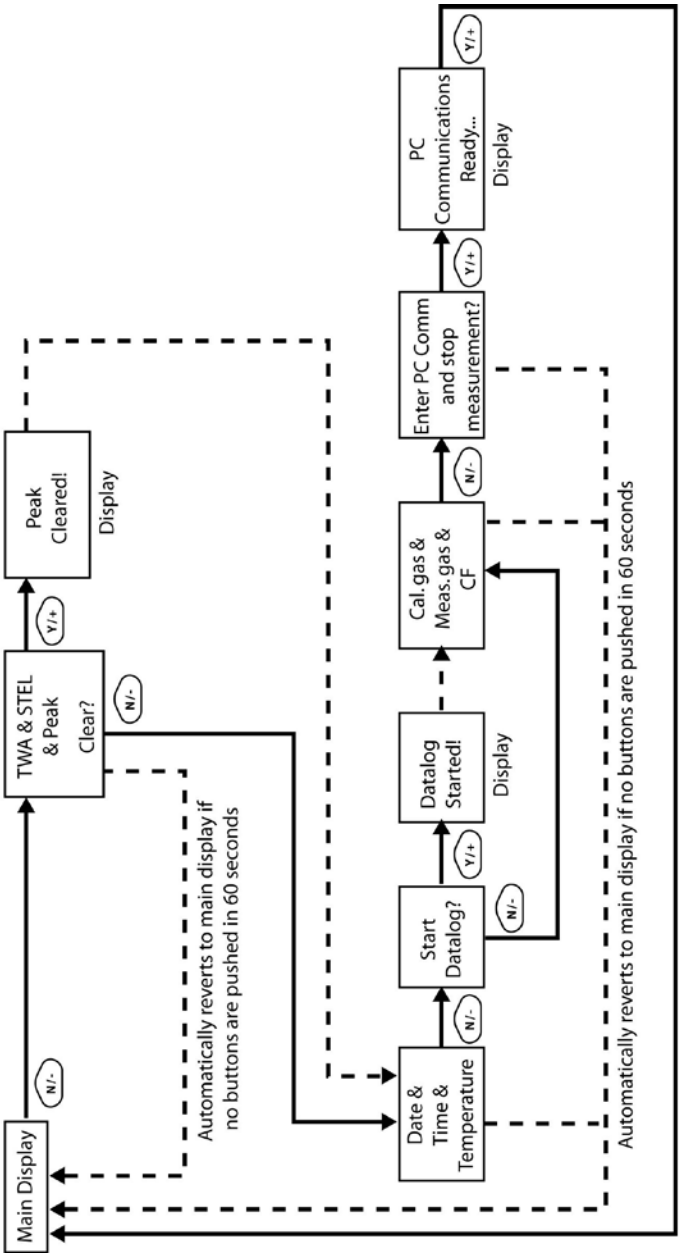
Press [N/-] to undo the changes and revert to the previous settings.

Manual Datalog

When the instrument is set to Manual Datalog, you turn datalogging on and off by stepping through the displays from the Main Display, and then pressing the keys to select datalog on/off functions.

- When you reach the screen that says "Start Datalog?" press [Y/+] to start it. You see "Datalog Started," confirming that datalogging is now on.

When you reach the screen that says "Stop Datalog?" press [Y/+] to stop it. You see "Datalog Stopped," confirming that datalogging is now off.



Note: Dashed line indicates automatic progression.

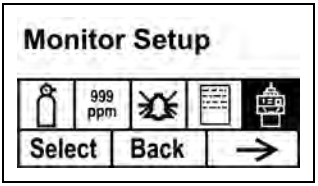
Snapshot Datalog

When the instrument is in Snapshot datalogging mode, it captures a single "snapshot" of the data at the moment of your choosing. Whenever the instrument is on and it is set to Snapshot, all you have to do is press [MODE] each time you want to capture a snapshot of the data at that instant.

When you send the data to a computer using ProRAE Studio, the data snapshots are uniquely identified by time and other parameters.

Monitor Setup

Many settings can be accessed in this menu, including setting the date and time and adjusting the pump's on/off duty cycle.



Radio Power

The radio connection can be turned on or off.

1. Press [N/-] to step from one option to the next (on or off).
2. Press [Y/+] to make your selection (the dark circle in the "radio button" indicates that the option is selected).
3. When you have completed your selection, press [MODE].

    - Press [Y/+] to accept the new radio setting (on or off).
    - Press [N/-] to discard the change and move to the next sub-menu.

Op Mode

Under Monitor Setup is "Op Mode."

Press [Y/+] to select.

You see two options (one is highlighted):

Hygiene
Search

The current mode is indicated by a dark circle within the circle in front of either Hygiene or Search.

1. Select Hygiene or Search by pressing [N/-]. The highlighting changes from one to the other each time you press [N/-].
2. Press [Y/+] to select that mode for the instrument.
3. Press [MODE] when you want to register your selection to place the instrument in the selected mode.
4. Press [Y/+] to commit the change and exit to the Monitor Setup screen, or press [N/-] to Undo (exit to the Monitor Setup screen without changing the Mode).

Site ID

Enter an 8-digit alphanumeric/character Site ID in the programming mode. This Site ID is included in the datalog report.

1. Press [Y/+] and the display shows the current site ID. Example: "RAE00001." Note that the left-most digit flashes to indicate it is the selected one.
2. Press [Y/+] to step through all 26 letters (A to Z) and 10 numerals (0 to 9).
   Note: The last four digits must be numerals.
3. Press [N/-] to advance to the next digit. The next digit to the right flashes.

Repeat this process until all eight digits of the new site ID are entered.

Press [MODE] to exit.

If there is any change to the existing site ID, the display shows "Save?" Press [Y/+] to accept the new site ID. Press [N/-] to discard the change and move to the next sub-menu.

User ID

Enter an 8-digit alphanumeric User ID in the programming mode. This User ID is included in the datalog report.

1. Press [Y/+] and the display shows the current User ID. Example: "RAE00001." Note that the left-most digit flashes to indicate it is the selected one.
2. Press [Y/+] to step through all 26 letters (A to Z) and 10 numerals (0 to 9).
3. Press [N/-] to advance to the next digit. The next digit to the right flashes.

   Repeat this process until all eight digits of the new User ID are entered.

Press [MODE] to exit.

If there is any change to the existing User ID, the display shows "Save" Press [Y/+] to accept the new site ID. Press [N/-] to discard (undo) the change and move to the next sub-menu.

User Mode

The instrument has two user modes:

Basic Basic users can only see and use a basic set of functions.
Advanced Advanced users can see all screens and perform all available functions.

Note: The default value for User Mode is Basic.

To change the User Mode:

1. Press [N/-] to step from one option to the next. The highlighting changes each time you press [N/-].
2. Press [Y/+] to make your selection (the dark circle in the "radio button" indicates "on").
3. When you have completed your selection, press [MODE].
4. Press [Y/+] to accept the new User Mode. Press [N/-] to discard the change and move to the next sub-menu.

Date

The Date is expressed as Month/Day/Year, with two digits for each.

1. Press [Y/+] and the display shows the current date. Note that the left-most digit flashes to indicate it is selected.
2. Press [Y/+] to step through all 10 numerals (0 to 9).
3. Press [N/-] to advance to the next digit. The next digit to the right flashes.

   Repeat this process until all six digits of the new date are entered.

Press [MODE] to exit.

- Press [Y/+] to save the new date.
- Press [N/-] to undo the change and move to the next sub-menu.

Time

The Time is expressed as Hours/Minutes/Seconds, with two digits for each. The time is in 24-hour (military) format.

1. Press [Y/+] and the display shows the current time. Note that the left-most digit flashes to indicate it is selected.

2. Press [Y/+] to step through all 10 numerals (0 to 9).
3. Press [N/-] to advance to the next digit. The next digit to the right flashes.

   Repeat this process until all six digits of the new time are entered.

Press [MODE] to exit.

- Press [Y/+] to save the new date.
- Press [N/-] to undo the change and move to the next sub-menu.

Duty Cycle

The pump's duty cycle is the ratio of its on time to off time. The duty cycle ranges from 50% to 100% (always on), and the period is 10 seconds. Therefore, a duty cycle of 60% means that the pump is on for 6 seconds and off for four seconds. Duty cycling is employed by the instrument to clean the PID. A lower duty cycle has a greater effect on keeping the PID clean than a higher duty cycle.

Important! Pump duty cycling is interrupted when the instrument senses a gas. The pump's duty cycle is disabled when the measurement is greater than the 2ppm threshold and is re-enabled when the reading falls below 90% of the threshold (1.8 ppm).

1. Press [Y/+] to increase the value.
2. When you have completed your selection, press [MODE].
   - Press [Y/+] to save the new duty cycle value.
   - Press [N/-] to undo the change and move to the next sub-menu.

Temperature Unit

The temperature display can be switched between Fahrenheit and Celsius units.

1. Press [N/-] to step from one option to the next.
2. Press [Y/+] to make your selection (the dark circle in the "radio button" indicates "on").
3. When you have completed your selection, press [MODE].
   - Press [Y/+] to save the new temperature unit.
   - Press [N/-] to undo the change and move to the next sub-menu.

Pump Speed

The pump can operate at two speeds, high and low. Running at low speed is quieter and conserves a small amount of power. There is almost no difference in sampling accuracy.

1. Press [N/-] to step from one option to the next.
2. Press [Y/+] to make your selection (the dark circle in the "radio button" indicates "on").
3. When you have completed your selection, press [MODE].
   - Press [Y/+] to save the new temperature unit.
   - Press [N/-] to undo the change and move to the next sub-menu.

Language

English is the default language, but other languages can be selected for the instrument.

1. Press [N/-] to step from one option to the next.
2. Press [Y/+] to make your selection (the dark circle in the "radio button" indicates "on").
3. When you have completed your selection, press [MODE].
   - Press [Y/+] to save your new language choice.
   - Press [N/-] to undo it and return to the previous language selection.

Real Time Protocol

Real Time Protocol is the setting for data transmission.

The choices are:

P2M (cable)	Point to multipoint. Data is transferred from the instrument to multiple locations using a wired connection. Default data rate: 19200 bps.
P2P (cable)	Point to point. Data is transferred only between the instrument and one other location, such as a computer. Default data rate: 9600 bps.
P2M (wireless)	Point to multipoint, wireless. Data is transferred wirelessly and can be received by multiple receivers.

1. Press [N/-] to step from one option to the next.
2. Press [Y/+] to make your selection (the dark circle in the "radio button" indicates "on").
3. When you have completed your selection, press [MODE].
   - Press [Y/+] to save the new real-time communications protocol.
   - Press [N/-] to undo the change and move to the next sub-menu.

Power On Zero

When Power On Zero is on, the instrument performs a zero calibration when it is turned on.

1. Press [N/-] to step from one option to the next.
2. Press [Y/+] to make your selection (the dark circle in the "radio button" indicates your selection).
3. When you have completed your selection, press [MODE].
   - Press [Y/+] to save the change.
   - Press [N/-] to discard the change and move to the next sub-menu.

Unit ID

This three-digit number keeps data separated by instrument when more than one instrument is used in a network. If multiple sensing units are attempting to communicate with the same Host, then the units must all have a different Unit ID.

1. Press [Y/+] to step through all 10 numerals (0 to 9). If you pass the numeral you want, keep pressing [Y/+]. After it counts up to 9, it starts counting up from 0 again.
2. Press [N/-] to advance to the next digit. The next digit to the right flashes.

Repeat this process until all three digits of the Unit ID are entered.

3. Press [MODE] when you are done.
   - Press [Y/+] to save the change.
   - Press [N/-] to discard the change and move to the next sub-menu.

LCD Contrast

The display's contrast can be increased or decreased from its default setting. You may not need to ever change the default setting, but sometimes you can optimize the display to suit extreme temperature and ambient brightness/darkness conditions.

- The minimum value is 20.
- The maximum value is 60.

1. Press [Y/+] to increase the value or [N/-] to decrease the value.
2. Press [MODE] to save your selection.
   - Press [Y/+] to save your new contrast value.
   - Press [N/-] to undo it and return to the previous value.

Hygiene Mode

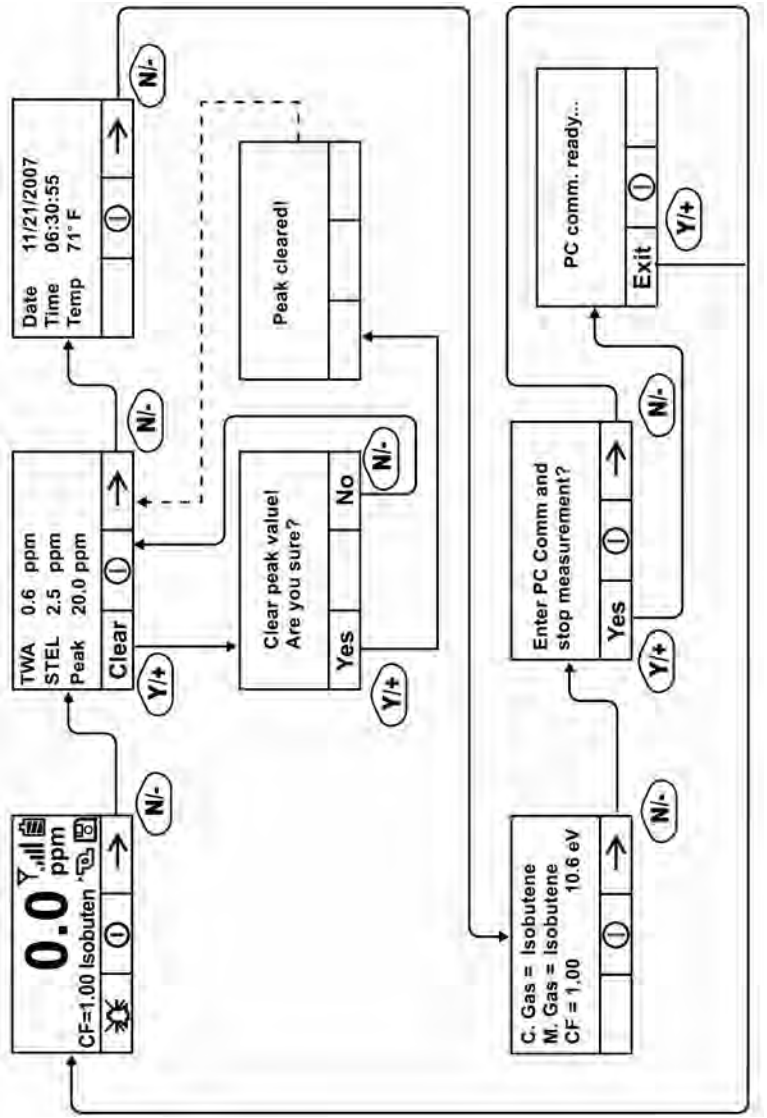
The instrument usually operates in Hygiene Mode, which provides basic functionality. However, it is possible to operate it in a second mode called Search Mode. Here are the primary differences:

Hygiene Mode: Automatic measurements, continuously running and datalogging, and calculates additional exposure values.

Search Mode: Manual start/stop of measurements and display of certain exposure values.

Basic User Level & Hygiene Mode

The default setting is navigated in the following way:



Note: Dashed line indicates automatic progression.

Pressing [N/-] steps you from screen to screen. Options include clearing the Peak value and turning on the instrument's PC Communications for data transfer to a PC.

Entering Search Mode From Hygiene Mode

In order to change the instrument's operational mode from Hygiene Mode to Search Mode, you must enter the password-protected Programming Mode:

1. Hold [MODE] and [N/-] until you see the password screen.
2. Use [Y/+] to increment to the number you want for the first digit. (If you pass by the desired number, press [Y/+] until it cycles through to 0 again. Then press [Y/+] until you reach the desired number.)
3. Press [N/-] to advance to the next digit.
4. Again press [Y/+] to increment the number.
5. Press [N/-] to advance to the next digit.

Continue the process until all four numbers of the password have been input. Then press [MODE] to proceed.

The screen changes to icons with the label "Calibration."

1. Press [N/-] to advance to "Monitor Setup."
2. Press [Y/+] to select Monitor Setup.

Under Monitor Setup, you will see "Op Mode."

Press [Y/+] to select.

You will see:

Hygiene
Search

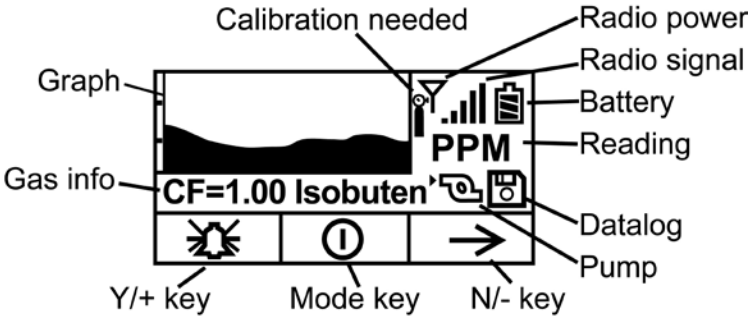
The current mode is indicated by a dark circle within the circle in front of either Hygiene or Search.

1. Select Hygiene or Search by pressing [N/-].
2. Press [Y/+] to place the instrument into the selected mode.

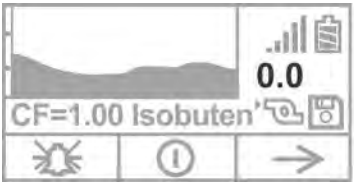
3. Press [MODE] when you want to register your selection to place the instrument in the selected mode.
4. Press [Y/+] to commit the change and exit to the Monitor Setup screen, or press [N/-] to Undo (exit to the Monitor Setup screen without changing the Mode).

Optional Graphic Screen In Search Mode

Using ProRAE Studio, you can set your instrument to show a graphic display instead of a numeric display of ongoing data. Consult your ProRAE Studio disc for information.



During sampling, the display's readings are shown numerically, plus the graph tracks the highest readings over time. The numeric reading alternates between the value and the measurement units, as well:





Advanced User Level (Hygiene Mode Or Search Mode)

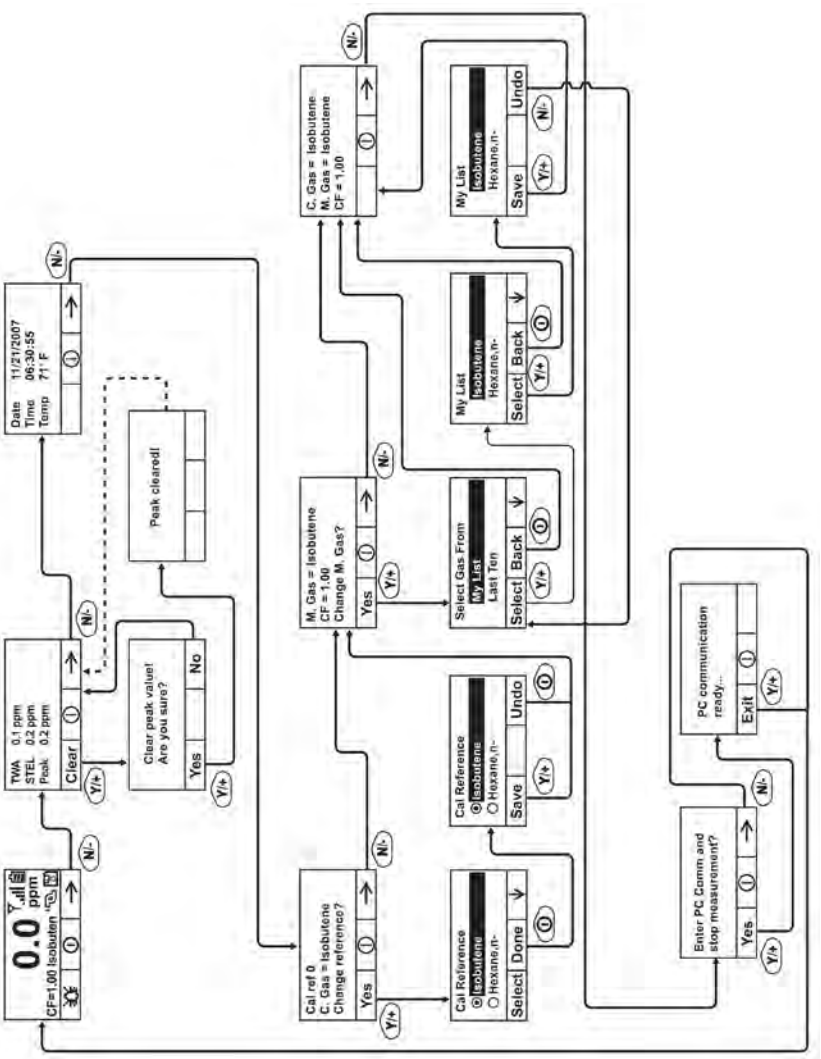
The User Mode called Advanced User Level allows a greater number of parameters to be changed than Basic User Level. It can be used with either of the Operation Modes, Hygiene Mode or Search Mode.

Advanced User Level & Hygiene Mode

With the instrument in Operation Mode: Hygiene Mode, enter User Mode: Advanced User Level (refer to the section called Monitor Mode for instructions).

Once you are in Advanced User Level and Hygiene Mode together, you can change the calibration reference and measurement gas, in addition to performing normal monitoring functions.

Pressing [N/-] progresses through the screens, while pressing [Y/+] selects options. Pressing [MODE] makes menu choices when it is shown for "Done" or "Back." Pressing and holding [Mode] whenever the circle with a vertical line in the middle is shown activates the countdown to shutoff.

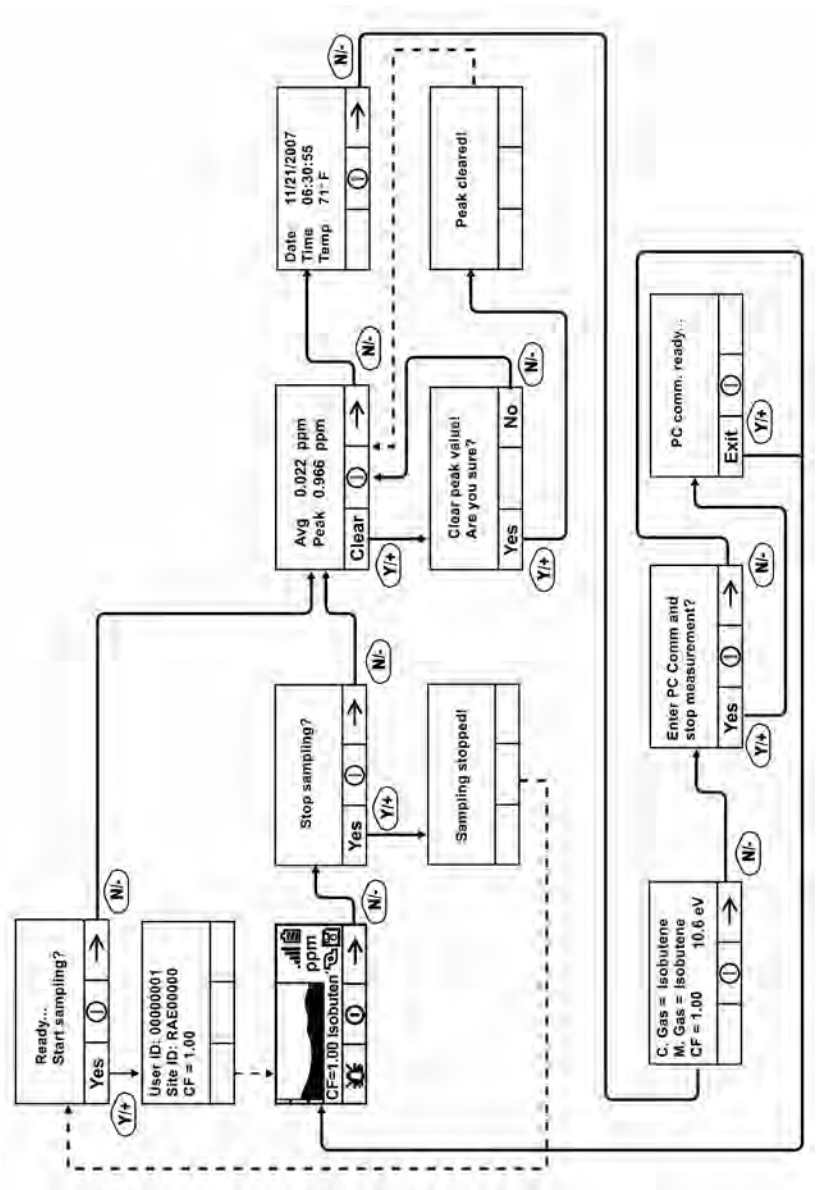


Note: Dashed line indicates automatic progression.

Basic User Level & Search Mode

With the instrument in Operation Mode: Search Mode, enter User Mode and select Basic User Level (refer to the section called User Mode for instructions).

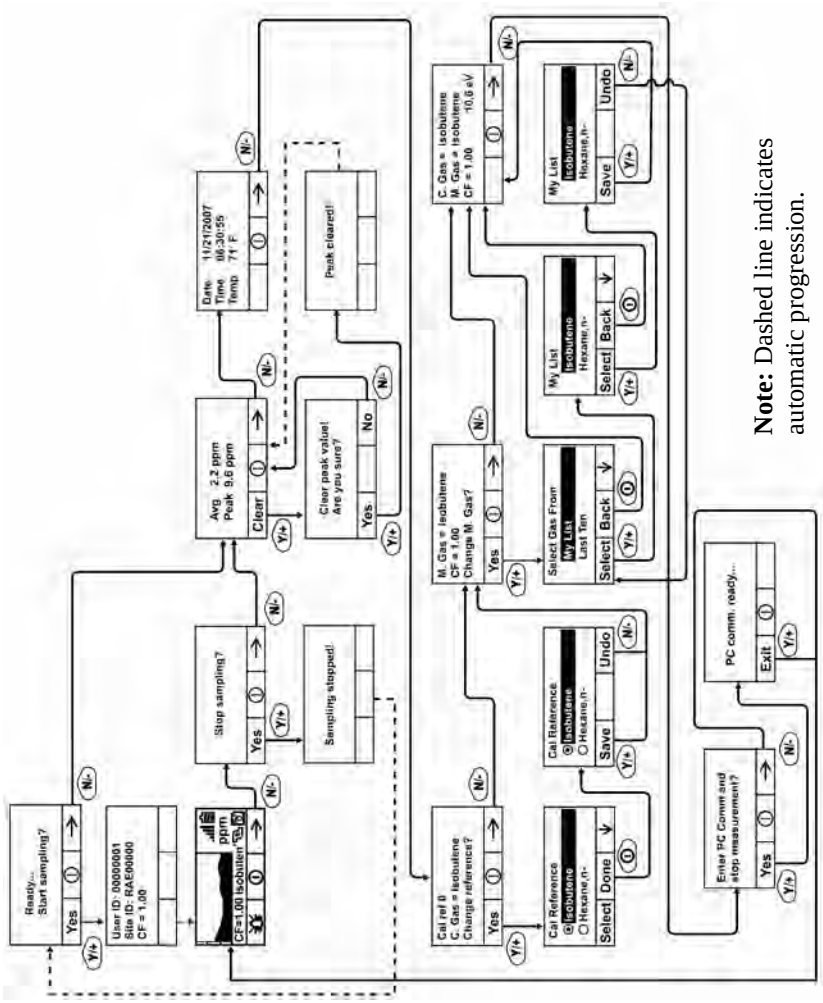
When the instrument is in Search Mode, it only samples when you activate sampling. When you see the display that says, "Ready…Start sampling?" press [Y/+] to start. The pump turns on and the instrument begins collecting data. To stop sampling, press [N/-] while the main display is showing. You will see a new screen that says, "Stop sampling?" Press [Y/+] to stop sampling. Press [N/-] if you want sampling to continue.



Note: Dashed line indicates automatic progression.

Advanced User Level & Search Mode

With the instrument in Operation Mode: Search Mode, enter User Mode and select Advanced User Level (refer to the section called Monitor Mode for instructions). Operation is similar to Basic User Level & Sampling Mode, but now allows you to change calibration and measurement reference gases. Refer to the section on measurement gases on page 52 for more details.



Note: Dashed line indicates automatic progression.

Diagnostic Mode

IMPORTANT! Diagnostic Mode is designed for servicing and manufacturing, and therefore is not intended for everyday use, even by advanced users. It provides raw data from sensors and about settings, but only allows adjustment of pump stall parameters, which should only be changed by qualified personnel.

Note: If the instrument is turned on in Diagnostic Mode and you switch to User Mode, datalog data remains in raw count form. To change to standard readings, you must restart the instrument.

Entering Diagnostic Mode

Note: To enter Diagnostic Mode, you must begin with the instrument turned off.

Press and hold [Y/+] and [MODE] until the instrument starts.

The instrument goes through a brief startup, and then displays raw data for the PID sensor. These numbers are raw sensor readings without calibration. The instrument is now in Diagnostic Mode.

Note: In Diagnostic Mode, the pump and lamp are normally on.

You can enter Programming Mode and calibrate the instrument as usual by pressing both [MODE] and [N/-] for three seconds.

You can enter Monitoring Mode by pressing [MODE] and [Y/+] together for three seconds.

Once the instrument is started up in Diagnostic Mode, you can switch between Diagnostic Mode and Monitoring Mode by pressing and holding [MODE] and [Y/+] simultaneously for two seconds.

In Diagnostic mode, you can step through parameter screens by pressing [MODE].

Adjusting The Pump Stall Threshold

If the gas inlet is blocked but the pump does not shut down, or the pump shuts down too easily with a slight blockage, the pump stall threshold value may be set too high or too low.

Use the following steps to adjust the pump stall threshold:

Pump High

In Diagnostic Mode, press the [MODE] key until "Pump High" is displayed. The display shows the maximum, minimum, and stall values for the pump at its high speed. Write down the "Max" reading.

Block the gas inlet and watch the pump current reading (labeled "I") increase. Write down its blocked reading. **Note:** If the pump current reading does not increase significantly (less than 10 counts), then there may be a leak in the gas inlet or the pump is weak or defective.

Add the two readings you wrote down. This is the average of the maximum block count and the maximum idle count. Divide that number by 2. Use the [Y/+] or [N/-] key to increase or decrease the stall value to equal that number.

Press the [MODE] key to exit this display.

Pump Low

In Diagnostic Mode, press the [MODE] key until "Pump Low" is displayed. The display shows the maximum, minimum, and stall values for the pump at its low speed. Write down the "Max" reading.

Block the gas inlet and watch the pump current reading (labeled "I") increase. Write down its blocked reading. **Note:** If the pump current reading does not increase significantly (less than 10 counts), then there may be a leak in the gas inlet or the pump is weak or defective.

Add the two readings you wrote down. This is the average of the maximum block count and the maximum idle count. Divide that

number by 2. Use the [Y/+] or [N/-] key to increase or decrease the stall value to equal that number.

Press the [MODE] key to exit this display.

Exiting Diagnostic Mode

You can exit Diagnostic Mode and go directly to Programming Mode or Monitor Mode as outlined above, or you can exit Diagnostic Mode completely.

To exit Diagnostic Mode so that it cannot be re-entered without a restart:

Shut down the instrument. When it is off, restart it by holding the [MODE] key. Diagnostic Mode cannot be entered until the instrument is restarted as outlined in "Entering Diagnostic Mode."

Transferring Data To & From A Computer

Once you have connected your instrument cradle to the PC, you can can transfer data, including a download of the datalog to the computer and updates of firmware to the instrument (should this ever be necessary).

Downloading The Datalog To A PC

1. Connect the data cable to the PC and the cradle.
2. Place the instrument into its cradle. The charging LED should be illuminated.
3. Start ProRAE Studio on your PC.
4. From ProRAE Studio, select "Operation" and select Setup Connection.
5. Select the COM port to establish a communication link between the PC and the instrument.
6. To receive the datalog in the PC, select "Downlog Datalog."
7. When you see "Unit Information," click OK.

During the data transfer, the display shows a progress bar.

When the transfer is done, you will see a screen with the datalog information. You can now export this datalog for other use or printing.

Uploading Firmware To The instrument From A PC

Uploading new firmware to your instrument requires connecting the instrument and PC. Follow these steps to make the connection:

1. Connect the data cable to the PC and the cradle.
2. Place the instrument into its cradle. The charging LED should be illuminated.
3. Start RAEProgrammer 7000 on your PC.
4. From RAEProgrammer 7000, select "Operation" and select Setup Connection.
5. Select the COM port to establish a communication link between the PC and the instrument.
6. Select Operation → Download Firmware.

Once communication is established, follow the instructions that accompany RAEProgrammer 7000 and the firmware to upload the new firmware to your instrument.

Note: Check for the latest updates to ProRAEProgrammer 7000 at www.raesystems.com.

Maintenance

The major maintenance items of the instrument are:

- Battery pack
- Sensor module
- PID lamp
- Sampling pump
- Inlet connectors and filters

Note: Maintenance should be performed by qualified personnel only.

NOTE: The printed circuit board of the instrument is connected to the battery pack even if the power is turned off. **Therefore, it is very important to disconnect the battery pack before servicing or replacing any components inside the instrument**. **Severe damage to the printed circuit board or battery may occur if the battery pack is not disconnected before servicing the unit.**

Battery Charging & Replacement

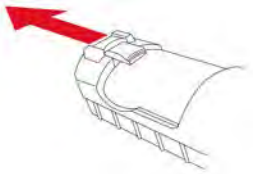
When the display shows a flashing empty battery icon, the battery requires recharging. It is recommended to recharge the instrument upon returning from fieldwork. A fully charged battery runs a instrument for 16 hours continuously. The charging time is less than 8 hours for a fully discharged battery. The battery may be replaced in the field (in areas known to be non-hazardous), if required.

WARNING!

To reduce the risk of ignition of hazardous atmospheres, recharge battery only in area known to be non-hazardous. **Remove and replace battery only in areas known to be non-hazardous.**

Replacing The Li-ion Battery

1. Turn off the instrument.
2. Located on the rear of the instrument is a battery tab. Slide it down to unlock the battery.



3. Remove the battery pack from the battery compartment by tilting it out.



4. Replace a fully charged spare battery pack inside the battery compartment. Make sure the battery pack is oriented properly inside the compartment.
5. Slide the capture tab back up to its locked position.

Replacing The Alkaline Battery Adapter

An alkaline battery adapter is supplied with each instrument. The adapter (part number 059-3052-000) accepts four AA alkaline batteries (use only Duracell MN1500) and provides approximately 12 hours of operation. The adapter is intended to be used in emergency situations when there is no time to charge the Li-ion battery pack.

To insert batteries into the adapter:

1. Remove the three Philips-head screws to open the compartment.
2. Insert four fresh AA batteries as indicated by the polarity (+/-) markings.
3. Replace the cover. Replace the three screws.

To install the adapter in the instrument:

1. Remove the Li-ion battery pack from the battery compartment by sliding the tab and tilting out the battery.
2. Replace it with the alkaline battery adapter
3. Slide the tab back into place to secure the battery adapter.

IMPORTANT!

Alkaline batteries cannot be recharged. The instrument's internal circuit detects alkaline batteries and will not allow recharging. If you place the instrument in its cradle, the alkaline battery will not be recharged. The internal charging circuit is designed to prevent damage to alkaline batteries and the charging circuit when alkaline batteries are installed inside the instrument.

Note: When replacing alkaline batteries, dispose of old ones properly.

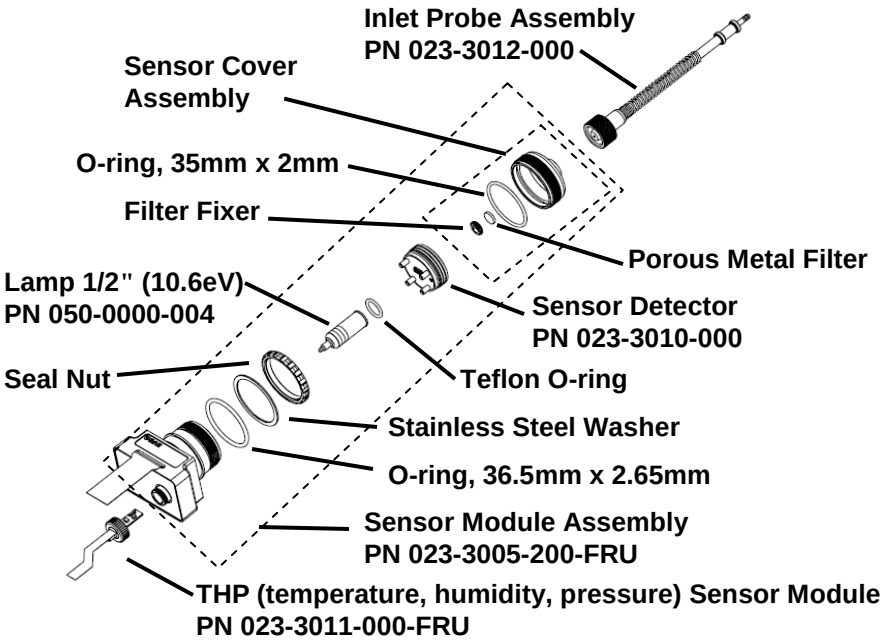
WARNING!

To reduce the risk of ignition of hazardous atmospheres, recharge the battery only in areas known to be non-hazardous. Remove and replace the battery only in areas known to be non-hazardous.

Note: The internal charging circuit is designed to prevent charging to alkaline batteries.

PID Sensor & Lamp Cleaning/Replacement

The sensor module is made of several components and is attached to the lamp-housing unit as shown below.



Sensor Components

Note: The cleaning procedure is not normally needed. Clean the PID sensor module, the lamp and the lamp housing only if:

1. The reading is inaccurate even after calibration.
2. The reading is very sensitive to air moisture.
3. A liquid has been sucked into the unit and damaged the unit.

Use of the external filter helps to prevent contamination of the sensor.

To access the sensor components and lamp, gently unscrew the lamp-housing cap, remove the sensor adapter with the gas inlet probe and the metal filter all together. Then hold the PID sensor and pull it straight out. A slight, gentle rocking motion helps release the sensor.

Cleaning The PID Sensor

Place the entire PID sensor module into GC grade methanol. It is highly recommended that an ultrasound bath to be used to clean the sensor for at least 15 minutes. Then dry the sensor thoroughly. Never touch the electrodes of the sensor by hand.
Also use a methanol-soaked cotton swab to wipe off the lamp housing where it contacts the sensor when the sensor is installed.

Turn over the sensor so that the pins point up and the sensor cavity is visible. Examine the sensor electrodes for any corrosion, damage, or bending out of alignment. The metal sensor electrode "fingers" should be flat and straight. If necessary, carefully bend the sensor fingers to ensure that they do not touch the Teflon portions and that they are parallel to each other. Make sure that the nuts on the sensor pins are snug but not overtight. If the sensor is corroded or otherwise damaged, it should be replaced.

Cleaning The Lamp Housing Or Changing The Lamp

If the lamp does not turn on, the instrument will display an error message to indicate replacement of the lamp may be required.

1. If the lamp is operational, clean the lamp window surface and the lamp housing by wiping it with GC grade methanol using a cotton swab using moderate pressure. After cleaning, hold the lamp up to the light at an angle to detect any remaining film. Repeat the process until the lamp window is clean. Never use water solutions to clean the lamp. Dry the lamp and the lamp housing thoroughly after cleaning.

   CAUTION: Never touch the window surface with the fingers or anything else that may leave a film. Never use acetone or aqueous solutions.

2. If the lamp does not turn on, remove the lamp from the lamp housing. Place the lamp O-ring onto the new lamp. Insert the new lamp, avoiding contact with the flat window surface.
3. Reinstall the PID sensor module.
4. Tighten the Lamp Housing Cap.

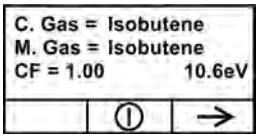
Determining The Lamp Type

The monitor can accommodate three lamp values: 10.6eV (standard), 9.8eV, and 11.7eV. The monitor automatically reads a marking on the side of the lamp to set the proper Correction Factor. There are two ways to determine the lamp type:

Remove the lamp and look for markings (bars) on the side:

- No bars: 10.6eV
- 1 bar: 11.7eV
- 2 bars: 9.8eV

Also, when the monitor is running, the lamp type is shown along with the calibration and measurement gas and Correction Factor:



Note: This screen can be accessed from the reading screen by pressing [N/-] four times.

Sampling Pump

When approaching the end of the specified lifetime of the pump, it will consume higher amount of energy and reduce its sample draw capability significantly. When this occurs, it is necessary to replace or rebuild the pump. When checking the pump flow, make sure that the inlet connector is tight and the inlet tubing is in good condition. Connect a flow meter to the gas inlet probe. The flow rate should be above 450 cc/min when there is no air leakage.

If the pump is not working properly, refer the instrument to qualified service personnel for further testing and, if necessary, pump repair or replacement.

Cleaning The Instrument

Occasional cleaning with a soft cloth is recommended. Do not use detergents or chemicals.

Visually inspect the contacts at the base of the instrument, on the battery, and on the charging cradle to make sure they are clean. If they are not, wipe them with a soft, dry cloth. Never use solvents or cleaners.

Ordering Replacement Parts

If you need replacement parts, contact your local RAE Systems distributor. A list is available online:

http://www.raesystems.com

In the U.S., you can order sensors, replacement batteries, and other accessories online at:

http://istore.raesystems.com/

Special Servicing Note

If the instrument needs to be serviced, contact either:

1. The RAE Systems distributor from whom the instrument was purchased; they will return the instrument on your behalf.

   or

2. The RAE Systems Technical Service Department. Before returning the instrument for service or repair, obtain a Returned Material Authorization (RMA) number for proper tracking of your equipment. This number needs to be on all documentation and posted on the outside of the box in which the instrument is returned for service or upgrade. Packages without RMA Numbers will be refused at the factory.

Troubleshooting

Problem	Possible Reasons & Solutions	
Cannot turn on power after charging the battery	**Reasons:**	Discharged battery. Defective battery.
	Solutions:	Charge or replace battery.
Lost password	**Solutions:**	Call Technical Support at +1 408-752-0723 or toll-free at +1 888-723-4800
Reading abnormally High	**Reasons:**	Dirty filter. Dirty sensor module. Excessive moisture and water condensation. Incorrect calibration.
	Solutions:	Replace filter. Blow-dry the sensor module. Calibrate the unit.
Reading abnormally Low	**Reasons:**	Dirty filter. Dirty sensor module. Weak or dirty lamp. Incorrect calibration.
	Solutions:	Replace filter. Remove Calibration Adapter. Calibrate the unit. Check for air leakage.
Buzzer Inoperative	**Reasons:**	Bad buzzer.
	Solutions:	Check that buzzer is not turned off. Call authorized service center.

Inlet flow too low	**Reasons:**	Pump diaphragm damaged or has debris. Flow path leaks.
	Solutions:	Check flow path for leaks; sensor module O-ring, tube connectors, Teflon tube compression fitting. Call Technical Support at +1 408-752-0723 or toll-free at +1 888-723-4800
"Lamp" message during operation	**Reasons:**	Lamp drive circuit. Weak or defective PID lamp, defective.
	Solutions:	Turn the unit off and back on. Replace UV lamp

Technical Support

To contact RAE Systems Technical Support Team:

Monday through Friday, 7:00AM to 5:00PM Pacific (US) Time
Phone (toll-free): +1 888-723-4800
Phone: +1 408-952-8461
Email: tech@raesystems.com

Life-critical after-hours support is available:

+1 408-952-8200 select option 8

RAE Systems Contacts

RAE Systems
World Headquarters
3775 N. First St.
San Jose, CA 95134-1708 USA
Phone: +1 408.952.8200
Fax: +1 408.952.8480

E-mail: customerserv@raesystems.com
Web Site: www.raesystems.com

RAE Systems Technical Support
Monday through Friday, 7:00AM to 5:00PM Pacific Time
Phone: +1.408.952.8461
Email: tech@raesystems.com

Life-critical after-hours support is available:
+1.408.952.8200 select option 9

RAE Systems Europe ApS
Kirstinehøj 23 A
DK-2770 Kastrup
Denmark
Phone: +45 86 52 51 55
Fax: +45 86 52 51 77
orders@raeeurope.com
sales@raeeurope.com
service@raesystems.com
Web: www.raesystems.dk

RAE Systems UK Ltd
D5 Culham Innovation Centre
Culham Science Centre
Abingdon, Oxon OX14 3DB
United Kingdom
Phone: +44 1865408368
Fax: +44 1235531119
Mobile: +44 7841362693
Email: raeuk@raeeurope.com

RAE Systems France
ZI des Ayats
679390 MILLERY
France
Phone: +33 4 78 46 16 65
Fax: +33 4 78 46 25 98
Email: info-france@raeeurope.com
Web: www.raesystems.fr

RAE BeNeLux BV
Hoofdweg 34C
2908 LC Capelle a/d IJssel
The Netherlands
Phone: +31 10 4426149
Fax: +31 10 4426148
Email: info@rae.nl
Web: www.rae.nl

RAE Systems Germany GmbH
Felix-Wankel-Str. 5
82152 Krailing
Germany
Phone: +49 89 20 70 40 248
Fax: +49 89 850 93 74
Email: orders@raeeurope.com

RAE Systems Spain, s.l.
Av. Remolar, 31
08820 El Prat de Llobregat
Spain
Phone: +34 933 788 352
Fax: +34 933 788 353
Mobile: +34 687 491 106
Email: mdelgado@raespain.com
Web: www.raespain.com

RAE Middle East
Lot 7, Ground Floor, Office 19
Jebel Ali Free Zone
Dubai
United Arab Emirates
Phone: +971 4 887 5562
Fax: +971 4 887 5563
Email: mesales@raesystems.com

RAE Systems (Hong Kong) Ltd.
Room 8, 6/F, Hong Leong Plaza
33 Lok Yip Road
Fanling, N.T, Hong Kong
Phone: +852.2669.0828
Fax: +852.2669.0803
Email: hksales@raesystems.com

RAE Systems Japan
403 Plaza Ochanomizu Bldg. 2-1
Surugadai Kanda Chiyoda-Ku
Tokyo, Japan
Phone: 81-3-5283-3268
Fax: 81-3-5283-3275
Email: jpsales@raesystems.com

RAE Systems Korea
#1010, DaeMyungAnsVill First,
Sang-Dong 412-2, Wonmi-Gu, Bucheon,
Kyungki-Do, Korea
Phone: 82-32-328-7123
Fax: 82-32-328-7127
Email: krsales@raesystems.com

Controlled Part of Manual

Intrinsic Safety:
US and Canada: Class I, Division 1, Groups A,B,C,D T4

Europe: ATEX (0575 Ex II 2G Ex ia IIC/IIB T4 Gb)
KEMA 07 ATEX 0127
Complies with EN60079-0:2009, EN60079-11:2007
IECEx CSA 10.0005 Ex ia IIC/IIB T4 Gb
Complies with IEC 60079-0:2007, IEC 60079-11:2006

Temperature: -20º C to 50º C (-4º to 122º F)

Humidity: 0% to 95% relative humidity (non-condensing)

Basic Operation

Turning The Instrument On

1. With the instrument turned off, press and hold [MODE].
2. When the display turns on, release the [MODE] key.

The instrument is now operating and performs self tests. Once the self tests are complete, the display shows a graph or numerical gas reading. This indicates that the instrument is fully functional and ready to use.

Turning The Instrument Off

1. Press and hold the Mode key for 3 seconds. A 5-second countdown to shutoff begins.
2. When you see "Unit off..." release your finger from the [MODE] key. The instrument is now off.

Note: You must hold your finger on the key for the entire shutoff process. If you remove your finger from the key during the countdown, the shutoff operation is canceled and the instrument continues normal operation.

Alarm Signals

During each measurement period, the gas concentration is compared with the programmed alarm limits (gas concentration alarm limit settings). If the concentration exceeds any of the preset limits, the loud buzzer and red flashing LED are activated immediately to warn you of the alarm condition.

In addition, the instrument alarms if one of the following conditions occurs: battery voltage falls below a preset voltage level, failure of the UV lamp, pump stall, or when the datalog memory is full.

Alarm Signal Summary

Message	Condition	Alarm Signal
HIGH	Gas exceeds "High Alarm" limit	3 beeps/flashes per second*
OVR	Gas exceeds measurement range	3 beeps/flashes per second*
MAX	Gas exceeds electronics' maximum range	3 beeps/flashes per second*
LOW	Gas exceeds "Low Alarm" limit	2 beeps/flashes per second*
TWA	Gas exceeds "TWA" limit	1 Beep/flash per second*
STEL	Gas exceeds "STEL" limit	1 Beep/flash per second*
Pump icon flashes	Pump failure	3 beeps/flashes per second
Lamp	PID lamp failure	3 beeps/flashes per second plus "Lamp" message on display

Battery icon flashes	Low battery	1 flash, 1 beep per minute plus battery icon flashes on display
CAL	Calibration failed, or needs calibration	1 beep/flash per second
NEG	Gas reading measures less than number stored in calibration	1 beep/flash per second

Preset Alarm Limits & Calibration

The instrument is factory calibrated with standard calibration gas, and is programmed with default alarm limits.

Cal Gas (Isobutylene)	Cal Span	unit	Low	High	TWA	STEL
ppbRAE 3000	10	ppm	10	25	10	25
MiniRAE 3000	100	ppm	50	100	10	25
MiniRAE Lite	100	ppm	50	100	10	25
UltraRAE 3000	100	ppm	50	100	10	25

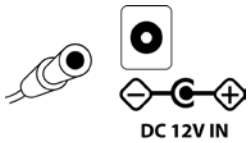
Charging The Battery

Always fully charge the battery before using the instrument. The instrument's Li-ion/NiMH battery is charged by placing the instrument in its cradle. Contacts on the bottom of the instrument meet the cradle's contacts, transferring power without other connections.

Note: Before setting the instrument into its charging cradle, visually inspect the contacts to make sure they are clean. If they are not, wipe them with a soft cloth. Do not use solvents or cleaners.

Follow this procedure to charge the instrument:

1. Plug the AC/DC adapter's barrel connector into the instrument's cradle.



2. Plug the AC/DC adapter into the wall outlet.
3. Place the instrument into the cradle, press down, and lean it back. It locks in place and the LED in the cradle glows.

Note: To release the instrument, press down and tilt the top out of the cradle and lift up.

The instrument begins charging automatically. The LED on the front of the cradle marked "Primary" blinks during charging. During charging, the diagonal lines in the battery icon on the instrument's display are animated and you see the message "Charging..."

When the instrument's battery is fully charged, the battery icon is no longer animated and shows a full battery. The message "Fully charged!" is shown and the Primary LED on the cradle glows continuously green.

Note: A spare Li-ion battery (059-3051-000) or NiMH(059-3054-000) can be charged by placing it directly in the charging port on the back of the cradle. It can be charged at the same time as the instrument. Press the battery in place, sliding it slightly toward the front of the cradle. This locks it in the cradle. To release the battery, slide it forward again and tilt it up.

Note: An Alkaline Battery Adapter (part number 059-3052-000), which uses four AA alkaline batteries (Duracell MN1500), may be substituted for the Li-Ion battery.

WARNING!

To reduce the risk of ignition of hazardous atmospheres, recharge and replace batteries only in areas known to be non-hazardous. **Remove and replace batteries only in areas known to be non-hazardous.**

Low Voltage Warning

When the battery's charge falls below a preset voltage, the instrument warns you by beeping once and flashing once every minute, and the battery icon blinks once per second. You should turn off the instrument within 10 minutes and either recharge the battery by placing the instrument in its cradle, or replace the battery with a fresh one with a full charge.

Clock Battery

An internal clock battery is mounted on one of the instrument's printed circuit boards. This long-life battery keeps settings in memory from being lost whenever the Li-ion, NiMH, or alkaline batteries are removed. This backup battery should last approximately five years, and must be replaced by an authorized RAE Systems service technician. It is not user-replaceable.

WARNING

To reduce the risk of ignition of hazardous atmospheres, recharge battery only in area known to be non-hazardous. Remove and replace battery only in an area known to be non-hazardous.

Replacing Rechargeable Li-Ion or NiMH Battery

Caution: Turn off the instrument before removing or replacing the battery.

Alkaline Battery Adapter

An alkaline battery adapter is supplied with each instrument. The adapter (part number 059-3052-000) accepts four AA alkaline batteries (use only Duracell MN1500).

Do not mix old and new batteries or different type batteries.

Troubleshooting

Problem	Possible Reasons & Solutions	
Cannot turn on power after charging the battery	**Reasons:**	Discharged battery. Defective battery.
	Solutions:	Charge or replace battery.
Lost password	**Solutions:**	Call Technical Support at +1 408-752-0723 or toll-free at +1 888-723-4800
Reading abnormally High	**Reasons:**	Dirty filter. Dirty sensor module. Excessive moisture and water condensation. Incorrect calibration.
	Solutions:	Replace filter. Blow-dry the sensor module. Calibrate the unit.
Reading abnormally Low	**Reasons:**	Dirty filter. Dirty sensor module. Weak or dirty lamp. Incorrect calibration.
	Solutions:	Replace filter. Remove Calibration Adapter. Calibrate the unit. Check for air leakage.
Buzzer Inoperative	**Reasons:**	Bad buzzer.
	Solutions:	Check that buzzer is not turned off. Call authorized service center.

Inlet flow too low	**Reasons:**	Pump diaphragm damaged or has debris. Flow path leaks.
	Solutions:	Check flow path for leaks; sensor module O-ring, tube connectors, Teflon tube compression fitting. Call Technical Support at +1 408-752-0723 or toll-free at +1 888-723-4800
"Lamp" message during operation	**Reasons:**	Lamp drive circuit. Weak or defective PID lamp, defective.
	Solutions:	Turn the unit off and back on. Replace UV lamp



RAE Systems by Honeywell
World Headquarters
3775 N. First St.
San Jose, CA 95134-1708 USA
Phone: 408.952.8200
Toll-Free: 888.723.4800
Fax: 408.952.8480

E-mail (sales support): raesales@raesystems.com
E-mail (technical support): tech@raesystems.com
Web Site: www.raesystems.com

RAE Systems Europe

Kristinehøj 23A, Boulevard 69, DK-2770 Kastrup • Denmark
Tel: +45.8652.5155 • Fax: +45.8652.5177

RAE Systems (Hong Kong) Ltd.

Units 1516-18, 15/F, Delta House, 3 On Yiu Street
Shatin, N.T. Hong Kong
Web: www.raesystems.cn • Email: asiasales@raesystems.com
Phone: +852.2669.0828

RAE Systems Middle East

LOB 7, Ground Floor, Office 19, Jebel Ali Free Zone
Dubai, United Arab Emirates
Email: mesales@raesystems.com • Phone: +971.4.887.5562

Rev. D
April 2014
P/N 059-4020-000

CSA INTERNATIONAL

Certificate of Compliance

Certificate: 1865837 **Master Contract:** 217005

Project: 2218210 **Date Issued:** 2010/01/14

Issued to: **RAE Systems, Inc.**

3775 North First St
San Jose, CA 95134
USA
Attention: James Pan

The products listed below are eligible to bear the CSA Mark shown with adjacent indicators 'C' and 'US' for Canada and US or with adjacent indicator 'US' for US only or without either indicator for Canada only.

C US

Rich Masek

Issued by: Rich Masek

PRODUCTS

CLASS 4828 82 - SIGNAL APPLIANCES-Toxic Gas Detection Instruments - For Hazardous Locations. Certified to U.S. Standards

CLASS 4828 02 - SIGNAL APPLIANCES - Toxic Gas Detection Instruments - For Hazardous Locations

Class I; Division 1; Group A, B, C, D; T4

- MiniRAE 3000, Model PGM 7320, Portable Handheld VOC Monitor
- ppbRAE 3000, Model PGM 7340, Portable Handheld VOC Monitor
- MiniRAE Lite, Model PGM 7350, Portable Handheld VOC Monitor
- UltraRAE 3000, Model PGM 7360, Portable Handheld VOC Monitor

All monitors rated 6 Vdc. Ambient –20 °C to +50 °C, Intrinsically safe when powered by battery pack 059-3052-000 using either Duracell MN1500 or Energizer E91 alkaline batteries, powered by rechargeable Li-Ion battery pack 059-3051-000 or powered by rechargeable NiMH battery pack 059-3054-000.

APPLICABLE REQUIREMENTS

CSA INTERNATIONAL

Certificate:	1865837	**Master Contract:**	217005
Project:	2218210	**Date Issued:**	2010/01/14

C22.2 No. 0-M91 - General Requirements – Canadian Electrical Code, Part II

C22.2 No. 142-M1987 - Process Control Equipment

C22.2 No. 157-92 - Intrinsically Safe and Non-Incendive Equipment for Use in Hazardous Locations

ANSI/UL 913:2004 - Intrinsically Safe Apparatus

ANSI/UL 916:1998 - Energy Management Equipment

MARKINGS

The following markings are required.
- Submittor's identification
- Model designation or equivalent
- Complete electrical rating (List of acceptable batteries)
- Applicable hazardous locations designation - Class I; Division 1; Groups A, B, C and D;
- Temperature Code – T4
- Serial Number or date code
- CSA Monogram with c/us indicator as shown on the Certificate of Compliance.
- WARNING: DO NOT CHANGE OR CHARGE BATTERIES IN A HAZARDOUS LOCATION.
- WARNING: - DO NOT MIX OLD/NEW OR DIFFERENT TYPE BATTERIES.
- WARNING: SUBSTITUTION OF COMPONENTS MAY IMPAIR INTRINSIC SAFETY. (May be in User Manual)

Battery Pack Markings
- Submittor's identification
- Battery Pack part number
- Voltage
- WARNING to not replace or charge battery pack in a hazardous location

Multi Water Quality Checker
U-50 Series

Instruction Manual

CODE:GZ0000144342C

Preface

This manual describes the operation of the Multi Water Quality Checker, U-50 Series.
Be sure to read this manual before using the product to ensure proper and safe operation of the instrument. Also safely store the manual so it is readily available whenever necessary.

Product specifications and appearance, as well as the contents of this manual are subject to change without notice.

■ Warranty and Responsibility

HORIBA warrants that the Product shall be free from defects in material and workmanship and agrees to repair or replace free of charge, at HORIBA's option, any malfunctioned or damaged Product attributable to HORIBA's responsibility for a period of one (1) year from the delivery unless otherwise agreed with a written agreement. In any one of the following cases, none of the warranties set forth herein shall be extended;

- Any malfunction or damage attributable to improper operation
- Any malfunction attributable to repair or modification by any person not authorized by HORIBA
- Any malfunction or damage attributable to the use in an environment not specified in this manual
- Any malfunction or damage attributable to violation of the instructions in this manual or operations in the manner not specified in this manual
- Any malfunction or damage attributable to any cause or causes beyond the reasonable control of HORIBA such as natural disasters
- Any deterioration in appearance attributable to corrosion, rust, and so on
- Replacement of consumables

HORIBA SHALL NOT BE LIABLE FOR ANY DAMAGES RESULTING FROM ANY MALFUNCTIONS OF THE PRODUCT, ANY ERASURE OF DATA, OR ANY OTHER USES OF THE PRODUCT.

■ Trademarks

Generally, company names and brand names are either registered trademarks or trademarks of the respective companies.

 © 2008 – 2009 HORIBA, Ltd.

Conformable Directive

This equipment conforms to the following directives and standards:

Directives: the EMC Directive 2004/108/EC

Standards: [the EMC Directive]
EN61326-1:2006 Class B, Portable test and measurement equipment

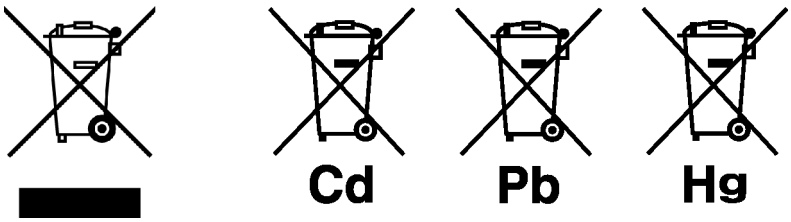
Information on Disposal of Electrical and Electronic Equipment and Disposal of Batteries and Accumulators

The crossed out wheeled bin symbol with underbar shown on the product or accompanying documents indicates the product requires appropriate treatment, collection and recycle for waste electrical and electronic equipment (WEEE) under the Directive 2002/96/EC, and/or waste batteries and accumulators under the Directive 2006/66/EC in the European Union.

The symbol might be put with one of the chemical symbols below. In this case, it satisfies the requirements of the Directive 2006/66/EC for the object chemical.

This product should not be disposed of as unsorted household waste.
Your correct disposal of WEEE, waste batteries and accumulators will contribute to reducing wasteful consumption of natural resources, and protecting human health and the environment from potential negative effects caused by hazardous substance in products.

Contact your supplier for information on applicable disposal methods.



FCC Rules

Any changes or modifications not expressly approved by the party responsible for compliance shall void the user's authority to operate the equipment.

WARNING

This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications.
Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at his own expense.

For your safety

Warning messages are described in the following manner. Read the messages and follow the instructions carefully.

● Meaning of warning messages

⚠DANGER	This indicates an imminently hazardous situation which, if not avoided, will result in death or serious injury. This signal word is to be limited to the most extreme situations.
⚠WARNING	This indicates a potentially hazardous situation which, if not avoided, could result in death or serious injury.
⚠CAUTION	This indicates a potentially hazardous situation which, if not avoided, may result in minor or moderate injury. It may also be used to alert against unsafe practices. Without safety alert indication of hazardous situation which, if not avoided, could result in property damage.

● Symbols

	Description of what should be done, or what should be followed
	Description of what should never be done, or what is prohibited

■ Safety Precautions

This section provides precautions to enable you to use the product safely and correctly and to prevent injury and damage. The terms of DANGER, WARNING, and CAUTION indicate the degree of imminency and hazardous situation. Read the precautions carefully as it contains important safety messages.

⚠ WARNING
Do not disassemble or modify the meter. May cause overheating or fire, resulting in accidents.

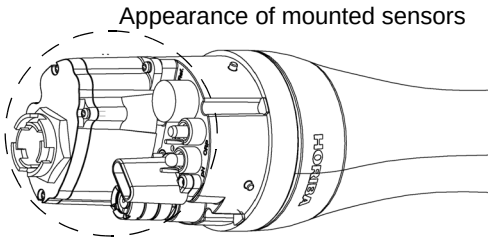
⚠ CAUTION
The pH and ORP sensors are made of glass. Handle them carefully to avoid breakage.
Do not ingest the DO, pH or ORP standard solutions. If it comes into contact with the eyes, rinse thoroughly with water. If swallowed, consult a physician.
Keep away from water when using USB communication. Improper use may result in fire or damage.

Points of concern

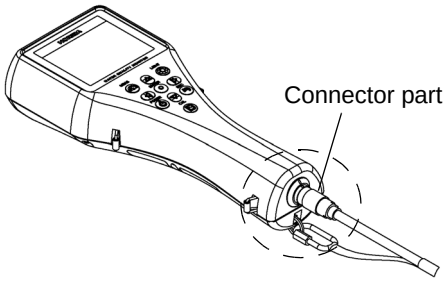
Use of the equipment in a manner not specified by the manufacturer may impair the protection provided by the equipment. It may also reduce equipment performance.

● Sensor probe

- Do not immerse the sensor probe in seawater or other samples with high salinity. Doing so may erode metallic parts. After use, promptly wash the sensor probe thoroughly in water.
- Do not immerse the sensor probe in alcohol, organic solvent, strong acid, strong alkaline, and other similar solutions.
- Do not subject to strong shocks.
- Do not perform measurement in environments of magnetic fields. Measurement errors may result.
- The sensor probe is no longer waterproof when the sensors are not mounted.

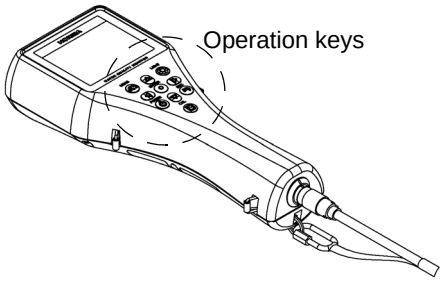


- Does not support measurement of samples containing fluorine.
- To disconnect the sensor cable or interface cable, pull them out with holding the connector part. Do not pull the cable part; it may cause breakage.



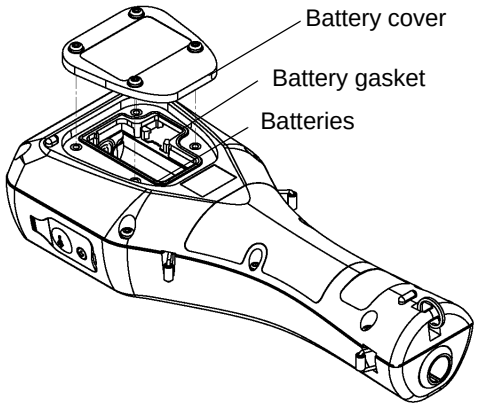
● Control unit

- Do not subject to strong shocks.
- The operation keys are designed to operate using the pad of a finger, sharp objects can tear the control unit cover damaging the operation keys.



- The control unit is no longer waterproof when the USB cable is connected.
- When operating the control unit only, protect the connector with the connector cap provided.

- Remove the batteries when not using the control unit for an extended period of time. Battery fluid leakage may cause equipment failure.
- Do not wipe the control unit with organic solvents or powder polish. The surface may deteriorate or its printing may disappear. If the display becomes dirty, wipe the dirt off with a soft cloth soaked in neutral detergent.
- Do not turn the power OFF or disconnect the cable during calibration or setting. Memory data may be erased.
- To perform measurement, connect the sensor probe cable before turning the power ON.
- Do not remove the battery gasket or twist it.
- When opening the battery case, make sure that no foreign matter is attached to the battery gasket.
- Do not use any unspecified batteries; it may cause breakage.



Measurement

- Do not pull the cable when lowering the sensor probe into the sample during measurement. Lower the sensor probe into the sample on a chain or string.
- Before lowering the sensor probe into the sample, do not connect the hook on the unit to a human body.
- The correct values are not displayed if the sensor is not mounted when the measurement display is activated.
- Perform DO measurement with no air bubbles in the internal solution.
- Do not reuse a membrane cap of DO sensor.
- Use the spanner for DO sensor provided to attach or remove the DO sensor.
- Avoid both U-53 and U-53G turbidity measurement in air, since the rubber wiper will quickly become damaged.
- Avoid turbidity measurement in direct sunlight, since the readout may be affected.

Calibration

During atmosphere calibration for the DO electrode with DO salinity compensation set to automatic, values are compensated based on electrical conductivity, but calibration is performed normally.

Location of use and storage

- Storage temperature: −10°C to 60°C
- Relative humidity: Under 80% and free from condensation

Store the meter in locations void of dust, strong vibrations, direct sunlight, corrosive gases, near air conditioners or windy areas.

Disposal of the product

When disposing of the product, follow the related laws and/or regulations of your country for disposal of the product.

Description in this manual

Note

This interprets the necessary points for correct operation and notifies the important points for handling the unit.

Reference

This indicates where to refer for information.

Tip

This indicates reference information.

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1 About this Unit

The U-50 Series Multi Water Quality Checker features an integrated control unit and sensors. It is capable of making a maximum of eleven simultaneous measurements for various parameters, and is perfect for use in the field. The U-50 Series is designed with on-site ease-of-use in mind, provides a wide variety of functions, and can be used for water quality measurements and inspections of river water, groundwater, and waste water.

2 Device Information

2.1 Measurement parameters

Parameters	Model				
	U-51	U-52	U-52G	U-53	U-53G
pH (pH)	✓	✓	✓	✓	✓
pH (mV)	✓	✓	✓	✓	✓
Oxidation reduction potential (ORP)	✓	✓	✓	✓	✓
Dissolved oxygen (DO)	✓	✓	✓	✓	✓
Electrical conductivity (COND)	✓	✓	✓	✓	✓
Salinity (SAL) [expressed as electrical conductivity]	✓	✓	✓	✓	✓
Total dissolved solids (TDS) [expressed as electrical conductivity]	✓	✓	✓	✓	✓
Seawater specific gravity (SG) [expressed as electrical conductivity]	✓	✓	✓	✓	✓
Water temperature (TEMP)	✓	✓	✓	✓	✓
Turbidity (TURB) [LED transmission/front 30° scattering method]	–	✓	✓	–	–
Turbidity (TURB) [tungsten lamp 90° transmission/scattering method] with wiper	–	–	–	✓	✓
Water depth (DEP)	–	–	✓	✓	✓
GPS	–	–	✓	–	✓

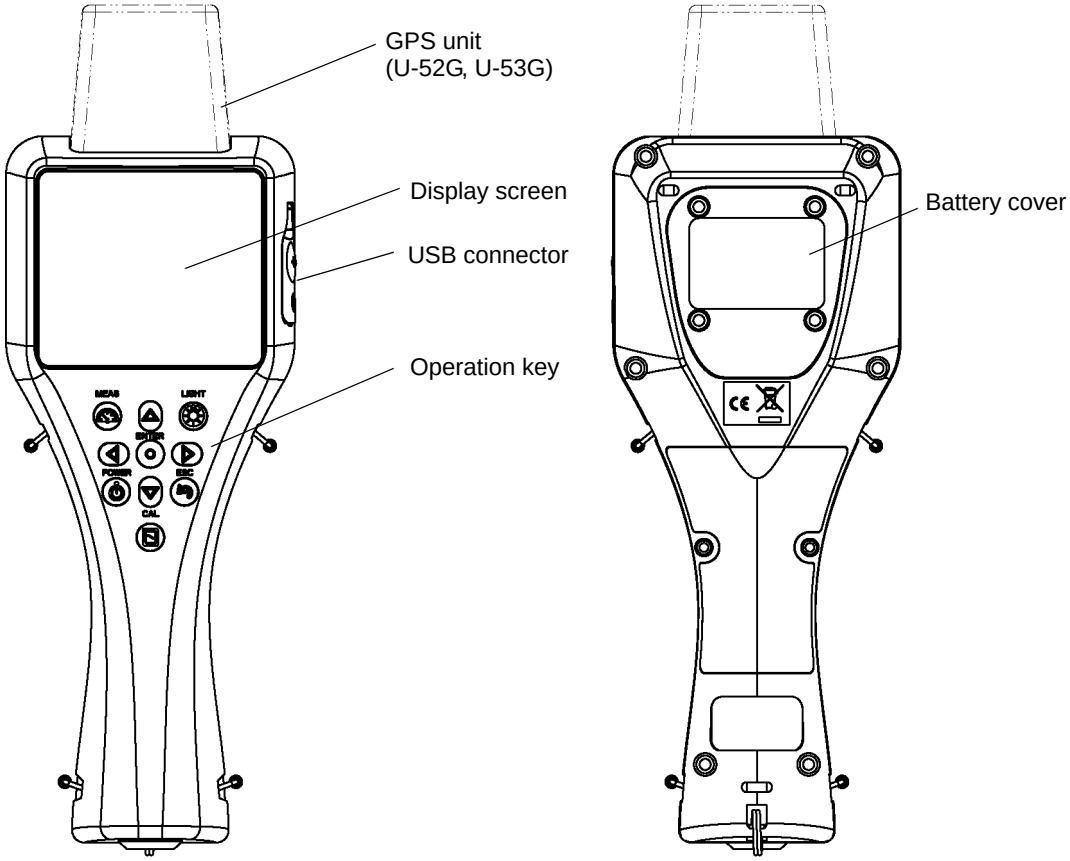
"✓" indicates a measurable parameter.

2.2 Packing list

Parts Name	Quantity	Note
Control unit	1	
Sensor probe	1	
pH sensor (#7112)	1	
ORP sensor (#7313)	1	
Reference electrode (#7210)	1	
DO sensor (#7543)	1	
Turbidity sensor (#7800)	1	With U-52/U-52G only. Attached to the sensor probe.
Turbidity sensor (#7801)	1	With U-53/U-53G only. Attached to the sensor probe.
pH 4 standard solution (#100-4)	1	500 mL
pH reference internal solution (#330)	1	250 mL
DO sensor internal solution set (#306)	1	Internal solution (50 mL), Sandpaper (#8000, #600), Syringe
DO Membrane spare parts set	1	
Spanner for DO sensor	1	
Cleaning brush	1	
calibration cup	1	transparent calibration cup, black calibration cup
Back pack	1	
Strap	1	
Alkaline batteries	4	LR14
Silicon grease	1	
Instruction manual	1	

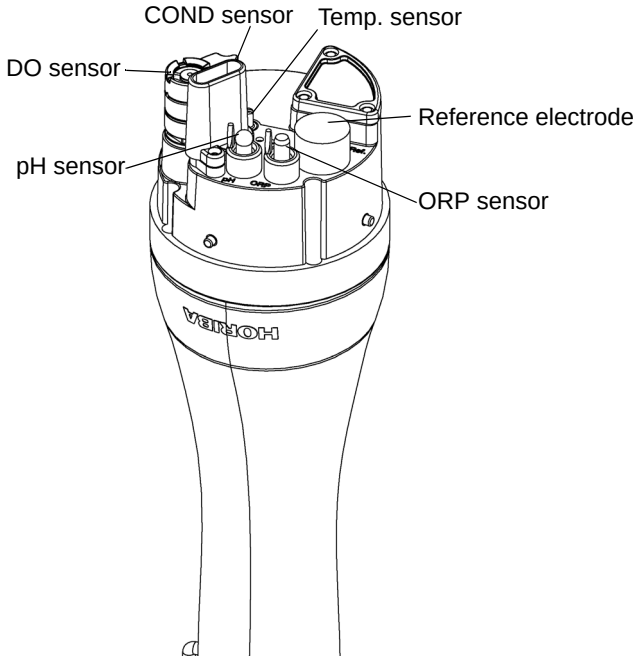
2.3 Parts name and functions

● Display

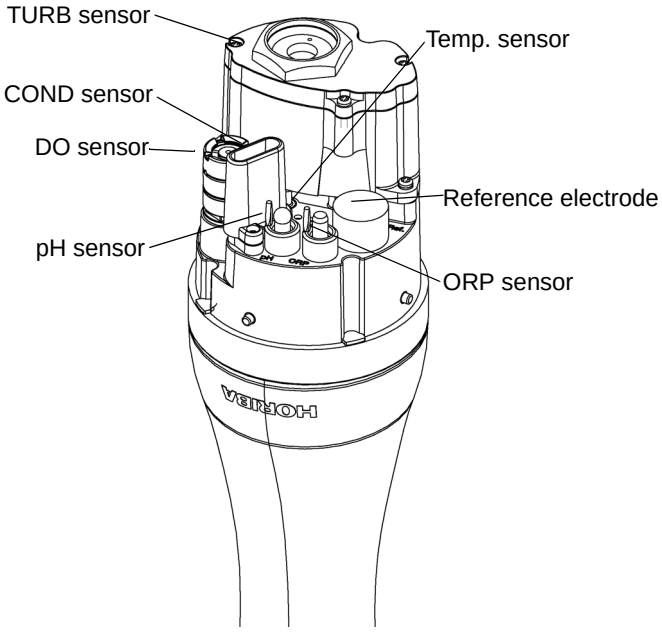


Front view　　Back view

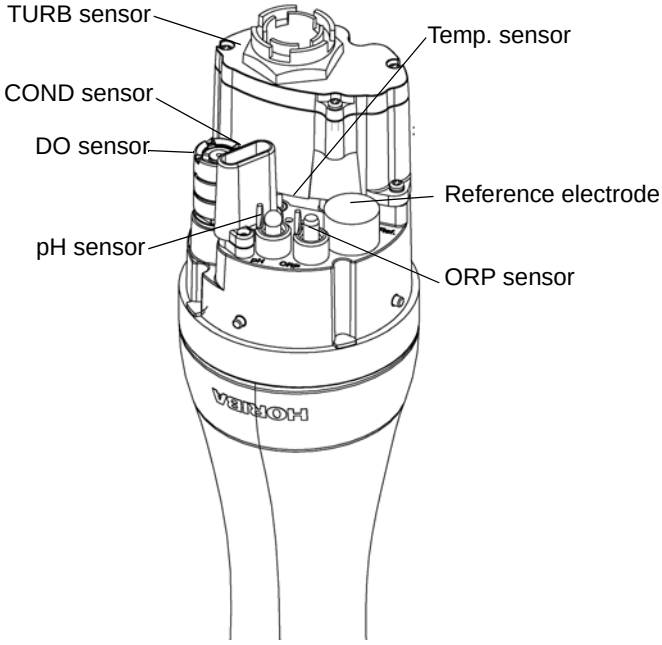
● Sensor probe (U-51)



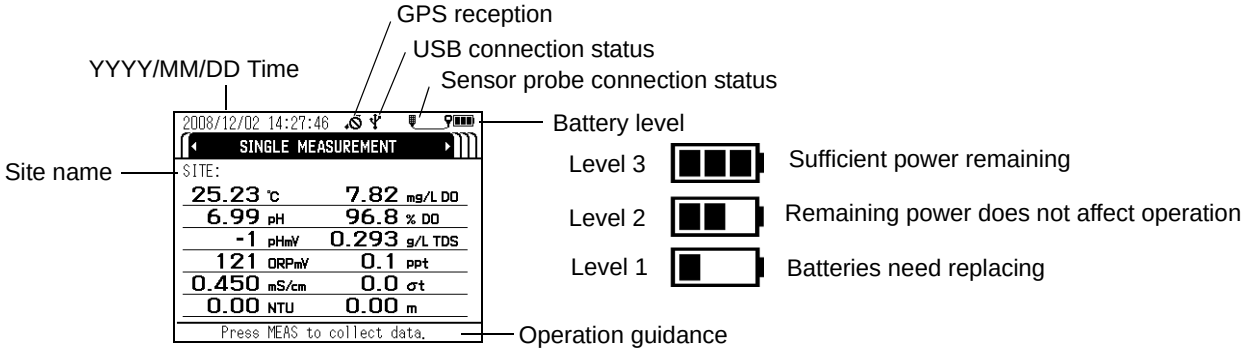
● Sensor probe (U-52)



● Sensor probe (U-53)



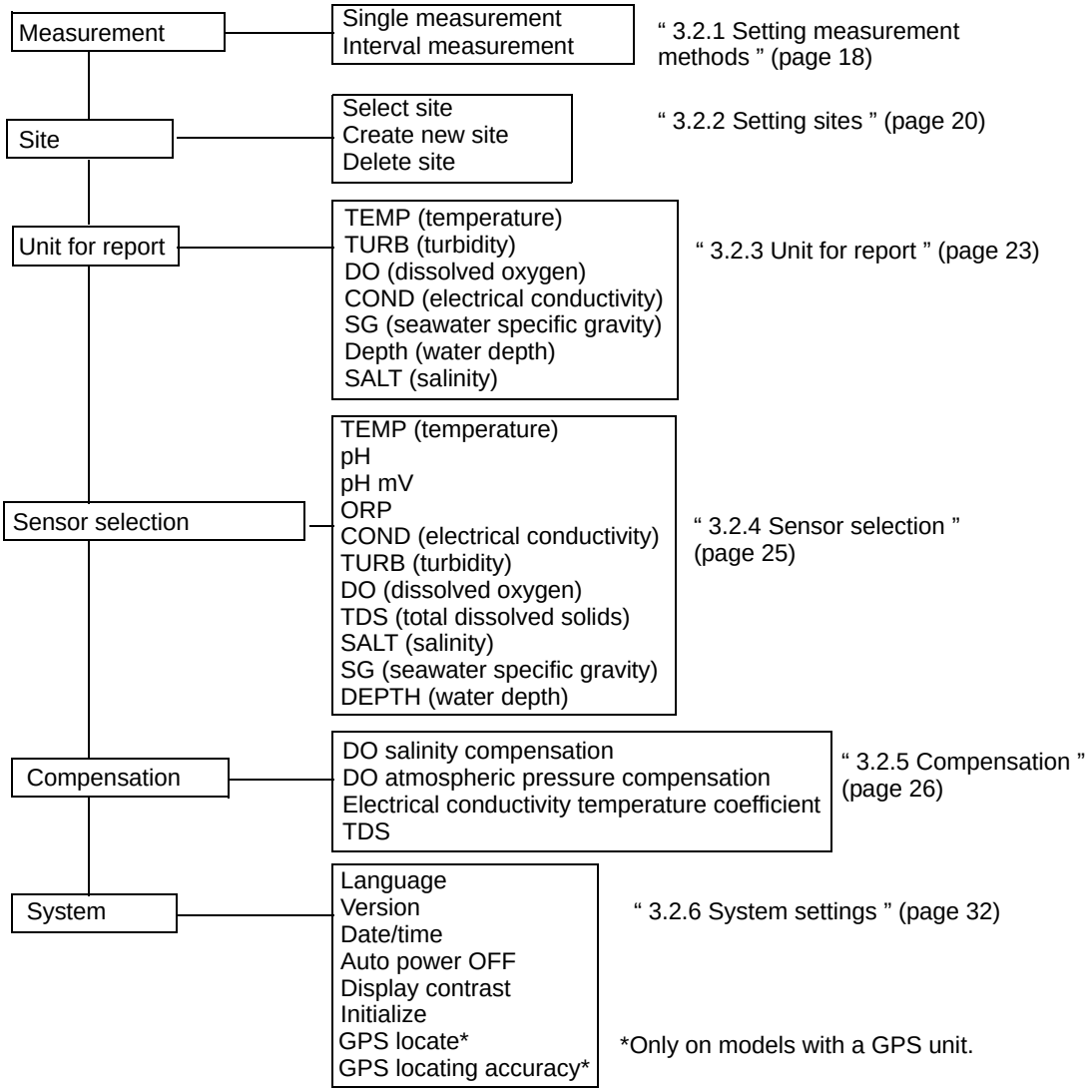
● Display screen



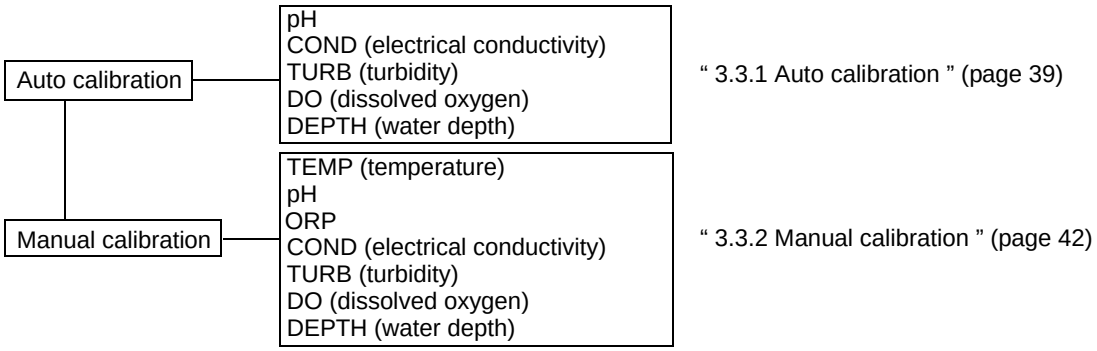
● Operation key

	Key name	description
	POWER key	Turns the system's power ON/OFF. The initial screen appears immediately after turning the power ON. Press and hold down the POWER key for about 3 seconds to turn the power ON and OFF.
	MEAS key	When pressed in the measurement screen, used to set the measurement values of all the measurement parameters. Measurement values flash until the data stabilizes.
		When pressed in the setting, calibration or data operation screen, returns to the measurement screen.
	ENTER key	Used to execute functions, set entered values or store data in memory.
	CAL key	Switches to the calibration screen.
	ESC key	Returns to the immediately preceding operation.
	LIGHT key	Turns the backlight ON/OFF. ● Using the backlight shortens battery life. ● The backlight does not light for about 3 seconds after power ON. ● When the sensor probe is connected while the display's backlight is lit, the backlight goes out for about 3 seconds.
	Left key	Moves the cursor to the left.
	Right key	Moves the cursor to the right.
	Up key	Moves the cursor up.
	Down key	Moves the cursor down.

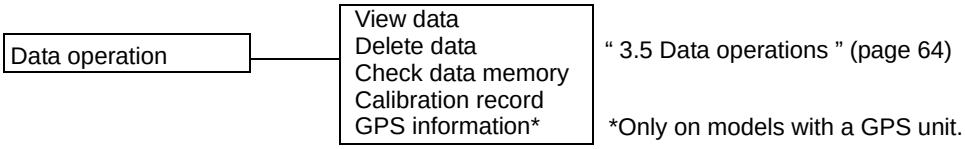
2.4 Setting menu items



2.5 Calibration menu items



2.6 Data operation menu items



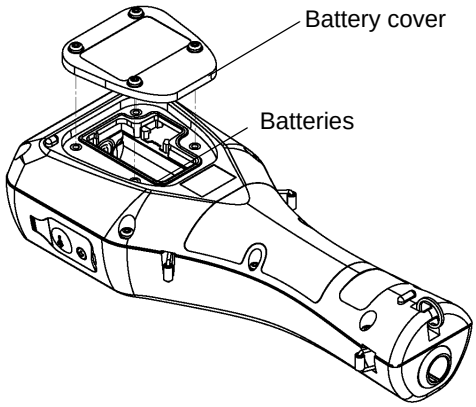
3 Basic Operation

3.1 System setup

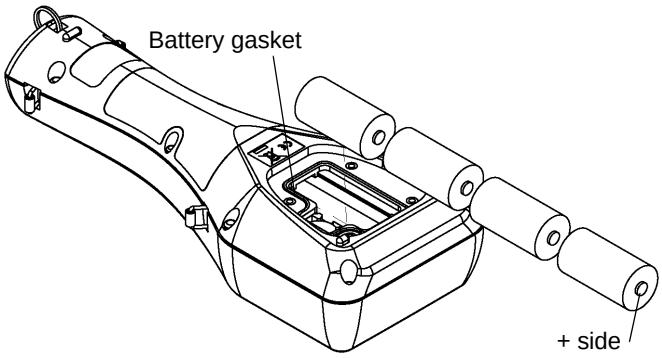
3.1.1 Inserting and replacing the batteries

The control unit is shipped without batteries. Follow the steps below to insert the batteries when using the system for the first time or replacing old batteries.

1. **Loosen the 4 screws on the battery cover by using No. 2 Phillips head screwdriver and remove the cover.**



2. **If replacing the batteries, discard the old batteries.**
3. **Insert new batteries in the control unit.**
   Check that the battery gasket is not dirty or twisted.



4. **Replace the battery cover and fasten it with the 4 screws.**
   Tighten the screws to less than 0.5 N·m.

Note

- **Data and settings will not be lost when the batteries are replaced.**
- **If dirty or twisted, the battery gasket will fail to keep the batteries dry. Check its condition before closing the cover.**
- **To ensure long service life, replacing the battery gasket periodically (once a year) is recommended.**

Precautions when using dry cell batteries

- **Batteries to use: LR14 alkaline dry cell batteries (C-size dry cell batteries) or rechargeable nickel-metal hydride dry cell batteries (C-size)**
  Do not use manganese batteries.
- **Dry cell batteries used incorrectly may leak or burst. Always observe the following**
  - Orient the batteries correctly (positive and negative ends in correct positions).
  - Do not combine new and used batteries, or batteries of different types.
  - Remove the batteries when not using the system for a prolonged period.
  - If batteries leak, have the system inspected at your nearest Horiba service station.

● Battery life

- The battery life for continuous operation when using C-size alkaline dry cell batteries is about 70 hours.
- Using the backlight consumes a proportionate amount of battery power, shortening battery life.
- Searching position information using the GPS unit consumes a proportionate amount of battery power, shortening battery life.
- Nickel-metal hydride secondary batteries can be used, but the battery life is not guaranteed since it will vary according to usage (number of times data is saved, number of charges and amount of each charge). In general, secondary batteries have one-half to one-third the life of C-size alkaline batteries.
- The 70-hour battery life figure applies to a control unit operating temperature of 20°C or more. The battery characteristics shorten the battery life at operating temperatures lower than 20°C, so check the remaining battery level, and replace the batteries before it reaches Level 1.
- The batteries packed with the system at the time of shipment are for checking operation. Their life is not guaranteed.
- The 70-hour battery life figure is the amount of operating time the batteries can provide until the system stops operating. The system may fail during operation if the remaining battery level is low, so it is a good idea to check the remaining battery level and replace the batteries with new ones well before the batteries run out completely.

U-51/52

Battery life: 70 hours (backlight off)

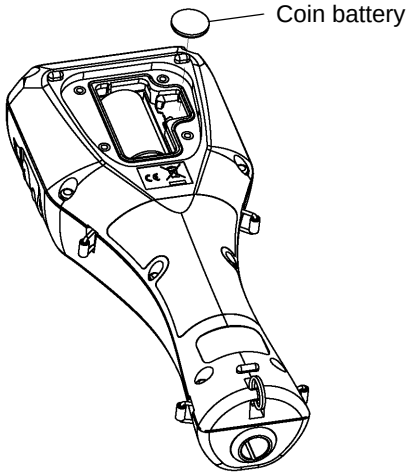
U-53

Battery life: 500 measurements (backlight off)

- Since U-53 is designed for turbidity measurement with wiper, its battery life is estimated in terms of the number of turbidity measurement sequences performed.
- Battery power is also consumed by measurement operations other than turbidity measurement.
- The battery life when turbidity measurement is not performed is about 70 hours.

3.1.2 Replacing the coin battery

- Coin battery to use: CR-2032
- The coin battery is only for the clock. It will provide problem-free operation for three years, but when using the clock continuously, it should be replaced every two years as a precaution.
- When replacing the coin battery for the clock, leave the control unit ON. If the coin battery is replaced when the control unit is turned OFF, the clock will be reset to the default settings.



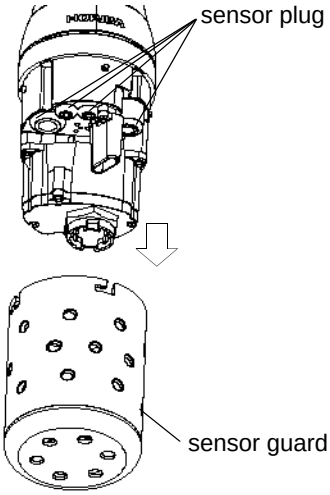
3.1.3 Attaching sensors

Note

- **When attaching or replacing a sensor, wipe any moisture off the sensor probe and sensor.**
- **Be sure to keep water out of sensor connectors. If moisture comes in contact with a sensor connector, blow-dry it with dry air.**
- **The sensor probe is not waterproof when the sensor is not mounted.**
- **Take care not to tighten the sensor too much.**

● Attaching the pH sensor

1. **Remove the sensor guard.**



2. **Remove the sensor plug.**

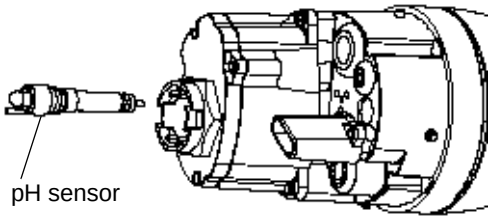
3. **Coat the pH sensor O-ring with a thin layer of silicon grease (part No. 3014017718).**

Note

Be sure no grease from the O-ring gets on the sensor connector. If the sensor connector gets grease on it, wipe it off with a soft cloth soaked in alcohol.

4. **Make sure there is no moisture on the sensor probe's sensor connector (marked "pH").**

5. **Fasten the pH sensor securely by hand.**



6. **Clean the sensor with an alcohol-soaked cloth.**

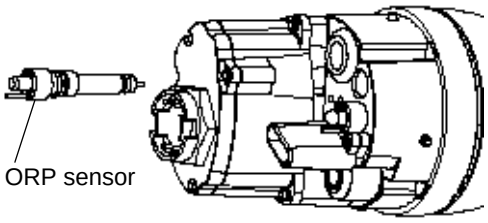
Attaching the ORP sensor

1. **Remove the sensor guard.**
2. **Remove the sensor plug.**
3. **Coat the ORP sensor O-ring with a thin layer of grease (part No. 3014017718).**

Note

Be sure no grease from the O-ring gets on the sensor connector. If the sensor connector gets grease on it, wipe it off with a soft cloth soaked in alcohol.

4. **Make sure there is no moisture on the sensor probe's sensor connector (marked "ORP").**
5. **Fasten the ORP sensor securely by hand.**



6. **Clean the sensor with an alcohol-soaked cloth.**

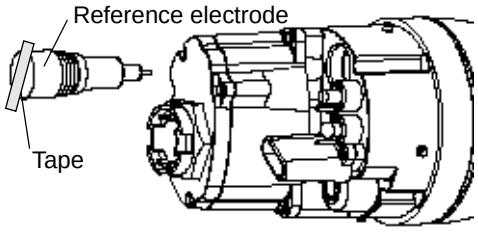
Attaching the reference electrode

1. **Remove the sensor guard.**
2. **Remove the sensor plug.**
3. **Coat the reference electrode O-ring with a thin layer of grease (part No. 3014017718).**

Note

Be sure no grease from the O-ring gets on the sensor connector. If the sensor connector gets grease on it, wipe it off with a soft cloth soaked in alcohol.

4. **Make sure there is no moisture on the sensor probe's sensor connector (marked "REF").**
5. **Fasten the reference electrode securely by hand.**
6. **Remove the tape from the liquid junction part of the reference electrode.**



Attaching the dissolved oxygen (DO) sensor

1. **Remove the membrane cap mounted on the DO sensor beforehand, and replace it with the new membrane cap provided. Replace the internal solution with fresh solution. The main component of the internal solution is potassium chloride (KCl), so the old solution can be disposed of down a sink or other drain.**

Reference

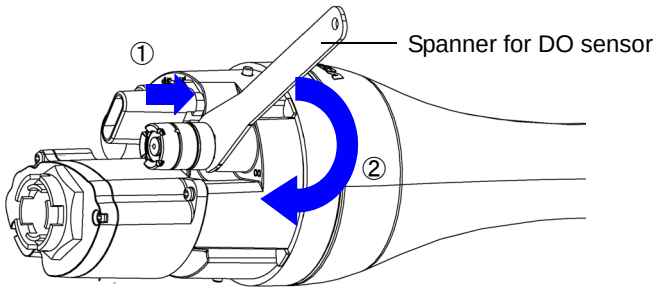
“ 4.5 Replacing the membrane cap ” (page 87)

2. **Screw in the DO sensor to attach it, allowing the internal solution to overflow slightly.**
3. **Use a soft cloth to wipe off the internal solution that overflowed onto the DO sensor.**
4. **Remove the sensor guard.**
5. **Remove the sensor plug.**
6. **Coat the DO sensor O-ring with a thin layer of grease (part No. 3014017718).**

Note

Be sure no grease from the O-ring gets on the sensor connector. If the sensor connector gets grease on it, wipe it off with a soft cloth soaked in alcohol.

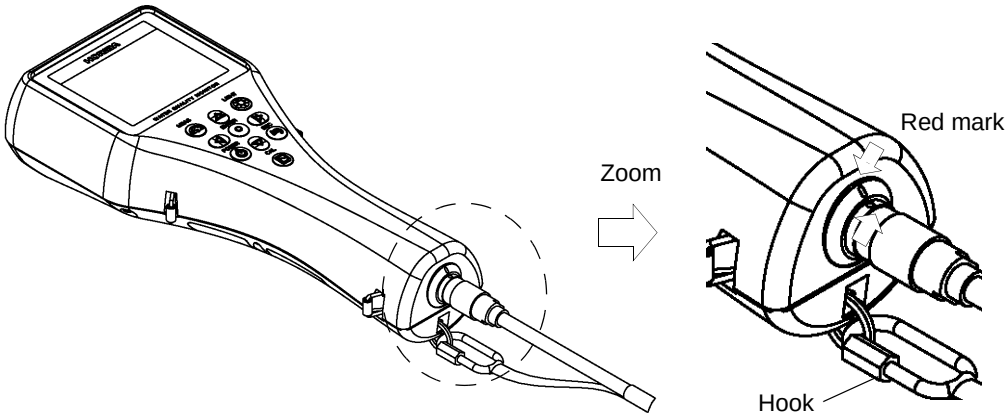
7. **Make sure there is no moisture on the sensor probe’s sensor connector (marked "DO").**
8. **Fasten the DO sensor securely using the spanner for DO sensor.**
   - Hold the DO sensor with the provided spanner for DO sensor and push the sensor down. (Step 1 in figure below)
   - Screw the DO sensor in place. (Step 2 in figure below)



3.1.4 Connecting the control unit and sensor probe

Note

Connect the control unit with its power OFF.

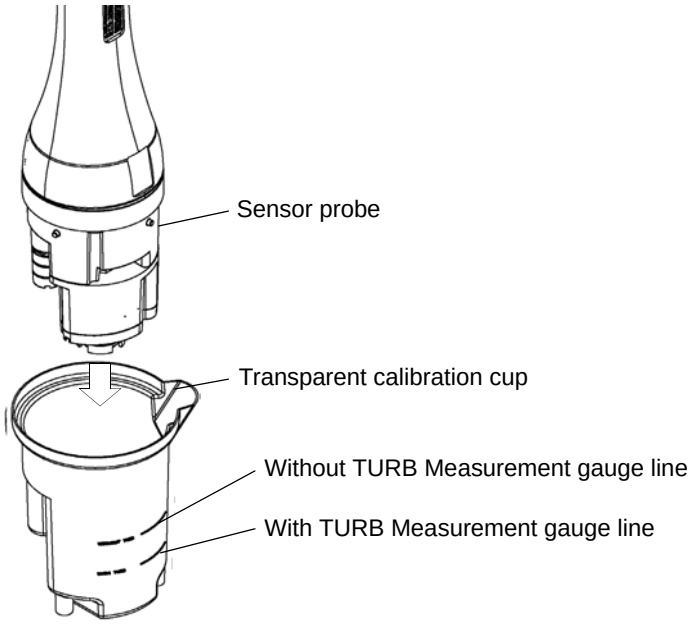


1. **Align the red mark on the connector, and press the connector in until you hear it click.**
2. **Connect the cable's hook to the display.**

3.1.5 Conditioning

Carry out the steps below when using the unit for the first time or when the system has not been used for 3 months or longer.

1. **Fill the transparent calibration cup to the line with pH 4 standard solution.**
   The transparent calibration cup has With TURB Measurement and Without TURB Measurement gauge lines.
2. **Insert the sensor probe in the transparent calibration cup.**



Note

Check that all sensors are attached.

3. **Press and hold down the control unit's POWER key for about 3 seconds to turn the power ON. Leave the unit for at least 20 minutes to condition the sensors.**

Note

The operation keys are designed to operate using the pad of a finger, sharp objects can tear the control unit cover damaging the operation keys.

Tip

- **The procedure for immersing the sensor probe in the pH standard solution is the same as that described in " 3.3.1 Auto calibration " (page 39).**
  Auto calibration can be performed using the same pH 4 standard solution that was used in the conditioning procedure.
- **Immersing the sensor in the standard solution is generally required for sensor conditioning, but a voltage supply is required for DO sensor conditioning. Turning ON the power of the control unit is necessary during sensor conditioning.**

3.1.6 GPS (U-52G, U-53G)

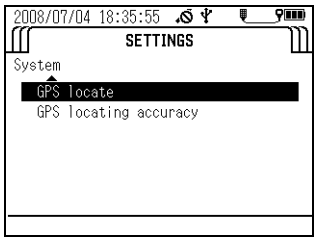
The GPS position measurement precision is proportional to the GPS position measurement time. When the position measurement precision increases, the position measurement time also increases. See " ● GPS locating accuracy" (page 17) for how to set the position measurement precision. See " ● GPS locate" (page 15) below for how to check acquired GPS data.

● GPS locate

1. **Press the right (▷) key to switch the display to the "SETTINGS" screen.**

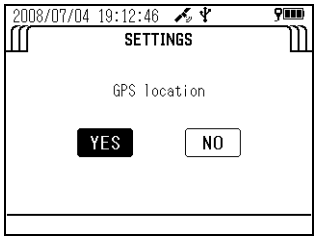
2. **Press the down (▽) key to move the cursor to "System", then press the ENTER key.**

3. **Press the down (▽) key to move the cursor to "GPS locate", then press the ENTER key.**



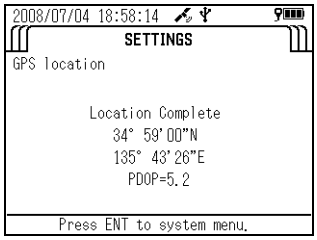
4. **The message "Press ENT key to start position measurement." appears. Press the ENTER key.**

5. **The message "Execute GPS position measurement?" appears. Move the cursor to "YES", then press the ENTER key.**

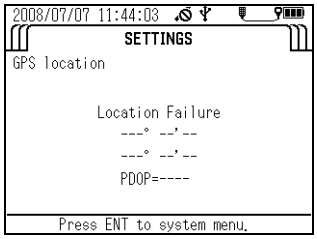


6. **The message "Warming up. Please wait." appears. Wait until the system has finished warming up (about 10 seconds).**

- Position measurement starts automatically when warmup has finished. Position measurement is performed up to 10 times.
- The GPS location complete screen appears after successful position measurement.

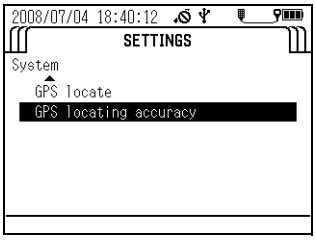


- The GPS location failure screen appears after position measurement has failed. Redo the measurement in a location free from obstacles, or wait for the meteorological conditions to improve before redoing the measurement.

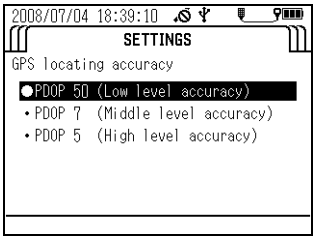


● GPS locating accuracy

1. **Press the right (▷) key to switch the display to the "SETTINGS" screen.**
2. **Press the down (▽) key to move the cursor to "System", then press the ENTER key.**
3. **Press the down (▽) key to move the cursor to "GPS locating accuracy", then press the ENTER key.**



4. **The screen below appears. Move the cursor to the locating accuracy, then press the ENTER key. The black circle (●) indicates the currently set precision.**



3.2 Settings

3.2.1 Setting measurement methods

This section describes how to set the measurement method.

● Measurement methods

● U-51/U-52

Single measurement	Pressing the MEAS key acquires the 5-second average for the selected measurement parameter.
Interval measurement	Pressing the MEAS key acquires and saves the 5-second average for the selected measurement parameter in the set interval. The measurement interval can be set to any value between 10 seconds and 24 hours.

● U-53

The U-53 turbidity sensor uses a tungsten lamp. The lamp lights for about 10 seconds, and the average measurement value acquired during this interval is displayed.

Single measurement	Pressing the MEAS key acquires the 5-second average for the selected measurement parameter after wiper operation. The 10-second average is acquired when measuring turbidity.
Interval measurement	Pressing the MEAS key acquires and saves the 5-second average for the selected measurement parameter in the set interval. The 10-second average is acquired when measuring turbidity. The measurement interval can be set to any value between 10 seconds (final check of this value required; 30 seconds may be better for U-52) and 24 hour.

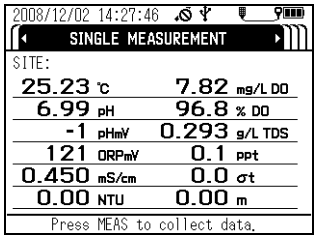
Reference

“ 3.4 Measurement ” (page 61)

● Operation method

1. **Press and hold down the control unit’s POWER key for about 3 seconds to turn the power ON.**

The "MEASUREMENT" screen appears after about 10 seconds.

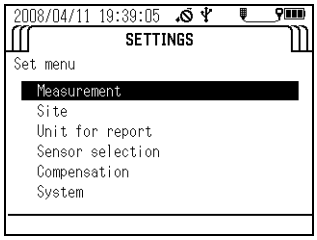


Note

The operation keys are designed to operate using the pad of a finger, sharp objects can tear the control unit cover damaging the operation keys.

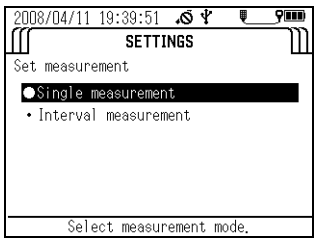
2. **Press the right (▷) key to switch the display to the "SETTINGS" screen.**

3. **Press the down (▽) key to move the cursor to "Measurement", then press the ENTER key.**



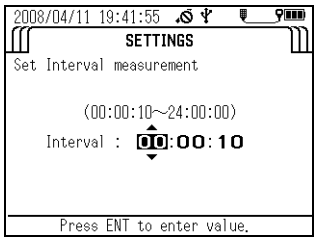
4. **Press the down (▽) key to move the cursor to the desired measurement mode. Press the ENTER key to save the setting.**

The black circle (●) indicates the currently selected measurement mode.



5. **If you selected "Interval measurement", the display switches to the screen used to set the measurement interval. Press the up (△) and down (▽) keys to set the measurement interval.**

The measurement interval can be set to any value between 10 seconds and 24 hours in the case of the U-51 and U-52, or between 30 seconds and 24 hours in the case of the U-53.



3.2.2 Setting sites

The site function allows position data to be connected to corresponding measurement data. Sites have the following specifications and features:

Site names: Text data consisting of up to 20 one-byte alphanumeric characters, spaces, etc.
Site names can be used for control unit searches and as labels for computer processing.
Site names allow measurement data to be saved with a name corresponding to the actual location where it was measured.

You can use site information as a search key when viewing data uploaded by a PC or data saved in the control unit (see " 3.5 Data operations " (page 64)).

- **Selecting sites**

  You can select previously created sites. The black circle (●) indicates the name of the currently selected site. No sites are created at new purchasing or after initialization. Select a site after first creating one from the "Create new site" menu.

- **Creating new sites**

  You can create and save new sites. Up to 20 site names can be registered.

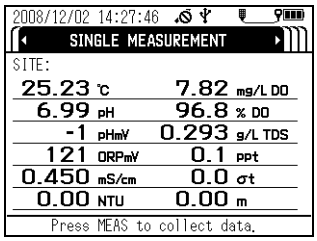
- **Deleting sites**

  You can select a previously created site and delete it.

● Operation methods

- **Selecting a site**

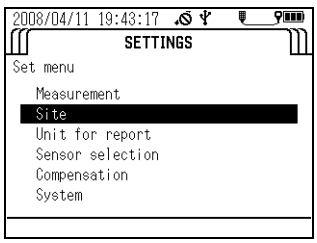
  1. **Press and hold down the control unit's POWER key for about 3 seconds to turn the power ON.**
     The "MEASUREMENT" screen appears after about 10 seconds.



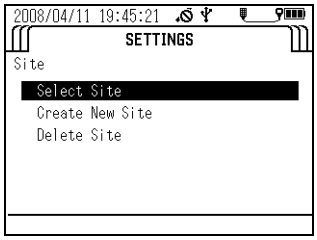
Note

The operation keys are designed to operate using the pad of a finger, sharp objects can tear the control unit cover damaging the operation keys.

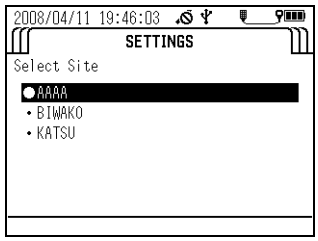
  2. **Press the right (▷) key to switch the display to the "SETTINGS" screen.**
  3. **Press the down (▽) key to move the cursor to "Site", then press the ENTER key.**



4. **Press the down (▽) key to move the cursor to "Select Site", then press the ENTER key to display the names of the currently saved sites.**



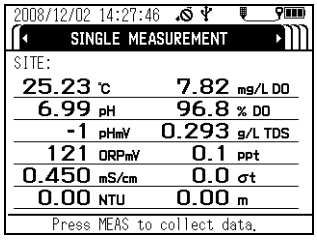
The black circle (●) indicates the currently selected site.



● **Creating a new site**

1. **Press and hold down the control unit's POWER key for about 3 seconds to turn the power ON.**

The "MEASUREMENT" screen appears after about 10 seconds.

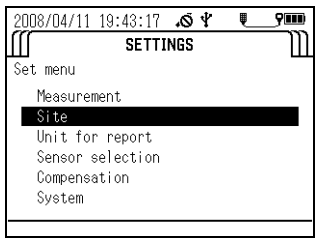


Note

The operation keys are designed to operate using the pad of a finger, sharp objects can tear the control unit cover damaging the operation keys.

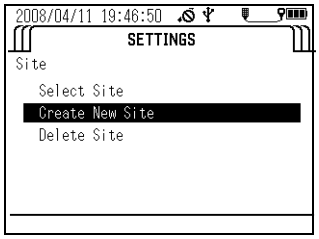
2. **Press the right (▷) key to switch the display to the "SETTINGS" screen.**

3. **Press the down (▽) key to move the cursor to "Site", then press the ENTER key.**

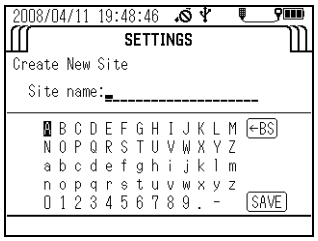


4. **Press the down (▽) key to move the cursor to "Create New Site", then press the ENTER key.**

Enter the desired site name (up to 20 alphanumeric non-Asian width characters).



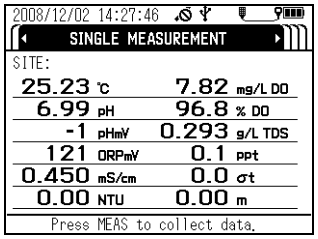
5. **Press the up (△), down (▽), right (▷), and left (◁) keys to move the cursor to each letter or number to use in the name, then press the ENTER key to confirm the entered characters. To delete incorrectly entered characters, move the cursor to "BS" and press the ENTER key to start deleting from the last character. When you have finished entering the name, save it by moving the cursor to "SAVE" and pressing the ENTER key.**



● **Deleting a site**

1. **Press and hold down the control unit's POWER key for about 3 seconds to turn the power ON.**

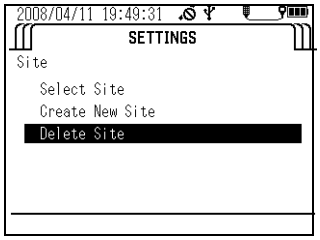
The "MEASUREMENT" screen appears after about 10 seconds.



Note

The operation keys are designed to operate using the pad of a finger, sharp objects can tear the control unit cover damaging the operation keys.

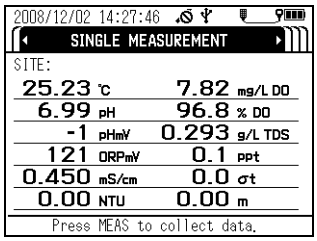
2. **Press the right (▷) key to switch the display to the "SETTINGS" screen.**



3. **Press the down (▽) key to move the cursor to "Site", then press the ENTER key.**

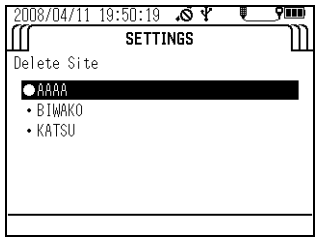
4. **Press the down (▽) key to move the cursor to "Delete Site", then press the ENTER key.**

A list of the currently saved sites appears. The black circle (●) indicates the currently selected site.



5. **Press the down (▽) key to move the cursor to the site to delete, then press the ENTER key to delete it.**

The currently selected site can be deleted after a different site has been selected from the site selection menu or after all unselected sites have been deleted. The same site name cannot be registered more than once.



3.2.3 Unit for report

Note

Units can only be selected when the sensor probe is connected.

Follow the steps below to set the measurement units of measurement parameters. No units are displayed if a measurement parameter has not been selected in the measurement parameter selection screen (see “ 3.2.4 Sensor selection ” (page 25)).

1. **Press and hold down the control unit’s POWER key for about 3 seconds to turn the power ON.**

The "MEASUREMENT" screen appears after about 10 seconds.

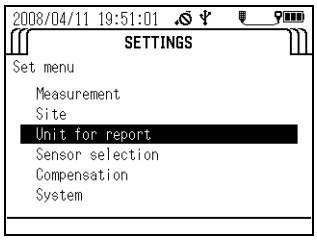
Note

The operation keys are designed to operate using the pad of a finger, sharp objects can tear the control unit cover damaging the operation keys.

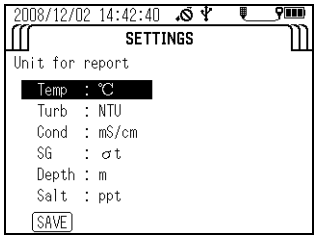
2. **Press the right (▷) key to switch the display to the "SETTINGS" screen.**

3. **Press the down (▽) key to move the cursor to "Unit for report", then press the ENTER key.**

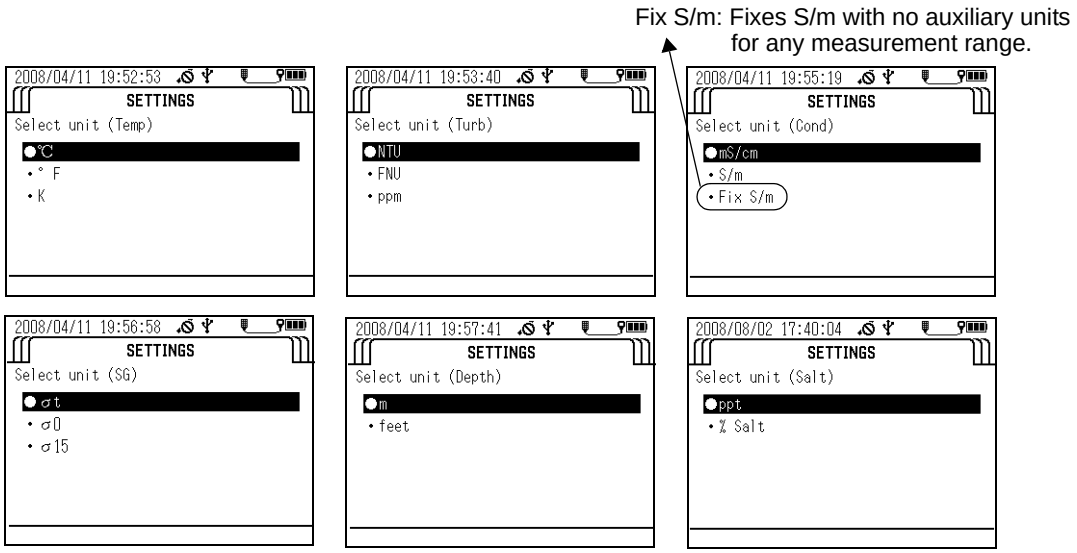
A list of the currently selected measurement parameters and their units appears. Note that measurement parameters not selected (in the measurement parameter selection screen) are not displayed.



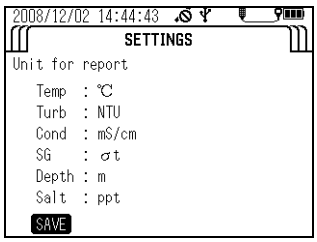
4. **Press the up (△) and down (▽) keys to move the cursor to the item to change, then press the ENTER key.**



5. **A list of the units that can be selected appears. The black circle (●) indicates the currently selected unit. Press the up (△) and down (▽) keys to move the cursor to the desired unit, then press the ENTER key.**



6. **To save the changes, press the up (△) and down (▽) keys to move the cursor to SAVE, then press the ENTER key. If you do not want to save the changes, press the ESC key.**



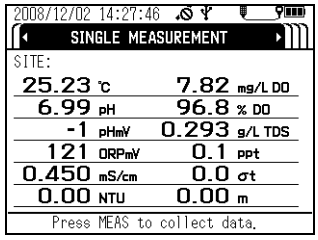
3.2.4 Sensor selection

Note

Measurement parameters can only be selected when the sensor probe is connected.

You can set between 1 and 11 measurement parameters to display in the control unit screen. Follow the steps below to select the desired measurement parameters.

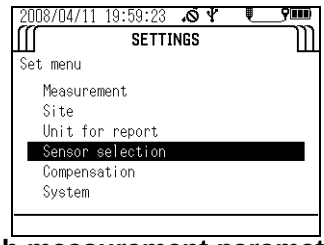
1. **Press and hold down the control unit's POWER key for about 3 seconds to turn the power ON.**
   The "MEASUREMENT" screen appears after about 10 seconds.



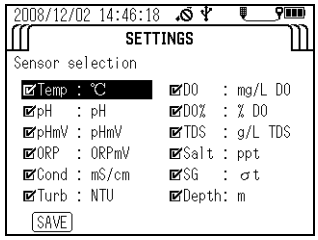
Note

The operation keys are designed to operate using the pad of a finger, sharp objects can tear the control unit cover damaging the operation keys.

2. **Press the right (▷) key to switch the display to the "SETTINGS" screen.**
3. **Press the down (▽) key to move the cursor to "Sensor selection", then press the ENTER key.**
   A list of the measurement parameters that can be set and the currently set units are displayed.



4. **Move the cursor to each measurement parameter to change, then press the ENTER key.**
   A check in the check box of a measurement parameter indicates it will be displayed.
5. **To save the changes, press the up (△), down (▽), left (◁) and right (▷) keys to move the cursor to SAVE, then press the ENTER key. If you don't want to save the changes, press the ESC key.**



Note

Available measurement parameters differ according to product specifications.

3.2.5 Compensation

Note

Compensation settings can only be made when the sensor probe is connected.

U-50 series have following functions of compensation.

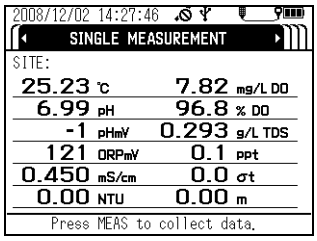
- Salinity compensation and atmospheric pressure compensation for dissolved oxygen (DO)
- Temperature compensation for conductivity (COND)
- Setting total dissolved solid (TDS) coefficient for TDS

● Salinity compensation (DO)

The dissolved oxygen (DO) value is presented higher than actual value if salinity compensation is not added, because the increase of salinity gives higher DO value. To obtain correct value salinity compensation is needed. The following modes are available for calculation of salinity compensation.

AUTO:	Salinity compensation is performed automatically with salinity converted from conductivity.
Value input:	Press the up (△) and down (▽) keys to enter a setting value when the salinity is known.

1. **Press and hold down the control unit's POWER key for about 3 seconds to turn the power ON.**
The "MEASUREMENT" screen appears after about 10 seconds.

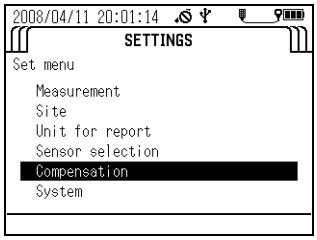


Note

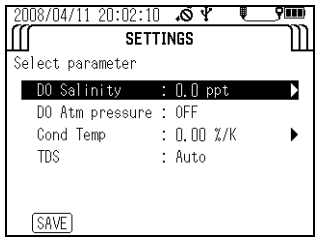
The operation keys are designed to operate using the pad of a finger, sharp objects can tear the control unit cover damaging the operation keys.

2. **Press the right (▷) key to switch the display to the "SETTINGS" screen.**

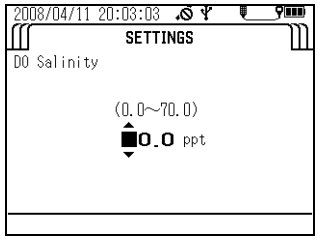
3. **Press the down (▽) key to move the cursor to "Compensation", then press the ENTER key.**



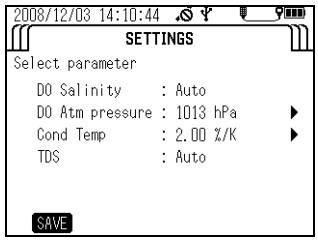
4. **Press the down (▽) key to move the cursor to "DO Salinity", then press the ENTER key to toggle the setting between "Auto" and "Input mode".**
Default: Auto



5. **If you selected "Input mode", press the right (▷) key to display the compensation value input screen. Press the up (△) and down (▽) keys to enter the desired value, then press the ENTER key to set it.**



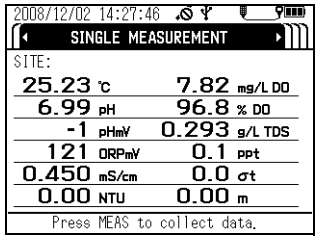
6. **To save the change, press the up (△) and down (▽) keys to move the cursor to SAVE, then press the ENTER key. If you don't want to save the change, press the ESC key.**



● **Atmospheric pressure compensation (DO)**

Differences in the atmospheric pressure of the measurement location influence the Dissolved Oxygen (DO) measurement. By setting (input) the actual atmospheric pressure of the measurement location into the control unit, it is possible to standardize the measured Dissolved Oxygen (DO) value to a value at the standard atmospheric pressure (1013 hPa).

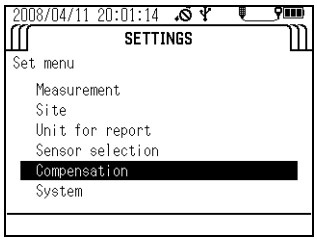
1. **Press and hold down the control unit's POWER key for about 3 seconds to turn the power ON.**
The "MEASUREMENT" screen appears after about 10 seconds.



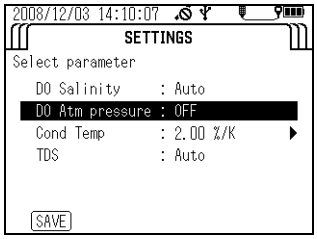
Note

The operation keys are designed to operate using the pad of a finger, sharp objects can tear the control unit cover damaging the operation keys.

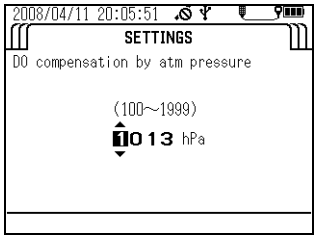
2. **Press the right (▷) key to switch the display to the "SETTINGS" screen.**
3. **Press the down (▽) key to move the cursor to "Compensation", then press the ENTER key.**



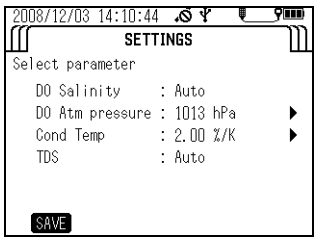
4. **Press the down (▽) key to move the cursor to "Cond Temp", then press the ENTER key to toggle the setting between "OFF" and "Input mode".**
   Default: OFF



5. **If you selected "Input mode", press the right (▷) key to display the compensation value input screen. Press the up (△) and down (▽) keys to enter the desired value, then press the ENTER key to set it.**



6. **To save the change, press the up (△) and down (▽) keys to move the cursor to SAVE, then press the ENTER key. If you don't want to save the change, press the ESC key.**

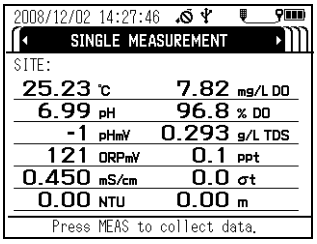


● Temperature compensation for conductivity (COND)

Sample conductivity (COND) varies with temperature, and this control unit uses a temperature compensation coefficient to automatically standardize the conductivity (COND) at 25°C. The initial setting coefficient is 2%/K, which is the generally used.

1. **Press and hold down the control unit's POWER key for about 3 seconds to turn the power ON.**

The "MEASUREMENT" screen appears after about 10 seconds.

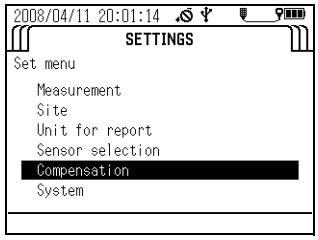


Note

The operation keys are designed to operate using the pad of a finger, sharp objects can tear the control unit cover damaging the operation keys.

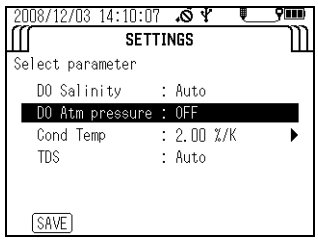
2. **Press the right (▷) key to switch the display to the "SETTINGS" screen.**

3. **Press the down (▽) key to move the cursor to "Compensation", then press the ENTER key.**

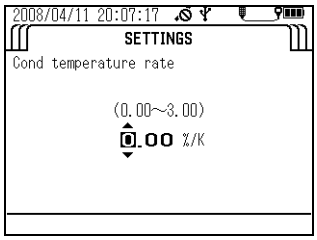


4. **Press the down (▽) key to move the cursor to "Cond Temp", then press the ENTER key to toggle the setting between "OFF" and "Input mode".**

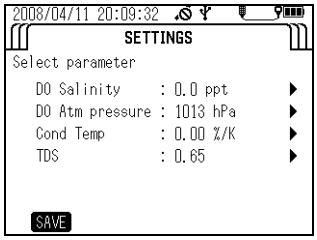
Default: 2.00%/K



5. **If you selected "Input mode", press the right (▷) key to display the compensation value input screen. Press the up (△) and down (▽) keys to enter the desired value, then press the ENTER key to set it.**



6. **To save the change, press the up (△) and down (▽) keys to move the cursor to SAVE, then press the ENTER key.**
If you don't want to save the change, press the ESC key.



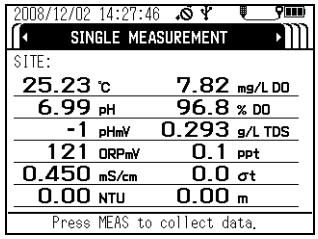
● Setting a total dissolved solid (TDS) coefficient

The total dissolved solid amount (TDS) is a converted value obtained by multiplying the conductivity (COND) by a known coefficient. The coefficient initially set for the control unit is based on a conversion for KCl and $CaCO_3$ solutions and it depends on the conductivity (COND) value as shown below.

Conductivity (COND) (S/m)	Conversion coefficient
< 0.05	0.65
0.05 to 0.5	0.64
0.5 to 1	0.63
1 to 3	0.62
3 to 5	0.61
> 5	0.60

1. **Press and hold down the control unit's POWER key for about 3 seconds to turn the power ON.**

The "MEASUREMENT" screen appears after about 10 seconds.

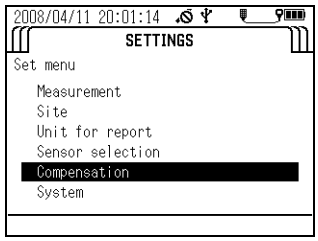


Note

The operation keys are designed to operate using the pad of a finger, sharp objects can tear the control unit cover damaging the operation keys.

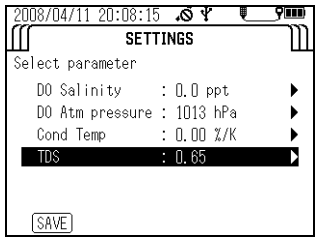
2. **Press the right (▷) key to switch the display to the "SETTINGS" screen.**

3. **Press the down (▽) key to move the cursor to "Compensation", then press the ENTER key.**

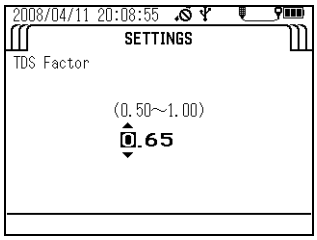


4. **Press the down (▽) key to move the cursor to "TDS", then press the ENTER key to toggle the setting between "AUTO" and "Input mode".**

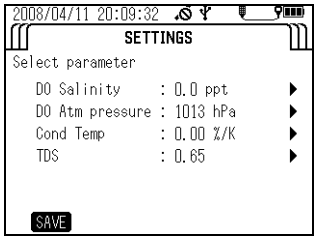
Default: Auto



5. **If you selected "Input mode", press the right (▷) key to display the compensation value input screen. Press the up (△) and down (▽) keys to enter the desired value, then press the ENTER key to set it.**



6. **To save the change, press the up (△) and down (▽) keys to move the cursor to SAVE, then press the ENTER key. If you don't want to save the change, press the ESC key.**



3.2.6 System settings

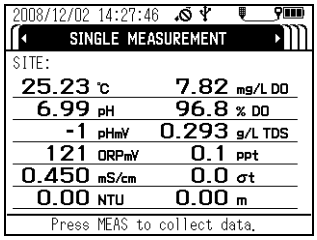
The system settings let you change the display language, check the system software version, set the date/time, set the auto power OFF time, set the display contrast, and initialize the settings.

● **Display language**

Follow the steps below to select either English or Japanese as the display language.

1. **Press and hold down the control unit's POWER key for about 3 seconds to turn the power ON.**

The "MEASUREMENT" screen appears after about 10 seconds.

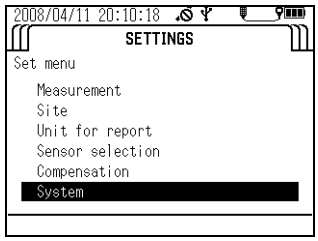


Note

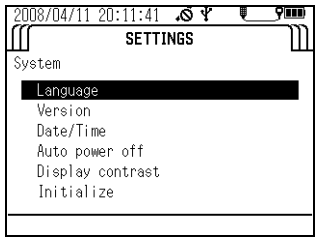
The operation keys are designed to operate using the pad of a finger, sharp objects can tear the control unit cover damaging the operation keys.

2. **Press the right (▷) key to switch the display to the "SETTINGS" screen.**

3. **Press the down (▽) key to move the cursor to "System", then press the ENTER key.**

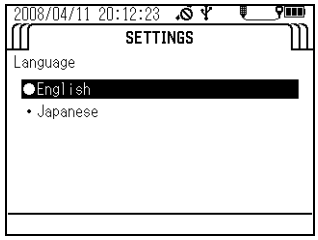


4. **Press the down (▽) key to move the cursor to "Language", then press the ENTER key.**



5. **A list of the supported display languages appears. Press the up (△) and down (▽) keys to move the cursor to the desired language, then press the ENTER key.**

The black circle (●) indicates the currently selected display language.



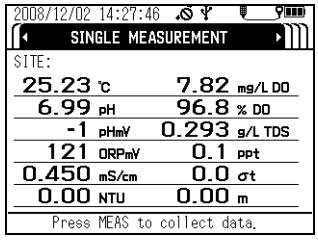
● Version

Follow the steps below to display the program No. and version of the control unit and sensor probe software.

The program No. and version of the sensor probe software will not be displayed if the sensor probe is not connected.

1. **Press and hold down the control unit's POWER key for about 3 seconds to turn the power ON.**

The "MEASUREMENT" screen appears after about 10 seconds.

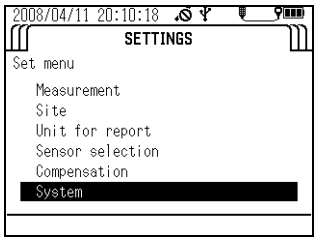


Note

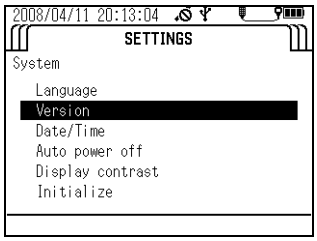
The operation keys are designed to operate using the pad of a finger, sharp objects can tear the control unit cover damaging the operation keys.

2. **Press the right (▷) key to switch the display to the "SETTINGS" screen.**

3. **Press the down (▽) key to move the cursor to "System", then press the ENTER key.**



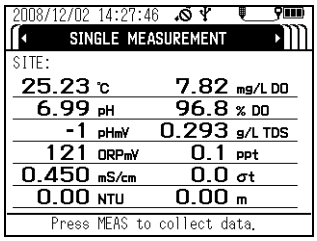
4. **Press the down (▽) key to move the cursor to "Version", then press the ENTER key.**
The program No. of the control unit and sensor probe software appears.



● **Setting the date/time**

Follow the steps below to set the date and time.

1. **Press and hold down the control unit's POWER key for about 3 seconds to turn the power ON.**
The "MEASUREMENT" screen appears after about 10 seconds.

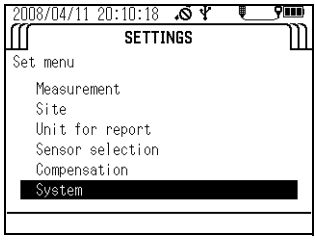


Note

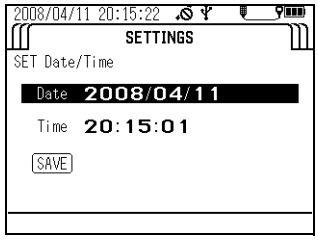
The operation keys are designed to operate using the pad of a finger, sharp objects can tear the control unit cover damaging the operation keys.

2. **Press the right (▷) key to switch the display to the "SETTINGS" screen.**

3. **Press the down (▽) key to move the cursor to "System", then press the ENTER key.**

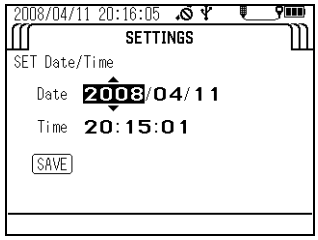


4. **Press the down (▽) key to move the cursor to "Date/time", then press the ENTER key.**

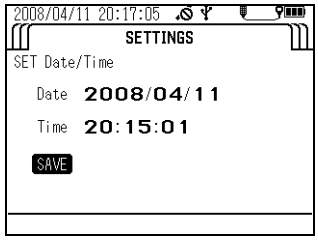


5. **Move the cursor to the date, then press the ENTER key.**

6. **Press the right (▷) key to move the cursor to the year, month, day, hour, minute and second, and press the up (△) and down (▽) keys to enter each value.**



7. **When finished entering settings, press the ENTER key to move the cursor to SAVE, then press the ENTER key again to save the settings.**

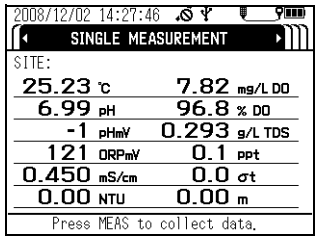


● Setting the auto power OFF time

Follow the steps below to set the time for the auto power OFF function (which turns the power OFF automatically when no operation is performed for the preset amount of time).

1. **Press and hold down the control unit's POWER key for about 3 seconds to turn the power ON.**

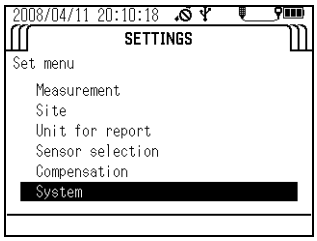
The "MEASUREMENT" screen appears after about 10 seconds.



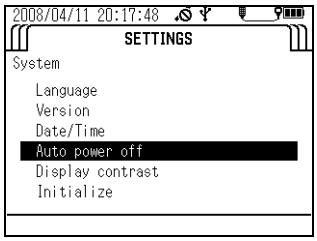
Note

The operation keys are designed to operate using the pad of a finger, sharp objects can tear the control unit cover damaging the operation keys.

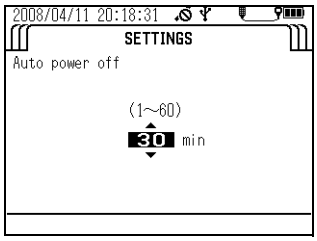
2. **Press the right (▷) key to switch the display to the "SETTINGS" screen.**
3. **Press the down (▽) key to move the cursor to "System", then press the ENTER key.**



4. **Press the down (▽) key to move the cursor to "Auto power off", then press the ENTER key.**



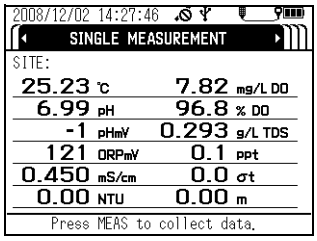
5. **Press the up (△) and down (▽) keys to select the desired time setting, then press the ENTER key.**
   You can select OFF, or settings of 1, 2, 5, 10, 20, 30 or 60 minutes.
   Default: 30 minutes



● Display contrast

Follow the steps below to adjust the display's contrast.

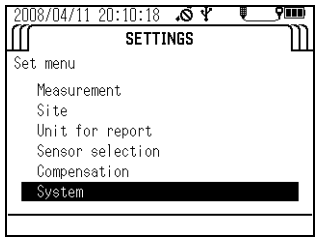
1. **Press and hold down the control unit's POWER key for about 3 seconds to turn the power ON.**
   The "MEASUREMENT" screen appears after about 10 seconds.



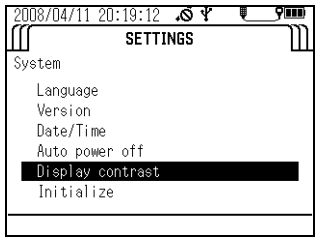
Note

The operation keys are designed to operate using the pad of a finger, sharp objects can tear the control unit cover damaging the operation keys.

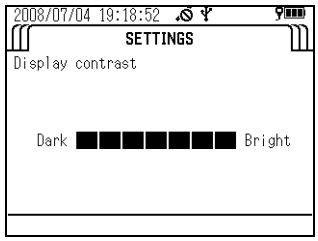
2. **Press the right (▷) key to switch the display to the "SETTINGS" screen.**
3. **Press the down (▽) key to move the cursor to "System", then press the ENTER key.**



4. **Press the down (▽) key to move the cursor to "Display contrast", then press the ENTER key.**



5. **Press the left (◁) and right (▷) keys to adjust the contrast.**
   Adjustment can be made in 26 steps.

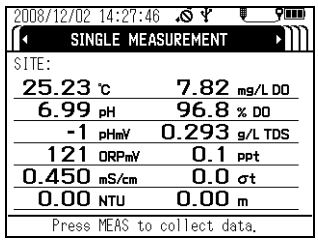


6. **Press the ENTER key.**

● Initialization

Follow the steps below to restore all the settings except date/time to their factory defaults. Factory default calibration data for the electrical conductivity and turbidity sensors will also be deleted at the same time.

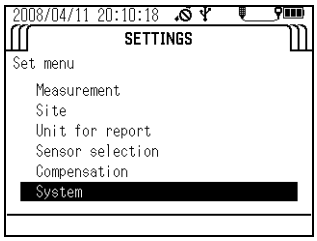
1. **Press and hold down the control unit's POWER key for about 3 seconds to turn the power ON.**
   The "MEASUREMENT" screen appears after about 10 seconds.



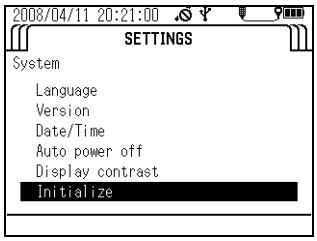
Note

The operation keys are designed to operate using the pad of a finger, sharp objects can tear the control unit cover damaging the operation keys.

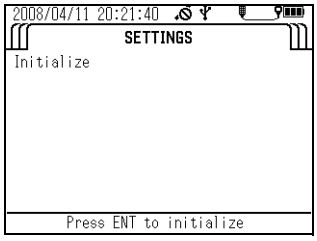
2. **Press the right (▷) key to switch the display to the "SETTINGS" screen.**
3. **Press the down (▽) key to move the cursor to "System", then press the ENTER key.**



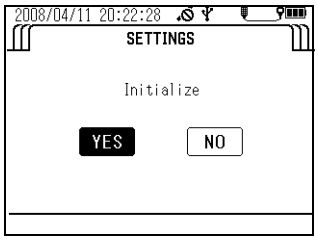
4. **Press the down (▽) key to move the cursor to "Initialize", then press the ENTER key.**



5. **Press the ENTER key again.**



6. **A confirmation message appears asking whether to execute initialization. Press the left (◁) key to move the cursor to YES, then press the ENTER key.**
   The message "Initialize Complete" appears to indicate the process has finished.



3.3 Calibration

To obtain correct measurement values, the sensors need to be calibrated using standard solution before measurement. You can select simultaneous auto calibration of the pH, COND and TURB sensors in pH4 standard solution and DO and DEP sensors simultaneously in air, or manual calibration of individual measurement parameters. You can check the result of the previous calibration using the procedure on " 3.5.4 Checking the calibration record " (page 70).

Note

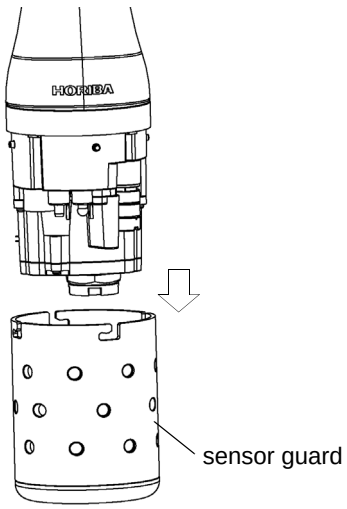
- **Wait at least 20 minutes after turning the system power ON before calibrating the DO sensor.**
- **Make the DO and COND compensation settings before calibration since these settings are applied during calibration.**
- **You can select only the desired parameters for calibration and calibrate just those parameters (see " 3.2.4 Sensor selection " (page 25)).**
- **Use about 200 mL of standard solution in the calibration cup.**
- **Calibration data is stored in the sensor probe.**

3.3.1 Auto calibration

Tip

- **The following parameters are calibrated (at 25°C):**
  pH: Set to 4.01 (zero-point calibration); the span is adjusted to the factory default value.
  COND: 0.449 S/m (4.49 mS/cm, span calibration); the zero point is adjusted to the factory default value.
  TURB: 0 NTU (zero-point calibration); the span is adjusted to the factory default value.
  DO: 8.92 mg/L (span calibration); the zero point is adjusted to the factory default value.
  DEP: 0 m (zero-point calibration); the zero point is adjusted to the factory default value.
- **If the air temperature changes, the readout value may not be stable. Ensure that the ambient air temperature is the same temperature as the calibration solution, because the internal probe temperature sensor and external temperature sensor (in the calibration solution) are used for the auto calibration. Allow the probe and standard solution to equilibrate for 1 hour if a thermometer is not available to verify that these temperatures are the same.**
- **Do not hold the probe while performing the auto calibration. Body temperature may elevate the internal temperature sensor measurement creating DO calibration error.**

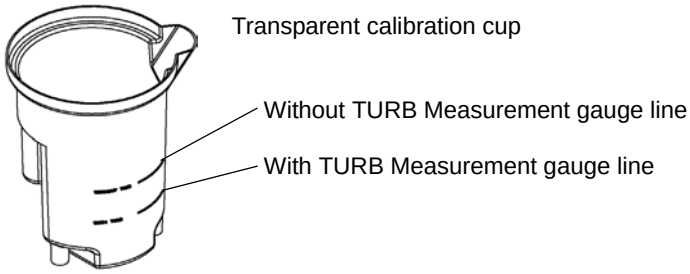
1. **Remove the sensor guard and wash the sensor probe 2 or 3 times with deionized water.**



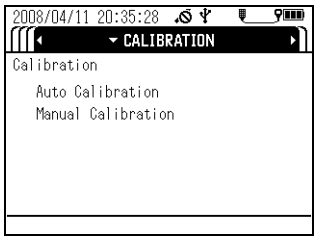
2. **Remove the transparent calibration cup.**

3. **Fill the transparent calibration cup to the line with pH 4 standard solution.**

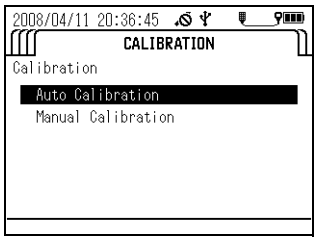
The transparent calibration cup has With TURB Measurement and Without TURB Measurement gauge lines.



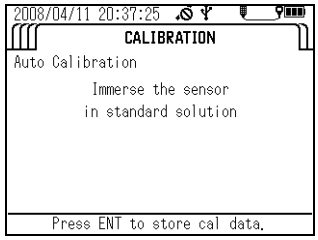
4. **Press the control unit's CAL key to set the calibration mode.**

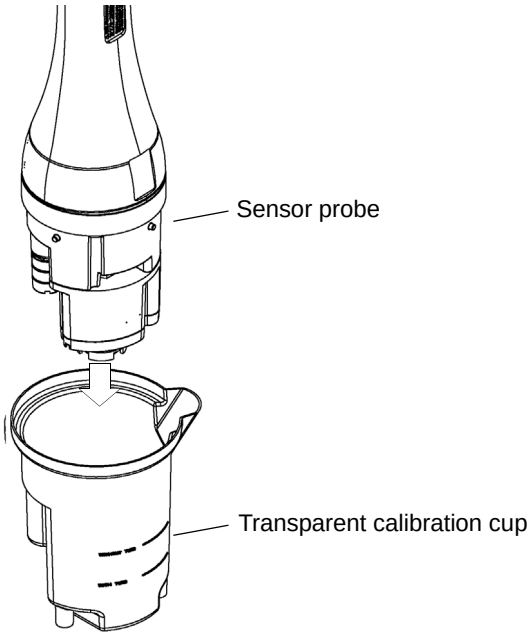


5. **Press the down (▽) key to move the cursor to "Auto Calibration", then press the ENTER key.**

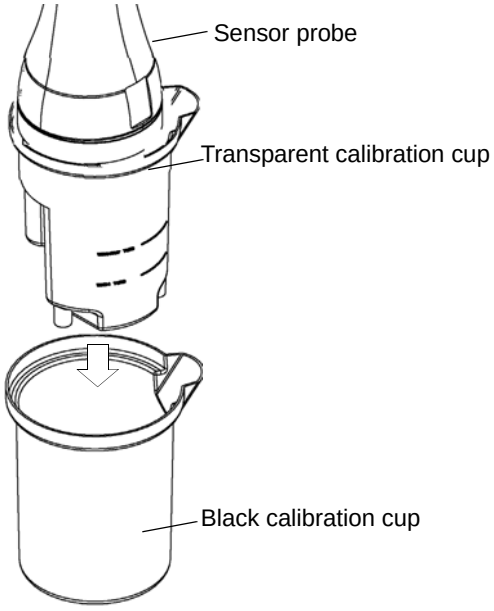


6. **Immerse the sensor probe in the transparent calibration cup.**
Check that the pH sensor, ORP sensor, reference electrode, COND sensor, TURB sensor and temperature sensor are submerged in the pH 4 standard solution and check that there are no air bubbles on the sensor.





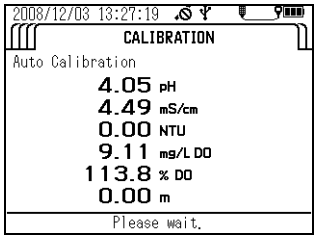
7. **With the sensor probe still in the transparent calibration cup, place the transparent calibration cup into the black calibration cup.**



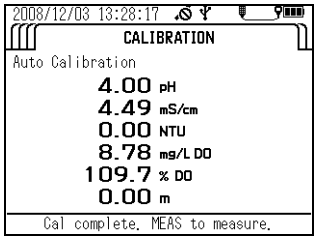
8. **When all the sensor values have stabilized, press the ENTER key to start calibration.**

Note

Do not remove the sensor probe from the calibration solution. U-53 turbidity data will display "----" until the calibration is completed.



Calibration is finished when the message "Cal complete. MEAS to measure." appears. Press the MEAS key to set the measurement screen, then start measurement.



If a calibration error occurs, start calibration after first resolving the issue according to the instructions in " 4.6 Troubleshooting " (page 89).

3.3.2 Manual calibration

The procedures below describe how to calibrate each sensor individually.

Note

The displayed units are the units set by selecting "Unit for report" in the "SETTINGS" screen.

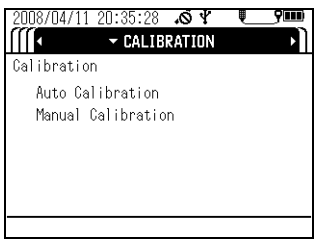
- **Temperature (TEMP) calibration**

1. **Fill a bucket or similar container with water of a known temperature, and insert the sensor probe in it.**

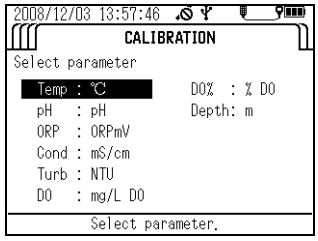
Wait 5 minutes before starting calibration to allow the sensor probe temperature to stabilize.

2. **Press the control unit's CAL key to set the calibration mode.**

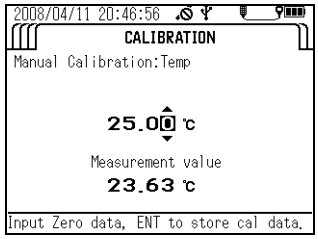
3. **Press the down (▽) key to move the cursor to "Manual Calibration", then press the ENTER key.**



4. **In the parameter selection screen, move the cursor to “Temp”, then press the ENTER key.**



5. **Press the up (△) and down (▽) keys to set the calibration value - the temperature of the water containing the submerged sensor probe.**



6. **Check that “Measurement value” has stabilized, then press the ENTER key to start calibration.**
Calibration is finished when the message “Cal complete. CNT to measure.” appears.

● pH calibration

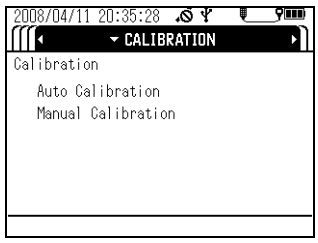
Note

You can select one calibration point (zero-point calibration) or two calibration points (zero-point calibration and span calibration). Carry out two calibration procedures to ensure good measurement precision throughout all measurement ranges.

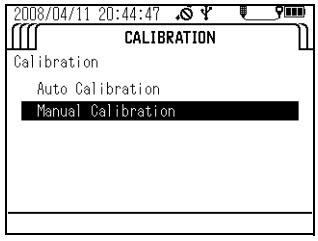
1. **Calibrate the zero point. Wash the transparent calibration cup 2 or 3 times with deionized water, then fill it to the reference line with pH 7 standard solution.**

2. **Wash the sensor probe 2 or 3 times in deionized water to remove any dirt, then submerge the sensor probe in the transparent calibration cup.**

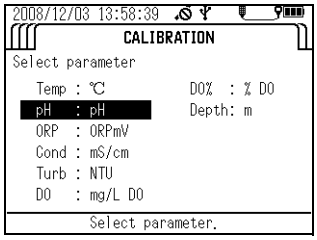
3. **Press the control unit’s CAL key to set the calibration mode.**



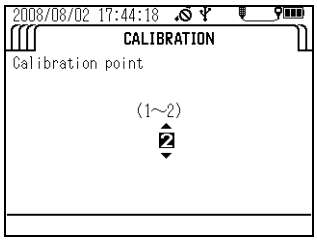
4. **Press the down (▽) key to move the cursor to "Manual Calibration", then press the ENTER key.**



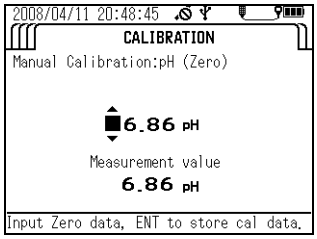
5. **In the parameter selection screen, move the cursor to "pH", then press the ENTER key.**



6. **Set the number of calibration points, then press the ENTER key.**



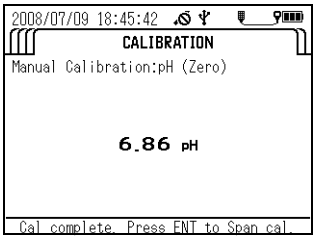
7. **Press the up (△) and down (▽) keys to set the pH value of the pH 7 standard solution containing the submerged sensor probe at the measurement temperature**



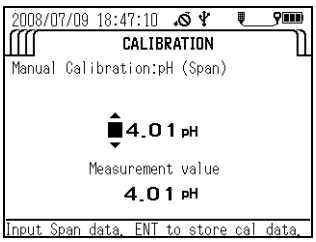
Temp. (°C)	pH 4 standard solution Phthalate	pH 7 standard solution Neutral phosphate	pH 9 standard solution Borate
0	4.01	6.98	9.46
5	4.01	6.95	9.39
10	4.00	6.92	9.33
15	4.00	6.90	9.27
20	4.00	6.88	9.22
25	4.01	6.86	9.18
30	4.01	6.85	9.14
35	4.02	6.84	9.10
40	4.03	6.84	9.07
45	4.04	6.84	9.04

8. **Check that "Measurement value" has stabilized, then press the ENTER key to start calibration.**

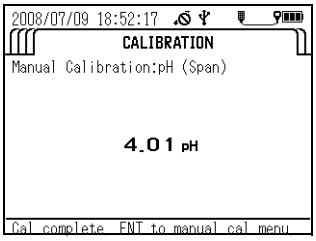
9. **Press the ENTER key to start the span calibration procedure when the message "Cal complete. Press ENT to Span cal." appears.**



10. **Wash the transparent calibration cup 2 or 3 times with deionized water, then fill it to the reference line with pH 4 or pH 9 standard solution.**
11. **Wash the sensor probe 2 or 3 times in deionized water to remove any dirt, then submerge the sensor probe in the transparent calibration cup.**
12. **Press the up (△) and down (▽) keys to set the pH value of the pH 4 or pH 9 standard solution containing the submerged sensor probe at the measurement temperature.**



13. **Check that "Measurement value" has stabilized, then press the ENTER key to start calibration.**
14. **Calibration is finished when the message "Cal complete. ENT to manual cal menu." appears. Press the ENTER key to return to the calibration parameter**

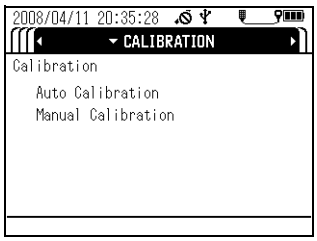


● ORP calibration

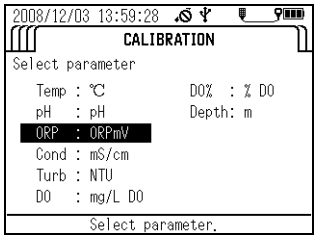
Note

- **If the prepared ORP standard solution is left in open air for one hour or more, the solution may be transformed. For this reason ORP standard solution cannot be stored.**
  Calibrate within one hour of preparing the solution.
- **When measuring sample with low concentrations of oxidants and reductants after conducting an operational check using a standard substance, the measured values may not stabilize or the results of measurement might not be repeatable. If this is the case, start the measurement after immersing the sensors in the sample water sufficiently.**
- **Note that when measuring the ORP of solution with extremely low concentrations of oxidants and reductants, such as tap water, well water, or water treated with purifying equipment, there may be less responsiveness, repeatability, and stability, in general.**
- **When alkaline ion water is left for 5 minutes, its ORP undergoes changes significantly. Always measure alkaline ion water promptly.**

1. **Fill a clean beaker with one bag of ORP standard powder No. 160-22 or No. 160-51. Add 250 mL of deionized water and agitate the solution thoroughly (there will be some excess quinhydrone (a black powder) that floats on the surface when agitating the solution). Fill the transparent calibration cup to the reference line with this standard solution.**
2. **Wash the sensor probe 2 or 3 times in deionized water to remove any dirt, then submerge the sensor probe in the transparent calibration cup.**
3. **Press the control unit's CAL key to set the calibration mode.**
4. **Press the down (▽) key to move the cursor to "Manual Calibration", then press the ENTER key.**



5. **In the parameter selection screen, move the cursor to ORP, then press the ENTER key.**



6. **Press the up (△) and down (▽) keys to set the mV value of the ORP standard solution containing the submerged sensor probe at the measurement temperature.**

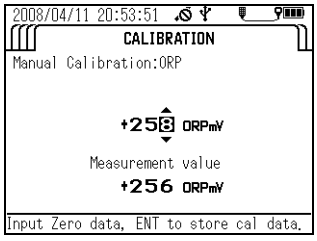


Table 1 Indicated value of ORP standard solution at various temperatures (mV)

Temperature	160-22	16051
5	+274	+112
10	+271	+107
15	+267	+101
20	+263	+95
25	+258	+89
30	+254	+83
35	+249	+76
40	+244	+69

7. **Check that "Measurement value" has stabilized, then press the ENTER key to start calibration.**

8. **Calibration is finished when the message "Cal complete. ENT to manual cal menu." appears. Press the ENTER key to return to the calibration parameter selection screen.**

● Conductivity (COND) calibration

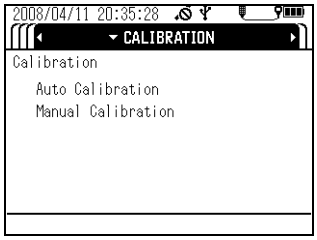
Note

- **To support a wide range of sample concentrations, electrical conductivity is divided into three measurement ranges: 0.0 mS/m to 99.9 mS/m, 0.090 S/m to 0.999 S/m, and 0.9 S/m to 9.99 S/m.**
- **When manually calibrating conductivity, you can select two calibration points (one zero-point calibration point and a span calibration point for one of the three measurement ranges) or four calibration points (one zero-point calibration point and span calibration points for all three measurement ranges). Carry out the four calibration points to ensure good measurement precision throughout all measurement ranges.**
- **Make the compensation setting before calibration since this setting is applied during calibration. (Refer to " 6.5.3 Temperature coefficient " (page 104)).**

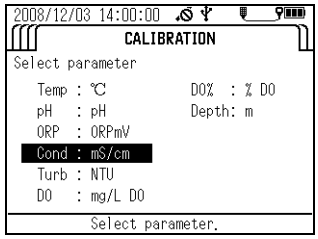
1. **Prepare the standard solution. Dry Potassium chloride (KCl) powder (high-grade commercially available) at 105°C for two hours, and leave it to cool in a desiccator.**
2. **Consult the following table and weigh potassium chloride (KCl), then prepare three standard potassium chloride (KCl) solutions following the procedure below.**

Potassium chloride (KCl) standard solution	Conductivity (COND) value	Potassium chloride (KCl) mass (g) at solution temperature of 25 °C	Calibration range
0.005 mol/L	71.8 mS/m (0.718 mS/cm)	0.373	0.0 mS/m to 99.9 mS/m (0.00 mS/cm to 0.999 mS/cm)
0.050 mol/L	0.667 S/m (6.67 mS/cm)	3.73	0.090 S/m to 0.999 S/m (1.00 mS/cm to 9.99 mS/cm)
0.500 mol/L	5.87 S/m (58.7 mS/cm)	37.2	0.9 S/m to 9.99 S/m (10.0 mS/cm to 99.9 mS/cm)

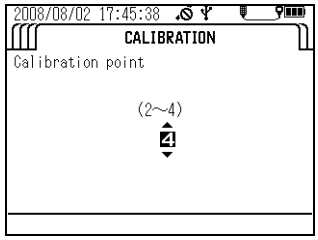
3. **Dissolve the weighed Potassium Chloride (KCl) in deionized water.**
4. **Put the dissolved Potassium Chloride (KCl) into a 1 L measuring flask, and fill to the 1 L mark with deionized water.**
5. **Calibrate the zero point. Wash the sensor probe 2 or 3 times in deionized water to remove any dirt, then remove all moisture from the sensor probe (it will be calibrated in air).**
6. **Press the control unit's CAL key to set the calibration mode.**
7. **Press the down (▽) key to move the cursor to "Manual Calibration", then press the ENTER key.**



8. **In the parameter selection screen, move the cursor to “Cond”, then press the ENTER key.**

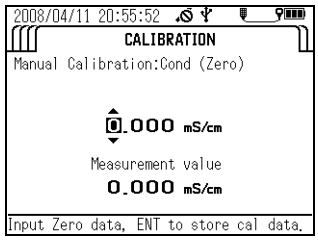


9. **Set the number of calibration points, then press the ENTER key.**

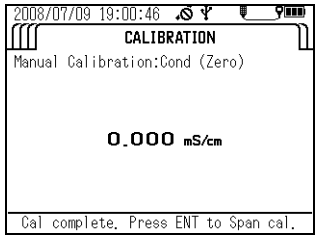


The instructions below assume that four calibration points have been set.

10. **Press the up (△) and down (▽) keys to set the "Cond" value to 0.0 mS/m (0.000 mS/cm).**
11. **Check that "Measurement value" has stabilized, then press the ENTER key to start calibration.**

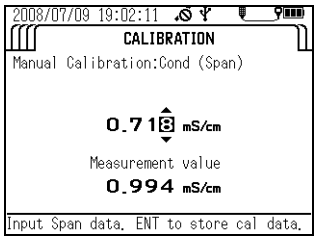


12. **When the message "Cal complete. Press ENT to Span cal." appears, press the ENTER key to start the first span calibration procedure.**



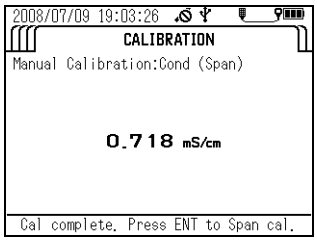
13. **Wash the transparent calibration cup 2 or 3 times with deionized water, then fill it to the reference line with 71.8 mS/m (0.718 mS/cm) standard solution.**
14. **Wash the sensor probe 2 or 3 times in deionized water to remove any dirt, then submerge the sensor probe in the transparent calibration cup.**

15. **Press the up (△) and down (▽) keys to set the "Cond" value to 71.8 mS/m (0.718 mS/cm).**
Calibration range = 0 mS/m to 99.9 mS/m (0 mS/cm to 0.999 mS/cm)



16. **Check that "Measurement value" has stabilized, then press the ENTER key to start calibration.**

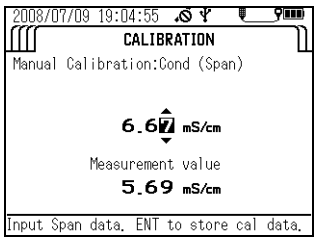
17. **When the message "Cal complete. Press ENT to Span cal." appears, press the ENTER key to start the next span calibration procedure.**



18. **Wash the transparent calibration cup 2 or 3 times with deionized water, then fill it to the reference line with 0.667 S/m (6.67 mS/cm) standard solution.**

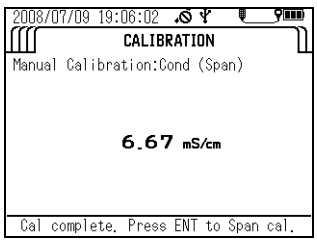
19. **Wash the sensor probe 2 or 3 times in deionized water to remove any dirt, then submerge the sensor probe in the transparent calibration cup.**

20. **Press the up (△) and down (▽) keys to set the "Cond" value to 0.667 S/m (6.67 mS/cm).**
Calibration range = 0.100 S/m to 0.999 S/m (1.00 mS/cm to 9.99 mS/cm)



21. **Check that "Measurement value" has stabilized, then press the ENTER key to start calibration.**

22. **When the message "Cal complete. Press ENT to Span cal." appears, press the ENTER key to start the next span calibration procedure.**

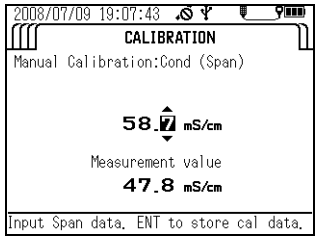


23. **Wash the transparent calibration cup 2 or 3 times with deionized water, then fill it to the reference line with 5.87 S/m (58.7 mS/cm) standard solution.**

24. **Wash the sensor probe 2 or 3 times in deionized water to remove any dirt, then submerge the sensor probe in the transparent calibration cup.**

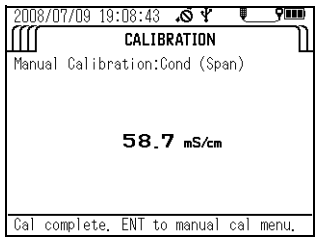
25. **Press the up (△) and down (▽) keys to set the "Cond" value to 5.87 S/m (58.7 mS/cm).**

Calibration range = 1.00 S/m to 10.00 S/m(10.0 mS/cm to 100.0 mS/cm)



26. **Check that "Measurement value" has stabilized, then press the ENTER key to start calibration.**

27. **Calibration is finished when the message "Cal complete. ENT to manual cal menu." appears. Press the ENTER key to return to the calibration parameter selection screen.**



● Turbidity (TURB) calibration

Note

- **To support a wide range of sample concentrations, turbidity is divided into three measurement ranges: 0.0 to 9.9 NTU, 10 to 100 NTU, and over 100 NTU.**
- **When manually calibrating turbidity, you can select two calibration procedures (one zero-point calibration procedure and a span calibration procedure for one of the three measurement ranges), three calibration procedures (one zero-point calibration procedure and a span calibration procedure for two of the three measurement ranges) or four calibration procedures (one zero-point calibration procedure and span calibration procedures for all three measurement ranges). Carry out the four calibration procedures to ensure good measurement precision throughout all measurement ranges.**
- **Always use the calibration cup provided. Using other containers can create effects from ambient light that cause incorrect calibration.**

● Preparing the standard solutions

1. **Weigh out 5.0 g of hydrazine sulfate (commercial special grade or above), and dissolve it in 400 mL of deionized water. Dissolve 50 g of hexamethylene tetramine (commercial special grade or above) in 400 mL of deionized water in anther flask.**
2. **Mix the two solutions and add deionized water until the total solution volume is 1000 mL, and mix well. Store this solution at a temperature of 25°C ±3°C for 48 hours.**
   The turbidity value (TURB) of this solution is equivalent to 4000 NTU.
3. **Dilute 4000 NTU-solution 5 times (use a pipette to measure 50 mL of the 4000 NTU solution and pour it into a 250 mL measuring flask, and fill up to 250 mL meniscus)**
   The turbidity value (TURB) of this solution is equivalent to 800 NTU.
4. **Dilute 800 NTU solution 10 times (use a pipette to measure 25 mL of the 800 NTU solution and pour it into a 250 mL measuring flask, and fill up to 250 mL meniscus)**
   The turbidity value (TURB) of this solution is equivalent to 80 NTU.
5. **Dilute 80 NTU solution 10 times (use a pipette to measure 25 mL of the 80 NTU solution and pour it into a 250 mL measuring flask, and fill up to 250 mL meniscus)**
   The turbidity value (TURB) of this solution is equivalent to 8 NTU.

Note

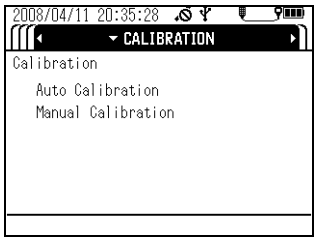
Instead of the standard solutions above, you can use other standard solutions of known concentration measured with other standard instruments.

● U-52, U-53 turbidity calibration

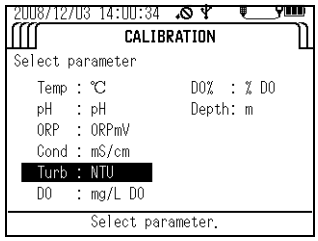
Set the number of calibration points.

You can set between 2 and 4 points.

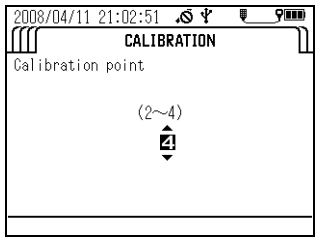
1. **Press the control unit's CAL key to set the calibration mode.**
2. **Press the down (▽) key to move the cursor to "Manual Calibration", then press the ENTER key.**



3. **In the parameter selection screen, move the cursor to "Turb", then press the ENTER key.**



4. **Press the up (△) and down (▽) keys to set the number of calibration points, then press the ENTER key.**

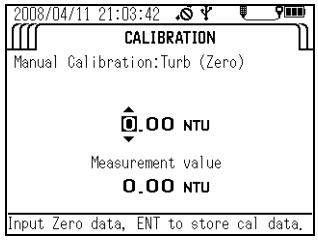


The instructions below assume that four calibration points have been set.

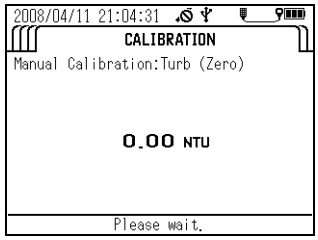
5. **Calibrate the zero point. Wash the transparent calibration cup 2 or 3 times with deionized water, then fill it to the reference line with deionized water.**

6. **Wash the sensor probe 2 or 3 times in deionized water to remove any dirt, then submerge the sensor probe in the transparent calibration cup.**

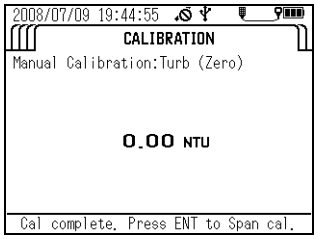
7. **Press the up (△) and down (▽) keys to set the "Turb" value to 0.0 NTU.**



8. **Check that "Measurement value" has stabilized, then press the ENTER key to start calibration.**



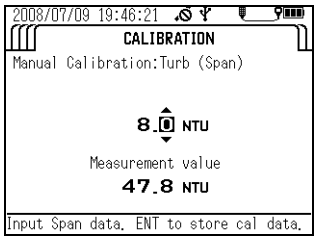
9. When the message "Cal complete. Press ENT to Span cal." appears, press the ENTER key to start the first span calibration procedure.



10. Wash the transparent calibration cup 2 or 3 times with deionized water, then fill it to the reference line with 8 NTU standard solution, or a standard solution of known concentration between 0.1 and 10 NTU.

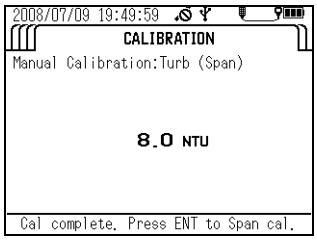
11. Wash the sensor probe 2 or 3 times in deionized water to remove any dirt, then submerge the sensor probe in the transparent calibration cup.

12. Press the up (△) and down (▽) keys to set the "TURB" value to 8 NTU, or to the known concentration of the standard solution between 0.1 and 10 NTU. (Input range = 0 NTU to 9.9 NTU (U-51) or 0 NTU to 9.99 NTU (U-52))



13. Check that "Current measurement value" has stabilized, then press the ENTER key to start calibration.

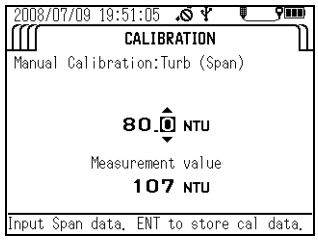
14. When the message "Cal complete. Press ENT to Span cal." appears, press the ENTER key to start the next span calibration procedure.



15. Wash the transparent calibration cup 2 or 3 times with deionized water, then fill it to the reference line with 80 NTU standard solution, or a standard solution of known concentration between 10 and 100 NTU.

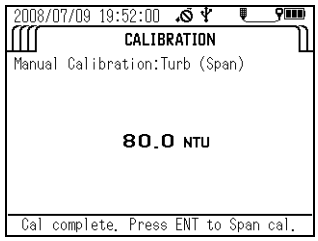
16. Wash the sensor probe 2 or 3 times in deionized water to remove any dirt, then submerge the sensor probe in the transparent calibration cup.

17. **Press the up (△) and down (▽) keys to set the "Turb" value to 80 NTU, or to the known concentration of the standard solution between 10 and 100 NTU. (Input range = 10.0 NTU to 99.9 NTU)**



18. **Check that "Measurement value" has stabilized, then press the ENTER key to start calibration.**

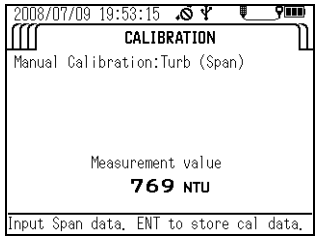
19. **When the message "Cal complete. Press ENT to Span cal." appears, press the ENTER key to start the next span calibration procedure.**



20. **Wash the transparent calibration cup 2 or 3 times with deionized water, then fill it to the reference line with 800 NTU standard solution, or a standard solution of known concentration 100 NTU above.**

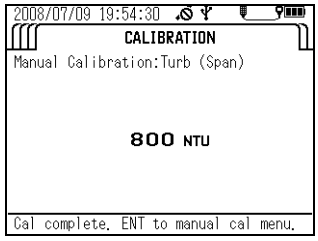
21. **Wash the sensor probe 2 or 3 times in deionized water to remove any dirt, then submerge the sensor probe in the transparent calibration cup.**

22. **Press the up (△) and down (▽) keys to set the "TURB" value to 800 NTU, or to the known concentration of the standard solution 100 NTU above.**
(Input range = 100 NTU to 800 NTU (U-51), 100 NTU to 1000 NTU (U-52))



23. **Check that "Measurement value" has stabilized, then press the ENTER key to start calibration.**

24. **Calibration is finished when the message "Cal complete. ENT to manual cal menu." appears. Press the ENTER key to return to the calibration parameter selection screen.**



● Dissolved oxygen (DO) calibration

Note

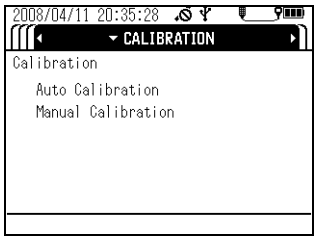
- **You can select one calibration procedure (span calibration) or two calibration procedures (zero-point calibration and span calibration). Carry out the two calibration procedures to ensure good measurement precision throughout all measurement ranges.**
- **It is necessary to prepare new solution before calibration of the Dissolved Oxygen (DO) sensor.**
- **The calibration cup (included) cannot be used to manually calibrate the DO sensor. Use a suitable bottle in which the DO sensor and the temperature sensor can be immersed.**
- **Wait at least 20 minutes after turning the system power ON before calibrating the DO sensor.**
- **Make the compensation setting before calibration since the setting is applied during calibration.**
- **The DO sensor is affected by flow. When performing span calibration with saturated dissolved oxygen water, move the cable slowly up and down (move the sensor probe at a rate of roughly 20 to 30 cm a second) or agitate the saturated dissolved oxygen water.**

1. **Prepare the standard solution.**

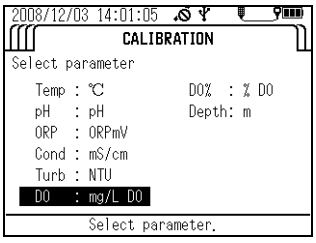
- Add about 50 g of sodium sulfite to 1000 mL of water (either deionized water or tap water) and stir the mixture to dissolve the sodium sulfite in it.
- Pour 1 to 2 liters of water into a suitable flask (either deionized water or tap water). Using a air pump, feed air into the water and aerate the solution until oxygen is saturated.

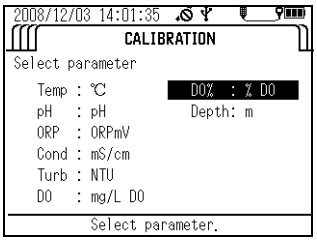
2. **First, calibrate the zero point. Press the control unit's CAL key to set the calibration mode.**

3. **Press the down (▽) key to move the cursor to "Manual Calibration", then press the ENTER key.**

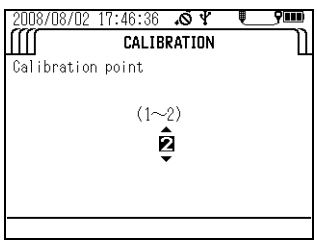


4. **In the parameter selection screen, move the cursor to DO or DO%, then press the ENTER key.**



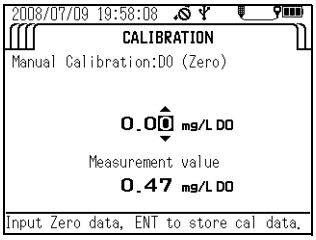


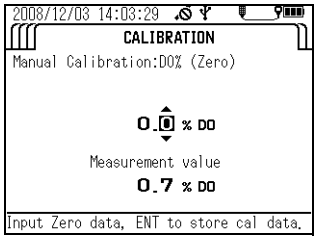
5. **Set the number of calibration procedures, then press the ENTER key.**



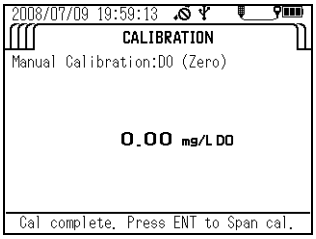
The instructions below assume that two calibration points have been set.

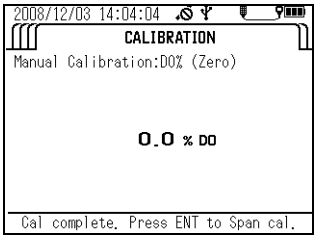
6. **Wash the sensor probe 2 or 3 times in deionized water to remove any dirt, then submerge the sensor probe in the bottle.**
7. **Press the up (△) and down (▽) keys to set the DO value to 0.00 mg/L or 0.0%.**



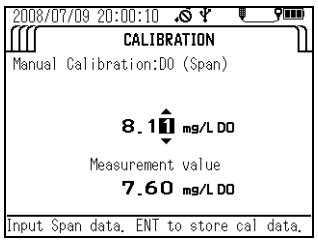


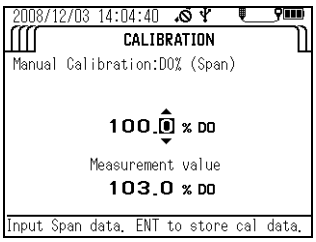
8. **Check that "Measurement value" has stabilized, then press the ENTER key to start calibration.**
9. **When the message "Cal complete. Press ENT to Span cal." appears, press the ENTER key to start the span calibration procedure.**



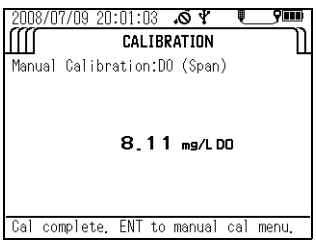


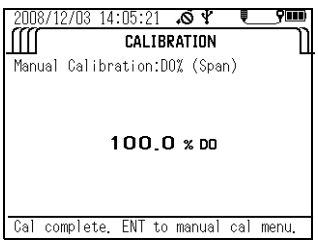
10. **Wash the sensor probe 2 or 3 times with deionized water to remove any dirt, then submerge the sensor probe in the container filled with the span solution.**
11. **Press the up (△) and down (▽) keys to set the DO value to the saturated dissolved oxygen value (mg/L) of the water at that temperature or the dissolved oxygen saturation ratio.**





12. **Check that "Measurement value" has stabilized, then press the ENTER key to start calibration.**
13. **Calibration is finished when the message "Cal complete. ENT to manual cal menu." appears. Press the ENTER key to return to the calibration parameter selection screen.**





Amounts of saturated dissolved oxygen in water at various temperatures (salinity=0.0%)

JIS K0101

Temp. (°C)	DO (mg/L)	Temp. (°C)	DO (mg/L)	Temp. (°C)	DO (mg/L)	Temp. (°C)	DO (mg/L)
0	14.16						
1	13.77	11	10.67	21	8.68	31	7.42
2	13.40	12	10.43	22	8.53	32	7.32
3	13.04	13	10.20	23	8.39	33	7.22
4	12.70	14	9.97	24	8.25	34	7.13
5	12.37	15	9.76	25	8.11	35	7.04
6	12.06	16	9.56	26	7.99	36	6.94
7	11.75	17	9.37	27	7.87	37	6.86
8	11.47	18	9.18	28	7.75	38	6.76
9	11.19	19	9.01	29	7.64	39	6.68
10	10.92	20	8.84	30	7.53	40	6.59

ISO5814

Temp. (°C)	DO (mg/L)	Temp. (°C)	DO (mg/L)	Temp. (°C)	DO (mg/L)
0	14.62				
1	14.22	11	11.03	21	8.91
2	13.83	12	10.78	22	8.74
3	13.46	13	10.54	23	8.58
4	13.11	14	10.31	24	8.42
5	12.77	15	10.08	25	8.26
6	12.45	16	9.87	26	8.11
7	12.14	17	9.66	27	7.97
8	11.84	18	9.47	28	7.83
9	11.56	19	9.28	29	7.69
10	11.29	20	9.09	30	7.56

● **Span setting values for calibration in air**

The software should display these values when auto calibration is performed.
Use this table to input values for manual span calibrations in air.

Tip

The DO measurement value of "air-saturated water" and air are different.
Due to the pressure difference against the membrane in air versus the membrane in water, the measurement value in air is about 10% higher than the value of air-saturated water on average.

Amounts of saturated dissolved oxygen in air at various temperatures

Following tables are applicable only to the air calibration of the U-50 DO sensor. Do not use them for other purpose.

Air calibration value in adopting evaluation based on JIS K0101

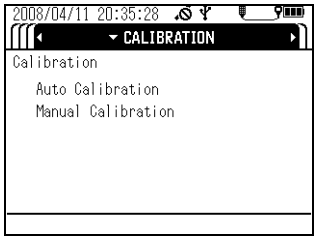
Temp (°C)	DO (mg/L)	Temp (°C)	DO (mg/L)	Temp (°C)	DO (mg/L)	Temp (°C)	DO (mg/L)
0	15.58						
1	15.15	11	11.74	21	9.55	31	8.16
2	14.74	12	11.47	22	9.38	32	8.05
3	14.34	13	11.22	23	9.23	33	7.94
4	13.97	14	10.97	24	9.08	34	7.84
5	13.61	15	10.74	25	8.92	35	7.74
6	13.27	16	10.52	26	8.79	36	7.63
7	12.93	17	10.31	27	8.66	37	7.55
8	12.62	18	10.10	28	8.53	38	7.44
9	12.31	19	9.91	29	8.40	39	7.35
10	12.01	20	9.72	30	8.28	40	7.25

Air calibration value in adopting evaluation based on ISO5814

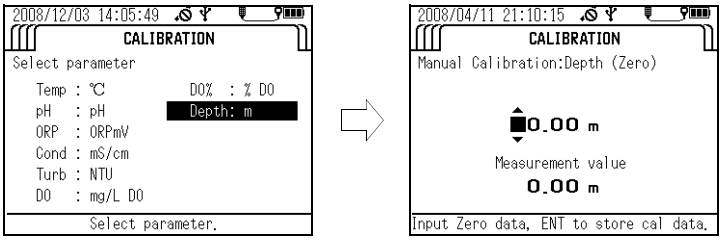
Temp. (°C)	DO (mg/L)	Temp. (°C)	DO (mg/L)	Temp. (°C)	DO (mg/L)
0	16.08				
1	15.64	11	12.13	21	9.80
2	15.21	12	11.86	22	9.61
3	14.81	13	11.59	23	9.44
4	14.42	14	11.34	24	9.26
5	14.05	15	11.09	25	9.09
6	13.70	16	10.86	26	8.92
7	13.35	17	10.63	27	8.77
8	13.02	18	10.42	28	8.61
9	12.72	19	10.21	29	8.46
10	12.42	20	10.00	30	8.32

● Water depth (DEPTH) calibration

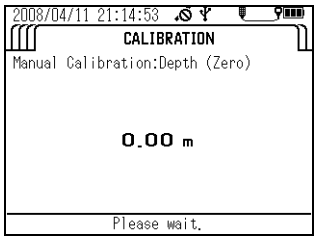
1. **Calibrate the zero point. Wash the sensor probe 2 or 3 times in deionized water to remove any dirt, then remove all moisture from the sensor probe (it will be calibrated in air).**
2. **Press the control unit's CAL key to set the calibration mode.**
3. **Press the down (▽) key to move the cursor to "Manual Calibration", then press the ENTER key.**



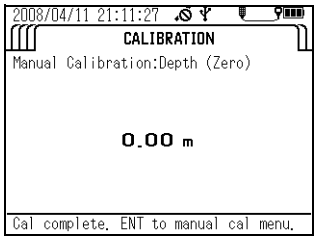
4. **In the parameter selection screen, move the cursor to "Depth", then press the ENTER key.**



5. **Press the up (△) and down (▽) keys to set the "Depth" value to 0.00 m.**
6. **Check that "Measurement value" has stabilized, then press the ENTER key to start calibration.**



7. **Calibration is finished when the message "Cal complete. ENT to manual cal menu." appears. Press the ENTER key to return to the calibration parameter selection screen.**



3.4 Measurement

You can perform measurement by either of the methods below.

- Storing data in memory manually with reference to the measurement value (single measurement)
- Having data stored in memory automatically and continuously
  U-51/U-52: Interval measurement (minimum memory interval of 10 seconds)
  U-53: Interval measurement (minimum memory interval of 30 seconds)

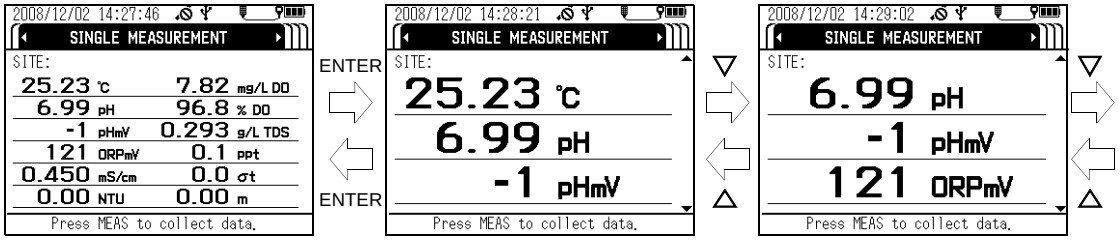
Select the measurement method that meets your requirements.

Note

- **Lower sensor probe slowly when submerging them in samples.**
- **Sensors may break if sensor probe are dropped from a height of 1 meter or more.**
- **Do not submerge sensor probe in water depths of over 30 meters. Sensor probe are only resistant to water pressure of up to 30 meters.**
- **After turning the power ON, check that the DO readout value has stabilized before starting measurement (takes around 20 minutes).**

Tip

- **When on the measurement screen, pressing the ENTER key enlarges the display and shows three measured values at a time.**
- **Pressing the up (△) and down (▽) keys scrolls through the measured values one item at a time.**
- **Pressing the ENTER key again reverts to the normal measurement screen display.**



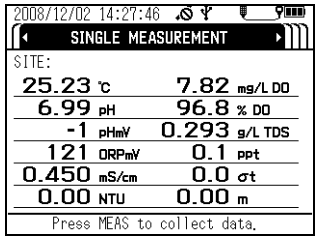
Measurement screen Normal Enlarged

3.4.1 Storing data in memory manually

Follow the steps below to manually store data in memory while referring to the measurement value to check the readout value is stable.

● **U-51/U-52**

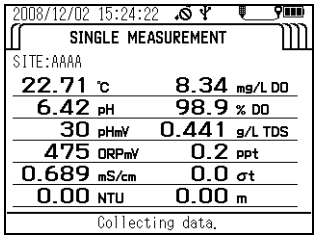
1. **Check that each sensor and sensor guard is mounted.**
2. **Check that "SINGLE MEASUREMENT" has been selected in the measurement screen.**



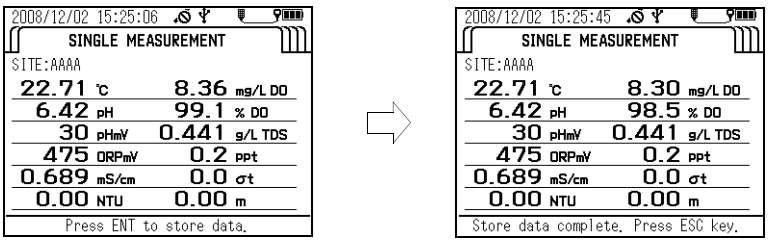
3. **Submerge the sensor probe in the sample, gently shaking them in the sample to remove any air bubbles from the sensors.**

If the sample is non-flowing, move the cable slowly up and down (move the sensor probe at a rate of roughly 20 to 30 cm a second) to ensure that fresh sample is continuously supplied to the DO sensor.

4. **When the measurement values are stable, press the MEAS key to acquire the 5-second average.**



5. **Press the ENTER key to save the held measurement values, or press the ESC key to cancel the operation.**

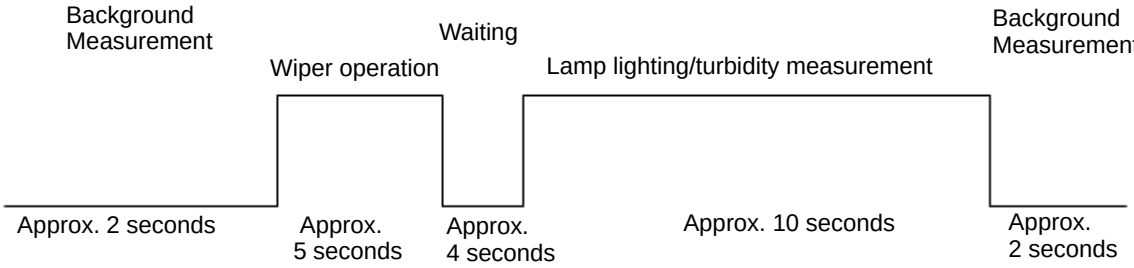


● U-53

Note

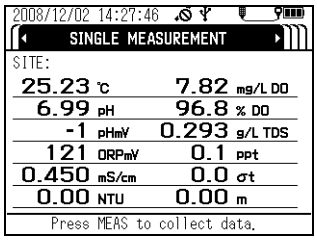
Do not perform turbidity measurement in air as it may damage the wiper.

U-53 turbidity measurement follows the sequence below. The measurement values are held after each sequence.

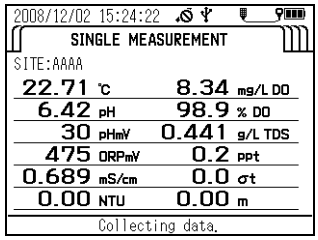


1. **Check that each sensor and sensor guard is mounted.**

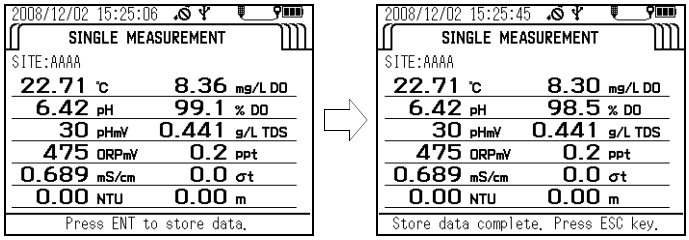
2. **Check that "SINGLE MEASUREMENT" has been selected in the measurement screen.**



3. **Submerge the sensor probe in the sample, gently shaking them in the sample to remove any air bubbles from the sensors.**
   If the sample is non-flowing, move the cable slowly up and down (move the sensor probe at a rate of roughly 20 to 30 cm a second) to ensure that fresh sample is continuously supplied to the DO sensor.
4. **When the non-turbidity meter measurement values are stable, press the MEAS key to start the sequence above.**



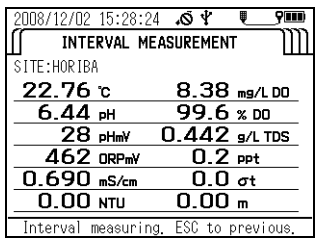
5. **When the sequence has finished, hold the measurement values. Press the ENTER key to store the held measurement values, or press the ESC key to cancel the operation.**



3.4.2 Automatic, continuous measurement

● **Interval measurement**

1. **Select the "Interval measurement" measurement setting (see " 3.2.1 Setting measurement methods " (page 18)).**
2. **Press the up (△) and down (▽) keys to set the interval value to the desired value (U-51/U-52: minimum interval: 10 seconds, U-53: minimum interval: 30 seconds), then press the ENTER key.**
   The measurement screen appears automatically, and the system becomes ready for measurement.
3. **Check that each sensor and sensor guard is mounted.**
4. **Submerge the sensor probe in the sample, gently shaking them in the sample to remove any air bubbles from the sensors.**
   If the sample is non-flowing, move the cable slowly up and down (move the sensor probe at a rate of roughly 20 to 30 cm a second) to ensure that fresh sample is continuously supplied to the DO sensor.
5. **Press the ENTER key to start measurement.**



3.5 Data operations

Use the procedures below to retrieve data stored in memory, delete all the data, check the remaining data memory capacity, and check the calibration record.

3.5.1 Displaying data

For maximum efficiency, there are 3 methods of displaying data.

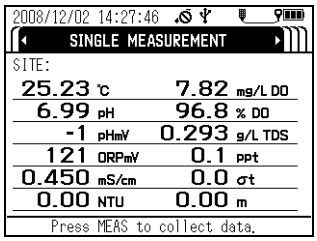
- Displaying the data for a specified site
- Displaying the data for a specified date/time
- Displaying all the data

Use the method that best suits your requirements.

● **Displaying the data for a specified site**

1. **Press and hold down the control unit's POWER key for about 3 seconds to turn the power ON.**

The "MEASUREMENT" screen appears after about 10 seconds.

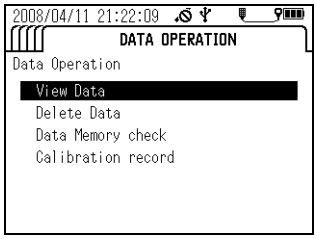


Note

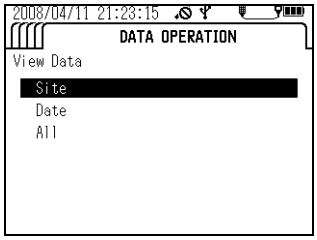
The operation keys are designed to operate using the pad of a finger, sharp objects can tear the control unit cover damaging the operation keys.

2. **Press the right (▷) key 3 times to display the "DATA OPERATION" screen.**

3. **Press the down (▽) key to move the cursor to "View Data", then press the ENTER key.**

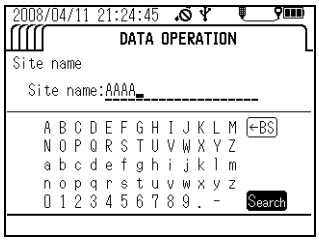


4. **Move the cursor to "Site", then press the ENTER key.**



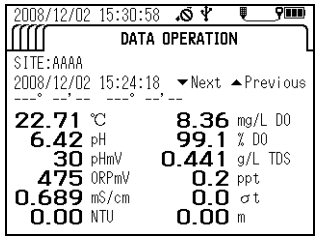
5. **Press the up (△), down (▽), left (◁) and right (▷) keys to enter the site to retrieve.**

6. **Move the cursor to "Search", then press the ENTER key.**



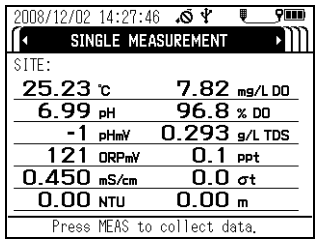
All site names that begin with the entered text are displayed.
The most recently measured data for the entered site is displayed.

7. **Press the up (△) and down (▽) keys to display earlier data.**



● Displaying the data for a specified date/time

1. **Press and hold down the control unit's POWER key for about 3 seconds to turn the power ON.**
The "MEASUREMENT" screen appears after about 10 seconds.

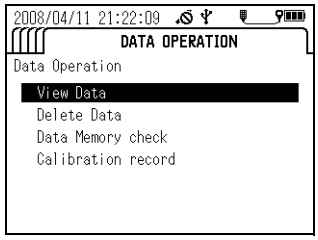


Note

The operation keys are designed to operate using the pad of a finger, sharp objects can tear the control unit cover damaging the operation keys.

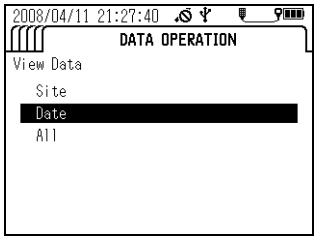
2. **Press the right (▷) key 3 times to display the "DATA OPERATION" screen.**

3. **Press the down (▽) key to move the cursor to "View Data", then press the ENTER key.**



4. **Move the cursor to "Date", then press the ENTER key.**

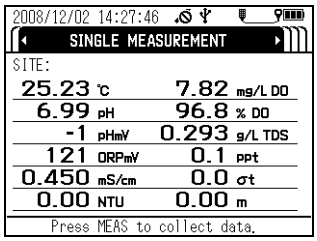
5. **With the cursor on the Date, press the ENTER key.**



6. **Press the up (△), down (▽), left (◁) and right (▷) keys to enter the desired date/ time, then press the ENTER key to apply the setting.**
7. **The cursor moves to "Search". Press the ENTER key to start the search.**
8. **Press the up (△) and down (▽) keys to display earlier data.**

● **Displaying all the data**

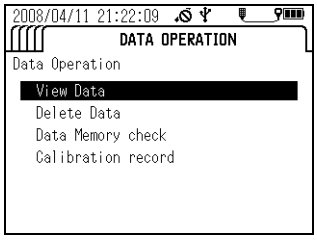
1. **Press and hold down the control unit's POWER key for about 3 seconds to turn the power ON.**
   The "MEASUREMENT" screen appears after about 10 seconds.



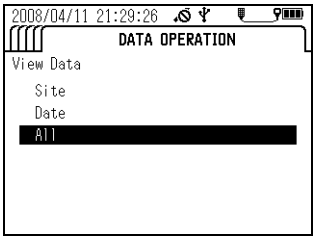
Note

The operation keys are designed to operate using the pad of a finger, sharp objects can tear the control unit cover damaging the operation keys.

2. **Press the right (▷) key 3 times to display the "DATA OPERATION" screen.**
3. **Press the down (▽) key to move the cursor to "View Data", then press the ENTER key.**



4. **Move the cursor to "All", then press the ENTER key.**
The most recently measured data is displayed.

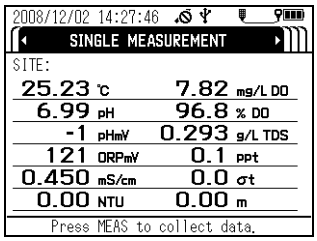


5. **Press the up (△) and down (▽) keys to display earlier data.**

3.5.2 Deleting data

Follow the steps below to delete all the data stored in memory.

1. **Press and hold down the control unit's POWER key for about 3 seconds to turn the power ON.**
The "MEASUREMENT" screen appears after about 10 seconds.

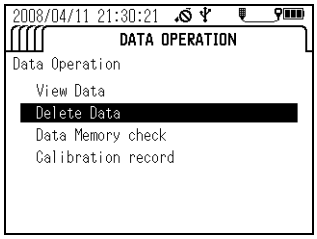


Note

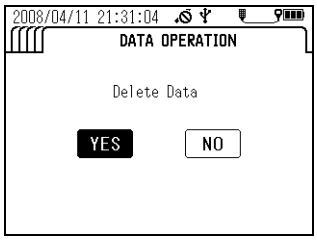
The operation keys are designed to operate using the pad of a finger, sharp objects can tear the control unit cover damaging the operation keys.

2. **Press the right (▷) key 3 times to display the "DATA OPERATION" screen.**

3. **Press the down (▽) key to move the cursor to "Delete Data", then press the ENTER key.**



4. **Press the left (◁) key to move the cursor to YES, then press the ENTER key.**
All the data has been deleted when the indicator appears along with the message "No data exists".

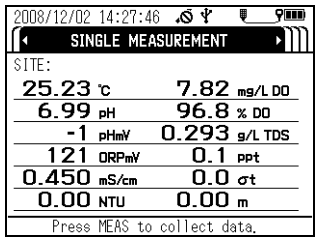


3.5.3 Checking the data memory

You can check the used data capacity and the remaining data capacity.

1. **Press and hold down the control unit's POWER key for about 3 seconds to turn the power ON.**

The "MEASUREMENT" screen appears after about 10 seconds.

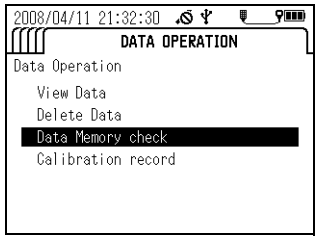


Note

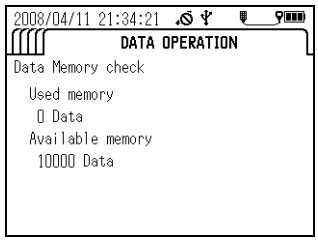
The operation keys are designed to operate using the pad of a finger, sharp objects can tear the control unit cover damaging the operation keys.

2. **Press the right (▷) key 3 times to display the "DATA OPERATION" screen.**

3. **Press the down (▽) key to move the cursor to "Data Memory Check", then press the ENTER key.**



The amount of memory in use and amount of available memory are displayed.

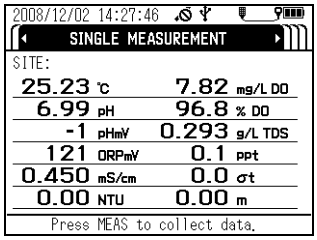


3.5.4 Checking the calibration record

Follow the steps below to check the latest calibration history.

1. **Press and hold down the control unit's POWER key for about 3 seconds to turn the power ON.**

The "MEASUREMENT" screen appears after about 10 seconds.



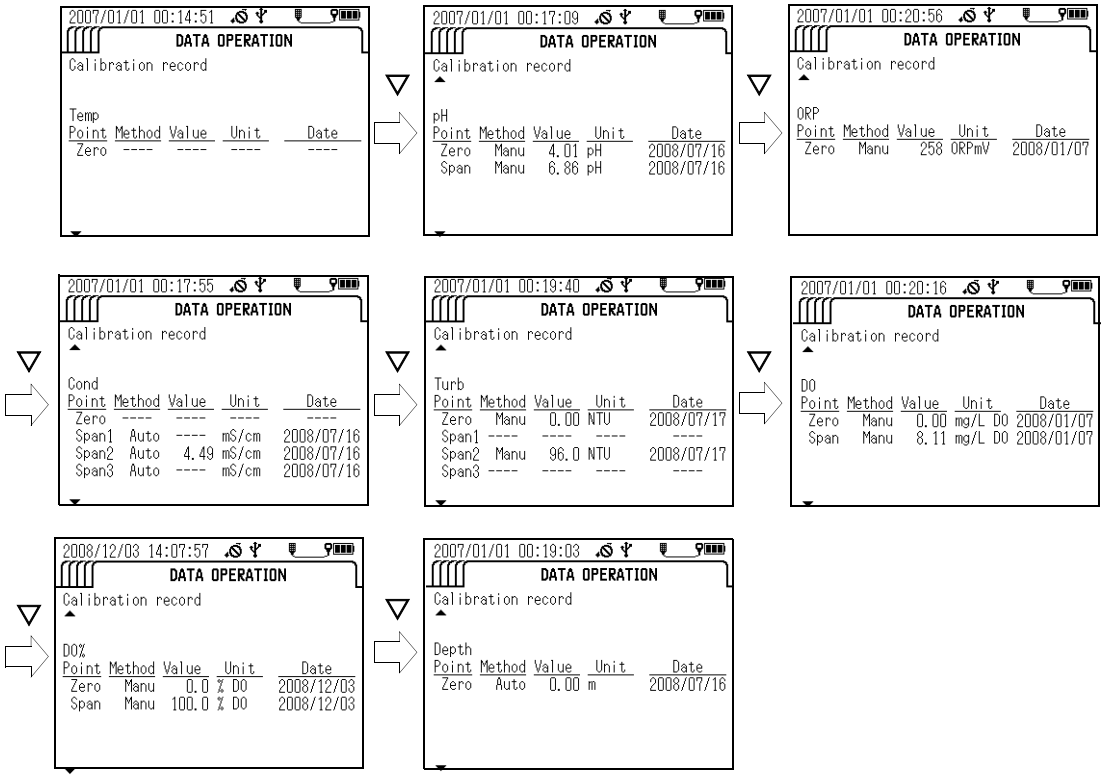
Note

The operation keys are designed to operate using the pad of a finger, sharp objects can tear the control unit cover damaging the operation keys.

2. **Press the right (▷) key 3 times to display the "DATA OPERATION" screen.**

3. **Press the down (▽) key to move the cursor to "Calibration record", then press the ENTER key.**

The latest calibration record is displayed.



3.5.5 GPS data operations

The menu for GPS data operations appears on the display to which the GPS unit is mounted.

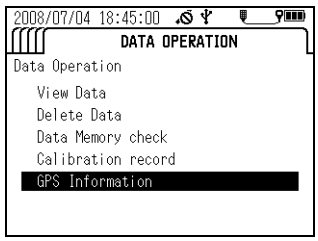
● GPS information

Follow the steps below to display acquired GPS information.

Note

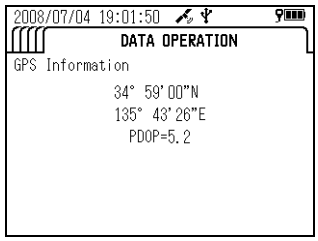
Turning the power OFF erases the GPS information.

1. **Press the right (▷) key to switch the display to the "DATA OPERATION" screen.**
2. **the down (▽) key to move the cursor to "GPS Information", then press the ENTER key.**

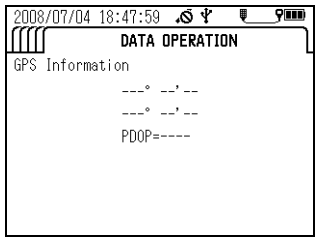


The last GPS information acquired is displayed.

● When received data exists

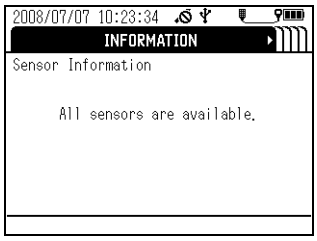


● When no received data exists

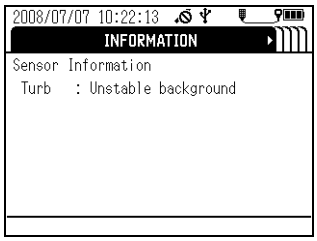


3.6 Sensor information

1. **Press and hold down the control unit's POWER key for about 3 seconds to turn the power ON.**
   The "MEASUREMENT" screen appears after about 10 seconds.
2. **Press the left (◁) key once to display the "INFORMATION" screen.**
   The "Sensor Information" screen displays the sensor probe's status.
   ● When the sensor probe is normal, the display below appears.



   ● When there is a sensor probe problem, individual measurement parameters generate messages such as the one shown below. Follow the troubleshooting information to remove the problem before continuing to operate the system.

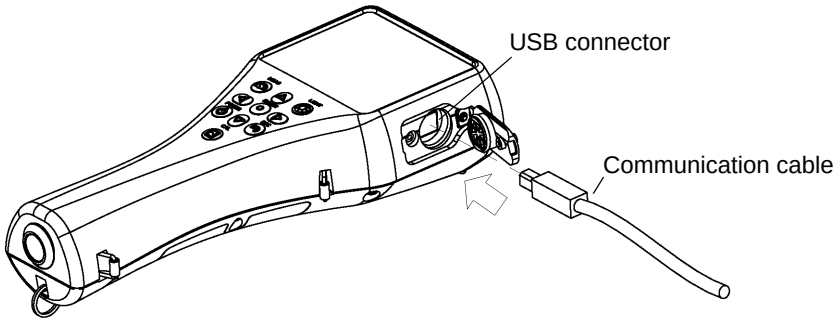


3.7 USB communication

The separately-sold, dedicated PC connection cable comes with data collection software. This software allows data to be downloaded from the control unit in CSV format.

This section contains instructions for communication commands used for USB communication.

● Connecting the cable



Dedicated cable

Part name: Communication cable (with data collection software)

Part no.: 3200174823

● Cautions when using USB communication

Take care to observe the following when using USB communication.

- Use the dedicated cable (with data collection software) or a commercially-available USB cable (A-B type) to connect to a PC.
- Be sure to match the transmission format on the control unit and the computer.
  The control unit uses the following transmission format:

Baud rate:	19200 bps
Number of stop bits:	1 bit
Data bit length:	8 bits
Parity:	None
Flow control:	None

Tip

If the transmission formats do not match, a communication error occurs and USB communication will not function normally. After changing the transmission format, restart the control unit and the computer.

- If received data is not sent back or an error occurs after a data request has been sent, adjust the program configuration so that it allows a little waiting time before a data request is sent again. This will enable more stable communication.
- The unit does not use DCD, CTS, or DSR signals. Take care of this when creating programs.

3.7.1 Communication settings

Baud rate:	19200 bps
Number of stop bits:	1 bit
Data bit length:	8 bits
Parity:	None
Flow control:	None

3.7.2 Commands

● Instant data requests

● Request command format

#	RD	@	XX	[CR]	[LF]
1	2	3	4		

1	Header	1 character
2	Command	2 characters
3	Delimiter character	1 character
4	Frame check sequence (FCS)	2 characters

The two ASCII-code characters created by converting the 8 bits of data created by successively combining the value of each character from # through @ in an exclusive OR (XOR) operation with the value of the next character.

Example: #RD@

(1)	0	XOR	35	(ASCII code of # symbol)	⇒	35
(2)	35	XOR	82	(ASCII code of R)	⇒	113
(3)	113	XOR	68	(ASCII code of D)	⇒	53
(4)	53	XOR	64	(ASCII code of @ symbol)	⇒	117 (decimal) ↓ 75 (hex) ↓ Sets "75".

Example: 35 XOR 82 operation

35 in binary	⇒	0	0	1	0	0	0	1	1	
82 in binary	⇒	0	1	0	1	0	0	1	0	
XOR result		0	1	1	1	0	0	0	1	⇒ 113 (decimal)

Note: Set "XX" if you do not want to test for communication frame errors with FCS.

● Response format

#	RD	AAAAAAAAAAAAAAAAAAAA	X	X	XXXX	XX	X	X	XXXXX	X
1	2	3	4	5	6	7	8	9	10	11

XX	X	X	XXXXX	X	XX	X	X	XXXXX	X	XX	X	X	XXXXX	X
12	13	14	15	16	17	18	19	20	21	22	23	24	25	26

XX	X	X	XXXXX	X	XX	X	X	XXXXX	X	XX	X	X	XXXXX	X
27	28	29	30	31	32	33	34	35	36	37	38	39	40	41

XX	X	X	XXXXX	X	XX	X	X	XXXXX	X	XX	X	X	XXXXX	X
42	43	44	45	46	47	48	49	50	51	52	53	54	55	56

XX	X	X	XXXXX	X	XX	X	X	XXXXX	X	XX	X	X	XXXXX	X
57	58	59	60	61	62	63	64	65	66	67	68	69	70	71

XX	XX	XX	XX	XX	XX	XX	XX	XX	X	X	XXX	XX	XX	X	X	@	XX	[CR]	[LF]
72	73	74	75	76	77	78	79	80	81	82	83	84	85	86	87	88	89		

1	Header		1 character
2	Command		2 characters
3	Site name	Upper- and lowercase letters, numbers, periods (.) hyphens (-) and spaces ( )	20 characters
4	Probe status	(3) Status code	1 character
5	Probe error	(4) Status error code	1 character
6	Unused		4 characters
7	Parameter 1 code	(1) Parameter code	2 characters
8	Parameter 1 status	(5) Parameter status code	1 character
9	Parameter 1 error	(6) Parameter error code	1 character
10	Parameter 1 data	5 characters including decimal point, right-justified with blanks filled	5 characters
11	Parameter 1 unit	(2) Unit code	1 character
12	Parameter 2 code	(1) Parameter code	2 characters
13	Parameter 2 status	(5) Parameter status code	1 character
14	Parameter 2 error	(6) Parameter error code	1 character
15	Parameter 2 data	5 characters including decimal point, right-justified with blanks filled	5 characters
16	Parameter 2 unit	(2) Unit code	1 character
17	Parameter 3 code	(1) Parameter code	2 characters
18	Parameter 3 status	(5) Parameter status code	1 character
19	Parameter 3 error	(6) Parameter error code	1 character
20	Parameter 3 data	5 characters including decimal point, right-justified with blanks filled	5 characters
21	Parameter 3 unit	(2) Unit code	1 character
22	Parameter 4 code	(1) Parameter code	2 characters
23	Parameter 4 status	(5) Parameter status code	1 character
24	Parameter 4 error	(6) Parameter error code	1 character
25	Parameter 4 data	5 characters including decimal point, right-justified with blanks filled	5 characters
26	Parameter 4 unit	(2) Unit code	1 character
27	Parameter 5 code	(1) Parameter code	2 characters
28	Parameter 5 status	(5) Parameter status code	1 character
29	Parameter 5 error	(6) Parameter error code	1 character
30	Parameter 5 data	5 characters including decimal point, right-justified with blanks filled	5 characters
31	Parameter 5 unit	(2) Unit code	1 character
32	Parameter 6 code	(1) Parameter code	2 characters
33	Parameter 6 status	(5) Parameter status code	1 character
34	Parameter 6 error	(6) Parameter error code	1 character

35	Parameter 6 data	5 characters including decimal point, right-justified with blanks filled	5 characters
36	Parameter 6 unit	(2) Unit code	1 character
37	Parameter 7 code	(1) Parameter code	2 characters
38	Parameter 7 status	(5) Parameter status code	1 character
39	Parameter 7 error	(6) Parameter error code	1 character
40	Parameter 7 data	5 characters including decimal point, right-justified with blanks filled	5 characters
41	Parameter 7 unit	(2) Unit code	1 character
42	Parameter 8 code	(1) Parameter code	2 characters
43	Parameter 8 status	(5) Parameter status code	1 character
44	Parameter 8 error	(6) Parameter error code	1 character
45	Parameter 8 data	5 characters including decimal point, right-justified with blanks filled	5 characters
46	Parameter 8 unit	(2) Unit code	1 character
47	Parameter 9 code	(1) Parameter code	2 characters
48	Parameter 9 status	(5) Parameter status code	1 character
49	Parameter 9 error	(6) Parameter error code	1 character
50	Parameter 9 data	5 characters including decimal point, right-justified with blanks filled	5 characters
51	Parameter 9 unit	(2) Unit code	1 character
52	Parameter 10 code	(1) Parameter code	2 characters
53	Parameter 10 status	(5) Parameter status code	1 character
54	Parameter 10 error	(6) Parameter error code	1 character
55	Parameter 10 data	5 characters including decimal point, right-justified with blanks filled	5 characters
56	Parameter 10 unit	(2) Unit code	1 character
57	Parameter 11 code	(1) Parameter code	2 characters
58	Parameter 11 status	(5) Parameter status code	1 character
59	Parameter 11 error	(6) Parameter error code	1 character
60	Parameter 11 data	5 characters including decimal point, right-justified with blanks filled	5 characters
61	Parameter 11 unit	(2) Unit code	1 character
62	Parameter 12 code	(1) Parameter code	2 characters
63	Parameter 12 status	(5) Parameter status code	1 character
64	Parameter 12 error	(6) Parameter error code	1 character
65	Parameter 12 data	5 characters including decimal point, right-justified with blanks filled	5 characters
66	Parameter 12 unit	(2) Unit code (6) Parameter error code	1 character
67	Parameter 13 code	(1) Parameter code	2 characters
68	Parameter 13 status	(5) Parameter status code	1 character
69	Parameter 13 error	(6) Parameter error code	1 character
70	Parameter 13 data	5 characters including decimal point, right-justified with blanks filled	5 characters
71	Parameter 13 unit	(2) Unit code	1 character
72	Year	00 to 99	2 characters

73	Month	01 to 12	2 characters
74	Day	01 to 31	2 characters
75	Hour	00 to 23	2 characters
76	Minute	00 to 59	2 characters
77	Second	00 to 59	2 characters
78	Longitude (degrees)	00 to 90 or "--" (no GPS data)	2 characters
79	Longitude (minutes)	00 to 59 or "--" (no GPS data)	2 characters
80	Longitude (seconds)	00 to 59 or "--" (no GPS data)	2 characters
81	Unused	1 character	1 character
82	North latitude/South latitude	N: North; S: South	1 character
83	Latitude (degrees)	000 to 180 or "---" (no GPS data)	3 characters
84	Latitude (minutes)	00 to 59 or "--" (no GPS data)	2 characters
85	Latitude (seconds)	00 to 59 or "--" (no GPS data)	2 characters
86	Unused		1 character
87	East longitude/West longitude	E: East; W: West	1 character
88	Delimiter character		1 character
89	Frame check sequence (FCS)		2 characters

● Memory data requests

● Request command format

#	RM	X	X	AAAAAAAAAAAAAAAAAAAA	XX	XX	XX	@	XX	[CR]	[LF]
1	2	3	4	5	6	7	8	9	10		

1	Header		1 character
2	Command		2 characters
3	Data specification[*1]	0: Start search; 1: Next data item; 2: Previous data item; 3: Request same data again	1 character
4	Search method specification	0: All data; 1: Site search; 2: Date search	1 character
5	Search site[*2]	Upper- and lowercase letters, numbers, periods (.) hyphens (-) and spaces ( )	20 characters
6	Search year[*3]	00 to 99	2 characters
7	Search month[*3]	01 to 12	2 characters
8	Search day[*3]	01 to 31	2 characters
9	Delimiter character		1 character
10	Frame check sequence (FCS)		2 characters

*1: When sending the RM command, first send 0 [Start search], then 1 [Next data item], 2 [Previous data item] or 3 [Request same data again].

*2: [Search site] is only needed when [Site search] is specified as the search method. If another search method is specified, fill this field with spaces.

*3: [Search year], [Search month] and [Search day] are only needed when [Date search] is specified as the search method. If another search method is specified, fill this field with spaces.

● **Response format**

(when data exists)

```
#   RM  AAAAAAAAAAAAAAAAAAAA   XX  X   X   XXXXX  X
1   2   3                      4   5   6   7      8

XX  X   X   XXXXX  X   XX  X   X   XXXXX  X   XX  X   X   XXXXX  X
9   10  11  12      13  14  15  16  17      18  19  20  21  22      23

XX  X   X   XXXXX  X   XX  X   X   XXXXX  X   XX  X   X   XXXXX  X
24  25  26  27      28  29  30  31  32      33  34  35  36  37      38

XX  X   X   XXXXX  X   XX  X   X   XXXXX  X   XX  X   X   XXXXX  X
39  40  41  42      43  44  45  46  47      48  49  50  51  52      53

XX  X   X   XXXXX  X   XX  X   X   XXXXX  X   XX  X   X   XXXXX  X
54  55  56  57      58  59  60  61  62      63  64  65  66  67      68

XX  XX  XX  XX  XX  XX  XX  XX  XX  X   X   XXX  XX  XX  X   X   @   XX  [CR]  [LF]
69  70  71  72  73  74  75  76  77  78  79  80   81  82  83  84  85  86
```

1	Header		1 character
2	Command		2 characters
3	Site name	Upper- and lowercase letters, numbers, periods (.) hyphens (-) and spaces ( )	20 characters
4	Parameter 1 code	(1) Parameter code	2 characters
5	Parameter 1 selection	0: No selection; 1: Selection made	1 character
6	Parameter 1 error	(6) Parameter error code	1 character
7	Parameter 1 data	5 characters including decimal point, right-justified with blanks filled	5 characters
8	Parameter 1 unit	(2) Unit code	1 character
9	Parameter 2 code	(1) Parameter code	2 characters
10	Parameter 2 selection	0: No selection; 1: Selection made	1 character
11	Parameter 2 error	(6) Parameter error code	1 character
12	Parameter 2 data	5 characters including decimal point, right-justified with blanks filled	5 characters
13	Parameter 2 unit	(2) Unit code	1 character
14	Parameter 3 code	(1) Parameter code	2 characters
15	Parameter 3 selection	0: No selection; 1: Selection made	1 character
16	Parameter 3 error	(6) Parameter error code	1 character
17	Parameter 3 data	5 characters including decimal point, right-justified with blanks filled	5 characters
18	Parameter 3 unit	(2) Unit code	1 character
19	Parameter 4 code	(1) Parameter code	2 characters
20	Parameter 4 selection	0: No selection; 1: Selection made	1 character

21	Parameter 4 error	(6) Parameter error code	1 character
22	Parameter 4 data	5 characters including decimal point, right-justified with blanks filled	5 characters
23	Parameter 4 unit	(2) Unit code	1 character
24	Parameter 5 code	(1) Parameter code	2 characters
25	Parameter 5 selection	0: No selection; 1: Selection made	1 character
26	Parameter 5 error	(6) Parameter error code	1 character
27	Parameter 5 data	5 characters including decimal point, right-justified with blanks filled	5 characters
28	Parameter 5 unit	(2) Unit code	1 character
29	Parameter 6 code	(1) Parameter code	2 characters
30	Parameter 6 selection	0: No selection; 1: Selection made	1 character
31	Parameter 6 error	(6) Parameter error code	1 character
32	Parameter 6 data	5 characters including decimal point, right-justified with blanks filled	5 characters
33	Parameter 6 unit	(2) Unit code	1 character
34	Parameter 7 code	(1) Parameter code	2 characters
35	Parameter 7 selection	0: No selection; 1: Selection made	1 character
36	Parameter 7 error	(6) Parameter error code	1 character
37	Parameter 7 data	5 characters including decimal point, right-justified with blanks filled	5 characters
38	Parameter 7 unit	(2) Unit code	1 character
39	Parameter 8 code	(1) Parameter code	2 characters
40	Parameter 8 selection	0: No selection; 1: Selection made	1 character
41	Parameter 8 error	(6) Parameter error code	1 character
42	Parameter 8 data	5 characters including decimal point, right-justified with blanks filled	5 characters
43	Parameter 8 unit	(2) Unit code	1 character
44	Parameter 9 code	(1) Parameter code	2 characters
45	Parameter 9 selection	0: No selection; 1: Selection made	1 character
46	Parameter 9 error	(6) Parameter error code	1 character
47	Parameter 9 data	5 characters including decimal point, right-justified with blanks filled	5 characters
48	Parameter 9 unit	(2) Unit code	1 character
49	Parameter 10 code	(1) Parameter code	2 characters
50	Parameter 10 selection	0: No selection; 1: Selection made	1 character
51	Parameter 10 error	(6) Parameter error code	1 character
52	Parameter 10 data	5 characters including decimal point, right-justified with blanks filled	5 characters
53	Parameter 10 unit	(2) Unit code	1 character
54	Parameter 11 code	(1) Parameter code	2 characters
55	Parameter 11 selection	0: No selection; 1: Selection made	1 character
56	Parameter 11 error	(6) Parameter error code	1 character
57	Parameter 11 data	5 characters including decimal point, right-justified with blanks filled	5 characters
58	Parameter 11 unit	(2) Unit code	1 character
59	Parameter 12 code	(1) Parameter code	2 characters

60	Parameter 12 selection	0: No selection; 1: Selection made	1 character
61	Parameter 12 error	(6) Parameter error code	1 character
62	Parameter 12 data	5 characters including decimal point, right-justified with blanks filled	5 characters
63	Parameter 12 unit	(2) Unit code	1 character
64	Parameter 13 code	(1) Parameter code	2 characters
65	Parameter 13 selection	0: No selection; 1: Selection made	1 character
66	Parameter 13 error	(6) Parameter error code	1 character
67	Parameter 13 data	5 characters including decimal point, right-justified with blanks filled	5 characters
68	Parameter 13 unit	(2) Unit code	1 character
69	Year	00 to 99	2 characters
70	Month	01 to 12	2 characters
71	Day	01 to 31	2 characters
72	Hour	00 to 23	2 characters
73	Minute	00 to 59	2 characters
74	Second	00 to 5	2 characters
75	Longitude (degrees)	00 to 90 or "--" (no GPS data)	2 characters
76	Longitude (minutes)	00 to 59 or "--" (no GPS data)	2 characters
77	Longitude (seconds)	00 to 59 or "--" (no GPS data)	2 characters
78	Unused		1 character
79	North latitude/South latitude	N: North; S: South	1 character
80	Latitude (degrees)	000 to 180 or "---" (no GPS data)	3 characters
81	Latitude (minutes)	00 to 59 or "--" (no GPS data)	2 characters
82	Latitude (seconds)	00 to 59 or "--" (no GPS data)	2 characters
83	Unused		1 character
84	East longitude/West longitude	E: East; W: West	1 character
85	Delimiter character		1 character
86	Frame check sequence (FCS)		2 characters

When no data exists, or memory is at capacity)

#	RM	@	XX	[CR]	[LF]
1	2	3	4		

1	Header	1 character
2	Command	2 characters
3	Delimiter character\	1 character
4	Frame check sequence (FCS)	2 characters

● Memory data count request

● Request command format

#	RN	@	XX	[CR]	[LF]
1	2	3	4		

1	Header	1 character
2	Command	2 characters
3	Delimiter character\	1 character
4	Frame check sequence (FCS)	2 characters

● Response format

#	RN	XXXXX	@	XX	[CR]	[LF]
1	2	3	4	5		

1	Header		1 character
2	Command		2 characters
3	Total data count	0 to 10000	5 characters
4	Delimiter character\		1 character
5	Frame check sequence (FCS)		2 characters

● Command parse failure response

#	??	X	XX	X	@	XX	[CR]	[LF]
1	2	3	4	5	6	7		

1	Header	1 character
2	Command	2 characters
3	Command parse failure reason*4	1 character
4	Received command*5	2 characters
5	(3) Status code for probe status*5	1 character
6	Delimiter character	1 character
7	Frame check sequence (FCS)	2 characters

*4: List of command parse failure reasons

1: Frame length error
2: FCS mismatch
3: Undefined command
4: Data error
5: Data out of range
6: No "@" delimiter character
7: No "#" header character
8: No [Carriage return] + [Line feed] footer
9: Cannot accept command in this timing.

*5: Only set for command parse failure reason 9, [Cannot accept command in this timing]. Otherwise this field is filled with spaces.

4 Maintenance

Tip

HORIBA recommends regular manufacturer maintenance checks in order to ensure a long product life.

4.1 Routine care

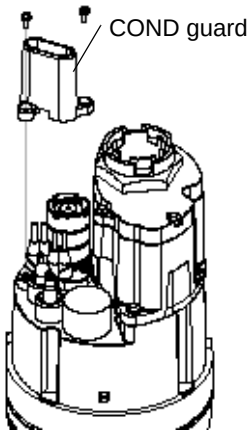
- **After measurement**

1. **Press and hold down the control unit's POWER key for about 3 seconds to turn the power OFF.**

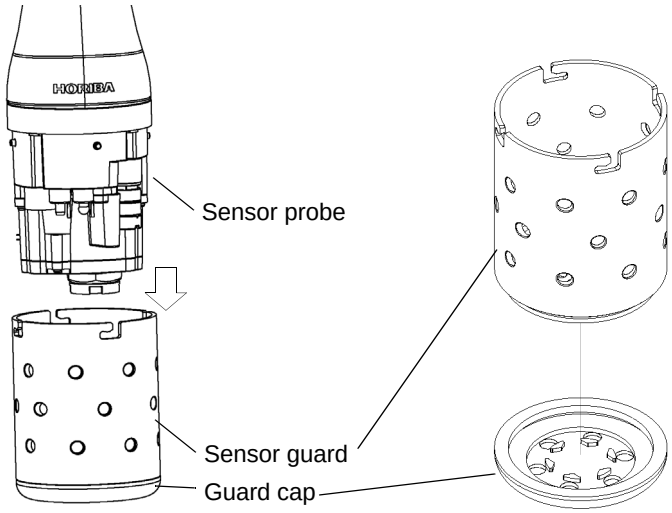
Note

The operation keys are designed to operate using the pad of a finger, sharp objects can tear the control unit cover damaging the operation keys.

2. **Remove the sensor guard, and clean the sensor with tap water.**
3. **Clean the turbidity sensor with the cleaning brush provided.**
4. **Remove the two screws securing the COND guard, and the COND guard itself, and use a test tube brush to gently remove any dirt from the electrical conductivity electrode.**



5. **Wipe off any dirt with a soft cloth. If parts are very dirty, clean them with neutral detergent, then rinse them. If parts are contaminated by oil, wipe it off with a soft cloth soaked in alcohol.**
6. **Put the COND guard back in place.**
7. **Remove the sensor guard's guard cap, wash off any dirt with tap water, then put the guard cap back in place.**



4.2 Every 2 months maintenance

● Dissolved oxygen (DO) sensor

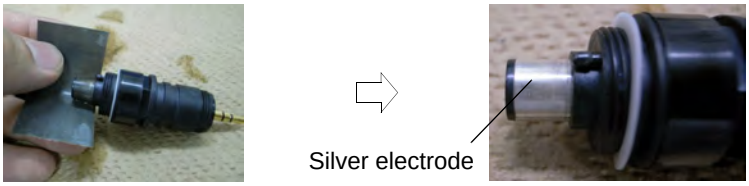
Note

- **The DO sensor's internal solution is potassium chloride (KCl). Although KCl is harmless, protective equipment such as gloves and goggles should be worn when working with it.**
- **Internal solution can be disposed of down a sink.**

- Replace the membrane cap.
- Polish the gold and silver electrodes when replacing the membrane cap.
  The gold electrode does not need to be polished if it is not dirty.

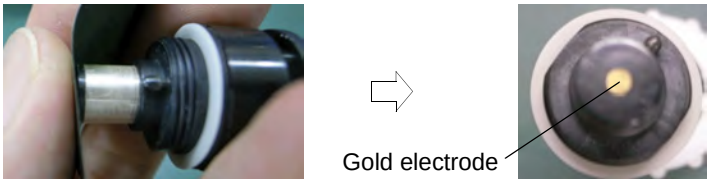
● **Silver electrode**

Polish a silver electrode part with sandpaper (#500) and then wash metal electrode parts with water.



● **Gold electrode**

Polish a gold electrode part with sandpaper (#8000) and then wash metal electrode parts with water.



Replace a membrane cap after clean metal electrodes parts.
Refer to “ 4.5 Replacing the membrane cap ” (page 87).

● **Reference electrode**

Note

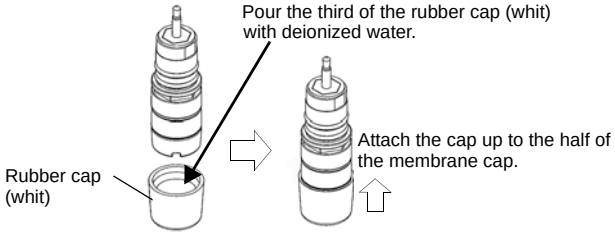
- **The pH reference internal solution is potassium chloride (KCl). Although KCl is harmless, protective equipment such as gloves and goggles should be worn when working with it.**
- **Internal solution can be disposed of down a sink.**

1. **Remove the rubber liquid junction plug from the reference electrode and dispose of the internal solution.**
2. **To prevent air entering, fill the reference electrode to the brim with its internal solution (No. 330).**
3. **Put the rubber liquid junction plug back in place.**
   If the rubber liquid junction plug is dirty, replace the liquid junctions (set of two; No. 9037005100). The reference electrode's internal solution will spill when replacing the liquid junctions. Rinse parts with tap water and dry them with a soft cloth.

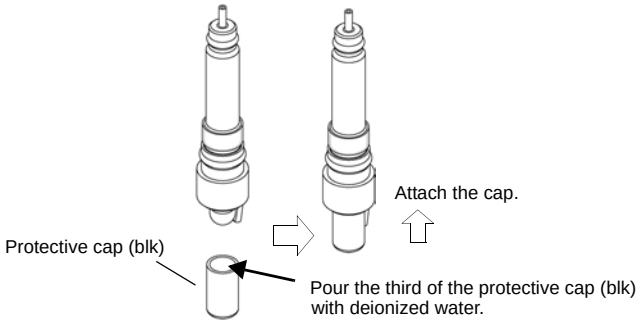
4.3 Storage

● Short-term (under 2 months) storage

- Before storing the DO sensor, pour the third of the rubber cap (whit) provided with deionized water and cover the DO sensor with them.



- Before storing the pH sensor, pour the third of the protective cap (blk) provided with deionized water and cover the pH sensor with them.



Note

Before measuerment, remove the rubber cap (whit) and the protective cap (blk).

● Long-term (2 months or more) storage

- Remove a membrane cap from DO sensor, and wash the gold electrode and silver electrode parts with water. Wipe off the moisture before storing DO sensor in the pack.
- Prevent internal solution seeping out of the reference chip by taping over the point of seepage with electrical tape.
- Before storing the system, remove the control unit's batteries to prevent battery leakage.

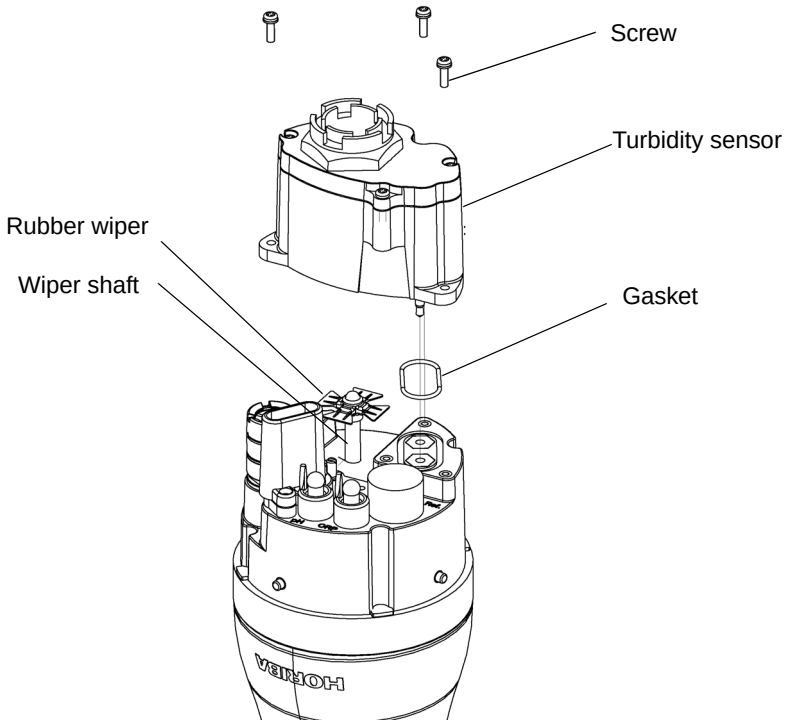
4.4 Replacing the turbidity sensor

1. **Press and hold down the control unit's POWER key for about 3 seconds to turn the power OFF.**

Note

The operation keys are designed to operate using the pad of a finger, sharp objects can tear the control unit cover damaging the operation keys.

2. **Remove the sensor guard, and clean the sensor probe with tap water.**
3. **Use dry air to blow away and dry off any moisture.**
4. **Remove the three screws holding the turbidity sensor by using No. 2 Phillips head screwdriver.**
5. **Pull out the turbidity sensor horizontally.**
6. **Remove the rubber wiper and gasket, and use a soft cloth to wipe off any dirt from the wiper shaft and turbidity sensor attachment. If parts are very dirty, use a soft cloth soaked in neutral detergent or alcohol.**
7. **Replace the rubber wiper and gasket with new ones. Coat the gasket with a thin layer of grease (No. 3014017718).**
8. **Attach the new turbidity sensor and fasten it in place with the three screws.**
9. **Perform four-point calibration before using the sensor.**



4.5 Replacing the membrane cap

● Replacement procedure

1. **Prepare the DO sensor.**

- Take a DO sensor out of pack (newly purchasing).
- Remove a DO sensor from the sensor probe (after use).



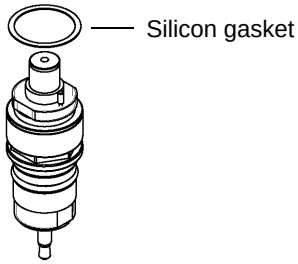
Newly purchasing



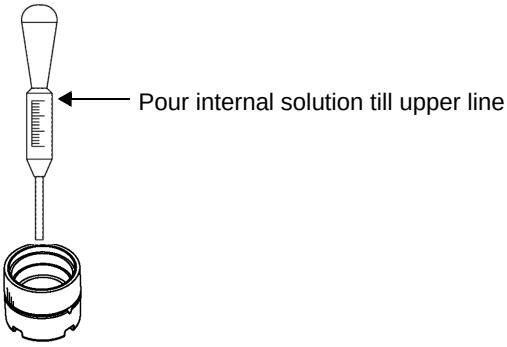
Undo a DO sensor from the sensor probe

- Twist a membrane cap from DO sensor.
- Wash the gold electrode and silver electrode parts with water.

2. **Replace the silicone gasket with a new one.**



3. **Pour internal solution into a membrane cap with a dropper.**

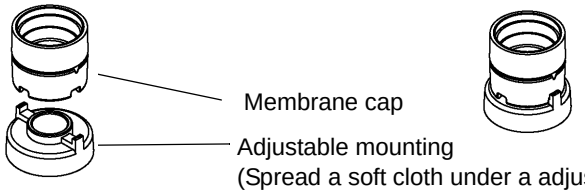


- Check air bubbles in a membrane cap.

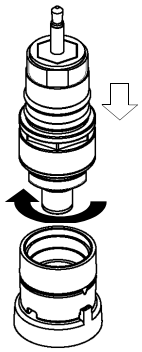


Pick a Cap up and drop it down, if there is air bubbles in internal solution of it.

4. **Set up a membrane cap on a adjustable mounting.**



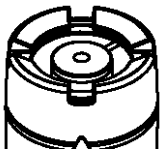
5. **Attach a membrane cap to DO sensor**



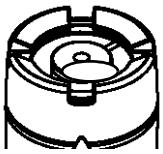
Twist a DO sensor
with holding a membrane cap tight.

6. **Check for membrane surface**

Check air bubbles in a membrane cap.



Good: Limited air bubbles



NG: Air bubbles of more than 5 mm in diameter

- NG → Replace a membrane cap again.
- Check that span calibration can be performed.

If the membrane cap is not attached correctly, sensitivity may be lost or response speed may decrease.

4.6 Troubleshooting

Note

If the sensor probe is removed while the control unit is indicating an error, errors cannot be canceled by using the ESC key. Either reconnect the sensor probe or restart the control unit.

4.6.1 Error displays

Error	Cause	Solution
Probe ADC error	Internal IC failure	Contact your nearest sales outlet to have the sensor probe repaired.
Probe EEPROM error/Factory	Internal IC failure	Turn the power OFF, then restart the system. If the error persists, initialize the system from the "System" menu. If the error still persists, contact your nearest sales outlet to have the sensor probe repaired.
Probe EEPROM error/User	Internal IC failure	Turn the power OFF, then restart the system. If the error persists, initialize the system from the "System" menu. If the error still persists, contact your nearest sales outlet to have the sensor probe repaired.
Turbidity sensor light source error	Turbidity sensor light source failure	Turn the power OFF, wipe off any water droplets on the probe, then remove the turbidity sensor. Check there are no water droplets around the turbidity sensor connector, then mount the sensor again. If the error persists, replace the turbidity sensor.
Turbidity sensor wiper motor error	The turbidity sensor wiper is not operating.	Press the ESC key. Check there are no obstacles near the wiper, then perform the measurement again. If the error persists, the motor will need to be replaced. Contact your nearest sales outlet to have the sensor probe repaired.
Probe capacitor error	Low battery voltage or internal IC failure	Turn the power OFF. Replace the display's batteries. If the error persists, contact your nearest sales outlet to have the sensor probe repaired.
Probe EEPROM error	Internal IC failure	Press the ESC key, then redo the operation. If the error persists, turn the power OFF, then restart the system (the current data will not be saved). If the error still persists, contact your nearest sales outlet to have the display repaired.
Probe board error	Probe board failure	Turn the power OFF. Contact your nearest sales outlet to have the sensor probe repaired.

Error	Cause	Solution
Zero-point calibration error	pH sensor 1. The pH standard solution is contaminated. 2. The pH-responsive membrane is dirty. 3. The concentration of the reference electrode's internal solution has changed. 4. The pH-responsive membrane is torn.	pH sensor 1. Replace the standard solution with new solution. 2. Clean the pH-responsive membrane. 3. Refil the reference electrode's internal solution. 4. Replace the sensor.
	COND sensor 1. There is moisture on the sensor. 2. The sensor is dirty. 3. The COND sensor is broken.	COND sensor 1. Blow-dry the moisture off the sensor. 2. Clean the sensor. 3. Contact your nearest sales outlet.
	TURB sensor 1. There are air bubbles on the cell. 2. The cell window is dirty. 3. The sensor is being affected by ambient light. 4. The solution is dirty. 5. The TURB sensor has failed.	TURB sensor 1. Shake the sensor probe vigorously. 2. Clean the cell window. 3. Calibrate using the calibration cup provided. 4. Replace the solution with new solution. 5. Replace the TURB sensor.
	DO sensor 1. There are air bubbles in the internal solution. 2. The DO sensor has failed.	DO sensor 1. Replace the diaphragm with a new one, and fill the DO sensor with new internal solution. 2. Replace the DO sensor.
	Water depth sensor 1. The water depth sensor is dirty. 2. The water depth sensor has failed.	Water depth sensor 1. Clean the water depth sensor. 2. Contact your nearest sales outlet.

Error	Cause	Solution
Span calibration error	pH sensor 1. The pH standard solution is contaminated. 2. The pH-responsive membrane is dirty. 3. The concentration of the reference electrode's internal solution has changed. 4. The pH-responsive membrane is torn.	pH sensor 1. Replace the standard solution with new solution. 2. Clean the pH-responsive membrane. 3. Refil the reference electrode's internal solution. 4. Replace the sensor.
	ORP sensor 1. The ORP standard solution is contaminated. 2. The ORP electrode is dirty. 3. The concentration of the reference electrode's internal solution has changed. 4. The ORP electrode has failed.	ORP sensor 1. Replace the standard solution with new solution. 2. Clean the ORP electrode. 3. Refil the reference electrode's internal solution. 4. Replace the ORP electrode.
	COND sensor 1. The calibration solution is not correct. 2. The sensor is dirty. 3. The COND sensor has failed.	COND sensor 1. Use the correct calibration solution for calibration. 2. Clean the sensor. 3. Contact your nearest sales outlet.
	TURB sensor 1. There are air bubbles on the cell. 2. The cell window is dirty. 3. The sensor is being affected by ambient light. 4. The solution is dirty. 5. The TURB sensor has failed.	TURB sensor 1. Shake the sensor probe vigorously. 2. Clean the cell window. 3. Calibrate using the calibration cup provided. 4. Replace the solution with new solution. 5. Replace the TURB sensor.
	DO sensor 1. The diaphragm is torn. 2. There are air bubbles in the internal solution. 3. The DO sensor has failed.	DO sensor 1. Replace the diaphragm with a new one, and fill the DO sensor with new internal solution. 2. Replace the diaphragm with a new one, and fill the DO sensor with new internal solution. 3. Replace the DO sensor.
	Temperature sensor The temperature sensor has failed.	Temperature sensor Contact your nearest sales outlet.
Calibration stability error	The calibration value of an individual parameter is not stable. 1. The sensor is dirty. 2. The sensor has not adjusted to the standard solution. 3. The temperature was unstable during calibration.	1. Clean the sensor. 2. Fill the transparent calibration cup with pH 4 standard solution, and wait for at least 20 minutes of conditioning before starting calibration. 3. Start calibration after the temperature has stabilized.
Turbidity calibration error	Error in turbidity measurement sequence	Turbidity calibration failed. Redo calibration after removing the displayed error.
Wet check	The cable connector is submerged.	Turn the power OFF and disconnect the cable connector. Wipe or blow-dry off all the water droplets on the probe. If the error persists, contact your nearest sales outlet to have the display and sensor probe repaired.
Power voltage error	The display's power board has failed.	This error could also be caused by poor cable contact. Turn the power OFF and disconnect the cable connector. Reconnect the connector and turn the power ON. If the error persists, contact your nearest sales outlet to have the display and sensor probe repaired.
Turbidity lamp power voltage error	The remaining battery level is low.	Turn the power OFF and replace the display's batteries with new ones.

Error	Cause	Solution
Display RTC error	The time display is incorrect.	Replace the coin battery.
Display FROM error	Internal IC failure	Contact your nearest sales outlet to have the control unit repaired.
Display EEPROM error	Internal IC failure	Contact your nearest sales outlet to have the control unit repaired.
Display save error	Insufficient memory space	Move data from the display, use the data operations screen to delete data, then redo the measurement.
Measurement sequence error	● When the measurement item is turbidity 1. The battery power is low. 2. The wiper is not operating normally. 3. The light source lamp is not lit. ● If items other than turbidity are also displayed 4. Board failure	1. Replace the batteries with new ones. 2. Check there are no obstacles near the wiper, then redo the measurement. If the error persists, the motor will need to be replaced. Contact your nearest sales outlet to have the sensor probe repaired. 3. Wipe off any water droplets on the probe, then remove the turbidity sensor. Check there are no water droplets around the turbidity sensor connector, then mount the sensor again. If the error persists, replace the turbidity sensor. 4. Contact your nearest sales outlet to have the sensor probe repaired.
Out of measurement range	The attempted measurement is outside the measurement range supported for that item.	The system must be used within its supported measurement ranges.
Last zero-point calibration invalid	pH sensor 1. The pH standard solution is contaminated. 2. The pH-responsive membrane is dirty. 3. The concentration of the reference electrode's internal solution has changed. 4. The pH-responsive membrane is torn.	pH sensor 1. Replace the standard solution with new solution. 2. Clean the pH-responsive membrane. 3. Refil the reference electrode's internal solution. 4. Replace the sensor.
	COND sensor 1. There is moisture on the sensor. 2. The sensor is dirty. 3. The COND sensor has failed.	COND sensor 1. Blow-dry the moisture off the sensor. 2. Clean the sensor. 3. Contact your nearest sales outlet.
	TURB sensor 1. There are air bubbles on the cell. 2. The cell window is dirty. 3. The sensor is being affected by ambient light. 4. The solution is dirty. 5. The TURB sensor has failed.	TURB sensor 1. Shake the sensor probe vigorously. 2. Clean the cell window. 3. Calibrate using the calibration cup provided. 4. Replace the solution with new solution. 5. Replace the TURB sensor.
	DO sensor 1. There are air bubbles in the internal solution. 2. The DO sensor has failed.	DO sensor 1. Replace the diaphragm with a new one, and fill the DO sensor with new internal solution. 2. Replace the DO sensor.
	Water depth sensor 1. The water depth sensor is dirty. 2. The water depth sensor has failed.	Water depth sensor 1. Clean the water depth sensor. 2. Contact your nearest sales outlet.
Out of measurement range	[See above.]	[See above.]
Last zero-point calibration invalid		

Error	Cause	Solution
Last span calibration invalid	pH sensor 1. The pH standard solution is contaminated. 2. The pH-responsive membrane is dirty. 3. The concentration of the reference electrode's internal solution has changed. 4. The pH-responsive membrane is torn.	pH sensor 1. Replace the standard solution with new solution. 2. Clean the pH-responsive membrane. 3. Refil the reference electrode's internal solution. 4. Replace the sensor.
	ORP sensor 1. The ORP standard solution is contaminated. 2. The ORP electrode is dirty. 3. The concentration of the reference electrode's internal solution has changed. 4. The ORP sensor glass is broken.	ORP sensor 1. Replace the standard solution with new solution. 2. Clean the ORP electrode. 3. Refil the reference electrode's internal solution. 4. Replace the sensor.
	COND sensor 1. The calibration solution is not correct. 2. The sensor is dirty. 3. The COND sensor has failed.	COND sensor 1. Use the correct calibration solution for calibration. 2. Clean the sensor. 3. Contact your nearest sales outlet.
	TURB sensor 1. There are air bubbles on the cell. 2. The cell window is dirty. 3. The sensor is being affected by ambient light. 4. The solution is dirty. 5. The TURB sensor has failed.	TURB sensor 1. Shake the sensor probe vigorously. 2. Clean the cell window. 3. Calibrate using the calibration cup provided. 4. Replace the solution with new solution. 5. Replace the TURB sensor.
	DO sensor 1. The diaphragm is torn. 2. There are air bubbles in the internal solution. 3. The DO sensor has failed.	DO sensor 1. Replace the diaphragm with a new one, and fill the DO sensor with new internal solution. 2. Replace the diaphragm with a new one, and fill the DO sensor with new internal solution. 3. Replace the DO sensor.
	Temperature sensor ● The temperature sensor has failed.	Temperature sensor ● Contact your nearest sales outlet.
Out of measurement range Last zero-point calibration invalid	[See above.]	[See above.]
Last span calibration invalid	The calibration value of an individual parameter is not stable. 1. The sensor is dirty. 2. The sensor has not adjusted to the standard solution. 3. The temperature was unstable during calibration.	1. Clean the sensors. 2. Fill the transparent calibration cup with pH 4 standard solution, and wait for at least 20 minutes of conditioning before starting calibration. 3. Start calibration after the temperature has stabilized.
Out of measurement range Last zero-point calibration invalid	[See above.]	[See above.]
Calibration value is factory default value.	Internal IC failure	Turn the power OFF, then restart the system. If the error persists, initialize the system from the "System" menu. If the error still persists, contact your nearest sales outlet to have the sensor probe repaired.

Error	Cause	Solution
Sample is unstable.	1. The concentration of the sample is unstable. 2. External light disturbance has affected the sensor. 3. Water has entered the turbidity sensor's connector.	1. Use a stirrer to agitate the sample during measurement. 2. Perform measurement away from direct sunlight. 3. Turn the power OFF, wipe off any water droplets on the probe, then remove the turbidity sensor. Check there are no water droplets around the turbidity sensor connector, then mount the sensor again. If the error persists, replace the turbidity sensor.

4.6.2 Error displays in sensor information

Error display	Cause	Solution
Measurement sequence error	Measurement sequence error	Turn the power OFF, then restart the system. If the error persists, have the probe repaired.
Out of measurement range	The measurement value is outside the measurement range.	Samples for measurement must be within the measurement range.
Last calibration invalid	The last calibration failed.	Redo calibration.
Calibration invalid	The calibration value is the factory default value.	Redo calibration.
Background unstable	The U-53 turbidity sensor is exposed to direct light.	Mount the guard cap and sensor guard and perform measurement away from direct sunlight.
	The turbidity value changed rapidly during measurement.	Measure a sample that has stable turbidity.

5 Specifications

Specification		Basic value	Model				
			U-51	U-52	U-52G	U-53	U-53G
Sensor probe	Measurement temperature range	−10°C to 55°C	✓	✓	✓	✓	✓
	Maximum sensor outer diameter	Approx. 96 mm					
	Sensor length	Approx. 340 mm					
	Cable length	2 m (standard) 10 m/30 m (options)					
	Mass	Approx. 1800 g					
	Auto calibration function	Uses pH 4 standard solution.					
	Measurement depth	30 m max.	✓	✓	✓	✓	✓
	Wet-part materials*3	PPS, glass, SUS316L, SUS304, FKM, PEEK, Q, titanium, FEP membrane, POM					
	Waterproofing standard	IP-68					
Control unit	Outer dimensions (W × D × H)	115 × 66 × 283 mm	✓	✓	—	✓	—
		115 × 66 × 335 mm	—	—	✓	—	✓
	Mass	Approx. 800 g	✓	✓	✓	✓	✓
	LCD	320 × 240 mm graphic LCD (monochrome) with backlight	✓	✓	✓	✓	✓
	Memory data items	10000	✓	✓	✓	✓	✓
	Communication interface	USB peripheral	✓	✓	✓	✓	✓
	Batteries	C-size dry cells (×4)	✓	✓	✓	✓	✓
	Waterproofing standard	IP-67	✓	✓	✓	✓	✓
	GPS unit	● Reception method (12 channel parallel) ● Measurement precision [With PDOP (high precision): 30 m or less (2 drms)]	—	—	✓	—	✓
	Estimated battery life*1	—	70 hours (no backlight)			500 measurements (no backlight)	
	Storage temperature range	−10°C to 60°C	✓	✓	✓	✓	✓
	Ambient temperature range	−5°C to 45°C					

Specification		Basic value	Model				
			U-51	U-52	U-52G	U-53	U-53G
pH measurement Two calibration	Measurement method	Glass electrode method	✓	✓	✓	✓	✓
	Range	pH 0 to 14					
	Resolution	0.01 pH					
	Precision*2	±0.1 pH					
Dissolved oxygen measurement ● Salinity conversion (0 to 70 PPT, automatic) ● Automatic temperature compensation	Measurement method	Polarographic method	✓	✓	✓	✓	✓
	Film thickness	25 μm					
	Range	0 mg/L to 50.0 mg/L					
	Resolution	0.01 mg/L					
	Precision*2	0 mg/L to 20 mg/L: ±0.2 mg/L 20 mg/L to 50 mg/L: ±0.5 mg/L					
Electrical conductivity measurement ● Auto range ● Automatic temperature conversion (25°C)	Measurement method	Four-AC-electrode method	✓	✓	✓	✓	✓
	Range	0 S/m to 10 S/m (0 mS/cm to 100 mS/cm)					
	Resolution	0.000 mS/cm to 0.999 mS/cm: 0.001 1.00 mS/cm to 9.99 mS/cm: 0.01 10.0 mS/cm to 99.9 mS/cm: 0.1 0.0 mS/m to 99.9 mS/m: 0.1 0.100 S/m to 0.999 S/m: 0.001 1.00 S/m to 9.99 S/m: 0.01					
	Precision*2	1% of full-scale (midpoint of two calibration points)					
Salinity measurement	Measurement method	Electrical conductivity conversion	✓	✓	✓	✓	✓
	Range	0 PPT to 70 PPT (parts per thousand)					
	Resolution	0.1 PPT					
	Precision	±3 PPT					
TDS (total dissolved solid) measurement ● Conversion coefficient setting	Measurement method	Electrical conductivity conversion	✓	✓	✓	✓	✓
	Range	0 g/L to 100 g/L					
	Resolution	0.1% of full-scale					
	Repeatability	±2 g/L					
	Precision	±5 g/L					
Seawater specific gravity measurement ● σt, σ0, σ15 display	Measurement method	Electrical conductivity conversion	✓	✓	✓	✓	✓
	Range	0 σt to 50 σt					
	Resolution	0.1 σt					
	Precision	±5 σt					

Specification		Basic value	Model				
			U-51	U-52	U-52G	U-53	U-53G
Temperature measurement	Measurement method	Platinum temperature sensor	✓	✓	✓	✓	✓
	Range	−10°C to 55°C					
	Resolution	0.01°C					
	Sensor	Platinum temperature sensor, JIS Class B (0.3 + 0.005 |t|)					
Turbidity measurement	Measurement method		–	LED forward 30° transmission/ scattering method		Tungsten lamp 90° transmission scattering method	
	Range			0 NTU to 800 NTU		0 NTU to 1000 NTU	
	Resolution			0.1 NTU		0.01 NTU	
	Precision*2			±5%of readout or ±1 NTU, whichever is larger		● ±0.5NTU (for 0 NTU to 10 NTU measurement range) ● 3% of readout or 1 NTU, whichever is larger (for 10 NTU to 1000 NTU measurement range)	
	Turbidity sensor wiper			–		✓	
Water depth measurement	Measurement method	Pressure method	–	–	✓	✓	✓
	Range	0 m to 30 m					
	Resolution	0.05 m					
	Precision*2	±0.3 m					
ORP (oxidation reduction potential) measurement	Measurement method	Platinum electrode method	✓	✓	✓	✓	✓
	Range	−2000 ～ +2000 mV					
	Resolution	1 mV					
	Precision*2	±15 mV					

*1: Battery life is estimated under following conditions.
- Continuous operation
- Using batteries: C-size alkaline dry cells
- Ambient temperature of the control unit: 20°C or more
- Backlight off

*2: The precision is defined by measuring the standard solution in the following cases.
- Turbidity and conductivity: after four point calibration
- pH and DO: after two point calibration
- Water depth and ORP: after one point calibration

*3: Metallic parts are made of stainless steel. Immersing in seawater may erode metallic parts.

6 Reference

6.1 Consumable parts

● Sensor

Name	Model	No.	Description
pH sensor	#7112	3014057312	Standard type pH sensor
pH sensor ToupH	#7113	3200170923	Tough glass type pH sensor
ORP sensor	#7313	3200170920	
DO sensor	#7543	3200170924	
Reference electrode	#7210	3200043582	
R bush unit	—	3200043587	Reference electrode liquid junction
TURB cell U-52	#7800	3200172803	For U-52/U-52G
TURB cell U-53	#7801	3200172800	For U-53/U-53G
Membrane cap	—	3200170194	For DO sensor

● Standard solution and inner solution

Name	Model	No.	Description
pH 4 (For automatic calibration) 500 mL	#100-4	3200043638	Standard solution for auto calibration. Also used for manual pH span calibration.
pH 4 (For automatic calibration) 4 L	#140-4	3200174430	
pH 7 500 mL	#100-7	3200043637	Standard solution for pH zero-point calibration.
pH 9 500 mL	#100-9	3200043636	Standard solution for pH manual span calibration.
Powder for ORP standard solution 10 packs	#160-51	3200043618	For ORP calibration.
Powder for ORP standard solution 10 packs	#160-22	3200043617	
Inner solution for DO sensor, 50 mL	#306	3200170938	Internal solution for DO sensor.
Internal solution for pH, 250 mL	#330	3200043641	Supplementary internal solution for pH reference electrode.

● Others

Name	Model	No.	Description
Silicone grease	—	3014017718	Silicone grease for coating sensor O-ring.
Sponge brush unit	—	3200169531	Brush for cleaning sensor probe.
O-ring set for reference electrode	—	3200169376	O-rings for reference electrode.
O-ring set for DO sensor	—	3200169426	O-rings for DO sensor.
Rubber cap set for sensor guard	—	3200169428	Rubber caps used between sensor guard and sensor probe.
O-ring set for pH and ORP sensor	—	3200169520	O-rings for pH and ORP sensors.
Wiper unit	—	3200169789	Rubber wiper for U-53/U-53G turbidity sensors.
Protective cap (blk) for pH sensor	—	3200175019	Cap attached to tip of pH sensor for sensor probe storage.
Rubber cap (whit) for DO sensor	—	3200175020	Cap attached to tip of DO sensor for sensor probe storage.

6.2 Options sold separately

Name	Model	No.	Description
Bag	U-5030	3200174772	Storage bag for sensor probes and flow cell. Can be carried in one hand.
Flow cell assy	—	3200156570	Used when collecting measurement samples by pump.
Probe guard	—	3200167002	Used for taking measurements in locations where there is a current or where there is a thick layer of sludge.
Communication cable	—	3200174823	A PC connection cable. Comes with data collection software.

6.3 pH measurement

6.3.1 Principle of pH measurement

U-50 series use the glass electrode method for pH measurements. The glass electrode method measures a potential difference between the glass film for pH and the reference electrode. For more information, refer to “JIS Z 8802 pH measurement method”.

6.3.2 Temperature compensation

The electromotive force generated by the glass electrode changes depending on the temperature of the solution.

Temperature compensation is used to compensate for the change in electromotive force caused by temperature.

This function does not compensate the change in pH caused by the temperature of the solution. When pH is to be measured, the temperature of the solution must be recorded along with that pH value, even if a pH meter has automatic temperature compensation function. If the solution temperature is not recorded, the results of the pH measurement may be meaningless.

6.3.3 Standard solutions

When measuring pH, the pH meter must be calibrated using standard solution. There are five kinds of standard solutions specified in “JIS Z 8802 pH measurement”. For normal measurement, two of standard solutions with pH of 4, 7, and 9 are sufficient to accurately calibrate the meter.

For standard solutions, refer to “JIS Z 8802 pH measurement”.

pH 4 standard solution: (Phthalate)	0.05 mol/L potassium hydrogen phthalate aqueous solution
pH 7 standard solutio: (Neutral phosphate)	0.025 mol/L potassium dihydrogenphosphate, 0.025 mol/L disodium hydrogenphosphate aqueous solution
pH 9 standard solution: (Borate)	0.01 mol/L sodium tetraborate aqueous solution

Table 2 pH values of pH standard solutions at various temperatures settings

Temp. (℃)	pH 4 standard solution Phthalate	pH 7 standard solution Neutral phosphate	pH 9 standard solution Borate
0	4.01	6.98	9.46
5	4.01	6.95	9.39
10	4.00	6.92	9.33
15	4.00	6.90	9.27
20	4.00	6.88	9.22
25	4.01	6.86	9.18
30	4.01	6.85	9.14
35	4.02	6.84	9.10
40	4.03	6.84	9.07
45	4.04	6.84	9.04

6.4 DO measurement

6.4.1 Principle of DO measurement

Dissolved oxygen (DO) refers to the amount of oxygen that is contained in water.
The concentration of dissolved oxygen is generally given as mg/L or as a percentage value (the dissolved oxygen saturation ratio).
Dissolved oxygen is essential for maintaining the self-purifying ability of rivers and seas and also for fish to live. The concentration of dissolved oxygen acts as an indicator of water quality. It is often measured when processing waste water and managing water quality. Fig. 1 provides an overview of the principles behind dissolved oxygen sensor measurement.

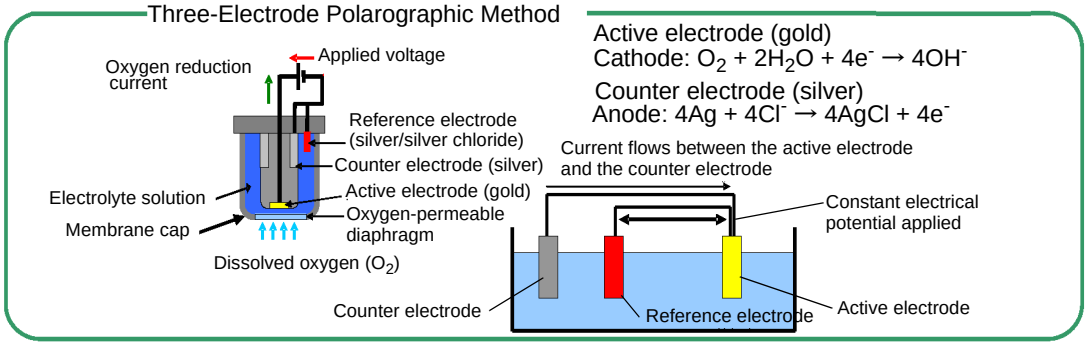


Fig. 1 Overview of principles behind dissolved oxygen sensor

The polarographic oxygen sensor is an enclosed sensor wherein voltage is applied to a cathode made of a precious metal (such as gold or platinum) and an anode also made of a precious metal (such as silver) via an external circuit, and a cap with an oxygen permeable diaphragm (membrane) is filled with electrolyte solution. As indicated in Fig. 1, the concentration of dissolved oxygen can be measured by measuring the current proportional to the amount of reduced oxygen when oxygen that has dispersed through the oxygen permeable diaphragm produces a reductive reaction on the surface of the active electrode (gold). The method of measuring dissolved oxygen based on the above principle is called the Membrane Electrode Method. Compared to the Chemical Analysis Method, which requires complicated pre-processing to alleviate the effect of reduced materials and oxidizing materials, this method allows dissolved oxygen to be measured very easily. It is also easy to remove undesired buildup from the silver electrode by polishing and cleaning if an insulator forms on it due to oxidation, making the method reusable.

6.4.2 Salinity calibration

When the solution and air come into contact and form an equilibrium (i.e. saturation), the relationship between the concentration of dissolved oxygen in the solution, C, [mol/L], and the partial pressure of oxygen in the air, Ps, [MPa/(mg/L)], can be represented by the following formula:

$$C = Ps/H$$

Where H [MPa/(mg/L)] is the Henry constant, a value that changes according to the composition of the solution. As H typically becomes larger as the salinity of the water increases, C becomes smaller.

The DO sensor detects the partial pressure of oxygen (Ps) in the above formula. Accordingly, if the DO sensor is immersed in deionized water saturated with air, or in an aqueous solution containing salt, the output current does not change, resulting in an erroneous measurement. For example, when salt is added to a sample, the amount of oxygen that can be dissolved in the solution decreases, but because the partial pressure of oxygen does not change, the value displayed by the control unit stays the same regardless of salt content. This concept is indicated in graph form below. (Fig. 2)

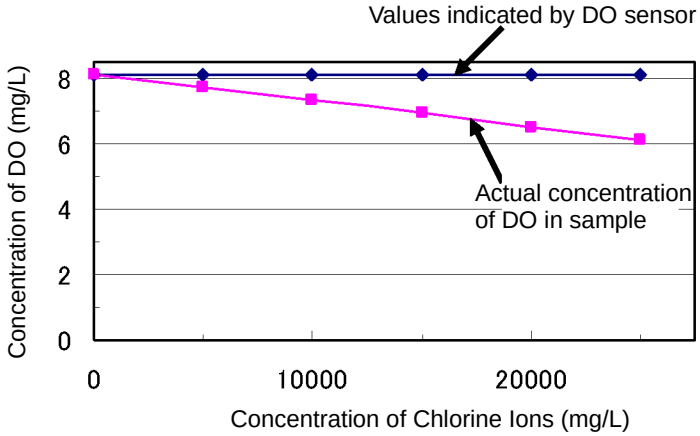


Fig. 2 Relationship between chlorine ion concentration and dissolved oxygen concentration

In samples with a high salt concentration, the solubility of oxygen is lower, but as the partial pressure of oxygen does not change, the value actually indicated on the control unit is higher than the actual value. In order to obtain a measurement of the concentration of dissolved oxygen in an aqueous solution that contains salt, it is therefore necessary to first perform salinity compensation. Conventionally, dissolved oxygen sensors have performed salinity compensation by inputting the salinity of the sample. This is fine as long as the salinity is already known. However, in most cases salinity is unknown, so even if dissolved oxygen sensors contained a salinity compensation function, it was of no practical use.

The U-50 Series can calculate and measure salinity in samples from electrical conductivity values, and can thus be used to automatically compensate for salinity.

6.5 Conductivity (COND) measurement

6.5.1 Four-AC-electrode method

Conductivity is an index of the flow of electrical current in a substance.

Salts dissolved in water are separated into cations and anions. Such solution is called electrolytic solution.

Electrolytic solution has the property of allowing the flow of current according to Ohm's law. This property is referred

to as ionic conductivity, since current flow is caused by ion movement in electrolytic solution.

Metals, on the other hand, allow the flow of current by means of electrons. This property is called electronic conductivity,

which is distinguished from ionic conductivity.

A cube with 1 m on each side, as shown in Fig. 3, is used to demonstrate an electrolytic solution. Two electrode plates are placed on opposite sides, and the cube is filled with solution. If the resistance between these two electrode plates is represented by r(Ω), the conductivity of the solution L($S \cdot m^{-1}$) is represented as L=1/r. S stands for Siemens, a unit of measurement of conductance.

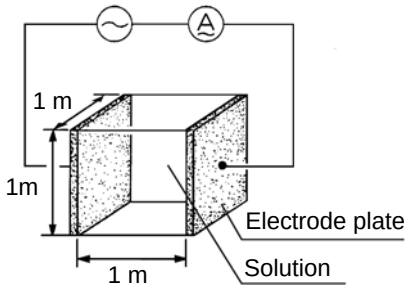


Fig. 3 Definition of conductivity

The most general method for measuring conductivity is based on the above principle, and is called the 2-electrode method.

In the 2-electrode method the influence of polarization cannot be ignored for solutions with high conductivity and conductivity cannot be measure accurately. In addition, contamination on the surface of the electrode increases apparent resistance, resulting in inaccurate measurement of conductivity.

The U-50 series has adopted the 4-electrode method to overcome these disadvantages of the the 2-electrode method.

As shown in Fig. 4, the U-50 series uses two voltage-detecting electrodes and two voltage-applying electrodes, for a total of four electrodes. The voltage-detecting electrodes are for detecting AC voltage, and the voltage-applying electrodes are for applying AC voltage.

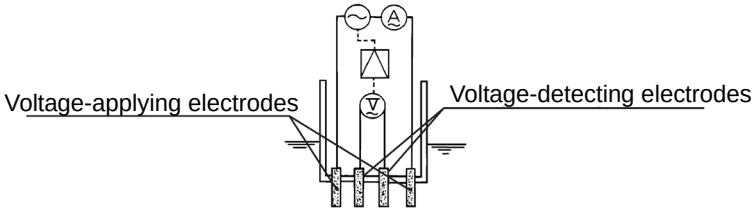


Fig. 4 Principle of the 4-electrode method

Let us assume that the current, I(A), flows in a sample of conductivity L – under automatic control of the voltage-applying electrodes – so that the voltage at the voltage-detecting-electrodes, E(V), remains constant at all times.

Then, the resistance of the sample, R(Ω), across the voltage-detecting electrodes is represented as R=E/I. The resistance, R, of the sample is inversely proportional to its conductivity, L. Accordingly, a measurement of current, Is,

of a standard solution of known conductivity, Ls, enables calculation of conductivity of a sample according to the formula L = Ls (I/Is) from the ratio L : Ls = I : Is.

Even in the 4-electrode method, polarization occurs, since AC current flows in the voltage-applying electrodes. The voltage-detecting electrodes are, however, free from the effects of polarization, since they are separated from the voltage-applying electrodes, and furthermore, current flow is negligible. Therefore, the 4-electrode method is an excellent method to enable measurement of conductivity covering a very high range.

6.5.2 SI units

New measurement units, called SI units, have been in use from 1996. Accordingly, the U-50 series also uses SI units. The following conversion table is provided for people who use the conventional kind of conductivity meter.

Note that along with the change in unit systems, the measurement values and cell counts have also changed.

	Former units	→	SI unit
Measurement value	0.1 mS/cm	→	0.01 S/m
	1 mS/cm	→	0.1 S/m
	100 mS/cm	→	10 S/m

6.5.3 Temperature coefficient

In general, the conductivity of a solution varies largely with its temperature.

The conductivity of a solution depends on the ionic conductivity, described earlier. As the temperature rises, conductivity becomes higher since the movement of the ions becomes more active.

The temperature coefficient shows the change in % of conductivity per °C, with a certain temperature taken as the reference temperature. This is expressed in units of %/°C. The temperature coefficient assumes the premise that the conductivity of a sample changes linearly according to temperature.

Strictly speaking, with actual samples, however, conductivity changes along a curve. Furthermore, the cuve varies with the type of sample. In the ranges of smaller temperature changes, however, samples are said to have the temperature coefficient of 2%/°C (at reference temperature 25°C); this holds for most samples, except in certain special cases.

(The temperature coefficients for various types of solutions are listed on the next page.)

The U-50 series uses an automatic temperature conversion function to calculate conductivity at 25°C at a temperature

coefficient of 2 %/°C based on the measured value of the temperature. Results are displayed on the readout.

The U-50 series's temperature conversion function is based on the following formula.

$L_{25} = L_t / \{ 1 + K (t - 25) \}$

L_{25} : Conductivity of solution converted to 25°C

t : Temperature of solution at time of measurement (°C)

L_t : Conductivity of solution at t (°C)

K : Temperature coefficient (%/°C)

● Conductivity and temperature coefficient for various solutions

Conductivity and related temperature coefficients of representative substances (at 25°C) are shown in the table below.

Substance	Temp. (ºC)	Conc. (wt%)	Cond. (S/m)	Temp.coef. (%/°C)	Substance	Temp. (ºC)	Conc. (wt%)	Cond. (S/m)	Temp.coef. (%/°C)
NaOH	15	5	19.69	2.01	NaCl	18	5	6.72	2.17
		10	31.24	2.17			10	12.11	2.14
		15	34.63	2.49			15	16.42	2.12
		20	32.70	2.99			20	19.57	2.16
		30	20.22	4.50			25	21.35	2.27
		40	11.64	6.48	Na_2SO_4	18	5	4.09	2.36
KOH	15	25.2	54.03	2.09			10	6.87	2.49
		29.4	54.34	2.21			15	8.86	2.56
		33.6	52.21	2.36	Na_2CO_3	18	5	4.56	2.52
		42	42.12	2.83			10	7.05	2.71
NH_3	15	0.1	0.0251	2.46			15	8.36	2.94
		1.6	0.0867	2.38	KCl	18	5	6.90	2.01
		4.01	0.1095	2.50			10	13.59	1.88
		8.03	0.1038	2.62			15	20.20	1.79
		16.15	0.0632	3.01			20	26.77	1.68
HF	18	1.5	1.98	7.20			21	28.10	1.66
		4.8	5.93	6.66	KBr	15	5	4.65	2.06
		24.5	28.32	5.83			10	9.28	1.94
HCl	18	5	39.48	1.58			20	19.07	1.77
		10	63.02	1.56	KCN	15	3.25	5.07	2.07
		20	76.15	1.54			6.5	10.26	1.93
		30	66.20	1.52			—	—	—
H_2S0_4	18	5	20.85	1.21	NH_4Cl	18	5	9.18	1.98
		10	39.15	1.28			10	17.76	1.86
		20	65.27	1.45			15	25.86	1.71
		40	68.00	1.78			20	33.65	1.61
		50	54.05	1.93			25	40.25	1.54
		60	37.26	2.13	NH_4NO_3	15	5	5.90	2.03
		80	11.05	3.49			10	11.17	1.94
		100.14	1.87	0.30			30	28.41	1.68
		—	—	—			50	36.22	1.56
HNO_3	18	6.2	31.23	1.47	$CuSO_4$	18	2.5	10.90	2.13
		12.4	54.18	1.42			5	18.90	2.16
		31	78.19	1.39			10	32.00	2.18
		49.6	63.41	1.57			15	42.10	2.31
		62	49.64	1.57	CH_3COOH	18	10	15.26	1.69
H_3PO_4	15	10	5.66	1.04			15	16.19	1.74
		20	11.29	1.14			20	16.05	1.79
		40	20.70	1.50			30	14.01	1.86
		45	20.87	1.61			40	10.81	1.96
		50	20.73	1.74			60	4.56	2.06

6.6 Salinity (SAL) conversion

The U-50 series is designed to calculate salinity as well as the other parameters.

Note that the “salinity” here is the salinity of sea water. There is a constant relation between conductivity and salinity at certain temperatures.

Therefore, if data on the conductivity and temperature are available, the corresponding salinity can be known. In other words, the salinity measurement of the U-50 series is based on the principle of calculating the salt content, making use of the measured values of conductivity and temperature.

Note therefore, that measured results of all substances whose conductivity is detected are displayed as salinity. For example, the measured result is displayed as NaCl concentration, even if in fact the sample component is, hydrochloric acid (HCl).

6.7 TDS conversion

TDS is short for Total Dissolved Solids and means the total dissolved solid amount.

The conductivity of a solution is affected by the amount of salinity, minerals, and dissolved gases. That is, conductivity is an index that shows the total amount of all substances in the solution. Of these substances, TDS indicates only the amount of dissolved solids.

TDS can be used for a comparison of the state of substances composed of a single component such as NaCl. However, the use of TDS for the comparison of solutions of different types causes serious errors.

Conductivity and TDS are expressed by the following formulas.

Conductivity in SI units (S/m) ..... TDS(g/L) = L (S/m) $\times$ K $\times$ 10

TDS(g/L) = L (mS/m) $\times$ K $\div$ 100

Conductivity in the old units (mS/cm) ..... TDS(g/L) = L (mS/cm)$\times$ K

K = TDS coefficient

Initial settings use the values listed in the table (Page 80) that generally uses TDS coefficients.

For accurate TDS comparisons, find the TDS coefficient from measured conductivity values. Then set the value thus obtained and make measurements.

6.8 σt conversion

- **Specific gravity of seawater**

The density and specific gravity of seawater are equal numerically and generally are not distinguished strictly. Since seawater density ρ is between 1.000 and 1.031, 1 is subtracted from ρ and σ is obtained by multiplying the value by 1000.

The resultant value is used as the specific gravity of seawater.

$\sigma = (\rho - 1) \times 1000$

The density of seawater ρ is expressed by function of temperature, hydraulic pressure, and salinity. The density of seawater under the atmospheric pressure is expressed as σ_t. The density of seawater under the atmospheric pressure is determined by temperature and salinity.

The U-50 Series models make salinity measurement through temperature measurements and conductivity conversion and find σ_t through calculations.

In Japan σ_{15} at 15°C is called a standard specific gravity and widely used while in foreign countries σ_0 at 0°C is employed. σ_{15} and σ_0 are determined by the function of salinity.

In ocean surveys, in particular, these values σ_t, σ_{15}, and σ_0 are more widely used than conductivity and salinity and, in the U-50 Series models, newly added as measurement components.

6.9 Turbidity (TURB) measurement

6.9.1 Principle of turbidity measurement

U-52 and U-53 sensors measure turbidity using the Transmitting and Scattering Method shown in Fig. 5. U-52 sensors use a pulse light LED (infra-red emitting diode) as a light source, and detect scattered light from a 30° angle off center. U-53 sensors use a tungsten lamp as a light source and detect scattered light from a 90° angle. Both models display turbidity as a ratio of scattered light to transmitted light to reduce the affect of the color of the sample. The U-53 method conforms to EPA Method 180.1, and employs wipers to reduce the affect of air bubbles.

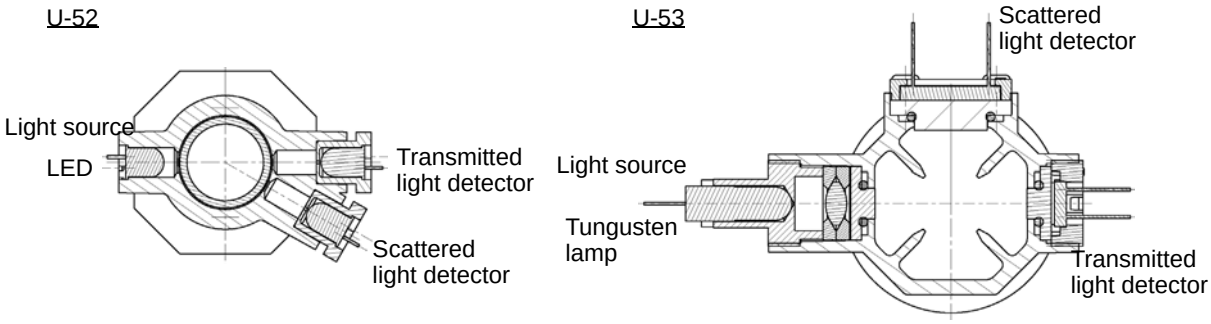


Fig. 5 Turbidity cell

6.9.2 Standard solution

U-50 series can perform calibration using formazin (NTU) or kaolin standard solutions as a turbidity standard solution. However, units for the solution used for calibration should be displayed in measurements. Do not use more than 400 mg/L of kaolin standard solution because it increases precipitation speed, resulting in measurement error.

6.10 Depth (DEPTH) measurement

6.10.1 Principle of depth measurement

For the W-22XD and W-23XD models, depth measurement can be made through use of a pressure gauge. The principle of the depth measurement uses the relation between depth and pressure.

Although the measurement with the depth sensor is affected by atmospheric pressure, the depth sensor, however, makes zero-point adjustments through the automatic calibration before measurements.

6.10.2 Influence of temperature and calibration

The depth sensor depends greatly on temperature. For a wide difference between the temperature at which the sensor has been automatically calibrated and the temperature of the measurement sample, the sensor can make depth measurements with a higher accuracy by the following method:

1. **Immerse the depth sensor of the sensor probe in the sample.**
2. **Keep the sensor immersed in the sample for about 30 minutes until the temperatures of the sensor and the sample are the same.**
3. **Then make the zero calibration of the sensor manually.**

6.11 Oxidation reduction potential (ORP) measurement

6.11.1 Principle of ORP measurement

ORP is an abbreviation for oxidation-reduction potential. ORP is the energy level (potential) determined according to the state of equilibrium between the oxidants (M^{Z+}) and reductants $M^{(Z-N)+}$ that coexist within a solution.

$$M^{Z+} + ne^- \Leftrightarrow M^{(Z-N)+} \quad \cdots (1)$$

If only the solution, forming the ORP measuring system shown in Fig. 6. The difference of potential between two electrodes is generally expressed by the following equation.

$$E = E_0 - \frac{RT}{nF} \ln \frac{a_M{}^{(z-n)+}}{a_M{}^{z+}} \quad \cdots (2)$$

E: Electric potential E_0 : Constant R: Gas constant T : Absolute temperature
n: Electron count F : Faraday constant a : Activity

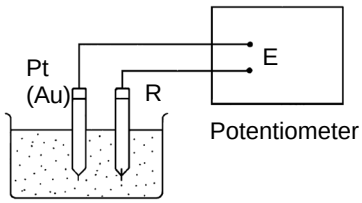


Fig. 6 Measuring mV

For example, for a solution in which trivalent iron ions coexist with bivalent iron ions, equations 1 and 2 would be as follows.

$$Fe^{3+} + e^- \Leftrightarrow Fe^{2+} \quad \cdots (1)$$

$$E = E_0 - \frac{RT}{F} \ln \frac{a_{Fe}{}^{2+}}{a_{Fe}{}^{3+}} \quad \cdots (2)$$

When only one type of state of equilibrium uniquely by equation (Fe^{3+}) and the reductant (Fe^{2+}) (using the equation $a_{Fe}{}^{2+}/ a_{Fe}{}^{3+}$). Actually, however many kinds of states of equilibrium exist simultaneously between various kinds of ions, in most solutions. This means that under actual circumstances, ORP cannot be expressed using the simple equation shown above and that the physical and chemical significance with respect to the solution is not very clear.
In this respect, the value of ORP must be understood to be only one indicator of the property of a solution. The measurement of ORP is widely used, however, as an important index in the analysis of solutions (potentiometric titration) and in the waste water treatment.

6.11.2 Standard electrode (reference electrode) types and ORP

The ORP is obtained comparing with corresponding reference electrode employed.
If different kinds of reference electrodes are used for measurement, the ORP value of the same solution may appear to be different. HORIBA's reference electrode uses Ag/AgCl with 3.33 mol/L KCl as inner solution. According to general technical literature, normal hydrogen electrodes (N.H.E.) are often used as the standard electrode.
The relationship between N.H.E. and the ORP that is measured using an Ag/AgCl with 3.33 mol/L KCl electrode is expressed by the following equation.
$E_{N.H.E.} = E + 206 - 0.7(t - 25)$ mV t = 0 - 60°C
$E_{N.H.E.}$: Measured ORP value using N.H.E. as the reference electrode

E: Measured ORP value using Ag/AgCl with 3.33 mol/L KCl as the reference electrode
Potential sign
Standard ORP is expressed in the following way, in literature related to electrochemistry and analytical chemistry.

A $Li^{+} + e^{-} \rightarrow Li$
$E_0 = -3.024$ V VS N.H.E.

However, in some literature, the "+" and "-" signs are reversed.

B $Li \rightarrow Li^{+} + e^{-}$
$E_0 = +3.024$ V VS N.H.E.

In expressions like B, above, the reaction is just reversed and there is no essential difference. But this kind of expression does invite confusion. The majority of the world, today, is consistent in its use of the signs as they are used in A, above.
For this reason, HORIBA, too, uses signs concerning ORP that are consistent with A, above.

HORIBA, Ltd.
2 Miyanohigashi, Kisshoin Minami-ku, Kyoto 601-8510 Japan
http://www.horiba.com

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DYNAMIC EARTH

Appendix H
Historical Environmental Documents

GEO-TECHNOLOGY ASSOCIATES, INC.

GEOTECHNICAL AND
ENVIRONMENTAL CONSULTANTS

A Practicing GBA Member Firm

MEMORANDUM

Environmental Conditions
OLD ORCHARD COUNTRY CLUB
54 Monmouth Road
Eatontown and West Long Branch Borough
Monmouth County, New Jersey

August 23, 2021

At NVR's request, GTA has prepared this Environmental Conditions Memorandum for Old Orchard Country Club. The Memorandum addresses certain environmental considerations for the planned mixed residential and commercial use development that may be constructed on the Site.

Notes: The information contained in this Memorandum is provided to NVR for general informational purposes only. The information should be considered preliminary in nature, subject to changes, and additional environmental considerations may be discovered during due diligence. Except where described herein, this Memorandum is not intended to cover land use elements including, but not limited to, wetlands, flood hazard areas, endangered species, etc.

Site Description

The Site comprises Block 2701 Lots 2, 53, 60, 66, and 69 in Eatontown Borough, and Block 68 Lot 6 in West Long Branch Borough, Monmouth County, New Jersey. The approximately 116.07-acre Site contains Old Orchard Country Club with an 18-hole golf course and associated infrastructure, and a residence. Historically, the Site has contained the golf course, farm fields, and orchards from at least 1929. The combination of historic orchards and a golf course, both on which it is common to encounter historically applied pesticides (HAP), compounds the likelihood for impacted soils above the applicable regulatory standards.

Site Investigation

GTA performed a Site Investigation (SI) to assess potential environmental impacts from its historic agricultural and orchard use and golf course use, pursuant to the New Jersey Department of Environmental Protection (NJDEP; Department) *Historically Applied Pesticide Technical Guidance* (December 2018, Version 3.0). On May 19, 2021, GTA collected sixty-five (65) near-surface soil samples from the Site from golf course features (greens, fairways, and tee boxes), an equipment wash area and trench, and historic orchard use areas. Soil samples were laboratory analyzed for arsenic, lead and Target Compound List (TCL) pesticides. Soil samples collected from the greens, tees, equipment wash area and trench were also analyzed for mercury, which is commonly associated with some fungicides used for golf course turf management.

Soil analytical results were either not detected (ND) above the laboratory's reporting limits (RLs) or were below New Jersey's Residential Soil Remediation Standards (SRS), except for:

- Arsenic, lead, mercury, heptachlor epoxide and/or chlordane were detected in 10 of the 19 **greens** sampled at concentrations that exceed the Residential SRS.[1] Arsenic was detected at a concentration up to 308 mg/kg, compared to the 19 mg/kg standard.

- Dieldrin was detected in several of the 18 **tee boxes** sampled at concentrations that exceed the Residential SRS. Based on GTA's evaluation of the data set, compliance averaging and rounding to significant digits can be used to demonstrate attainment of the Residential SRS.

- Dieldrin was detected in 6 of the 18 **fairways** sampled at concentrations that exceed the Residential SRS. Arsenic was detected in 4 of the 18 **fairways** sampled at concentrations that exceed the Residential SRS. Based on GTA's evaluation of the data set, compliance averaging can be used to demonstrate attainment of the Residential SRS for arsenic, but <u>not</u> dieldrin.

- Heptachlor epoxide and chlordane were detected in the **trench area** sampled at concentrations that exceed the Residential SRS.

None of the other sample results from the SI exceeded the Residential SRS.

[1] One of the golf holes contains two non-contiguous putting greens.

Remedial Investigation

On July 12, 20, and 21, 2021, GTA performed a Remedial Investigation (RI) to further evaluate the horizontal and vertical extents of impacted soils on and near the greens, within the fairways, and near the trench. For each of the 10 greens where one or more contaminants were detected above the Residential SRS during the SI, GTA collected samples at 4 locations approximately 15 feet beyond the edge of the green. For each of the 6 fairways where dieldrin was detected above the Residential SRS during the SI, GTA collected samples at 7 additional locations spread across the fairway. GTA also collected several additional samples at the trench area. A summary of the RI findings is presented below.

Greens

The soil analytical data show chlordane-impacted soils are generally within the uppermost 12-inch soil horizon and do not extend further than 15 feet beyond the edge of the greens.

The data show that in most instances, arsenic was detected above the Residential and Non-Residential SRS of 19 mg/kg in the RI soil samples collected from the 12 to 18-inch depth interval and, therefore, vertical delineation is not complete. Similarly, the horizontal extents of arsenic-impacted soils within and near the greens has not been delineated.

On two greens, lead was detected above the Residential SRS in the RI soil sample collected from the 12 to 18-inch depth interval. On one green mercury was detected above the Residential SRS in the RI soil sample collected from the 12 to 18-inch depth interval.

The soil analytical data show the lead and mercury impacted soils above the Residential SRS do not extend further than 15 feet beyond the edge of the greens.

Data for deeper samples GTA collected within and near the greens are pending.

Fairways

The soil analytical data show widespread dieldrin-impacted soils above the Residential SRS, and in some instances above the Non-Residential SRS, within the 6 fairways sampled during the RI phase. Some of the soil analytical results exceed the Residential SRS for dieldrin by a factor of 8 times to more than 10 times the standard. The RI data suggest there is a likelihood that dieldrin-impacted soils occur on some or all of the remaining 12 fairways on which no sampling was performed beyond the initial soil sample collected during the SI phase.

The data show dieldrin-impacted soils are generally limited to the uppermost 12 to 18-inch soil horizon.

The extents of dieldrin-impacted soils beyond the edge of the fairways (i.e., within the rough) have not been evaluated.

Trench Area – The soil analytical data show that chlordane was detected above the Residential SRS in a deeper sample collected from the 24 to 30-inch depth interval, and in the uppermost 6-inch soil horizon in some of the horizontal delineation samples.

GTA will provide drawings that show the soil sample locations and soil analytical data for the greens, fairways, and trench area, for the contaminants of concern.

Proposed Construction

GTA understands a mixed-use development may be constructed on the Site, with a residential component generally on the central and northern portions of the Site and a commercial component on southern portions of the Site near Route 36.

Ecological Considerations

NJDEP provides technical guidance on how to conduct an Ecological Evaluation (EE) and an Ecological Risk Assessment (ERA) pursuant to N.J.A.C. 7:26E-1.16 and N.J.A.C. 7:26E-4.8 for environmentally sensitive natural resources (ESNR) associated with contaminated sites. The EE is conducted to examine the site for the co-occurrence of the following: (1) ESNRs on, adjacent to, or potentially impacted by the site, (2) the presence of Contaminants of Potential Ecological Concern (COPEC) at the site or Area of Concern (AOC) and in the ESNRs, and (3) the presence of a contaminant migration pathway (historic or current) from the site to the ESNR or evidence of contaminated material having been placed directly into an ESNR. The outcome of the EE will be a recommendation either to conduct an ERA or no further ecological evaluation.

Remedial Alternatives

Remedial alternatives for the pesticide-impacted soils may include soil blending, consolidation and capping on site, and/or excavation and off-site disposal, or a combination thereof. GTA believes that based on the concentrations of the contaminants in the samples collected to date, it is unlikely that soil blending will be a viable alternative in some or all of the affected areas.

Some, but not all, of the variables that may affect the practicability of the remedial alternatives include:

- Horizontal and vertical extents of the contaminants of concern;
- Concentrations of the contaminants of concern;
- Volume of soil impacted by one or more contaminants of concern;
- Outcome of the EE and ERA (if necessary);
- Site grading and development plans; and
- Remedial costs.

Proposed Next Steps and Timeline

GTA recommends the following next steps to help develop a conceptual site model (CSM) and costs for site remediation:

- Collect soil samples for dieldrin analysis at the 12 fairways within which only one sample was previously collected (during the initial SI phase).
- Collect soil samples beyond the edge of the fairways to evaluate the horizontal extents of dieldrin-impacted soils.
- Obtain soil analytical data from the greens to assess the vertical extents of arsenic, lead, and mercury-impacted soils. Laboratory data for deeper samples GTA previously collected are pending.
- Collect soil samples to further evaluate the horizontal extents of arsenic-impacted soils near the greens, and to also evaluate if some of the arsenic may be naturally occurring on the Site.
- Collect additional soil samples for chlordane analysis near the trench area, since the horizontal and vertical extents of the chlordane-impacted soils have not been determined.
- Perform the initial EE and determine if an ERA will be necessary.

GTA anticipates these tasks can be performed within an approximate 90-day timeframe, excluding an ERA (if necessary).



GTA
14 Worlds Fair Drive, Suite A
Somerset, New Jersey 08873
(732) 271-9301
fax (732) 271-9306
GEO-TECHNOLOGY ASSOCIATES, INC.

SOIL BORING LOCATION PLAN

Note: Site boundary and sample locations are approximate.

Old Orchard Country Club
54 Monmouth Road
Borough of Eatontown
Monmouth County, New Jersey

1 " = 300 '	AUG 2021	PROJECT #: 210724	SOURCE: NJOGIS, USDA-FPAC-BC (2019)

LEGEND

Initial Samples

- G-6 — Initial Green Sample
- F-4 — Initial Fairway Sample
- Trench-1 — Initial Trench Sample

RI Investigation Samples

- G-6-1 — RI Green Sample
- F-4-1 — RI Fairway Sample
- Trench-2 — RI Trench Sample
- Site Boundary
- Trench



LEGEND

- Site Boundary
- Wash Area
- Trench
- Historic Orchard Areas

Soil Sample Locations

G-1 to G-19	Greens
T-1 to T-18	Tee Boxes
F-1 to F-18	Fairways
O-1 to O-6	Historic Orchard
WA-1 to WA-3	Wash Area
Trench-1	Trench

GTA
14 Worlds Fair Drive, Suite A
Somerset, New Jersey 08873
(732) 271-9301
fax (732) 271-9306
GEO-TECHNOLOGY ASSOCIATES, INC.

SOIL SAMPLE LOCATION PLAN

Note: Site boundary and sample locations are approximate.

Old Orchard Country Club
54 Monmouth Road
Borough of Eatontown
Monmouth County, New Jersey

1 " = 300 '	MAY 2021	PROJECT #: 210724	SOURCE: NJOGIS, USDA-FPAC-BC (2019)

TABLE 1: SOIL ANALYTICAL RESULTS
OLD ORCHARD COUNTRY CLUB
54 MONMOUTH ROAD
MONMOUTH COUNTY, NEW JERSEY

SAMPLE ID:	NJDEP Residential Soil Remediation Standards	G-1			G-2			G-3			G-4			G-5		
LAB ID:		L2126518-10			L2126518-13			L2126518-16			L2126518-20			L2126518-23		
COLLECTION DATE:		5/19/2021			5/19/2021			5/19/2021			5/19/2021			5/19/2021		
SAMPLE DEPTH:		(0-0.5')			(0-0.5')			(0-0.5')			(0-0.5')			(0-0.5')		
SAMPLE MATRIX:		SOIL			SOIL			SOIL			SOIL			SOIL		
ANALYTE	**(mg/kg)**	**Conc**	**Q**	**RL**	**Conc**	**Q**	**RL**	**Conc**	**Q**	**RL**	**Conc**	**Q**	**RL**	**Conc**	**Q**	**RL**
PESTICIDES																
Delta-BHC	NC	ND		0.00222	ND		0.00226	ND		0.00223	ND		0.00235	ND		0.00192
Lindane	0.57	ND		0.00092	ND		0.00094	ND		0.00092	ND		0.00098	ND		0.0008
Alpha-BHC	0.086	ND		0.00092	ND		0.00094	ND		0.00092	ND		0.00098	ND		0.0008
Beta-BHC	0.3	ND		0.00222	ND		0.00226	ND		0.00223	ND		0.00235	ND		0.00192
Heptachlor	0.15	ND		0.00111	ND		0.00113	ND		0.00111	ND		0.00118	ND		0.00096
Aldrin	0.041	ND		0.00222	ND		0.00226	ND		0.00223	ND		0.00235	ND		0.00192
Heptachlor epoxide	0.076	0.0218		0.00417	ND		0.00423	0.00569		0.00418	ND		0.00441	0.0203		0.0036
Endrin	19	ND		0.00092	ND		0.00094	ND		0.00092	ND		0.00098	ND		0.0008
Endrin aldehyde	NC	ND		0.00278	ND		0.00282	ND		0.00278	ND		0.00294	ND		0.0024
Endrin ketone	NC	ND		0.00222	ND		0.00226	ND		0.00223	ND		0.00235	ND		0.00192
Dieldrin	0.034	0.00408		0.00139	ND		0.00141	0.0194		0.00139	ND		0.00147	ND		0.0012
4,4'-DDE	2	0.0319		0.00222	0.00917	P	0.00226	0.0149		0.00223	0.00452		0.00235	0.0135		0.00192
4,4'-DDD	2.3	0.00434		0.00222	ND		0.00226	0.00381		0.00223	ND		0.00235	ND		0.00192
4,4'-DDT	1.9	0.0037	J	0.00417	ND		0.00423	ND		0.00418	ND		0.00441	0.00869		0.0036
Endosulfan I	NC	ND		0.00222	ND		0.00226	ND		0.00223	ND		0.00235	ND		0.00192
Endosulfan II	NC	ND		0.00222	ND		0.00226	ND		0.00223	ND		0.00235	ND		0.00192
Endosulfan (I and II)	470	ND		0.00222	ND		0.00226	ND		0.00223	ND		0.00235	ND		0.00192
Endosulfan sulfate	470	ND		0.00092	ND		0.00094	ND		0.00092	ND		0.00098	ND		0.0008
Methoxychlor	320	ND		0.00417	ND		0.00423	ND		0.00418	ND		0.00441	ND		0.0036
Toxaphene	0.49	ND		0.0417	ND		0.0423	ND		0.0418	ND		0.0441	ND		0.036
Chlordane (cis and trans)	0.27	0.1045		0.0185	ND		0.0188	0.032		0.0186	ND		0.0196	0.1117		0.016
cis-Chlordane	NC	0.0608	IP	0.00278	ND		0.00282	0.0178	IP	0.00278	ND		0.00294	0.066	IP	0.0024
trans-Chlordane	NC	0.0437		0.00278	ND		0.00282	0.0142		0.00278	ND		0.00294	0.0457		0.0024
TOTAL METALS																
Arsenic, Total	19	12.7		0.576	2.36		0.562	4.88		0.584	1.14		0.566	1.42		0.47
Lead, Total	400	14.1		2.88	7.92		2.81	8.67		2.92	3.97		2.83	11.4		2.35
Mercury, Total	23	1.82		0.092	0.648		0.093	0.917		0.094	0.118		0.093	0.987		0.079

Notes:
Results reported in milligrams per kilogram (mg/kg) or parts per million
Exceedances (if any) are highlighted
ND = Not detected above laboratory's reporting limit (RL)
NA = Not analyzed
NC = No criteria
J = Estimated value, Concentration is below the RL but above the Method Detection Limit (MDL)
P = The relative percent difference (RPD) between the two columns exceeds the method-specified criteria
I = The lower value for the two columns has been reported due to obvious interference

TABLE 1: SOIL ANALYTICAL RESULTS
OLD ORCHARD COUNTRY CLUB
54 MONMOUTH ROAD
MONMOUTH COUNTY, NEW JERSEY

SAMPLE ID:	NJDEP Residential Soil Remediation Standards	G-6			G-7			G-8			G-9			G-10		
LAB ID:		L2126518-27			L2126518-30			L2126518-33			L2126518-36			L2126518-39		
COLLECTION DATE:		5/19/2021			5/19/2021			5/19/2021			5/19/2021			5/19/2021		
SAMPLE DEPTH:		(0-0.5')			(0-0.5')			(0-0.5')			(0-0.5')			(0-0.5')		
SAMPLE MATRIX:		SOIL			SOIL			SOIL			SOIL			SOIL		
ANALYTE	**(mg/kg)**	**Conc**	**Q**	**RL**	**Conc**	**Q**	**RL**	**Conc**	**Q**	**RL**	**Conc**	**Q**	**RL**	**Conc**	**Q**	**RL**
PESTICIDES																
Delta-BHC	NC	ND		0.0023	ND		0.00165	ND		0.00242	ND		0.00202	ND		0.0022
Lindane	0.57	ND		0.00095	ND		0.00068	ND		0.00101	ND		0.00084	ND		0.00091
Alpha-BHC	0.086	ND		0.00095	ND		0.00068	ND		0.00101	ND		0.00084	ND		0.00091
Beta-BHC	0.3	ND		0.0023	ND		0.00165	ND		0.00242	ND		0.00202	ND		0.0022
Heptachlor	0.15	ND		0.00115	ND		0.00082	ND		0.00121	ND		0.00101	ND		0.0011
Aldrin	0.041	ND		0.0023	ND		0.00165	ND		0.00242	ND		0.00202	ND		0.0022
Heptachlor epoxide	0.076	0.0277		0.00431	ND		0.0031	0.0173		0.00454	0.0939	P	0.00379	0.0564		0.00412
Endrin	19	ND		0.00095	ND		0.00068	ND		0.00101	ND		0.00084	ND		0.00091
Endrin aldehyde	NC	ND		0.00287	ND		0.00206	ND		0.00303	ND		0.00253	ND		0.00274
Endrin ketone	NC	ND		0.0023	ND		0.00165	ND		0.00242	ND		0.00202	ND		0.0022
Dieldrin	0.034	ND		0.00144	ND		0.00103	ND		0.00152	ND		0.00126	ND		0.00137
4,4'-DDE	2	0.438	P	0.0115	0.015		0.00165	0.0329		0.00242	0.798	P	0.0202	0.391		0.011
4,4'-DDD	2.3	0.0443	P	0.0023	0.00212		0.00165	0.00477		0.00242	0.0996	P	0.00202	0.0299		0.0022
4,4'-DDT	1.9	0.149	P	0.00431	0.00303	J	0.0031	ND		0.00454	0.459	P	0.0379	0.116	P	0.00412
Endosulfan I	NC	ND		0.0023	ND		0.00165	ND		0.00242	ND		0.00202	ND		0.0022
Endosulfan II	NC	ND		0.0023	ND		0.00165	ND		0.00242	ND		0.00202	ND		0.0022
Endosulfan (I and II)	470	ND		0.0023	ND		0.00165	ND		0.00242	ND		0.00202	ND		0.0022
Endosulfan sulfate	470	ND		0.00095	ND		0.00068	ND		0.00101	ND		0.00084	ND		0.00091
Methoxychlor	320	ND		0.00431	ND		0.0031	ND		0.00454	ND		0.00379	ND		0.00412
Toxaphene	0.49	ND		0.0431	ND		0.031	ND		0.0454	ND		0.0379	ND		0.0412
Chlordane (cis and trans)	0.27	0.1284		0.0192	ND		0.0138	0.1831		0.0202	0.338	P	0.168	0.457		0.0183
cis-Chlordane	NC	0.0698		0.00287	ND		0.00206	0.0977	IP	0.00303	0.187	IP	0.0253	0.338	P	0.0137
trans-Chlordane	NC	0.0586	P	0.00287	ND		0.00206	0.0854		0.00303	0.151	P	0.0253	0.119		0.00274
TOTAL METALS																
Arsenic, Total	19	60.9		0.607	4.98		0.414	9.61		0.631	122		0.507	61.2		0.566
Lead, Total	400	527		3.03	22		2.07	91.2		3.16	746		2.53	509		2.83
Mercury, Total	23	25		1.9	0.254		0.079	5.27		2.14	27.5		1.83	21.8		1.86

Notes:
Results reported in milligrams per kilogram (mg/kg) or parts per million
Exceedances (if any) are highlighted
ND = Not detected above laboratory's reporting limit (RL)
NA = Not analyzed
NC = No criteria
J = Estimated value, Concentration is below the RL but above the Method Detection Limit (MDL)
P = The relative percent difference (RPD) between the two columns exceeds the method-specified criteria
I = The lower value for the two columns has been reported due to obvious interference

TABLE 1: SOIL ANALYTICAL RESULTS
OLD ORCHARD COUNTRY CLUB
54 MONMOUTH ROAD
MONMOUTH COUNTY, NEW JERSEY

SAMPLE ID:	NJDEP Residential Soil Remediation Standards	G-11			G-12			G-13			G-14			G-15		
LAB ID:		L2126518-42			L2126518-45			L2126518-49			L2126518-52			L2126518-55		
COLLECTION DATE:		5/19/2021			5/19/2021			5/19/2021			5/19/2021			5/19/2021		
SAMPLE DEPTH:		(0-0.5')			(0-0.5')			(0-0.5')			(0-0.5')			(0-0.5')		
SAMPLE MATRIX:		SOIL			SOIL			SOIL			SOIL			SOIL		
ANALYTE	**(mg/kg)**	**Conc**	**Q**	**RL**	**Conc**	**Q**	**RL**	**Conc**	**Q**	**RL**	**Conc**	**Q**	**RL**	**Conc**	**Q**	**RL**
PESTICIDES																
Delta-BHC	NC	ND		0.00233	ND		0.00232	ND		0.00234	ND		0.00184	ND		0.00242
Lindane	0.57	ND		0.00097	ND		0.00096	ND		0.00097	ND		0.00076	ND		0.00101
Alpha-BHC	0.086	ND		0.00097	ND		0.00096	ND		0.00097	ND		0.00076	ND		0.00101
Beta-BHC	0.3	ND		0.00233	ND		0.00232	ND		0.00234	ND		0.00184	ND		0.00242
Heptachlor	0.15	ND		0.00116	ND		0.00116	ND		0.00117	ND		0.00092	ND		0.00121
Aldrin	0.041	ND		0.00233	ND		0.00232	ND		0.00234	ND		0.00184	ND		0.00242
Heptachlor epoxide	0.076	0.0635		0.00437	0.103		0.00434	0.0498		0.0044	0.00236	J	0.00345	0.0842	P	0.00453
Endrin	19	ND		0.00097	ND		0.00096	ND		0.00097	ND		0.00076	ND		0.00101
Endrin aldehyde	NC	ND		0.00291	ND		0.00289	ND		0.00293	ND		0.0023	ND		0.00302
Endrin ketone	NC	ND		0.00233	ND		0.00232	ND		0.00234	ND		0.00184	ND		0.00242
Dieldrin	0.034	0.0298		0.00146	ND		0.00145	ND		0.00146	ND		0.00115	ND		0.00151
4,4'-DDE	2	0.315		0.0116	0.0696		0.00232	0.188		0.0117	0.0115		0.00184	0.11		0.0121
4,4'-DDD	2.3	0.0282		0.00233	0.0249		0.00232	0.0176	P	0.00234	0.00111	J	0.00184	0.0154		0.00242
4,4'-DDT	1.9	0.0612		0.00437	0.0262		0.00434	0.0409	P	0.0044	0.00866		0.00345	0.0368	P	0.00453
Endosulfan I	NC	ND		0.00233	ND		0.00232	ND		0.00234	ND		0.00184	ND		0.00242
Endosulfan II	NC	ND		0.00233	ND		0.00232	ND		0.00234	ND		0.00184	ND		0.00242
Endosulfan (I and II)	470	ND		0.00233	ND		0.00232	ND		0.00234	ND		0.00184	ND		0.00242
Endosulfan sulfate	470	ND		0.00097	ND		0.00096	ND		0.00097	ND		0.00076	ND		0.00101
Methoxychlor	320	ND		0.00437	ND		0.00434	ND		0.0044	ND		0.00345	ND		0.00453
Toxaphene	0.49	ND		0.0437	ND		0.0434	ND		0.044	ND		0.0345	ND		0.0453
Chlordane (cis and trans)	0.27	0.1938		0.0194	0.462		0.0965	0.279		0.0195	ND		0.0153	0.565		0.101
cis-Chlordane	NC	0.11	IP	0.00291	0.274	IP	0.0145	0.131		0.0146	ND		0.0023	0.283	IP	0.0151
trans-Chlordane	NC	0.0838		0.00291	0.188		0.0145	0.148		0.00293	ND		0.0023	0.282		0.0151
TOTAL METALS																
Arsenic, Total	19	146		0.595	13.8		0.594	77.3		0.577	1.82		0.448	55.5		0.603
Lead, Total	400	966		2.97	44.9		2.97	475		2.88	10.4		2.24	250		3.01
Mercury, Total	23	63.2		1.99	3.61		0.1	26.2		1.03	1.04		0.083	18.2		1.1

Notes:
Results reported in milligrams per kilogram (mg/kg) or parts per million
Exceedances (if any) are highlighted
ND = Not detected above laboratory's reporting limit (RL)
NA = Not analyzed
NC = No criteria
J = Estimated value, Concentration is below the RL but above the Method Detection Limit (MDL)
P = The relative percent difference (RPD) between the two columns exceeds the method-specified criteria
I = The lower value for the two columns has been reported due to obvious interference

TABLE 1: SOIL ANALYTICAL RESULTS
OLD ORCHARD COUNTRY CLUB
54 MONMOUTH ROAD
MONMOUTH COUNTY, NEW JERSEY

SAMPLE ID:	NJDEP Residential Soil Remediation Standards	G-16			G-17			G-18			G-19			T-1		
LAB ID:		L2126518-58			L2126518-65			L2126518-63			L2126518-24			L2126518-08		
COLLECTION DATE:		5/19/2021			5/19/2021			5/19/2021			5/19/2021			5/19/2021		
SAMPLE DEPTH:		(0-0.5')			(0-0.5')			(0-0.5')			(0-0.5')			(0-0.5')		
SAMPLE MATRIX:		SOIL			SOIL			SOIL			SOIL			SOIL		
ANALYTE	**(mg/kg)**	**Conc**	**Q**	**RL**	**Conc**	**Q**	**RL**	**Conc**	**Q**	**RL**	**Conc**	**Q**	**RL**	**Conc**	**Q**	**RL**
PESTICIDES																
Delta-BHC	NC	ND		0.00227	ND		0.00236	ND		0.00237	ND		0.00195	ND		0.00177
Lindane	0.57	ND		0.00094	ND		0.00098	ND		0.00098	ND		0.00081	ND		0.00073
Alpha-BHC	0.086	ND		0.00094	ND		0.00098	ND		0.00098	ND		0.00081	ND		0.00073
Beta-BHC	0.3	ND		0.00227	ND		0.00236	ND		0.00237	ND		0.00195	ND		0.00177
Heptachlor	0.15	ND		0.00114	ND		0.00118	ND		0.00119	ND		0.00097	ND		0.00088
Aldrin	0.041	ND		0.00227	ND		0.00236	ND		0.00237	ND		0.00195	ND		0.00177
Heptachlor epoxide	0.076	0.0812		0.00426	0.0697	P	0.00443	ND		0.00445	ND		0.00366	0.013		0.00331
Endrin	19	ND		0.00094	ND		0.00098	ND		0.00098	ND		0.00081	ND		0.00073
Endrin aldehyde	NC	ND		0.00284	ND		0.00295	ND		0.00297	ND		0.00244	ND		0.00221
Endrin ketone	NC	ND		0.00227	ND		0.00236	ND		0.00237	ND		0.00195	ND		0.00177
Dieldrin	0.034	ND		0.00142	ND		0.00148	ND		0.00148	ND		0.00122	0.00273		0.0011
4,4'-DDE	2	0.713	P	0.0227	0.406	P	0.00236	0.0546		0.00237	0.00878		0.00195	0.0565		0.00177
4,4'-DDD	2.3	0.076	P	0.00227	0.0659	P	0.00236	0.0164		0.00237	0.00257		0.00195	0.00332		0.00177
4,4'-DDT	1.9	0.365	P	0.0426	0.0487	P	0.00443	0.0107		0.00445	ND		0.00366	0.00607		0.00331
Endosulfan I	NC	ND		0.00227	ND		0.00236	ND		0.00237	ND		0.00195	ND		0.00177
Endosulfan II	NC	ND		0.00227	ND		0.00236	ND		0.00237	ND		0.00195	ND		0.00177
Endosulfan (I and II)	470	ND		0.00227	ND		0.00236	ND		0.00237	ND		0.00195	ND		0.00177
Endosulfan sulfate	470	ND		0.00094	ND		0.00098	ND		0.00098	ND		0.00081	ND		0.00073
Methoxychlor	320	ND		0.00426	ND		0.00443	ND		0.00445	ND		0.00366	ND		0.00331
Toxaphene	0.49	ND		0.0426	ND		0.0443	ND		0.0445	ND		0.0366	ND		0.0331
Chlordane (cis and trans)	0.27	0.441		0.189	0.67	P	0.0197	0.0509		0.0198	ND		0.0163	0.043		0.0147
cis-Chlordane	NC	0.243	IP	0.0284	0.356	IP	0.00295	0.0361	P	0.00297	ND		0.00244	0.0232	IP	0.00221
trans-Chlordane	NC	0.198	P	0.0284	0.314	P	0.00295	0.0148		0.00297	ND		0.00244	0.0198		0.00221
TOTAL METALS																
Arsenic, Total	19	308		0.593	85.5		0.584	63.8		0.62	1.18		0.49	15.2		0.448
Lead, Total	400	1850		2.96	776		2.92	743		3.1	14.8		2.45	80.6		2.24
Mercury, Total	23	81.1		2.08	33.7		2.08	11.4		1.94	0.279		0.087	3.48		0.728

Notes:
Results reported in milligrams per kilogram (mg/kg) or parts per million
Exceedances (if any) are highlighted
ND = Not detected above laboratory's reporting limit (RL)
NA = Not analyzed
NC = No criteria
J = Estimated value, Concentration is below the RL but above the Method Detection Limit (MDL)
P = The relative percent difference (RPD) between the two columns exceeds the method-specified criteria
I = The lower value for the two columns has been reported due to obvious interference

TABLE 1: SOIL ANALYTICAL RESULTS
OLD ORCHARD COUNTRY CLUB
54 MONMOUTH ROAD
MONMOUTH COUNTY, NEW JERSEY

SAMPLE ID:	NJDEP Residential Soil Remediation Standards	T-2			T-3			T-4			T-5			T-6		
LAB ID:		L2126518-11			L2126518-14			L2126518-18			L2126518-21			L2126518-25		
COLLECTION DATE:		5/19/2021			5/19/2021			5/19/2021			5/19/2021			5/19/2021		
SAMPLE DEPTH:		(0-0.5')			(0-0.5')			(0-0.5')			(0-0.5')			(0-0.5')		
SAMPLE MATRIX:		SOIL			SOIL			SOIL			SOIL			SOIL		
ANALYTE	**(mg/kg)**	**Conc**	**Q**	**RL**	**Conc**	**Q**	**RL**	**Conc**	**Q**	**RL**	**Conc**	**Q**	**RL**	**Conc**	**Q**	**RL**
PESTICIDES																
Delta-BHC	NC	ND		0.00197	ND		0.0019	ND		0.00189	ND		0.00271	ND		0.00251
Lindane	0.57	ND		0.00082	ND		0.00079	ND		0.00078	ND		0.00113	ND		0.00105
Alpha-BHC	0.086	ND		0.00082	ND		0.00079	ND		0.00078	ND		0.00113	ND		0.00105
Beta-BHC	0.3	ND		0.00197	ND		0.0019	ND		0.00189	ND		0.00271	ND		0.00251
Heptachlor	0.15	ND		0.00098	ND		0.00095	ND		0.00094	ND		0.00136	ND		0.00126
Aldrin	0.041	ND		0.00197	ND		0.0019	ND		0.00189	ND		0.00271	ND		0.00251
Heptachlor epoxide	0.076	0.0065		0.0037	0.00977	P	0.00357	ND		0.00354	ND		0.00508	ND		0.00471
Endrin	19	ND		0.00082	ND		0.00079	ND		0.00078	ND		0.00113	ND		0.00105
Endrin aldehyde	NC	ND		0.00247	ND		0.00238	ND		0.00236	ND		0.00339	ND		0.00314
Endrin ketone	NC	ND		0.00197	ND		0.0019	ND		0.00189	ND		0.00271	ND		0.00251
Dieldrin	0.034	0.0456		0.00123	0.0805		0.00119	0.0515		0.00118	0.0198		0.00169	ND		0.00157
4,4'-DDE	2	0.398		0.00987	0.38		0.00952	0.0421		0.00189	0.303		0.0136	0.00592		0.00251
4,4'-DDD	2.3	0.00832		0.00197	0.00954		0.0019	0.00221		0.00189	ND		0.00271	ND		0.00251
4,4'-DDT	1.9	0.148		0.0037	0.109		0.00357	0.0255		0.00354	0.08		0.00508	0.00355	J	0.00471
Endosulfan I	NC	ND		0.00197	ND		0.0019	ND		0.00189	ND		0.00271	ND		0.00251
Endosulfan II	NC	ND		0.00197	ND		0.0019	ND		0.00189	ND		0.00271	ND		0.00251
Endosulfan (I and II)	470	ND		0.00197	ND		0.0019	ND		0.00189	ND		0.00271	ND		0.00251
Endosulfan sulfate	470	ND		0.00082	ND		0.00079	ND		0.00078	ND		0.00113	ND		0.00105
Methoxychlor	320	ND		0.0037	ND		0.00357	ND		0.00354	ND		0.00508	ND		0.00471
Toxaphene	0.49	ND		0.037	ND		0.0357	ND		0.0354	ND		0.0508	ND		0.0471
Chlordane (cis and trans)	0.27	0.00375		0.0164	0.01028		0.0158	0.00596		0.0158	ND		0.0226	ND		0.0209
cis-Chlordane	NC	0.00114	JIP	0.00247	0.00421	IP	0.00238	0.00344	P	0.00236	ND		0.00339	ND		0.00314
trans-Chlordane	NC	0.00261		0.00247	0.00607		0.00238	0.00252	P	0.00236	ND		0.00339	ND		0.00314
TOTAL METALS																
Arsenic, Total	19	12.2		0.486	6.29		0.47	3.97		0.468	17.4		0.688	5.76		0.611
Lead, Total	400	29.4		2.43	16.7		2.35	12.7		2.34	48.8		3.44	17.2		3.06
Mercury, Total	23	0.293		0.08	0.283		0.078	0.165		0.077	0.636		0.124	ND		0.118

Notes:
Results reported in milligrams per kilogram (mg/kg) or parts per million
Exceedances (if any) are highlighted
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J = Estimated value, Concentration is below the RL but above the Method Detection Limit (MDL)
P = The relative percent difference (RPD) between the two columns exceeds the method-specified criteria
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TABLE 1: SOIL ANALYTICAL RESULTS
OLD ORCHARD COUNTRY CLUB
54 MONMOUTH ROAD
MONMOUTH COUNTY, NEW JERSEY

SAMPLE ID:	NJDEP Residential Soil Remediation Standards	T-7			T-8			T-9			T-10			T-11		
LAB ID:		L2126518-28			L2126518-31			L2126518-34			L2126518-37			L2126518-40		
COLLECTION DATE:		5/19/2021			5/19/2021			5/19/2021			5/19/2021			5/19/2021		
SAMPLE DEPTH:		(0-0.5')			(0-0.5')			(0-0.5')			(0-0.5')			(0-0.5')		
SAMPLE MATRIX:		SOIL			SOIL			SOIL			SOIL			SOIL		
ANALYTE	**(mg/kg)**	**Conc**	**Q**	**RL**	**Conc**	**Q**	**RL**	**Conc**	**Q**	**RL**	**Conc**	**Q**	**RL**	**Conc**	**Q**	**RL**
PESTICIDES																
Delta-BHC	NC	ND		0.00235	ND		0.00263	ND		0.00191	ND		0.00251	ND		0.00197
Lindane	0.57	ND		0.00097	ND		0.0011	ND		0.00079	ND		0.00104	ND		0.00082
Alpha-BHC	0.086	ND		0.00097	ND		0.0011	ND		0.00079	ND		0.00104	ND		0.00082
Beta-BHC	0.3	ND		0.00235	ND		0.00263	ND		0.00191	ND		0.00251	ND		0.00197
Heptachlor	0.15	ND		0.00118	ND		0.00132	ND		0.00095	ND		0.00125	ND		0.00098
Aldrin	0.041	ND		0.00235	ND		0.00263	ND		0.00191	ND		0.00251	ND		0.00197
Heptachlor epoxide	0.076	ND		0.00441	ND		0.00494	ND		0.00358	ND		0.0047	ND		0.0037
Endrin	19	ND		0.00097	ND		0.0011	ND		0.00079	ND		0.00104	ND		0.00082
Endrin aldehyde	NC	ND		0.00294	ND		0.00329	ND		0.00239	ND		0.00314	ND		0.00247
Endrin ketone	NC	ND		0.00235	ND		0.00263	ND		0.00191	ND		0.00251	ND		0.00197
Dieldrin	0.034	0.00831		0.00147	0.00212		0.00164	0.0232		0.00119	0.0274		0.00157	0.00091	J	0.00123
4,4'-DDE	2	0.0801		0.00235	0.00222	J	0.00263	0.178		0.00955	0.00576		0.00251	0.00314		0.00197
4,4'-DDD	2.3	0.00119	J	0.00235	ND		0.00263	0.00114	J	0.00191	ND		0.00251	ND		0.00197
4,4'-DDT	1.9	0.0221		0.00441	ND		0.00494	0.0672		0.00358	0.00672	P	0.0047	0.00377		0.0037
Endosulfan I	NC	ND		0.00235	ND		0.00263	ND		0.00191	ND		0.00251	ND		0.00197
Endosulfan II	NC	ND		0.00235	ND		0.00263	ND		0.00191	ND		0.00251	ND		0.00197
Endosulfan (I and II)	470	ND		0.00235	ND		0.00263	ND		0.00191	ND		0.00251	ND		0.00197
Endosulfan sulfate	470	ND		0.00097	ND		0.0011	ND		0.00079	ND		0.00104	ND		0.00082
Methoxychlor	320	ND		0.00441	ND		0.00494	ND		0.00358	ND		0.0047	ND		0.0037
Toxaphene	0.49	ND		0.0441	ND		0.0494	ND		0.0358	ND		0.047	ND		0.037
Chlordane (cis and trans)	0.27	ND		0.0196	ND		0.0219	ND		0.0159	ND		0.0209	ND		0.0164
cis-Chlordane	NC	ND		0.00294	ND		0.00329	ND		0.00239	ND		0.00314	ND		0.00247
trans-Chlordane	NC	ND		0.00294	ND		0.00329	ND		0.00239	ND		0.00314	ND		0.00247
TOTAL METALS																
Arsenic, Total	19	13.3		0.584	11.9		0.658	9.39		0.48	6.22		0.614	12.1		0.48
Lead, Total	400	39.6		2.92	30.6		3.29	21		2.4	13.1		3.07	26.4		2.4
Mercury, Total	23	0.111		0.106	0.384		0.138	0.091		0.088	ND		0.126	0.133		0.088

Notes:
Results reported in milligrams per kilogram (mg/kg) or parts per million
Exceedances (if any) are highlighted
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NC = No criteria
J = Estimated value, Concentration is below the RL but above the Method Detection Limit (MDL)
P = The relative percent difference (RPD) between the two columns exceeds the method-specified criteria
I = The lower value for the two columns has been reported due to obvious interference

TABLE 1: SOIL ANALYTICAL RESULTS
OLD ORCHARD COUNTRY CLUB
54 MONMOUTH ROAD
MONMOUTH COUNTY, NEW JERSEY

SAMPLE ID:	NJDEP Residential Soil Remediation Standards	T-12			T-13			T-14			T-15			T-16		
LAB ID:		L2126518-43			L2126518-47			L2126518-50			L2126518-53			L2126518-56		
COLLECTION DATE:		5/19/2021			5/19/2021			5/19/2021			5/19/2021			5/19/2021		
SAMPLE DEPTH:		(0-0.5')			(0-0.5')			(0-0.5')			(0-0.5')			(0-0.5')		
SAMPLE MATRIX:		SOIL			SOIL			SOIL			SOIL			SOIL		
ANALYTE	**(mg/kg)**	**Conc**	**Q**	**RL**	**Conc**	**Q**	**RL**	**Conc**	**Q**	**RL**	**Conc**	**Q**	**RL**	**Conc**	**Q**	**RL**
PESTICIDES																
Delta-BHC	NC	ND		0.00181	ND		0.00178	ND		0.00248	ND		0.00192	ND		0.0018
Lindane	0.57	ND		0.00075	ND		0.00074	ND		0.00103	ND		0.0008	ND		0.00075
Alpha-BHC	0.086	ND		0.00075	ND		0.00074	ND		0.00103	ND		0.0008	ND		0.00075
Beta-BHC	0.3	ND		0.00181	ND		0.00178	ND		0.00248	ND		0.00192	ND		0.0018
Heptachlor	0.15	ND		0.0009	ND		0.00089	ND		0.00124	ND		0.00096	ND		0.0009
Aldrin	0.041	ND		0.00181	ND		0.00178	ND		0.00248	ND		0.00192	ND		0.0018
Heptachlor epoxide	0.076	0.00334	J	0.0034	ND		0.00334	0.0284		0.00464	ND		0.0036	ND		0.00338
Endrin	19	ND		0.00075	ND		0.00074	ND		0.00103	ND		0.0008	ND		0.00075
Endrin aldehyde	NC	ND		0.00227	ND		0.00223	ND		0.0031	ND		0.0024	ND		0.00225
Endrin ketone	NC	ND		0.00181	ND		0.00178	ND		0.00248	ND		0.00192	ND		0.0018
Dieldrin	0.034	0.0364		0.00113	0.0175		0.00111	0.0874		0.00155	0.00861		0.0012	ND		0.00113
4,4'-DDE	2	0.438		0.0181	0.00991		0.00178	0.0892		0.00248	0.141		0.0096	0.264		0.00902
4,4'-DDD	2.3	0.00194		0.00181	0.00074	J	0.00178	ND		0.00248	ND		0.00192	ND		0.0018
4,4'-DDT	1.9	0.168		0.034	0.0118	P	0.00334	0.0337		0.00464	0.054		0.0036	0.0969		0.00338
Endosulfan I	NC	ND		0.00181	ND		0.00178	ND		0.00248	ND		0.00192	ND		0.0018
Endosulfan II	NC	ND		0.00181	ND		0.00178	ND		0.00248	ND		0.00192	ND		0.0018
Endosulfan (I and II)	470	ND		0.00181	ND		0.00178	ND		0.00248	ND		0.00192	ND		0.0018
Endosulfan sulfate	470	ND		0.00075	ND		0.00074	ND		0.00103	ND		0.0008	ND		0.00075
Methoxychlor	320	ND		0.0034	ND		0.00334	ND		0.00464	ND		0.0036	ND		0.00338
Toxaphene	0.49	ND		0.034	ND		0.0334	ND		0.0464	ND		0.036	ND		0.0338
Chlordane (cis and trans)	0.27	ND		0.0151	ND		0.0148	0.0265		0.0206	ND		0.016	ND		0.015
cis-Chlordane	NC	ND		0.00227	ND		0.00223	0.013	IP	0.0031	ND		0.0024	ND		0.00225
trans-Chlordane	NC	ND		0.00227	ND		0.00223	0.0135		0.0031	ND		0.0024	ND		0.00225
TOTAL METALS																
Arsenic, Total	19	12.3		0.463	6.88		0.437	12.2		0.607	12.4		0.493	9.11		0.469
Lead, Total	400	25.1		2.32	16		2.19	35.3		3.03	35.5		2.46	24.1		2.35
Mercury, Total	23	0.088		0.084	0.069	J	0.077	0.552		0.115	0.212		0.077	0.152		0.078

Notes:
Results reported in milligrams per kilogram (mg/kg) or parts per million
Exceedances (if any) are highlighted
ND = Not detected above laboratory's reporting limit (RL)
NA = Not analyzed
NC = No criteria
J = Estimated value, Concentration is below the RL but above the Method Detection Limit (MDL)
P = The relative percent difference (RPD) between the two columns exceeds the method-specified criteria
I = The lower value for the two columns has been reported due to obvious interference

TABLE 1: SOIL ANALYTICAL RESULTS
OLD ORCHARD COUNTRY CLUB
54 MONMOUTH ROAD
MONMOUTH COUNTY, NEW JERSEY

SAMPLE ID:	NJDEP Residential Soil Remediation Standards	T-17			T-18			F-1			F-2			F-3		
LAB ID:		L2126518-59			L2126518-61			L2126518-09			L2126518-12			L2126518-15		
COLLECTION DATE:		5/19/2021			5/19/2021			5/19/2021			5/19/2021			5/19/2021		
SAMPLE DEPTH:		(0-0.5')			(0-0.5')			(0-0.5')			(0-0.5')			(0-0.5')		
SAMPLE MATRIX:		SOIL			SOIL			SOIL			SOIL			SOIL		
ANALYTE	**(mg/kg)**	**Conc**	**Q**	**RL**	**Conc**	**Q**	**RL**	**Conc**	**Q**	**RL**	**Conc**	**Q**	**RL**	**Conc**	**Q**	**RL**
PESTICIDES																
Delta-BHC	NC	ND		0.00191	ND		0.00206	ND		0.00248	ND		0.00239	ND		0.00229
Lindane	0.57	ND		0.00079	ND		0.00085	ND		0.00104	ND		0.00099	ND		0.00095
Alpha-BHC	0.086	ND		0.00079	ND		0.00085	ND		0.00104	ND		0.00099	ND		0.00095
Beta-BHC	0.3	ND		0.00191	ND		0.00206	ND		0.00248	ND		0.00239	ND		0.00229
Heptachlor	0.15	ND		0.00095	ND		0.00103	ND		0.00124	ND		0.0012	ND		0.00114
Aldrin	0.041	ND		0.00191	ND		0.00206	ND		0.00248	ND		0.00239	ND		0.00229
Heptachlor epoxide	0.076	ND		0.00358	ND		0.00385	ND		0.00466	ND		0.00448	0.00174	J	0.00429
Endrin	19	ND		0.00079	ND		0.00085	ND		0.00104	ND		0.00099	ND		0.00095
Endrin aldehyde	NC	ND		0.00239	ND		0.00257	ND		0.0031	ND		0.00299	ND		0.00286
Endrin ketone	NC	ND		0.00191	ND		0.00206	ND		0.00248	ND		0.00239	ND		0.00229
Dieldrin	0.034	ND		0.0012	ND		0.00128	0.00184		0.00155	0.014		0.00149	0.0133		0.00143
4,4'-DDE	2	0.0266		0.00191	0.00439		0.00206	0.0167		0.00248	0.0423		0.00239	0.0847		0.00229
4,4'-DDD	2.3	0.00173	J	0.00191	0.00122	J	0.00206	ND		0.00248	ND		0.00239	0.00172	J	0.00229
4,4'-DDT	1.9	0.0266		0.00358	0.00694		0.00385	0.0113		0.00466	0.0178		0.00448	0.0375		0.00429
Endosulfan I	NC	ND		0.00191	ND		0.00206	ND		0.00248	ND		0.00239	ND		0.00229
Endosulfan II	NC	ND		0.00191	ND		0.00206	ND		0.00248	ND		0.00239	ND		0.00229
Endosulfan (I and II)	470	ND		0.00191	ND		0.00206	ND		0.00248	ND		0.00239	ND		0.00229
Endosulfan sulfate	470	ND		0.00079	ND		0.00085	ND		0.00104	ND		0.00099	ND		0.00095
Methoxychlor	320	ND		0.00358	ND		0.00385	ND		0.00466	ND		0.00448	ND		0.00429
Toxaphene	0.49	ND		0.0358	ND		0.0385	ND		0.0466	ND		0.0448	ND		0.0429
Chlordane (cis and trans)	0.27	ND		0.0159	ND		0.0171	ND		0.0207	ND		0.0199	ND		0.0191
cis-Chlordane	NC	ND		0.00239	ND		0.00257	ND		0.0031	ND		0.00299	ND		0.00286
trans-Chlordane	NC	ND		0.00239	ND		0.00257	ND		0.0031	ND		0.00299	ND		0.00286
TOTAL METALS																
Arsenic, Total	19	7.37		0.483	9.72		0.53	11.2		0.636	9.63		0.602	11.6		0.547
Lead, Total	400	15.3		2.42	19.6		2.65	15.6		3.18	17.2		3.01	13.5		2.74
Mercury, Total	23	0.107		0.078	0.411		0.088	-		-	-		-	-		-

Notes:
Results reported in milligrams per kilogram (mg/kg) or parts per million
Exceedances (if any) are highlighted
ND = Not detected above laboratory's reporting limit (RL)
NA = Not analyzed
NC = No criteria
J = Estimated value, Concentration is below the RL but above the Method Detection Limit (MDL)
P = The relative percent difference (RPD) between the two columns exceeds the method-specified criteria
I = The lower value for the two columns has been reported due to obvious interference

TABLE 1: SOIL ANALYTICAL RESULTS
OLD ORCHARD COUNTRY CLUB
54 MONMOUTH ROAD
MONMOUTH COUNTY, NEW JERSEY

SAMPLE ID:	NJDEP Residential Soil Remediation Standards	F-4			F-5			F-6			F-7			F-8		
LAB ID:		L2126518-19			L2126518-22			L2126518-26			L2126518-29			L2126518-32		
COLLECTION DATE:		5/19/2021			5/19/2021			5/19/2021			5/19/2021			5/19/2021		
SAMPLE DEPTH:		(0-0.5')			(0-0.5')			(0-0.5')			(0-0.5')			(0-0.5')		
SAMPLE MATRIX:		SOIL			SOIL			SOIL			SOIL			SOIL		
ANALYTE	**(mg/kg)**	**Conc**	**Q**	**RL**	**Conc**	**Q**	**RL**	**Conc**	**Q**	**RL**	**Conc**	**Q**	**RL**	**Conc**	**Q**	**RL**
PESTICIDES																
Delta-BHC	NC	ND		0.00244	ND		0.00183	ND		0.00246	ND		0.00208	ND		0.00278
Lindane	0.57	ND		0.00102	ND		0.00076	ND		0.00102	ND		0.00086	ND		0.00116
Alpha-BHC	0.086	ND		0.00102	ND		0.00076	ND		0.00102	ND		0.00086	ND		0.00116
Beta-BHC	0.3	ND		0.00244	ND		0.00183	ND		0.00246	ND		0.00208	ND		0.00278
Heptachlor	0.15	ND		0.00122	ND		0.00091	ND		0.00123	ND		0.00104	ND		0.00139
Aldrin	0.041	ND		0.00244	ND		0.00183	ND		0.00246	ND		0.00208	ND		0.00278
Heptachlor epoxide	0.076	0.00572		0.00458	0.00362		0.00342	ND		0.00461	ND		0.0039	ND		0.00521
Endrin	19	ND		0.00102	ND		0.00076	ND		0.00102	ND		0.00086	ND		0.00116
Endrin aldehyde	NC	ND		0.00305	ND		0.00228	ND		0.00308	ND		0.0026	ND		0.00347
Endrin ketone	NC	ND		0.00244	ND		0.00183	ND		0.00246	ND		0.00208	ND		0.00278
Dieldrin	0.034	0.077		0.00152	0.129		0.00114	ND		0.00154	0.0135		0.0013	0.0186		0.00174
4,4'-DDE	2	0.138		0.00244	0.0829		0.00183	0.00664		0.00246	0.0292		0.00208	0.0736		0.00278
4,4'-DDD	2.3	0.00281		0.00244	ND		0.00183	ND		0.00246	ND		0.00208	ND		0.00278
4,4'-DDT	1.9	0.026		0.00458	0.0334		0.00342	0.00684	P	0.00461	0.0263		0.0039	0.0343		0.00521
Endosulfan I	NC	ND		0.00244	ND		0.00183	ND		0.00246	ND		0.00208	ND		0.00278
Endosulfan II	NC	ND		0.00244	ND		0.00183	ND		0.00246	ND		0.00208	ND		0.00278
Endosulfan (I and II)	470	ND		0.00244	ND		0.00183	ND		0.00246	ND		0.00208	ND		0.00278
Endosulfan sulfate	470	ND		0.00102	ND		0.00076	ND		0.00102	ND		0.00086	ND		0.00116
Methoxychlor	320	ND		0.00458	ND		0.00342	ND		0.00461	ND		0.0039	ND		0.00521
Toxaphene	0.49	ND		0.0458	ND		0.0342	ND		0.0461	ND		0.039	ND		0.0521
Chlordane (cis and trans)	0.27	0.00131		0.0203	ND		0.0152	ND		0.0205	ND		0.0174	ND		0.0231
cis-Chlordane	NC	ND		0.00305	ND		0.00228	ND		0.00308	ND		0.0026	ND		0.00347
trans-Chlordane	NC	0.00131	J	0.00305	ND		0.00228	ND		0.00308	ND		0.0026	ND		0.00347
TOTAL METALS																
Arsenic, Total	19	6.1		0.606	3.92		0.451	30.6		0.62	8.34		0.521	9.15		0.707
Lead, Total	400	15		3.03	11.1		2.25	18.3		3.1	14.6		2.61	17		3.54
Mercury, Total	23	-		-	-		-	-		-	-		-	-		-

Notes:
Results reported in milligrams per kilogram (mg/kg) or parts per million
Exceedances (if any) are highlighted
ND = Not detected above laboratory's reporting limit (RL)
NA = Not analyzed
NC = No criteria
J = Estimated value, Concentration is below the RL but above the Method Detection Limit (MDL)
P = The relative percent difference (RPD) between the two columns exceeds the method-specified criteria
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TABLE 1: SOIL ANALYTICAL RESULTS
OLD ORCHARD COUNTRY CLUB
54 MONMOUTH ROAD
MONMOUTH COUNTY, NEW JERSEY

SAMPLE ID:	NJDEP Residential Soil Remediation Standards	F-9			F-10			F-11			F-12			F-13		
LAB ID:		L2126518-35			L2126518-38			L2126518-41			L2126518-44			L2126518-48		
COLLECTION DATE:		5/19/2021			5/19/2021			5/19/2021			5/19/2021			5/19/2021		
SAMPLE DEPTH:		(0-0.5')			(0-0.5')			(0-0.5')			(0-0.5')			(0-0.5')		
SAMPLE MATRIX:		SOIL			SOIL			SOIL			SOIL			SOIL		
ANALYTE	**(mg/kg)**	**Conc**	**Q**	**RL**	**Conc**	**Q**	**RL**	**Conc**	**Q**	**RL**	**Conc**	**Q**	**RL**	**Conc**	**Q**	**RL**
PESTICIDES																
Delta-BHC	NC	ND		0.00203	ND		0.00222	ND		0.00188	ND		0.002	ND		0.00234
Lindane	0.57	ND		0.00084	ND		0.00092	ND		0.00078	ND		0.00083	ND		0.00097
Alpha-BHC	0.086	ND		0.00084	ND		0.00092	ND		0.00078	ND		0.00083	ND		0.00097
Beta-BHC	0.3	ND		0.00203	ND		0.00222	ND		0.00188	ND		0.002	ND		0.00234
Heptachlor	0.15	ND		0.00102	ND		0.00111	ND		0.00094	ND		0.001	ND		0.00117
Aldrin	0.041	ND		0.00203	ND		0.00222	ND		0.00188	ND		0.002	ND		0.00234
Heptachlor epoxide	0.076	ND		0.00381	ND		0.00416	0.00214	J	0.00352	0.0027	J	0.00375	ND		0.00438
Endrin	19	ND		0.00084	ND		0.00092	ND		0.00078	ND		0.00083	ND		0.00097
Endrin aldehyde	NC	ND		0.00254	ND		0.00277	ND		0.00235	ND		0.0025	ND		0.00292
Endrin ketone	NC	ND		0.00203	ND		0.00222	ND		0.00188	ND		0.002	ND		0.00234
Dieldrin	0.034	0.0354		0.00127	0.072		0.00139	0.0143		0.00117	0.0194		0.00125	0.503		0.00731
4,4'-DDE	2	0.0467		0.00203	0.0917		0.00222	0.0764		0.00188	0.242		0.01	0.218		0.0117
4,4'-DDD	2.3	0.00162	J	0.00203	0.0008	J	0.00222	ND		0.00188	ND		0.002	0.0178		0.00234
4,4'-DDT	1.9	0.0194	P	0.00381	0.0343		0.00416	0.0564		0.00352	0.0768		0.00375	0.0721		0.00438
Endosulfan I	NC	ND		0.00203	ND		0.00222	ND		0.00188	ND		0.002	ND		0.00234
Endosulfan II	NC	ND		0.00203	ND		0.00222	ND		0.00188	ND		0.002	ND		0.00234
Endosulfan (I and II)	470	ND		0.00203	ND		0.00222	ND		0.00188	ND		0.002	ND		0.00234
Endosulfan sulfate	470	ND		0.00084	ND		0.00092	ND		0.00078	ND		0.00083	ND		0.00097
Methoxychlor	320	ND		0.00381	ND		0.00416	ND		0.00352	ND		0.00375	ND		0.00438
Toxaphene	0.49	ND		0.0381	ND		0.0416	ND		0.0352	ND		0.0375	ND		0.0438
Chlordane (cis and trans)	0.27	ND		0.0169	ND		0.0185	ND		0.0157	ND		0.0167	ND		0.0195
cis-Chlordane	NC	ND		0.00254	ND		0.00277	ND		0.00235	ND		0.0025	ND		0.00292
trans-Chlordane	NC	ND		0.00254	ND		0.00277	ND		0.00235	ND		0.0025	ND		0.00292
TOTAL METALS																
Arsenic, Total	19	5.57		0.5	9.2		0.547	20.4		0.473	6.25		0.491	4.69		0.59
Lead, Total	400	16.5		2.5	16.9		2.74	12.7		2.36	19		2.45	15.9		2.95
Mercury, Total	23	-		-	-		-	-		-	-		-	-		-

Notes:
Results reported in milligrams per kilogram (mg/kg) or parts per million
Exceedances (if any) are highlighted
ND = Not detected above laboratory's reporting limit (RL)
NA = Not analyzed
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J = Estimated value, Concentration is below the RL but above the Method Detection Limit (MDL)
P = The relative percent difference (RPD) between the two columns exceeds the method-specified criteria
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TABLE 1: SOIL ANALYTICAL RESULTS
OLD ORCHARD COUNTRY CLUB
54 MONMOUTH ROAD
MONMOUTH COUNTY, NEW JERSEY

SAMPLE ID:	NJDEP Residential Soil Remediation Standards	F-14			F-15			F-16			F-17			F-18		
LAB ID:		L2126518-51			L2126518-54			L2126518-57			L2126518-64			L2126518-62		
COLLECTION DATE:		5/19/2021			5/19/2021			5/19/2021			5/19/2021			5/19/2021		
SAMPLE DEPTH:		(0-0.5')			(0-0.5')			(0-0.5')			(0-0.5')			(0-0.5')		
SAMPLE MATRIX:		SOIL			SOIL			SOIL			SOIL			SOIL		
ANALYTE	**(mg/kg)**	**Conc**	**Q**	**RL**	**Conc**	**Q**	**RL**	**Conc**	**Q**	**RL**	**Conc**	**Q**	**RL**	**Conc**	**Q**	**RL**
PESTICIDES																
Delta-BHC	NC	ND		0.0022	ND		0.00184	ND		0.00254	ND		0.0024	ND		0.00252
Lindane	0.57	ND		0.00091	ND		0.00076	ND		0.00106	ND		0.001	ND		0.00105
Alpha-BHC	0.086	ND		0.00091	ND		0.00076	ND		0.00106	ND		0.001	ND		0.00105
Beta-BHC	0.3	ND		0.0022	ND		0.00184	ND		0.00254	ND		0.0024	ND		0.00252
Heptachlor	0.15	ND		0.0011	ND		0.00092	ND		0.00127	ND		0.0012	ND		0.00126
Aldrin	0.041	ND		0.0022	ND		0.00184	ND		0.00254	ND		0.0024	ND		0.00252
Heptachlor epoxide	0.076	0.00296	J	0.00412	0.00396		0.00346	ND		0.00477	ND		0.0045	0.00182	J	0.00474
Endrin	19	ND		0.00091	ND		0.00076	ND		0.00106	ND		0.001	ND		0.00105
Endrin aldehyde	NC	ND		0.00275	ND		0.0023	ND		0.00318	ND		0.003	ND		0.00316
Endrin ketone	NC	ND		0.0022	ND		0.00184	ND		0.00254	ND		0.0024	ND		0.00252
Dieldrin	0.034	0.0118		0.00137	0.0632		0.00115	0.00969		0.00159	ND		0.0015	0.0317		0.00158
4,4'-DDE	2	0.0345		0.0022	0.566		0.0184	0.0225		0.00254	0.0666		0.0024	0.0312		0.00252
4,4'-DDD	2.3	ND		0.0022	0.00344		0.00184	ND		0.00254	0.00316		0.0024	0.0046		0.00252
4,4'-DDT	1.9	0.00764		0.00412	0.278		0.0346	0.0112		0.00477	0.0386		0.0045	0.0278		0.00474
Endosulfan I	NC	ND		0.0022	ND		0.00184	ND		0.00254	ND		0.0024	ND		0.00252
Endosulfan II	NC	ND		0.0022	ND		0.00184	ND		0.00254	ND		0.0024	ND		0.00252
Endosulfan (I and II)	470	ND		0.0022	ND		0.00184	ND		0.00254	ND		0.0024	ND		0.00252
Endosulfan sulfate	470	ND		0.00091	ND		0.00076	ND		0.00106	ND		0.001	ND		0.00105
Methoxychlor	320	ND		0.00412	ND		0.00346	ND		0.00477	ND		0.0045	ND		0.00474
Toxaphene	0.49	ND		0.0412	ND		0.0346	ND		0.0477	ND		0.045	ND		0.0474
Chlordane (cis and trans)	0.27	0.01418		0.0183	ND		0.0154	ND		0.0212	ND		0.02	ND		0.021
cis-Chlordane	NC	0.00777	IP	0.00275	ND		0.0023	ND		0.00318	ND		0.003	ND		0.00316
trans-Chlordane	NC	0.00641		0.00275	ND		0.0023	ND		0.00318	ND		0.003	ND		0.00316
TOTAL METALS																
Arsenic, Total	19	7.83		0.564	28.4		0.472	7.97		0.631	43.3		0.589	11		0.633
Lead, Total	400	44.2		2.82	12.5		2.36	15		3.16	15.1		2.94	23		3.16
Mercury, Total	23	-		-	-		-	-		-	-		-	-		-

Notes:
Results reported in milligrams per kilogram (mg/kg) or parts per million
Exceedances (if any) are highlighted
ND = Not detected above laboratory's reporting limit (RL)
NA = Not analyzed
NC = No criteria
J = Estimated value, Concentration is below the RL but above the Method Detection Limit (MDL)
P = The relative percent difference (RPD) between the two columns exceeds the method-specified criteria
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TABLE 1: SOIL ANALYTICAL RESULTS
OLD ORCHARD COUNTRY CLUB
54 MONMOUTH ROAD
MONMOUTH COUNTY, NEW JERSEY

SAMPLE ID:	NJDEP Residential Soil Remediation Standards	O-1			O-2			O-3			O-4			O-5		
LAB ID:		L2126518-05			L2126518-06			L2126518-07			L2126518-46			L2126518-17		
COLLECTION DATE:		5/19/2021			5/19/2021			5/19/2021			5/19/2021			5/19/2021		
SAMPLE DEPTH:		(0-0.5')			(0-0.5')			(0-0.5')			(0-0.5')			(0-0.5')		
SAMPLE MATRIX:		SOIL			SOIL			SOIL			SOIL			SOIL		
ANALYTE	**(mg/kg)**	**Conc**	**Q**	**RL**	**Conc**	**Q**	**RL**	**Conc**	**Q**	**RL**	**Conc**	**Q**	**RL**	**Conc**	**Q**	**RL**
PESTICIDES																
Delta-BHC	NC	ND		0.00467	ND		0.00525	ND		0.00195	ND		0.00232	ND		0.00246
Lindane	0.57	ND		0.00194	ND		0.00219	ND		0.00081	ND		0.00096	ND		0.00102
Alpha-BHC	0.086	ND		0.00194	ND		0.00219	ND		0.00081	ND		0.00096	ND		0.00102
Beta-BHC	0.3	ND		0.00467	ND		0.00525	ND		0.00195	ND		0.00232	ND		0.00246
Heptachlor	0.15	ND		0.00233	ND		0.00262	ND		0.00097	ND		0.00116	ND		0.00123
Aldrin	0.041	0.00378	JP	0.00467	0.00689		0.00525	ND		0.00195	ND		0.00232	ND		0.00246
Heptachlor epoxide	0.076	0.0244		0.00876	ND		0.00984	ND		0.00366	ND		0.00434	ND		0.00461
Endrin	19	ND		0.00194	ND		0.00219	ND		0.00081	ND		0.00096	ND		0.00102
Endrin aldehyde	NC	ND		0.00584	ND		0.00656	ND		0.00244	ND		0.00289	ND		0.00308
Endrin ketone	NC	ND		0.00467	ND		0.00525	ND		0.00195	ND		0.00232	ND		0.00246
Dieldrin	0.034	ND		0.00292	0.00964	P	0.00328	0.00313		0.00122	ND		0.00145	ND		0.00154
4,4'-DDE	2	0.00728	P	0.00467	0.0145	P	0.00525	0.0195		0.00195	ND		0.00232	ND		0.00246
4,4'-DDD	2.3	ND		0.00467	ND		0.00525	0.00502		0.00195	ND		0.00232	ND		0.00246
4,4'-DDT	1.9	ND		0.00876	ND		0.00984	0.047		0.00366	ND		0.00434	ND		0.00461
Endosulfan I	NC	ND		0.00467	ND		0.00525	ND		0.00195	ND		0.00232	ND		0.00246
Endosulfan II	NC	ND		0.00467	ND		0.00525	ND		0.00195	ND		0.00232	ND		0.00246
Endosulfan (I and II)	470	ND		0.00467	ND		0.00525	ND		0.00195	ND		0.00232	ND		0.00246
Endosulfan sulfate	470	ND		0.00194	ND		0.00219	ND		0.00081	ND		0.00096	ND		0.00102
Methoxychlor	320	ND		0.00876	ND		0.00984	ND		0.00366	ND		0.00434	ND		0.00461
Toxaphene	0.49	ND		0.0876	ND		0.0984	ND		0.0366	ND		0.0434	ND		0.0461
Chlordane (cis and trans)	0.27	0.206	P	0.0389	0.00977		0.0437	0.00988		0.0163	ND		0.0193	ND		0.0205
cis-Chlordane	NC	0.103	IP	0.00584	0.00304	JIP	0.00656	0.00669	P	0.00244	ND		0.00289	ND		0.00308
trans-Chlordane	NC	0.103		0.00584	0.00673		0.00656	0.00319		0.00244	ND		0.00289	ND		0.00308
TOTAL METALS																
Arsenic, Total	19	3.82		1.16	10.4		1.27	8.47		0.488	5.71		0.594	3.43		0.596
Lead, Total	400	77.1		5.79	19.8		6.34	58.1		2.44	22.6		2.97	13.5		2.98
Mercury, Total	23	-		-	-		-	-		-	-		-	-		-

Notes:
Results reported in milligrams per kilogram (mg/kg) or parts per million
Exceedances (if any) are highlighted
ND = Not detected above laboratory's reporting limit (RL)
NA = Not analyzed
NC = No criteria
J = Estimated value, Concentration is below the RL but above the Method Detection Limit (MDL)
P = The relative percent difference (RPD) between the two columns exceeds the method-specified criteria
I = The lower value for the two columns has been reported due to obvious interference

TABLE 1: SOIL ANALYTICAL RESULTS
OLD ORCHARD COUNTRY CLUB
54 MONMOUTH ROAD
MONMOUTH COUNTY, NEW JERSEY

SAMPLE ID:	NJDEP Residential Soil Remediation Standards	O-6			WA-1			WA-2			WA-3			TRENCH-1		
LAB ID:		L2126518-60			L2126518-01			L2126518-02			L2126518-03			L2126518-04		
COLLECTION DATE:		5/19/2021			5/19/2021			5/19/2021			5/19/2021			5/19/2021		
SAMPLE DEPTH:		(0-0.5')			(0-0.5')			(0-0.5')			(0-0.5')			(0-0.5')		
SAMPLE MATRIX:		SOIL			SOIL			SOIL			SOIL			SOIL		
ANALYTE	**(mg/kg)**	**Conc**	**Q**	**RL**	**Conc**	**Q**	**RL**	**Conc**	**Q**	**RL**	**Conc**	**Q**	**RL**	**Conc**	**Q**	**RL**
PESTICIDES																
Delta-BHC	NC	ND		0.00212	ND		0.00168	ND		0.00172	ND		0.00216	ND		0.00278
Lindane	0.57	ND		0.00088	ND		0.00069	ND		0.00071	ND		0.0009	ND		0.00116
Alpha-BHC	0.086	ND		0.00088	ND		0.00069	ND		0.00071	ND		0.0009	ND		0.00116
Beta-BHC	0.3	ND		0.00212	ND		0.00168	ND		0.00172	0.0123	P	0.00216	ND		0.00278
Heptachlor	0.15	ND		0.00106	ND		0.00083	ND		0.00086	ND		0.00108	0.038		0.00139
Aldrin	0.041	ND		0.00212	ND		0.00168	ND		0.00172	ND		0.00216	ND		0.00278
Heptachlor epoxide	0.076	ND		0.00397	ND		0.00314	ND		0.00323	ND		0.00405	0.126	P	0.0052
Endrin	19	ND		0.00088	ND		0.00069	ND		0.00071	ND		0.0009	ND		0.00116
Endrin aldehyde	NC	ND		0.00265	ND		0.0021	ND		0.00216	ND		0.0027	ND		0.00347
Endrin ketone	NC	ND		0.00212	ND		0.00168	ND		0.00172	ND		0.00216	ND		0.00278
Dieldrin	0.034	ND		0.00132	ND		0.00105	ND		0.00108	0.00232		0.00135	ND		0.00173
4,4'-DDE	2	0.00177	J	0.00212	0.0183		0.00168	0.00506		0.00172	0.0678		0.00216	0.0245		0.00278
4,4'-DDD	2.3	ND		0.00212	ND		0.00168	0.00343		0.00172	ND		0.00216	ND		0.00278
4,4'-DDT	1.9	ND		0.00397	0.0306		0.00314	0.0137		0.00323	0.324		0.0202	0.117		0.0052
Endosulfan I	NC	ND		0.00212	ND		0.00168	ND		0.00172	ND		0.00216	ND		0.00278
Endosulfan II	NC	ND		0.00212	ND		0.00168	ND		0.00172	ND		0.00216	ND		0.00278
Endosulfan (I and II)	470	ND		0.00212	ND		0.00168	ND		0.00172	ND		0.00216	ND		0.00278
Endosulfan sulfate	470	ND		0.00088	ND		0.00069	ND		0.00071	ND		0.0009	ND		0.00116
Methoxychlor	320	ND		0.00397	ND		0.00314	ND		0.00323	ND		0.00405	ND		0.0052
Toxaphene	0.49	ND		0.0397	ND		0.0314	ND		0.0323	ND		0.0405	ND		0.052
Chlordane (cis and trans)	0.27	ND		0.0176	ND		0.014	0.02702		0.0144	0.0525		0.018	2.79	P	0.462
cis-Chlordane	NC	ND		0.00265	ND		0.0021	0.00842	IP	0.00216	0.0327	P	0.0027	1.27	IP	0.0694
trans-Chlordane	NC	ND		0.00265	ND		0.0021	0.0186	P	0.00216	0.0198		0.0027	1.52		0.0694
TOTAL METALS																
Arsenic, Total	19	7.3		0.525	3.31		0.411	8.4		0.421	9.21		0.525	6.74		0.653
Lead, Total	400	16.4		2.63	11.8		2.05	96.6		2.11	144		2.63	47.2		3.26
Mercury, Total	23	-		-	0.18		0.068	0.45		0.069	0.566		0.087	0.298		0.109

Notes:
Results reported in milligrams per kilogram (mg/kg) or parts per million
Exceedances (if any) are highlighted
ND = Not detected above laboratory's reporting limit (RL)
NA = Not analyzed
NC = No criteria
J = Estimated value, Concentration is below the RL but above the Method Detection Limit (MDL)
P = The relative percent difference (RPD) between the two columns exceeds the method-specified criteria
I = The lower value for the two columns has been reported due to obvious interference

FAIRWAY 4: SOIL ANALYTICAL RESULTS
OLD ORCHARD COUNTRY CLUB
54 MONMOUTH ROAD
EATONTOWN, NJ

SAMPLE ID:	NJDEP 2021 Residential Soil Remediation Standards	F-4			F-4A			F-4B			F-4-1			F-4-1A		
ALPHA LAB ID:		L2126518-19			L2137339-01			L2137339-02			L2137339-04			L2137339-05		
COLLECTION DATE:		5/19/2021			7/12/2021			7/12/2021			7/12/2021			7/12/2021		
SAMPLE DEPTH:		0-0.5'			1'-1.5'			2'-2.5'			0-0.5'			1'-1.5'		
SAMPLE MATRIX:		SOIL			SOIL			SOIL			SOIL			SOIL		
ANALYTE	(mg/kg)	Conc	Q	RL	Conc	Q	RL	Conc	Q	RL	Conc	Q	RL	Conc	Q	RL
PESTICIDES																
Dieldrin	0.034	0.077		0.00152	0.064		0.00109	0.00586		0.00109	0.0443		0.00116	0.00851		0.00109

Notes:
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ND = Not detected above laboratory's reporting limit (RL)
NA = Not analyzed
NC = No criteria
J = Estimated value, Concentration is below the RL but above the Method Detection Limit (MDL)
P = The relative percent difference (RPD) between the two columns exceeds the method-specified criteria
I = The lower value for the two columns has been reported due to obvious interference

FAIRWAY 4: SOIL ANALYTICAL RESULTS
OLD ORCHARD COUNTRY CLUB
54 MONMOUTH ROAD
EATONTOWN, NJ

SAMPLE ID:	NJDEP 2021 Residential Soil Remediation Standards	F-4-2			F-4-2A			F-4-3			F-4-3A			F-4-4		
ALPHA LAB ID:		L2137339-08			L2137339-09			L2137339-12			L2137339-13			L2137339-16		
COLLECTION DATE:		7/12/2021			7/12/2021			7/12/2021			7/12/2021			7/12/2021		
SAMPLE DEPTH:		0-0.5'			1'-1.5'			0-0.5'			1'-1.5'			0-0.5'		
SAMPLE MATRIX:		SOIL			SOIL			SOIL			SOIL			SOIL		
ANALYTE	(mg/kg)	Conc	Q	RL	Conc	Q	RL	Conc	Q	RL	Conc	Q	RL	Conc	Q	RL
PESTICIDES																
Dieldrin	0.034	0.0786		0.0011	ND		0.00113	0.374		0.0116	0.0019		0.00114	0.102		0.00113

Notes:
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NC = No criteria
J = Estimated value, Concentration is below the RL but above the Method Detection Limit (MDL)
P = The relative percent difference (RPD) between the two columns exceeds the method-specified criteria
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FAIRWAY 4: SOIL ANALYTICAL RESULTS
OLD ORCHARD COUNTRY CLUB
54 MONMOUTH ROAD
EATONTOWN, NJ

SAMPLE ID:	NJDEP 2021 Residential Soil Remediation Standards	F-4-4A			F-4-5			F-4-6			F-4-6A			F-4-7		
ALPHA LAB ID:		L2137339-17			L2137339-58			L2137339-62			L2137339-63			L2137339-66		
COLLECTION DATE:		7/12/2021			7/12/2021			7/12/2021			7/12/2021			7/12/2021		
SAMPLE DEPTH:		1'-1.5'			0-0.5'			0-0.5'			1'-1.5'			0-0.5'		
SAMPLE MATRIX:		SOIL			SOIL			SOIL			SOIL			SOIL		
ANALYTE	(mg/kg)	Conc	Q	RL	Conc	Q	RL	Conc	Q	RL	Conc	Q	RL	Conc	Q	RL
PESTICIDES																
Dieldrin	0.034	0.00444		0.00109	0.0206		0.00116	0.226		0.00576	0.00596		0.00127	0.0238		0.00117

Notes:
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J = Estimated value, Concentration is below the RL but above the Method Detection Limit (MDL)
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FAIRWAY 5: SOIL ANALYTICAL RESULTS
OLD ORCHARD COUNTRY CLUB
54 MONMOUTH ROAD
EATONTOWN, NJ

SAMPLE ID:	NJDEP 2021 Residential Soil Remediation Standards	F-5			F-5A			F-5-1			F-5-1A			F-5-2		
ALPHA LAB ID:		L2126518-22			L2137339-20			L2137339-23			L2137339-24			L2137339-27		
COLLECTION DATE:		5/19/2021			7/12/2021			7/12/2021			7/12/2021			7/12/2021		
SAMPLE DEPTH:		0-0.5'			1'-1.5'			0-0.5'			1'-1.5'			0-0.5'		
SAMPLE MATRIX:		SOIL			SOIL			SOIL			SOIL			SOIL		
ANALYTE	(mg/kg)	Conc	Q	RL	Conc	Q	RL	Conc	Q	RL	Conc	Q	RL	Conc	Q	RL
PESTICIDES																
Dieldrin	0.034	0.129		0.00114	0.00177		0.00117	0.0695		0.00119	0.016		0.00112	0.49		0.0113

Notes:
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J = Estimated value, Concentration is below the RL but above the Method Detection Limit (MDL)
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FAIRWAY 5: SOIL ANALYTICAL RESULTS
OLD ORCHARD COUNTRY CLUB
54 MONMOUTH ROAD
EATONTOWN, NJ

SAMPLE ID:	NJDEP 2021 Residential Soil Remediation Standards	F-5-2A			F-5-3			F-5-3A			F-5-4			F-5-4A		
ALPHA LAB ID:		L2137339-28			L2137339-31			L2137339-32			L2137339-35			L2137339-36		
COLLECTION DATE:		7/12/2021			7/12/2021			7/12/2021			7/12/2021			7/12/2021		
SAMPLE DEPTH:		1'-1.5'			0-0.5'			1'-1.5'			0-0.5'			1'-1.5'		
SAMPLE MATRIX:		SOIL			SOIL			SOIL			SOIL			SOIL		
ANALYTE	(mg/kg)	Conc	Q	RL	Conc	Q	RL	Conc	Q	RL	Conc	Q	RL	Conc	Q	RL
PESTICIDES																
Dieldrin	0.034	0.00452		0.00114	0.183		0.00539	0.00562		0.0011	0.126		0.00108	0.0488		0.00113

Notes:
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FAIRWAY 5: SOIL ANALYTICAL RESULTS
OLD ORCHARD COUNTRY CLUB
54 MONMOUTH ROAD
EATONTOWN, NJ

SAMPLE ID:	NJDEP 2021 Residential Soil Remediation Standards	F-5-4B			F-5-5			F-5-6			F-5-7		
ALPHA LAB ID:		L2137339-37			L2137339-70			L2137339-74			L2137339-78		
COLLECTION DATE:		7/12/2021			7/12/2021			7/12/2021			7/12/2021		
SAMPLE DEPTH:		2'-2.5'			0-0.5'			0-0.5'			0-0.5'		
SAMPLE MATRIX:		SOIL			SOIL			SOIL			SOIL		
ANALYTE	(mg/kg)	Conc	Q	RL	Conc	Q	RL	Conc	Q	RL	Conc	Q	RL
PESTICIDES													
Dieldrin	0.034	ND		0.00108	0.00314		0.00112	ND		0.00109	0.0187		0.00117

Notes:
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FAIRWAY 9: SOIL ANALYTICAL RESULTS
OLD ORCHARD COUNTRY CLUB
54 MONMOUTH ROAD
EATONTOWN, NJ

SAMPLE ID:	NJDEP 2021 Residential Soil Remediation Standards	F-9			F-9A			F-9-1			F-9-1A			F-9-2		
ALPHA LAB ID:		L2126518-35			L2137339-39			L2137339-42			L2137339-43			L2137339-46		
COLLECTION DATE:		5/19/2021			7/12/2021			7/12/2021			7/12/2021			7/12/2021		
SAMPLE DEPTH:		0-0.5'			1'-1.5'			0-0.5'			1'-1.5'			0-0.5'		
SAMPLE MATRIX:		SOIL			SOIL			SOIL			SOIL			SOIL		
ANALYTE	(mg/kg)	Conc	Q	RL	Conc	Q	RL	Conc	Q	RL	Conc	Q	RL	Conc	Q	RL
PESTICIDES																
Dieldrin	0.034	0.0354		0.00127	0.011		0.00111	0.245		0.00563	0.00245		0.00111	0.0196		0.00112

Notes:
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NA = Not analyzed
NC = No criteria
J = Estimated value, Concentration is below the RL but above the Method Detection Limit (MDL)
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I = The lower value for the two columns has been reported due to obvious interference

FAIRWAY 9: SOIL ANALYTICAL RESULTS
OLD ORCHARD COUNTRY CLUB
54 MONMOUTH ROAD
EATONTOWN, NJ

SAMPLE ID:	NJDEP 2021 Residential Soil Remediation Standards	F-9-3			F-9-3A			F-9-4			F-9-4A			F-9-5		
ALPHA LAB ID:		L2137339-50			L2137339-51			L2137339-54			L2137339-55			L2137339-82		
COLLECTION DATE:		7/12/2021			7/12/2021			7/12/2021			7/12/2021			7/12/2021		
SAMPLE DEPTH:		0-0.5'			1'-1.5'			0-0.5'			1'-1.5'			0-0.5'		
SAMPLE MATRIX:		SOIL			SOIL			SOIL			SOIL			SOIL		
ANALYTE	(mg/kg)	Conc	Q	RL	Conc	Q	RL	Conc	Q	RL	Conc	Q	RL	Conc	Q	RL
PESTICIDES																
Dieldrin	0.034	0.077		0.00108	0.00753		0.0011	0.114		0.00109	0.00718		0.0011	0.224		0.00614

Notes:
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FAIRWAY 9: SOIL ANALYTICAL RESULTS
OLD ORCHARD COUNTRY CLUB
54 MONMOUTH ROAD
EATONTOWN, NJ

SAMPLE ID:	NJDEP 2021 Residential Soil Remediation Standards	F-9-5A			F-9-6			F-9-6A			F-9-6B			F-9-7		
ALPHA LAB ID:		L2137339-83			L2137339-86			L2137339-87			L2137339-88			L2137339-90		
COLLECTION DATE:		7/12/2021			7/12/2021			7/12/2021			7/12/2021			7/12/2021		
SAMPLE DEPTH:		1'-1.5'			0-0.5'			1'-1.5'			2'-2.5'			0-0.5'		
SAMPLE MATRIX:		SOIL			SOIL			SOIL			SOIL			SOIL		
ANALYTE	(mg/kg)	Conc	Q	RL	Conc	Q	RL	Conc	Q	RL	Conc	Q	RL	Conc	Q	RL
PESTICIDES																
Dieldrin	0.034	0.0132		0.00118	0.0678		0.00124	0.039		0.00125	ND		0.00119	0.00563		0.00115

Notes:
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ND = Not detected above laboratory's reporting limit (RL)
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P = The relative percent difference (RPD) between the two columns exceeds the method-specified criteria
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FAIRWAY 10: SOIL ANALYTICAL RESULTS
OLD ORCHARD COUNTRY CLUB
54 MONMOUTH ROAD
EATONTOWN, NJ

SAMPLE ID:	NJDEP 2021 Residential Soil Remediation Standards	F-10			F-10A			F-10-1			F-10-1A			F-10-2		
ALPHA LAB ID:		L2126518-38			L2138869-01			L2138869-04			L2138869-05			L2138869-08		
COLLECTION DATE:		5/19/2021			7/20/2021			7/20/2021			7/20/2021			7/20/2021		
SAMPLE DEPTH:		0-0.5'			1'-1.5'			0-0.5'			1'-1.5'			0-0.5'		
SAMPLE MATRIX:		SOIL			SOIL			SOIL			SOIL			SOIL		
ANALYTE	(mg/kg)	Conc	Q	RL	Conc	Q	RL	Conc	Q	RL	Conc	Q	RL	Conc	Q	RL
PESTICIDES																
Dieldrin	0.034	0.072		0.00139	0.00405		0.00114	0.281		0.00593	0.0114		0.00118	0.0344		0.00116

Notes:
Results reported in milligrams per kilogram (mg/kg) or parts per million
Exceedances (if any) are highlighted
ND = Not detected above laboratory's reporting limit (RL)
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FAIRWAY 10: SOIL ANALYTICAL RESULTS
OLD ORCHARD COUNTRY CLUB
54 MONMOUTH ROAD
EATONTOWN, NJ

SAMPLE ID:	NJDEP 2021 Residential Soil Remediation Standards	F-10-2A			F-10-3			F-10-4			F-10-4A			F-10-5		
ALPHA LAB ID:		L2138869-09			L2138869-12			L2138869-16			L2138869-17			L2138869-20		
COLLECTION DATE:		7/20/2021			7/20/2021			7/20/2021			7/20/2021			7/20/2021		
SAMPLE DEPTH:		1'-1.5'			0-0.5'			0-0.5'			1'-1.5'			0-0.5'		
SAMPLE MATRIX:		SOIL			SOIL			SOIL			SOIL			SOIL		
ANALYTE	(mg/kg)	Conc	Q	RL	Conc	Q	RL	Conc	Q	RL	Conc	Q	RL	Conc	Q	RL
PESTICIDES																
Dieldrin	0.034	0.0102		0.00118	0.00852		0.00115	0.246		0.00603	0.00741		0.00117	0.238		0.00592

Notes:
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FAIRWAY 10: SOIL ANALYTICAL RESULTS
OLD ORCHARD COUNTRY CLUB
54 MONMOUTH ROAD
EATONTOWN, NJ

SAMPLE ID:	NJDEP 2021 Residential Soil Remediation Standards	F-10-5A			F-10-6			F-10-7			F-10-7A		
ALPHA LAB ID:		L2138869-21			L2138869-24			L2138869-28			L2138869-29		
COLLECTION DATE:		7/20/2021			7/20/2021			7/20/2021			7/20/2021		
SAMPLE DEPTH:		1'-1.5'			0-0.5'			0-0.5'			1'-1.5'		
SAMPLE MATRIX:		SOIL			SOIL			SOIL			SOIL		
ANALYTE	(mg/kg)	Conc	Q	RL	Conc	Q	RL	Conc	Q	RL	Conc	Q	RL
PESTICIDES													
Dieldrin	0.034	0.0129		0.00117	0.0194		0.00117	0.0386		0.00112	ND		0.00112

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FAIRWAY 13: SOIL ANALYTICAL RESULTS
OLD ORCHARD COUNTRY CLUB
54 MONMOUTH ROAD
EATONTOWN, NJ

SAMPLE ID:	NJDEP 2021 Residential Soil Remediation Standards	F-13			F-13A			F-13B			F-13-1			F-13-1A		
ALPHA LAB ID:		L2126518-48			L2139174-39			L2139174-40			L2139174-42			L2139174-43		
COLLECTION DATE:		5/19/2021			7/21/2021			7/21/2021			7/21/2021			7/21/2021		
SAMPLE DEPTH:		0-0.5'			1'-1.5'			2'-2.5'			0-0.5'			1'-1.5'		
SAMPLE MATRIX:		SOIL			SOIL			SOIL			SOIL			SOIL		
ANALYTE	(mg/kg)	Conc	Q	RL	Conc	Q	RL	Conc	Q	RL	Conc	Q	RL	Conc	Q	RL
PESTICIDES																
Dieldrin	0.034	0.503		0.00731	0.0372		0.00112	0.00158		0.0012	0.0369		0.00113	ND		0.00122

Notes:
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FAIRWAY 13: SOIL ANALYTICAL RESULTS
OLD ORCHARD COUNTRY CLUB
54 MONMOUTH ROAD
EATONTOWN, NJ

SAMPLE ID:	NJDEP 2021 Residential Soil Remediation Standards	F-13-2			F-13-2A			F-13-3			F-13-3A			F-13-4		
ALPHA LAB ID:		L2139174-46			L2139174-47			L2139174-50			L2139174-51			L2139174-54		
COLLECTION DATE:		7/21/2021			7/21/2021			7/21/2021			7/21/2021			7/21/2021		
SAMPLE DEPTH:		0-0.5'			1'-1.5'			0-0.5'			1'-1.5'			0-0.5'		
SAMPLE MATRIX:		SOIL			SOIL			SOIL			SOIL			SOIL		
ANALYTE	(mg/kg)	Conc	Q	RL	Conc	Q	RL	Conc	Q	RL	Conc	Q	RL	Conc	Q	RL
PESTICIDES																
Dieldrin	0.034	0.0748		0.00134	ND		0.00123	0.0946		0.00113	0.00101	JP	0.00167	0.145		0.00111

Notes:
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FAIRWAY 13: SOIL ANALYTICAL RESULTS
OLD ORCHARD COUNTRY CLUB
54 MONMOUTH ROAD
EATONTOWN, NJ

SAMPLE ID:	NJDEP 2021 Residential Soil Remediation Standards	F-13-4A			F-13-5			F-13-5A			F-13-6			F-13-7		
ALPHA LAB ID:		L2139174-55			L2139174-58			L2139174-59			L2139174-62			L2139174-66		
COLLECTION DATE:		7/21/2021			7/21/2021			7/21/2021			7/21/2021			7/21/2021		
SAMPLE DEPTH:		1'-1.5'			0-0.5'			1'-1.5'			0-0.5'			0-0.5'		
SAMPLE MATRIX:		SOIL			SOIL			SOIL			SOIL			SOIL		
ANALYTE	(mg/kg)	Conc	Q	RL	Conc	Q	RL	Conc	Q	RL	Conc	Q	RL	Conc	Q	RL
PESTICIDES																
Dieldrin	0.034	0.00071	JP	0.00138	0.0757		0.0012	0.00208		0.00121	ND		0.00118	ND		0.00128

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FAIRWAY 15: SOIL ANALYTICAL RESULTS
OLD ORCHARD COUNTRY CLUB
54 MONMOUTH ROAD
EATONTOWN, NJ

SAMPLE ID:	NJDEP 2021 Residential Soil Remediation Standards	F-15			F-15A			F-15-1			F-15-1A			F-15-1B		
ALPHA LAB ID:		L2126518-54			L2139174-70			L2139174-73			L2139174-74			L2145224-01		
COLLECTION DATE:		5/19/2021			7/21/2021			7/21/2021			7/21/2021			7/21/2021		
SAMPLE DEPTH:		0-0.5'			1'-1.5'			0-0.5'			1'-1.5'			2'-2.5'		
SAMPLE MATRIX:		SOIL			SOIL			SOIL			SOIL			SOIL		
ANALYTE	(mg/kg)	Conc	Q	RL	Conc	Q	RL	Conc	Q	RL	Conc	Q	RL	Conc	Q	RL
PESTICIDES																
Dieldrin	0.034	0.0632		0.00115	0.00866		0.00116	0.317		0.00581	0.0604		0.00109	0.00134		0.00114

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FAIRWAY 15: SOIL ANALYTICAL RESULTS
OLD ORCHARD COUNTRY CLUB
54 MONMOUTH ROAD
EATONTOWN, NJ

SAMPLE ID:	NJDEP 2021 Residential Soil Remediation Standards	F-15-2			F-15-2A			F-15-3			F-15-3A			F-15-4			F-15-4A		
ALPHA LAB ID:		L2139174-77			L2139174-78			L2139174-81			L2139174-82			L2139174-85			L2139174-86		
COLLECTION DATE:		7/21/2021			7/21/2021			7/21/2021			7/21/2021			7/21/2021			7/21/2021		
SAMPLE DEPTH:		0-0.5'			1'-1.5'			0-0.5'			1'-1.5'			0-0.5'			1'-1.5'		
SAMPLE MATRIX:		SOIL			SOIL			SOIL			SOIL			SOIL			SOIL		
ANALYTE	(mg/kg)	Conc	Q	RL	Conc	Q	RL	Conc	Q	RL	Conc	Q	RL	Conc	Q	RL	Conc	Q	RL
PESTICIDES																			
Dieldrin	0.034	0.623		0.00585	0.0206		0.00113	0.468		0.0115	0.00898		0.00113	0.0596		0.00115	ND		0.00115

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FAIRWAY 15: SOIL ANALYTICAL RESULTS
OLD ORCHARD COUNTRY CLUB
54 MONMOUTH ROAD
EATONTOWN, NJ

SAMPLE ID:	NJDEP 2021 Residential Soil Remediation Standards	F-15-5			F-15-5A			F-15-6			F-15-6A			F-15-7			F-15-7A		
ALPHA LAB ID:		L2139174-89			L2139174-90			L2139174-93			L2139174-94			L2139174-97			L2139174-98		
COLLECTION DATE:		7/21/2021			7/21/2021			7/21/2021			7/21/2021			7/21/2021			7/21/2021		
SAMPLE DEPTH:		0-0.5'			1'-1.5'			0-0.5'			1'-1.5'			0-0.5'			1'-1.5'		
SAMPLE MATRIX:		SOIL			SOIL			SOIL			SOIL			SOIL			SOIL		
ANALYTE	(mg/kg)	Conc	Q	RL	Conc	Q	RL	Conc	Q	RL	Conc	Q	RL	Conc	Q	RL	Conc	Q	RL
PESTICIDES																			
Dieldrin	0.034	0.228		0.00233	0.0218		0.0011	0.358		0.00598	0.0164		0.00116	0.0435		0.00112	0.00785	IP	0.00113

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GREEN 6: SOIL ANALYTICAL RESULTS
OLD ORCHARD COUNTRY CLUB
54 MONMOUTH ROAD
EATONTOWN, NJ

SAMPLE ID:	NJDEP 2021 Residential Soil Remediation Standards	G-6			G-6A			G-6B			G-6C			G-6-1			G-6-2		
ALPHA LAB ID:		L2126518-27			-			-			-			-			-		
HAMPTON-CLARKE LAB ID:		-			AD24655-001			AD25463-001			AD25463-003			AD24655-004			AD24655-008		
COLLECTION DATE:		5/19/2021			7/12/2021			7/12/2021			7/12/2021			7/12/2021			7/12/2021		
SAMPLE DEPTH:		0-0.5'			1'-1.5'			2'-2.5'			3'-3.5'			0-0.5'			0-0.5'		
SAMPLE MATRIX:		SOIL			SOIL			SOIL			Soil			SOIL			SOIL		
ANALYTE	(mg/kg)	Conc	Q	RL	Conc	Q	RL	Conc	Q	RL	Conc	Q	RL	Conc	Q	RL	Conc	Q	RL
TOTAL METALS																			
Arsenic, Total	19	60.9		0.607	110		0.23	54		0.22	6.6		0.23	1.6		0.23	9.0		0.24
Lead, Total	400	527		3.03	190		1.4	4.6		0.45	3.6		0.46	4.2		0.46	26		0.48
Mercury, Total	23	25		1.9	15		0.48	-		-	-		-	0.52		0.096	2.5		0.099

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GREEN 6: SOIL ANALYTICAL RESULTS
OLD ORCHARD COUNTRY CLUB
54 MONMOUTH ROAD
EATONTOWN, NJ

SAMPLE ID:	NJDEP 2021 Residential Soil Remediation Standards	G-6-3			G-6-4		
ALPHA LAB ID:		-			-		
HAMPTON-CLARKE LAB ID:		AD24655-012			AD24655-016		
COLLECTION DATE:		7/12/2021			7/12/2021		
SAMPLE DEPTH:		0-0.5'			0-0.5'		
SAMPLE MATRIX:		SOIL			SOIL		
ANALYTE	**(mg/kg)**	**Conc**	**Q**	**RL**	**Conc**	**Q**	**RL**
TOTAL METALS							
Arsenic, Total	19	7.2		0.23	2.1		0.23
Lead, Total	400	7.2		0.46	4.2		0.45
Mercury, Total	23	0.75		0.096	0.64		0.095

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GREEN 9: SOIL ANALYTICAL RESULTS
OLD ORCHARD COUNTRY CLUB
54 MONMOUTH ROAD
EATONTOWN, NJ

SAMPLE ID:	NJDEP 2021 Residential Soil Remediation Standards	G-9			G-9A			G-9B			G-9-1			G-9-2		
ALPHA LAB ID:		L2126518-36			L2137339-94			-			L2137339-97			L2137339-101		
HAMPTON-CLARKE LAB ID:		-			AD24655-020			AD25463-002			AD24655-023			AD24655-027		
COLLECTION DATE:		5/19/2021			7/12/2021			44389			7/12/2021			7/12/2021		
SAMPLE DEPTH:		0-0.5'			1'-1.5'			2'-2.5'			0-0.5'			0-0.5'		
SAMPLE MATRIX:		SOIL			SOIL			SOIL			SOIL			SOIL		
ANALYTE	**(mg/kg)**	**Conc**	**Q**	**RL**	**Conc**	**Q**	**RL**	**Conc**	**Q**	**RL**	**Conc**	**Q**	**RL**	**Conc**	**Q**	**RL**
PESTICIDES																
Chlordane (cis and trans)	0.27	0.338	P	0.168	0.00539		0.0166	-		-	0.00869	P	0.0162	ND		0.0181
cis-Chlordane	NC	0.187	IP	0.0253	0.00384	IP	0.00249	-		-	0.00183	J	0.00242	ND		0.00272
trans-Chlordane	NC	0.151	P	0.0253	0.00155	JIP	0.00249	-		-	0.00686	P	0.00242	ND		0.00272
TOTAL METALS																
Arsenic, Total	19	122		0.507	150		1.2	8.1		0.24	2.2		0.25	2.2		0.27
Lead, Total	400	746		2.53	380		2.4	-		-	5.0		0.49	8.9		0.54
Mercury, Total	23	27.5		1.83	37		0.99	ND		0.098	0.23		0.10	4.1		0.11

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GREEN 9: SOIL ANALYTICAL RESULTS
OLD ORCHARD COUNTRY CLUB
54 MONMOUTH ROAD
EATONTOWN, NJ

SAMPLE ID:	NJDEP 2021 Residential Soil Remediation Standards	G-9-3			G-9-4		
ALPHA LAB ID:		L2137339-105			L2137339-109		
HAMPTON-CLARKE LAB ID:		AD24655-031			AD24655-035		
COLLECTION DATE:		7/12/2021			7/12/2021		
SAMPLE DEPTH:		0-0.5'			0-0.5'		
SAMPLE MATRIX:		SOIL			SOIL		
ANALYTE	**(mg/kg)**	**Conc**	**Q**	**RL**	**Conc**	**Q**	**RL**
PESTICIDES							
Chlordane (cis and trans)	0.27	0.00132		0.017	ND		0.0151
cis-Chlordane	NC	ND		0.00255	ND		0.00227
trans-Chlordane	NC	0.00132	JP	0.00255	ND		0.00227
TOTAL METALS							
Arsenic, Total	19	6.0		0.25	0.79		0.23
Lead, Total	400	22		0.49	3.3		0.45
Mercury, Total	23	2.5		0.10	0.17		0.095

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GREEN 10: SOIL ANALYTICAL RESULTS
OLD ORCHARD COUNTRY CLUB
54 MONMOUTH ROAD
EATONTOWN, NJ

SAMPLE ID:	NJDEP 2021 Residential Soil Remediation Standards	G-10			G-10A			G-10B			G-10-1			G-10-2		
ALPHA LAB ID:		L2126518-39			L2138869-32			-			L2138869-35			L2138869-39		
HAMPTON-CLARKE LAB ID:		-			AD24855-113			AD25611-011			AD24855-002			AD24855-006		
COLLECTION DATE:		5/19/2021			7/20/2021			7/20/2021			7/20/2021			7/20/2021		
SAMPLE DEPTH:		0-0.5'			1'-1.5'			2-2.5'			0-0.5'			0-0.5'		
SAMPLE MATRIX:		SOIL			SOIL			SOIL			SOIL			SOIL		
ANALYTE	(mg/kg)	Conc	Q	RL	Conc	Q	RL	Conc	Q	RL	Conc	Q	RL	Conc	Q	RL
PESTICIDES																
Chlordane (cis and trans)	0.27	0.457		0.0183	0.00258		0.0148	-	-	-	0.00105		0.015	0.00571		0.0163
cis-Chlordane	NC	0.338	P	0.0137	0.00168	JIP	0.00221	-	-	-	ND		0.00225	0.00212	JIP	0.00244
trans-Chlordane	NC	0.119		0.00274	0.0009	JIP	0.00221	-	-	-	0.00105	J	0.00225	0.00359		0.00244
TOTAL METALS																
Arsenic, Total	19	61.2		0.566	330		2.3	7.5		0.23	12		0.25	14		0.24
Lead, Total	400	509		2.83	580		4.6	4.0		0.46	28		0.50	48		0.48

Notes:
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GREEN 10: SOIL ANALYTICAL RESULTS
OLD ORCHARD COUNTRY CLUB
54 MONMOUTH ROAD
EATONTOWN, NJ

SAMPLE ID:	NJDEP 2021 Residential Soil Remediation Standards	G-10-3			G-10-3A			G-10-4			G-10-4A		
ALPHA LAB ID:		L2138869-43			-			L2138869-47			-		
HAMPTON-CLARKE LAB ID:		AD24855-010			AD25611-001			AD24855-014			AD25611-002		
COLLECTION DATE:		7/20/2021			7/20/2021			7/20/2021			7/20/2021		
SAMPLE DEPTH:		0-0.5'			1-1.5'			0-0.5'			1-1.5'		
SAMPLE MATRIX:		SOIL			SOIL			SOIL			SOIL		
ANALYTE	**(mg/kg)**	**Conc**	**Q**	**RL**	**Conc**	**Q**	**RL**	**Conc**	**Q**	**RL**	**Conc**		**RL**
PESTICIDES													
Chlordane (cis and trans)	0.27	ND		0.016	-	-	-	0.00076		0.0158	-	-	-
cis-Chlordane	NC	ND		0.0024	-	-	-	ND		0.00237	-	-	-
trans-Chlordane	NC	ND		0.0024	-	-	-	0.00076	JP	0.00237	-	-	-
TOTAL METALS													
Arsenic, Total	19	35		0.26	9.5		0.24	20		0.26	12		0.24
Lead, Total	400	110		0.52	16		0.47	58		0.52	20		0.49

Notes:
Results reported in milligrams per kilogram (mg/kg) or parts per million
Exceedances (if any) are highlighted
ND = Not detected above laboratory's reporting limit (RL)
NA = Not analyzed
NC = No criteria
J = Estimated value, Concentration is below the RL but above the Method Detection Limit (MDL)
P = The relative percent difference (RPD) between the two columns exceeds the method-specified criteria
I = The lower value for the two columns has been reported due to obvious interference

GREEN 11: SOIL ANALYTICAL RESULTS
OLD ORCHARD COUNTRY CLUB
54 MONMOUTH ROAD
EATONTOWN, NJ

SAMPLE ID:	NJDEP 2021 Residential Soil Remediation Standards	G-11			G-11A			G-11B			G-11-1			G-11-1A		
ALPHA LAB ID:		L2126518-42			-			-			-			-		
HAMPTON-CLARKE LAB ID:		-			AD24855-018			AD25611-003			AD24855-021			AD25611-004		
COLLECTION DATE:		5/19/2021			7/20/2021			7/20/2021			7/20/2021			7/20/2021		
SAMPLE DEPTH:		0-0.5'			1'-1.5'			2-2.5'			0-0.5'			1-1.5'		
SAMPLE MATRIX:		SOIL			SOIL			SOIL			SOIL			SOIL		
ANALYTE	(mg/kg)	Conc	Q	RL	Conc		RL	Conc		RL	Conc		RL	Conc		RL
TOTAL METALS																
Arsenic, Total	19	146		0.595	28		0.23	9.5		0.23	23		0.25	14		0.23
Lead, Total	400	966		2.97	33		0.47	5.1		0.46	40		0.51	22		0.47
Mercury	23	63.2		1.99	1.0		0.097	-	-	-	2.0		0.11	-	-	-

Notes:

Results reported in milligrams per kilogram (mg/kg) or parts per million

Exceedances (if any) are highlighted

ND = Not detected above laboratory's reporting limit (RL)

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NC = No criteria

J = Estimated value, Concentration is below the RL but above the Method Detection Limit (MDL)

P = The relative percent difference (RPD) between the two columns exceeds the method-specified criteria

I = The lower value for the two columns has been reported due to obvious interference

GREEN 11: SOIL ANALYTICAL RESULTS
OLD ORCHARD COUNTRY CLUB
54 MONMOUTH ROAD
EATONTOWN, NJ

SAMPLE ID:	NJDEP 2021 Residential Soil Remediation Standards	G-11-2		G-11-3		G-11-4	
ALPHA LAB ID:		-		-		-	
HAMPTON-CLARKE LAB ID:		AD24855-025		AD24855-029		AD24855-033	
COLLECTION DATE:		7/20/2021		7/20/2021		7/20/2021	
SAMPLE DEPTH:		0-0.5'		0-0.5'		0-0.5'	
SAMPLE MATRIX:		SOIL		SOIL		SOIL	
ANALYTE	**(mg/kg)**	**Conc**	**RL**	**Conc**	**RL**	**Conc**	**RL**
TOTAL METALS							
Arsenic, Total	19	9.3	0.24	15	0.23	9.0	0.23
Lead, Total	400	10	0.48	26	0.46	10	0.47
Mercury	23	0.14	0.10	1.1	0.096	ND	0.097

Notes:

Results reported in milligrams per kilogram (mg/kg) or parts per million

Exceedances (if any) are highlighted

ND = Not detected above laboratory's reporting limit (RL)

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NC = No criteria

J = Estimated value, Concentration is below the RL but above the Method Detection Limit (MDL)

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GREEN 12: SOIL ANALYTICAL RESULTS
OLD ORCHARD COUNTRY CLUB
54 MONMOUTH ROAD
EATONTOWN, NJ

SAMPLE ID:	NJDEP 2021 Residential Soil Remediation Standards	G-12			G-12A			G-12-1			G-12-2			G-12-3			G-12-4		
LAB ID:		L2126518-45			L2139174-01			L2139174-04			L2139174-08			L2139174-12			L2139174-16		
COLLECTION DATE:		5/19/2021			7/21/2021			7/21/2021			7/21/2021			7/21/2021			7/21/2021		
SAMPLE DEPTH:		0-0.5'			1'-1.5'			0-0.5'			0-0.5'			0-0.5'			0-0.5'		
SAMPLE MATRIX:		SOIL			SOIL			SOIL			SOIL			SOIL			SOIL		
ANALYTE	**(mg/kg)**	**Conc**	**Q**	**RL**	**Conc**	**Q**	**RL**	**Conc**	**Q**	**RL**	**Conc**	**Q**	**RL**	**Conc**	**Q**	**RL**	**Conc**	**Q**	**RL**
PESTICIDES																			
Chlordane (cis and trans)	0.27	0.462		0.0965	0.0228	P	0.0147	0.0121		0.0151	0.00099		0.0143	0.01121		0.0146	0.00811		0.0145
cis-Chlordane	NC	0.274	IP	0.0145	0.0102	IP	0.0022	0.00808	IP	0.00227	ND		0.00215	0.00451	IP	0.00219	0.00412	IP	0.00217
trans-Chlordane	NC	0.188		0.0145	0.0126		0.0022	0.00402		0.00227	0.00099	J	0.00215	0.0067		0.00219	0.00399		0.00217

Notes:
Results reported in milligrams per kilogram (mg/kg) or parts per million
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J = Estimated value, Concentration is below the RL but above the Method Detection Limit (MDL)
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GREEN 13: SOIL ANALYTICAL RESULTS
OLD ORCHARD COUNTRY CLUB
54 MONMOUTH ROAD
EATONTOWN, NJ

SAMPLE ID:	NJDEP 2021 Residential Soil Remediation Standards	G-13			G-13A			G-13B			G-13-1			G-13-2		
ALPHA LAB ID:		L2126518-49			L2139174-20			L2139429			L2139174-23			L2139174-27		
HAMPTON-CLARKE LAB ID:		-			AD24880-001			AD25655-002			AD24880-004			AD24880-008		
COLLECTION DATE:		5/19/2021			7/21/2021			7/21/2021			7/21/2021			7/21/2021		
SAMPLE DEPTH:		0-0.5'			1'-1.5'			2'-2.5'			0-0.5'			0-0.5'		
SAMPLE MATRIX:		SOIL			SOIL			Soil			SOIL			SOIL		
ANALYTE	**(mg/kg)**	**Conc**	**Q**	**RL**	**Conc**	**Q**	**RL**	**Conc**	**Q**	**RL**	**Conc**	**Q**	**RL**	**Conc**	**Q**	**RL**
PESTICIDES																
Chlordane (cis and trans)	0.27	0.279		0.0195	0.00553		0.0152	-		-	ND		0.015	0.00388		0.0155
cis-Chlordane	NC	0.131		0.0146	0.00331		0.00227	-		-	ND		0.00225	0.00288	IP	0.00233
trans-Chlordane	NC	0.148		0.00293	0.00222	J	0.00227	-		-	ND		0.00225	0.001	JIP	0.00233
TOTAL METALS																
Arsenic, Total	19	77.3		0.577	150		0.70	5.2		0.24	12		0.23	16		0.22
Lead, Total	400	475		2.88	9.8		0.47	1.9		0.48	40		0.45	34		0.45
Mercury, Total	23	26.2		1.03	2.3		0.097				1.6		0.095	1.3		0.094

Notes:
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ND = Not detected above laboratory's reporting limit (RL)
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GREEN 13: SOIL ANALYTICAL RESULTS
OLD ORCHARD COUNTRY CLUB
54 MONMOUTH ROAD
EATONTOWN, NJ

SAMPLE ID:	NJDEP 2021 Residential Soil Remediation Standards	G-13-3			G-13-4		
ALPHA LAB ID:		L2139174-31			L2139174-35		
HAMPTON-CLARKE LAB ID:		AD24881-002			AD24881-006		
COLLECTION DATE:		7/21/2021			7/21/2021		
SAMPLE DEPTH:		0-0.5'			0-0.5'		
SAMPLE MATRIX:		SOIL			SOIL		
ANALYTE	**(mg/kg)**	**Conc**	**Q**	**RL**	**Conc**	**Q**	**RL**
PESTICIDES							
Chlordane (cis and trans)	0.27	0.0476		0.0141	0.00193		0.0167
cis-Chlordane	NC	0.0365	IP	0.00212	0.00076	JIP	0.0025
trans-Chlordane	NC	0.0111	IP	0.00212	0.00117	J	0.0025
TOTAL METALS							
Arsenic, Total	19	8.6		0.22	7.6		0.22
Lead, Total	400	32		0.44	19		0.45
Mercury, Total	23	0.88		0.093	0.73		0.094

Notes:
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GREEN 15: SOIL ANALYTICAL RESULTS
OLD ORCHARD COUNTRY CLUB
54 MONMOUTH ROAD
EATONTOWN, NJ

SAMPLE ID:	NJDEP 2021 Residential Soil Remediation Standards	G-15			G-15A			G-15B			G-15-1			G-15-1A		
ALPHA LAB ID:		L2126518-55			L2138869-51			-			L2138869-54			-		
HAMPTON-CLARKE LAB ID:		-			AD24855-037			AD25611-005			AD24855-040			AD25611-010		
COLLECTION DATE:		5/19/2021			7/20/2021			7/20/2021			7/20/2021			7/20/2021		
SAMPLE DEPTH:		0-0.5'			1'-1.5'			2-2.5'			0-0.5'			1-1.5'		
SAMPLE MATRIX:		SOIL			SOIL			SOIL			SOIL			SOIL		
ANALYTE	**(mg/kg)**	**Conc**	**Q**	**RL**	**Conc**	**Q**	**RL**	**Conc**	**Q**	**RL**	**Conc**	**Q**	**RL**	**Conc**	**Q**	**RL**
PESTICIDES																
Chlordane (cis and trans)	0.27	0.565		0.101	0.038	P	0.0148	-	-	-	0.01516		0.015	-	-	-
cis-Chlordane	NC	0.283	IP	0.0151	0.0206	IP	0.00223	-	-	-	0.0071	IP	0.00226	-	-	-
trans-Chlordane	NC	0.282		0.0151	0.0174		0.00223	-	-	-	0.00806		0.00226	-	-	-
TOTAL METALS																
Arsenic, Total	19	55.5		0.603	29		0.23	6.9		0.23	68		0.25	19		0.24

Notes:
Results reported in milligrams per kilogram (mg/kg) or parts per million
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GREEN 15: SOIL ANALYTICAL RESULTS
OLD ORCHARD COUNTRY CLUB
54 MONMOUTH ROAD
EATONTOWN, NJ

SAMPLE ID:	NJDEP 2021 Residential Soil Remediation Standards	G-15-2			G-15-3			G-15-4		
ALPHA LAB ID:		L2138869-58			L2138869-62			L2138869-66		
HAMPTON-CLARKE LAB ID:		AD24855-043			AD24855-047			AD24855-051		
COLLECTION DATE:		7/20/2021			7/20/2021			7/20/2021		
SAMPLE DEPTH:		0-0.5'			0-0.5'			0-0.5'		
SAMPLE MATRIX:		SOIL			SOIL			SOIL		
ANALYTE	**(mg/kg)**	**Conc**	**Q**	**RL**	**Conc**	**Q**	**RL**	**Conc**	**Q**	**RL**
PESTICIDES										
Chlordane (cis and trans)	0.27	ND		0.0161	ND		0.015	0.00334		0.0147
cis-Chlordane	NC	ND		0.00241	ND		0.00226	0.0019	JIP	0.00221
trans-Chlordane	NC	ND		0.00241	ND		0.00226	0.00144	J	0.00221
TOTAL METALS										
Arsenic, Total	19	13		0.24	7.3		0.24	7.1		0.24

Notes:
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GREEN 16: SOIL ANALYTICAL RESULTS
OLD ORCHARD COUNTRY CLUB
54 MONMOUTH ROAD
EATONTOWN, NJ

SAMPLE ID:	NJDEP 2021 Residential Soil Remediation Standards	G-16			G-16A			G-16B			G-16-1			G-16-2		
ALPHA LAB ID:		L2126518-58			L2138869-70			-			L2138869-73			L2138869-77		
HAMPTON-CLARKE LABE ID:		-			AD24855-055			AD25611-006			AD24855-058			AD24855-062		
COLLECTION DATE:		5/19/2021			7/20/2021			7/20/2021			7/20/2021			7/20/2021		
SAMPLE DEPTH:		0-0.5'			1'-1.5'			2-2.5'			0-0.5'			0-0.5'		
SAMPLE MATRIX:		SOIL			SOIL			SOIL			SOIL			SOIL		
ANALYTE	**(mg/kg)**	**Conc**	**Q**	**RL**	**Conc**	**Q**	**RL**	**Conc**	**Q**	**RL**	**Conc**	**Q**	**RL**	**Conc**	**Q**	**RL**
PESTICIDES																
Chlordane (cis and trans)	0.27	0.441		0.189	0.0687		0.0147	-	-	-	ND		0.0156	ND		0.0154
cis-Chlordane	NC	0.243	IP	0.0284	0.0367	IP	0.00221	-	-	-	ND		0.00235	ND		0.0023
trans-Chlordane	NC	0.198	P	0.0284	0.032		0.00221	-	-	-	ND		0.00235	ND		0.0023
TOTAL METALS																
Arsenic, Total	19	308		0.593	61		0.24	8.9		0.24	16		0.25	8.4		0.24
Lead, Total	400	1850		2.96	41		0.47	12		0.48	35		0.50	14		0.47
Mercury, Total	23	81.1		2.08	2.5		0.098	-	-	-	3.7		0.10	0.14		0.098

Notes:
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GREEN 16: SOIL ANALYTICAL RESULTS
OLD ORCHARD COUNTRY CLUB
54 MONMOUTH ROAD
EATONTOWN, NJ

SAMPLE ID:	NJDEP 2021 Residential Soil Remediation Standards	G-16-3			G-16-4		
ALPHA LAB ID:		L2138869-81			L2138869-85		
HAMPTON-CLARKE LABE ID:		AD24855-066			AD24855-070		
COLLECTION DATE:		7/20/2021			7/20/2021		
SAMPLE DEPTH:		0-0.5'			0-0.5'		
SAMPLE MATRIX:		SOIL			SOIL		
ANALYTE	**(mg/kg)**	**Conc**	**Q**	**RL**	**Conc**	**Q**	**RL**
PESTICIDES							
Chlordane (cis and trans)	0.27	0.0052		0.0153	ND		0.0146
cis-Chlordane	NC	0.00188	JIP	0.00229	ND		0.00219
trans-Chlordane	NC	0.00332		0.00229	ND		0.00219
TOTAL METALS							
Arsenic, Total	19	9.4		0.24	9.2		0.23
Lead, Total	400	15		0.48	41		0.47
Mercury, Total	23	0.40		0.099	1.4		0.097

Notes:
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J = Estimated value, Concentration is below the RL but above the Method Detection Limit (MDL)
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GREEN 17: SOIL ANALYTICAL RESULTS
OLD ORCHARD COUNTRY CLUB
54 MONMOUTH ROAD
EATONTOWN, NJ

SAMPLE ID:	NJDEP 2021 Residential Soil Remediation Standards	G-17			G-17A			G-17B			G-17-1			G-17-1A		
ALPHA LAB ID:		L2126518-65			L2138869-89			-			L2138869-92			-		
HAMPTON-CLARKE LAB ID:		-			AD24855-074			AD25611-007			AD24855-077			AD25611-008		
COLLECTION DATE:		5/19/2021			7/20/2021			7/20/2021			7/20/2021			7/20/2021		
SAMPLE DEPTH:		0-0.5'			1'-1.5'			2-2.5'			0-0.5'			1-1.5		
SAMPLE MATRIX:		SOIL			SOIL			SOIL			SOIL			SOIL		
ANALYTE	(mg/kg)	Conc	Q	RL	Conc	Q	RL	Conc	Q	RL	Conc	Q	RL	Conc	Q	RL
PESTICIDES																
Chlordane (cis and trans)	0.27	0.67	P	0.0197	0.0238		0.0155	-	-	-	ND		0.0153	-	-	-
cis-Chlordane	NC	0.356	IP	0.00295	0.013	IP	0.00233	-	-	-	ND		0.00229	-	-	-
trans-Chlordane	NC	0.314	P	0.00295	0.0108		0.00233	-	-	-	ND		0.00229	-	-	-
TOTAL METALS																
Arsenic, Total	19	85.5		0.584	140		0.72	8.8		0.25	32		0.24	14		0.24
Lead, Total	400	776		2.92	37		0.48	5.5		0.49	28		0.48	6.1		0.48
Mercury, Total	23	33.7		2.08	0.97		0.10	-	-	-	1.4		0.10	-	-	-

Notes:
Results reported in milligrams per kilogram (mg/kg) or parts per million
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NC = No criteria
J = Estimated value, Concentration is below the RL but above the Method Detection Limit (MDL)
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GREEN 17: SOIL ANALYTICAL RESULTS
OLD ORCHARD COUNTRY CLUB
54 MONMOUTH ROAD
EATONTOWN, NJ

SAMPLE ID:	NJDEP 2021 Residential Soil Remediation Standards	G-17-2			G-17-3			G-17-4		
ALPHA LAB ID:		L2138869-96			L2138869-100			L2138869-104		
HAMPTON-CLARKE LAB ID:		AD24855-081			AD24855-085			AD24855-089		
COLLECTION DATE:		7/20/2021			7/20/2021			7/20/2021		
SAMPLE DEPTH:		0-0.5'			0-0.5'			0-0.5'		
SAMPLE MATRIX:		SOIL			SOIL			SOIL		
ANALYTE	**(mg/kg)**	**Conc**	**Q**	**RL**	**Conc**	**Q**	**RL**	**Conc**	**Q**	**RL**
PESTICIDES										
Chlordane (cis and trans)	0.27	0.00129		0.0158	ND		0.0157	ND		0.0138
cis-Chlordane	NC	ND		0.00237	ND		0.00235	ND		0.00208
trans-Chlordane	NC	0.00129	JP	0.00237	ND		0.00235	ND		0.00208
TOTAL METALS										
Arsenic, Total	19	14		0.25	11		0.24	6.2		0.22
Lead, Total	400	31		0.49	17		0.48	15		0.45
Mercury, Total	23	1.2		0.10	0.49		0.099	0.48		0.094

Notes:
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J = Estimated value, Concentration is below the RL but above the Method Detection Limit (MDL)
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GREEN 18: SOIL ANALYTICAL RESULTS
OLD ORCHARD COUNTRY CLUB
54 MONMOUTH ROAD
EATONTOWN, NJ

SAMPLE ID:	NJDEP 2021 Residential Soil Remediation Standards	G-18			G-18A			G-18B			G-18-1			G-18-2			G-18-3			G-18-4		
ALPHA LAB ID:		L2126518-63			-						-			-			-			-		
HAMPTON-CLARKE LAB ID:		-			AD24855-093			AD25611-009			AD24855-096			AD24855-100			AD24855-104			AD24855-108		
COLLECTION DATE:		5/19/2021			7/20/2021			7/20/2021			7/20/2021			7/20/2021			7/20/2021			7/20/2021		
SAMPLE DEPTH:		0-0.5'			1'-1.5'			2-2.5			0-0.5'			0-0.5'			0-0.5'			0-0.5'		
SAMPLE MATRIX:		SOIL			SOIL			SOIL			SOIL			SOIL			SOIL			SOIL		
ANALYTE	(mg/kg)	Conc	Q	RL	Conc	Q	RL	Conc	Q	RL	Conc	Q	RL	Conc	Q	RL	Conc	Q	RL	Conc	Q	RL
TOTAL METALS																						
Arsenic, Total	19	63.8		0.62	590		5.8	10		0.24	9.5		0.24	9.3		0.25	12		0.23	17		0.22
Lead, Total	400	743		3.1	2,200		12	72		0.48	18		0.48	18		0.49	33		0.45	38		0.44

Notes:

Results reported in milligrams per kilogram (mg/kg) or parts per million

Exceedances (if any) are highlighted

ND = Not detected above laboratory's reporting limit (RL)

NA = Not analyzed

NC = No criteria

J = Estimated value, Concentration is below the RL but above the Method Detection Limit (MDL)

P = The relative percent difference (RPD) between the two columns exceeds the method-specified criteria

I = The lower value for the two columns has been reported due to obvious interference

TRENCH: SOIL ANALYTICAL RESULTS
OLD ORCHARD COUNTRY CLUB
54 MONMOUTH ROAD
EATONTOWN, NJ

SAMPLE ID:	NJDEP 2021 Residential Soil Remediation Standards	TRENCH-1			TRENCH-1A			TRENCH-1B			TRENCH-1C			TRENCH-2		
ALPHA LAB ID:		L2126518-04			L2139174-101			L2139174-102			L2145224-02			L2139174-104		
COLLECTION DATE:		5/19/2021			7/21/2021			7/21/2021			7/21/2021			7/21/2021		
SAMPLE DEPTH:		0-0.5'			1'-1.5'			2'-2.5'			3'-3.5'			0-0.5'		
SAMPLE MATRIX:		SOIL			SOIL			SOIL			SOIL			SOIL		
ANALYTE	(mg/kg)	Conc	Q	RL	Conc	Q	RL	Conc	Q	RL	Conc	Q	RL	Conc	Q	RL
PESTICIDES																
Heptachlor epoxide	0.076	0.126	P	0.0052	0.00326	IP	0.00321	-		-	-	-	-	ND		0.0153
Chlordane (cis and trans)	0.27	2.79	P	0.462	0.697	P	0.0285	0.486		0.0773	ND		0.0159	0.0592		0.0679
cis-Chlordane	NC	1.27	IP	0.0694	0.405	P	0.0214	0.33		0.0116	0.00207	JIP	0.00238	0.0199	IP	0.0102
trans-Chlordane	NC	1.52		0.0694	0.292		0.0214	0.156		0.0116	0.00252	P	0.00238	0.0393	P	0.0102

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TRENCH: SOIL ANALYTICAL RESULTS
OLD ORCHARD COUNTRY CLUB
54 MONMOUTH ROAD
EATONTOWN, NJ

SAMPLE ID:	NJDEP 2021 Residential Soil Remediation Standards	TRENCH-3			TRENCH-3A			TRENCH-4			TRENCH-5			TRENCH-5A		
ALPHA LAB ID:		L2139174-108			L2139174-109			L2139174-112			L2139174-116			L2139174-117		
COLLECTION DATE:		7/21/2021			7/21/2021			7/21/2021			7/21/2021			7/21/2021		
SAMPLE DEPTH:		0-0.5'			1'-1.5'			0-0.5'			0-0.5'			1'-1.5'		
SAMPLE MATRIX:		SOIL			SOIL			SOIL			SOIL			SOIL		
ANALYTE	(mg/kg)	Conc	Q	RL	Conc	Q	RL	Conc	Q	RL	Conc	Q	RL	Conc	Q	RL
PESTICIDES																
Heptachlor epoxide	0.076	0.0119	J	0.0161	-		-	0.0138	JP	0.0184	0.00498	IP	0.00339	-		-
Chlordane (cis and trans)	0.27	0.277		0.0715	0.01321	P	0.0151	0.1874		0.0816	0.572	P	0.0301	0.1162	IP	0.0156
cis-Chlordane	NC	0.115	IP	0.0107	0.00706		0.00227	0.0794	IP	0.0122	0.364	P	0.0226	0.0657		0.00234
trans-Chlordane	NC	0.162		0.0107	0.00615		0.00227	0.108		0.0122	0.208		0.0226	0.0505	P	0.00234

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