ROANOKE SAND & GRAVEL CORP.
104 ROCKY POINT ROAD
MIDDLE ISLAND, NY 11953
NYSDEC # 1-4722-00611/00005

2024 3RD QUARTER GROUNDWATER MONITORING EVENT AND REPORT

PREPARED FOR:

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ROANOKE SAND & GRAVEL CORP.
QUARTERLY GROUNDWATER MONITORING REPORT
NYSDEC #1-4722-00611/00005

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1.0 INTRODUCTION

This *Quarterly Groundwater Monitoring Report* (Report) has been prepared by P.W. Grosser Consulting, Inc. (PWGC) on behalf of Roanoke Sand & Gravel Corp. (herein referred to as "the Mine" or "the Site"). The overall objective of this report is to document routine groundwater monitoring and sampling activities for the third quarter of 2024 (July 2024-September 2024) in accordance with Mined Land Reclamation Permit (MLRP) 1-4722-00611/00005 and the approved Groundwater Monitoring Well Sampling Procedure Plan developed by PWGC dated June 2023.

The MLR Permit is limited to the continuation of below water-table mining within the currently permitted area of excavation to a maximum depth of 140 feet below the groundwater table and to continue sand and gravel excavation to create a 172.2-acre lake on the property, referred to herein as "the Project." A permit application renewal was submitted in 2021, which was merely a continuation of mining operations as approved following the Request for Mining Permit Modification (RMPM) prepared by P.W. Grosser Consulting Engineers and Hydrogeologist, P.C. in June 2010, and subsequently renewed in 2016.

This Report documents routine groundwater monitoring and sampling activities performed on September 4 & 5, 2024. As per the approved Groundwater Monitoring Well Sampling Procedure Plan, the content of the report and sampling includes groundwater elevation measurement and samples collected four times a year from the network of groundwater monitoring wells which includes wells 2A, 2B, 3A, 3B, 4A, 4B, 5A, 5B, 6A, 6B, 7A, 7B, 8A, 8B, 9A, 9B, 10A, and 10B.

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2.0 SITE DESCRIPTION

2.1. Past and Present Land Use

The Mine is located at the intersection of Miller Place-Yaphank Road and Rocky Point Road in Middle Island. The Project area is separated from surrounding land uses by a vegetated buffer zone.

The Mine is located on Rocky Point Road, west of William Floyd Parkway and north of Route 25, in Middle Island, New York. Refer to **Figure 1 – Vicinity Map**. A review of historical aerial photographs indicates the site has been utilized for mining purposes since at least 1962. Vegetated berms and buffers are maintained around the Mine to provide natural visual and acoustical screening from surrounding properties. In addition, a perimeter fence is maintained to provide security for the Mine. Sand and gravel are excavated with an electrically powered wet dredge. Sand and gravel are transported by a conveyor system to the Mine's processing area where it is screened, sorted, and stockpiled. The material is then loaded into vehicles and delivered to local residential, commercial, and municipal construction projects.

The land immediately surrounding the site is mostly residential properties, undeveloped, wooded land, and commercial properties. The nearest residence is approximately 380 feet west of the Mine. There is an active mining facility approximately 4,340 feet northwest of the site identified as Coram Materials.

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3.0 GROUNDWATER MONITORING PLAN COMPLIANCE

PWGC has completed an assessment of the groundwater monitoring wells at the Mine. All monitoring wells were observed to be secured, maintained, and accessible.

Groundwater monitoring has been ongoing at the Mine dating back to at least 2006. A Supply Well Protection Management Plan submitted in 2008 as part of a Spill Prevention & Response Plan developed by P.W. Grosser Consulting indicates that seven (7) dual-level monitoring well clusters were installed at that time. In accordance with the permit issued at that time, samples were analyzed for volatile organic compounds (VOCs) and semi-volatile organic compounds (SVOCs). Sampling was performed on a quarterly basis in the active working zone (dredging active), while wells located in inactive working zones (dredging complete) were sampled on a biannual basis.

As per the 2016 permit application package, groundwater samples collected from groundwater monitoring wells were analyzed for VOCs, SVOCs, and total metals. Polychlorinated biphenyls (PCBs), pesticides, and herbicides baseline samples were collected in March 2020. In the most recent Permit Application submission, a Groundwater Monitoring Well Sampling Procedure, dated December 2020, proposed to include sampling for TCL VOCs, TCL SVOCs, and total/dissolved metals. This Groundwater Monitoring Well Sampling Procedure Plan has since been replaced by the June 2023 iteration which was developed voluntarily per the requirements of the Groundwater Study at Long Island Mines.

The groundwater monitoring plan implemented for the Site during this quarter and documented by this report consisted of the following activities:

Monitoring Program	Frequency
Inspection condition of active groundwater monitoring wells	Quarterly
Collect groundwater measurements from active groundwater monitoring wells	Quarterly
Collect groundwater samples from the active groundwater monitoring wells	Quarterly

3.1. Monitoring Wells Maintenance

All 18 wells installed on-site were inspected during the September 2024 sampling event. Each well was observed to be clear, accessible, and in good condition overall condition. See **Figure 2 – Monitoring Well Locations** for monitoring well locations.

4.0 GROUNDWATER MONITORING AND SAMPLING

Groundwater monitoring and sampling for this reporting period were performed by two PWGC hydrogeologists on September 4 & 5, 2024.

4.1. Groundwater Monitoring Well Condition

Eighteen (18) groundwater monitoring wells (2A, 2B, 3A, 3B, 4A, 4B, 5A, 5B, 6A, 6B, 7A, 7B, 8A, 8B, 9A, 9B, 10A, and 10B) are installed at the Mine to facilitate upgradient and downgradient monitoring in the vicinity of the Mine across the property to provide early notification of potential groundwater impact in the event that contaminants are introduced to the subsurface during mining operations.

4.2. Groundwater Level Gauging

Groundwater level measurements for this reporting period were obtained by PWGC on September 5, 2024 for all wells (2A, 2B, 3A, 3B, 4A, 4B, 5A, 5B, 6A, 6B, 7A, 7B, 8A, 8B, 9A, 9B, 10A, and 10B).

4.2.1. Groundwater Level Gauging Procedure

A PWGC field hydrogeologist collected depth to water readings on September 5, 2024. Well logs for this sampling event can be found in **Attachment A**. Field notes for this sampling event can be found in **Attachment B**. An interface probe was slowly lowered into the well and care was taken to prevent it from splashing into the groundwater. No non-aqueous phase liquid (NAPL - product) was detected in the wells. Measurements were collected for the depth to water (DTW) and the depth to the bottom (DTB) of the well. DTB and DTW measurement are obtained from the top of the casing on the compass north side of the casing or at notch. The interface probe was decontaminated after each measurement.

The interface probe measures up to hundredths of a foot. These measurements were used to determine groundwater flow direction.

4.2.2. Groundwater Level Gauging Results

Data retrieved on September 5, 2024 was used to generate a groundwater elevation contour map for the groundwater flow. Refer to **Figure 3 – Groundwater Contours September 2024 Shallow** and **Figure 4 – Groundwater Contours September 2024 Deep**.

Well ID	Latitude	Longitude	Measuring Point (feet above MSL)(NAVD88)	Depth to Water (ft)	Elevations
2A	40.8983413	72.9493182	68.53	17.12	51.41
2B	40.8983413	72.9493182	68.4	16.88	51.52
3A	40.8963084	72.9459719	62.34	11.45	50.89
3B	40.8963084	72.9459719	62.53	11.59	50.94
4A	40.8943198	72.9443509	61.52	10.59	50.93
4B	40.8943198	72.9443509	61.45	10.55	50.90
5A	40.8903809	72.9484147	59.54	8.43	51.11
5B	40.8903809	72.9484147	59.36	8.36	51.00
6A	40.8873610	72.9483034	122.30	71.66	50.64

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6B	40.8873610	72.9483034	122.25	71.68	50.57
7A	40.8853720	72.9486928	138.96	88.52	50.44
7B	40.8853720	72.9486928	138.76	88.4	50.36
8A	40.8920719	72.9534393	60.41	7.91	52.50
8B	40.8920719	72.9534393	60.34	7.82	52.52
9A	40.8897605	72.9515666	59.01	7.15	51.86
9B	40.8897605	72.9515666	59.09	7.03	52.06
10A	40.8861100	72.9518230	59.82	7.8	52.02
10B	40.8861100	72.9518230	59.93	9.51	50.42

Groundwater elevations from September 2024 at the shallow wells ranged between 52.50 feet AMSL (NAVD88) at 8A and 50.44 feet AMSL (NAVD88) at 7A. Shallow groundwater flow was observed to move in a southeasterly direction during this observational period. This is consistent with observations from previous sample events.

Groundwater elevations from September 2024 at the deep wells ranged between 52.52 feet AMSL (NAVD88) at 8B and 50.36 feet AMSL (NAVD88) at 7B. Deep groundwater flow was observed to move in a southeasterly direction during this observational period. This is consistent with observations from previous sample events.

4.3. Groundwater Monitoring Well Sampling

Groundwater monitoring well sampling is currently being performed four (4) times a year (March, June, September, and December). Groundwater monitoring well sampling was conducted on September 4 & 5, 2024 for this reporting period. PWGC field hydrogeologists sampled each of the groundwater monitoring wells as specified in the MLRP issued on March 11, 2020. The sampling was guided by procedures outlined in the approved Groundwater Monitoring Well Sampling Procedure Plan developed by PWGC dated June 2023.

4.4. Groundwater Monitoring Well Procedure

Groundwater samples were collected from each monitoring well at the Site. Prior to 2024, groundwater samples were initially collected using Geotech Geosub 2 portable submersible pumps with dedicated polyethylene tubing. To improve sampling efficiency, maintaining efficacy, and reducing waste, the installation of dedicated submersible pumps was considered and approved by NYSDEC. On March 8, 2024, PWGC installed dedicated Proactive Sample Champ XL submersible pumps at the approximate midpoint of each well location. Each pump has been installed with dedicated high-density polyethylene (HDPE) tubing and are capable of collecting low flow groundwater samples. Four (4) equipment blanks were collected from the pumps prior to installation. The Proactive Sample Champ XL submersible pump wire lengths are listed for each well in the following table:

Well ID	Wire Length (ft)
2A	40
2B	86
3A	38

3B	86
4A	17
4B	40
5A	22
5B	96
6A	94
6B	103
7A	94
7B	150
8A	23
8B	124
9A	23
9B	115
10A	22
10B	141

Wells were purged at flow rates varying from approximately 230-380 mL/minute, while confirming water level drawdown at less than 0.3 ft from initial measurement. Two Horiba U-52 multi parameter water quality meters with flow through cells were utilized to monitor field parameters (turbidity, pH, temperature, dissolved oxygen, and conductivity) at three to five-minute intervals.

Stabilization of indicator field parameters is used to indicate that conditions are suitable for sampling to begin. Stabilization is achieved when three (3) consecutive measurements are within the following limits:

- Turbidity (10% for values greater than 5 NTUs; if three Turbidity values are less than 5 NTUs, consider the values as stabilized),
- Dissolved Oxygen (10% for values greater than 0.5 mg/L, if three Dissolved Oxygen values are less than 0.5 mg/L, consider the values as stabilized),
- Specific Conductance (3%),
- Temperature (3%),
- pH (± 0.1 unit),
- Oxidation/Reduction Potential (±10 millivolts).

Upon stabilization of field parameters, (three (3) consecutive readings within allowable tolerances) groundwater samples were collected.

4.4.1. Quality Assurance/ Quality Control Procedures

In accordance with the NYSDEC guidance document, QA/QC analysis was performed for this sampling event. The following QA/QC samples were included in the analysis:

- **Duplicate Sample-** A blind duplicate, identified as DUP on the chain of custody and lab results, was collected as a duplicate sample associated with parent well 8A.
- **MS/MSD-** A matrix spike/matrix spike duplicate, identified as 2A MS & 2A MSD, was collected from well 2A.

- **Trip Blank-** A trip blank was present in the sample collection cooler containing bottle ware for Volatile Organic Compounds (VOCs) provided by Alpha Analytical Laboratories, a subsidiary of Pace Analytical, which is recognized as a New York State Environmental Laboratory Approval Program (ELAP) certified analytical laboratory. The trip blank was maintained in its designated cooler from bottle ware drop off at the PWGC office, located in Bohemia, NY, through sample pickup by a Pace Analytical courier at the PWGC office.

4.4.2. Groundwater Monitoring Well Analytical Results

Groundwater samples were analyzed for volatile organic compounds (VOCs) (via EPA Method 8260D), semi-volatile organic compounds (SVOCs) (via EPA Method 8270E), and Total and Dissolved Metals (via EPA Method 200.7), Mercury (via EPA Method 245.1), Hexavalent Chromium (via EPA Method 7196A), Cyanide (via SM 4500-CN-E), Total Dissolved Solids (TDS) (via SM 2540 C), Polychlorinated biphenyls (PCBs) (via Method 8082A), pesticides (via Method 8081B), herbicides (via Method 8151A), Ammonium (via EPA Method 711),and cations/anions (via EPA Method 300.0) by Pace Analytical. In addition to these analyses, four (4) well locations, two upgradient monitoring wells (8A & 10A) and two downgradient monitoring wells (3A & 6A) were analyzed for Perfluorinated Alkyl Acids (PFAAs) (via EPA Method 1633), 1,4-Dioxane (via EPA 8270E-Secondary Ion Mass Spectrometry (SIM)), and radionuclides (via EPA Method 901.1).

Analytical results were compared to the New York New York State 6NYCRR Part 703.5 Class GA groundwater standards. Analytical summary tables for samples collected during the September 4 & 5, 2024 sampling events can be found in **Attachment C**. A copy of the analytical results from the September 4 & 5, 2024 sampling events can be found in **Attachment D**.

There were two (2) Metals (total) that exceeded GA groundwater standards:

- Iron (Total) (New York TOGS 1.1.1 Ambient Water Quality Standard- 300 ug/L)
  - 9/05/2024- 971 ug/L @ 8B
  - 9/05/2024- 452 ug/L @ 10B

- Manganese (Total) (New York TOGS 1.1.1 Ambient Water Quality Standard- 300 ug/L)
  - 9/05/2024- 2,620 ug/L @ 7A
  - 9/05/2024- 378 ug/L @ 7B

There were two (2) metals (dissolved) that exceeded GA groundwater standards:

- Iron (dissolved) (New York TOGS 1.1.1 Ambient Water Quality Standard- 300 ug/L)
  - 9/05/2024- 966 ug/L @8B

- Manganese (dissolved) (New York TOGS 1.1.1 Ambient Water Quality Standards 300 ug/L)
  - 9/05/2024- 2,640 ug/L @ 7A
  - 9/5/2024- 356 ug/L @ 7B

There was one (1) pesticide that exceeded GA groundwater standards:

- Dieldrin (New York TOGS 1.1.1 Ambient Water Quality Standard- 0.004 ug/L)
  - 09/05/2024- 0.004 ug/L (J) @ 6A

- 09/05/2024- 0.010 ug/L (J) @ 6B
- 09/05/2024- 0.014 ug/L (J) @ 7A
- 09/05/2024- 0.014 ug/L (J) @ 7B

There was one (1) SVOC that exceeded GA groundwater standards:

- Phenol (New York TOGS 1.1.1 Ambient Water Quality Standard- 1 ug/L)
  - 09/04/2024- 1.8 ug/L (J) @ 2A
  - 09/04/2024- 3.0 ug/L (J) @ 2B
  - 09/04/2024- 2.9 ug/L (J) @ 3A
  - 09/04/2024- 4.0 ug/L (J) @ 3B
  - 09/04/2024- 2.8 ug/L (J) @ 4B
  - 09/05/2024- 1.5 ug/L (J) @ 5A
  - 09/05/2024- 1.8 ug/L (J) @ 5B
  - 09/05/2024- 1.9 ug/L (J) @ 6B
  - 09/05/2024- 2.8 ug/L (J) @ 7A
  - 09/05/2024- 2.0 ug/L (J) @ 7B
  - 09/05/2024- 4.6 ug/L (J) @ 8A
  - 09/04/2024- 2.6 ug/L (J) @ 9B
  - 09/05/2024- 1.0 ug/L (J) @ 10A

There were two Perfluorinated Alkyl Acids (PFAAs) that exceeded GA groundwater standards:

- Perfluorooctanesulfonic Acid (PFOS)(New York TOGS 1.1.1 Ambient Water Quality Standard- 0.0027 ug/L)
  - 09/05/2024- 0.0184 ug/L @ 6A
  - 09/05/2024- 0.0253 ug/L @ 3A
- Perfluorooctanoic Acid (PFOA)(New York TOGS 1.1.1 Ambient Water Quality Standard- 0.0067 ug/L)
  - 09/05/2024- 0.00833 ug/L @ 8A

Total iron concentrations were observed above its respective AWQS standard at monitoring wells 8B and 10B. Although total iron was observed at a concentration that exceeded the AWQS standard at 10B, dissolved iron concentrations were detected below the laboratory reporting limit and is accompanied by a J qualifier. The elevated total iron concentration observed at 10B may be attributed to suspended sediment that was filtered out of solution by the 0.45-micron in-line filter.

The concentrations of dissolved iron observed at monitoring well 8B, and total manganese observed at 7A & 7B exceeded their AWQS standards established in TOGS 1.1.1. Iron and Manganese are naturally occurring in soils and groundwater across Long Island and are considered secondary drinking water contaminants and generally not a risk to human health. While the Environmental Protection Agency (EPA) established secondary drinking water standards for these metals to assist public water systems in managing their drinking water for aesthetic consideration such as taste, color, and odor, the EPA does not enforce these.

Phenol and Dieldrin detected during this analysis were flagged with a J laboratory qualifier, denoting that the target compound was detected at or above the analyte's Minimum Detection Limit (MDL), but below the Reporting Limit (RL), and therefore is an estimation,

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as the qualifier denotes that the concentration is less than equipment's ability to accurately quantify.

Phenol concentrations detected at monitoring wells 2A, 2B, 3A, 3B, 4B, 5A, 5B, 6B, 7A, 7B, 8A, 9B, and 10A were detected above the MDL (0.35 ug/L) of the EPA 8270 GC/MS analysis, but well below the RL (5.0 ug/L). The June 2024 sample event is the first time that phenols were detected at any of the well locations.

Dieldrin concentrations detected at monitoring wells 6A, 6B, 7A and 7B were detected above the MDL (0.003 ug/L) of the Method 8081B, but well below the RL (0.029 ug/L). The September 2024 sample event is the second time that Dieldrin was detected at any of the well locations and is the second consecutive event with low level detections.

Per- and polyfluoroalkyl substances (PFAS) compounds were detected in each of the four samples collected from two upgradient wells (8A, 10A) and two downgradient wells (3A, 6A). There are two PFAS compounds that have established groundwater quality standards: Perfluorooctanoic Acid (PFOA) (New York TOGS 1.1.1 Ambient Water Quality Standard- 0.0067 ug/L) and Perfluorooctanesulfonic Acid (PFOS) (New York TOGS 1.1.1 Ambient Water Quality Standard- 0.0027 ug/L). Concentrations that exceed the AWQS standard for PFOS were observed at 3A & 6A, while PFOA was observed at a level that exceeds the AWQS standard at 8A. These observances are not likely to be caused by mining operations and may continue to be monitored in the subsequent sample event.

4.4.3. Data Usability Evaluation

As stated in Section 4.4.1, the overall QA/QC objective for the groundwater sampling event was to develop and implement procedures that provide data of known and documented quality. QA/QC characteristics for data include precision, accuracy, representativeness, completeness, and comparability. The purpose of the QA/QC activities developed for this site was to verify the integrity of the work performed at the site to assure that the data collected are of the appropriate type and quality needed for the intended use.

The QA/QC program included the preparation and analysis of a trip blank for each cooler containing VOC samples, a blind duplicate, and the collection and evaluation of a matrix spike and matrix spike duplicate. The blind duplicate was collected from well 8A. The matrix spike and matrix spike duplicate samples were collected from well 2A. Because two coolers were able to contain all the VOA vials containing samples for VOCs analysis, only two trip blanks were analyzed.

While the majority of the results from the blind duplicate sample are consistent with those of the parent well, phenol was present in the results of 8A but not DUP001, whose parent well is 8A. This discrepancy could be due to variations in sample handling, analytical procedures, or inherent heterogeneity in the sample matrix. Further investigation may be required to determine the cause of these differences. In general. the analysis of the blind duplicate sample shows results that are consistent with those of the parent well, indicating that the sampling and analytical procedures are reliable

A review of the Matrix Spike and Duplicate reports indicates that total iron, total potassium, bromide, and benzoic acid extractions were accompanied by a Q qualifier, meaning that the quality control sample exceeds the associated acceptance criteria. Note that this qualifier is

not applicable for matrix spike recoveries when the sample concentration is greater than 4 times the spike added for a batch duplicate Relative Percent Difference (RPD) when the sample concentrations are less than 5x the Reporting Limit (RL).

As per the provided case narrative issued in the laboratory report, the following details were provided in reference to these qualifiers:

- Magnesium- The dissolved result is greater than the total result for magnesium. The sample containers were verified as being labeled correctly by the laboratory, and aliquots were analyzed from each bottle, confirming the original results.
- Total potassium- The WG1969777-3/-4 MS/MSD recoveries, performed on L2450417-06, are outside the acceptance criteria for potassium (131%/129%). A post digestion spike was performed and yielded an unacceptable recovery of 130%. The serial dilution recovery was not applicable; therefore, this element fails the matrix test, and the result reported in the native sample should be considered estimated.
- The WG1969777-7 MS recovery, performed on L2450417-07, is outside the acceptance criteria for iron (195%). A post digestion spike was performed and was within acceptance criteria.
- The WG1968778-3 MS recovery, performed on L2450417-08, is outside the acceptance criteria for bromide (84%); however, the associated LCS recovery is within criteria. No further action was taken.
- The WG1968975-3 LCSD recovery, associated with L2450417-01 through -04 and -06 through -09, is below the acceptance criteria for benzoic acid (0%); however, it has been identified as a "difficult" analyte. The results of the associated samples are reported.
- The WG1968975-4/-5 MS/MSD recoveries, performed on L2450417-06, are below the acceptance criteria for benzoic acid (0%/0%) due to the concentration of this compound in the MS/MSD falling below the reported detection limit.

There were no additional qualifiers associated included in the lab results related to analyte recovery abnormalities and were noted at concentrations within normal parameters for analysis. The only qualifiers noted in the lab report and summary tables are the U (under) and J (estimated concentration) qualifiers. The overall quality of the data was acceptable.

4.4.4 Deviations from the Approved Workplan

Sample Collection/ Laboratory Analysis Deviations

Upon review of the laboratory results received from Alpha Analytical/ Pace Analytical, PWGC has noted that some analytes did not meet the specified reporting limits denoted in Appendix 4 of the *Groundwater Study at Long Island Mines Workplan* issued by the NYSDEC in June 2022. These analytes included:

Table 1-Reporting Limit Comparison Table

Analyte	Laboratory RL (ug/L)	Specified Reporting Limit (ug/L)
VOCs		
Acetone	5	0.5
2-butanone	5	0.5
2-hexanone	5	0.5
Dichlorodifluoromethane	5	0.5
Chloromethane	2.5	0.5
Vinyl chloride	1	0.5

Bromomethane	2.5	0.5
Chloroethane	2.5	0.5
Trichlorofluoromethane	2.5	0.5
Carbon disulfide	5.0	0.5
Methylene chloride	2.5	0.5
Trans-1,2-dichloroethene	2.5	0.5
Methyl tert-butyl ether	2.5	0.5
1,1-dichloroethene	2.5	0.5
Cis-1,2-dichloroethene	2.5	0.5
Bromochloromethane	2.5	0.5
Chloroform	2.5	0.5
1,1,1-trichloroethane	2.5	0.5
1,2-dichloropropane	1	0.5
4-methyl-2-pentanone	5	0.5
Toluene	2.5	0.5
1,1,2-trichloroethane	1.5	0.5
1,2-dibromoethane	2.0	0.5
Chlorobenzene	2.5	0.5
Ethylbenzene	2.5	0.5
Xylenes	2.5	2.0
Styrene	2.5	0.5
Bromoform	2.0	0.5
Isopropylbenzene	2.5	0.5
1,3-dichlorobenzene	2.5	0.5
1,4-dichlorobenzene	2.5	0.5
1,2-dichlorobenzene	2.5	0.5
1,2-dibromo-3-chloropropane	2.5	0.5
1,2,4-trichlorobenzene	2.5	0.5
1,2,3-trichlorobenzene	2.5	0.5
SVOCs		
2,4-Dinitrophenol	20	5
4,6-Dinitro-2-methylphenol	10	5
4-Nitrophenol	10	5
1,2,4,5-Tetrachlorobenzene	10	5
Metals		
Beryllium	5	0.5
Cation & Anion		
Sulfate	10,000	500
Herbicides		
Methylchlorophenoxypropionic acid (MCPP)	58.5	1

2-methyl-4-chlorophenoxyacetic acid (MCPA)	63.2	1

In order to comply with the specified reporting limits, the following analyses were analyzed via a different method to meet the reporting requirements:

Table 2-Alternative Method Reporting Limit Comparison Table

Analyte	Laboratory RL (ug/L)	Specified Reporting Limit (ug/L)	Alternative Method
1,2-dibromoethane	0.01	0.5	8011
1,2-dibromo-3-chloropropane	0.01	0.5	8011

Although these analyses did not meet the specified reporting limits for these analytes, the majority of these analyses did meet or exceed the AWQS standards specified in TOGS 1.1.1, with the exception of:

Table 3-AWQS vs. Reporting Limit Comparison Table

Analyte	Laboratory RL (ug/L)	AWQS Standard (ug/L)
1,1,2-Trichloroethane	1.5	0.5
2,4-Dinitrophenol	20	10
1,2,4,5-Tetrachlorobenzene	10	5
Beryllium	5	3

Radionuclides, including isotopic Thorium, Uranium, and Radium, were analyzed from samples collected from two upgradient wells (8A, 10A) and two downgradient wells (3A, 6A). The analysis of these radionuclides was performed using EPA Method 901.1, which consists of a gamma spectroscopy procedure. This method is generally useful for analysis of radionuclides in soil analysis and is not sensitive enough for comparison to drinking water standards. Therefore, the radionuclide concentration results are not usable for comparison to the standards established in the SDWA, as the uncertainty and the Minimum Detectable Limit (MDL) are greater than the guideline limits. Gross Alpha/Beta concentrations should be analyzed via EPA Method 903.1 for Radium-226, EPA Method 904,0 for Radium-228, and EPA Method 908.0 for Total Uranium.

Radionuclides analyses were performed using EPA Method 901.1, rather than the methods specified in Appendix 4 of the Groundwater Study at Long Island Mines Workplan dated June 2022 and the approved Groundwater Monitoring Well Sampling Procedure Plan developed by PWGC dated June 2023.

5.0 CONCLUSIONS AND RECOMMENDATIONS

Groundwater monitoring and sampling for this reporting period were obtained by PWGC on September 4 & 5, 2024.

Monitoring wells were observed to be secured, maintained, and easily accessible.

Groundwater elevations from September 2024 at the shallow wells ranged between 52.50 feet AMSL (NAVD88) at 8A and 50.44 feet AMSL (NAVD88) at 7A and 52.52 feet AMSL (NAVD88) at 8B and 50.36 feet AMSL (NAVD88) at 7B in the deep wells. Shallow groundwater flow was observed to move in an southeasterly direction during this observational period. Deep groundwater flow was observed to move in a southeasterly direction during this observational period.

The total iron concentration was noted above its respective AWQS standard at monitoring well 10B, but was not observed at concentrations that exceeded their AWQS standard when examining the dissolved iron concentrations.

The concentrations of dissolved iron observed at monitoring well 8B, and total and dissolved manganese observed at 7A & 7B exceeded their AWQS standards established in TOGS 1.1.1. Iron and Manganese are considered secondary drinking water contaminants and generally not a risk to human health.

Phenol and Dieldrin detected during this analysis were flagged with a J laboratory qualifier, denoting that the target compound was detected at or above the analyte's Minimum Detection Limit (MDL), but below the Reporting Limit (RL), and therefore is an estimation.

No exceedances of PCBs, herbicides, or VOCs were detected at concentrations exceeding Class GA groundwater standards. Cations/anions and Totals Dissolved Solids (TDS) do not have applicable groundwater standards.

Because the sampling methodology used to analyze radionuclides measure gamma spectroscopy and is not sensitive enough to compare to applicable drinking water standards, the radionuclide concentration results are not usable for comparison to the standards established in the SDWA, as the uncertainty and the Minimum Detectable Limit (MDL) are greater than the guideline limits. Roanoke proposes to collect additional radionuclides samples at monitoring wells 4A, 6A, 8A, and 10A in Q1 2025 to provide usable data for 2 quarters as required in the approved workplan.

Historic groundwater monitoring and sampling results indicate that groundwater is not impacted by mining operations. Groundwater monitoring will continue to be implemented to continually assess the quality of the groundwater at the Mine and immediately down gradient of the Mine during excavation. In addition, it has been shown through the monitoring well network that the existing operation has not introduced contaminants into the aquifer system.

FIGURES

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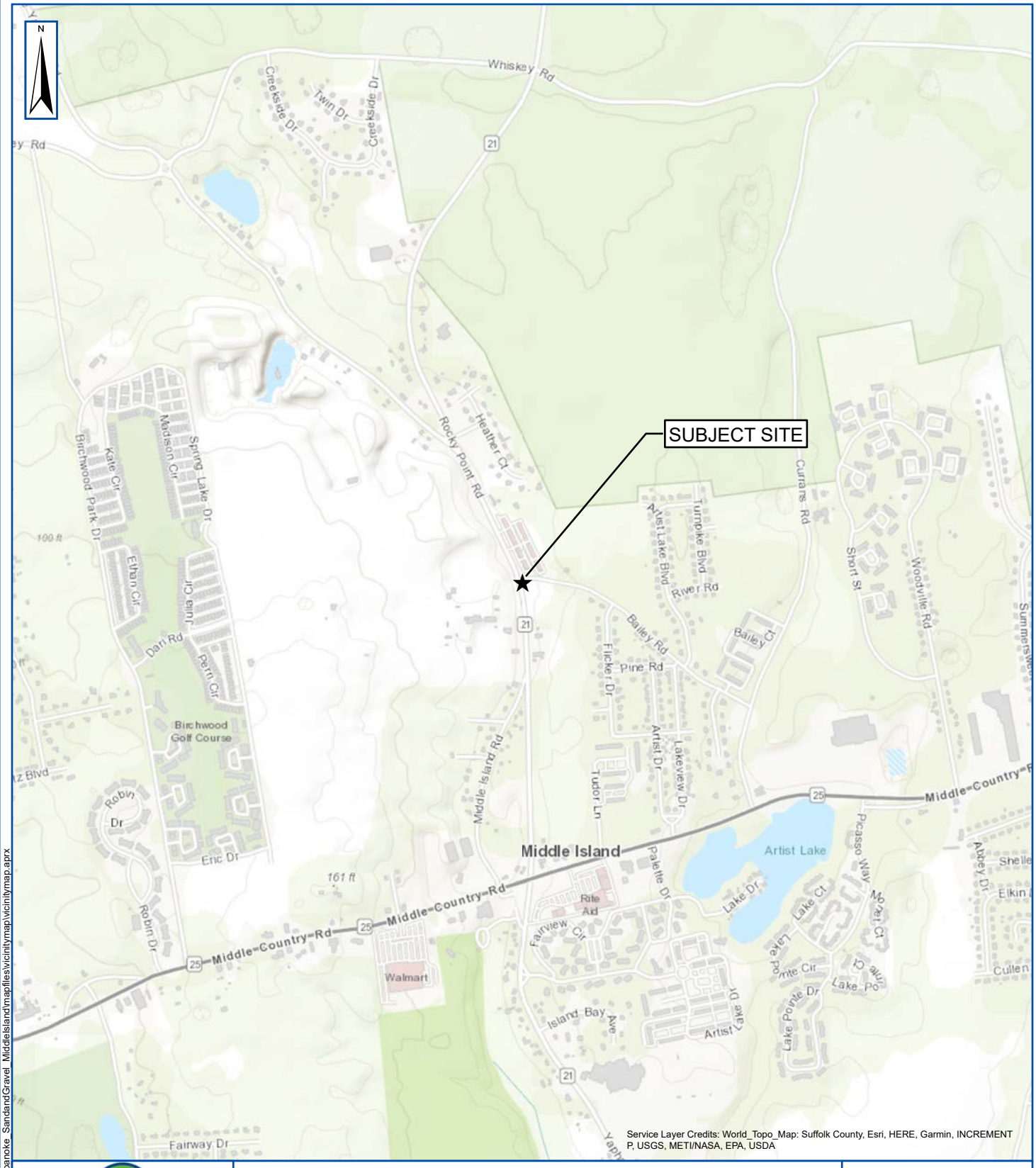

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pwgc.info@pwgrosser.com

SUBJECT SITE VICINITY

104 ROCKY POINT RD
MIDDLE ISLAND, NY

Miles
0 0.13 0.25 0.5 0.75 1

Project:	
Date:	8/4/2020
Designed by:	RN
Drawn by:	HS
Approved by:	RN
Figure No:	1

Document Path: W:\Projects\A-D\BSD\1504-Roanoke_Sand and Gravel_Middle Island\mapfiles\vicinitymap\vicinitymap.aprx

LEGEND

‐·‐·‐	PROPERTY LINE	±300 ACRES
-30	PROPOSED LAKE CONTOUR	
-70	CLAY LENS CONTOUR	
BH-5	BOREHOLE LOCATION	
TW 8A EL.60.41	MONITORING WELL LOCATION	
	PROPOSED REEF	
⨯	PROPOSED ACCESS AREA	
	EXISTING TOP OF LAKE	
	LIMIT OF POST RECLAMATION AREA	±174 ACRES

SITE PLAN

SCALE: 1" = 300'

0 300 600

NOTES:

1. BASE MAP PROVIDED BY KENNTH H. BECKMAN, L.S. SURVEYING AND LAND PLANNING
1814 MIDDLE COUNTRY ROAD
SUITE D
RIDGE, NY 11761
RECEIVED VIA EMAILED JULY 27, 2020

LEGEND

MEDIUM TO COARSE BROWN SAND W/ SOME GRAVEL	🟨
FINE TO MEDIUM SAND	▨
SILTY SAND AND SAND WITH SILT	▤
SILTY CLAY WITH SILT AND SAND	■
MULTICOLOR AND GRAY FINE TO MEDIUM QUARTZOSE SAND WITH INTERBEDED CLAY, SILT AND COARSE SAND AND GRAVEL	■

NOTES:

BORING #1 TO BORING #9: BORING DATA FROM GREAT LAKES DREDGE & DOCK COMPANY DATED OCTOBER 6, 1998

BORING #10 TO BORING #11: BORINGS INSTALLED AND LOGGED BY DELTA WELL AND PUMP CO., INC. DATED AUGUST AND SEPTEMBER 2007

BORING DATA CONVERTED TO UNIFIED SOILS CLASSIFICATION SYSTEM (USCS) FORMAT BY PWGC

PWGC
CLIENT DRIVEN SOLUTIONS

P.W. GROSSER CONSULTING ENGINEER
AND HYDROGEOLOGIST, P.C.

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CONSULTANTS

Number	Revision Description	Revision Date
7		
6		
5		
4		
3		
2		
1		

Designed By: RN	Date Submitted: 12/10/2020
Drawn By: RN	Date Created: 6/28/2023
Approved By: PKB	Scale: AS SHOWN

Client:
**ROANOKE SAND AND GRAVEL CORP.
104 ROCKY POINT ROAD
MIDDLE ISLAND, NY**

Project:

ROANOKE SAND AND GRAVEL

Project Address:
**104 ROCKY POINT ROAD
MIDDLE ISLAND, TOWN OF BROOKHAVEN
SUFFOLK COUNTY, NY**

County Tax Map Number:
Contract Number:
Regulatory Reference Number:

Title of Drawing:

SITE PLAN

Drawing Number:

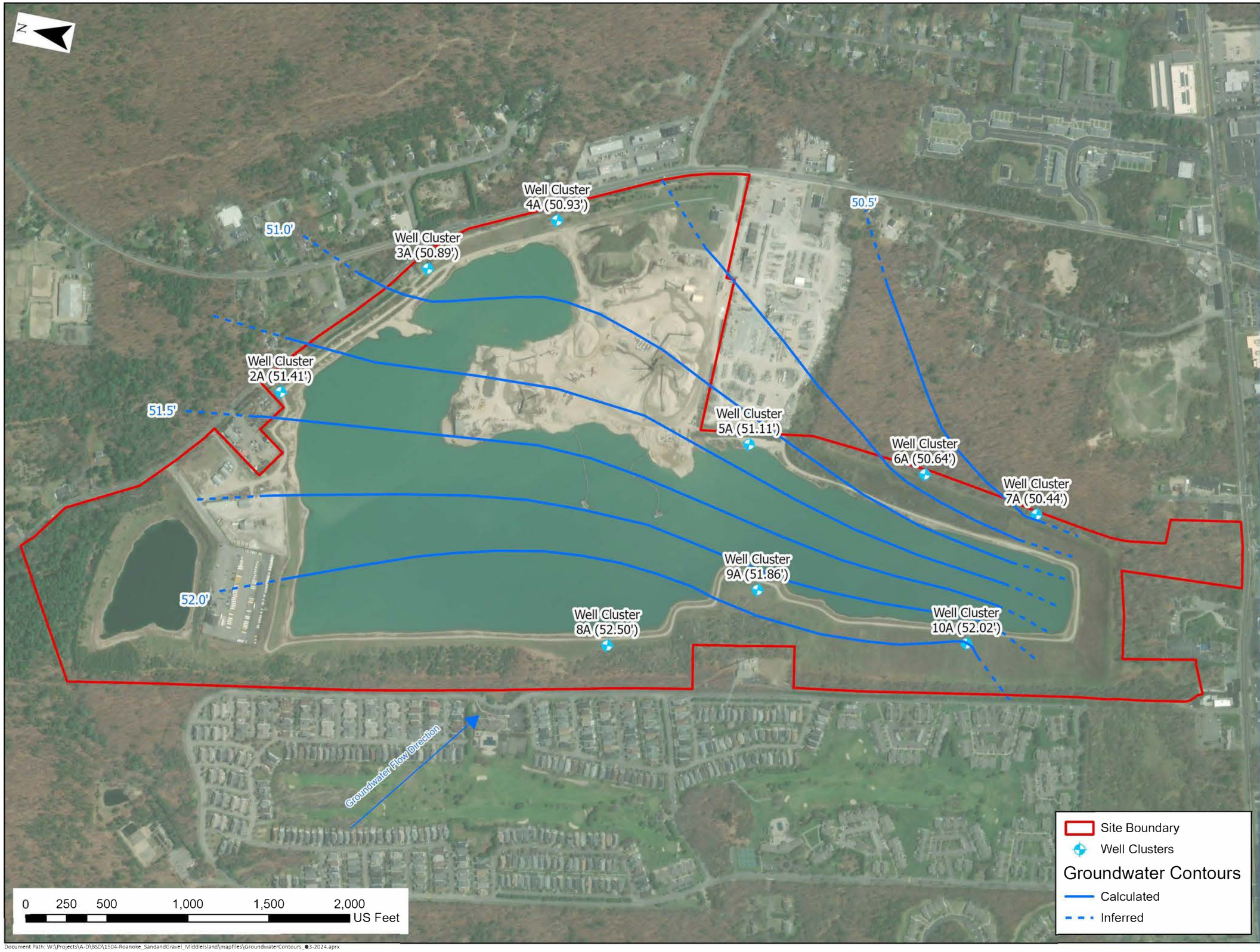
FIGURE 2

Sheet of

PWGC Project Number:
BSD1504

Unauthorized alteration or addition
to this drawing and related documents
is a violation of Section 7209
of the New York State Education Law

PWGC FILE NAME: J:\Projects A-D\BSD\BSD1504 - Roanoke submarie survey\Task 5 - Site Specific Sampling Plan\Deliverables\CAD\FIGURE 1 - SITE PLAN-06282023.dwg (FIGURE 2)
PLOT DATE/TIME: Jun 28, 2023-11:16am By: NASH



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DRAWING PREPARED FOR:

REVISION	DATE	INITIAL	COMMENTS

DRAWING INFORMATION:

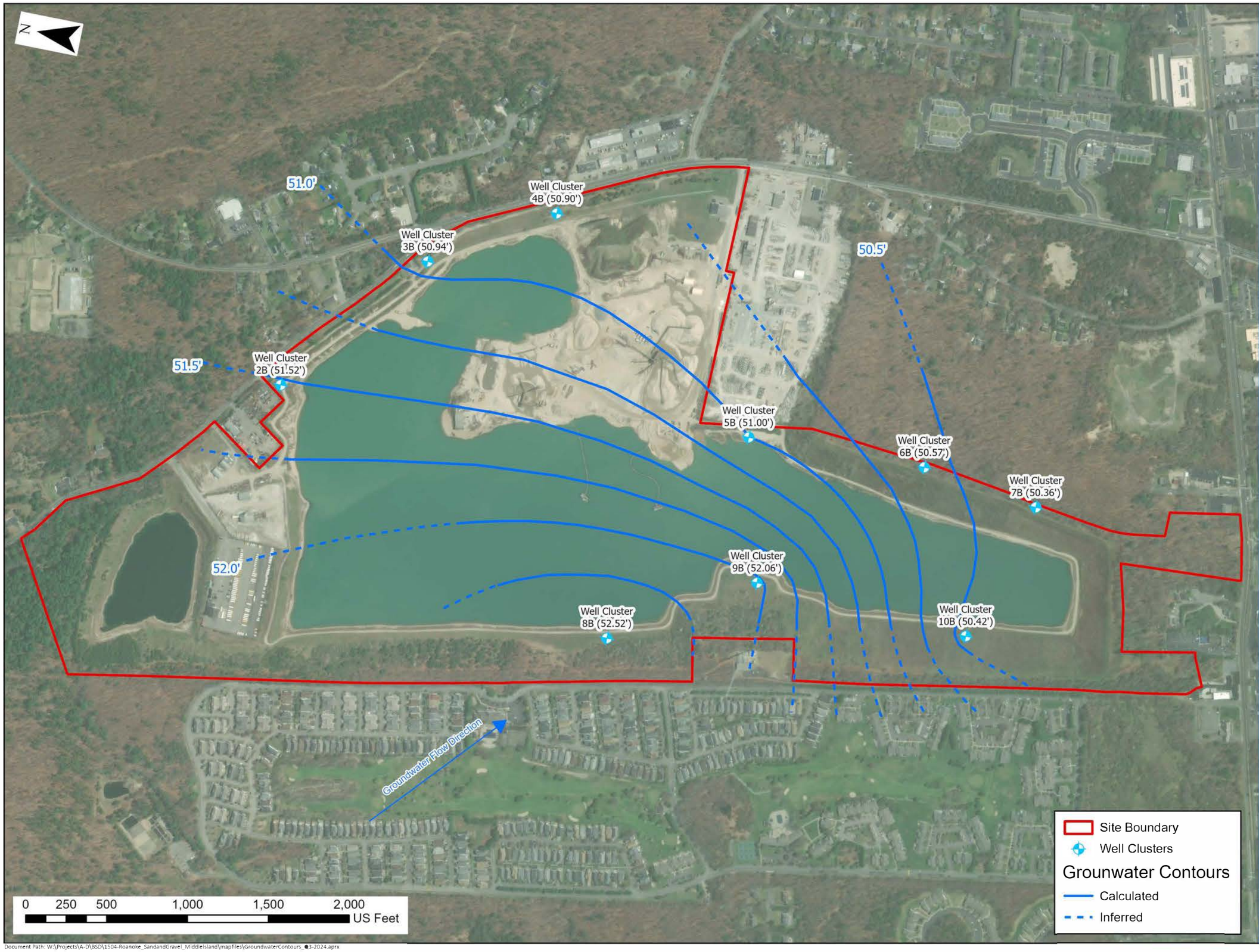
Project:	BSD1504	Designed by:	MM
Date:	9/18/2024	Drawn by:	AM
Scale:	AS SHOWN	Approved by:	MM

Groundwater Contours Shallow - Quarter 3 2024

104 Rocky Point Road
Middle Island, NY

FIGURE NO:

3



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DRAWING PREPARED FOR:

REVISION	DATE	INITIAL	COMMENTS

DRAWING INFORMATION:

Project:	BSD1504	Designed by:	MM
Date:	9/18/2024	Drawn by:	AM
Scale:	AS SHOWN	Approved by:	MM

Groundwater Contours Deep - Quarter 3 2024

104 Rocky Point Road
Middle Island, NY

FIGURE NO:

4

Document Path: W:\Projects\A-D\BSD\1504-Roanoke_SandandGravel_MiddleIsland\mapfiles\GroundwaterContours_●3-2024.aprx

ATTACHMENT A

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P.W. GROSSER CONSULTING, Inc

Well Sampling Log

Well Designation:	2A	**Sampled By:**	KM
Site Address:	104 Rocky Point Road Middle Island NY	**Project Manager:**	MM
		Project Number:	BSD1504

Measuring Point (feet above MSL) (NAVD88)	68.53	**Well Use:**	Monitoring
Depth to Product (ft):	N/A	**Product Elevation (ft):**	N/A
Depth to Water (ft):	17.12	**Groundwater Elevation (ft):**	51.41
Depth to Bottom (ft):	51.34	**Bottom Elevation (ft):**	16.42
Depth to Top Screen BGS (ft):	32.11	**Pump Speed**	28.40%
Depth to Bottom Screen below BGS (ft):	52.11	**Well Diameter (in):**	2
Depth to Pump (ft):	40.00		

Sample Date:	9/4/2024	**Begin Purge Time:**	13:10
Sample Time:	13:40	**Complete Purge Time:**	13:25
Pump Type:	Sample Champ XL	**Sample Method:**	Low Flow
Average Purge Rate (mL/min):	300	**Purge Time (min):**	15
Total Purge Volume (L):	4.50		
Sample Appearance:	Clear	**Odors Observed:**	None
Analytical Laboratory:	Alpha/Pace/Galbraith	**Notes:**	Well is accessible and in good condition. Dissolved metals samples were collected using a 0.45 micron in-line filter.Horiba: FA03499, MS/MSD Taken Here
Date Shipped:	9/4/2024		
Headspace (ppm)	NM		
Analyses Requested:			

VOCs, SVOCs, TAL Metals(Total and Dissolved), Cations/Anions, Total Dissolved Solids, PCBs, Pesticides, Herbicides

Field Stabilization Parameters

Reading	DTW (ft) below MP	Time HH:MM	Temp. (ºC)	pH	Turbidity NTU	ORP mV	Cond. (mS/cm)	DO mg/L	Note
1	NM	13:10	16.44	6.76	29.6	43	0.224	3.08	
2	NM	13:13	16.34	6.38	17.5	55	0.224	3.04	
3	NM	13:16	16.27	6.64	4.3	61	0.225	2.93	
4	NM	13:19	16.25	6.60	0.0	66	0.224	2.92	
5	NM	13:22	16.20	6.60	0.0	71	0.224	2.94	
6	**NM**	**13:25**	**16.16**	**6.58**	**0.0**	**73**	**0.224**	**2.95**	
Stabilization Parameters			3%	±0.1	10%*	±10	3%	10%*	

*Turbidity if three values are less than 5NTU , consider the values stabilized

*DO if three values are less than 0.5 mg/L, consider the values stabilized

P.W. GROSSER CONSULTING, Inc

Well Sampling Log

Well Designation:	2B	**Sampled By:**	KM/VC
Site Address:	104 Rocky Point Road Middle Island NY	**Project Manager:**	MM
		Project Number:	BSD1504

Measuring Point (feet above MSL) (NAVD88)	68.40	**Well Use:**	Monitoring
Depth to Product (ft):	N/A	**Product Elevation (ft):**	N/A
Depth to Water (ft):	16.88	**Groundwater Elevation (ft):**	51.52
Depth to Bottom (ft):	96.29	**Bottom Elevation (ft):**	-30.01
Depth to Top Screen BGS (ft):	78.74	**Pump Speed**	27%
Depth to Bottom Screen below BGS (ft):	98.41	**Well Diameter (in):**	2
Depth to Pump (ft):	86.00		
Sample Date:	9/4/2024	**Begin Purge Time:**	13:09
Sample Time:	13:33	**Complete Purge Time:**	13:27
Pump Type	Sample Champ XL	**Sample Method:**	Low Flow
Average Purge Rate (mL/min)	260	**Purge Time (min):**	18
Total Purge Volume (L):	4.68		-
Sample Appearance:	Clear	**Odors Observed:**	None
Analytical Laboratory:	Alpha/Pace/Galbraith	**Notes:**	Well is accessible and in good condition. Dissolved metals samples were collected using a 0.45 micron in-line filter. Horiba: 19515
Date Shipped:	9/4/2024		
Headspace (ppm)	NM		

Analyses Requested:

VOCs, SVOCs, TAL Metals(Total and Dissolved), Cations/Anions, Total Dissolved Solids, PCBs, Pesticides, Herbicides

Field Stabilization Parameters

Reading	DTW (ft) below MP	Time HH:MM	Temp. (ºC)	pH	Turbidity NTU	ORP mV	Cond. (mS/cm)	DO mg/L	Note
1	NM	13:09	14.27	6.22	15.7	184	0.205	2.04	
2	NM	13:12	14.12	6.22	8.2	169	0.205	1.50	
3	NM	13:15	13.94	6.24	5.6	155	0.206	1.31	
4	NM	13:18	13.88	6.27	2.6	153	0.206	1.28	
5	NM	13:21	13.81	6.29	0.0	165	0.206	1.26	
6	NM	13:24	13.82	6.31	0.0	170	0.206	1.24	
7	**NM**	**13:27**	**13.80**	**6.33**	**0.0**	**172**	**0.206**	**1.22**	
Stabilization Parameters			3%	±0.1	10%*	±10	3%	10%*	

*Turbidity if three values are less than 5NTU , consider the values stabilized

*DO if three values are less than 0.5 mg/L, consider the values stabilized

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Well Sampling Log

Well Designation:	3A	**Sampled By:**	VC
Site Address:	104 Rocky Point Road Middle Island NY	**Project Manager:**	MM
	15 Middle Hwy, East Hampton	**Project Number:**	BSD1504

Measuring Point (feet above MSL) (NAVD88)	62.34	**Well Use:**	Monitoring
Depth to Product (ft):	N/A	**Product Elevation (ft):**	N/A
Depth to Water (ft):	11.45	**Groundwater Elevation (ft):**	50.89
Depth to Bottom (ft):	49.26	**Bottom Elevation (ft):**	12.19
Depth to Top Screen BGS (ft):	30.15	**Pump Speed**	35%
Depth to Bottom Screen below BGS (ft):	50.15	**Well Diameter (in):**	2
Depth to Pump (ft):	38.00		
Sample Date:	9/4/2024	**Begin Purge Time:**	10:50
Sample Time:	11:30	**Complete Purge Time:**	11:26
Pump Type	Sample Champ XL	**Sample Method:**	Low Flow
Average Purge Rate mL/min)	280	**Purge Time (min):**	36
Total Purge Volume (L):	10.08		
Sample Appearance:	Clear	**Odors Observed:**	None
Analytical Laboratory:	Alpha/Pace/Galbraith	**Notes:**	Well is accessible and in good condition. Dissolved metals samples were collected using a 0.45 micron in-line filter. Horiba: FA03499
Date Shipped:	9/4/2024		
Headspace (ppm)	NM		
Analyses Requested:			
VOCs, SVOCs, TAL Metals(Total and Dissolved), Cations/Anions, Total Dissolved Solids, PCBs, Pesticides, Herbicides, PFAS compounds, 1,4-Dioxane, Radionuclides			

Field Stabilization Parameters

Reading	DTW (ft) below MP	Time HH:MM	Temp. (ºC)	pH	Turbidity NTU	ORP mV	Cond. (mS/cm)	DO mg/L	Note
1	NM	10:50	14.16	6.33	1000+	0	0.306	2.40	
2	NM	10:53	15.21	6.59	757	0	0.256	1.34	
3	NM	10:56	14.88	6.84	43.6	0	0.238	1.18	
4	NM	10:59	15.05	6.89	28.7	0	0.238	1.05	
5	NM	11:02	15.15	6.91	15.3	0	0.239	1.03	
6	NM	11:05	15.19	6.91	11.3	0	0.239	0.97	
7	NM	11:08	15.17	6.92	6.2	0	0.239	0.94	
8	NM	11:11	15.17	6.92	4.2	0	0.239	0.93	
9	NM	11:14	15.23	6.94	2.2	0	0.239	0.94	
10	NM	11:17	15.22	6.94	0.0	0	0.239	0.82	
11	NM	11:20	15.25	6.94	0.0	0	0.239	0.81	
12	NM	11:23	15.23	6.95	0.0	0	0.239	0.80	
13	**NM**	**11:26**	**15.23**	**6.94**	**0.0**	**0**	**0.238**	**0.81**	
Stabilization Parameters			3%	±0.1	10%*	±10	3%	10%*	

*Turbidity if three values are less than 5NTU , consider the values stabilized

*DO if three values are less than 0.5 mg/L, consider the values stabilized

P.W. GROSSER CONSULTING, Inc

Well Sampling Log

Well Designation:	3B	**Sampled By:**	VC
Site Address:	104 Rocky Point Road Middle Island NY	**Project Manager:**	MM
		Project Number:	BSD1504

Measuring Point (feet above MSL) (NAVD88)	62.53	**Well Use:**	Monitoring
Depth to Product (ft):	N/A	**Product Elevation (ft):**	N/A
Depth to Water (ft):	11.59	**Groundwater Elevation (ft):**	50.94
Depth to Bottom (ft):	96.29	**Bottom Elevation (ft):**	-33.89
Depth to Top Screen BGS (ft):	76.23	**Pump Speed**	23.90%
Depth to Bottom Screen below BGS (ft):	96.23	**Well Diameter (in):**	2
Depth to Pump (ft):	86.00		
Sample Date:	9/4/2024	**Begin Purge Time:**	10:49
Sample Time:	12:10	**Complete Purge Time:**	12:06
Pump Type	Sample Champ XL	**Sample Method:**	Low Flow
Average Purge Rate (mL/min):	280	**Purge Time (min):**	115
Total Purge Volume (L):	32.20		
Sample Appearance:	Clear	**Odors Observed:**	None
Analytical Laboratory:	Alpha/Pace/Galbraith	**Notes:**	Well is accessible and in good condition. Dissolved metals samples were collected using a 0.45 micron in-line filter. Horiba: 19515
Date Shipped:	9/4/2024		
Headspace (ppm)	NM		
Analyses Requested:			
VOCs, SVOCs, TAL Metals(Total and Dissolved), Cations/Anions, Total Dissolved Solids, PCBs, Pesticides, Herbicides			

Field Stabilization Parameters

Reading	DTW (ft) below MP	Time HH:MM	Temp. (ºC)	pH	Turbidity NTU	ORP mV	Cond. (mS/cm)	DO mg/L	Note
1	NM	10:49	15.98	6.00	44.3	154	0.194	0.00	
2	NM	10:52	16.4	5.99	28.5	113	0.189	0.00	
3	NM	10:55	13.70	6.16	186	178	0.205	0.00	
4	NM	10:58	13.85	6.21	163	155	0.203	0.00	
5	NM	11:01	13.57	6.23	142	158	0.204	0.00	
6	NM	11:04	13.97	6.26	152	152	0.203	0.00	
7	NM	11:07	14.15	6.28	115	146	0.203	0.00	
8	NM	11:10	14.17	6.29	96.0	144	0.200	0.00	
9	NM	11:13	14.13	6.30	58.7	143	0.203	0.00	
10	NM	11:16	14.56	6.32	43.2	141	0.201	0.00	
11	NM	11:19	14.51	6.33	36.5	140	0.201	0.00	
12	NM	11:22	14.50	6.34	34.5	137	0.201	0.00	
13	NM	11:25	14.51	6.35	28.9	135	0.204	0.00	
14	NM	11:28	14.50	6.35	34.5	134	0.204	0.00	
15	NM	11:31	13.38	6.37	28.0	134	0.204	0.00	
16	NM	11:34	13.44	6.36	25.1	133	0.204	0.00	
17	NM	11:37	13.73	6.39	20.4	132	0.202	0.00	
18	NM	11:40	13.42	6.40	13.0	131	0.203	0.00	
19	NM	11:43	13.40	6.40	12.8	131	0.203	0.00	
20	NM	11:46	13.72	6.41	7.3	130	0.202	0.00	
21	NM	11:49	13.65	6.42	6.9	130	0.202	0.00	
22	NM	11:49	13.69	6.42	6.0	131	0.201	0.00	
23	NM	11:52	13.71	6.42	4.2	130	0.204	0.00	
24	NM	11:55	13.72	6.42	2.3	131	0.204	0.00	
25	NM	11:57	13.70	6.42	0.0	130	0.200	0.00	
26	NM	12:00	13.70	6.44	0.0	131	0.201	0.00	
27	NM	12:03	13.71	6.45	0.0	131	0.201	0.00	
28	**NM**	**12:06**	**13.70**	**6.44**	**0.0**	**130**	**0.201**	**0.00**	
Stabilization Parameters			3%	±0.1	10%*	±10	3%	10%*	

*Turbidity if three values are less than 5NTU , consider the values stabilized

*DO if three values are less than 0.5 mg/L, consider the values stabilized

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Well Sampling Log

Well Designation:	4A	**Sampled By:**	VC
Site Address:	104 Rocky Point Road Middle Island NY	**Project Manager:**	MM
		Project Number:	BSD1504

Measuring Point (feet above MSL) (NAVD88)	61.52	**Well Use:**	Monitoring
Depth to Product (ft):	N/A	**Product Elevation (ft):**	N/A
Depth to Water (ft):	10.59	**Groundwater Elevation (ft):**	50.93
Depth to Bottom (ft):	28.72	**Bottom Elevation (ft):**	32.33
Depth to Top Screen BGS (ft):	9.19	**Pump Speed**	23.90
Depth to Bottom Screen below BGS (ft):	29.19	**Well Diameter (in):**	2
Depth to Pump (ft):	17.00		
Sample Date:	9/4/2024	**Begin Purge Time:**	8:09
Sample Time:	8:40	**Complete Purge Time:**	8:40
Pump Type	Sample Champ XL	**Sample Method:**	Low Flow
Average Purge Rate (mL/min)	300	**Purge Time (min):**	32
Total Purge Volume (L):	9.60		
Sample Appearance:	Clear	**Odors Observed:**	None
Analytical Laboratory:	Alpha/Pace/Galbraith	**Notes:**	Well is accessible and in good condition. Dissolved metals samples were collected using a 0.45 micron in-line filter. Horiba: 19515
Date Shipped:	9/4/2024		
Headspace (ppm)	NM		
Analyses Requested:			
VOCs, SVOCs, TAL Metals(Total and Dissolved), Cations/Anions, Total Dissolved Solids, PCBs, Pesticides, Herbicides			

Field Stabilization Parameters

Reading	DTW (ft) below MP	Time HH:MM	Temp. (ºC)	pH	Turbidity NTU	ORP mV	Cond. (mS/cm)	DO mg/L	Note
1	NM	8:08	16.53	5.33	30.5	190	0.196	2.30	
2	NM	8:11	16.42	5.24	16.7	203	0.193	2.09	
3	NM	8:14	16.64	5.23	12.0	218	0.192	2.15	
4	NM	8:17	17.22	5.27	5.5	230	0.193	2.24	
5	NM	8:20	17.26	5.26	4.2	232	0.192	2.25	
6	NM	8:23	17.41	5.29	3.9	236	0.193	2.25	
7	NM	8:26	17.59	5.32	2.2	237	0.193	2.29	
8	NM	8:29	17.71	5.36	1.5	236	0.193	2.30	
9	NM	8:32	17.81	5.40	0.6	236	0.193	2.29	
10	NM	8:35	17.88	5.41	0.4	236	0.193	2.31	
11	**NM**	**8:38**	**17.89**	**5.42**	**0.0**	**232**	**0.192**	**2.32**	
Stabilization Parameters			3%	±0.1	10%*	±10	3%	10%*	

*Turbidity if three values are less than 5NTU , consider the values stabilized

*DO if three values are less than 0.5 mg/L, consider the values stabilized

P.W. GROSSER CONSULTING, Inc

Well Sampling Log

Well Designation:	4B	**Sampled By:**	KM
Site Address:	104 Rocky Point Road Middle Island NY	**Project Manager:**	MM
		Project Number:	BSD1504

Measuring Point (feet above MSL) (NAVD88)	61.45	**Well Use:**	Monitoring
Depth to Product (ft):	N/A	**Product Elevation (ft):**	N/A
Depth to Water (ft):	10.55	**Groundwater Elevation (ft):**	50.90
Depth to Bottom (ft):	46.66	**Bottom Elevation (ft):**	14.22
Depth to Top Screen BGS (ft):	27.23	**Pump Speed**	24.50%
Depth to Bottom Screen below BGS (ft):	47.23	**Well Diameter (in):**	2
Depth to Pump (ft):	40.00		
Sample Date:	9/4/2024	**Begin Purge Time:**	8:50
Sample Time:	10:00	**Complete Purge Time:**	9:56
Pump Type	Sample Champ XL	**Sample Method:**	Low Flow
Average Purge Rate (mL/min)	300	**Purge Time (min):**	66
Total Purge Volume (L):	19.80		
Sample Appearance:	Clear	**Odors Observed:**	None
Analytical Laboratory:	Alpha/Pace/Galbraith	**Notes:**	Well is accessible and in good condition. Dissolved metals samples were collected using a 0.45 micron in-line filter. Horiba: 19515
Date Shipped:	9/4/2024		
Headspace (ppm)	NM		
Analyses Requested:			
VOCs, SVOCs, TAL Metals(Total and Dissolved), Cations/Anions, Total Dissolved Solids, PCBs, Pesticides, Herbicides			

Field Stabilization Parameters

Reading	DTW (ft) below MP	Time HH:MM	Temp. (ºC)	pH	Turbidity NTU	ORP mV	Cond. (mS/cm)	DO mg/L	Note
1	NM	8:50	16.98	6.27	517	219	0.202	8.87	
2	NM	8:53	16.81	5.60	473	253	0.200	8.46	
3	NM	8:56	15.42	5.60	237	246	0.205	8.53	
4	NM	8:59	14.18	5.67	201	236	0.206	8.19	
5	NM	9:02	14.42	5.62	115	234	0.206	7.53	
6	NM	9:05	14.63	5.65	89.2	231	0.206	7.04	
7	NM	9:08	14.86	5.65	65.3	231	0.206	6.50	
8	NM	9:11	14.51	5.65	51.2	231	0.205	6.45	
9	NM	9:14	14.27	5.65	45.3	232	0.205	6.13	
10	NM	9:17	14.03	5.65	33.1	233	0.205	6.11	
11	NM	9:20	13.95	5.67	29.1	233	0.205	5.23	
12	NM	9:23	13.96	5.68	24.5	233	0.205	4.99	
13	NM	9:26	13.88	5.70	18.7	235	0.204	4.64	
14	NM	9:29	14.01	5.69	13.1	238	0.204	4.31	
15	NM	9:32	14.08	5.67	10.3	237	0.204	4.14	
16	NM	9:35	13.97	5.70	6.9	239	0.204	3.91	
17	NM	9:38	14.00	5.70	5.7	240	0.204	3.65	
18	NM	9:41	14.01	5.71	2.5	241	0.204	3.47	
19	NM	9:44	14.03	5.71	0.9	242	0.204	3.24	
20	NM	9:47	14.05	5.73	0.0	241	0.203	2.94	
21	NM	9:50	14.07	5.71	0.0	242	0.203	2.91	
22	NM	9:53	14.09	5.72	0.0	242	0.203	2.98	
23	**NM**	**9:56**	**14.20**	**5.71**	**0.0**	**242**	**0.203**	**2.98**	
Stabilization Parameters			3%	±0.1	10%*	±10	3%	10%*	

*Turbidity if three values are less than 5NTU , consider the values stabilized

*DO if three values are less than 0.5 mg/L, consider the values stabilized

P.W. GROSSER CONSULTING, Inc

Well Sampling Log

Well Designation:	5A	**Sampled By:**	KM
Site Address:	104 Rocky Point Road Middle Island NY	**Project Manager:**	MM
		Project Number:	BSD1504

Measuring Point (feet above MSL) (NAVD88)	59.54	**Well Use:**	Monitoring
Depth to Product (ft):	N/A	**Product Elevation (ft):**	N/A
Depth to Water (ft):	8.43	**Groundwater Elevation (ft):**	51.11
Depth to Bottom (ft):	38.31	**Bottom Elevation (ft):**	20.20
Depth to Top Screen BGS (ft):	19.34	**Pump Speed**	23.00%
Depth to Bottom Screen below BGS (ft):	39.34	**Well Diameter (in):**	2
Depth to Pump (ft):	22.00		

Sample Date:	9/5/2024	**Begin Purge Time:**	13:35
Sample Time:	13:53	**Complete Purge Time:**	13:50
Pump Type	Sample Champ XL	**Sample Method:**	Low Flow
Average Purge Rate (mL/min)	250	**Purge Time (min):**	15
Total Purge Volume (L):	3.75		
Sample Appearance:	Clear	**Odors Observed:**	None
Analytical Laboratory:	Alpha/Pace/Galbraith	**Notes:**	Well is accessible and in good condition. Dissolved metals samples were collected using a 0.45 micron in-line filter. Horiba: 19278
Date Shipped:	9/5/2024		
Headspace (ppm)	NM		
Analyses Requested:			
VOCs, SVOCs, TAL Metals(Total and Dissolved), Cations/Anions, Total Dissolved Solids, PCBs, Pesticides, Herbicides			

Field Stabilization Parameters

Reading	DTW (ft) below MP	Time HH:MM	Temp. (ºC)	pH	Turbidity NTU	ORP mV	Cond. (mS/cm)	DO mg/L	Note
1	NM	13:35	26.59	6.19	3.1	0	0.210	0.44	
2	NM	13:38	26.34	6.47	0.6	40	0.213	0.27	
3	NM	13:41	26.15	6.56	0.0	58	0.214	0.25	
4	NM	13:44	26.12	6.57	0.0	54	0.213	0.22	
5	NM	13:47	25.96	6.58	0.0	67	0.212	0.20	
6	**NM**	**13:50**	**26.11**	**6.57**	**0.0**	**68**	**0.212**	**0.19**	
Stabilization Parameters			3%	±0.1	10%*	±10	3%	10%*	

*Turbidity if three values are less than 5NTU , consider the values stabilized

*DO if three values are less than 0.5 mg/L, consider the values stabilized

P.W. GROSSER CONSULTING, Inc

Well Sampling Log

Well Designation:	5B	**Sampled By:**	KM
Site Address:	104 Rocky Point Road Middle Island NY	**Project Manager:**	MM
		Project Number:	BSD1504

Measuring Point (feet above MSL) (NAVD88)	59.36	**Well Use:**	Monitoring
Depth to Product (ft):	N/A	**Product Elevation (ft):**	N/A
Depth to Water (ft):	8.36	**Groundwater Elevation (ft):**	51.00
Depth to Bottom (ft):	106.28	**Bottom Elevation (ft):**	-48.59
Depth to Top Screen BGS (ft):	87.95	**Pump Speed**	32%
Depth to Bottom Screen below BGS (ft):	107.95	**Well Diameter (in):**	2
Depth to Pump (ft):	96.00		
Sample Date:	9/5/2024	**Begin Purge Time:**	13:36
Sample Time:	13:55	**Complete Purge Time:**	13:54
Pump Type	Sample Champ XL	**Sample Method:**	Low Flow
Average Purge Rate (mL/min):	300	**Purge Time (min):**	18
Total Purge Volume (L):	5.40		
Sample Appearance:	Clear	**Odors Observed:**	None
Analytical Laboratory:	Alpha/Pace/Galbraith	**Notes:**	Well is accessible and in good condition. Dissolved metals samples were collected using a 0.45 micron in-line filter. Horiba: 19515
Date Shipped:	9/5/2024		
Headspace (ppm)	NM		
Analyses Requested:			
VOCs, SVOCs, TAL Metals(Total and Dissolved), Cations/Anions, Total Dissolved Solids, PCBs, Pesticides, Herbicides			

Field Stabilization Parameters

Reading	DTW (ft) below MP	Time HH:MM	Temp. (ºC)	pH	Turbidity NTU	ORP mV	Cond. (mS/cm)	DO mg/L	Note
1	NM	13:36	14.89	4.96	0.0	324	0.186	4.01	
2	NM	13:39	15.25	4.86	0.0	322	0.186	3.99	
3	NM	13:42	15.30	4.82	0.0	311	0.185	4.30	
4	NM	13:45	15.12	4.78	0.0	310	0.185	4.41	
5	NM	13:48	15.09	4.77	0.0	307	0.184	4.48	
6	NM	13:51	15.08	4.78	0.0	303	0.185	4.41	
7	**NM**	**13:54**	**15.07**	**4.79**	**0.0**	**299**	**0.185**	**4.45**	
Stabilization Parameters			3%	±0.1	10%*	±10	3%	10%*	

*Turbidity if three values are less than 5NTU , consider the values stabilized

*DO if three values are less than 0.5 mg/L, consider the values stabilized

P.W. GROSSER CONSULTING, Inc

Well Sampling Log

Well Designation:	6A	**Sampled By:**	VC
Site Address:	104 Rocky Point Road Middle Island NY	**Project Manager:**	MM
		Project Number:	BSD1504

Measuring Point (feet above MSL) (NAVD88)	122.30	**Well Use:**	Monitoring
Depth to Product (ft):	N/A	**Product Elevation (ft):**	N/A
Depth to Water (ft):	71.66	**Groundwater Elevation (ft):**	50.64
Depth to Bottom (ft):	106.00	**Bottom Elevation (ft):**	8.70
Depth to Top Screen BGS (ft):	84.00	**Pump Speed**	67.40%
Depth to Bottom Screen below BGS (ft):	104.00	**Well Diameter (in):**	2
Depth to Pump (ft):	94.00		

Sample Date:	9/5/2024	**Begin Purge Time:**	12:33
Sample Time:	12:50	**Complete Purge Time:**	12:48
Pump Type	Sample Champ XL	**Sample Method:**	Low Flow
Average Purge Rate (mL/min):	260	**Purge Time (min):**	15
Total Purge Volume (L):	3.90		
Sample Appearance:	Clear	**Odors Observed:**	None
Analytical Laboratory:	Alpha/Pace/Galbraith	**Notes:**	Well is accessible and in good condition. Dissolved metals samples were collected using a 0.45 micron in-line filter. Horiba: 19515
Date Shipped:	9/5/2024		
Headspace (ppm)	NM		
Analyses Requested:			

VOCs, SVOCs, TAL Metals(Total and Dissolved), Cations/Anions, Total Dissolved Solids, PCBs, Pesticides, Herbicides, PFAS compounds,1,4-Dioxane, Radionuclides

Field Stabilization Parameters

Reading	DTW (ft) below MP	Time HH:MM	Temp. (ºC)	pH	Turbidity NTU	ORP mV	Cond. (mS/cm)	DO mg/L	Note
1	NM	12:33	12.24	5.84	0.0	284	0.173	11.11	
2	NM	12:36	12.42	5.78	0.0	284	0.175	7.35	
3	NM	12:39	12.61	5.74	0.0	282	0.176	6.59	
4	NM	12:42	12.63	5.74	0.0	281	0.177	6.40	
5	NM	12:45	12.64	5.75	0.0	280	0.176	6.39	
6	**NM**	**12:48**	**12.66**	**5.77**	**0.0**	**281**	**0.176**	**6.10**	
Stabilization Parameters			3%	±0.1	10%*	±10	3%	10%*	

*Turbidity if three values are less than 5NTU , consider the values stabilized

*DO if three values are less than 0.5 mg/L, consider the values stabilized

P.W. GROSSER CONSULTING, Inc

Well Sampling Log

Well Designation:	6B	**Sampled By:**	KM
Site Address:	104 Rocky Point Road Middle Island NY	**Project Manager:**	MM
		Project Number:	BSD1504

Measuring Point (feet above MSL) (NAVD88)	122.25	**Well Use:**	Monitoring
Depth to Product (ft):	N/A	**Product Elevation (ft):**	N/A
Depth to Water (ft):	71.68	**Groundwater Elevation (ft):**	50.57
Depth to Bottom (ft):	113.60	**Bottom Elevation (ft):**	8.65
Depth to Top Screen BGS (ft):	93.60	**Pump Speed**	37.60%
Depth to Bottom Screen below BGS (ft):	113.60	**Well Diameter (in):**	2
Depth to Pump (ft):	103.00		
Sample Date:	9/5/2024	**Begin Purge Time:**	12:34
Sample Time:	12:47	**Complete Purge Time:**	12:46
Pump Type	Sample Champ XL	**Sample Method:**	Low Flow
Average Purge Rate (L/M):	240	**Purge Time (min):**	12
Total Purge Volume (L):	2.88		
Sample Appearance:	Clear	**Odors Observed:**	None
Analytical Laboratory:	Alpha/Pace/Galbraith	**Notes:**	Well is accessible and in good condition. Dissolved metals samples were collected using a 0.45 micron in-line filter. Horiba: 19278
Date Shipped:	9/5/2024		
Headspace (ppm)	NM		
Analyses Requested:			
VOCs, SVOCs, TAL Metals(Total and Dissolved), Cations/Anions, Total Dissolved Solids, PCBs, Pesticides, Herbicides			

Field Stabilization Parameters

Reading	DTW (ft) below MP	Time HH:MM	Temp. (ºC)	pH	Turbidity	ORP mV	Cond. (mS/cm)	DO mg/L	Note
1	NM	12:34	15.28	5.95	0.0	80	0.221	0.00	
2	NM	12:37	14.97	5.70	0.0	130	0.223	0.00	
3	NM	12:40	15.12	5.63	0.0	137	0.240	0.00	
4	NM	12:43	15.27	5.61	0.0	143	0.224	0.00	
5	**NM**	**12:46**	**15.29**	**5.62**	**0.0**	**151**	**0.224**	**0.00**	
Stabilization Parameters			3%	±0.1	10%*	±10	3%	10%*	

*Turbidity if three values are less than 5NTU , consider the values stabilized

*DO if three values are less than 0.5 mg/L, consider the values stabilized

P.W. GROSSER CONSULTING, Inc

Well Sampling Log

Well Designation:	7A	**Sampled By:**	KM
Site Address:	104 Rocky Point Road Middle Island NY	**Project Manager:**	MM
		Project Number:	BSD1504

Measuring Point (feet above MSL) (NAVD88)	138.96	**Well Use:**	Monitoring
Depth to Product (ft):	N/A	**Product Elevation (ft):**	N/A
Depth to Water (ft):	88.52	**Groundwater Elevation (ft):**	50.44
Depth to Bottom (ft):	104.29	**Bottom Elevation (ft):**	34.63
Depth to Top Screen BGS (ft):	84.33	**Pump Speed**	26.20%
Depth to Bottom Screen below BGS (ft):	104.33	**Well Diameter (in):**	2
Depth to Pump (ft):	94.00		

Sample Date:	9/5/2024	**Begin Purge Time:**	11:38
Sample Time:	11:55	**Complete Purge Time:**	11:53
Pump Type	Sample Champ XL	**Sample Method:**	Low Flow
Average Purge Rate (mL/min)	300	**Purge Time (min):**	15
Total Purge Volume (L):	4.5		
Sample Appearance:	Clear	**Odors Observed:**	None
Analytical Laboratory:	Alpha/Pace/Galbraith	**Notes:**	Well is accessible and in good condition. Dissolved metals samples were collected using a 0.45 micron in-line filter. Horiba: 19515
Date Shipped:	9/5/2024		
Headspace (ppm)	NM		
Analyses Requested:			
VOCs, SVOCs, TAL Metals(Total and Dissolved), Cations/Anions, Total Dissolved Solids, PCBs, Pesticides, Herbicides			

Field Stabilization Parameters

Reading	DTW (ft) below MP	Time HH:MM	Temp. (ºC)	pH	Turbidity NTU	ORP mV	Cond. (mS/cm)	DO mg/L	Note
1	NM	11:38	18.61	5.44	0.00	296	0.399	0.94	
2	NM	11:41	17.63	5.78	0.00	278	0.410	0.03	
3	NM	11:44	17.56	5.91	0.00	271	0.417	0.00	
4	NM	11:47	17.95	5.92	0.00	265	0.422	0.00	
5	NM	11:50	18.14	5.90	0.00	264	0.426	0.00	
6	**NM**	**11:53**	**18.19**	**5.91**	**0.00**	**264**	**0.427**	**0.00**	
Stabilization Parameters			3%	±0.1	10%*	±10	3%	10%*	

*Turbidity if three values are less than 5NTU , consider the values stabilized

*DO if three values are less than 0.5 mg/L, consider the values stabilized

P.W. GROSSER CONSULTING, Inc

Well Sampling Log

Well Designation:	7B	**Sampled By:**	KM
Site Address:	104 Rocky Point Road Middle Island NY	**Project Manager:**	MM
		Project Number:	BSD1504

Measuring Point (feet above MSL) (NAVD88)	138.76	**Well Use:**	Monitoring
Depth to Product (ft):	N/A	**Product Elevation (ft):**	N/A
Depth to Water (ft):	88.40	**Groundwater Elevation (ft):**	50.36
Depth to Bottom (ft):	159.90	**Bottom Elevation (ft):**	-21.14
Depth to Top Screen BGS (ft):	140	**Pump Speed**	71%
Depth to Bottom Screen below BGS (ft):	159.90	**Well Diameter (in):**	2
Depth to Pump (ft):	150.00		

Sample Date:	9/5/2024	**Begin Purge Time:**	11:38
Sample Time:	09:35	**Complete Purge Time:**	11:53
Pump Type	Sample Champ XL	**Sample Method:**	Low Flow
Average Purge Rate (mL/min):	320	**Purge Time (min):**	15
Total Purge Volume (L):	4.80		
Sample Appearance:	Clear	**Odors Observed:**	None
Analytical Laboratory:	Alpha/Pace/Galbraith	**Notes:**	Well is accessible and in good condition. Dissolved metals samples were collected using a 0.45 micron in-line filter. Horiba: 19278
Date Shipped:	9/5/2024		
Headspace (ppm)	NM		
Analyses Requested:			
VOCs, SVOCs, TAL Metals(Total and Dissolved), Cations/Anions, Total Dissolved Solids, PCBs, Pesticides, Herbicides			

Field Stabilization Parameters

Reading	DTW (ft) below MP	Time HH:MM	Temp. (ºC)	pH	Turbidity NTU	ORP mV	Cond. (mS/cm)	DO mg/L	Note
1	NM	11:38	16.24	6.04	0.07	38	0.350	0.00	
2	NM	11:41	15.79	6.22	0.00	45	0.447	0.00	
3	NM	11:44	15.55	6.19	0.00	38	0.440	0.00	
4	NM	11:47	16.04	6.14	0.00	21	0.447	0.00	
5	NM	11:50	16.23	6.12	0.00	22	0.455	0.00	
6	**NM**	**11:53**	**16.32**	**6.12**	**0.00**	**23**	**0.457**	**0.00**	
Stabilization Parameters			3%	±0.1	10%*	±10	3%	10%*	

*Turbidity if three values are less than 5NTU , consider the values stabilized

*DO if three values are less than 0.5 mg/L, consider the values stabilized

P.W. GROSSER CONSULTING, Inc

Well Sampling Log

Well Designation:	8A	**Sampled By:**	VC
Site Address:	104 Rocky Point Road Middle Island NY	**Project Manager:**	MM
		Project Number:	BSD1504

Measuring Point (feet above MSL) (NAVD88)	60.41	**Well Use:**	Monitoring
Depth to Product (ft):	N/A	**Product Elevation (ft):**	N/A
Depth to Water (ft):	7.91	**Groundwater Elevation (ft):**	52.50
Depth to Bottom (ft):	34.20	**Bottom Elevation (ft):**	25.26
Depth to Top Screen BGS (ft):	15.15	**Pump Speed**	26.8%
Depth to Bottom Screen below BGS (ft):	35.15	**Well Diameter (in):**	2
Depth to Pump (ft):	23.00		

Sample Date:	9/5/2024	**Begin Purge Time:**	07:39
Sample Time:	08:00	**Complete Purge Time:**	08:00
Pump Type	Sample Champ XL	**Sample Method:**	Low Flow
Average Purge Rate (mL/min)	290	**Purge Time (min):**	21
Total Purge Volume (L):	6.09		
Sample Appearance:	Clear	**Odors Observed:**	None
Analytical Laboratory:	Alpha/Pace/Galbraith	**Notes:**	Well is accessible and in good condition. Dissolved metals samples were collected using a 0.45 micron in-line filter. Horiba: 19515, DUP collected here
Date Shipped:	9/5/2024		
Headspace (ppm)	NM		
Analyses Requested:			
VOCs, SVOCs, TAL Metals(Total and Dissolved), Cations/Anions, Total Dissolved Solids, PCBs, Pesticides, Herbicides, PFAS compounds,1,4-Dioxane, Radionuclides			

Field Stabilization Parameters

Reading	DTW (ft)	Time	Temp.	pH	Turbidity	ORP	Cond.	DO	Note
	below MP	HH:MM	(ºC)		NTU	mV	(mS/cm)	mg/L	
1	NM	7:39	14.44	5.03	25.0	242	0.201	10.64	
2	NM	7:42	14.13	5.29	14.1	245	0.197	10.06	
3	NM	7:45	14.62	5.27	2.9	256	0.200	9.37	
4	NM	7:48	14.64	5.25	2.8	264	0.201	9.72	
5	NM	7:51	14.73	5.21	0.6	263	0.198	9.63	
6	NM	7:54	14.77	5.20	0.0	270	0.197	9.55	
7	NM	7:57	14.90	5.21	0.0	273	0.197	9.43	
8	**NM**	**8:00**	**14.91**	**5.21**	**0.0**	**274**	**0.197**	**9.39**	
Stabilization Parameters			3%	±0.1	10%*	±10	3%	10%*	

*Turbidity if three values are less than 5NTU , consider the values stabilized

*DO if three values are less than 0.5 mg/L, consider the values stabilized

P.W. GROSSER CONSULTING, Inc

Well Sampling Log

Well Designation:	8B	**Sampled By:**	VC
Site Address:	104 Rocky Point Road Middle Island NY	**Project Manager:**	MM
		Project Number:	BSD1504

Measuring Point (feet above MSL) (NAVD88)	60.34	**Well Use:**	Monitoring
Depth to Product (ft):	N/A	**Product Elevation (ft):**	N/A
Depth to Water (ft):	7.82	**Groundwater Elevation (ft):**	52.52
Depth to Bottom (ft):	134.20	**Bottom Elevation (ft):**	-75.74
Depth to Top Screen BGS (ft):	116.08	**Pump Speed**	25.7%
Depth to Bottom Screen below BGS (ft):	136.08	**Well Diameter (in):**	2
Depth to Pump (ft):	124.00		
Sample Date:	9/5/2024	**Begin Purge Time:**	7:40
Sample Time:	8:55	**Complete Purge Time:**	8:52
Pump Type	Sample Champ XL	**Sample Method:**	Low Flow
Average Purge Rate (mL/min)	290	**Purge Time (min):**	72
Total Purge Volume (L):	20.08		
Sample Appearance:	Clear	**Odors Observed:**	None
Analytical Laboratory:	Alpha/Pace/Galbraith	**Notes:**	Well is accessible and in good condition. Dissolved metals samples were collected using a 0.45 micron in-line filter. Horiba: 19248
Date Shipped:	9/5/2024		
Headspace (ppm)	NM		
Analyses Requested:			
VOCs, SVOCs, TAL Metals(Total and Dissolved), Cations/Anions, Total Dissolved Solids, PCBs, Pesticides, Herbicides			

Field Stabilization Parameters

Reading	DTW (ft) below MP	Time HH:MM	Temp. (ºC)	pH	Turbidity NTU	ORP mV	Cond. (mS/cm)	DO mg/L	Note
1	NM	7:40	14.62	5.50	344	100	0.117	2.09	
2	NM	7:43	14.78	5.83	207	45	0.108	1.31	
3	NM	7:46	14.53	6.10	66.7	21	0.109	1.07	
4	NM	7:49	14.46	6.13	46.8	16	0.108	0.94	
5	NM	7:52	14.92	6.12	38.7	13	0.108	0.85	
6	NM	7:55	15.07	6.16	29.7	9	0.107	0.79	
7	NM	7:58	15.14	6.19	24.0	6	0.107	0.71	
8	NM	8:01	15.19	6.22	20.5	3	0.107	0.67	
9	NM	8:04	15.23	6.23	16.6	2	0.106	0.60	
10	NM	8:07	15.26	6.24	14.4	1	0.106	0.56	
11	NM	8:10	15.31	6.25	11.6	1	0.106	0.53	
12	NM	8:13	15.31	6.24	10.7	0	0.106	0.50	
13	NM	8:16	15.34	6.25	9.2	0	0.106	0.47	
14	NM	8:19	15.39	6.25	8.0	0	0.106	0.46	
15	NM	8:22	15.44	6.25	6.3	0	0.105	0.42	
16	NM	8:25	15.54	6.25	5.4	0	0.105	0.39	
17	NM	8:28	15.56	6.25	4.9	0	0.104	0.37	
18	NM	8:31	15.68	6.25	3.9	0	0.104	0.36	

19	NM	8:34	15.73	6.25	3.0	-3	0.104	0.32	
20	NM	8:07	15.63	6.26	2.9	-2	0.104	0.26	
21	NM	8:40	15.40	6.25	2.6	-2	0.103	0.25	
22	NM	8:43	15.39	6.25	0.0	-1	0.104	0.21	
23	NM	8:46	15.38	6.25	0.0	-2	0.104	0.15	
24	NM	8:49	15.40	6.25	0.0	-1	0.103	0.12	
25	**NM**	**8:52**	**15.41**	**6.25**	**0.0**	**-1**	**0.103**	**0.13**	
Stabilization Parameters			3%	±0.1	10%*	±10	3%	10%*	

*Turbidity if three values are less than 5NTU , consider the values stabilized

*DO if three values are less than 0.5 mg/L, consider the values stabilized

P.W. GROSSER CONSULTING, Inc

Well Sampling Log

Well Designation:	9A	**Sampled By:**	VC
Site Address:	104 Rocky Point Road Middle Island NY	**Project Manager:**	MM
		Project Number:	BSD1504

Measuring Point (feet above MSL) (NAVD88)	59.01	**Well Use:**	Monitoring
Depth to Product (ft):	N/A	**Product Elevation (ft):**	N/A
Depth to Water (ft):	7.15	**Groundwater Elevation (ft):**	51.86
Depth to Bottom (ft):	34.82	**Bottom Elevation (ft):**	23.65
Depth to Top Screen BGS (ft):	15.36	**Pump Speed**	23.20%
Depth to Bottom Screen below BGS (ft):	35.36	**Well Diameter (in):**	2
Depth to Pump (ft):	23.00		

Sample Date:	9/4/2024	**Begin Purge Time:**	15:00
Sample Time:	15:20	**Complete Purge Time:**	15:18
Pump Type	Sample Champ XL	**Sample Method:**	Low Flow
Average Purge Rate (mL/min):	240	**Purge Time (min):**	18
Total Purge Volume (L):	4.32		
Sample Appearance:	Clear	**Odors Observed:**	None
Analytical Laboratory:	Alpha/Pace/Galbraith	**Notes:**	Well is accessible and in good condition. Dissolved metals samples were collected using a 0.45 micron in-line filter. Horiba: FA03499
Date Shipped:	9/4/2024		
Headspace (ppm)	NM		
Analyses Requested:			
VOCs, SVOCs, TAL Metals(Total and Dissolved), Cations/Anions, Total Dissolved Solids, PCBs, Pesticides, Herbicides			

Field Stabilization Parameters

Reading	DTW (ft) below MP	Time HH:MM	Temp. (ºC)	pH	Turbidity NTU	ORP mV	Cond. (mS/cm)	DO mg/L	Note
1	NM	15:00	16.16	6.53	0.0	44	0.196	11.84	
2	NM	15:03	14.16	5.66	0.0	58	0.194	11.29	
3	NM	15:06	14.98	5.17	0.0	52	0.191	10.12	
4	NM	15:09	14.98	5.21	0.0	53	0.191	9.92	
5	NM	15:12	14.95	5.22	0.0	54	0.190	9.97	
6	NM	15:15	14.94	5.19	0.0	52	0.191	9.99	
7	**NM**	**15:18**	**14.93**	**5.21**	**0.0**	**53**	**0.190**	**9.96**	
Stabilization Parameters			3%	±0.1	10%*	±10	3%	10%*	

*Turbidity if three values are less than 5NTU , consider the values stabilized

*DO if three values are less than 0.5 mg/L, consider the values stabilized

P.W. GROSSER CONSULTING, Inc

Well Sampling Log

Well Designation:	9B	**Sampled By:**	KM
Site Address:	104 Rocky Point Road Middle Island NY	**Project Manager:**	MM
		Project Number:	BSD1504

Measuring Point (feet above MSL) (NAVD88)	59.09	**Well Use:**	Monitoring
Depth to Product (ft):	N/A	**Product Elevation (ft):**	N/A
Depth to Water (ft):	7.03	**Groundwater Elevation (ft):**	52.06
Depth to Bottom (ft):	125.65	**Bottom Elevation (ft):**	-68.28
Depth to Top Screen BGS (ft):	107.37	**Pump Speed**	30.20%
Depth to Bottom Screen below BGS (ft):	127.37	**Well Diameter (in):**	2
Depth to Pump (ft):	115.00		

Sample Date:	9/4/2024	**Begin Purge Time:**	15:00
Sample Time:	15:40	**Complete Purge Time:**	15:30
Pump Type	Sample Champ XL	**Sample Method:**	Low Flow
Average Purge Rate (mL/min)	280	**Purge Time (min):**	30
Total Purge Volume (L):	8.40		
Sample Appearance:	Clear	**Odors Observed:**	None
Analytical Laboratory:	Alpha/Pace/Galbraith	**Notes:**	Well is accessible and in good condition. Dissolved metals samples were collected using a 0.45 micron in-line filter. Horiba: 19515
Date Shipped:	9/4/2024		
Headspace (ppm)	NM		
Analyses Requested:			
VOCs, SVOCs, TAL Metals(Total and Dissolved), Cations/Anions, Total Dissolved Solids, PCBs, Pesticides, Herbicides			

Field Stabilization Parameters

Reading	DTW (ft) below MP	Time HH:MM	Temp. (ºC)	pH	Turbidity NTU	ORP mV	Cond. (mS/cm)	DO mg/L	Note
1	NM	15:00	12.94	6.99	95.8	110	0.216	1.12	
2	NM	15:03	12.59	7.00	91.4	69	0.216	1.25	
3	NM	15:06	12.48	7.22	88.9	65	0.216	1.30	
4	NM	15:09	12.50	7.31	84.4	60	0.216	1.34	
5	NM	15:12	12.21	7.42	55.1	4	0.218	0.36	
6	NM	15:15	12.01	7.61	31.0	-45	0.220	0.43	
7	NM	14:18	11.99	7.72	10.8	-65	0.220	0.19	
8	NM	15:21	11.89	7.76	7.3	-75	0.220	0.04	
9	NM	15:24	11.85	7.80	0.1	-81	0.220	0.00	
10	NM	15:27	11.78	7.84	0.0	-88	0.220	0.00	
11	**NM**	**15:30**	**11.75**	**7.86**	**0.0**	**-94**	**0.220**	**0.00**	
Stabilization Parameters			3%	±0.1	10%*	±10	3%	10%*	

*Turbidity if three values are less than 5NTU , consider the values stabilized

*DO if three values are less than 0.5 mg/L, consider the values stabilized

P.W. GROSSER CONSULTING, Inc

Well Sampling Log

Well Designation:	10A	**Sampled By:**	VC
Site Address:	104 Rocky Point Road Middle Island NY	**Project Manager:**	MM
		Project Number:	BSD1504

Measuring Point (feet above MSL) (NAVD88)	59.82	**Well Use:**	Monitoring
Depth to Product (ft):	N/A	**Product Elevation (ft):**	N/A
Depth to Water (ft):	7.80	**Groundwater Elevation (ft):**	52.02
Depth to Bottom (ft):	34.01	**Bottom Elevation (ft):**	25.81
Depth to Top Screen BGS (ft):	14.01	**Pump Speed**	22.7%
Depth to Bottom Screen below BGS (ft):	34.01	**Well Diameter (in):**	2
Depth to Pump (ft):	22.00		

Sample Date:	9/5/2024	**Begin Purge Time:**	9:50
Sample Time:	10:10	**Complete Purge Time:**	10:08
Pump Type	Sample Champ XL	**Sample Method:**	Low Flow
Average Purge Rate (mL/min)	220	**Purge Time (min):**	18
Total Purge Volume (L):	3.96		
Sample Appearance:	Clear	**Odors Observed:**	None
Analytical Laboratory:	Alpha/Pace/Galbraith	**Notes:**	Well is accessible and in good condition. Dissolved metals samples were collected using a 0.45 micron in-line filter. Horiba: 19515
Date Shipped:	6/4/2024		
Headspace (ppm)	NM		
Analyses Requested:			
VOCs, SVOCs, TAL Metals(Total and Dissolved), Cations/Anions, Total Dissolved Solids, PCBs, Pesticides, Herbicides, PFAS compounds,1,4-Dioxane, Radionuclides			

Field Stabilization Parameters

Reading	DTW (ft) below MP	Time HH:MM	Temp. (ºC)	pH	Turbidity NTU	ORP mV	Cond. (mS/cm)	DO mg/L	Note
1	NM	9:50	16.22	5.15	5.7	209	0.210	2.26	
2	NM	9:53	15.81	5.27	0.0	220	0.211	1.85	
3	NM	9:56	16.27	5.29	0.0	228	0.214	1.91	
4	NM	9:59	16.30	5.27	0.0	230	0.215	1.94	
5	NM	10:02	16.34	5.25	0.0	246	0.214	2.00	
6	NM	10:05	16.35	5.24	0.0	250	0.214	1.99	
7	**NM**	**10:08**	**16.34**	**5.23**	**0.0**	**251**	**0.214**	**1.97**	
Stabilization Parameters			3%	±0.1	10%*	±10	3%	10%*	

*Turbidity if three values are less than 5NTU , consider the values stabilized

*DO if three values are less than 0.5 mg/L, consider the values stabilized

P.W. GROSSER CONSULTING, Inc

Well Sampling Log

Well Designation:	10B	**Sampled By:**	KM
Site Address:	104 Rocky Point Road Middle Island NY	**Project Manager:**	MM
		Project Number:	BSD1504

Measuring Point (feet above MSL) (NAVD88)	59.93	**Well Use:**	Monitoring
Depth to Product (ft):	N/A	**Product Elevation (ft):**	N/A
Depth to Water (ft):	9.51	**Groundwater Elevation (ft):**	50.42
Depth to Bottom (ft):	151.40	**Bottom Elevation (ft):**	-91.97
Depth to Top Screen BGS (ft):	131.90	**Pump Speed**	81.00%
Depth to Bottom Screen below BGS (ft):	151.90	**Well Diameter (in):**	2
Depth to Pump (ft):	141.00		

Sample Date:	9/5/2024	**Begin Purge Time:**	9:55
Sample Time:	10:16	**Complete Purge Time:**	10:16
Pump Type	Sample Champ XL	**Sample Method:**	Low Flow
Average Purge Rate (mL/min)	300	**Purge Time (min):**	21
Total Purge Volume (L):	6.3		
Sample Appearance:	Clear	**Odors Observed:**	None
Analytical Laboratory:	Alpha/Pace/Galbraith	**Notes:**	Well is accessible and in good condition. Dissolved metals samples were collected using a 0.45 micron in-line filter. Horiba: 19278
Date Shipped:	9/5/2021		
Headspace (ppm)	NM		
Analyses Requested:			
VOCs, SVOCs, TAL Metals(Total and Dissolved), Cations/Anions, Total Dissolved Solids, PCBs, Pesticides, Herbicides			

Field Stabilization Parameters

Reading	DTW (ft) below MP	Time HH:MM	Temp. (ºC)	pH	Turbidity NTU	ORP mV	Cond. (mS/cm)	DO mg/L	Note
1	NM	9:55	20.32	5.17	0.0	287	0.164	0.62	
2	NM	9:58	18.15	5.03	78.3	238	0.142	0.00	
3	NM	10:01	17.34	5.00	14.4	193	0.135	0.00	
4	NM	10:04	16.99	5.00	3.2	131	0.144	0.00	
5	NM	10:07	16.87	4.90	1.3	200	0.151	0.08	
6	NM	10:10	16.71	4.93	0.0	202	0.158	0.34	
7	NM	10:13	16.68	4.90	0.0	211	0.161	0.51	
8	**NM**	**10:16**	**16.7**	**4.93**	**0.0**	**213**	**0.161**	**0.74**	
Stabilization Parameters			3%	±0.1	10%*	±10	3%	10%*	

*Turbidity if three values are less than 5NTU , consider the values stabilized

*DO if three values are less than 0.5 mg/L, consider the values stabilized

ATTACHMENT B

P.W. GROSSER CONSULTING, INC • P.W. GROSSER CONSULTING ENGINEER & HYDROGEOLOGIST, PC
631.589.6353 • WWW.PWGROSSER.COM • PWGC.INFO@PWGROSSER.COM
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09/04/24 BS01504 Clear ~75° WINDS 4 mph NE

104 Rocky Point Rd. - Roanoke Sand + Gravel - Middle Is.

0645 PWGC (KM + VC) on site for Q3 GW sampling event. Tom is let known PWGC is on site + will need all wells unlocked to gauge today 09/04.

TIME:	MW: [redacted]	MW DTW:
	MW-02A	17.12
	MW-02B	16.88
11:30	MW-03A	11:45 -Field Blank
	MW-03B	11.59
	MW-04A	10.59
	MW-04B	10.55'
	MW-05A	
	MW-05B	
	MW-06A	
	MW-06B	
	MW-07A	
	MW-07B	
	MW-08A	
	MW-08B	
	MW-09A	7.15
	MW-09B	7.03
	MW-10A	
	MW-10B	

0700 PWGC mobilizes to cluster MW-04. Calibrates Pine Envi rented U-52 Horibas #'s 21387 + 19515 with supplied auto-calibration solution. Please see attached calibration log!

09/04/24 BSD1504

21387

0745 Horiba #[redacted] Turbidity reading appears off once purge begins - reads 0.0 NTU when water does not appear as so. Sensors cleaned, attempt to calibrate, cal. failed due to turb sensor. Troubleshooting.

0805 MW-4A purge begins. Purge appx. 300mg/L. PWGC staff coming with replacement Horiba.

0840 MW-4A purge complete, no drawdown obsv. when DTW gauged, sampled.

0850 MW-4B purge begins, ~~reading with Horiba #~~ [redacted], reading with Horiba #19515.

[redacted] MW-4B sampled, after drawdown obvs. to 10:00 be non-existent. Decons depth to water meter with 2-bucket alconox decon solution.

1015 Mr. Sovokin w/ the DEC on site as PWGC is setting up to begin purging MW-3 cluster. DEC will observe field blanks sampled at Cluster3. Horiba #21387 determined to be broken, PWGC will use replacement FA03499 for today.

1025 FA03499 calibrated with auto-cal solution (see log)

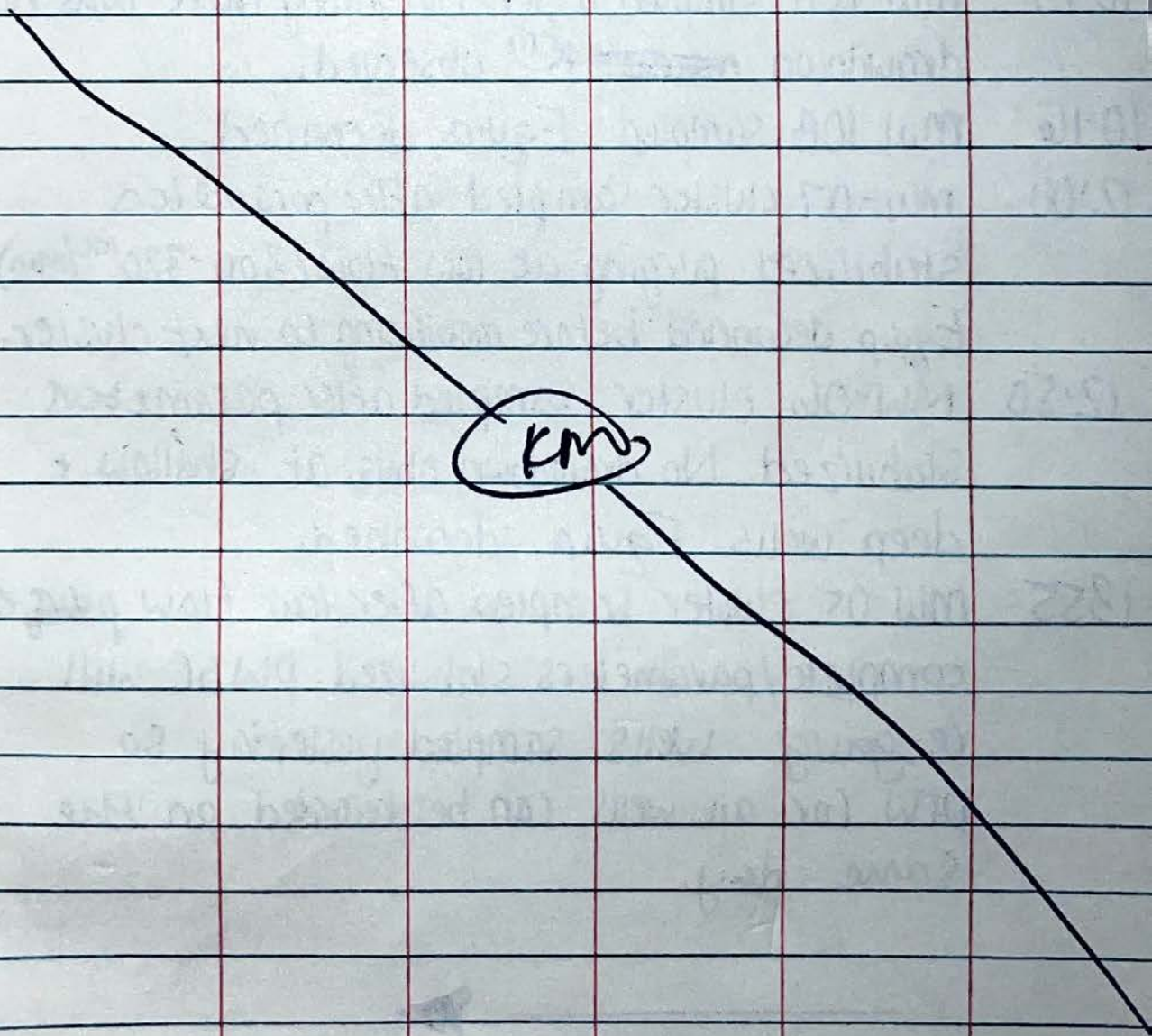
10:50 Cluster 3 purge begins. PWGC measures for drawdown and observes none. PWGC will take field blank by simulating methods/handling of bottleware in the field under DEC's suggestion

1130 Field Blank and MW-3A sampled.

12:10 MW-3B sampled. Field equipment decanned. DEC off site.

09/04/24 BSD1504

13:10 MW-02 cluster purge begins, purging at ~300 mL/min
13:40 MW-02 cluster sampled, equipment decanned.
15:00 MW-09 cluster purge begins at low flow.
15:40 MW-09 cluster sampled after parameters stabilized. Equip. decanned.
16:00 PWGC calls Tom to let him know they are demobilized + will be off site. Alpha picked samples up PWGC off site



09/05/24 BSD1504 Clear 69-73°
104 Rocky Point Rd. - Roanoke Sand + Gravel WIND S

0700 PWGC (KM + VC) on site to continue Q3 GW Sampling event. Mobilize to Cluster 8A. PWGC calibrates Horibas #19278 and #19575 with supplied auto-cal solution (see log).

0800 MW-8A sampled. DUP001 taken at 8A.

0855 MW-8B sampled, no drawdown observed. Equip. deconned before mobilizing to next cluster.

10:10 MW-10A sampled after confirming there was no drawdown ~~measured~~ (KM) observed.

10:16 MW-10B sampled. Equip. deconned.

12:00 MW-07 cluster sampled after parameters stabilized purging at low flow (300-320 mL/min). Equip deconned before mobilizing to next cluster.

12:50 MW-06 cluster sampled after parameters stabilized. No drawdown obvs. at shallow + deep wells. Equip. deconned.

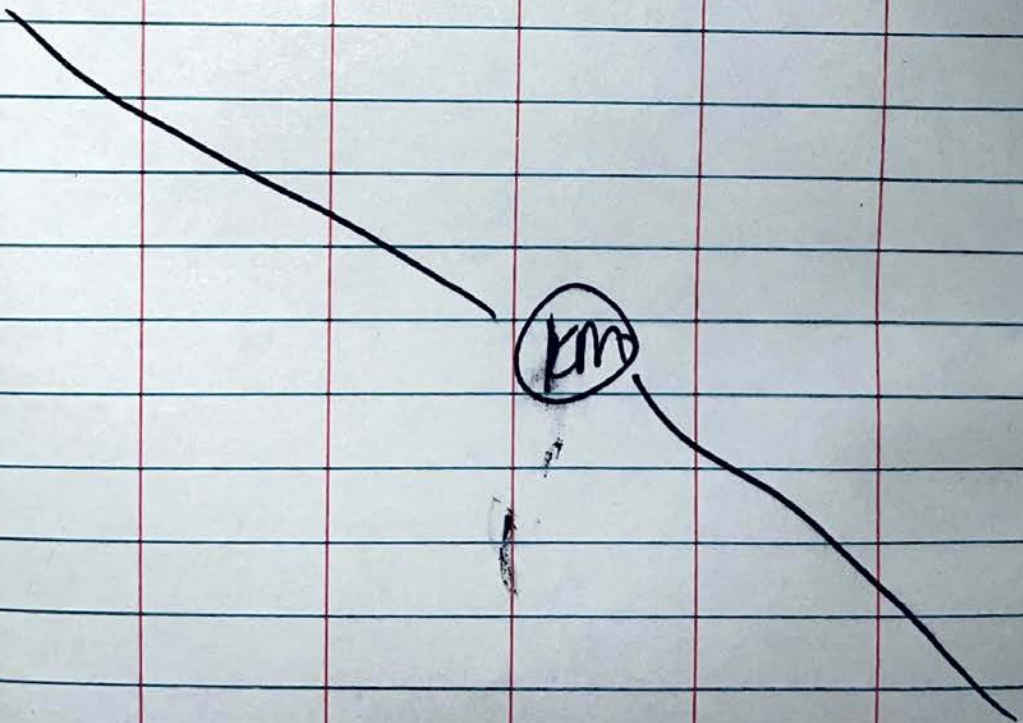
1355 MW-05 cluster sampled after low flow purge complete/parameters stabilized. PWGC will re-gauge wells sampled yesterday so DTW for all wells can be recorded on the same day.

09/05/24 BSD1504

1430 PWGC mobilizes to re-gauge well clusters that were sampled yesterday:

MW	DTW (ft)
MW-4A	10.61
MW-4B	10.53
MW-3A	11.41
MW-3B	11.55
MW-2A	17.10
MW-2B	16.86
MW-9A	7.14
MW-9B	7.05

14:45 Pace on site to collect samples. PWGC demobilized + off site after off-loading samples.



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Equipment Calibration Log

Equipment Model	Serial Number	Time HH:MM	Temp. (ºC)	pH	Turbidity NTU	ORP mV	Cond. (mS/cm)	DO mg/L
Horiba U-52	21387	7:17	17.99	3.99	0.0	163	4.52	9.05
Horiba U-52	19515	7:18	16.45	3.98	0.0	325	4.49	9.99
Horiba U-52	FA03499	10:24	21.72	3.99	0.0	257	4.50	9.05
Calibration Values				4.00	0.0	221-241	4.49	0.0

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Equipment Calibration Log

Equipment Model	Serial Number	Time HH:MM	Temp. (ºC)	pH	Turbidity NTU	ORP mV	Cond. (mS/cm)	DO mg/L
Horiba U-52	19278	7:30	17.81	4.01	0.0	316	4.45	8.73
Horiba U-52	19515	7:30	15.19	3.99	0.0	292	4.48	10.49
Calibration Values				4.00	0.0	221-241	4.49	0.0

ATTACHMENT C

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LOCATION					MW-2A		MW-2B		MW-3A		MW-3A		MW-3B		MW-4A		MW-4B		MW-5A		MW-5B		MW-6A		MW-6B		MW-7A		MW-7B		MW-8A		DUP (PARENT WELL: 8A)		MW-8B		MW-9A		MW-9B		MW-10A		MW-10B		TRIP BLANK		FIELD BLANK		TRIP BLANK		
SAMPLING DATE					9/4/2024		9/4/2024		9/4/2024		9/4/2024		9/4/2024		9/4/2024		9/4/2024		9/5/2024		9/5/2024		9/5/2024		9/5/2024		9/5/2024		9/5/2024		9/5/2024		9/5/2024		9/5/2024		9/4/2024		9/4/2024		9/5/2024		9/5/2024		9/4/2024		9/4/2024		9/4/2024		
LAB SAMPLE ID					L2450417-06		L2450417-07		L2450417-03		L2450786-13		L2450417-04		L2450417-01		L2450417-02		L2450786-01		L2450786-02		L2450786-03		L2450786-04		L2450786-05		L2450786-06		L2450786-07		L2450786-12		L2450786-08		L2450417-08		L2450417-09		L2450786-09		L2450786-10		L2450417-10		L2450786-11		L2450786-14		
SAMPLE TYPE					WATER		WATER		WATER		WATER		WATER		WATER		WATER		WATER		WATER		WATER		WATER		WATER		WATER		WATER		WATER		WATER		WATER		WATER		WATER		WATER		WATER		WATER		WATER		
SAMPLE DEPTH (ft.)																																																			
	CasNum	EPA-MCL	NY-AWQS	Units	Results	Qual	Results	Qual	Results	Qual	Results	Qual	Results	Qual	Results	Qual	Results	Qual	Results	Qual	Results	Qual	Results	Qual	Results	Qual	Results	Qual	Results	Qual	Results	Qual	Results	Qual	Results	Qual	Results	Qual	Results	Qual	Results	Qual	Results	Qual	Results	Qual	Results	Qual	Results	Qual	
1,4 Dioxane by 8270E-SIM																																																			
1,4-Dioxane	123-91-1		0.35	ug/l	-	-	-	-	0.134	U	-	-	-	-	-	-	-	-	-	-	-	-	0.144	U	-	-	-	-	-	-	0.144	U	-	-	-	-	-	-	-	-	0.15	U	-	-	-	-	-	-	-	-	-
Anions by Ion Chromatography																																																			
Bromide	24959-67-9		2000	ug/l	153		96		156		-	-	154		91		165		179		171		154		209		283		286		401		352		103		59		56		252		170		-	-	-	-	-	-	-
Chlorinated Herbicides by GC																																																			
MCPP	93-65-2			ug/l	500	U	500	U	500	U	-	-	500	U	500	U	500	U	500	U	500	U	500	U	500	U	500	U	500	U	500	U	500	U	500	U	500	U	500	U	500	U	500	U	-	-	-	-	-	-	-
MCPA	94-74-6			ug/l	500	U	500	U	500	U	-	-	500	U	500	U	500	U	500	U	500	U	500	U	500	U	500	U	500	U	500	U	500	U	500	U	500	U	500	U	500	U	500	U	-	-	-	-	-	-	-
Dalapon	75-99-0		50	ug/l	20	U	20	U	20	U	-	-	20	U	20	U	20	U	20	U	20	U	20	U	20	U	20	U	20	U	20	U	20	U	20	U	20	U	20	U	20	U	20	U	-	-	-	-	-	-	-
Dicamba	1918-00-9		0.44	ug/l	1	U	1	U	1	U	-	-	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	-	-	-	-	-	-	-
Dichloroprop	120-36-5			ug/l	10	U	10	U	10	U	-	-	10	U	10	U	10	U	10	U	10	U	10	U	10	U	10	U	10	U	10	U	10	U	10	U	10	U	10	U	10	U	10	U	-	-	-	-	-	-	-
2,4-D	94-75-7		50	ug/l	10	U	10	U	10	U	-	-	10	U	10	U	10	U	10	U	10	U	10	U	10	U	10	U	10	U	10	U	10	U	10	U	10	U	10	U	10	U	10	U	-	-	-	-	-	-	-
2,4-DB	94-82-6			ug/l	10	U	10	U	10	U	-	-	10	U	10	U	10	U	10	U	10	U	10	U	10	U	10	U	10	U	10	U	10	U	10	U	10	U	10	U	10	U	10	U	-	-	-	-	-	-	-
2,4,5-T	93-76-5		35	ug/l	2	U	2	U	2	U	-	-	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U	-	-	-	-	-	-	-
2,4,5-TP (Silvex)	93-72-1			ug/l	2	U	2	U	2	U	-	-	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U	-	-	-	-	-	-	-
Dinoseb	88-85-7		1	ug/l	5	U	5	U	5	U	-	-	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	-	-	-	-	-	-	-
Dissolved Metals																																																			
Aluminum, Dissolved	7429-90-5			ug/l	100	U	100	U	100	U	-	-	100	U	100	U	100	U	100	U	100	U	100	U	100	U	100	U	100	U	100	U	100	U	100	U	100	U	100	U	100	U	100	U	-	-	-	-	-	-	-
Antimony, Dissolved	7440-36-0		3	ug/l	50	U	50	U	50	U	-	-	50	U	50	U	50	U	50	U	50	U	50	U	50	U	50	U	50	U	50	U	50	U	50	U	50	U	50	U	50	U	50	U	-	-	-	-	-	-	-
Arsenic, Dissolved	7440-38-2		25	ug/l	5	U	5	U	5	U	-	-	5	U	3.6	J	2.5	J	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	1.9	J	2.1	J	5	U	5	U	-	-	-	-	-	-	-
Barium, Dissolved	7440-39-3		1000	ug/l	18.7		37.9		17		-	-	16.4		19.1		20.1		16.1		69.5		16.6		45.4		98.4		58.6		44		42.6		2.3	J	36.6		10	U	42.6		27.1		-	-	-	-	-	-	-
Beryllium, Dissolved	7440-41-7		3	ug/l	5	U	5	U	5	U	-	-	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	-	-	-	-	-	-	-
Cadmium, Dissolved	7440-43-9		5	ug/l	5	U	5	U	5	U	-	-	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	-	-	-	-	-	-	-
Calcium, Dissolved	7440-70-2			ug/l	23300		23200		27800		-	-	23200		22200		21800		23800		14600		22400		23100		64700		71600		17800		17100		7700		12100		28600		16900		14600		-	-	-	-	-	-	-
Chromium, Dissolved	7440-47-3		50	ug/l	10	U	4.4	J	10	U	-	-	10	U	10	U	10	U	10	U	10	U	10	U	10	U	10	U	10	U	10	U	10	U	10	U	10	U	10	U	10	U	10	U	-	-	-	-	-	-	-
Cobalt, Dissolved	7440-48-4			ug/l	20	U	20	U	20	U	-	-	20	U	20	U	20	U	20	U	20	U	20	U	20	U	20	U	20	U	20	U	20	U	20	U	20	U	20	U	20	U	5.2	J	-	-	-	-	-	-	-
Copper, Dissolved	7440-50-8		200	ug/l	10	U	10	U	22.2		-	-	11.4		10	U	6.3	J	2.3	J	23.9		6.7	J	7.1	J	16.5		3.6	J	6.2	J	10	U	9.5	J	10		10	U	10.7		11.8		-	-	-	-	-	-	-
Iron, Dissolved	7439-89-6		300	ug/l	50	U	20.6	J	50	U	-	-	50	U	72.8		50	U	50	U	50	U	50	U	12.7	J	50	U	46.7	J	50	U	50	U	966		50	U	29.6	J	50	U	85.7		-	-	-	-	-	-	-
Lead, Dissolved	7439-92-1		25	ug/l	10	U	10	U	10	U	-	-	10	U	10	U	10	U	10	U	10	U	10	U	10	U	10	U	10	U	10	U	10	U	10	U	10	U	10	U	10	U	10	U	-	-	-	-	-	-	-
Magnesium, Dissolved	7439-95-4		35000	ug/l	4880		6160		5800		-	-	6120		6020		6280		4950		6280		4880		5630		12400		13900		3720		3630		3120		4180		4010		5020		6400		-	-	-	-	-	-	-
Manganese, Dissolved	7439-96-5		300	ug/l	10	U	10	U	5.9	J	-	-	1.8	J	18		10	U	10	U	10	U	10	U	3.1	J	2640		356		10	U	10	U	29.5		2.2	J	53.6		2.5	J	15.6		-	-	-	-	-	-	-
Mercury, Dissolved	7439-97-6		0.7	ug/l	0.2	U	0.2	U	0.2	U	-	-	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	-	-	-	-	-	-	-
Nickel, Dissolved	7440-02-0		100	ug/l	25	U	25	U	25	U	-	-	25	U	25	U	25	U	25	U	25	U	25	U	27.3		25	U	2.9	J	25	U	25	U	25	U	25	U	25	U	25	U	9.3	J	-	-	-	-	-	-	-
Potassium, Dissolved	7440-09-7			ug/l	1850	J	840	J	1490	J	-	-	1250	J	1260	J	1040	J	2040	J	1220	J	1160	J	1260	J	10100		2610		2640		2520		1050	J	2060	J	1520	J	2250	J	1300	J	-	-	-	-	-	-	-
Selenium, Dissolved	7782-49-2		10	ug/l	10	U	10	U	10	U	-	-	10	U	10	U	10	U	10	U	10	U	10	U	10	U	10	U	10	U	10	U	10	U	10	U	10	U	10	U	10	U	10	U	-	-	-	-	-	-	-
Silver, Dissolved	7440-22-4		50	ug/l	7	U	7	U	7	U	-	-	7	U	7	U	7	U	7	U	7	U	7	U	7	U	7	U	7	U	7	U	7	U	7	U	7	U	7	U	7	U	7	U	-	-	-	-	-	-	-
Sodium, Dissolved	7440-23-5		20000	ug/l	8700		8440		10800		-	-	9300		10000		9670		10300		13000		8530		10700		12500		17000		14000		13300		6020		11800		7240		12700		16000		-	-	-	-	-	-	-
Thallium, Dissolved	7440-28-0		0.5	ug/l	20	U	20	U	20	U	-	-	20	U	20	U	20	U	20	U	20	U	20	U	20	U	20	U	20	U	20	U	20	U	20	U	20	U	20	U	20	U	20	U	-	-	-	-	-	-	-
Vanadium, Dissolved	7440-62-2			ug/l	10	U	10	U	10	U	-	-	10	U	10	U	10	U	10	U	10	U	10	U	10	U	10	U	10	U	10	U	10	U	10	U	10	U	10	U	10	U	10	U	-	-	-	-	-	-	-
Zinc, Dissolved	7440-66-6		2000	ug/l	5	U	5	U	20.9		-	-	11.5		5	U	13.3		5	U	24.4		6.8		15		19.8		13.1		11.4		5	U	12.4		20.3		5	U	12.8		36.8		-	-	-	-	-	-	-
General Chemistry																																																			
Alkalinity, Carbonate	3812-32-6			mg CaCO	2	U	2	U	2	U	-	-	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U	-	-	-	-	-	-	-
Alkalinity, Bicarbonate	71-52-3			mg CaCO	60.3		62.7		78.2		-	-	64.4		51.9		61.1		63.1		24.7		50.9		46.7		194		205		23.2		21.8		23.6		14.8		60.1		31.6		23.3		-	-	-	-	-	-	-
Solids, Total Dissolved	NONE			ug/l	110000		130000		120000		-	-	120000		92000		120000		84000		120000		100000		130000		260000		280000		120000		90000		44000		110000		160000		110000		120000		-	-	-	-	-	-	-
Chloride	16887-00-6		250000	ug/l	18000		17000		18000		-	-	18000		18000		18000		18000		27000		16000		24000		18000		22000		41000		38000		7900		21000		9300		27000		33000		-	-	-	-	-	-	-
Fluoride	16984-48-8		1500	ug/l	150	J	130	J	100	J	-	-	260		120	J	80	J	70	J	30	J	80	J	440		100	J	80	J	30	J	30	J	60	J	30	J	70	J	20	J	50	J	-	-	-	-	-	-	-
Nitrogen, Nitrate/Nitrite	NONE		10000	ug/l	110		200		100	U	-	-	170		160		57	J	110		3200		260		1100		90	J	100	U	1200		1200		300		4500		100	U	2800		2900		-	-	-	-	-	-	-
Total Nitrogen	NONE			ug/l	300	U	300	U	300	U	-	-	300	U	470		300	U	300	U	3200		300	U	1100		530		300	U	1200		1200		300		4500		300	U	2800		2900		-	-	-	-	-	-	-
Nitrogen, Total Kjeldahl	NONE			ug/l	300	U	78	J	129	J	-	-	101	J	309		90	J	300	U	300	U	300	U	300	U	532		234	J	300	U	300	U	103	J	300	U	202	J	83	J	300	U	-	-	-	-	-	-	-
Phosphate, Total	7723-14-0			ug/l	61		31		34		-	-	43		61		61		120		25	J	52		28	J	89		71		25	J	22	J	154		40		288		37		31	U	-	-	-	-	-	-	-
Sulfate	14808-79-8		250000	ug/l	17000		19000		9700	J	-	-	17000		21000		17000		15000		17000		19000		16000		34000		35000		12000		12000		10000		16000		37000		13000		18000		-	-	-	-	-	-	-
Organochlorine Pesticides by GC																																																			
Delta-BHC	319-86-8		0.04	ug/l	0.014	U	0.014	U	0.014	U	-	-	0.014	U	0.014	U	0.014	U	0.014	U	0.014	U	0.014	U	0.014	U	0.014	U	0.014	U	0.014	U	0.014	U	0.014	U	0.014	U	0.014	U	0.014	U	0.014	U	-	-	-	-	-	-	-
Lindane	58-89-9		0.05	ug/l	0.014	U	0.014	U	0.014	U	-	-	0.014	U	0.014	U	0.014	U	0.014	U	0.014	U	0.014	U	0.014	U	0.014	U	0.014	U	0.014	U	0.014	U	0.014	U	0.014	U	0.014	U	0.014	U	0.014	U	-	-	-	-	-	-	-
Alpha-BHC	319-84-6		0.01	ug/l	0.014	U	0.014	U	0.014	U	-	-	0.014	U	0.014	U	0.014	U	0.014	U	0.014	U	0.014	U	0.014	U	0.014	U	0.014	U	0.014	U	0.014	U	0.014	U	0.014	U	0.014	U	0.014	U	0.014	U	-	-	-	-	-	-	-
Beta-BHC	319-85-7		0.04	ug/l	0.014	U	0.014	U	0.014	U	-	-	0.014	U	0.014	U	0.014	U	0.014	U	0.014	U	0.014	U	0.014	U	0.014	U	0.014	U	0.014	U	0.014	U	0.014	U	0.014	U	0.014	U	0.014	U	0.014	U	-	-	-	-	-	-	-
Heptachlor	76-44-8		0.04	ug/l	0.014	U	0.014	U	0.014	U	-	-	0.014	U	0.014	U	0.014	U	0.014	U	0.014	U	0.014	U	0.014	U	0.014	U	0.014	U	0.014	U	0.014	U	0.014	U	0.014	U	0.014	U	0.014	U	0.014	U	-	-	-	-	-	-	-
Aldrin	309-00-2		0	ug/l	0.014	U	0.014	U	0.014	U	-	-	0.014	U	0.014	U	0.014	U	0.014	U	0.014	U	0.014	U	0.014	U	0.014	U	0.014	U	0.014	U	0.014	U	0.014	U	0.014	U	0.014	U	0.014	U	0.014	U	-	-	-	-	-	-	-
Heptachlor epoxide	1024-57-3		0.03	ug/l	0.014	U	0.014	U	0.014	U	-	-	0.014	U	0.014	U	0.014	U	0.014	U	0.014	U	0.014	U	0.014	U	0.014	U	0.014	U	0.014	U	0.014	U	0.014	U	0.014	U	0.014	U	0.014	U	0.014	U	-	-	-	-	-	-	-
Endrin	72-20-8		0	ug/l	0.029	U	0.029	U	0.029	U	-	-	0.029	U	0.029	U	0.029	U	0.029	U	0.029	U	0.029	U	0.029	U	0.029	U	0.029	U	0.029	U	0.029	U	0.029	U	0.029	U	0.029	U	0.029	U	0.029	U	-	-	-	-	-	-	-
Endrin aldehyde	7421-93-4		5	ug/l	0.029	U	0.029	U	0.029	U	-	-	0.029	U	0.029	U	0.029	U	0.029	U	0.029	U	0.029	U	0.029	U	0.029	U	0.029	U	0.029	U	0.029	U	0.029	U	0.029	U	0.029	U	0.029	U	0.029	U	-	-	-	-	-	-	-
Endrin ketone	53494-70-5		5	ug/l	0.029	U	0.029	U	0.029	U	-	-	0.029	U	0.029	U	0.029	U	0.029	U	0.029	U	0.029	U	0.029	U	0.029	U	0.029	U	0.029	U	0.029	U	0.029	U	0.029	U	0.029	U	0.029	U	0.029	U	-	-	-	-	-	-	-
Dieldrin	60-57-1		0.004	ug/l	0.029	U	0.029	U	0.029	U	-	-	0.029	U	0.029	U	0.029	U	0.029	U	0.029	U	0.004	J	0.01	J	0.014	J	0.014	J	0.029	U	0.029	U	0.029	U	0.029	U	0.029	U	0.029	U	0.029	U	-	-	-	-	-	-	-
4,4'-DDE	72-55-9		0.2	ug/l	0.029	U	0.029	U	0.029	U	-	-	0.029	U	0.029	U	0.029	U	0.029	U	0.029	U	0.029	U	0.029	U	0.029	U	0.029	U	0.029	U	0.029	U	0.029	U	0.029	U	0.029	U	0.029	U	0.029	U	-	-	-	-	-	-	-
4,4'-DDD	72-54-8		0.3	ug/l	0.029	U	0.029	U	0.029	U	-	-	0.029	U	0.029	U	0.029	U	0.029	U	0.029	U	0.029	U	0.029	U	0.029	U	0.029	U	0.029	U	0.029	U	0.029	U	0.029	U	0.029	U	0.029	U	0.029	U	-	-	-	-	-	-	-
4,4'-DDT	50-29-3		0.2	ug/l	0.029	U	0.029	U	0.029	U	-	-	0.029	U	0.029	U	0.029	U	0.019	J	0.012	J	0.029	U	0.006	J	0.004	J	0.029	U	0.029	U	0.029	U	0.029	U	0.029	U	0.029	U	0.029	U	0.029	U	-	-	-	-	-	-	-
Endosulfan I	959-98-8			ug/l	0.014	U	0.014	U	0.014	U	-	-	0.014	U	0.014	U	0.014	U	0.014	U	0.014	U	0.014	U	0.014	U	0.014	U	0.014	U	0.014	U	0.014	U	0.014	U	0.014	U	0.014	U	0.014	U	0.014	U	-	-	-	-	-	-	-
Endosulfan II	33213-65-9			ug/l	0.029	U	0.029	U	0.029	U	-	-	0.029	U	0.029	U	0.029	U	0.029	U	0.029	U	0.029	U	0.029	U	0.029	U	0.029	U	0.029	U	0.029	U	0.029	U	0.029	U	0.029	U	0.029	U	0.029	U	-	-	-	-	-	-	-
Endosulfan sulfate	1031-07-8			ug/l	0.029	U	0.029	U	0.029	U	-	-	0.029	U	0.029	U	0.029	U	0.029	U	0.029	U	0.029	U	0.029	U	0.029	U	0.029	U	0.029	U	0.029	U	0.029	U	0.029	U	0.029	U	0.029	U	0.029	U	-	-	-	-	-	-	-
Methoxychlor	72-43-5		35	ug/l	0.143	U	0.143	U	0.143	U	-	-	0.143	U	0.143	U	0.143	U	0.143	U	0.143	U	0.143	U	0.143	U	0.143	U	0.143	U	0.143	U	0.143	U	0.143	U	0.143	U	0.143	U	0.143	U	0.143	U	-	-	-	-	-	-	-
Toxaphene	8001-35-2		0.06	ug/l	0.143	U	0.143	U	0.143	U	-	-	0.143	U	0.143	U	0.143	U	0.143	U	0.143	U	0.143	U	0.143	U	0.143	U	0.143	U	0.143	U	0.143	U	0.143	U	0.143	U	0.143	U	0.143	U	0.143	U	-	-	-	-	-	-	-
cis-Chlordane	5103-71-9			ug/l	0.014	U	0.014	U	0.014	U	-	-	0.014	U	0.014	U	0.014	U	0.014	U	0.014	U	0.014	U	0.014	U	0.014	U	0.014	U	0.014	U	0.014	U	0.014	U	0.014	U	0.014	U	0.014	U	0.014	U	-	-	-	-	-	-	-
trans-Chlordane	5103-74-2			ug/l	0.014	U	0.014	U	0.014	U	-	-	0.014	U	0.014	U	0.014	U	0.014	U	0.014	U	0.014	U	0.014	U	0.014	U	0.014	U	0.014	U	0.014	U	0.014	U	0.014	U	0.014	U	0.014	U	0.014	U	-	-	-	-	-	-	-
Chlordane	57-74-9		0.05	ug/l	0.143	U	0.143	U	0.143	U	-	-	0.143	U	0.143	U	0.143	U	0.143	U	0.143	U	0.143	U	0.143	U	0.143	U	0.143	U	0.143	U	0.143	U	0.143	U	0.143	U	0.143	U	0.143	U	0.143	U	-	-	-	-	-	-	-
Perfluorinated Alkyl Acids by EPA 1633																																																			
Perfluorobutanoic Acid (PFBA)	375-22-4			ug/l	-	-	-	-	-	-	0.00303	J	-	-	-	-	-	-	-	-	-	-	0.00247	J	-	-	-	-	-	-	0.00262	J	-	-	-	-	-	-	-	-	0.00328	J	-	-	-	-	0.0057	U	-	-	-
Perfluoropentanoic Acid (PFPeA)	2706-90-3			ug/l	-	-	-	-	-	-	0.00271	J	-	-	-	-	-	-	-	-	-	-	0.00106	J	-	-	-	-	-	-	0.00257	J	-	-	-	-	-	-	-	-	0.00367		-	-	-	-	0.00285	U	-	-	-
Perfluorobutanesulfonic Acid (PFBS)	375-73-5			ug/l	-	-	-	-	-	-	0.00116	J	-	-	-	-	-	-	-	-	-	-	0.00104	J	-	-	-	-	-	-	0.00313		-	-	-	-	-	-	-	-	0.00328		-	-	-	-	0.00143	U	-	-	-
1H,1H,2H,2H-Perfluorohexanesulfonic Acid (4:2FTS)	757124-72-4			ug/l	-	-	-	-	-	-	0.00605	U	-	-	-	-	-	-	-	-	-	-	0.00613	U	-	-	-	-	-	-	0.00603	U	-	-	-	-	-	-	-	-	0.00615	U	-	-	-	-	0.0057	U	-	-	-
Perfluorohexanoic Acid (PFHxA)	307-24-4			ug/l	-	-	-	-	-	-	0.00263		-	-	-	-	-	-	-	-	-	-	0.00244		-	-	-	-	-	-	0.00327		-	-	-	-	-	-	-	-	0.00287		-	-	-	-	0.00143	U	-	-	-
Perfluoropentanesulfonic Acid (PFPeS)	2706-91-4			ug/l	-	-	-	-	-	-	0.00151	U	-	-	-	-	-	-	-	-	-	-	0.00153	U	-	-	-	-	-	-	0.000294	J	-	-	-	-	-	-	-	-	0.00154	U	-	-	-	-	0.00143	U	-	-	-
Perfluoroheptanoic Acid (PFHpA)	375-85-9			ug/l	-	-	-	-	-	-	0.00218		-	-	-	-	-	-	-	-	-	-	0.00185		-	-	-	-	-	-	0.00471		-	-	-	-	-	-	-	-	0.00144	J	-	-	-	-	0.00143	U	-	-	-
Perfluorohexanesulfonic Acid (PFHxS)	355-46-4			ug/l	-	-	-	-	-	-	0.002		-	-	-	-	-	-	-	-	-	-	0.00306		-	-	-	-	-	-	0.00164		-	-	-	-	-	-	-	-	0.00101	J	-	-	-	-	0.00143	U	-	-	-
Perfluorooctanoic Acid (PFOA)	335-67-1		0.0067	ug/l	-	-	-	-	-	-	0.00573		-	-	-	-	-	-	-	-	-	-	0.00632		-	-	-	-	-	-	0.00833		-	-	-	-	-	-	-	-	0.0025		-	-	-	-	0.00143	U	-	-	-
1H,1H,2H,2H-Perfluorooctanesulfonic Acid (6:2FTS)	27619-97-2			ug/l	-	-	-	-	-	-	0.00605	U	-	-	-	-	-	-	-	-	-	-	0.00613	U	-	-	-	-	-	-	0.00603	U	-	-	-	-	-	-	-	-	0.00615	U	-	-	-	-	0.0057	U	-	-	-
Perfluoroheptanesulfonic Acid (PFHpS)	375-92-8			ug/l	-	-	-	-	-	-	0.00151	U	-	-	-	-	-	-	-	-	-	-	0.00153	U	-	-	-	-	-	-	0.00151	U	-	-	-	-	-	-	-	-	0.00154	U	-	-	-	-	0.00143	U	-	-	-
Perfluorononanoic Acid (PFNA)	375-95-1			ug/l	-	-	-	-	-	-	0.00818		-	-	-	-	-	-	-	-	-	-	0.00311		-	-	-	-	-	-	0.000558	J	-	-	-	-	-	-	-	-	0.00154	U	-	-	-	-	0.00143	U	-	-	-
Perfluorooctanesulfonic Acid (PFOS)	1763-23-1		0.0027	ug/l	-	-	-	-	-	-	0.0253		-	-	-	-	-	-	-	-	-	-	0.0184		-	-	-	-	-	-	0.00185		-	-	-	-	-	-	-	-	0.00257		-	-	-	-	0.00143	U	-	-	-
Perfluorodecanoic Acid (PFDA)	335-76-2			ug/l	-	-	-	-	-	-	0.00151	U	-	-	-	-	-	-	-	-	-	-	0.00153	U	-	-	-	-	-	-	0.00151	U	-	-	-	-	-	-	-	-	0.00154	U	-	-	-	-	0.00143	U	-	-	-
1H,1H,2H,2H-Perfluorodecanesulfonic Acid (8:2FTS)	39108-34-4			ug/l	-	-	-	-	-	-	0.00605	U	-	-	-	-	-	-	-	-	-	-	0.00613	U	-	-	-	-	-	-	0.00603	U	-	-	-	-	-	-	-	-	0.00615	U	-	-	-	-	0.0057	U	-	-	-
Perfluorononanesulfonic Acid (PFNS)	68259-12-1			ug/l	-	-	-	-	-	-	0.00151	U	-	-	-	-	-	-	-	-	-	-	0.00153	U	-	-	-	-	-	-	0.00151	U	-	-	-	-	-	-	-	-	0.00154	U	-	-	-	-	0.00143	U	-	-	-
N-Methyl Perfluorooctanesulfonamidoacetic Acid (NMeFOSAA)	2355-31-9			ug/l	-	-	-	-	-	-	0.00151	U	-	-	-	-	-	-	-	-	-	-	0.00153	U	-	-	-	-	-	-	0.00151	U	-	-	-	-	-	-	-	-	0.00154	U	-	-	-	-	0.00143	U	-	-	-
Perfluoroundecanoic Acid (PFUnA)	2058-94-8			ug/l	-	-	-	-	-	-	0.00151	U	-	-	-	-	-	-	-	-	-	-	0.00153	U	-	-	-	-	-	-	0.00151	U	-	-	-	-	-	-	-	-	0.00154	U	-	-	-	-	0.00143	U	-	-	-
Perfluorodecanesulfonic Acid (PFDS)	335-77-3			ug/l	-	-	-	-	-	-	0.00151	U	-	-	-	-	-	-	-	-	-	-	0.00153	U	-	-	-	-	-	-	0.00151	U	-	-	-	-	-	-	-	-	0.00154	U	-	-	-	-	0.00143	U	-	-	-
Perfluorooctanesulfonamide (PFOSA)	754-91-6			ug/l	-	-	-	-	-	-	0.00151	U	-	-	-	-	-	-	-	-	-	-	0.00153	U	-	-	-	-	-	-	0.00151	U	-	-	-	-	-	-	-	-	0.00154	U	-	-	-	-	0.00143	U	-	-	-
N-Ethyl Perfluorooctanesulfonamidoacetic Acid (NEtFOSAA)	2991-50-6			ug/l	-	-	-	-	-	-	0.00151	U	-	-	-	-	-	-	-	-	-	-	0.00153	U	-	-	-	-	-	-	0.00151	U	-	-	-	-	-	-	-	-	0.00154	U	-	-	-	-	0.00143	U	-	-	-
Perfluorododecanoic Acid (PFDoA)	307-55-1			ug/l	-	-	-	-	-	-	0.00151	U	-	-	-	-	-	-	-	-	-	-	0.00153	U	-	-	-	-	-	-	0.00151	U	-	-	-	-	-	-	-	-	0.00154	U	-	-	-	-	0.00143	U	-	-	-
Perfluorotridecanoic Acid (PFTrDA)	72629-94-8			ug/l	-	-	-	-	-	-	0.00151	U	-	-	-	-	-	-	-	-	-	-	0.00153	U	-	-	-	-	-	-	0.00151	U	-	-	-	-	-	-	-	-	0.00154	U	-	-	-	-	0.00143	U	-	-	-
Perfluorotetradecanoic Acid (PFTeDA)	376-06-7			ug/l	-	-	-	-	-	-	0.00151	U	-	-	-	-	-	-	-	-	-	-	0.00153	U	-	-	-	-	-	-	0.00151	U	-	-	-	-	-	-	-	-	0.00154	U	-	-	-	-	0.00143	U	-	-	-
Hexafluoropropylene Oxide Dimer Acid (HFPO-DA)	13252-13-6			ug/l	-	-	-	-	-	-	0.00605	U	-	-	-	-	-	-	-	-	-	-	0.00613	U	-	-	-	-	-	-	0.00603	U	-	-	-	-	-	-	-	-	0.00615	U	-	-	-	-	0.0057	U	-	-	-
4,8-Dioxa-3h-Perfluorononanoic Acid (ADONA)	919005-14-4			ug/l	-	-	-	-	-	-	0.00605	U	-	-	-	-	-	-	-	-	-	-	0.00613	U	-	-	-	-	-	-	0.00603	U	-	-	-	-	-	-	-	-	0.00615	U	-	-	-	-	0.0057	U	-	-	-
Perfluorododecanesulfonic Acid (PFDoS)	79780-39-5			ug/l	-	-	-	-	-	-	0.00151	U	-	-	-	-	-	-	-	-	-	-	0.00153	U	-	-	-	-	-	-	0.00151	U	-	-	-	-	-	-	-	-	0.00154	U	-	-	-	-	0.00143	U	-	-	-
9-Chlorohexadecafluoro-3-Oxanone-1-Sulfonic Acid (9Cl-PF3ONS)	756426-58-1			ug/l	-	-	-	-	-	-	0.00605	U	-	-	-	-	-	-	-	-	-	-	0.00613	U	-	-	-	-	-	-	0.00603	U	-	-	-	-	-	-	-	-	0.00615	U	-	-	-	-	0.0057	U	-	-	-
11-Chloroeicosafluoro-3-Oxaundecane-1-Sulfonic Acid (11Cl-PF3OUd	763051-92-9			ug/l	-	-	-	-	-	-	0.00605	U	-	-	-	-	-	-	-	-	-	-	0.00613	U	-	-	-	-	-	-	0.00603	U	-	-	-	-	-	-	-	-	0.00615	U	-	-	-	-	0.0057	U	-	-	-
N-Methyl Perfluorooctane Sulfonamide (NMeFOSA)	31506-32-8			ug/l	-	-	-	-	-	-	0.00151	U	-	-	-	-	-	-	-	-	-	-	0.00153	U	-	-	-	-	-	-	0.00151	U	-	-	-	-	-	-	-	-	0.00154	U	-	-	-	-	0.00143	U	-	-	-
N-Ethyl Perfluorooctane Sulfonamide (NEtFOSA)	4151-50-2			ug/l	-	-	-	-	-	-	0.00151	U	-	-	-	-	-	-	-	-	-	-	0.00153	U	-	-	-	-	-	-	0.00151	U	-	-	-	-	-	-	-	-	0.00154	U	-	-	-	-	0.00143	U	-	-	-
N-Methyl Perfluorooctanesulfonamido Ethanol (NMeFOSE)	24448-09-7			ug/l	-	-	-	-	-	-	0.0151	U	-	-	-	-	-	-	-	-	-	-	0.0153	U	-	-	-	-	-	-	0.0151	U	-	-	-	-	-	-	-	-	0.0154	U	-	-	-	-	0.0143	U	-	-	-
N-Ethyl Perfluorooctanesulfonamido Ethanol (NEtFOSE)	1691-99-2			ug/l	-	-	-	-	-	-	0.0151	U	-	-	-	-	-	-	-	-	-	-	0.0153	U	-	-	-	-	-	-	0.0151	U	-	-	-	-	-	-	-	-	0.0154	U	-	-	-	-	0.0143	U	-	-	-
Perfluoro-3-Methoxypropanoic Acid (PFMPA)	377-73-1			ug/l	-	-	-	-	-	-	0.00302	U	-	-	-	-	-	-	-	-	-	-	0.00306	U	-	-	-	-	-	-	0.00302	U	-	-	-	-	-	-	-	-	0.00308	U	-	-	-	-	0.00285	U	-	-	-
Perfluoro-4-Methoxybutanoic Acid (PFMBA)	863090-89-5			ug/l	-	-	-	-	-	-	0.00302	U	-	-	-	-	-	-	-	-	-	-	0.00306	U	-	-	-	-	-	-	0.00302	U	-	-	-	-	-	-	-	-	0.00308	U	-	-	-	-	0.00285	U	-	-	-
Perfluoro(2-Ethoxyethane)Sulfonic Acid (PFEESA)	113507-82-7			ug/l	-	-	-	-	-	-	0.00302	U	-	-	-	-	-	-	-	-	-	-	0.00306	U	-	-	-	-	-	-	0.00302	U	-	-	-	-	-	-	-	-	0.00308	U	-	-	-	-	0.00285	U	-	-	-
Nonafluoro-3,6-Dioxaheptanoic Acid (NFDHA)	151772-58-6			ug/l	-	-	-	-	-	-	0.00302	U	-	-	-	-	-	-	-	-	-	-	0.00306	U	-	-	-	-	-	-	0.00302	U	-	-	-	-	-	-	-	-	0.00308	U	-	-	-	-	0.00285	U	-	-	-
3-Perfluoropropyl Propanoic Acid (3:3FTCA)	356-02-5			ug/l	-	-	-	-	-	-	0.00756	U	-	-	-	-	-	-	-	-	-	-	0.00766	U	-	-	-	-	-	-	0.00754	U	-	-	-	-	-	-	-	-	0.00769	U	-	-	-	-	0.00713	U	-	-	-
2H,2H,3H,3H-Perfluorooctanoic Acid (5:3FTCA)	914637-49-3			ug/l	-	-	-	-	-	-	0.0378	U	-	-	-	-	-	-	-	-	-	-	0.0383	U	-	-	-	-	-	-	0.0377	U	-	-	-	-	-	-	-	-	0.0384	U	-	-	-	-	0.0356	U	-	-	-
3-Perfluoroheptyl Propanoic Acid (7:3FTCA)	812-70-4			ug/l	-	-	-	-	-	-	0.0378	U	-	-	-	-	-	-	-	-	-	-	0.0383	U	-	-	-	-	-	-	0.0377	U	-	-	-	-	-	-	-	-	0.0384	U	-	-	-	-	0.0356	U	-	-	-
Polychlorinated Biphenyls by GC																																																			
Aroclor 1016	12674-11-2		0.09	ug/l	0.071	U	0.071	U	0.071	U	-	-	0.071	U	0.071	U	0.071	U	0.071	U	0.071	U	0.071	U	0.071	U	0.071	U	0.071	U	0.071	U	0.071	U	0.071	U	0.071	U	0.071	U	0.071	U	0.071	U	-	-	-	-	-	-	-
Aroclor 1221	11104-28-2		0.09	ug/l	0.071	U	0.071	U	0.071	U	-	-	0.071	U	0.071	U	0.071	U	0.071	U	0.071	U	0.071	U	0.071	U	0.071	U	0.071	U	0.071	U	0.071	U	0.071	U	0.071	U	0.071	U	0.071	U	0.071	U	-	-	-	-	-	-	-
Aroclor 1232	11141-16-5		0.09	ug/l	0.071	U	0.071	U	0.071	U	-	-	0.071	U	0.071	U	0.071	U	0.071	U	0.071	U	0.071	U	0.071	U	0.071	U	0.071	U	0.071	U	0.071	U	0.071	U	0.071	U	0.071	U	0.071	U	0.071	U	-	-	-	-	-	-	-
Aroclor 1242	53469-21-9		0.09	ug/l	0.071	U	0.071	U	0.071	U	-	-	0.071	U	0.071	U	0.071	U	0.071	U	0.071	U	0.071	U	0.071	U	0.071	U	0.071	U	0.071	U	0.071	U	0.071	U	0.071	U	0.071	U	0.071	U	0.071	U	-	-	-	-	-	-	-
Aroclor 1248	12672-29-6		0.09	ug/l	0.071	U	0.071	U	0.071	U	-	-	0.071	U	0.071	U	0.071	U	0.071	U	0.071	U	0.071	U	0.071	U	0.071	U	0.071	U	0.071	U	0.071	U	0.071	U	0.071	U	0.071	U	0.071	U	0.071	U	-	-	-	-	-	-	-
Aroclor 1254	11097-69-1		0.09	ug/l	0.071	U	0.071	U	0.071	U	-	-	0.071	U	0.071	U	0.071	U	0.071	U	0.071	U	0.071	U	0.071	U	0.071	U	0.071	U	0.071	U	0.071	U	0.071	U	0.071	U	0.071	U	0.071	U	0.071	U	-	-	-	-	-	-	-
Aroclor 1260	11096-82-5		0.09	ug/l	0.071	U	0.071	U	0.071	U	-	-	0.071	U	0.071	U	0.071	U	0.071	U	0.071	U	0.071	U	0.071	U	0.071	U	0.071	U	0.071	U	0.071	U	0.071	U	0.071	U	0.071	U	0.071	U	0.071	U	-	-	-	-	-	-	-
Aroclor 1262	37324-23-5		0.09	ug/l	0.071	U	0.071	U	0.071	U	-	-	0.071	U	0.071	U	0.071	U	0.071	U	0.071	U	0.071	U	0.071	U	0.071	U	0.071	U	0.071	U	0.071	U	0.071	U	0.071	U	0.071	U	0.071	U	0.071	U	-	-	-	-	-	-	-
Aroclor 1268	11100-14-4		0.09	ug/l	0.071	U	0.071	U	0.071	U	-	-	0.071	U	0.071	U	0.071	U	0.071	U	0.071	U	0.071	U	0.071	U	0.071	U	0.071	U	0.071	U	0.071	U	0.071	U	0.071	U	0.071	U	0.071	U	0.071	U	-	-	-	-	-	-	-
PCBs, Total	1336-36-3			ug/l	0.071	U	0.071	U	0.071	U	-	-	0.071	U	0.071	U	0.071	U	0.071	U	0.071	U	0.071	U	0.071	U	0.071	U	0.071	U	0.071	U	0.071	U	0.071	U	0.071	U	0.071	U	0.071	U	0.071	U	-	-	-	-	-	-	-
Semivolatile Organics by GC/MS																																																			
1,2,4-Trichlorobenzene	120-82-1		5	ug/l	5	U	5	U	5	U	-	-	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	-	-	-	-	-	-	-
Bis(2-chloroethyl)ether	111-44-4		1	ug/l	2	U	2	U	2	U	-	-	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U	-	-	-	-	-	-	-
1,2-Dichlorobenzene	95-50-1		3	ug/l	2	U	2	U	2	U	-	-	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U	-	-	-	-	-	-	-
1,3-Dichlorobenzene	541-73-1		3	ug/l	2	U	2	U	2	U	-	-	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U	-	-	-	-	-	-	-
1,4-Dichlorobenzene	106-46-7		3	ug/l	2	U	2	U	2	U	-	-	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U	-	-	-	-	-	-	-
3,3'-Dichlorobenzidine	91-94-1		5	ug/l	5	U	5	U	5	U	-	-	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	-	-	-	-	-	-	-
2,4-Dinitrotoluene	121-14-2		5	ug/l	5	U	5	U	5	U	-	-	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	-	-	-	-	-	-	-
2,6-Dinitrotoluene	606-20-2		5	ug/l	5	U	5	U	5	U	-	-	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	-	-	-	-	-	-	-
4-Chlorophenyl phenyl ether	7005-72-3			ug/l	2	U	2	U	2	U	-	-	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U	-	-	-	-	-	-	-
4-Bromophenyl phenyl ether	101-55-3			ug/l	2	U	2	U	2	U	-	-	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U	-	-	-	-	-	-	-
Bis(2-chloroisopropyl)ether	108-60-1		5	ug/l	2	U	2	U	2	U	-	-	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U	-	-	-	-	-	-	-
Bis(2-chloroethoxy)methane	111-91-1		5	ug/l	5	U	5	U	5	U	-	-	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	-	-	-	-	-	-	-
Hexachlorocyclopentadiene	77-47-4		5	ug/l	20	U	20	U	20	U	-	-	20	U	20	U	20	U	20	U	20	U	20	U	20	U	20	U	20	U	20	U	20	U	20	U	20	U	20	U	20	U	20	U	-	-	-	-	-	-	-
Isophorone	78-59-1		50	ug/l	5	U	5	U	5	U	-	-	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	-	-	-	-	-	-	-
Nitrobenzene	98-95-3		0.4	ug/l	2	U	2	U	2	U	-	-	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U	-	-	-	-	-	-	-
NDPA/DPA	86-30-6		50	ug/l	2	U	2	U	2	U	-	-	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U	-	-	-	-	-	-	-
n-Nitrosodi-n-propylamine	621-64-7			ug/l	5	U	5	U	5	U	-	-	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	-	-	-	-	-	-	-
Bis(2-ethylhexyl)phthalate	117-81-7		5	ug/l	3	U	3	U	3	U	-	-	3	U	3	U	3	U	3	U	3	U	3	U	3	U	3	U	3	U	3	U	3	U	3	U	3	U	3	U	3	U	3	U	-	-	-	-	-	-	-
Butyl benzyl phthalate	85-68-7		50	ug/l	5	U	5	U	5	U	-	-	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	-	-	-	-	-	-	-
Di-n-butylphthalate	84-74-2		50	ug/l	5	U	5	U	5	U	-	-	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	-	-	-	-	-	-	-
Di-n-octylphthalate	117-84-0		50	ug/l	5	U	5	U	5	U	-	-	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	-	-	-	-	-	-	-
Diethyl phthalate	84-66-2		50	ug/l	5	U	5	U	5	U	-	-	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	-	-	-	-	-	-	-
Dimethyl phthalate	131-11-3		50	ug/l	5	U	5	U	5	U	-	-	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	-	-	-	-	-	-	-
Biphenyl	92-52-4			ug/l	2	U	2	U	2	U	-	-	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U	-	-	-	-	-	-	-
4-Chloroaniline	106-47-8		5	ug/l	5	U	5	U	5	U	-	-	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	-	-	-	-	-	-	-
2-Nitroaniline	88-74-4		5	ug/l	5	U	5	U	5	U	-	-	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	-	-	-	-	-	-	-
3-Nitroaniline	99-09-2		5	ug/l	5	U	5	U	5	U	-	-	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	-	-	-	-	-	-	-
4-Nitroaniline	100-01-6		5	ug/l	5	U	5	U	5	U	-	-	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	-	-	-	-	-	-	-
Dibenzofuran	132-64-9			ug/l	2	U	2	U	2	U	-	-	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U	-	-	-	-	-	-	-
1,2,4,5-Tetrachlorobenzene	95-94-3		5	ug/l	10	U	10	U	10	U	-	-	10	U	10	U	10	U	10	U	10	U	10	U	10	U	10	U	10	U	10	U	10	U	10	U	10	U	10	U	10	U	10	U	-	-	-	-	-	-	-
Acetophenone	98-86-2			ug/l	5	U	5	U	5	U	-	-	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	-	-	-	-	-	-	-
2,4,6-Trichlorophenol	88-06-2			ug/l	5	U	5	U	5	U	-	-	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	-	-	-	-	-	-	-
p-Chloro-m-cresol	59-50-7			ug/l	2	U	2	U	2	U	-	-	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U	-	-	-	-	-	-	-
2-Chlorophenol	95-57-8			ug/l	2	U	2	U	2	U	-	-	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U	-	-	-	-	-	-	-
2,4-Dichlorophenol	120-83-2		1	ug/l	5	U	5	U	5	U	-	-	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	-	-	-	-	-	-	-
2,4-Dimethylphenol	105-67-9		50	ug/l	5	U	5	U	5	U	-	-	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	-	-	-	-	-	-	-
2-Nitrophenol	88-75-5			ug/l	10	U	10	U	10	U	-	-	10	U	10	U	10	U	10	U	10	U	10	U	10	U	10	U	10	U	10	U	10	U	10	U	10	U	10	U	10	U	10	U	-	-	-	-	-	-	-
4-Nitrophenol	100-02-7			ug/l	10	U	10	U	10	U	-	-	10	U	10	U	10	U	10	U	10	U	10	U	10	U	10	U	10	U	10	U	10	U	10	U	10	U	10	U	10	U	10	U	-	-	-	-	-	-	-
2,4-Dinitrophenol	51-28-5		10	ug/l	20	U	20	U	20	U	-	-	20	U	20	U	20	U	20	U	20	U	20	U	20	U	20	U	20	U	20	U	20	U	20	U	20	U	20	U	20	U	20	U	-	-	-	-	-	-	-
4,6-Dinitro-o-cresol	534-52-1			ug/l	10	U	10	U	10	U	-	-	10	U	10	U	10	U	10	U	10	U	10	U	10	U	10	U	10	U	10	U	10	U	10	U	10	U	10	U	10	U	10	U	-	-	-	-	-	-	-
Phenol	108-95-2		1	ug/l	1.8	J	3	J	2.9	J	-	-	4	J	5	U	2.8	J	1.5	J	1.8	J	5	U	1.9	J	2.8	J	2	J	4.6	J	5	U	5	U	0.67	J	2.6	J	1	J	5	U	-	-	-	-	-	-	-
2-Methylphenol	95-48-7			ug/l	5	U	5	U	5	U	-	-	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	-	-	-	-	-	-	-
3-Methylphenol/4-Methylphenol	108-39-4/106-44-5			ug/l	5	U	5	U	5	U	-	-	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	-	-	-	-	-	-	-
2,4,5-Trichlorophenol	95-95-4			ug/l	5	U	5	U	5	U	-	-	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	-	-	-	-	-	-	-
Benzoic Acid	65-85-0			ug/l	50	U	50	U	50	U	-	-	50	U	50	U	50	U	50	U	50	U	50	U	50	U	50	U	50	U	50	U	50	U	50	U	50	U	50	U	50	U	50	U	-	-	-	-	-	-	-
Benzyl Alcohol	100-51-6			ug/l	2	U	2	U	2	U	-	-	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U	-	-	-	-	-	-	-
Carbazole	86-74-8			ug/l	2	U	2	U	2	U	-	-	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U	-	-	-	-	-	-	-
Semivolatile Organics by GC/MS-SIM																																																			
Acenaphthene	83-32-9		20	ug/l	0.1	U	0.1	U	0.1	U	-	-	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	-	-	-	-	-	-	-
2-Chloronaphthalene	91-58-7		10	ug/l	0.2	U	0.2	U	0.2	U	-	-	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	-	-	-	-	-	-	-
Fluoranthene	206-44-0		50	ug/l	0.1	U	0.1	U	0.1	U	-	-	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	-	-	-	-	-	-	-
Hexachlorobutadiene	87-68-3		0.5	ug/l	0.5	U	0.5	U	0.5	U	-	-	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	-	-	-	-	-	-	-
Naphthalene	91-20-3		10	ug/l	0.1	U	0.1	U	0.1	U	-	-	0.1	U	0.1	U	0.1	U	0.1	J	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.04	J	0.1	U	0.05	J	0.1	U	0.1	U	-	-	-	-	-	-	-
Benzo(a)anthracene	56-55-3		0.002	ug/l	0.1	U	0.1	U	0.1	U	-	-	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	-	-	-	-	-	-	-
Benzo(a)pyrene	50-32-8		0	ug/l	0.1	U	0.1	U	0.1	U	-	-	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	-	-	-	-	-	-	-
Benzo(b)fluoranthene	205-99-2		0.002	ug/l	0.1	U	0.1	U	0.1	U	-	-	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	-	-	-	-	-	-	-
Benzo(k)fluoranthene	207-08-9		0.002	ug/l	0.1	U	0.1	U	0.1	U	-	-	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	-	-	-	-	-	-	-
Chrysene	218-01-9		0.002	ug/l	0.1	U	0.1	U	0.1	U	-	-	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	-	-	-	-	-	-	-
Acenaphthylene	208-96-8			ug/l	0.1	U	0.1	U	0.1	U	-	-	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	-	-	-	-	-	-	-
Anthracene	120-12-7		50	ug/l	0.1	U	0.1	U	0.1	U	-	-	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	-	-	-	-	-	-	-
Benzo(ghi)perylene	191-24-2			ug/l	0.1	U	0.1	U	0.1	U	-	-	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	-	-	-	-	-	-	-
Fluorene	86-73-7		50	ug/l	0.1	U	0.1	U	0.1	U	-	-	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	-	-	-	-	-	-	-
Phenanthrene	85-01-8		50	ug/l	0.1	U	0.1	U	0.1	U	-	-	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.04	J	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	-	-	-	-	-	-	-
Dibenzo(a,h)anthracene	53-70-3			ug/l	0.1	U	0.1	U	0.1	U	-	-	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	-	-	-	-	-	-	-
Indeno(1,2,3-cd)pyrene	193-39-5		0.002	ug/l	0.1	U	0.1	U	0.1	U	-	-	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	-	-	-	-	-	-	-
Pyrene	129-00-0		50	ug/l	0.1	U	0.1	U	0.1	U	-	-	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	-	-	-	-	-	-	-
2-Methylnaphthalene	91-57-6			ug/l	0.1	U	0.1	U	0.1	U	-	-	0.1	U	0.1	U	0.1	U	0.04	J	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.05	J	0.1	U	0.04	J	0.1	U	0.1	U	-	-	-	-	-	-	-
Pentachlorophenol	87-86-5		1	ug/l	0.8	U	0.8	U	0.8	U	-	-	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U	-	-	-	-	-	-	-
Hexachlorobenzene	118-74-1		0.04	ug/l	0.8	U	0.8	U	0.8	U	-	-	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U	-	-	-	-	-	-	-
Hexachloroethane	67-72-1		5	ug/l	0.8	U	0.8	U	0.8	U	-	-	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U	-	-	-	-	-	-	-
Total Metals																																																			
Aluminum, Total	7429-90-5			ug/l	100	U	100	U	100	U	-	-	104		100	U	100	U	100	U	100	U	100	U	100	U	100	U	100	U	100	U	100	U	100	U	100	U	79.8	J	100	U	100	U	-	-	-	-	-	-	-
Antimony, Total	7440-36-0		3	ug/l	50	U	50	U	50	U	-	-	50	U	50	U	50	U	50	U	50	U	50	U	50	U	50	U	50	U	50	U	50	U	50	U	50	U	50	U	50	U	50	U	-	-	-	-	-	-	-
Arsenic, Total	7440-38-2		25	ug/l	5	U	5	U	5	U	-	-	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	-	-	-	-	-	-	-
Barium, Total	7440-39-3		1000	ug/l	21.5		43.1		18		-	-	19.2		16.5		22.5		15.5		66.2		15.7		42.9		92.1		56.5		40.7		40.4		10	U	42		10	U	40.7		24.7		-	-	-	-	-	-	-
Beryllium, Total	7440-41-7		3	ug/l	5	U	5	U	5	U	-	-	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	-	-	-	-	-	-	-
Cadmium, Total	7440-43-9		5	ug/l	5	U	5	U	5	U	-	-	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	-	-	-	-	-	-	-
Calcium, Total	7440-70-2			ug/l	27000		26400		29400		-	-	26700		23700		24800		23600		14200		22400		22800		63300		71200		17900		17500		7220		14200		33400		16700		14300		-	-	-	-	-	-	-
Chromium, Total	7440-47-3		50	ug/l	10	U	10	U	10	U	-	-	10	U	10	U	10	U	10	U	10	U	10	U	3.5	J	10	U	9.6	J	10	U	10	U	10	U	10	U	10	U	10	U	2.3	J	-	-	-	-	-	-	-
Cobalt, Total	7440-48-4			ug/l	20	U	20	U	20	U	-	-	20	U	20	U	20	U	20	U	20	U	20	U	20	U	20	U	20	U	20	U	20	U	20	U	20	U	20	U	20	U	5.7	J	-	-	-	-	-	-	-
Copper, Total	7440-50-8		200	ug/l	10	U	8.4	J	10	U	-	-	10	U	10	U	10	U	10	U	10	U	10	U	10	U	10	U	10	U	10	U	10	U	10	U	10	U	10	U	10	U	10	U	-	-	-	-	-	-	-
Iron, Total	7439-89-6		300	ug/l	10.3	J	14.4	J	26.3	J	-	-	128		292		19.2	J	50	U	21.2	J	50	U	28.2	J	50	U	85		41.1	J	10.4	J	971		50	U	172		50	U	452		-	-	-	-	-	-	-
Lead, Total	7439-92-1		25	ug/l	10	U	10	U	10	U	-	-	10	U	10	U	10	U	10	U	10	U	10	U	10	U	10	U	10	U	10	U	10	U	10	U	10	U	10	U	10	U	10	U	-	-	-	-	-	-	-
Magnesium, Total	7439-95-4		35000	ug/l	4670		5970		5520		-	-	5920		4310		6080		5080		6380		5020		5590		12200		14000		3750		3730		3000		4110		3760		5160		6500		-	-	-	-	-	-	-
Manganese, Total	7439-96-5		300	ug/l	10	U	10	U	12.8		-	-	7.9	J	75.8		2	J	10	U	1.9	J	10	U	2.9	J	2620		378		13.6		1.8	J	28.7		3.1	J	65.2		2.4	J	16.6		-	-	-	-	-	-	-
Mercury, Total	7439-97-6		0.7	ug/l	0.2	U	0.2	U	0.2	U	-	-	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	-	-	-	-	-	-	-
Nickel, Total	7440-02-0		100	ug/l	25	U	25	U	25	U	-	-	25	U	25	U	25	U	25	U	25	U	25	U	26.4		25	U	7.2	J	25	U	25	U	25	U	25	U	25	U	25	U	8.4	J	-	-	-	-	-	-	-
Potassium, Total	7440-09-7			ug/l	2150	J	952	J	1520	J	-	-	1390	J	2040	J	1090	J	1990	J	1150	J	1120	J	1190	J	9390		2510		2420	J	2340	J	929	J	2340	J	1760	J	2170	J	1210	J	-	-	-	-	-	-	-
Selenium, Total	7782-49-2		10	ug/l	10	U	10	U	10	U	-	-	10	U	10	U	10	U	10	U	10	U	10	U	10	U	10	U	10	U	10	U	10	U	10	U	10	U	10	U	10	U	10	U	-	-	-	-	-	-	-
Silver, Total	7440-22-4		50	ug/l	7	U	7	U	7	U	-	-	7	U	7	U	7	U	7	U	7	U	7	U	7	U	7	U	7	U	7	U	7	U	7	U	7	U	7	U	7	U	7	U	-	-	-	-	-	-	-
Sodium, Total	7440-23-5		20000	ug/l	10100		9710		11400		-	-	10600		11200		11100		10200		12500		8460		10400		12200		16700		13500		13300		5480		13700		8480		12400		15300		-	-	-	-	-	-	-
Thallium, Total	7440-28-0		0.5	ug/l	20	U	20	U	20	U	-	-	20	U	20	U	20	U	20	U	20	U	20	U	20	U	20	U	20	U	20	U	20	U	20	U	20	U	20	U	20	U	20	U	-	-	-	-	-	-	-
Vanadium, Total	7440-62-2			ug/l	10	U	10	U	10	U	-	-	10	U	10	U	10	U	10	U	10	U	10	U	10	U	10	U	10	U	10	U	10	U	10	U	10	U	10	U	10	U	10	U	-	-	-	-	-	-	-
Zinc, Total	7440-66-6		2000	ug/l	5	U	10.2		5	U	-	-	5	U	5	U	5	U	2.2	J	5	U	5	U	2.1	J	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	16		-	-	-	-	-	-	-
Volatile Organics by GC/MS																																																			
Methylene chloride	75-09-2		5	ug/l	2.5	U	2.5	U	2.5	U	-	-	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	-	-	2.5	U	-
1,1-Dichloroethane	75-34-3		5	ug/l	2.5	U	2.5	U	2.5	U	-	-	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	-	-	2.5	U	-
Chloroform	67-66-3		7	ug/l	2.5	U	2.5	U	2.5	U	-	-	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	0.81	J	0.8	J	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	-	-	2.5	U	-
Carbon tetrachloride	56-23-5		5	ug/l	0.5	U	0.5	U	0.5	U	-	-	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	-	-	0.5	U	-
1,2-Dichloropropane	78-87-5		1	ug/l	1	U	1	U	1	U	-	-	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	-	-	1	U	-
Dibromochloromethane	124-48-1		50	ug/l	0.5	U	0.5	U	0.5	U	-	-	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	-	-	0.5	U	-
1,1,2-Trichloroethane	79-00-5		1	ug/l	1.5	U	1.5	U	1.5	U	-	-	1.5	U	1.5	U	1.5	U	1.5	U	1.5	U	1.5	U	1.5	U	1.5	U	1.5	U	1.5	U	1.5	U	1.5	U	1.5	U	1.5	U	1.5	U	1.5	U	1.5	U	-	-	1.5	U	-
Tetrachloroethene	127-18-4		5	ug/l	0.5	U	0.5	U	0.5	U	-	-	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	-	-	0.5	U	-
Chlorobenzene	108-90-7		5	ug/l	2.5	U	2.5	U	2.5	U	-	-	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	-	-	2.5	U	-
Trichlorofluoromethane	75-69-4		5	ug/l	2.5	U	2.5	U	2.5	U	-	-	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	-	-	2.5	U	-
1,2-Dichloroethane	107-06-2		0.6	ug/l	0.5	U	0.5	U	0.5	U	-	-	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	-	-	0.5	U	-
1,1,1-Trichloroethane	71-55-6		5	ug/l	2.5	U	2.5	U	2.5	U	-	-	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	-	-	2.5	U	-
Bromodichloromethane	75-27-4		50	ug/l	0.5	U	0.5	U	0.5	U	-	-	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.24	J	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	-	-	0.5	U	-
trans-1,3-Dichloropropene	10061-02-6		0.4	ug/l	0.5	U	0.5	U	0.5	U	-	-	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	-	-	0.5	U	-
cis-1,3-Dichloropropene	10061-01-5		0.4	ug/l	0.5	U	0.5	U	0.5	U	-	-	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	-	-	0.5	U	-
1,3-Dichloropropene, Total	542-75-6			ug/l	0.5	U	0.5	U	0.5	U	-	-	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	-	-	0.5	U	-
1,1-Dichloropropene	563-58-6		5	ug/l	2.5	U	2.5	U	2.5	U	-	-	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	-	-	2.5	U	-
Bromoform	75-25-2		50	ug/l	2	U	2	U	2	U	-	-	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U	-	-	2	U	-
1,1,2,2-Tetrachloroethane	79-34-5		5	ug/l	0.5	U	0.5	U	0.5	U	-	-	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	-	-	0.5	U	-
Benzene	71-43-2		1	ug/l	0.5	U	0.5	U	0.5	U	-	-	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	-	-	0.5	U	-
Toluene	108-88-3		5	ug/l	2.5	U	2.5	U	2.5	U	-	-	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	-	-	2.5	U	-
Ethylbenzene	100-41-4		5	ug/l	2.5	U	2.5	U	2.5	U	-	-	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	-	-	2.5	U	-
Chloromethane	74-87-3			ug/l	2.5	U	2.5	U	2.5	U	-	-	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	-	-	2.5	U	-
Bromomethane	74-83-9		5	ug/l	2.5	U	2.5	U	2.5	U	-	-	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	-	-	2.5	U	-
Vinyl chloride	75-01-4		2	ug/l	1	U	1	U	1	U	-	-	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	-	-	1	U	-
Chloroethane	75-00-3		5	ug/l	2.5	U	2.5	U	2.5	U	-	-	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	-	-	2.5	U	-
1,1-Dichloroethene	75-35-4		5	ug/l	0.5	U	0.5	U	0.5	U	-	-	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	-	-	0.5	U	-
trans-1,2-Dichloroethene	156-60-5		5	ug/l	2.5	U	2.5	U	2.5	U	-	-	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	-	-	2.5	U	-
Trichloroethene	79-01-6		5	ug/l	0.5	U	0.5	U	0.5	U	-	-	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	-	-	0.5	U	-
1,2-Dichlorobenzene	95-50-1		3	ug/l	2.5	U	2.5	U	2.5	U	-	-	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	-	-	2.5	U	-
1,3-Dichlorobenzene	541-73-1		3	ug/l	2.5	U	2.5	U	2.5	U	-	-	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	-	-	2.5	U	-
1,4-Dichlorobenzene	106-46-7		3	ug/l	2.5	U	2.5	U	2.5	U	-	-	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	-	-	2.5	U	-
Methyl tert butyl ether	1634-04-4		10	ug/l	2.5	U	2.5	U	2.5	U	-	-	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	-	-	2.5	U	-
p/m-Xylene	179601-23-1		5	ug/l	2.5	U	2.5	U	2.5	U	-	-	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	-	-	2.5	U	-
o-Xylene	95-47-6		5	ug/l	2.5	U	2.5	U	2.5	U	-	-	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	-	-	2.5	U	-
Xylenes, Total	1330-20-7			ug/l	2.5	U	2.5	U	2.5	U	-	-	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	-	-	2.5	U	-
cis-1,2-Dichloroethene	156-59-2		5	ug/l	2.5	U	2.5	U	2.5	U	-	-	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	-	-	2.5	U	-
1,2-Dichloroethene, Total	540-59-0			ug/l	2.5	U	2.5	U	2.5	U	-	-	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	-	-	2.5	U	-
Dibromomethane	74-95-3		5	ug/l	5	U	5	U	5	U	-	-	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	-	-	5	U	-
1,2,3-Trichloropropane	96-18-4		0.04	ug/l	2.5	U	2.5	U	2.5	U	-	-	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	-	-	2.5	U	-
Acrylonitrile	107-13-1		5	ug/l	5	U	5	U	5	U	-	-	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	-	-	5	U	-
Styrene	100-42-5		5	ug/l	2.5	U	2.5	U	2.5	U	-	-	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	-	-	2.5	U	-
Dichlorodifluoromethane	75-71-8		5	ug/l	5	U	5	U	5	U	-	-	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	-	-	5	U	-
Acetone	67-64-1		50	ug/l	5	U	5	U	1.6	J	-	-	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	2.2	J	5	U	5	U	5	U	5	U	5	U	5	U	-	-	5	U	-
Carbon disulfide	75-15-0		60	ug/l	5	U	5	U	5	U	-	-	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	-	-	5	U	-
2-Butanone	78-93-3		50	ug/l	5	U	5	U	5	U	-	-	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	-	-	5	U	-
Vinyl acetate	108-05-4			ug/l	5	U	5	U	5	U	-	-	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	-	-	5	U	-
4-Methyl-2-pentanone	108-10-1			ug/l	5	U	5	U	5	U	-	-	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	-	-	5	U	-
2-Hexanone	591-78-6		50	ug/l	5	U	5	U	5	U	-	-	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	-	-	5	U	-
Bromochloromethane	74-97-5		5	ug/l	2.5	U	2.5	U	2.5	U	-	-	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	-	-	2.5	U	-
2,2-Dichloropropane	594-20-7		5	ug/l	2.5	U	2.5	U	2.5	U	-	-	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	-	-	2.5	U	-
1,2-Dibromoethane	106-93-4		0.0006	ug/l	2	U	2	U	2	U	-	-	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U	-	-	2	U	-
1,3-Dichloropropane	142-28-9		5	ug/l	2.5	U	2.5	U	2.5	U	-	-	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	-	-	2.5	U	-
1,1,1,2-Tetrachloroethane	630-20-6		5	ug/l	2.5	U	2.5	U	2.5	U	-	-	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	-	-	2.5	U	-
Bromobenzene	108-86-1		5	ug/l	2.5	U	2.5	U	2.5	U	-	-	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	-	-	2.5	U	-
n-Butylbenzene	104-51-8		5	ug/l	2.5	U	2.5	U	2.5	U	-	-	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	-	-	2.5	U	-
sec-Butylbenzene	135-98-8		5	ug/l	2.5	U	2.5	U	2.5	U	-	-	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	-	-	2.5	U	-
tert-Butylbenzene	98-06-6		5	ug/l	2.5	U	2.5	U	2.5	U	-	-	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	-	-	2.5	U	-
o-Chlorotoluene	95-49-8		5	ug/l	2.5	U	2.5	U	2.5	U	-	-	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	-	-	2.5	U	-
p-Chlorotoluene	106-43-4		5	ug/l	2.5	U	2.5	U	2.5	U	-	-	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	-	-	2.5	U	-
1,2-Dibromo-3-chloropropane	96-12-8		0.04	ug/l	2.5	U	2.5	U	2.5	U	-	-	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	-	-	2.5	U	-
Hexachlorobutadiene	87-68-3		0.5	ug/l	2.5	U	2.5	U	2.5	U	-	-	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	-	-	2.5	U	-
Isopropylbenzene	98-82-8		5	ug/l	2.5	U	2.5	U	2.5	U	-	-	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	-	-	2.5	U	-
p-Isopropyltoluene	99-87-6		5	ug/l	2.5	U	2.5	U	2.5	U	-	-	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	-	-	2.5	U	-
Naphthalene	91-20-3		10	ug/l	2.5	U	2.5	U	2.5	U	-	-	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	-	-	2.5	U	-
n-Propylbenzene	103-65-1		5	ug/l	2.5	U	2.5	U	2.5	U	-	-	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	-	-	2.5	U	-
1,2,3-Trichlorobenzene	87-61-6		5	ug/l	2.5	U	2.5	U	2.5	U	-	-	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	-	-	2.5	U	-
1,2,4-Trichlorobenzene	120-82-1		5	ug/l	2.5	U	2.5	U	2.5	U	-	-	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	-	-	2.5	U	-
1,3,5-Trimethylbenzene	108-67-8		5	ug/l	2.5	U	2.5	U	2.5	U	-	-	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	-	-	2.5	U	-
1,2,4-Trimethylbenzene	95-63-6		5	ug/l	2.5	U	2.5	U	2.5	U	-	-	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	-	-	2.5	U	-
1,4-Dioxane	123-91-1		0.35	ug/l	250	U	250	U	250	U	-	-	250	U	250	U	250	U	250	U	250	U	250	U	250	U	250	U	250	U	250	U	250	U	250	U	250	U	250	U	250	U	250	U	250	U	-	-	250	U	-
p-Diethylbenzene	105-05-5			ug/l	2	U	2	U	2	U	-	-	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U	-	-	2	U	-
p-Ethyltoluene	622-96-8			ug/l	2	U	2	U	2	U	-	-	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U	-	-	2	U	-
1,2,4,5-Tetramethylbenzene	95-93-2		5	ug/l	2	U	2	U	2	U	-	-	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U	-	-	2	U	-
Ethyl ether	60-29-7			ug/l	2.5	U	2.5	U	2.5	U	-	-	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	-	-	2.5	U	-
trans-1,4-Dichloro-2-butene	110-57-6		5	ug/l	2.5	U	2.5	U	2.5	U	-	-	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	-	-	2.5	U	-
Subcontractor Results																																																			
Sulfide				mg/L	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	8.2	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U							
Iodide				mg/L	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U							

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* Comparison is not performed on parameters with non-numeric criteria.

*EPA MCLs for Radionuclides is derived from The USEPA Radionuclides Rule. Available at https://www.epa.gov/dwreginfo/radionuclides-rule

*To convert micrograms per liter (ug/L) to picocuries per liter (pCi/L), you can multiply the ug/L by 0.67:ug/L to pCi/L: ug/L x 0.67 = pCi/L

NY-AWQS: New York TOGS 111 Ambient Water Quality Standards & Guidance Values Criteria per Standards & Guidance Values including all addenda through February 2023.

Qualifier RA- The reported Ra-226 results were determined using a direct gamma emission (186 keV) shared by both Ra-226 andnaturally-occurring U-235. The reported Ra-226 results were determined assuming the shared energy peak is attributableexclusively to Ra-226. Reported results for Ra-226 may be biased high if U-235 is present in the sample.

ATTACHMENT D

P.W. GROSSER CONSULTING, INC • P.W. GROSSER CONSULTING ENGINEER & HYDROGEOLOGIST, PC
631.589.6353 • WWW.PWGROSSER.COM • PWGC.INFO@PWGROSSER.COM
BOHEMIA • MANHATTAN • SARATOGA SPRINGS • MONTICELLO • SYRACUSE • SHELTON, CT

Analytical Data Package

Prepared by:

Pace Analytical Services

Pace Project No.: 50381973

Table Of Contents

Pace Analytical Services, LLC
7726 Moller Road
Indianapolis, IN 46268
(317)228-3100

September 15, 2024

Pace MA
Pace MA
Eight Walkup Drive
Westborough, MA 01581

RE: Project: L2450786
Pace Project No.: 50381973

Dear Pace MA:

Enclosed are the analytical results for sample(s) received by the laboratory on September 10, 2024. The results relate only to the samples included in this report. Results reported herein conform to the applicable TNI/NELAC Standards and the laboratory's Quality Manual, where applicable, unless otherwise noted in the body of the report.

The test results provided in this final report were generated by each of the following laboratories within the Pace Network:

- Pace Analytical Services - Indianapolis

If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Tina Sayer

Tina Sayer
tina.sayer@pacelabs.com
(317)228-3127
Project Manager

Enclosures

cc: Mitchell Ostrowski, Pace MA

Pace Analytical Services, LLC
7726 Moller Road
Indianapolis, IN 46268
(317)228-3100

CERTIFICATIONS

Project: L2450786
Pace Project No.: 50381973

Pace Analytical Services Indianapolis
7726 Moller Road, Indianapolis, IN 46268
Illinois Accreditation #: 200074
Indiana Drinking Water Laboratory #: C-49-06
Kansas/TNI Certification #: E-10177
Kentucky UST Agency Interest #: 80226
Kentucky WW Laboratory ID #: 98019
Michigan Drinking Water Laboratory #9050
Oklahoma Laboratory #: 9204
Texas Certification #: T104704355
Washington Dept of Ecology #: C1081
Wisconsin Laboratory #: 999788130
USDA Foreign Soil Permit #: 525-23-13-23119
USDA Compliance Agreement #: IN-SL-22-001

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
7726 Moller Road
Indianapolis, IN 46268
(317)228-3100

SAMPLE SUMMARY

Project: L2450786
Pace Project No.: 50381973

Lab ID	Sample ID	Matrix	Date Collected	Date Received
50381973001	**MW-5A**	Water	09/05/24 13:53	09/10/24 09:30
50381973002	**MW-5B**	Water	09/05/24 13:55	09/10/24 09:30
50381973003	**MW-6A**	Water	09/05/24 12:50	09/10/24 09:30
50381973004	**MW-6B**	Water	09/05/24 12:47	09/10/24 09:30
50381973005	**MW-7A**	Water	09/05/24 11:55	09/10/24 09:30
50381973006	**MW-7B**	Water	09/05/24 12:00	09/10/24 09:30
50381973007	**MW-8A**	Water	09/05/24 08:00	09/10/24 09:30
50381973008	**MW-8B**	Water	09/05/24 08:55	09/10/24 09:30
50381973009	**MW-10A**	Water	09/05/24 10:10	09/10/24 09:30
50381973010	**MW-10B**	Water	09/05/24 10:16	09/10/24 09:30
50381973011	**DUP**	Water	09/05/24 00:00	09/10/24 09:30

Pace Analytical Services, LLC
7726 Moller Road
Indianapolis, IN 46268
(317)228-3100

SAMPLE ANALYTE COUNT

Project: L2450786
Pace Project No.: 50381973

Lab ID	Sample ID	Method	Analysts	Analytes Reported
50381973001	**MW-5A**	EPA 9056	DMP1	1
50381973002	**MW-5B**	EPA 9056	DMP1	1
50381973003	**MW-6A**	EPA 9056	DMP1	1
50381973004	**MW-6B**	EPA 9056	DMP1	1
50381973005	**MW-7A**	EPA 9056	DMP1	1
50381973006	**MW-7B**	EPA 9056	DMP1	1
50381973007	**MW-8A**	EPA 9056	DMP1	1
50381973008	**MW-8B**	EPA 9056	DMP1	1
50381973009	**MW-10A**	EPA 9056	DMP1	1
50381973010	**MW-10B**	EPA 9056	DMP1	1
50381973011	**DUP**	EPA 9056	DMP1	1

PASI-I = Pace Analytical Services - Indianapolis

Pace Analytical Services, LLC
7726 Moller Road
Indianapolis, IN 46268
(317)228-3100

ANALYTICAL RESULTS

Project: L2450786
Pace Project No.: 50381973

Sample: MW-5A **Lab ID: 50381973001** Collected: 09/05/24 13:53 Received: 09/10/24 09:30 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
9056 Iodide by IC	Analytical Method: EPA 9056 Pace Analytical Services - Indianapolis							
Iodide	ND	mg/L	0.50	1		09/11/24 11:57		

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
7726 Moller Road
Indianapolis, IN 46268
(317)228-3100

ANALYTICAL RESULTS

Project: L2450786
Pace Project No.: 50381973

Sample: MW-5B **Lab ID: 50381973002** Collected: 09/05/24 13:55 Received: 09/10/24 09:30 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
9056 Iodide by IC	Analytical Method: EPA 9056 Pace Analytical Services - Indianapolis							
Iodide	ND	mg/L	0.50	1		09/11/24 12:15		

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
7726 Moller Road
Indianapolis, IN 46268
(317)228-3100

ANALYTICAL RESULTS

Project: L2450786
Pace Project No.: 50381973

Sample: MW-6A **Lab ID: 50381973003** Collected: 09/05/24 12:50 Received: 09/10/24 09:30 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
9056 Iodide by IC	Analytical Method: EPA 9056 Pace Analytical Services - Indianapolis							
Iodide	ND	mg/L	0.50	1		09/11/24 12:33		

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
7726 Moller Road
Indianapolis, IN 46268
(317)228-3100

ANALYTICAL RESULTS

Project: L2450786
Pace Project No.: 50381973

Sample: MW-6B **Lab ID: 50381973004** Collected: 09/05/24 12:47 Received: 09/10/24 09:30 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
9056 Iodide by IC	Analytical Method: EPA 9056 Pace Analytical Services - Indianapolis							
Iodide	ND	mg/L	0.50	1		09/11/24 12:51		

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
7726 Moller Road
Indianapolis, IN 46268
(317)228-3100

ANALYTICAL RESULTS

Project: L2450786
Pace Project No.: 50381973

Sample: MW-7A **Lab ID: 50381973005** Collected: 09/05/24 11:55 Received: 09/10/24 09:30 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
9056 Iodide by IC	Analytical Method: EPA 9056 Pace Analytical Services - Indianapolis							
Iodide	ND	mg/L	0.50	1		09/11/24 13:08		

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
7726 Moller Road
Indianapolis, IN 46268
(317)228-3100

ANALYTICAL RESULTS

Project: L2450786
Pace Project No.: 50381973

Sample: MW-7B **Lab ID: 50381973006** Collected: 09/05/24 12:00 Received: 09/10/24 09:30 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
9056 Iodide by IC	Analytical Method: EPA 9056 Pace Analytical Services - Indianapolis							
Iodide	ND	mg/L	0.50	1		09/11/24 13:25		

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
7726 Moller Road
Indianapolis, IN 46268
(317)228-3100

ANALYTICAL RESULTS

Project: L2450786
Pace Project No.: 50381973

Sample: MW-8A **Lab ID: 50381973007** Collected: 09/05/24 08:00 Received: 09/10/24 09:30 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
9056 Iodide by IC	Analytical Method: EPA 9056 Pace Analytical Services - Indianapolis							
Iodide	ND	mg/L	0.50	1		09/11/24 13:42		

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
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Indianapolis, IN 46268
(317)228-3100

ANALYTICAL RESULTS

Project: L2450786
Pace Project No.: 50381973

Sample: MW-8B **Lab ID: 50381973008** Collected: 09/05/24 08:55 Received: 09/10/24 09:30 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
9056 Iodide by IC	Analytical Method: EPA 9056 Pace Analytical Services - Indianapolis							
Iodide	ND	mg/L	0.50	1		09/11/24 13:59		

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
7726 Moller Road
Indianapolis, IN 46268
(317)228-3100

ANALYTICAL RESULTS

Project: L2450786
Pace Project No.: 50381973

Sample: MW-10A **Lab ID: 50381973009** Collected: 09/05/24 10:10 Received: 09/10/24 09:30 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
9056 Iodide by IC	Analytical Method: EPA 9056 Pace Analytical Services - Indianapolis							
Iodide	ND	mg/L	0.50	1		09/11/24 14:50		

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
7726 Moller Road
Indianapolis, IN 46268
(317)228-3100

ANALYTICAL RESULTS

Project: L2450786
Pace Project No.: 50381973

Sample: MW-10B **Lab ID: 50381973010** Collected: 09/05/24 10:16 Received: 09/10/24 09:30 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
9056 Iodide by IC	Analytical Method: EPA 9056 Pace Analytical Services - Indianapolis							
Iodide	ND	mg/L	0.50	1		09/11/24 15:07		

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
7726 Moller Road
Indianapolis, IN 46268
(317)228-3100

ANALYTICAL RESULTS

Project: L2450786
Pace Project No.: 50381973

Sample: DUP **Lab ID: 50381973011** Collected: 09/05/24 00:00 Received: 09/10/24 09:30 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
9056 Iodide by IC	Analytical Method: EPA 9056 Pace Analytical Services - Indianapolis							
Iodide	ND	mg/L	0.50	1		09/11/24 15:24		

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
7726 Moller Road
Indianapolis, IN 46268
(317)228-3100

QUALITY CONTROL DATA

Project: L2450786
Pace Project No.: 50381973

QC Batch: 808395
QC Batch Method: EPA 9056
Analysis Method: EPA 9056
Analysis Description: 9056 Iodide by IC
Laboratory: Pace Analytical Services - Indianapolis
Associated Lab Samples: 50381973001, 50381973002, 50381973003, 50381973004, 50381973005, 50381973006, 50381973007, 50381973008, 50381973009, 50381973010, 50381973011

METHOD BLANK: 3696993 Matrix: Water
Associated Lab Samples: 50381973001, 50381973002, 50381973003, 50381973004, 50381973005, 50381973006, 50381973007, 50381973008, 50381973009, 50381973010, 50381973011

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Iodide	mg/L	ND	0.50	09/11/24 11:23	

LABORATORY CONTROL SAMPLE: 3696994

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Iodide	mg/L	5	4.9	99	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3696995 3696996

Parameter	Units	50381975005 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Iodide	mg/L	ND	5	5	5.0	5.0	101	101	80-120	0	15	

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
7726 Moller Road
Indianapolis, IN 46268
(317)228-3100

QUALIFIERS

Project: L2450786
Pace Project No.: 50381973

DEFINITIONS

DF - Dilution Factor, if reported, represents the factor applied to the reported data due to dilution of the sample aliquot.

ND - Not Detected at or above adjusted reporting limit.

TNTC - Too Numerous To Count

J - Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.

MDL - Adjusted Method Detection Limit.

PQL - Practical Quantitation Limit.

RL - Reporting Limit - The lowest concentration value that meets project requirements for quantitative data with known precision and bias for a specific analyte in a specific matrix.

S - Surrogate

1,2-Diphenylhydrazine decomposes to and cannot be separated from Azobenzene using Method 8270. The result for each analyte is a combined concentration.

Consistent with EPA guidelines, unrounded data are displayed and have been used to calculate % recovery and RPD values.

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

U - Indicates the compound was analyzed for, but not detected.

N-Nitrosodiphenylamine decomposes and cannot be separated from Diphenylamine using Method 8270. The result reported for each analyte is a combined concentration.

Reported results are not rounded until the final step prior to reporting. Therefore, calculated parameters that are typically reported as "Total" may vary slightly from the sum of the reported component parameters.

Pace Analytical is TNI accredited. Contact your Pace PM for the current list of accredited analytes.

TNI - The NELAC Institute.

Pace Analytical Services, LLC
7726 Moller Road
Indianapolis, IN 46268
(317)228-3100

QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: L2450786
Pace Project No.: 50381973

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
50381973001	**MW-5A**	EPA 9056	808395		
50381973002	**MW-5B**	EPA 9056	808395		
50381973003	**MW-6A**	EPA 9056	808395		
50381973004	**MW-6B**	EPA 9056	808395		
50381973005	**MW-7A**	EPA 9056	808395		
50381973006	**MW-7B**	EPA 9056	808395		
50381973007	**MW-8A**	EPA 9056	808395		
50381973008	**MW-8B**	EPA 9056	808395		
50381973009	**MW-10A**	EPA 9056	808395		
50381973010	**MW-10B**	EPA 9056	808395		
50381973011	**DUP**	EPA 9056	808395		

WO# : 50381973

50381973

Subcontract Chain of Custody

Pace Analytical (Indianapolis, IN)
7726 Moller Road
Indianapolis, IN 46268

Alpha Job Number
L2450786

Client Information	Project Information	Regulatory Requirements/Report Limits
Client: Alpha Analytical Labs Address: Eight Walkup Drive Westborough, MA 01581-1019 Phone: 508.844.4115 Email: Mitchell.Ostrowski@pacelabs.com	Project Location: NY Project Manager: Mitchell Ostrowski **Turnaround & Deliverables Information** Due Date: Deliverables:	State/Federal Program: Regulatory Criteria:

Project Specific Requirements and/or Report Requirements

Reference following Alpha Job Number on final report/deliverables: L2450786

Report to include Method Blank, LCS/LCSD:

Additional Comments: Invoices to: invoices@pacelabs.coupahost.com Reports to: west.subreports@pacelabs.com

Lab ID	Client ID	Collection Date/Time	Sample Matrix	Analysis	Batch QC
	MW-5A	09-05-24 13:53	WATER	Iodide	001
	MW-5B	09-05-24 13:55	WATER	Iodide	002
	MW-6A	09-05-24 12:50	WATER	Iodide	003
	MW-6B	09-05-24 12:47	WATER	Iodide	004
	MW-7A	09-05-24 11:55	WATER	Iodide	005
	MW-7B	09-05-24 12:00	WATER	Iodide	006
	MW-8A	09-05-24 08:00	WATER	Iodide	007
	MW-8B	09-05-24 08:55	WATER	Iodide	008

	Relinquished By:	Date/Time:	Received By:	Date/Time:
		9/9/24	Fed ex	9/9/24
	Fed ex	9/10/24 9:30	Walter Schelbe Pace	9/10/24 9:30
Form No: AL_subcoc				

Subcontract Chain of Custody

Pace Analytical (Indianapolis, IN)
7726 Moller Road
Indianapolis, IN 46268

Alpha Job Number
L2450786

Client Information

Client: Alpha Analytical Labs
Address: Eight Walkup Drive
Westborough, MA 01581-1019

Phone: 508.844.4115
Email: Mitchell.Ostrowski@pacelabs.com

Project Information

Project Location: NY
Project Manager: Mitchell Ostrowski

Turnaround & Deliverables Information

Due Date:
Deliverables:

Regulatory Requirements/Report Limits

State/Federal Program:
Regulatory Criteria:

Project Specific Requirements and/or Report Requirements

Reference following Alpha Job Number on final report/deliverables: L2450786

Report to include Method Blank, LCS/LCSD:

Additional Comments: Send all results/reports to subreports@alphalab.com

Lab ID	Client ID	Collection Date/Time	Sample Matrix	Analysis	Batch QC
	MW-10A	09-05-24 10:10	WATER	Iodide	009
	MW-10B	09-05-24 10:16	WATER	Iodide	010
	DUP	09-05-24 00:00	WATER	Iodide	011

Relinquished By:	Date/Time:	Received By:	Date/Time:
	a/a/24	Fedex	9/9/24
Fedex	9/10/24 9.30	Tabitha Schelen	9/10/24 9.30

Form No: AL_subcoc

SAMPLE CONDITION UPON RECEIPT FORM

Date/Time and Initials of person examining contents: 9/10/24 10:55 TS

1. **Courier:** ☑ FED EX ☐ UPS ☐ CLIENT ☐ PACE ☐ NOW/JETT ☐ OTHER _____
2. **Custody Seal on Cooler/Box Present:** ☐ Yes ☑ No
   (If yes)Seals Intact: ☐ Yes ☐ No **(leave blank if no seals were present)**
3. **Thermometer:** 1 2 3 4 5 6 7 8 9 (A) B C D E F G H I
4. **Cooler Temperature(s):** 1.1/2.1 | | | |
   (Initial/Corrected) RECORD TEMPS OF ALL COOLERS RECEIVED (use Comments below to add more)

5. **Packing Material:** ☐ Bubble Wrap ☑ Bubble Bags ☐ None ☐ Other _____
6. **Ice Type:** ☑ Wet ☐ Blue ☐ None
7. **Was the PM notified of out of temp cooler?:** ☐ Yes ☐ No
   Cooler temp should be above freezing to 6°C

All discrepancies will be written out in the comments section below.

	Yes	No		Yes	No	N/A
USDA Regulated Soils? (HI, ID, NY, WA, OR,CA, NM, TX, OK, AR, LA, TN, AL, MS, NC, SC, GA, FL, or Puerto Rico)		✓	All containers needing acid/base preservation have been pH CHECKED?: **Exceptions: VOA, coliform, LLHg, O&G, RAD CHEM, and any container with a septum cap or preserved with HCl.** **Circle: HNO3 (<2) H2SO4 (<2) NaOH (>10) NaOH/ZnAc (>9)** Any non-conformance to pH recommendations will be noted on the container count form			✓
Short Hold Time Analysis (48 hours or less)? Analysis:		✓				
Time 5035A TC placed in Freezer or Short Holds To Lab	Time:			Present	Absent	N/A
			Residual Chlorine Check (SVOC 625 Pest/PCB 608)			✓
Rush TAT Requested (4 days or less):		✓	Residual Chlorine Check (Total/Amenable/Free Cyanide)			✓
Custody Signatures Present?	✓		Headspace Wisconsin Sulfide?			✓
Containers Intact?	✓		Headspace in VOA Vials (>6mm): See Containter Count form for details	Present	Absent	No VOA Vials Sent ✓
Sample Label (IDs/Dates/Times) Match COC?: Except TCs, which only require sample ID	✓		Trip Blank Present?		✓	
Extra labels on Terracore Vials? (soils only)			Trip Blank Custody Seals?:			✓

COMMENTS:

COC PAGE 1 of 2

Sample Container Count

** Place a PINK dot on containers that are out of conformance **

COC Line Item	WGFU	WGKU BG1U	MeOH (only) SBS DI R	DG9H VG9H	VOA VIAL HS (>6mm)	VG9U DG9U	VG9T	AG0U	AG1H	AG1U	AG3U	AG3S	AG3SF	AG3B	BP1U	BP1N	BP2U	BP3U	BP3N	BP3F	BP3S	BP3B	BP3Z	CG3H	CG3F	Syringe Kit			Matrix
				AMBER GLASS											PLASTIC									OTHER					
1																		1											W
2																													
3																													
4																													
5																													
6																													
7																													
8																													
9																													
10																													
11																													
12																													

Nitric	Sulfuric	Sodium Hydroxide	Sodium Hydroxide/ ZnAc
Red	Yellow	Green	Black
HNO3 <2	H2SO4 <2	NaOH >10	NaOH/Zn Ac >9

ontainer Codes

Glass

G9H	40mL HCl amber voa vial	BG1T	1L Na Thiosulfate clear glass
G9P	40mL TSP amber vial	BG1U	1L unpreserved glass
G9S	40mL H2SO4 amber vial	CG3H	250mL HCl Clear Glass
G9T	40mL Na Thio amber vial	CG3U	250mL Unpres Clear Glass
G9U	40mL unpreserved amber vial	AG0U	100mL unpres amber glass
G9H	40mL HCl clear vial	AG1H	1L HCl amber glass
G9T	40mL Na Thio. clear vial	AG1S	1L H2SO4 amber glass
G9U	40mL unpreserved clear vial	AG1T	1L Na Thiosulfate amber glass
I	40mL w/hexane wipe vial	AG1U	1liter unpres amber glass
GKU	8oz unpreserved clear jar	AG2N	500mL HNO3 amber glass
GFU	4oz clear soil jar	AG2S	500mL H2SO4 amber glass
FU	4oz unpreserved amber wide	AG2U	500mL unpres amber glass
G3H	250mL clear glass HCl	AG3S	250mL H2SO4 amber glass
3F	250mL clear glass HCl, Field Filter	AG3SF	250mL H2SO4 amb glass -field filtered
1H	1L HCl clear glass	AG3U	250mL unpres amber glass
1S	1L H2SO4 clear glass	AG3B	250mL NaOH amber glass

Plastic

BP1B	1L NaOH plastic
BP1N	1L HNO3 plastic
BP1S	1L H2SO4 plastic
BP1U	1L unpreserved plastic
BP1Z	1L NaOH, Zn, Ac
BP2N	500mL HNO3 plastic
BP2C	500mL NaOH plastic
BP2S	500mL H2SO4 plastic
BP2U	500mL unpreserved plastic
BP2Z	500mL NaOH, Zn Ac
BP3B	250mL NaOH plastic
BP3N	250mL HNO3 plastic
BP3F	250mL HNO3 plastic-field filtered
BP3U	250mL unpreserved plastic
BP3S	250mL H2SO4 plastic
BP3Z	250mL NaOH, ZnAc plastic

NT3U	Non Teflon 250mL unpreserved plastic
BP4U	125mL unpreserved plastic
BP4N	125mL HNO3 plastic
BP4S	125mL H2SO4 plastic

Miscellaneous

Syringe Kit	LL Cr+6 sampling kit
ZPLC	Ziploc Bag
R	Terracore Kit
SP5T	120mL Coliform Sodium Thiosulfate
GN	General Container
U	Summa Can (air sample)
WT	Water
SL	Solid
OL:	Oil
NAL	Non-aqueous liquid
WP	Wipe

COC PAGE 2 of 2

Sample Container Count

** Place a PINK dot on containers that are out of conformance **

COC Line Item	WGFU	WGKU BG1U	MeOH (only) SBS DI R	DG9H VG9H	VOA VIAL HS (>6mm)	VG9U DG9U	VG9T	AG0U	AG1H	AG1U	AG3U	AG3S	AG3SF	AG3B	BP1U	BP1N	BP2U	BP3U	BP3N	BP3F	BP3S	BP3B	BP3Z	CG3H	CG3F	Syringe Kit		Matrix	Nitric Red HNO3 <2	Sulfuric Yellow H2SO4 <2	Sodium Hydroxide Green NaOH >10	Sodium Hydroxide/ ZnAc Black NaOH/Zn Ac >9
								AMBER GLASS							PLASTIC									OTHER									
1																																
2																																
3																																
4																																
5																																
6																																
7																																
8																																
9																																
10																																
11																																
12																																

Container Codes

Glass

G9H	40mL HCl amber voa vial	BG1T	1L Na Thiosulfate clear glass
G9P	40mL TSP amber vial	BG1U	1L unpreserved glass
G9S	40mL H2SO4 amber vial	CG3H	250mL HCl Clear Glass
G9T	40mL Na Thio amber vial	CG3U	250mL Unpres Clear Glass
G9U	40mL unpreserved amber vial	AG0U	100mL unpres amber glass
G9H	40mL HCl clear vial	AG1H	1L HCl amber glass
G9T	40mL Na Thio. clear vial	AG1S	1L H2SO4 amber glass
G9U	40mL unpreserved clear vial	AG1T	1L Na Thiosulfate amber glass
I	40mL w/hexane wipe vial	AG1U	1liter unpres amber glass
GKU	8oz unpreserved clear jar	AG2N	500mL HNO3 amber glass
GFU	4oz clear soil jar	AG2S	500mL H2SO4 amber glass
FU	4oz unpreserved amber wide	AG2U	500mL unpres amber glass
G3H	250mL clear glass HCl	AG3S	250mL H2SO4 amber glass
G3F	250mL clear glass HCl, Field Filter	AG3SF	250mL H2SO4 amb glass -field filtered
1H	1L HCl clear glass	AG3U	250mL unpres amber glass
1S	1L H2SO4 clear glass	AG3B	250mL NaOH amber glass

Plastic

BP1B	1L NaOH plastic
BP1N	1L HNO3 plastic
BP1S	1L H2SO4 plastic
BP1U	1L unpreserved plastic
BP1Z	1L NaOH, Zn, Ac
BP2N	500mL HNO3 plastic
BP2C	500mL NaOH plastic
BP2S	500mL H2SO4 plastic
BP2U	500mL unpreserved plastic
BP2Z	500mL NaOH, Zn Ac
BP3B	250mL NaOH plastic
BP3N	250mL HNO3 plastic
BP3F	250mL HNO3 plastic-field filtered
BP3U	250mL unpreserved plastic
BP3S	250mL H2SO4 plastic
BP3Z	250mL NaOH, ZnAc plastic

NT3U	Non Teflon 250mL unpreserved plastic
BP4U	125mL unpreserved plastic
BP4N	125mL HNO3 plastic
BP4S	125mL H2SO4 plastic

Miscellaneous

Syringe Kit	LL Cr+6 sampling kit
ZPLC	Ziploc Bag
R	Terracore Kit
SP5T	120mL Coliform Sodium Thiosulfate
GN	General Container
U	Summa Can (air sample)
WT	Water
SL	Solid
OL:	Oil
NAL	Non-aqueous liquid
WP	Wipe

SAMPLE NO.

MW-5A

FORM I INORGANIC-1

INORGANIC ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Indiana SDG No. : 50381973 Contract: L2450786

Lab Sample ID: 50381973001 Percent Moisture:

CAS No.	Analyte	Concentration	Q	Units	DF	Analysis Date/Time
	Iodide	ND	U	mg/L	1	09/11/2024 11:57

SAMPLE NO.

MW-5B

FORM I INORGANIC-1

INORGANIC ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Indiana SDG No. : 50381973 Contract: L2450786

Lab Sample ID: 50381973002 Percent Moisture:

CAS No.	Analyte	Concentration	Q	Units	DF	Analysis Date/Time
	Iodide	ND	U	mg/L	1	09/11/2024 12:15

SAMPLE NO.

MW-6A

FORM I INORGANIC-1

INORGANIC ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Indiana SDG No. : 50381973 Contract: L2450786

Lab Sample ID: 50381973003 Percent Moisture:

CAS No.	Analyte	Concentration	Q	Units	DF	Analysis Date/Time
	Iodide	ND	U	mg/L	1	09/11/2024 12:33

SAMPLE NO.

MW-6B

FORM I INORGANIC-1

INORGANIC ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Indiana SDG No. : 50381973 Contract: L2450786

Lab Sample ID: 50381973004 Percent Moisture:

CAS No.	Analyte	Concentration	Q	Units	DF	Analysis Date/Time
	Iodide	ND	U	mg/L	1	09/11/2024 12:51

SAMPLE NO.

MW-7A

FORM I INORGANIC-1

INORGANIC ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Indiana SDG No. : 50381973 Contract: L2450786

Lab Sample ID: 50381973005 Percent Moisture:

CAS No.	Analyte	Concentration	Q	Units	DF	Analysis Date/Time
	Iodide	ND	U	mg/L	1	09/11/2024 13:08

SAMPLE NO.

MW-7B

FORM I INORGANIC-1

INORGANIC ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Indiana SDG No. : 50381973 Contract: L2450786

Lab Sample ID: 50381973006 Percent Moisture:

CAS No.	Analyte	Concentration	Q	Units	DF	Analysis Date/Time
	Iodide	ND	U	mg/L	1	09/11/2024 13:25

SAMPLE NO.

MW-8A

FORM I INORGANIC-1

INORGANIC ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Indiana SDG No. : 50381973 Contract: L2450786

Lab Sample ID: 50381973007 Percent Moisture:

CAS No.	Analyte	Concentration	Q	Units	DF	Analysis Date/Time
	Iodide	ND	U	mg/L	1	09/11/2024 13:42

SAMPLE NO.

MW-8B

FORM I INORGANIC-1

INORGANIC ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Indiana SDG No. : 50381973 Contract: L2450786

Lab Sample ID: 50381973008 Percent Moisture:

CAS No.	Analyte	Concentration	Q	Units	DF	Analysis Date/Time
	Iodide	ND	U	mg/L	1	09/11/2024 13:59

SAMPLE NO.

MW-10A

FORM I INORGANIC-1

INORGANIC ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Indiana SDG No. : 50381973 Contract: L2450786

Lab Sample ID: 50381973009 Percent Moisture:

CAS No.	Analyte	Concentration	Q	Units	DF	Analysis Date/Time
	Iodide	ND	U	mg/L	1	09/11/2024 14:50

SAMPLE NO.

MW-10B

FORM I INORGANIC-1

INORGANIC ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Indiana SDG No. : 50381973 Contract: L2450786

Lab Sample ID: 50381973010 Percent Moisture:

CAS No.	Analyte	Concentration	Q	Units	DF	Analysis Date/Time
	Iodide	ND	U	mg/L	1	09/11/2024 15:07

SAMPLE NO.

DUP

FORM I INORGANIC-1

INORGANIC ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Indiana SDG No. : 50381973 Contract: L2450786

Lab Sample ID: 50381973011 Percent Moisture:

CAS No.	Analyte	Concentration	Q	Units	DF	Analysis Date/Time
	Iodide	ND	U	mg/L	1	09/11/2024 15:24

FORM II INORGANIC-1

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: Pace Analytical - Indiana SDG No. : 50381973 Contract: L2450786

Initial Calibration Verification Source: 391054

Continuing Calibration Verification Source: 392572

Concentration Units: mg/L Instrument ID: 50IC05

	Initial Calibration Verification				Continuing Calibration Verification						
	09/06/2024 14:03				09/11/2024 10:50			09/11/2024 14:16			Control Limit
Analyte	True	Found	%R	Control Limit	True	Found	%R	True	Found	%R	
Iodide	5.0	5.0	99.4	90-110	1.0	1.0	100.0	1.0	0.99	99.0	90-110

FORM II INORGANIC-2

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: Pace Analytical - Indiana SDG No. : 50381973 Contract: L2450786

Initial Calibration Verification Source:

Continuing Calibration Verification Source: 392572

Concentration Units: mg/L Instrument ID: 50IC05

	Continuing Calibration Verification			
	09/11/2024 17:42			Control Limit
Analyte	True	Found	%R	
Iodide	1.0	1.0	102.4	90-110

FORM III INORGANIC-1

BLANKS

Lab Name: Pace Analytical - Indiana SDG No. : 50381973 Contract : L2450786

Method Blank Matrix: Water Instrument ID: 50IC05

Method Blank Concentration Units: mg/L

Analyte	Initial Calibration Blank (mg/L)		Continuing Calibration Blank (mg/L)						Method Blank	
	09/06/2024 14:22	C	09/11/2024 11:06	C	09/11/2024 14:33	C	09/11/2024 18:00	C	3696993	C
Iodide	0.068	U	0.068	U	0.068	U	0.068	U	ND	U

SAMPLE NO.

3696995MS

FORM V INORGANIC-1

MATRIX SPIKE SAMPLE RECOVERY

Lab Name: Pace Analytical - Indiana SDG No. : 50381973 Contract: L2450786

Matrix: Water Basis: Wet Parent Sample ID: 50381975005

Percent Moisture:

Analyte	Units	Control Limit %R	Spiked Sample Result (SSR)	Sample Result (SR)	Spike Added (SA)	%R
Iodide	mg/L	80-120	5.0	ND	5.0	101

SAMPLE NO.

3696996MSD

FORM V INORGANIC-2

MATRIX SPIKE SAMPLE RECOVERY

Lab Name: Pace Analytical - Indiana SDG No. : 50381973 Contract: L2450786

Matrix: Water Basis: Wet Parent Sample ID: 50381975005

Percent Moisture:

Analyte	Units	Control Limit %R	Spiked Sample Result (SSR)	Sample Result (SR)	Spike Added (SA)	%R
Iodide	mg/L	80-120	5.0	ND	5.0	101

SAMPLE NO.

3696996MSD

FORM VI INORGANIC-1
DUPLICATES

Lab Name: Pace Analytical - Indiana SDG No. : 50381973 Contract: L2450786

Matrix: Water Concentration Units: mg/L

Percent Moisture: Basis: Wet

Analyte	RPD Control Limit	Sample	Duplicate	RPD
Iodide	15	5.0	5.0	0

SAMPLE NO.

3696994LCS

FORM VII INORGANIC-1
LABORATORY CONTROL SAMPLE

Lab Name: Pace Analytical - Indiana SDG No. : 50381973 Contract: L2450786

Matrix: Water

Analyte	Units	True	Found	%R	Limits	
Iodide	mg/L	5.0	4.9	99	80	120

FORM XII INORGANIC-1
PREPARATION LOG

Lab Name: Pace Analytical - Indiana SDG No. : 50381973 Contract: L2450786

Preparation Method: EPA 9056 Batch: GCSV 57521

Lab Sample ID	Sample Name	Preparation Date	Initial Volume (mL)	Final Volume (mL)
3696993	3696993BLANK	09/11/2024	10	10
3696994	3696994LCS	09/11/2024	10	10
3696995	3696995MS	09/11/2024	10	10
3696996	3696996MSD	09/11/2024	10	10
50381973001	MW-5A	09/11/2024	10	10
50381973002	MW-5B	09/11/2024	10	10
50381973003	MW-6A	09/11/2024	10	10
50381973004	MW-6B	09/11/2024	10	10
50381973005	MW-7A	09/11/2024	10	10
50381973006	MW-7B	09/11/2024	10	10
50381973007	MW-8A	09/11/2024	10	10
50381973008	MW-8B	09/11/2024	10	10
50381973009	MW-10A	09/11/2024	10	10
50381973010	MW-10B	09/11/2024	10	10
50381973011	DUP	09/11/2024	10	10

FORM XIII INORGANIC-1

ANALYSIS RUN LOG

Lab Name: Pace Analytical - Indiana SDG No. : 50381973 Contract: L2450786

Instrument ID: 50IC05 Analysis Method: EPA 9056

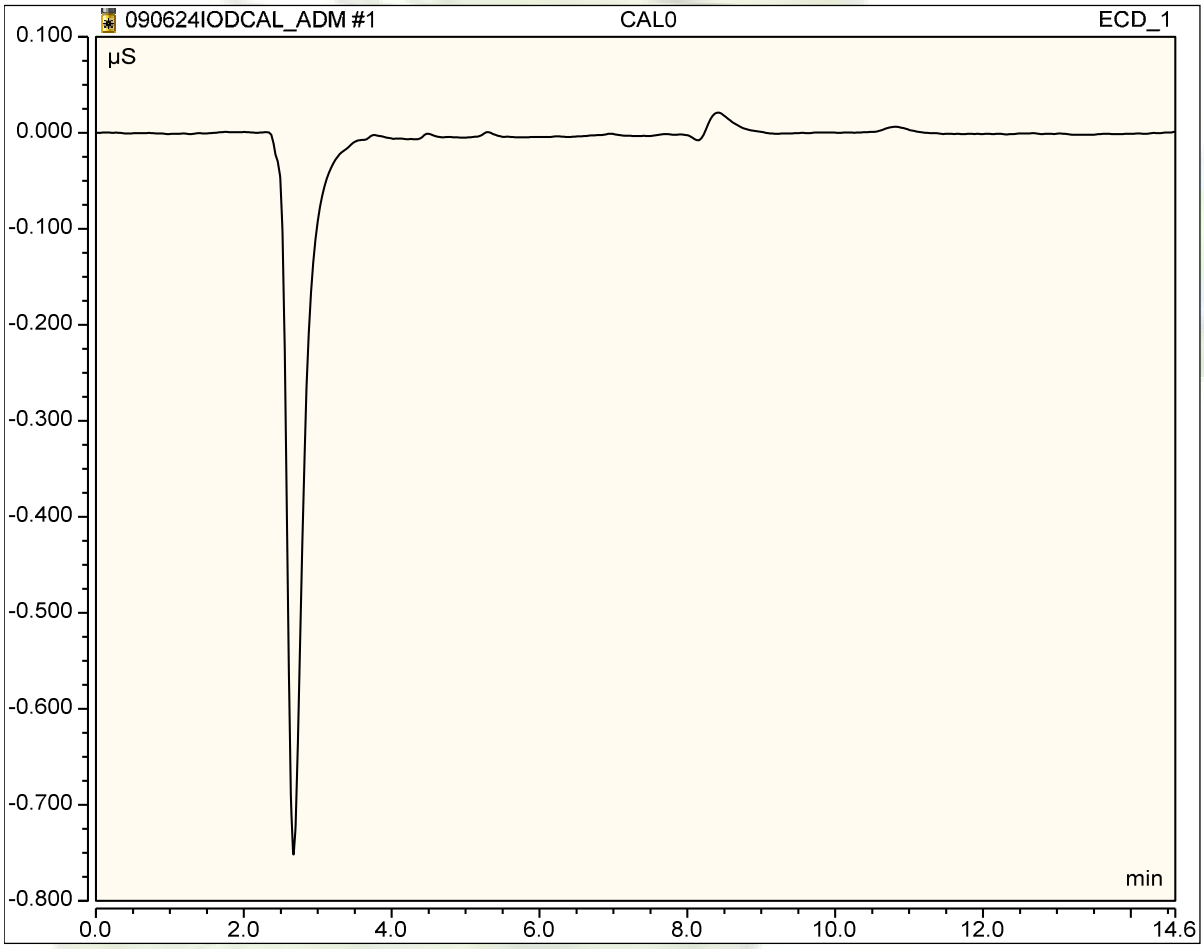
Start Date: 09/06/2024 12:22 End Date: 09/11/2024 18:00

Sample Name	Lab Sample ID	D/F	Date	Time	iodi
25592659CAL0	25592659CAL0	1	09/06/2024	12:22	X
25592660CAL1	25592660CAL1	1	09/06/2024	12:39	X
25592661CAL2	25592661CAL2	1	09/06/2024	12:55	X
25592662CAL3	25592662CAL3	1	09/06/2024	13:12	X
25592663CAL4	25592663CAL4	1	09/06/2024	13:29	X
25592664CAL5	25592664CAL5	1	09/06/2024	13:46	X
25592665ICV	25592665ICV	1	09/06/2024	14:03	X
25751833ICB	25751833ICB	1	09/06/2024	14:22	X
25619679CCV	25619679CCV	1	09/11/2024	10:50	X
25619680CCB	25619680CCB	1	09/11/2024	11:06	X
3696993BLANK	3696993	1	09/11/2024	11:23	X
3696994LCS	3696994	1	09/11/2024	11:40	X
MW-5A	50381973001	1	09/11/2024	11:57	X
MW-5B	50381973002	1	09/11/2024	12:15	X
MW-6A	50381973003	1	09/11/2024	12:33	X
MW-6B	50381973004	1	09/11/2024	12:51	X
MW-7A	50381973005	1	09/11/2024	13:08	X
MW-7B	50381973006	1	09/11/2024	13:25	X
MW-8A	50381973007	1	09/11/2024	13:42	X
MW-8B	50381973008	1	09/11/2024	13:59	X
25619681CCV	25619681CCV	1	09/11/2024	14:16	X
25619682CCB	25619682CCB	1	09/11/2024	14:33	X
MW-10A	50381973009	1	09/11/2024	14:50	X
MW-10B	50381973010	1	09/11/2024	15:07	X
DUP	50381973011	1	09/11/2024	15:24	X
50381975005	50381975005	1	09/11/2024	16:49	X
3696995MS	3696995	1	09/11/2024	17:07	X
3696996MSD	3696996	1	09/11/2024	17:25	X
25619687CCV	25619687CCV	1	09/11/2024	17:42	X
25619688CCB	25619688CCB	1	09/11/2024	18:00	X

CAL0
371408

Sample Name:	CAL0	Injection Volume (uL):	25.00
Vial Number:	GE1	Channel:	ECD_1
Sample Type:	Calibration Standard	Calibration:	09/06/24 14:50
Control ro! ram:	"#IC#"I$ %& S((	Eluent Stoc):	392545
* uanti+ - ethod:	C' L. I$ %i%E#"	%lution / actor	1.0000
0 ecordin! Time:	09/06/2024 12:22	Sample 1 ei! ht:	1.0000
0 un Time (min):	12,3#	Sy4tem Name:	50IC05

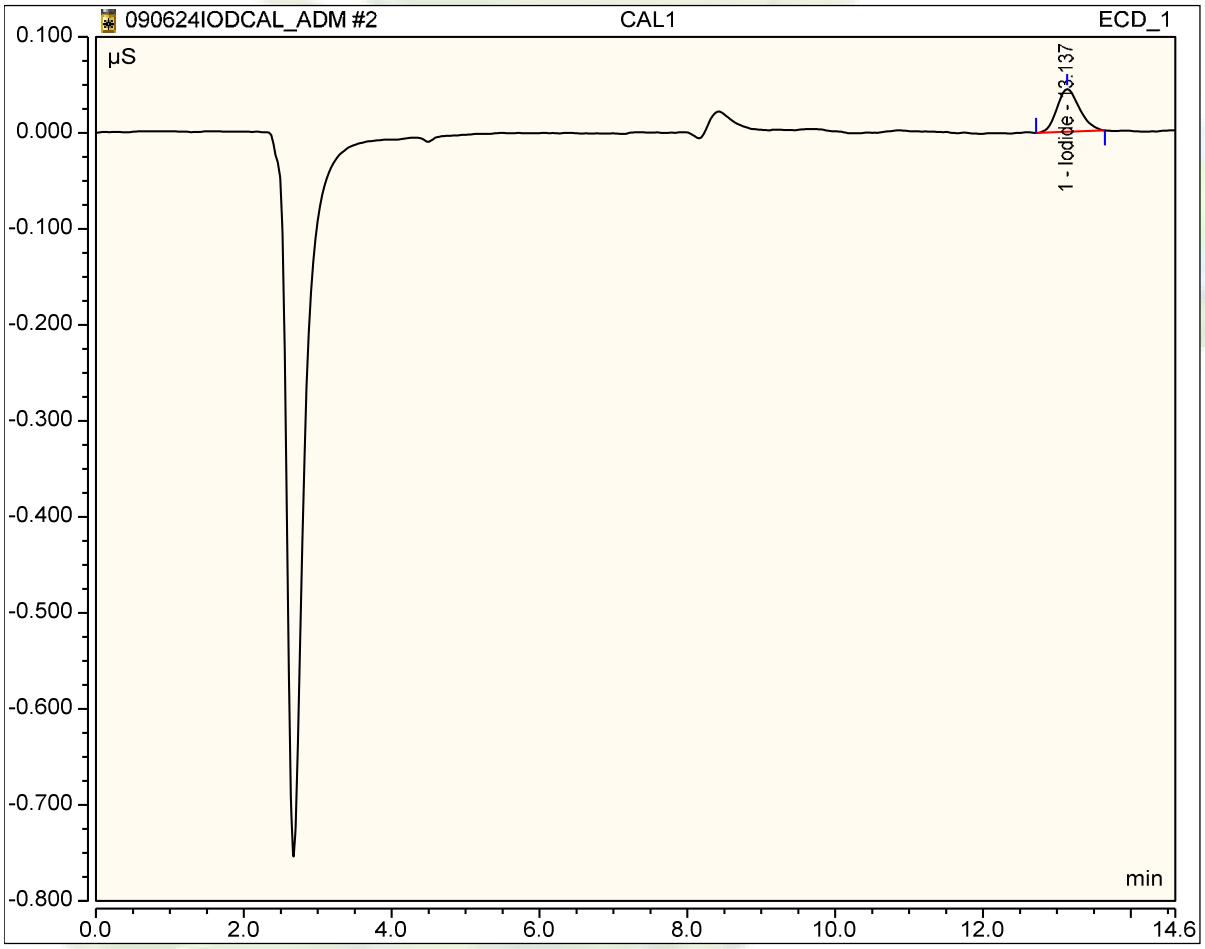
No.	Retention Time min	Name	Amo nt n.a.	A!ea ' ( )min	" ei#$t ' (	T%&e



CAL1
371407

Sample Name:	CAL1	Injection Volume (uL):	25.00
Vial Number:	GE(	Channel:	ECD_1
Sample Type:	Calibration Standard	Calibration:	09/06/24 14:50
Control ro! ram:	"#IC#"I$ %& S((	Eluent Stoc):	392545
* uanti+ - ethod:	C' L. I$ %i%E#"	%lution / actor	1.0000
0 ecordin! Time:	09/06/2024 12:39	Sample 1 ei! ht:	1.0000
0 un Time (min):	12,3#	Sy4tem Name:	50IC05

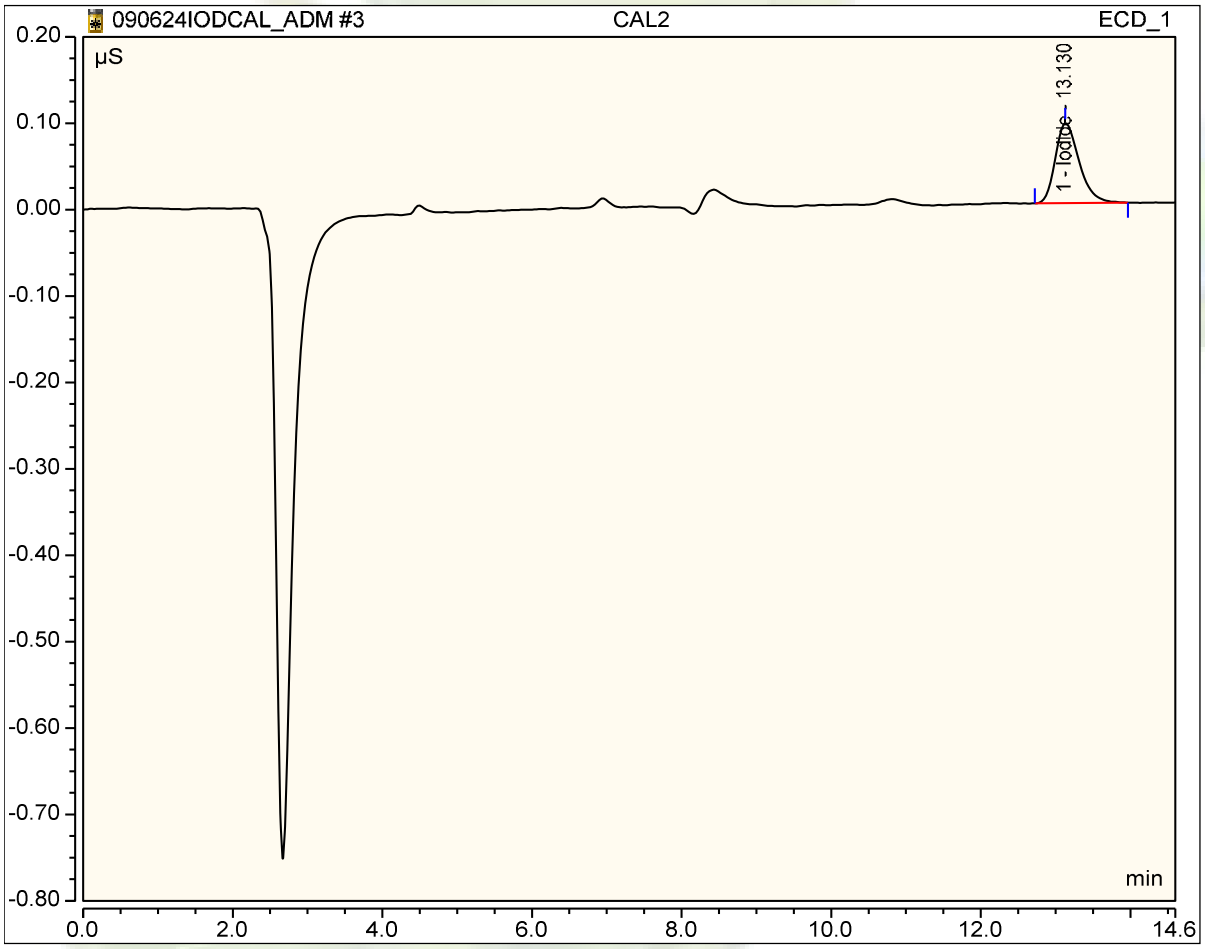
No.	Retention Time min	Name	Amo nt m#/L	A!ea ' ( )min	" ei#$t ' (	T%&e
1	13.14	Io* i* e	0.4913	0.016	0.045	BMB



CAL2
371406

Sample Name:	CAL2	Injection Volume (uL):	25.00
Vial Number:	*5(*	Channel:	ECD_1
Sample Type:	Calibration Standard	Calibration:	09/06/24 14:50
Control ro*!* ram:	*"#*IC#"I*$ %&* S*((*	Eluent Stoc*)*:	392545
* uanti+ - ethod:	C′ L. I*$ %i%*E#"	*%*lution / actor	1.0000
0 ecordin*!* Time:	09/06/2024 12:55	Sample *1* ei*!* ht:	1.0000
0 un Time (min):	1*2,3#*	Sy*4*tem Name:	50IC05

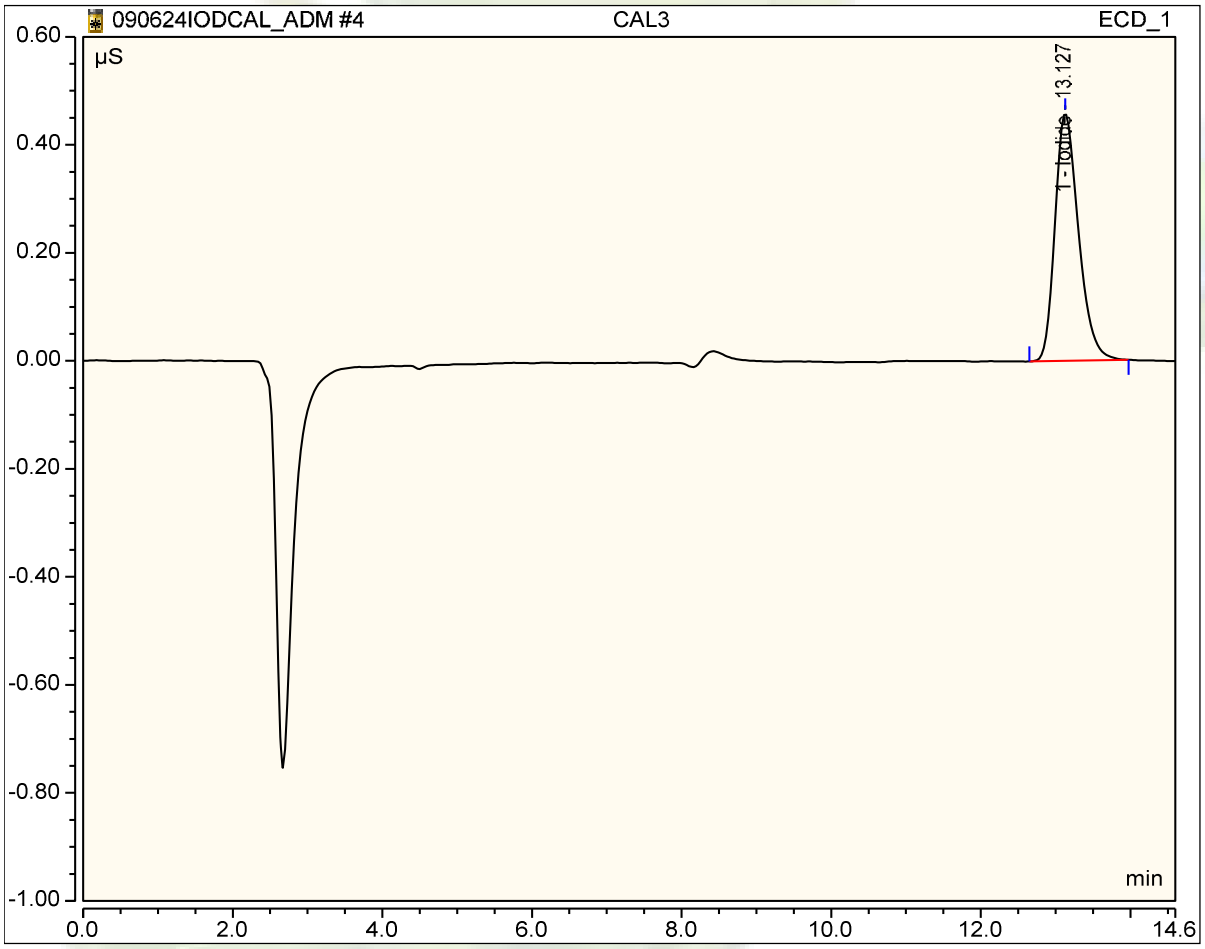
No.	Retention Time min	Name	Amo nt m#/L	A!ea ' ( )min	" ei#$t ' (	T%&e
1	13.13	Io* i* e	1.0331	0.034	0.093	BMB



CAL3
371405

Sample Name:	CAL3	Injection Volume (uL):	25.00
Vial Number:	GE*6*	Channel:	ECD_1
Sample Type:	Calibration Standard	Calibration:	09/06/24 14:50
Control ro*!* ram:	*"#*IC#"I*$ %&* S*((	Eluent Stoc*)*:	392545
* uanti+ - ethod:	C' L. I*$ %i%*E#"	*%*lution / actor	1.0000
0 ecordin*!* Time:	09/06/2024 13:12	Sample *1* ei*!* ht:	1.0000
0 un Time (min):	1*2,3#*	Sy*4*tem Name:	50IC05

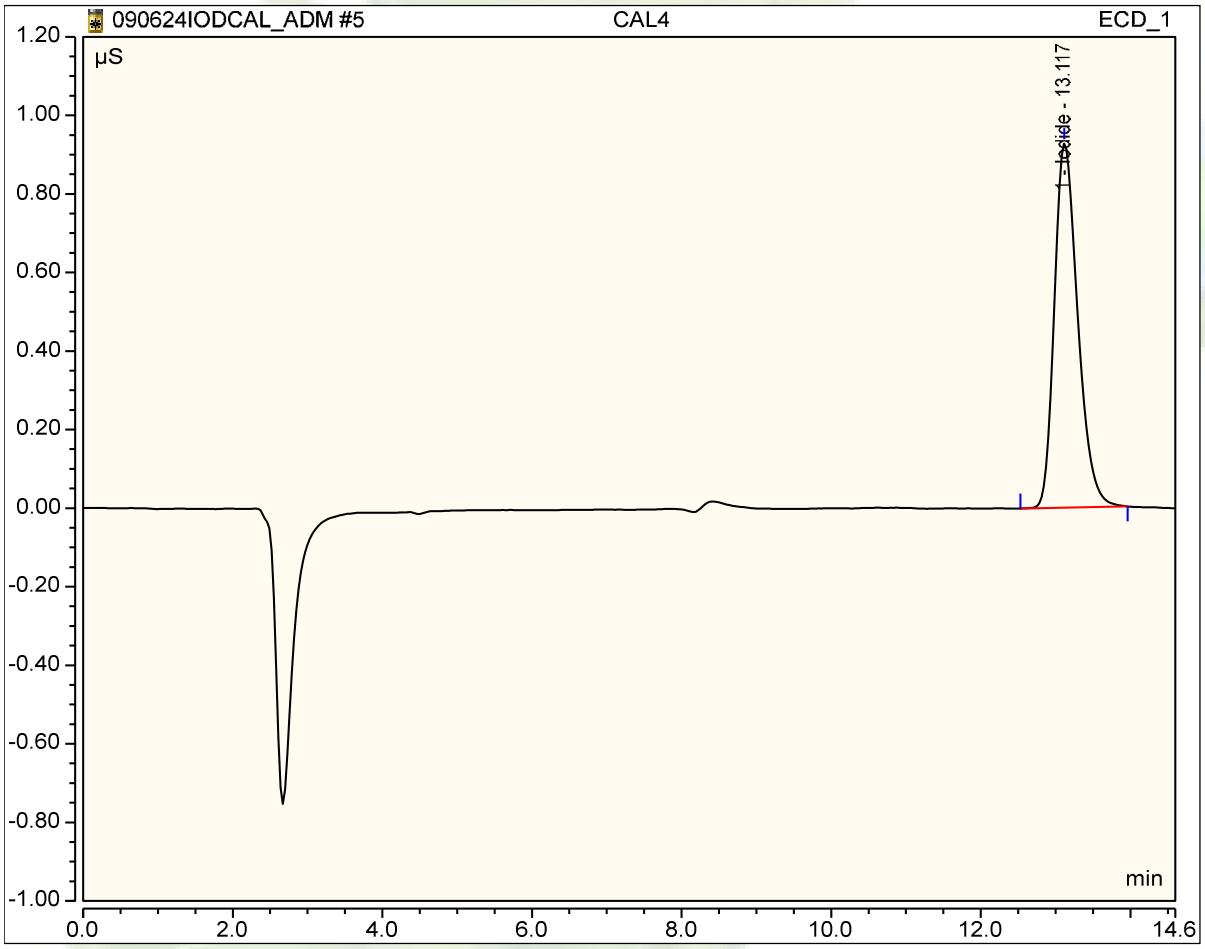
No.	Retention Time min	Name	Amo nt m#/L	A!ea ' ( )min	" ei#$t ' (	T%&e
1	13.13	Io* i* e	4.9411	0.167	0.458	BMB



CAL4
371404

Sample Name:	CAL4	Injection Volume (uL):	25.00
Vial Number:	GE*2*	Channel:	ECD_1
Sample Type:	Calibration Standard	Calibration:	09/06/24 14:50
Control ro*!* ram:	*"#*IC#"I$ %& S*((	Eluent Stoc*)*:	392545
* uanti+ - ethod:	C' L. I$ %i%E#"	%lution / actor	1.0000
0 ecordin*!* Time:	09/06/2024 13:29	Sample *1* ei*!* ht:	1.0000
0 un Time (min):	1*2,3#*	Sy*4*tem Name:	50IC05

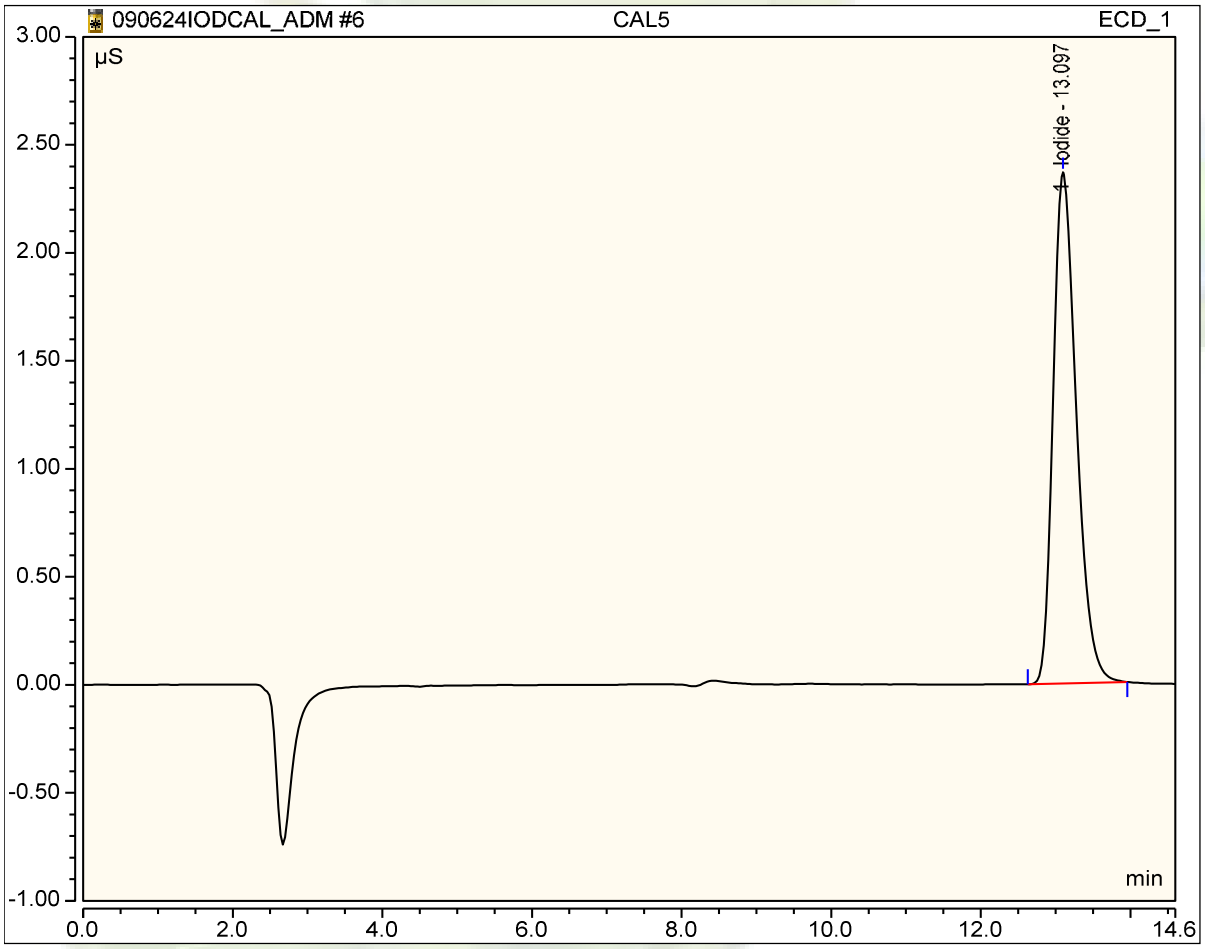
No.	Retention Time min	Name	Amo nt m#/L	A!ea ' ( )min	" ei#$t ' (	T%&e
1	13.12	Io* i* e	9.9122	0.336	0.928	BMB



CAL5
371403

Sample Name:	CAL5	Injection Volume (uL):	25.00
Vial Number:	GE"	Channel:	ECD_1
Sample Type:	Calibration Standard	Calibration:	09/06/24 14:50
Control ro! ram:	"#IC#"I$ %& S((	Eluent Stoc) :	392545
* uanti+ - ethod:	C' L. I$ %i%E#"	%lution / actor	1.0000
0 ecordin! Time:	09/06/2024 13:46	Sample 1 ei! ht:	1.0000
0 un Time (min):	12,3#	Sy4tem Name:	50IC05

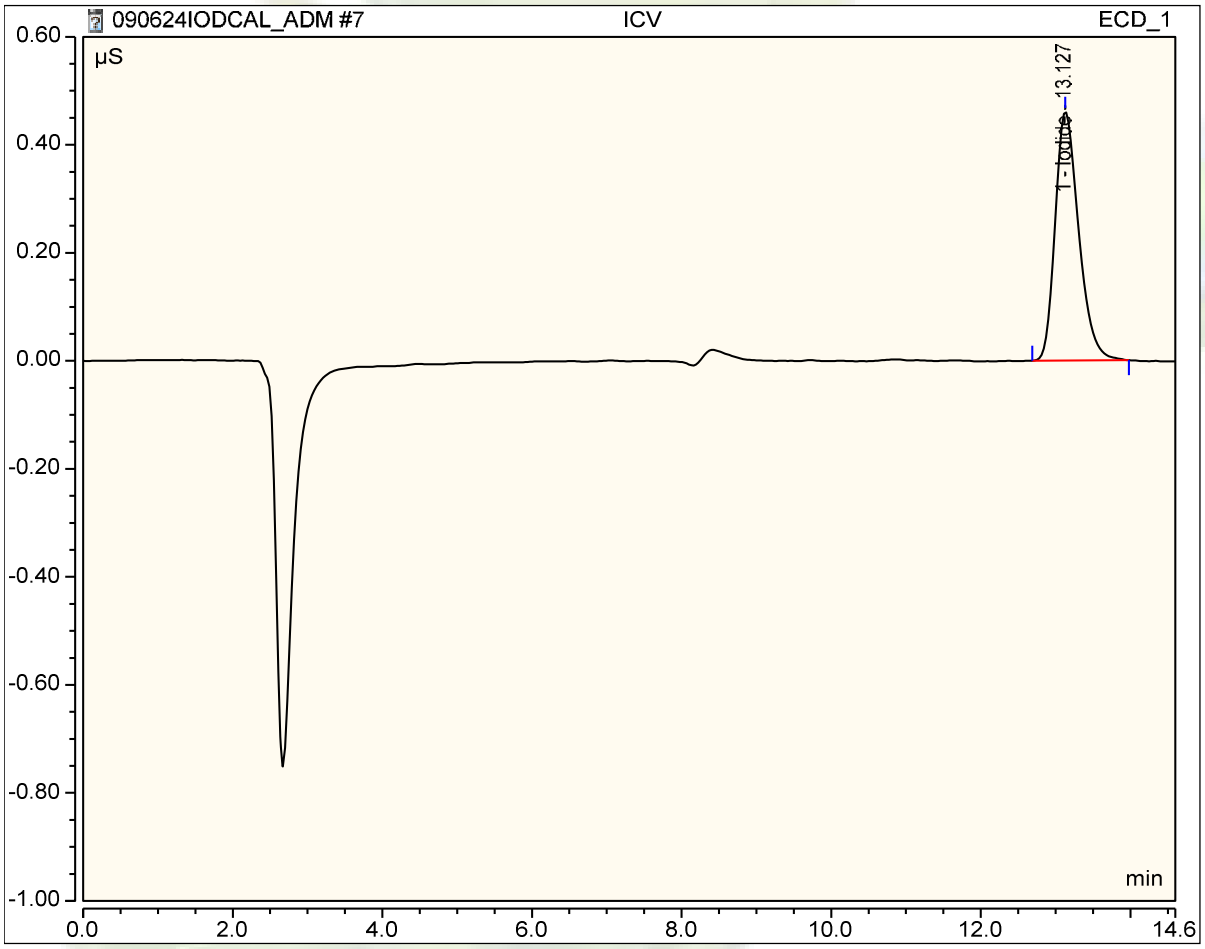
No.	Retention Time min	Name	Amo nt m#/L	A!ea ' ( )min	" ei#$t ' (	T%&e
1	13.10	Io* i* e	25.1222	0.853	2.365	BMB



IC+
371401

Sample Name:	IC+	Injection Volume (uL):	25.00
Vial Number:	56	Channel:	ECD_1
Sample Type:	7n) no8n	Calibration:	09/06/24 14:50
Control ro! ram:	"#IC#"I$ %& S((	Eluent Stoc):	392545
* uanti+ - ethod:	C' L. I$ %i%E#"	%lution / actor	1.0000
0ecordin! Time:	09/06/2024 14:03	Sample 1 ei! ht:	1.0000
0un Time (min):	12,3#	Sy4tem Name:	50IC05

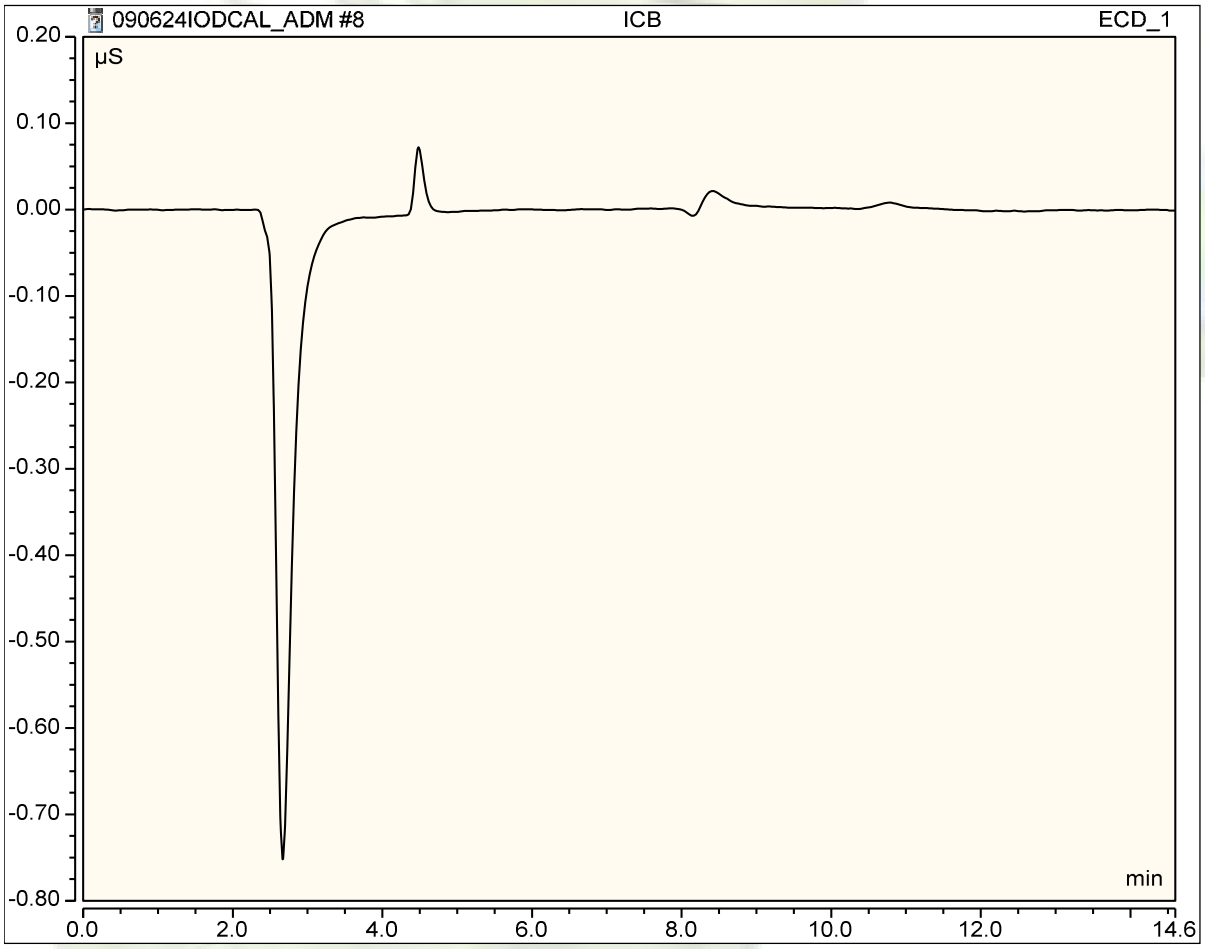
No.	Retention Time min	Name	Amo nt m#/L	A!ea ' ( )min	" ei#$t ' (	T%&e
1	13.13	Io* i* e	4.9692	0.168	0.461	BMB



IC,
340111

Sample Name:	IC,	Injection Volume (uL):	25.00
Vial Number:	51	Channel:	ECD_1
Sample Type:	7n)no8n	Calibration:	09/06/24 14:50
Control ro! ram:	"#IC#"I$ %& S((	Eluent Stoc):	392545
* uanti+ - ethod:	C' L. I$ %i%E#"	%lution / actor	1.0000
0ecordin! Time:	09/06/2024 14:22	Sample 1 ei! ht:	1.0000
0un Time (min):	12,3#	Sy4tem Name:	50IC05

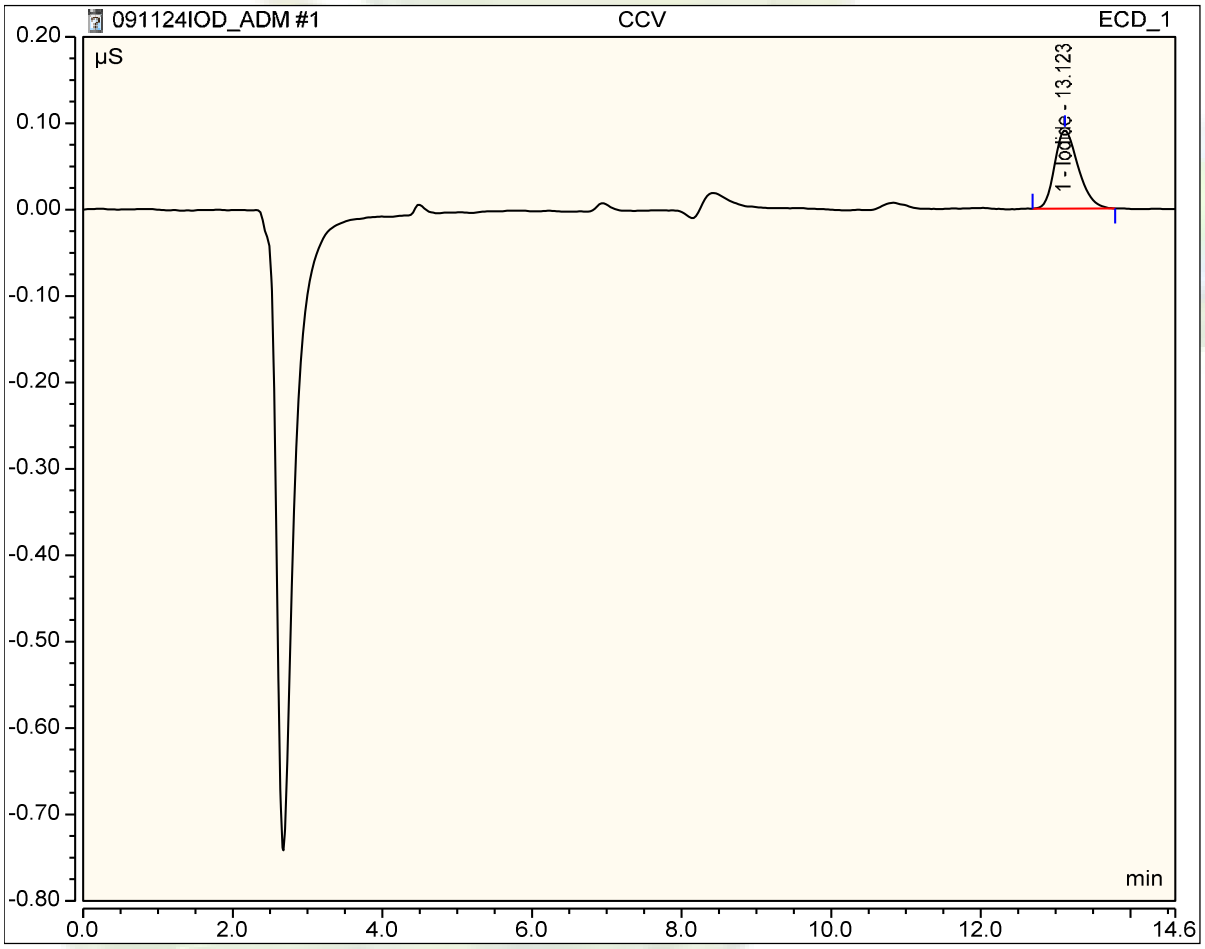
No.	Retention Time min	Name	Amo nt n.a.	A!ea ' ( )min	" ei#$t ' (	T%&e



CCV
392572

Sample Name:	CCV	Injection Volume (uL):	25.00
Vial Number:	B2	Channel:	ECD_1
Sample Type:	Unkno n	Calibration:	09/06/24 14:50
Control ! ro"ram:	#IC#I%&'(S22	) luent Stock:	392545
* uanti+ - etho. :	C(L/ I%&I&) $#	&ilution 0actor	1.0000
1 ecor. in" Time:	09/11/2024 10:50	Sample 2 ei"ht:	1.0000
1 un Time (min):	34,5$	Sy6tem Name:	50IC05

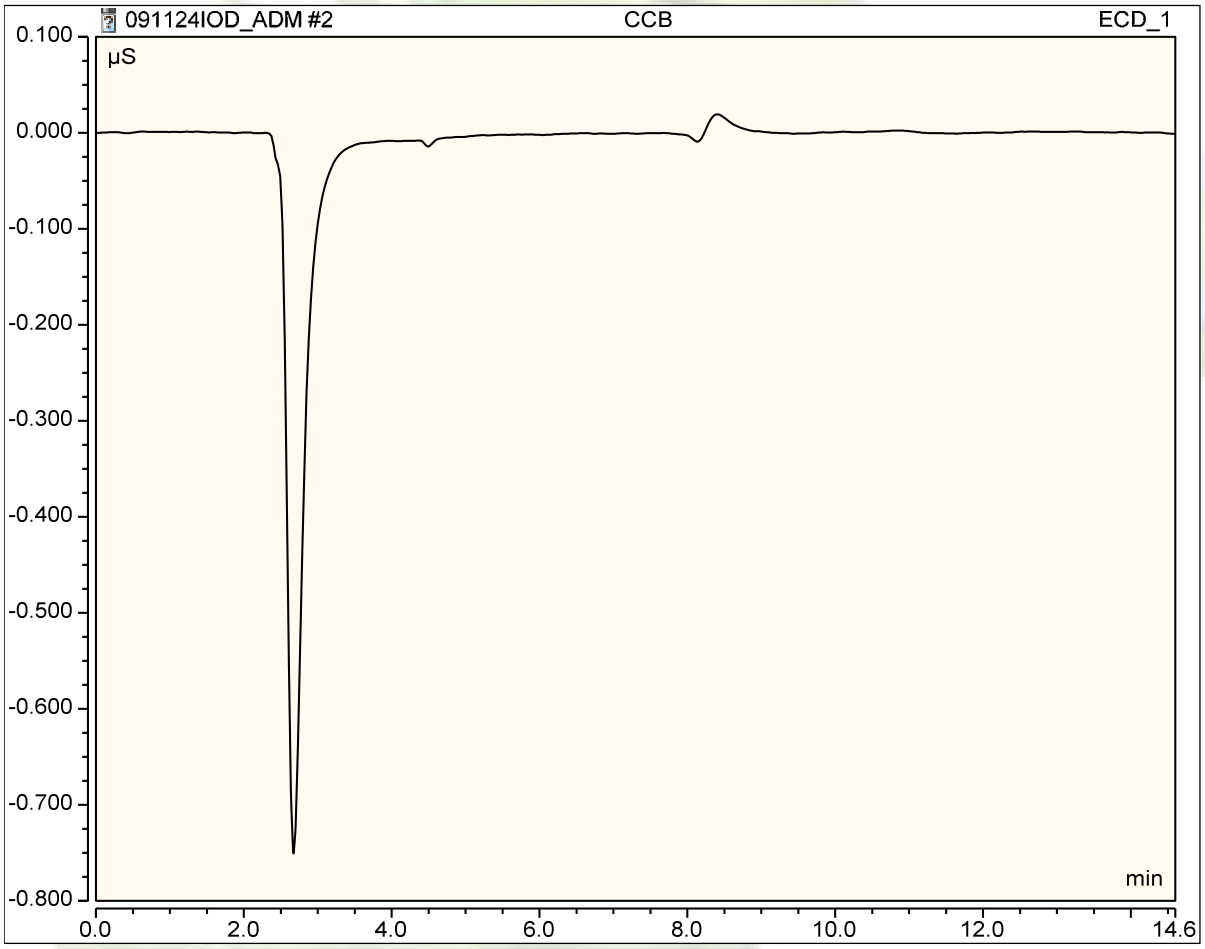
No.	Retention Time min	Name	Amount m"/&	A ea ' ( )min	! ei"#t ' (	T$%e
1	13.12	Io* i* e	1.0004	0.033	0.090	BMB



CC+
340111

Sample Name:	CC+	Injection Volume (uL):	25.00
Vial Number:	B4	Channel:	ECD_1
Sample Type:	Unkno n	Calibration:	09/06/24 14:50
Control ! ro"ram:	#IC#I%&'(S22	) luent Stock:	392545
* uanti+ - etho. :	C(L/ I%&I&) $#	&ilution 0actor	1.0000
1ecor. in" Time:	09/11/2024 11:06	Sample 2 ei"ht:	1.0000
1un Time (min):	34,5$	Sy6tem Name:	50IC05

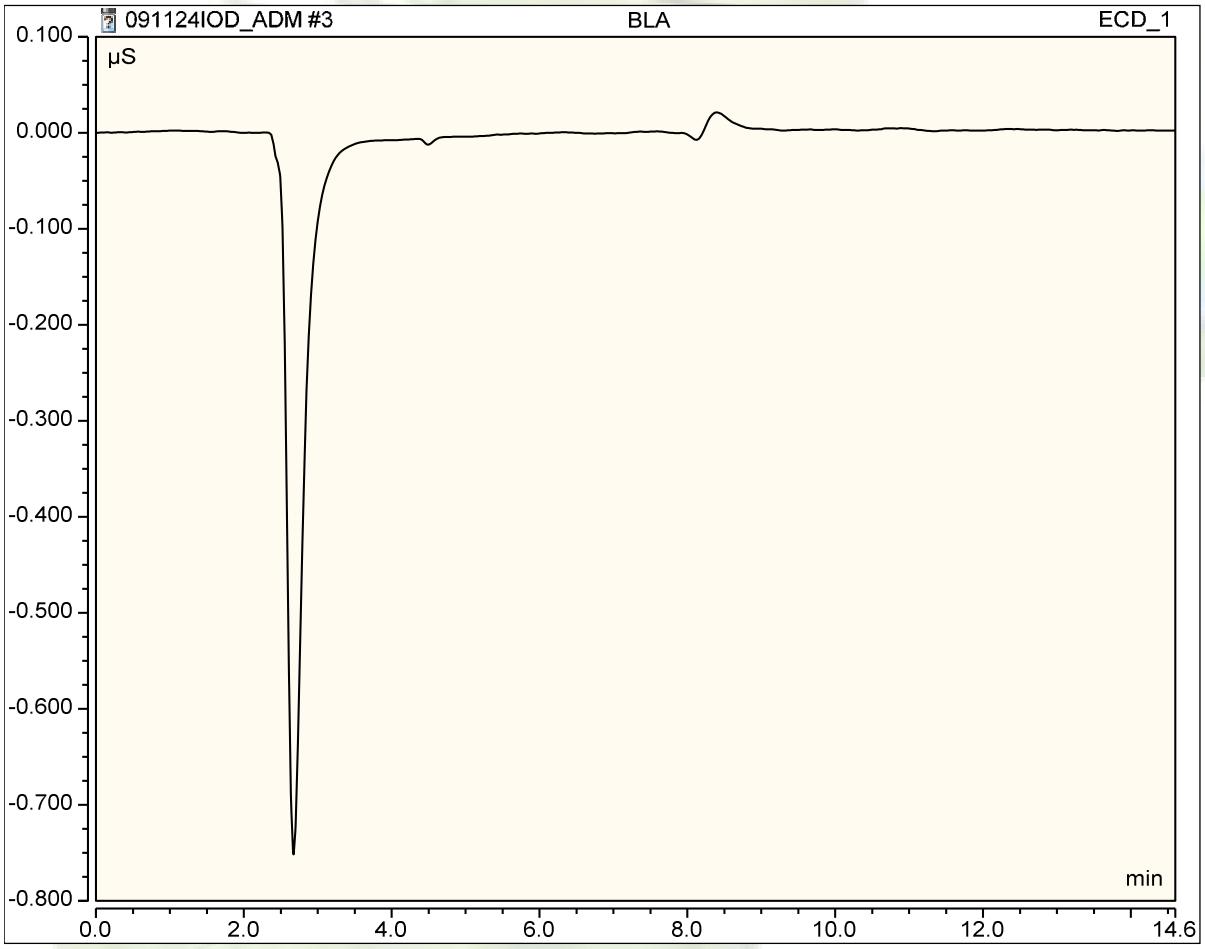
No.	Retention Time min	Name	Amount n.a.	A ea ' ( )min	! ei"#t ' (	T$%e



+ &A
340111

Sample Name:	+ &A	Injection Volume (uL):	25.00
Vial Number:	B*3*	Channel:	ECD_1
Sample Type:	Unkno n	Calibration:	09/06/24 14:50
Control *!* ro"ram:	*#$*IC*$#*I*%&'(* S22	*)* luent Stock:	392545
* uanti+ - etho. :	C*(* L/ I*%&*I*&) $#*	*&*ilution *0*actor	1.0000
1 ecor. in" Time:	09/11/2024 11:23	Sample *2* ei"ht:	1.0000
1 un Time (min):	*34,5$*	Sy*6*tem Name:	50IC05

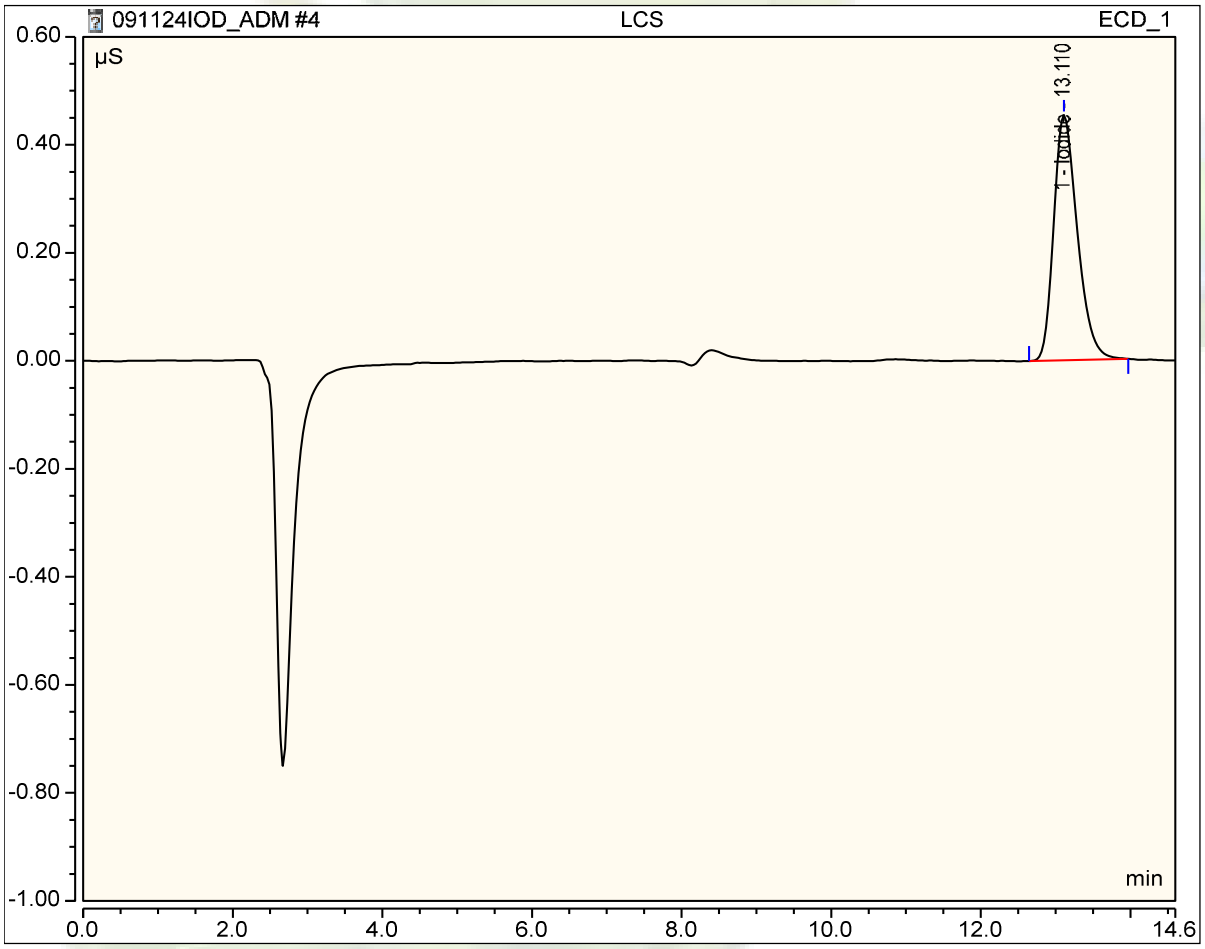
No.	Retention Time min	Name	Amount n.a.	A ea ' ( )min	! ei"#t ' (	T$%e



&C(
346539

Sample Name:	&C(	Injection Volume (uL):	25.00
Vial Number:	B7	Channel:	ECD_1
Sample Type:	Unkno n	Calibration:	09/06/24 14:50
Control ! ro"ram:	#IC#I%&'(S22	) luent Stock:	392545
* uanti+ - etho. :	C(L/ I%&I&) $#	&ilution 0actor	1.0000
1 ecor. in" Time:	09/11/2024 11:40	Sample 2 ei"ht:	1.0000
1 un Time (min):	34,5$	Sy6tem Name:	50IC05

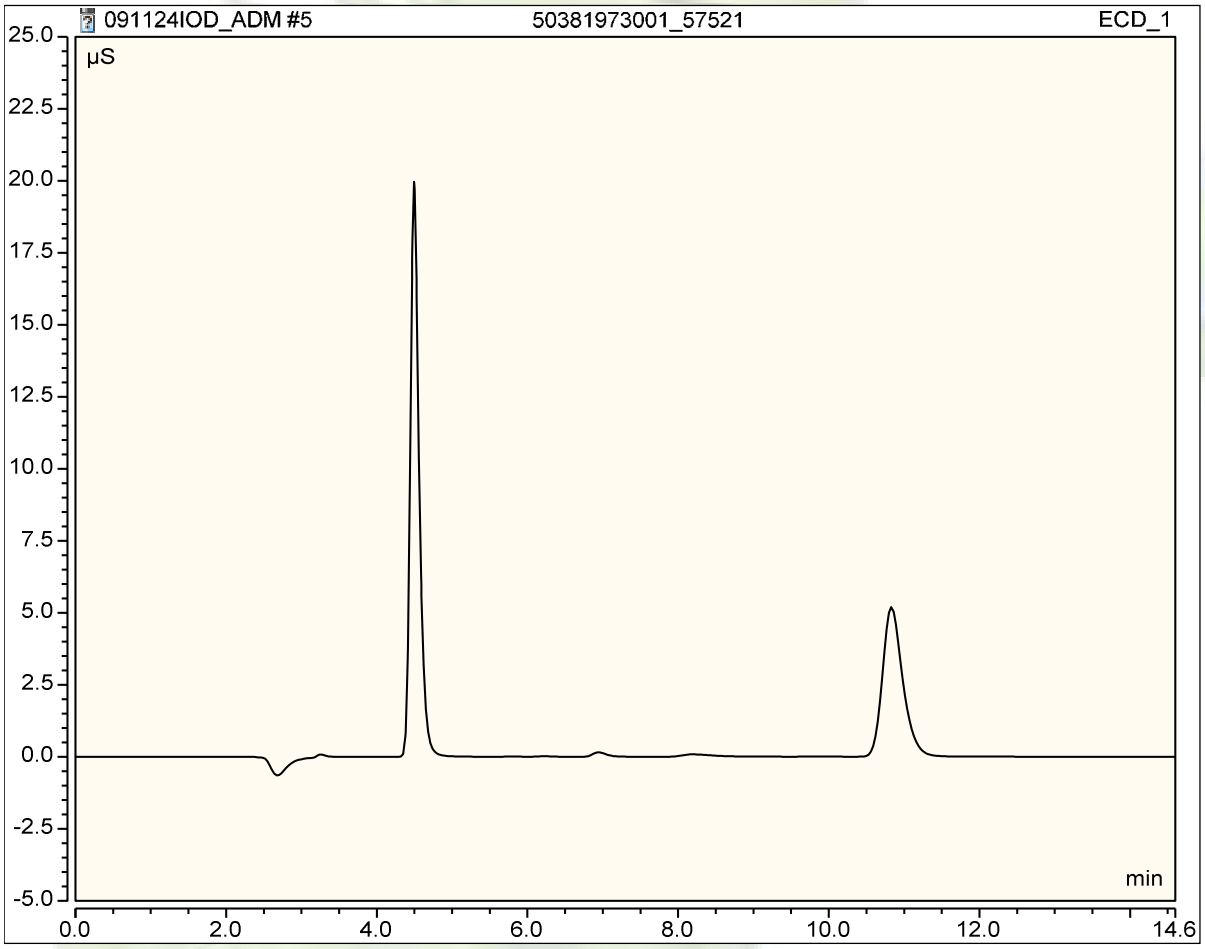
No.	Retention Time min	Name	Amount m"/&	A ea ' ( )min	! ei"#t ' (	T$%e
1	13.11	Io* i* e	4.9277	0.167	0.454	BMB



503, 1973001_57521

Sample Name:	503, 1973001_57521	Injection Volume (uL):	25.00
Vial Number:	B(3	Channel:	ECD_1
Sample Type:	Unkno n	Calibration:	09/06/24 14:50
Control ! ro"ram:	#IC#I%&'(S22	) luent Stock:	392545
* uanti+ - etho. :	C(L/ I%&I&) $#	&ilution 0actor	1.0000
1 ecor. in" Time:	09/11/2024 11:57	Sample 2 ei"ht:	1.0000
1 un Time (min):	34,5$	Sy6tem Name:	50IC05

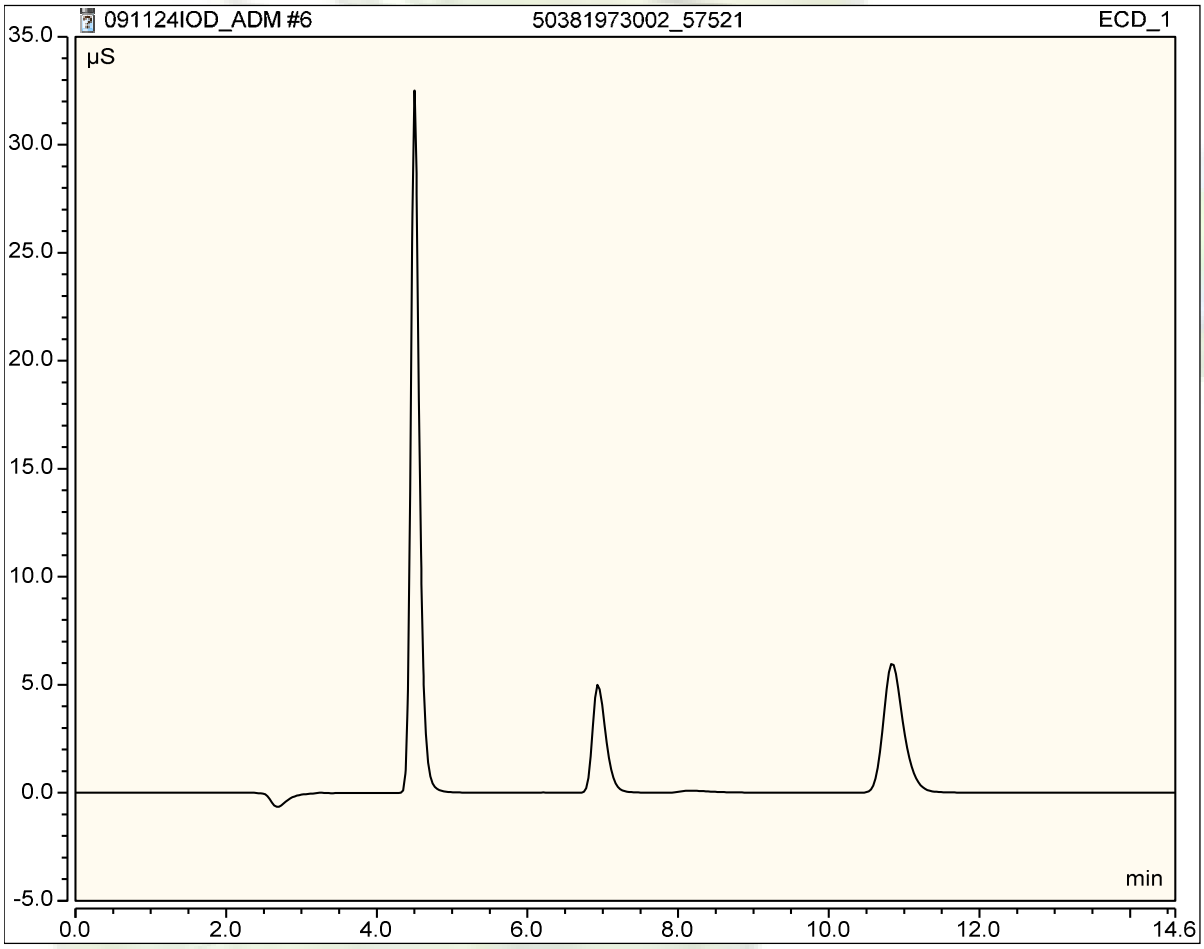
No.	Retention Time min	Name	Amount n.a.	A ea ' ( )min	! ei"#t ' (	T$%e



503, 1973002_57521

Sample Name:	503, 1973002_57521	Injection Volume (uL):	25.00
Vial Number:	B(2	Channel:	ECD_1
Sample Type:	Unkno n	Calibration:	09/06/24 14:50
Control ! ro"ram:	#IC#I%&'(S22	) luent Stock:	392545
* uanti+ - etho. :	C(L/ I%&I&) $#	&ilution 0actor	1.0000
1ecor. in" Time:	09/11/2024 12:15	Sample 2 ei"ht:	1.0000
1un Time (min):	34,5$	Sy6tem Name:	50IC05

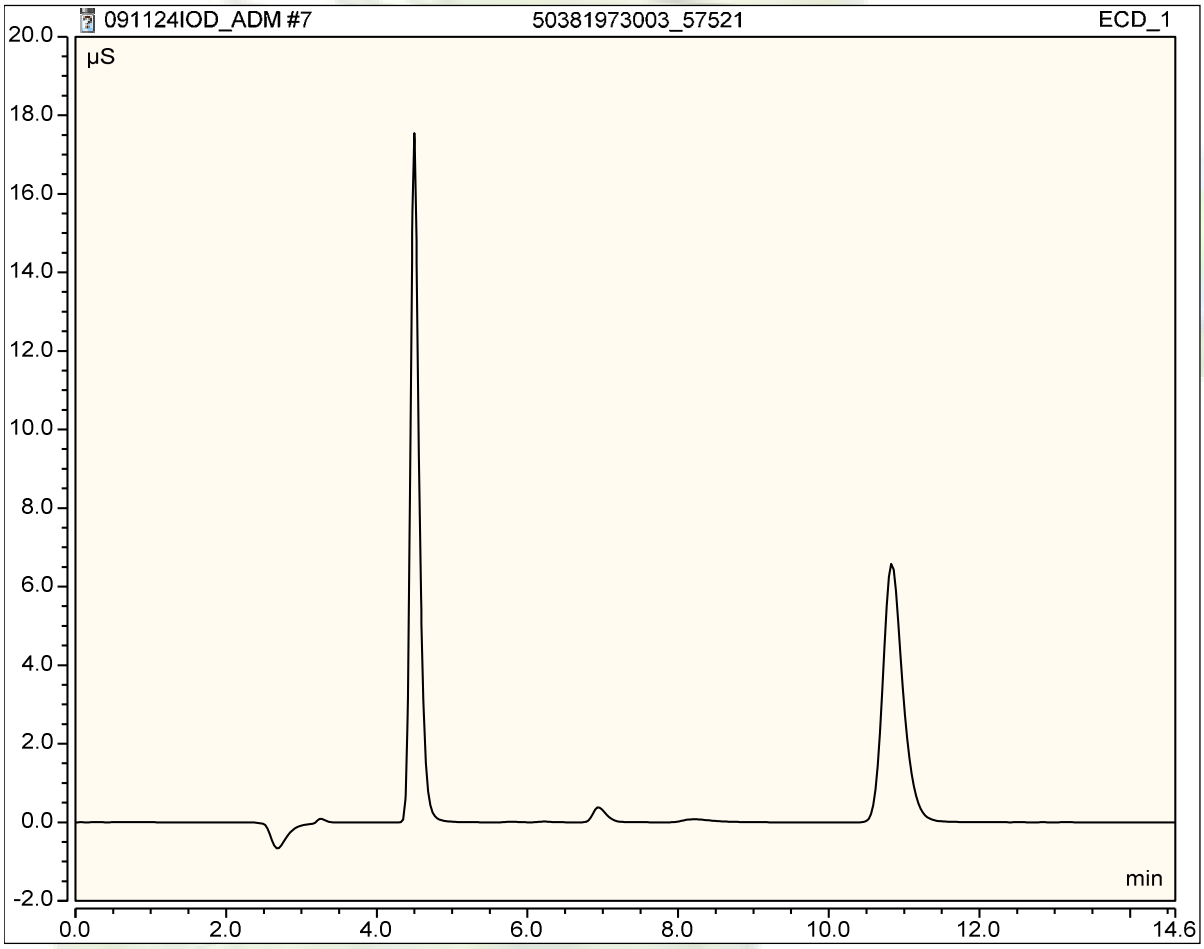
No.	Retention Time min	Name	Amount n.a.	A ea ' ( )min	! ei"#t ' (	T$%e



503, 1973003_57521

Sample Name:	503, 1973003_57521	Injection Volume (uL):	25.00
Vial Number:	B(7	Channel:	ECD_1
Sample Type:	Unkno n	Calibration:	09/06/24 14:50
Control ! ro"ram:	#IC#I%&'(S22	) luent Stock:	392545
* uanti+ - etho. :	C(L/ I%&I&) $#	&ilution 0actor	1.0000
1ecor. in" Time:	09/11/2024 12:33	Sample 2 ei"ht:	1.0000
1un Time (min):	34,5$	Sy6tem Name:	50IC05

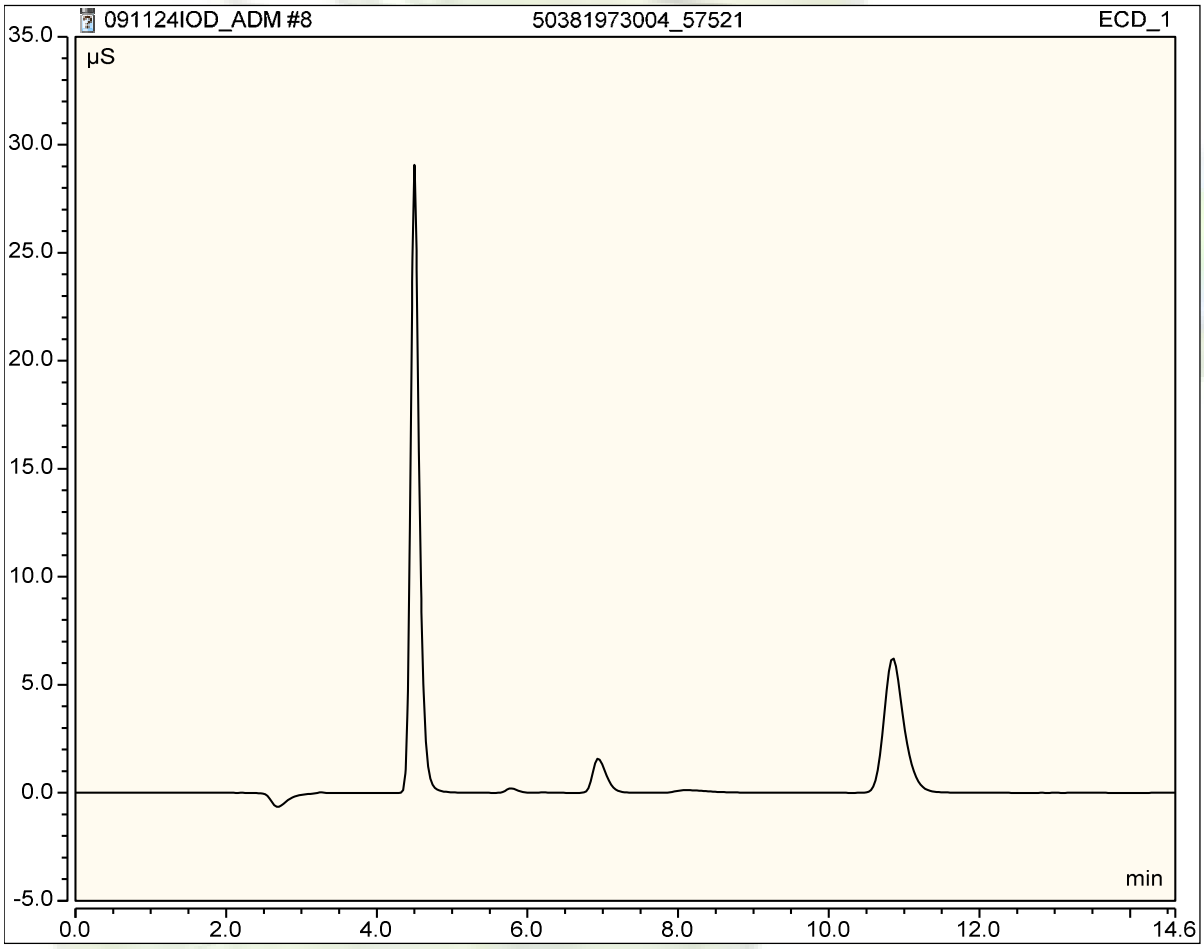
No.	Retention Time min	Name	Amount n.a.	A ea ' ( )min	! ei"#t ' (	T$%e



503, 1973004_57521

Sample Name:	503, 1973004_57521	Injection Volume (uL):	25.00
Vial Number:	B(4	Channel:	ECD_1
Sample Type:	Unkno n	Calibration:	09/06/24 14:50
Control ! ro"ram:	#IC#I%&'(S22	) luent Stock:	392545
* uanti+ - etho. :	C(L/ I%&I&) $#	&ilution 0actor	1.0000
1 ecor. in" Time:	09/11/2024 12:51	Sample 2 ei"ht:	1.0000
1 un Time (min):	34,5$	Sy6tem Name:	50IC05

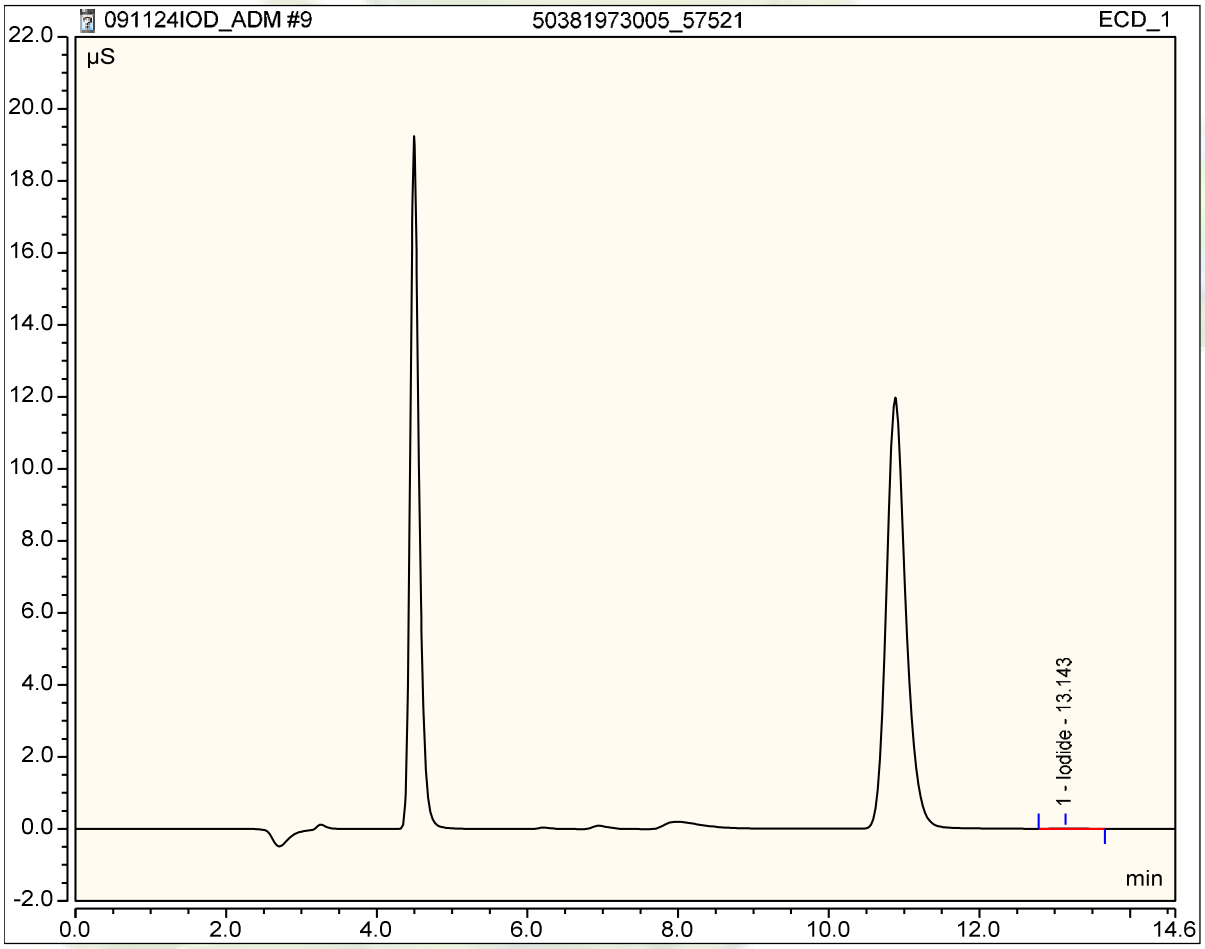
No.	Retention Time min	Name	Amount n.a.	A ea ' ( )min	! ei"#t ' (	T$%e



503, 1973005_57521

Sample Name:	503, 1973005_57521	Injection Volume (uL):	25.00
Vial Number:	B(#	Channel:	ECD_1
Sample Type:	Unkno n	Calibration:	09/06/24 14:50
Control ! ro"ram:	#IC#I%&'(S22	) luent Stock:	392545
* uanti+ - etho. :	C(L/ I%&I&) $#	&ilution 0actor	1.0000
1 ecor. in" Time:	09/11/2024 13:0,	Sample 2 ei"ht:	1.0000
1 un Time (min):	34,5$	Sy6tem Name:	50IC05

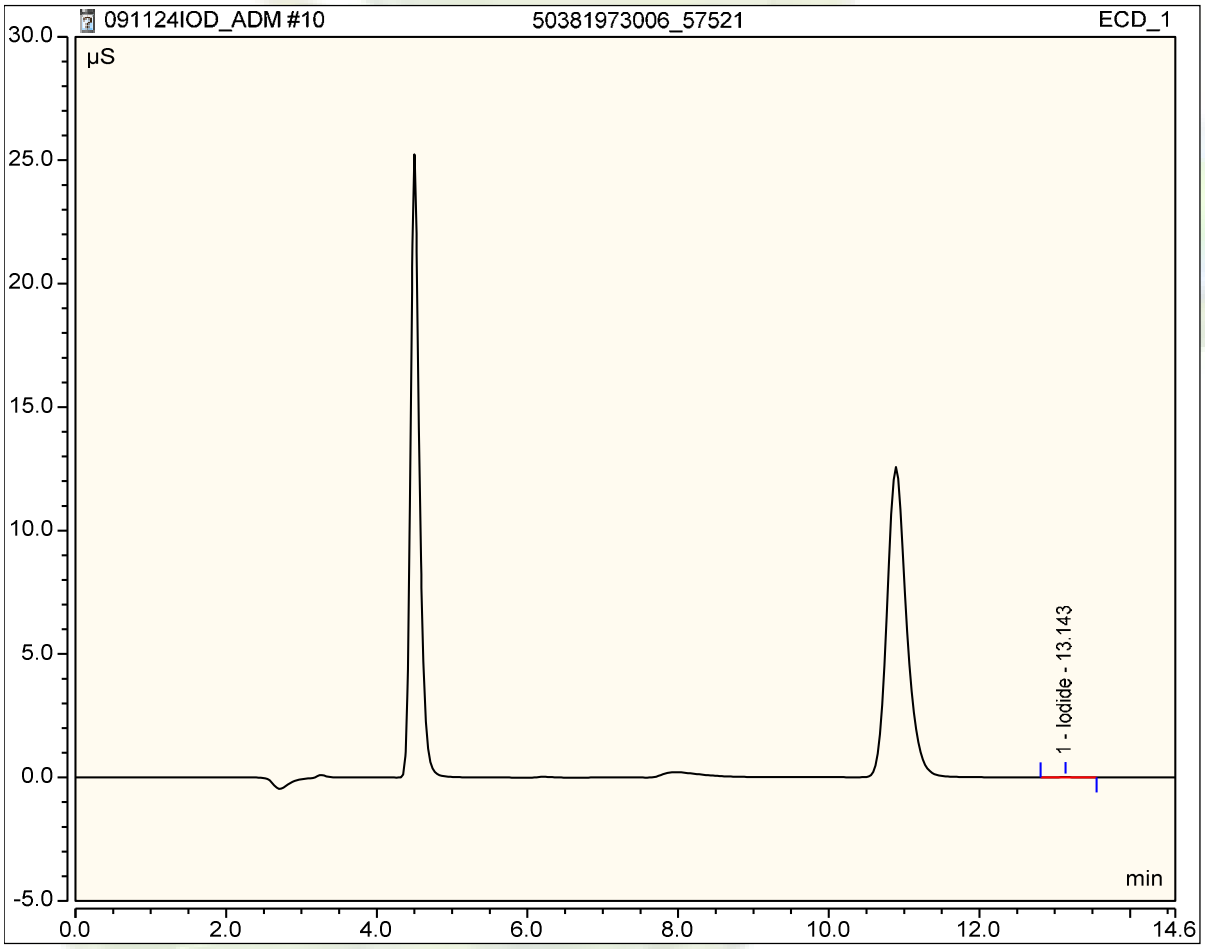
No.	Retention Time min	Name	Amount m"/&	A ea ' ( )min	! ei"#t ' (	T$%e
1	13.14	Io* i* e	0.1082	0.003	0.008	BMB



503, 1973006_57521

Sample Name:	503, 1973006_57521	Injection Volume (uL):	25.00
Vial Number:	B(5	Channel:	ECD_1
Sample Type:	Unkno n	Calibration:	09/06/24 14:50
Control ! ro"ram:	#IC#I%&'(S22	) luent Stock:	392545
* uanti+ - etho. :	C(L/ I%&I&) $#	&ilution 0actor	1.0000
1 ecor. in" Time:	09/11/2024 13:25	Sample 2 ei"ht:	1.0000
1 un Time (min):	34,5$	Sy6tem Name:	50IC05

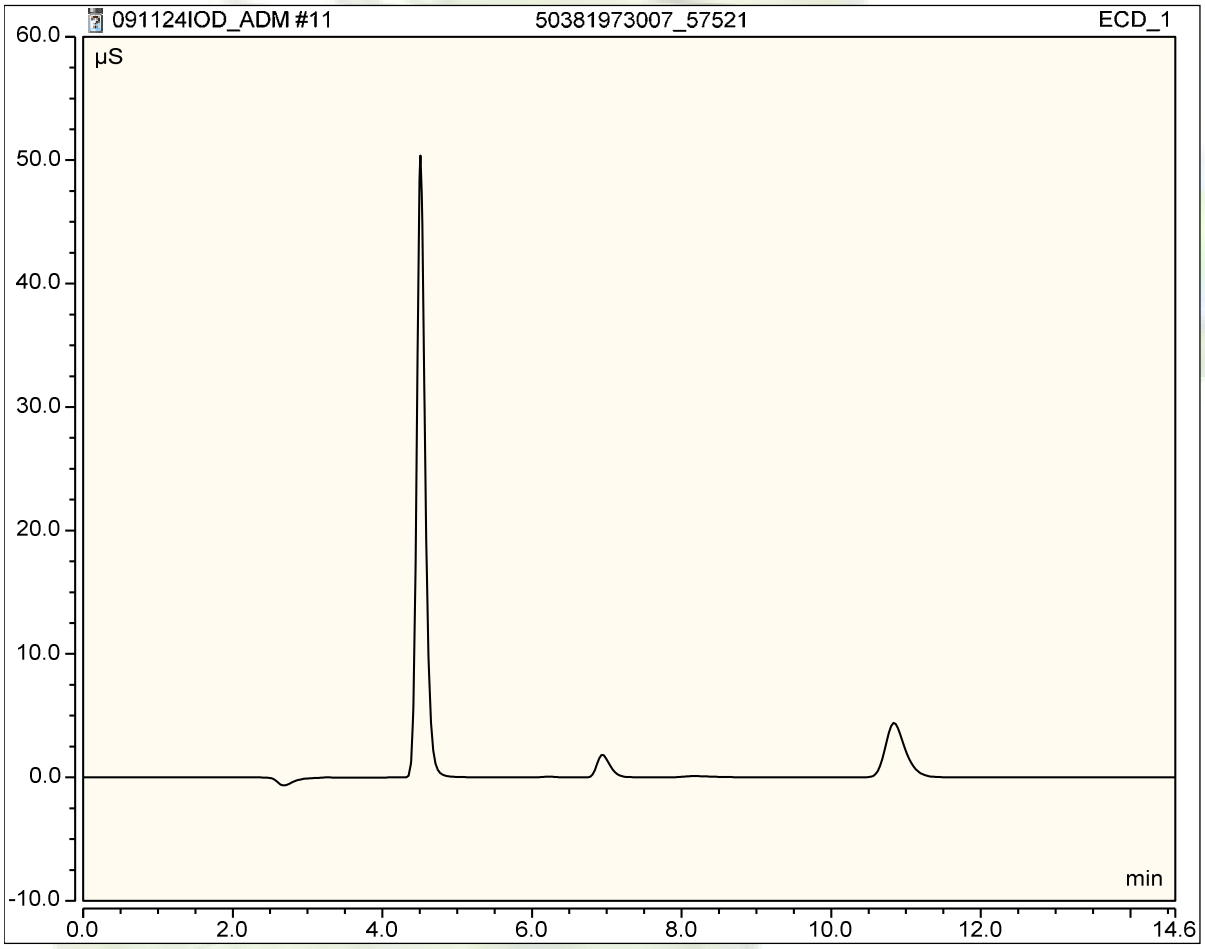
No.	Retention Time min	Name	Amount m"/&	A ea ' ( )min	! ei"#t ' (	T$%e
1	13.14	Io* i* e	0.1022	0.003	0.008	BMB



503, 1973007_57521

Sample Name:	503, 1973007_57521	Injection Volume (uL):	25.00
Vial Number:	B(8	Channel:	ECD_1
Sample Type:	Unkno n	Calibration:	09/06/24 14:50
Control ! ro"ram:	#IC#I%&'(S22	) luent Stock:	392545
* uanti+ - etho. :	C(L/ I%&I&) $#	&ilution 0actor	1.0000
1 ecor. in" Time:	09/11/2024 13:42	Sample 2 ei"ht:	1.0000
1 un Time (min):	34,5$	Sy6tem Name:	50IC05

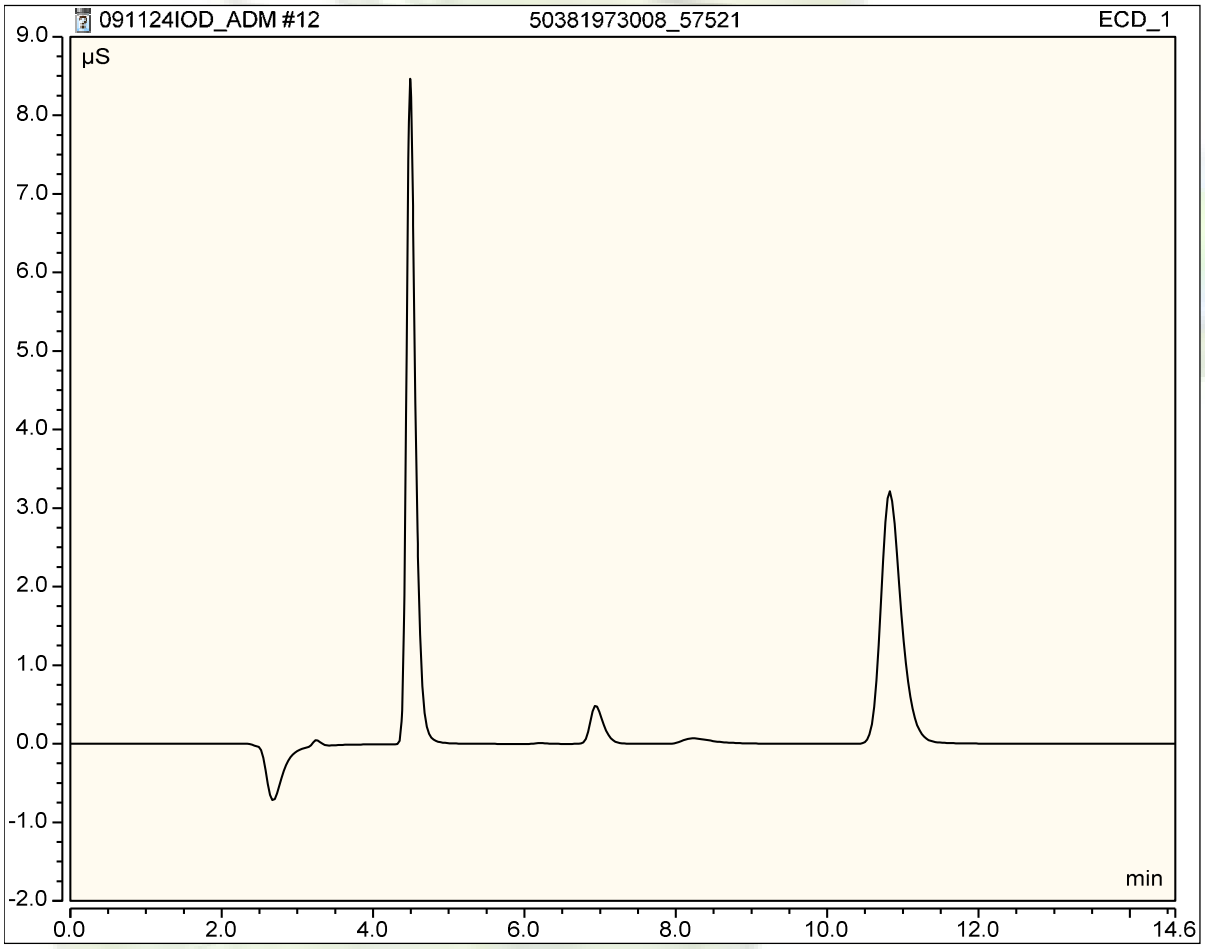
No.	Retention Time min	Name	Amount n.a.	A ea ' ( )min	! ei"#t ' (	T$%e



503, 197300, _57521

Sample Name:	503, 197300, _57521	Injection Volume (uL):	25.00
Vial Number:	B(9	Channel:	ECD_1
Sample Type:	Unkno n	Calibration:	09/06/24 14:50
Control ! ro"ram:	#IC#I%&'(S22	) luent Stock:	392545
* uanti+ - etho. :	C(L/ I%&I&) $#	&ilution 0actor	1.0000
1 ecor. in" Time:	09/11/2024 13:59	Sample 2 ei"ht:	1.0000
1 un Time (min):	34,5$	Sy6tem Name:	50IC05

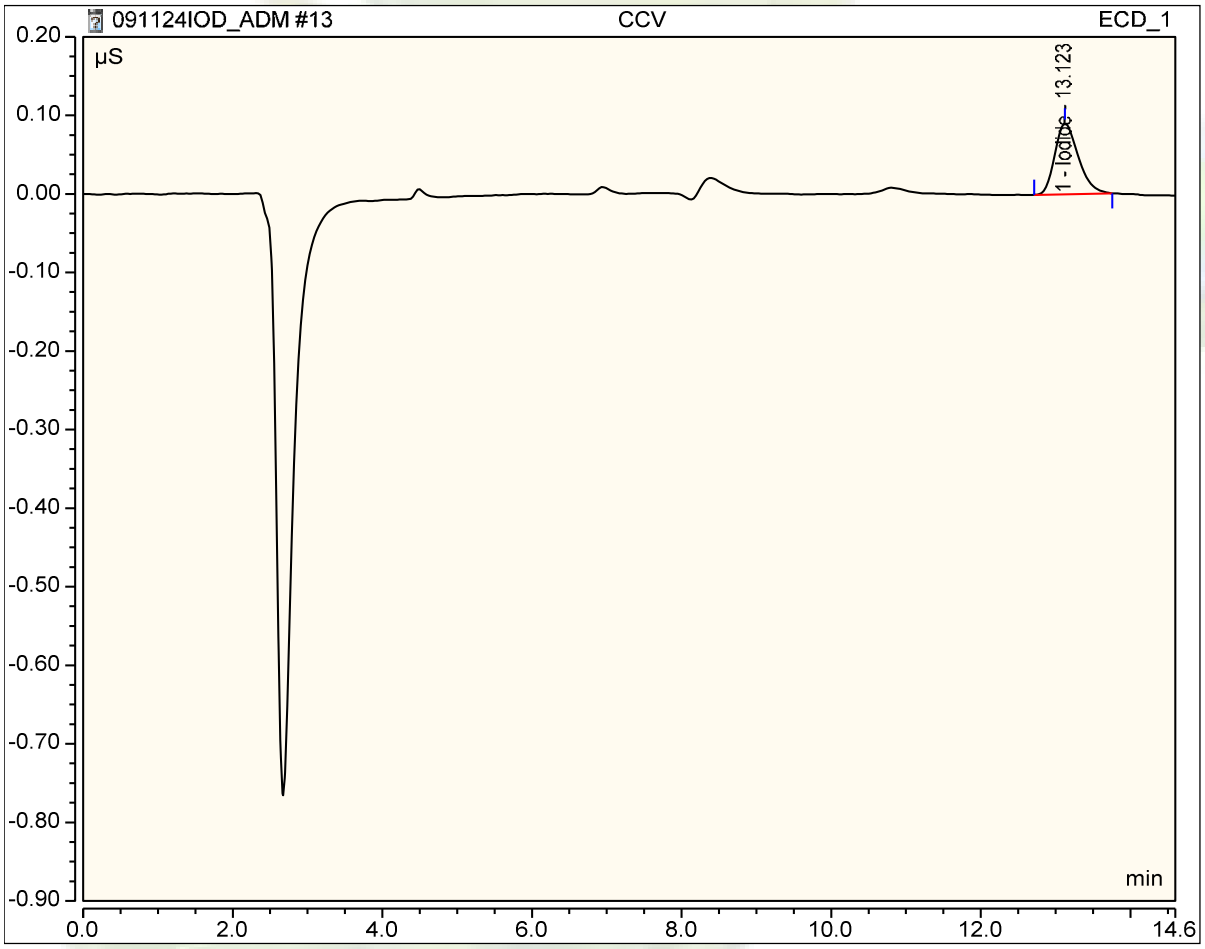
No.	Retention Time min	Name	Amount n.a.	A ea ' ( )min	! ei"#t ' (	T$%e



CCV
392572

Sample Name:	CCV	Injection Volume (uL):	25.00
Vial Number:	B2	Channel:	ECD_1
Sample Type:	Unkno n	Calibration:	09/06/24 14:50
Control ! ro"ram:	#IC#I%&'(S22	) luent Stock:	392545
* uanti+ - etho. :	C(L/ I%&I&) $#	&ilution 0actor	1.0000
1 ecor. in" Time:	09/11/2024 14:16	Sample 2 ei"ht:	1.0000
1 un Time (min):	34,5$	Sy6tem Name:	50IC05

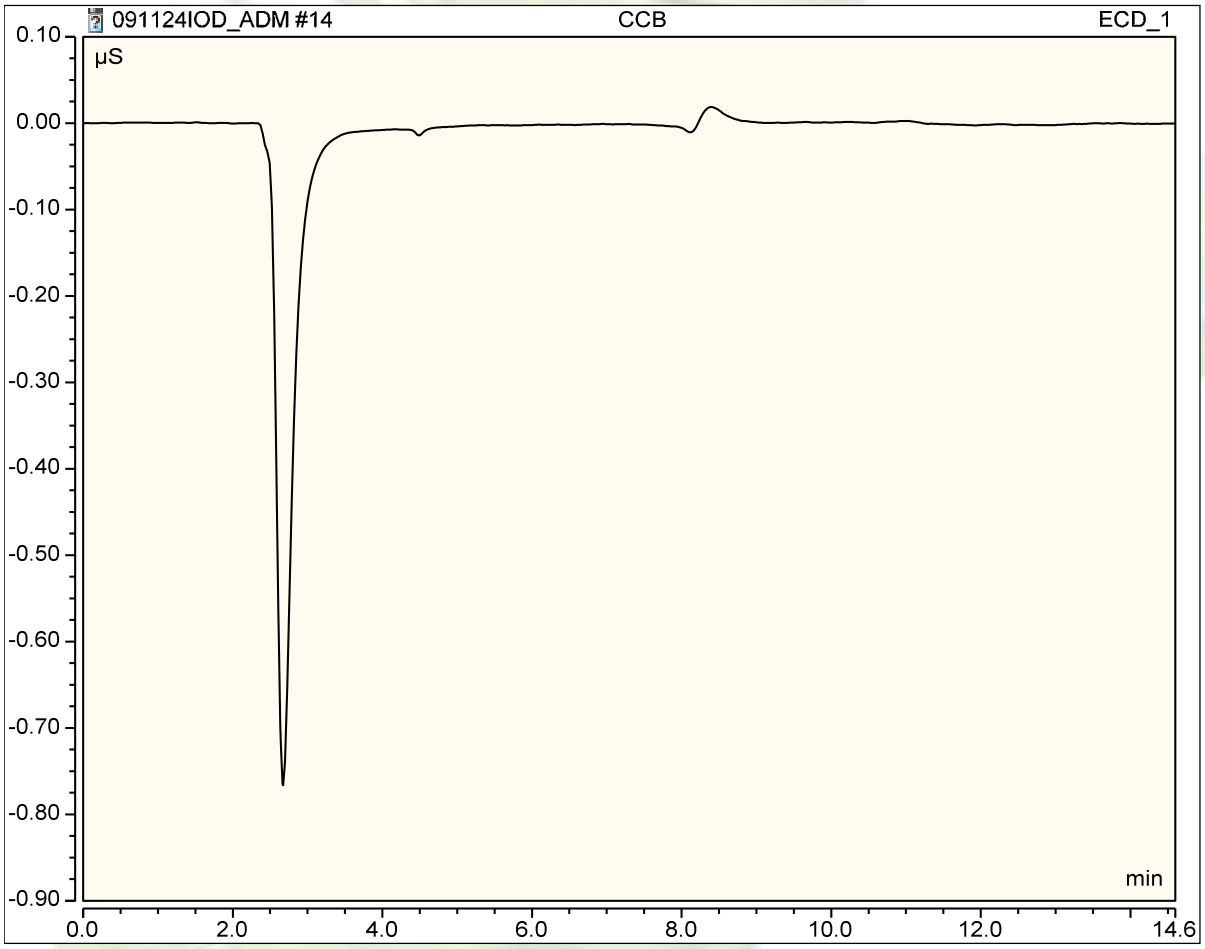
No.	Retention Time min	Name	Amount m"/&	A ea ' ( )min	! ei"#t ' (	T$%e
1	13.12	Io* i* e	0.9898	0.033	0.090	BMB



CC+
340111

Sample Name:	CC+	Injection Volume (uL):	25.00
Vial Number:	B4	Channel:	ECD_1
Sample Type:	Unkno n	Calibration:	09/06/24 14:50
Control ! ro"ram:	#IC#I%&'(S22	) luent Stock:	392545
* uanti+ - etho. :	C(L/ I%&I&) $#	&ilution 0actor	1.0000
1ecor. in" Time:	09/11/2024 14:33	Sample 2 ei"ht:	1.0000
1un Time (min):	34,5$	Sy6tem Name:	50IC05

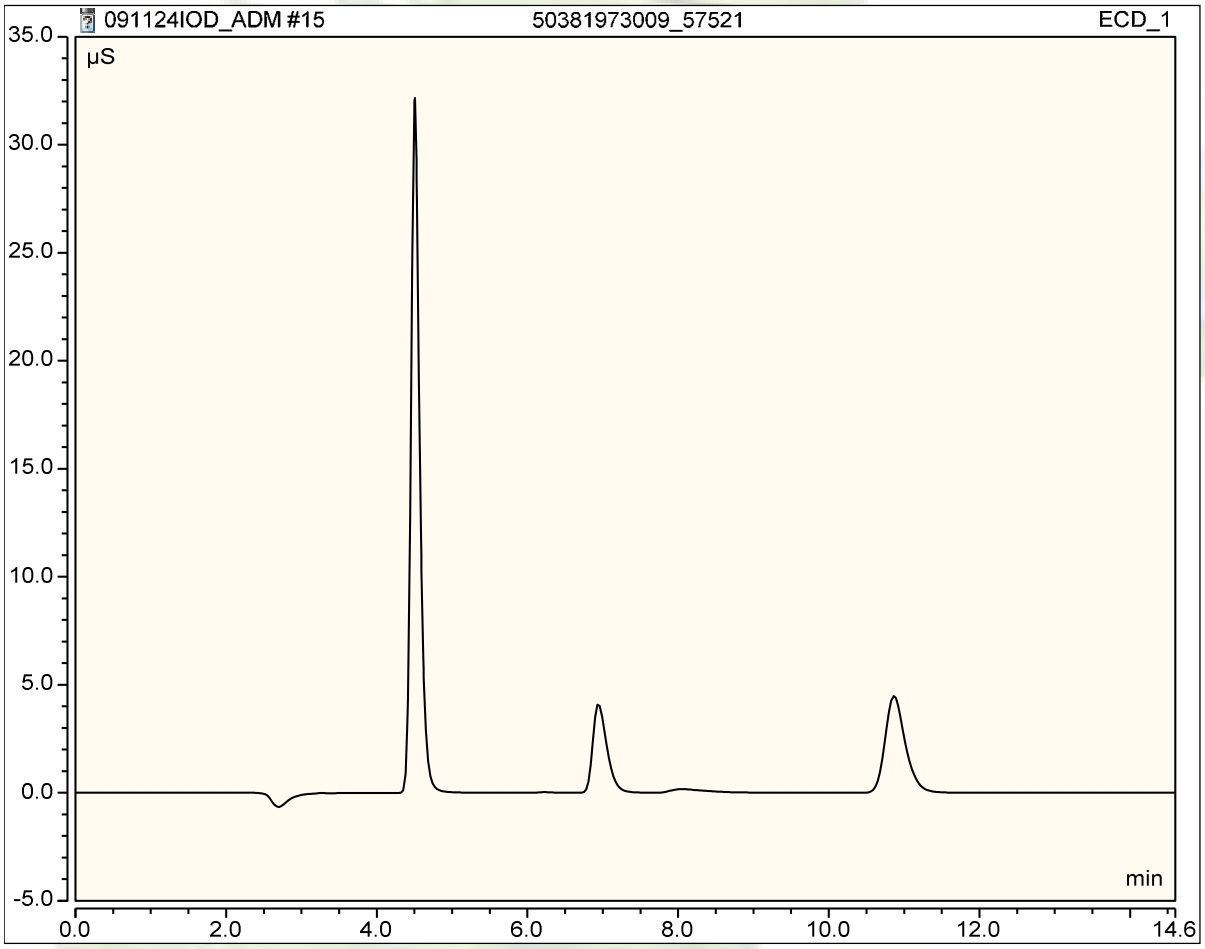
No.	Retention Time min	Name	Amount n.a.	A ea ' ( )min	! ei"#t ' (	T$%e



503, 1973009_57521

Sample Name:	503, 1973009_57521	Injection Volume (uL):	25.00
Vial Number:	BB3	Channel:	ECD_1
Sample Type:	Unkno n	Calibration:	09/06/24 14:50
Control ! ro"ram:	#IC#I%&'(S22	) luent Stock:	392545
* uanti+ - etho. :	C(L/ I%&I&) $#	&ilution 0actor	1.0000
1ecor. in" Time:	09/11/2024 14:50	Sample 2 ei"ht:	1.0000
1un Time (min):	34,5$	Sy6tem Name:	50IC05

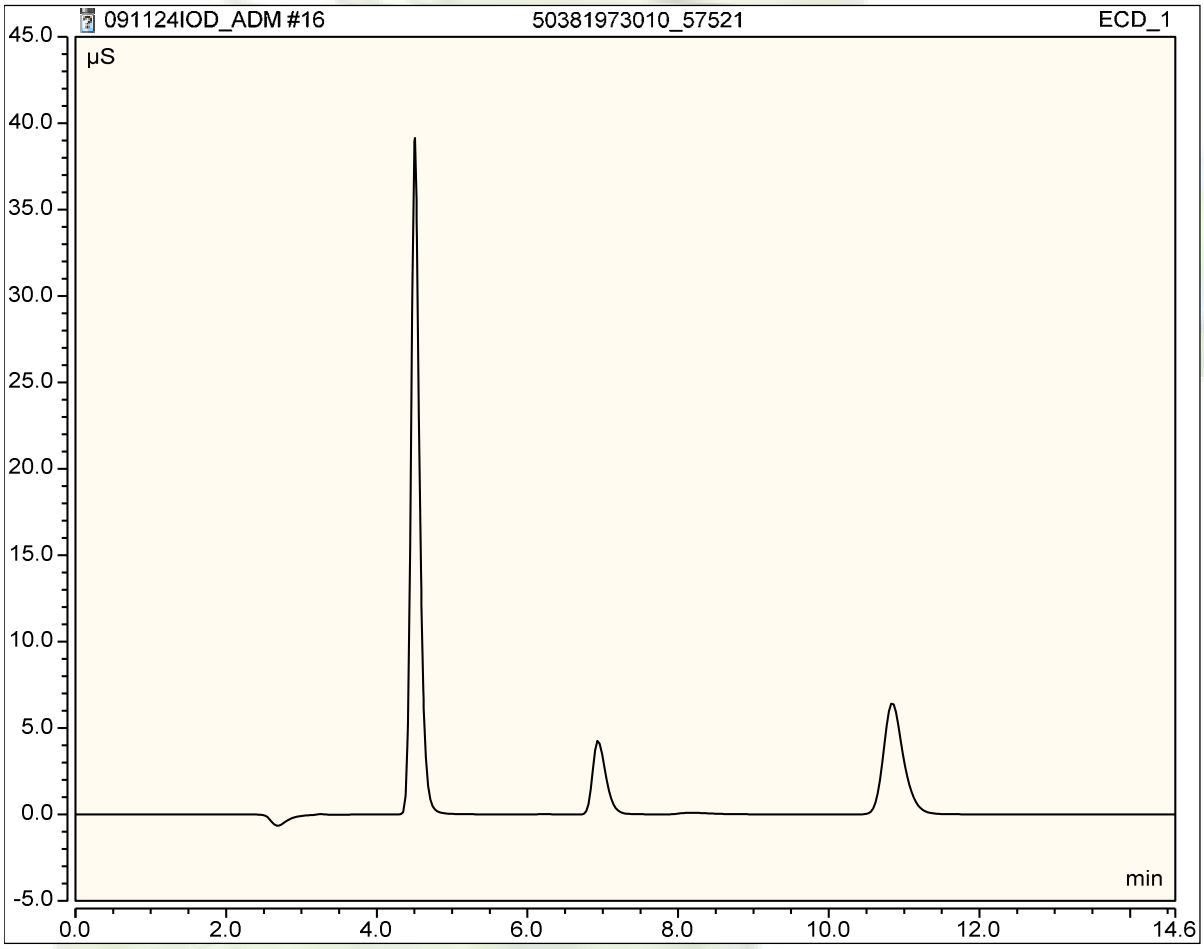
No.	Retention Time min	Name	Amount n.a.	A ea ' ( )min	! ei"#t ' (	T$%e



503, 1973010_57521

Sample Name:	503, 1973010_57521	Injection Volume (uL):	25.00
Vial Number:	BB2	Channel:	ECD_1
Sample Type:	Unkno n	Calibration:	09/06/24 14:50
Control ! ro"ram:	#IC#I%&'(S22	) luent Stock:	392545
* uanti+ - etho. :	C(L/ I%&I&) $#	&ilution 0actor	1.0000
1 ecor. in" Time:	09/11/2024 15:07	Sample 2 ei"ht:	1.0000
1 un Time (min):	34,5$	Sy6tem Name:	50IC05

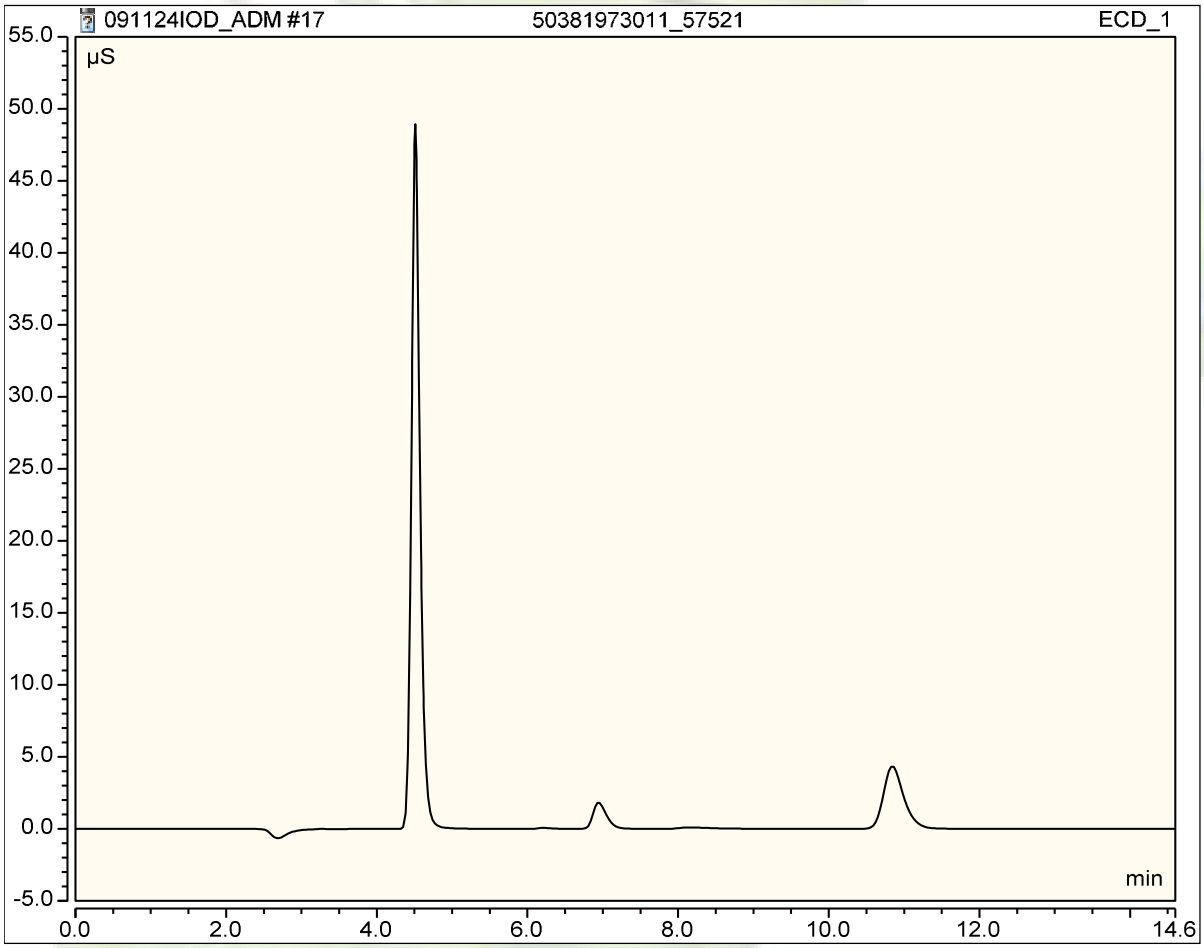
No.	Retention Time min	Name	Amount n.a.	A ea ' ( )min	! ei"#t ' (	T$%e



503, 1973011_57521

Sample Name:	503, 1973011_57521	Injection Volume (uL):	25.00
Vial Number:	BB7	Channel:	ECD_1
Sample Type:	Unkno n	Calibration:	09/06/24 14:50
Control ! ro"ram:	#IC#I%&'(S22	) luent Stock:	392545
* uanti+ - etho. :	C(L/ I%&I&) $#	&ilution 0actor	1.0000
1 ecor. in" Time:	09/11/2024 15:24	Sample 2 ei"ht:	1.0000
1 un Time (min):	34,5$	Sy6tem Name:	50IC05

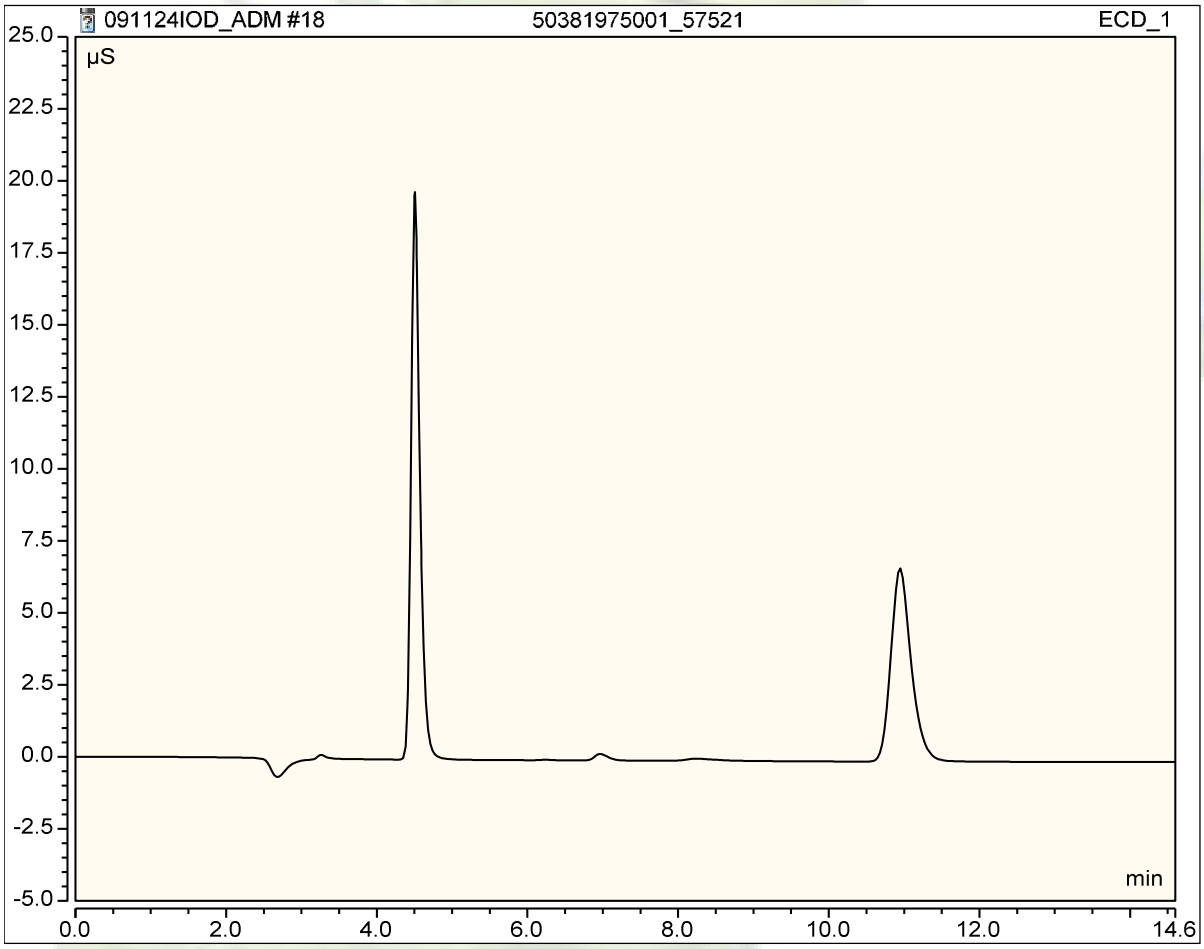
No.	Retention Time min	Name	Amount n.a.	A ea ' ( )min	! ei"#t ' (	T$%e



503, 1975001_57521

Sample Name:	503, 1975001_57521	Injection Volume (uL):	25.00
Vial Number:	BB4	Channel:	ECD_1
Sample Type:	Unkno n	Calibration:	09/06/24 14:50
Control ! ro"ram:	#IC#I%&'(S22	) luent Stock:	392545
* uanti+ - etho. :	C(L/ I%&I&) $#	&ilution 0actor	1.0000
1 ecor. in" Time:	09/11/2024 15:41	Sample 2 ei"ht:	1.0000
1 un Time (min):	34,5$	Sy6tem Name:	50IC05

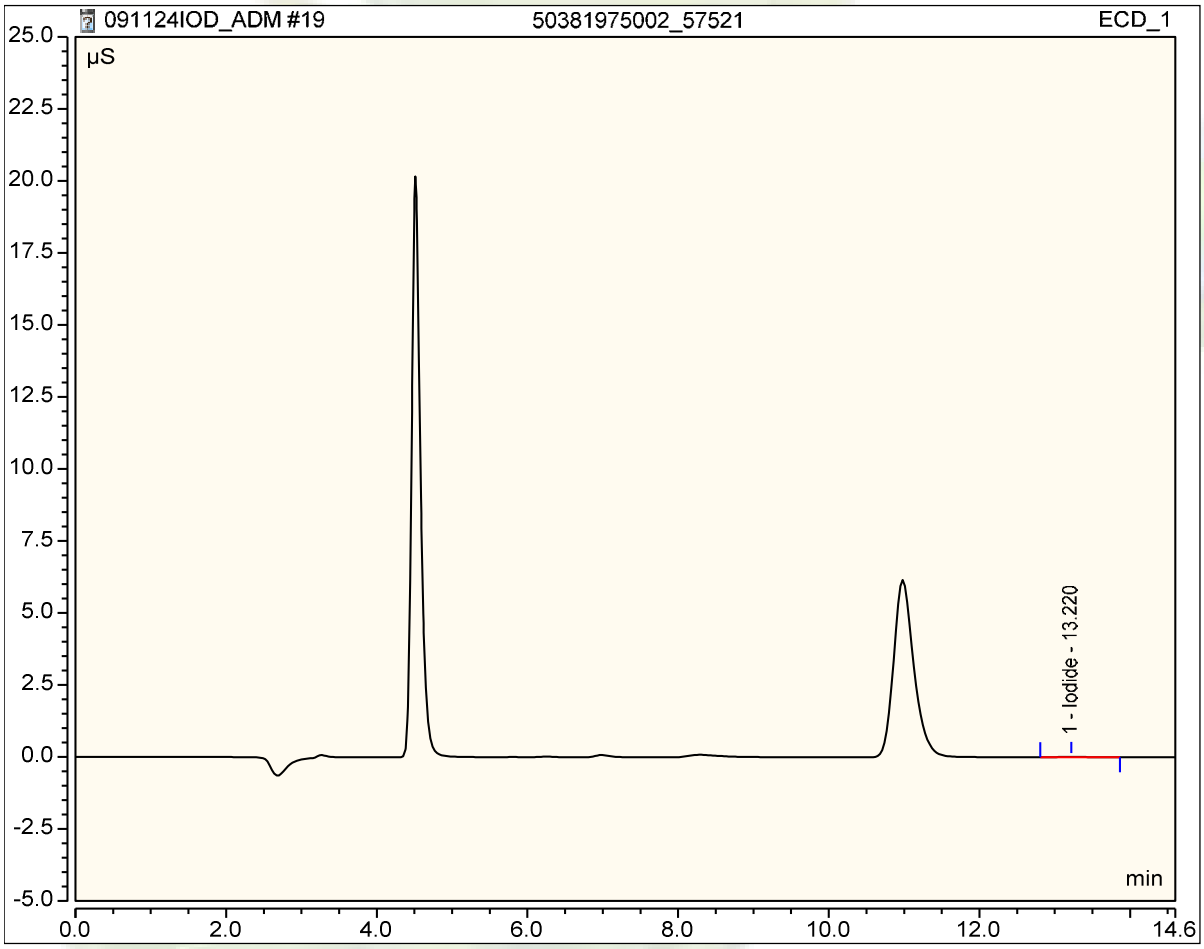
No.	Retention Time min	Name	Amount n.a.	A ea ' ( )min	! ei"#t ' (	T$%e



503, 1975002_57521

Sample Name:	503, 1975002_57521	Injection Volume (uL):	25.00
Vial Number:	BB#	Channel:	ECD_1
Sample Type:	Unkno n	Calibration:	09/06/24 14:50
Control ! ro"ram:	#IC#I%&'(S22	) luent Stock:	392545
* uanti+ - etho. :	C(L/ I%&I&) $#	&ilution 0actor	1.0000
1 ecor. in" Time:	09/11/2024 15:57	Sample 2 ei"ht:	1.0000
1 un Time (min):	34,5$	Sy6tem Name:	50IC05

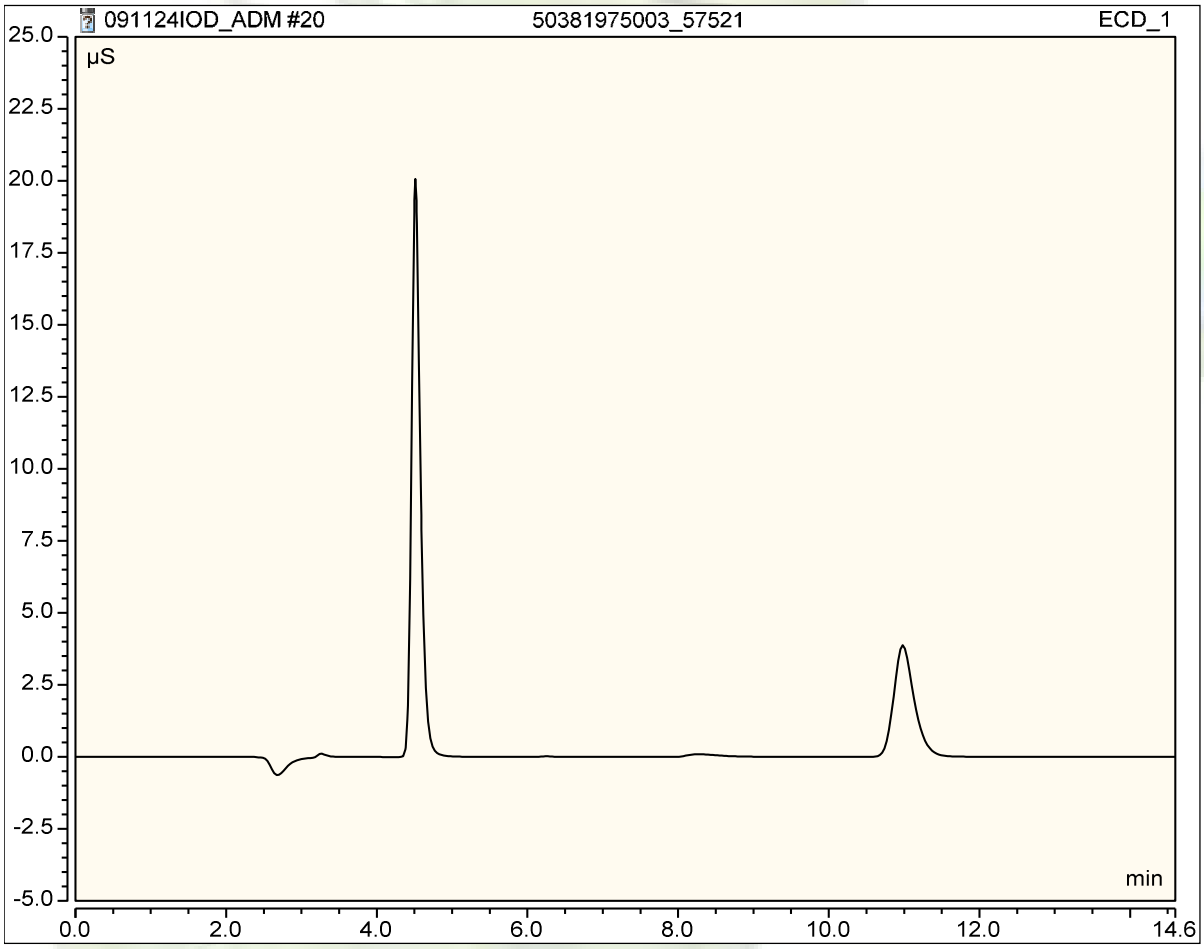
No.	Retention Time min	Name	Amount m"/&	A ea ' ( )min	! ei"#t ' (	T$%e
1	13.22	Io* i* e	0.1328	0.004	0.010	BMB



503, 1975003_57521

Sample Name:	503, 1975003_57521	Injection Volume (uL):	25.00
Vial Number:	BB5	Channel:	ECD_1
Sample Type:	Unkno n	Calibration:	09/06/24 14:50
Control ! ro"ram:	#IC#I%&'(S22	) luent Stock:	392545
* uanti+ - etho. :	C(L/ I%&I&) $#	&ilution 0actor	1.0000
1ecor. in" Time:	09/11/2024 16:14	Sample 2 ei"ht:	1.0000
1un Time (min):	34,5$	Sy6tem Name:	50IC05

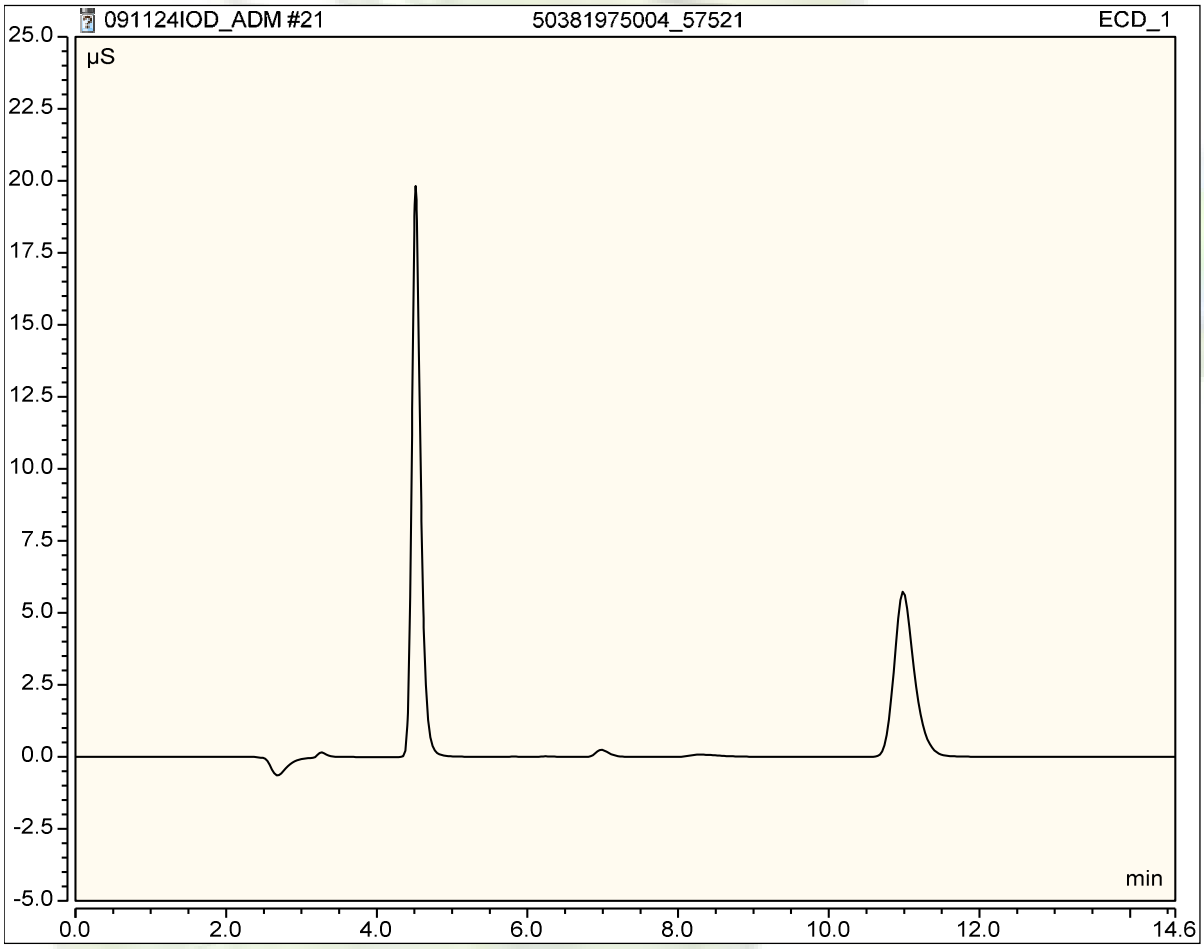
No.	Retention Time min	Name	Amount n.a.	A ea ' ( )min	! ei"#t ' (	T$%e



503, 1975004_57521

Sample Name:	503, 1975004_57521	Injection Volume (uL):	25.00
Vial Number:	BB8	Channel:	ECD_1
Sample Type:	Unkno n	Calibration:	09/06/24 14:50
Control ! ro"ram:	#IC#I%&'(S22	) luent Stock:	392545
* uanti+ - etho. :	C(L/ I%&I&) $#	&ilution 0actor	1.0000
1ecor. in" Time:	09/11/2024 16:31	Sample 2 ei"ht:	1.0000
1un Time (min):	34,5$	Sy6tem Name:	50IC05

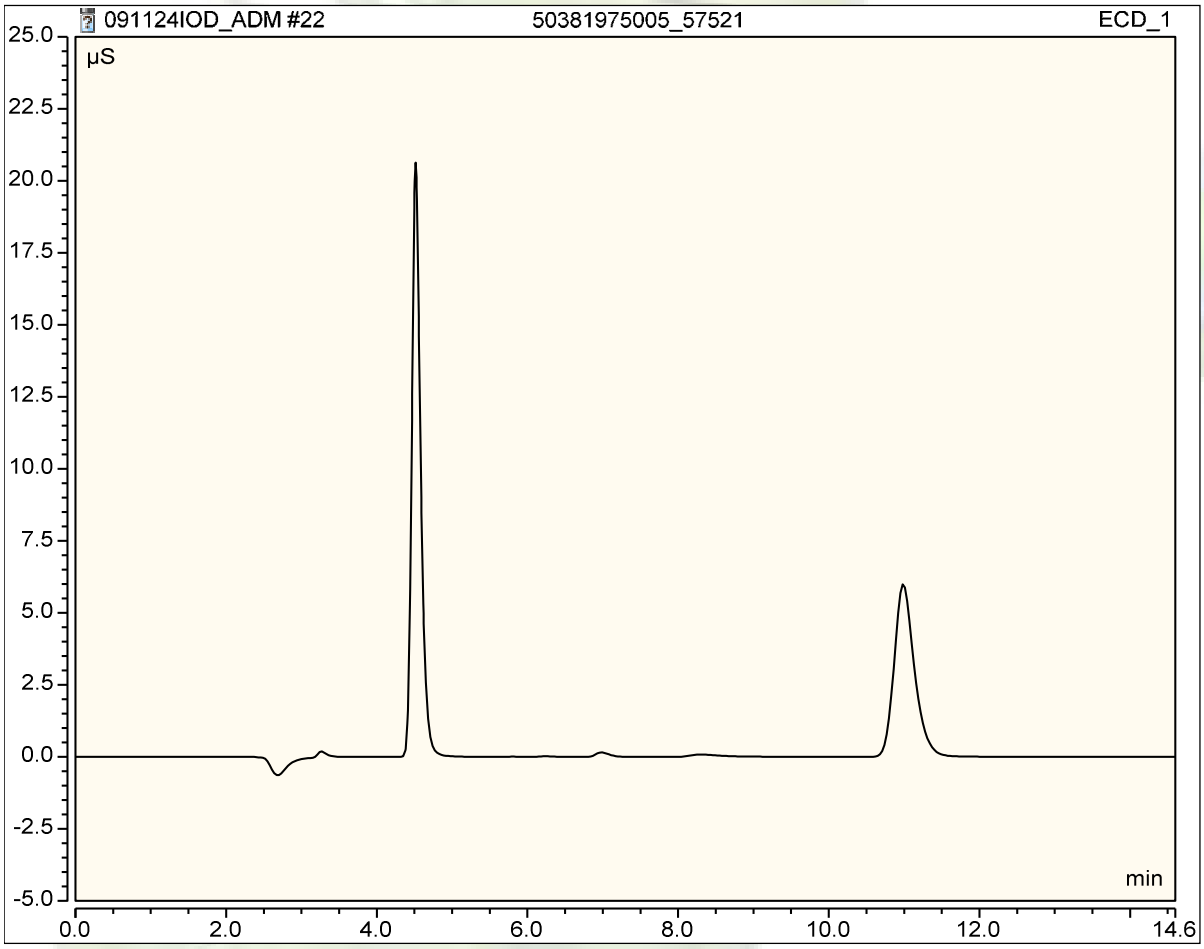
No.	Retention Time min	Name	Amount n.a.	A ea ' ( )min	! ei"#t ' (	T$%e



503, 1975005_57521

Sample Name:	503, 1975005_57521	Injection Volume (uL):	25.00
Vial Number:	BB9	Channel:	ECD_1
Sample Type:	Unkno n	Calibration:	09/06/24 14:50
Control ! ro"ram:	#IC#I%&'(S22	) luent Stock:	392545
* uanti+ - etho. :	C(L/ I%&I&) $#	&ilution 0actor	1.0000
1ecor. in" Time:	09/11/2024 16:49	Sample 2 ei"ht:	1.0000
1un Time (min):	34,5$	Sy6tem Name:	50IC05

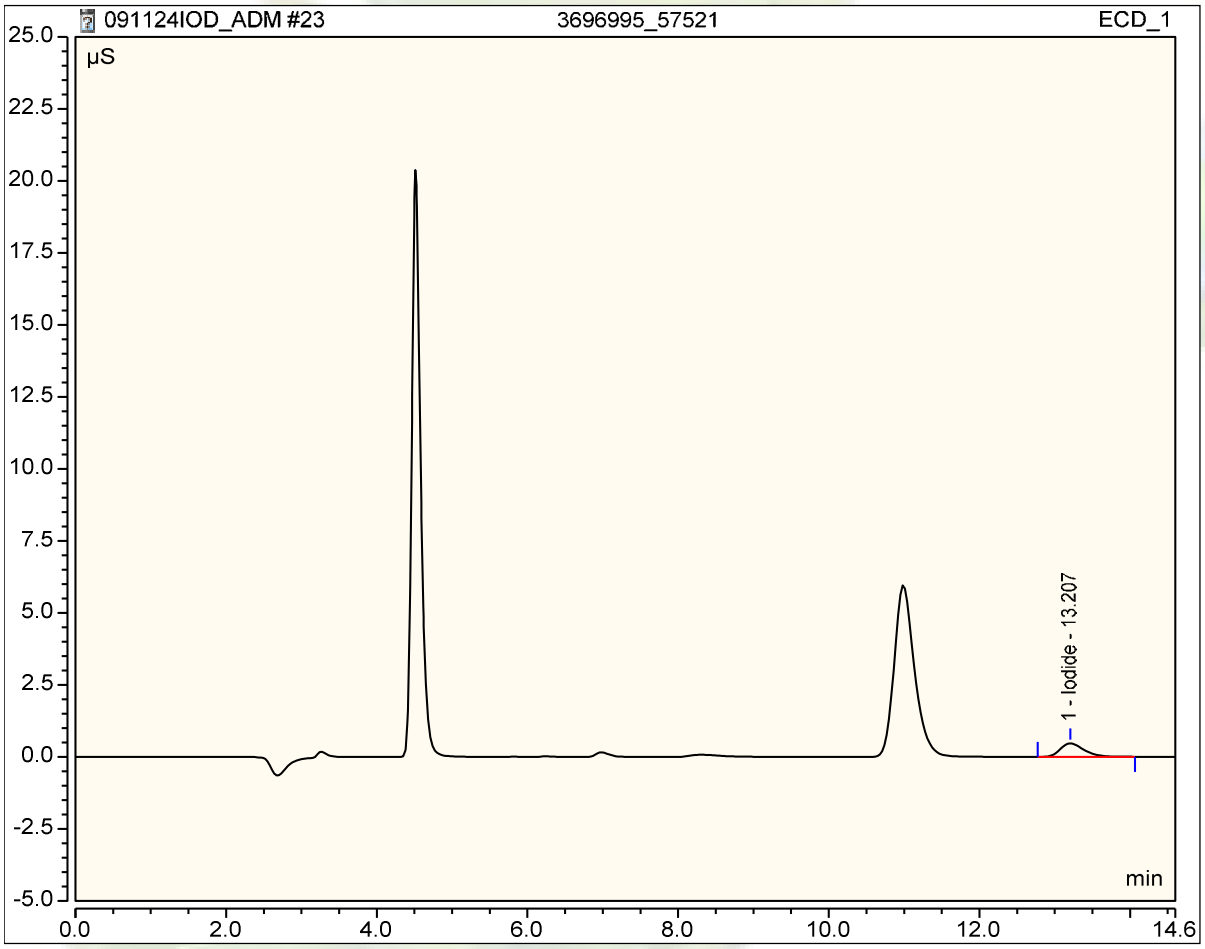
No.	Retention Time min	Name	Amount n.a.	A ea ' ( )min	! ei"#t ' (	T$%e



3696995_57521

Sample Name:	3696995_57521	Injection Volume (uL):	25.00
Vial Number:	BC*3*	Channel:	ECD_1
Sample Type:	Unkno n	Calibration:	09/06/24 14:50
Control *!* ro"ram:	*#$*IC*$#*I*%&'(* S22	*)* luent Stock:	392545
* uanti+ - etho. :	C*(* L/ I*%&*I*&) $#*	*&*ilution *0*actor	1.0000
1 ecor. in" Time:	09/11/2024 17:07	Sample *2* ei"ht:	1.0000
1 un Time (min):	*34,5$*	Sy*6*tem Name:	50IC05

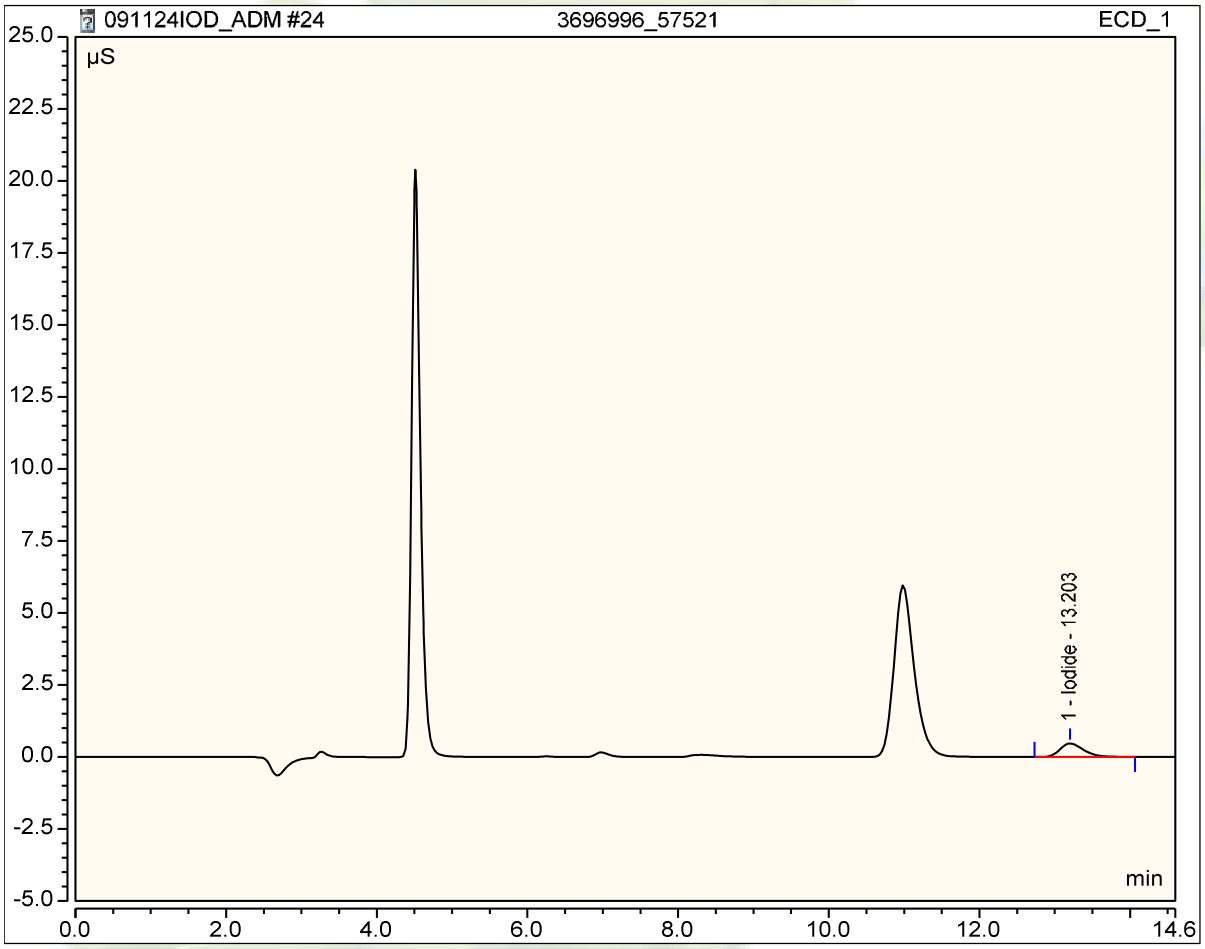
No.	Retention Time min	Name	Amount m"/&	A ea ' ( )min	! ei"#t ' (	T$%e
1	13.21	Io* i* e	5.0497	0.171	0.467	BMB



3696996_57521

Sample Name:	3696996_57521	Injection Volume (uL):	25.00
Vial Number:	BC*3*	Channel:	ECD_1
Sample Type:	Unkno n	Calibration:	09/06/24 14:50
Control *!* ro"ram:	*#$*IC*$#*I*%&'(* S22	*)* luent Stock:	392545
* uanti+ - etho. :	C*(* L/ I*%&*I*&) $#*	*&*ilution *0*actor	1.0000
1 ecor. in" Time:	09/11/2024 17:25	Sample *2* ei"ht:	1.0000
1 un Time (min):	*34,5$*	Sy*6*tem Name:	50IC05

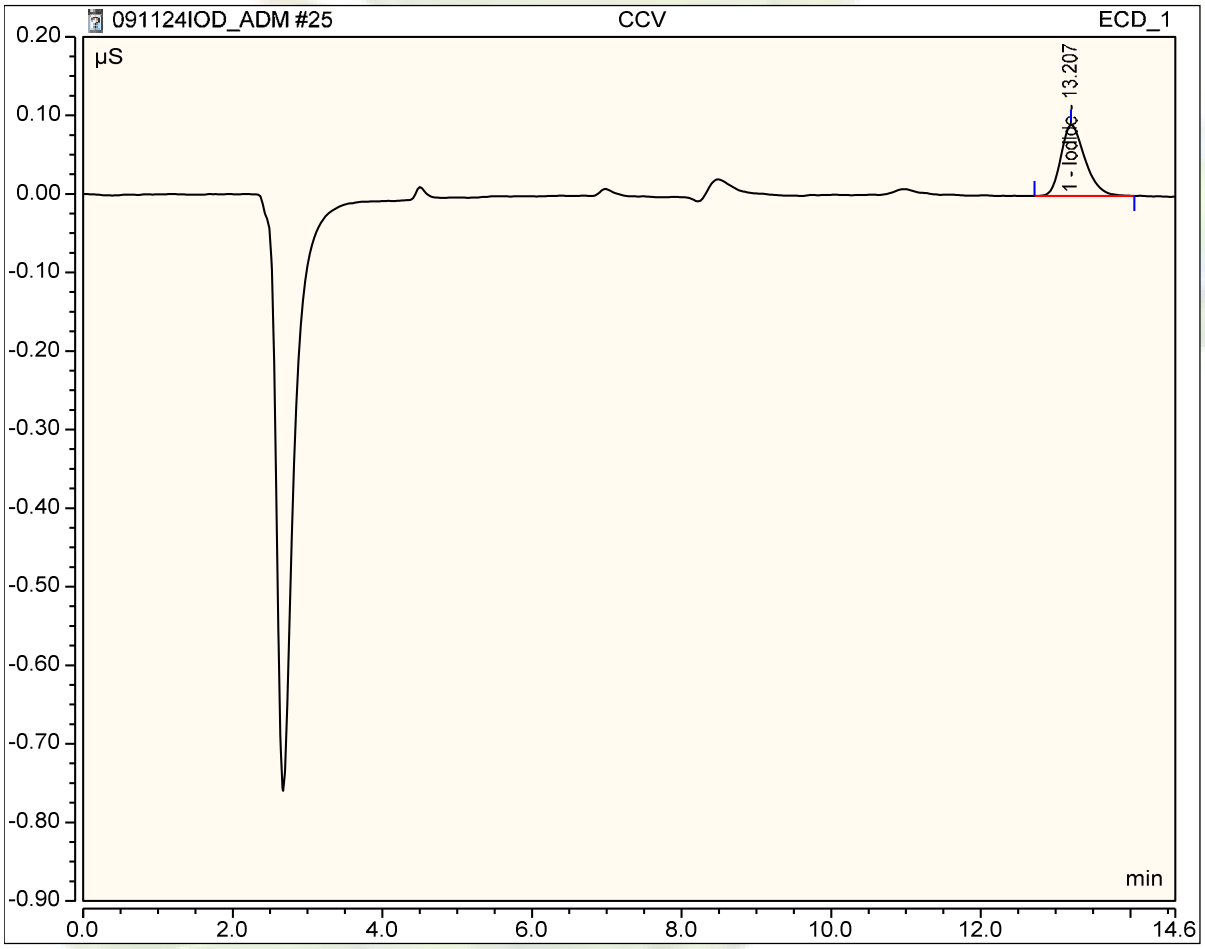
No.	Retention Time min	Name	Amount m"/&	A ea ' ( )min	! ei"#t ' (	T$%e
1	13.20	Io* i* e	5.0476	0.171	0.467	BMB



CCV
392572

Sample Name:	CCV	Injection Volume (uL):	25.00
Vial Number:	B2	Channel:	ECD_1
Sample Type:	Unkno n	Calibration:	09/06/24 14:50
Control ! ro"ram:	#IC#I%&'(S22	) luent Stock:	392545
* uanti+ - etho. :	C(L/ I%&I&) $#	&ilution 0actor	1.0000
1 ecor. in" Time:	09/11/2024 17:42	Sample 2 ei"ht:	1.0000
1 un Time (min):	34,5$	Sy6tem Name:	50IC05

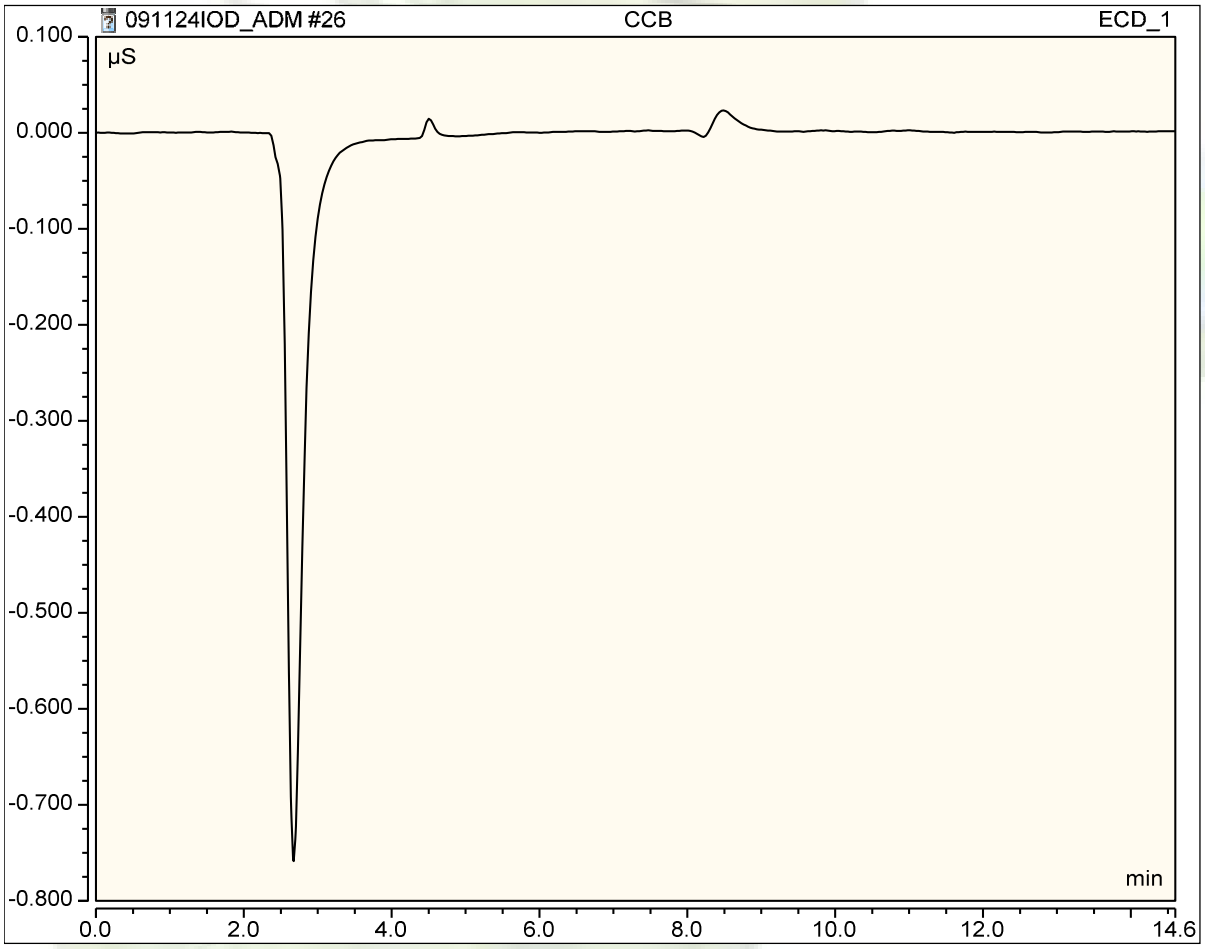
No.	Retention Time min	Name	Amount m"/&	A ea ' ( )min	! ei"#t ' (	T$%e
1	13.21	Io* i* e	1.0242	0.034	0.091	BMB



CC+
340111

Sample Name:	CC+	Injection Volume (uL):	25.00
Vial Number:	B4	Channel:	ECD_1
Sample Type:	Unkno n	Calibration:	09/06/24 14:50
Control ! ro"ram:	#IC#I%&'(S22	) luent Stock:	392545
* uanti+ - etho. :	C(L/ I%&I&) $#	&ilution 0actor	1.0000
1 ecor. in" Time:	09/11/2024 1, :00	Sample 2 ei"ht:	1.0000
1 un Time (min):	34,5$	Sy6tem Name:	50IC05

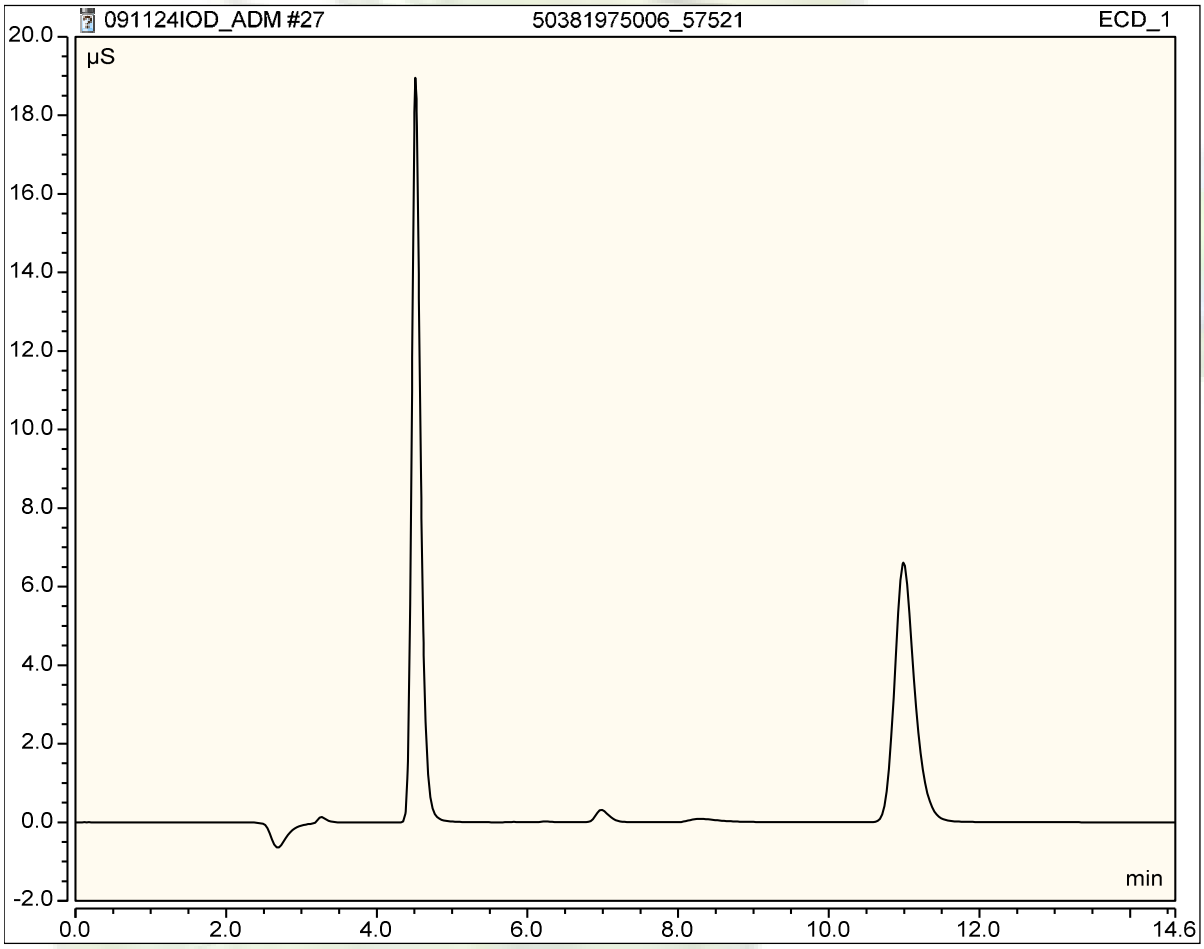
No.	Retention Time min	Name	Amount n.a.	A ea ' ( )min	! ei"#t ' (	T$%e



503, 1975006_57521

Sample Name:	503, 1975006_57521	Injection Volume (uL):	25.00
Vial Number:	BC2	Channel:	ECD_1
Sample Type:	Unkno n	Calibration:	09/06/24 14:50
Control ! ro"ram:	#IC#I%&'(S22	) luent Stock:	392545
* uanti+ - etho. :	C(L/ I%&I&) $#	&ilution 0actor	1.0000
1 ecor. in" Time:	09/11/2024 1, :1,	Sample 2 ei"ht:	1.0000
1 un Time (min):	34,5$	Sy6tem Name:	50IC05

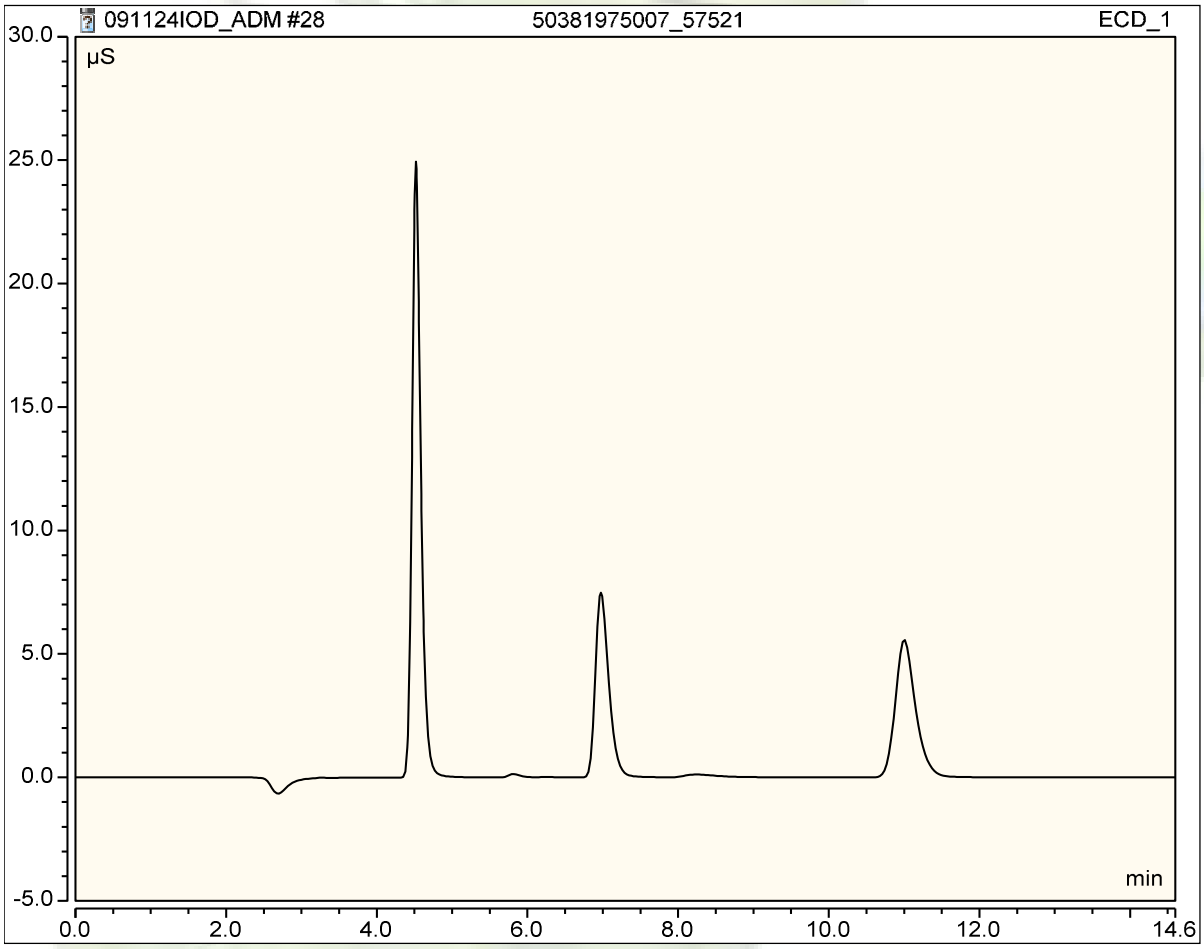
No.	Retention Time min	Name	Amount n.a.	A ea ' ( )min	! ei"#t ' (	T$%e



503, 1975007_57521

Sample Name:	503, 1975007_57521	Injection Volume (uL):	25.00
Vial Number:	BC7	Channel:	ECD_1
Sample Type:	Unkno n	Calibration:	09/06/24 14:50
Control ! ro"ram:	#IC#I%&'(S22	) luent Stock:	392545
* uanti+ - etho. :	C(L/ I%&I&) $#	&ilution 0actor	1.0000
1 ecor. in" Time:	09/11/2024 1, :36	Sample 2 ei"ht:	1.0000
1 un Time (min):	34,5$	Sy6tem Name:	50IC05

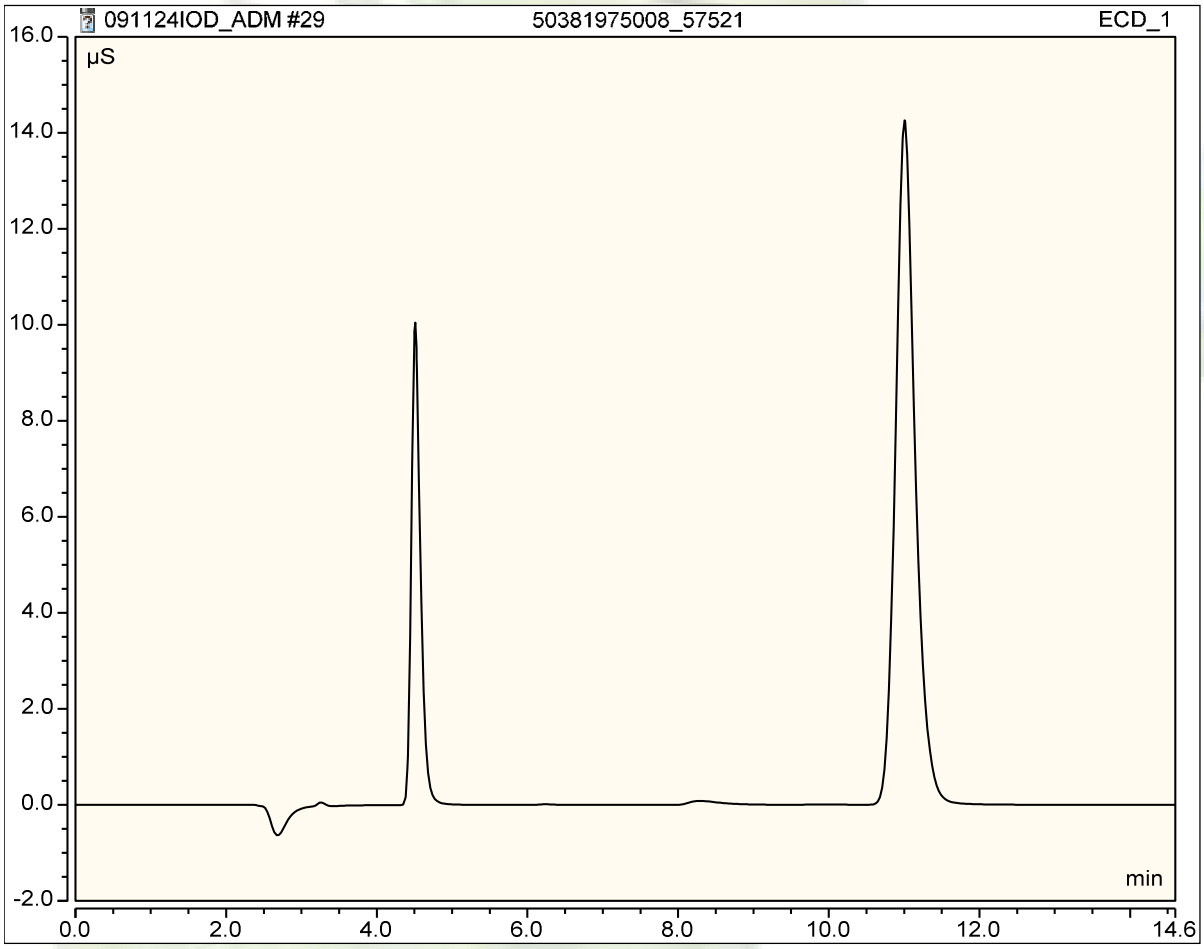
No.	Retention Time min	Name	Amount n.a.	A ea ' ( )min	! ei"#t ' (	T$%e



503, 197500, _57521

Sample Name:	503, 197500, _57521	Injection Volume (uL):	25.00
Vial Number:	BC4	Channel:	ECD_1
Sample Type:	Unkno n	Calibration:	09/06/24 14:50
Control ! ro"ram:	#IC#I%&'(S22	) luent Stock:	392545
* uanti+ - etho. :	C(L/ I%&I&) $#	&ilution 0actor	1.0000
1ecor. in" Time:	09/11/2024 1, :53	Sample 2 ei"ht:	1.0000
1un Time (min):	34,5$	Sy6tem Name:	50IC05

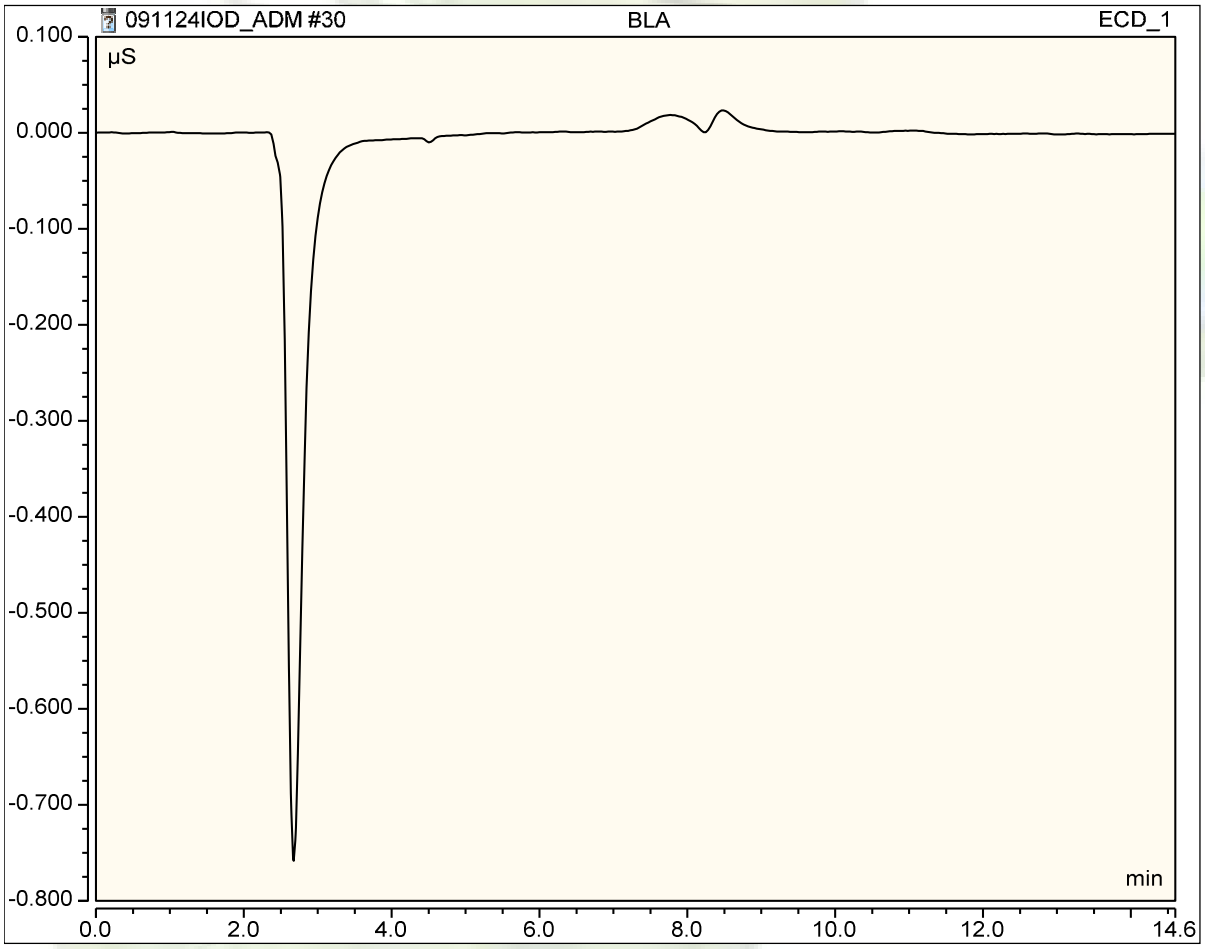
No.	Retention Time min	Name	Amount n.a.	A ea ' ( )min	! ei"#t ' (	T$%e



+ &A
340111

Sample Name:	+ &A	Injection Volume (uL):	25.00
Vial Number:	B*3*	Channel:	ECD_1
Sample Type:	Unkno n	Calibration:	09/06/24 14:50
Control *!* ro"ram:	*#$*IC*$#*I*%&'(* S22	*)* luent Stock:	392545
* uanti+ - etho. :	C*(* L/ I*%&*I*&) $#*	*&*ilution *0*actor	1.0000
1 ecor. in" Time:	09/11/2024 19:11	Sample *2* ei"ht:	1.0000
1 un Time (min):	*34,5$*	Sy*6*tem Name:	50IC05

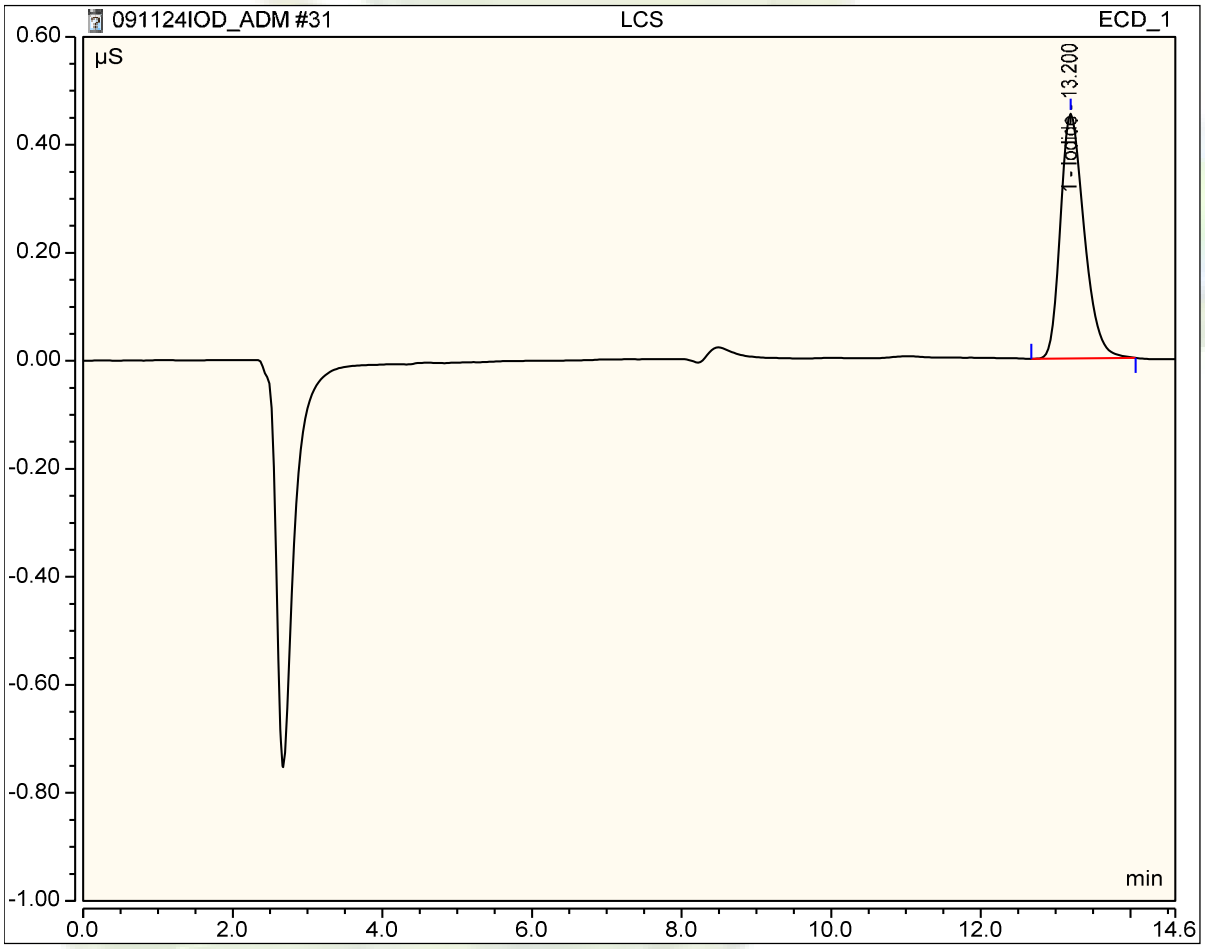
No.	Retention Time min	Name	Amount n.a.	A ea ' ( )min	! ei"#t ' (	T$%e



&C(
346539

Sample Name:	&C(	Injection Volume (uL):	25.00
Vial Number:	B7	Channel:	ECD_1
Sample Type:	Unkno n	Calibration:	09/06/24 14:50
Control ! ro"ram:	#IC#I%&'(S22	) luent Stock:	392545
* uanti+ - etho. :	C(L/ I%&I&) $#	&ilution 0actor	1.0000
1 ecor. in" Time:	09/11/2024 19:29	Sample 2 ei"ht:	1.0000
1 un Time (min):	34,5$	Sy6tem Name:	50IC05

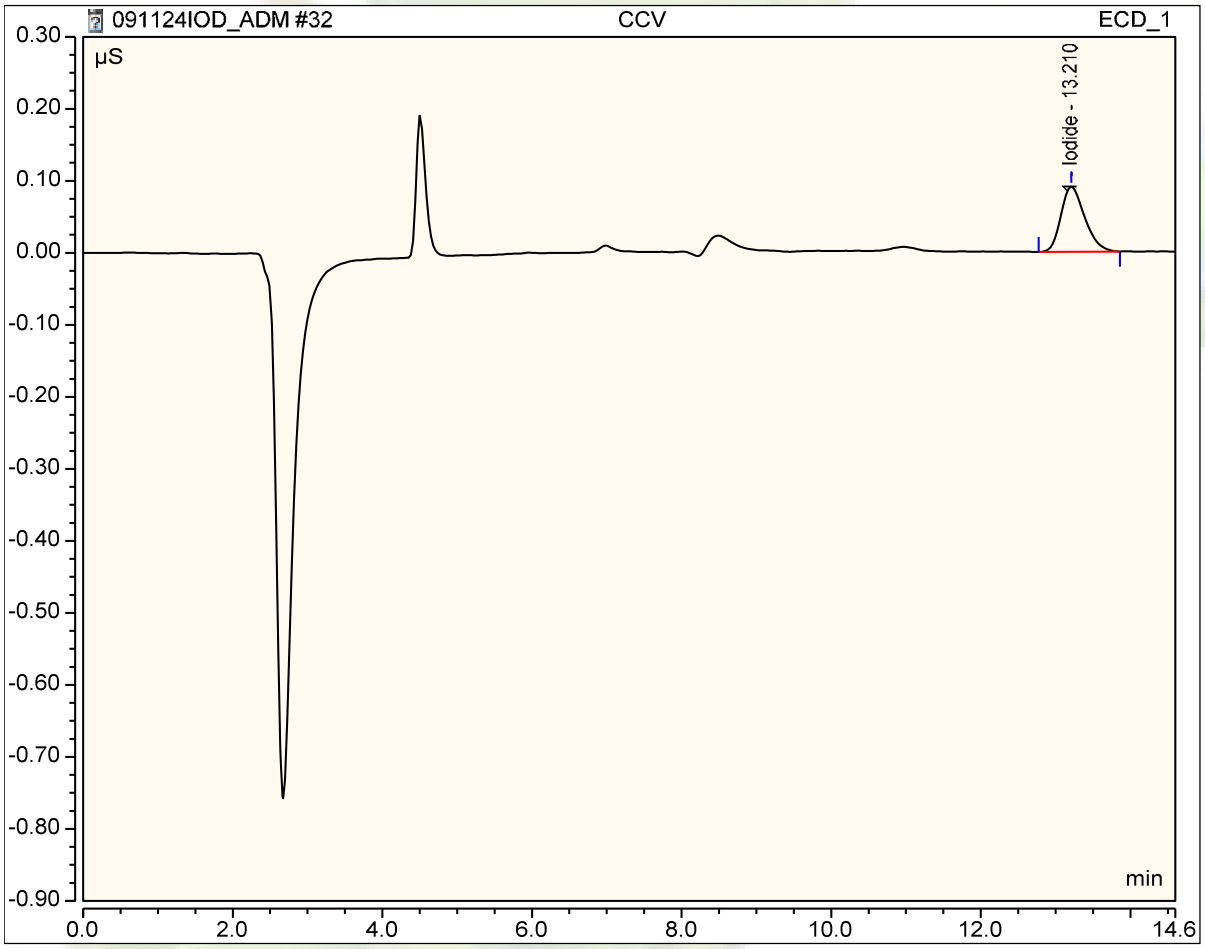
No.	Retention Time min	Name	Amount m"/&	A ea ' ( )min	! ei"#t ' (	T$%e
1	13.20	lo* i* e	4.9463	0.167	0.453	BMB



CCV
392572

Sample Name:	CCV	Injection Volume (uL):	25.00
Vial Number:	B2	Channel:	ECD_1
Sample Type:	Unkno n	Calibration:	09/06/24 14:50
Control ! ro"ram:	#IC#I%&'(S22	) luent Stock:	392545
* uanti+ - etho. :	C(L/ I%&I&) $#	&ilution 0actor	1.0000
1 ecor. in" Time:	09/11/2024 19:47	Sample 2 ei"ht:	1.0000
1 un Time (min):	34,5$	Sy6tem Name:	50IC05

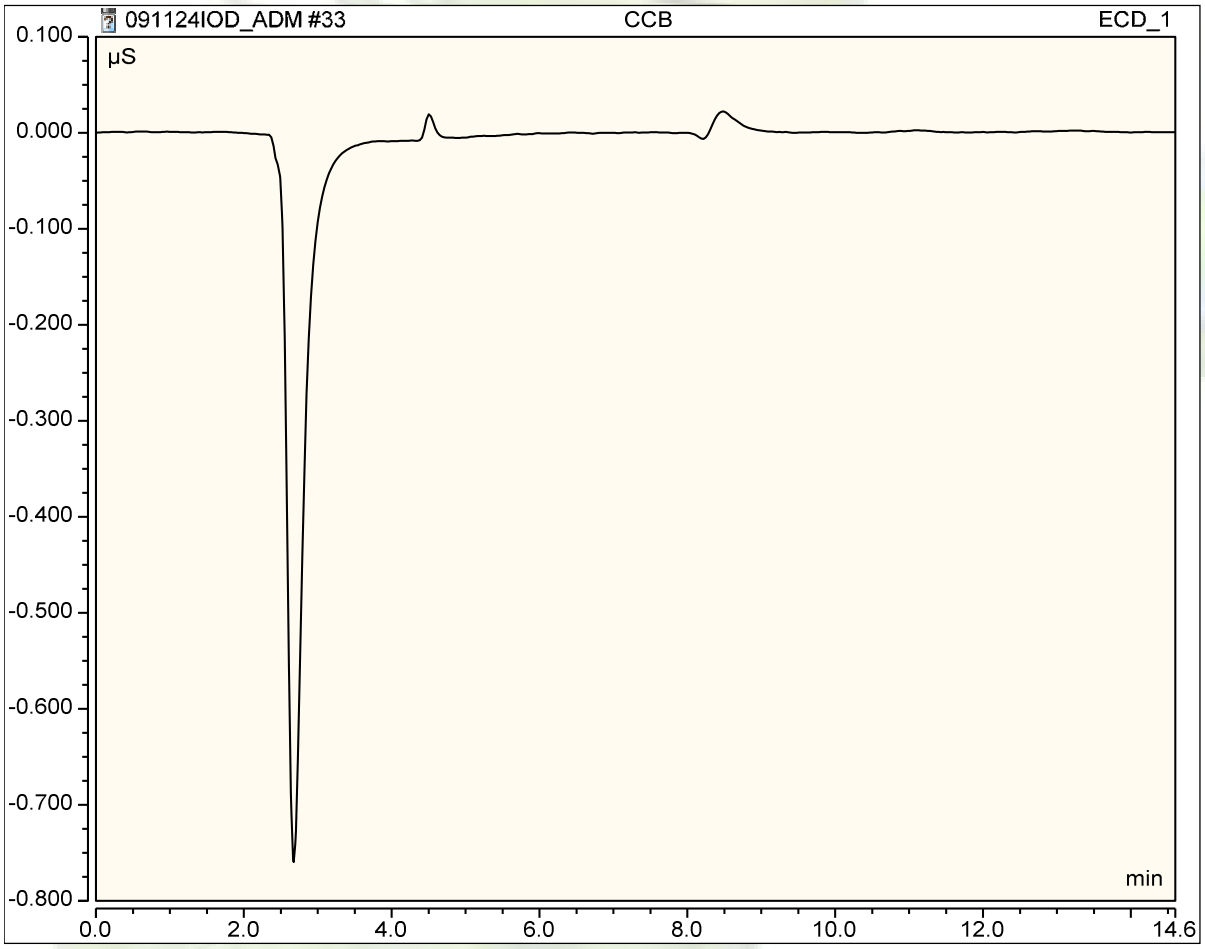
No.	Retention Time min	Name	Amount m"/&	A ea ' ( )min	! ei"#t ' (	T$%e
1	13.21	Io* i* e	1.0047	0.033	0.090	BMB



CC+
340111

Sample Name:	CC+	Injection Volume (uL):	25.00
Vial Number:	B4	Channel:	ECD_1
Sample Type:	Unkno n	Calibration:	09/06/24 14:50
Control ! ro"ram:	#IC#I%&'(S22	) luent Stock:	392545
* uanti+ - etho. :	C(L/ I%&I&) $#	&ilution 0actor	1.0000
1ecor. in" Time:	09/11/2024 20:05	Sample 2 ei"ht:	1.0000
1un Time (min):	34,5$	Sy6tem Name:	50IC05

No.	Retention Time min	Name	Amount n.a.	A ea ' ( )min	! ei"#t ' (	T$%e



Analytical Data Package

Prepared by:

Pace Analytical Services

Pace Project No.: 50381975

Table Of Contents

Pace Analytical Services, LLC
7726 Moller Road
Indianapolis, IN 46268
(317)228-3100

September 15, 2024

Pace MA
Pace MA
Eight Walkup Drive
Westborough, MA 01581

RE: Project: L2450417
Pace Project No.: 50381975

Dear Pace MA:

Enclosed are the analytical results for sample(s) received by the laboratory on September 10, 2024. The results relate only to the samples included in this report. Results reported herein conform to the applicable TNI/NELAC Standards and the laboratory's Quality Manual, where applicable, unless otherwise noted in the body of the report.

The test results provided in this final report were generated by each of the following laboratories within the Pace Network:

- Pace Analytical Services - Indianapolis

If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Tina Sayer

Tina Sayer
tina.sayer@pacelabs.com
(317)228-3127
Project Manager

Enclosures

cc: Mitchell Ostrowski, Pace MA

Pace Analytical Services, LLC
7726 Moller Road
Indianapolis, IN 46268
(317)228-3100

CERTIFICATIONS

Project: L2450417
Pace Project No.: 50381975

Pace Analytical Services Indianapolis
7726 Moller Road, Indianapolis, IN 46268
Illinois Accreditation #: 200074
Indiana Drinking Water Laboratory #: C-49-06
Kansas/TNI Certification #: E-10177
Kentucky UST Agency Interest #: 80226
Kentucky WW Laboratory ID #: 98019
Michigan Drinking Water Laboratory #9050
Oklahoma Laboratory #: 9204
Texas Certification #: T104704355
Washington Dept of Ecology #: C1081
Wisconsin Laboratory #: 999788130
USDA Foreign Soil Permit #: 525-23-13-23119
USDA Compliance Agreement #: IN-SL-22-001

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
7726 Moller Road
Indianapolis, IN 46268
(317)228-3100

SAMPLE SUMMARY

Project: L2450417
Pace Project No.: 50381975

Lab ID	Sample ID	Matrix	Date Collected	Date Received
50381975001	**MW-4A**	Water	09/04/24 08:40	09/10/24 09:30
50381975002	**MW-4B**	Water	09/04/24 10:00	09/10/24 09:30
50381975003	**MW-3A**	Water	09/04/24 11:30	09/10/24 09:30
50381975004	**MW-3B**	Water	09/04/24 12:10	09/10/24 09:30
50381975005	**MW-2A**	Water	09/04/24 13:40	09/10/24 09:30
50381975006	**MW-2B**	Water	09/04/24 13:33	09/10/24 09:30
50381975007	**MW-9A**	Water	09/04/24 15:20	09/10/24 09:30
50381975008	**MW-9B**	Water	09/04/24 15:40	09/10/24 09:30

Pace Analytical Services, LLC
7726 Moller Road
Indianapolis, IN 46268
(317)228-3100

SAMPLE ANALYTE COUNT

Project: L2450417
Pace Project No.: 50381975

Lab ID	Sample ID	Method	Analysts	Analytes Reported
50381975001	**MW-4A**	EPA 9056	DMP1	1
50381975002	**MW-4B**	EPA 9056	DMP1	1
50381975003	**MW-3A**	EPA 9056	DMP1	1
50381975004	**MW-3B**	EPA 9056	DMP1	1
50381975005	**MW-2A**	EPA 9056	DMP1	1
50381975006	**MW-2B**	EPA 9056	DMP1	1
50381975007	**MW-9A**	EPA 9056	DMP1	1
50381975008	**MW-9B**	EPA 9056	DMP1	1

PASI-I = Pace Analytical Services - Indianapolis

Pace Analytical Services, LLC
7726 Moller Road
Indianapolis, IN 46268
(317)228-3100

ANALYTICAL RESULTS

Project: L2450417
Pace Project No.: 50381975

Sample: MW-4A **Lab ID: 50381975001** Collected: 09/04/24 08:40 Received: 09/10/24 09:30 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
9056 Iodide by IC	Analytical Method: EPA 9056 Pace Analytical Services - Indianapolis							
Iodide	ND	mg/L	0.50	1		09/11/24 15:41		

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
7726 Moller Road
Indianapolis, IN 46268
(317)228-3100

ANALYTICAL RESULTS

Project: L2450417
Pace Project No.: 50381975

Sample: MW-4B **Lab ID: 50381975002** Collected: 09/04/24 10:00 Received: 09/10/24 09:30 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
9056 Iodide by IC	Analytical Method: EPA 9056 Pace Analytical Services - Indianapolis							
Iodide	ND	mg/L	0.50	1		09/11/24 15:57		

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
7726 Moller Road
Indianapolis, IN 46268
(317)228-3100

ANALYTICAL RESULTS

Project: L2450417
Pace Project No.: 50381975

Sample: MW-3A **Lab ID: 50381975003** Collected: 09/04/24 11:30 Received: 09/10/24 09:30 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
9056 Iodide by IC	Analytical Method: EPA 9056 Pace Analytical Services - Indianapolis							
Iodide	ND	mg/L	0.50	1		09/11/24 16:14		

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
7726 Moller Road
Indianapolis, IN 46268
(317)228-3100

ANALYTICAL RESULTS

Project: L2450417
Pace Project No.: 50381975

Sample: MW-3B **Lab ID: 50381975004** Collected: 09/04/24 12:10 Received: 09/10/24 09:30 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
9056 Iodide by IC	Analytical Method: EPA 9056 Pace Analytical Services - Indianapolis							
Iodide	ND	mg/L	0.50	1		09/11/24 16:31		

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
7726 Moller Road
Indianapolis, IN 46268
(317)228-3100

ANALYTICAL RESULTS

Project: L2450417
Pace Project No.: 50381975

Sample: MW-2A **Lab ID: 50381975005** Collected: 09/04/24 13:40 Received: 09/10/24 09:30 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
9056 Iodide by IC	Analytical Method: EPA 9056 Pace Analytical Services - Indianapolis							
Iodide	ND	mg/L	0.50	1		09/11/24 16:49		

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
7726 Moller Road
Indianapolis, IN 46268
(317)228-3100

ANALYTICAL RESULTS

Project: L2450417
Pace Project No.: 50381975

Sample: MW-2B **Lab ID: 50381975006** Collected: 09/04/24 13:33 Received: 09/10/24 09:30 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
9056 Iodide by IC	Analytical Method: EPA 9056 Pace Analytical Services - Indianapolis							
Iodide	ND	mg/L	0.50	1		09/11/24 18:18		

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
7726 Moller Road
Indianapolis, IN 46268
(317)228-3100

ANALYTICAL RESULTS

Project: L2450417
Pace Project No.: 50381975

Sample: MW-9A **Lab ID: 50381975007** Collected: 09/04/24 15:20 Received: 09/10/24 09:30 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
9056 Iodide by IC	Analytical Method: EPA 9056 Pace Analytical Services - Indianapolis							
Iodide	ND	mg/L	0.50	1		09/11/24 18:36		

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
7726 Moller Road
Indianapolis, IN 46268
(317)228-3100

ANALYTICAL RESULTS

Project: L2450417
Pace Project No.: 50381975

Sample: MW-9B **Lab ID: 50381975008** Collected: 09/04/24 15:40 Received: 09/10/24 09:30 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
9056 Iodide by IC	Analytical Method: EPA 9056 Pace Analytical Services - Indianapolis							
Iodide	ND	mg/L	0.50	1		09/11/24 18:53		

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
7726 Moller Road
Indianapolis, IN 46268
(317)228-3100

QUALITY CONTROL DATA

Project: L2450417
Pace Project No.: 50381975

QC Batch: 808395
QC Batch Method: EPA 9056
Analysis Method: EPA 9056
Analysis Description: 9056 Iodide by IC
Laboratory: Pace Analytical Services - Indianapolis
Associated Lab Samples: 50381975001, 50381975002, 50381975003, 50381975004, 50381975005, 50381975006, 50381975007, 50381975008

METHOD BLANK: 3696993 Matrix: Water
Associated Lab Samples: 50381975001, 50381975002, 50381975003, 50381975004, 50381975005, 50381975006, 50381975007, 50381975008

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Iodide	mg/L	ND	0.50	09/11/24 11:23	

LABORATORY CONTROL SAMPLE: 3696994

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Iodide	mg/L	5	4.9	99	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3696995 3696996

Parameter	Units	50381975005 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Iodide	mg/L	ND	5	5	5.0	5.0	101	101	80-120	0	15	

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
7726 Moller Road
Indianapolis, IN 46268
(317)228-3100

QUALIFIERS

Project: L2450417
Pace Project No.: 50381975

DEFINITIONS

DF - Dilution Factor, if reported, represents the factor applied to the reported data due to dilution of the sample aliquot.

ND - Not Detected at or above adjusted reporting limit.

TNTC - Too Numerous To Count

J - Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.

MDL - Adjusted Method Detection Limit.

PQL - Practical Quantitation Limit.

RL - Reporting Limit - The lowest concentration value that meets project requirements for quantitative data with known precision and bias for a specific analyte in a specific matrix.

S - Surrogate

1,2-Diphenylhydrazine decomposes to and cannot be separated from Azobenzene using Method 8270. The result for each analyte is a combined concentration.

Consistent with EPA guidelines, unrounded data are displayed and have been used to calculate % recovery and RPD values.

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

U - Indicates the compound was analyzed for, but not detected.

N-Nitrosodiphenylamine decomposes and cannot be separated from Diphenylamine using Method 8270. The result reported for each analyte is a combined concentration.

Reported results are not rounded until the final step prior to reporting. Therefore, calculated parameters that are typically reported as "Total" may vary slightly from the sum of the reported component parameters.

Pace Analytical is TNI accredited. Contact your Pace PM for the current list of accredited analytes.

TNI - The NELAC Institute.

Pace Analytical Services, LLC
7726 Moller Road
Indianapolis, IN 46268
(317)228-3100

QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: L2450417
Pace Project No.: 50381975

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
50381975001	**MW-4A**	EPA 9056	808395		
50381975002	**MW-4B**	EPA 9056	808395		
50381975003	**MW-3A**	EPA 9056	808395		
50381975004	**MW-3B**	EPA 9056	808395		
50381975005	**MW-2A**	EPA 9056	808395		
50381975006	**MW-2B**	EPA 9056	808395		
50381975007	**MW-9A**	EPA 9056	808395		
50381975008	**MW-9B**	EPA 9056	808395		

WO# : 50381975

50381975

Subcontract Chain of Custody

Pace Analytical (Indianapolis, IN)
7726 Moller Road
Indianapolis, IN 46268

Alpha Job Number
L2450417

Client Information	Project Information	Regulatory Requirements/Report Limits
Client: Alpha Analytical Labs Address: Eight Walkup Drive Westborough, MA 01581-1019 Phone: 508.844.4115 Email: Mitchell.Ostrowski@pacelabs.com	Project Location: NY Project Manager: Mitchell Ostrowski **Turnaround & Deliverables Information** Due Date: Deliverables:	State/Federal Program: Regulatory Criteria:

Project Specific Requirements and/or Report Requirements

Reference following Alpha Job Number on final report/deliverables: L2450417

Report to include Method Blank, LCS/LCSD:

Additional Comments: Invoices to: invoices@pacelabs.coupahost.com Reports to: west.subreports@pacelabs.com MS/MSD

Lab ID	Client ID	Collection Date/Time	Sample Matrix	Analysis	Batch QC
	MW-4A	09-04-24 08:40	WATER	Iodide	001
	MW-4B	09-04-24 10:00	WATER	Iodide	002
	MW-3A	09-04-24 11:30	WATER	Iodide	003
	MW-3B	09-04-24 12:10	WATER	Iodide	MS;MSD 004
	MW-2A	09-04-24 13:40	WATER	Iodide	005
	MW-2B	09-04-24 13:33	WATER	Iodide	006
	MW-9A	09-04-24 15:20	WATER	Iodide	007
	MW-9B	09-04-24 15:40	WATER	Iodide	008

	Relinquished By:	Date/Time:	Received By:	Date/Time:
		9/9/24	Fed ex	9/9/24
	Fed ex	9/10/24 9.30	Fabiola Toledo-Pace	9/10/24 9.30
Form No: AL_subcoc				

SAMPLE CONDITION UPON RECEIPT FORM

Date/Time and Initials of person examining contents: 9/10/24 11.15 TS

1. **Courier:** ☑ FED EX ☐ UPS ☐ CLIENT ☐ PACE ☐ NOW/JETT ☐ OTHER _____
2. **Custody Seal on Cooler/Box Present:** ☐ Yes ☑ No
   (If yes)Seals Intact: ☐ Yes ☐ No **(leave blank if no seals were present)**
3. **Thermometer:** 1 2 3 4 5 6 7 8 9 (A) B C D E F G H I
4. **Cooler Temperature(s):** 1.1 /2.1 | | | |
   (Initial/Corrected) RECORD TEMPS OF ALL COOLERS RECEIVED (use Comments below to add more)

5. **Packing Material:** ☐ Bubble Wrap ☑ Bubble Bags ☐ None ☐ Other _____
6. **Ice Type:** ☑ Wet ☐ Blue ☐ None
7. **Was the PM notified of out of temp cooler?:** ☐ Yes ☐ No
   Cooler temp should be above freezing to 6°C

All discrepancies will be written out in the comments section below.

	Yes	No		Yes	No	N/A
USDA Regulated Soils? (HI, ID, NY, WA, OR,CA, NM, TX, OK, AR, LA, TN, AL, MS, NC, SC, GA, FL, or Puerto Rico)		✓	All containers needing acid/base preservation have been pH CHECKED?: **Exceptions: VOA, coliform, LLHg, O&G, RAD CHEM, and any container with a septum cap or preserved with HCl.** **Circle:** **HNO3 (<2) H2SO4 (<2) NaOH (>10) NaOH/ZnAc (>9)** Any non-conformance to pH recommendations will be noted on the container count form			✓
Short Hold Time Analysis (48 hours or less)? Analysis:		✓				
Time 5035A TC placed in Freezer or Short Holds To Lab	Time:			Present	Absent	N/A
			Residual Chlorine Check (SVOC 625 Pest/PCB 608)			✓
Rush TAT Requested (4 days or less):		✓	Residual Chlorine Check (Total/Amenable/Free Cyanide)			✓
Custody Signatures Present?	✓		Headspace Wisconsin Sulfide?			✓
Containers Intact?:	✓		Headspace in VOA Vials (>6mm): See Containter Count form for details	Present	Absent	No VOA Vials Sent ✓
Sample Label (IDs/Dates/Times) Match COC?: Except TCs, which only require sample ID	✓		Trip Blank Present?		✓	
Extra labels on Terracore Vials? (soils only)			Trip Blank Custody Seals?:			✓

COMMENTS:

COC PAGE 1 of 1

Sample Container Count

** Place a PINK dot on containers that are out of conformance **

COC Line Item	WGFU	WGKU BG1U	MeOH (only) SBS DI R	DG9H VG9H	VOA VIAL HS (>6mm)	VG9U DG9U	VG9T	AMBER GLASS: AG0U	AG1H	AG1U	AG3U	AG3S	AG3SF	AG3B	PLASTIC: BP1U	BP1N	BP2U	BP3U	BP3N	BP3F	BP3S	BP3B	BP3Z	OTHER: CG3H	CG3F	Syringe Kit			Matrix	Nitric Red HNO3 <2	Sulfuric Yellow H2SO4 <2	Sodium Hydroxide Green NaOH >10	Sodium Hydroxide/ ZnAc Black NaOH/Zn Ac >9
1																		1										W				
2																																
3																																
4																																
5																		3														
6																																
7																																
8																																
9																																
10																																
11																																
12																																

Container Codes

Glass

G9H	40mL HCl amber voa vial	BG1T	1L Na Thiosulfate clear glass	BP1B	1L NaOH plastic
G9P	40mL TSP amber vial	BG1U	1L unpreserved glass	BP1N	1L HNO3 plastic
G9S	40mL H2SO4 amber vial	CG3H	250mL HCl Clear Glass	BP1S	1L H2SO4 plastic
G9T	40mL Na Thio amber vial	CG3U	250mL Unpres Clear Glass	BP1U	1L unpreserved plastic
G9U	40mL unpreserved amber vial	AG0U	100mL unpres amber glass	BP1Z	1L NaOH, Zn, Ac
G9H	40mL HCl clear vial	AG1H	1L HCl amber glass	BP2N	500mL HNO3 plastic
G9T	40mL Na Thio. clear vial	AG1S	1L H2SO4 amber glass	BP2C	500mL NaOH plastic
G9U	40mL unpreserved clear vial	AG1T	1L Na Thiosulfate amber glass	BP2S	500mL H2SO4 plastic
I	40mL w/hexane wipe vial	AG1U	1liter unpres amber glass	BP2U	500mL unpreserved plastic
GKU	8oz unpreserved clear jar	AG2N	500mL HNO3 amber glass	BP2Z	500mL NaOH, Zn Ac
GFU	4oz clear soil jar	AG2S	500mL H2SO4 amber glass	BP3B	250mL NaOH plastic
FU	4oz unpreserved amber wide	AG2U	500mL unpres amber glass	BP3N	250mL HNO3 plastic
G3H	250mL clear glass HCl	AG3S	250mL H2SO4 amber glass	BP3F	250mL HNO3 plastic-field filtered
3F	250mL clear glass HCl, Field Filter	AG3SF	250mL H2SO4 amb glass -field filtered	BP3U	250mL unpreserved plastic
1H	1L HCl clear glass	AG3U	250mL unpres amber glass	BP3S	250mL H2SO4 plastic
1S	1L H2SO4 clear glass	AG3B	250mL NaOH amber glass	BP3Z	250mL NaOH, ZnAc plastic

Plastic

NT3U	Non Teflon 250mL unpreserved plastic
BP4U	125mL unpreserved plastic
BP4N	125mL HNO3 plastic
BP4S	125mL H2SO4 plastic

Miscellaneous

Syringe Kit	LL Cr+6 sampling kit
ZPLC	Ziploc Bag
R	Terracore Kit
SP5T	120mL Coliform Sodium Thiosulfate
GN	General Container
U	Summa Can (air sample)
WT	Water
SL	Solid
OL	Oil
NAL	Non-aqueous liquid
WP	Wipe

SAMPLE NO.

MW-4A

FORM I INORGANIC-1

INORGANIC ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Indiana SDG No. : 50381975 Contract: L2450417

Lab Sample ID: 50381975001 Percent Moisture:

CAS No.	Analyte	Concentration	Q	Units	DF	Analysis Date/Time
	Iodide	ND	U	mg/L	1	09/11/2024 15:41

SAMPLE NO.

MW-4B

FORM I INORGANIC-1

INORGANIC ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Indiana SDG No. : 50381975 Contract: L2450417

Lab Sample ID: 50381975002 Percent Moisture:

CAS No.	Analyte	Concentration	Q	Units	DF	Analysis Date/Time
	Iodide	ND	U	mg/L	1	09/11/2024 15:57

SAMPLE NO.

MW-3A

FORM I INORGANIC-1

INORGANIC ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Indiana SDG No. : 50381975 Contract: L2450417

Lab Sample ID: 50381975003 Percent Moisture:

CAS No.	Analyte	Concentration	Q	Units	DF	Analysis Date/Time
	Iodide	ND	U	mg/L	1	09/11/2024 16:14

SAMPLE NO.

MW-3B

FORM I INORGANIC-1

INORGANIC ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Indiana SDG No. : 50381975 Contract: L2450417

Lab Sample ID: 50381975004 Percent Moisture:

CAS No.	Analyte	Concentration	Q	Units	DF	Analysis Date/Time
	Iodide	ND	U	mg/L	1	09/11/2024 16:31

SAMPLE NO.

MW-2A

FORM I INORGANIC-1

INORGANIC ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Indiana SDG No. : 50381975 Contract: L2450417

Lab Sample ID: 50381975005 Percent Moisture:

CAS No.	Analyte	Concentration	Q	Units	DF	Analysis Date/Time
	Iodide	ND	U	mg/L	1	09/11/2024 16:49

SAMPLE NO.

MW-2B

FORM I INORGANIC-1

INORGANIC ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Indiana SDG No. : 50381975 Contract: L2450417

Lab Sample ID: 50381975006 Percent Moisture:

CAS No.	Analyte	Concentration	Q	Units	DF	Analysis Date/Time
	Iodide	ND	U	mg/L	1	09/11/2024 18:18

SAMPLE NO.

MW-9A

FORM I INORGANIC-1

INORGANIC ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Indiana SDG No. : 50381975 Contract: L2450417

Lab Sample ID: 50381975007 Percent Moisture:

CAS No.	Analyte	Concentration	Q	Units	DF	Analysis Date/Time
	Iodide	ND	U	mg/L	1	09/11/2024 18:36

SAMPLE NO.

MW-9B

FORM I INORGANIC-1

INORGANIC ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Indiana SDG No. : 50381975 Contract: L2450417

Lab Sample ID: 50381975008 Percent Moisture:

CAS No.	Analyte	Concentration	Q	Units	DF	Analysis Date/Time
	Iodide	ND	U	mg/L	1	09/11/2024 18:53

FORM II INORGANIC-1

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: Pace Analytical - Indiana SDG No. : 50381975 Contract: L2450417

Initial Calibration Verification Source: 391054

Continuing Calibration Verification Source: 392572

Concentration Units: mg/L Instrument ID: 50IC05

	Initial Calibration Verification				Continuing Calibration Verification						
	09/06/2024 14:03				09/11/2024 10:50			09/11/2024 14:16			Control Limit
Analyte	True	Found	%R	Control Limit	True	Found	%R	True	Found	%R	
Iodide	5.0	5.0	99.4	90-110	1.0	1.0	100.0	1.0	0.99	99.0	90-110

FORM II INORGANIC-2

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: Pace Analytical - Indiana SDG No. : 50381975 Contract: L2450417

Initial Calibration Verification Source:

Continuing Calibration Verification Source: 392572

Concentration Units: mg/L Instrument ID: 50IC05

	Continuing Calibration Verification						
	09/11/2024 17:42			09/11/2024 19:47			Control Limit
Analyte	True	Found	%R	True	Found	%R	
Iodide	1.0	1.0	102.4	1.0	1.0	100.5	90-110

FORM III INORGANIC-1

BLANKS

Lab Name: Pace Analytical - Indiana SDG No. : 50381975 Contract : L2450417

Method Blank Matrix: Water Instrument ID: 50IC05

Method Blank Concentration Units: mg/L

Analyte	Initial Calibration Blank (mg/L)		Continuing Calibration Blank (mg/L)						Method Blank	
	09/06/2024 14:22	C	09/11/2024 11:06	C	09/11/2024 14:33	C	09/11/2024 18:00	C	3696993	C
Iodide	0.068	U	0.068	U	0.068	U	0.068	U	ND	U

FORM III INORGANIC-2

BLANKS

Lab Name: Pace Analytical - Indiana SDG No. : 50381975 Contract : L2450417

Method Blank Matrix: Instrument ID: 50IC05

Method Blank Concentration Units:

Analyte	Initial Calibration Blank		Continuing Calibration Blank (mg/L)					
		C	09/11/2024 20:05	C		C		C
Iodide			0.068	U				

SAMPLE NO.

3696995MS

FORM V INORGANIC-1

MATRIX SPIKE SAMPLE RECOVERY

Lab Name: Pace Analytical - Indiana SDG No. : 50381975 Contract: L2450417

Matrix: Water Basis: Wet Parent Sample ID: MW-2A

Percent Moisture:

Analyte	Units	Control Limit %R	Spiked Sample Result (SSR)	Sample Result (SR)	Spike Added (SA)	%R
Iodide	mg/L	80-120	5.0	ND	5.0	101

SAMPLE NO.

3696996MSD

FORM V INORGANIC-2

MATRIX SPIKE SAMPLE RECOVERY

Lab Name: Pace Analytical - Indiana SDG No. : 50381975 Contract: L2450417

Matrix: Water Basis: Wet Parent Sample ID: MW-2A

Percent Moisture:

Analyte	Units	Control Limit %R	Spiked Sample Result (SSR)	Sample Result (SR)	Spike Added (SA)	%R
Iodide	mg/L	80-120	5.0	ND	5.0	101

SAMPLE NO.

3696996MSD

FORM VI INORGANIC-1
DUPLICATES

Lab Name: Pace Analytical - Indiana SDG No. : 50381975 Contract: L2450417

Matrix: Water Concentration Units: mg/L

Percent Moisture: Basis: Wet

Analyte	RPD Control Limit	Sample	Duplicate	RPD
Iodide	15	5.0	5.0	0

SAMPLE NO.

3696994LCS

FORM VII INORGANIC-1
LABORATORY CONTROL SAMPLE

Lab Name: Pace Analytical - Indiana SDG No. : 50381975 Contract: L2450417

Matrix: Water

Analyte	Units	True	Found	%R	Limits	
Iodide	mg/L	5.0	4.9	99	80	120

FORM XII INORGANIC-1
PREPARATION LOG

Lab Name: Pace Analytical - Indiana SDG No. : 50381975 Contract: L2450417

Preparation Method: EPA 9056 Batch: GCSV 57521

Lab Sample ID	Sample Name	Preparation Date	Initial Volume (mL)	Final Volume (mL)
3696993	3696993BLANK	09/11/2024	10	10
3696994	3696994LCS	09/11/2024	10	10
3696995	3696995MS	09/11/2024	10	10
3696996	3696996MSD	09/11/2024	10	10
50381975001	MW-4A	09/11/2024	10	10
50381975002	MW-4B	09/11/2024	10	10
50381975003	MW-3A	09/11/2024	10	10
50381975004	MW-3B	09/11/2024	10	10
50381975005	MW-2A	09/11/2024	10	10
50381975006	MW-2B	09/11/2024	10	10
50381975007	MW-9A	09/11/2024	10	10
50381975008	MW-9B	09/11/2024	10	10

FORM XIII INORGANIC-1
ANALYSIS RUN LOG

Lab Name: Pace Analytical - Indiana SDG No. : 50381975 Contract: L2450417

Instrument ID: 50IC05 Analysis Method: EPA 9056

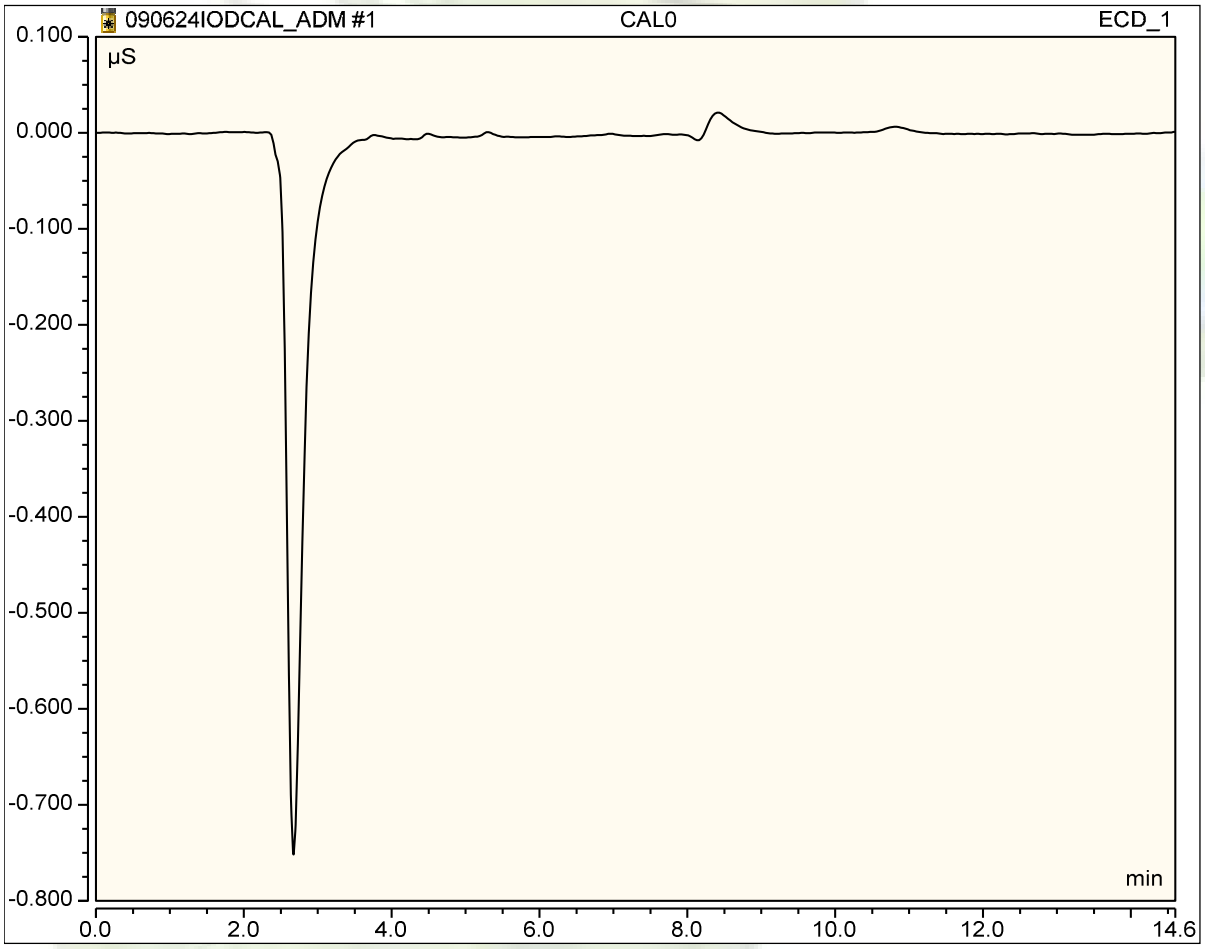
Start Date: 09/06/2024 12:22 End Date: 09/11/2024 20:05

Sample Name	Lab Sample ID	D/F	Date	Time	iodi
25592659CAL0	25592659CAL0	1	09/06/2024	12:22	X
25592660CAL1	25592660CAL1	1	09/06/2024	12:39	X
25592661CAL2	25592661CAL2	1	09/06/2024	12:55	X
25592662CAL3	25592662CAL3	1	09/06/2024	13:12	X
25592663CAL4	25592663CAL4	1	09/06/2024	13:29	X
25592664CAL5	25592664CAL5	1	09/06/2024	13:46	X
25592665ICV	25592665ICV	1	09/06/2024	14:03	X
25751833ICB	25751833ICB	1	09/06/2024	14:22	X
25619679CCV	25619679CCV	1	09/11/2024	10:50	X
25619680CCB	25619680CCB	1	09/11/2024	11:06	X
3696993BLANK	3696993	1	09/11/2024	11:23	X
3696994LCS	3696994	1	09/11/2024	11:40	X
25619681CCV	25619681CCV	1	09/11/2024	14:16	X
25619682CCB	25619682CCB	1	09/11/2024	14:33	X
MW-4A	50381975001	1	09/11/2024	15:41	X
MW-4B	50381975002	1	09/11/2024	15:57	X
MW-3A	50381975003	1	09/11/2024	16:14	X
MW-3B	50381975004	1	09/11/2024	16:31	X
MW-2A	50381975005	1	09/11/2024	16:49	X
3696995MS	3696995	1	09/11/2024	17:07	X
3696996MSD	3696996	1	09/11/2024	17:25	X
25619687CCV	25619687CCV	1	09/11/2024	17:42	X
25619688CCB	25619688CCB	1	09/11/2024	18:00	X
MW-2B	50381975006	1	09/11/2024	18:18	X
MW-9A	50381975007	1	09/11/2024	18:36	X
MW-9B	50381975008	1	09/11/2024	18:53	X
25619690CCV	25619690CCV	1	09/11/2024	19:47	X
25619691CCB	25619691CCB	1	09/11/2024	20:05	X

CAL0
371408

Sample Name:	CAL0	Injection Volume (uL):	25.00
Vial Number:	GE1	Channel:	ECD_1
Sample Type:	Calibration Standard	Calibration:	09/06/24 14:50
Control ro!ram:	"#IC#"I$%&'S((	Eluent Stoc):	392545
*uanti+, -ethod:	C'L.I$%I%E#"	%ilution /actor	1.0000
0ecordin! Time:	09/06/2024 12:22	Sample 1ei!ht:	1.0000
0un Time (min):	12,3#	Sy4tem Name:	50IC05

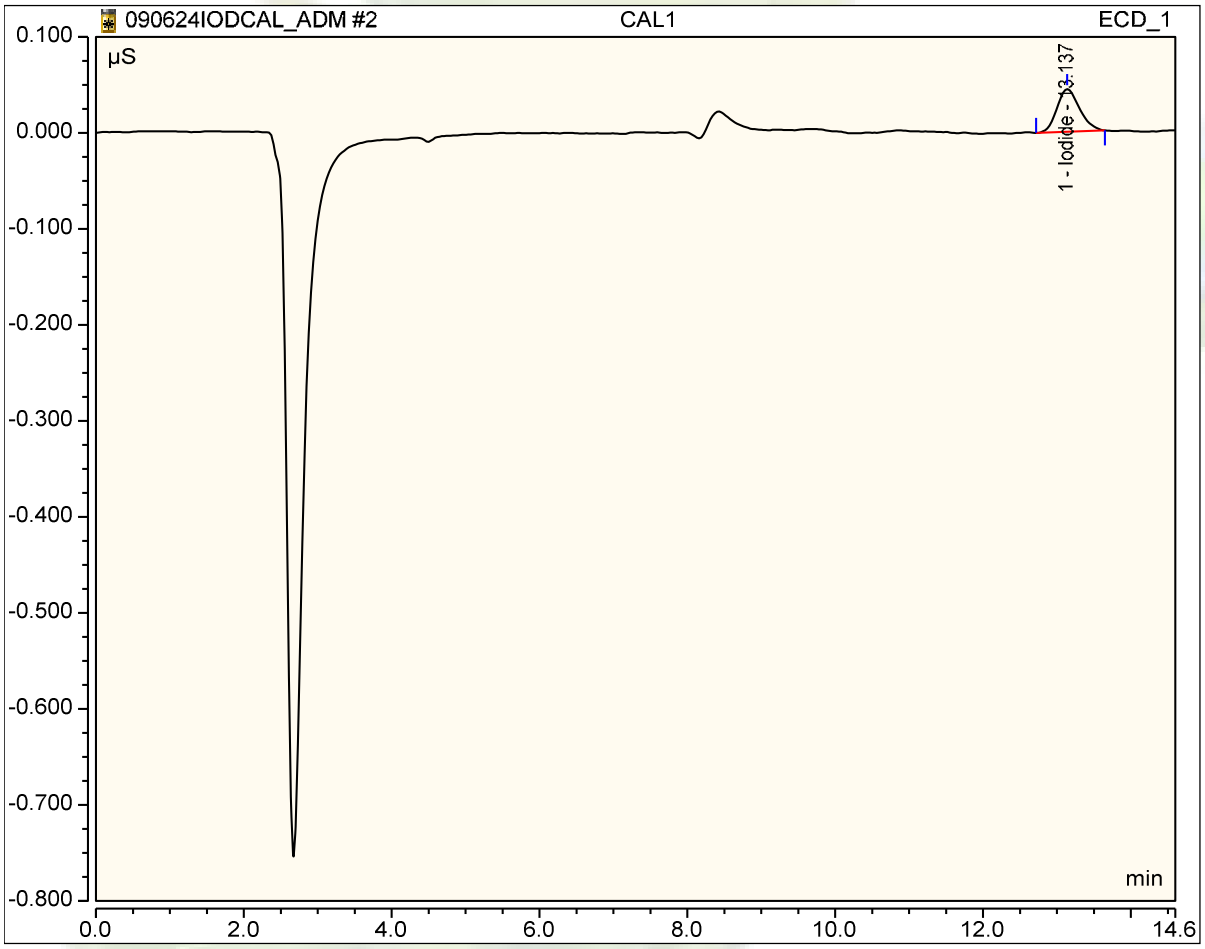
No.	Retention Time min	Name	Amo nt n.a.	A!ea '()min	"ei#$t '(	T%&e



CAL1
371407

Sample Name:	CAL1	Injection Volume (uL):	25.00
Vial Number:	GE(	Channel:	ECD_1
Sample Type:	Calibration Standard	Calibration:	09/06/24 14:50
Control ro!ram:	"#IC#"I$%&'S((	Eluent Stoc):	392545
*uanti+, -ethod:	C'L.I$%I%E#"	%ilution /actor	1.0000
0ecordin! Time:	09/06/2024 12:39	Sample 1ei!ht:	1.0000
0un Time (min):	12,3#	Sy4tem Name:	50IC05

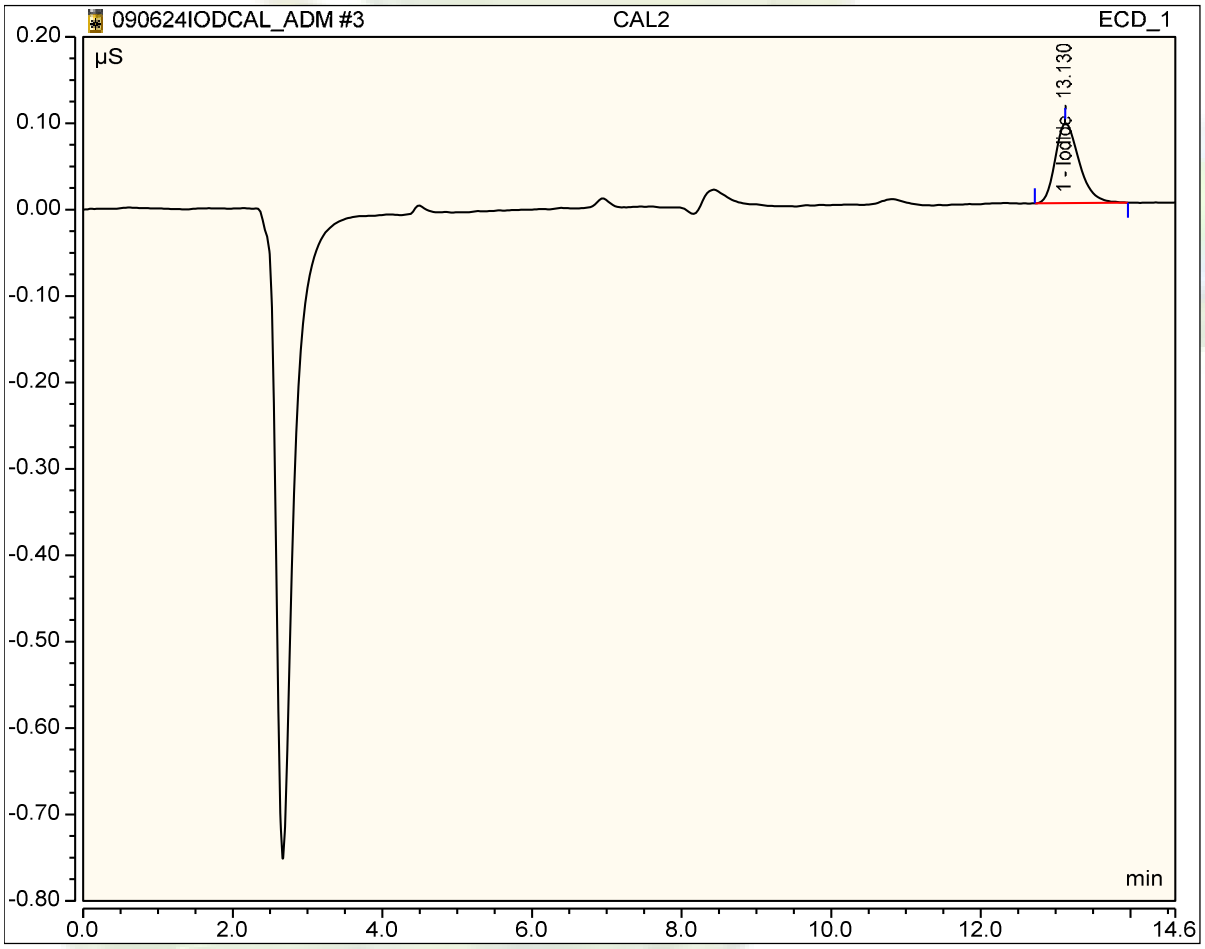
No.	Retention Time min	Name	Amo nt m#/L	A!ea '()min	"ei#$t '(	T%&e
1	13.14	Io*i*e	0.4913	0.016	0.045	BMB



CAL2
371406

Sample Name:	CAL2	Injection Volume (uL):	25.00
Vial Number:	***5(***	Channel:	ECD_1
Sample Type:	Calibration Standard	Calibration:	09/06/24 14:50
Control ro***!***ram:	***"#***IC#"I***$%&***'S***((***	Eluent Stoc***)***:	392545
*******uanti***+, -*** ethod:	C'L.I***$%***I%E#"	***%***ilution ***/***actor	1.0000
0ecordin***!*** Time:	09/06/2024 12:55	Sample ***1***ei***!***ht:	1.0000
0un Time (min):	1***2,3#***	Sy***4***tem Name:	50IC05

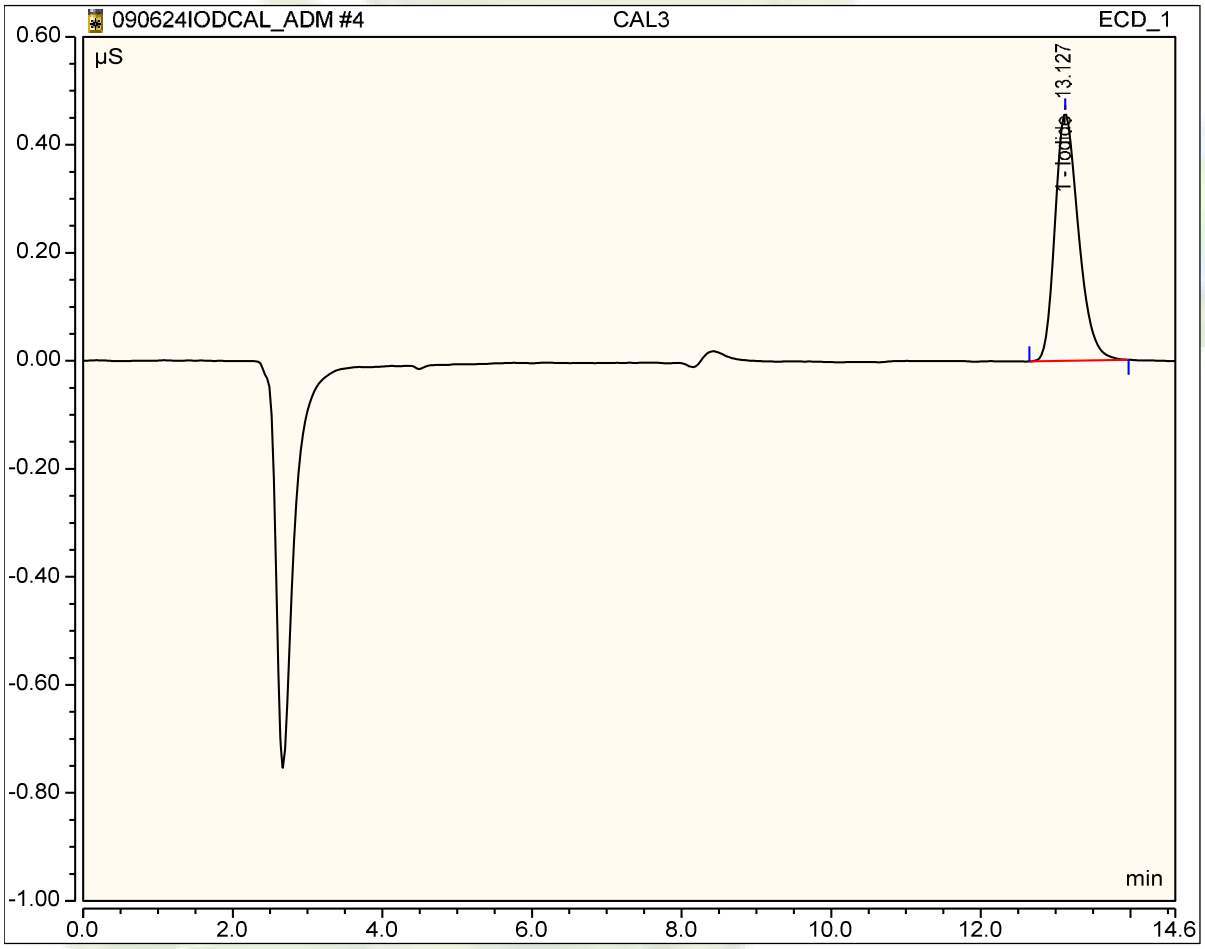
No.	Retention Time min	Name	Amo nt m#/L	A!ea '()min	"ei#$t '(	T%&e
1	13.13	Io*i*e	1.0331	0.034	0.093	BMB



CAL3
371405

Sample Name:	CAL3	Injection Volume (uL):	25.00
Vial Number:	GE*6*	Channel:	ECD_1
Sample Type:	Calibration Standard	Calibration:	09/06/24 14:50
Control ro*!*ram:	*"#*IC#"I$%&'S((	Eluent Stoc*)*:	392545
***uanti+, -ethod:	C'L.I$%I%E#"	%ilution /actor	1.0000
*0*ecordin*!* Time:	09/06/2024 13:12	Sample *1*ei*!*ht:	1.0000
*0*un Time (min):	1*2,3#*	Sy*4*tem Name:	50IC05

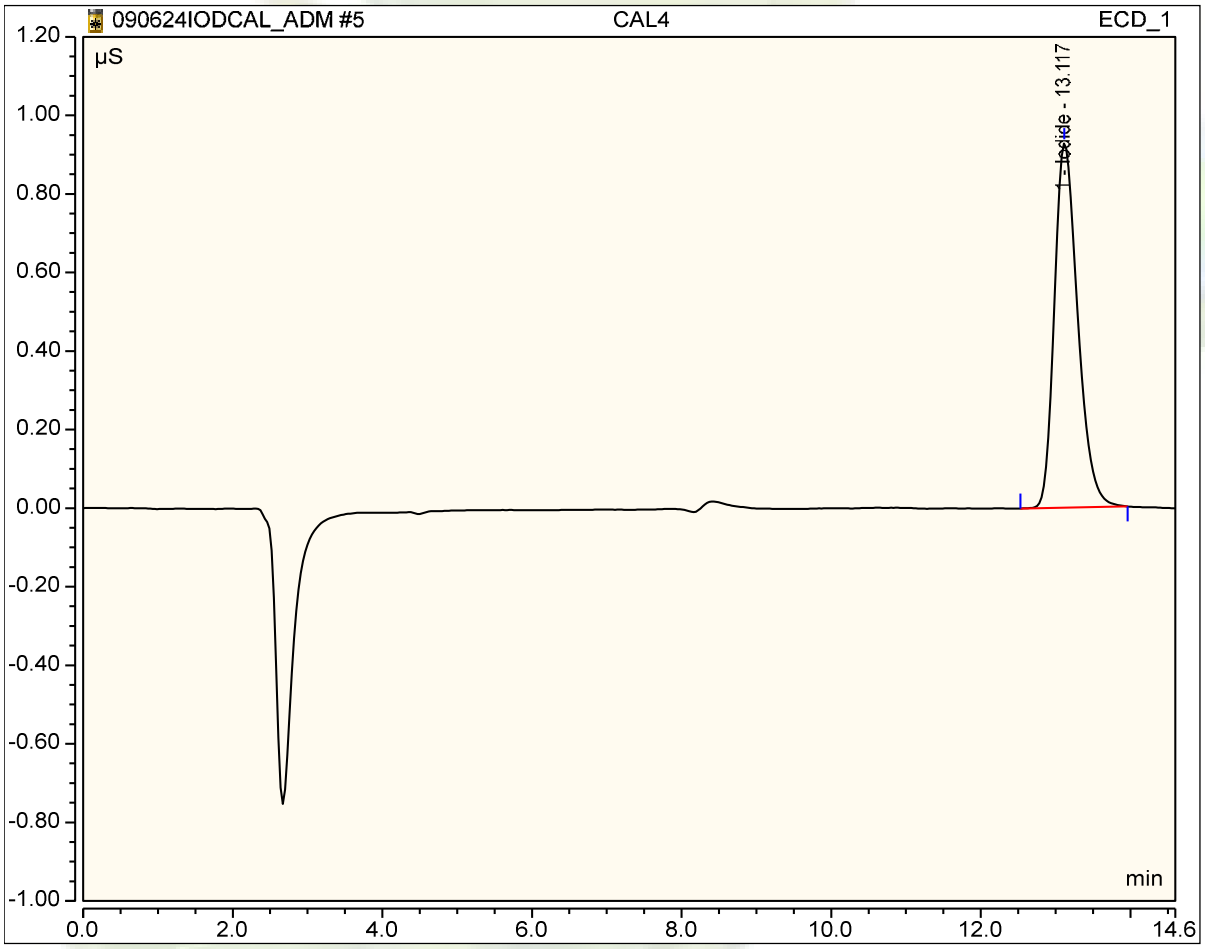
No.	Retention Time min	Name	Amo nt m#/L	A!ea '()min	"ei#$t '(	T%&e
1	13.13	Io*i*e	4.9411	0.167	0.458	BMB



CAL4
371404

Sample Name:	CAL4	Injection Volume (uL):	25.00
Vial Number:	GE*2*	Channel:	ECD_1
Sample Type:	Calibration Standard	Calibration:	09/06/24 14:50
Control ro*!*ram:	*"#*IC#"I$%&'S((	Eluent Stoc*)*:	392545
***uanti+, -ethod:	C'L.I$%I%E#"	%ilution /actor	1.0000
*0*ecordin*!* Time:	09/06/2024 13:29	Sample *1*ei*!*ht:	1.0000
*0*un Time (min):	1*2,3#*	Sy*4*tem Name:	50IC05

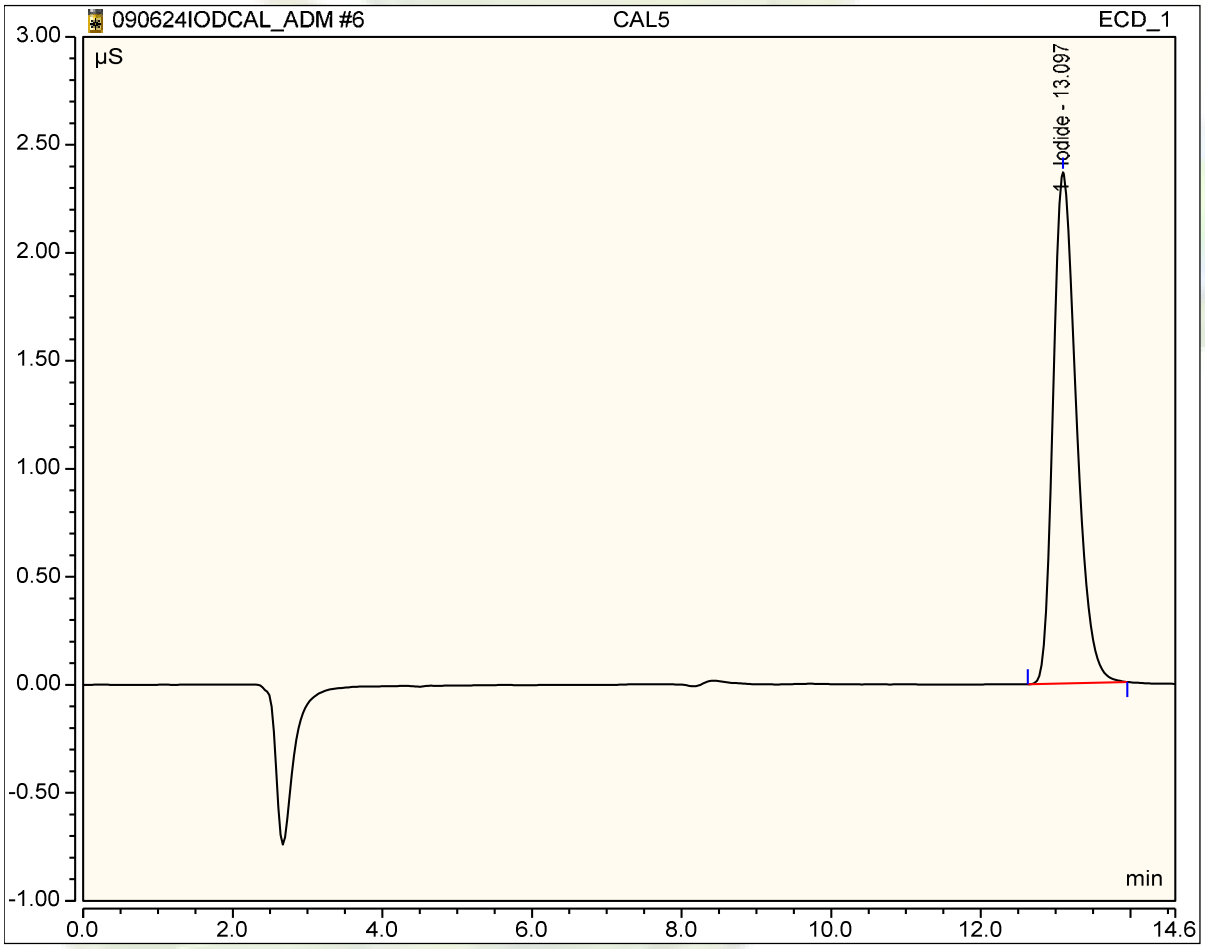
No.	Retention Time min	Name	Amo nt m#/L	A!ea '()min	"ei#$t '(	T%&e
1	13.12	Io*i*e	9.9122	0.336	0.928	BMB



CAL5
371403

Sample Name:	CAL5	Injection Volume (uL):	25.00
Vial Number:	GE"	Channel:	ECD_1
Sample Type:	Calibration Standard	Calibration:	09/06/24 14:50
Control ro!ram:	"#IC#"I$%&'S((	Eluent Stoc):	392545
*uanti+, -ethod:	C'L.I$%I%E#"	%ilution /actor	1.0000
0ecordin! Time:	09/06/2024 13:46	Sample 1ei!ht:	1.0000
0un Time (min):	12,3#	Sy4tem Name:	50IC05

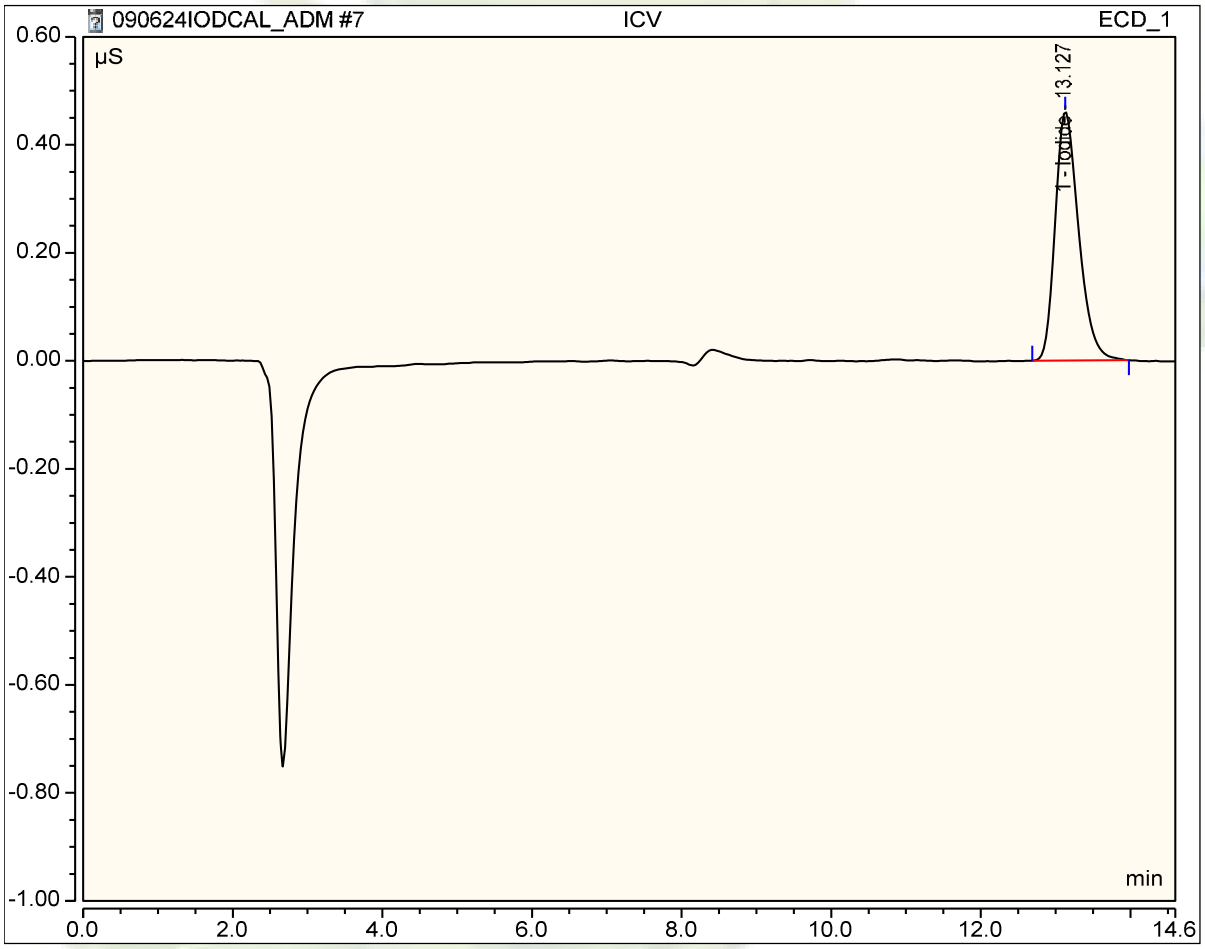
No.	Retention Time min	Name	Amo nt m#/L	A!ea '()min	"ei#$t '(	T%&e
1	13.10	Io*i*e	25.1222	0.853	2.365	BMB



IC+
371401

Sample Name:	IC+	Injection Volume (uL):	25.00
Vial Number:	56	Channel:	ECD_1
Sample Type:	7n)no8n	Calibration:	09/06/24 14:50
Control ro!ram:	"#IC#"I$%&'S((	Eluent Stoc):	392545
*uanti+, -ethod:	C'L.I$%I%E#"	%ilution /actor	1.0000
0ecordin! Time:	09/06/2024 14:03	Sample 1ei!ht:	1.0000
0un Time (min):	12,3#	Sy4tem Name:	50IC05

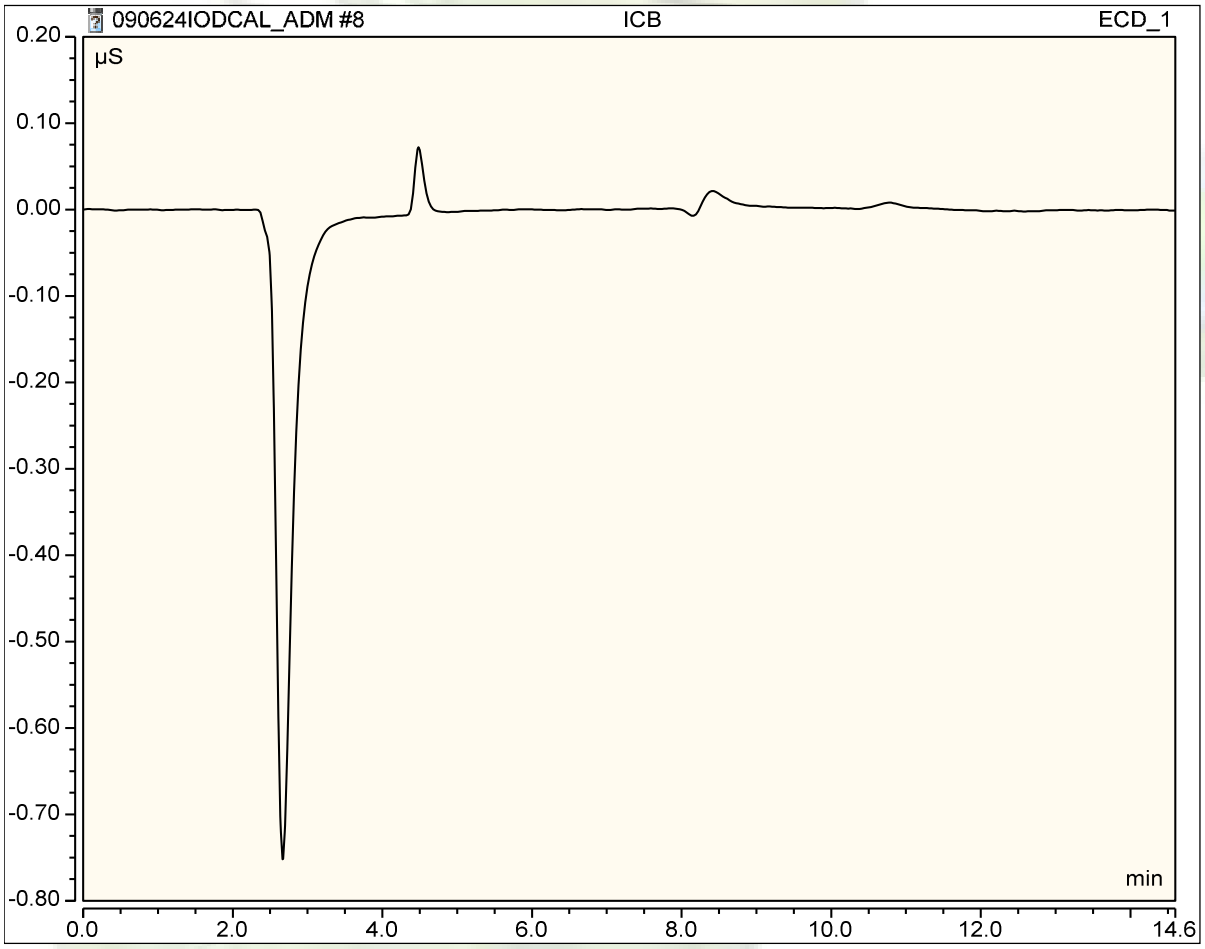
No.	Retention Time min	Name	Amo nt m#/L	A!ea '()min	"ei#$t '(	T%&e
1	13.13	Io*i*e	4.9692	0.168	0.461	BMB



IC ,
340111

Sample Name:	IC ,	Injection Volume (uL):	25.00
Vial Number:	51	Channel:	ECD_1
Sample Type:	7n)no8n	Calibration:	09/06/24 14:50
Control ro!ram:	"#IC#"I$%&'S((	Eluent Stoc):	392545
*uanti+, -ethod:	C'L.I$%I%E#"	%ilution /actor	1.0000
0ecordin! Time:	09/06/2024 14:22	Sample 1ei!ht:	1.0000
0un Time (min):	12,3#	Sy4tem Name:	50IC05

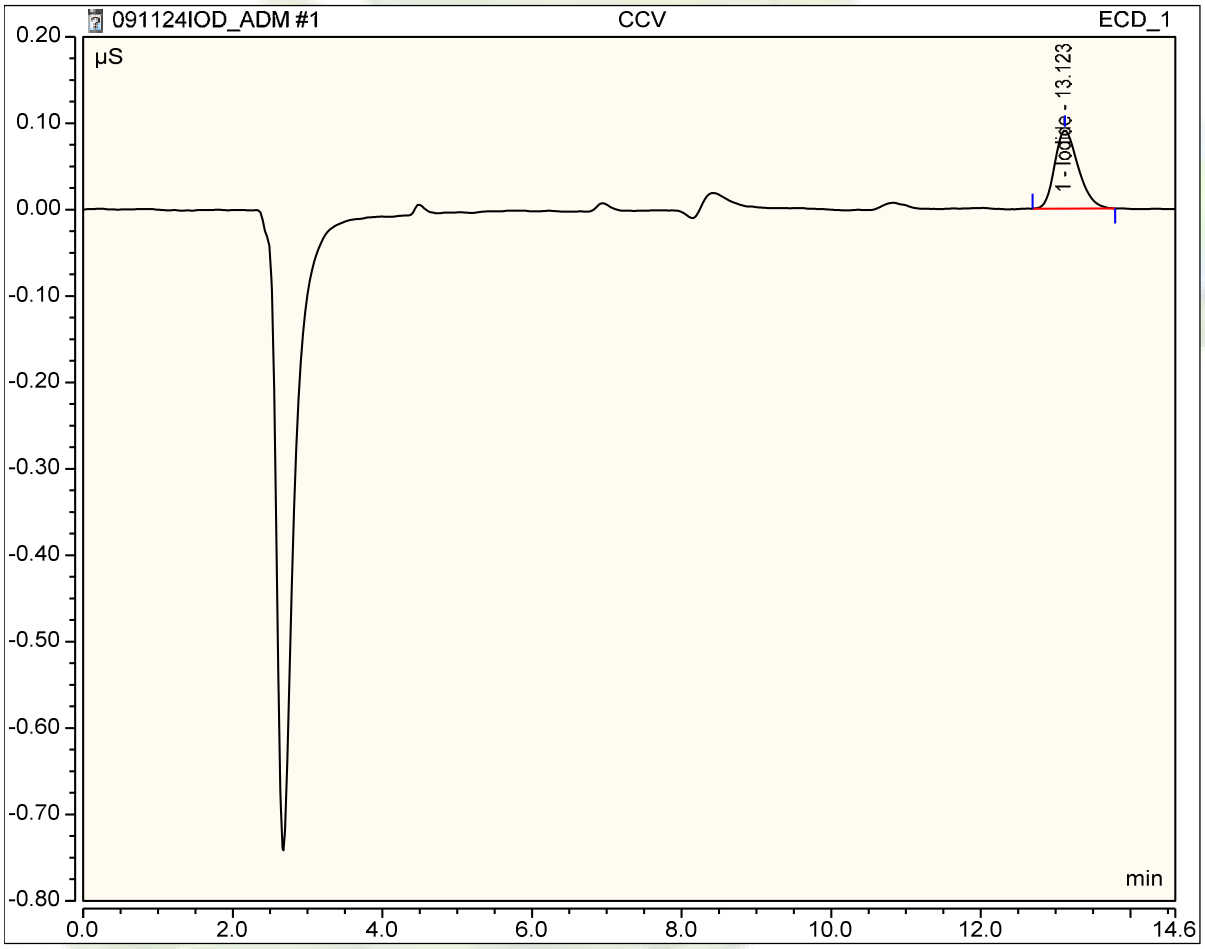
No.	Retention Time min	Name	Amo nt n.a.	A!ea '()min	"ei#$t '(	T%&e



CCV
392572

Sample Name:	CCV	Injection Volume (uL):	25.00
Vial Number:	B2	Channel:	ECD_1
Sample Type:	Unkno n	Calibration:	09/06/24 14:50
Control ! ro"ram:	#IC#I%&'(S22	) luent Stock:	392545
* uanti+ - etho. :	C(L/ I%&I&) $#	&ilution 0actor	1.0000
1 ecor. in" Time:	09/11/2024 10:50	Sample 2 ei"ht:	1.0000
1 un Time (min):	34,5$	Sy6tem Name:	50IC05

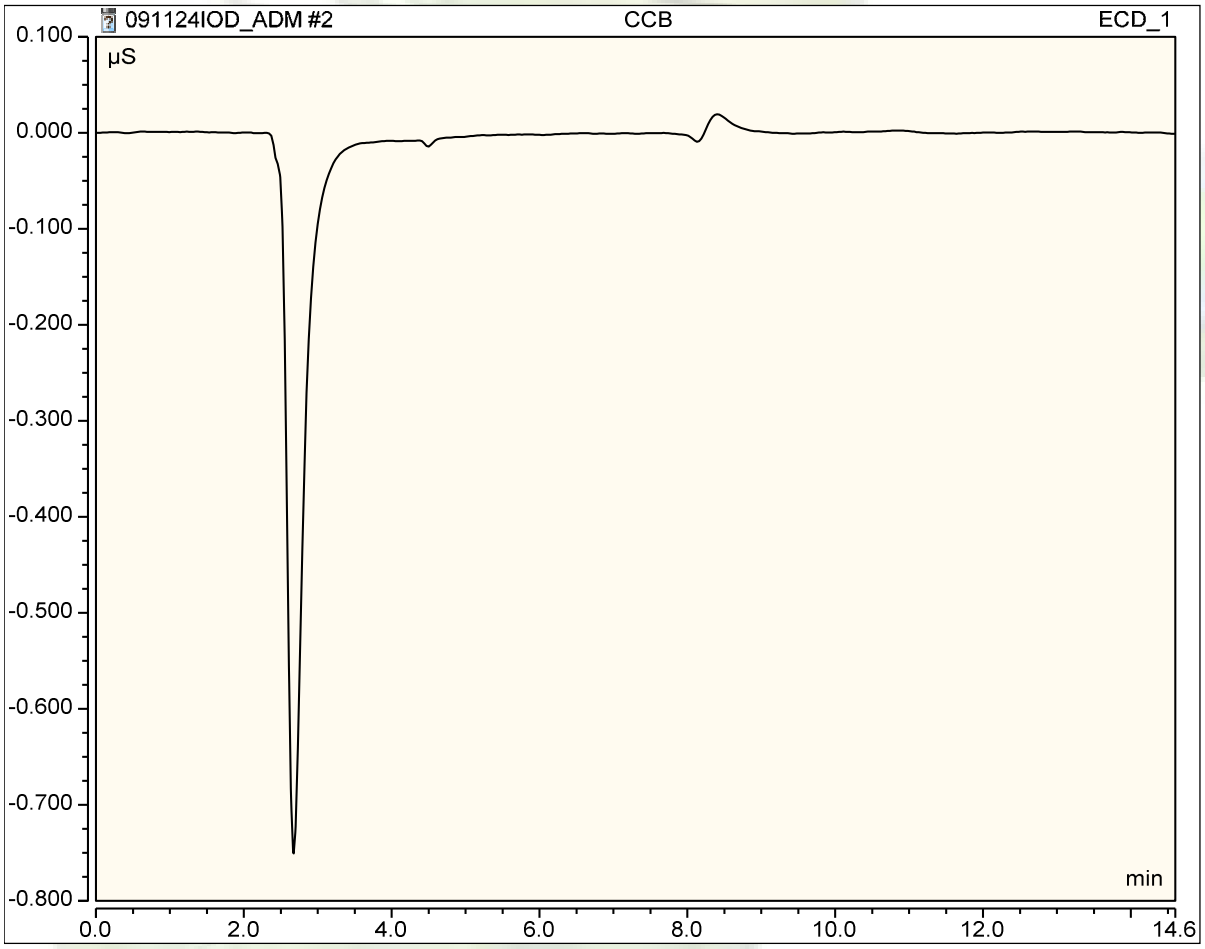
No.	Retention Time min	Name	Amount m"/&	A ea ' ( )min	! ei"#t ' (	T$%e
1	13.12	Io* i* e	1.0004	0.033	0.090	BMB



CC+
340111

Sample Name:	CC+	Injection Volume (uL):	25.00
Vial Number:	B4	Channel:	ECD_1
Sample Type:	Unkno n	Calibration:	09/06/24 14:50
Control ! ro"ram:	#IC#I%&'(S22	) luent Stock:	392545
* uanti+ - etho. :	C(L/ I%&I&) $#	&ilution 0actor	1.0000
1ecor. in" Time:	09/11/2024 11:06	Sample 2 ei"ht:	1.0000
1un Time (min):	34,5$	Sy6tem Name:	50IC05

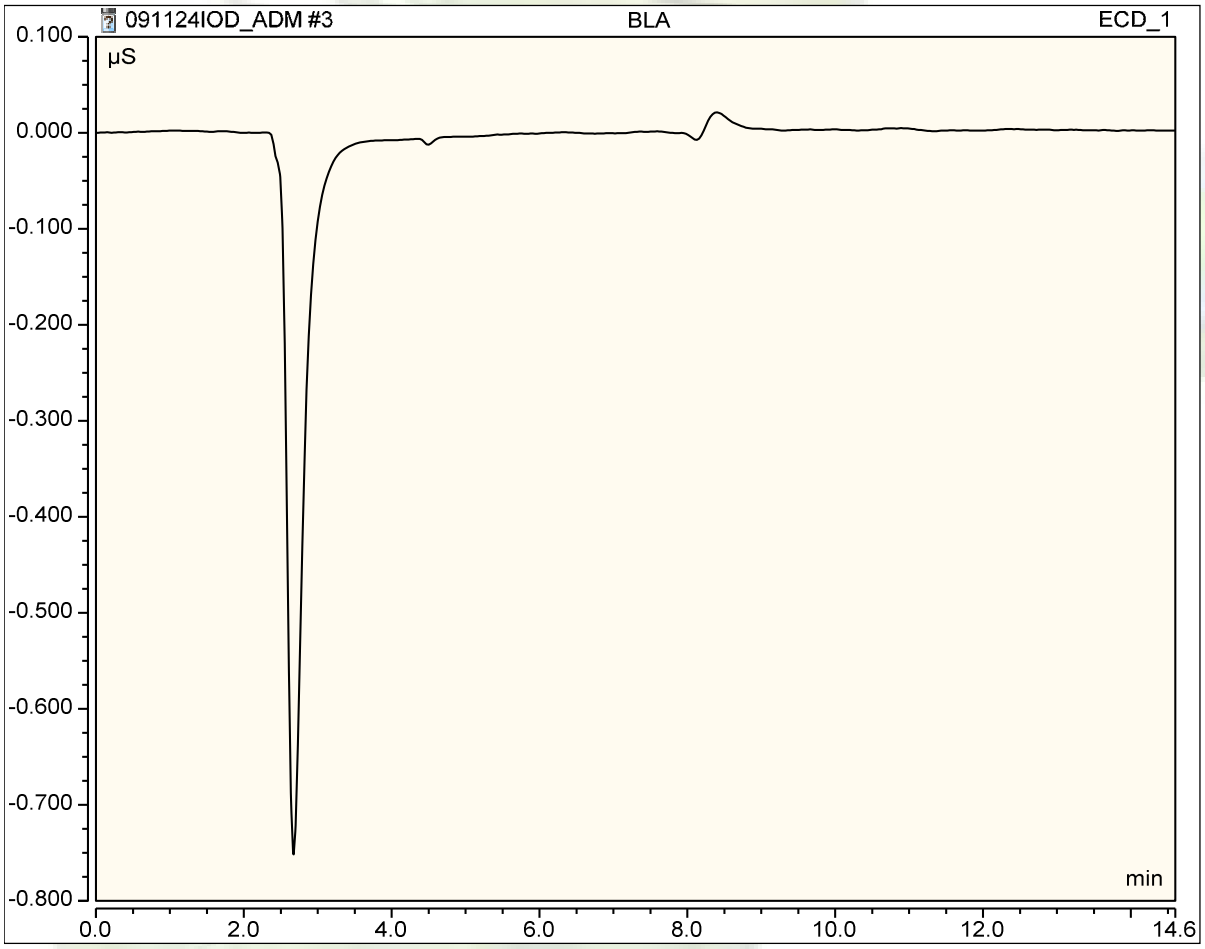
No.	Retention Time min	Name	Amount n.a.	A ea ' ( )min	! ei"#t ' (	T$%e



+ &A
340111

Sample Name:	+ &A	Injection Volume (uL):	25.00
Vial Number:	B*3*	Channel:	ECD_1
Sample Type:	Unkno n	Calibration:	09/06/24 14:50
Control *!* ro"ram:	*#$*IC*$#*I*%&'(* S22	*)* luent Stock:	392545
* uanti+ - etho. :	C*(* L/ I*%&*I*&) $#*	*&*ilution *0*actor	1.0000
1 ecor. in" Time:	09/11/2024 11:23	Sample *2* ei"ht:	1.0000
1 un Time (min):	*34,5$*	Sy*6*tem Name:	50IC05

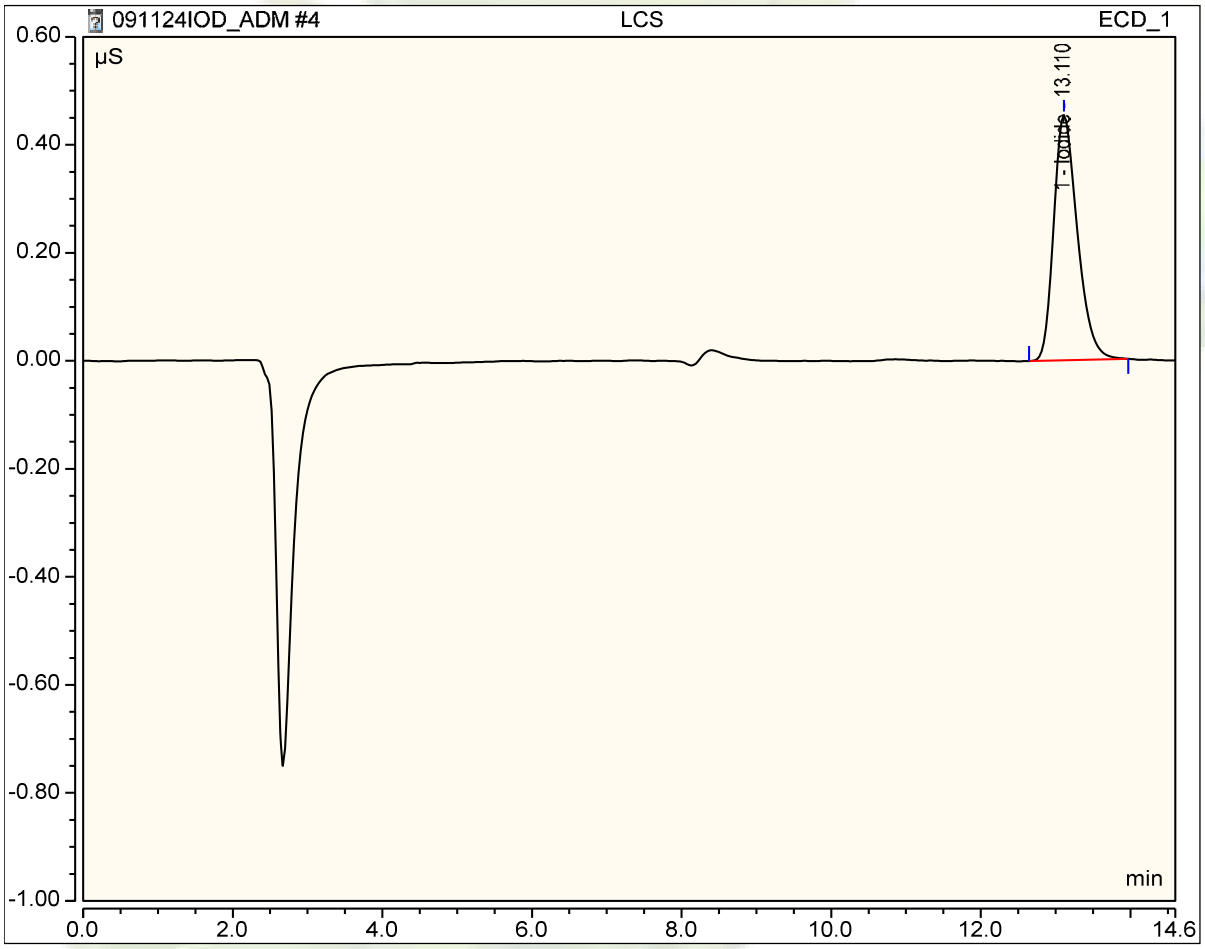
No.	Retention Time min	Name	Amount n.a.	A ea ' ( )min	! ei"#t ' (	T$%e



&C(
346539

Sample Name:	&C(	Injection Volume (uL):	25.00
Vial Number:	B7	Channel:	ECD_1
Sample Type:	Unkno n	Calibration:	09/06/24 14:50
Control ! ro"ram:	#IC#I%&'(S22	) luent Stock:	392545
* uanti+ - etho. :	C(L/ I%&I&) $#	&ilution 0actor	1.0000
1 ecor. in" Time:	09/11/2024 11:40	Sample 2 ei"ht:	1.0000
1 un Time (min):	34,5$	Sy6tem Name:	50IC05

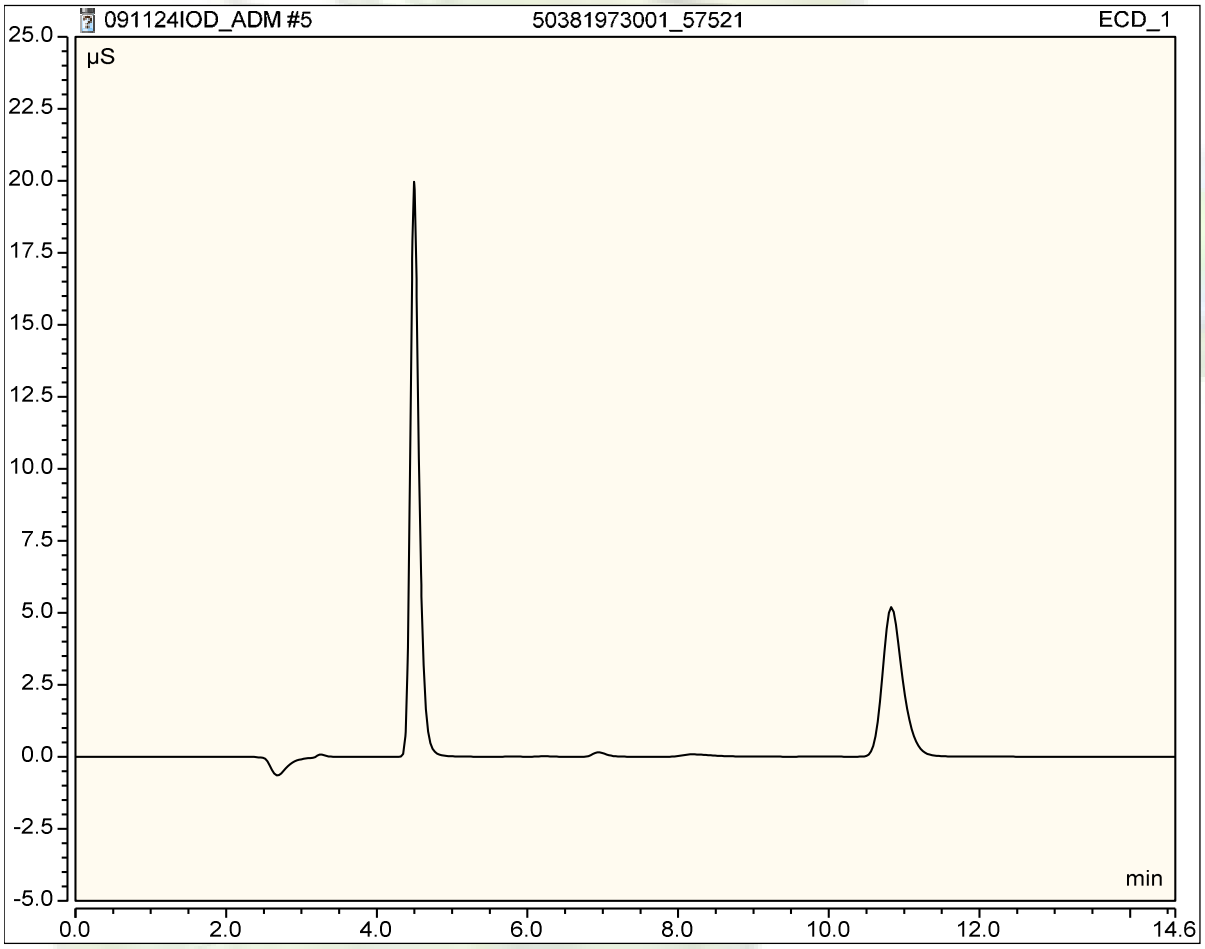
No.	Retention Time min	Name	Amount m"/&	A ea ' ( )min	! ei"#t ' (	T$%e
1	13.11	Io* i* e	4.9277	0.167	0.454	BMB



503, 1973001_57521

Sample Name:	503, 1973001_57521	Injection Volume (uL):	25.00
Vial Number:	B(3	Channel:	ECD_1
Sample Type:	Unkno n	Calibration:	09/06/24 14:50
Control ! ro"ram:	#IC#I%&'(S22	) luent Stock:	392545
* uanti+ - etho. :	C(L/ I%&I&) $#	&ilution 0actor	1.0000
1 ecor. in" Time:	09/11/2024 11:57	Sample 2 ei"ht:	1.0000
1 un Time (min):	34,5$	Sy6tem Name:	50IC05

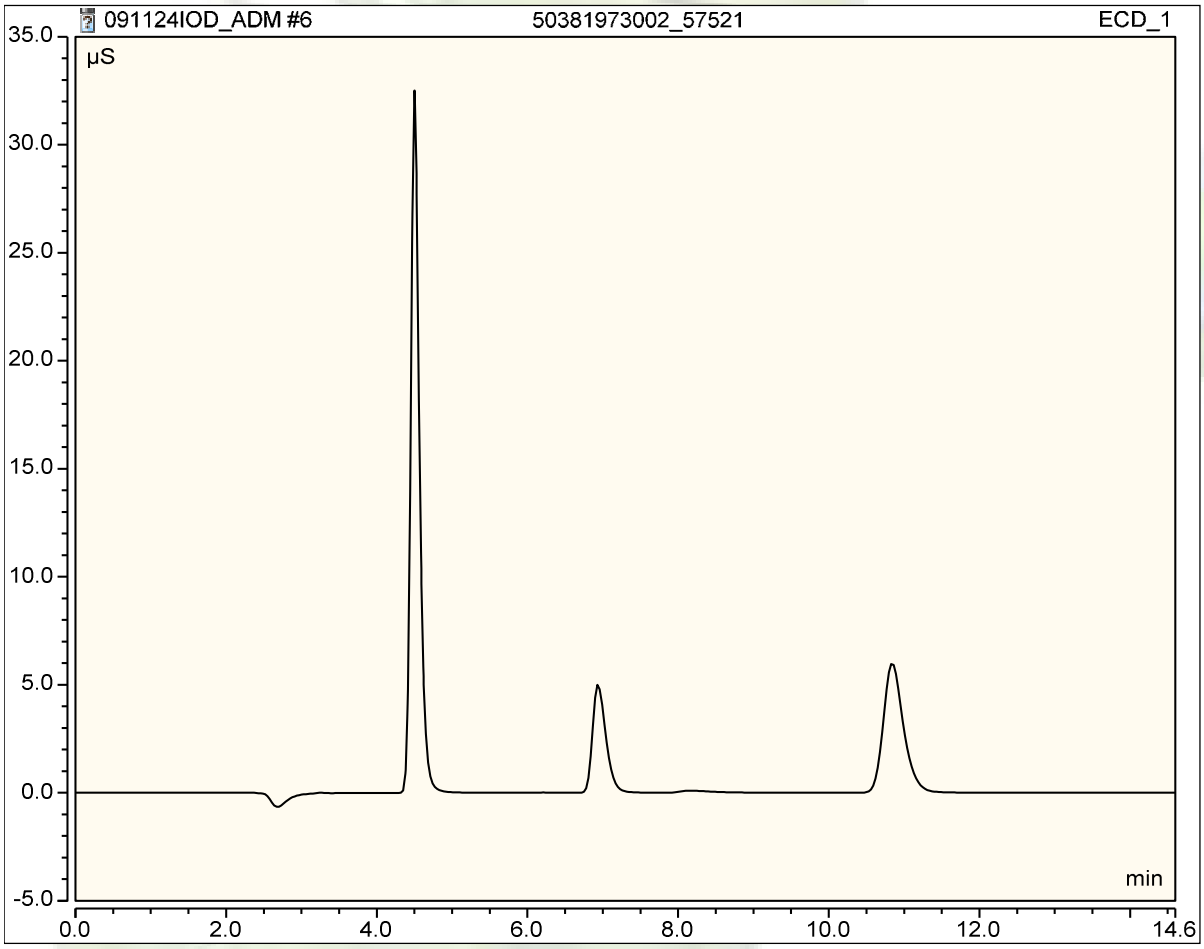
No.	Retention Time min	Name	Amount n.a.	A ea ' ( )min	! ei"#t ' (	T$%e



503, 1973002_57521

Sample Name:	503, 1973002_57521	Injection Volume (uL):	25.00
Vial Number:	B(2	Channel:	ECD_1
Sample Type:	Unkno n	Calibration:	09/06/24 14:50
Control ! ro"ram:	#IC#I%&'(S22	) luent Stock:	392545
* uanti+ - etho. :	C(L/ I%&I&) $#	&ilution 0actor	1.0000
1ecor. in" Time:	09/11/2024 12:15	Sample 2 ei"ht:	1.0000
1un Time (min):	34,5$	Sy6tem Name:	50IC05

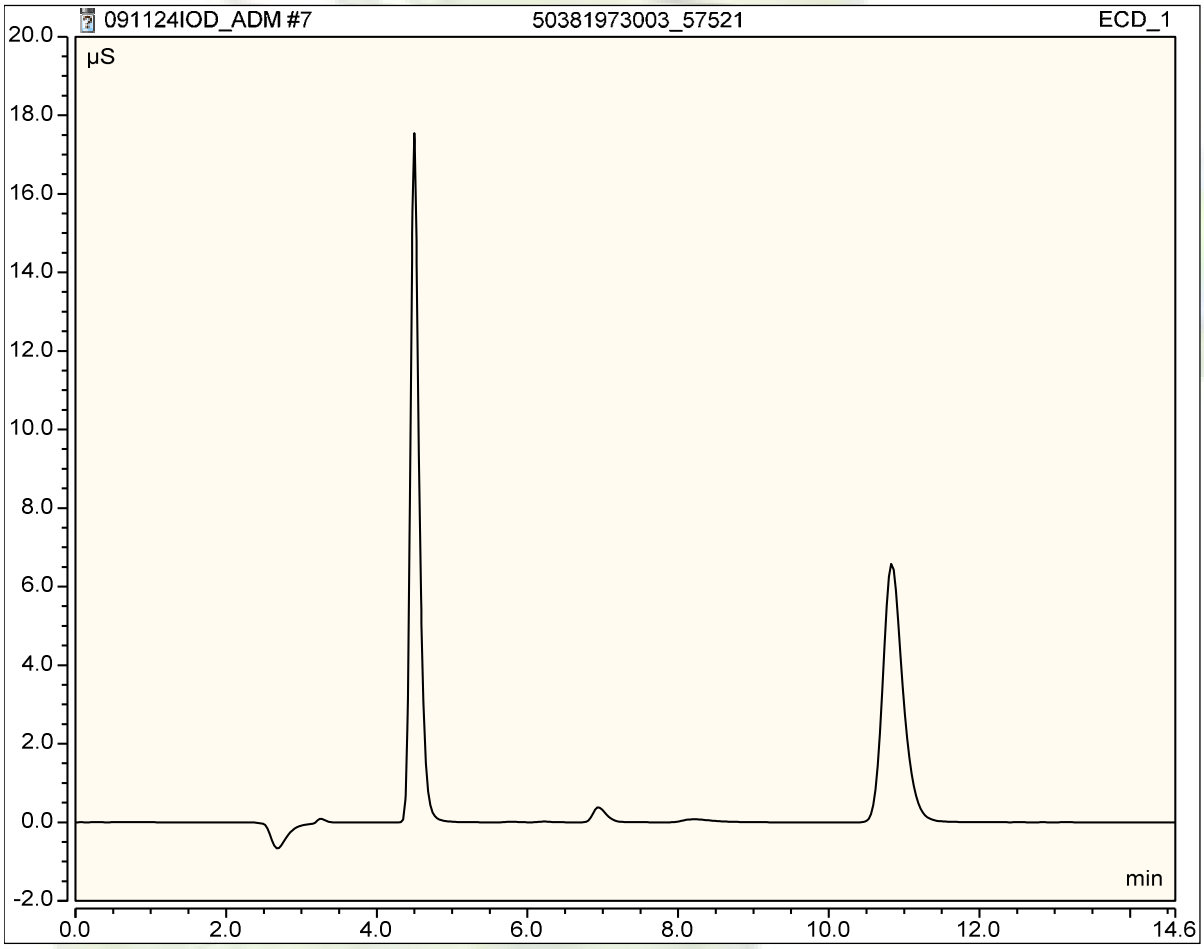
No.	Retention Time min	Name	Amount n.a.	A ea ' ( )min	! ei"#t ' (	T$%e



503, 1973003_57521

Sample Name:	503, 1973003_57521	Injection Volume (uL):	25.00
Vial Number:	B(7	Channel:	ECD_1
Sample Type:	Unkno n	Calibration:	09/06/24 14:50
Control ! ro"ram:	#IC#I%&'(S22	) luent Stock:	392545
* uanti+ - etho. :	C(L/ I%&I&) $#	&ilution 0actor	1.0000
1ecor. in" Time:	09/11/2024 12:33	Sample 2 ei"ht:	1.0000
1un Time (min):	34,5$	Sy6tem Name:	50IC05

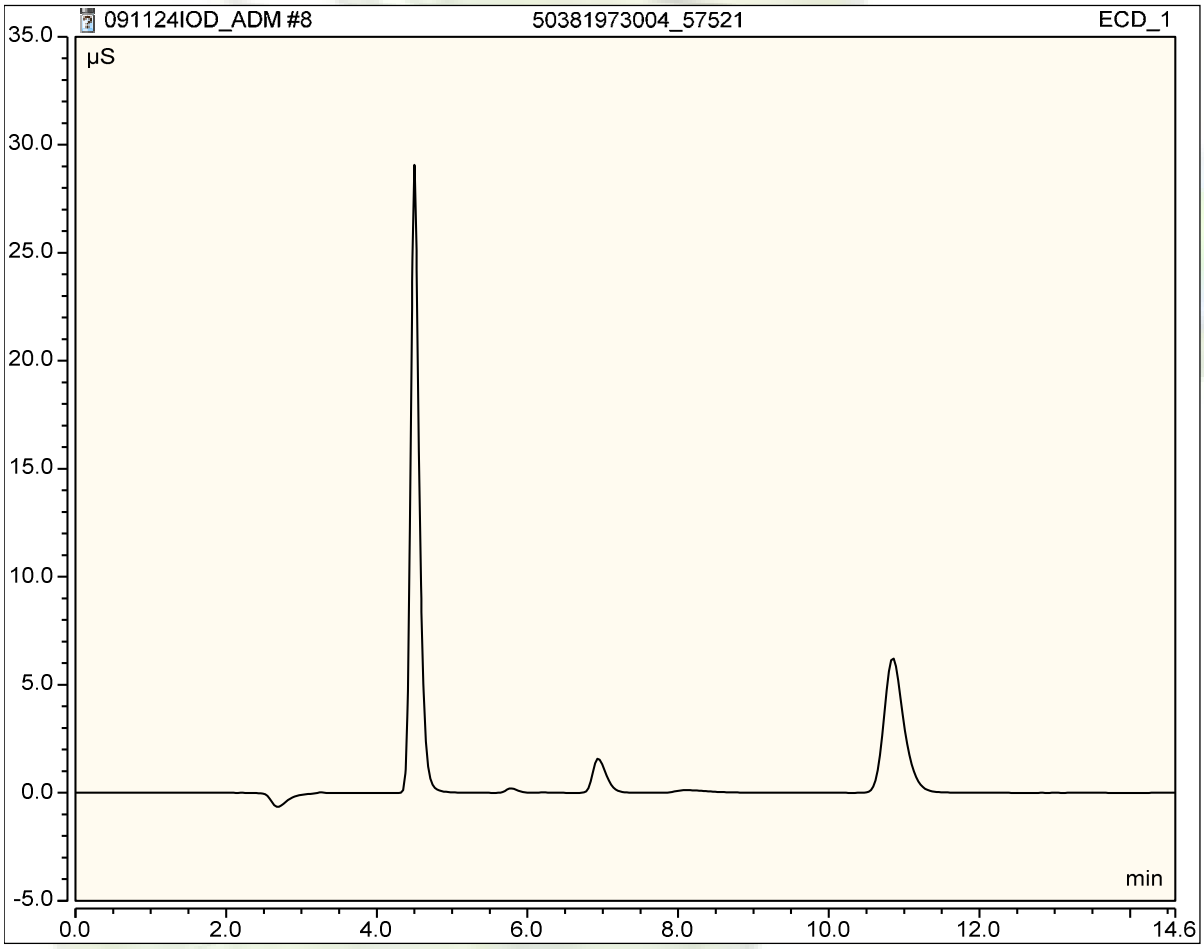
No.	Retention Time min	Name	Amount n.a.	A ea ' ( )min	! ei"#t ' (	T$%e



503, 1973004_57521

Sample Name:	503, 1973004_57521	Injection Volume (uL):	25.00
Vial Number:	B(4	Channel:	ECD_1
Sample Type:	Unkno n	Calibration:	09/06/24 14:50
Control ! ro"ram:	#IC#I%&'(S22	) luent Stock:	392545
* uanti+ - etho. :	C(L/ I%&I&) $#	&ilution 0actor	1.0000
1 ecor. in" Time:	09/11/2024 12:51	Sample 2 ei"ht:	1.0000
1 un Time (min):	34,5$	Sy6tem Name:	50IC05

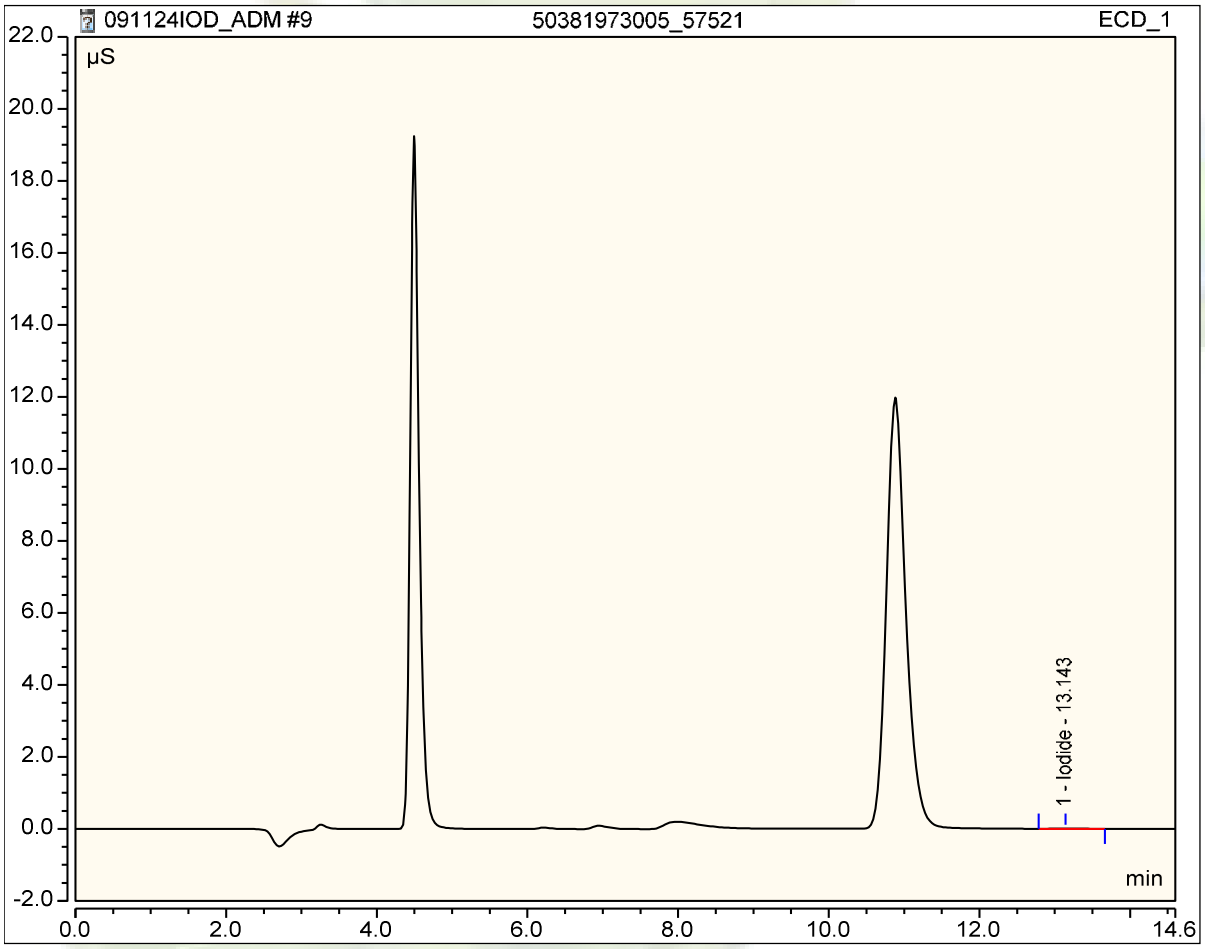
No.	Retention Time min	Name	Amount n.a.	A ea ' ( )min	! ei"#t ' (	T$%e



503, 1973005_57521

Sample Name:	503, 1973005_57521	Injection Volume (uL):	25.00
Vial Number:	B(#	Channel:	ECD_1
Sample Type:	Unkno n	Calibration:	09/06/24 14:50
Control ! ro"ram:	#IC#I%&'(S22	) luent Stock:	392545
* uanti+ - etho. :	C(L/ I%&I&) $#	&ilution 0actor	1.0000
1 ecor. in" Time:	09/11/2024 13:0,	Sample 2 ei"ht:	1.0000
1 un Time (min):	34,5$	Sy6tem Name:	50IC05

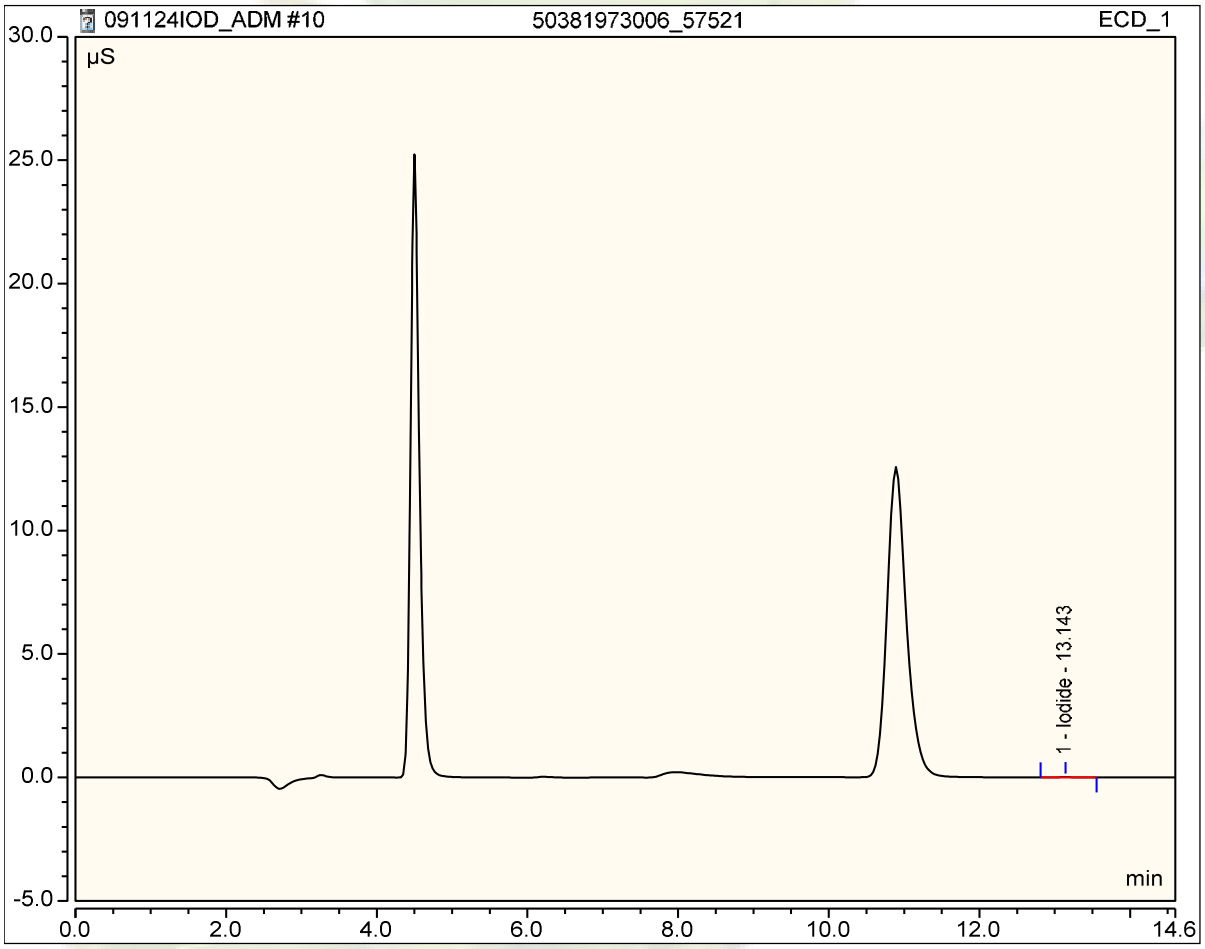
No.	Retention Time min	Name	Amount m"/&	A ea ' ( )min	! ei"#t ' (	T$%e
1	13.14	Io* i* e	0.1082	0.003	0.008	BMB



503, 1973006_57521

Sample Name:	503, 1973006_57521	Injection Volume (uL):	25.00
Vial Number:	B(5	Channel:	ECD_1
Sample Type:	Unkno n	Calibration:	09/06/24 14:50
Control ! ro"ram:	#IC#I%&'(S22	) luent Stock:	392545
* uanti+ - etho. :	C(L/ I%&I&) $#	&ilution 0actor	1.0000
1 ecor. in" Time:	09/11/2024 13:25	Sample 2 ei"ht:	1.0000
1 un Time (min):	34,5$	Sy6tem Name:	50IC05

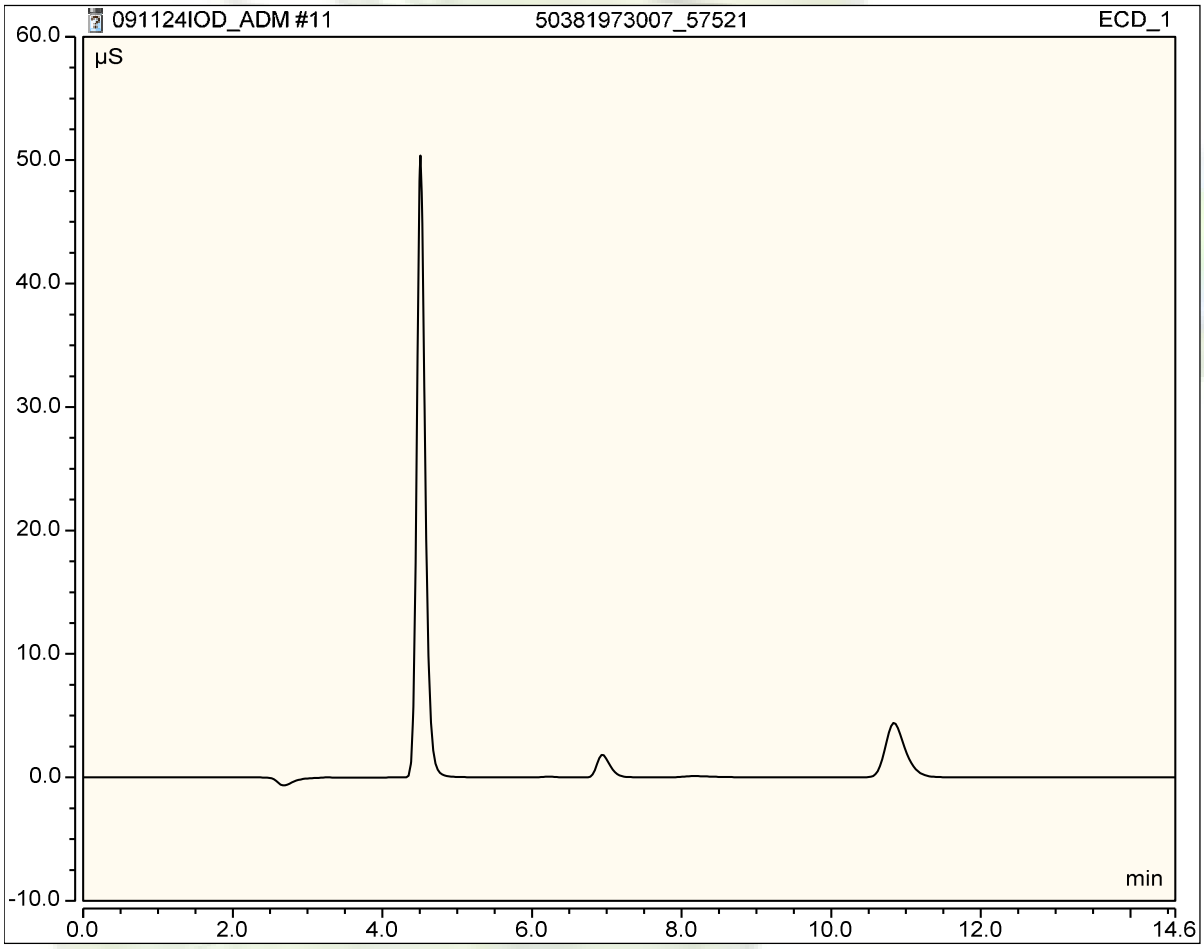
No.	Retention Time min	Name	Amount m"/&	A ea ' ( )min	! ei"#t ' (	T$%e
1	13.14	Io* i* e	0.1022	0.003	0.008	BMB



503, 1973007_57521

Sample Name:	503, 1973007_57521	Injection Volume (uL):	25.00
Vial Number:	B(8	Channel:	ECD_1
Sample Type:	Unkno n	Calibration:	09/06/24 14:50
Control ! ro"ram:	#IC#I%&'(S22	) luent Stock:	392545
* uanti+ - etho. :	C(L/ I%&I&) $#	&ilution 0actor	1.0000
1 ecor. in" Time:	09/11/2024 13:42	Sample 2 ei"ht:	1.0000
1 un Time (min):	34,5$	Sy6tem Name:	50IC05

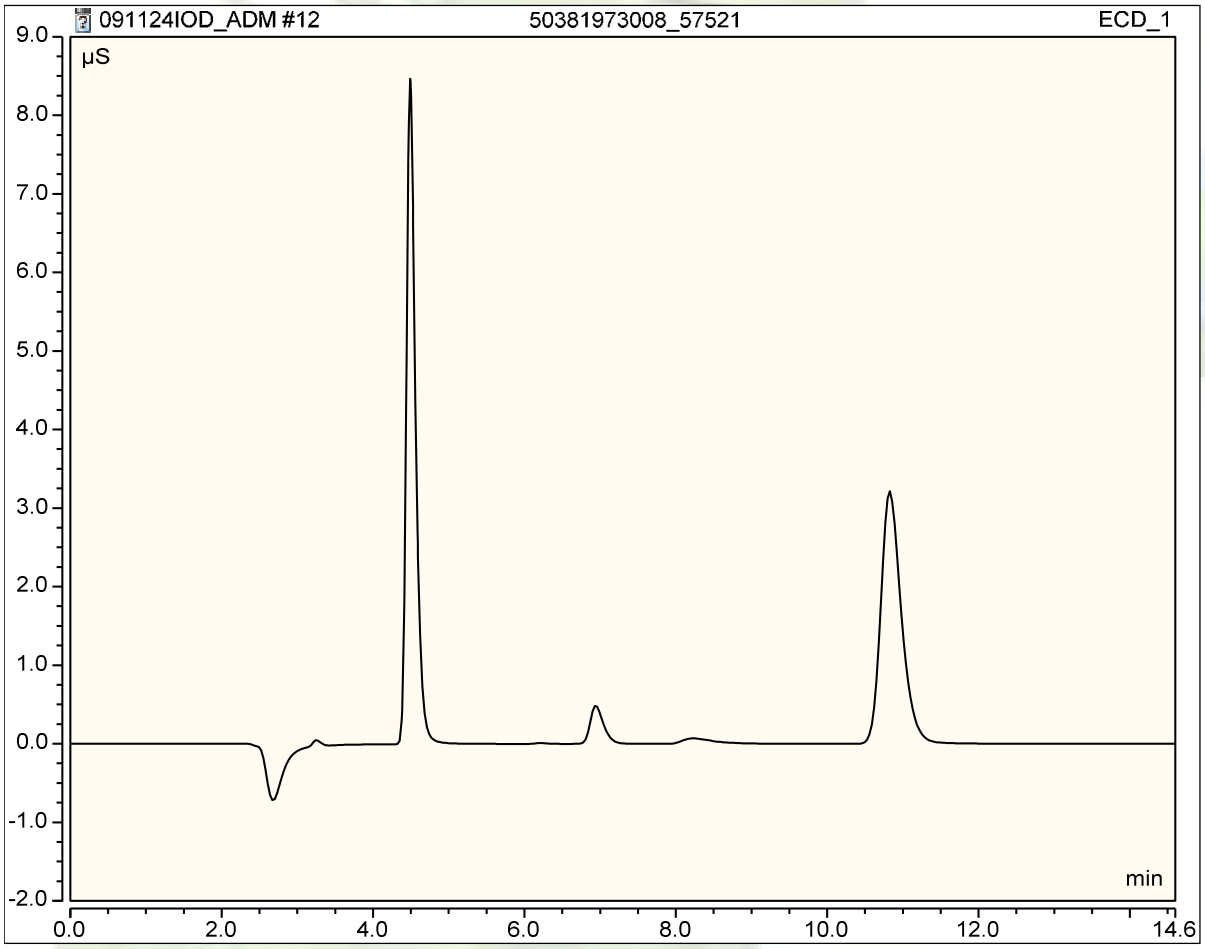
No.	Retention Time min	Name	Amount n.a.	A ea ' ( )min	! ei"#t ' (	T$%e



503, 197300, _57521

Sample Name:	503, 197300, _57521	Injection Volume (uL):	25.00
Vial Number:	B(9	Channel:	ECD_1
Sample Type:	Unkno n	Calibration:	09/06/24 14:50
Control ! ro"ram:	#IC#I%&'(S22	) luent Stock:	392545
* uanti+ - etho. :	C(L/ I%&I&) $#	&ilution 0actor	1.0000
1 ecor. in" Time:	09/11/2024 13:59	Sample 2 ei"ht:	1.0000
1 un Time (min):	34,5$	Sy6tem Name:	50IC05

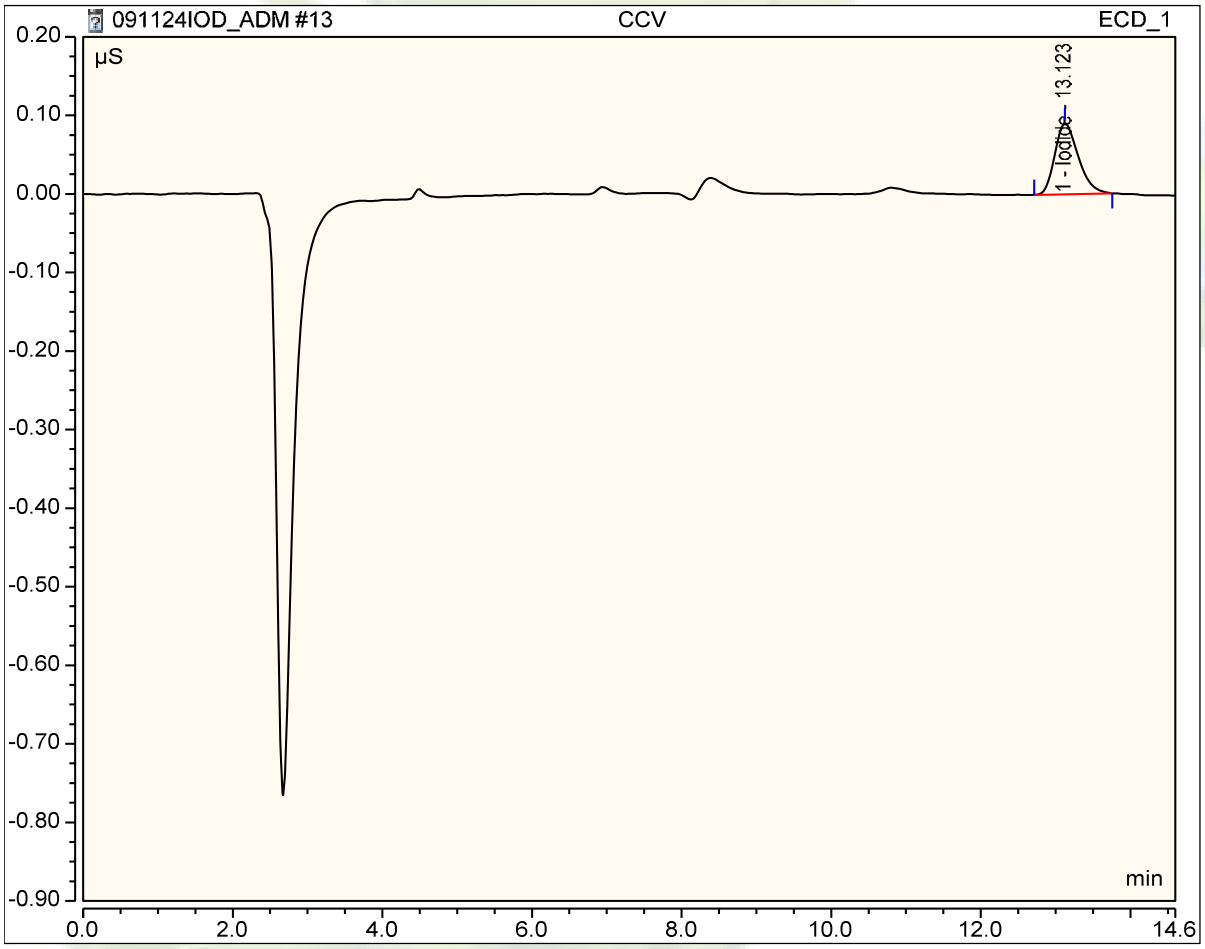
No.	Retention Time min	Name	Amount n.a.	A ea ' ( )min	! ei"#t ' (	T$%e



CCV
392572

Sample Name:	CCV	Injection Volume (uL):	25.00
Vial Number:	B2	Channel:	ECD_1
Sample Type:	Unkno n	Calibration:	09/06/24 14:50
Control ! ro"ram:	#IC#I%&'(S22	) luent Stock:	392545
* uanti+ - etho. :	C(L/ I%&I&) $#	&ilution 0actor	1.0000
1 ecor. in" Time:	09/11/2024 14:16	Sample 2 ei"ht:	1.0000
1 un Time (min):	34,5$	Sy6tem Name:	50IC05

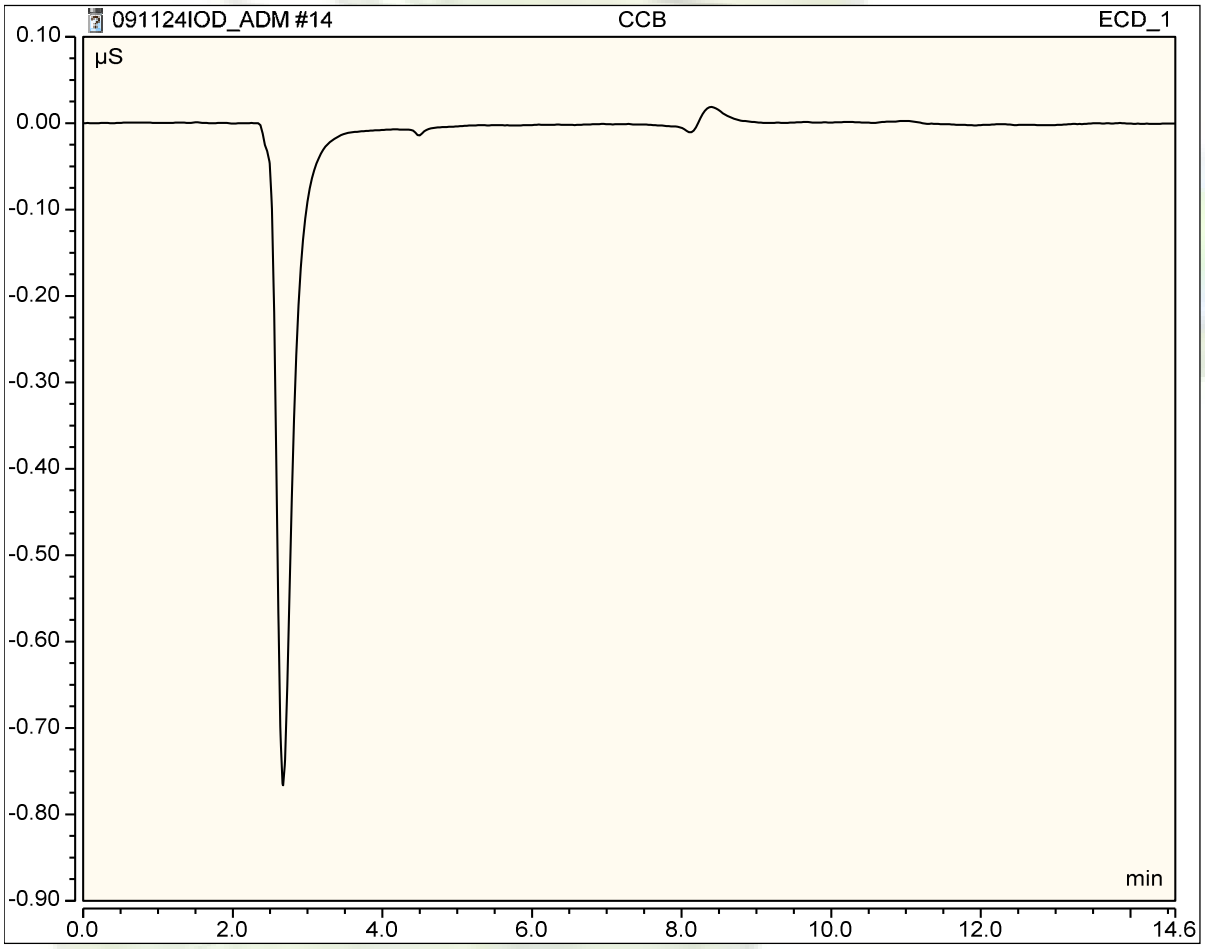
No.	Retention Time min	Name	Amount m"/&	A ea ' ( )min	! ei"#t ' (	T$%e
1	13.12	Io* i* e	0.9898	0.033	0.090	BMB



CC+
340111

Sample Name:	CC+	Injection Volume (uL):	25.00
Vial Number:	B4	Channel:	ECD_1
Sample Type:	Unkno n	Calibration:	09/06/24 14:50
Control ! ro"ram:	#IC#I%&'(S22	) luent Stock:	392545
* uanti+ - etho. :	C(L/ I%&I&) $#	&ilution 0actor	1.0000
1ecor. in" Time:	09/11/2024 14:33	Sample 2 ei"ht:	1.0000
1un Time (min):	34,5$	Sy6tem Name:	50IC05

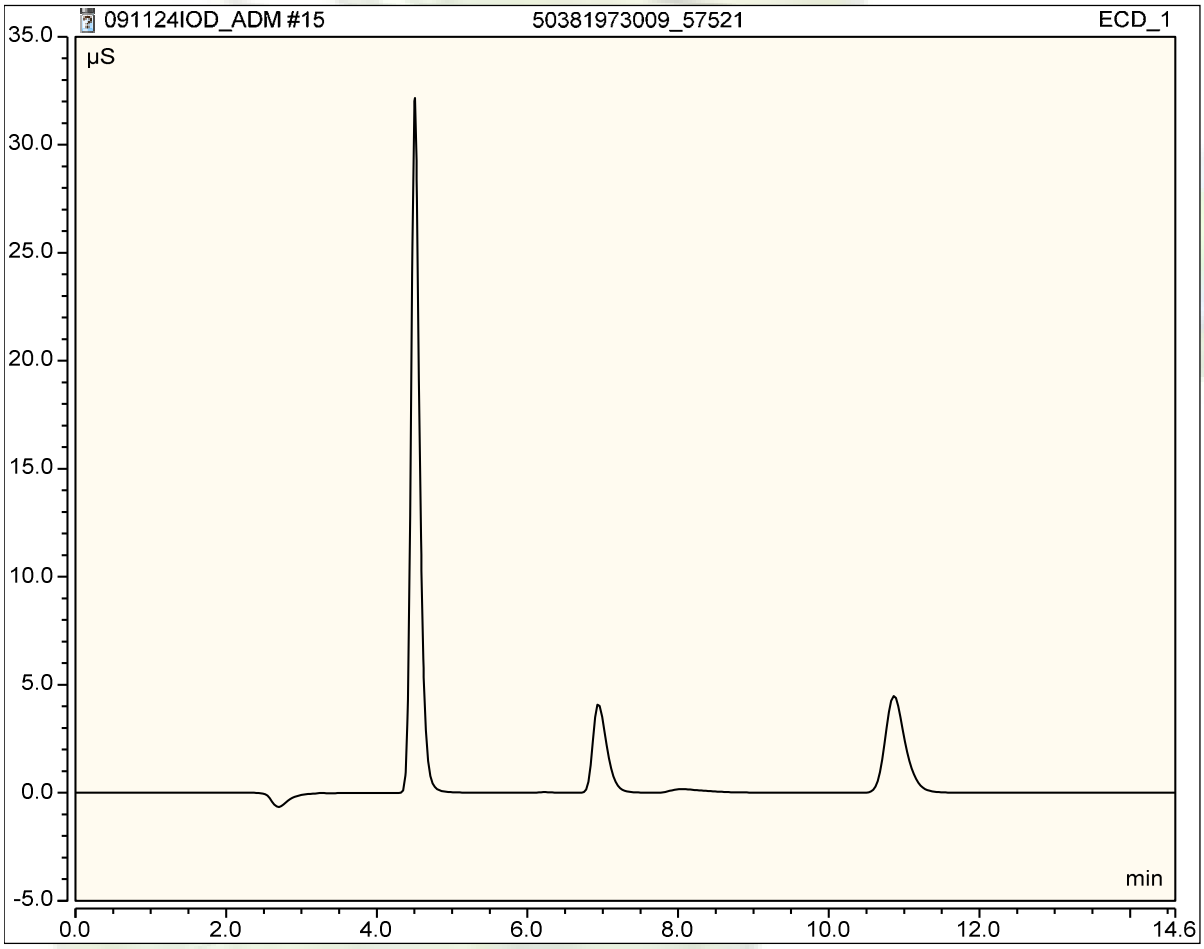
No.	Retention Time min	Name	Amount n.a.	A ea ' ( )min	! ei"#t ' (	T$%e



503, 1973009_57521

Sample Name:	503, 1973009_57521	Injection Volume (uL):	25.00
Vial Number:	BB3	Channel:	ECD_1
Sample Type:	Unkno n	Calibration:	09/06/24 14:50
Control ! ro"ram:	#IC#I%&'(S22	) luent Stock:	392545
* uanti+ - etho. :	C(L/ I%&I&) $#	&ilution 0actor	1.0000
1ecor. in" Time:	09/11/2024 14:50	Sample 2 ei"ht:	1.0000
1un Time (min):	34,5$	Sy6tem Name:	50IC05

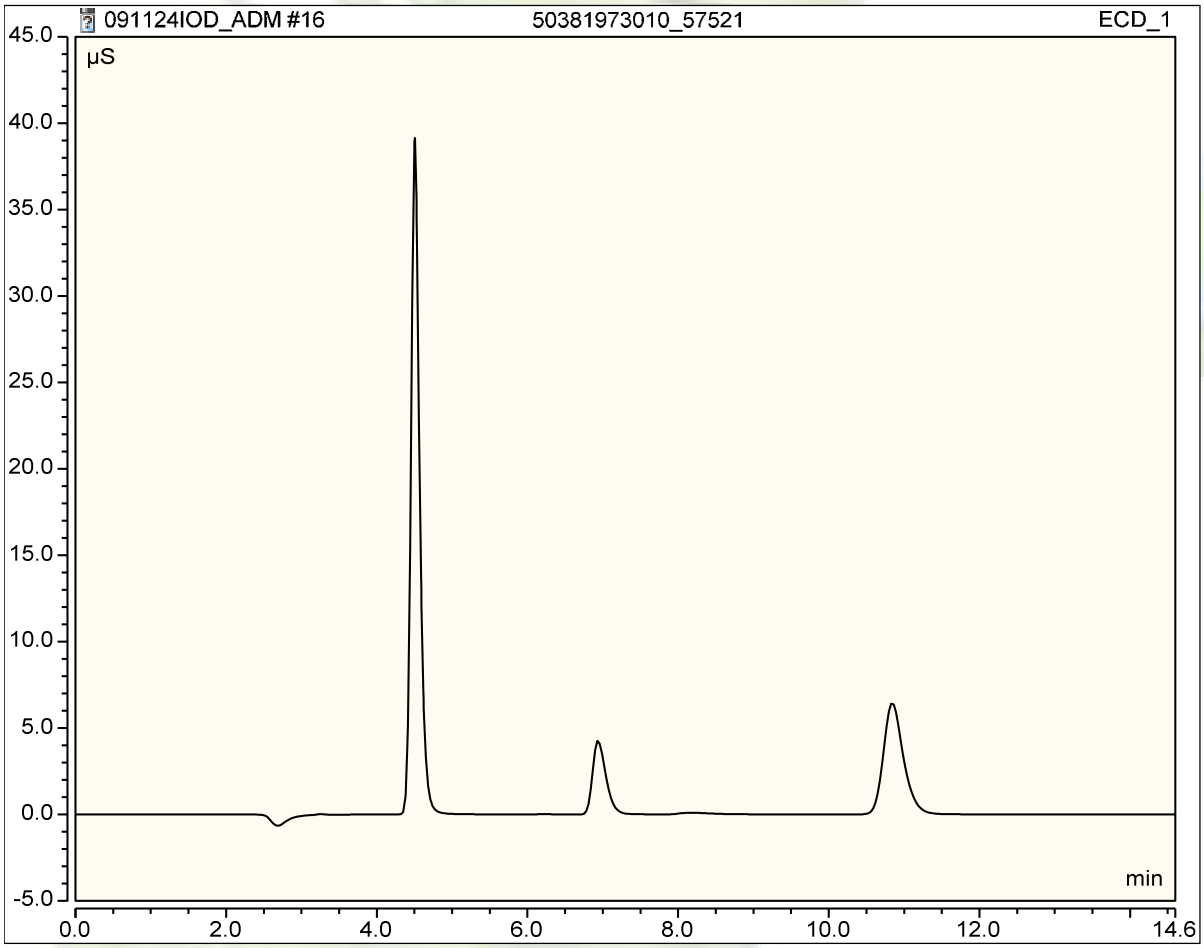
No.	Retention Time min	Name	Amount n.a.	A ea ' ( )min	! ei"#t ' (	T$%e



503, 1973010_57521

Sample Name:	503, 1973010_57521	Injection Volume (uL):	25.00
Vial Number:	BB2	Channel:	ECD_1
Sample Type:	Unkno n	Calibration:	09/06/24 14:50
Control ! ro"ram:	#IC#I%&'(S22	) luent Stock:	392545
* uanti+ - etho. :	C(L/ I%&I&) $#	&ilution 0actor	1.0000
1ecor. in" Time:	09/11/2024 15:07	Sample 2 ei"ht:	1.0000
1un Time (min):	34,5$	Sy6tem Name:	50IC05

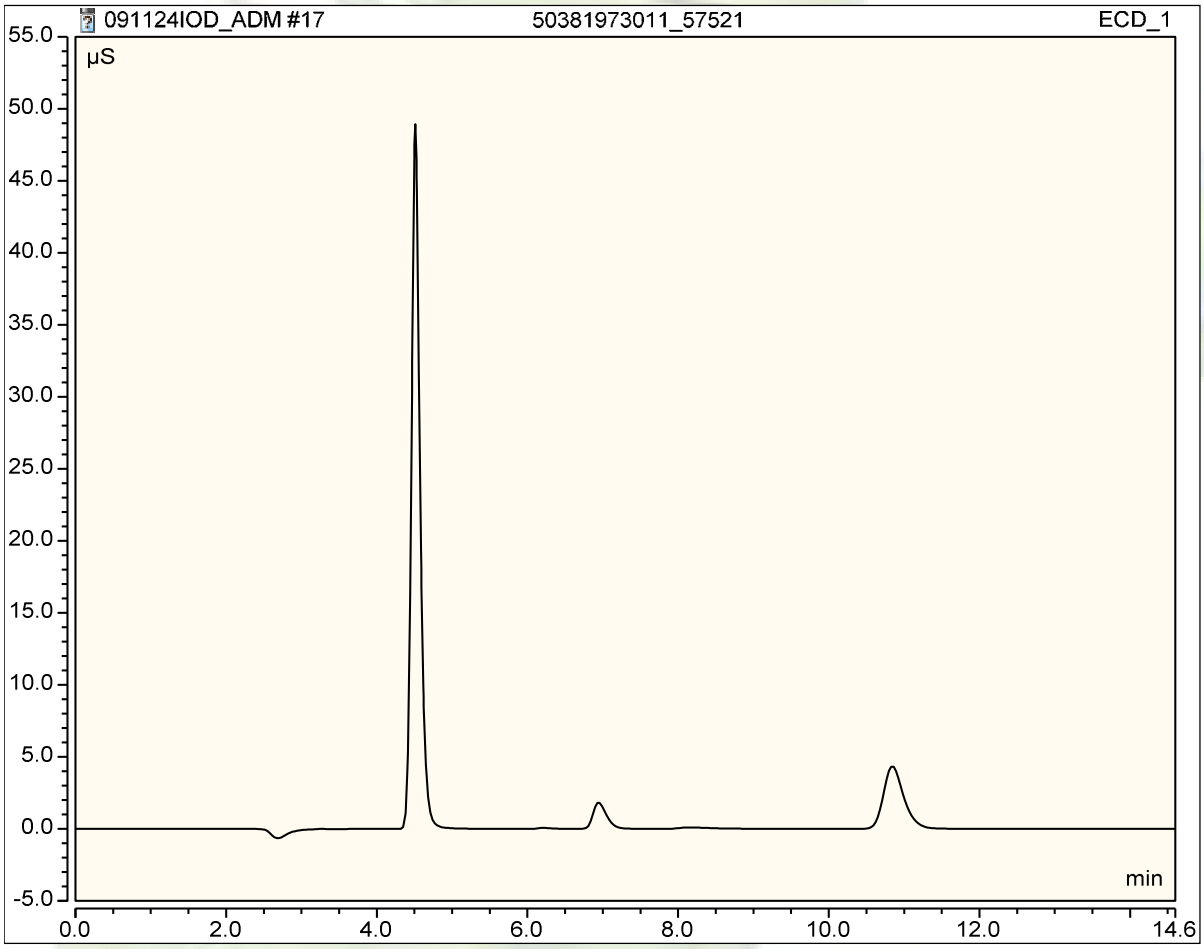
No.	Retention Time min	Name	Amount n.a.	A ea ' ( )min	! ei"#t ' (	T$%e



503, 1973011_57521

Sample Name:	503, 1973011_57521	Injection Volume (uL):	25.00
Vial Number:	BB7	Channel:	ECD_1
Sample Type:	Unkno n	Calibration:	09/06/24 14:50
Control ! ro"ram:	#IC#I%&'(S22	) luent Stock:	392545
* uanti+ - etho. :	C(L/ I%&I&) $#	&ilution 0actor	1.0000
1ecor. in" Time:	09/11/2024 15:24	Sample 2 ei"ht:	1.0000
1un Time (min):	34,5$	Sy6tem Name:	50IC05

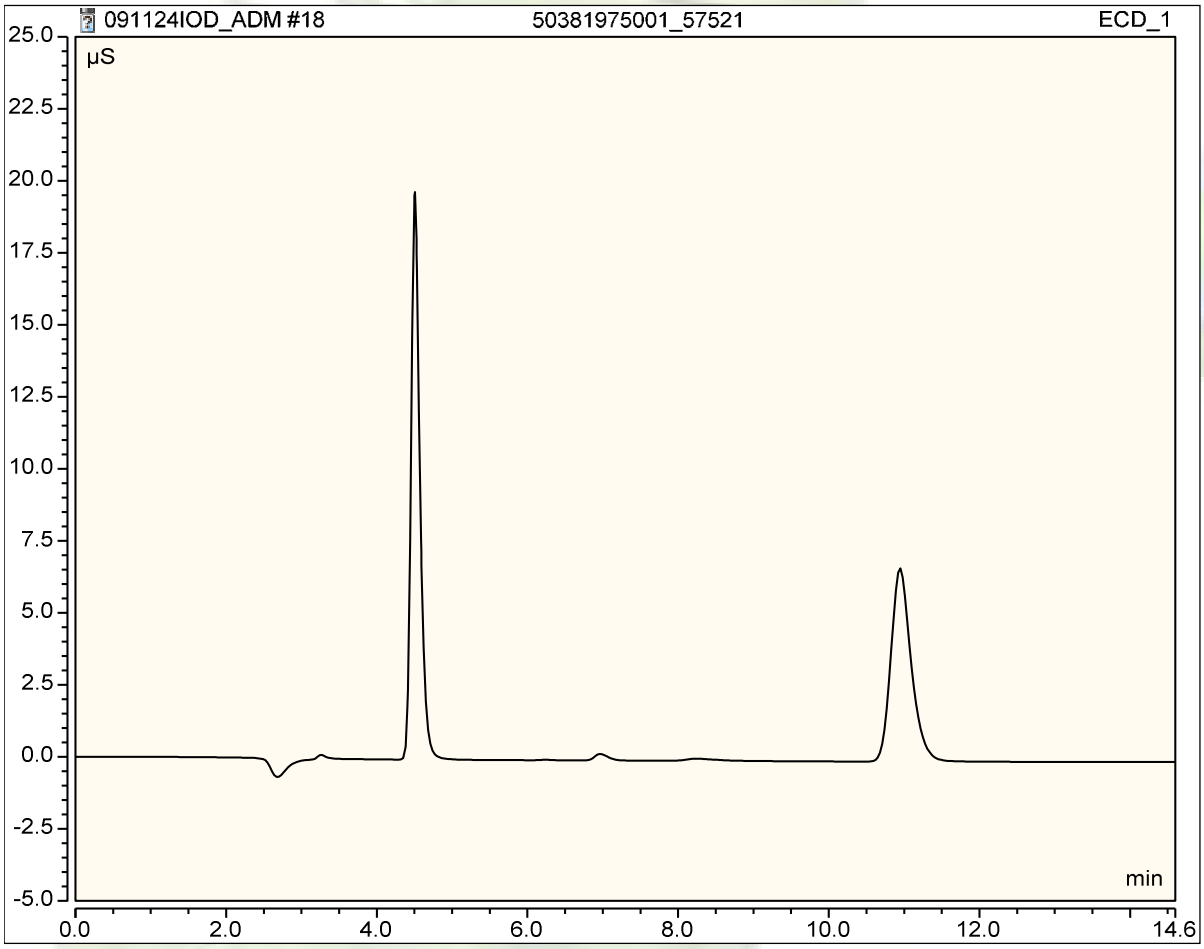
No.	Retention Time min	Name	Amount n.a.	A ea ' ( )min	! ei"#t ' (	T$%e



503, 1975001_57521

Sample Name:	503, 1975001_57521	Injection Volume (uL):	25.00
Vial Number:	BB4	Channel:	ECD_1
Sample Type:	Unkno n	Calibration:	09/06/24 14:50
Control ! ro"ram:	#IC#I%&'(S22	) luent Stock:	392545
* uanti+ - etho. :	C(L/ I%&I&) $#	&ilution 0actor	1.0000
1ecor. in" Time:	09/11/2024 15:41	Sample 2 ei"ht:	1.0000
1un Time (min):	34,5$	Sy6tem Name:	50IC05

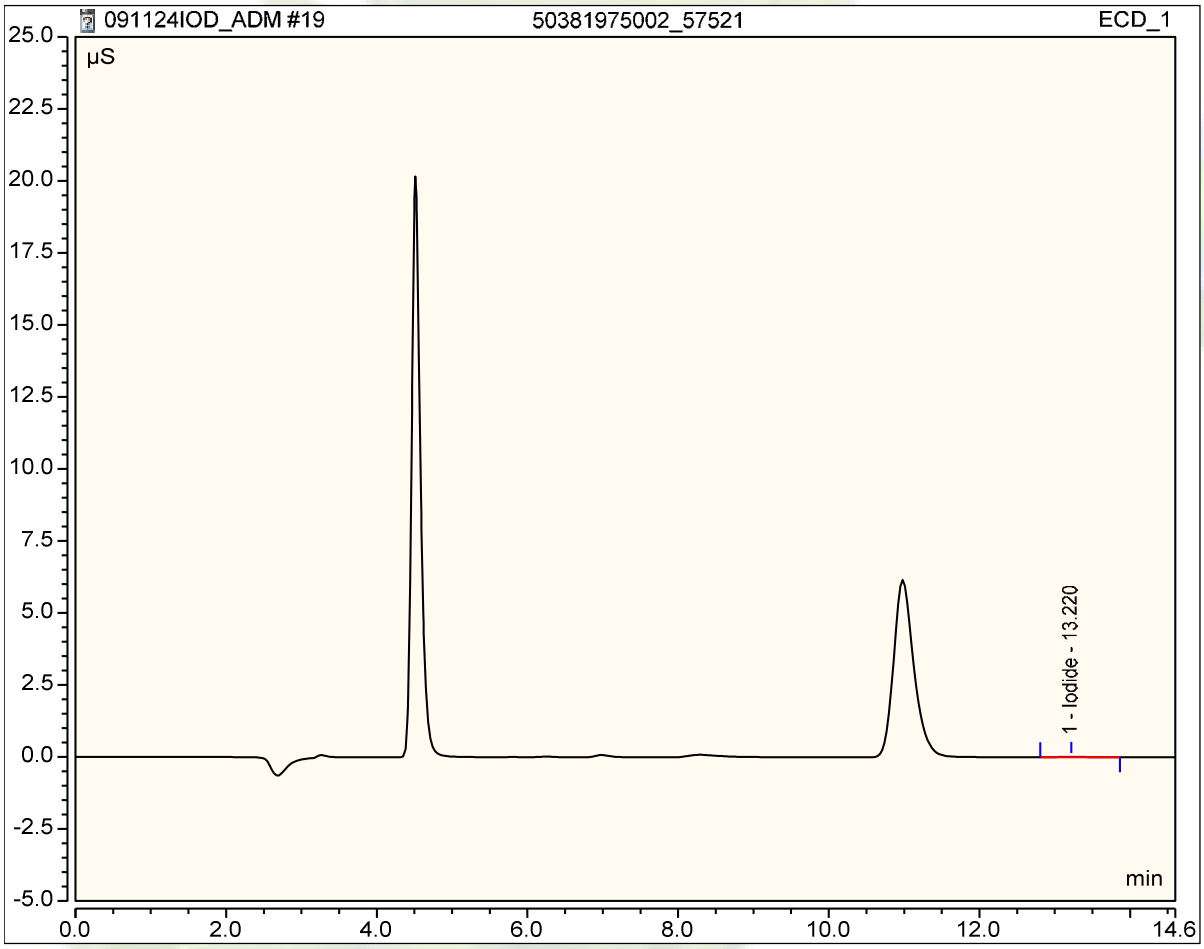
No.	Retention Time min	Name	Amount n.a.	A ea ' ( )min	! ei"#t ' (	T$%e



503, 1975002_57521

Sample Name:	503, 1975002_57521	Injection Volume (uL):	25.00
Vial Number:	BB#	Channel:	ECD_1
Sample Type:	Unkno n	Calibration:	09/06/24 14:50
Control ! ro"ram:	#IC#I%&'(S22	) luent Stock:	392545
* uanti+ - etho. :	C(L/ I%&I&) $#	&ilution 0actor	1.0000
1 ecor. in" Time:	09/11/2024 15:57	Sample 2 ei"ht:	1.0000
1 un Time (min):	34,5$	Sy6tem Name:	50IC05

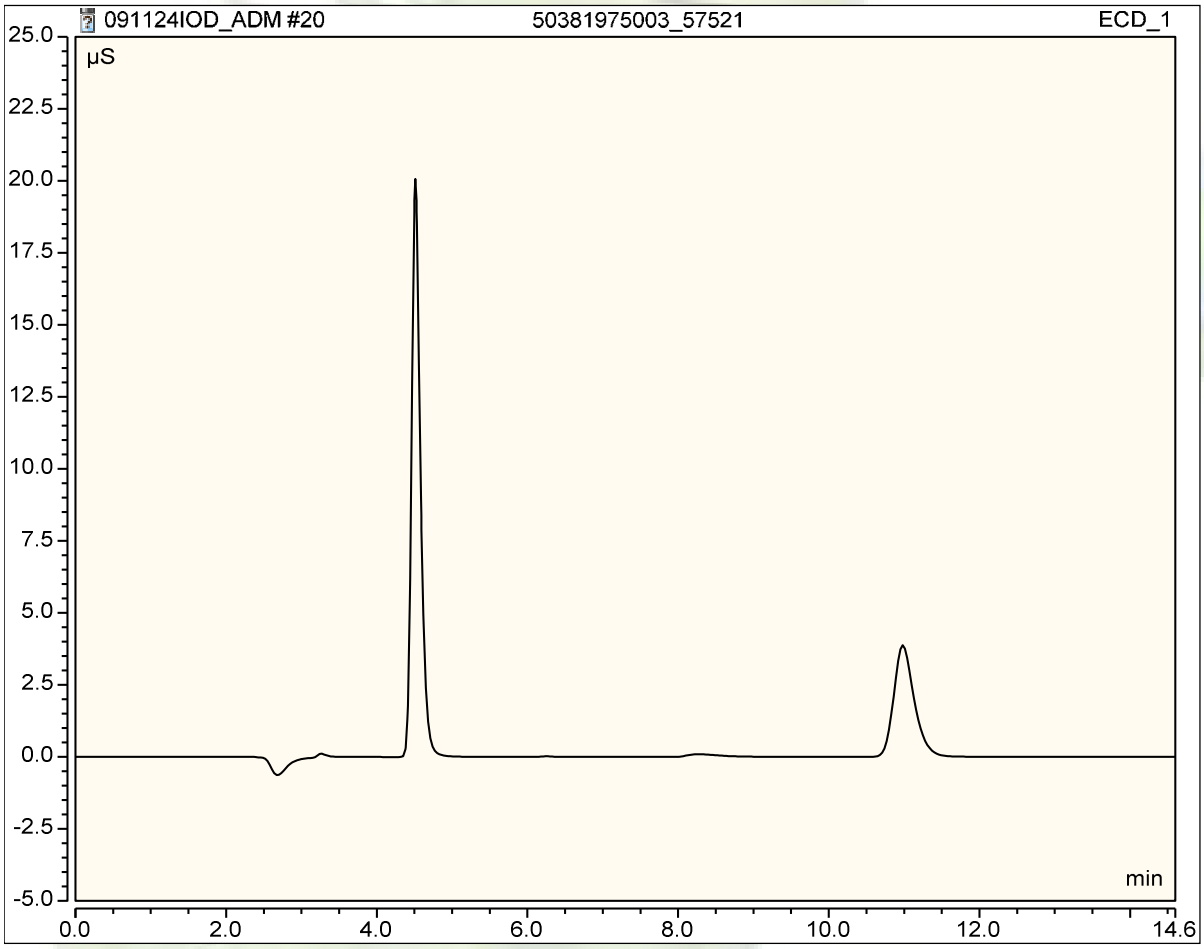
No.	Retention Time min	Name	Amount m"/&	A ea ' ( )min	! ei"#t ' (	T$%e
1	13.22	Io* i* e	0.1328	0.004	0.010	BMB



503, 1975003_57521

Sample Name:	503, 1975003_57521	Injection Volume (uL):	25.00
Vial Number:	BB5	Channel:	ECD_1
Sample Type:	Unkno n	Calibration:	09/06/24 14:50
Control ! ro"ram:	#IC#I%&'(S22	) luent Stock:	392545
* uanti+ - etho. :	C(L/ I%&I&) $#	&ilution 0actor	1.0000
1ecor. in" Time:	09/11/2024 16:14	Sample 2 ei"ht:	1.0000
1un Time (min):	34,5$	Sy6tem Name:	50IC05

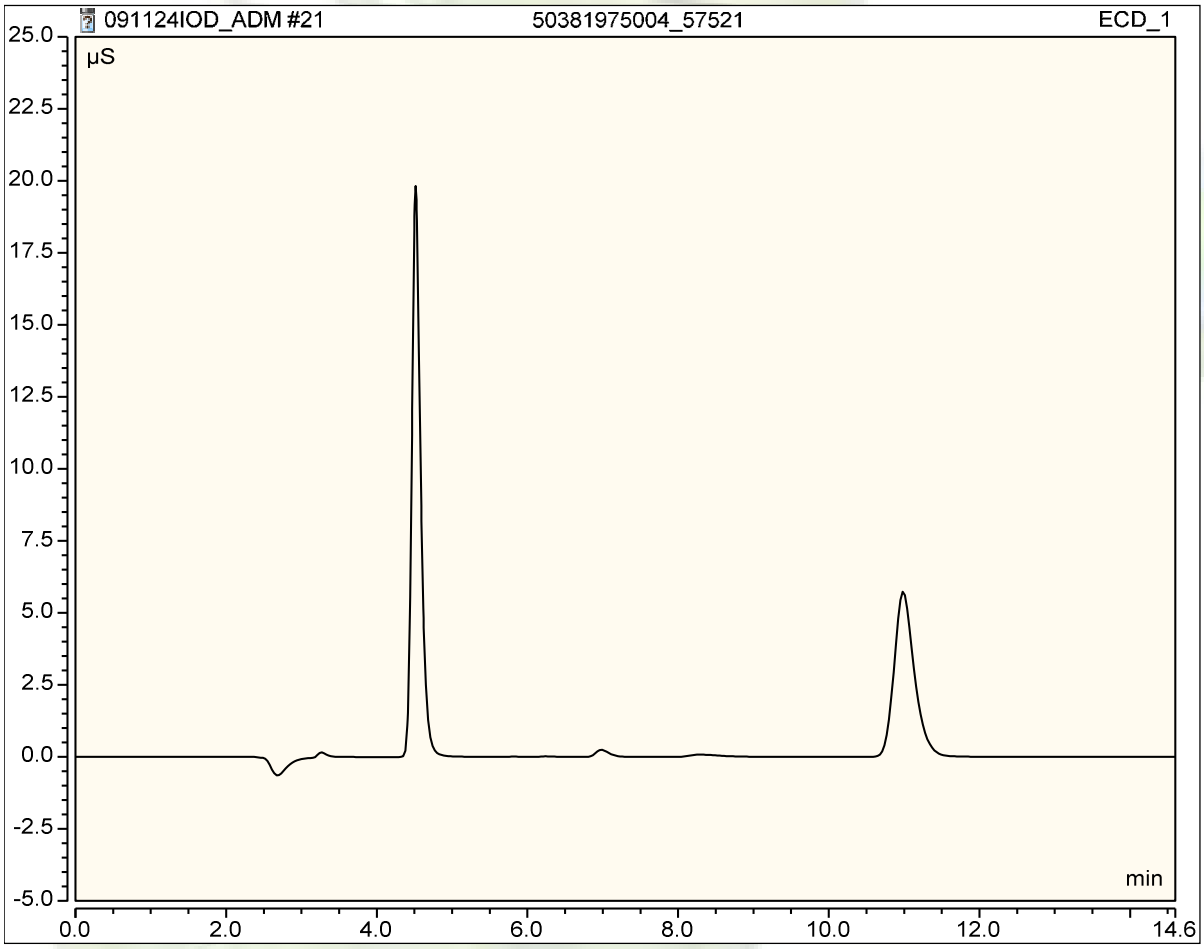
No.	Retention Time min	Name	Amount n.a.	A ea ' ( )min	! ei"#t ' (	T$%e



503, 1975004_57521

Sample Name:	503, 1975004_57521	Injection Volume (uL):	25.00
Vial Number:	BB8	Channel:	ECD_1
Sample Type:	Unkno n	Calibration:	09/06/24 14:50
Control ! ro"ram:	#IC#I%&'(S22	) luent Stock:	392545
* uanti+ - etho. :	C(L/ I%&I&) $#	&ilution 0actor	1.0000
1ecor. in" Time:	09/11/2024 16:31	Sample 2 ei"ht:	1.0000
1un Time (min):	34,5$	Sy6tem Name:	50IC05

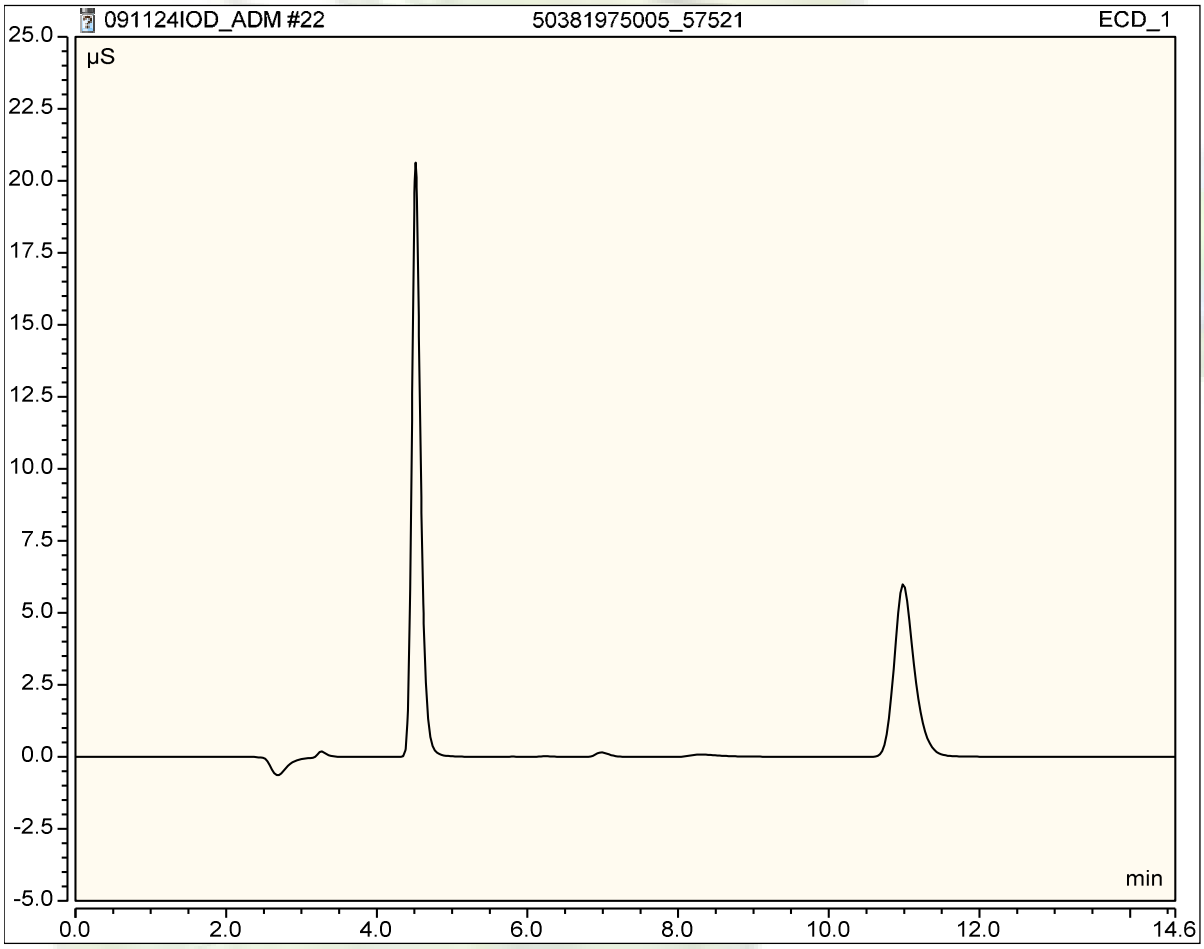
No.	Retention Time min	Name	Amount n.a.	A ea ' ( )min	! ei"#t ' (	T$%e



503, 1975005_57521

Sample Name:	503, 1975005_57521	Injection Volume (uL):	25.00
Vial Number:	BB9	Channel:	ECD_1
Sample Type:	Unkno n	Calibration:	09/06/24 14:50
Control ! ro"ram:	#IC#I%&'(S22	) luent Stock:	392545
* uanti+ - etho. :	C(L/ I%&I&) $#	&ilution 0actor	1.0000
1ecor. in" Time:	09/11/2024 16:49	Sample 2 ei"ht:	1.0000
1un Time (min):	34,5$	Sy6tem Name:	50IC05

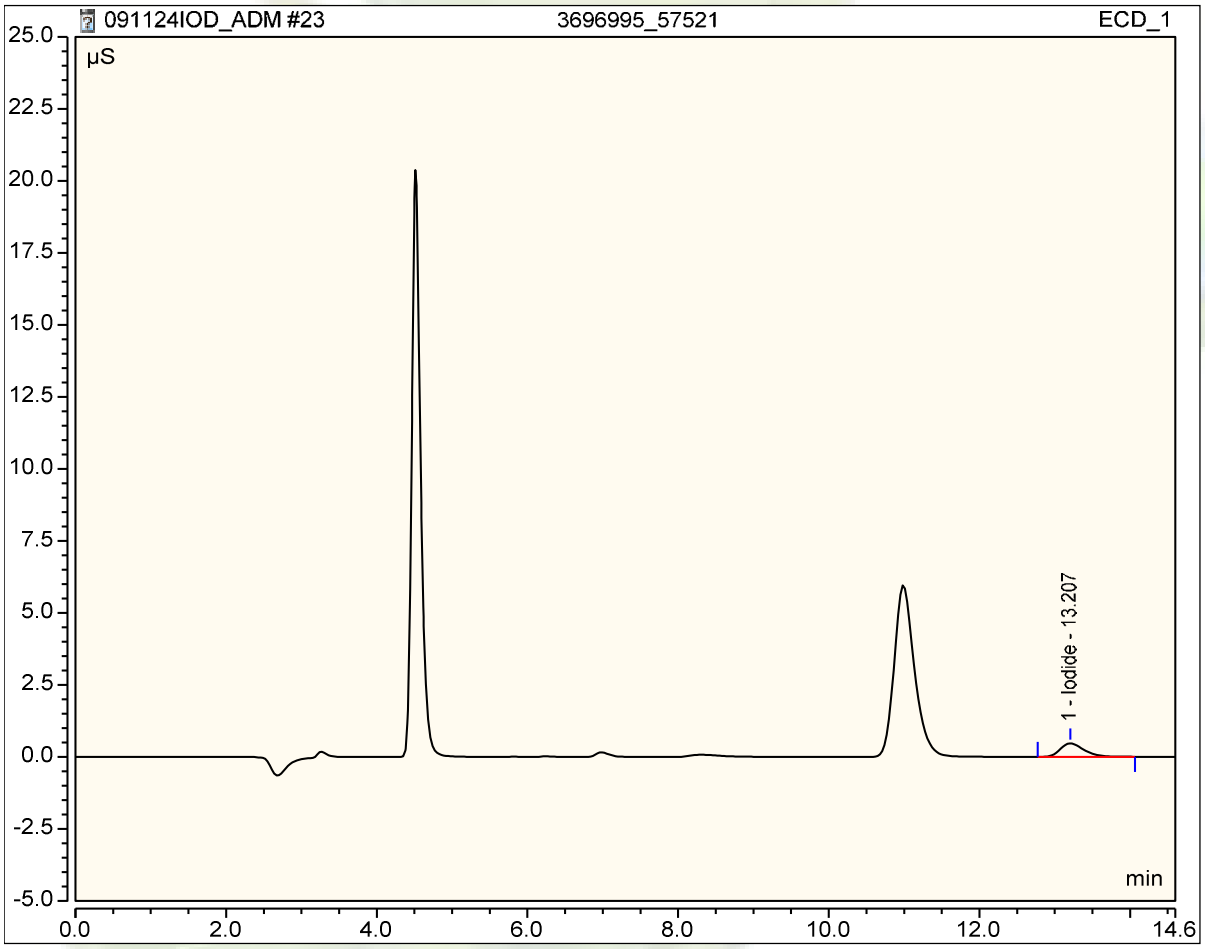
No.	Retention Time min	Name	Amount n.a.	A ea ' ( )min	! ei"#t ' (	T$%e



3696995_57521

Sample Name:	3696995_57521	Injection Volume (uL):	25.00
Vial Number:	BC*3*	Channel:	ECD_1
Sample Type:	Unkno n	Calibration:	09/06/24 14:50
Control *!* ro"ram:	*#$*IC*$#*I*%&'(* S22	*)* luent Stock:	392545
* uanti+ - etho. :	C*(* L/ I*%&*I*&) $#*	*&*ilution *0*actor	1.0000
1 ecor. in" Time:	09/11/2024 17:07	Sample *2* ei"ht:	1.0000
1 un Time (min):	*34,5$*	Sy*6*tem Name:	50IC05

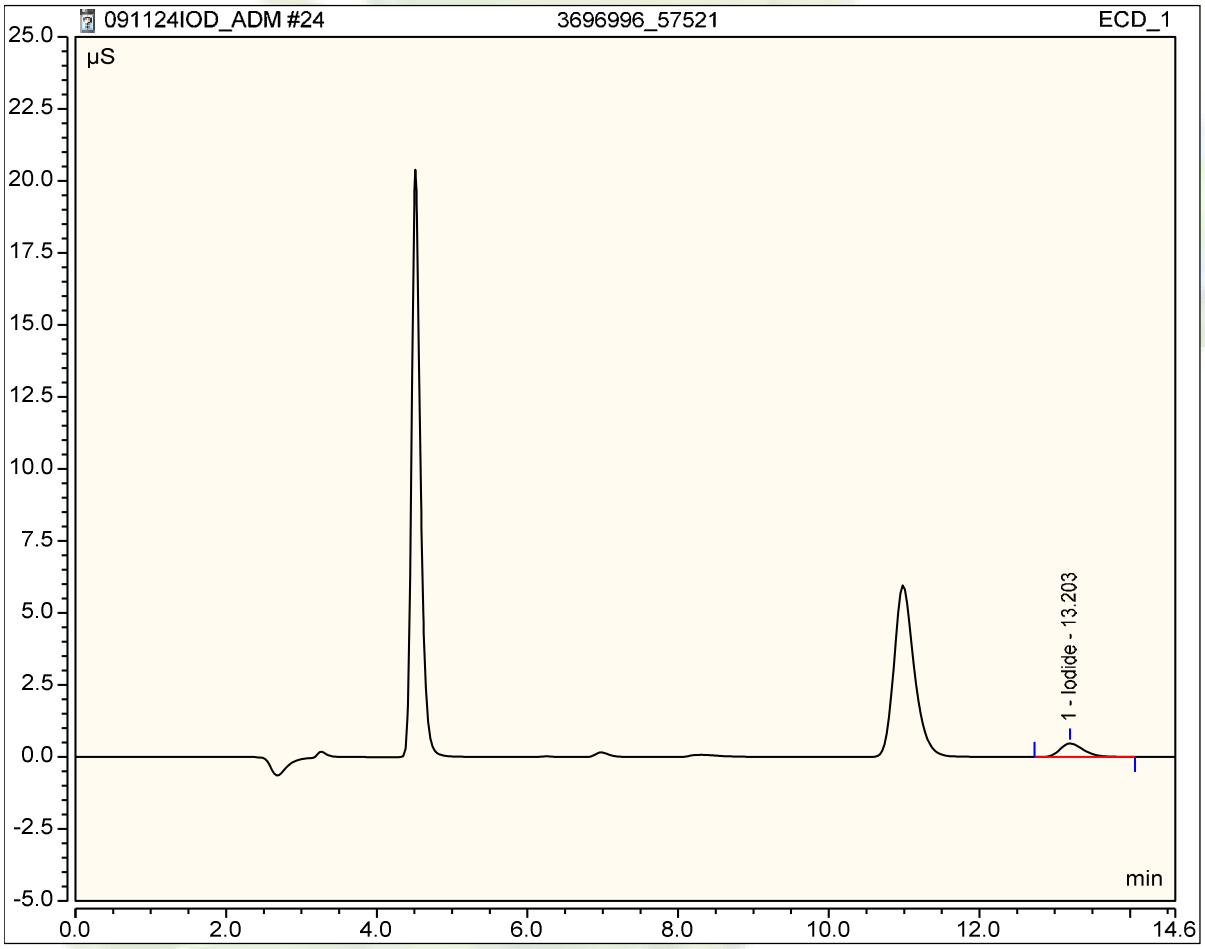
No.	Retention Time min	Name	Amount m"/&	A ea ' ( )min	! ei"#t ' (	T$%e
1	13.21	Io* i* e	5.0497	0.171	0.467	BMB



3696996_57521

Sample Name:	3696996_57521	Injection Volume (uL):	25.00
Vial Number:	BC*3*	Channel:	ECD_1
Sample Type:	Unkno n	Calibration:	09/06/24 14:50
Control *!* ro"ram:	*#$*IC*$#*I*%&'(* S22	*)* luent Stock:	392545
* uanti+ - etho. :	C*(* L/ I*%&*I*&) $#*	*&*ilution *0*actor	1.0000
1 ecor. in" Time:	09/11/2024 17:25	Sample *2* ei"ht:	1.0000
1 un Time (min):	*34,5$*	Sy*6*tem Name:	50IC05

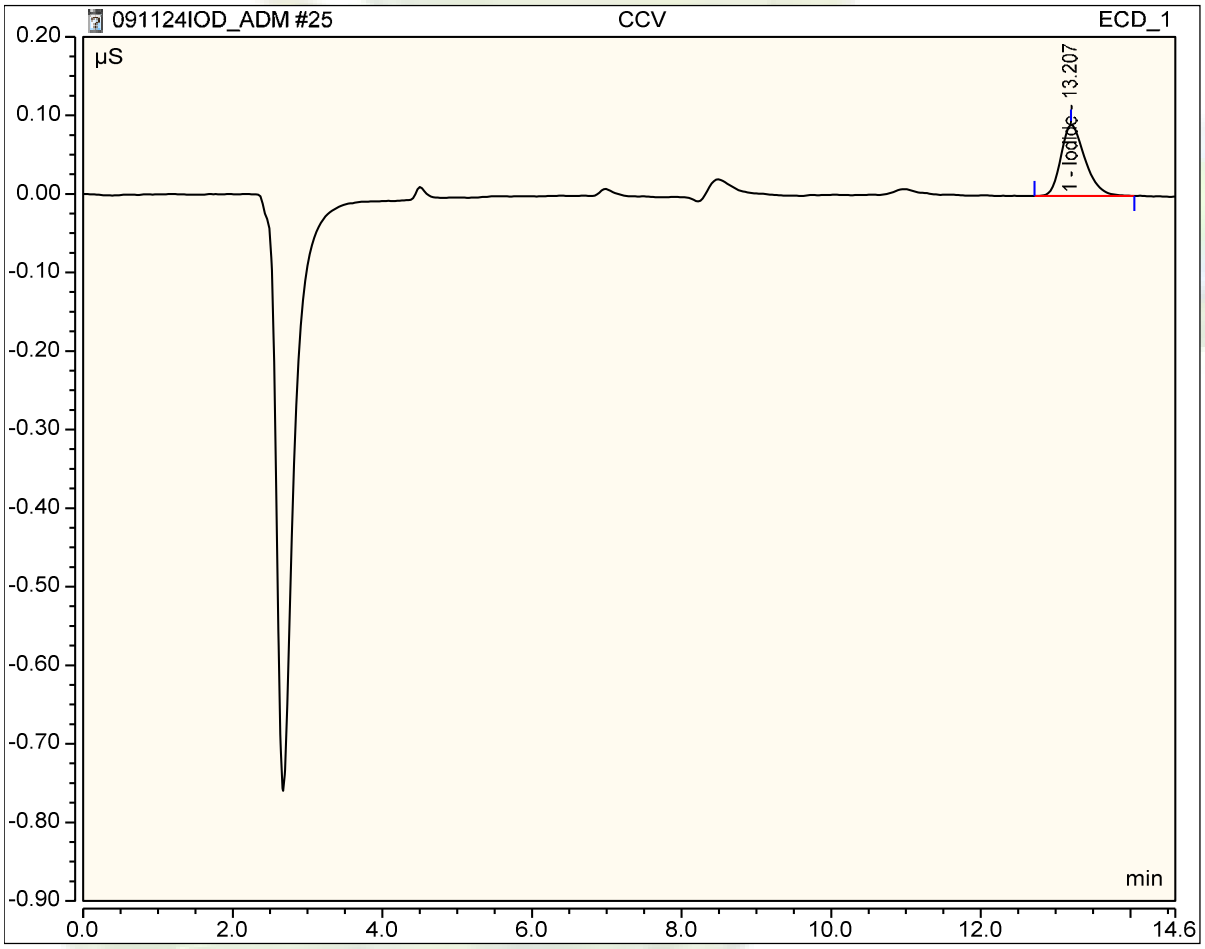
No.	Retention Time min	Name	Amount m"/&	A ea ' ( )min	! ei"#t ' (	T$%e
1	13.20	Io* i* e	5.0476	0.171	0.467	BMB



CCV
392572

Sample Name:	CCV	Injection Volume (uL):	25.00
Vial Number:	B2	Channel:	ECD_1
Sample Type:	Unkno n	Calibration:	09/06/24 14:50
Control ! ro"ram:	#IC#I%&'(S22	) luent Stock:	392545
* uanti+ - etho. :	C(L/ I%&I&) $#	&ilution 0actor	1.0000
1 ecor. in" Time:	09/11/2024 17:42	Sample 2 ei"ht:	1.0000
1 un Time (min):	34,5$	Sy6tem Name:	50IC05

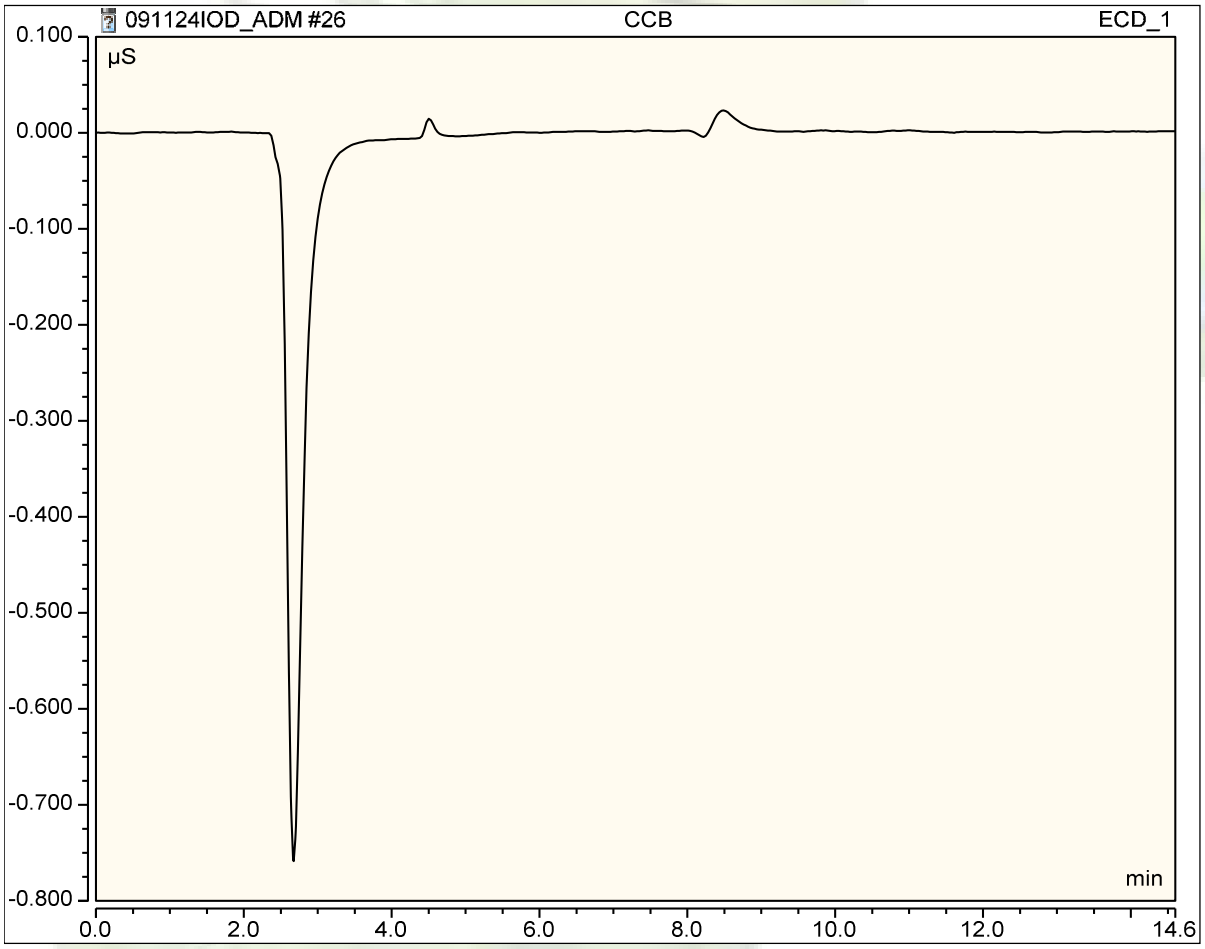
No.	Retention Time min	Name	Amount m"/&	A ea ' ( )min	! ei"#t ' (	T$%e
1	13.21	lo* i* e	1.0242	0.034	0.091	BMB



CC+
340111

Sample Name:	CC+	Injection Volume (uL):	25.00
Vial Number:	B4	Channel:	ECD_1
Sample Type:	Unkno n	Calibration:	09/06/24 14:50
Control ! ro"ram:	#IC#I%&'(S22	) luent Stock:	392545
* uanti+ - etho. :	C(L/ I%&I&) $#	&ilution 0actor	1.0000
1 ecor. in" Time:	09/11/2024 1, :00	Sample 2 ei"ht:	1.0000
1 un Time (min):	34,5$	Sy6tem Name:	50IC05

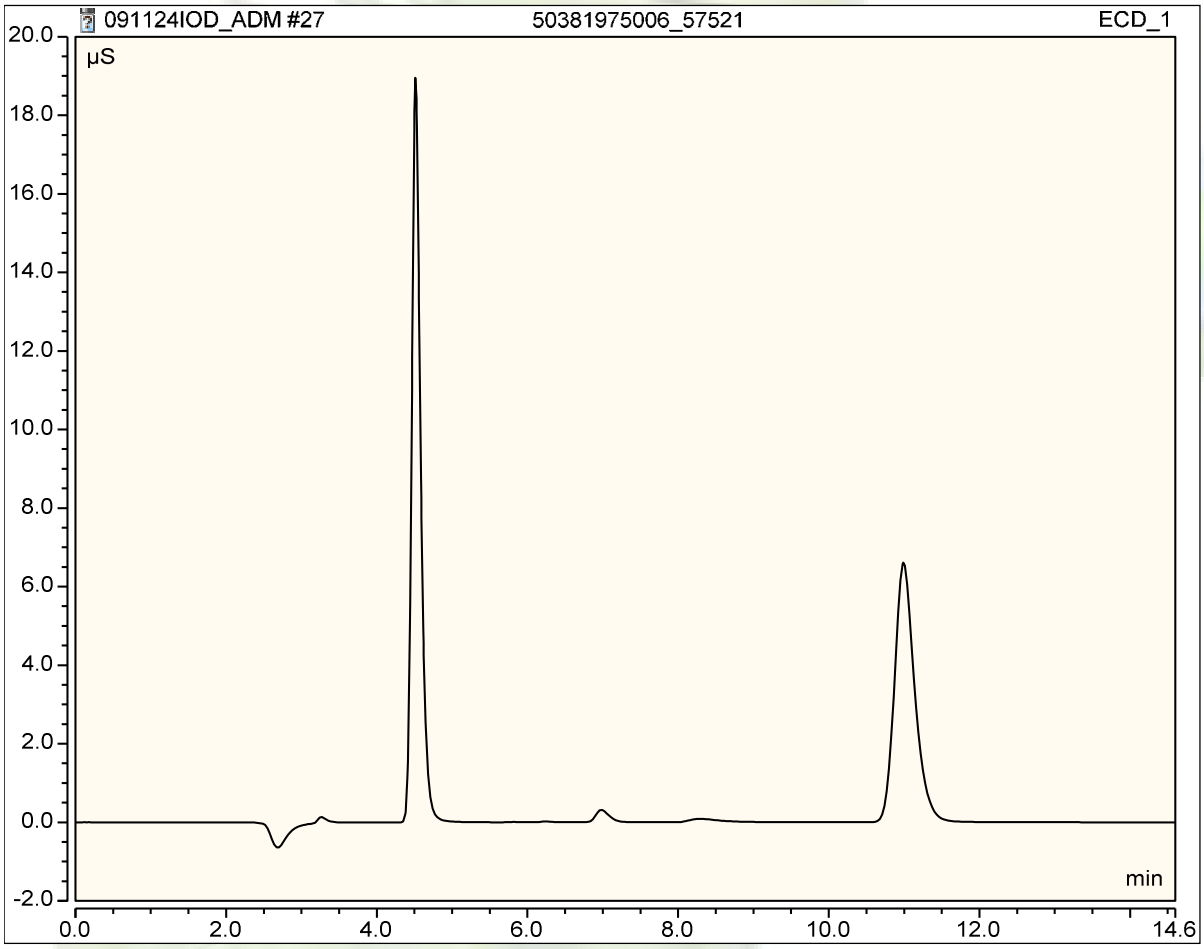
No.	Retention Time min	Name	Amount n.a.	A ea ' ( )min	! ei"#t ' (	T$%e



503, 1975006_57521

Sample Name:	503, 1975006_57521	Injection Volume (uL):	25.00
Vial Number:	BC2	Channel:	ECD_1
Sample Type:	Unkno n	Calibration:	09/06/24 14:50
Control ! ro"ram:	#IC#I%&'(S22	) luent Stock:	392545
* uanti+ - etho. :	C(L/ I%&I&) $#	&ilution 0actor	1.0000
1 ecor. in" Time:	09/11/2024 1, :1,	Sample 2 ei"ht:	1.0000
1 un Time (min):	34,5$	Sy6tem Name:	50IC05

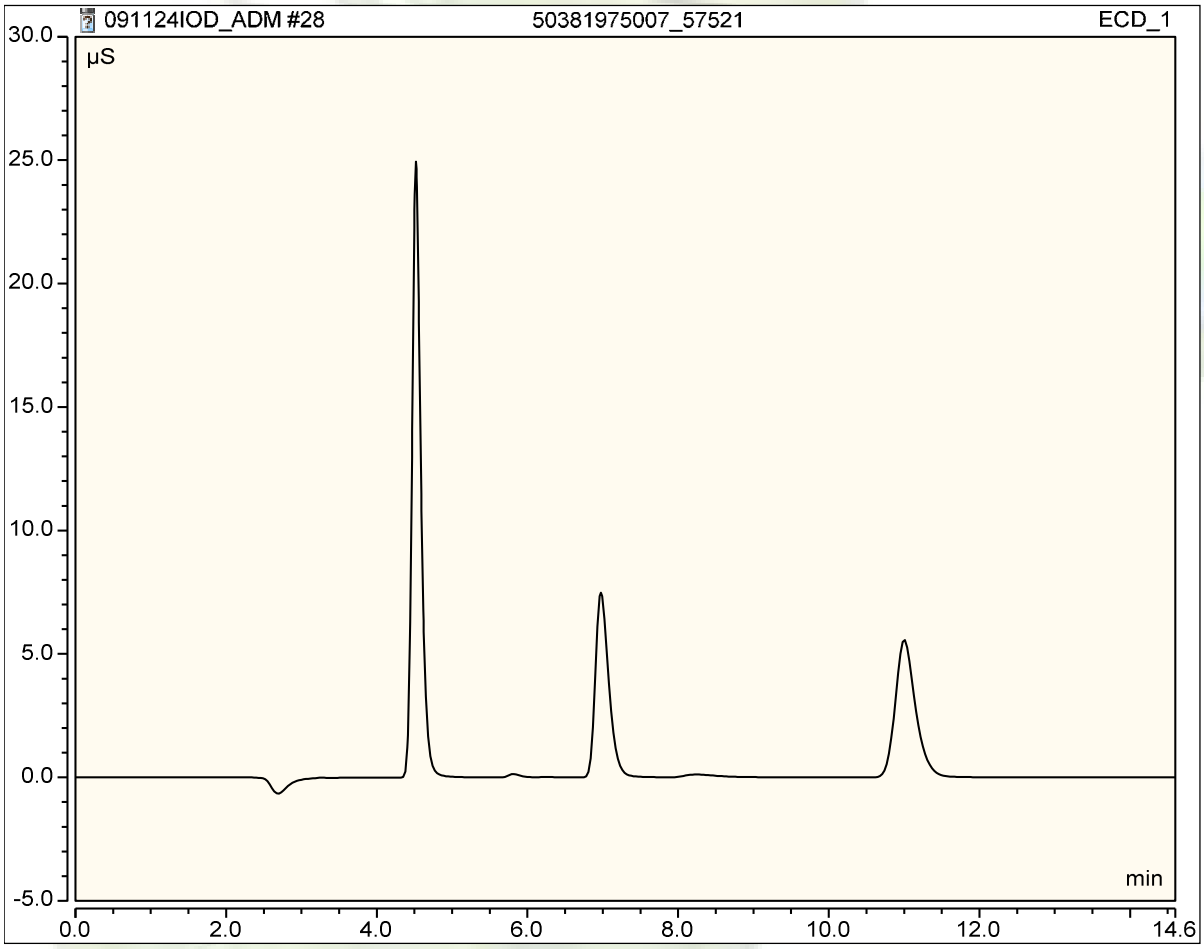
No.	Retention Time min	Name	Amount n.a.	A ea ' ( )min	! ei"#t ' (	T$%e



503, 1975007_57521

Sample Name:	503, 1975007_57521	Injection Volume (uL):	25.00
Vial Number:	BC7	Channel:	ECD_1
Sample Type:	Unkno n	Calibration:	09/06/24 14:50
Control ! ro"ram:	#IC#I%&'(S22	) luent Stock:	392545
* uanti+ - etho. :	C(L/ I%&I&) $#	&ilution 0actor	1.0000
1 ecor. in" Time:	09/11/2024 1, :36	Sample 2 ei"ht:	1.0000
1 un Time (min):	34,5$	Sy6tem Name:	50IC05

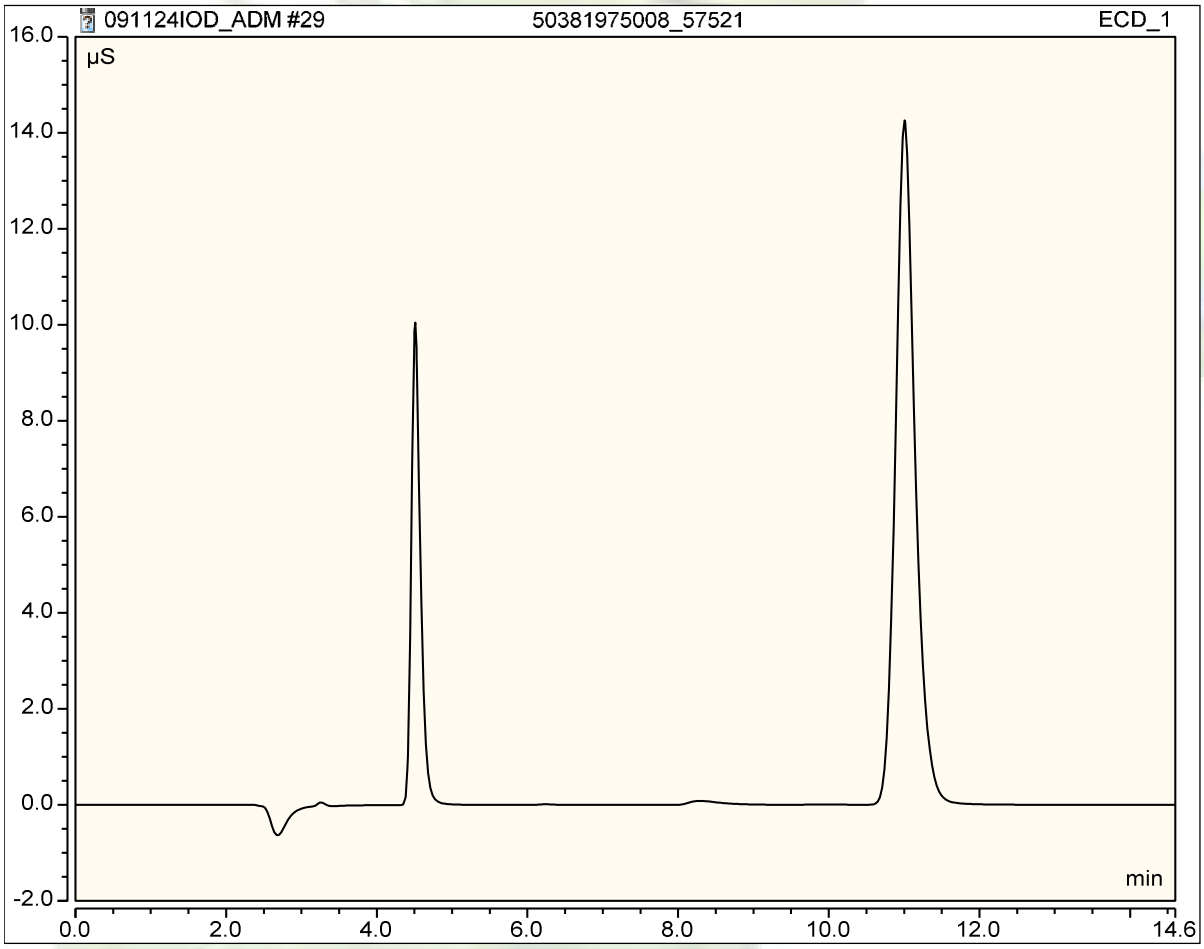
No.	Retention Time min	Name	Amount n.a.	A ea ' ( )min	! ei"#t ' (	T$%e



503, 197500, _57521

Sample Name:	503, 197500, _57521	Injection Volume (uL):	25.00
Vial Number:	BC4	Channel:	ECD_1
Sample Type:	Unkno n	Calibration:	09/06/24 14:50
Control ! ro"ram:	#IC#I%&'(S22	) luent Stock:	392545
* uanti+ - etho. :	C(L/ I%&I&) $#	&ilution 0actor	1.0000
1 ecor. in" Time:	09/11/2024 1, :53	Sample 2 ei"ht:	1.0000
1 un Time (min):	34,5$	Sy6tem Name:	50IC05

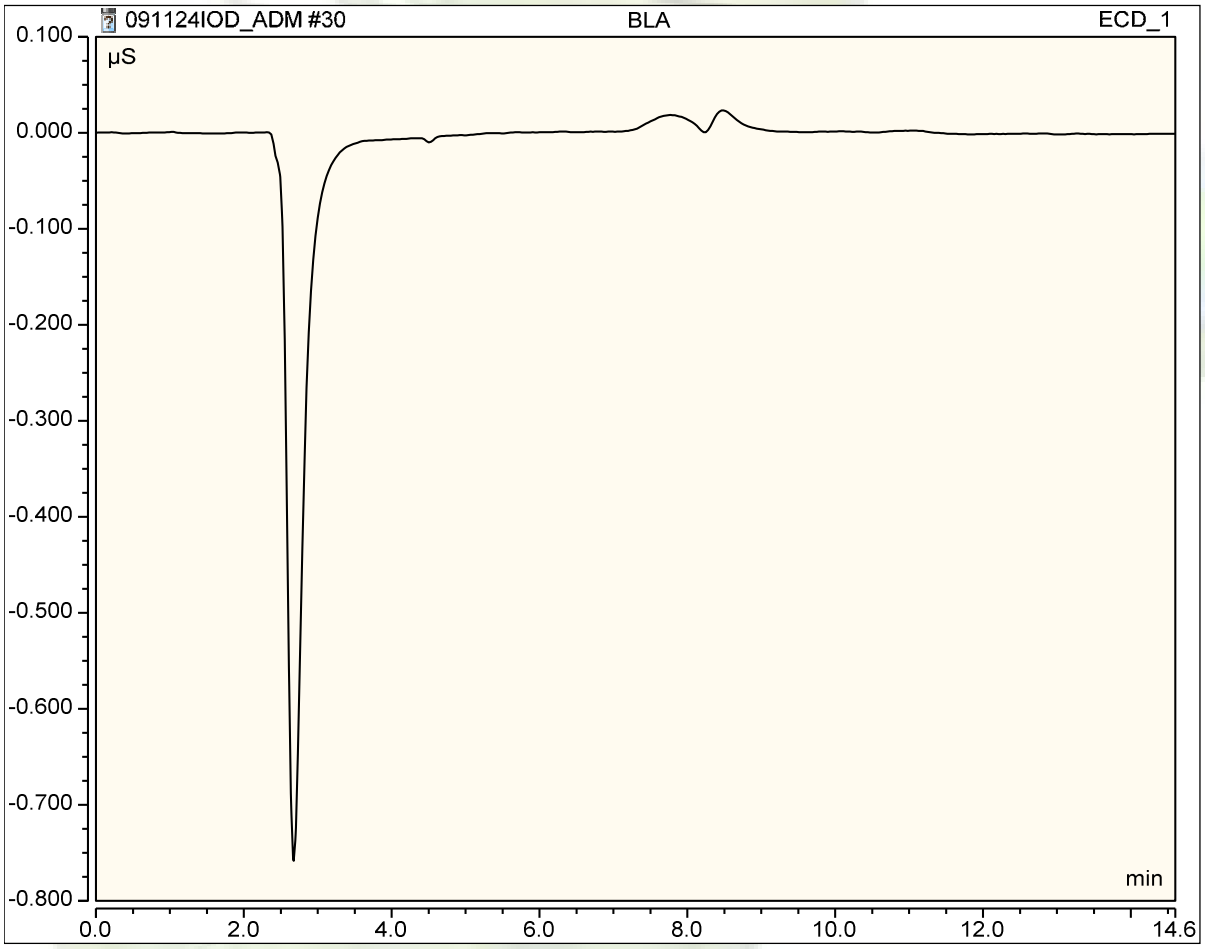
No.	Retention Time min	Name	Amount n.a.	A ea ' ( )min	! ei"#t ' (	T$%e



+ &A
340111

Sample Name:	+ &A	Injection Volume (uL):	25.00
Vial Number:	B*3*	Channel:	ECD_1
Sample Type:	Unkno n	Calibration:	09/06/24 14:50
Control *!* ro"ram:	*#$*IC*$#*I*%&'(* S22	*)* luent Stock:	392545
* uanti+ - etho. :	C*(* L/ I*%&*I*&) $#*	*&*ilution *0*actor	1.0000
1 ecor. in" Time:	09/11/2024 19:11	Sample *2* ei"ht:	1.0000
1 un Time (min):	*34,5$*	Sy*6*tem Name:	50IC05

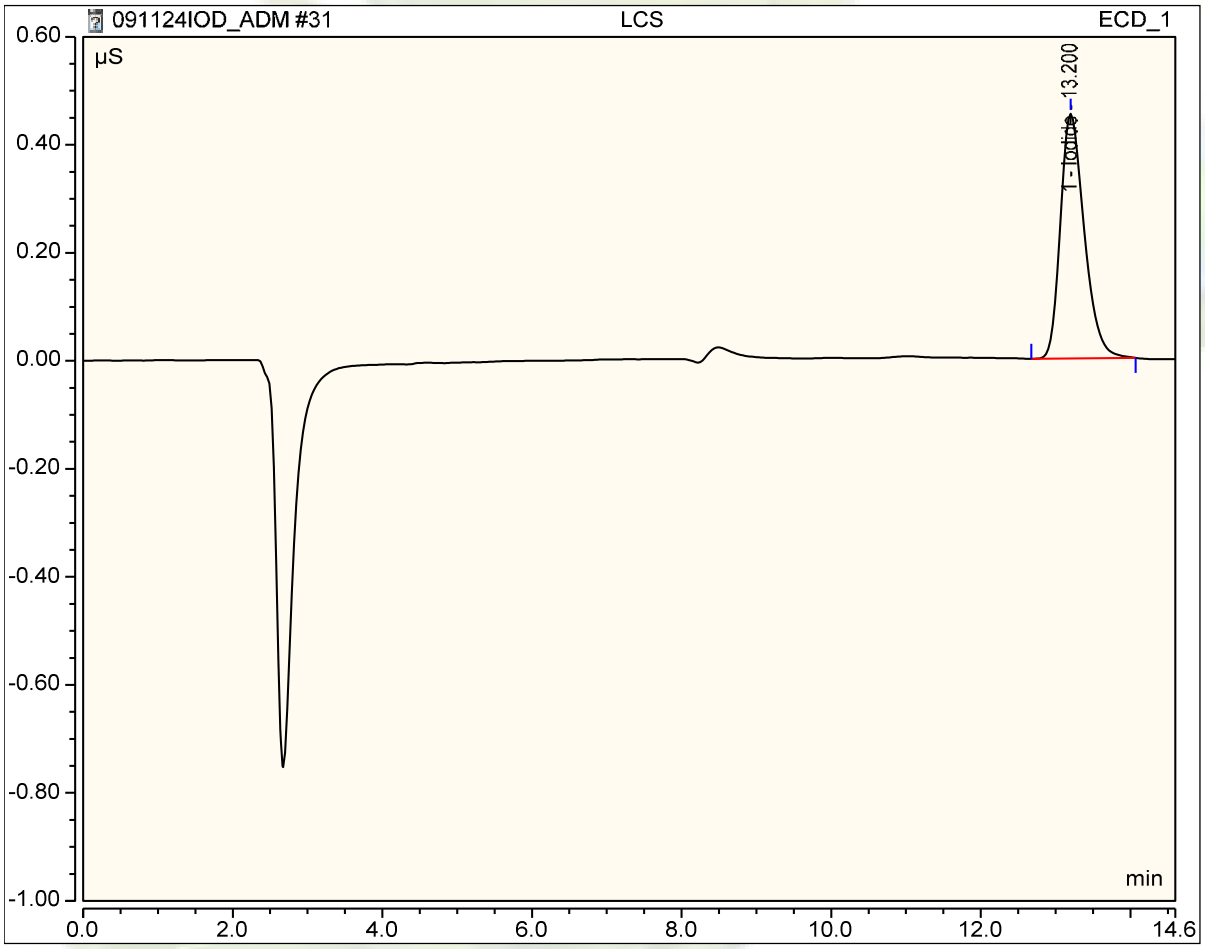
No.	Retention Time min	Name	Amount n.a.	A ea ' ( )min	! ei"#t ' (	T$%e



&C(
346539

Sample Name:	&C(	Injection Volume (uL):	25.00
Vial Number:	B7	Channel:	ECD_1
Sample Type:	Unkno n	Calibration:	09/06/24 14:50
Control ! ro"ram:	#IC#I%&'(S22	) luent Stock:	392545
* uanti+ - etho. :	C(L/ I%&I&) $#	&ilution 0actor	1.0000
1 ecor. in" Time:	09/11/2024 19:29	Sample 2 ei"ht:	1.0000
1 un Time (min):	34,5$	Sy6tem Name:	50IC05

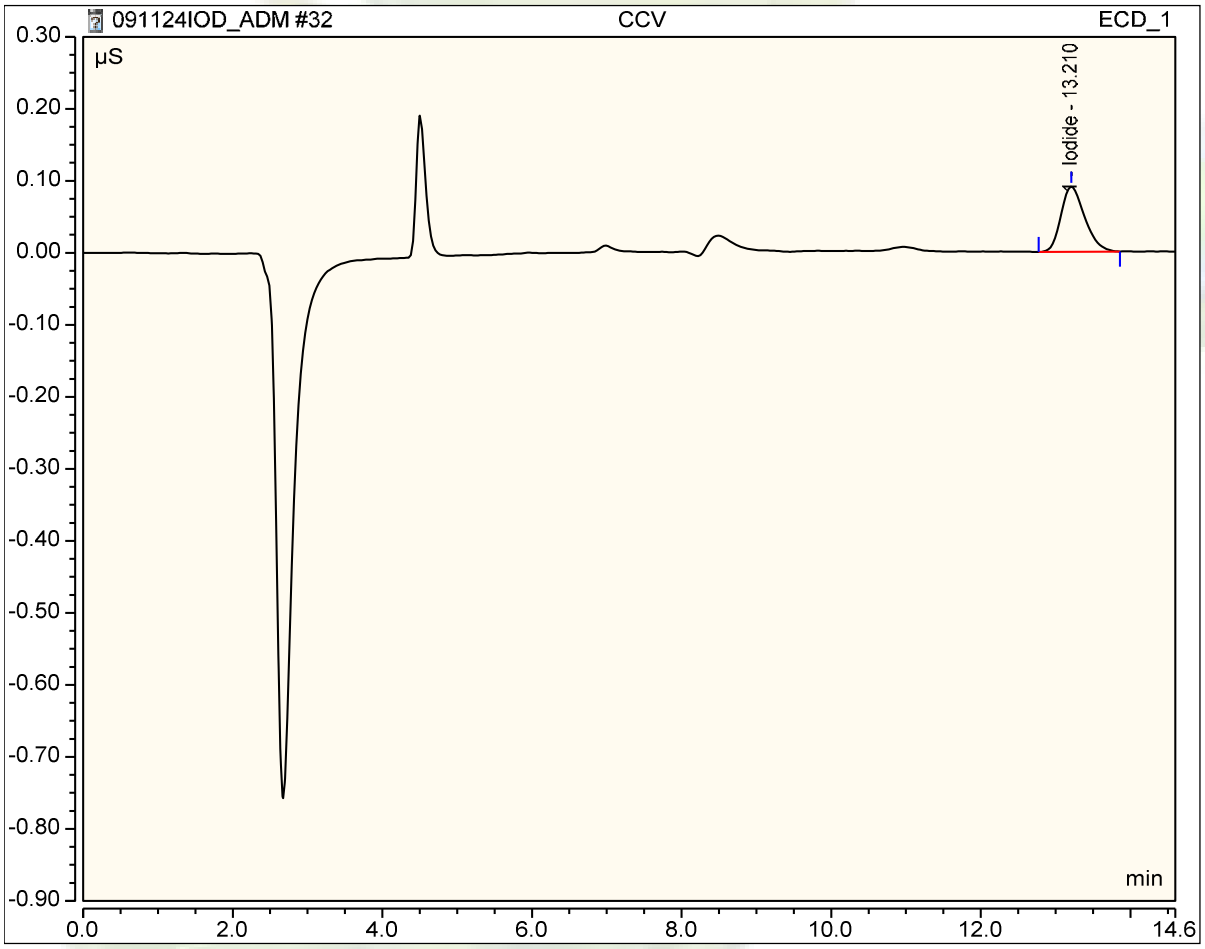
No.	Retention Time min	Name	Amount m"/&	A ea ' ( )min	! ei"#t ' (	T$%e
1	13.20	lo* i* e	4.9463	0.167	0.453	BMB



CCV
392572

Sample Name:	CCV	Injection Volume (uL):	25.00
Vial Number:	B2	Channel:	ECD_1
Sample Type:	Unkno n	Calibration:	09/06/24 14:50
Control ! ro"ram:	#IC#I%&'(S22	) luent Stock:	392545
* uanti+ - etho. :	C(L/ I%&I&) $#	&ilution 0actor	1.0000
1 ecor. in" Time:	09/11/2024 19:47	Sample 2 ei"ht:	1.0000
1 un Time (min):	34,5$	Sy6tem Name:	50IC05

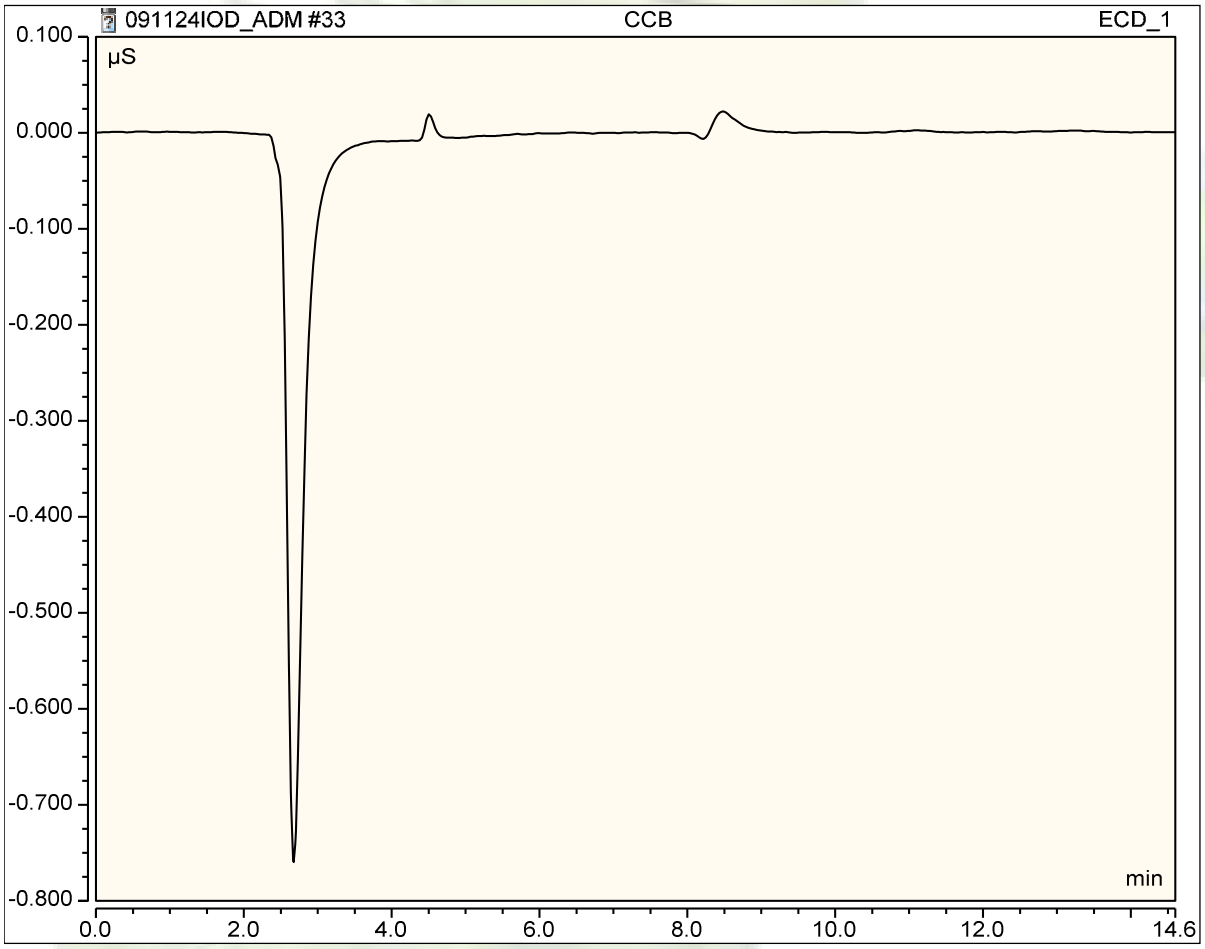
No.	Retention Time min	Name	Amount m"/&	A ea ' ( )min	! ei"#t ' (	T$%e
1	13.21	Io* i* e	1.0047	0.033	0.090	BMB



CC+
340111

Sample Name:	CC+	Injection Volume (uL):	25.00
Vial Number:	B4	Channel:	ECD_1
Sample Type:	Unkno n	Calibration:	09/06/24 14:50
Control ! ro"ram:	#IC#I%&'(S22	) luent Stock:	392545
* uanti+ - etho. :	C(L/ I%&I&) $#	&ilution 0actor	1.0000
1ecor. in" Time:	09/11/2024 20:05	Sample 2 ei"ht:	1.0000
1un Time (min):	34,5$	Sy6tem Name:	50IC05

No.	Retention Time min	Name	Amount n.a.	A ea ' ( )min	! ei"#t ' (	T$%e



Analytical Data Package

Prepared by:

Pace Analytical Services

Pace Project No.: 70312803

Table Of Contents

Pace Analytical Services, LLC
575 Broad Hollow Road
Melville, NY 11747
516-370-6000

October 22, 2024

Reports
Alpha Analytical
8 Walkup Drive
Westborough, MA 01581

RE: Project: L2450417
Pace Project No.: 70312803

Dear Reports:

Enclosed are the analytical results for sample(s) received by the laboratory on September 10, 2024. The results relate only to the samples included in this report. Results reported herein conform to the applicable TNI/NELAC Standards and the laboratory's Quality Manual, where applicable, unless otherwise noted in the body of the report.

The test results provided in this final report were generated by each of the following laboratories within the Pace Network:

- Pace Analytical Services - Melville

REVISION #1: Report re-issued on 10/22/2024 to include case narrative

If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Brianna D. Rivera
brianna.rivera@pacelabs.com
516-370-6007
Project Manager

Enclosures

Pace Analytical Services, LLC
575 Broad Hollow Road
Melville, NY 11747
516-370-6000

CERTIFICATIONS

Project: L2450417
Pace Project No.: 70312803

Pace Analytical Services, LLC - Melville, NY

575 Broad Hollow Rd, Melville, NY 11747
Connecticut Certification #: PH-0435
Delaware Certification # NY 10478
Maryland Certification #: 208
Massachusetts Certification #: M-NY026
New Hampshire Certification #: 2987
New Jersey Certification #: NY158
New York Certification #: 10478 Primary Accrediting Body
Pennsylvania Certification #: 68-00350
Rhode Island Certification #: LAO00340

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
575 Broad Hollow Road
Melville, NY 11747
516-370-6000

SAMPLE SUMMARY

Project: L2450417
Pace Project No.: 70312803

Lab ID	Sample ID	Matrix	Date Collected	Date Received
70312803001	**MW-4A**	Water	09/04/24 08:40	09/10/24 08:00
70312803002	**MW-4B**	Water	09/04/24 10:00	09/10/24 08:00
70312803003	**MW-3A**	Water	09/04/24 11:30	09/10/24 08:00
70312803004	**MW-3B**	Water	09/04/24 12:10	09/10/24 08:00
70312803005	**MW-2A**	Water	09/04/24 13:40	09/10/24 08:00
70312803006	**MW-2B**	Water	09/04/24 13:33	09/10/24 08:00
70312803007	**MW-9A**	Water	09/04/24 15:20	09/10/24 08:00
70312803008	**MW-9B**	Water	09/04/24 15:40	09/10/24 08:00

Pace Analytical Services, LLC
575 Broad Hollow Road
Melville, NY 11747
516-370-6000

SAMPLE ANALYTE COUNT

Project: L2450417
Pace Project No.: 70312803

Lab ID	Sample ID	Method	Analysts	Analytes Reported
70312803001	**MW-4A**	SM22 4500-S2 F	JWM	1
70312803002	**MW-4B**	SM22 4500-S2 F	JWM	1
70312803003	**MW-3A**	SM22 4500-S2 F	JWM	1
70312803004	**MW-3B**	SM22 4500-S2 F	JWM	1
70312803005	**MW-2A**	SM22 4500-S2 F	JWM	1
70312803006	**MW-2B**	SM22 4500-S2 F	JWM	1
70312803007	**MW-9A**	SM22 4500-S2 F	JWM	1
70312803008	**MW-9B**	SM22 4500-S2 F	JWM	1

PACE-MV = Pace Analytical Services - Melville

Pace Analytical Services, LLC
575 Broad Hollow Road
Melville, NY 11747
516-370-6000

PROJECT NARRATIVE

Project: L2450417
Pace Project No.: 70312803

Method: **SM22 4500-S2 F**
Description: 4500S2F W Sulfide Iodometric
Client: Alpha Analytical
Date: October 22, 2024

General Information:
8 samples were analyzed for SM22 4500-S2 F by Pace Analytical Services Melville. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Additional Comments:

This data package has been reviewed for quality and completeness and is approved for release.

Pace Analytical Services, LLC
575 Broad Hollow Road
Melville, NY 11747
516-370-6000

ANALYTICAL RESULTS

Project: L2450417
Pace Project No.: 70312803

Sample: MW-4A **Lab ID: 70312803001** Collected: 09/04/24 08:40 Received: 09/10/24 08:00 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
4500S2F W Sulfide Iodometric	Analytical Method: SM22 4500-S2 F Pace Analytical Services - Melville								
Sulfide	**8.2**	mg/L	2.0	0.20	1		09/11/24 17:04		

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
575 Broad Hollow Road
Melville, NY 11747
516-370-6000

ANALYTICAL RESULTS

Project: L2450417
Pace Project No.: 70312803

Sample: MW-4B **Lab ID: 70312803002** Collected: 09/04/24 10:00 Received: 09/10/24 08:00 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
4500S2F W Sulfide Iodometric	Analytical Method: SM22 4500-S2 F Pace Analytical Services - Melville								
Sulfide	**<2.0**	mg/L	2.0	0.20	1		09/11/24 17:07		

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
575 Broad Hollow Road
Melville, NY 11747
516-370-6000

ANALYTICAL RESULTS

Project: L2450417
Pace Project No.: 70312803

Sample: MW-3A **Lab ID: 70312803003** Collected: 09/04/24 11:30 Received: 09/10/24 08:00 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
4500S2F W Sulfide Iodometric	Analytical Method: SM22 4500-S2 F Pace Analytical Services - Melville								
Sulfide	**<2.0**	mg/L	2.0	0.20	1		09/11/24 17:10		

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
575 Broad Hollow Road
Melville, NY 11747
516-370-6000

ANALYTICAL RESULTS

Project: L2450417
Pace Project No.: 70312803

Sample: MW-3B **Lab ID: 70312803004** Collected: 09/04/24 12:10 Received: 09/10/24 08:00 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
4500S2F W Sulfide Iodometric	Analytical Method: SM22 4500-S2 F Pace Analytical Services - Melville								
Sulfide	**<2.0**	mg/L	2.0	0.20	1		09/11/24 17:13		

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
575 Broad Hollow Road
Melville, NY 11747
516-370-6000

ANALYTICAL RESULTS

Project: L2450417
Pace Project No.: 70312803

Sample: MW-2A **Lab ID: 70312803005** Collected: 09/04/24 13:40 Received: 09/10/24 08:00 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
4500S2F W Sulfide Iodometric	Analytical Method: SM22 4500-S2 F Pace Analytical Services - Melville								
Sulfide	**<2.0**	mg/L	2.0	0.20	1		09/11/24 17:16		

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
575 Broad Hollow Road
Melville, NY 11747
516-370-6000

ANALYTICAL RESULTS

Project: L2450417
Pace Project No.: 70312803

Sample: MW-2B **Lab ID: 70312803006** Collected: 09/04/24 13:33 Received: 09/10/24 08:00 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
4500S2F W Sulfide Iodometric	Analytical Method: SM22 4500-S2 F Pace Analytical Services - Melville								
Sulfide	**<2.0**	mg/L	2.0	0.20	1		09/11/24 17:27		

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
575 Broad Hollow Road
Melville, NY 11747
516-370-6000

ANALYTICAL RESULTS

Project: L2450417
Pace Project No.: 70312803

Sample: MW-9A **Lab ID: 70312803007** Collected: 09/04/24 15:20 Received: 09/10/24 08:00 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
4500S2F W Sulfide Iodometric	Analytical Method: SM22 4500-S2 F Pace Analytical Services - Melville								
Sulfide	**<2.0**	mg/L	2.0	0.20	1		09/11/24 17:30		

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
575 Broad Hollow Road
Melville, NY 11747
516-370-6000

ANALYTICAL RESULTS

Project: L2450417
Pace Project No.: 70312803

Sample: MW-9B **Lab ID: 70312803008** Collected: 09/04/24 15:40 Received: 09/10/24 08:00 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
4500S2F W Sulfide Iodometric	Analytical Method: SM22 4500-S2 F Pace Analytical Services - Melville								
Sulfide	**<2.0**	mg/L	2.0	0.20	1		09/11/24 17:33		

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
575 Broad Hollow Road
Melville, NY 11747
516-370-6000

QUALITY CONTROL DATA

Project: L2450417
Pace Project No.: 70312803

QC Batch: 362280
QC Batch Method: SM22 4500-S2 F
Analysis Method: SM22 4500-S2 F
Analysis Description: 4500S2F W Sulfide Iodometric
Laboratory: Pace Analytical Services - Melville
Associated Lab Samples: 70312803001, 70312803002, 70312803003, 70312803004, 70312803005, 70312803006, 70312803007, 70312803008

METHOD BLANK: 1885419 Matrix: Water
Associated Lab Samples: 70312803001, 70312803002, 70312803003, 70312803004, 70312803005, 70312803006, 70312803007, 70312803008

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Sulfide	mg/L	ND	2.0	0.20	09/11/24 17:00	

LABORATORY CONTROL SAMPLE: 1885420

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Sulfide	mg/L	14	14.0	100	85-115	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1885421 1885422

Parameter	Units	70312803005 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Sulfide	mg/L	<2.0	11.2	11.2	8.3	8.3	74	74	70-130	0	20	

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
575 Broad Hollow Road
Melville, NY 11747
516-370-6000

QUALIFIERS

Project: L2450417
Pace Project No.: 70312803

DEFINITIONS

DF - Dilution Factor, if reported, represents the factor applied to the reported data due to dilution of the sample aliquot.

ND - Not Detected at or above adjusted reporting limit.

TNTC - Too Numerous To Count

J - Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.

MDL - Adjusted Method Detection Limit.

PQL - Practical Quantitation Limit.

RL - Reporting Limit - The lowest concentration value that meets project requirements for quantitative data with known precision and bias for a specific analyte in a specific matrix.

S - Surrogate

1,2-Diphenylhydrazine decomposes to and cannot be separated from Azobenzene using Method 8270. The result for each analyte is a combined concentration.

Consistent with EPA guidelines, unrounded data are displayed and have been used to calculate % recovery and RPD values.

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

U - Indicates the compound was analyzed for, but not detected.

N-Nitrosodiphenylamine decomposes and cannot be separated from Diphenylamine using Method 8270. The result reported for each analyte is a combined concentration.

Reported results are not rounded until the final step prior to reporting. Therefore, calculated parameters that are typically reported as "Total" may vary slightly from the sum of the reported component parameters.

Pace Analytical is TNI accredited. Contact your Pace PM for the current list of accredited analytes.

TNI - The NELAC Institute.

Pace Analytical Services, LLC
575 Broad Hollow Road
Melville, NY 11747
516-370-6000

QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: L2450417
Pace Project No.: 70312803

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
70312803001	**MW-4A**	SM22 4500-S2 F	362280		
70312803002	**MW-4B**	SM22 4500-S2 F	362280		
70312803003	**MW-3A**	SM22 4500-S2 F	362280		
70312803004	**MW-3B**	SM22 4500-S2 F	362280		
70312803005	**MW-2A**	SM22 4500-S2 F	362280		
70312803006	**MW-2B**	SM22 4500-S2 F	362280		
70312803007	**MW-9A**	SM22 4500-S2 F	362280		
70312803008	**MW-9B**	SM22 4500-S2 F	362280		

ALPHA ANALYTICAL
World Class Chemistry

Subcontract Cha

Pace Analytical (Melville
575 Broad Hollow Road
Melville, NY 11747

WO# : 70312803

70312803

Alpha Job Number
L2450417

Client Information	Project Information	Regulatory Requirements/Report Limits
Client: Alpha Analytical Labs Address: Eight Walkup Drive Westborough, MA 01581-1019 Phone: 508.844.4115 Email: Mitchell.Ostrowski@pacelabs.com	Project Location: NY Project Manager: Mitchell Ostrowski **Turnaround & Deliverables Information** Due Date: Deliverables:	State/Federal Program: Regulatory Criteria:

Project Specific Requirements and/or Report Requirements

Reference following Alpha Job Number on final report/deliverables: L2450417

Report to include Method Blank, LCS/LCSD:

Additional Comments: Invoices to: invoices@pacelabs.coupahost.com Reports to: west.subreports@pacelabs.com MS/MSD

Lab ID	Client ID	Collection Date/Time	Sample Matrix	Analysis	Batch QC
	MW-4A	09-04-24 08:40	WATER	Sulfide	
	MW-4B	09-04-24 10:00	WATER	Sulfide	
	MW-3A	09-04-24 11:30	WATER	Sulfide	
	MW-3B	09-04-24 12:10	WATER	Sulfide	
	MW-2A	09-04-24 13:40	WATER	Sulfide	MS;MSD
	MW-2B	09-04-24 13:33	WATER	Sulfide	
	MW-9A	09-04-24 15:20	WATER	Sulfide	
	MW-9B	09-04-24 15:40	WATER	Sulfide	

	Relinquished By:	Date/Time:	Received By:	Date/Time:
		9/9/24 1805		9/9/24 1805
		9/9/24 2246	PACE	9/10/24 0052
	PACE	9/10/24		9/10 9:10
Form No: AL_subcoc		9/10 8:00		

RMS P. E 9/10/24 8m

1-9

Client: Alpha

Work ID: 12450417

Profile #: 5378

☐ Use Point Number Spreadsheet ☐ Multiday Project

☐ Add SCLOGFD to first sample for field charge

COC Page _____ of _____

COC Line Item	Matrix	VG9U	VG9C	VG9H	VG9S	VG9T	DG9Y	DG9P	DG9A	DG6T	DG9S	AG4U	AG3U	AG2U	AG1U	AG34	AG3S	AG4E	AG3T	AG2R	AG1T	AG1H	AG1A	AG5U	AG44	CG1U	WG9O	WG4O	BP4U	BP3U	BP2U	BP1U	BP3S	BP2S	BP4N	BP3N	BP2N	BP3C	BP3T	BP35	BP3R	BP1Z	BP1N	BP1B	SP5T	R	WG2U	WGFU	WGKU	WGDU	ZPLC	GN	WP	TEDL	BGIH	LLHG	BG1N	IOC	SOC	BP3Z			
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12																																																														1				

Container Codes

Glass				Plastic	
VG9U	40mL unpres clear vial	AG4U	125mL unpres amber glass	BP4U	125mL unpreserved plastic
VG9C	40mL Ascorbic-HCl clear vial	AG3U	250mL unpres amber glass	BP3U	250mL unpreserved plastic
VG9H	40mL HCl clear vial	AG2U	500mL unpres amber glass	BP2U	500mL unpreserved plastic
VG9S	40mL Sulfuirc clear vial	AG1U	1liter unpres amber glass	BP1U	1L unpreserved plastic
VG9T	40mL Na Thiosulfate vial	AG34	Ammonium Cl 250mL bottle	BP4N	125mL HNO3 plastic
DG9Y	40mL Citrate-Na Thiosulfate	AG3S	250mL H2SO4 amber glass	BP3N	250mL HNO3 plastic
DG9P	40mL amber vial - TSP	AG4E	125mL EDA amber glass	BP2N	500mL HNO3 plastic
DG9A	Ascorbic/Maleic Acid 40mL	AG3T	250mL Na Thio amber glass	BP3S	250mL H2SO4 plastic
DG6T	Na Thio 60mL Vial	AG2R	Na Sulfite 500mL (blue Cap)	BP2S	500mL H2SO4 plastic
DG9S	Ammonium Cl/CuSO4 40mL	AG1T	Na Thiosulfate 1L bottle	BP3C	NaOH 250mL bottle
CG1U	1L Unpres Jar (Con Ed)	AG1H	1L HCl amber glass	BP3T	250mL Trizma
WG9O	8oz clear soil jar	AG1A	(NH4Cl)	BP35	250mL Ammonium Acetate
WG4O	4oz clear soil jar	AG5U	100mL unpres Amber Glass	BP3R	250mL NH4SO4-NH4OH
		AG44	Ammonium Cl 120mL bottle	BP1Z	1L NaOH, Zn Acetate
				BP1N	1L HNO3 plastic
				BP1B	Na Thiosulfate Amber Bottle

Misc.	
SP5T	120mL Coliform Na Thio
R	Terracore Kit
WG2U	2oz Unpreserved Jar
WGFU	4oz Unpreserved Jar
WGKU	8oz Unpreserved Jar
WGDU	16oz Unpreserved Jar
ZPLC	Ziplock Bag
TEDL	Tedlar Bag
BG1H	1L HCL Clear Glass
GN	General
WP	Wipe
LLHG	Low Level Hg Bottles
BG1N	1L HNO3 Clear Glass

IOC	
BP1U	1L unpreserved plastic
BP3N*	250mL HNO3 plastic
BP3C	250mL Sodium Hydroxide
AG2U	500mL unpres amber glass
BP3U	250mL unpreserved plastic

* Can also be a BP4N

Matrix	
WT	Water
SL	Solid
NAL	Non-aqueous Liquid
OL	OIL
WP	Wipe
DW	Drinking Water

SOC	
VG9T	40mL Na Thio amber vial
DG9A	40mL Ascorbic acid/ maleic Acid vials
DG9Y	Citrate/Na Thiosulfate 40mL
DG6T	Na Thiosulfate 60mL vial
DG6M	MonoClActetic/Na Thio 60mL
AG3U	250mL unpres amber glass
AG3T	Na Thiosulfate 250mL bottle
BP1B	Na Thiosulfate Amber bottle
AG1T	Na Thiosulfate 1L Amber
AG1A	525.3 Chemical Blend

Sender Initials _____

Additional Comments

WO#: 70312803

PM: BDR Due Date: 09/17/24

CLIENT: ALPHA

WO#: 70312803

PM: BDR **Due Date: 09/17/24**

CLIENT: ALPHA

Client Name: ALPHA Project #:

Courier: Fed Ex UPS USPS Client Commercial Pace Other

Tracking #:

Custody Seal on Cooler/Box Present: Yes No Seals intact: Yes No Temperature Blank Present: Yes No

Packing Material: Bubble Wrap Bubble Bags Ziplot None Other Type of Ice: Wet Blue None

Thermometer Used: TH214 Correction Factor: +0.3 Samples on ice cooling process has begun

Cooler Temperature(°C): 1.9 Cooler Temperature Corrected(°C): 2.2 Date/Time 5035A kits placed in freezer

Temp should be above freezing to 6.0°C

USDA Regulated Soil (N/A, water sample)

Did samples originate in a quarantine zone within the United States: AL, AR, CA, FL, GA, ID, LA, MS, NC, NM, NY, OK, OR, SC, TN, TX, or VA (check map)? Ye No

Did samples orignate from a foreign source including Hawaii and Puerto Rico)? Yes No

If Yes to either question, fill out a Regulated Soil Checklist (ENV-FRM-MELV-0076) and include with SCUR/COC paperwork.

Date and Initials of person examining contents: 9/11/24 AEB

				COMMENTS:
Chain of Custody Present	Yes	No		1.
Chain of Custody Filled Out	Yes	No		2.
Chain of Custody Relinquished:	Yes	No		3.
Sampler Name & Signature on COC	Yes	No	N/A	4.
Samples Arrived within Hold Time:	Yes	No		5.
Short Hold Time Analysis (<72hr):	Yes	No		6.
Rush Turn Around Time Requested	Yes	No		7.
Sufficient Volume: (Triple volume provided for MS/MSD)	Yes	No		8.
Correct Containers Used:	Yes	No		9.
-Pace Containers Used:	Yes	No		
Containers Intact:	Yes	No		10.
Filtered volume received for Dissolved tests	Yes	No	N/A	11. Note: if sediment is visible in the dissolved container.
Sample Labels match COC: -Includes date/time/ID/Analysis	Yes	No		12.
Matrix:	SL	WT	OIL OTHER	

Date and Initials of person checking preservation: 9/11/24 AEB

All containers needing preservation have been checked.	Yes	No	N/A	13. HNO3 H2SO4 NaOH HCl
pH paper Lot # 2053DM				Sample #
All containers needing preservation are found to be in compliance with method recommendation? (HNO3, H2SO4, HCl, NaOH>9 Sulfide, NAOH>12 Cyanide)	Yes	No	N/A	
Exceptions: VOA, Coliform, TOC/DOC, Oil and Grease, DRO/8015 (water)				Initial when completed: / Lot # of added preservative: / Date/Time preservative added:
Per Method, VOA pH is checked after analysis				
Samples checked for dechlorination:	Yes	No	N/A	14.
KI starch test strips Lot #				Positive for Res. Chlorine? Y N
Residual chlorine strips Lot #				
SM 4500 CN samples checked for sul	Yes	No	N/A	15.
Lead Acetate Strips Lot #				Positive for Sulfide? Y N
Headspace in ALK Bottle (>6mm):	Yes	No	N/A	
Headspace in VOA Vials (>6mm):	Yes	No	N/A	16.
Trip Blank Present:	Yes	No	N/A	17.
Trip Blank Custody Seals Present	Yes	No	N/A	

Client Notification/ Resolution: Field Data Required? Y / N

Person Contacted: Date/Time:

Comments/ Resolution:

* PM (Project Manager) review (which includes the SCUR) is documented electronically in LIMS

SAMPLE NO.

MW-4A

FORM I INORGANIC-1

INORGANIC ANALYSIS DATA SHEET

Lab Name: Pace Analytical - New York SDG No. : 70312803 Contract: L2450417

Lab Sample ID: 70312803001 Percent Moisture:

CAS No.	Analyte	Concentration	Q	Units	DF	Analysis Date/Time
	Sulfide	8.2		mg/L	1	09/11/2024 17:04

SAMPLE NO.

MW-4B

FORM I INORGANIC-1

INORGANIC ANALYSIS DATA SHEET

Lab Name: Pace Analytical - New York SDG No. : 70312803 Contract: L2450417

Lab Sample ID: 70312803002 Percent Moisture:

CAS No.	Analyte	Concentration	Q	Units	DF	Analysis Date/Time
	Sulfide	<2.0	U	mg/L	1	09/11/2024 17:07

SAMPLE NO.

MW-3A

FORM I INORGANIC-1

INORGANIC ANALYSIS DATA SHEET

Lab Name: Pace Analytical - New York SDG No. : 70312803 Contract: L2450417

Lab Sample ID: 70312803003 Percent Moisture:

CAS No.	Analyte	Concentration	Q	Units	DF	Analysis Date/Time
	Sulfide	<2.0	U	mg/L	1	09/11/2024 17:10

SAMPLE NO.

MW-3B

FORM I INORGANIC-1

INORGANIC ANALYSIS DATA SHEET

Lab Name: Pace Analytical - New York SDG No. : 70312803 Contract: L2450417

Lab Sample ID: 70312803004 Percent Moisture:

CAS No.	Analyte	Concentration	Q	Units	DF	Analysis Date/Time
	Sulfide	<2.0	U	mg/L	1	09/11/2024 17:13

SAMPLE NO.

MW-2A

FORM I INORGANIC-1

INORGANIC ANALYSIS DATA SHEET

Lab Name: Pace Analytical - New York SDG No. : 70312803 Contract: L2450417

Lab Sample ID: 70312803005 Percent Moisture:

CAS No.	Analyte	Concentration	Q	Units	DF	Analysis Date/Time
	Sulfide	<2.0	U	mg/L	1	09/11/2024 17:16

SAMPLE NO.

MW-2B

FORM I INORGANIC-1

INORGANIC ANALYSIS DATA SHEET

Lab Name: Pace Analytical - New York SDG No. : 70312803 Contract: L2450417

Lab Sample ID: 70312803006 Percent Moisture:

CAS No.	Analyte	Concentration	Q	Units	DF	Analysis Date/Time
	Sulfide	<2.0	U	mg/L	1	09/11/2024 17:27

SAMPLE NO.

MW-9A

FORM I INORGANIC-1

INORGANIC ANALYSIS DATA SHEET

Lab Name: Pace Analytical - New York SDG No. : 70312803 Contract: L2450417

Lab Sample ID: 70312803007 Percent Moisture:

CAS No.	Analyte	Concentration	Q	Units	DF	Analysis Date/Time
	Sulfide	<2.0	U	mg/L	1	09/11/2024 17:30

SAMPLE NO.

MW-9B

FORM I INORGANIC-1

INORGANIC ANALYSIS DATA SHEET

Lab Name: Pace Analytical - New York SDG No. : 70312803 Contract: L2450417

Lab Sample ID: 70312803008 Percent Moisture:

CAS No.	Analyte	Concentration	Q	Units	DF	Analysis Date/Time
	Sulfide	<2.0	U	mg/L	1	09/11/2024 17:33

FORM III INORGANIC-1

BLANKS

Lab Name: Pace Analytical - New York SDG No. : 70312803 Contract : L2450417

Method Blank Matrix: Water Instrument ID: 70WET0

Method Blank Concentration Units: mg/L

Analyte	Initial Calibration Blank		Continuing Calibration Blank						Method Blank	
		C		C		C		C	1885419	C
Sulfide									ND	U

SAMPLE NO.

1885421MS

FORM V INORGANIC-1

MATRIX SPIKE SAMPLE RECOVERY

Lab Name: Pace Analytical - New York SDG No. : 70312803 Contract: L2450417

Matrix: Water Basis: Wet Parent Sample ID: MW-2A

Percent Moisture:

Analyte	Units	Control Limit %R	Spiked Sample Result (SSR)	Sample Result (SR)	Spike Added (SA)	%R
Sulfide	mg/L	70-130	8.3	<2.0	11.2	74

SAMPLE NO.

1885422MSD

FORM V INORGANIC-2

MATRIX SPIKE SAMPLE RECOVERY

Lab Name: Pace Analytical - New York SDG No. : 70312803 Contract: L2450417

Matrix: Water Basis: Wet Parent Sample ID: MW-2A

Percent Moisture:

Analyte	Units	Control Limit %R	Spiked Sample Result (SSR)	Sample Result (SR)	Spike Added (SA)	%R
Sulfide	mg/L	70-130	8.3	<2.0	11.2	74

SAMPLE NO.

1885422MSD

FORM VI INORGANIC-1
DUPLICATES

Lab Name: Pace Analytical - New York SDG No. : 70312803 Contract: L2450417

Matrix: Water Concentration Units: mg/L

Percent Moisture: Basis: Wet

Analyte	RPD Control Limit	Sample	Duplicate	RPD
Sulfide	20	8.3	8.3	0

SAMPLE NO.

1885420LCS

FORM VII INORGANIC-1
LABORATORY CONTROL SAMPLE

Lab Name: Pace Analytical - New York SDG No. : 70312803 Contract: L2450417

Matrix: Water

Analyte	Units	True	Found	%R	Limits	
Sulfide	mg/L	14.0	14.0	100	85	115

FORM XII INORGANIC-1
PREPARATION LOG

Lab Name: Pace Analytical - New York SDG No. : 70312803 Contract: L2450417

Preparation Method: SM22 4500-S2 F Batch: WET 83879

Lab Sample ID	Sample Name	Preparation Date	Initial Volume (mL)	Final Volume (mL)
1885419	1885419BLANK	09/11/2024	200	200
1885420	1885420LCS	09/11/2024	200	200
1885421	1885421MS	09/11/2024	250	250
1885422	1885422MSD	09/11/2024	250	250
70312803001	MW-4A	09/11/2024	250	250
70312803002	MW-4B	09/11/2024	250	250
70312803003	MW-3A	09/11/2024	250	250
70312803004	MW-3B	09/11/2024	250	250
70312803005	MW-2A	09/11/2024	250	250
70312803006	MW-2B	09/11/2024	250	250
70312803007	MW-9A	09/11/2024	250	250
70312803008	MW-9B	09/11/2024	250	250

FORM XIII INORGANIC-1

ANALYSIS RUN LOG

Lab Name: Pace Analytical - New York SDG No. : 70312803 Contract: L2450417

Instrument ID: 70WET0 Analysis Method: SM22 4500-S2 F

Start Date: 09/11/2024 17:00 End Date: 09/11/2024 17:33

Sample Name	Lab Sample ID	D/F	Date	Time	sulf
1885419BLANK	1885419	1	09/11/2024	17:00	X
1885420LCS	1885420	1	09/11/2024	17:01	X
MW-4A	70312803001	1	09/11/2024	17:04	X
MW-4B	70312803002	1	09/11/2024	17:07	X
MW-3A	70312803003	1	09/11/2024	17:10	X
MW-3B	70312803004	1	09/11/2024	17:13	X
MW-2A	70312803005	1	09/11/2024	17:16	X
1885421MS	1885421	1	09/11/2024	17:20	X
1885422MSD	1885422	1	09/11/2024	17:24	X
MW-2B	70312803006	1	09/11/2024	17:27	X
MW-9A	70312803007	1	09/11/2024	17:30	X
MW-9B	70312803008	1	09/11/2024	17:33	X

Prep Log Report

Batch Information: WET_SULFIDE_83879_09/11/24 **4500S2F | Sulfide**

Analysis Method	SM22 4500-S2 F	Instrument	70WET0	Analyzed By	JWM	1:1 HCl	187085
Starch Indicator Solution	185588	Reviewed By	SDO	Reviewed By Date	09/12/2024 10:18	Batch Notes	

Sample Information:

QC Rule	Sample Type	Lab Sample ID	Select	Initial Volume (mL)	Iodine 0.025N (mL)	Thio Start (mL)	Thio End (mL)	Sodium Thiosulfate 0.025N (mL)	Sulfide	Units	Run Date/Time	Filtered	Glass Fiber Filters ()	Sample Notes
4500S2F W	BLANK	**1885419**	Y	200	187084 (5)	2.2	7.2	183216 (5.00)	0.00	mg/L	09/11/2024 17:00:42	Yes	188807 ()	
4500S2F W	LCS	**1885420**	Y	200	187084 (10)	7.2	10.2	183216 (3.00)	14.00	mg/L	09/11/2024 17:01:44	Yes	188807 ()	
4500S2F W	PS	**70312803001**	Y	250	187084 (10)	0	4.9	183216 (4.90)	8.16	mg/L	09/11/2024 17:04:47	Yes	188807 ()	
4500S2F W	PS	**70312803002**	Y	250	187084 (5)	4.9	9.8	183216 (4.90)	0.16	mg/L	09/11/2024 17:07:51	Yes	188807 ()	
4500S2F W	PS	**70312803003**	Y	250	187084 (5)	9.8	14.6	183216 (4.80)	0.32	mg/L	09/11/2024 17:10:53	Yes	188807 ()	
4500S2F W	PS	**70312803004**	Y	250	187084 (5)	14.6	19.5	183216 (4.90)	0.16	mg/L	09/11/2024 17:13:56	Yes	188807 ()	
4500S2F W	RQS	**70312803005**	Y	250	187084 (5)	19.5	24.5	183216 (5.00)	0.00	mg/L	09/11/2024 17:16:59	Yes	188807 ()	
4500S2F W	MS	**1885421**	Y	250	187084 (10)	24.5	29.3	183216 (4.80)	8.32	mg/L	09/11/2024 17:20:07	Yes	188807 ()	
4500S2F W	MSD	**1885422**	Y	250	187084 (10)	29.3	34.1	183216 (4.80)	8.32	mg/L	09/11/2024 17:24:11	Yes	188807 ()	
4500S2F W	PS	**70312803006**	Y	250	187084 (5)	34.3	39.2	183216 (4.90)	0.16	mg/L	09/11/2024 17:27:15	Yes	188807 ()	
4500S2F W	PS	**70312803007**	Y	250	187084 (5)	39.2	44.1	183216 (4.90)	0.16	mg/L	09/11/2024 17:30:29	Yes	188807 ()	
4500S2F W	PS	**70312803008**	Y	250	187084 (5)	44.1	49.1	183216 (5.00)	0.00	mg/L	09/11/2024 17:33:41	Yes	188807 ()	

QC Rule	Sample Type	Lab Sample ID	S-SPK (mL)
4500S2F W	BLANK	**1885419**	
4500S2F W	LCS	**1885420**	188757 (1)
4500S2F W	PS	**70312803001**	

Prep Log Report

QC Rule	Sample Type	Lab Sample ID	S-SPK (mL)
4500S2F W	PS	**70312803002**	
4500S2F W	PS	**70312803003**	
4500S2F W	PS	**70312803004**	
4500S2F W	RQS	**70312803005**	
4500S2F W	MS	**1885421**	188757 (1)
4500S2F W	MSD	**1885422**	188757 (1)
4500S2F W	PS	**70312803006**	
4500S2F W	PS	**70312803007**	
4500S2F W	PS	**70312803008**	

Standard Notes:

188757: Wet Sulfide LCS/ Second Source 5mL

Analytical Data Package

Prepared by:

Pace Analytical Services

Pace Project No.: 70312804

Table Of Contents

Pace Analytical Services, LLC
575 Broad Hollow Road
Melville, NY 11747
516-370-6000

October 22, 2024

Reports
Alpha Analytical
8 Walkup Drive
Westborough, MA 01581

RE: Project: L2450786
Pace Project No.: 70312804

Dear Reports:

Enclosed are the analytical results for sample(s) received by the laboratory on September 10, 2024. The results relate only to the samples included in this report. Results reported herein conform to the applicable TNI/NELAC Standards and the laboratory's Quality Manual, where applicable, unless otherwise noted in the body of the report.

The test results provided in this final report were generated by each of the following laboratories within the Pace Network:

- Pace Analytical Services - Melville

REVISION #1: Report re-issued on 10/22/2024 to include case narrative

If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Brianna D. Rivera
brianna.rivera@pacelabs.com
516-370-6007
Project Manager

Enclosures

Pace Analytical Services, LLC
575 Broad Hollow Road
Melville, NY 11747
516-370-6000

CERTIFICATIONS

Project: L2450786
Pace Project No.: 70312804

Pace Analytical Services, LLC - Melville, NY

575 Broad Hollow Rd, Melville, NY 11747
Connecticut Certification #: PH-0435
Delaware Certification # NY 10478
Maryland Certification #: 208
Massachusetts Certification #: M-NY026
New Hampshire Certification #: 2987
New Jersey Certification #: NY158
New York Certification #: 10478 Primary Accrediting Body
Pennsylvania Certification #: 68-00350
Rhode Island Certification #: LAO00340

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
575 Broad Hollow Road
Melville, NY 11747
516-370-6000

SAMPLE SUMMARY

Project: L2450786
Pace Project No.: 70312804

Lab ID	Sample ID	Matrix	Date Collected	Date Received
70312804001	**MW-5A**	Water	09/05/24 13:53	09/10/24 08:00
70312804002	**MW-5B**	Water	09/05/24 13:55	09/10/24 08:00
70312804003	**MW-6A**	Water	09/05/24 12:50	09/10/24 08:00
70312804004	**MW-6B**	Water	09/05/24 12:47	09/10/24 08:00
70312804005	**MW-7A**	Water	09/05/24 11:55	09/10/24 08:00
70312804006	**MW-7B**	Water	09/05/24 12:00	09/10/24 08:00
70312804007	**MW-8A**	Water	09/05/24 08:00	09/10/24 08:00
70312804008	**MW-8B**	Water	09/05/24 08:55	09/10/24 08:00
70312804009	**MW-10A**	Water	09/05/24 10:10	09/10/24 08:00
70312804010	**MW-10B**	Water	09/05/24 10:16	09/10/24 08:00
70312804011	**DUP**	Water	09/05/24 00:00	09/10/24 08:00

Pace Analytical Services, LLC
575 Broad Hollow Road
Melville, NY 11747
516-370-6000

SAMPLE ANALYTE COUNT

Project: L2450786
Pace Project No.: 70312804

Lab ID	Sample ID	Method	Analysts	Analytes Reported
70312804001	**MW-5A**	SM22 4500-S2 F	JWM	1
70312804002	**MW-5B**	SM22 4500-S2 F	JWM	1
70312804003	**MW-6A**	SM22 4500-S2 F	JWM	1
70312804004	**MW-6B**	SM22 4500-S2 F	JWM	1
70312804005	**MW-7A**	SM22 4500-S2 F	JWM	1
70312804006	**MW-7B**	SM22 4500-S2 F	JWM	1
70312804007	**MW-8A**	SM22 4500-S2 F	JWM	1
70312804008	**MW-8B**	SM22 4500-S2 F	JWM	1
70312804009	**MW-10A**	SM22 4500-S2 F	JWM	1
70312804010	**MW-10B**	SM22 4500-S2 F	JWM	1
70312804011	**DUP**	SM22 4500-S2 F	JWM	1

PACE-MV = Pace Analytical Services - Melville

Pace Analytical Services, LLC
575 Broad Hollow Road
Melville, NY 11747
516-370-6000

PROJECT NARRATIVE

Project: L2450786
Pace Project No.: 70312804

Method: **SM22 4500-S2 F**
Description: 4500S2F W Sulfide Iodometric
Client: Alpha Analytical
Date: October 22, 2024

General Information:
11 samples were analyzed for SM22 4500-S2 F by Pace Analytical Services Melville. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Additional Comments:

This data package has been reviewed for quality and completeness and is approved for release.

Pace Analytical Services, LLC
575 Broad Hollow Road
Melville, NY 11747
516-370-6000

ANALYTICAL RESULTS

Project: L2450786
Pace Project No.: 70312804

Sample: MW-5A **Lab ID: 70312804001** Collected: 09/05/24 13:53 Received: 09/10/24 08:00 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
4500S2F W Sulfide Iodometric	Analytical Method: SM22 4500-S2 F Pace Analytical Services - Melville								
Sulfide	**<2.0**	mg/L	2.0	0.20	1		09/12/24 16:03		

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
575 Broad Hollow Road
Melville, NY 11747
516-370-6000

ANALYTICAL RESULTS

Project: L2450786
Pace Project No.: 70312804

Sample: MW-5B **Lab ID: 70312804002** Collected: 09/05/24 13:55 Received: 09/10/24 08:00 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
4500S2F W Sulfide Iodometric	Analytical Method: SM22 4500-S2 F Pace Analytical Services - Melville								
Sulfide	**<2.0**	mg/L	2.0	0.20	1		09/12/24 16:06		

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
575 Broad Hollow Road
Melville, NY 11747
516-370-6000

ANALYTICAL RESULTS

Project: L2450786
Pace Project No.: 70312804

Sample: MW-6A **Lab ID: 70312804003** Collected: 09/05/24 12:50 Received: 09/10/24 08:00 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
4500S2F W Sulfide Iodometric	Analytical Method: SM22 4500-S2 F Pace Analytical Services - Melville								
Sulfide	**<2.0**	mg/L	2.0	0.20	1		09/12/24 16:09		

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
575 Broad Hollow Road
Melville, NY 11747
516-370-6000

ANALYTICAL RESULTS

Project: L2450786
Pace Project No.: 70312804

Sample: MW-6B **Lab ID: 70312804004** Collected: 09/05/24 12:47 Received: 09/10/24 08:00 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
4500S2F W Sulfide Iodometric	Analytical Method: SM22 4500-S2 F Pace Analytical Services - Melville								
Sulfide	**<2.0**	mg/L	2.0	0.20	1		09/12/24 16:11		

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
575 Broad Hollow Road
Melville, NY 11747
516-370-6000

ANALYTICAL RESULTS

Project: L2450786
Pace Project No.: 70312804

Sample: MW-7A **Lab ID: 70312804005** Collected: 09/05/24 11:55 Received: 09/10/24 08:00 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
4500S2F W Sulfide Iodometric	Analytical Method: SM22 4500-S2 F Pace Analytical Services - Melville								
Sulfide	**<2.0**	mg/L	2.0	0.20	1		09/12/24 16:14		

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
575 Broad Hollow Road
Melville, NY 11747
516-370-6000

ANALYTICAL RESULTS

Project: L2450786
Pace Project No.: 70312804

Sample: MW-7B **Lab ID: 70312804006** Collected: 09/05/24 12:00 Received: 09/10/24 08:00 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
4500S2F W Sulfide Iodometric	Analytical Method: SM22 4500-S2 F Pace Analytical Services - Melville								
Sulfide	**<2.0**	mg/L	2.0	0.20	1		09/12/24 16:16		

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
575 Broad Hollow Road
Melville, NY 11747
516-370-6000

ANALYTICAL RESULTS

Project: L2450786
Pace Project No.: 70312804

Sample: MW-8A **Lab ID: 70312804007** Collected: 09/05/24 08:00 Received: 09/10/24 08:00 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
4500S2F W Sulfide Iodometric	Analytical Method: SM22 4500-S2 F Pace Analytical Services - Melville								
Sulfide	**<2.0**	mg/L	2.0	0.20	1		09/12/24 16:19		

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
575 Broad Hollow Road
Melville, NY 11747
516-370-6000

ANALYTICAL RESULTS

Project: L2450786
Pace Project No.: 70312804

Sample: MW-8B **Lab ID: 70312804008** Collected: 09/05/24 08:55 Received: 09/10/24 08:00 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
4500S2F W Sulfide Iodometric	Analytical Method: SM22 4500-S2 F Pace Analytical Services - Melville								
Sulfide	**<2.0**	mg/L	2.0	0.20	1		09/12/24 16:22		

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
575 Broad Hollow Road
Melville, NY 11747
516-370-6000

ANALYTICAL RESULTS

Project: L2450786
Pace Project No.: 70312804

Sample: MW-10A **Lab ID: 70312804009** Collected: 09/05/24 10:10 Received: 09/10/24 08:00 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
4500S2F W Sulfide Iodometric	Analytical Method: SM22 4500-S2 F Pace Analytical Services - Melville								
Sulfide	**<2.0**	mg/L	2.0	0.20	1		09/12/24 16:25		

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
575 Broad Hollow Road
Melville, NY 11747
516-370-6000

ANALYTICAL RESULTS

Project: L2450786
Pace Project No.: 70312804

Sample: MW-10B **Lab ID: 70312804010** Collected: 09/05/24 10:16 Received: 09/10/24 08:00 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
4500S2F W Sulfide Iodometric	Analytical Method: SM22 4500-S2 F Pace Analytical Services - Melville								
Sulfide	**<2.0**	mg/L	2.0	0.20	1		09/12/24 16:28		

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
575 Broad Hollow Road
Melville, NY 11747
516-370-6000

ANALYTICAL RESULTS

Project: L2450786
Pace Project No.: 70312804

Sample: DUP **Lab ID: 70312804011** Collected: 09/05/24 00:00 Received: 09/10/24 08:00 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
4500S2F W Sulfide Iodometric	Analytical Method: SM22 4500-S2 F Pace Analytical Services - Melville								
Sulfide	**<2.0**	mg/L	2.0	0.20	1		09/12/24 16:31		

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
575 Broad Hollow Road
Melville, NY 11747
516-370-6000

QUALITY CONTROL DATA

Project: L2450786
Pace Project No.: 70312804

QC Batch: 362362 | Analysis Method: SM22 4500-S2 F
QC Batch Method: SM22 4500-S2 F | Analysis Description: 4500S2F W Sulfide Iodometric
Laboratory: Pace Analytical Services - Melville

Associated Lab Samples: 70312804001, 70312804002, 70312804003, 70312804004, 70312804005, 70312804006, 70312804007, 70312804008, 70312804009, 70312804010, 70312804011

METHOD BLANK: 1886007 Matrix: Water

Associated Lab Samples: 70312804001, 70312804002, 70312804003, 70312804004, 70312804005, 70312804006, 70312804007, 70312804008, 70312804009, 70312804010, 70312804011

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Sulfide	mg/L	ND	2.0	0.20	09/12/24 15:55	

LABORATORY CONTROL SAMPLE & LCSD: 1886008 1886009

Parameter	Units	Spike Conc.	LCS Result	LCSD Result	LCS % Rec	LCSD % Rec	% Rec Limits	RPD	Max RPD	Qualifiers
Sulfide	mg/L	14	14.0	14.0	100	100	85-115	0	20	

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
575 Broad Hollow Road
Melville, NY 11747
516-370-6000

QUALIFIERS

Project: L2450786
Pace Project No.: 70312804

DEFINITIONS

DF - Dilution Factor, if reported, represents the factor applied to the reported data due to dilution of the sample aliquot.

ND - Not Detected at or above adjusted reporting limit.

TNTC - Too Numerous To Count

J - Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.

MDL - Adjusted Method Detection Limit.

PQL - Practical Quantitation Limit.

RL - Reporting Limit - The lowest concentration value that meets project requirements for quantitative data with known precision and bias for a specific analyte in a specific matrix.

S - Surrogate

1,2-Diphenylhydrazine decomposes to and cannot be separated from Azobenzene using Method 8270. The result for each analyte is a combined concentration.

Consistent with EPA guidelines, unrounded data are displayed and have been used to calculate % recovery and RPD values.

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

U - Indicates the compound was analyzed for, but not detected.

N-Nitrosodiphenylamine decomposes and cannot be separated from Diphenylamine using Method 8270. The result reported for each analyte is a combined concentration.

Reported results are not rounded until the final step prior to reporting. Therefore, calculated parameters that are typically reported as "Total" may vary slightly from the sum of the reported component parameters.

Pace Analytical is TNI accredited. Contact your Pace PM for the current list of accredited analytes.

TNI - The NELAC Institute.

Pace Analytical Services, LLC
575 Broad Hollow Road
Melville, NY 11747
516-370-6000

QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: L2450786
Pace Project No.: 70312804

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
70312804001	**MW-5A**	SM22 4500-S2 F	362362		
70312804002	**MW-5B**	SM22 4500-S2 F	362362		
70312804003	**MW-6A**	SM22 4500-S2 F	362362		
70312804004	**MW-6B**	SM22 4500-S2 F	362362		
70312804005	**MW-7A**	SM22 4500-S2 F	362362		
70312804006	**MW-7B**	SM22 4500-S2 F	362362		
70312804007	**MW-8A**	SM22 4500-S2 F	362362		
70312804008	**MW-8B**	SM22 4500-S2 F	362362		
70312804009	**MW-10A**	SM22 4500-S2 F	362362		
70312804010	**MW-10B**	SM22 4500-S2 F	362362		
70312804011	**DUP**	SM22 4500-S2 F	362362		

ALPHA ANALYTICAL
World Class Chemistry

Subcontract

Pace Analytical (M
575 Broad Hollow
Melville, NY 11747

WO# : 70312804

70312804

Alpha Job Number
L2450786

Client Information	Project Information	Regulatory Requirements/Report Limits
Client: Alpha Analytical Labs Address: Eight Walkup Drive Westborough, MA 01581-1019 Phone: 508.844.4115 Email: Mitchell.Ostrowski@pacelabs.com	Project Location: NY Project Manager: Mitchell Ostrowski **Turnaround & Deliverables Information** Due Date: Deliverables:	State/Federal Program: Regulatory Criteria:

Project Specific Requirements and/or Report Requirements

Reference following Alpha Job Number on final report/deliverables: L2450786

Report to include Method Blank, LCS/LCSD:

Additional Comments: Invoices to: invoices@pacelabs.coupahost.com Reports to: west.subreports@pacelabs.com

Lab ID	Client ID	Collection Date/Time	Sample Matrix	Analysis	Batch QC
	MW-5A	09-05-24 13:53	WATER	Sulfide	
	MW-5B	09-05-24 13:55	WATER	Sulfide	
	MW-6A	09-05-24 12:50	WATER	Sulfide	
	MW-6B	09-05-24 12:47	WATER	Sulfide	
	MW-7A	09-05-24 11:55	WATER	Sulfide	
	MW-7B	09-05-24 12:00	WATER	Sulfide	
	MW-8A	09-05-24 08:00	WATER	Sulfide	
	MW-8B	09-05-24 08:55	WATER	Sulfide	

	Relinquished By:	Date/Time:	Received By:	Date/Time:
		9/9/24 1805	PACE	9/9/24 1805
	PACE	9/9/24 2240		9/10/24 0052
		9/10/24	PACE	9/10 4:10
Form No: AL_subcoc		9/10 8:00		

RMJ 9/10/24 8:00 1.9 (W)

WO# : 70312804
PM: BDR Due Date: 09/17/24
CLIENT: ALPHA

Subcontract Ch

Pace Analytical (Melvil
575 Broad Hollow Roa
Melville, NY 11747

Alpha Job Number
L2450786

Client Information	Project Information	Regulatory Requirements/Report Limits
Client: Alpha Analytical Labs Address: Eight Walkup Drive Westborough, MA 01581-1019 Phone: 508.844.4115 Email: Mitchell.Ostrowski@pacelabs.com	Project Location: NY Project Manager: Mitchell Ostrowski **Turnaround & Deliverables Information** Due Date: Deliverables:	State/Federal Program: Regulatory Criteria:

Project Specific Requirements and/or Report Requirements

Reference following Alpha Job Number on final report/deliverables: L2450786

Report to include Method Blank, LCS/LCSD:

Additional Comments: Send all results/reports to subreports@alphalab.com

Lab ID	Client ID	Collection Date/Time	Sample Matrix	Analysis	Batch QC
	MW-10A	09-05-24 10:10	WATER	Sulfide	
	MW-10B	09-05-24 10:16	WATER	Sulfide	
	DUP	09-05-24 00:00	WATER	Sulfide	

	Relinquished By:	Date/Time:	Received By:	Date/Time:
		9/9/24 1805	PACE	9/9/24 1805
	PACE	9/10/24	PACE	9/10/24 0052
Form No: AL_subcoc		9/10 8:00		9/10 4:10

1-9

Client: ALPHA
Work ID: L2450786
Profile #: 5378
COC Page ______ of ______

☐ Use Point Number Spreadsheet
☐ Add SCLOGFD to first sample for field charge
☐ Multiday Project

COC Line Item	Matrix	VG9U	VG9C	VG9H	VG9S	VG9T	DG9Y	DG9P	DG9A	DG6T	DG9S	AG4U	AG3U	AG2U	AG1U	AG34	AG3S	AG4E	AG3T	AG2R	AG1T	AG1H	AG1A	AG5U	AG44	CG1U	WG9O	WG4O	BP4U	BP3U	BP2U	BP1U	BP3S	BP2S	BP4N	BP3N	BP2N	BP3C	BP3T	BP35	BP3R	BP1Z	BP1N	BP1B	SP5T	R	WG2U	WGFU	WGKU	WGDU	ZPLC	GN	WP	TEDL	BGIH	LLHG	BG1N	IOC	SOC	BP32			
1																																																												1			
2																																																												1			
3																																																												1			
4																																																												1			
5																																																												1			
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7																																																												1			
8																																																												1			
9																																																												1			
10																																																												1			
11																																																												1			
12																																																															

Container Codes

Glass			
VG9U	40mL unpres clear vial	AG4U	125mL unpres amber glass
VG9C	40mL Ascorbic-HCl clear vial	AG3U	250mL unpres amber glass
VG9H	40mL HCl clear vial	AG2U	500mL unpres amber glass
VG9S	40mL Sulfurc clear vial	AG1U	1liter unpres amber glass
VG9T	40mL Na Thiosulfate vial	AG34	Ammonium Cl 250mL bottle
DG9Y	40mL Citrate-Na Thiosulfate	AG3S	250mL H2SO4 amber glass
DG9P	40mL amber vial - TSP	AG4E	125mL EDA amber glass
DG9A	Ascorbic/Maleic Acid 40mL	AG3T	250mL Na Thio amber glass
DG6T	Na Thio 60mL Vial	AG2R	Na Sulfite 500mL (blue Cap)
DG9S	Ammonium Cl/CuSO4 40mL	AG1T	Na Thiosulfate 1L bottle
CG1U	1L Unpres Jar (Con Ed)	AG1H	1L HCl amber glass
WG9O	8oz clear soil jar	AG1A	(NH4Cl)
WG4O	4oz clear soil jar	AG5U	100mL unpres Amber Glass
		AG44	Ammonium Cl 120mL bottle

Plastic	
BP4U	125mL unpreserved plastic
BP3U	250mL unpreserved plastic
BP2U	500mL unpreserved plastic
BP1U	1L unpreserved plastic
BP4N	125mL HNO3 plastic
BP3N	250mL HNO3 plastic
BP2N	500mL HNO3 plastic
BP3S	250mL H2SO4 plastic
BP2S	500mL H2SO4 plastic
BP3C	NaOH 250mL bottle
BP3T	250mL Trizma
BP35	250mL Ammonium Acetate
BP3R	250mL NH4SO4-NH4OH
BP1Z	1L NaOH, Zn Acetate
BP1N	1L HNO3 plastic
BP1B	Na Thiosulfate Amber Bottle

Misc.	
SP5T	120mL Coliform Na Thio
R	Terracore Kit
WG2U	2oz Unpreserved Jar
WGFU	4oz Unpreserved Jar
WGKU	8oz Unpreserved Jar
WGDU	16oz Unpreserved Jar
ZPLC	Ziplock Bag
TEDL	Tedlar Bag
BG1H	1L HCL Clear Glass
GN	General
WP	Wipe
LLHG	Low Level Hg Bottles
BG1N	1L HNO3 Clear Glass

IOC	
BP1U	1L unpreserved plastic
BP3N*	250mL HNO3 plastic
BP3C	250mL Sodium Hydroxide
AG2U	500mL unpres amber glass
BP3U	250mL unpreserved plastic

* Can also be a BP4N

Matrix	
WT	Water
SL	Solid
NAL	Non-aqueous Liquid
OL	OIL
WP	Wipe
DW	Drinking Water

SOC	
VG9T	40mL Na Thio amber vial
DG9A	40mL Ascorbic acid/ maleic Acid vials
DG9Y	Citrate/Na Thiosulfate 40mL
DG6T	Na Thiosulfate 60mL vial
DG6M	MonoClActelic/Na Thio 60mL
AG3U	250mL unpres amber glass
AG3T	Na Thiosulfate 250mL bottle
BP1B	Na Thiosulfate Amber bottle
AG1T	Na Thiosulfate 1L Amber
AG1A	525.3 Chemical Blend

Sender Initials ______

Additional Comments

2 CoC

WO#: 70312804

PM: BDR **Due Date: 09/17/24**
CLIENT: ALPHA

Client Name: ALPHA Project #

Courier: ☐ Fed Ex ☐ UPS ☐ USPS ☐ Client ☐ Commercial ☐ Pace ☐ Other

Tracking #:

Custody Seal on Cooler/Box Present: ☐ Yes ☐ No Seals intact: ☐ Yes ☐ No Temperature Blank Present: ☐ Yes ☐ No
Packing Material: ☐ Bubble Wrap ☐ Bubble Bags ☐ Ziplo ☐ None ☐ Other Type of Ice: (Wet) Blue None

Thermometer Used: THR4 Correction Factor: +0.3 ☐ Samples on ice, cooling process has begun
Cooler Temperature(°C): 1.9 Cooler Temperature Corrected(°C): 2.2 Date/Time 5035A kits placed in freezer
Temp should be above freezing to 6 °C

USDA Regulated Soil (☐ N/A, water sample)

Did samples originate in a quarantine zone within the United States: AL, AR, CA, FL, GA, ID, LA, MS, NC, NM, NY, OK, OR, SC, TN, TX, or VA (check map)? ☐ Yes ☐ No

Did samples orignate from a foreign source including Hawaii and Puerto Rico)? ☐ Yes ☐ No

If Yes to either question, fill out a Regulated Soil Checklist (ENV-FRM-MELV-0076) and include with SCUR/COC paperwork.

Date and Initials of person examining contents: 9/11/24 ABB

				COMMENTS:
Chain of Custody Present:	☑Yes	☐No		1.
Chain of Custody Filled Out:	☑Yes	☐No		2.
Chain of Custody Relinquished:	☑Yes	☐No		3.
Sampler Name & Signature on COC:	☑Yes	☐No	☐N/A	4.
Samples Arrived within Hold Time:	☑Yes	☐No		5.
Short Hold Time Analysis (<72hr):	☐Yes	☑No		6.
Rush Turn Around Time Requested	☐Yes	☑No		7.
Sufficient Volume: (Triple volume provided for MS/MSD)	☑Yes	☐No		8.
Correct Containers Used:	☑Yes	☐No		9.
-Pace Containers Used:	☑Yes	☐No		
Containers Intact:	☑Yes	☐No		10.
Filtered volume received for Dissolved tests	☐Yes	☐No	☑N/A	11. Note: if sediment is visible in the dissolved container
Sample Labels match COC: -Includes date/time/ID/Analysis	☑Yes	☐No		12.
Matrix:	SL	(WT)	OIL OTHER	

Date and Initials of person checking preservation: 9/11/24 AEB

All containers needing preservation have been checked.	☑Yes	☐No	☐N/A	13. ☐ HNO_3 ☐ H_2SO_4 ☐ NaOH ☐ HCl
pH paper Lot # 205324				Sample #
All containers needing preservation are found to be in compliance with method recommendation? (HNO_3, H_2SO_4, HCl, NaOH>9 Sulfide, NAOH>12 Cyanide)	☑Yes	☐No	☐N/A	
Exceptions: VOA, Coliform, TOC/DOC, Oil and Grease, DRO/8015 (water). Per Method, VOA pH is checked after analysis				Initial when completed: / Lot # of added preservative: / Date/Time preservative added:
Samples checked for dechlorination:	☐Yes	☐No	☑N/A	14.
KI starch test strips Lot #				Positive for Res. Chlorine? Y N
Residual chlorine strips Lot #				
SM 4500 CN samples checked for sul	☐Yes	☐No	☑N/A	15.
Lead Acetate Strips Lot #				Positive for Sulfide? Y N
Headspace in ALK Bottle (>6mm):	☐Yes	☐No	☑N/A	
Headspace in VOA Vials (>6mm):	☐Yes	☐No	☑N/A	16.
Trip Blank Present:	☐Yes	☐No	☑N/A	17
Trip Blank Custody Seals Present	☐Yes	☐No	☑N/A	

Client Notification/ Resolution: Field Data Required? Y / N
Person Contacted: Date/Time:
Comments/ Resolution:

* PM (Project Manager) review (which includes the SCUR) is documented electronically in LIMS

SAMPLE NO.

MW-5A

FORM I INORGANIC-1

INORGANIC ANALYSIS DATA SHEET

Lab Name: Pace Analytical - New York SDG No. : 70312804 Contract: L2450786

Lab Sample ID: 70312804001 Percent Moisture:

CAS No.	Analyte	Concentration	Q	Units	DF	Analysis Date/Time
	Sulfide	<2.0	U	mg/L	1	09/12/2024 16:03

SAMPLE NO.

MW-5B

FORM I INORGANIC-1

INORGANIC ANALYSIS DATA SHEET

Lab Name: Pace Analytical - New York SDG No. : 70312804 Contract: L2450786

Lab Sample ID: 70312804002 Percent Moisture:

CAS No.	Analyte	Concentration	Q	Units	DF	Analysis Date/Time
	Sulfide	<2.0	U	mg/L	1	09/12/2024 16:06

SAMPLE NO.

MW-6A

FORM I INORGANIC-1

INORGANIC ANALYSIS DATA SHEET

Lab Name: Pace Analytical - New York SDG No. : 70312804 Contract: L2450786

Lab Sample ID: 70312804003 Percent Moisture:

CAS No.	Analyte	Concentration	Q	Units	DF	Analysis Date/Time
	Sulfide	<2.0	U	mg/L	1	09/12/2024 16:09

SAMPLE NO.

MW-6B

FORM I INORGANIC-1

INORGANIC ANALYSIS DATA SHEET

Lab Name: Pace Analytical - New York SDG No. : 70312804 Contract: L2450786

Lab Sample ID: 70312804004 Percent Moisture:

CAS No.	Analyte	Concentration	Q	Units	DF	Analysis Date/Time
	Sulfide	<2.0	U	mg/L	1	09/12/2024 16:11

SAMPLE NO.

MW-7A

FORM I INORGANIC-1

INORGANIC ANALYSIS DATA SHEET

Lab Name: Pace Analytical - New York SDG No. : 70312804 Contract: L2450786

Lab Sample ID: 70312804005 Percent Moisture:

CAS No.	Analyte	Concentration	Q	Units	DF	Analysis Date/Time
	Sulfide	<2.0	U	mg/L	1	09/12/2024 16:14

SAMPLE NO.

MW-7B

FORM I INORGANIC-1

INORGANIC ANALYSIS DATA SHEET

Lab Name: Pace Analytical - New York SDG No. : 70312804 Contract: L2450786

Lab Sample ID: 70312804006 Percent Moisture:

CAS No.	Analyte	Concentration	Q	Units	DF	Analysis Date/Time
	Sulfide	<2.0	U	mg/L	1	09/12/2024 16:16

SAMPLE NO.

MW-8A

FORM I INORGANIC-1

INORGANIC ANALYSIS DATA SHEET

Lab Name: Pace Analytical - New York SDG No. : 70312804 Contract: L2450786

Lab Sample ID: 70312804007 Percent Moisture:

CAS No.	Analyte	Concentration	Q	Units	DF	Analysis Date/Time
	Sulfide	<2.0	U	mg/L	1	09/12/2024 16:19

SAMPLE NO.

MW-8B

FORM I INORGANIC-1

INORGANIC ANALYSIS DATA SHEET

Lab Name: Pace Analytical - New York SDG No. : 70312804 Contract: L2450786

Lab Sample ID: 70312804008 Percent Moisture:

CAS No.	Analyte	Concentration	Q	Units	DF	Analysis Date/Time
	Sulfide	<2.0	U	mg/L	1	09/12/2024 16:22

SAMPLE NO.

MW-10A

FORM I INORGANIC-1

INORGANIC ANALYSIS DATA SHEET

Lab Name: Pace Analytical - New York SDG No. : 70312804 Contract: L2450786

Lab Sample ID: 70312804009 Percent Moisture:

CAS No.	Analyte	Concentration	Q	Units	DF	Analysis Date/Time
	Sulfide	<2.0	U	mg/L	1	09/12/2024 16:25

SAMPLE NO.

MW-10B

FORM I INORGANIC-1

INORGANIC ANALYSIS DATA SHEET

Lab Name: Pace Analytical - New York SDG No. : 70312804 Contract: L2450786

Lab Sample ID: 70312804010 Percent Moisture:

CAS No.	Analyte	Concentration	Q	Units	DF	Analysis Date/Time
	Sulfide	<2.0	U	mg/L	1	09/12/2024 16:28

SAMPLE NO.

DUP

FORM I INORGANIC-1

INORGANIC ANALYSIS DATA SHEET

Lab Name: Pace Analytical - New York SDG No. : 70312804 Contract: L2450786

Lab Sample ID: 70312804011 Percent Moisture:

CAS No.	Analyte	Concentration	Q	Units	DF	Analysis Date/Time
	Sulfide	<2.0	U	mg/L	1	09/12/2024 16:31

FORM III INORGANIC-1

BLANKS

Lab Name: Pace Analytical - New York SDG No. : 70312804 Contract : L2450786

Method Blank Matrix: Water Instrument ID: 70WET0

Method Blank Concentration Units: mg/L

Analyte	Initial Calibration Blank		Continuing Calibration Blank						Method Blank	
		C		C		C		C	1886007	C
Sulfide									ND	U

SAMPLE NO.

1886009LCSD

FORM VI INORGANIC-1
DUPLICATES

Lab Name: Pace Analytical - New York SDG No. : 70312804 Contract: L2450786

Matrix: Water Concentration Units: mg/L

Percent Moisture: Basis: Wet

Analyte	RPD Control Limit	Sample	Duplicate	RPD
Sulfide	20	14.0	14.0	0

SAMPLE NO.

1886008LCS

FORM VII INORGANIC-1
LABORATORY CONTROL SAMPLE

Lab Name: Pace Analytical - New York SDG No. : 70312804 Contract: L2450786

Matrix: Water

Analyte	Units	True	Found	%R	Limits	
Sulfide	mg/L	14.0	14.0	100	85	115

SAMPLE NO.

1886009LCSD

FORM VII INORGANIC-2
LABORATORY CONTROL SAMPLE

Lab Name: Pace Analytical - New York SDG No. : 70312804 Contract: L2450786

Matrix: Water

Analyte	Units	True	Found	%R	Limits	
Sulfide	mg/L	14.0	14.0	100	85	115

FORM XII INORGANIC-1
PREPARATION LOG

Lab Name: Pace Analytical - New York SDG No. : 70312804 Contract: L2450786

Preparation Method: SM22 4500-S2 F Batch: WET 83893

Lab Sample ID	Sample Name	Preparation Date	Initial Volume (mL)	Final Volume (mL)
1886007	1886007BLANK	09/12/2024	200	200
1886008	1886008LCS	09/12/2024	200	200
1886009	1886009LCSD	09/12/2024	200	200
70312804001	MW-5A	09/12/2024	250	250
70312804002	MW-5B	09/12/2024	250	250
70312804003	MW-6A	09/12/2024	250	250
70312804004	MW-6B	09/12/2024	250	250
70312804005	MW-7A	09/12/2024	250	250
70312804006	MW-7B	09/12/2024	250	250
70312804007	MW-8A	09/12/2024	250	250
70312804008	MW-8B	09/12/2024	250	250
70312804009	MW-10A	09/12/2024	250	250
70312804010	MW-10B	09/12/2024	250	250
70312804011	DUP	09/12/2024	250	250

FORM XIII INORGANIC-1
ANALYSIS RUN LOG

Lab Name: Pace Analytical - New York SDG No. : 70312804 Contract: L2450786

Instrument ID: 70WET0 Analysis Method: SM22 4500-S2 F

Start Date: 09/12/2024 15:55 End Date: 09/12/2024 16:31

Sample Name	Lab Sample ID	D/F	Date	Time	sulf
1886007BLANK	1886007	1	09/12/2024	15:55	X
1886008LCS	1886008	1	09/12/2024	15:58	X
1886009LCSD	1886009	1	09/12/2024	16:01	X
MW-5A	70312804001	1	09/12/2024	16:03	X
MW-5B	70312804002	1	09/12/2024	16:06	X
MW-6A	70312804003	1	09/12/2024	16:09	X
MW-6B	70312804004	1	09/12/2024	16:11	X
MW-7A	70312804005	1	09/12/2024	16:14	X
MW-7B	70312804006	1	09/12/2024	16:16	X
MW-8A	70312804007	1	09/12/2024	16:19	X
MW-8B	70312804008	1	09/12/2024	16:22	X
MW-10A	70312804009	1	09/12/2024	16:25	X
MW-10B	70312804010	1	09/12/2024	16:28	X
DUP	70312804011	1	09/12/2024	16:31	X

Prep Log Report

Batch Information: WET_SULFIDE_83893_09/12/24 **4500S2F | Sulfide**

Analysis Method	SM22 4500-S2 F	Instrument	70WET0	Analyzed By	JWM	1:1 HCl	187085
Starch Indicator Solution	185588	Reviewed By	SDO	Reviewed By Date	09/12/2024 16:46	Batch Notes	

Sample Information:

QC Rule	Sample Type	Lab Sample ID	Select	Initial Volume (mL)	Iodine 0.025N (mL)	Thio Start (mL)	Thio End (mL)	Sodium Thiosulfate 0.025N (mL)	Sulfide	Units	Run Date/Time	Filtered	Glass Fiber Filters ()	Sample Notes
4500S2F W	BLANK	**1886007**	Y	200	187084 (5)	24.6	29.6	183216 (5.00)	0.00	mg/L	09/12/2024 15:55:54	Yes	188807 ()	
4500S2F W	LCS	**1886008**	Y	200	187084 (10)	29.6	32.6	183216 (3.00)	14.00	mg/L	09/12/2024 15:58:59	Yes	188807 ()	
4500S2F W	LCSD	**1886009**	Y	200	187084 (10)	32.6	35.6	183216 (3.00)	14.00	mg/L	09/12/2024 16:01:02	Yes	188807 ()	
4500S2F W	PS	**70312804001**	Y	250	187084 (5)	35.6	40.3	183216 (4.70)	0.48	mg/L	09/12/2024 16:03:06	Yes	188807 ()	
4500S2F W	PS	**70312804002**	Y	250	187084 (5)	40.3	45.1	183216 (4.80)	0.32	mg/L	09/12/2024 16:06:11	Yes	188807 ()	
4500S2F W	PS	**70312804003**	Y	250	187084 (5)	4.7	9.4	183216 (4.70)	0.48	mg/L	09/12/2024 16:09:19	Yes	188807 ()	
4500S2F W	PS	**70312804004**	Y	250	187084 (5)	9.4	14.2	183216 (4.80)	0.32	mg/L	09/12/2024 16:11:22	Yes	188807 ()	
4500S2F W	PS	**70312804005**	Y	250	187084 (5)	14.2	19.2	183216 (5.00)	0.00	mg/L	09/12/2024 16:14:25	Yes	188807 ()	
4500S2F W	PS	**70312804006**	Y	250	187084 (5)	19.2	24.2	183216 (5.00)	0.00	mg/L	09/12/2024 16:16:28	Yes	188807 ()	
4500S2F W	PS	**70312804007**	Y	250	187084 (5)	24.2	29.1	183216 (4.90)	0.16	mg/L	09/12/2024 16:19:31	Yes	188807 ()	
4500S2F W	PS	**70312804008**	Y	250	187084 (5)	29.1	33.9	183216 (4.80)	0.32	mg/L	09/12/2024 16:22:36	Yes	188807 ()	
4500S2F W	PS	**70312804009**	Y	250	187084 (5)	33.9	38.9	183216 (5.00)	0.00	mg/L	09/12/2024 16:25:39	Yes	188807 ()	
4500S2F W	PS	**70312804010**	Y	250	187084 (5)	38.9	43.6	183216 (4.70)	0.48	mg/L	09/12/2024 16:28:42	Yes	188807 ()	
4500S2F W	PS	**70312804011**	Y	250	187084 (5)	43.6	48.3	183216 (4.70)	0.48	mg/L	09/12/2024 16:31:45	Yes	188807 ()	

Prep Log Report

QC Rule	Sample Type	Lab Sample ID	S-SPK (mL)
4500S2F W	BLANK	**1886007**	
4500S2F W	LCS	**1886008**	188757 (1)
4500S2F W	LCSD	**1886009**	188757 (1)
4500S2F W	PS	**70312804001**	
4500S2F W	PS	**70312804002**	
4500S2F W	PS	**70312804003**	
4500S2F W	PS	**70312804004**	
4500S2F W	PS	**70312804005**	
4500S2F W	PS	**70312804006**	
4500S2F W	PS	**70312804007**	
4500S2F W	PS	**70312804008**	
4500S2F W	PS	**70312804009**	
4500S2F W	PS	**70312804010**	
4500S2F W	PS	**70312804011**	

Standard Notes:

188757: Wet Sulfide LCS/ Second Source 5mL

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