



REPORT

Compliance Monitoring Report March 2025 Groundwater Sampling *Landsburg Mine Site*

Submitted to:

Washington Department of Ecology

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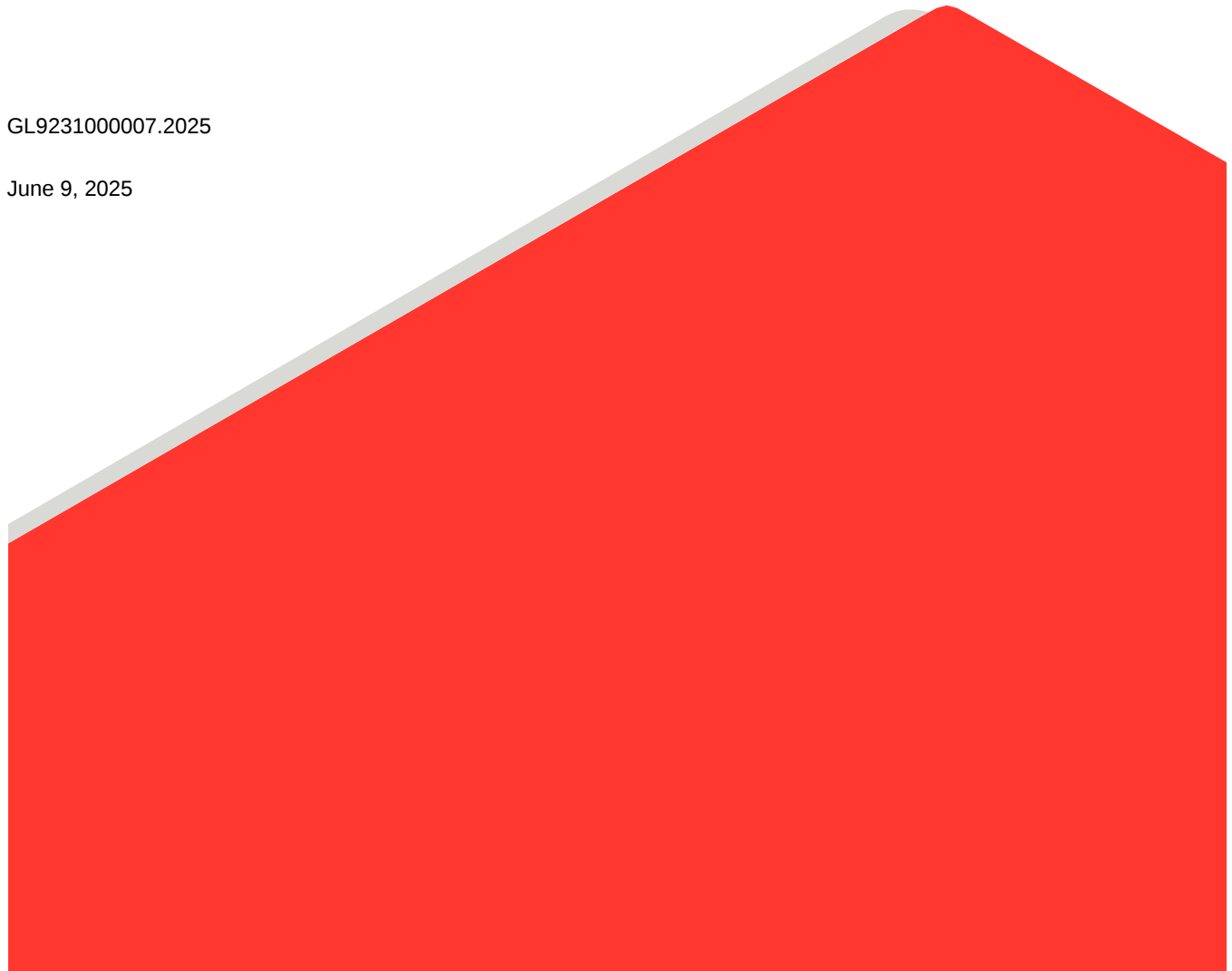
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Distribution List

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1.0 INTRODUCTION

The Compliance Monitoring Plan (CMP) (Ecology 2017) describes the long-term confirmational monitoring required after remediation actions are completed at the Landsburg Mine Site (the Site). Additional groundwater monitoring requirements are specified in the Amendment to the Cleanup Action Plan (CAP) (Ecology 2021). This report presents the results of the March 2025 confirmational monitoring event, which was completed in March 2025.

The event was conducted on March 10, 11, 12, and 13, 2025, and included collecting groundwater samples from monitoring wells LMW-2, LMW-3, LMW-4, LMW-5, LMW-6, LMW-7, LMW-8, LMW-9, LMW-10, LMW-11, LMW-12, LMW-13R, LMW-14, and LMW-15.

Figure 1 presents the locations of the monitoring wells. Figure 2 presents a cross-section along the strike at the coal seam that also depicts the location of the monitoring wells. Monitoring wells LMW-2, LMW-4, LMW-10, LMW-12, and LMW-13R are completed to monitor shallow, middle, and deeper zones within the north end of the Rogers Coal Mine subsidence trench. Monitoring wells LMW-3, LMW-5, LMW-8, LMW-9, LMW-11, LMW-14, and LMW-15 are completed to monitor shallow, middle, and deeper zones along the southern half of the Rogers Coal Mine. Wells LMW-6 and LMW-7 monitor groundwater from the Frasier and Landsburg Coal Mines to the west and east of the Rogers Coal Mine, respectively.

2.0 SAMPLING ACTIVITIES

Groundwater sampling was conducted in accordance with the CMP (Ecology 2017), and included the following activities:

- Measurement of static water levels at monitoring wells.
- Well purging with the dedicated pumping systems installed in each well to ensure sample representativeness.
- Measurement of field parameters including: pH, specific conductance, temperature, dissolved oxygen, oxidation-reduction potential (ORP), and turbidity.
- Collection of representative samples in appropriate containers provided by the analytical laboratory.
- Analyses of groundwater samples for the following parameters:
 - Volatile Organic Compounds (VOCs) by United States Environmental Protection Agency (USEPA) USEPA Method 8260D
 - Semivolatile Organic Compounds (SVOCs) by GC/MS, including:
 - 1,4-Dioxane following USEPA SW-846 Method 8270E
 - Total Petroleum Hydrocarbons (TPHs) by NWTPH-HCID
 - Low-Level Polychlorinated Biphenyls (PCBs) by USEPA SW-846 Method 8082A
 - Organochlorine Pesticides following USEPA SW-846 Method 8081B, Organochlorine Pesticides by Gas Chromatography
 - Total Metals by USEPA SW-846 Method 200.8 and SW-846 6010D

- Total Mercury by USEPA SW-846 Method 7470A

Appendix A presents the laboratory analytical data validation report with added data qualifiers noted. Appendix B presents the laboratory analytical data. Field sampling activities were documented on Sample Integrity Data Sheets (SIDS), provided in Appendix C.

Following sample collection, all bottles were sealed, labeled, and placed in an iced cooler until delivery to the laboratory. Groundwater samples were transported under chain-of-custody procedures to Analytical Resources LLC (ARL), of Tukwila, Washington, for analyses.

The laboratory data packages underwent data validation. Items of note are provided in a validation memorandum in Appendix A. In general, data were found to be acceptable with minor qualification, with the following exception: the analytical results for 2-chloroethyl vinyl ether and 3,3'-Dichlorobenzidine for LMW-4-0325 were rejected. The matrix spike/ matrix spike duplicate (MS/MSD) results were non-detect and the calculated percent recovery of the associated MS/MSD did not recover. Following guidelines and using professional judgment, the non-detect results for 2-chloroethyl vinyl ether and 3,3'-Dichlorobenzidine for LMW-4-0325 were rejected. 2-chloroethyl vinyl ether and 3,3'-Dichlorobenzidine have never been detected at the Site.

The associated Laboratory Control Sample Duplicates (LCSDs) were below QC criteria for Bis(2-Chloroethoxy)methane, 4-Chloroaniline, Carbazole, Butylbenzylphthalate, 3,3'-Dichlorobenzidine, Benzyl Alcohol, Acenaphthylene, and 3-Nitroaniline in both LMW-2 and LMW-11 and were thus rejected (R). Due to a surrogate recovery below 10% of 1,4-dioxane in LMW-5, the associated non-detect result was also rejected.

Bis(2-ethylhexyl) phthalate was detected in LMW-6. Bis(2-ethylhexyl) phthalate is a known laboratory contaminant and is the most common member of the class of phthalates present in plastics. The sample from LMW-6 was re-analyzed, and bis(2-ethylhexyl) phthalate was not detected in the re-analysis. The re-analysis was performed past the recommended holding time, but the non-detect result supports the conjecture that the initial detection was attributable to laboratory contamination. The data validation chemist deemed the initial detection as reportable and likely attributable to laboratory contamination, as further detailed in the Appendix A data validation memorandum.

Acetone was detected in both field blanks and in LMW-3 and LMW-4. Acetone is a solvent used in laboratories and is a common laboratory contaminant detected in samples and blanks. Using professional judgment and historical standings, the acetone reported for samples from LMW-3 and LMW-4 were qualified as non-detect (U).

Table 1 presents depths to groundwater measured during the event and calculated static water level elevations. Table 2 presents the field parameter measurements and laboratory analytical results for each groundwater sample at the Site.

3.0 RESULTS

The March 2025 groundwater monitoring results are summarized below:

- Laboratory analyses did not detect TPH, PCBs, or pesticides above the laboratory reporting limits in any of the groundwater samples.
- There were no confirmed VOCs detected in groundwater above the trigger level concentrations prescribed in the CMP (Ecology 2017).

- There were no SVOCs detected in groundwater above the trigger level concentrations prescribed in the CMP, except for 1,4-dioxane.
 - 1,4-Dioxane was detected in LMW-2, LMW-4, and LMW-13R at 3.5, 3.4, and 0.3 (J-qualified) micrograms per liter (µg/L), respectively. These concentrations are slightly higher than concentrations previously reported in LMW-2 and LMW-4, but are below the 20 µg/L threshold for contingent groundwater treatment specified for these wells in the Amendment to the CAP. 1,4-Dioxane was not detected in any other groundwater samples during the March 2025 round.
 - Under the approved Amendment to the CAP, 5 years of quarterly groundwater samples (20 rounds of sampling) were collected to conduct a statistical analysis on 1,4-dioxane trends (CAP Amendment Section 4.2). The statistical trend analysis of 1,4-dioxane was conducted following the completion of the March 2023 sampling round, and the results were presented to Ecology (WSP 2023). The statistical trend analyses using Mann-Kendall and Theil-Sen methods indicated that 1,4-dioxane concentrations in LMW-2 and LMW-12 were stable to decreasing. In LMW-4, 1,4-dioxane trends indicated no clear trend using the Theil-Sen statistical method and potentially increasing trends using the Mann-Kendall method. In an email response, Ecology indicated that based on the statistical trend analysis, future sampling of Site monitoring wells, except well LMW-4, shall continue at the frequency specified in the CMP (Ecology 2017). Ecology requested that quarterly monitoring of LMW-4 continue for 1,4-dioxane analysis until statistical trend analysis indicates concentrations are steady to decreasing in LMW-4.

An updated trend analysis for 1,4-dioxane concentrations reported in LMW-4 with the inclusion of data collected since the March 2023 analysis was completed and presented to Ecology (WSP 2024). Data were entered into the Environmental Protection Agency statistical program ProUCL version 5.1 (EPA 2016). Trend analyses were evaluated using Mann-Kendall and Theil-Sen statistical tests. Both the Mann-Kendall and Theil-Sen statistical tests indicated there were no statistically significant trends in the data. The overall analysis strongly indicated that the concentration of 1,4-dioxane in LMW-4 was steady. In an email response, Ecology approved that groundwater monitoring for 1,4-dioxane will be conducted in accordance with the general groundwater monitoring schedule prescribed in the CMP (Ecology 2017). Under the CMP groundwater monitoring schedule, wells are currently sampled semi-annually, with 1,4-dioxane analysis conducted in all wells during the spring sampling rounds (including this March 2025 event).

- Metals detected in groundwater samples during the current sampling round include the following:
 - The groundwater samples from LMW-2, LMW-4, LMW-5, LMW-6, LMW-7, LMW-8, LMW-9, LMW-11, LMW 12, LMW-13, LMW-14, and LMW-15 contained iron concentrations above the laboratory reporting limit, but below the MTCA Method B cleanup level of 11 milligrams per liter (mg/L); except in LMW-8 and LMW-14, where iron was reported at 13.4 mg/L and 13.0 mg/L, respectively. Iron is a naturally occurring metal that is commonly associated with groundwater from coal mines (Fuste et al. 1983). The concentrations of iron reported during the March 2025 sampling event are within the range of typical concentrations reported during previous groundwater monitoring events at the Site.
 - The groundwater sample from LMW-11 contained total arsenic at a concentration of 0.00872 mg/L. Arsenic in LMW-11 is slightly greater than the MTCA Method A groundwater cleanup level (0.005 mg/L) but less than the Washington State primary drinking water MCL (0.01 mg/L). Arsenic was also detected in groundwater from LMW-3, and LMW-7 through LMW-15 at concentrations below both the MTCA

Method A groundwater cleanup level and the Washington State primary drinking water MCL. The MTCA groundwater cleanup level is based on typical groundwater background levels in the State of Washington. Arsenic has been detected in groundwater from LMW-11 near or above MTCA cleanup levels during every monitoring event since LMW-11 was installed. LMW-11 is screened within the deepest portions of the Rogers coal seam, where the groundwater is naturally reducing with low reduction-oxidation (redox) potential and low dissolved oxygen levels. Arsenic is a naturally occurring metal commonly detectable in groundwater, especially in groundwater having low redox and dissolved oxygen levels.

- Groundwater samples from LMW-14 contained a reported cobalt concentration of 0.0101 mg/L, which is above the MTCA Method B cleanup level of 0.0048 mg/L. Cobalt has been detected in LMW-14 in most monitoring events since it was installed. The March 2025 reported concentration of 0.0101 mg/L is less than half of the historical high of 0.0515 mg/L, detected in March 2020. The cobalt detection in LMW-14 is naturally occurring in association with the coal mine water (Golder 2020).

4.0 NEXT SAMPLING EVENT

The next compliance monitoring event will occur sometime during September-October 2025, and will include sampling of all Site groundwater monitoring wells: LMW-2 through LMW-15, and sampling of the private Landsburg Estates well if accessible.

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Tables

Table 1: Groundwater Elevation Data, Landsburg Mine Site, March 10, 2025

	LMW-1	LMW-2	LMW-3	LMW-4 ¹	LMW-5	LMW-6	LMW-7 ¹	LMW-8	LMW-9	LMW-10	LMW-11	LMW-12	LMW-13R	LMW-14 ¹	LMW-15
Water Depths															
Date of data collection	3/10/2025	3/10/2025	3/10/2025	3/10/2025	3/10/2025	3/10/2025	3/10/2025	3/10/2025	3/10/2025	3/10/2025	3/10/2025	3/10/2025	3/10/2025	3/10/2025	3/10/2025
Time of data collection	10:27 AM	11:57 AM	11:25 AM	11:54 AM	11:19 AM	10:09 AM	10:59 AM	11:14 AM	11:30 AM	1:56 PM	10:43 AM	9:37 AM	11:40 AM	10:20 AM	10:38 AM
Measured to Top of PVC (ft btc)	132.91	5.89	10.99	7.94	12.45	23.12	212.08	3.18	97.45	0.06	155.34	6.65	8.10	157.50	149.30
Surveyed Elevation															
Top of PVC (ft NAVD88)	765.36	617.79	656.75	619.27	658.27	632.33	771.51	646.97	743.99	618.98	802.19	625.35	625.86	805.12	796.46
Top of Monument (ft NAVD88)	766.16	618.38	657.48	619.89	658.87	633.00	771.88	NC	NC	619.10	802.51	625.49	625.91	805.14	796.61
Ground Level (ft NAVD88)	763.02	614.92	654.40	617.37	655.63	629.95	768.79	645.25	741.13	615.78	799.89	621.90	622.07	802.22	792.64
Corrected Water Elevation															
Using PVC elevation (ft NAVD88)	632.45	611.90	645.76	611.33	645.82	609.21	559.43	643.79	646.54	618.92	646.85	618.70	617.76	647.62	647.16

Notes:
¹ Data corrected to accommodate well inclination from vertical
NA = Not applicable
NC = Data not collected
ft btc = feet below top of casing
ft NAVD88 = elevation in feet NAVD88

Table 2: March 2025 Groundwater Analytical Results Landsburg Mine Site

ANALYTE	UNITS	LMW-2	LMW-2 Duplicate	LMW-3	LMW-4	LMW-5	LMW-6	LMW-7	LMW-8	LMW-9	LMW-10	LMW-11	LMW-12	LMW-13R	LMW-14	LMW-15	Field Blank 1	Field Blank 2	Trip Blank 1	Trip Blank 2
		3/13/2025	3/13/2025	3/11/2025	3/13/2025	3/11/2025	3/12/2025	3/11/2025	3/11/2025	3/11/2025	3/10/2025	3/12/2025	3/10/2025	3/10/2025	3/12/2025	3/12/2025	3/11/2025	3/12/2025	-	-
Field Parameter																				
Temperature	°C	10.9	-	10.9	10	10.6	9.6	13.5	9.6	10.1	9	9.9	8.5	8.4	9.9	9.3	-	-	-	-
pH	stnd	6.44	-	7.47	6.47	6.51	6.56	6.83	6.36	6.6	8.66	7.05	6.57	7.32	6.37	7.16	-	-	-	-
Specific Conductance	uS/cm	1017	-	314.5	1024	685	254.5	474.2	561	669	701	548	815	1,740	1429	512	-	-	-	-
Dissolved Oxygen	mg/L	0.03	-	0.22	0.02	0.01	0.28	0.26	0.01	0.26	0.01	0.41	0.01	1.18	0.11	0.46	-	-	-	-
ORP	mV	-20.5	-	11.3	-25.6	-19.8	34.4	-45.5	-65.6	-31.2	-153.9	-57.9	-53.5	-74.2	-16.4	-106.4	-	-	-	-
Turbidity	NTU	0.24	-	0.62	0.12	8.78	1.46	0.99	8.9	1.34	0.24	0.73	4.87	2.32	2.59	1.19	-	-	-	-
Metals (Total)																				
Aluminum	mg/L	0.021 U	0.021 U	0.021 U	0.021 U	0.021 U	0.021 U	0.021 U	0.021 U	0.021 U	0.021 U	0.021 U	0.0309	0.021 U	0.021 U	0.021 U	0.021 U	0.021 U	NA	NA
Antimony	mg/L	0.00015 U	0.00015 U	0.00015 U	0.00015 U	0.00015 U	0.00015 U	0.00015 U	0.00015 U	0.00015 U	0.00015 U	0.00015 U	0.00015 U	0.00015 U	0.00015 U	0.00015 U	0.00015 U	0.00015 U	NA	NA
Arsenic	mg/L	0.0001 U	0.0001 U	0.000649	0.0001 U	0.0001 U	0.0001 U	0.00467	0.00273	0.000116	0.000118	0.00872	0.000364	0.000318	0.00142	0.00327	0.0001 U	0.0001 U	NA	NA
Barium	mg/L	0.416	0.41	0.0689	0.41	0.253	0.109	0.41	0.0457	0.294	0.0356	0.317	0.131	0.324	0.0478	0.212	0.0007 U	0.0007 U	NA	NA
Beryllium	mg/L	0.0002 U	0.0002 U	0.0002 U	0.0002 U	0.0002 U	0.0002 U	0.0002 U	0.0002 U	0.0002 U	0.0002 U	0.0002 U	0.0002 U	0.0002 U	0.0002 U	0.0002 U	0.0002 U	0.0002 U	NA	NA
Cadmium	mg/L	0.0005 U	0.0005 U	0.0005 U	0.0005 U	0.0005 U	0.0005 U	0.0005 U	0.0005 U	0.0005 U	0.0005 U	0.0005 U	0.0005 U	0.0005 U	0.0005 U	0.0005 U	0.0005 U	0.0005 U	NA	NA
Calcium	mg/L	116	114	36.3	114	80.2	26.7	44.3	61.2	80.8	6.59	61	47.2	85.6	178	60.5	0.03 U	0.0743	NA	NA
Chromium	mg/L	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U	NA	NA
Cobalt	mg/L	0.0025 U	0.0025 U	0.0025 U	0.0025 U	0.0025 U	0.0025 U	0.0025 U	0.0025 U	0.0025 U	0.0025 U	0.0025 U	0.0025 U	0.0025 U	0.0025 U	0.0101	0.0025 U	0.0025 U	NA	NA
Copper	mg/L	0.003 U	0.003 U	0.003 U	0.003 U	0.003 U	0.003 U	0.003 U	0.003 U	0.003 U	0.003 U	0.003 U	0.003 U	0.003 U	0.003 U	0.003 U	0.003 U	0.003 U	NA	NA
Iron	mg/L	0.368	0.355	0.054 U	0.724	0.582	1.53	1.77	13.4	1.52	0.054 U	0.512	9.18	1.13	13	3.98	0.054 U	0.054 U	NA	NA
Lead	mg/L	0.0001 U	0.0001 U	0.0001 U	0.0001 U	0.0001 U	0.0001 U	0.0001 U	0.0001 U	0.0001 U	0.0001 U	0.0001 U	0.000101	0.0001 U	0.0001 U	0.0001 U	0.0001 U	0.0001 U	NA	NA
Magnesium	mg/L	68.6	67.6	15.1	66.9	42.5	13.1	20.1	32.3	42.2	2.88	26.2	27.3	39.3	82	25.1	0.025 U	0.025 U	NA	NA
Manganese	mg/L	0.244	0.241	0.0268	0.191	0.203	0.0189	0.0844	0.522	0.175	0.0065	0.177	0.688	0.0305	0.755	0.356	0.002 U	0.002 U	NA	NA
Mercury	mg/L	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	NA	NA
Nickel	mg/L	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.0152	0.005 U	0.005 U	0.005 U	NA	NA
Potassium	mg/L	3.54	3.51	1.56	3.72	2.32	0.614	2.39	1.62	2.36	1.16	2.04	2.15	2.99	3.89	1.81	0.25 U	0.25 U	NA	NA
Selenium	mg/L	0.0005 U	0.0005 U	0.0005 U	0.0005 U	0.0005 U	0.0005 U	0.0005 U	0.0005 U	0.0005 U	0.0005 U	0.0005 U	0.0005 U	0.0005 U	0.000555	0.0005 U	0.0005 U	0.0005 U	NA	NA
Silver	mg/L	0.0015 U	0.0015 U	0.0015 U	0.0015 U	0.0015 U	0.0015 U	0.0015 U	0.0015 U	0.0015 U	0.0015 U	0.0015 U	0.0015 U	0.0015 U	0.0015 U	0.0015 U	0.0015 U	0.0015 U	NA	NA
Sodium	mg/L	20.6	20.3	9.92 J-	24.5	14.6 J-	6.73	41.8 J-	10.8 J-	14.2 J-	81.8 J-	21.8	5.62 J-	74.5 J-	15.5	12.6	0.25 U	0.25 U	NA	NA
Thallium	mg/L	0.0001 U	0.0001 U	0.0001 U	0.0001 U	0.0001 U	0.0001 U	0.0001 U	0.0001 U	0.0001 U	0.0001 U	0.0001 U	0.0001 U	0.0001 U	0.0001 U	0.0001 U	0.0001 U	0.0001 U	NA	NA
Vanadium	mg/L	0.0015 U	0.0015 U	0.0015 U	0.0015 U	0.0015 U	0.0015 U	0.0015 U	0.0015 U	0.0015 U	0.0015 U	0.0015 U	0.0015 U	0.0015 U	0.0015 U	0.0015 U	0.0015 U	0.0015 U	NA	NA
Zinc	mg/L	0.015 U	0.015 U	0.015 U	0.015 U	0.015 U	0.015 U	0.015 U	0.015 U	0.015 U	0.015 U	0.015 U	0.015 U	0.0199	0.015 U	0.015 U	0.015 U	0.015 U	NA	NA
Volatile Organic Compounds (VOCs)																				
Acetone	ug/L	5 U	5 U	5.42 U	5.41 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5.68	6.58	5 U	7.13
Acrolein	ug/L	5 UJ	5 UJ	5 UJ	5 UJ	5 UJ	5 UJ	5 UJ	5 UJ	5 UJ	5 UJ	5 UJ	5 UJ	5 UJ	5 UJ	5 UJ	5 UJ	5 UJ	5 UJ	5 UJ
Acrylonitrile	ug/L	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ
Benzene	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
Bromobenzene	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
Bromochloromethane	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
Bromoform	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
Bromomethane	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
methyl ethyl ketone	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
n-Butylbenzene	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
Sec-Butylbenzene	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
tert-butylbenzene	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
Carbon Disulfide	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
Carbon Tetrachloride	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
Chlorobenzene	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
Chloroethane	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
2-Chloroethyl vinyl ether	ug/L	1 UJ	1 UJ	1 UJ	1 R	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ
Chloroform	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
Chloromethane	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
2-Chlorotoluene	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
4-Chlorotoluene	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
Dichlorodifluoromethane	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
1,2-Dibromo-3-Chloropropane	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
Ethylene Dibromide	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
Dibromomethane	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
1,2-Dichlorobenzene	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
1,3-Dichlorobenzene	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

Table 2: March 2025 Groundwater Analytical Results Landsburg Mine Site

ANALYTE	UNITS	LMW-2	LMW-2 Duplicate	LMW-3	LMW-4	LMW-5	LMW-6	LMW-7	LMW-8	LMW-9	LMW-10	LMW-11	LMW-12	LMW-13R	LMW-14	LMW-15	Field Blank 1	Field Blank 2	Trip Blank 1	Trip Blank 2
1,4-Dichlorobenzene	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
Trans-1,4-Dichloro-2-butene	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
1,1-Dichloroethane	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
1,2-Dichloroethane	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
1,1-Dichloroethene	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
Cis-1,2-Dichloroethene	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
Trans-1,2-Dichloroethene	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
1,2-Dichloropropane	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
1,3-Dichloropropane	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
2,2-Dichloropropane	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
1,1-Dichloropropene	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
Cis-1,3-Dichloropropene	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
Trans-1,3-Dichloropropene	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
Ethylbenzene	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
Hexachlorobutadiene	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
2-Hexanone	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
Iodomethane	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
Cumene	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
p-Isopropyltoluene	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
Methylene Chloride	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
Methyl isobutyl ketone	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
Naphthalene	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
n-Propylbenzene	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
Styrene	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
1,2,3-Trichlorobenzene	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
1,2,4-Trichlorobenzene	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
1,1,1,2-Tetrachloroethane	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
1,1,2,2-Tetrachloroethane	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
Tetrachloroethene	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
Toluene	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
1,1,1-Trichloroethane	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
1,1,2-Trichloroethane	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
Trichloroethene	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
CFC-113	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
1,2,3-Trichloropropane	ug/L	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U
1,2,4-Trimethylbenzene	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
1,3,5-Trimethylbenzene	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
Vinyl Acetate	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
Vinyl Chloride	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
m, p-Xylene	ug/L	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U
o-Xylene	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
Semi-Volatile Organic Compounds (SVOCs)																				
Phenol	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	NA	NA
bis(2-chloroethyl)Ether	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	NA	NA
2-Chlorophenol	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	NA	NA
1,3-Dichlorobenzene	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	NA	NA
1,4-Dichlorobenzene	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	NA	NA
Benzyl Alcohol	ug/L	2 R	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 R	2 U	2 U	2 U	2 U	2 U	2 U	NA	NA
1,2-Dichlorobenzene	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	NA	NA
o-cresol	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	NA	NA
Bis(2-chloro-1-methylethyl) ether	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	NA	NA
p-cresol	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	NA	NA
N-Nitrosodi-n-propylamine	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	NA	NA
Hexachloroethane	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	NA	NA
Nitrobenzene	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	NA	NA
Isophorone	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	NA	NA
2-Nitrophenol	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	NA	NA
2,4-Dimethylphenol	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	NA	NA
Bis(2-Chloroethoxy)Methane	ug/L	1 R	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 R	1 U	1 U	1 U	1 U	1 U	1 U	NA	NA
Benzoic Acid	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	NA	NA

Table 2: March 2025 Groundwater Analytical Results Landsburg Mine Site

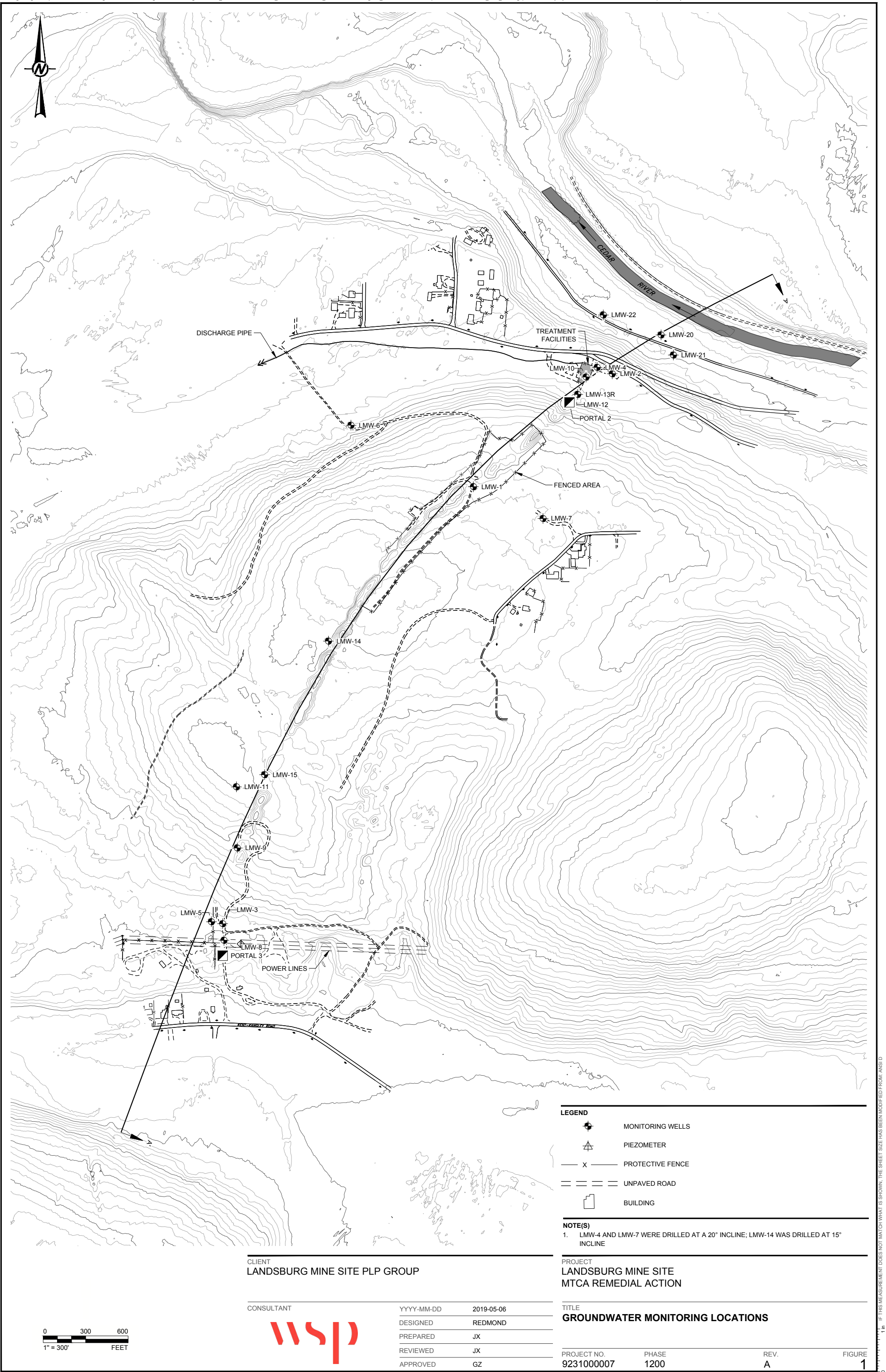
ANALYTE	UNITS	LMW-2	LMW-2 Duplicate	LMW-3	LMW-4	LMW-5	LMW-6	LMW-7	LMW-8	LMW-9	LMW-10	LMW-11	LMW-12	LMW-13R	LMW-14	LMW-15	Field Blank 1	Field Blank 2	Trip Blank 1	Trip Blank 2
2,4-Dichlorophenol	ug/L	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	NA	NA
1,2,4-Trichlorobenzene	ug/L	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	NA	NA
Naphthalene	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	NA	NA
4-Chloroaniline	ug/L	5 UJ	5 U	5 UJ	5 UJ	5 UJ	5 UJ	5 UJ	5 UJ	5 UJ	5 UJ	5 UJ	5 UJ	5 UJ	5 UJ	5 UJ	5 U	5 U	NA	NA
Hexachlorobutadiene	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	NA	NA
4-Chloro-3-Methylphenol	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	NA	NA
2-Methylnaphthalene	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	NA	NA
Hexachlorocyclopentadiene	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	NA	NA
2,4,6-Trichlorophenol	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	NA	NA
2,4,5-Trichlorophenol	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	NA	NA
pcn-002	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	NA	NA
2-Nitroaniline	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	NA	NA
Dimethyl phthalate	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	NA	NA
Acenaphthylene	ug/L	1 R	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 R	1 U	1 U	1 U	1 U	1 U	1 U	NA	NA
2,6-Dinitrotoluene	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	NA	NA
m-Nitroaniline	ug/L	3 R	3 U	3 U	3 UJ	3 U	3 U	3 U	3 U	3 U	3 U	3 R	3 U	3 U	3 U	3 U	3 U	3 U	NA	NA
Acenaphthene	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	NA	NA
2,4-Dinitrophenol	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	NA	NA
Dibenzofuran	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	NA	NA
4-Nitrophenol	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	NA	NA
2,4-Dinitrotoluene	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	NA	NA
Fluorene	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	NA	NA
Diethyl phthalate	ug/L	1 U	1 U	1 UJ	1 U	1 UJ	1 U	1 UJ	1 UJ	1 UJ	1 UJ	1 U	1 UJ	1 UJ	1 U	1 U	1 U	1 U	NA	NA
4-chlorophenyl-Phenylether	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	NA	NA
4-Nitroaniline	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	NA	NA
4,6-Dinitro-2-Methylphenol	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	NA	NA
N-Nitrosodiphenylamine	ug/L	1 UJ	1 UJ	1 U	1 UJ	1 U	1 U	1 U	1 U	1 U	1 U	1 UJ	1 U	1 U	1 U	1 U	1 U	1 U	NA	NA
Hexachlorobenzene	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	NA	NA
Pentachlorophenol	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	NA	NA
Phenanthrene	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	NA	NA
Anthracene	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	NA	NA
Carbazole	ug/L	1 R	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 R	1 U	1 U	1 U	1 U	1 U	1 U	NA	NA
dibutyl phthalate	ug/L	1 UJ	1 U	1 UJ	1 U	1 UJ	1 U	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 U	1 U	1 U	1 U	NA	NA
Fluoranthene	ug/L	1 UJ	1 UJ	1 U	1 UJ	1 U	1 U	1 U	1 U	1 U	1 U	1 UJ	1 U	1 U	1 U	1 U	1 U	1 U	NA	NA
Pyrene	ug/L	1 UJ	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 UJ	1 U	1 U	1 U	1 U	1 U	1 U	NA	NA
Butyl benzyl phthalate	ug/L	1 R	1 UJ	1 UJ	1 UJ	1 UJ	1 U	1 UJ	1 UJ	1 UJ	1 UJ	1 R	1 UJ	1 UJ	1 U	1 U	1 U	1 U	NA	NA
3,3'-Dichlorobenzidine	ug/L	10 R	10 UJ	10 UJ	10 R	10 UJ	10 UJ	10 UJ	10 UJ	10 UJ	10 UJ	10 R	10 UJ	10 UJ	10 UJ	10 UJ	10 U	10 U	NA	NA
Chrysene	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	NA	NA
bis(2-ethylhexyl) Phthalate	ug/L	3 U	3 U	3 U	3 UJ	3 U	8 / 3UJ*	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	NA	NA
Di-n-Octyl Phthalate	ug/L	1 UJ	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 UJ	1 U	1 U	1 U	1 U	1 U	1 U	NA	NA
Benzo(a)pyrene	ug/L	1 UJ	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 UJ	1 U	1 U	1 U	1 U	1 U	1 U	NA	NA
Indeno(1,2,3-cd)pyrene	ug/L	1 UJ	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 UJ	1 U	1 U	1 U	1 U	1 U	1 U	NA	NA
Dibenzo(a,h)anthracene	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	NA	NA
Benzo(ghi)perylene	ug/L	1 UJ	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 UJ	1 U	1 U	1 U	1 U	1 U	1 U	NA	NA
Benzofluoranthenes, Total (b+k+j)	ug/L	2 UJ	2 U	2 U	2 UJ	2 U	2 U	2 U	2 U	2 U	2 U	2 UJ	2 U	2 U	2 U	2 U	2 U	2 U	NA	NA
1-Methylnaphthalene	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	NA	NA
1,4-Dioxane	ug/L	3.5	3.4	0.2 U	3.4	0.2 R	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 J-	0.2 U	0.2 U	0.2 U	0.2 U	NA	NA
Polychlorinated Biphenyls (PCBs)																				
PCB-aroclor 1016	ug/L	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	NA	NA
PCB-aroclor 1221	ug/L	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	NA	NA
PCB-aroclor 1232	ug/L	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	NA	NA
PCB-aroclor 1242	ug/L	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	NA	NA
PCB-aroclor 1248	ug/L	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	NA	NA
PCB-aroclor 1254	ug/L	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	NA	NA
PCB-aroclor 1260	ug/L	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	NA	NA

Table 2: March 2025 Groundwater Analytical Results Landsburg Mine Site

ANALYTE	UNITS	LMW-2	LMW-2 Duplicate	LMW-3	LMW-4	LMW-5	LMW-6	LMW-7	LMW-8	LMW-9	LMW-10	LMW-11	LMW-12	LMW-13R	LMW-14	LMW-15	Field Blank 1	Field Blank 2	Trip Blank 1	Trip Blank 2
Pesticides																				
alpha-BHC	ug/L	0.025 U	0.025 U	0.025 U	0.025 U	0.025 U	0.025 U	0.025 U	0.025 U	0.025 U	0.025 U	0.025 U	0.025 U	0.025 U	0.025 U	0.025 U	0.025 U	0.025 U	NA	NA
beta-BHC	ug/L	0.025 U	0.025 U	0.025 U	0.025 U	0.025 U	0.025 U	0.025 U	0.025 U	0.025 U	0.025 U	0.025 U	0.025 U	0.025 U	0.025 U	0.025 U	0.025 U	0.025 U	NA	NA
Lindane	ug/L	0.025 U	0.025 U	0.025 U	0.025 U	0.025 U	0.025 U	0.025 U	0.025 U	0.025 U	0.025 U	0.025 U	0.025 U	0.025 U	0.025 U	0.025 U	0.025 U	0.025 U	NA	NA
delta-BHC	ug/L	0.025 U	0.025 U	0.025 U	0.025 U	0.025 U	0.025 U	0.025 U	0.025 U	0.025 U	0.025 U	0.025 U	0.025 U	0.025 U	0.025 U	0.025 U	0.025 U	0.025 U	NA	NA
Heptachlor	ug/L	0.025 U	0.025 U	0.025 U	0.025 U	0.025 U	0.025 U	0.025 U	0.025 U	0.025 U	0.025 U	0.025 U	0.025 U	0.025 U	0.025 U	0.025 U	0.025 U	0.025 U	NA	NA
Aldrin	ug/L	0.025 U	0.025 U	0.025 U	0.025 U	0.025 U	0.025 U	0.025 U	0.025 U	0.025 U	0.025 U	0.025 U	0.025 U	0.025 U	0.025 U	0.025 U	0.025 U	0.025 U	NA	NA
Heptachlor Epoxide	ug/L	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	NA	NA
trans-Chlordane	ug/L	0.025 U	0.025 U	0.025 U	0.025 U	0.025 U	0.025 U	0.025 U	0.025 U	0.025 U	0.025 U	0.025 U	0.025 U	0.025 U	0.025 U	0.025 U	0.025 U	0.025 U	NA	NA
cis-Chlordane	ug/L	0.025 U	0.025 U	0.025 U	0.025 U	0.025 U	0.025 U	0.025 U	0.025 U	0.025 U	0.025 U	0.025 U	0.025 U	0.025 U	0.025 U	0.025 U	0.025 U	0.025 U	NA	NA
4,4'-DDE	ug/L	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	NA	NA
Dieldrin	ug/L	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	NA	NA
Endrin	ug/L	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	NA	NA
4,4'-DDD	ug/L	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	NA	NA
Endrin Aldehyde	ug/L	0.05 U	0.05 U	0.05 U	0.05 UJ	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	NA	NA
4,4'-DDT	ug/L	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	NA	NA
Endosulfan Sulfate	ug/L	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	NA	NA
Endrin Ketone	ug/L	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	NA	NA
Methoxychlor	ug/L	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	NA	NA
Toxaphene	ug/L	1.25 U	1.25 U	1.25 U	1.25 U	1.25 U	1.25 U	1.25 U	1.25 U	1.25 U	1.25 U	1.25 U	1.25 U	1.25 U	1.25 U	1.25 U	1.25 U	1.25 U	NA	NA
Hydrocarbon Identification																				
Diesel Range	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	NA	NA
Gas Range	mg/L	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	NA	NA
Lube Oil Range	mg/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	NA	NA

Notes:
U - Analyte was not detected above the Reporting Limit (RL).
J - Analyte was detected above the Method Detection Limit (MDL) but below the RL.
R - Analytical result is unusable because certain data quality criteria were not met.
Bold values indicate detections above the RL.
NA - Not Applicable
*Re-analysis was not detected

Figures



APPENDIX A

**Laboratory Analytical Report Data Validation
and Quality Assurance / Quality Control
Review Memorandum**



TECHNICAL MEMORANDUM

DATE May 9, 2025

Project No. GL923-1000-007.2025

TO Bill Kombol
Palmer Coking Coal Company

FROM Gary Zimmerman (WSP)

EMAIL gary.zimmerman@wsp.com

LANDSBURG MINE SITE MARCH 2025 DATA VALIDATION & QUALITY ASSURANCE / QUALITY CONTROL REVIEW

This Data Usability Summary Report (DUSR) presents the findings of the data quality assessment performed on the analyses of water samples collected on March 10, 11, 12, and 13, 2025 at the Landsburg Mine Site in Washington (Site) as part of the Landsburg Groundwater sampling project. Samples in the laboratory sample delivery group (SDG) as indicated in Table 1 were reviewed in this DUSR to identify quality issues which could affect the use of the sample data for decision-making purposes.

Fourteen water samples, one field duplicate sample, two field blanks, and two trip blanks were collected by WSP. Samples were analyzed by Analytical Resources LLC. of Tukwila, Washington for the following parameters:

- Volatile Organic Compounds (VOCs) following United States Environmental Protection Agency (USEPA) USEPA SW-846¹ Method 8260D, Volatile Organic Compounds by Gas Chromatography/Mass Spectrometry (GC/MS)
- Semivolatile Organic Compounds (SVOCs) by GC/MS, including:
 - 1,4-Dioxane following USEPA SW-846 Method 8270E
- Low-Level Polychlorinated Biphenyls (PCBs) following USEPA SW-846 Method 8082A, Polychlorinated Biphenyls (PCBs) by Gas Chromatography
- Organochlorine Pesticides following USEPA SW-846 Method 8081B, Organochlorine Pesticides by Gas Chromatography
- Northwest Total Petroleum Hydrocarbons – Hydrocarbon Identification Scan by NWTPH-HCID
- Total Metals by USEPA SW-846 Method 200.8 and SW-846 6010D
- Total Mercury by USEPA SW-846 Method 7470A

Quality assurance / quality control (QA/QC) reviews of laboratory data were performed in the laboratory in accordance with the laboratory quality assurance program plan (QAPP). The data validation QA/QC review

¹ USEPA. 2020. Test methods for evaluating solid waste, physical/chemical methods (SW-846): 3rd edition, and subsequent updates, Environmental Protection Agency, National Center for Environmental Publications, Cincinnati, Ohio, accessed at URL <http://www.epa.gov/epaoswer/hazwaste/test/sw846.htm>

focused primarily on laboratory results and quality control data to ensure that work plan data quality objectives were met for the project.

Data validation was conducted in accordance with the criteria outlined in the National Functional Guidelines for Organic Review (USEPA 2020a²) and Inorganic Review (USEPA 2020b³), modified to include method specific requirements of the laboratory, and laboratory standard operating procedures. Where there was, if any, a discrepancy between the QC criteria in the Guidelines and the QC criterion established in the analytic methodology, method-specific criteria, the QAPP, or professional judgment was used.

In general, chemical results for the samples collected at the Site were evaluated based on laboratory preservation, hold times, laboratory and field blank contamination, outlying precision or accuracy parameters, or based on professional judgment. The following definitions provide brief explanations of the qualifiers which may have been assigned to data during the data validation process.

Data Qualifier Definitions

- J The result is an estimated quantity. The associated numerical value is the approximate concentration of the analyte in the sample.
- J+ The result is an estimated quantity, but the result may be biased high.
- J- The result is an estimated quantity, but the result may be biased low.
- UJ The analyte was analyzed for but was not detected. However, the reported quantitation limit is approximate and may or may not represent the actual limit of quantitation necessary to accurately and precisely measure the analyte in the sample.
- U The analyte was analyzed for but was not detected.
- R The data are unusable. The sample results are rejected due to serious deficiencies in meeting QC criteria. The analyte may or may not be present in the sample.

The validation level for the data is Tier 2A, and included the following:

- Data package completeness assessment
- Verification of required deliverables
- Evaluation of holding times
- Laboratory narrative evaluation
- Evaluation and qualification of QC elements for surrogates, matrix spike samples, laboratory control samples, blanks (method, equipment, and trip blank) laboratory duplicate samples, and field duplicate samples
- Evaluation of detection limits

² United States Environmental Protection Agency (USEPA). 2020a. National Functional Guidelines for Organic Superfund Methods Data Review. OLEM 9240.0-51. EPA-540-R-20-005, November.

³ USEPA. 2020b. National Functional Guidelines for Inorganic Superfund Methods Data Review. OLEM 9240.0-66. EPA-542-R-20-006, November.

Raw data and calibration elements, including GC instrument tuning and performance check, initial and continuing calibration, internal standard performance, and analyte identification, were not provided by the lab. Data review and validation was performed by an experienced QA personnel independent of the analytical laboratory and not directly involved in the project. Data qualifiers that were applied by the laboratory have been removed from the data summary report sheets, when applicable, and superseded by data validation qualifiers.

Overall, the data review showed that data are acceptable for use, except for 2-chloroethyl vinyl ether and 3,3'-Dichlorobenzidine. The MS/MSD results were non-detect and the calculated percent recovery of the associated MS/MSD did not recover. Following Guidelines and using professional judgment, the results for 2-chloroethyl vinyl ether and 3,3'-Dichlorobenzidine were rejected (R) in LMW-4. 2-chloroethyl vinyl ether and 3,3'-Dichlorobenzidine were not detected during the March 2025 sampling round and have never been detected at the Site.

The associated LCSDs were below QC criteria for Bis(2-Chloroethoxy)methane, 4-Chloroaniline, Carbazole, Butylbenzylphthalate, 3,3'-Dichlorobenzidine, Benzyl Alcohol, Acenaphthylene, and 3-Nitroaniline in both LMW-2 and LMW-11 and were thus rejected (R). Due to a surrogate recovery below 10% of 1,4-dioxane in LMW-5, the associated non-detect result was also rejected. Other minor data qualifiers were also reported as detailed in Attachment B.

The laboratory analyzed 2-chloroethyl vinyl ether, acrolein, and acrylonitrile from the preserved volatile organic analysis (VOA) vials. Due to the acid-labile nature of analytes 2-chloroethyl vinyl ether, acrolein and acrylonitrile, when samples were collected in acid-preserved vials but all associated LCS/LCSDs were within or above QC criteria, the associated non-detect results for these three analytes were qualified as estimated (UJ) due to possible acid degradation, except for 2-chloroethyl vinyl ether, the results for which were rejected in LMW-4 as noted above. 2-chloroethyl vinyl ether, acrolein, and acrylonitrile were not detected during the March 2025 sampling round and have never been detected at the Site.

Some associated LCS/LCSDs were also outside QC criteria for other SVOCs as detailed in Attachment B. The associated non-detect results for those analytes were qualified as estimated (UJ).

Bis(2-ethylhexyl) phthalate, a common laboratory contaminant, was detected in LMW-6. The sample from LMW-6 was re-analyzed, and bis(2-ethylhexyl) phthalate was not detected in the re-analysis. The re-analysis was performed past the recommended holding time, but the non-detect result supports the possibility that the initial detection was attributable to laboratory contamination. The data validation chemist deemed the initial detection as reportable and likely attributable to laboratory contamination as further detailed in Attachment B.

Acetone was detected in both field blanks and in LMW-3 and LMW-4. Because the blank detections were greater than the reporting limit (RL) and the sample results were greater than the RL but less than the blank detection, the samples in LMW-3 and LMW-4 were qualified as non-detect (U) and reported at the sample result.

Qualifier Summary Table (Table 2) is included with the qualifiers applied. For details about the data validation, refer to the data validation checklist in Attachment A. The following bulleted items highlight comments and/or qualifications to specific parameters:

- A data completeness of 99% was achieved, which exceeds the QAPP-stipulated completeness goal of 90%.

Attachments

Attachment A Tables

Table 1: Sample Collection and Analysis Summary

Table 2: Qualifier Summary Table

Table 3: MS/MSD Recoveries

Table 4: LCS/LCSD Recoveries

Attachment B Level 2A Data Validation Checklist

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ATTACHMENT A

Tables

Table 1: Sample Collection and Analysis Summary

Q1 - March 2025

SDG	Field Identification	Collection Date	Lab Identification	Matrix	QC Samples	Analyses/Parameters							
						VOCs by 8260D	1,4-Dioxane by 8270E-SIM	NWTPH HCID	TPH-DX+TPH-GX	PCBs by 8082A	Organochlorine Pesticides by 8081B	SVOCs by 8270E	Total Priority Pollutant Metals
25C0223	LMW-12-0325	3/10/2025	25C0223-01	GW	-	X	X	X	X	X	X	X	X
25C0223	LMW-13R-0325	3/10/2025	25C0223-02	GW	-	X	X	X	X	X	X	X	X
25C0223	LMW-10-0325	3/10/2025	25C0223-03	GW	-	X	X	X	X	X	X	X	X
25C0223	LMW-FB-0325	3/11/2025	25C0223-04	WQ	FB	X	X	X	X	X	X	X	X
25C0223	LMW-9-0325	3/11/2025	25C0223-05	GW	-	X	X	X	X	X	X	X	X
25C0223	LMW-3-0325	3/11/2025	25C0223-06	GW	-	X	X	X	X	X	X	X	X
25C0223	LMW-5-0325	3/11/2025	25C0223-07	GW	-	X	X	X	X	X	X	X	X
25C0223	LMW-8-0325	3/11/2025	25C0223-08	GW	-	X	X	X	X	X	X	X	X
25C0223	LMW-7-0325	3/11/2025	25C0223-09	GW	-	X	X	X	X	X	X	X	X
25C0223	Trip Blank	3/10/2025	25C0223-10	WQ	TB	X	-	-	-	-	-	-	-
25C0281	LMW-6-0325	3/12/2025	25C0281-01	GW	-	X	X	X	X	X	X	X	X
25C0281	LMW-14-0325	3/12/2025	25C0281-02	GW	-	X	X	X	X	X	X	X	X
25C0281	LMW-15-0325	3/12/2025	25C0281-03	GW	-	X	X	X	X	X	X	X	X
25C0281	LMW-11-0325	3/12/2025	25C0281-04	GW	-	X	X	X	X	X	X	X	X
25C0281	LMW-FB1-0325	3/12/2025	25C0281-05	WQ	FB	X	X	X	X	X	X	X	X
25C0281	LMW-4-0325	3/13/2025	25C0281-06	GW	MS/MSD	X	X	X	X	X	X	X	X
25C0281	LMW-2-0325	3/13/2025	25C0281-07	GW	-	X	X	X	X	X	X	X	X
25C0281	LMW-2-0325-D	3/13/2025	25C0281-08	GW	FD (LMW-2-0325)	X	X	X	X	X	X	X	X
25C0281	Trip Blank	3/12/2025	25C0281-09	WQ	TB	X	-	-	-	-	-	-	-

Notes:

All analyses performed by Analytical Resources, LLC (ARL), Tukwila WA.

Samples collected for TPH-DX and GX were placed on hold.

MS/MSD was not collected for TPH-DX and HX

Abbreviations:

GW: Groundwater

WQ: Water quality

VOCs: Volatile Organic Compounds

SIM: Selective Ion Monitoring

NWTPH: Northwest Total Petroleum Hydrocarbons

HCID: Hydrocarbon Identification

MS/MSD: Matrix Spike/Matrix Spike Duplicate

FB: Field Blank

TB: Trip Blank

FD: Field Duplicate

SDG: Sample Delivery Group

Table 2: Qualifier Summary Table

Q1 - March 2025

SDG	Sample Name	Constituent	New Result	New MDL	New RL	Qualifier	Reason
All SDGs	All samples	Acrolein	--	--	--	UJ	Improper sample preservation
All SDGs	All samples	Acrylonitrile	--	--	--	UJ	Improper sample preservation
All SDGs	All samples	2-Chloroethyl vinyl ether	--	--	--	UJ	Improper sample preservation
25C0223	LMW-12-0325	4-Chloroaniline	--	--	--	UJ	LCS recovery below QC criteria
25C0223	LMW-13R-0325	4-Chloroaniline	--	--	--	UJ	LCS recovery below QC criteria
25C0223	LMW-10-0325	4-Chloroaniline	--	--	--	UJ	LCS recovery below QC criteria
25C0223	LMW-9-0325	4-Chloroaniline	--	--	--	UJ	LCS recovery below QC criteria
25C0223	LMW-3-0325	4-Chloroaniline	--	--	--	UJ	LCS recovery below QC criteria
25C0223	LMW-5-0325	4-Chloroaniline	--	--	--	UJ	LCS recovery below QC criteria
25C0223	LMW-8-0325	4-Chloroaniline	--	--	--	UJ	LCS recovery below QC criteria
25C0223	LMW-7-0325	4-Chloroaniline	--	--	--	UJ	LCS recovery below QC criteria
25C0223	LMW-12-0325	Diethyl phthalate	--	--	--	UJ	LCS recovery below QC criteria
25C0223	LMW-13R-0325	Diethyl phthalate	--	--	--	UJ	LCS recovery below QC criteria
25C0223	LMW-10-0325	Diethyl phthalate	--	--	--	UJ	LCS recovery below QC criteria
25C0223	LMW-9-0325	Diethyl phthalate	--	--	--	UJ	LCS recovery below QC criteria
25C0223	LMW-3-0325	Diethyl phthalate	--	--	--	UJ	LCS recovery below QC criteria
25C0223	LMW-5-0325	Diethyl phthalate	--	--	--	UJ	LCS recovery below QC criteria
25C0223	LMW-8-0325	Diethyl phthalate	--	--	--	UJ	LCS recovery below QC criteria
25C0223	LMW-7-0325	Diethyl phthalate	--	--	--	UJ	LCS recovery below QC criteria
25C0223	LMW-12-0325	Di-n-Butylphthalate	--	--	--	UJ	LCS recovery below QC criteria
25C0223	LMW-13R-0325	Di-n-Butylphthalate	--	--	--	UJ	LCS recovery below QC criteria
25C0223	LMW-10-0325	Di-n-Butylphthalate	--	--	--	UJ	LCS recovery below QC criteria
25C0223	LMW-9-0325	Di-n-Butylphthalate	--	--	--	UJ	LCS recovery below QC criteria
25C0223	LMW-3-0325	Di-n-Butylphthalate	--	--	--	UJ	LCS recovery below QC criteria

Table 2: Qualifier Summary Table

Q1 - March 2025

SDG	Sample Name	Constituent	New Result	New MDL	New RL	Qualifier	Reason
25C0223	LMW-5-0325	Di-n-Butylphthalate	--	--	--	UJ	LCS recovery below QC criteria
25C0223	LMW-8-0325	Di-n-Butylphthalate	--	--	--	UJ	LCS recovery below QC criteria
25C0223	LMW-7-0325	Di-n-Butylphthalate	--	--	--	UJ	LCS recovery below QC criteria
25C0223	LMW-12-0325	Butylbenzylphthalate	--	--	--	UJ	LCS recovery below QC criteria
25C0223	LMW-13R-0325	Butylbenzylphthalate	--	--	--	UJ	LCS recovery below QC criteria
25C0223	LMW-10-0325	Butylbenzylphthalate	--	--	--	UJ	LCS recovery below QC criteria
25C0223	LMW-9-0325	Butylbenzylphthalate	--	--	--	UJ	LCS recovery below QC criteria
25C0223	LMW-3-0325	Butylbenzylphthalate	--	--	--	UJ	LCS recovery below QC criteria
25C0223	LMW-5-0325	Butylbenzylphthalate	--	--	--	UJ	LCS recovery below QC criteria
25C0223	LMW-8-0325	Butylbenzylphthalate	--	--	--	UJ	LCS recovery below QC criteria
25C0223	LMW-7-0325	Butylbenzylphthalate	--	--	--	UJ	LCS recovery below QC criteria
25C0223	LMW-12-0325	3,3'-Dichlorobenzidine	--	--	--	UJ	LCS recovery below QC criteria
25C0223	LMW-13R-0325	3,3'-Dichlorobenzidine	--	--	--	UJ	LCS recovery below QC criteria
25C0223	LMW-10-0325	3,3'-Dichlorobenzidine	--	--	--	UJ	LCS recovery below QC criteria
25C0223	LMW-9-0325	3,3'-Dichlorobenzidine	--	--	--	UJ	LCS recovery below QC criteria
25C0223	LMW-3-0325	3,3'-Dichlorobenzidine	--	--	--	UJ	LCS recovery below QC criteria
25C0223	LMW-5-0325	3,3'-Dichlorobenzidine	--	--	--	UJ	LCS recovery below QC criteria
25C0223	LMW-8-0325	3,3'-Dichlorobenzidine	--	--	--	UJ	LCS recovery below QC criteria
25C0223	LMW-7-0325	3,3'-Dichlorobenzidine	--	--	--	UJ	LCS recovery below QC criteria
25C0281	LMW-6-0325	4-Chloroaniline	--	--	--	UJ	LCS/LCSD recovery below QC criteria
25C0281	LMW-14-0325	4-Chloroaniline	--	--	--	UJ	LCS/LCSD recovery below QC criteria
25C0281	LMW-15-0325	4-Chloroaniline	--	--	--	UJ	LCS/LCSD recovery below QC criteria

Table 2: Qualifier Summary Table

Q1 - March 2025

SDG	Sample Name	Constituent	New Result	New MDL	New RL	Qualifier	Reason
25C0281	LMW-6-0325	3,3'-Dichlorobenzidine	--	--	--	UJ	LCS/LCSD recovery below QC criteria
25C0281	LMW-14-0325	3,3'-Dichlorobenzidine	--	--	--	UJ	LCS/LCSD recovery below QC criteria
25C0281	LMW-15-0325	3,3'-Dichlorobenzidine	--	--	--	UJ	LCS/LCSD recovery below QC criteria
25C0281	LMW-11-0325	Fluoranthene	--	--	--	UJ	LCS/LCSD recovery below QC criteria
25C0281	LMW-2-0325	Fluoranthene	--	--	--	UJ	LCS/LCSD recovery below QC criteria
25C0281	LMW-11-0325	Di-n-Octylphthalate	--	--	--	UJ	LCS/LCSD recovery below QC criteria
25C0281	LMW-2-0325	Di-n-Octylphthalate	--	--	--	UJ	LCS/LCSD recovery below QC criteria
25C0281	LMW-11-0325	Benzo(a)fluoranthene, Total	--	--	--	UJ	LCS/LCSD recovery below QC criteria
25C0281	LMW-2-0325	Benzo(a)fluoranthene, Total	--	--	--	UJ	LCS/LCSD recovery below QC criteria
25C0281	LMW-11-0325	N-Nitrosodiphenylamine	--	--	--	UJ	LCSD and RPD outside QC criteria
25C0281	LMW-2-0325	N-Nitrosodiphenylamine	--	--	--	UJ	LCSD and RPD outside QC criteria
25C0281	LMW-11-0325	Di-n-Butylphthalate	--	--	--	UJ	LCS/LCSD and RPD recovery outside QC criteria
25C0281	LMW-2-0325	Di-n-Butylphthalate	--	--	--	UJ	LCS/LCSD and RPD recovery outside QC criteria
25C0281	LMW-11-0325	Pyrene	--	--	--	UJ	LCSD and RPD recovery outside QC criteria
25C0281	LMW-2-0325	Pyrene	--	--	--	UJ	LCSD and RPD recovery outside QC criteria
25C0281	LMW-11-0325	Benzo(a)pyrene	--	--	--	UJ	LCS and RPD recovery outside QC criteria
25C0281	LMW-2-0325	Benzo(a)pyrene	--	--	--	UJ	LCS and RPD recovery outside QC criteria
25C0281	LMW-11-0325	Indeno(1,2,3-cd)pyrene	--	--	--	UJ	LCSD and RPD recovery outside QC criteria
25C0281	LMW-2-0325	Indeno(1,2,3-cd)pyrene	--	--	--	UJ	LCSD and RPD recovery outside QC criteria
25C0281	LMW-11-0325	Benzo(g,h,i)perylene	--	--	--	UJ	LCSD and RPD recovery outside QC criteria
25C0281	LMW-2-0325	Benzo(g,h,i)perylene	--	--	--	UJ	LCSD and RPD recovery outside QC criteria
25C0281	LMW-4-0325	N-Nitrosodiphenylamine	--	--	--	UJ	LCS and RPD recovery outside QC criteria

Table 2: Qualifier Summary Table

Q1 - March 2025

SDG	Sample Name	Constituent	New Result	New MDL	New RL	Qualifier	Reason
25C0281	LMW-2-0325-D	N-Nitrosodiphenylamine	--	--	--	UJ	LCS and RPD recovery outside QC criteria
25C0281	LMW-2-0325-D	Fluoranthene	--	--	--	UJ	LCS/LCSD recovery below QC criteria
25C0281	LMW-4-0325	Butylbenzylphthalate	--	--	--	UJ	LCS and RPD recovery outside QC criteria
25C0281	LMW-2-0325-D	Butylbenzylphthalate	--	--	--	UJ	LCS and RPD recovery outside QC criteria
25C0281	LMW-2-0325-D	3,3'-Dichlorobenzidine	--	--	--	UJ	LCS/LCSD and RPD recovery outside QC criteria
25C0281	LMW-4-0325	4-Chloroaniline	--	--	--	UJ	MS/MSD below QC criteria
25C0281	LMW-4-0325	3-Nitroaniline	--	--	--	UJ	MS/MSD below QC criteria
25C0281	LMW-4-0325	Fluoranthene	--	--	--	UJ	MS/MSD below QC criteria, LCS/LCSD recovery below QC criteria
25C0281	LMW-4-0325	bis(2-Ethylhexyl)phthalate	--	--	--	UJ	MS/MSD below QC criteria
25C0281	LMW-4-0325	Benzofluoranthenes, Total	--	--	--	UJ	MS/MSD below QC criteria
25C0281	LMW-4-0325	Endosulfan I	--	--	--	UJ	MS/MSD below QC criteria
25C0281	LMW-4-0325	Endrin Aldehyde	--	--	--	UJ	MS/MSD below QC criteria

Abbreviations

MDL - Method Detection Limit

MS - Matrix Spike

MSD - Matrix Spike Duplicate

RL - Reporting Limit

SDG - Sample Delivery Group

%R - Percent Recovery

Qualifier Definitions

UJ: Non-Detect Result, RL is estimated

R: Result is rejected and considered unusable

W: Considered non-detect see lab narrative

Table 3: MS/MSD Recoveries
Q1 - March 2025

SDG	Sample Name	Parameter	Analyte	MS/MSD% R	RPD	%R/RPD Criteria	Sample>4x spike value
25C0281	LMW-4-0325	8260D	2-chloroethyl vinyl ether	0 / 0	0	64-120/30	No
25C0281	LMW-4-0325	8270E	1,4-Dioxane	163 / 154	4.9	30-160/30	No
25C0281	LMW-4-0325	8270E	4-Chloroaniline	35.6 / 35.4	0.41	42.7-132/30	No
25C0281	LMW-4-0325	8270E	3-Nitroaniline	60.2 / 59.1	1.81	60.9-120/30	No
25C0281	LMW-4-0325	8270E	4-Nitrophenol	108 / 170	5.9	50.2-136/30	No
25C0281	LMW-4-0325	8270E	Fluoranthene	63.4 / 63.4	0.04	66.7-120/30	No
25C0281	LMW-4-0325	8270E	3,3'-Dichlorobenzidine	0 / 0	NC	34-120/30	No
25C0281	LMW-4-0325	8270E	bis(2-Ethylhexyl)phthalate	66.6 / 66.4	0.18	68.3-120/30	No
25C0281	LMW-4-0325	8270E	Benzo(a)fluoranthene, Total	64.2 / 66	2.84	66.5-120/30	No
25C0281	LMW-4-0325	8081B	Endosulfan I	44.2 / 45.6	3.06	48-137/30	No
25C0281	LMW-4-0325	8081B	Endrin Aldehyde	42.6 / 37.3	13.5	53-120/30	No
25C0281	LMW-4-0325	8081B	cis-Chlordane (alpha-chlordane)	51.8 / 50.8	1.98	51-132/30	No
25C0281	LMW-4-0325	8081B	Dieldrin	63 / 54.9	13.9	55-130/30	No

Abbreviations

MS - Matrix Spike

MSD - Matrix Spike Duplicate

SDG - Sample Delivery Group

%R - Percent Recovery

Table 4: LCS/LCSD Recoveries
Q1 - March 2025

SDG	Sample Name	Parameter	Analyte	LCS/LCSD% R	RPD	%R/RPD Criteria
25C0223	BNC0300-BS1	8270E	4-Chloroaniline	32.9 / --	--	42.7-120/--
25C0223	BNC0300-BS1	8270E	Diethyl phthalate	67.8 / --	--	68.1-120/--
25C0223	BNC0300-BS1	8270E	Di-n-Butylphthalate	67.8 / --	--	71-120/--
25C0223	BNC0300-BS1	8270E	Butylbenzylphthalate	65.5 / --	--	67.4-128/--
25C0223	BNC0300-BS1	8270E	3,3'-Dichlorobenzidine	14.9 / --	--	34.1-120/--
25C0223	BNC0360-BS1	6010D	Sodium	0 /--	--	80-120/--
25C0281	BNC0433-BS1 BNC0433-BSD1	8270E	4-Chloroaniline	33.3 / 38.1	13.6	42.7-120/30
25C0281	BNC0433-BS1 BNC0433-BSD1	8270E	4-Nitrophenol	255 / 279	8.99	50.2-136/30
25C0281	BNC0433-BS1 BNC0433-BSD1	8270E	3,3'-Dichlorobenzidine	14.1 / 19.1	30	34.1-120/30
25C0281	BNC0433-BS1 BNC0433-BSD1	8270E	Indeno(1,2,3-cd)pyrene	128 / 139	8.33	46.5-120/30
25C0281	BNC0433-BS1 BNC0433-BSD1	8270E	Benzo(g,h,i)perylene	123 / 135	8.7	37-120/30
25C0281	BNC0433-BS1 BNC0433-BSD1	8270E	Hexachloroethane	44.2 / 62	33.7	29.5-120/30
25C0281	BNC0433-BS1 BNC0433-BSD1	8270E	Hexachlorobutadiene	44.5 / 68	41.6	32.3-120/30
25C0281	BNC0433-BSD1	8270E	4-Chloro-3-Methylphenol	114 / 121	6.4	51.9-120/30
25C0281	BNC0433-BS1 BNC0433-BSD1	8270E	Hexachlorocyclopentadiene	76.6 / 109	35.3	23.3-120/30
25C0281	BNC0433-BS1 BNC0433-BSD1	8270E	2,4,6-Trichlorophenol	115 / 123	6.94	47-120/30
25C0281	BNC0433-BS1 BNC0433-BSD1	8270E	Dibenzo(a,h)anthracene	119 / 129	8.33	49.6-120/30
25C0281	BNC0437-BS1 BNC0437-BSD1	8270E	Bis(2-Chloroethoxy)methane	45.4 / 0	NC	52.9-120/30
25C0281	BNC0437-BS1 BNC0437-BSD1	8270E	4-Chloroaniline	38.9 / 0	NC	42.7-120/30
25C0281	BNC0437-BS1 BNC0437-BSD1	8270E	4-Nitrophenol	169 / 170	0.63	50.2-136/30
25C0281	BNC0437-BS1 BNC0437-BSD1	8270E	Carbazole	58.9 / 0	NC	59.7-120/30
25C0281	BNC0437-BS1 BNC0437-BSD1	8270E	Fluoranthene	64 / 56.9	11.7	66.7-120/30
25C0281	BNC0437-BS1 BNC0437-BSD1	8270E	Butylbenzylphthalate	52.7 / 0	NC	67.4-128/30
25C0281	BNC0437-BS1 BNC0437-BSD1	8270E	3,3'-Dichlorobenzidine	23.7 / 0	NC	34.1-120/30
25C0281	BNC0437-BS1 BNC0437-BSD1	8270E	bis(2-Ethylhexyl)phthalate	62.2 / 52.4	17	68.3-123/30
25C0281	BNC0437-BS1 BNC0437-BSD1	8270E	Di-n-Octylphthalate	61.2 / 55.3	10.1	61.5-120/30
25C0281	BNC0437-BS1 BNC0437-BSD1	8270E	Benzo(a)fluoranthene, Total	64.2 / 49.4	26	66.5-120/30
25C0281	BNC0437-BS1	8270E	Benzyl Alcohol	72.2 / 5.6	171	27.4-120/30
25C0281	BNC0437-BS1 BNC0437-BSD1	8270E	Dimethylphthalate	67.4 / 62.7	7.14	65.2-125/30

Table 4: LCS/LCSD Recoveries
Q1 - March 2025

SDG	Sample Name	Parameter	Analyte	LCS/LCSD% R	RPD	%R/RPD Criteria
25C0281	BNC0437-BS1 BNC0437-BSD1	8270E	Acenaphthylene	60.2 / 2.8	182	44.1-120/30
25C0281	BNC0437-BS1 BNC0437-BSD1	8270E	3-Nitroaniline	63.5 / 0	NC	60.9-120/30
25C0281	BNC0437-BS1 BNC0437-BSD1	8270E	Diethyl phthalate	71.7 / 57	22.8	68.1-120/30
25C0281	BNC0437-BS1 BNC0437-BSD1	8270E	N-Nitrosodiphenylamine	65 / 29.9	74	59.6-120/30
25C0281	BNC0437-BS1 BNC0437-BSD1	8270E	Di-n-Butylphthalate	67.4 / 41.9	46.6	71-120/30
25C0281	BNC0437-BS1 BNC0437-BSD1	8270E	Pyrene	65.1 / 16.6	119	62.7-127/30
25C0281	BNC0437-BS1 BNC0437-BSD1	8270E	Benzo(a)anthracene	64.1 / 50.8	23.2	58.3-128/30
25C0281	BNC0437-BS1 BNC0437-BSD1	8270E	Benzo(a)pyrene	72.3 / 8.1	160	70.6-120/30
25C0281	BNC0437-BS1 BNC0437-BSD1	8270E	Indeno(1,2,3-cd)pyrene	71.9 / 26.7	91.7	46.5-120/30
25C0281	BNC0437-BS1 BNC0437-BSD1	8270E	Benzo(g,h,i)perylene	65.6 / 15.6	123	37-120/30
25C0281	BNC0438-BS1 BNC0438-BSD1	8270E	Bis(2-Chloroethoxy)methane	20.1 / 95.1	95.1	52.9-120/30
25C0281	BNC0438-BS1 BNC0438-BSD1	8270E	4-Chloroaniline	25.1 / 43.4	53.7	42.7-120/30
25C0281	BNC0438-BS1 BNC0438-BSD1	8270E	Dimethylphthalate	64.2 / 72.6	12.3	65.2-125/30
25C0281	BNC0438-BS1 BNC0438-BSD1	8270E	2,6-Dinitrotoluene	67.4 / 75.7	11.7	69.3-140/30
25C0281	BNC0438-BS1 BNC0438-BSD1	8270E	3-Nitroaniline	59.3 / 73.8	21.7	60.9-120/30
25C0281	BNC0438-BS1 BNC0438-BSD1	8270E	4-Nitrophenol	162 / 201	21.3	50.2-136/30
25C0281	BNC0438-BS1 BNC0438-BSD1	8270E	Diethyl phthalate	66.5 / 77	14.5	68.1-120/30
25C0281	BNC0438-BS1 BNC0438-BSD1	8270E	4-Chlorophenylphenyl ether	58.8 / 65.1	10.2	59.1-127/30
25C0281	BNC0438-BS1 BNC0438-BSD1	8270E	N-Nitrosodiphenylamine	52 / 75.7	37	59.6-120/30
25C0281	BNC0438-BS1 BNC0438-BSD1	8270E	Carbazole	51.7 / 63.5	20.5	59.7-120/30
25C0281	BNC0438-BS1 BNC0438-BSD1	8270E	Di-n-Butylphthalate	58.1 / 72.4	22	71-120/30
25C0281	BNC0438-BS1 BNC0438-BSD1	8270E	Fluoranthene	58.8 / 65	9.97	66.7-120/30
25C0281	BNC0438-BS1 BNC0438-BSD1	8270E	Pyrene	58.5 / 65.3	11	62.7-127/30
25C0281	BNC0438-BS1 BNC0438-BSD1	8270E	Butylbenzylphthalate	45.4 / 75.5	49.8	67.4-128/30
25C0281	BNC0438-BS1 BNC0438-BSD1	8270E	3,3'-Dichlorobenzidine	19.3 / 30.8	46	34.1-120/30

Table 4: LCS/LCSD Recoveries
Q1 - March 2025

SDG	Sample Name	Parameter	Analyte	LCS/LCSD% R	RPD	%R/RPD Criteria
25C0281	BNC0438-BS1 BNC0438-BSD1	8270E	bis(2-Ethylhexyl)phthalate	61.3 / 69.9	13.2	68.3-123/30
25C0281	BNC0438-BS1 BNC0438-BSD1	8270E	Benzofluoranthenes, Total	59.5 / 67.7	12.8	66.5-120/30
25C0281	BNC0438-BS1 BNC0438-BSD1	8270E	Benzo(a)pyrene	66.8 / 78.2	15.6	70.6-120/30

Abbreviations

Lab Control Spike
Control Spike Duplicate
Sample Delivery Group
Percent Recovery

ATTACHMENT B

Level 2A Data Validation Checklist

QA LEVEL 2A - DATA VERIFICATION/DATA VALIDATION CHECKLIST

Project Name: Landsburg Groundwater

Project Number/Phase/Task: US-WSP-

GL9231000007/Task: 2025.LBR-GW Mont & Reporting LBR

Reviewing Company: WSP

Project Manager: Gary Zimmerman

Data Evaluator: Julia Campbell

Data Evaluation Date: April 21, 2025

Checked by: Michael Shadle

Review Date: April 28, 2025

Laboratory: Analytical Resources, Inc., Tukwila, WA

Lab SDG #: 25C0281, 25C0223

Matrix: ☒ Aqueous ☐ Soil ☐ Sediment ☐ Waste ☐ Air ☐ Other:

Analytical Methods: See Table 1.

Sample Information: See Table 1.

Work Plan or QAPP: Compliance Monitoring Plan and QAPP for Landsburg Mine Site (Exhibit D, to the Consent Decree, 2017).

Data Validation Guidance: National Functional Guidelines for Organic Superfund Methods Data Review, EPA-540-R-20-005, November 2020 and National Functional Guidelines for Inorganic Superfund Methods Data Review, EPA- EPA-542-R-20-006, November 2020

COC and Sample Receipt	YES	NO	NA	COMMENT
a) COC complete and correct?	☒	☐		
b) COC documents release of custody (signed and dated)?	☒	☐		
c) Field QC types provided (note types)?	☒	☐	☐	FB, FD, TB, MS/MSD; See Table 1
d) Did the cooler contents match the COC?	☒	☐		
e) Were samples received in good condition?	☐	☒		See Note 1
f) Were cooler temperatures within control limits?	☐	☒		

Data Package Information	YES	NO	NA	COMMENT
a) Laboratory name and location documented?	☒	☐		
b) All samples on COC reported in data package?	☒	☐		
c) Requested analytical methods used?	☐	☒		See Note 2
d) Requested sample preparation methods used?	☒	☐	☐	
e) Requested analyte list reported?	☒	☐		
f) Requested units reported?	☒	☐	☐	
g) Did the laboratory define the qualifiers used?	☒	☐		
h) Data package contains all information necessary to complete the data quality review?	☒	☐		See Note 3

Analytical Assessment	YES	NO	NA	COMMENT
a) Solid samples reported on a dry-weight basis?	☐	☐	☒	
b) Were solid samples percent moisture criteria acceptable?	☐	☐	☒	
c) Were sample dilutions noted?	☒	☐		
d) Were detected concentrations less than the QL qualified by the laboratory?	☒	☐		
e) Were detected concentrations above the calibration range reported by the laboratory?	☒	☐		
f) Did the laboratory satisfy the requested sensitivity requirements?	☒	☐		

Laboratory Case Narrative	YES	NO	NA	COMMENT
a) Do the laboratory narrative or laboratory qualifiers indicate deficiencies?	☒	☐	☐	
b) Were all deficiencies noted in the laboratory qualifiers or narrative?	☒	☐	☐	
Sample Preservation and Holding Time	YES	NO	NA	COMMENT
a) Were samples properly preserved?	☐	☒		See Note 4
b) Were holding times met for sample preparation?	☐	☒	☐	See Note 6
c) Were holding times met for sample analysis?	☒	☐		
Blanks	YES	NO	NA	COMMENTS
a) Were blanks analyzed at the appropriate frequency?	☒	☐		
b) Were any analytes detected in the associated preparation/method blank?	☒	☐		See Note 5
c) Were any analytes detected in the associated trip blanks?	☒	☐	☐	See Note 5
d) Were any analytes detected in the associated field or equipment/rinsate blanks?	☒	☐	☐	See Note 5
e) Were any analytes detected in the associated storage blanks?	☐	☐	☒	
Surrogates or Deuterated Monitoring Compounds	YES	NO	NA	COMMENTS
a) Were the correct surrogate compounds added to each sample?	☒	☐	☐	
b) Were surrogate recoveries within control limits?	☐	☒	☐	See Note 6
c) If not, were samples analyzed at dilution factors of 20x or greater?	☐	☒	☐	
LCS/LCSD	YES	NO	NA	COMMENTS
a) Were LCS/LCSD reported at the appropriate frequency?	☒	☐		
b) Were proper analytes included in the LCS/LCSD?	☒	☐		
c) Were LCS/LCSD recoveries within control limits?	☐	☒		See Table 4 and Note 7
d) Were RPD values within control limits (if LCSD was analyzed)?	☒	☐	☐	
MS/MSDs	YES	NO	NA	COMMENTS
a) Were project-specific MS (and MSD) reported?	☒	☐		LMW-4-0325
b) Were proper analytes reported in the MS/MSD?	☒	☐	☐	
c) Were project-specific MS/MSD recoveries within control limits?	☐	☒	☐	See Table 3 and Note 8
d) If not, were sample concentrations greater than 4x the spiking concentration?	☐	☒	☐	
e) Was the RPD or absolute difference within control limits (if project-specific MSD analyzed)?	☐	☒	☐	See Table 3 and Note 8
f) Were project-specific post-digestion spikes analyzed?	☐	☐	☒	
g) Were project-specific post-digestion spike recoveries within control limits?	☐	☐	☒	
Duplicates	YES	NO	NA	COMMENTS
a) Were project-specific laboratory duplicates reported?	☒	☐	☐	LMW-12-0325
b) Was laboratory duplicate RPD or absolute difference criteria acceptable?	☒	☐	☐	
c) Were field duplicates reported?	☒	☐	☐	LMW-2-0325/LMW-2-0325-D

Duplicates	YES	NO	NA	COMMENTS
d) Was field duplicate RPD or absolute difference criteria acceptable?	☒	☐	☐	
ICP Serial Dilution (SD)	YES	NO	NA	COMMENTS
a) Was project-specific ICP SD data provided?	☐	☐	☒	
b) Were project-specific ICP SD within acceptable criteria?	☐	☐	☒	
Overall Evaluation	YES	NO	NA	COMMENTS
a) Were there any other technical problems not previously addressed?	☒	☐		See Note 9
b) Were data acceptable and usable, except where noted?	☒	☐		

Comments/Notes:

- The cooler receipt form of SDG 25C0223 states that bubbles were present in samples LMW-9-0325 and Trip Blank. Sample LMW-9-0325 was said to have small bubbles and the trip blank to have large bubbles. Using professional judgement when the bubbles were stated to be small, no further action was required other than to note. QC samples do not require qualification.
- The chain of custody (COC) indicates that TPH-Dx and TPH-Gx were put on hold. The samples were not taken off hold or analyzed. There is no other action but to note.
- In SDG 25C0281, QC sample LCS BNC0433-BS1 was missing results for analyte 4-chloro-3-methylphenol. A revision was requested to include the missing compound. No further action is required other than to note.
- Samples for analysis of 2-chloroethyl vinyl, acrolein, and acrylonitrile were collected in preserved VOA vials and the recoveries were potentially lost due to the acid-labile nature of these compounds. Specifically, acrolein and acrylonitrile need to be preserved in sodium thiosulfate at a pH range between 4 to 5. Following Guidelines and using professional judgement, non-detects are qualified as 'UJ'.
- Certain analytes were detected in the method and field blanks. Using professional judgement, when the blank detection was between the MDL and RL, associated sample results detected between the MDL and RL were qualified as non-detect (U) at the RL and the MDL was raised to the sample result. If the associated sample was above the RL and the blank was below the RL, no qualifications were required. When the blank detection was greater than the RL and the sample result was greater than the RL but less than the blank detection, the sample was qualified as non-detect (U) and reported at the sample result. Following inorganic guidance, when the blank is above the RL and the associated sample detections are 10x greater than the blank detection, no qualifications are required. If associated sample detections are 10x less than the blank detection, associated detects were qualified as estimated, bias high (J+).

SDG	Sample ID	Method	Type	Analyte	Blank Result	Reporting Limit	Units
25C0223	BNC0360-BLK1	6010D	Method	Manganese	0.009	0.002	mg/L
25C0223	BNC0360-BLK2	6010D	Method	Manganese	0.0082	0.002	mg/L
25C0223	LMW-FB-0325	8260D	Field	Acetone	5.68	5	ug/L
25C0281	BNC0390-BLK1	6010D	Method	Barium	0.0022	0.006	mg/L
25C0281	LMW-FB1-0325	8260D	Field	Acetone	6.58	4.33	ug/L
25C0281	LMW-FB1-0325	6010D	Field	Calcium	0.0743	0.03	mg/L
25C0281	Trip Blank	8260D	Trip	Acetone	7.13	4.33	ug/L

- Surrogate recoveries were outside of control limits, as shown in the table below. For SVOCs, data are not qualified when only one of the three surrogates per fraction (acid) was out of control limit. Recovery was also outside QC limits for 1,4-dioxane analysis. Using professional judgement, when the surrogate recovery was below QC limits and the sample result

was a detect, it was qualified as estimated, bias low (J-). If recovery was below 10% and the associated sample result was a non-detect, it was rejected (R). Samples LMW-13R-0325 and LMW-5-0325 for 1,4-dioxane were re-prepared more than 2x the holding time of 7 days due to the original sample results displaying low surrogate recoveries. The original results and re-analyzed results were qualified J- and R, respectively. Using professional judgement, the re-analyzed results were deemed non-reportable and the original analyses with low surrogate recoveries were deemed reportable. The re-analysis of LMW-6-0325 for bis(2-ethylhexyl)phthalate was prepared more than 2x the holding time of 7 days. The re-analyzed result had surrogate recovery below QC criteria and would be rejected. Using professional judgement, these results were deemed non-reportable and the original analyses with low surrogate recovery were deemed reportable.

SDG	Sample ID	Method	Analyte	Dilution	% R	% R Limits
25C0223	LMW-13R-0325	8270E	1,4-Dioxane-d8	1	12.6	30-160
25C0223	LMW-5-0325	8270E	1,4-Dioxane-d8	1	0.643	30-160
25C0281	LMW-6-0325	8270E	Phenol-d5	1	32.7	38-120
25C0281	LMW-14-0325	8270E	Phenol-d5	1	37.5	38-120
25C0281	LMW-15-0325	8270E	Phenol-d5	1	32.4	38-120
25C0281	LMW-2-0325-D	8270E	Phenol-d5	1	35.6	38-120
25C0281	25C0281-01RE1	8270E	2,4,6-Tribromophenol	1	39.3	52-120

7. LCS/LCSD recoveries were outside of acceptance criteria for select analytes, as summarized in Table 4. Using professional judgement, when only an LCS was analyzed, and it was below QC criteria and the sample was a non-detect it was qualified as estimated (UJ). When both the LCS/LCSD analyzed and RPD were calculated if only one of the criteria were outside limits, no qualifications were required. If the LCS and LCSD were below QC criteria and the associated sample was non-detect, it was qualified as estimated (UJ). If the LCS and/or LCSD were below QC criteria and the RPD was outside QC criteria, non-detects were qualified as estimated (UJ). Associated non-detects with recovery below 10% were rejected (R).
8. MS/MSD recoveries were outside of acceptance criteria for select analytes as summarized in Table 3. Using professional judgment, when only one QC indicator (MS/MSD/RPD) did not meet QC criteria, qualification was not required. If the parent sample concentration was four times greater than the spiking concentration, no qualification was required.

The MS/MSD results for 2-chloroethyl vinyl ether were non-detect and the lab did not calculate both the recoveries and the RPD. Samples were collected in preserved VOA vials and the recovery was most likely lost due to the acid-labile nature of 2-chloroethyl vinyl ether. Following Guidelines and using professional judgment, when the MS/MSD results were non-detect and the calculated percent recovery of the associated MS/MSD did not recover, the associated non-detect results were rejected (R). When the MS/MSD recoveries were less than the lower acceptance limit, the non-detect result in the parent sample was qualified as estimated (UJ). If the RPD and MSD were outside, and the associated result was non-detect the parent sample was qualified as estimated (UJ). No qualifications were required for a non-detect parent sample that had MS/MSD recoveries greater than the upper limit.

9. The laboratory case narrative in both SDGs indicated that certain ICV and CCV recoveries were outside of QC criteria in the VOC, SVOC, and/or pesticide analyses. Review of calibration data is outside the scope of the 2A data validation. No further action is required other than to note.

Data qualification: See Table 2.

APPENDIX B

Laboratory Analytical Report



Analytical Resources, LLC
Analytical Chemists and Consultants
Tukwila, WA

22 April 2025

Gary Zimmerman
WSP USA, Inc.
210 East 13th Street, Suite 300
Vancouver, WA 98660-3231

RE: Landsburg

Please find enclosed sample receipt documentation and analytical results for samples from the project referenced above.

Sample analyses were performed according to ARI's Quality Assurance Plan and any provided project specific Quality Assurance Plan. Each analytical section of this report has been approved and reviewed by an analytical peer, the appropriate Laboratory Supervisor or qualified substitute, and a technical reviewer.

Should you have any questions or problems, please feel free to contact us at your convenience.

Associated Work Order(s)
25C0223

Associated SDG ID(s)
N/A

I certify that this data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed in the enclose Narrative. ARI, an accredited laboratory, certifies that the report results for which ARI is accredited meets all the requirements of the accrediting body. A list of certified analyses, accreditations, and expiration dates is included in this report.

Release of the data contained in this hardcopy data package has been authorized by the Laboratory Manager or his/her designee, as verified by the following signature.

Analytical Resources, LLC

Shelly Fishel For Kelly Bottem, Client Services Manager

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.



Chain of Custody Record & Laboratory Analysis Request

PO#: P118412US001

PO# MUST BE INCLUDED ON ALL INVOICES



Analytical Resources, Incorporated
Analytical Chemists and Consultants
4611 South 134th Place, Suite 100
Tukwila, WA 98168
206-695-6200 206-695-6201 (fax)

ARI Assigned Number: 25C0223 Turn-around Requested: Standard

ARI Client Company: WSP Phone: 425-883-0777

Client Contact: Gary Zimmerman/Autumn Pearson

Client Project Name: Landsburg 2025-03 Sampling

Client Project #: GL9231000007 Samplers: AP+SG
Task 2025.EXP

Date: 3/11/25
Page: 1 of 1
No. of Coolers: 1 Cooler Temps: 1

Sample ID	Date	Time	Matrix	No. Containers
-----------	------	------	--------	----------------

Analysis Requested										Notes/Comments	
VOCs	1,4-Dioxane	Total Priority Metal	TPH-HCID (NWTPH)	TPH-DX + TPH-GX (HOLD)	PCBs (8082A)	Organochlorine Pesticides (8081B)	SVOCs (8270E)				

LMW-12-0325	3/10/25	1105	W	18
LMW-13R-0325	↓	1245	↓	↓
LMW-10-0325	↓	1445	↓	↓
LMW-FB-0325	3/11/25	0935	↓	↓
LMW-9-0325	↓	0945	↓	↓
LMW-3-0325	↓	1110	↓	↓
LMW-5-0325	↓	1205	↓	↓
LMW-8-0325	↓	1305	↓	↓
LMW-7-0325	↓	1440	↓	↓
Trip Blank	-	-	W	6

X	X	X	X	X	X	X	X		
X	X	X	X	X	X	X	X		
X	X	X	X	X	X	X	X		
X	X	X	X	X	X	X	X		
X	X	X	X	X	X	X	X		
X	X	X	X	X	X	X	X		
X	X	X	X	X	X	X	X		
X	X	X	X	X	X	X	X		
X	X	X	X	X	X	X	X		
X									

Comments/Special Instructions
HOLD TPH FOLLOW-UPS. CLIENT SPECIFIC RLs/Analyte List
Include PO# on invoice: P118412US001

Relinquished by: [Signature]
(Signature)
Printed Name: Autumn Pearson
Company: WSP
Date & Time: 3/11/25 1639

Received by: [Signature]
(Signature)
Printed Name: Roman M.
Company: ARLLC
Date & Time: 03/11/25 1639

Relinquished by:
(Signature)
Printed Name:
Company:
Date & Time:

Received by:
(Signature)
Printed Name:
Company:
Date & Time:

Limits of Liability: ARI will perform all requested services in accordance with appropriate methodology following ARI Standard Operating Procedures and the ARI Quality Assurance Program. This program meets standards for the industry. The total liability of ARI, its officers, agents, employees, or successors, arising out of or in connection with the requested services, shall not exceed the Invoiced amount for said services. The acceptance by the client of a proposal for services by ARI release ARI from any liability in excess thereof, not withstanding any provision to the contrary in any contract, purchase order or co-signed agreement between ARI and the Client.

Sample Retention Policy: Unless specified by workorder or contract, all water/soil samples submitted to ARI will be discarded or returned, no sooner than 90 days after receipt or 60 days after submission of hardcopy data, whichever is longer. Sediment samples submitted under PSSDA/PSEP/SMS protocol will be stored frozen for up to one year and then discarded.



WSP USA, Inc.
210 East 13th Street, Suite 300
Vancouver WA, 98660-3231

Project: Landsburg
Project Number: [none]
Project Manager: Gary Zimmerman

Reported:
22-Apr-2025 14:45

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
LMW-12-0325	25C0223-01	Water	10-Mar-2025 11:05	11-Mar-2025 16:39
LMW-13R-0325	25C0223-02	Water	10-Mar-2025 12:45	11-Mar-2025 16:39
LMW-10-0325	25C0223-03	Water	10-Mar-2025 14:45	11-Mar-2025 16:39
LMW-FB-0325	25C0223-04	Water	11-Mar-2025 09:35	11-Mar-2025 16:39
LMW-9-0325	25C0223-05	Water	11-Mar-2025 09:45	11-Mar-2025 16:39
LMW-3-0325	25C0223-06	Water	11-Mar-2025 11:10	11-Mar-2025 16:39
LMW-5-0325	25C0223-07	Water	11-Mar-2025 12:05	11-Mar-2025 16:39
LMW-8-0325	25C0223-08	Water	11-Mar-2025 13:05	11-Mar-2025 16:39
LMW-7-0325	25C0223-09	Water	11-Mar-2025 14:40	11-Mar-2025 16:39
Trip Blank	25C0223-10	Water	10-Mar-2025 11:05	11-Mar-2025 16:39



WSP USA, Inc.
210 East 13th Street, Suite 300
Vancouver WA, 98660-3231

Project: Landsburg
Project Number: [none]
Project Manager: Gary Zimmerman

Reported:
22-Apr-2025 14:45

Work Order Case Narrative

Client: WSP USA, Inc.

Project: Landsburg

Work Order: 25C0223

Revised Report - April 22, 2025

Corrected sample IDs. Removed the statement regarding Acetone detections at one half the reporting limit in the field blank and trip blank since the client only wants data reported to the reporting limit.

Sample receipt

Samples as listed on the preceding page were received 11-Mar-2025 16:39 under ARI work order 25C0223. For details regarding sample receipt, please refer to the Cooler Receipt Form.

Volatiles - EPA Method SW8260D

The sample(s) were analyzed within the recommended holding times.

Two sample vials used in analysis contained bubbles. Sample 25C0223-05 contained small bubbles. Sample 25C0223-10 contained large bubbles.

Initial and continuing calibrations were within method requirements except Naphthalene which had a greater than 20% RSD. All associated samples have been flagged with a "Q" qualifier.

Internal standard areas were within limits.

The surrogate percent recoveries were within control limits.

The method blank(s) were clean at the reporting limits.

The blank spike and blank spike duplicate (BS/LCS and BSD/LCSD) spike recoveries and relative percent difference (RPD) were within control limits.

1,4-Dioxane- EPA Method SW8270E

The sample(s) were extracted and analyzed within the recommended holding times except samples 25C0223-02RE1 and 25C0223-07RE1. The original extraction data resulted in low surrogate recovery. The samples were re-extracted out of hold with passing surrogate. Both the original and re-extract data have been reported. The out of hold data has been flagged.

Initial and continuing calibrations were within method requirements.

Internal standard areas were within limits.



WSP USA, Inc.

210 East 13th Street, Suite 300

Vancouver WA, 98660-3231

Project: Landsburg

Project Number: [none]

Project Manager: Gary Zimmerman

Reported:

22-Apr-2025 14:45

The surrogate percent recoveries were within control limits except as flagged.

The method blank(s) were clean at the reporting limits.

The blank spike and blank spike duplicate (BS/LCS and BSD/LCSD) spike recoveries and relative percent difference (RPD) were within control limits.

Semivolatiles - EPA Method SW8270E

The sample(s) were extracted and analyzed within the recommended holding times.

Initial and continuing calibrations were within method requirements except 4-Nitrophenol and Hexachlorocyclopentadiene which were out of control high in the initial calibration verification SNC0314-ICV1 and Hexachlorocyclopentadiene which was out of control high in SNC0228-ICV1. The high biased analytes were non-detects in the samples. All associated samples which contain analyte have been flagged with a "Q" qualifier. Due to an autosampler malfunction the continuing calibration verification SNC0314-CCV1 was injected the next day.

Internal standard areas were within limits.

The surrogate percent recoveries were within control limits.

The method blank(s) were clean at the reporting limits.

The blank spike (BS/LCS) percent recoveries were within control limits except as flagged.

PCB Aroclors - EPA Method SW8082A (low-level)

The sample(s) were extracted and analyzed within the recommended holding times.

Initial and continuing calibrations were within method requirements.

Internal standard areas were within limits.

The surrogate percent recoveries were within control limits.

The method blank(s) were clean at the reporting limits.

The blank spike (BS/LCS) percent recoveries were within control limits.

Pesticides - EPA Method SW8081B

The sample(s) were extracted and analyzed within the recommended holding times.



WSP USA, Inc.

210 East 13th Street, Suite 300

Vancouver WA, 98660-3231

Project: Landsburg

Project Number: [none]

Project Manager: Gary Zimmerman

Reported:

22-Apr-2025 14:45

Endrin breakdown passes on one column in SDN013-PEM2

Initial and continuing calibrations were within method requirements except as follows. All analytes pass criteria on at least one column except 4,4'-DDT was out of control high on both columns in the initial calibration verification SND 0131-ICV1 and the continuing calibration verification SDN0131-CCV1. Despite the high bias the samples were non-detects for this analyte. Surrogate Terachlorometaxylene which was out of control low on both columns in the initial calibration verification SND0131-ICV4 and the continuing calibration verification SDN0131-CCV4.

Internal standard areas were within limits on at least one column. Hexabromobiphenyl was out of control low on the back column in sample 25C0223-06 so Decachlorobiphenyl was set to primary despite having the lower value.

The surrogate percent recoveries were within control limits except Terachlorometaxylene which was out of control low on both columns in the initial calibration verification SND0131-ICV4 and the continuing calibration verification SDN0131-CCV4.

The method blank(s) were clean at the reporting limits.

The blank spike (BS/LCS) percent recoveries were within control limits.

Hydrocarbon Identification (HCID) - WA-Ecology Method NW-HCID

The sample(s) were extracted and analyzed within the recommended holding times.

Initial and continuing calibrations were within method requirements.

The surrogate percent recoveries were within control limits.

The method blank(s) were clean at the reporting limits.

Total Metals - EPA Method 6010D

The sample(s) were digested and analyzed within the recommended holding times.

Initial and continuing calibrations were within method requirements.

The method blank(s) were clean at the reporting limits except Manganese in batch BNC0360. All associated samples which contain analyte have been flagged with a "B" qualifier.

The blank spike (BS/LCS) percent recoveries were within control limits.

The duplicate (DUP) relative percent difference (RPD) were within advisory control limits. The matrix spike/matrix spike duplicate (MS/MSD) spike recoveries and relative percent difference (RPD) were within advisory control limits.

Total Metals - EPA Method 200.8



WSP USA, Inc.

210 East 13th Street, Suite 300

Vancouver WA, 98660-3231

Project: Landsburg

Project Number: [none]

Project Manager: Gary Zimmerman

Reported:

22-Apr-2025 14:45

The sample(s) were digested and analyzed within the recommended holding times.

Initial and continuing calibrations including interference checks were within method requirements for reported elements.

The method blank(s) were clean at the reporting limits.

The blank spike (BS/LCS) percent recoveries were within control limits.

The duplicate (DUP) relative percent difference (RPD) were within advisory control limits. The matrix spike/matrix spike duplicate (MS/MSD) spike recoveries and relative percent difference (RPD) were within advisory control limits.

Total Mercury - EPA Method 7470/7471

The sample(s) were digested and analyzed within the recommended holding times.

Initial and continuing calibrations were within method requirements.

The method blank(s) were clean at the reporting limits.

The blank spike (BS/LCS) percent recoveries were within control limits.

The duplicate (DUP) relative percent difference (RPD) were within advisory control limits. The matrix spike/matrix spike duplicate (MS/MSD) spike recoveries and relative percent difference (RPD) were within advisory control limits.



WORK ORDER

25C0223

Client: WSP USA, Inc.

Project Manager: Kelly Bottem

Project: Landsburg

Project Number: [none]

Preservation Confirmation

Container ID	Container Type	pH	pH Paper Lot#: <u>N000119</u>
25C0223-01 A	Glass NM, Amber, 1000 mL		
25C0223-01 B	Glass NM, Amber, 1000 mL		
25C0223-01 C	Glass NM, Amber, 1000 mL		
25C0223-01 D	Glass NM, Amber, 1000 mL		
25C0223-01 E	Glass NM, Amber, 1000 mL		
25C0223-01 F	Glass NM, Amber, 1000 mL		
25C0223-01 G	Glass NM, Amber, 500 mL		
25C0223-01 H	Glass NM, Amber, 500 mL		
25C0223-01 I	Glass NM, Amber, 500 mL		
25C0223-01 J	Glass NM, Amber, 500 mL		
25C0223-01 K	Glass NM, Amber, 500 mL		
25C0223-01 L	Glass NM, Amber, 500 mL		
25C0223-01 M	HDPE NM, 500 mL, 1:1 HNO ₃	<u>L2p</u>	
25C0223-01 N	VOA Vial, Clear, 40 mL, HCL		
25C0223-01 O	VOA Vial, Clear, 40 mL, HCL		
25C0223-01 P	VOA Vial, Clear, 40 mL, HCL		
25C0223-01 Q	VOA Vial, Clear, 40 mL, HCL		
25C0223-01 R	VOA Vial, Clear, 40 mL, HCL		
25C0223-02 A	Glass NM, Amber, 1000 mL		
25C0223-02 B	Glass NM, Amber, 1000 mL		
25C0223-02 C	Glass NM, Amber, 1000 mL		
25C0223-02 D	Glass NM, Amber, 1000 mL		
25C0223-02 E	Glass NM, Amber, 1000 mL		
25C0223-02 F	Glass NM, Amber, 1000 mL		
25C0223-02 G	Glass NM, Amber, 500 mL		
25C0223-02 H	Glass NM, Amber, 500 mL		
25C0223-02 I	Glass NM, Amber, 500 mL		
25C0223-02 J	Glass NM, Amber, 500 mL		
25C0223-02 K	Glass NM, Amber, 500 mL		
25C0223-02 L	Glass NM, Amber, 500 mL		
25C0223-02 M	HDPE NM, 500 mL, 1:1 HNO ₃	<u>L2p</u>	
25C0223-02 N	VOA Vial, Clear, 40 mL, HCL		



WORK ORDER

25C0223

Client: WSP USA, Inc.

Project Manager: Kelly Bottem

Project: Landsburg

Project Number: [none]

25C0223-02 O	VOA Vial, Clear, 40 mL, HCL
25C0223-02 P	VOA Vial, Clear, 40 mL, HCL
25C0223-02 Q	VOA Vial, Clear, 40 mL, HCL
25C0223-02 R	VOA Vial, Clear, 40 mL, HCL
25C0223-03 A	Glass NM, Amber, 1000 mL
25C0223-03 B	Glass NM, Amber, 1000 mL
25C0223-03 C	Glass NM, Amber, 1000 mL
25C0223-03 D	Glass NM, Amber, 1000 mL
25C0223-03 E	Glass NM, Amber, 1000 mL
25C0223-03 F	Glass NM, Amber, 1000 mL
25C0223-03 G	Glass NM, Amber, 500 mL
25C0223-03 H	Glass NM, Amber, 500 mL
25C0223-03 I	Glass NM, Amber, 500 mL
25C0223-03 J	Glass NM, Amber, 500 mL
25C0223-03 K	Glass NM, Amber, 500 mL
25C0223-03 L	Glass NM, Amber, 500 mL
25C0223-03 M	HDPE NM, 500 mL, 1:1 HNO3
25C0223-03 N	VOA Vial, Clear, 40 mL, HCL
25C0223-03 O	VOA Vial, Clear, 40 mL, HCL
25C0223-03 P	VOA Vial, Clear, 40 mL, HCL
25C0223-03 Q	VOA Vial, Clear, 40 mL, HCL
25C0223-03 R	VOA Vial, Clear, 40 mL, HCL
25C0223-04 A	Glass NM, Amber, 1000 mL
25C0223-04 B	Glass NM, Amber, 1000 mL
25C0223-04 C	Glass NM, Amber, 1000 mL
25C0223-04 D	Glass NM, Amber, 1000 mL
25C0223-04 E	Glass NM, Amber, 1000 mL
25C0223-04 F	Glass NM, Amber, 1000 mL
25C0223-04 G	Glass NM, Amber, 500 mL
25C0223-04 H	Glass NM, Amber, 500 mL
25C0223-04 I	Glass NM, Amber, 500 mL
25C0223-04 J	Glass NM, Amber, 500 mL
25C0223-04 K	Glass NM, Amber, 500 mL
25C0223-04 L	Glass NM, Amber, 500 mL

L2P



WORK ORDER

25C0223

Client: WSP USA, Inc.

Project Manager: Kelly Bottem

Project: Landsburg

Project Number: [none]

25C0223-04 M HDPE NM, 500 mL, 1:1 HNO₃

25C0223-04 N VOA Vial, Clear, 40 mL, HCL

25C0223-04 O VOA Vial, Clear, 40 mL, HCL

25C0223-04 P VOA Vial, Clear, 40 mL, HCL

25C0223-04 Q VOA Vial, Clear, 40 mL, HCL

25C0223-04 R VOA Vial, Clear, 40 mL, HCL

25C0223-05 A Glass NM, Amber, 1000 mL

25C0223-05 B Glass NM, Amber, 1000 mL

25C0223-05 C Glass NM, Amber, 1000 mL

25C0223-05 D Glass NM, Amber, 1000 mL

25C0223-05 E Glass NM, Amber, 1000 mL

25C0223-05 F Glass NM, Amber, 1000 mL

25C0223-05 G Glass NM, Amber, 500 mL

25C0223-05 H Glass NM, Amber, 500 mL

25C0223-05 I Glass NM, Amber, 500 mL

25C0223-05 J Glass NM, Amber, 500 mL

25C0223-05 K Glass NM, Amber, 500 mL

25C0223-05 L Glass NM, Amber, 500 mL

25C0223-05 M HDPE NM, 500 mL, 1:1 HNO₃

25C0223-05 N VOA Vial, Clear, 40 mL, HCL

25C0223-05 O VOA Vial, Clear, 40 mL, HCL

25C0223-05 P VOA Vial, Clear, 40 mL, HCL

25C0223-05 Q VOA Vial, Clear, 40 mL, HCL

25C0223-05 R VOA Vial, Clear, 40 mL, HCL

25C0223-06 A Glass NM, Amber, 1000 mL

25C0223-06 B Glass NM, Amber, 1000 mL

25C0223-06 C Glass NM, Amber, 1000 mL

25C0223-06 D Glass NM, Amber, 1000 mL

25C0223-06 E Glass NM, Amber, 1000 mL

25C0223-06 F Glass NM, Amber, 1000 mL

25C0223-06 G Glass NM, Amber, 500 mL

25C0223-06 H Glass NM, Amber, 500 mL

25C0223-06 I Glass NM, Amber, 500 mL

25C0223-06 J Glass NM, Amber, 500 mL



WORK ORDER

25C0223

Client: WSP USA, Inc.

Project Manager: Kelly Bottem

Project: Landsburg

Project Number: [none]

25C0223-06 K	Glass NM, Amber, 500 mL	
25C0223-06 L	Glass NM, Amber, 500 mL	
25C0223-06 M	HDPE NM, 500 mL, 1:1 HNO3	L2p
25C0223-06 N	VOA Vial, Clear, 40 mL, HCL	
25C0223-06 O	VOA Vial, Clear, 40 mL, HCL	
25C0223-06 P	VOA Vial, Clear, 40 mL, HCL	
25C0223-06 Q	VOA Vial, Clear, 40 mL, HCL	
25C0223-06 R	VOA Vial, Clear, 40 mL, HCL	
25C0223-07 A	Glass NM, Amber, 1000 mL	
25C0223-07 B	Glass NM, Amber, 1000 mL	
25C0223-07 C	Glass NM, Amber, 1000 mL	
25C0223-07 D	Glass NM, Amber, 1000 mL	
25C0223-07 E	Glass NM, Amber, 1000 mL	
25C0223-07 F	Glass NM, Amber, 1000 mL	
25C0223-07 G	Glass NM, Amber, 500 mL	
25C0223-07 H	Glass NM, Amber, 500 mL	
25C0223-07 I	Glass NM, Amber, 500 mL	
25C0223-07 J	Glass NM, Amber, 500 mL	
25C0223-07 K	Glass NM, Amber, 500 mL	
25C0223-07 L	Glass NM, Amber, 500 mL	
25C0223-07 M	HDPE NM, 500 mL, 1:1 HNO3	L2p
25C0223-07 N	VOA Vial, Clear, 40 mL, HCL	
25C0223-07 O	VOA Vial, Clear, 40 mL, HCL	
25C0223-07 P	VOA Vial, Clear, 40 mL, HCL	
25C0223-07 Q	VOA Vial, Clear, 40 mL, HCL	
25C0223-07 R	VOA Vial, Clear, 40 mL, HCL	
25C0223-08 A	Glass NM, Amber, 1000 mL	
25C0223-08 B	Glass NM, Amber, 1000 mL	
25C0223-08 C	Glass NM, Amber, 1000 mL	
25C0223-08 D	Glass NM, Amber, 1000 mL	
25C0223-08 E	Glass NM, Amber, 1000 mL	
25C0223-08 F	Glass NM, Amber, 1000 mL	
25C0223-08 G	Glass NM, Amber, 500 mL	
25C0223-08 H	Glass NM, Amber, 500 mL	



WORK ORDER

25C0223

Client: WSP USA, Inc.

Project Manager: Kelly Bottem

Project: Landsburg

Project Number: [none]

25C0223-08 I	Glass NM, Amber, 500 mL	
25C0223-08 J	Glass NM, Amber, 500 mL	
25C0223-08 K	Glass NM, Amber, 500 mL	
25C0223-08 L	Glass NM, Amber, 500 mL	
25C0223-08 M	HDPE NM, 500 mL, 1:1 HNO3	L2p
25C0223-08 N	VOA Vial, Clear, 40 mL, HCL	
25C0223-08 O	VOA Vial, Clear, 40 mL, HCL	
25C0223-08 P	VOA Vial, Clear, 40 mL, HCL	
25C0223-08 Q	VOA Vial, Clear, 40 mL, HCL	
25C0223-08 R	VOA Vial, Clear, 40 mL, HCL	
25C0223-09 A	Glass NM, Amber, 1000 mL	
25C0223-09 B	Glass NM, Amber, 1000 mL	
25C0223-09 C	Glass NM, Amber, 1000 mL	
25C0223-09 D	Glass NM, Amber, 1000 mL	
25C0223-09 E	Glass NM, Amber, 1000 mL	
25C0223-09 F	Glass NM, Amber, 1000 mL	
25C0223-09 G	Glass NM, Amber, 500 mL	
25C0223-09 H	Glass NM, Amber, 500 mL	
25C0223-09 I	Glass NM, Amber, 500 mL	
25C0223-09 J	Glass NM, Amber, 500 mL	
25C0223-09 K	Glass NM, Amber, 500 mL	
25C0223-09 L	Glass NM, Amber, 500 mL	
25C0223-09 M	HDPE NM, 500 mL, 1:1 HNO3	L2p
25C0223-09 N	VOA Vial, Clear, 40 mL, HCL	
25C0223-09 O	VOA Vial, Clear, 40 mL, HCL	
25C0223-09 P	VOA Vial, Clear, 40 mL, HCL	
25C0223-09 Q	VOA Vial, Clear, 40 mL, HCL	
25C0223-09 R	VOA Vial, Clear, 40 mL, HCL	
25C0223-10 A	VOA Vial, Clear, 40 mL, HCL	bubbles
25C0223-10 B	VOA Vial, Clear, 40 mL, HCL	bubbles
25C0223-10 C	VOA Vial, Clear, 40 mL, HCL	bubbles
25C0223-10 D	VOA Vial, Clear, 40 mL, HCL	
25C0223-10 E	VOA Vial, Clear, 40 mL, HCL	
25C0223-10 F	VOA Vial, Clear, 40 mL, HCL	



WORK ORDER

25C0223

Client: WSP USA, Inc.

Project Manager: Kelly Bottem

Project: Landsburg

Project Number: [none]

SA

Preservation Confirmed By

3/12/25

Date

Cooler Receipt Form

ARI Client: hr SP

Project Name: Lantsburg

COC No(s): NA

Delivered by: Fed-Ex UPS Courier Hand Delivered Other: NA

Assigned ARI Job No: 25C0223

Tracking No: NA

Preliminary Examination Phase:

Were intact, properly signed and dated custody seals attached to the outside of the cooler? YES NO

Were custody papers included with the cooler? YES NO

Were custody papers properly filled out (ink, signed, etc.) YES NO

Temperature of Cooler(s) (°C) Time 3.1^{oc} 4.2^{oc} 1.6^{oc} 3.4^{oc} 5.4^{oc} 1.9^{oc} Temp Gun ID#: 9708

Was a temperature blank included in the cooler? 0.3, 4.2, 1.7 YES NO

Were coolers received between 0° - 6° (°C) YES NO

Was sufficient ice used (if appropriate)? NA YES NO

Cooler Accepted by: hr Date: 03/11/25 Time: 1639

Complete custody forms and attach all shipping documents

Log-In Phase:

What kind of packing material was used? Bubble Wrap Wet Ice Gel Packs Baggies Foam Block N/A Other: NA

Are any samples that were out of temperature compliance documented in LIMS? YES NO

How were bottles sealed in plastic bags? Individually Grouped Not

Did all bottles arrive in good condition (unbroken)? YES NO

Were all bottle labels complete and legible? YES NO

Did the number of containers listed on COC match with the number of containers received? YES NO

Did all bottle labels and tags agree with custody papers? YES NO

Were all bottles used correct for the requested analyses? YES NO

Do any of the analyses (bottles) require preservation? (attach preservation sheet, excluding VOCs) ... NA YES NO

Were all VOC vials free of air bubbles? NA YES NO

Was sufficient amount of sample sent in each bottle? YES NO

Date VOC Trip Blank was made at ARI: 3/12/25 NA 2/24/25

Were the sample(s) split by ARI? NA YES Date/Time: 3/12/25 Equipment: SA Split by: SA

Samples Logged by: SA Date: 3/12/25 Time: 0918 Labels checked by: SA

**** Notify Project Manager of discrepancies or concerns ****

Additional Notes, Discrepancies, & Resolutions:

By: SA Date: 3/12/25



WSP USA, Inc.
210 East 13th Street, Suite 300
Vancouver WA, 98660-3231

Project: Landsburg
Project Number: [none]
Project Manager: Gary Zimmerman

Reported:
22-Apr-2025 14:45

LMW-12-0325
25C0223-01 (Water)

Volatile Organic Compounds

Method: EPA 8260D
Instrument: NT20 Analyst: FL

Sampled: 03/10/2025 11:05
Analyzed: 03/13/2025 20:16

Sample Preparation: Preparation Method: EPA 5030C (Purge and Trap)
Preparation Batch: BNC0328 Sample Size: 10 mL
Prepared: 03/13/2025 Final Volume: 10 mL

Extract ID: 25C0223-01 N

Analyte	CAS Number	Dilution	Reporting Limit	Result	Units	Notes
Chloromethane	74-87-3	1	0.50	ND	ug/L	U
Vinyl Chloride	75-01-4	1	0.10	ND	ug/L	U
Bromomethane	74-83-9	1	1.00	ND	ug/L	U
Chloroethane	75-00-3	1	0.20	ND	ug/L	U
Trichlorofluoromethane	75-69-4	1	0.20	ND	ug/L	U
Acrolein	107-02-8	1	5.00	ND	ug/L	U
1,1,2-Trichloro-1,2,2-Trifluoroethane	76-13-1	1	0.20	ND	ug/L	U
Acetone	67-64-1	1	5.00	ND	ug/L	U
1,1-Dichloroethene	75-35-4	1	0.20	ND	ug/L	U
Iodomethane	74-88-4	1	1.00	ND	ug/L	U
Methylene Chloride	75-09-2	1	1.00	ND	ug/L	U
Acrylonitrile	107-13-1	1	1.00	ND	ug/L	U
Carbon Disulfide	75-15-0	1	0.20	ND	ug/L	U
trans-1,2-Dichloroethene	156-60-5	1	0.20	ND	ug/L	U
Vinyl Acetate	108-05-4	1	0.20	ND	ug/L	U
1,1-Dichloroethane	75-34-3	1	0.20	ND	ug/L	U
2-Butanone	78-93-3	1	5.00	ND	ug/L	U
2,2-Dichloropropane	594-20-7	1	0.20	ND	ug/L	U
cis-1,2-Dichloroethene	156-59-2	1	0.20	ND	ug/L	U
Chloroform	67-66-3	1	0.20	ND	ug/L	U
Bromochloromethane	74-97-5	1	0.20	ND	ug/L	U
1,1,1-Trichloroethane	71-55-6	1	0.20	ND	ug/L	U
1,1-Dichloropropene	563-58-6	1	0.10	ND	ug/L	U
Carbon tetrachloride	56-23-5	1	0.20	ND	ug/L	U
1,2-Dichloroethane	107-06-2	1	0.20	ND	ug/L	U
Benzene	71-43-2	1	0.20	ND	ug/L	U
Trichloroethene	79-01-6	1	0.20	ND	ug/L	U
1,2-Dichloropropane	78-87-5	1	0.20	ND	ug/L	U
Bromodichloromethane	75-27-4	1	0.20	ND	ug/L	U
Dibromomethane	74-95-3	1	0.20	ND	ug/L	U
2-Chloroethyl vinyl ether	110-75-8	1	1.00	ND	ug/L	U



WSP USA, Inc.
210 East 13th Street, Suite 300
Vancouver WA, 98660-3231

Project: Landsburg
Project Number: [none]
Project Manager: Gary Zimmerman

Reported:
22-Apr-2025 14:45

LMW-12-0325
25C0223-01 (Water)

Volatile Organic Compounds

Method: EPA 8260D

Sampled: 03/10/2025 11:05

Instrument: NT20 Analyst: FL

Analyzed: 03/13/2025 20:16

Analyte	CAS Number	Dilution	Reporting Limit	Result	Units	Notes
4-Methyl-2-Pentanone	108-10-1	1	2.50	ND	ug/L	U
cis-1,3-Dichloropropene	10061-01-5	1	0.20	ND	ug/L	U
Toluene	108-88-3	1	0.20	ND	ug/L	U
trans-1,3-Dichloropropene	10061-02-6	1	0.20	ND	ug/L	U
2-Hexanone	591-78-6	1	5.00	ND	ug/L	U
1,1,2-Trichloroethane	79-00-5	1	0.20	ND	ug/L	U
1,3-Dichloropropane	142-28-9	1	0.10	ND	ug/L	U
Tetrachloroethene	127-18-4	1	0.20	ND	ug/L	U
Dibromochloromethane	124-48-1	1	0.20	ND	ug/L	U
1,2-Dibromoethane	106-93-4	1	0.10	ND	ug/L	U
Chlorobenzene	108-90-7	1	0.20	ND	ug/L	U
Ethylbenzene	100-41-4	1	0.20	ND	ug/L	U
1,1,1,2-Tetrachloroethane	630-20-6	1	0.20	ND	ug/L	U
m,p-Xylene	179601-23-1	1	0.40	ND	ug/L	U
o-Xylene	95-47-6	1	0.20	ND	ug/L	U
Xylenes, total	1330-20-7	1	0.60	ND	ug/L	U
Styrene	100-42-5	1	0.20	ND	ug/L	U
Bromoform	75-25-2	1	0.20	ND	ug/L	U
1,1,2,2-Tetrachloroethane	79-34-5	1	0.20	ND	ug/L	U
1,2,3-Trichloropropane	96-18-4	1	0.25	ND	ug/L	U
trans-1,4-Dichloro 2-Butene	110-57-6	1	1.00	ND	ug/L	U
n-Propylbenzene	103-65-1	1	0.20	ND	ug/L	U
Bromobenzene	108-86-1	1	0.20	ND	ug/L	U
Isopropyl Benzene	98-82-8	1	0.20	ND	ug/L	U
2-Chlorotoluene	95-49-8	1	0.10	ND	ug/L	U
4-Chlorotoluene	106-43-4	1	0.20	ND	ug/L	U
t-Butylbenzene	98-06-6	1	0.20	ND	ug/L	U
1,3,5-Trimethylbenzene	108-67-8	1	0.20	ND	ug/L	U
1,2,4-Trimethylbenzene	95-63-6	1	0.20	ND	ug/L	U
s-Butylbenzene	135-98-8	1	0.20	ND	ug/L	U
4-Isopropyl Toluene	99-87-6	1	0.20	ND	ug/L	U
1,3-Dichlorobenzene	541-73-1	1	0.20	ND	ug/L	U
1,4-Dichlorobenzene	106-46-7	1	0.20	ND	ug/L	U
n-Butylbenzene	104-51-8	1	0.20	ND	ug/L	U
1,2-Dichlorobenzene	95-50-1	1	0.20	ND	ug/L	U



WSP USA, Inc.
210 East 13th Street, Suite 300
Vancouver WA, 98660-3231

Project: Landsburg
Project Number: [none]
Project Manager: Gary Zimmerman

Reported:
22-Apr-2025 14:45

LMW-12-0325
25C0223-01 (Water)

Volatile Organic Compounds

Method: EPA 8260D

Sampled: 03/10/2025 11:05

Instrument: NT20 Analyst: FL

Analyzed: 03/13/2025 20:16

Analyte	CAS Number	Dilution	Reporting Limit	Result	Units	Notes
1,2-Dibromo-3-chloropropane	96-12-8	1	0.50	ND	ug/L	U
1,2,4-Trichlorobenzene	120-82-1	1	0.50	ND	ug/L	U
Hexachloro-1,3-Butadiene	87-68-3	1	0.50	ND	ug/L	U
Naphthalene	91-20-3	1	0.50	ND	ug/L	U
1,2,3-Trichlorobenzene	87-61-6	1	0.50	ND	ug/L	U
Dichlorodifluoromethane	75-71-8	1	0.20	ND	ug/L	U
<i>Surrogate: 1,2-Dichloroethane-d4</i>			<i>80-129 %</i>	<i>103</i>	<i>%</i>	
<i>Surrogate: Toluene-d8</i>			<i>80-120 %</i>	<i>99.4</i>	<i>%</i>	
<i>Surrogate: 4-Bromofluorobenzene</i>			<i>80-120 %</i>	<i>94.1</i>	<i>%</i>	
<i>Surrogate: 1,2-Dichlorobenzene-d4</i>			<i>80-120 %</i>	<i>103</i>	<i>%</i>	



WSP USA, Inc.
210 East 13th Street, Suite 300
Vancouver WA, 98660-3231

Project: Landsburg
Project Number: [none]
Project Manager: Gary Zimmerman

Reported:
22-Apr-2025 14:45

LMW-12-0325
25C0223-01 (Water)

Semivolatile Organic Compounds

Method: EPA 8270E
Instrument: NT10 Analyst: JZ

Sampled: 03/10/2025 11:05

Analyzed: 03/25/2025 19:04

Sample Preparation: Preparation Method: EPA 3520C (Liq Liq)
Preparation Batch: BNC0300
Prepared: 03/13/2025

Sample Size: 500 mL
Final Volume: 0.5 mL

Extract ID: 25C0223-01 H 01

Analyte	CAS Number	Dilution	Reporting Limit	Result	Units	Notes
Phenol	108-95-2	1	1.0	ND	ug/L	U
bis(2-chloroethyl) ether	111-44-4	1	1.0	ND	ug/L	U
2-Chlorophenol	95-57-8	1	1.0	ND	ug/L	U
1,3-Dichlorobenzene	541-73-1	1	1.0	ND	ug/L	U
1,4-Dichlorobenzene	106-46-7	1	1.0	ND	ug/L	U
Benzyl Alcohol	100-51-6	1	2.0	ND	ug/L	U
1,2-Dichlorobenzene	95-50-1	1	1.0	ND	ug/L	U
2-Methylphenol	95-48-7	1	1.0	ND	ug/L	U
2,2'-Oxybis(1-chloropropane)	108-60-1	1	1.0	ND	ug/L	U
4-Methylphenol	106-44-5	1	2.0	ND	ug/L	U
N-Nitroso-di-n-Propylamine	621-64-7	1	1.0	ND	ug/L	U
Hexachloroethane	67-72-1	1	2.0	ND	ug/L	U
Nitrobenzene	98-95-3	1	1.0	ND	ug/L	U
Isophorone	78-59-1	1	1.0	ND	ug/L	U
2-Nitrophenol	88-75-5	1	3.0	ND	ug/L	U
2,4-Dimethylphenol	105-67-9	1	3.0	ND	ug/L	U
Bis(2-Chloroethoxy)methane	111-91-1	1	1.0	ND	ug/L	U
Benzoic acid	65-85-0	1	10.0	ND	ug/L	U
2,4-Dichlorophenol	120-83-2	1	3.0	ND	ug/L	U
1,2,4-Trichlorobenzene	120-82-1	1	1.0	ND	ug/L	U
Naphthalene	91-20-3	1	1.0	ND	ug/L	U
4-Chloroaniline	106-47-8	1	5.0	ND	ug/L	U
Hexachlorobutadiene	87-68-3	1	3.0	ND	ug/L	U
4-Chloro-3-Methylphenol	59-50-7	1	3.0	ND	ug/L	U
2-Methylnaphthalene	91-57-6	1	1.0	ND	ug/L	U
Hexachlorocyclopentadiene	77-47-4	1	5.0	ND	ug/L	U
2,4,6-Trichlorophenol	88-06-2	1	3.0	ND	ug/L	U
2,4,5-Trichlorophenol	95-95-4	1	5.0	ND	ug/L	U
2-Chloronaphthalene	91-58-7	1	1.0	ND	ug/L	U
2-Nitroaniline	88-74-4	1	3.0	ND	ug/L	U
Dimethylphthalate	131-11-3	1	1.0	ND	ug/L	U
Acenaphthylene	208-96-8	1	1.0	ND	ug/L	U



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Project: Landsburg
Project Number: [none]
Project Manager: Gary Zimmerman

Reported:
22-Apr-2025 14:45

LMW-12-0325
25C0223-01 (Water)

Semivolatile Organic Compounds

Method: EPA 8270E

Sampled: 03/10/2025 11:05

Instrument: NT10 Analyst: JZ

Analyzed: 03/25/2025 19:04

Analyte	CAS Number	Dilution	Reporting Limit	Result	Units	Notes
2,6-Dinitrotoluene	606-20-2	1	3.0	ND	ug/L	U
3-Nitroaniline	99-09-2	1	3.0	ND	ug/L	U
Acenaphthene	83-32-9	1	1.0	ND	ug/L	U
2,4-Dinitrophenol	51-28-5	1	10.0	ND	ug/L	U
Dibenzofuran	132-64-9	1	1.0	ND	ug/L	U
4-Nitrophenol	100-02-7	1	5.0	ND	ug/L	U
2,4-Dinitrotoluene	121-14-2	1	3.0	ND	ug/L	U
Fluorene	86-73-7	1	1.0	ND	ug/L	U
Diethyl phthalate	84-66-2	1	1.0	ND	ug/L	U
4-Chlorophenylphenyl ether	7005-72-3	1	1.0	ND	ug/L	U
4-Nitroaniline	100-01-6	1	3.0	ND	ug/L	U
4,6-Dinitro-2-methylphenol	534-52-1	1	10.0	ND	ug/L	U
N-Nitrosodiphenylamine	86-30-6	1	1.0	ND	ug/L	U
4-Bromophenyl phenyl ether	101-55-3	1	1.0	ND	ug/L	U
Hexachlorobenzene	118-74-1	1	1.0	ND	ug/L	U
Pentachlorophenol	87-86-5	1	5.0	ND	ug/L	U
Phenanthrene	85-01-8	1	1.0	ND	ug/L	U
Anthracene	120-12-7	1	1.0	ND	ug/L	U
Carbazole	86-74-8	1	1.0	ND	ug/L	U
Di-n-Butylphthalate	84-74-2	1	1.0	ND	ug/L	U
Fluoranthene	206-44-0	1	1.0	ND	ug/L	U
Pyrene	129-00-0	1	1.0	ND	ug/L	U
Butylbenzylphthalate	85-68-7	1	1.0	ND	ug/L	U
Benzo(a)anthracene	56-55-3	1	1.0	ND	ug/L	U
3,3'-Dichlorobenzidine	91-94-1	1	10.0	ND	ug/L	U
Chrysene	218-01-9	1	1.0	ND	ug/L	U
bis(2-Ethylhexyl)phthalate	117-81-7	1	3.0	ND	ug/L	U
Di-n-Octylphthalate	117-84-0	1	1.0	ND	ug/L	U
Benzofluoranthenes, Total		1	2.0	ND	ug/L	U
Benzo(a)pyrene	50-32-8	1	1.0	ND	ug/L	U
Indeno(1,2,3-cd)pyrene	193-39-5	1	1.0	ND	ug/L	U
Dibenzo(a,h)anthracene	53-70-3	1	1.0	ND	ug/L	U
Benzo(g,h,i)perylene	191-24-2	1	1.0	ND	ug/L	U
1-Methylnaphthalene	90-12-0	1	1.0	ND	ug/L	U
Surrogate: 2-Fluorophenol			33-120 %	62.5	%	



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LMW-12-0325
25C0223-01 (Water)

Semivolatile Organic Compounds

Method: EPA 8270E

Sampled: 03/10/2025 11:05

Instrument: NT10 Analyst: JZ

Analyzed: 03/25/2025 19:04

Analyte	CAS Number	Recovery	Recovery	Units	Notes
		Limits			
Surrogate: Phenol-d5		38-120 %	64.6	%	
Surrogate: 2-Chlorophenol-d4		41-120 %	69.1	%	
Surrogate: 1,2-Dichlorobenzene-d4		20-120 %	63.3	%	
Surrogate: Nitrobenzene-d5		27-120 %	74.1	%	
Surrogate: 2-Fluorobiphenyl		33-120 %	68.5	%	
Surrogate: 2,4,6-Tribromophenol		52-120 %	71.9	%	
Surrogate: p-Terphenyl-d14		28-120 %	65.2	%	



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Reported:
22-Apr-2025 14:45

LMW-12-0325
25C0223-01 (Water)

Semivolatile Organic Compounds

Method: EPA 8270E
Instrument: NT14 Analyst: RT

Sampled: 03/10/2025 11:05

Analyzed: 03/27/2025 17:21

Sample Preparation: Preparation Method: EPA 3520C (Liq Liq)
Preparation Batch: BNC0345
Prepared: 03/14/2025

Sample Size: 500 mL
Final Volume: 1 mL

Extract ID: 25C0223-01 I 01

Analyte	CAS Number	Dilution	Detection Limit	Reporting Limit	Result	Units	Notes
1,4-Dioxane	123-91-1	1	0.2	0.4	ND	ug/L	U
<i>Surrogate: 1,4-Dioxane-d8</i>				30-160 %	68.8	%	



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Project Manager: Gary Zimmerman

Reported:

22-Apr-2025 14:45

LMW-12-0325
25C0223-01 (Water)

Petroleum Hydrocarbons

Method: NWTPH-HCID

Sampled: 03/10/2025 11:05

Instrument: FID4 Analyst: JR

Analyzed: 03/17/2025 11:17

Sample Preparation:

Preparation Method: EPA 3510C SepF

Extract ID: 25C0223-01 G 01

Preparation Batch: BNC0298

Sample Size: 500 mL

Prepared: 03/13/2025

Final Volume: 1 mL

Analyte	CAS Number	Dilution	Reporting Limit	Result	Units	Notes
Gasoline Range Organics (Tol-C12)	GRO	1	0.25	ND	mg/L	U
Diesel Range Organics (C12-C24)	DRO	1	0.50	ND	mg/L	U
Motor Oil Range Organics (C24-C38)	RRO	1	1.00	ND	mg/L	U
Surrogate: o-Terphenyl			50-150 %	101	%	
Surrogate: n-Triacontane			50-150 %	105	%	



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Reported:
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LMW-12-0325
25C0223-01 (Water)

Chlorinated Pesticides

Method: EPA 8081B
Instrument: ECD6 Analyst: RT

Sampled: 03/10/2025 11:05

Analyzed: 04/10/2025 14:14

Sample Preparation: Preparation Method: EPA 3510C SepF
Preparation Batch: BNC0335
Prepared: 03/14/2025

Sample Size: 500 mL

Final Volume: 5 mL

Extract ID: 25C0223-01 B 01

Sample Cleanup: Cleanup Method: Silica Gel
Cleanup Batch: CNC0125
Cleaned: 26-Mar-2025

Initial Volume: 5 uL

Final Volume: 5 uL

Extract ID: 25C0223-01 B 01

Analyte	CAS Number	Dilution	Reporting Limit	Result	Units	Notes
alpha-BHC	319-84-6	1	0.025	ND	ug/L	U
beta-BHC	319-85-7	1	0.025	ND	ug/L	U
gamma-BHC (Lindane)	58-89-9	1	0.025	ND	ug/L	U
delta-BHC	319-86-8	1	0.025	ND	ug/L	U
Heptachlor	76-44-8	1	0.025	ND	ug/L	U
Aldrin	309-00-2	1	0.025	ND	ug/L	U
Heptachlor Epoxide	1024-57-3	1	0.050	ND	ug/L	U
trans-Chlordane (beta-Chlordane)	5103-74-2	1	0.025	ND	ug/L	U
cis-Chlordane (alpha-chlordane)	5103-71-9	1	0.025	ND	ug/L	U
Endosulfan I	959-98-8	1	0.025	ND	ug/L	U
4,4'-DDE	72-55-9	1	0.050	ND	ug/L	U
Dieldrin	60-57-1	1	0.050	ND	ug/L	U
Endrin	72-20-8	1	0.050	ND	ug/L	U
Endosulfan II	33213-65-9	1	0.050	ND	ug/L	U
4,4'-DDD	72-54-8	1	0.050	ND	ug/L	U
Endrin Aldehyde	7421-93-4	1	0.050	ND	ug/L	U
4,4'-DDT	50-29-3	1	0.050	ND	ug/L	U
Endosulfan Sulfate	1031-07-8	1	0.050	ND	ug/L	U
Endrin Ketone	53494-70-5	1	0.050	ND	ug/L	U
Methoxychlor	72-43-5	1	0.250	ND	ug/L	U
Toxaphene	8001-35-2	1	1.25	ND	ug/L	U
Surrogate: Decachlorobiphenyl			11-144 %	77.2	%	
Surrogate: Decachlorobiphenyl [2C]			11-144 %	78.7	%	
Surrogate: Tetrachlorometaxylene			30-120 %	46.5	%	
Surrogate: Tetrachlorometaxylene [2C]			30-120 %	55.8	%	



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Reported:
22-Apr-2025 14:45

LMW-12-0325
25C0223-01 (Water)

Aroclor PCB

Method: EPA 8082A			Sampled: 03/10/2025 11:05		
Instrument: ECD7 Analyst: NRB			Analyzed: 03/19/2025 18:02		
Sample Preparation:	Preparation Method: EPA 3510C SepF			Extract ID: 25C0223-01 A 01	
	Preparation Batch: BNC0299	Sample Size: 1000 mL			
	Prepared: 03/13/2025	Final Volume: 0.5 mL			
Sample Cleanup:	Cleanup Method: Sulfuric Acid			Extract ID: 25C0223-01 A 01	
	Cleanup Batch: CNC0075	Initial Volume: 0.5 uL			
	Cleaned: 18-Mar-2025	Final Volume: 0.5 uL			
Sample Cleanup:	Cleanup Method: Sulfur			Extract ID: 25C0223-01 A 01	
	Cleanup Batch: CNC0076	Initial Volume: 0.5 uL			
	Cleaned: 18-Mar-2025	Final Volume: 0.5 uL			

Analyte	CAS Number	Dilution	Reporting Limit	Result	Units	Notes
Aroclor 1016	12674-11-2	1	0.010	ND	ug/L	U
Aroclor 1221	11104-28-2	1	0.010	ND	ug/L	U
Aroclor 1232	11141-16-5	1	0.010	ND	ug/L	U
Aroclor 1242	53469-21-9	1	0.010	ND	ug/L	U
Aroclor 1248	12672-29-6	1	0.010	ND	ug/L	U
Aroclor 1254	11097-69-1	1	0.010	ND	ug/L	U
Aroclor 1260	11096-82-5	1	0.010	ND	ug/L	U
Surrogate: Decachlorobiphenyl			29-120 %	43.9	%	P1
Surrogate: Tetrachlorometaxylene			32-120 %	78.4	%	
Surrogate: Decachlorobiphenyl [2C]			29-120 %	73.3	%	P1
Surrogate: Tetrachlorometaxylene [2C]			32-120 %	63.3	%	



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Reported:
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LMW-12-0325
25C0223-01 (Water)

Metals and Metallic Compounds

Method: EPA 200.8	Sampled: 03/10/2025 11:05
Instrument: ICPMS2 Analyst: HAL	Analyzed: 03/21/2025 04:43
Sample Preparation:	Preparation Method: REN - EPA 3010A M
	Preparation Batch: BNC0383
	Prepared: 03/15/2025
	Sample Size: 25 mL
	Final Volume: 25 mL
	Extract ID: 25C0223-01 M 02

Analyte	CAS Number	Dilution	Detection Limit	Reporting Limit	Result	Units	Notes
Antimony	7440-36-0	1	0.150	3.00	ND	ug/L	U
Arsenic UCT	7440-38-2	1	0.100	3.00	0.364	ug/L	J
Lead	7439-92-1	1	0.100	10.0	0.101	ug/L	J
Selenium UCT	7782-49-2	1	0.500	25.0	ND	ug/L	U
Thallium	7440-28-0	1	0.100	2.00	ND	ug/L	U



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Reported:
22-Apr-2025 14:45

LMW-12-0325
25C0223-01 (Water)

Metals and Metallic Compounds

Method: EPA 6010D
Instrument: ICP3 Analyst: SH

Sampled: 03/10/2025 11:05

Analyzed: 03/26/2025 17:29

Sample Preparation: Preparation Method: TWC EPA 3010A
Preparation Batch: BNC0360
Prepared: 03/14/2025

Sample Size: 25 mL
Final Volume: 25 mL

Extract ID: 25C0223-01 M 01

Analyte	CAS Number	Dilution	Detection Limit	Reporting Limit	Result	Units	Notes
Aluminum	7429-90-5	1	0.0210	0.0700	0.0309	mg/L	J
Barium	7440-39-3	1	0.0007	0.0060	0.131	mg/L	
Beryllium	7440-41-7	1	0.0002	0.0010	ND	mg/L	U
Cadmium	7440-43-9	1	0.0005	0.0020	ND	mg/L	U
Calcium	7440-70-2	1	0.0300	0.0500	47.2	mg/L	
Chromium	7440-47-3	1	0.0020	0.0090	ND	mg/L	U
Cobalt	7440-48-4	1	0.0025	0.0050	ND	mg/L	U
Copper	7440-50-8	1	0.0030	0.0050	ND	mg/L	U
Iron	7439-89-6	1	0.0540	0.100	9.18	mg/L	
Magnesium	7439-95-4	1	0.0250	0.0500	27.3	mg/L	
Manganese	7439-96-5	1	0.0020	0.0040	0.688	mg/L	B
Nickel	7440-02-0	1	0.0050	0.0100	ND	mg/L	U
Potassium	7440-09-7	1	0.250	0.500	2.15	mg/L	
Silver	7440-22-4	1	0.0015	0.0030	ND	mg/L	U
Sodium	7440-23-5	1	0.250	0.500	5.62	mg/L	
Vanadium	7440-62-2	1	0.0015	0.0030	ND	mg/L	U
Zinc	7440-66-6	1	0.0150	0.0300	ND	mg/L	U



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Reported:
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LMW-12-0325
25C0223-01 (Water)

Metals and Metallic Compounds

Method: EPA 7470A	Sampled: 03/10/2025 11:05
Instrument: HYDRA Analyst: AMS	Analyzed: 03/19/2025 11:49
Sample Preparation:	Preparation Method: TWM EPA 7470A
	Preparation Batch: BNC0366
	Prepared: 03/16/2025
	Sample Size: 20 mL
	Final Volume: 20 mL
	Extract ID: 25C0223-01 M

Analyte	CAS Number	Dilution	Reporting Limit	Result	Units	Notes
Mercury	7439-97-6	1	0.00100	ND	mg/L	U



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Project: Landsburg
Project Number: [none]
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Reported:
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LMW-13R-0325
25C0223-02 (Water)

Volatile Organic Compounds

Method: EPA 8260D
Instrument: NT20 Analyst: FL

Sampled: 03/10/2025 12:45

Analyzed: 03/13/2025 20:39

Sample Preparation: Preparation Method: EPA 5030C (Purge and Trap)
Preparation Batch: BNC0328 Sample Size: 10 mL
Prepared: 03/13/2025 Final Volume: 10 mL

Extract ID: 25C0223-02 O

Analyte	CAS Number	Dilution	Reporting Limit	Result	Units	Notes
Chloromethane	74-87-3	1	0.50	ND	ug/L	U
Vinyl Chloride	75-01-4	1	0.10	ND	ug/L	U
Bromomethane	74-83-9	1	1.00	ND	ug/L	U
Chloroethane	75-00-3	1	0.20	ND	ug/L	U
Trichlorofluoromethane	75-69-4	1	0.20	ND	ug/L	U
Acrolein	107-02-8	1	5.00	ND	ug/L	U
1,1,2-Trichloro-1,2,2-Trifluoroethane	76-13-1	1	0.20	ND	ug/L	U
Acetone	67-64-1	1	5.00	ND	ug/L	U
1,1-Dichloroethene	75-35-4	1	0.20	ND	ug/L	U
Iodomethane	74-88-4	1	1.00	ND	ug/L	U
Methylene Chloride	75-09-2	1	1.00	ND	ug/L	U
Acrylonitrile	107-13-1	1	1.00	ND	ug/L	U
Carbon Disulfide	75-15-0	1	0.20	ND	ug/L	U
trans-1,2-Dichloroethene	156-60-5	1	0.20	ND	ug/L	U
Vinyl Acetate	108-05-4	1	0.20	ND	ug/L	U
1,1-Dichloroethane	75-34-3	1	0.20	ND	ug/L	U
2-Butanone	78-93-3	1	5.00	ND	ug/L	U
2,2-Dichloropropane	594-20-7	1	0.20	ND	ug/L	U
cis-1,2-Dichloroethene	156-59-2	1	0.20	ND	ug/L	U
Chloroform	67-66-3	1	0.20	ND	ug/L	U
Bromochloromethane	74-97-5	1	0.20	ND	ug/L	U
1,1,1-Trichloroethane	71-55-6	1	0.20	ND	ug/L	U
1,1-Dichloropropene	563-58-6	1	0.10	ND	ug/L	U
Carbon tetrachloride	56-23-5	1	0.20	ND	ug/L	U
1,2-Dichloroethane	107-06-2	1	0.20	ND	ug/L	U
Benzene	71-43-2	1	0.20	ND	ug/L	U
Trichloroethene	79-01-6	1	0.20	ND	ug/L	U
1,2-Dichloropropane	78-87-5	1	0.20	ND	ug/L	U
Bromodichloromethane	75-27-4	1	0.20	ND	ug/L	U
Dibromomethane	74-95-3	1	0.20	ND	ug/L	U
2-Chloroethyl vinyl ether	110-75-8	1	1.00	ND	ug/L	U
4-Methyl-2-Pentanone	108-10-1	1	2.50	ND	ug/L	U



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Reported:
22-Apr-2025 14:45

LMW-13R-0325
25C0223-02 (Water)

Volatile Organic Compounds

Method: EPA 8260D

Sampled: 03/10/2025 12:45

Instrument: NT20 Analyst: FL

Analyzed: 03/13/2025 20:39

Analyte	CAS Number	Dilution	Reporting Limit	Result	Units	Notes
cis-1,3-Dichloropropene	10061-01-5	1	0.20	ND	ug/L	U
Toluene	108-88-3	1	0.20	ND	ug/L	U
trans-1,3-Dichloropropene	10061-02-6	1	0.20	ND	ug/L	U
2-Hexanone	591-78-6	1	5.00	ND	ug/L	U
1,1,2-Trichloroethane	79-00-5	1	0.20	ND	ug/L	U
1,3-Dichloropropane	142-28-9	1	0.10	ND	ug/L	U
Tetrachloroethene	127-18-4	1	0.20	ND	ug/L	U
Dibromochloromethane	124-48-1	1	0.20	ND	ug/L	U
1,2-Dibromoethane	106-93-4	1	0.10	ND	ug/L	U
Chlorobenzene	108-90-7	1	0.20	ND	ug/L	U
Ethylbenzene	100-41-4	1	0.20	ND	ug/L	U
1,1,1,2-Tetrachloroethane	630-20-6	1	0.20	ND	ug/L	U
m,p-Xylene	179601-23-1	1	0.40	ND	ug/L	U
o-Xylene	95-47-6	1	0.20	ND	ug/L	U
Xylenes, total	1330-20-7	1	0.60	ND	ug/L	U
Styrene	100-42-5	1	0.20	ND	ug/L	U
Bromoform	75-25-2	1	0.20	ND	ug/L	U
1,1,2,2-Tetrachloroethane	79-34-5	1	0.20	ND	ug/L	U
1,2,3-Trichloropropane	96-18-4	1	0.25	ND	ug/L	U
trans-1,4-Dichloro 2-Butene	110-57-6	1	1.00	ND	ug/L	U
n-Propylbenzene	103-65-1	1	0.20	ND	ug/L	U
Bromobenzene	108-86-1	1	0.20	ND	ug/L	U
Isopropyl Benzene	98-82-8	1	0.20	ND	ug/L	U
2-Chlorotoluene	95-49-8	1	0.10	ND	ug/L	U
4-Chlorotoluene	106-43-4	1	0.20	ND	ug/L	U
t-Butylbenzene	98-06-6	1	0.20	ND	ug/L	U
1,3,5-Trimethylbenzene	108-67-8	1	0.20	ND	ug/L	U
1,2,4-Trimethylbenzene	95-63-6	1	0.20	ND	ug/L	U
s-Butylbenzene	135-98-8	1	0.20	ND	ug/L	U
4-Isopropyl Toluene	99-87-6	1	0.20	ND	ug/L	U
1,3-Dichlorobenzene	541-73-1	1	0.20	ND	ug/L	U
1,4-Dichlorobenzene	106-46-7	1	0.20	ND	ug/L	U
n-Butylbenzene	104-51-8	1	0.20	ND	ug/L	U
1,2-Dichlorobenzene	95-50-1	1	0.20	ND	ug/L	U
1,2-Dibromo-3-chloropropane	96-12-8	1	0.50	ND	ug/L	U



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Project: Landsburg
Project Number: [none]
Project Manager: Gary Zimmerman

Reported:
22-Apr-2025 14:45

LMW-13R-0325
25C0223-02 (Water)

Volatile Organic Compounds

Method: EPA 8260D

Sampled: 03/10/2025 12:45

Instrument: NT20 Analyst: FL

Analyzed: 03/13/2025 20:39

Analyte	CAS Number	Dilution	Reporting Limit	Result	Units	Notes
1,2,4-Trichlorobenzene	120-82-1	1	0.50	ND	ug/L	U
Hexachloro-1,3-Butadiene	87-68-3	1	0.50	ND	ug/L	U
Naphthalene	91-20-3	1	0.50	ND	ug/L	U
1,2,3-Trichlorobenzene	87-61-6	1	0.50	ND	ug/L	U
Dichlorodifluoromethane	75-71-8	1	0.20	ND	ug/L	U
Surrogate: 1,2-Dichloroethane-d4			80-129 %	103	%	
Surrogate: Toluene-d8			80-120 %	100	%	
Surrogate: 4-Bromofluorobenzene			80-120 %	96.1	%	
Surrogate: 1,2-Dichlorobenzene-d4			80-120 %	101	%	



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Project: Landsburg
Project Number: [none]
Project Manager: Gary Zimmerman

Reported:
22-Apr-2025 14:45

LMW-13R-0325
25C0223-02 (Water)

Semivolatile Organic Compounds

Method: EPA 8270E
Instrument: NT10 Analyst: JZ

Sampled: 03/10/2025 12:45

Analyzed: 03/25/2025 19:45

Sample Preparation: Preparation Method: EPA 3520C (Liq Liq)
Preparation Batch: BNC0300
Prepared: 03/13/2025

Sample Size: 500 mL
Final Volume: 0.5 mL

Extract ID: 25C0223-02 H 01

Analyte	CAS Number	Dilution	Reporting Limit	Result	Units	Notes
Phenol	108-95-2	1	1.0	ND	ug/L	U
bis(2-chloroethyl) ether	111-44-4	1	1.0	ND	ug/L	U
2-Chlorophenol	95-57-8	1	1.0	ND	ug/L	U
1,3-Dichlorobenzene	541-73-1	1	1.0	ND	ug/L	U
1,4-Dichlorobenzene	106-46-7	1	1.0	ND	ug/L	U
Benzyl Alcohol	100-51-6	1	2.0	ND	ug/L	U
1,2-Dichlorobenzene	95-50-1	1	1.0	ND	ug/L	U
2-Methylphenol	95-48-7	1	1.0	ND	ug/L	U
2,2'-Oxybis(1-chloropropane)	108-60-1	1	1.0	ND	ug/L	U
4-Methylphenol	106-44-5	1	2.0	ND	ug/L	U
N-Nitroso-di-n-Propylamine	621-64-7	1	1.0	ND	ug/L	U
Hexachloroethane	67-72-1	1	2.0	ND	ug/L	U
Nitrobenzene	98-95-3	1	1.0	ND	ug/L	U
Isophorone	78-59-1	1	1.0	ND	ug/L	U
2-Nitrophenol	88-75-5	1	3.0	ND	ug/L	U
2,4-Dimethylphenol	105-67-9	1	3.0	ND	ug/L	U
Bis(2-Chloroethoxy)methane	111-91-1	1	1.0	ND	ug/L	U
Benzoic acid	65-85-0	1	10.0	ND	ug/L	U
2,4-Dichlorophenol	120-83-2	1	3.0	ND	ug/L	U
1,2,4-Trichlorobenzene	120-82-1	1	1.0	ND	ug/L	U
Naphthalene	91-20-3	1	1.0	ND	ug/L	U
4-Chloroaniline	106-47-8	1	5.0	ND	ug/L	U
Hexachlorobutadiene	87-68-3	1	3.0	ND	ug/L	U
4-Chloro-3-Methylphenol	59-50-7	1	3.0	ND	ug/L	U
2-Methylnaphthalene	91-57-6	1	1.0	ND	ug/L	U
Hexachlorocyclopentadiene	77-47-4	1	5.0	ND	ug/L	U
2,4,6-Trichlorophenol	88-06-2	1	3.0	ND	ug/L	U
2,4,5-Trichlorophenol	95-95-4	1	5.0	ND	ug/L	U
2-Chloronaphthalene	91-58-7	1	1.0	ND	ug/L	U
2-Nitroaniline	88-74-4	1	3.0	ND	ug/L	U
Dimethylphthalate	131-11-3	1	1.0	ND	ug/L	U
Acenaphthylene	208-96-8	1	1.0	ND	ug/L	U



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Project Manager: Gary Zimmerman

Reported:
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LMW-13R-0325
25C0223-02 (Water)

Semivolatile Organic Compounds

Method: EPA 8270E

Sampled: 03/10/2025 12:45

Instrument: NT10 Analyst: JZ

Analyzed: 03/25/2025 19:45

Analyte	CAS Number	Dilution	Reporting Limit	Result	Units	Notes
2,6-Dinitrotoluene	606-20-2	1	3.0	ND	ug/L	U
3-Nitroaniline	99-09-2	1	3.0	ND	ug/L	U
Acenaphthene	83-32-9	1	1.0	ND	ug/L	U
2,4-Dinitrophenol	51-28-5	1	10.0	ND	ug/L	U
Dibenzofuran	132-64-9	1	1.0	ND	ug/L	U
4-Nitrophenol	100-02-7	1	5.0	ND	ug/L	U
2,4-Dinitrotoluene	121-14-2	1	3.0	ND	ug/L	U
Fluorene	86-73-7	1	1.0	ND	ug/L	U
Diethyl phthalate	84-66-2	1	1.0	ND	ug/L	U
4-Chlorophenylphenyl ether	7005-72-3	1	1.0	ND	ug/L	U
4-Nitroaniline	100-01-6	1	3.0	ND	ug/L	U
4,6-Dinitro-2-methylphenol	534-52-1	1	10.0	ND	ug/L	U
N-Nitrosodiphenylamine	86-30-6	1	1.0	ND	ug/L	U
4-Bromophenyl phenyl ether	101-55-3	1	1.0	ND	ug/L	U
Hexachlorobenzene	118-74-1	1	1.0	ND	ug/L	U
Pentachlorophenol	87-86-5	1	5.0	ND	ug/L	U
Phenanthrene	85-01-8	1	1.0	ND	ug/L	U
Anthracene	120-12-7	1	1.0	ND	ug/L	U
Carbazole	86-74-8	1	1.0	ND	ug/L	U
Di-n-Butylphthalate	84-74-2	1	1.0	ND	ug/L	U
Fluoranthene	206-44-0	1	1.0	ND	ug/L	U
Pyrene	129-00-0	1	1.0	ND	ug/L	U
Butylbenzylphthalate	85-68-7	1	1.0	ND	ug/L	U
Benzo(a)anthracene	56-55-3	1	1.0	ND	ug/L	U
3,3'-Dichlorobenzidine	91-94-1	1	10.0	ND	ug/L	U
Chrysene	218-01-9	1	1.0	ND	ug/L	U
bis(2-Ethylhexyl)phthalate	117-81-7	1	3.0	ND	ug/L	U
Di-n-Octylphthalate	117-84-0	1	1.0	ND	ug/L	U
Benzofluoranthenes, Total		1	2.0	ND	ug/L	U
Benzo(a)pyrene	50-32-8	1	1.0	ND	ug/L	U
Indeno(1,2,3-cd)pyrene	193-39-5	1	1.0	ND	ug/L	U
Dibenzo(a,h)anthracene	53-70-3	1	1.0	ND	ug/L	U
Benzo(g,h,i)perylene	191-24-2	1	1.0	ND	ug/L	U
1-Methylnaphthalene	90-12-0	1	1.0	ND	ug/L	U
Surrogate: 2-Fluorophenol			33-120 %	58.9	%	



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LMW-13R-0325
25C0223-02 (Water)

Semivolatile Organic Compounds

Method: EPA 8270E

Sampled: 03/10/2025 12:45

Instrument: NT10 Analyst: JZ

Analyzed: 03/25/2025 19:45

Analyte	CAS Number	Recovery	Recovery	Units	Notes
		Limits			
Surrogate: Phenol-d5		38-120 %	60.7	%	
Surrogate: 2-Chlorophenol-d4		41-120 %	66.6	%	
Surrogate: 1,2-Dichlorobenzene-d4		20-120 %	63.0	%	
Surrogate: Nitrobenzene-d5		27-120 %	72.7	%	
Surrogate: 2-Fluorobiphenyl		33-120 %	70.1	%	
Surrogate: 2,4,6-Tribromophenol		52-120 %	72.7	%	
Surrogate: p-Terphenyl-d14		28-120 %	73.0	%	



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Reported:
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LMW-13R-0325
25C0223-02 (Water)

Semivolatile Organic Compounds

Method: EPA 8270E
Instrument: NT14 Analyst: RT

Sampled: 03/10/2025 12:45

Analyzed: 03/27/2025 17:38

Sample Preparation: Preparation Method: EPA 3520C (Liq Liq)
Preparation Batch: BNC0345
Prepared: 03/14/2025

Sample Size: 500 mL

Final Volume: 1 mL

Extract ID: 25C0223-02 I 01

Analyte	CAS Number	Dilution	Detection Limit	Reporting Limit	Result	Units	Notes
1,4-Dioxane	123-91-1	1	0.2	0.4	0.3	ug/L	J
Surrogate: 1,4-Dioxane-d8				30-160 %	12.6	%	*



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Reported:
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LMW-13R-0325
25C0223-02 (Water)

Petroleum Hydrocarbons

Method: NWTPH-HCID
Instrument: FID4 Analyst: JR

Sampled: 03/10/2025 12:45

Analyzed: 03/17/2025 11:37

Sample Preparation: Preparation Method: EPA 3510C SepF
Preparation Batch: BNC0298
Prepared: 03/13/2025

Sample Size: 500 mL
Final Volume: 1 mL

Extract ID: 25C0223-02 G 01

Analyte	CAS Number	Dilution	Reporting Limit	Result	Units	Notes
Gasoline Range Organics (Tol-C12)	GRO	1	0.25	ND	mg/L	U
Diesel Range Organics (C12-C24)	DRO	1	0.50	ND	mg/L	U
Motor Oil Range Organics (C24-C38)	RRO	1	1.00	ND	mg/L	U
Surrogate: o-Terphenyl			50-150 %	97.2	%	
Surrogate: n-Triacontane			50-150 %	101	%	



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Reported:
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LMW-13R-0325
25C0223-02 (Water)

Chlorinated Pesticides

Method: EPA 8081B
Instrument: ECD6 Analyst: RT

Sampled: 03/10/2025 12:45

Analyzed: 04/10/2025 14:32

Sample Preparation: Preparation Method: EPA 3510C SepF
Preparation Batch: BNC0335
Prepared: 03/14/2025

Sample Size: 500 mL

Final Volume: 5 mL

Extract ID: 25C0223-02 B 01

Sample Cleanup: Cleanup Method: Silica Gel
Cleanup Batch: CNC0125
Cleaned: 26-Mar-2025

Initial Volume: 5 uL

Final Volume: 5 uL

Extract ID: 25C0223-02 B 01

Analyte	CAS Number	Dilution	Reporting Limit	Result	Units	Notes
alpha-BHC	319-84-6	1	0.025	ND	ug/L	U
beta-BHC	319-85-7	1	0.025	ND	ug/L	U
gamma-BHC (Lindane)	58-89-9	1	0.025	ND	ug/L	U
delta-BHC	319-86-8	1	0.025	ND	ug/L	U
Heptachlor	76-44-8	1	0.025	ND	ug/L	U
Aldrin	309-00-2	1	0.025	ND	ug/L	U
Heptachlor Epoxide	1024-57-3	1	0.050	ND	ug/L	U
trans-Chlordane (beta-Chlordane)	5103-74-2	1	0.025	ND	ug/L	U
cis-Chlordane (alpha-chlordane)	5103-71-9	1	0.025	ND	ug/L	U
Endosulfan I	959-98-8	1	0.025	ND	ug/L	U
4,4'-DDE	72-55-9	1	0.050	ND	ug/L	U
Dieldrin	60-57-1	1	0.050	ND	ug/L	U
Endrin	72-20-8	1	0.050	ND	ug/L	U
Endosulfan II	33213-65-9	1	0.050	ND	ug/L	U
4,4'-DDD	72-54-8	1	0.050	ND	ug/L	U
Endrin Aldehyde	7421-93-4	1	0.050	ND	ug/L	U
4,4'-DDT	50-29-3	1	0.050	ND	ug/L	U
Endosulfan Sulfate	1031-07-8	1	0.050	ND	ug/L	U
Endrin Ketone	53494-70-5	1	0.050	ND	ug/L	U
Methoxychlor	72-43-5	1	0.250	ND	ug/L	U
Toxaphene	8001-35-2	1	1.25	ND	ug/L	U
Surrogate: Decachlorobiphenyl			11-144 %	81.3	%	
Surrogate: Decachlorobiphenyl [2C]			11-144 %	85.2	%	
Surrogate: Tetrachlorometaxylene			30-120 %	38.6	%	
Surrogate: Tetrachlorometaxylene [2C]			30-120 %	52.6	%	



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Project: Landsburg

Project Number: [none]

Project Manager: Gary Zimmerman

Reported:

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LMW-13R-0325

25C0223-02 (Water)

Aroclor PCB

Method: EPA 8082A

Sampled: 03/10/2025 12:45

Instrument: ECD7 Analyst: NRB

Analyzed: 03/19/2025 18:23

Sample Preparation:	Preparation Method: EPA 3510C SepF	Sample Size: 1000 mL	Extract ID: 25C0223-02 A 01
	Preparation Batch: BNC0299		
	Prepared: 03/13/2025		
Sample Cleanup:	Cleanup Method: Sulfuric Acid	Initial Volume: 0.5 uL	Extract ID: 25C0223-02 A 01
	Cleanup Batch: CNC0075		
	Cleaned: 18-Mar-2025		
Sample Cleanup:	Cleanup Method: Sulfur	Initial Volume: 0.5 uL	Extract ID: 25C0223-02 A 01
	Cleanup Batch: CNC0076		
	Cleaned: 18-Mar-2025		

Analyte	CAS Number	Dilution	Reporting Limit	Result	Units	Notes
Aroclor 1016	12674-11-2	1	0.010	ND	ug/L	U
Aroclor 1221	11104-28-2	1	0.010	ND	ug/L	U
Aroclor 1232	11141-16-5	1	0.010	ND	ug/L	U
Aroclor 1242	53469-21-9	1	0.010	ND	ug/L	U
Aroclor 1248	12672-29-6	1	0.010	ND	ug/L	U
Aroclor 1254	11097-69-1	1	0.010	ND	ug/L	U
Aroclor 1260	11096-82-5	1	0.010	ND	ug/L	U
Surrogate: Decachlorobiphenyl			29-120 %	47.5	%	P1
Surrogate: Tetrachlorometaxylene			32-120 %	82.1	%	
Surrogate: Decachlorobiphenyl [2C]			29-120 %	73.6	%	P1
Surrogate: Tetrachlorometaxylene [2C]			32-120 %	70.0	%	



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Project Manager: Gary Zimmerman

Reported:
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LMW-13R-0325
25C0223-02 (Water)

Metals and Metallic Compounds

Method: EPA 200.8

Sampled: 03/10/2025 12:45

Instrument: ICPMS2 Analyst: HAL

Analyzed: 03/21/2025 04:20

Sample Preparation:

Preparation Method: REN - EPA 3010A M

Extract ID: 25C0223-02 M 02

Preparation Batch: BNC0383

Sample Size: 25 mL

Prepared: 03/15/2025

Final Volume: 25 mL

Analyte	CAS Number	Dilution	Detection Limit	Reporting Limit	Result	Units	Notes
Antimony	7440-36-0	1	0.150	3.00	ND	ug/L	U
Arsenic UCT	7440-38-2	1	0.100	3.00	0.318	ug/L	J
Lead	7439-92-1	1	0.100	10.0	ND	ug/L	U
Selenium UCT	7782-49-2	1	0.500	25.0	ND	ug/L	U
Thallium	7440-28-0	1	0.100	2.00	ND	ug/L	U



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Reported:
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LMW-13R-0325
25C0223-02 (Water)

Metals and Metallic Compounds

Method: EPA 6010D
Instrument: ICP3 Analyst: SH

Sampled: 03/10/2025 12:45

Analyzed: 03/26/2025 17:00

Sample Preparation: Preparation Method: TWC EPA 3010A
Preparation Batch: BNC0360
Prepared: 03/14/2025

Sample Size: 25 mL
Final Volume: 25 mL

Extract ID: 25C0223-02 M 01

Analyte	CAS Number	Dilution	Detection Limit	Reporting Limit	Result	Units	Notes
Aluminum	7429-90-5	1	0.0210	0.0700	ND	mg/L	U
Barium	7440-39-3	1	0.0007	0.0060	0.324	mg/L	
Beryllium	7440-41-7	1	0.0002	0.0010	ND	mg/L	U
Cadmium	7440-43-9	1	0.0005	0.0020	ND	mg/L	U
Calcium	7440-70-2	1	0.0300	0.0500	85.6	mg/L	
Chromium	7440-47-3	1	0.0020	0.0090	ND	mg/L	U
Cobalt	7440-48-4	1	0.0025	0.0050	ND	mg/L	U
Copper	7440-50-8	1	0.0030	0.0050	ND	mg/L	U
Iron	7439-89-6	1	0.0540	0.100	1.13	mg/L	
Magnesium	7439-95-4	1	0.0250	0.0500	39.3	mg/L	
Nickel	7440-02-0	1	0.0050	0.0100	ND	mg/L	U
Potassium	7440-09-7	1	0.250	0.500	2.99	mg/L	
Silver	7440-22-4	1	0.0015	0.0030	ND	mg/L	U
Sodium	7440-23-5	1	25.0	50.0	74.5	mg/L	
Vanadium	7440-62-2	1	0.0015	0.0030	ND	mg/L	U
Zinc	7440-66-6	1	0.0150	0.0300	0.0199	mg/L	J



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Project: Landsburg

Project Number: [none]

Project Manager: Gary Zimmerman

Reported:

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LMW-13R-0325

25C0223-02 (Water)

Metals and Metallic Compounds

Method: EPA 7470A

Sampled: 03/10/2025 12:45

Instrument: HYDRA Analyst: AMS

Analyzed: 03/19/2025 12:19

Sample Preparation:

Preparation Method: TWM EPA 7470A

Extract ID: 25C0223-02 M

Preparation Batch: BNC0366

Sample Size: 20 mL

Prepared: 03/16/2025

Final Volume: 20 mL

Analyte	CAS Number	Dilution	Reporting Limit	Result	Units	Notes
Mercury	7439-97-6	1	0.00100	ND	mg/L	U



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Reported:
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LMW-13R-0325
25C0223-02RE1 (Water)

Semivolatile Organic Compounds

Method: EPA 8270E
Instrument: NT14 Analyst: RT

Sampled: 03/10/2025 12:45

Analyzed: 04/07/2025 16:16

Sample Preparation: Preparation Method: EPA 3520C (Liq Liq) Sample Size: 500 mL
Preparation Batch: BNC0753 Final Volume: 1 mL
Prepared: 04/01/2025 Extract ID: 25C0223-02RE1 C 01

Analyte	CAS Number	Dilution	Detection Limit	Reporting Limit	Result	Units	Notes
1,4-Dioxane	123-91-1	1	0.2	0.4	0.3	ug/L	H, J
Surrogate: 1,4-Dioxane-d8				30-160 %	61.5	%	H



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Project Number: [none]
Project Manager: Gary Zimmerman

Reported:
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LMW-13R-0325
25C0223-02RE1 (Water)

Metals and Metallic Compounds

Method: EPA 6010D
Instrument: ICP3 Analyst: SH

Sampled: 03/10/2025 12:45

Analyzed: 04/01/2025 17:41

Sample Preparation: Preparation Method: TWC EPA 3010A
Preparation Batch: BNC0737
Prepared: 03/28/2025

Sample Size: 25 mL
Final Volume: 25 mL

Extract ID: 25C0223-02RE1 M

Analyte	CAS Number	Dilution	Detection Limit	Reporting Limit	Result	Units	Notes
Manganese	7439-96-5	1	0.0020	0.0040	0.0305	mg/L	



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Project: Landsburg
Project Number: [none]
Project Manager: Gary Zimmerman

Reported:
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LMW-10-0325
25C0223-03 (Water)

Volatile Organic Compounds

Method: EPA 8260D
Instrument: NT20 Analyst: FL

Sampled: 03/10/2025 14:45

Analyzed: 03/13/2025 21:03

Sample Preparation: Preparation Method: EPA 5030C (Purge and Trap)
Preparation Batch: BNC0328 Sample Size: 10 mL
Prepared: 03/13/2025 Final Volume: 10 mL

Extract ID: 25C0223-03 N

Analyte	CAS Number	Dilution	Reporting Limit	Result	Units	Notes
Chloromethane	74-87-3	1	0.50	ND	ug/L	U
Vinyl Chloride	75-01-4	1	0.10	ND	ug/L	U
Bromomethane	74-83-9	1	1.00	ND	ug/L	U
Chloroethane	75-00-3	1	0.20	ND	ug/L	U
Trichlorofluoromethane	75-69-4	1	0.20	ND	ug/L	U
Acrolein	107-02-8	1	5.00	ND	ug/L	U
1,1,2-Trichloro-1,2,2-Trifluoroethane	76-13-1	1	0.20	ND	ug/L	U
Acetone	67-64-1	1	5.00	ND	ug/L	U
1,1-Dichloroethene	75-35-4	1	0.20	ND	ug/L	U
Iodomethane	74-88-4	1	1.00	ND	ug/L	U
Methylene Chloride	75-09-2	1	1.00	ND	ug/L	U
Acrylonitrile	107-13-1	1	1.00	ND	ug/L	U
Carbon Disulfide	75-15-0	1	0.20	ND	ug/L	U
trans-1,2-Dichloroethene	156-60-5	1	0.20	ND	ug/L	U
Vinyl Acetate	108-05-4	1	0.20	ND	ug/L	U
1,1-Dichloroethane	75-34-3	1	0.20	ND	ug/L	U
2-Butanone	78-93-3	1	5.00	ND	ug/L	U
2,2-Dichloropropane	594-20-7	1	0.20	ND	ug/L	U
cis-1,2-Dichloroethene	156-59-2	1	0.20	ND	ug/L	U
Chloroform	67-66-3	1	0.20	ND	ug/L	U
Bromochloromethane	74-97-5	1	0.20	ND	ug/L	U
1,1,1-Trichloroethane	71-55-6	1	0.20	ND	ug/L	U
1,1-Dichloropropene	563-58-6	1	0.10	ND	ug/L	U
Carbon tetrachloride	56-23-5	1	0.20	ND	ug/L	U
1,2-Dichloroethane	107-06-2	1	0.20	ND	ug/L	U
Benzene	71-43-2	1	0.20	ND	ug/L	U
Trichloroethene	79-01-6	1	0.20	ND	ug/L	U
1,2-Dichloropropane	78-87-5	1	0.20	ND	ug/L	U
Bromodichloromethane	75-27-4	1	0.20	ND	ug/L	U
Dibromomethane	74-95-3	1	0.20	ND	ug/L	U
2-Chloroethyl vinyl ether	110-75-8	1	1.00	ND	ug/L	U
4-Methyl-2-Pentanone	108-10-1	1	2.50	ND	ug/L	U



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Vancouver WA, 98660-3231

Project: Landsburg
Project Number: [none]
Project Manager: Gary Zimmerman

Reported:
22-Apr-2025 14:45

LMW-10-0325
25C0223-03 (Water)

Volatile Organic Compounds

Method: EPA 8260D

Sampled: 03/10/2025 14:45

Instrument: NT20 Analyst: FL

Analyzed: 03/13/2025 21:03

Analyte	CAS Number	Dilution	Reporting Limit	Result	Units	Notes
cis-1,3-Dichloropropene	10061-01-5	1	0.20	ND	ug/L	U
Toluene	108-88-3	1	0.20	ND	ug/L	U
trans-1,3-Dichloropropene	10061-02-6	1	0.20	ND	ug/L	U
2-Hexanone	591-78-6	1	5.00	ND	ug/L	U
1,1,2-Trichloroethane	79-00-5	1	0.20	ND	ug/L	U
1,3-Dichloropropane	142-28-9	1	0.10	ND	ug/L	U
Tetrachloroethene	127-18-4	1	0.20	ND	ug/L	U
Dibromochloromethane	124-48-1	1	0.20	ND	ug/L	U
1,2-Dibromoethane	106-93-4	1	0.10	ND	ug/L	U
Chlorobenzene	108-90-7	1	0.20	ND	ug/L	U
Ethylbenzene	100-41-4	1	0.20	ND	ug/L	U
1,1,1,2-Tetrachloroethane	630-20-6	1	0.20	ND	ug/L	U
m,p-Xylene	179601-23-1	1	0.40	ND	ug/L	U
o-Xylene	95-47-6	1	0.20	ND	ug/L	U
Xylenes, total	1330-20-7	1	0.60	ND	ug/L	U
Styrene	100-42-5	1	0.20	ND	ug/L	U
Bromoform	75-25-2	1	0.20	ND	ug/L	U
1,1,2,2-Tetrachloroethane	79-34-5	1	0.20	ND	ug/L	U
1,2,3-Trichloropropane	96-18-4	1	0.25	ND	ug/L	U
trans-1,4-Dichloro 2-Butene	110-57-6	1	1.00	ND	ug/L	U
n-Propylbenzene	103-65-1	1	0.20	ND	ug/L	U
Bromobenzene	108-86-1	1	0.20	ND	ug/L	U
Isopropyl Benzene	98-82-8	1	0.20	ND	ug/L	U
2-Chlorotoluene	95-49-8	1	0.10	ND	ug/L	U
4-Chlorotoluene	106-43-4	1	0.20	ND	ug/L	U
t-Butylbenzene	98-06-6	1	0.20	ND	ug/L	U
1,3,5-Trimethylbenzene	108-67-8	1	0.20	ND	ug/L	U
1,2,4-Trimethylbenzene	95-63-6	1	0.20	ND	ug/L	U
s-Butylbenzene	135-98-8	1	0.20	ND	ug/L	U
4-Isopropyl Toluene	99-87-6	1	0.20	ND	ug/L	U
1,3-Dichlorobenzene	541-73-1	1	0.20	ND	ug/L	U
1,4-Dichlorobenzene	106-46-7	1	0.20	ND	ug/L	U
n-Butylbenzene	104-51-8	1	0.20	ND	ug/L	U
1,2-Dichlorobenzene	95-50-1	1	0.20	ND	ug/L	U
1,2-Dibromo-3-chloropropane	96-12-8	1	0.50	ND	ug/L	U



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Reported:
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LMW-10-0325
25C0223-03 (Water)

Volatile Organic Compounds

Method: EPA 8260D

Sampled: 03/10/2025 14:45

Instrument: NT20 Analyst: FL

Analyzed: 03/13/2025 21:03

Analyte	CAS Number	Dilution	Reporting Limit	Result	Units	Notes
1,2,4-Trichlorobenzene	120-82-1	1	0.50	ND	ug/L	U
Hexachloro-1,3-Butadiene	87-68-3	1	0.50	ND	ug/L	U
Naphthalene	91-20-3	1	0.50	ND	ug/L	U
1,2,3-Trichlorobenzene	87-61-6	1	0.50	ND	ug/L	U
Dichlorodifluoromethane	75-71-8	1	0.20	ND	ug/L	U
Surrogate: 1,2-Dichloroethane-d4			80-129 %	103	%	
Surrogate: Toluene-d8			80-120 %	98.9	%	
Surrogate: 4-Bromofluorobenzene			80-120 %	92.7	%	
Surrogate: 1,2-Dichlorobenzene-d4			80-120 %	101	%	



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Project: Landsburg
Project Number: [none]
Project Manager: Gary Zimmerman

Reported:
22-Apr-2025 14:45

LMW-10-0325
25C0223-03 (Water)

Semivolatile Organic Compounds

Method: EPA 8270E
Instrument: NT10 Analyst: JZ

Sampled: 03/10/2025 14:45

Analyzed: 03/25/2025 20:25

Sample Preparation: Preparation Method: EPA 3520C (Liq Liq)
Preparation Batch: BNC0300
Prepared: 03/13/2025

Sample Size: 500 mL
Final Volume: 0.5 mL

Extract ID: 25C0223-03 H 01

Analyte	CAS Number	Dilution	Reporting Limit	Result	Units	Notes
Phenol	108-95-2	1	1.0	ND	ug/L	U
bis(2-chloroethyl) ether	111-44-4	1	1.0	ND	ug/L	U
2-Chlorophenol	95-57-8	1	1.0	ND	ug/L	U
1,3-Dichlorobenzene	541-73-1	1	1.0	ND	ug/L	U
1,4-Dichlorobenzene	106-46-7	1	1.0	ND	ug/L	U
Benzyl Alcohol	100-51-6	1	2.0	ND	ug/L	U
1,2-Dichlorobenzene	95-50-1	1	1.0	ND	ug/L	U
2-Methylphenol	95-48-7	1	1.0	ND	ug/L	U
2,2'-Oxybis(1-chloropropane)	108-60-1	1	1.0	ND	ug/L	U
4-Methylphenol	106-44-5	1	2.0	ND	ug/L	U
N-Nitroso-di-n-Propylamine	621-64-7	1	1.0	ND	ug/L	U
Hexachloroethane	67-72-1	1	2.0	ND	ug/L	U
Nitrobenzene	98-95-3	1	1.0	ND	ug/L	U
Isophorone	78-59-1	1	1.0	ND	ug/L	U
2-Nitrophenol	88-75-5	1	3.0	ND	ug/L	U
2,4-Dimethylphenol	105-67-9	1	3.0	ND	ug/L	U
Bis(2-Chloroethoxy)methane	111-91-1	1	1.0	ND	ug/L	U
Benzoic acid	65-85-0	1	10.0	ND	ug/L	U
2,4-Dichlorophenol	120-83-2	1	3.0	ND	ug/L	U
1,2,4-Trichlorobenzene	120-82-1	1	1.0	ND	ug/L	U
Naphthalene	91-20-3	1	1.0	ND	ug/L	U
4-Chloroaniline	106-47-8	1	5.0	ND	ug/L	U
Hexachlorobutadiene	87-68-3	1	3.0	ND	ug/L	U
4-Chloro-3-Methylphenol	59-50-7	1	3.0	ND	ug/L	U
2-Methylnaphthalene	91-57-6	1	1.0	ND	ug/L	U
Hexachlorocyclopentadiene	77-47-4	1	5.0	ND	ug/L	U
2,4,6-Trichlorophenol	88-06-2	1	3.0	ND	ug/L	U
2,4,5-Trichlorophenol	95-95-4	1	5.0	ND	ug/L	U
2-Chloronaphthalene	91-58-7	1	1.0	ND	ug/L	U
2-Nitroaniline	88-74-4	1	3.0	ND	ug/L	U
Dimethylphthalate	131-11-3	1	1.0	ND	ug/L	U
Acenaphthylene	208-96-8	1	1.0	ND	ug/L	U



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Project Manager: Gary Zimmerman

Reported:
22-Apr-2025 14:45

LMW-10-0325
25C0223-03 (Water)

Semivolatile Organic Compounds

Method: EPA 8270E

Sampled: 03/10/2025 14:45

Instrument: NT10 Analyst: JZ

Analyzed: 03/25/2025 20:25

Analyte	CAS Number	Dilution	Reporting Limit	Result	Units	Notes
2,6-Dinitrotoluene	606-20-2	1	3.0	ND	ug/L	U
3-Nitroaniline	99-09-2	1	3.0	ND	ug/L	U
Acenaphthene	83-32-9	1	1.0	ND	ug/L	U
2,4-Dinitrophenol	51-28-5	1	10.0	ND	ug/L	U
Dibenzofuran	132-64-9	1	1.0	ND	ug/L	U
4-Nitrophenol	100-02-7	1	5.0	ND	ug/L	U
2,4-Dinitrotoluene	121-14-2	1	3.0	ND	ug/L	U
Fluorene	86-73-7	1	1.0	ND	ug/L	U
Diethyl phthalate	84-66-2	1	1.0	ND	ug/L	U
4-Chlorophenylphenyl ether	7005-72-3	1	1.0	ND	ug/L	U
4-Nitroaniline	100-01-6	1	3.0	ND	ug/L	U
4,6-Dinitro-2-methylphenol	534-52-1	1	10.0	ND	ug/L	U
N-Nitrosodiphenylamine	86-30-6	1	1.0	ND	ug/L	U
4-Bromophenyl phenyl ether	101-55-3	1	1.0	ND	ug/L	U
Hexachlorobenzene	118-74-1	1	1.0	ND	ug/L	U
Pentachlorophenol	87-86-5	1	5.0	ND	ug/L	U
Phenanthrene	85-01-8	1	1.0	ND	ug/L	U
Anthracene	120-12-7	1	1.0	ND	ug/L	U
Carbazole	86-74-8	1	1.0	ND	ug/L	U
Di-n-Butylphthalate	84-74-2	1	1.0	ND	ug/L	U
Fluoranthene	206-44-0	1	1.0	ND	ug/L	U
Pyrene	129-00-0	1	1.0	ND	ug/L	U
Butylbenzylphthalate	85-68-7	1	1.0	ND	ug/L	U
Benzo(a)anthracene	56-55-3	1	1.0	ND	ug/L	U
3,3'-Dichlorobenzidine	91-94-1	1	10.0	ND	ug/L	U
Chrysene	218-01-9	1	1.0	ND	ug/L	U
bis(2-Ethylhexyl)phthalate	117-81-7	1	3.0	ND	ug/L	U
Di-n-Octylphthalate	117-84-0	1	1.0	ND	ug/L	U
Benzofluoranthenes, Total		1	2.0	ND	ug/L	U
Benzo(a)pyrene	50-32-8	1	1.0	ND	ug/L	U
Indeno(1,2,3-cd)pyrene	193-39-5	1	1.0	ND	ug/L	U
Dibenzo(a,h)anthracene	53-70-3	1	1.0	ND	ug/L	U
Benzo(g,h,i)perylene	191-24-2	1	1.0	ND	ug/L	U
1-Methylnaphthalene	90-12-0	1	1.0	ND	ug/L	U
Surrogate: 2-Fluorophenol			33-120 %	63.6	%	



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Reported:
22-Apr-2025 14:45

LMW-10-0325
25C0223-03 (Water)

Semivolatile Organic Compounds

Method: EPA 8270E

Sampled: 03/10/2025 14:45

Instrument: NT10 Analyst: JZ

Analyzed: 03/25/2025 20:25

Analyte	CAS Number	Recovery	Recovery	Units	Notes
		Limits			
Surrogate: Phenol-d5		38-120 %	65.5	%	
Surrogate: 2-Chlorophenol-d4		41-120 %	70.1	%	
Surrogate: 1,2-Dichlorobenzene-d4		20-120 %	67.2	%	
Surrogate: Nitrobenzene-d5		27-120 %	73.9	%	
Surrogate: 2-Fluorobiphenyl		33-120 %	70.7	%	
Surrogate: 2,4,6-Tribromophenol		52-120 %	73.9	%	
Surrogate: p-Terphenyl-d14		28-120 %	72.0	%	



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Reported:
22-Apr-2025 14:45

LMW-10-0325
25C0223-03 (Water)

Semivolatile Organic Compounds

Method: EPA 8270E
Instrument: NT14 Analyst: RT

Sampled: 03/10/2025 14:45

Analyzed: 03/27/2025 17:54

Sample Preparation: Preparation Method: EPA 3520C (Liq Liq)
Preparation Batch: BNC0345
Prepared: 03/14/2025

Sample Size: 500 mL

Final Volume: 1 mL

Extract ID: 25C0223-03 I 01

Analyte	CAS Number	Dilution	Detection Limit	Reporting Limit	Result	Units	Notes
1,4-Dioxane	123-91-1	1	0.2	0.4	ND	ug/L	U
<i>Surrogate: 1,4-Dioxane-d8</i>				30-160 %	47.9	%	



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Project: Landsburg
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Reported:
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LMW-10-0325
25C0223-03 (Water)

Petroleum Hydrocarbons

Method: NWTPH-HCID
Instrument: FID4 Analyst: JR

Sampled: 03/10/2025 14:45

Analyzed: 03/17/2025 11:56

Sample Preparation: Preparation Method: EPA 3510C SepF
Preparation Batch: BNC0298 Sample Size: 500 mL
Prepared: 03/13/2025 Final Volume: 1 mL

Extract ID: 25C0223-03 G 01

Analyte	CAS Number	Dilution	Reporting Limit	Result	Units	Notes
Gasoline Range Organics (Tol-C12)	GRO	1	0.25	ND	mg/L	U
Diesel Range Organics (C12-C24)	DRO	1	0.50	ND	mg/L	U
Motor Oil Range Organics (C24-C38)	RRO	1	1.00	ND	mg/L	U
Surrogate: o-Terphenyl			50-150 %	103	%	
Surrogate: n-Triacontane			50-150 %	107	%	



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Project: Landsburg
Project Number: [none]
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Reported:
22-Apr-2025 14:45

LMW-10-0325
25C0223-03 (Water)

Chlorinated Pesticides

Method: EPA 8081B
Instrument: ECD6 Analyst: RT

Sampled: 03/10/2025 14:45

Analyzed: 04/10/2025 14:50

Sample Preparation: Preparation Method: EPA 3510C SepF
Preparation Batch: BNC0335
Prepared: 03/14/2025

Sample Size: 500 mL
Final Volume: 5 mL

Extract ID: 25C0223-03 B 01

Sample Cleanup: Cleanup Method: Silica Gel
Cleanup Batch: CNC0125
Cleaned: 26-Mar-2025

Initial Volume: 5 uL
Final Volume: 5 uL

Extract ID: 25C0223-03 B 01

Analyte	CAS Number	Dilution	Reporting Limit	Result	Units	Notes
alpha-BHC	319-84-6	1	0.025	ND	ug/L	U
beta-BHC	319-85-7	1	0.025	ND	ug/L	U
gamma-BHC (Lindane)	58-89-9	1	0.025	ND	ug/L	U
delta-BHC	319-86-8	1	0.025	ND	ug/L	U
Heptachlor	76-44-8	1	0.025	ND	ug/L	U
Aldrin	309-00-2	1	0.025	ND	ug/L	U
Heptachlor Epoxide	1024-57-3	1	0.050	ND	ug/L	U
trans-Chlordane (beta-Chlordane)	5103-74-2	1	0.025	ND	ug/L	U
cis-Chlordane (alpha-chlordane)	5103-71-9	1	0.025	ND	ug/L	U
Endosulfan I	959-98-8	1	0.025	ND	ug/L	U
4,4'-DDE	72-55-9	1	0.050	ND	ug/L	U
Dieldrin	60-57-1	1	0.050	ND	ug/L	U
Endrin	72-20-8	1	0.050	ND	ug/L	U
Endosulfan II	33213-65-9	1	0.050	ND	ug/L	U
4,4'-DDD	72-54-8	1	0.050	ND	ug/L	U
Endrin Aldehyde	7421-93-4	1	0.050	ND	ug/L	U
4,4'-DDT	50-29-3	1	0.050	ND	ug/L	U
Endosulfan Sulfate	1031-07-8	1	0.050	ND	ug/L	U
Endrin Ketone	53494-70-5	1	0.050	ND	ug/L	U
Methoxychlor	72-43-5	1	0.250	ND	ug/L	U
Toxaphene	8001-35-2	1	1.25	ND	ug/L	U
Surrogate: Decachlorobiphenyl			11-144 %	75.6	%	
Surrogate: Decachlorobiphenyl [2C]			11-144 %	82.5	%	
Surrogate: Tetrachlorometaxylene			30-120 %	49.2	%	
Surrogate: Tetrachlorometaxylene [2C]			30-120 %	57.8	%	



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Project: Landsburg

Project Number: [none]

Project Manager: Gary Zimmerman

Reported:

22-Apr-2025 14:45

LMW-10-0325
25C0223-03 (Water)

Aroclor PCB

Method: EPA 8082A

Sampled: 03/10/2025 14:45

Instrument: ECD7 Analyst: NRB

Analyzed: 03/19/2025 18:44

Sample Preparation:	Preparation Method: EPA 3510C SepF	Sample Size: 1000 mL	Extract ID: 25C0223-03 A 01
	Preparation Batch: BNC0299		
	Prepared: 03/13/2025		
Sample Cleanup:	Cleanup Method: Sulfuric Acid	Initial Volume: 0.5 uL	Extract ID: 25C0223-03 A 01
	Cleanup Batch: CNC0075		
	Cleaned: 18-Mar-2025		
Sample Cleanup:	Cleanup Method: Sulfur	Initial Volume: 0.5 uL	Extract ID: 25C0223-03 A 01
	Cleanup Batch: CNC0076		
	Cleaned: 18-Mar-2025		

Analyte	CAS Number	Dilution	Reporting Limit	Result	Units	Notes
Aroclor 1016	12674-11-2	1	0.010	ND	ug/L	U
Aroclor 1221	11104-28-2	1	0.010	ND	ug/L	U
Aroclor 1232	11141-16-5	1	0.010	ND	ug/L	U
Aroclor 1242	53469-21-9	1	0.010	ND	ug/L	U
Aroclor 1248	12672-29-6	1	0.010	ND	ug/L	U
Aroclor 1254	11097-69-1	1	0.010	ND	ug/L	U
Aroclor 1260	11096-82-5	1	0.010	ND	ug/L	U
Surrogate: Decachlorobiphenyl			29-120 %	49.7	%	P1
Surrogate: Tetrachlorometaxylene			32-120 %	78.4	%	
Surrogate: Decachlorobiphenyl [2C]			29-120 %	76.6	%	P1
Surrogate: Tetrachlorometaxylene [2C]			32-120 %	64.6	%	



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Project: Landsburg
Project Number: [none]
Project Manager: Gary Zimmerman

Reported:
22-Apr-2025 14:45

LMW-10-0325
25C0223-03 (Water)

Metals and Metallic Compounds

Method: EPA 200.8

Sampled: 03/10/2025 14:45

Instrument: ICPMS2 Analyst: HAL

Analyzed: 03/21/2025 04:24

Sample Preparation:

Preparation Method: REN - EPA 3010A M

Extract ID: 25C0223-03 M 02

Preparation Batch: BNC0383

Sample Size: 25 mL

Prepared: 03/15/2025

Final Volume: 25 mL

Analyte	CAS Number	Dilution	Detection Limit	Reporting Limit	Result	Units	Notes
Antimony	7440-36-0	1	0.150	3.00	ND	ug/L	U
Arsenic UCT	7440-38-2	1	0.100	3.00	0.118	ug/L	J
Lead	7439-92-1	1	0.100	10.0	ND	ug/L	U
Selenium UCT	7782-49-2	1	0.500	25.0	ND	ug/L	U
Thallium	7440-28-0	1	0.100	2.00	ND	ug/L	U



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Project: Landsburg
Project Number: [none]
Project Manager: Gary Zimmerman

Reported:
22-Apr-2025 14:45

LMW-10-0325
25C0223-03 (Water)

Metals and Metallic Compounds

Method: EPA 6010D
Instrument: ICP3 Analyst: SH

Sampled: 03/10/2025 14:45

Analyzed: 03/26/2025 17:11

Sample Preparation: Preparation Method: TWC EPA 3010A
Preparation Batch: BNC0360
Prepared: 03/14/2025

Sample Size: 25 mL
Final Volume: 25 mL

Extract ID: 25C0223-03 M 01

Analyte	CAS Number	Dilution	Detection Limit	Reporting Limit	Result	Units	Notes
Aluminum	7429-90-5	1	0.0210	0.0700	ND	mg/L	U
Barium	7440-39-3	1	0.0007	0.0060	0.0356	mg/L	
Beryllium	7440-41-7	1	0.0002	0.0010	ND	mg/L	U
Cadmium	7440-43-9	1	0.0005	0.0020	ND	mg/L	U
Calcium	7440-70-2	1	0.0300	0.0500	6.59	mg/L	
Chromium	7440-47-3	1	0.0020	0.0090	ND	mg/L	U
Cobalt	7440-48-4	1	0.0025	0.0050	ND	mg/L	U
Copper	7440-50-8	1	0.0030	0.0050	ND	mg/L	U
Iron	7439-89-6	1	0.0540	0.100	ND	mg/L	U
Magnesium	7439-95-4	1	0.0250	0.0500	2.88	mg/L	
Nickel	7440-02-0	1	0.0050	0.0100	ND	mg/L	U
Potassium	7440-09-7	1	0.250	0.500	1.16	mg/L	
Silver	7440-22-4	1	0.0015	0.0030	ND	mg/L	U
Sodium	7440-23-5	1	25.0	50.0	81.8	mg/L	
Vanadium	7440-62-2	1	0.0015	0.0030	ND	mg/L	U
Zinc	7440-66-6	1	0.0150	0.0300	ND	mg/L	U



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Project: Landsburg
Project Number: [none]
Project Manager: Gary Zimmerman

Reported:
22-Apr-2025 14:45

LMW-10-0325
25C0223-03 (Water)

Metals and Metallic Compounds

Method: EPA 7470A	Sampled: 03/10/2025 14:45
Instrument: HYDRA Analyst: AMS	Analyzed: 03/19/2025 12:21
Sample Preparation:	Extract ID: 25C0223-03 M
Preparation Method: TWM EPA 7470A	
Preparation Batch: BNC0366	Sample Size: 20 mL
Prepared: 03/16/2025	Final Volume: 20 mL

Analyte	CAS Number	Dilution	Reporting Limit	Result	Units	Notes
Mercury	7439-97-6	1	0.00100	ND	mg/L	U



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Reported:
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LMW-10-0325
25C0223-03RE1 (Water)

Metals and Metallic Compounds

Method: EPA 6010D
Instrument: ICP3 Analyst: SH

Sampled: 03/10/2025 14:45

Analyzed: 04/01/2025 17:44

Sample Preparation: Preparation Method: TWC EPA 3010A
Preparation Batch: BNC0737
Prepared: 03/28/2025

Sample Size: 25 mL
Final Volume: 25 mL

Extract ID: 25C0223-03RE1 M

Analyte	CAS Number	Dilution	Detection Limit	Reporting Limit	Result	Units	Notes
Manganese	7439-96-5	1	0.0020	0.0040	0.0065	mg/L	



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Reported:
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LMW-FB-0325
25C0223-04 (Water)

Volatile Organic Compounds

Method: EPA 8260D
Instrument: NT20 Analyst: FL

Sampled: 03/11/2025 09:35

Analyzed: 03/13/2025 21:26

Sample Preparation: Preparation Method: EPA 5030C (Purge and Trap)
Preparation Batch: BNC0328 Sample Size: 10 mL
Prepared: 03/13/2025 Final Volume: 10 mL

Extract ID: 25C0223-04 N

Analyte	CAS Number	Dilution	Reporting Limit	Result	Units	Notes
Chloromethane	74-87-3	1	0.50	ND	ug/L	U
Vinyl Chloride	75-01-4	1	0.10	ND	ug/L	U
Bromomethane	74-83-9	1	1.00	ND	ug/L	U
Chloroethane	75-00-3	1	0.20	ND	ug/L	U
Trichlorofluoromethane	75-69-4	1	0.20	ND	ug/L	U
Acrolein	107-02-8	1	5.00	ND	ug/L	U
1,1,2-Trichloro-1,2,2-Trifluoroethane	76-13-1	1	0.20	ND	ug/L	U
Acetone	67-64-1	1	5.00	5.68	ug/L	
1,1-Dichloroethene	75-35-4	1	0.20	ND	ug/L	U
Iodomethane	74-88-4	1	1.00	ND	ug/L	U
Methylene Chloride	75-09-2	1	1.00	ND	ug/L	U
Acrylonitrile	107-13-1	1	1.00	ND	ug/L	U
Carbon Disulfide	75-15-0	1	0.20	ND	ug/L	U
trans-1,2-Dichloroethene	156-60-5	1	0.20	ND	ug/L	U
Vinyl Acetate	108-05-4	1	0.20	ND	ug/L	U
1,1-Dichloroethane	75-34-3	1	0.20	ND	ug/L	U
2-Butanone	78-93-3	1	5.00	ND	ug/L	U
2,2-Dichloropropane	594-20-7	1	0.20	ND	ug/L	U
cis-1,2-Dichloroethene	156-59-2	1	0.20	ND	ug/L	U
Chloroform	67-66-3	1	0.20	ND	ug/L	U
Bromochloromethane	74-97-5	1	0.20	ND	ug/L	U
1,1,1-Trichloroethane	71-55-6	1	0.20	ND	ug/L	U
1,1-Dichloropropene	563-58-6	1	0.10	ND	ug/L	U
Carbon tetrachloride	56-23-5	1	0.20	ND	ug/L	U
1,2-Dichloroethane	107-06-2	1	0.20	ND	ug/L	U
Benzene	71-43-2	1	0.20	ND	ug/L	U
Trichloroethene	79-01-6	1	0.20	ND	ug/L	U
1,2-Dichloropropane	78-87-5	1	0.20	ND	ug/L	U
Bromodichloromethane	75-27-4	1	0.20	ND	ug/L	U
Dibromomethane	74-95-3	1	0.20	ND	ug/L	U
2-Chloroethyl vinyl ether	110-75-8	1	1.00	ND	ug/L	U
4-Methyl-2-Pentanone	108-10-1	1	2.50	ND	ug/L	U



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Reported:
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LMW-FB-0325
25C0223-04 (Water)

Volatile Organic Compounds

Method: EPA 8260D

Sampled: 03/11/2025 09:35

Instrument: NT20 Analyst: FL

Analyzed: 03/13/2025 21:26

Analyte	CAS Number	Dilution	Reporting Limit	Result	Units	Notes
cis-1,3-Dichloropropene	10061-01-5	1	0.20	ND	ug/L	U
Toluene	108-88-3	1	0.20	ND	ug/L	U
trans-1,3-Dichloropropene	10061-02-6	1	0.20	ND	ug/L	U
2-Hexanone	591-78-6	1	5.00	ND	ug/L	U
1,1,2-Trichloroethane	79-00-5	1	0.20	ND	ug/L	U
1,3-Dichloropropane	142-28-9	1	0.10	ND	ug/L	U
Tetrachloroethene	127-18-4	1	0.20	ND	ug/L	U
Dibromochloromethane	124-48-1	1	0.20	ND	ug/L	U
1,2-Dibromoethane	106-93-4	1	0.10	ND	ug/L	U
Chlorobenzene	108-90-7	1	0.20	ND	ug/L	U
Ethylbenzene	100-41-4	1	0.20	ND	ug/L	U
1,1,1,2-Tetrachloroethane	630-20-6	1	0.20	ND	ug/L	U
m,p-Xylene	179601-23-1	1	0.40	ND	ug/L	U
o-Xylene	95-47-6	1	0.20	ND	ug/L	U
Xylenes, total	1330-20-7	1	0.60	ND	ug/L	U
Styrene	100-42-5	1	0.20	ND	ug/L	U
Bromoform	75-25-2	1	0.20	ND	ug/L	U
1,1,2,2-Tetrachloroethane	79-34-5	1	0.20	ND	ug/L	U
1,2,3-Trichloropropane	96-18-4	1	0.25	ND	ug/L	U
trans-1,4-Dichloro 2-Butene	110-57-6	1	1.00	ND	ug/L	U
n-Propylbenzene	103-65-1	1	0.20	ND	ug/L	U
Bromobenzene	108-86-1	1	0.20	ND	ug/L	U
Isopropyl Benzene	98-82-8	1	0.20	ND	ug/L	U
2-Chlorotoluene	95-49-8	1	0.10	ND	ug/L	U
4-Chlorotoluene	106-43-4	1	0.20	ND	ug/L	U
t-Butylbenzene	98-06-6	1	0.20	ND	ug/L	U
1,3,5-Trimethylbenzene	108-67-8	1	0.20	ND	ug/L	U
1,2,4-Trimethylbenzene	95-63-6	1	0.20	ND	ug/L	U
s-Butylbenzene	135-98-8	1	0.20	ND	ug/L	U
4-Isopropyl Toluene	99-87-6	1	0.20	ND	ug/L	U
1,3-Dichlorobenzene	541-73-1	1	0.20	ND	ug/L	U
1,4-Dichlorobenzene	106-46-7	1	0.20	ND	ug/L	U
n-Butylbenzene	104-51-8	1	0.20	ND	ug/L	U
1,2-Dichlorobenzene	95-50-1	1	0.20	ND	ug/L	U
1,2-Dibromo-3-chloropropane	96-12-8	1	0.50	ND	ug/L	U



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LMW-FB-0325
25C0223-04 (Water)

Volatile Organic Compounds

Method: EPA 8260D

Sampled: 03/11/2025 09:35

Instrument: NT20 Analyst: FL

Analyzed: 03/13/2025 21:26

Analyte	CAS Number	Dilution	Reporting Limit	Result	Units	Notes
1,2,4-Trichlorobenzene	120-82-1	1	0.50	ND	ug/L	U
Hexachloro-1,3-Butadiene	87-68-3	1	0.50	ND	ug/L	U
Naphthalene	91-20-3	1	0.50	ND	ug/L	U
1,2,3-Trichlorobenzene	87-61-6	1	0.50	ND	ug/L	U
Dichlorodifluoromethane	75-71-8	1	0.20	ND	ug/L	U
Surrogate: 1,2-Dichloroethane-d4			80-129 %	106	%	
Surrogate: Toluene-d8			80-120 %	98.3	%	
Surrogate: 4-Bromofluorobenzene			80-120 %	93.9	%	
Surrogate: 1,2-Dichlorobenzene-d4			80-120 %	103	%	



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Reported:
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LMW-FB-0325
25C0223-04 (Water)

Semivolatile Organic Compounds

Method: EPA 8270E
Instrument: NT10 Analyst: JZ

Sampled: 03/11/2025 09:35

Analyzed: 03/25/2025 21:06

Sample Preparation: Preparation Method: EPA 3520C (Liq Liq)
Preparation Batch: BNC0300
Prepared: 03/13/2025

Sample Size: 500 mL
Final Volume: 0.5 mL

Extract ID: 25C0223-04 H 01

Analyte	CAS Number	Dilution	Reporting Limit	Result	Units	Notes
Phenol	108-95-2	1	1.0	ND	ug/L	U
bis(2-chloroethyl) ether	111-44-4	1	1.0	ND	ug/L	U
2-Chlorophenol	95-57-8	1	1.0	ND	ug/L	U
1,3-Dichlorobenzene	541-73-1	1	1.0	ND	ug/L	U
1,4-Dichlorobenzene	106-46-7	1	1.0	ND	ug/L	U
Benzyl Alcohol	100-51-6	1	2.0	ND	ug/L	U
1,2-Dichlorobenzene	95-50-1	1	1.0	ND	ug/L	U
2-Methylphenol	95-48-7	1	1.0	ND	ug/L	U
2,2'-Oxybis(1-chloropropane)	108-60-1	1	1.0	ND	ug/L	U
4-Methylphenol	106-44-5	1	2.0	ND	ug/L	U
N-Nitroso-di-n-Propylamine	621-64-7	1	1.0	ND	ug/L	U
Hexachloroethane	67-72-1	1	2.0	ND	ug/L	U
Nitrobenzene	98-95-3	1	1.0	ND	ug/L	U
Isophorone	78-59-1	1	1.0	ND	ug/L	U
2-Nitrophenol	88-75-5	1	3.0	ND	ug/L	U
2,4-Dimethylphenol	105-67-9	1	3.0	ND	ug/L	U
Bis(2-Chloroethoxy)methane	111-91-1	1	1.0	ND	ug/L	U
Benzoic acid	65-85-0	1	10.0	ND	ug/L	U
2,4-Dichlorophenol	120-83-2	1	3.0	ND	ug/L	U
1,2,4-Trichlorobenzene	120-82-1	1	1.0	ND	ug/L	U
Naphthalene	91-20-3	1	1.0	ND	ug/L	U
4-Chloroaniline	106-47-8	1	5.0	ND	ug/L	U
Hexachlorobutadiene	87-68-3	1	3.0	ND	ug/L	U
4-Chloro-3-Methylphenol	59-50-7	1	3.0	ND	ug/L	U
2-Methylnaphthalene	91-57-6	1	1.0	ND	ug/L	U
Hexachlorocyclopentadiene	77-47-4	1	5.0	ND	ug/L	U
2,4,6-Trichlorophenol	88-06-2	1	3.0	ND	ug/L	U
2,4,5-Trichlorophenol	95-95-4	1	5.0	ND	ug/L	U
2-Chloronaphthalene	91-58-7	1	1.0	ND	ug/L	U
2-Nitroaniline	88-74-4	1	3.0	ND	ug/L	U
Dimethylphthalate	131-11-3	1	1.0	ND	ug/L	U
Acenaphthylene	208-96-8	1	1.0	ND	ug/L	U



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LMW-FB-0325
25C0223-04 (Water)

Semivolatile Organic Compounds

Method: EPA 8270E

Sampled: 03/11/2025 09:35

Instrument: NT10 Analyst: JZ

Analyzed: 03/25/2025 21:06

Analyte	CAS Number	Dilution	Reporting Limit	Result	Units	Notes
2,6-Dinitrotoluene	606-20-2	1	3.0	ND	ug/L	U
3-Nitroaniline	99-09-2	1	3.0	ND	ug/L	U
Acenaphthene	83-32-9	1	1.0	ND	ug/L	U
2,4-Dinitrophenol	51-28-5	1	10.0	ND	ug/L	U
Dibenzofuran	132-64-9	1	1.0	ND	ug/L	U
4-Nitrophenol	100-02-7	1	5.0	ND	ug/L	U
2,4-Dinitrotoluene	121-14-2	1	3.0	ND	ug/L	U
Fluorene	86-73-7	1	1.0	ND	ug/L	U
Diethyl phthalate	84-66-2	1	1.0	ND	ug/L	U
4-Chlorophenylphenyl ether	7005-72-3	1	1.0	ND	ug/L	U
4-Nitroaniline	100-01-6	1	3.0	ND	ug/L	U
4,6-Dinitro-2-methylphenol	534-52-1	1	10.0	ND	ug/L	U
N-Nitrosodiphenylamine	86-30-6	1	1.0	ND	ug/L	U
4-Bromophenyl phenyl ether	101-55-3	1	1.0	ND	ug/L	U
Hexachlorobenzene	118-74-1	1	1.0	ND	ug/L	U
Pentachlorophenol	87-86-5	1	5.0	ND	ug/L	U
Phenanthrene	85-01-8	1	1.0	ND	ug/L	U
Anthracene	120-12-7	1	1.0	ND	ug/L	U
Carbazole	86-74-8	1	1.0	ND	ug/L	U
Di-n-Butylphthalate	84-74-2	1	1.0	ND	ug/L	U
Fluoranthene	206-44-0	1	1.0	ND	ug/L	U
Pyrene	129-00-0	1	1.0	ND	ug/L	U
Butylbenzylphthalate	85-68-7	1	1.0	ND	ug/L	U
Benzo(a)anthracene	56-55-3	1	1.0	ND	ug/L	U
3,3'-Dichlorobenzidine	91-94-1	1	10.0	ND	ug/L	U
Chrysene	218-01-9	1	1.0	ND	ug/L	U
bis(2-Ethylhexyl)phthalate	117-81-7	1	3.0	ND	ug/L	U
Di-n-Octylphthalate	117-84-0	1	1.0	ND	ug/L	U
Benzofluoranthenes, Total		1	2.0	ND	ug/L	U
Benzo(a)pyrene	50-32-8	1	1.0	ND	ug/L	U
Indeno(1,2,3-cd)pyrene	193-39-5	1	1.0	ND	ug/L	U
Dibenzo(a,h)anthracene	53-70-3	1	1.0	ND	ug/L	U
Benzo(g,h,i)perylene	191-24-2	1	1.0	ND	ug/L	U
1-Methylnaphthalene	90-12-0	1	1.0	ND	ug/L	U
Surrogate: 2-Fluorophenol			33-120 %	56.6	%	



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Reported:
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LMW-FB-0325
25C0223-04 (Water)

Semivolatile Organic Compounds

Method: EPA 8270E

Sampled: 03/11/2025 09:35

Instrument: NT10 Analyst: JZ

Analyzed: 03/25/2025 21:06

Analyte	CAS Number	Recovery	Recovery	Units	Notes
		Limits			
Surrogate: Phenol-d5		38-120 %	59.3	%	
Surrogate: 2-Chlorophenol-d4		41-120 %	66.1	%	
Surrogate: 1,2-Dichlorobenzene-d4		20-120 %	59.2	%	
Surrogate: Nitrobenzene-d5		27-120 %	68.9	%	
Surrogate: 2-Fluorobiphenyl		33-120 %	64.3	%	
Surrogate: 2,4,6-Tribromophenol		52-120 %	69.3	%	
Surrogate: p-Terphenyl-d14		28-120 %	68.5	%	



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Reported:
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LMW-FB-0325
25C0223-04 (Water)

Semivolatile Organic Compounds

Method: EPA 8270E	Sampled: 03/11/2025 09:35	
Instrument: NT14 Analyst: RT	Analyzed: 03/27/2025 18:11	
Sample Preparation:	Preparation Method: EPA 3520C (Liq Liq)	Extract ID: 25C0223-04 I 01
	Preparation Batch: BNC0345	Sample Size: 500 mL
	Prepared: 03/14/2025	Final Volume: 1 mL

Analyte	CAS Number	Dilution	Detection Limit	Reporting Limit	Result	Units	Notes
1,4-Dioxane	123-91-1	1	0.2	0.4	ND	ug/L	U
<i>Surrogate: 1,4-Dioxane-d8</i>				30-160 %	71.8	%	



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Reported:
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LMW-FB-0325
25C0223-04 (Water)

Petroleum Hydrocarbons

Method: NWTPH-HCID
Instrument: FID4 Analyst: JR

Sampled: 03/11/2025 09:35

Analyzed: 03/17/2025 12:16

Sample Preparation: Preparation Method: EPA 3510C SepF
Preparation Batch: BNC0298 Sample Size: 500 mL
Prepared: 03/13/2025 Final Volume: 1 mL

Extract ID: 25C0223-04 G 01

Analyte	CAS Number	Dilution	Reporting Limit	Result	Units	Notes
Gasoline Range Organics (Tol-C12)	GRO	1	0.25	ND	mg/L	U
Diesel Range Organics (C12-C24)	DRO	1	0.50	ND	mg/L	U
Motor Oil Range Organics (C24-C38)	RRO	1	1.00	ND	mg/L	U
Surrogate: o-Terphenyl			50-150 %	102	%	
Surrogate: n-Triacontane			50-150 %	108	%	



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Project: Landsburg
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Project Manager: Gary Zimmerman

Reported:
22-Apr-2025 14:45

LMW-FB-0325
25C0223-04 (Water)

Chlorinated Pesticides

Method: EPA 8081B
Instrument: ECD6 Analyst: RT

Sampled: 03/11/2025 09:35

Analyzed: 04/10/2025 15:09

Sample Preparation: Preparation Method: EPA 3510C SepF
Preparation Batch: BNC0335
Prepared: 03/14/2025

Sample Size: 500 mL
Final Volume: 5 mL

Extract ID: 25C0223-04 B 01

Sample Cleanup: Cleanup Method: Silica Gel
Cleanup Batch: CNC0125
Cleaned: 26-Mar-2025

Initial Volume: 5 uL
Final Volume: 5 uL

Extract ID: 25C0223-04 B 01

Analyte	CAS Number	Dilution	Reporting Limit	Result	Units	Notes
alpha-BHC	319-84-6	1	0.025	ND	ug/L	U
beta-BHC	319-85-7	1	0.025	ND	ug/L	U
gamma-BHC (Lindane)	58-89-9	1	0.025	ND	ug/L	U
delta-BHC	319-86-8	1	0.025	ND	ug/L	U
Heptachlor	76-44-8	1	0.025	ND	ug/L	U
Aldrin	309-00-2	1	0.025	ND	ug/L	U
Heptachlor Epoxide	1024-57-3	1	0.050	ND	ug/L	U
trans-Chlordane (beta-Chlordane)	5103-74-2	1	0.025	ND	ug/L	U
cis-Chlordane (alpha-chlordane)	5103-71-9	1	0.025	ND	ug/L	U
Endosulfan I	959-98-8	1	0.025	ND	ug/L	U
4,4'-DDE	72-55-9	1	0.050	ND	ug/L	U
Dieldrin	60-57-1	1	0.050	ND	ug/L	U
Endrin	72-20-8	1	0.050	ND	ug/L	U
Endosulfan II	33213-65-9	1	0.050	ND	ug/L	U
4,4'-DDD	72-54-8	1	0.050	ND	ug/L	U
Endrin Aldehyde	7421-93-4	1	0.050	ND	ug/L	U
4,4'-DDT	50-29-3	1	0.050	ND	ug/L	U
Endosulfan Sulfate	1031-07-8	1	0.050	ND	ug/L	U
Endrin Ketone	53494-70-5	1	0.050	ND	ug/L	U
Methoxychlor	72-43-5	1	0.250	ND	ug/L	U
Toxaphene	8001-35-2	1	1.25	ND	ug/L	U
Surrogate: Decachlorobiphenyl			11-144 %	47.0	%	
Surrogate: Decachlorobiphenyl [2C]			11-144 %	49.2	%	
Surrogate: Tetrachlorometaxylene			30-120 %	51.9	%	
Surrogate: Tetrachlorometaxylene [2C]			30-120 %	63.2	%	



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Project: Landsburg

Project Number: [none]

Project Manager: Gary Zimmerman

Reported:

22-Apr-2025 14:45

LMW-FB-0325
25C0223-04 (Water)

Aroclor PCB

Method: EPA 8082A

Sampled: 03/11/2025 09:35

Instrument: ECD7 Analyst: NRB

Analyzed: 03/19/2025 19:05

Sample Preparation:	Preparation Method: EPA 3510C SepF Preparation Batch: BNC0299 Prepared: 03/13/2025	Sample Size: 1000 mL Final Volume: 0.5 mL	Extract ID: 25C0223-04 A 01
Sample Cleanup:	Cleanup Method: Sulfuric Acid Cleanup Batch: CNC0075 Cleaned: 18-Mar-2025	Initial Volume: 0.5 uL Final Volume: 0.5 uL	Extract ID: 25C0223-04 A 01
Sample Cleanup:	Cleanup Method: Sulfur Cleanup Batch: CNC0076 Cleaned: 18-Mar-2025	Initial Volume: 0.5 uL Final Volume: 0.5 uL	Extract ID: 25C0223-04 A 01

Analyte	CAS Number	Dilution	Reporting Limit	Result	Units	Notes
Aroclor 1016	12674-11-2	1	0.010	ND	ug/L	U
Aroclor 1221	11104-28-2	1	0.010	ND	ug/L	U
Aroclor 1232	11141-16-5	1	0.010	ND	ug/L	U
Aroclor 1242	53469-21-9	1	0.010	ND	ug/L	U
Aroclor 1248	12672-29-6	1	0.010	ND	ug/L	U
Aroclor 1254	11097-69-1	1	0.010	ND	ug/L	U
Aroclor 1260	11096-82-5	1	0.010	ND	ug/L	U
Surrogate: Decachlorobiphenyl			29-120 %	49.4	%	P1
Surrogate: Tetrachlorometaxylene			32-120 %	80.9	%	
Surrogate: Decachlorobiphenyl [2C]			29-120 %	80.7	%	P1
Surrogate: Tetrachlorometaxylene [2C]			32-120 %	70.0	%	



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Project: Landsburg
Project Number: [none]
Project Manager: Gary Zimmerman

Reported:
22-Apr-2025 14:45

LMW-FB-0325
25C0223-04 (Water)

Metals and Metallic Compounds

Method: EPA 200.8	Sampled: 03/11/2025 09:35
Instrument: ICPMS2 Analyst: HAL	Analyzed: 03/21/2025 04:29
Sample Preparation:	Preparation Method: REN - EPA 3010A M
	Preparation Batch: BNC0383
	Prepared: 03/15/2025
	Sample Size: 25 mL
	Final Volume: 25 mL
	Extract ID: 25C0223-04 M 02

Analyte	CAS Number	Dilution	Detection Limit	Reporting Limit	Result	Units	Notes
Antimony	7440-36-0	1	0.150	3.00	ND	ug/L	U
Arsenic UCT	7440-38-2	1	0.100	3.00	ND	ug/L	U
Lead	7439-92-1	1	0.100	10.0	ND	ug/L	U
Selenium UCT	7782-49-2	1	0.500	25.0	ND	ug/L	U
Thallium	7440-28-0	1	0.100	2.00	ND	ug/L	U



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Project: Landsburg
Project Number: [none]
Project Manager: Gary Zimmerman

Reported:
22-Apr-2025 14:45

LMW-FB-0325
25C0223-04 (Water)

Metals and Metallic Compounds

Method: EPA 6010D
Instrument: ICP3 Analyst: SH

Sampled: 03/11/2025 09:35

Analyzed: 03/26/2025 17:14

Sample Preparation: Preparation Method: TWC EPA 3010A
Preparation Batch: BNC0360
Prepared: 03/14/2025

Sample Size: 25 mL
Final Volume: 25 mL

Extract ID: 25C0223-04 M 01

Analyte	CAS Number	Dilution	Detection Limit	Reporting Limit	Result	Units	Notes
Aluminum	7429-90-5	1	0.0210	0.0700	ND	mg/L	U
Barium	7440-39-3	1	0.0007	0.0060	ND	mg/L	U
Beryllium	7440-41-7	1	0.0002	0.0010	ND	mg/L	U
Cadmium	7440-43-9	1	0.0005	0.0020	ND	mg/L	U
Calcium	7440-70-2	1	0.0300	0.0500	ND	mg/L	U
Chromium	7440-47-3	1	0.0020	0.0090	ND	mg/L	U
Cobalt	7440-48-4	1	0.0025	0.0050	ND	mg/L	U
Copper	7440-50-8	1	0.0030	0.0050	ND	mg/L	U
Iron	7439-89-6	1	0.0540	0.100	ND	mg/L	U
Magnesium	7439-95-4	1	0.0250	0.0500	ND	mg/L	U
Manganese	7439-96-5	1	0.0020	0.0040	ND	mg/L	U
Nickel	7440-02-0	1	0.0050	0.0100	ND	mg/L	U
Potassium	7440-09-7	1	0.250	0.500	ND	mg/L	U
Silver	7440-22-4	1	0.0015	0.0030	ND	mg/L	U
Sodium	7440-23-5	1	0.250	0.500	ND	mg/L	U
Vanadium	7440-62-2	1	0.0015	0.0030	ND	mg/L	U
Zinc	7440-66-6	1	0.0150	0.0300	ND	mg/L	U



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Project Manager: Gary Zimmerman

Reported:
22-Apr-2025 14:45

LMW-FB-0325
25C0223-04 (Water)

Metals and Metallic Compounds

Method: EPA 7470A	Sampled: 03/11/2025 09:35
Instrument: HYDRA Analyst: AMS	Analyzed: 03/19/2025 12:24
Sample Preparation:	Extract ID: 25C0223-04 M
Preparation Method: TWM EPA 7470A	
Preparation Batch: BNC0366	Sample Size: 20 mL
Prepared: 03/16/2025	Final Volume: 20 mL

Analyte	CAS Number	Dilution	Reporting Limit	Result	Units	Notes
Mercury	7439-97-6	1	0.00100	ND	mg/L	U



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Project: Landsburg
Project Number: [none]
Project Manager: Gary Zimmerman

Reported:
22-Apr-2025 14:45

LMW-9-0325
25C0223-05 (Water)

Volatile Organic Compounds

Method: EPA 8260D
Instrument: NT20 Analyst: FL

Sampled: 03/11/2025 09:45

Analyzed: 03/13/2025 21:49

Sample Preparation: Preparation Method: EPA 5030C (Purge and Trap)
Preparation Batch: BNC0328 Sample Size: 10 mL
Prepared: 03/13/2025 Final Volume: 10 mL

Extract ID: 25C0223-05 P

Analyte	CAS Number	Dilution	Reporting Limit	Result	Units	Notes
Chloromethane	74-87-3	1	0.50	ND	ug/L	U
Vinyl Chloride	75-01-4	1	0.10	ND	ug/L	U
Bromomethane	74-83-9	1	1.00	ND	ug/L	U
Chloroethane	75-00-3	1	0.20	ND	ug/L	U
Trichlorofluoromethane	75-69-4	1	0.20	ND	ug/L	U
Acrolein	107-02-8	1	5.00	ND	ug/L	U
1,1,2-Trichloro-1,2,2-Trifluoroethane	76-13-1	1	0.20	ND	ug/L	U
Acetone	67-64-1	1	5.00	ND	ug/L	U
1,1-Dichloroethene	75-35-4	1	0.20	ND	ug/L	U
Iodomethane	74-88-4	1	1.00	ND	ug/L	U
Methylene Chloride	75-09-2	1	1.00	ND	ug/L	U
Acrylonitrile	107-13-1	1	1.00	ND	ug/L	U
Carbon Disulfide	75-15-0	1	0.20	ND	ug/L	U
trans-1,2-Dichloroethene	156-60-5	1	0.20	ND	ug/L	U
Vinyl Acetate	108-05-4	1	0.20	ND	ug/L	U
1,1-Dichloroethane	75-34-3	1	0.20	ND	ug/L	U
2-Butanone	78-93-3	1	5.00	ND	ug/L	U
2,2-Dichloropropane	594-20-7	1	0.20	ND	ug/L	U
cis-1,2-Dichloroethene	156-59-2	1	0.20	ND	ug/L	U
Chloroform	67-66-3	1	0.20	ND	ug/L	U
Bromochloromethane	74-97-5	1	0.20	ND	ug/L	U
1,1,1-Trichloroethane	71-55-6	1	0.20	ND	ug/L	U
1,1-Dichloropropene	563-58-6	1	0.10	ND	ug/L	U
Carbon tetrachloride	56-23-5	1	0.20	ND	ug/L	U
1,2-Dichloroethane	107-06-2	1	0.20	ND	ug/L	U
Benzene	71-43-2	1	0.20	ND	ug/L	U
Trichloroethene	79-01-6	1	0.20	ND	ug/L	U
1,2-Dichloropropane	78-87-5	1	0.20	ND	ug/L	U
Bromodichloromethane	75-27-4	1	0.20	ND	ug/L	U
Dibromomethane	74-95-3	1	0.20	ND	ug/L	U
2-Chloroethyl vinyl ether	110-75-8	1	1.00	ND	ug/L	U
4-Methyl-2-Pentanone	108-10-1	1	2.50	ND	ug/L	U



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Project Manager: Gary Zimmerman

Reported:
22-Apr-2025 14:45

LMW-9-0325
25C0223-05 (Water)

Volatile Organic Compounds

Method: EPA 8260D

Sampled: 03/11/2025 09:45

Instrument: NT20 Analyst: FL

Analyzed: 03/13/2025 21:49

Analyte	CAS Number	Dilution	Reporting Limit	Result	Units	Notes
cis-1,3-Dichloropropene	10061-01-5	1	0.20	ND	ug/L	U
Toluene	108-88-3	1	0.20	ND	ug/L	U
trans-1,3-Dichloropropene	10061-02-6	1	0.20	ND	ug/L	U
2-Hexanone	591-78-6	1	5.00	ND	ug/L	U
1,1,2-Trichloroethane	79-00-5	1	0.20	ND	ug/L	U
1,3-Dichloropropane	142-28-9	1	0.10	ND	ug/L	U
Tetrachloroethene	127-18-4	1	0.20	ND	ug/L	U
Dibromochloromethane	124-48-1	1	0.20	ND	ug/L	U
1,2-Dibromoethane	106-93-4	1	0.10	ND	ug/L	U
Chlorobenzene	108-90-7	1	0.20	ND	ug/L	U
Ethylbenzene	100-41-4	1	0.20	ND	ug/L	U
1,1,1,2-Tetrachloroethane	630-20-6	1	0.20	ND	ug/L	U
m,p-Xylene	179601-23-1	1	0.40	ND	ug/L	U
o-Xylene	95-47-6	1	0.20	ND	ug/L	U
Xylenes, total	1330-20-7	1	0.60	ND	ug/L	U
Styrene	100-42-5	1	0.20	ND	ug/L	U
Bromoform	75-25-2	1	0.20	ND	ug/L	U
1,1,2,2-Tetrachloroethane	79-34-5	1	0.20	ND	ug/L	U
1,2,3-Trichloropropane	96-18-4	1	0.25	ND	ug/L	U
trans-1,4-Dichloro 2-Butene	110-57-6	1	1.00	ND	ug/L	U
n-Propylbenzene	103-65-1	1	0.20	ND	ug/L	U
Bromobenzene	108-86-1	1	0.20	ND	ug/L	U
Isopropyl Benzene	98-82-8	1	0.20	ND	ug/L	U
2-Chlorotoluene	95-49-8	1	0.10	ND	ug/L	U
4-Chlorotoluene	106-43-4	1	0.20	ND	ug/L	U
t-Butylbenzene	98-06-6	1	0.20	ND	ug/L	U
1,3,5-Trimethylbenzene	108-67-8	1	0.20	ND	ug/L	U
1,2,4-Trimethylbenzene	95-63-6	1	0.20	ND	ug/L	U
s-Butylbenzene	135-98-8	1	0.20	ND	ug/L	U
4-Isopropyl Toluene	99-87-6	1	0.20	ND	ug/L	U
1,3-Dichlorobenzene	541-73-1	1	0.20	ND	ug/L	U
1,4-Dichlorobenzene	106-46-7	1	0.20	ND	ug/L	U
n-Butylbenzene	104-51-8	1	0.20	ND	ug/L	U
1,2-Dichlorobenzene	95-50-1	1	0.20	ND	ug/L	U
1,2-Dibromo-3-chloropropane	96-12-8	1	0.50	ND	ug/L	U



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Reported:
22-Apr-2025 14:45

LMW-9-0325
25C0223-05 (Water)

Volatile Organic Compounds

Method: EPA 8260D

Sampled: 03/11/2025 09:45

Instrument: NT20 Analyst: FL

Analyzed: 03/13/2025 21:49

Analyte	CAS Number	Dilution	Reporting Limit	Result	Units	Notes
1,2,4-Trichlorobenzene	120-82-1	1	0.50	ND	ug/L	U
Hexachloro-1,3-Butadiene	87-68-3	1	0.50	ND	ug/L	U
Naphthalene	91-20-3	1	0.50	ND	ug/L	U
1,2,3-Trichlorobenzene	87-61-6	1	0.50	ND	ug/L	U
Dichlorodifluoromethane	75-71-8	1	0.20	ND	ug/L	U
Surrogate: 1,2-Dichloroethane-d4			80-129 %	109	%	
Surrogate: Toluene-d8			80-120 %	98.9	%	
Surrogate: 4-Bromofluorobenzene			80-120 %	93.9	%	
Surrogate: 1,2-Dichlorobenzene-d4			80-120 %	104	%	



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Project: Landsburg
Project Number: [none]
Project Manager: Gary Zimmerman

Reported:
22-Apr-2025 14:45

LMW-9-0325
25C0223-05 (Water)

Semivolatile Organic Compounds

Method: EPA 8270E
Instrument: NT10 Analyst: JZ

Sampled: 03/11/2025 09:45

Analyzed: 03/25/2025 21:46

Sample Preparation: Preparation Method: EPA 3520C (Liq Liq)
Preparation Batch: BNC0300
Prepared: 03/13/2025

Sample Size: 500 mL
Final Volume: 0.5 mL

Extract ID: 25C0223-05 H 01

Analyte	CAS Number	Dilution	Reporting Limit	Result	Units	Notes
Phenol	108-95-2	1	1.0	ND	ug/L	U
bis(2-chloroethyl) ether	111-44-4	1	1.0	ND	ug/L	U
2-Chlorophenol	95-57-8	1	1.0	ND	ug/L	U
1,3-Dichlorobenzene	541-73-1	1	1.0	ND	ug/L	U
1,4-Dichlorobenzene	106-46-7	1	1.0	ND	ug/L	U
Benzyl Alcohol	100-51-6	1	2.0	ND	ug/L	U
1,2-Dichlorobenzene	95-50-1	1	1.0	ND	ug/L	U
2-Methylphenol	95-48-7	1	1.0	ND	ug/L	U
2,2'-Oxybis(1-chloropropane)	108-60-1	1	1.0	ND	ug/L	U
4-Methylphenol	106-44-5	1	2.0	ND	ug/L	U
N-Nitroso-di-n-Propylamine	621-64-7	1	1.0	ND	ug/L	U
Hexachloroethane	67-72-1	1	2.0	ND	ug/L	U
Nitrobenzene	98-95-3	1	1.0	ND	ug/L	U
Isophorone	78-59-1	1	1.0	ND	ug/L	U
2-Nitrophenol	88-75-5	1	3.0	ND	ug/L	U
2,4-Dimethylphenol	105-67-9	1	3.0	ND	ug/L	U
Bis(2-Chloroethoxy)methane	111-91-1	1	1.0	ND	ug/L	U
Benzoic acid	65-85-0	1	10.0	ND	ug/L	U
2,4-Dichlorophenol	120-83-2	1	3.0	ND	ug/L	U
1,2,4-Trichlorobenzene	120-82-1	1	1.0	ND	ug/L	U
Naphthalene	91-20-3	1	1.0	ND	ug/L	U
4-Chloroaniline	106-47-8	1	5.0	ND	ug/L	U
Hexachlorobutadiene	87-68-3	1	3.0	ND	ug/L	U
4-Chloro-3-Methylphenol	59-50-7	1	3.0	ND	ug/L	U
2-Methylnaphthalene	91-57-6	1	1.0	ND	ug/L	U
Hexachlorocyclopentadiene	77-47-4	1	5.0	ND	ug/L	U
2,4,6-Trichlorophenol	88-06-2	1	3.0	ND	ug/L	U
2,4,5-Trichlorophenol	95-95-4	1	5.0	ND	ug/L	U
2-Chloronaphthalene	91-58-7	1	1.0	ND	ug/L	U
2-Nitroaniline	88-74-4	1	3.0	ND	ug/L	U
Dimethylphthalate	131-11-3	1	1.0	ND	ug/L	U
Acenaphthylene	208-96-8	1	1.0	ND	ug/L	U



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Project: Landsburg
Project Number: [none]
Project Manager: Gary Zimmerman

Reported:
22-Apr-2025 14:45

LMW-9-0325
25C0223-05 (Water)

Semivolatile Organic Compounds

Method: EPA 8270E

Sampled: 03/11/2025 09:45

Instrument: NT10 Analyst: JZ

Analyzed: 03/25/2025 21:46

Analyte	CAS Number	Dilution	Reporting Limit	Result	Units	Notes
2,6-Dinitrotoluene	606-20-2	1	3.0	ND	ug/L	U
3-Nitroaniline	99-09-2	1	3.0	ND	ug/L	U
Acenaphthene	83-32-9	1	1.0	ND	ug/L	U
2,4-Dinitrophenol	51-28-5	1	10.0	ND	ug/L	U
Dibenzofuran	132-64-9	1	1.0	ND	ug/L	U
4-Nitrophenol	100-02-7	1	5.0	ND	ug/L	U
2,4-Dinitrotoluene	121-14-2	1	3.0	ND	ug/L	U
Fluorene	86-73-7	1	1.0	ND	ug/L	U
Diethyl phthalate	84-66-2	1	1.0	ND	ug/L	U
4-Chlorophenylphenyl ether	7005-72-3	1	1.0	ND	ug/L	U
4-Nitroaniline	100-01-6	1	3.0	ND	ug/L	U
4,6-Dinitro-2-methylphenol	534-52-1	1	10.0	ND	ug/L	U
N-Nitrosodiphenylamine	86-30-6	1	1.0	ND	ug/L	U
4-Bromophenyl phenyl ether	101-55-3	1	1.0	ND	ug/L	U
Hexachlorobenzene	118-74-1	1	1.0	ND	ug/L	U
Pentachlorophenol	87-86-5	1	5.0	ND	ug/L	U
Phenanthrene	85-01-8	1	1.0	ND	ug/L	U
Anthracene	120-12-7	1	1.0	ND	ug/L	U
Carbazole	86-74-8	1	1.0	ND	ug/L	U
Di-n-Butylphthalate	84-74-2	1	1.0	ND	ug/L	U
Fluoranthene	206-44-0	1	1.0	ND	ug/L	U
Pyrene	129-00-0	1	1.0	ND	ug/L	U
Butylbenzylphthalate	85-68-7	1	1.0	ND	ug/L	U
Benzo(a)anthracene	56-55-3	1	1.0	ND	ug/L	U
3,3'-Dichlorobenzidine	91-94-1	1	10.0	ND	ug/L	U
Chrysene	218-01-9	1	1.0	ND	ug/L	U
bis(2-Ethylhexyl)phthalate	117-81-7	1	3.0	ND	ug/L	U
Di-n-Octylphthalate	117-84-0	1	1.0	ND	ug/L	U
Benzofluoranthenes, Total		1	2.0	ND	ug/L	U
Benzo(a)pyrene	50-32-8	1	1.0	ND	ug/L	U
Indeno(1,2,3-cd)pyrene	193-39-5	1	1.0	ND	ug/L	U
Dibenzo(a,h)anthracene	53-70-3	1	1.0	ND	ug/L	U
Benzo(g,h,i)perylene	191-24-2	1	1.0	ND	ug/L	U
1-Methylnaphthalene	90-12-0	1	1.0	ND	ug/L	U
Surrogate: 2-Fluorophenol			33-120 %	55.0	%	



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Project: Landsburg
Project Number: [none]
Project Manager: Gary Zimmerman

Reported:
22-Apr-2025 14:45

LMW-9-0325
25C0223-05 (Water)

Semivolatile Organic Compounds

Method: EPA 8270E

Sampled: 03/11/2025 09:45

Instrument: NT10 Analyst: JZ

Analyzed: 03/25/2025 21:46

Analyte	CAS Number	Recovery	Recovery	Units	Notes
		Limits			
Surrogate: Phenol-d5		38-120 %	56.3	%	
Surrogate: 2-Chlorophenol-d4		41-120 %	62.7	%	
Surrogate: 1,2-Dichlorobenzene-d4		20-120 %	57.8	%	
Surrogate: Nitrobenzene-d5		27-120 %	65.4	%	
Surrogate: 2-Fluorobiphenyl		33-120 %	62.7	%	
Surrogate: 2,4,6-Tribromophenol		52-120 %	69.8	%	
Surrogate: p-Terphenyl-d14		28-120 %	69.1	%	



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Project: Landsburg
Project Number: [none]
Project Manager: Gary Zimmerman

Reported:
22-Apr-2025 14:45

LMW-9-0325
25C0223-05 (Water)

Semivolatile Organic Compounds

Method: EPA 8270E
Instrument: NT14 Analyst: RT

Sampled: 03/11/2025 09:45

Analyzed: 03/27/2025 18:28

Sample Preparation: Preparation Method: EPA 3520C (Liq Liq)
Preparation Batch: BNC0345
Prepared: 03/14/2025

Sample Size: 500 mL
Final Volume: 1 mL

Extract ID: 25C0223-05 I 01

Analyte	CAS Number	Dilution	Detection Limit	Reporting Limit	Result	Units	Notes
1,4-Dioxane	123-91-1	1	0.2	0.4	ND	ug/L	U
<i>Surrogate: 1,4-Dioxane-d8</i>				30-160 %	73.1	%	



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Project: Landsburg
Project Number: [none]
Project Manager: Gary Zimmerman

Reported:
22-Apr-2025 14:45

LMW-9-0325
25C0223-05 (Water)

Petroleum Hydrocarbons

Method: NWTPH-HCID
Instrument: FID4 Analyst: JR

Sampled: 03/11/2025 09:45

Analyzed: 03/17/2025 12:36

Sample Preparation: Preparation Method: EPA 3510C SepF
Preparation Batch: BNC0298
Prepared: 03/13/2025

Sample Size: 500 mL
Final Volume: 1 mL

Extract ID: 25C0223-05 G 01

Analyte	CAS Number	Dilution	Reporting Limit	Result	Units	Notes
Gasoline Range Organics (Tol-C12)	GRO	1	0.25	ND	mg/L	U
Diesel Range Organics (C12-C24)	DRO	1	0.50	ND	mg/L	U
Motor Oil Range Organics (C24-C38)	RRO	1	1.00	ND	mg/L	U
Surrogate: o-Terphenyl			50-150 %	96.6	%	
Surrogate: n-Triacontane			50-150 %	102	%	



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Project: Landsburg
Project Number: [none]
Project Manager: Gary Zimmerman

Reported:
22-Apr-2025 14:45

LMW-9-0325
25C0223-05 (Water)

Chlorinated Pesticides

Method: EPA 8081B
Instrument: ECD6 Analyst: RT

Sampled: 03/11/2025 09:45

Analyzed: 04/10/2025 15:27

Sample Preparation: Preparation Method: EPA 3510C SepF
Preparation Batch: BNC0335
Prepared: 03/14/2025

Sample Size: 500 mL
Final Volume: 5 mL

Extract ID: 25C0223-05 B 01

Sample Cleanup: Cleanup Method: Silica Gel
Cleanup Batch: CNC0125
Cleaned: 26-Mar-2025

Initial Volume: 5 uL
Final Volume: 5 uL

Extract ID: 25C0223-05 B 01

Analyte	CAS Number	Dilution	Reporting Limit	Result	Units	Notes
alpha-BHC	319-84-6	1	0.025	ND	ug/L	U
beta-BHC	319-85-7	1	0.025	ND	ug/L	U
gamma-BHC (Lindane)	58-89-9	1	0.025	ND	ug/L	U
delta-BHC	319-86-8	1	0.025	ND	ug/L	U
Heptachlor	76-44-8	1	0.025	ND	ug/L	U
Aldrin	309-00-2	1	0.025	ND	ug/L	U
Heptachlor Epoxide	1024-57-3	1	0.050	ND	ug/L	U
trans-Chlordane (beta-Chlordane)	5103-74-2	1	0.025	ND	ug/L	U
cis-Chlordane (alpha-chlordane)	5103-71-9	1	0.025	ND	ug/L	U
Endosulfan I	959-98-8	1	0.025	ND	ug/L	U
4,4'-DDE	72-55-9	1	0.050	ND	ug/L	U
Dieldrin	60-57-1	1	0.050	ND	ug/L	U
Endrin	72-20-8	1	0.050	ND	ug/L	U
Endosulfan II	33213-65-9	1	0.050	ND	ug/L	U
4,4'-DDD	72-54-8	1	0.050	ND	ug/L	U
Endrin Aldehyde	7421-93-4	1	0.050	ND	ug/L	U
4,4'-DDT	50-29-3	1	0.050	ND	ug/L	U
Endosulfan Sulfate	1031-07-8	1	0.050	ND	ug/L	U
Endrin Ketone	53494-70-5	1	0.050	ND	ug/L	U
Methoxychlor	72-43-5	1	0.250	ND	ug/L	U
Toxaphene	8001-35-2	1	1.25	ND	ug/L	U

Surrogate: Decachlorobiphenyl

11-144 % 83.9 %

Surrogate: Decachlorobiphenyl [2C]

11-144 % 88.0 %

Surrogate: Tetrachlorometaxylene

30-120 % 52.4 %

Surrogate: Tetrachlorometaxylene [2C]

30-120 % 63.5 %



WSP USA, Inc.
210 East 13th Street, Suite 300
Vancouver WA, 98660-3231

Project: Landsburg
Project Number: [none]
Project Manager: Gary Zimmerman

Reported:
22-Apr-2025 14:45

LMW-9-0325
25C0223-05 (Water)

Aroclor PCB

Method: EPA 8082A			Sampled: 03/11/2025 09:45
Instrument: ECD7 Analyst: NRB			Analyzed: 03/19/2025 19:26
Sample Preparation:	Preparation Method: EPA 3510C SepF		Extract ID: 25C0223-05 A 01
	Preparation Batch: BNC0299		
	Sample Size: 1000 mL		
	Prepared: 03/13/2025		Final Volume: 0.5 mL
Sample Cleanup:	Cleanup Method: Sulfuric Acid		Extract ID:25C0223-05 A 01
	Cleanup Batch: CNC0075		
	Initial Volume: 0.5 uL		
	Cleaned: 18-Mar-2025		Final Volume: 0.5 uL
Sample Cleanup:	Cleanup Method: Sulfur		Extract ID:25C0223-05 A 01
	Cleanup Batch: CNC0076		
	Initial Volume: 0.5 uL		
	Cleaned: 18-Mar-2025		Final Volume: 0.5 uL

Analyte	CAS Number	Dilution	Reporting Limit	Result	Units	Notes
Aroclor 1016	12674-11-2	1	0.010	ND	ug/L	U
Aroclor 1221	11104-28-2	1	0.010	ND	ug/L	U
Aroclor 1232	11141-16-5	1	0.010	ND	ug/L	U
Aroclor 1242	53469-21-9	1	0.010	ND	ug/L	U
Aroclor 1248	12672-29-6	1	0.010	ND	ug/L	U
Aroclor 1254	11097-69-1	1	0.010	ND	ug/L	U
Aroclor 1260	11096-82-5	1	0.010	ND	ug/L	U
Surrogate: Decachlorobiphenyl			29-120 %	48.4	%	P1
Surrogate: Tetrachlorometaxylene			32-120 %	72.8	%	
Surrogate: Decachlorobiphenyl [2C]			29-120 %	74.5	%	P1
Surrogate: Tetrachlorometaxylene [2C]			32-120 %	64.7	%	



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Project Number: [none]
Project Manager: Gary Zimmerman

Reported:
22-Apr-2025 14:45

LMW-9-0325
25C0223-05 (Water)

Metals and Metallic Compounds

Method: EPA 200.8

Sampled: 03/11/2025 09:45

Instrument: ICPMS2 Analyst: HAL

Analyzed: 03/21/2025 04:34

Sample Preparation:

Preparation Method: REN - EPA 3010A M

Extract ID: 25C0223-05 M 02

Preparation Batch: BNC0383

Sample Size: 25 mL

Prepared: 03/15/2025

Final Volume: 25 mL

Analyte	CAS Number	Dilution	Detection Limit	Reporting Limit	Result	Units	Notes
Antimony	7440-36-0	1	0.150	3.00	ND	ug/L	U
Arsenic UCT	7440-38-2	1	0.100	3.00	0.116	ug/L	J
Lead	7439-92-1	1	0.100	10.0	0.204	ug/L	J
Selenium UCT	7782-49-2	1	0.500	25.0	ND	ug/L	U
Thallium	7440-28-0	1	0.100	2.00	ND	ug/L	U



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Project: Landsburg
Project Number: [none]
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Reported:
22-Apr-2025 14:45

LMW-9-0325
25C0223-05 (Water)

Metals and Metallic Compounds

Method: EPA 6010D
Instrument: ICP3 Analyst: SH

Sampled: 03/11/2025 09:45

Analyzed: 03/26/2025 17:17

Sample Preparation: Preparation Method: TWC EPA 3010A
Preparation Batch: BNC0360
Prepared: 03/14/2025

Sample Size: 25 mL
Final Volume: 25 mL

Extract ID: 25C0223-05 M 01

Analyte	CAS Number	Dilution	Detection Limit	Reporting Limit	Result	Units	Notes
Aluminum	7429-90-5	1	0.0210	0.0700	ND	mg/L	U
Barium	7440-39-3	1	0.0007	0.0060	0.294	mg/L	
Beryllium	7440-41-7	1	0.0002	0.0010	ND	mg/L	U
Cadmium	7440-43-9	1	0.0005	0.0020	ND	mg/L	U
Calcium	7440-70-2	1	0.0300	0.0500	80.8	mg/L	
Chromium	7440-47-3	1	0.0020	0.0090	ND	mg/L	U
Cobalt	7440-48-4	1	0.0025	0.0050	ND	mg/L	U
Copper	7440-50-8	1	0.0030	0.0050	ND	mg/L	U
Iron	7439-89-6	1	0.0540	0.100	1.52	mg/L	
Magnesium	7439-95-4	1	0.0250	0.0500	42.2	mg/L	
Manganese	7439-96-5	1	0.0020	0.0040	0.175	mg/L	B
Nickel	7440-02-0	1	0.0050	0.0100	ND	mg/L	U
Potassium	7440-09-7	1	0.250	0.500	2.36	mg/L	
Silver	7440-22-4	1	0.0015	0.0030	ND	mg/L	U
Sodium	7440-23-5	1	0.250	0.500	14.2	mg/L	
Vanadium	7440-62-2	1	0.0015	0.0030	ND	mg/L	U
Zinc	7440-66-6	1	0.0150	0.0300	ND	mg/L	U



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Project: Landsburg
Project Number: [none]
Project Manager: Gary Zimmerman

Reported:
22-Apr-2025 14:45

LMW-9-0325
25C0223-05 (Water)

Metals and Metallic Compounds

Method: EPA 7470A	Sampled: 03/11/2025 09:45
Instrument: HYDRA Analyst: AMS	Analyzed: 03/19/2025 12:26
Sample Preparation:	Extract ID: 25C0223-05 M
Preparation Method: TWM EPA 7470A	
Preparation Batch: BNC0366	Sample Size: 20 mL
Prepared: 03/16/2025	Final Volume: 20 mL

Analyte	CAS Number	Dilution	Reporting Limit	Result	Units	Notes
Mercury	7439-97-6	1	0.00100	ND	mg/L	U



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Project: Landsburg
Project Number: [none]
Project Manager: Gary Zimmerman

Reported:
22-Apr-2025 14:45

LMW-3-0325
25C0223-06 (Water)

Volatile Organic Compounds

Method: EPA 8260D
Instrument: NT20 Analyst: FL

Sampled: 03/11/2025 11:10

Analyzed: 03/13/2025 22:12

Sample Preparation: Preparation Method: EPA 5030C (Purge and Trap) Sample Size: 10 mL
Preparation Batch: BNC0328 Final Volume: 10 mL
Prepared: 03/13/2025 Extract ID: 25C0223-06 N

Analyte	CAS Number	Dilution	Reporting Limit	Result	Units	Notes
Chloromethane	74-87-3	1	0.50	ND	ug/L	U
Vinyl Chloride	75-01-4	1	0.10	ND	ug/L	U
Bromomethane	74-83-9	1	1.00	ND	ug/L	U
Chloroethane	75-00-3	1	0.20	ND	ug/L	U
Trichlorofluoromethane	75-69-4	1	0.20	ND	ug/L	U
Acrolein	107-02-8	1	5.00	ND	ug/L	U
1,1,2-Trichloro-1,2,2-Trifluoroethane	76-13-1	1	0.20	ND	ug/L	U
Acetone	67-64-1	1	5.00	5.42	ug/L	
1,1-Dichloroethene	75-35-4	1	0.20	ND	ug/L	U
Iodomethane	74-88-4	1	1.00	ND	ug/L	U
Methylene Chloride	75-09-2	1	1.00	ND	ug/L	U
Acrylonitrile	107-13-1	1	1.00	ND	ug/L	U
Carbon Disulfide	75-15-0	1	0.20	ND	ug/L	U
trans-1,2-Dichloroethene	156-60-5	1	0.20	ND	ug/L	U
Vinyl Acetate	108-05-4	1	0.20	ND	ug/L	U
1,1-Dichloroethane	75-34-3	1	0.20	ND	ug/L	U
2-Butanone	78-93-3	1	5.00	ND	ug/L	U
2,2-Dichloropropane	594-20-7	1	0.20	ND	ug/L	U
cis-1,2-Dichloroethene	156-59-2	1	0.20	ND	ug/L	U
Chloroform	67-66-3	1	0.20	ND	ug/L	U
Bromochloromethane	74-97-5	1	0.20	ND	ug/L	U
1,1,1-Trichloroethane	71-55-6	1	0.20	ND	ug/L	U
1,1-Dichloropropene	563-58-6	1	0.10	ND	ug/L	U
Carbon tetrachloride	56-23-5	1	0.20	ND	ug/L	U
1,2-Dichloroethane	107-06-2	1	0.20	ND	ug/L	U
Benzene	71-43-2	1	0.20	ND	ug/L	U
Trichloroethene	79-01-6	1	0.20	ND	ug/L	U
1,2-Dichloropropane	78-87-5	1	0.20	ND	ug/L	U
Bromodichloromethane	75-27-4	1	0.20	ND	ug/L	U
Dibromomethane	74-95-3	1	0.20	ND	ug/L	U
2-Chloroethyl vinyl ether	110-75-8	1	1.00	ND	ug/L	U
4-Methyl-2-Pentanone	108-10-1	1	2.50	ND	ug/L	U



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Project: Landsburg
Project Number: [none]
Project Manager: Gary Zimmerman

Reported:
22-Apr-2025 14:45

LMW-3-0325
25C0223-06 (Water)

Volatile Organic Compounds

Method: EPA 8260D

Sampled: 03/11/2025 11:10

Instrument: NT20 Analyst: FL

Analyzed: 03/13/2025 22:12

Analyte	CAS Number	Dilution	Reporting Limit	Result	Units	Notes
cis-1,3-Dichloropropene	10061-01-5	1	0.20	ND	ug/L	U
Toluene	108-88-3	1	0.20	ND	ug/L	U
trans-1,3-Dichloropropene	10061-02-6	1	0.20	ND	ug/L	U
2-Hexanone	591-78-6	1	5.00	ND	ug/L	U
1,1,2-Trichloroethane	79-00-5	1	0.20	ND	ug/L	U
1,3-Dichloropropane	142-28-9	1	0.10	ND	ug/L	U
Tetrachloroethene	127-18-4	1	0.20	ND	ug/L	U
Dibromochloromethane	124-48-1	1	0.20	ND	ug/L	U
1,2-Dibromoethane	106-93-4	1	0.10	ND	ug/L	U
Chlorobenzene	108-90-7	1	0.20	ND	ug/L	U
Ethylbenzene	100-41-4	1	0.20	ND	ug/L	U
1,1,1,2-Tetrachloroethane	630-20-6	1	0.20	ND	ug/L	U
m,p-Xylene	179601-23-1	1	0.40	ND	ug/L	U
o-Xylene	95-47-6	1	0.20	ND	ug/L	U
Xylenes, total	1330-20-7	1	0.60	ND	ug/L	U
Styrene	100-42-5	1	0.20	ND	ug/L	U
Bromoform	75-25-2	1	0.20	ND	ug/L	U
1,1,2,2-Tetrachloroethane	79-34-5	1	0.20	ND	ug/L	U
1,2,3-Trichloropropane	96-18-4	1	0.25	ND	ug/L	U
trans-1,4-Dichloro 2-Butene	110-57-6	1	1.00	ND	ug/L	U
n-Propylbenzene	103-65-1	1	0.20	ND	ug/L	U
Bromobenzene	108-86-1	1	0.20	ND	ug/L	U
Isopropyl Benzene	98-82-8	1	0.20	ND	ug/L	U
2-Chlorotoluene	95-49-8	1	0.10	ND	ug/L	U
4-Chlorotoluene	106-43-4	1	0.20	ND	ug/L	U
t-Butylbenzene	98-06-6	1	0.20	ND	ug/L	U
1,3,5-Trimethylbenzene	108-67-8	1	0.20	ND	ug/L	U
1,2,4-Trimethylbenzene	95-63-6	1	0.20	ND	ug/L	U
s-Butylbenzene	135-98-8	1	0.20	ND	ug/L	U
4-Isopropyl Toluene	99-87-6	1	0.20	ND	ug/L	U
1,3-Dichlorobenzene	541-73-1	1	0.20	ND	ug/L	U
1,4-Dichlorobenzene	106-46-7	1	0.20	ND	ug/L	U
n-Butylbenzene	104-51-8	1	0.20	ND	ug/L	U
1,2-Dichlorobenzene	95-50-1	1	0.20	ND	ug/L	U
1,2-Dibromo-3-chloropropane	96-12-8	1	0.50	ND	ug/L	U



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Reported:
22-Apr-2025 14:45

LMW-3-0325
25C0223-06 (Water)

Volatile Organic Compounds

Method: EPA 8260D

Sampled: 03/11/2025 11:10

Instrument: NT20 Analyst: FL

Analyzed: 03/13/2025 22:12

Analyte	CAS Number	Dilution	Reporting Limit	Result	Units	Notes
1,2,4-Trichlorobenzene	120-82-1	1	0.50	ND	ug/L	U
Hexachloro-1,3-Butadiene	87-68-3	1	0.50	ND	ug/L	U
Naphthalene	91-20-3	1	0.50	ND	ug/L	U
1,2,3-Trichlorobenzene	87-61-6	1	0.50	ND	ug/L	U
Dichlorodifluoromethane	75-71-8	1	0.20	ND	ug/L	U
<i>Surrogate: 1,2-Dichloroethane-d4</i>			<i>80-129 %</i>	<i>107</i>	<i>%</i>	
<i>Surrogate: Toluene-d8</i>			<i>80-120 %</i>	<i>99.5</i>	<i>%</i>	
<i>Surrogate: 4-Bromofluorobenzene</i>			<i>80-120 %</i>	<i>94.2</i>	<i>%</i>	
<i>Surrogate: 1,2-Dichlorobenzene-d4</i>			<i>80-120 %</i>	<i>102</i>	<i>%</i>	



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Project: Landsburg
Project Number: [none]
Project Manager: Gary Zimmerman

Reported:
22-Apr-2025 14:45

LMW-3-0325
25C0223-06 (Water)

Semivolatile Organic Compounds

Method: EPA 8270E
Instrument: NT10 Analyst: JZ

Sampled: 03/11/2025 11:10

Analyzed: 03/25/2025 22:27

Sample Preparation: Preparation Method: EPA 3520C (Liq Liq)
Preparation Batch: BNC0300
Prepared: 03/13/2025

Sample Size: 500 mL
Final Volume: 0.5 mL

Extract ID: 25C0223-06 H 01

Analyte	CAS Number	Dilution	Reporting Limit	Result	Units	Notes
Phenol	108-95-2	1	1.0	ND	ug/L	U
bis(2-chloroethyl) ether	111-44-4	1	1.0	ND	ug/L	U
2-Chlorophenol	95-57-8	1	1.0	ND	ug/L	U
1,3-Dichlorobenzene	541-73-1	1	1.0	ND	ug/L	U
1,4-Dichlorobenzene	106-46-7	1	1.0	ND	ug/L	U
Benzyl Alcohol	100-51-6	1	2.0	ND	ug/L	U
1,2-Dichlorobenzene	95-50-1	1	1.0	ND	ug/L	U
2-Methylphenol	95-48-7	1	1.0	ND	ug/L	U
2,2'-Oxybis(1-chloropropane)	108-60-1	1	1.0	ND	ug/L	U
4-Methylphenol	106-44-5	1	2.0	ND	ug/L	U
N-Nitroso-di-n-Propylamine	621-64-7	1	1.0	ND	ug/L	U
Hexachloroethane	67-72-1	1	2.0	ND	ug/L	U
Nitrobenzene	98-95-3	1	1.0	ND	ug/L	U
Isophorone	78-59-1	1	1.0	ND	ug/L	U
2-Nitrophenol	88-75-5	1	3.0	ND	ug/L	U
2,4-Dimethylphenol	105-67-9	1	3.0	ND	ug/L	U
Bis(2-Chloroethoxy)methane	111-91-1	1	1.0	ND	ug/L	U
Benzoic acid	65-85-0	1	10.0	ND	ug/L	U
2,4-Dichlorophenol	120-83-2	1	3.0	ND	ug/L	U
1,2,4-Trichlorobenzene	120-82-1	1	1.0	ND	ug/L	U
Naphthalene	91-20-3	1	1.0	ND	ug/L	U
4-Chloroaniline	106-47-8	1	5.0	ND	ug/L	U
Hexachlorobutadiene	87-68-3	1	3.0	ND	ug/L	U
4-Chloro-3-Methylphenol	59-50-7	1	3.0	ND	ug/L	U
2-Methylnaphthalene	91-57-6	1	1.0	ND	ug/L	U
Hexachlorocyclopentadiene	77-47-4	1	5.0	ND	ug/L	U
2,4,6-Trichlorophenol	88-06-2	1	3.0	ND	ug/L	U
2,4,5-Trichlorophenol	95-95-4	1	5.0	ND	ug/L	U
2-Chloronaphthalene	91-58-7	1	1.0	ND	ug/L	U
2-Nitroaniline	88-74-4	1	3.0	ND	ug/L	U
Dimethylphthalate	131-11-3	1	1.0	ND	ug/L	U
Acenaphthylene	208-96-8	1	1.0	ND	ug/L	U



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Project: Landsburg
Project Number: [none]
Project Manager: Gary Zimmerman

Reported:
22-Apr-2025 14:45

LMW-3-0325
25C0223-06 (Water)

Semivolatile Organic Compounds

Method: EPA 8270E

Sampled: 03/11/2025 11:10

Instrument: NT10 Analyst: JZ

Analyzed: 03/25/2025 22:27

Analyte	CAS Number	Dilution	Reporting Limit	Result	Units	Notes
2,6-Dinitrotoluene	606-20-2	1	3.0	ND	ug/L	U
3-Nitroaniline	99-09-2	1	3.0	ND	ug/L	U
Acenaphthene	83-32-9	1	1.0	ND	ug/L	U
2,4-Dinitrophenol	51-28-5	1	10.0	ND	ug/L	U
Dibenzofuran	132-64-9	1	1.0	ND	ug/L	U
4-Nitrophenol	100-02-7	1	5.0	ND	ug/L	U
2,4-Dinitrotoluene	121-14-2	1	3.0	ND	ug/L	U
Fluorene	86-73-7	1	1.0	ND	ug/L	U
Diethyl phthalate	84-66-2	1	1.0	ND	ug/L	U
4-Chlorophenylphenyl ether	7005-72-3	1	1.0	ND	ug/L	U
4-Nitroaniline	100-01-6	1	3.0	ND	ug/L	U
4,6-Dinitro-2-methylphenol	534-52-1	1	10.0	ND	ug/L	U
N-Nitrosodiphenylamine	86-30-6	1	1.0	ND	ug/L	U
4-Bromophenyl phenyl ether	101-55-3	1	1.0	ND	ug/L	U
Hexachlorobenzene	118-74-1	1	1.0	ND	ug/L	U
Pentachlorophenol	87-86-5	1	5.0	ND	ug/L	U
Phenanthrene	85-01-8	1	1.0	ND	ug/L	U
Anthracene	120-12-7	1	1.0	ND	ug/L	U
Carbazole	86-74-8	1	1.0	ND	ug/L	U
Di-n-Butylphthalate	84-74-2	1	1.0	ND	ug/L	U
Fluoranthene	206-44-0	1	1.0	ND	ug/L	U
Pyrene	129-00-0	1	1.0	ND	ug/L	U
Butylbenzylphthalate	85-68-7	1	1.0	ND	ug/L	U
Benzo(a)anthracene	56-55-3	1	1.0	ND	ug/L	U
3,3'-Dichlorobenzidine	91-94-1	1	10.0	ND	ug/L	U
Chrysene	218-01-9	1	1.0	ND	ug/L	U
bis(2-Ethylhexyl)phthalate	117-81-7	1	3.0	ND	ug/L	U
Di-n-Octylphthalate	117-84-0	1	1.0	ND	ug/L	U
Benzofluoranthenes, Total		1	2.0	ND	ug/L	U
Benzo(a)pyrene	50-32-8	1	1.0	ND	ug/L	U
Indeno(1,2,3-cd)pyrene	193-39-5	1	1.0	ND	ug/L	U
Dibenzo(a,h)anthracene	53-70-3	1	1.0	ND	ug/L	U
Benzo(g,h,i)perylene	191-24-2	1	1.0	ND	ug/L	U
1-Methylnaphthalene	90-12-0	1	1.0	ND	ug/L	U
Surrogate: 2-Fluorophenol			33-120 %	59.3	%	



WSP USA, Inc.
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Project: Landsburg
Project Number: [none]
Project Manager: Gary Zimmerman

Reported:
22-Apr-2025 14:45

LMW-3-0325
25C0223-06 (Water)

Semivolatile Organic Compounds

Method: EPA 8270E

Sampled: 03/11/2025 11:10

Instrument: NT10 Analyst: JZ

Analyzed: 03/25/2025 22:27

Analyte	CAS Number	Recovery	Recovery	Units	Notes
		Limits			
Surrogate: Phenol-d5		38-120 %	62.6	%	
Surrogate: 2-Chlorophenol-d4		41-120 %	69.3	%	
Surrogate: 1,2-Dichlorobenzene-d4		20-120 %	66.2	%	
Surrogate: Nitrobenzene-d5		27-120 %	73.5	%	
Surrogate: 2-Fluorobiphenyl		33-120 %	72.2	%	
Surrogate: 2,4,6-Tribromophenol		52-120 %	74.0	%	
Surrogate: p-Terphenyl-d14		28-120 %	73.8	%	



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Project: Landsburg
Project Number: [none]
Project Manager: Gary Zimmerman

Reported:
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LMW-3-0325
25C0223-06 (Water)

Semivolatile Organic Compounds

Method: EPA 8270E
Instrument: NT14 Analyst: RT

Sampled: 03/11/2025 11:10

Analyzed: 03/27/2025 18:45

Sample Preparation: Preparation Method: EPA 3520C (Liq Liq)
Preparation Batch: BNC0345
Prepared: 03/14/2025

Sample Size: 500 mL

Final Volume: 1 mL

Extract ID: 25C0223-06 I 01

Analyte	CAS Number	Dilution	Detection Limit	Reporting Limit	Result	Units	Notes
1,4-Dioxane	123-91-1	1	0.2	0.4	ND	ug/L	U
<i>Surrogate: 1,4-Dioxane-d8</i>				30-160 %	68.0	%	



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Project: Landsburg

Project Number: [none]

Project Manager: Gary Zimmerman

Reported:

22-Apr-2025 14:45

LMW-3-0325

25C0223-06 (Water)

Petroleum Hydrocarbons

Method: NWTPH-HCID

Sampled: 03/11/2025 11:10

Instrument: FID4 Analyst: JR

Analyzed: 03/17/2025 12:56

Sample Preparation:

Preparation Method: EPA 3510C SepF

Extract ID: 25C0223-06 G 01

Preparation Batch: BNC0298

Sample Size: 500 mL

Prepared: 03/13/2025

Final Volume: 1 mL

Analyte	CAS Number	Dilution	Reporting Limit	Result	Units	Notes
Gasoline Range Organics (Tol-C12)	GRO	1	0.25	ND	mg/L	U
Diesel Range Organics (C12-C24)	DRO	1	0.50	ND	mg/L	U
Motor Oil Range Organics (C24-C38)	RRO	1	1.00	ND	mg/L	U
Surrogate: o-Terphenyl			50-150 %	104	%	
Surrogate: n-Triacontane			50-150 %	110	%	



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Reported:
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LMW-3-0325
25C0223-06 (Water)

Chlorinated Pesticides

Method: EPA 8081B
Instrument: ECD6 Analyst: RT

Sampled: 03/11/2025 11:10

Analyzed: 04/10/2025 15:45

Sample Preparation: Preparation Method: EPA 3510C SepF
Preparation Batch: BNC0335
Prepared: 03/14/2025

Sample Size: 500 mL
Final Volume: 5 mL

Extract ID: 25C0223-06 B 01

Sample Cleanup: Cleanup Method: Silica Gel
Cleanup Batch: CNC0125
Cleaned: 26-Mar-2025

Initial Volume: 5 uL
Final Volume: 5 uL

Extract ID: 25C0223-06 B 01

Analyte	CAS Number	Dilution	Reporting Limit	Result	Units	Notes
alpha-BHC	319-84-6	1	0.025	ND	ug/L	U
beta-BHC	319-85-7	1	0.025	ND	ug/L	U
gamma-BHC (Lindane)	58-89-9	1	0.025	ND	ug/L	U
delta-BHC	319-86-8	1	0.025	ND	ug/L	U
Heptachlor	76-44-8	1	0.025	ND	ug/L	U
Aldrin	309-00-2	1	0.025	ND	ug/L	U
Heptachlor Epoxide	1024-57-3	1	0.050	ND	ug/L	U
trans-Chlordane (beta-Chlordane)	5103-74-2	1	0.025	ND	ug/L	U
cis-Chlordane (alpha-chlordane)	5103-71-9	1	0.025	ND	ug/L	U
Endosulfan I	959-98-8	1	0.025	ND	ug/L	U
4,4'-DDE	72-55-9	1	0.050	ND	ug/L	U
Dieldrin	60-57-1	1	0.050	ND	ug/L	U
Endrin	72-20-8	1	0.050	ND	ug/L	U
Endosulfan II	33213-65-9	1	0.050	ND	ug/L	U
4,4'-DDD	72-54-8	1	0.050	ND	ug/L	U
Endrin Aldehyde	7421-93-4	1	0.050	ND	ug/L	U
4,4'-DDT	50-29-3	1	0.050	ND	ug/L	U
Endosulfan Sulfate	1031-07-8	1	0.050	ND	ug/L	U
Endrin Ketone	53494-70-5	1	0.050	ND	ug/L	U
Methoxychlor	72-43-5	1	0.250	ND	ug/L	U
Toxaphene	8001-35-2	1	1.25	ND	ug/L	U
Surrogate: Decachlorobiphenyl			11-144 %	66.2	%	
Surrogate: Decachlorobiphenyl [2C]			11-144 %	71.8	%	
Surrogate: Tetrachlorometaxylene			30-120 %	39.7	%	
Surrogate: Tetrachlorometaxylene [2C]			30-120 %	50.0	%	



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Project Manager: Gary Zimmerman

Reported:

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LMW-3-0325

25C0223-06 (Water)

Aroclor PCB

Method: EPA 8082A

Sampled: 03/11/2025 11:10

Instrument: ECD7 Analyst: NRB

Analyzed: 03/19/2025 19:47

Sample Preparation:	Preparation Method: EPA 3510C SepF	Sample Size: 1000 mL	Extract ID: 25C0223-06 A 01
	Preparation Batch: BNC0299		
	Prepared: 03/13/2025		
Sample Cleanup:	Cleanup Method: Sulfuric Acid	Initial Volume: 0.5 uL	Extract ID: 25C0223-06 A 01
	Cleanup Batch: CNC0075		
	Cleaned: 18-Mar-2025		
Sample Cleanup:	Cleanup Method: Sulfur	Initial Volume: 0.5 uL	Extract ID: 25C0223-06 A 01
	Cleanup Batch: CNC0076		
	Cleaned: 18-Mar-2025		

Analyte	CAS Number	Dilution	Reporting Limit	Result	Units	Notes
Aroclor 1016	12674-11-2	1	0.010	ND	ug/L	U
Aroclor 1221	11104-28-2	1	0.010	ND	ug/L	U
Aroclor 1232	11141-16-5	1	0.010	ND	ug/L	U
Aroclor 1242	53469-21-9	1	0.010	ND	ug/L	U
Aroclor 1248	12672-29-6	1	0.010	ND	ug/L	U
Aroclor 1254	11097-69-1	1	0.010	ND	ug/L	U
Aroclor 1260	11096-82-5	1	0.010	ND	ug/L	U
Surrogate: Decachlorobiphenyl			29-120 %	56.8	%	P1
Surrogate: Tetrachlorometaxylene			32-120 %	81.8	%	
Surrogate: Decachlorobiphenyl [2C]			29-120 %	85.2	%	P1
Surrogate: Tetrachlorometaxylene [2C]			32-120 %	70.1	%	



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Reported:
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LMW-3-0325
25C0223-06 (Water)

Metals and Metallic Compounds

Method: EPA 200.8

Sampled: 03/11/2025 11:10

Instrument: ICPMS2 Analyst: HAL

Analyzed: 03/21/2025 04:39

Sample Preparation:

Preparation Method: REN - EPA 3010A M

Extract ID: 25C0223-06 M 02

Preparation Batch: BNC0383

Sample Size: 25 mL

Prepared: 03/15/2025

Final Volume: 25 mL

Analyte	CAS Number	Dilution	Detection Limit	Reporting Limit	Result	Units	Notes
Antimony	7440-36-0	1	0.150	3.00	ND	ug/L	U
Arsenic UCT	7440-38-2	1	0.100	3.00	0.649	ug/L	J
Lead	7439-92-1	1	0.100	10.0	ND	ug/L	U
Selenium UCT	7782-49-2	1	0.500	25.0	ND	ug/L	U
Thallium	7440-28-0	1	0.100	2.00	ND	ug/L	U



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Reported:
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LMW-3-0325
25C0223-06 (Water)

Metals and Metallic Compounds

Method: EPA 6010D
Instrument: ICP3 Analyst: SH

Sampled: 03/11/2025 11:10

Analyzed: 03/26/2025 17:20

Sample Preparation: Preparation Method: TWC EPA 3010A
Preparation Batch: BNC0360
Prepared: 03/14/2025

Sample Size: 25 mL
Final Volume: 25 mL

Extract ID: 25C0223-06 M 01

Analyte	CAS Number	Dilution	Detection Limit	Reporting Limit	Result	Units	Notes
Aluminum	7429-90-5	1	0.0210	0.0700	ND	mg/L	U
Barium	7440-39-3	1	0.0007	0.0060	0.0689	mg/L	
Beryllium	7440-41-7	1	0.0002	0.0010	ND	mg/L	U
Cadmium	7440-43-9	1	0.0005	0.0020	ND	mg/L	U
Calcium	7440-70-2	1	0.0300	0.0500	36.3	mg/L	
Chromium	7440-47-3	1	0.0020	0.0090	ND	mg/L	U
Cobalt	7440-48-4	1	0.0025	0.0050	ND	mg/L	U
Copper	7440-50-8	1	0.0030	0.0050	ND	mg/L	U
Iron	7439-89-6	1	0.0540	0.100	ND	mg/L	U
Magnesium	7439-95-4	1	0.0250	0.0500	15.1	mg/L	
Nickel	7440-02-0	1	0.0050	0.0100	ND	mg/L	U
Potassium	7440-09-7	1	0.250	0.500	1.56	mg/L	
Silver	7440-22-4	1	0.0015	0.0030	ND	mg/L	U
Sodium	7440-23-5	1	0.250	0.500	9.92	mg/L	
Vanadium	7440-62-2	1	0.0015	0.0030	ND	mg/L	U
Zinc	7440-66-6	1	0.0150	0.0300	ND	mg/L	U



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Reported:
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LMW-3-0325
25C0223-06 (Water)

Metals and Metallic Compounds

Method: EPA 7470A

Sampled: 03/11/2025 11:10

Instrument: HYDRA Analyst: AMS

Analyzed: 03/19/2025 12:35

Sample Preparation:

Preparation Method: TWM EPA 7470A

Extract ID: 25C0223-06 M

Preparation Batch: BNC0366

Sample Size: 20 mL

Prepared: 03/16/2025

Final Volume: 20 mL

Analyte	CAS Number	Dilution	Reporting Limit	Result	Units	Notes
Mercury	7439-97-6	1	0.00100	ND	mg/L	U



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Reported:
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LMW-3-0325
25C0223-06RE1 (Water)

Metals and Metallic Compounds

Method: EPA 6010D

Sampled: 03/11/2025 11:10

Instrument: ICP3 Analyst: SH

Analyzed: 04/01/2025 17:47

Sample Preparation:

Preparation Method: TWC EPA 3010A

Extract ID: 25C0223-06RE1 M

Preparation Batch: BNC0737

Sample Size: 25 mL

Prepared: 03/28/2025

Final Volume: 25 mL

Analyte	CAS Number	Dilution	Detection Limit	Reporting Limit	Result	Units	Notes
Manganese	7439-96-5	1	0.0020	0.0040	0.0268	mg/L	



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Reported:
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LMW-5-0325
25C0223-07 (Water)

Volatile Organic Compounds

Method: EPA 8260D
Instrument: NT20 Analyst: FL

Sampled: 03/11/2025 12:05

Analyzed: 03/13/2025 22:36

Sample Preparation: Preparation Method: EPA 5030C (Purge and Trap)
Preparation Batch: BNC0328 Sample Size: 10 mL
Prepared: 03/13/2025 Final Volume: 10 mL

Extract ID: 25C0223-07 N

Analyte	CAS Number	Dilution	Reporting Limit	Result	Units	Notes
Chloromethane	74-87-3	1	0.50	ND	ug/L	U
Vinyl Chloride	75-01-4	1	0.10	ND	ug/L	U
Bromomethane	74-83-9	1	1.00	ND	ug/L	U
Chloroethane	75-00-3	1	0.20	ND	ug/L	U
Trichlorofluoromethane	75-69-4	1	0.20	ND	ug/L	U
Acrolein	107-02-8	1	5.00	ND	ug/L	U
1,1,2-Trichloro-1,2,2-Trifluoroethane	76-13-1	1	0.20	ND	ug/L	U
Acetone	67-64-1	1	5.00	ND	ug/L	U
1,1-Dichloroethene	75-35-4	1	0.20	ND	ug/L	U
Iodomethane	74-88-4	1	1.00	ND	ug/L	U
Methylene Chloride	75-09-2	1	1.00	ND	ug/L	U
Acrylonitrile	107-13-1	1	1.00	ND	ug/L	U
Carbon Disulfide	75-15-0	1	0.20	ND	ug/L	U
trans-1,2-Dichloroethene	156-60-5	1	0.20	ND	ug/L	U
Vinyl Acetate	108-05-4	1	0.20	ND	ug/L	U
1,1-Dichloroethane	75-34-3	1	0.20	ND	ug/L	U
2-Butanone	78-93-3	1	5.00	ND	ug/L	U
2,2-Dichloropropane	594-20-7	1	0.20	ND	ug/L	U
cis-1,2-Dichloroethene	156-59-2	1	0.20	ND	ug/L	U
Chloroform	67-66-3	1	0.20	ND	ug/L	U
Bromochloromethane	74-97-5	1	0.20	ND	ug/L	U
1,1,1-Trichloroethane	71-55-6	1	0.20	ND	ug/L	U
1,1-Dichloropropene	563-58-6	1	0.10	ND	ug/L	U
Carbon tetrachloride	56-23-5	1	0.20	ND	ug/L	U
1,2-Dichloroethane	107-06-2	1	0.20	ND	ug/L	U
Benzene	71-43-2	1	0.20	ND	ug/L	U
Trichloroethene	79-01-6	1	0.20	ND	ug/L	U
1,2-Dichloropropane	78-87-5	1	0.20	ND	ug/L	U
Bromodichloromethane	75-27-4	1	0.20	ND	ug/L	U
Dibromomethane	74-95-3	1	0.20	ND	ug/L	U
2-Chloroethyl vinyl ether	110-75-8	1	1.00	ND	ug/L	U
4-Methyl-2-Pentanone	108-10-1	1	2.50	ND	ug/L	U



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Reported:
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LMW-5-0325
25C0223-07 (Water)

Volatile Organic Compounds

Method: EPA 8260D

Sampled: 03/11/2025 12:05

Instrument: NT20 Analyst: FL

Analyzed: 03/13/2025 22:36

Analyte	CAS Number	Dilution	Reporting Limit	Result	Units	Notes
cis-1,3-Dichloropropene	10061-01-5	1	0.20	ND	ug/L	U
Toluene	108-88-3	1	0.20	ND	ug/L	U
trans-1,3-Dichloropropene	10061-02-6	1	0.20	ND	ug/L	U
2-Hexanone	591-78-6	1	5.00	ND	ug/L	U
1,1,2-Trichloroethane	79-00-5	1	0.20	ND	ug/L	U
1,3-Dichloropropane	142-28-9	1	0.10	ND	ug/L	U
Tetrachloroethene	127-18-4	1	0.20	ND	ug/L	U
Dibromochloromethane	124-48-1	1	0.20	ND	ug/L	U
1,2-Dibromoethane	106-93-4	1	0.10	ND	ug/L	U
Chlorobenzene	108-90-7	1	0.20	ND	ug/L	U
Ethylbenzene	100-41-4	1	0.20	ND	ug/L	U
1,1,1,2-Tetrachloroethane	630-20-6	1	0.20	ND	ug/L	U
m,p-Xylene	179601-23-1	1	0.40	ND	ug/L	U
o-Xylene	95-47-6	1	0.20	ND	ug/L	U
Xylenes, total	1330-20-7	1	0.60	ND	ug/L	U
Styrene	100-42-5	1	0.20	ND	ug/L	U
Bromoform	75-25-2	1	0.20	ND	ug/L	U
1,1,2,2-Tetrachloroethane	79-34-5	1	0.20	ND	ug/L	U
1,2,3-Trichloropropane	96-18-4	1	0.25	ND	ug/L	U
trans-1,4-Dichloro 2-Butene	110-57-6	1	1.00	ND	ug/L	U
n-Propylbenzene	103-65-1	1	0.20	ND	ug/L	U
Bromobenzene	108-86-1	1	0.20	ND	ug/L	U
Isopropyl Benzene	98-82-8	1	0.20	ND	ug/L	U
2-Chlorotoluene	95-49-8	1	0.10	ND	ug/L	U
4-Chlorotoluene	106-43-4	1	0.20	ND	ug/L	U
t-Butylbenzene	98-06-6	1	0.20	ND	ug/L	U
1,3,5-Trimethylbenzene	108-67-8	1	0.20	ND	ug/L	U
1,2,4-Trimethylbenzene	95-63-6	1	0.20	ND	ug/L	U
s-Butylbenzene	135-98-8	1	0.20	ND	ug/L	U
4-Isopropyl Toluene	99-87-6	1	0.20	ND	ug/L	U
1,3-Dichlorobenzene	541-73-1	1	0.20	ND	ug/L	U
1,4-Dichlorobenzene	106-46-7	1	0.20	ND	ug/L	U
n-Butylbenzene	104-51-8	1	0.20	ND	ug/L	U
1,2-Dichlorobenzene	95-50-1	1	0.20	ND	ug/L	U
1,2-Dibromo-3-chloropropane	96-12-8	1	0.50	ND	ug/L	U



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Reported:
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LMW-5-0325
25C0223-07 (Water)

Volatile Organic Compounds

Method: EPA 8260D

Sampled: 03/11/2025 12:05

Instrument: NT20 Analyst: FL

Analyzed: 03/13/2025 22:36

Analyte	CAS Number	Dilution	Reporting Limit	Result	Units	Notes
1,2,4-Trichlorobenzene	120-82-1	1	0.50	ND	ug/L	U
Hexachloro-1,3-Butadiene	87-68-3	1	0.50	ND	ug/L	U
Naphthalene	91-20-3	1	0.50	ND	ug/L	U
1,2,3-Trichlorobenzene	87-61-6	1	0.50	ND	ug/L	U
Dichlorodifluoromethane	75-71-8	1	0.20	ND	ug/L	U
Surrogate: 1,2-Dichloroethane-d4			80-129 %	104	%	
Surrogate: Toluene-d8			80-120 %	98.0	%	
Surrogate: 4-Bromofluorobenzene			80-120 %	94.0	%	
Surrogate: 1,2-Dichlorobenzene-d4			80-120 %	104	%	



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Project Number: [none]
Project Manager: Gary Zimmerman

Reported:
22-Apr-2025 14:45

LMW-5-0325
25C0223-07 (Water)

Semivolatile Organic Compounds

Method: EPA 8270E
Instrument: NT10 Analyst: JZ

Sampled: 03/11/2025 12:05

Analyzed: 03/25/2025 23:08

Sample Preparation: Preparation Method: EPA 3520C (Liq Liq)
Preparation Batch: BNC0300
Prepared: 03/13/2025

Sample Size: 500 mL
Final Volume: 0.5 mL

Extract ID: 25C0223-07 H 01

Analyte	CAS Number	Dilution	Reporting Limit	Result	Units	Notes
Phenol	108-95-2	1	1.0	ND	ug/L	U
bis(2-chloroethyl) ether	111-44-4	1	1.0	ND	ug/L	U
2-Chlorophenol	95-57-8	1	1.0	ND	ug/L	U
1,3-Dichlorobenzene	541-73-1	1	1.0	ND	ug/L	U
1,4-Dichlorobenzene	106-46-7	1	1.0	ND	ug/L	U
Benzyl Alcohol	100-51-6	1	2.0	ND	ug/L	U
1,2-Dichlorobenzene	95-50-1	1	1.0	ND	ug/L	U
2-Methylphenol	95-48-7	1	1.0	ND	ug/L	U
2,2'-Oxybis(1-chloropropane)	108-60-1	1	1.0	ND	ug/L	U
4-Methylphenol	106-44-5	1	2.0	ND	ug/L	U
N-Nitroso-di-n-Propylamine	621-64-7	1	1.0	ND	ug/L	U
Hexachloroethane	67-72-1	1	2.0	ND	ug/L	U
Nitrobenzene	98-95-3	1	1.0	ND	ug/L	U
Isophorone	78-59-1	1	1.0	ND	ug/L	U
2-Nitrophenol	88-75-5	1	3.0	ND	ug/L	U
2,4-Dimethylphenol	105-67-9	1	3.0	ND	ug/L	U
Bis(2-Chloroethoxy)methane	111-91-1	1	1.0	ND	ug/L	U
Benzoic acid	65-85-0	1	10.0	ND	ug/L	U
2,4-Dichlorophenol	120-83-2	1	3.0	ND	ug/L	U
1,2,4-Trichlorobenzene	120-82-1	1	1.0	ND	ug/L	U
Naphthalene	91-20-3	1	1.0	ND	ug/L	U
4-Chloroaniline	106-47-8	1	5.0	ND	ug/L	U
Hexachlorobutadiene	87-68-3	1	3.0	ND	ug/L	U
4-Chloro-3-Methylphenol	59-50-7	1	3.0	ND	ug/L	U
2-Methylnaphthalene	91-57-6	1	1.0	ND	ug/L	U
Hexachlorocyclopentadiene	77-47-4	1	5.0	ND	ug/L	U
2,4,6-Trichlorophenol	88-06-2	1	3.0	ND	ug/L	U
2,4,5-Trichlorophenol	95-95-4	1	5.0	ND	ug/L	U
2-Chloronaphthalene	91-58-7	1	1.0	ND	ug/L	U
2-Nitroaniline	88-74-4	1	3.0	ND	ug/L	U
Dimethylphthalate	131-11-3	1	1.0	ND	ug/L	U
Acenaphthylene	208-96-8	1	1.0	ND	ug/L	U



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Project: Landsburg
Project Number: [none]
Project Manager: Gary Zimmerman

Reported:
22-Apr-2025 14:45

LMW-5-0325
25C0223-07 (Water)

Semivolatile Organic Compounds

Method: EPA 8270E

Sampled: 03/11/2025 12:05

Instrument: NT10 Analyst: JZ

Analyzed: 03/25/2025 23:08

Analyte	CAS Number	Dilution	Reporting Limit	Result	Units	Notes
2,6-Dinitrotoluene	606-20-2	1	3.0	ND	ug/L	U
3-Nitroaniline	99-09-2	1	3.0	ND	ug/L	U
Acenaphthene	83-32-9	1	1.0	ND	ug/L	U
2,4-Dinitrophenol	51-28-5	1	10.0	ND	ug/L	U
Dibenzofuran	132-64-9	1	1.0	ND	ug/L	U
4-Nitrophenol	100-02-7	1	5.0	ND	ug/L	U
2,4-Dinitrotoluene	121-14-2	1	3.0	ND	ug/L	U
Fluorene	86-73-7	1	1.0	ND	ug/L	U
Diethyl phthalate	84-66-2	1	1.0	ND	ug/L	U
4-Chlorophenylphenyl ether	7005-72-3	1	1.0	ND	ug/L	U
4-Nitroaniline	100-01-6	1	3.0	ND	ug/L	U
4,6-Dinitro-2-methylphenol	534-52-1	1	10.0	ND	ug/L	U
N-Nitrosodiphenylamine	86-30-6	1	1.0	ND	ug/L	U
4-Bromophenyl phenyl ether	101-55-3	1	1.0	ND	ug/L	U
Hexachlorobenzene	118-74-1	1	1.0	ND	ug/L	U
Pentachlorophenol	87-86-5	1	5.0	ND	ug/L	U
Phenanthrene	85-01-8	1	1.0	ND	ug/L	U
Anthracene	120-12-7	1	1.0	ND	ug/L	U
Carbazole	86-74-8	1	1.0	ND	ug/L	U
Di-n-Butylphthalate	84-74-2	1	1.0	ND	ug/L	U
Fluoranthene	206-44-0	1	1.0	ND	ug/L	U
Pyrene	129-00-0	1	1.0	ND	ug/L	U
Butylbenzylphthalate	85-68-7	1	1.0	ND	ug/L	U
Benzo(a)anthracene	56-55-3	1	1.0	ND	ug/L	U
3,3'-Dichlorobenzidine	91-94-1	1	10.0	ND	ug/L	U
Chrysene	218-01-9	1	1.0	ND	ug/L	U
bis(2-Ethylhexyl)phthalate	117-81-7	1	3.0	ND	ug/L	U
Di-n-Octylphthalate	117-84-0	1	1.0	ND	ug/L	U
Benzofluoranthenes, Total		1	2.0	ND	ug/L	U
Benzo(a)pyrene	50-32-8	1	1.0	ND	ug/L	U
Indeno(1,2,3-cd)pyrene	193-39-5	1	1.0	ND	ug/L	U
Dibenzo(a,h)anthracene	53-70-3	1	1.0	ND	ug/L	U
Benzo(g,h,i)perylene	191-24-2	1	1.0	ND	ug/L	U
1-Methylnaphthalene	90-12-0	1	1.0	ND	ug/L	U
Surrogate: 2-Fluorophenol			33-120 %	62.8	%	



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Project Manager: Gary Zimmerman

Reported:
22-Apr-2025 14:45

LMW-5-0325
25C0223-07 (Water)

Semivolatile Organic Compounds

Method: EPA 8270E

Sampled: 03/11/2025 12:05

Instrument: NT10 Analyst: JZ

Analyzed: 03/25/2025 23:08

Analyte	CAS Number	Recovery	Recovery	Units	Notes
		Limits			
Surrogate: Phenol-d5		38-120 %	61.9	%	
Surrogate: 2-Chlorophenol-d4		41-120 %	69.6	%	
Surrogate: 1,2-Dichlorobenzene-d4		20-120 %	63.6	%	
Surrogate: Nitrobenzene-d5		27-120 %	72.0	%	
Surrogate: 2-Fluorobiphenyl		33-120 %	70.5	%	
Surrogate: 2,4,6-Tribromophenol		52-120 %	77.4	%	
Surrogate: p-Terphenyl-d14		28-120 %	72.9	%	



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Reported:
22-Apr-2025 14:45

LMW-5-0325
25C0223-07 (Water)

Semivolatile Organic Compounds

Method: EPA 8270E
Instrument: NT14 Analyst: RT

Sampled: 03/11/2025 12:05

Analyzed: 03/27/2025 19:02

Sample Preparation: Preparation Method: EPA 3520C (Liq Liq)
Preparation Batch: BNC0345
Prepared: 03/14/2025

Sample Size: 500 mL

Final Volume: 1 mL

Extract ID: 25C0223-07 I 01

Analyte	CAS Number	Dilution	Detection Limit	Reporting Limit	Result	Units	Notes
1,4-Dioxane	123-91-1	1	0.2	0.4	ND	ug/L	U
Surrogate: 1,4-Dioxane-d8				30-160 %	0.643	%	*



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Project Manager: Gary Zimmerman

Reported:
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LMW-5-0325
25C0223-07 (Water)

Petroleum Hydrocarbons

Method: NWTPH-HCID
Instrument: FID4 Analyst: JR

Sampled: 03/11/2025 12:05

Analyzed: 03/17/2025 13:16

Sample Preparation: Preparation Method: EPA 3510C SepF
Preparation Batch: BNC0298
Prepared: 03/13/2025

Sample Size: 500 mL
Final Volume: 1 mL

Extract ID: 25C0223-07 G 01

Analyte	CAS Number	Dilution	Reporting Limit	Result	Units	Notes
Gasoline Range Organics (Tol-C12)	GRO	1	0.25	ND	mg/L	U
Diesel Range Organics (C12-C24)	DRO	1	0.50	ND	mg/L	U
Motor Oil Range Organics (C24-C38)	RRO	1	1.00	ND	mg/L	U
Surrogate: o-Terphenyl			50-150 %	104	%	
Surrogate: n-Triacontane			50-150 %	108	%	



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Project Manager: Gary Zimmerman

Reported:

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LMW-5-0325

25C0223-07 (Water)

Chlorinated Pesticides

Method: EPA 8081B

Sampled: 03/11/2025 12:05

Instrument: ECD6 Analyst: RT

Analyzed: 04/10/2025 16:03

Sample Preparation:

Preparation Method: EPA 3510C SepF

Extract ID: 25C0223-07 B 01

Preparation Batch: BNC0335

Sample Size: 500 mL

Prepared: 03/14/2025

Final Volume: 5 mL

Sample Cleanup:

Cleanup Method: Silica Gel

Extract ID: 25C0223-07 B 01

Cleanup Batch: CNC0125

Initial Volume: 5 uL

Cleaned: 26-Mar-2025

Final Volume: 5 uL

Analyte	CAS Number	Dilution	Reporting Limit	Result	Units	Notes
alpha-BHC	319-84-6	1	0.025	ND	ug/L	U
beta-BHC	319-85-7	1	0.025	ND	ug/L	U
gamma-BHC (Lindane)	58-89-9	1	0.025	ND	ug/L	U
delta-BHC	319-86-8	1	0.025	ND	ug/L	U
Heptachlor	76-44-8	1	0.025	ND	ug/L	U
Aldrin	309-00-2	1	0.025	ND	ug/L	U
Heptachlor Epoxide	1024-57-3	1	0.050	ND	ug/L	U
trans-Chlordane (beta-Chlordane)	5103-74-2	1	0.025	ND	ug/L	U
cis-Chlordane (alpha-chlordane)	5103-71-9	1	0.025	ND	ug/L	U
Endosulfan I	959-98-8	1	0.025	ND	ug/L	U
4,4'-DDE	72-55-9	1	0.050	ND	ug/L	U
Dieldrin	60-57-1	1	0.050	ND	ug/L	U
Endrin	72-20-8	1	0.050	ND	ug/L	U
Endosulfan II	33213-65-9	1	0.050	ND	ug/L	U
4,4'-DDD	72-54-8	1	0.050	ND	ug/L	U
Endrin Aldehyde	7421-93-4	1	0.050	ND	ug/L	U
4,4'-DDT	50-29-3	1	0.050	ND	ug/L	U
Endosulfan Sulfate	1031-07-8	1	0.050	ND	ug/L	U
Endrin Ketone	53494-70-5	1	0.050	ND	ug/L	U
Methoxychlor	72-43-5	1	0.250	ND	ug/L	U
Toxaphene	8001-35-2	1	1.25	ND	ug/L	U

Surrogate: Decachlorobiphenyl

11-144 %

82.7 %

Surrogate: Decachlorobiphenyl [2C]

11-144 %

88.6 %

Surrogate: Tetrachlorometaxylene

30-120 %

51.4 %

Surrogate: Tetrachlorometaxylene [2C]

30-120 %

63.1 %



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Project: Landsburg

Project Number: [none]

Project Manager: Gary Zimmerman

Reported:

22-Apr-2025 14:45

LMW-5-0325

25C0223-07 (Water)

Aroclor PCB

Method: EPA 8082A

Sampled: 03/11/2025 12:05

Instrument: ECD7 Analyst: NRB

Analyzed: 03/19/2025 20:08

Sample Preparation:	Preparation Method: EPA 3510C SepF	Sample Size: 1000 mL	Extract ID: 25C0223-07 A 01
	Preparation Batch: BNC0299		
	Prepared: 03/13/2025		
Sample Cleanup:	Cleanup Method: Sulfuric Acid	Initial Volume: 0.5 uL	Extract ID: 25C0223-07 A 01
	Cleanup Batch: CNC0075		
	Cleaned: 18-Mar-2025		
Sample Cleanup:	Cleanup Method: Sulfur	Initial Volume: 0.5 uL	Extract ID: 25C0223-07 A 01
	Cleanup Batch: CNC0076		
	Cleaned: 18-Mar-2025		

Analyte	CAS Number	Dilution	Reporting Limit	Result	Units	Notes
Aroclor 1016	12674-11-2	1	0.010	ND	ug/L	U
Aroclor 1221	11104-28-2	1	0.010	ND	ug/L	U
Aroclor 1232	11141-16-5	1	0.010	ND	ug/L	U
Aroclor 1242	53469-21-9	1	0.010	ND	ug/L	U
Aroclor 1248	12672-29-6	1	0.010	ND	ug/L	U
Aroclor 1254	11097-69-1	1	0.010	ND	ug/L	U
Aroclor 1260	11096-82-5	1	0.010	ND	ug/L	U
Surrogate: Decachlorobiphenyl			29-120 %	55.0	%	P1
Surrogate: Tetrachlorometaxylene			32-120 %	77.6	%	
Surrogate: Decachlorobiphenyl [2C]			29-120 %	81.2	%	P1
Surrogate: Tetrachlorometaxylene [2C]			32-120 %	69.5	%	



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Reported:
22-Apr-2025 14:45

LMW-5-0325
25C0223-07 (Water)

Metals and Metallic Compounds

Method: EPA 200.8
Instrument: ICPMS2 Analyst: HAL

Sampled: 03/11/2025 12:05

Analyzed: 03/21/2025 05:19

Sample Preparation: Preparation Method: REN - EPA 3010A M
Preparation Batch: BNC0383 Sample Size: 25 mL
Prepared: 03/15/2025 Final Volume: 25 mL

Extract ID: 25C0223-07 M 01

Analyte	CAS Number	Dilution	Detection Limit	Reporting Limit	Result	Units	Notes
Antimony	7440-36-0	1	0.150	3.00	ND	ug/L	U
Arsenic UCT	7440-38-2	1	0.100	3.00	ND	ug/L	U
Lead	7439-92-1	1	0.100	10.0	ND	ug/L	U
Selenium UCT	7782-49-2	1	0.500	25.0	ND	ug/L	U
Thallium	7440-28-0	1	0.100	2.00	ND	ug/L	U



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Reported:
22-Apr-2025 14:45

LMW-5-0325
25C0223-07 (Water)

Metals and Metallic Compounds

Method: EPA 6010D
Instrument: ICP3 Analyst: SH

Sampled: 03/11/2025 12:05

Analyzed: 03/26/2025 17:23

Sample Preparation: Preparation Method: TWC EPA 3010A
Preparation Batch: BNC0360
Prepared: 03/14/2025

Sample Size: 25 mL
Final Volume: 25 mL

Extract ID: 25C0223-07 M 01

Analyte	CAS Number	Dilution	Detection Limit	Reporting Limit	Result	Units	Notes
Aluminum	7429-90-5	1	0.0210	0.0700	ND	mg/L	U
Barium	7440-39-3	1	0.0007	0.0060	0.253	mg/L	
Beryllium	7440-41-7	1	0.0002	0.0010	ND	mg/L	U
Cadmium	7440-43-9	1	0.0005	0.0020	ND	mg/L	U
Calcium	7440-70-2	1	0.0300	0.0500	80.2	mg/L	
Chromium	7440-47-3	1	0.0020	0.0090	ND	mg/L	U
Cobalt	7440-48-4	1	0.0025	0.0050	ND	mg/L	U
Copper	7440-50-8	1	0.0030	0.0050	ND	mg/L	U
Iron	7439-89-6	1	0.0540	0.100	0.582	mg/L	
Magnesium	7439-95-4	1	0.0250	0.0500	42.5	mg/L	
Manganese	7439-96-5	1	0.0020	0.0040	0.203	mg/L	B
Nickel	7440-02-0	1	0.0050	0.0100	ND	mg/L	U
Potassium	7440-09-7	1	0.250	0.500	2.32	mg/L	
Silver	7440-22-4	1	0.0015	0.0030	ND	mg/L	U
Sodium	7440-23-5	1	0.250	0.500	14.6	mg/L	
Vanadium	7440-62-2	1	0.0015	0.0030	ND	mg/L	U
Zinc	7440-66-6	1	0.0150	0.0300	ND	mg/L	U



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Reported:
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LMW-5-0325
25C0223-07 (Water)

Metals and Metallic Compounds

Method: EPA 7470A	Sampled: 03/11/2025 12:05
Instrument: HYDRA Analyst: AMS	Analyzed: 03/19/2025 12:38
Sample Preparation:	Preparation Method: TWM EPA 7470A
	Preparation Batch: BNC0366
	Prepared: 03/16/2025
	Sample Size: 20 mL
	Final Volume: 20 mL
	Extract ID: 25C0223-07 M

Analyte	CAS Number	Dilution	Reporting Limit	Result	Units	Notes
Mercury	7439-97-6	1	0.00100	ND	mg/L	U



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Reported:
22-Apr-2025 14:45

LMW-5-0325
25C0223-07RE1 (Water)

Semivolatile Organic Compounds

Method: EPA 8270E
Instrument: NT14 Analyst: RT

Sampled: 03/11/2025 12:05

Analyzed: 04/07/2025 16:32

Sample Preparation: Preparation Method: EPA 3520C (Liq Liq) Sample Size: 500 mL
Preparation Batch: BNC0753 Final Volume: 1 mL
Prepared: 04/01/2025 Extract ID: 25C0223-07RE1 C 01

Analyte	CAS Number	Dilution	Detection Limit	Reporting Limit	Result	Units	Notes
1,4-Dioxane	123-91-1	1	0.2	0.4	ND	ug/L	H, U
Surrogate: 1,4-Dioxane-d8				30-160 %	61.5	%	H



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Project: Landsburg
Project Number: [none]
Project Manager: Gary Zimmerman

Reported:
22-Apr-2025 14:45

LMW-8-0325
25C0223-08 (Water)

Volatile Organic Compounds

Method: EPA 8260D
Instrument: NT20 Analyst: FL

Sampled: 03/11/2025 13:05

Analyzed: 03/13/2025 22:59

Sample Preparation: Preparation Method: EPA 5030C (Purge and Trap)
Preparation Batch: BNC0328 Sample Size: 10 mL
Prepared: 03/13/2025 Final Volume: 10 mL

Extract ID: 25C0223-08 N

Analyte	CAS Number	Dilution	Reporting Limit	Result	Units	Notes
Chloromethane	74-87-3	1	0.50	ND	ug/L	U
Vinyl Chloride	75-01-4	1	0.10	ND	ug/L	U
Bromomethane	74-83-9	1	1.00	ND	ug/L	U
Chloroethane	75-00-3	1	0.20	ND	ug/L	U
Trichlorofluoromethane	75-69-4	1	0.20	ND	ug/L	U
Acrolein	107-02-8	1	5.00	ND	ug/L	U
1,1,2-Trichloro-1,2,2-Trifluoroethane	76-13-1	1	0.20	ND	ug/L	U
Acetone	67-64-1	1	5.00	ND	ug/L	U
1,1-Dichloroethene	75-35-4	1	0.20	ND	ug/L	U
Iodomethane	74-88-4	1	1.00	ND	ug/L	U
Methylene Chloride	75-09-2	1	1.00	ND	ug/L	U
Acrylonitrile	107-13-1	1	1.00	ND	ug/L	U
Carbon Disulfide	75-15-0	1	0.20	ND	ug/L	U
trans-1,2-Dichloroethene	156-60-5	1	0.20	ND	ug/L	U
Vinyl Acetate	108-05-4	1	0.20	ND	ug/L	U
1,1-Dichloroethane	75-34-3	1	0.20	ND	ug/L	U
2-Butanone	78-93-3	1	5.00	ND	ug/L	U
2,2-Dichloropropane	594-20-7	1	0.20	ND	ug/L	U
cis-1,2-Dichloroethene	156-59-2	1	0.20	ND	ug/L	U
Chloroform	67-66-3	1	0.20	ND	ug/L	U
Bromochloromethane	74-97-5	1	0.20	ND	ug/L	U
1,1,1-Trichloroethane	71-55-6	1	0.20	ND	ug/L	U
1,1-Dichloropropene	563-58-6	1	0.10	ND	ug/L	U
Carbon tetrachloride	56-23-5	1	0.20	ND	ug/L	U
1,2-Dichloroethane	107-06-2	1	0.20	ND	ug/L	U
Benzene	71-43-2	1	0.20	ND	ug/L	U
Trichloroethene	79-01-6	1	0.20	ND	ug/L	U
1,2-Dichloropropane	78-87-5	1	0.20	ND	ug/L	U
Bromodichloromethane	75-27-4	1	0.20	ND	ug/L	U
Dibromomethane	74-95-3	1	0.20	ND	ug/L	U
2-Chloroethyl vinyl ether	110-75-8	1	1.00	ND	ug/L	U
4-Methyl-2-Pentanone	108-10-1	1	2.50	ND	ug/L	U



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Project: Landsburg
Project Number: [none]
Project Manager: Gary Zimmerman

Reported:
22-Apr-2025 14:45

LMW-8-0325
25C0223-08 (Water)

Volatile Organic Compounds

Method: EPA 8260D

Sampled: 03/11/2025 13:05

Instrument: NT20 Analyst: FL

Analyzed: 03/13/2025 22:59

Analyte	CAS Number	Dilution	Reporting Limit	Result	Units	Notes
cis-1,3-Dichloropropene	10061-01-5	1	0.20	ND	ug/L	U
Toluene	108-88-3	1	0.20	ND	ug/L	U
trans-1,3-Dichloropropene	10061-02-6	1	0.20	ND	ug/L	U
2-Hexanone	591-78-6	1	5.00	ND	ug/L	U
1,1,2-Trichloroethane	79-00-5	1	0.20	ND	ug/L	U
1,3-Dichloropropane	142-28-9	1	0.10	ND	ug/L	U
Tetrachloroethene	127-18-4	1	0.20	ND	ug/L	U
Dibromochloromethane	124-48-1	1	0.20	ND	ug/L	U
1,2-Dibromoethane	106-93-4	1	0.10	ND	ug/L	U
Chlorobenzene	108-90-7	1	0.20	ND	ug/L	U
Ethylbenzene	100-41-4	1	0.20	ND	ug/L	U
1,1,1,2-Tetrachloroethane	630-20-6	1	0.20	ND	ug/L	U
m,p-Xylene	179601-23-1	1	0.40	ND	ug/L	U
o-Xylene	95-47-6	1	0.20	ND	ug/L	U
Xylenes, total	1330-20-7	1	0.60	ND	ug/L	U
Styrene	100-42-5	1	0.20	ND	ug/L	U
Bromoform	75-25-2	1	0.20	ND	ug/L	U
1,1,2,2-Tetrachloroethane	79-34-5	1	0.20	ND	ug/L	U
1,2,3-Trichloropropane	96-18-4	1	0.25	ND	ug/L	U
trans-1,4-Dichloro 2-Butene	110-57-6	1	1.00	ND	ug/L	U
n-Propylbenzene	103-65-1	1	0.20	ND	ug/L	U
Bromobenzene	108-86-1	1	0.20	ND	ug/L	U
Isopropyl Benzene	98-82-8	1	0.20	ND	ug/L	U
2-Chlorotoluene	95-49-8	1	0.10	ND	ug/L	U
4-Chlorotoluene	106-43-4	1	0.20	ND	ug/L	U
t-Butylbenzene	98-06-6	1	0.20	ND	ug/L	U
1,3,5-Trimethylbenzene	108-67-8	1	0.20	ND	ug/L	U
1,2,4-Trimethylbenzene	95-63-6	1	0.20	ND	ug/L	U
s-Butylbenzene	135-98-8	1	0.20	ND	ug/L	U
4-Isopropyl Toluene	99-87-6	1	0.20	ND	ug/L	U
1,3-Dichlorobenzene	541-73-1	1	0.20	ND	ug/L	U
1,4-Dichlorobenzene	106-46-7	1	0.20	ND	ug/L	U
n-Butylbenzene	104-51-8	1	0.20	ND	ug/L	U
1,2-Dichlorobenzene	95-50-1	1	0.20	ND	ug/L	U
1,2-Dibromo-3-chloropropane	96-12-8	1	0.50	ND	ug/L	U



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Project: Landsburg
Project Number: [none]
Project Manager: Gary Zimmerman

Reported:
22-Apr-2025 14:45

LMW-8-0325
25C0223-08 (Water)

Volatile Organic Compounds

Method: EPA 8260D

Sampled: 03/11/2025 13:05

Instrument: NT20 Analyst: FL

Analyzed: 03/13/2025 22:59

Analyte	CAS Number	Dilution	Reporting Limit	Result	Units	Notes
1,2,4-Trichlorobenzene	120-82-1	1	0.50	ND	ug/L	U
Hexachloro-1,3-Butadiene	87-68-3	1	0.50	ND	ug/L	U
Naphthalene	91-20-3	1	0.50	ND	ug/L	U
1,2,3-Trichlorobenzene	87-61-6	1	0.50	ND	ug/L	U
Dichlorodifluoromethane	75-71-8	1	0.20	ND	ug/L	U
Surrogate: 1,2-Dichloroethane-d4			80-129 %	106	%	
Surrogate: Toluene-d8			80-120 %	98.7	%	
Surrogate: 4-Bromofluorobenzene			80-120 %	95.5	%	
Surrogate: 1,2-Dichlorobenzene-d4			80-120 %	101	%	



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Project: Landsburg
Project Number: [none]
Project Manager: Gary Zimmerman

Reported:
22-Apr-2025 14:45

LMW-8-0325
25C0223-08 (Water)

Semivolatile Organic Compounds

Method: EPA 8270E
Instrument: NT10 Analyst: JZ

Sampled: 03/11/2025 13:05

Analyzed: 03/25/2025 23:49

Sample Preparation: Preparation Method: EPA 3520C (Liq Liq)
Preparation Batch: BNC0300
Prepared: 03/13/2025

Sample Size: 500 mL
Final Volume: 0.5 mL

Extract ID: 25C0223-08 H 01

Analyte	CAS Number	Dilution	Reporting Limit	Result	Units	Notes
Phenol	108-95-2	1	1.0	ND	ug/L	U
bis(2-chloroethyl) ether	111-44-4	1	1.0	ND	ug/L	U
2-Chlorophenol	95-57-8	1	1.0	ND	ug/L	U
1,3-Dichlorobenzene	541-73-1	1	1.0	ND	ug/L	U
1,4-Dichlorobenzene	106-46-7	1	1.0	ND	ug/L	U
Benzyl Alcohol	100-51-6	1	2.0	ND	ug/L	U
1,2-Dichlorobenzene	95-50-1	1	1.0	ND	ug/L	U
2-Methylphenol	95-48-7	1	1.0	ND	ug/L	U
2,2'-Oxybis(1-chloropropane)	108-60-1	1	1.0	ND	ug/L	U
4-Methylphenol	106-44-5	1	2.0	ND	ug/L	U
N-Nitroso-di-n-Propylamine	621-64-7	1	1.0	ND	ug/L	U
Hexachloroethane	67-72-1	1	2.0	ND	ug/L	U
Nitrobenzene	98-95-3	1	1.0	ND	ug/L	U
Isophorone	78-59-1	1	1.0	ND	ug/L	U
2-Nitrophenol	88-75-5	1	3.0	ND	ug/L	U
2,4-Dimethylphenol	105-67-9	1	3.0	ND	ug/L	U
Bis(2-Chloroethoxy)methane	111-91-1	1	1.0	ND	ug/L	U
Benzoic acid	65-85-0	1	10.0	ND	ug/L	U
2,4-Dichlorophenol	120-83-2	1	3.0	ND	ug/L	U
1,2,4-Trichlorobenzene	120-82-1	1	1.0	ND	ug/L	U
Naphthalene	91-20-3	1	1.0	ND	ug/L	U
4-Chloroaniline	106-47-8	1	5.0	ND	ug/L	U
Hexachlorobutadiene	87-68-3	1	3.0	ND	ug/L	U
4-Chloro-3-Methylphenol	59-50-7	1	3.0	ND	ug/L	U
2-Methylnaphthalene	91-57-6	1	1.0	ND	ug/L	U
Hexachlorocyclopentadiene	77-47-4	1	5.0	ND	ug/L	U
2,4,6-Trichlorophenol	88-06-2	1	3.0	ND	ug/L	U
2,4,5-Trichlorophenol	95-95-4	1	5.0	ND	ug/L	U
2-Chloronaphthalene	91-58-7	1	1.0	ND	ug/L	U
2-Nitroaniline	88-74-4	1	3.0	ND	ug/L	U
Dimethylphthalate	131-11-3	1	1.0	ND	ug/L	U
Acenaphthylene	208-96-8	1	1.0	ND	ug/L	U



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Project Manager: Gary Zimmerman

Reported:
22-Apr-2025 14:45

LMW-8-0325
25C0223-08 (Water)

Semivolatile Organic Compounds

Method: EPA 8270E

Sampled: 03/11/2025 13:05

Instrument: NT10 Analyst: JZ

Analyzed: 03/25/2025 23:49

Analyte	CAS Number	Dilution	Reporting Limit	Result	Units	Notes
2,6-Dinitrotoluene	606-20-2	1	3.0	ND	ug/L	U
3-Nitroaniline	99-09-2	1	3.0	ND	ug/L	U
Acenaphthene	83-32-9	1	1.0	ND	ug/L	U
2,4-Dinitrophenol	51-28-5	1	10.0	ND	ug/L	U
Dibenzofuran	132-64-9	1	1.0	ND	ug/L	U
4-Nitrophenol	100-02-7	1	5.0	ND	ug/L	U
2,4-Dinitrotoluene	121-14-2	1	3.0	ND	ug/L	U
Fluorene	86-73-7	1	1.0	ND	ug/L	U
Diethyl phthalate	84-66-2	1	1.0	ND	ug/L	U
4-Chlorophenylphenyl ether	7005-72-3	1	1.0	ND	ug/L	U
4-Nitroaniline	100-01-6	1	3.0	ND	ug/L	U
4,6-Dinitro-2-methylphenol	534-52-1	1	10.0	ND	ug/L	U
N-Nitrosodiphenylamine	86-30-6	1	1.0	ND	ug/L	U
4-Bromophenyl phenyl ether	101-55-3	1	1.0	ND	ug/L	U
Hexachlorobenzene	118-74-1	1	1.0	ND	ug/L	U
Pentachlorophenol	87-86-5	1	5.0	ND	ug/L	U
Phenanthrene	85-01-8	1	1.0	ND	ug/L	U
Anthracene	120-12-7	1	1.0	ND	ug/L	U
Carbazole	86-74-8	1	1.0	ND	ug/L	U
Di-n-Butylphthalate	84-74-2	1	1.0	ND	ug/L	U
Fluoranthene	206-44-0	1	1.0	ND	ug/L	U
Pyrene	129-00-0	1	1.0	ND	ug/L	U
Butylbenzylphthalate	85-68-7	1	1.0	ND	ug/L	U
Benzo(a)anthracene	56-55-3	1	1.0	ND	ug/L	U
3,3'-Dichlorobenzidine	91-94-1	1	10.0	ND	ug/L	U
Chrysene	218-01-9	1	1.0	ND	ug/L	U
bis(2-Ethylhexyl)phthalate	117-81-7	1	3.0	ND	ug/L	U
Di-n-Octylphthalate	117-84-0	1	1.0	ND	ug/L	U
Benzofluoranthenes, Total		1	2.0	ND	ug/L	U
Benzo(a)pyrene	50-32-8	1	1.0	ND	ug/L	U
Indeno(1,2,3-cd)pyrene	193-39-5	1	1.0	ND	ug/L	U
Dibenzo(a,h)anthracene	53-70-3	1	1.0	ND	ug/L	U
Benzo(g,h,i)perylene	191-24-2	1	1.0	ND	ug/L	U
1-Methylnaphthalene	90-12-0	1	1.0	ND	ug/L	U
Surrogate: 2-Fluorophenol			33-120 %	53.5	%	



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Reported:
22-Apr-2025 14:45

LMW-8-0325
25C0223-08 (Water)

Semivolatile Organic Compounds

Method: EPA 8270E

Sampled: 03/11/2025 13:05

Instrument: NT10 Analyst: JZ

Analyzed: 03/25/2025 23:49

Analyte	CAS Number	Recovery	Recovery	Units	Notes
		Limits			
Surrogate: Phenol-d5		38-120 %	55.3	%	
Surrogate: 2-Chlorophenol-d4		41-120 %	61.8	%	
Surrogate: 1,2-Dichlorobenzene-d4		20-120 %	56.4	%	
Surrogate: Nitrobenzene-d5		27-120 %	64.0	%	
Surrogate: 2-Fluorobiphenyl		33-120 %	62.9	%	
Surrogate: 2,4,6-Tribromophenol		52-120 %	71.6	%	
Surrogate: p-Terphenyl-d14		28-120 %	67.6	%	



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Reported:
22-Apr-2025 14:45

LMW-8-0325
25C0223-08 (Water)

Semivolatile Organic Compounds

Method: EPA 8270E
Instrument: NT14 Analyst: RT

Sampled: 03/11/2025 13:05

Analyzed: 03/27/2025 19:18

Sample Preparation: Preparation Method: EPA 3520C (Liq Liq)
Preparation Batch: BNC0345
Prepared: 03/14/2025

Sample Size: 500 mL

Final Volume: 1 mL

Extract ID: 25C0223-08 I 01

Analyte	CAS Number	Dilution	Detection Limit	Reporting Limit	Result	Units	Notes
1,4-Dioxane	123-91-1	1	0.2	0.4	ND	ug/L	U
<i>Surrogate: 1,4-Dioxane-d8</i>				30-160 %	65.7	%	



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Project: Landsburg
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Reported:
22-Apr-2025 14:45

LMW-8-0325
25C0223-08 (Water)

Petroleum Hydrocarbons

Method: NWTPH-HCID

Sampled: 03/11/2025 13:05

Instrument: FID4 Analyst: JR

Analyzed: 03/17/2025 13:36

Sample Preparation:

Preparation Method: EPA 3510C SepF

Extract ID: 25C0223-08 G 01

Preparation Batch: BNC0298

Sample Size: 500 mL

Prepared: 03/13/2025

Final Volume: 1 mL

Analyte	CAS Number	Dilution	Reporting Limit	Result	Units	Notes
Gasoline Range Organics (Tol-C12)	GRO	1	0.25	ND	mg/L	U
Diesel Range Organics (C12-C24)	DRO	1	0.50	ND	mg/L	U
Motor Oil Range Organics (C24-C38)	RRO	1	1.00	ND	mg/L	U
Surrogate: o-Terphenyl			50-150 %	107	%	
Surrogate: n-Triacontane			50-150 %	109	%	



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Project: Landsburg
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Reported:
22-Apr-2025 14:45

LMW-8-0325
25C0223-08 (Water)

Chlorinated Pesticides

Method: EPA 8081B
Instrument: ECD6 Analyst: RT

Sampled: 03/11/2025 13:05

Analyzed: 04/10/2025 16:21

Sample Preparation: Preparation Method: EPA 3510C SepF
Preparation Batch: BNC0335
Prepared: 03/14/2025

Sample Size: 500 mL
Final Volume: 5 mL

Extract ID: 25C0223-08 B 01

Sample Cleanup: Cleanup Method: Silica Gel
Cleanup Batch: CNC0125
Cleaned: 26-Mar-2025

Initial Volume: 5 uL
Final Volume: 5 uL

Extract ID: 25C0223-08 B 01

Analyte	CAS Number	Dilution	Reporting Limit	Result	Units	Notes
alpha-BHC	319-84-6	1	0.025	ND	ug/L	U
beta-BHC	319-85-7	1	0.025	ND	ug/L	U
gamma-BHC (Lindane)	58-89-9	1	0.025	ND	ug/L	U
delta-BHC	319-86-8	1	0.025	ND	ug/L	U
Heptachlor	76-44-8	1	0.025	ND	ug/L	U
Aldrin	309-00-2	1	0.025	ND	ug/L	U
Heptachlor Epoxide	1024-57-3	1	0.050	ND	ug/L	U
trans-Chlordane (beta-Chlordane)	5103-74-2	1	0.025	ND	ug/L	U
cis-Chlordane (alpha-chlordane)	5103-71-9	1	0.025	ND	ug/L	U
Endosulfan I	959-98-8	1	0.025	ND	ug/L	U
4,4'-DDE	72-55-9	1	0.050	ND	ug/L	U
Dieldrin	60-57-1	1	0.050	ND	ug/L	U
Endrin	72-20-8	1	0.050	ND	ug/L	U
Endosulfan II	33213-65-9	1	0.050	ND	ug/L	U
4,4'-DDD	72-54-8	1	0.050	ND	ug/L	U
Endrin Aldehyde	7421-93-4	1	0.050	ND	ug/L	U
4,4'-DDT	50-29-3	1	0.050	ND	ug/L	U
Endosulfan Sulfate	1031-07-8	1	0.050	ND	ug/L	U
Endrin Ketone	53494-70-5	1	0.050	ND	ug/L	U
Methoxychlor	72-43-5	1	0.250	ND	ug/L	U
Toxaphene	8001-35-2	1	1.25	ND	ug/L	U
Surrogate: Decachlorobiphenyl			11-144 %	67.0	%	
Surrogate: Decachlorobiphenyl [2C]			11-144 %	69.5	%	
Surrogate: Tetrachlorometaxylene			30-120 %	40.2	%	
Surrogate: Tetrachlorometaxylene [2C]			30-120 %	49.3	%	



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Project: Landsburg

Project Number: [none]

Project Manager: Gary Zimmerman

Reported:

22-Apr-2025 14:45

LMW-8-0325

25C0223-08 (Water)

Aroclor PCB

Method: EPA 8082A

Sampled: 03/11/2025 13:05

Instrument: ECD7 Analyst: NRB

Analyzed: 03/19/2025 20:29

Sample Preparation:	Preparation Method: EPA 3510C SepF	Sample Size: 1000 mL	Extract ID: 25C0223-08 A 01
	Preparation Batch: BNC0299		
	Prepared: 03/13/2025		
Sample Cleanup:	Cleanup Method: Sulfuric Acid	Initial Volume: 0.5 uL	Extract ID: 25C0223-08 A 01
	Cleanup Batch: CNC0075		
	Cleaned: 18-Mar-2025		
Sample Cleanup:	Cleanup Method: Sulfur	Initial Volume: 0.5 uL	Extract ID: 25C0223-08 A 01
	Cleanup Batch: CNC0076		
	Cleaned: 18-Mar-2025		

Analyte	CAS Number	Dilution	Reporting Limit	Result	Units	Notes
Aroclor 1016	12674-11-2	1	0.010	ND	ug/L	U
Aroclor 1221	11104-28-2	1	0.010	ND	ug/L	U
Aroclor 1232	11141-16-5	1	0.010	ND	ug/L	U
Aroclor 1242	53469-21-9	1	0.010	ND	ug/L	U
Aroclor 1248	12672-29-6	1	0.010	ND	ug/L	U
Aroclor 1254	11097-69-1	1	0.010	ND	ug/L	U
Aroclor 1260	11096-82-5	1	0.010	ND	ug/L	U
Surrogate: Decachlorobiphenyl			29-120 %	46.7	%	P1
Surrogate: Tetrachlorometaxylene			32-120 %	78.2	%	
Surrogate: Decachlorobiphenyl [2C]			29-120 %	75.3	%	P1
Surrogate: Tetrachlorometaxylene [2C]			32-120 %	66.6	%	



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Project: Landsburg
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Project Manager: Gary Zimmerman

Reported:
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LMW-8-0325
25C0223-08 (Water)

Metals and Metallic Compounds

Method: EPA 200.8

Sampled: 03/11/2025 13:05

Instrument: ICPMS2 Analyst: HAL

Analyzed: 03/21/2025 05:24

Sample Preparation:

Preparation Method: REN - EPA 3010A M

Extract ID: 25C0223-08 M 02

Preparation Batch: BNC0383

Sample Size: 25 mL

Prepared: 03/15/2025

Final Volume: 25 mL

Analyte	CAS Number	Dilution	Detection Limit	Reporting Limit	Result	Units	Notes
Antimony	7440-36-0	1	0.150	3.00	ND	ug/L	U
Arsenic UCT	7440-38-2	1	0.100	3.00	2.73	ug/L	J
Lead	7439-92-1	1	0.100	10.0	ND	ug/L	U
Selenium UCT	7782-49-2	1	0.500	25.0	ND	ug/L	U
Thallium	7440-28-0	1	0.100	2.00	ND	ug/L	U



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Reported:
22-Apr-2025 14:45

LMW-8-0325
25C0223-08 (Water)

Metals and Metallic Compounds

Method: EPA 6010D
Instrument: ICP3 Analyst: SH

Sampled: 03/11/2025 13:05

Analyzed: 03/26/2025 17:26

Sample Preparation: Preparation Method: TWC EPA 3010A
Preparation Batch: BNC0360 Sample Size: 25 mL
Prepared: 03/14/2025 Final Volume: 25 mL

Extract ID: 25C0223-08 M 01

Analyte	CAS Number	Dilution	Detection Limit	Reporting Limit	Result	Units	Notes
Aluminum	7429-90-5	1	0.0210	0.0700	ND	mg/L	U
Barium	7440-39-3	1	0.0007	0.0060	0.0457	mg/L	
Beryllium	7440-41-7	1	0.0002	0.0010	ND	mg/L	U
Cadmium	7440-43-9	1	0.0005	0.0020	ND	mg/L	U
Calcium	7440-70-2	1	0.0300	0.0500	61.2	mg/L	
Chromium	7440-47-3	1	0.0020	0.0090	ND	mg/L	U
Cobalt	7440-48-4	1	0.0025	0.0050	ND	mg/L	U
Copper	7440-50-8	1	0.0030	0.0050	ND	mg/L	U
Iron	7439-89-6	1	0.0540	0.100	13.4	mg/L	
Magnesium	7439-95-4	1	0.0250	0.0500	32.3	mg/L	
Manganese	7439-96-5	1	0.0020	0.0040	0.522	mg/L	B
Nickel	7440-02-0	1	0.0050	0.0100	ND	mg/L	U
Potassium	7440-09-7	1	0.250	0.500	1.62	mg/L	
Silver	7440-22-4	1	0.0015	0.0030	ND	mg/L	U
Sodium	7440-23-5	1	0.250	0.500	10.8	mg/L	
Vanadium	7440-62-2	1	0.0015	0.0030	ND	mg/L	U
Zinc	7440-66-6	1	0.0150	0.0300	ND	mg/L	U



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Project: Landsburg
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Reported:
22-Apr-2025 14:45

LMW-8-0325
25C0223-08 (Water)

Metals and Metallic Compounds

Method: EPA 7470A	Sampled: 03/11/2025 13:05
Instrument: HYDRA Analyst: AMS	Analyzed: 03/19/2025 12:40
Sample Preparation:	Preparation Method: TWM EPA 7470A
	Preparation Batch: BNC0366
	Prepared: 03/16/2025
	Sample Size: 20 mL
	Final Volume: 20 mL
	Extract ID: 25C0223-08 M

Analyte	CAS Number	Dilution	Reporting Limit	Result	Units	Notes
Mercury	7439-97-6	1	0.00100	ND	mg/L	U



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Project: Landsburg
Project Number: [none]
Project Manager: Gary Zimmerman

Reported:
22-Apr-2025 14:45

LMW-7-0325
25C0223-09 (Water)

Volatile Organic Compounds

Method: EPA 8260D
Instrument: NT20 Analyst: FL

Sampled: 03/11/2025 14:40

Analyzed: 03/13/2025 23:22

Sample Preparation: Preparation Method: EPA 5030C (Purge and Trap)
Preparation Batch: BNC0328 Sample Size: 10 mL
Prepared: 03/13/2025 Final Volume: 10 mL

Extract ID: 25C0223-09 N

Analyte	CAS Number	Dilution	Reporting Limit	Result	Units	Notes
Chloromethane	74-87-3	1	0.50	ND	ug/L	U
Vinyl Chloride	75-01-4	1	0.10	ND	ug/L	U
Bromomethane	74-83-9	1	1.00	ND	ug/L	U
Chloroethane	75-00-3	1	0.20	ND	ug/L	U
Trichlorofluoromethane	75-69-4	1	0.20	ND	ug/L	U
Acrolein	107-02-8	1	5.00	ND	ug/L	U
1,1,2-Trichloro-1,2,2-Trifluoroethane	76-13-1	1	0.20	ND	ug/L	U
Acetone	67-64-1	1	5.00	ND	ug/L	U
1,1-Dichloroethene	75-35-4	1	0.20	ND	ug/L	U
Iodomethane	74-88-4	1	1.00	ND	ug/L	U
Methylene Chloride	75-09-2	1	1.00	ND	ug/L	U
Acrylonitrile	107-13-1	1	1.00	ND	ug/L	U
Carbon Disulfide	75-15-0	1	0.20	ND	ug/L	U
trans-1,2-Dichloroethene	156-60-5	1	0.20	ND	ug/L	U
Vinyl Acetate	108-05-4	1	0.20	ND	ug/L	U
1,1-Dichloroethane	75-34-3	1	0.20	ND	ug/L	U
2-Butanone	78-93-3	1	5.00	ND	ug/L	U
2,2-Dichloropropane	594-20-7	1	0.20	ND	ug/L	U
cis-1,2-Dichloroethene	156-59-2	1	0.20	ND	ug/L	U
Chloroform	67-66-3	1	0.20	ND	ug/L	U
Bromochloromethane	74-97-5	1	0.20	ND	ug/L	U
1,1,1-Trichloroethane	71-55-6	1	0.20	ND	ug/L	U
1,1-Dichloropropene	563-58-6	1	0.10	ND	ug/L	U
Carbon tetrachloride	56-23-5	1	0.20	ND	ug/L	U
1,2-Dichloroethane	107-06-2	1	0.20	ND	ug/L	U
Benzene	71-43-2	1	0.20	ND	ug/L	U
Trichloroethene	79-01-6	1	0.20	ND	ug/L	U
1,2-Dichloropropane	78-87-5	1	0.20	ND	ug/L	U
Bromodichloromethane	75-27-4	1	0.20	ND	ug/L	U
Dibromomethane	74-95-3	1	0.20	ND	ug/L	U
2-Chloroethyl vinyl ether	110-75-8	1	1.00	ND	ug/L	U
4-Methyl-2-Pentanone	108-10-1	1	2.50	ND	ug/L	U



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Project: Landsburg
Project Number: [none]
Project Manager: Gary Zimmerman

Reported:
22-Apr-2025 14:45

LMW-7-0325
25C0223-09 (Water)

Volatile Organic Compounds

Method: EPA 8260D

Sampled: 03/11/2025 14:40

Instrument: NT20 Analyst: FL

Analyzed: 03/13/2025 23:22

Analyte	CAS Number	Dilution	Reporting Limit	Result	Units	Notes
cis-1,3-Dichloropropene	10061-01-5	1	0.20	ND	ug/L	U
Toluene	108-88-3	1	0.20	ND	ug/L	U
trans-1,3-Dichloropropene	10061-02-6	1	0.20	ND	ug/L	U
2-Hexanone	591-78-6	1	5.00	ND	ug/L	U
1,1,2-Trichloroethane	79-00-5	1	0.20	ND	ug/L	U
1,3-Dichloropropane	142-28-9	1	0.10	ND	ug/L	U
Tetrachloroethene	127-18-4	1	0.20	ND	ug/L	U
Dibromochloromethane	124-48-1	1	0.20	ND	ug/L	U
1,2-Dibromoethane	106-93-4	1	0.10	ND	ug/L	U
Chlorobenzene	108-90-7	1	0.20	ND	ug/L	U
Ethylbenzene	100-41-4	1	0.20	ND	ug/L	U
1,1,1,2-Tetrachloroethane	630-20-6	1	0.20	ND	ug/L	U
m,p-Xylene	179601-23-1	1	0.40	ND	ug/L	U
o-Xylene	95-47-6	1	0.20	ND	ug/L	U
Xylenes, total	1330-20-7	1	0.60	ND	ug/L	U
Styrene	100-42-5	1	0.20	ND	ug/L	U
Bromoform	75-25-2	1	0.20	ND	ug/L	U
1,1,2,2-Tetrachloroethane	79-34-5	1	0.20	ND	ug/L	U
1,2,3-Trichloropropane	96-18-4	1	0.25	ND	ug/L	U
trans-1,4-Dichloro 2-Butene	110-57-6	1	1.00	ND	ug/L	U
n-Propylbenzene	103-65-1	1	0.20	ND	ug/L	U
Bromobenzene	108-86-1	1	0.20	ND	ug/L	U
Isopropyl Benzene	98-82-8	1	0.20	ND	ug/L	U
2-Chlorotoluene	95-49-8	1	0.10	ND	ug/L	U
4-Chlorotoluene	106-43-4	1	0.20	ND	ug/L	U
t-Butylbenzene	98-06-6	1	0.20	ND	ug/L	U
1,3,5-Trimethylbenzene	108-67-8	1	0.20	ND	ug/L	U
1,2,4-Trimethylbenzene	95-63-6	1	0.20	ND	ug/L	U
s-Butylbenzene	135-98-8	1	0.20	ND	ug/L	U
4-Isopropyl Toluene	99-87-6	1	0.20	ND	ug/L	U
1,3-Dichlorobenzene	541-73-1	1	0.20	ND	ug/L	U
1,4-Dichlorobenzene	106-46-7	1	0.20	ND	ug/L	U
n-Butylbenzene	104-51-8	1	0.20	ND	ug/L	U
1,2-Dichlorobenzene	95-50-1	1	0.20	ND	ug/L	U
1,2-Dibromo-3-chloropropane	96-12-8	1	0.50	ND	ug/L	U



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Project: Landsburg
Project Number: [none]
Project Manager: Gary Zimmerman

Reported:
22-Apr-2025 14:45

LMW-7-0325
25C0223-09 (Water)

Volatile Organic Compounds

Method: EPA 8260D

Sampled: 03/11/2025 14:40

Instrument: NT20 Analyst: FL

Analyzed: 03/13/2025 23:22

Analyte	CAS Number	Dilution	Reporting Limit	Result	Units	Notes
1,2,4-Trichlorobenzene	120-82-1	1	0.50	ND	ug/L	U
Hexachloro-1,3-Butadiene	87-68-3	1	0.50	ND	ug/L	U
Naphthalene	91-20-3	1	0.50	ND	ug/L	U
1,2,3-Trichlorobenzene	87-61-6	1	0.50	ND	ug/L	U
Dichlorodifluoromethane	75-71-8	1	0.20	ND	ug/L	U
Surrogate: 1,2-Dichloroethane-d4			80-129 %	105	%	
Surrogate: Toluene-d8			80-120 %	99.2	%	
Surrogate: 4-Bromofluorobenzene			80-120 %	94.8	%	
Surrogate: 1,2-Dichlorobenzene-d4			80-120 %	102	%	



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Reported:
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LMW-7-0325
25C0223-09 (Water)

Semivolatile Organic Compounds

Method: EPA 8270E
Instrument: NT10 Analyst: JZ

Sampled: 03/11/2025 14:40

Analyzed: 03/26/2025 00:30

Sample Preparation: Preparation Method: EPA 3520C (Liq Liq)
Preparation Batch: BNC0300
Prepared: 03/13/2025

Sample Size: 500 mL

Final Volume: 0.5 mL

Extract ID: 25C0223-09 H 01

Analyte	CAS Number	Dilution	Reporting Limit	Result	Units	Notes
Phenol	108-95-2	1	1.0	ND	ug/L	U
bis(2-chloroethyl) ether	111-44-4	1	1.0	ND	ug/L	U
2-Chlorophenol	95-57-8	1	1.0	ND	ug/L	U
1,3-Dichlorobenzene	541-73-1	1	1.0	ND	ug/L	U
1,4-Dichlorobenzene	106-46-7	1	1.0	ND	ug/L	U
Benzyl Alcohol	100-51-6	1	2.0	ND	ug/L	U
1,2-Dichlorobenzene	95-50-1	1	1.0	ND	ug/L	U
2-Methylphenol	95-48-7	1	1.0	ND	ug/L	U
2,2'-Oxybis(1-chloropropane)	108-60-1	1	1.0	ND	ug/L	U
4-Methylphenol	106-44-5	1	2.0	ND	ug/L	U
N-Nitroso-di-n-Propylamine	621-64-7	1	1.0	ND	ug/L	U
Hexachloroethane	67-72-1	1	2.0	ND	ug/L	U
Nitrobenzene	98-95-3	1	1.0	ND	ug/L	U
Isophorone	78-59-1	1	1.0	ND	ug/L	U
2-Nitrophenol	88-75-5	1	3.0	ND	ug/L	U
2,4-Dimethylphenol	105-67-9	1	3.0	ND	ug/L	U
Bis(2-Chloroethoxy)methane	111-91-1	1	1.0	ND	ug/L	U
Benzoic acid	65-85-0	1	10.0	ND	ug/L	U
2,4-Dichlorophenol	120-83-2	1	3.0	ND	ug/L	U
1,2,4-Trichlorobenzene	120-82-1	1	1.0	ND	ug/L	U
Naphthalene	91-20-3	1	1.0	ND	ug/L	U
4-Chloroaniline	106-47-8	1	5.0	ND	ug/L	U
Hexachlorobutadiene	87-68-3	1	3.0	ND	ug/L	U
4-Chloro-3-Methylphenol	59-50-7	1	3.0	ND	ug/L	U
2-Methylnaphthalene	91-57-6	1	1.0	ND	ug/L	U
Hexachlorocyclopentadiene	77-47-4	1	5.0	ND	ug/L	U
2,4,6-Trichlorophenol	88-06-2	1	3.0	ND	ug/L	U
2,4,5-Trichlorophenol	95-95-4	1	5.0	ND	ug/L	U
2-Chloronaphthalene	91-58-7	1	1.0	ND	ug/L	U
2-Nitroaniline	88-74-4	1	3.0	ND	ug/L	U
Dimethylphthalate	131-11-3	1	1.0	ND	ug/L	U
Acenaphthylene	208-96-8	1	1.0	ND	ug/L	U



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Reported:
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LMW-7-0325
25C0223-09 (Water)

Semivolatile Organic Compounds

Method: EPA 8270E

Sampled: 03/11/2025 14:40

Instrument: NT10 Analyst: JZ

Analyzed: 03/26/2025 00:30

Analyte	CAS Number	Dilution	Reporting Limit	Result	Units	Notes
2,6-Dinitrotoluene	606-20-2	1	3.0	ND	ug/L	U
3-Nitroaniline	99-09-2	1	3.0	ND	ug/L	U
Acenaphthene	83-32-9	1	1.0	ND	ug/L	U
2,4-Dinitrophenol	51-28-5	1	10.0	ND	ug/L	U
Dibenzofuran	132-64-9	1	1.0	ND	ug/L	U
4-Nitrophenol	100-02-7	1	5.0	ND	ug/L	U
2,4-Dinitrotoluene	121-14-2	1	3.0	ND	ug/L	U
Fluorene	86-73-7	1	1.0	ND	ug/L	U
Diethyl phthalate	84-66-2	1	1.0	ND	ug/L	U
4-Chlorophenylphenyl ether	7005-72-3	1	1.0	ND	ug/L	U
4-Nitroaniline	100-01-6	1	3.0	ND	ug/L	U
4,6-Dinitro-2-methylphenol	534-52-1	1	10.0	ND	ug/L	U
N-Nitrosodiphenylamine	86-30-6	1	1.0	ND	ug/L	U
4-Bromophenyl phenyl ether	101-55-3	1	1.0	ND	ug/L	U
Hexachlorobenzene	118-74-1	1	1.0	ND	ug/L	U
Pentachlorophenol	87-86-5	1	5.0	ND	ug/L	U
Phenanthrene	85-01-8	1	1.0	ND	ug/L	U
Anthracene	120-12-7	1	1.0	ND	ug/L	U
Carbazole	86-74-8	1	1.0	ND	ug/L	U
Di-n-Butylphthalate	84-74-2	1	1.0	ND	ug/L	U
Fluoranthene	206-44-0	1	1.0	ND	ug/L	U
Pyrene	129-00-0	1	1.0	ND	ug/L	U
Butylbenzylphthalate	85-68-7	1	1.0	ND	ug/L	U
Benzo(a)anthracene	56-55-3	1	1.0	ND	ug/L	U
3,3'-Dichlorobenzidine	91-94-1	1	10.0	ND	ug/L	U
Chrysene	218-01-9	1	1.0	ND	ug/L	U
bis(2-Ethylhexyl)phthalate	117-81-7	1	3.0	ND	ug/L	U
Di-n-Octylphthalate	117-84-0	1	1.0	ND	ug/L	U
Benzofluoranthenes, Total		1	2.0	ND	ug/L	U
Benzo(a)pyrene	50-32-8	1	1.0	ND	ug/L	U
Indeno(1,2,3-cd)pyrene	193-39-5	1	1.0	ND	ug/L	U
Dibenzo(a,h)anthracene	53-70-3	1	1.0	ND	ug/L	U
Benzo(g,h,i)perylene	191-24-2	1	1.0	ND	ug/L	U
1-Methylnaphthalene	90-12-0	1	1.0	ND	ug/L	U
Surrogate: 2-Fluorophenol			33-120 %	49.1	%	



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LMW-7-0325
25C0223-09 (Water)

Semivolatile Organic Compounds

Method: EPA 8270E

Sampled: 03/11/2025 14:40

Instrument: NT10 Analyst: JZ

Analyzed: 03/26/2025 00:30

Analyte	CAS Number	Recovery	Recovery	Units	Notes
		Limits			
Surrogate: Phenol-d5		38-120 %	50.5	%	
Surrogate: 2-Chlorophenol-d4		41-120 %	57.6	%	
Surrogate: 1,2-Dichlorobenzene-d4		20-120 %	55.2	%	
Surrogate: Nitrobenzene-d5		27-120 %	62.4	%	
Surrogate: 2-Fluorobiphenyl		33-120 %	60.5	%	
Surrogate: 2,4,6-Tribromophenol		52-120 %	67.3	%	
Surrogate: p-Terphenyl-d14		28-120 %	63.1	%	



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Reported:
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LMW-7-0325
25C0223-09 (Water)

Semivolatile Organic Compounds

Method: EPA 8270E
Instrument: NT14 Analyst: RT

Sampled: 03/11/2025 14:40

Analyzed: 03/27/2025 19:35

Sample Preparation: Preparation Method: EPA 3520C (Liq Liq)
Preparation Batch: BNC0345
Prepared: 03/14/2025

Sample Size: 500 mL

Final Volume: 1 mL

Extract ID: 25C0223-09 I 01

Analyte	CAS Number	Dilution	Detection Limit	Reporting Limit	Result	Units	Notes
1,4-Dioxane	123-91-1	1	0.2	0.4	ND	ug/L	U
Surrogate: 1,4-Dioxane-d8				30-160 %	41.2	%	



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Reported:
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LMW-7-0325
25C0223-09 (Water)

Petroleum Hydrocarbons

Method: NWTPH-HCID

Sampled: 03/11/2025 14:40

Instrument: FID4 Analyst: JR

Analyzed: 03/17/2025 13:56

Sample Preparation:

Preparation Method: EPA 3510C SepF

Extract ID: 25C0223-09 G 01

Preparation Batch: BNC0298

Sample Size: 500 mL

Prepared: 03/13/2025

Final Volume: 1 mL

Analyte	CAS Number	Dilution	Reporting Limit	Result	Units	Notes
Gasoline Range Organics (Tol-C12)	GRO	1	0.25	ND	mg/L	U
Diesel Range Organics (C12-C24)	DRO	1	0.50	ND	mg/L	U
Motor Oil Range Organics (C24-C38)	RRO	1	1.00	ND	mg/L	U
Surrogate: o-Terphenyl			50-150 %	104	%	
Surrogate: n-Triacontane			50-150 %	109	%	



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Reported:
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LMW-7-0325
25C0223-09 (Water)

Chlorinated Pesticides

Method: EPA 8081B
Instrument: ECD6 Analyst: RT

Sampled: 03/11/2025 14:40

Analyzed: 04/10/2025 16:40

Sample Preparation: Preparation Method: EPA 3510C SepF
Preparation Batch: BNC0335
Prepared: 03/14/2025

Sample Size: 500 mL

Final Volume: 5 mL

Extract ID: 25C0223-09 B 01

Sample Cleanup: Cleanup Method: Silica Gel
Cleanup Batch: CNC0125
Cleaned: 26-Mar-2025

Initial Volume: 5 uL

Final Volume: 5 uL

Extract ID: 25C0223-09 B 01

Analyte	CAS Number	Dilution	Reporting Limit	Result	Units	Notes
alpha-BHC	319-84-6	1	0.025	ND	ug/L	U
beta-BHC	319-85-7	1	0.025	ND	ug/L	U
gamma-BHC (Lindane)	58-89-9	1	0.025	ND	ug/L	U
delta-BHC	319-86-8	1	0.025	ND	ug/L	U
Heptachlor	76-44-8	1	0.025	ND	ug/L	U
Aldrin	309-00-2	1	0.025	ND	ug/L	U
Heptachlor Epoxide	1024-57-3	1	0.050	ND	ug/L	U
trans-Chlordane (beta-Chlordane)	5103-74-2	1	0.025	ND	ug/L	U
cis-Chlordane (alpha-chlordane)	5103-71-9	1	0.025	ND	ug/L	U
Endosulfan I	959-98-8	1	0.025	ND	ug/L	U
4,4'-DDE	72-55-9	1	0.050	ND	ug/L	U
Dieldrin	60-57-1	1	0.050	ND	ug/L	U
Endrin	72-20-8	1	0.050	ND	ug/L	U
Endosulfan II	33213-65-9	1	0.050	ND	ug/L	U
4,4'-DDD	72-54-8	1	0.050	ND	ug/L	U
Endrin Aldehyde	7421-93-4	1	0.050	ND	ug/L	U
4,4'-DDT	50-29-3	1	0.050	ND	ug/L	U
Endosulfan Sulfate	1031-07-8	1	0.050	ND	ug/L	U
Endrin Ketone	53494-70-5	1	0.050	ND	ug/L	U
Methoxychlor	72-43-5	1	0.250	ND	ug/L	U
Toxaphene	8001-35-2	1	1.25	ND	ug/L	U
Surrogate: Decachlorobiphenyl			11-144 %	72.2	%	
Surrogate: Decachlorobiphenyl [2C]			11-144 %	76.0	%	
Surrogate: Tetrachlorometaxylene			30-120 %	39.2	%	
Surrogate: Tetrachlorometaxylene [2C]			30-120 %	49.1	%	



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Project Manager: Gary Zimmerman

Reported:

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LMW-7-0325

25C0223-09 (Water)

Aroclor PCB

Method: EPA 8082A

Sampled: 03/11/2025 14:40

Instrument: ECD7 Analyst: NRB

Analyzed: 03/19/2025 20:50

Sample Preparation:	Preparation Method: EPA 3510C SepF Preparation Batch: BNC0299 Prepared: 03/13/2025	Sample Size: 1000 mL Final Volume: 0.5 mL	Extract ID: 25C0223-09 A 01
Sample Cleanup:	Cleanup Method: Sulfuric Acid Cleanup Batch: CNC0075 Cleaned: 18-Mar-2025	Initial Volume: 0.5 uL Final Volume: 0.5 uL	Extract ID: 25C0223-09 A 01
Sample Cleanup:	Cleanup Method: Sulfur Cleanup Batch: CNC0076 Cleaned: 18-Mar-2025	Initial Volume: 0.5 uL Final Volume: 0.5 uL	Extract ID: 25C0223-09 A 01

Analyte	CAS Number	Dilution	Reporting Limit	Result	Units	Notes
Aroclor 1016	12674-11-2	1	0.010	ND	ug/L	U
Aroclor 1221	11104-28-2	1	0.010	ND	ug/L	U
Aroclor 1232	11141-16-5	1	0.010	ND	ug/L	U
Aroclor 1242	53469-21-9	1	0.010	ND	ug/L	U
Aroclor 1248	12672-29-6	1	0.010	ND	ug/L	U
Aroclor 1254	11097-69-1	1	0.010	ND	ug/L	U
Aroclor 1260	11096-82-5	1	0.010	ND	ug/L	U
Surrogate: Decachlorobiphenyl			29-120 %	50.7	%	P1
Surrogate: Tetrachlorometaxylene			32-120 %	75.9	%	
Surrogate: Decachlorobiphenyl [2C]			29-120 %	83.0	%	P1
Surrogate: Tetrachlorometaxylene [2C]			32-120 %	66.2	%	



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Reported:
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LMW-7-0325
25C0223-09 (Water)

Metals and Metallic Compounds

Method: EPA 200.8

Sampled: 03/11/2025 14:40

Instrument: ICPMS2 Analyst: HAL

Analyzed: 03/21/2025 05:29

Sample Preparation:

Preparation Method: REN - EPA 3010A M

Extract ID: 25C0223-09 M 02

Preparation Batch: BNC0383

Sample Size: 25 mL

Prepared: 03/15/2025

Final Volume: 25 mL

Analyte	CAS Number	Dilution	Detection Limit	Reporting Limit	Result	Units	Notes
Antimony	7440-36-0	1	0.150	3.00	ND	ug/L	U
Arsenic UCT	7440-38-2	1	0.100	3.00	4.67	ug/L	
Lead	7439-92-1	1	0.100	10.0	ND	ug/L	U
Selenium UCT	7782-49-2	1	0.500	25.0	ND	ug/L	U
Thallium	7440-28-0	1	0.100	2.00	ND	ug/L	U



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Reported:
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LMW-7-0325
25C0223-09 (Water)

Metals and Metallic Compounds

Method: EPA 6010D
Instrument: ICP3 Analyst: SH

Sampled: 03/11/2025 14:40

Analyzed: 03/26/2025 17:46

Sample Preparation: Preparation Method: TWC EPA 3010A
Preparation Batch: BNC0360
Prepared: 03/14/2025

Sample Size: 25 mL
Final Volume: 25 mL

Extract ID: 25C0223-09 M 01

Analyte	CAS Number	Dilution	Detection Limit	Reporting Limit	Result	Units	Notes
Aluminum	7429-90-5	1	0.0210	0.0700	ND	mg/L	U
Barium	7440-39-3	1	0.0007	0.0060	0.410	mg/L	
Beryllium	7440-41-7	1	0.0002	0.0010	ND	mg/L	U
Cadmium	7440-43-9	1	0.0005	0.0020	ND	mg/L	U
Calcium	7440-70-2	1	0.0300	0.0500	44.3	mg/L	
Chromium	7440-47-3	1	0.0020	0.0090	ND	mg/L	U
Cobalt	7440-48-4	1	0.0025	0.0050	ND	mg/L	U
Copper	7440-50-8	1	0.0030	0.0050	ND	mg/L	U
Iron	7439-89-6	1	0.0540	0.100	1.77	mg/L	
Magnesium	7439-95-4	1	0.0250	0.0500	20.1	mg/L	
Nickel	7440-02-0	1	0.0050	0.0100	ND	mg/L	U
Potassium	7440-09-7	1	0.250	0.500	2.39	mg/L	
Silver	7440-22-4	1	0.0015	0.0030	ND	mg/L	U
Sodium	7440-23-5	1	0.250	0.500	41.8	mg/L	
Vanadium	7440-62-2	1	0.0015	0.0030	ND	mg/L	U
Zinc	7440-66-6	1	0.0150	0.0300	ND	mg/L	U



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Project: Landsburg
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Reported:
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LMW-7-0325
25C0223-09 (Water)

Metals and Metallic Compounds

Method: EPA 7470A	Sampled: 03/11/2025 14:40
Instrument: HYDRA Analyst: AMS	Analyzed: 03/19/2025 12:45
Sample Preparation:	Preparation Method: TWM EPA 7470A
	Preparation Batch: BNC0366
	Prepared: 03/16/2025
	Sample Size: 20 mL
	Final Volume: 20 mL
	Extract ID: 25C0223-09 M

Analyte	CAS Number	Dilution	Reporting Limit	Result	Units	Notes
Mercury	7439-97-6	1	0.00100	ND	mg/L	U



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Reported:
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LMW-7-0325
25C0223-09RE1 (Water)

Metals and Metallic Compounds

Method: EPA 6010D
Instrument: ICP3 Analyst: SH

Sampled: 03/11/2025 14:40

Analyzed: 04/01/2025 17:50

Sample Preparation: Preparation Method: TWC EPA 3010A
Preparation Batch: BNC0737
Prepared: 03/28/2025

Sample Size: 25 mL
Final Volume: 25 mL

Extract ID: 25C0223-09RE1 M

Analyte	CAS Number	Dilution	Detection Limit	Reporting Limit	Result	Units	Notes
Manganese	7439-96-5	1	0.0020	0.0040	0.0844	mg/L	



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Project: Landsburg
Project Number: [none]
Project Manager: Gary Zimmerman

Reported:
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Trip Blank
25C0223-10 (Water)

Volatile Organic Compounds

Method: EPA 8260D
Instrument: NT20 Analyst: FL

Sampled: 03/10/2025 11:05

Analyzed: 03/13/2025 18:45

Sample Preparation: Preparation Method: EPA 5030C (Purge and Trap) Sample Size: 10 mL
Preparation Batch: BNC0328 Final Volume: 10 mL
Prepared: 03/13/2025 Extract ID: 25C0223-10 A

Analyte	CAS Number	Dilution	Reporting Limit	Result	Units	Notes
Chloromethane	74-87-3	1	0.50	ND	ug/L	U
Vinyl Chloride	75-01-4	1	0.10	ND	ug/L	U
Bromomethane	74-83-9	1	1.00	ND	ug/L	U
Chloroethane	75-00-3	1	0.20	ND	ug/L	U
Trichlorofluoromethane	75-69-4	1	0.20	ND	ug/L	U
Acrolein	107-02-8	1	5.00	ND	ug/L	U
1,1,2-Trichloro-1,2,2-Trifluoroethane	76-13-1	1	0.20	ND	ug/L	U
Acetone	67-64-1	1	5.00	ND	ug/L	U
1,1-Dichloroethene	75-35-4	1	0.20	ND	ug/L	U
Iodomethane	74-88-4	1	1.00	ND	ug/L	U
Methylene Chloride	75-09-2	1	1.00	ND	ug/L	U
Acrylonitrile	107-13-1	1	1.00	ND	ug/L	U
Carbon Disulfide	75-15-0	1	0.20	ND	ug/L	U
trans-1,2-Dichloroethene	156-60-5	1	0.20	ND	ug/L	U
Vinyl Acetate	108-05-4	1	0.20	ND	ug/L	U
1,1-Dichloroethane	75-34-3	1	0.20	ND	ug/L	U
2-Butanone	78-93-3	1	5.00	ND	ug/L	U
2,2-Dichloropropane	594-20-7	1	0.20	ND	ug/L	U
cis-1,2-Dichloroethene	156-59-2	1	0.20	ND	ug/L	U
Chloroform	67-66-3	1	0.20	ND	ug/L	U
Bromochloromethane	74-97-5	1	0.20	ND	ug/L	U
1,1,1-Trichloroethane	71-55-6	1	0.20	ND	ug/L	U
1,1-Dichloropropene	563-58-6	1	0.10	ND	ug/L	U
Carbon tetrachloride	56-23-5	1	0.20	ND	ug/L	U
1,2-Dichloroethane	107-06-2	1	0.20	ND	ug/L	U
Benzene	71-43-2	1	0.20	ND	ug/L	U
Trichloroethene	79-01-6	1	0.20	ND	ug/L	U
1,2-Dichloropropane	78-87-5	1	0.20	ND	ug/L	U
Bromodichloromethane	75-27-4	1	0.20	ND	ug/L	U
Dibromomethane	74-95-3	1	0.20	ND	ug/L	U
2-Chloroethyl vinyl ether	110-75-8	1	1.00	ND	ug/L	U
4-Methyl-2-Pentanone	108-10-1	1	2.50	ND	ug/L	U



WSP USA, Inc.
210 East 13th Street, Suite 300
Vancouver WA, 98660-3231

Project: Landsburg
Project Number: [none]
Project Manager: Gary Zimmerman

Reported:
22-Apr-2025 14:45

Trip Blank
25C0223-10 (Water)

Volatile Organic Compounds

Method: EPA 8260D

Sampled: 03/10/2025 11:05

Instrument: NT20 Analyst: FL

Analyzed: 03/13/2025 18:45

Analyte	CAS Number	Dilution	Reporting Limit	Result	Units	Notes
cis-1,3-Dichloropropene	10061-01-5	1	0.20	ND	ug/L	U
Toluene	108-88-3	1	0.20	ND	ug/L	U
trans-1,3-Dichloropropene	10061-02-6	1	0.20	ND	ug/L	U
2-Hexanone	591-78-6	1	5.00	ND	ug/L	U
1,1,2-Trichloroethane	79-00-5	1	0.20	ND	ug/L	U
1,3-Dichloropropane	142-28-9	1	0.10	ND	ug/L	U
Tetrachloroethene	127-18-4	1	0.20	ND	ug/L	U
Dibromochloromethane	124-48-1	1	0.20	ND	ug/L	U
1,2-Dibromoethane	106-93-4	1	0.10	ND	ug/L	U
Chlorobenzene	108-90-7	1	0.20	ND	ug/L	U
Ethylbenzene	100-41-4	1	0.20	ND	ug/L	U
1,1,1,2-Tetrachloroethane	630-20-6	1	0.20	ND	ug/L	U
m,p-Xylene	179601-23-1	1	0.40	ND	ug/L	U
o-Xylene	95-47-6	1	0.20	ND	ug/L	U
Xylenes, total	1330-20-7	1	0.60	ND	ug/L	U
Styrene	100-42-5	1	0.20	ND	ug/L	U
Bromoform	75-25-2	1	0.20	ND	ug/L	U
1,1,2,2-Tetrachloroethane	79-34-5	1	0.20	ND	ug/L	U
1,2,3-Trichloropropane	96-18-4	1	0.25	ND	ug/L	U
trans-1,4-Dichloro 2-Butene	110-57-6	1	1.00	ND	ug/L	U
n-Propylbenzene	103-65-1	1	0.20	ND	ug/L	U
Bromobenzene	108-86-1	1	0.20	ND	ug/L	U
Isopropyl Benzene	98-82-8	1	0.20	ND	ug/L	U
2-Chlorotoluene	95-49-8	1	0.10	ND	ug/L	U
4-Chlorotoluene	106-43-4	1	0.20	ND	ug/L	U
t-Butylbenzene	98-06-6	1	0.20	ND	ug/L	U
1,3,5-Trimethylbenzene	108-67-8	1	0.20	ND	ug/L	U
1,2,4-Trimethylbenzene	95-63-6	1	0.20	ND	ug/L	U
s-Butylbenzene	135-98-8	1	0.20	ND	ug/L	U
4-Isopropyl Toluene	99-87-6	1	0.20	ND	ug/L	U
1,3-Dichlorobenzene	541-73-1	1	0.20	ND	ug/L	U
1,4-Dichlorobenzene	106-46-7	1	0.20	ND	ug/L	U
n-Butylbenzene	104-51-8	1	0.20	ND	ug/L	U
1,2-Dichlorobenzene	95-50-1	1	0.20	ND	ug/L	U
1,2-Dibromo-3-chloropropane	96-12-8	1	0.50	ND	ug/L	U



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Project: Landsburg
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Trip Blank
25C0223-10 (Water)

Volatile Organic Compounds

Method: EPA 8260D

Sampled: 03/10/2025 11:05

Instrument: NT20 Analyst: FL

Analyzed: 03/13/2025 18:45

Analyte	CAS Number	Dilution	Reporting Limit	Result	Units	Notes
1,2,4-Trichlorobenzene	120-82-1	1	0.50	ND	ug/L	U
Hexachloro-1,3-Butadiene	87-68-3	1	0.50	ND	ug/L	U
Naphthalene	91-20-3	1	0.50	ND	ug/L	U
1,2,3-Trichlorobenzene	87-61-6	1	0.50	ND	ug/L	U
Dichlorodifluoromethane	75-71-8	1	0.20	ND	ug/L	U
Surrogate: 1,2-Dichloroethane-d4			80-129 %	99.8	%	
Surrogate: Toluene-d8			80-120 %	98.4	%	
Surrogate: 4-Bromofluorobenzene			80-120 %	96.9	%	
Surrogate: 1,2-Dichlorobenzene-d4			80-120 %	101	%	



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Project: Landsburg
Project Number: [none]
Project Manager: Gary Zimmerman

Reported:
22-Apr-2025 14:45

Analysis by: Analytical Resources, LLC

Volatile Organic Compounds - Quality Control

Batch BNC0328 - EPA 8260D in Water

Instrument: NT20 Analyst: FL

QC Sample/Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC Limits	RPD	RPD Limit	Notes
Blank (BNC0328-BLK1)		Prepared: 13-Mar-2025 Analyzed: 13-Mar-2025 18:21							
Chloromethane	ND	0.50	ug/L						U
Vinyl Chloride	ND	0.10	ug/L						U
Bromomethane	ND	1.00	ug/L						U
Chloroethane	ND	0.20	ug/L						U
Trichlorofluoromethane	ND	0.20	ug/L						U
Acrolein	ND	5.00	ug/L						U
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	0.20	ug/L						U
Acetone	ND	5.00	ug/L						U
1,1-Dichloroethene	ND	0.20	ug/L						U
Iodomethane	ND	1.00	ug/L						U
Methylene Chloride	ND	1.00	ug/L						U
Acrylonitrile	ND	1.00	ug/L						U
Carbon Disulfide	ND	0.20	ug/L						U
trans-1,2-Dichloroethene	ND	0.20	ug/L						U
Vinyl Acetate	ND	0.20	ug/L						U
1,1-Dichloroethane	ND	0.20	ug/L						U
2-Butanone	ND	5.00	ug/L						U
2,2-Dichloropropane	ND	0.20	ug/L						U
cis-1,2-Dichloroethene	ND	0.20	ug/L						U
Chloroform	ND	0.20	ug/L						U
Bromochloromethane	ND	0.20	ug/L						U
1,1,1-Trichloroethane	ND	0.20	ug/L						U
1,1-Dichloropropene	ND	0.10	ug/L						U
Carbon tetrachloride	ND	0.20	ug/L						U
1,2-Dichloroethane	ND	0.20	ug/L						U
Benzene	ND	0.20	ug/L						U
Trichloroethene	ND	0.20	ug/L						U
1,2-Dichloropropane	ND	0.20	ug/L						U
Bromodichloromethane	ND	0.20	ug/L						U
Dibromomethane	ND	0.20	ug/L						U
2-Chloroethyl vinyl ether	ND	1.00	ug/L						U
4-Methyl-2-Pentanone	ND	2.50	ug/L						U
cis-1,3-Dichloropropene	ND	0.20	ug/L						U
Toluene	ND	0.20	ug/L						U



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Project: Landsburg
Project Number: [none]
Project Manager: Gary Zimmerman

Reported:
22-Apr-2025 14:45

Analysis by: Analytical Resources, LLC

Volatile Organic Compounds - Quality Control

Batch BNC0328 - EPA 8260D in Water

Instrument: NT20 Analyst: FL

QC Sample/Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Blank (BNC0328-BLK1)		Prepared: 13-Mar-2025 Analyzed: 13-Mar-2025 18:21								
trans-1,3-Dichloropropene	ND	0.20	ug/L							U
2-Hexanone	ND	5.00	ug/L							U
1,1,2-Trichloroethane	ND	0.20	ug/L							U
1,3-Dichloropropane	ND	0.10	ug/L							U
Tetrachloroethene	ND	0.20	ug/L							U
Dibromochloromethane	ND	0.20	ug/L							U
1,2-Dibromoethane	ND	0.10	ug/L							U
Chlorobenzene	ND	0.20	ug/L							U
Ethylbenzene	ND	0.20	ug/L							U
1,1,1,2-Tetrachloroethane	ND	0.20	ug/L							U
m,p-Xylene	ND	0.40	ug/L							U
o-Xylene	ND	0.20	ug/L							U
Xylenes, total	ND	0.60	ug/L							U
Styrene	ND	0.20	ug/L							U
Bromoform	ND	0.20	ug/L							U
1,1,2,2-Tetrachloroethane	ND	0.20	ug/L							U
1,2,3-Trichloropropane	ND	0.25	ug/L							U
trans-1,4-Dichloro 2-Butene	ND	1.00	ug/L							U
n-Propylbenzene	ND	0.20	ug/L							U
Bromobenzene	ND	0.20	ug/L							U
Isopropyl Benzene	ND	0.20	ug/L							U
2-Chlorotoluene	ND	0.10	ug/L							U
4-Chlorotoluene	ND	0.20	ug/L							U
t-Butylbenzene	ND	0.20	ug/L							U
1,3,5-Trimethylbenzene	ND	0.20	ug/L							U
1,2,4-Trimethylbenzene	ND	0.20	ug/L							U
s-Butylbenzene	ND	0.20	ug/L							U
4-Isopropyl Toluene	ND	0.20	ug/L							U
1,3-Dichlorobenzene	ND	0.20	ug/L							U
1,4-Dichlorobenzene	ND	0.20	ug/L							U
n-Butylbenzene	ND	0.20	ug/L							U
1,2-Dichlorobenzene	ND	0.20	ug/L							U
1,2-Dibromo-3-chloropropane	ND	0.50	ug/L							U
1,2,4-Trichlorobenzene	ND	0.50	ug/L							U



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Project: Landsburg
Project Number: [none]
Project Manager: Gary Zimmerman

Reported:
22-Apr-2025 14:45

Analysis by: Analytical Resources, LLC

Volatile Organic Compounds - Quality Control

Batch BNC0328 - EPA 8260D in Water

Instrument: NT20 Analyst: FL

QC Sample/Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Blank (BNC0328-BLK1)		Prepared: 13-Mar-2025 Analyzed: 13-Mar-2025 18:21								
Hexachloro-1,3-Butadiene	ND	0.50	ug/L							U
Naphthalene	ND	0.50	ug/L							U
1,2,3-Trichlorobenzene	ND	0.50	ug/L							U
Dichlorodifluoromethane	ND	0.20	ug/L							U
Surrogate: 1,2-Dichloroethane-d4	5.00		ug/L	5.00		100	80-129			
Surrogate: Toluene-d8	4.95		ug/L	5.00		98.9	80-120			
Surrogate: 4-Bromofluorobenzene	4.84		ug/L	5.00		96.8	80-120			
Surrogate: 1,2-Dichlorobenzene-d4	5.05		ug/L	5.00		101	80-120			
LCS (BNC0328-BS1)		Prepared: 13-Mar-2025 Analyzed: 13-Mar-2025 17:12								
Chloromethane	10.0	0.50	ug/L	10.0		100	60-138			
Vinyl Chloride	10.4	0.10	ug/L	10.0		104	66-133			
Bromomethane	10.2	1.00	ug/L	10.0		102	72-131			
Chloroethane	10.5	0.20	ug/L	10.0		105	60-155			
Trichlorofluoromethane	10.5	0.20	ug/L	10.0		105	62-141			
Acrolein	48.1	5.00	ug/L	50.0		96.2	52-190			
1,1,2-Trichloro-1,2,2-Trifluoroethane	10.2	0.20	ug/L	10.0		102	76-129			
Acetone	45.5	5.00	ug/L	50.0		91.0	58-142			
1,1-Dichloroethene	10.2	0.20	ug/L	10.0		102	69-135			
Iodomethane	9.77	1.00	ug/L	10.0		97.7	56-147			
Methylene Chloride	9.73	1.00	ug/L	10.0		97.3	65-135			
Acrylonitrile	9.85	1.00	ug/L	10.0		98.5	64-134			
Carbon Disulfide	9.76	0.20	ug/L	10.0		97.6	78-125			
trans-1,2-Dichloroethene	10.2	0.20	ug/L	10.0		102	78-128			
Vinyl Acetate	10.1	0.20	ug/L	10.0		101	55-138			
1,1-Dichloroethane	10.1	0.20	ug/L	10.0		101	76-124			
2-Butanone	47.6	5.00	ug/L	50.0		95.2	61-140			
2,2-Dichloropropane	10.1	0.20	ug/L	10.0		101	66-147			
cis-1,2-Dichloroethene	9.95	0.20	ug/L	10.0		99.5	80-121			
Chloroform	9.99	0.20	ug/L	10.0		99.9	80-122			
Bromochloromethane	9.80	0.20	ug/L	10.0		98.0	80-121			
1,1,1-Trichloroethane	9.85	0.20	ug/L	10.0		98.5	79-123			
1,1-Dichloropropene	10.6	0.10	ug/L	10.0		106	80-127			
Carbon tetrachloride	9.84	0.20	ug/L	10.0		98.4	53-137			
1,2-Dichloroethane	10.1	0.20	ug/L	10.0		101	75-123			



WSP USA, Inc.
210 East 13th Street, Suite 300
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Project: Landsburg
Project Number: [none]
Project Manager: Gary Zimmerman

Reported:
22-Apr-2025 14:45

Analysis by: Analytical Resources, LLC

Volatile Organic Compounds - Quality Control

Batch BNC0328 - EPA 8260D in Water

Instrument: NT20 Analyst: FL

QC Sample/Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
LCS (BNC0328-BS1)		Prepared: 13-Mar-2025 Analyzed: 13-Mar-2025 17:12								
Benzene	10.4	0.20	ug/L	10.0		104	80-120			
Trichloroethene	10.0	0.20	ug/L	10.0		100	80-120			
1,2-Dichloropropane	9.82	0.20	ug/L	10.0		98.2	80-120			
Bromodichloromethane	9.91	0.20	ug/L	10.0		99.1	80-121			
Dibromomethane	9.77	0.20	ug/L	10.0		97.7	80-120			
2-Chloroethyl vinyl ether	9.79	1.00	ug/L	10.0		97.9	64-120			
4-Methyl-2-Pentanone	49.1	2.50	ug/L	50.0		98.1	67-133			
cis-1,3-Dichloropropene	10.3	0.20	ug/L	10.0		103	80-124			
Toluene	10.0	0.20	ug/L	10.0		100	80-120			
trans-1,3-Dichloropropene	10.3	0.20	ug/L	10.0		103	71-127			
2-Hexanone	47.7	5.00	ug/L	50.0		95.5	69-133			
1,1,2-Trichloroethane	9.86	0.20	ug/L	10.0		98.6	80-121			
1,3-Dichloropropane	9.80	0.10	ug/L	10.0		98.0	80-120			
Tetrachloroethene	10.0	0.20	ug/L	10.0		100	80-120			
Dibromochloromethane	9.79	0.20	ug/L	10.0		97.9	65-135			
1,2-Dibromoethane	9.78	0.10	ug/L	10.0		97.8	80-121			
Chlorobenzene	9.96	0.20	ug/L	10.0		99.6	80-120			
Ethylbenzene	10.1	0.20	ug/L	10.0		101	80-120			
1,1,1,2-Tetrachloroethane	9.89	0.20	ug/L	10.0		98.9	80-120			
m,p-Xylene	21.1	0.40	ug/L	20.0		106	80-121			
o-Xylene	10.4	0.20	ug/L	10.0		104	80-121			
Xylenes, total	31.5	0.60	ug/L	30.0		105	76-127			
Styrene	10.8	0.20	ug/L	10.0		108	80-124			
Bromoform	9.23	0.20	ug/L	10.0		92.3	51-134			
1,1,2,2-Tetrachloroethane	9.11	0.20	ug/L	10.0		91.1	77-123			
1,2,3-Trichloropropane	8.96	0.25	ug/L	10.0		89.6	76-125			
trans-1,4-Dichloro 2-Butene	9.39	1.00	ug/L	10.0		93.9	55-129			
n-Propylbenzene	10.5	0.20	ug/L	10.0		105	78-130			
Bromobenzene	9.57	0.20	ug/L	10.0		95.7	80-120			
Isopropyl Benzene	10.5	0.20	ug/L	10.0		105	80-128			
2-Chlorotoluene	9.81	0.10	ug/L	10.0		98.1	78-122			
4-Chlorotoluene	10.0	0.20	ug/L	10.0		100	80-121			
t-Butylbenzene	10.4	0.20	ug/L	10.0		104	78-125			
1,3,5-Trimethylbenzene	10.5	0.20	ug/L	10.0		105	80-129			



WSP USA, Inc.
210 East 13th Street, Suite 300
Vancouver WA, 98660-3231

Project: Landsburg
Project Number: [none]
Project Manager: Gary Zimmerman

Reported:
22-Apr-2025 14:45

Analysis by: Analytical Resources, LLC

Volatile Organic Compounds - Quality Control

Batch BNC0328 - EPA 8260D in Water

Instrument: NT20 Analyst: FL

QC Sample/Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
LCS (BNC0328-BS1)		Prepared: 13-Mar-2025 Analyzed: 13-Mar-2025 17:12								
1,2,4-Trimethylbenzene	10.6	0.20	ug/L	10.0		106	80-127			
s-Butylbenzene	10.6	0.20	ug/L	10.0		106	78-129			
4-Isopropyl Toluene	10.9	0.20	ug/L	10.0		109	79-130			
1,3-Dichlorobenzene	9.75	0.20	ug/L	10.0		97.5	80-120			
1,4-Dichlorobenzene	9.53	0.20	ug/L	10.0		95.3	80-120			
n-Butylbenzene	10.5	0.20	ug/L	10.0		105	74-129			
1,2-Dichlorobenzene	9.44	0.20	ug/L	10.0		94.4	80-120			
1,2-Dibromo-3-chloropropane	8.72	0.50	ug/L	10.0		87.2	62-123			
1,2,4-Trichlorobenzene	9.49	0.50	ug/L	10.0		94.9	64-124			
Hexachloro-1,3-Butadiene	9.93	0.50	ug/L	10.0		99.3	65-145			
Naphthalene	8.94	0.50	ug/L	10.0		89.4	50-134			Q
1,2,3-Trichlorobenzene	9.33	0.50	ug/L	10.0		93.3	49-133			
Dichlorodifluoromethane	9.66	0.20	ug/L	10.0		96.6	48-147			
Surrogate: 1,2-Dichloroethane-d4	4.87		ug/L	5.00		97.3	80-129			
Surrogate: Toluene-d8	5.03		ug/L	5.00		101	80-120			
Surrogate: 4-Bromofluorobenzene	5.18		ug/L	5.00		104	80-120			
Surrogate: 1,2-Dichlorobenzene-d4	4.94		ug/L	5.00		98.7	80-120			
LCS Dup (BNC0328-BSD1)		Prepared: 13-Mar-2025 Analyzed: 13-Mar-2025 17:35								
Chloromethane	10.4	0.50	ug/L	10.0		104	60-138	3.26	30	
Vinyl Chloride	10.7	0.10	ug/L	10.0		107	66-133	2.89	30	
Bromomethane	10.4	1.00	ug/L	10.0		104	72-131	2.50	30	
Chloroethane	10.9	0.20	ug/L	10.0		109	60-155	3.46	30	
Trichlorofluoromethane	10.9	0.20	ug/L	10.0		109	62-141	3.29	30	
Acrolein	47.7	5.00	ug/L	50.0		95.4	52-190	0.83	30	
1,1,2-Trichloro-1,2,2-Trifluoroethane	10.5	0.20	ug/L	10.0		105	76-129	3.16	30	
Acetone	47.2	5.00	ug/L	50.0		94.4	58-142	3.68	30	
1,1-Dichloroethene	10.5	0.20	ug/L	10.0		105	69-135	2.80	30	
Iodomethane	10.2	1.00	ug/L	10.0		102	56-147	4.31	30	
Methylene Chloride	9.93	1.00	ug/L	10.0		99.3	65-135	2.07	30	
Acrylonitrile	9.98	1.00	ug/L	10.0		99.8	64-134	1.30	30	
Carbon Disulfide	10.2	0.20	ug/L	10.0		102	78-125	4.37	30	
trans-1,2-Dichloroethene	10.4	0.20	ug/L	10.0		104	78-128	2.53	30	
Vinyl Acetate	10.5	0.20	ug/L	10.0		105	55-138	3.52	30	
1,1-Dichloroethane	10.3	0.20	ug/L	10.0		103	76-124	2.01	30	



WSP USA, Inc.
210 East 13th Street, Suite 300
Vancouver WA, 98660-3231

Project: Landsburg
Project Number: [none]
Project Manager: Gary Zimmerman

Reported:
22-Apr-2025 14:45

Analysis by: Analytical Resources, LLC

Volatile Organic Compounds - Quality Control

Batch BNC0328 - EPA 8260D in Water

Instrument: NT20 Analyst: FL

QC Sample/Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
LCS Dup (BNC0328-BSD1)		Prepared: 13-Mar-2025 Analyzed: 13-Mar-2025 17:35								
2-Butanone	48.5	5.00	ug/L	50.0		97.0	61-140	1.91	30	
2,2-Dichloropropane	10.3	0.20	ug/L	10.0		103	66-147	2.22	30	
cis-1,2-Dichloroethene	10.3	0.20	ug/L	10.0		103	80-121	3.56	30	
Chloroform	10.2	0.20	ug/L	10.0		102	80-122	2.42	30	
Bromochloromethane	10.0	0.20	ug/L	10.0		100	80-121	2.47	30	
1,1,1-Trichloroethane	9.77	0.20	ug/L	10.0		97.7	79-123	0.80	30	
1,1-Dichloropropene	10.9	0.10	ug/L	10.0		109	80-127	3.25	30	
Carbon tetrachloride	10.1	0.20	ug/L	10.0		101	53-137	2.23	30	
1,2-Dichloroethane	10.2	0.20	ug/L	10.0		102	75-123	0.79	30	
Benzene	10.6	0.20	ug/L	10.0		106	80-120	2.41	30	
Trichloroethene	10.4	0.20	ug/L	10.0		104	80-120	3.85	30	
1,2-Dichloropropane	10.2	0.20	ug/L	10.0		102	80-120	3.74	30	
Bromodichloromethane	10.1	0.20	ug/L	10.0		101	80-121	1.96	30	
Dibromomethane	9.96	0.20	ug/L	10.0		99.6	80-120	1.90	30	
2-Chloroethyl vinyl ether	10.1	1.00	ug/L	10.0		101	64-120	2.81	30	
4-Methyl-2-Pentanone	50.8	2.50	ug/L	50.0		102	67-133	3.48	30	
cis-1,3-Dichloropropene	10.6	0.20	ug/L	10.0		106	80-124	2.84	30	
Toluene	10.3	0.20	ug/L	10.0		103	80-120	2.56	30	
trans-1,3-Dichloropropene	10.6	0.20	ug/L	10.0		106	71-127	3.10	30	
2-Hexanone	49.1	5.00	ug/L	50.0		98.1	69-133	2.76	30	
1,1,2-Trichloroethane	10.1	0.20	ug/L	10.0		101	80-121	2.71	30	
1,3-Dichloropropane	10.0	0.10	ug/L	10.0		100	80-120	2.43	30	
Tetrachloroethene	10.4	0.20	ug/L	10.0		104	80-120	4.20	30	
Dibromochloromethane	10.2	0.20	ug/L	10.0		102	65-135	4.48	30	
1,2-Dibromoethane	9.99	0.10	ug/L	10.0		99.9	80-121	2.14	30	
Chlorobenzene	10.4	0.20	ug/L	10.0		104	80-120	4.18	30	
Ethylbenzene	10.6	0.20	ug/L	10.0		106	80-120	4.89	30	
1,1,1,2-Tetrachloroethane	10.1	0.20	ug/L	10.0		101	80-120	2.38	30	
m,p-Xylene	22.0	0.40	ug/L	20.0		110	80-121	3.89	30	
o-Xylene	10.8	0.20	ug/L	10.0		108	80-121	3.76	30	
Xylenes, total	32.7	0.60	ug/L	30.0		109	76-127	3.84	30	
Styrene	11.2	0.20	ug/L	10.0		112	80-124	3.20	30	
Bromoform	9.59	0.20	ug/L	10.0		95.9	51-134	3.76	30	
1,1,2,2-Tetrachloroethane	9.55	0.20	ug/L	10.0		95.5	77-123	4.74	30	



WSP USA, Inc.
210 East 13th Street, Suite 300
Vancouver WA, 98660-3231

Project: Landsburg
Project Number: [none]
Project Manager: Gary Zimmerman

Reported:
22-Apr-2025 14:45

Analysis by: Analytical Resources, LLC

Volatile Organic Compounds - Quality Control

Batch BNC0328 - EPA 8260D in Water

Instrument: NT20 Analyst: FL

QC Sample/Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
LCS Dup (BNC0328-BSD1)		Prepared: 13-Mar-2025 Analyzed: 13-Mar-2025 17:35								
1,2,3-Trichloropropane	9.48	0.25	ug/L	10.0		94.8	76-125	5.61	30	
trans-1,4-Dichloro 2-Butene	9.91	1.00	ug/L	10.0		99.1	55-129	5.42	30	
n-Propylbenzene	10.9	0.20	ug/L	10.0		109	78-130	3.46	30	
Bromobenzene	10.0	0.20	ug/L	10.0		100	80-120	4.77	30	
Isopropyl Benzene	10.9	0.20	ug/L	10.0		109	80-128	4.13	30	
2-Chlorotoluene	10.3	0.10	ug/L	10.0		103	78-122	4.96	30	
4-Chlorotoluene	10.4	0.20	ug/L	10.0		104	80-121	3.14	30	
t-Butylbenzene	10.9	0.20	ug/L	10.0		109	78-125	3.83	30	
1,3,5-Trimethylbenzene	10.9	0.20	ug/L	10.0		109	80-129	4.10	30	
1,2,4-Trimethylbenzene	11.0	0.20	ug/L	10.0		110	80-127	4.05	30	
s-Butylbenzene	11.0	0.20	ug/L	10.0		110	78-129	3.97	30	
4-Isopropyl Toluene	11.3	0.20	ug/L	10.0		113	79-130	3.25	30	
1,3-Dichlorobenzene	10.1	0.20	ug/L	10.0		101	80-120	3.68	30	
1,4-Dichlorobenzene	9.82	0.20	ug/L	10.0		98.2	80-120	3.00	30	
n-Butylbenzene	10.8	0.20	ug/L	10.0		108	74-129	2.84	30	
1,2-Dichlorobenzene	9.79	0.20	ug/L	10.0		97.9	80-120	3.57	30	
1,2-Dibromo-3-chloropropane	9.22	0.50	ug/L	10.0		92.2	62-123	5.60	30	
1,2,4-Trichlorobenzene	9.95	0.50	ug/L	10.0		99.5	64-124	4.71	30	
Hexachloro-1,3-Butadiene	10.3	0.50	ug/L	10.0		103	65-145	3.63	30	
Naphthalene	9.34	0.50	ug/L	10.0		93.4	50-134	4.31	30	Q
1,2,3-Trichlorobenzene	9.62	0.50	ug/L	10.0		96.2	49-133	3.06	30	
Dichlorodifluoromethane	8.68	0.20	ug/L	10.0		86.8	48-147	10.70	30	
Surrogate: 1,2-Dichloroethane-d4	4.73		ug/L	5.00		94.6	80-129			
Surrogate: Toluene-d8	5.01		ug/L	5.00		100	80-120			
Surrogate: 4-Bromofluorobenzene	5.17		ug/L	5.00		103	80-120			
Surrogate: 1,2-Dichlorobenzene-d4	4.94		ug/L	5.00		98.7	80-120			



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Project: Landsburg
Project Number: [none]
Project Manager: Gary Zimmerman

Reported:
22-Apr-2025 14:45

Analysis by: Analytical Resources, LLC

Semivolatile Organic Compounds - Quality Control

Batch BNC0300 - EPA 8270E in Water

Instrument: NT10 Analyst: JZ

QC Sample/Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Blank (BNC0300-BLK1)		Prepared: 13-Mar-2025 Analyzed: 19-Mar-2025 21:50								
Phenol	ND	1.0	ug/L							U
bis(2-chloroethyl) ether	ND	1.0	ug/L							U
2-Chlorophenol	ND	1.0	ug/L							U
1,3-Dichlorobenzene	ND	1.0	ug/L							U
1,4-Dichlorobenzene	ND	1.0	ug/L							U
Benzyl Alcohol	ND	2.0	ug/L							U
1,2-Dichlorobenzene	ND	1.0	ug/L							U
2-Methylphenol	ND	1.0	ug/L							U
2,2'-Oxybis(1-chloropropane)	ND	1.0	ug/L							U
4-Methylphenol	ND	2.0	ug/L							U
N-Nitroso-di-n-Propylamine	ND	1.0	ug/L							U
Hexachloroethane	ND	2.0	ug/L							U
Nitrobenzene	ND	1.0	ug/L							U
Isophorone	ND	1.0	ug/L							U
2-Nitrophenol	ND	3.0	ug/L							U
2,4-Dimethylphenol	ND	3.0	ug/L							U
Bis(2-Chloroethoxy)methane	ND	1.0	ug/L							U
Benzoic acid	ND	10.0	ug/L							U
2,4-Dichlorophenol	ND	3.0	ug/L							U
1,2,4-Trichlorobenzene	ND	1.0	ug/L							U
Naphthalene	ND	1.0	ug/L							U
4-Chloroaniline	ND	5.0	ug/L							U
Hexachlorobutadiene	ND	3.0	ug/L							U
4-Chloro-3-Methylphenol	ND	3.0	ug/L							U
2-Methylnaphthalene	ND	1.0	ug/L							U
Hexachlorocyclopentadiene	ND	5.0	ug/L							U
2,4,6-Trichlorophenol	ND	3.0	ug/L							U
2,4,5-Trichlorophenol	ND	5.0	ug/L							U
2-Chloronaphthalene	ND	1.0	ug/L							U
2-Nitroaniline	ND	3.0	ug/L							U
Dimethylphthalate	ND	1.0	ug/L							U
Acenaphthylene	ND	1.0	ug/L							U
2,6-Dinitrotoluene	ND	3.0	ug/L							U
3-Nitroaniline	ND	3.0	ug/L							U



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210 East 13th Street, Suite 300
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Project: Landsburg
Project Number: [none]
Project Manager: Gary Zimmerman

Reported:
22-Apr-2025 14:45

Analysis by: Analytical Resources, LLC

Semivolatile Organic Compounds - Quality Control

Batch BNC0300 - EPA 8270E in Water

Instrument: NT10 Analyst: JZ

QC Sample/Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Blank (BNC0300-BLK1)		Prepared: 13-Mar-2025 Analyzed: 19-Mar-2025 21:50								
Acenaphthene	ND	1.0	ug/L							U
2,4-Dinitrophenol	ND	10.0	ug/L							U
Dibenzofuran	ND	1.0	ug/L							U
4-Nitrophenol	ND	5.0	ug/L							U
2,4-Dinitrotoluene	ND	3.0	ug/L							U
Fluorene	ND	1.0	ug/L							U
Diethyl phthalate	ND	1.0	ug/L							U
4-Chlorophenylphenyl ether	ND	1.0	ug/L							U
4-Nitroaniline	ND	3.0	ug/L							U
4,6-Dinitro-2-methylphenol	ND	10.0	ug/L							U
N-Nitrosodiphenylamine	ND	1.0	ug/L							U
4-Bromophenyl phenyl ether	ND	1.0	ug/L							U
Hexachlorobenzene	ND	1.0	ug/L							U
Pentachlorophenol	ND	5.0	ug/L							U
Phenanthrene	ND	1.0	ug/L							U
Anthracene	ND	1.0	ug/L							U
Carbazole	ND	1.0	ug/L							U
Di-n-Butylphthalate	ND	1.0	ug/L							U
Fluoranthene	ND	1.0	ug/L							U
Pyrene	ND	1.0	ug/L							U
Butylbenzylphthalate	ND	1.0	ug/L							U
Benzo(a)anthracene	ND	1.0	ug/L							U
3,3'-Dichlorobenzidine	ND	10.0	ug/L							U
Chrysene	ND	1.0	ug/L							U
bis(2-Ethylhexyl)phthalate	ND	3.0	ug/L							U
Di-n-Octylphthalate	ND	1.0	ug/L							U
Benzo(a)fluoranthene, Total	ND	2.0	ug/L							U
Benzo(a)pyrene	ND	1.0	ug/L							U
Indeno(1,2,3-cd)pyrene	ND	1.0	ug/L							U
Dibenzo(a,h)anthracene	ND	1.0	ug/L							U
Benzo(g,h,i)perylene	ND	1.0	ug/L							U
1-Methylnaphthalene	ND	1.0	ug/L							U
Surrogate: 2-Fluorophenol	10.1		ug/L	18.8		54.0	33-120			
Surrogate: Phenol-d5	7.87		ug/L	18.8		42.0	38-120			



WSP USA, Inc.
210 East 13th Street, Suite 300
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Project: Landsburg
Project Number: [none]
Project Manager: Gary Zimmerman

Reported:
22-Apr-2025 14:45

Analysis by: Analytical Resources, LLC

Semivolatile Organic Compounds - Quality Control

Batch BNC0300 - EPA 8270E in Water

Instrument: NT10 Analyst: JZ

QC Sample/Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Blank (BNC0300-BLK1)		Prepared: 13-Mar-2025 Analyzed: 19-Mar-2025 21:50								
Surrogate: 2-Chlorophenol-d4	10.9		ug/L	18.8		58.4	41-120			
Surrogate: 1,2-Dichlorobenzene-d4	8.71		ug/L	12.5		69.7	20-120			
Surrogate: Nitrobenzene-d5	10.3		ug/L	12.5		82.1	27-120			
Surrogate: 2-Fluorobiphenyl	9.26		ug/L	12.5		74.1	33-120			
Surrogate: 2,4,6-Tribromophenol	13.8		ug/L	18.8		73.4	52-120			
Surrogate: p-Terphenyl-d14	10.7		ug/L	12.5		86.0	28-120			
LCS (BNC0300-BS1)		Prepared: 13-Mar-2025 Analyzed: 19-Mar-2025 22:30								
Phenol	12.3	1.0	ug/L	20.0		61.3	35-120			
bis(2-chloroethyl) ether	12.3	1.0	ug/L	20.0		61.4	46.5-120			
2-Chlorophenol	12.3	1.0	ug/L	20.0		61.4	48-120			
1,3-Dichlorobenzene	11.4	1.0	ug/L	20.0		57.2	34.2-120			
1,4-Dichlorobenzene	11.7	1.0	ug/L	20.0		58.3	36-120			
Benzyl Alcohol	13.9	2.0	ug/L	20.0		69.7	27.4-120			
1,2-Dichlorobenzene	11.5	1.0	ug/L	20.0		57.3	38.4-120			
2-Methylphenol	12.1	1.0	ug/L	20.0		60.5	47.8-120			
2,2'-Oxybis(1-chloropropane)	13.4	1.0	ug/L	20.0		67.0	40.4-120			
4-Methylphenol	12.9	2.0	ug/L	20.0		64.4	52.3-120			
N-Nitroso-di-n-Propylamine	11.5	1.0	ug/L	20.0		57.7	51.4-120			
Hexachloroethane	12.0	2.0	ug/L	20.0		60.0	29.5-120			
Nitrobenzene	13.5	1.0	ug/L	20.0		67.7	51.5-120			
Isophorone	15.0	1.0	ug/L	20.0		75.2	62.3-128			
2-Nitrophenol	14.6	3.0	ug/L	20.0		72.8	58.6-124			
2,4-Dimethylphenol	29.0	3.0	ug/L	60.0		48.4	38.5-120			
Bis(2-Chloroethoxy)methane	13.5	1.0	ug/L	20.0		67.7	52.9-120			
Benzoic acid	71.3	10.0	ug/L	90.0		79.3	38.2-120			
2,4-Dichlorophenol	50.1	3.0	ug/L	60.0		83.5	43.6-120			
1,2,4-Trichlorobenzene	12.7	1.0	ug/L	20.0		63.4	38.6-120			
Naphthalene	12.9	1.0	ug/L	20.0		64.3	40.5-120			
4-Chloroaniline	19.7	5.0	ug/L	60.0		32.9	42.7-120			*
Hexachlorobutadiene	13.6	3.0	ug/L	20.0		68.1	32.3-120			
4-Chloro-3-Methylphenol	47.9	3.0	ug/L	60.0		79.8	51.9-120			
2-Methylnaphthalene	12.3	1.0	ug/L	20.0		61.7	47.3-120			
Hexachlorocyclopentadiene	49.9	5.0	ug/L	60.0		83.1	23.3-120			
2,4,6-Trichlorophenol	47.8	3.0	ug/L	60.0		79.7	47-120			



WSP USA, Inc.
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Project: Landsburg
Project Number: [none]
Project Manager: Gary Zimmerman

Reported:
22-Apr-2025 14:45

Analysis by: Analytical Resources, LLC

Semivolatile Organic Compounds - Quality Control

Batch BNC0300 - EPA 8270E in Water

Instrument: NT10 Analyst: JZ

QC Sample/Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
LCS (BNC0300-BS1)		Prepared: 13-Mar-2025 Analyzed: 19-Mar-2025 22:30								
2,4,5-Trichlorophenol	48.1	5.0	ug/L	60.0		80.1	48.4-120			
2-Chloronaphthalene	13.3	1.0	ug/L	20.0		66.5	47.7-123			
2-Nitroaniline	48.9	3.0	ug/L	60.0		81.5	56.8-120			
Dimethylphthalate	13.4	1.0	ug/L	20.0		67.0	65.2-125			
Acenaphthylene	13.1	1.0	ug/L	20.0		65.7	44.1-120			
2,6-Dinitrotoluene	44.7	3.0	ug/L	60.0		74.4	69.3-140			
3-Nitroaniline	42.1	3.0	ug/L	60.0		70.2	60.9-120			
Acenaphthene	12.7	1.0	ug/L	20.0		63.5	50.4-120			
2,4-Dinitrophenol	74.6	10.0	ug/L	110		67.8	33.7-183			
Dibenzofuran	14.6	1.0	ug/L	20.0		72.9	49.9-120			
4-Nitrophenol	75.1	5.0	ug/L	60.0		125	50.2-136			
2,4-Dinitrotoluene	44.3	3.0	ug/L	60.0		73.9	66.8-132			
Fluorene	13.2	1.0	ug/L	20.0		65.8	57.8-120			
Diethyl phthalate	13.6	1.0	ug/L	20.0		67.8	68.1-120			*
4-Chlorophenylphenyl ether	13.1	1.0	ug/L	20.0		65.3	59.1-127			
4-Nitroaniline	37.5	3.0	ug/L	60.0		62.6	56-122			
4,6-Dinitro-2-methylphenol	90.5	10.0	ug/L	110		82.3	37.9-162			
N-Nitrosodiphenylamine	14.9	1.0	ug/L	20.0		74.3	59.6-120			
4-Bromophenyl phenyl ether	14.3	1.0	ug/L	20.0		71.5	59.6-120			
Hexachlorobenzene	13.5	1.0	ug/L	20.0		67.4	53.7-120			
Pentachlorophenol	51.1	5.0	ug/L	60.0		85.1	40.3-128			
Phenanthrene	13.7	1.0	ug/L	20.0		68.7	58.8-120			
Anthracene	13.4	1.0	ug/L	20.0		67.2	60.5-120			
Carbazole	13.7	1.0	ug/L	20.0		68.7	59.7-120			
Di-n-Butylphthalate	13.6	1.0	ug/L	20.0		67.8	71-120			*
Fluoranthene	13.8	1.0	ug/L	20.0		69.2	66.7-120			
Pyrene	14.4	1.0	ug/L	20.0		72.2	62.7-127			
Butylbenzylphthalate	13.1	1.0	ug/L	20.0		65.5	67.4-128			*
Benzo(a)anthracene	13.3	1.0	ug/L	20.0		66.3	58.3-128			
3,3'-Dichlorobenzidine	ND	10.0	ug/L	40.0		14.9	34.1-120			*, U
Chrysene	14.7	1.0	ug/L	20.0		73.7	58.9-120			
bis(2-Ethylhexyl)phthalate	16.1	3.0	ug/L	20.0		80.5	68.3-123			
Di-n-Octylphthalate	14.7	1.0	ug/L	20.0		73.3	61.5-120			
Benzofluoranthenes, Total	28.2	2.0	ug/L	40.0		70.4	66.5-120			



WSP USA, Inc.
210 East 13th Street, Suite 300
Vancouver WA, 98660-3231

Project: Landsburg
Project Number: [none]
Project Manager: Gary Zimmerman

Reported:
22-Apr-2025 14:45

Analysis by: Analytical Resources, LLC

Semivolatile Organic Compounds - Quality Control

Batch BNC0300 - EPA 8270E in Water

Instrument: NT10 Analyst: JZ

QC Sample/Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC Limits	RPD	RPD Limit	Notes
LCS (BNC0300-BS1)		Prepared: 13-Mar-2025 Analyzed: 19-Mar-2025 22:30							
Benzo(a)pyrene	15.3	1.0	ug/L	20.0		76.7 70.6-120			
Indeno(1,2,3-cd)pyrene	17.0	1.0	ug/L	20.0		85.0 46.5-120			
Dibenzo(a,h)anthracene	16.0	1.0	ug/L	20.0		80.0 49.6-120			
Benzo(g,h,i)perylene	15.4	1.0	ug/L	20.0		77.1 37-120			
1-Methylnaphthalene	14.1	1.0	ug/L	20.0		70.5 46.9-120			
Surrogate: 2-Fluorophenol	10.9		ug/L	18.8		58.2 33-120			
Surrogate: Phenol-d5	11.7		ug/L	18.8		62.5 38-120			
Surrogate: 2-Chlorophenol-d4	12.8		ug/L	18.8		68.2 41-120			
Surrogate: 1,2-Dichlorobenzene-d4	8.61		ug/L	12.5		68.9 20-120			
Surrogate: Nitrobenzene-d5	9.99		ug/L	12.5		79.9 27-120			
Surrogate: 2-Fluorobiphenyl	9.58		ug/L	12.5		76.6 33-120			
Surrogate: 2,4,6-Tribromophenol	15.3		ug/L	18.8		81.8 52-120			
Surrogate: p-Terphenyl-d14	9.38		ug/L	12.5		75.0 28-120			



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Vancouver WA, 98660-3231

Project: Landsburg
Project Number: [none]
Project Manager: Gary Zimmerman

Reported:
22-Apr-2025 14:45

Analysis by: Analytical Resources, LLC

Semivolatile Organic Compounds - Quality Control

Batch BNC0345 - EPA 8270E in Water

Instrument: NT14 Analyst: RT

QC Sample/Analyte	Result	Detection Limit	Reporting Limit	Units	Spike Level	Source Result	%REC Limits	RPD	RPD Limit	Notes
Blank (BNC0345-BLK1)					Prepared: 14-Mar-2025 Analyzed: 27-Mar-2025 16:31					
1,4-Dioxane	ND	0.2	0.4	ug/L						U
Surrogate: 1,4-Dioxane-d8	7.49			ug/L	10.0	74.9	30-160			
LCS (BNC0345-BS1)					Prepared: 14-Mar-2025 Analyzed: 27-Mar-2025 16:47					
1,4-Dioxane	14.3	0.2	0.4	ug/L	10.0	143	30-160			
Surrogate: 1,4-Dioxane-d8	6.94			ug/L	10.0	69.4	30-160			
LCS Dup (BNC0345-BSD1)					Prepared: 14-Mar-2025 Analyzed: 27-Mar-2025 17:04					
1,4-Dioxane	14.0	0.2	0.4	ug/L	10.0	140	30-160	1.91	30	
Surrogate: 1,4-Dioxane-d8	7.15			ug/L	10.0	71.5	30-160			



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Project: Landsburg
Project Number: [none]
Project Manager: Gary Zimmerman

Reported:
22-Apr-2025 14:45

Analysis by: Analytical Resources, LLC

Semivolatile Organic Compounds - Quality Control

Batch BNC0753 - EPA 8270E in Water

Instrument: NT14 Analyst: RT

QC Sample/Analyte	Result	Detection Limit	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Blank (BNC0753-BLK1)					Prepared: 01-Apr-2025 Analyzed: 07-Apr-2025 15:25						
1,4-Dioxane	ND	0.2	0.4	ug/L							U
Surrogate: 1,4-Dioxane-d8	7.20			ug/L	10.0		72.0	30-160			
LCS (BNC0753-BS1)					Prepared: 01-Apr-2025 Analyzed: 07-Apr-2025 15:42						
1,4-Dioxane	15.3	0.2	0.4	ug/L	10.0		153	30-160			
Surrogate: 1,4-Dioxane-d8	5.51			ug/L	10.0		55.1	30-160			
LCS Dup (BNC0753-BSD1)					Prepared: 01-Apr-2025 Analyzed: 07-Apr-2025 15:59						
1,4-Dioxane	15.0	0.2	0.4	ug/L	10.0		150	30-160	1.95	30	
Surrogate: 1,4-Dioxane-d8	6.79			ug/L	10.0		67.9	30-160			



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Project: Landsburg
Project Number: [none]
Project Manager: Gary Zimmerman

Reported:
22-Apr-2025 14:45

Analysis by: Analytical Resources, LLC

Petroleum Hydrocarbons - Quality Control

Batch BNC0298 - NWTPH-HCID in Water

Instrument: FID4 Analyst: JR/VTJ/JW

QC Sample/Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Blank (BNC0298-BLK1)		Prepared: 13-Mar-2025 Analyzed: 17-Mar-2025 10:17								
Gasoline Range Organics (Tol-C12)	ND	0.25	mg/L							U
Diesel Range Organics (C12-C24)	ND	0.50	mg/L							U
Motor Oil Range Organics (C24-C38)	ND	1.00	mg/L							U
Surrogate: o-Terphenyl	0.226		mg/L	0.225		100	50-150			
Surrogate: n-Triacontane	0.236		mg/L	0.225		105	50-150			



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Project: Landsburg
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Reported:
22-Apr-2025 14:45

Analysis by: Analytical Resources, LLC

Chlorinated Pesticides - Quality Control

Batch BNC0335 - EPA 8081B in Water

Instrument: ECD6 Analyst: RT/JGR

QC Sample/Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Blank (BNC0335-BLK1)		Prepared: 14-Mar-2025 Analyzed: 10-Apr-2025 13:19								
alpha-BHC	ND	0.025	ug/L							U
beta-BHC	ND	0.025	ug/L							U
gamma-BHC (Lindane)	ND	0.025	ug/L							U
delta-BHC	ND	0.025	ug/L							U
Heptachlor	ND	0.025	ug/L							U
Aldrin	ND	0.025	ug/L							U
Heptachlor Epoxide	ND	0.050	ug/L							U
trans-Chlordane (beta-Chlordane)	ND	0.025	ug/L							U
cis-Chlordane (alpha-chlordane)	ND	0.025	ug/L							U
Endosulfan I	ND	0.025	ug/L							U
4,4'-DDE	ND	0.050	ug/L							U
Dieldrin	ND	0.050	ug/L							U
Endrin	ND	0.050	ug/L							U
Endosulfan II	ND	0.050	ug/L							U
4,4'-DDD	ND	0.050	ug/L							U
Endrin Aldehyde	ND	0.050	ug/L							U
4,4'-DDT	ND	0.050	ug/L							U
Endosulfan Sulfate	ND	0.050	ug/L							U
Endrin Ketone	ND	0.050	ug/L							U
Methoxychlor	ND	0.250	ug/L							U
Toxaphene	ND	1.25	ug/L							U
Surrogate: Decachlorobiphenyl	0.262		ug/L	0.400		65.4	11-144			
Surrogate: Decachlorobiphenyl [2C]	0.263		ug/L	0.400		65.7	11-144			
Surrogate: Tetrachlorometaxylene	0.189		ug/L	0.400		47.4	30-120			
Surrogate: Tetrachlorometaxylene [2C]	0.234		ug/L	0.400		58.5	30-120			
LCS (BNC0335-BS1)		Prepared: 14-Mar-2025 Analyzed: 10-Apr-2025 13:37								
alpha-BHC [2C]	0.144	0.025	ug/L	0.200		72.0	54-124			
beta-BHC [2C]	0.145	0.025	ug/L	0.200		72.7	53-123			
gamma-BHC (Lindane) [2C]	0.153	0.025	ug/L	0.200		76.6	53-127			
delta-BHC [2C]	0.154	0.025	ug/L	0.200		77.2	53-122			
Heptachlor [2C]	0.162	0.025	ug/L	0.200		81.2	50-120			
Aldrin [2C]	0.153	0.025	ug/L	0.200		76.6	47-120			
Heptachlor Epoxide [2C]	0.159	0.050	ug/L	0.200		79.6	50-127			
trans-Chlordane (beta-Chlordane) [2C]	0.149	0.025	ug/L	0.200		74.4	47-127			



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Project: Landsburg
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Project Manager: Gary Zimmerman

Reported:
22-Apr-2025 14:45

Analysis by: Analytical Resources, LLC

Chlorinated Pesticides - Quality Control

Batch BNC0335 - EPA 8081B in Water

Instrument: ECD6 Analyst: RT/JGR

QC Sample/Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
LCS (BNC0335-BS1)		Prepared: 14-Mar-2025 Analyzed: 10-Apr-2025 13:37								
cis-Chlordane (alpha-chlordane) [2C]	0.147	0.025	ug/L	0.200		73.3	51-132			P1
Endosulfan I [2C]	0.146	0.025	ug/L	0.200		72.9	48-137			P1
4,4'-DDE [2C]	0.307	0.050	ug/L	0.400		76.7	47-133			
Dieldrin [2C]	0.308	0.050	ug/L	0.400		77.0	55-130			
Endrin [2C]	0.429	0.050	ug/L	0.400		107	52-121			
Endosulfan II	0.357	0.050	ug/L	0.400		89.2	60-120			
4,4'-DDD [2C]	0.387	0.050	ug/L	0.400		96.9	60-120			
Endrin Aldehyde [2C]	0.333	0.050	ug/L	0.400		83.3	53-120			
4,4'-DDT	0.415	0.050	ug/L	0.400		104	57-122			
Endosulfan Sulfate [2C]	0.379	0.050	ug/L	0.400		94.8	56-120			
Endrin Ketone	0.315	0.050	ug/L	0.400		78.8	61-120			P1
Methoxychlor [2C]	1.92	0.250	ug/L	2.00		96.2	55-120			
Surrogate: Decachlorobiphenyl	0.251		ug/L	0.400		62.8	11-144			
Surrogate: Decachlorobiphenyl [2C]	0.269		ug/L	0.400		67.1	11-144			
Surrogate: Tetrachlorometaxylene	0.207		ug/L	0.400		51.7	30-120			
Surrogate: Tetrachlorometaxylene [2C]	0.245		ug/L	0.400		61.3	30-120			
LCS Dup (BNC0335-BSD1)		Prepared: 14-Mar-2025 Analyzed: 10-Apr-2025 13:56								
alpha-BHC [2C]	0.143	0.025	ug/L	0.200		71.3	54-124	0.96	30	
beta-BHC [2C]	0.140	0.025	ug/L	0.200		69.9	53-123	3.94	30	
gamma-BHC (Lindane) [2C]	0.147	0.025	ug/L	0.200		73.4	53-127	4.35	30	
delta-BHC [2C]	0.147	0.025	ug/L	0.200		73.3	53-122	5.17	30	
Heptachlor [2C]	0.154	0.025	ug/L	0.200		76.8	50-120	5.60	30	
Aldrin [2C]	0.146	0.025	ug/L	0.200		73.2	47-120	4.42	30	
Heptachlor Epoxide [2C]	0.152	0.050	ug/L	0.200		76.0	50-127	4.64	30	
trans-Chlordane (beta-Chlordane) [2C]	0.145	0.025	ug/L	0.200		72.4	47-127	2.78	30	
cis-Chlordane (alpha-chlordane) [2C]	0.143	0.025	ug/L	0.200		71.6	51-132	2.36	30	P1
Endosulfan I [2C]	0.145	0.025	ug/L	0.200		72.4	48-137	0.75	30	P1
4,4'-DDE [2C]	0.297	0.050	ug/L	0.400		74.1	47-133	3.47	30	
Dieldrin [2C]	0.293	0.050	ug/L	0.400		73.2	55-130	5.06	30	
Endrin [2C]	0.444	0.050	ug/L	0.400		111	52-121	3.53	30	
Endosulfan II	0.375	0.050	ug/L	0.400		93.7	60-120	4.94	30	
4,4'-DDD [2C]	0.382	0.050	ug/L	0.400		95.4	60-120	1.51	30	
Endrin Aldehyde [2C]	0.330	0.050	ug/L	0.400		82.4	53-120	1.00	30	
4,4'-DDT	0.449	0.050	ug/L	0.400		112	57-122	7.85	30	



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Project: Landsburg
Project Number: [none]
Project Manager: Gary Zimmerman

Reported:
22-Apr-2025 14:45

Analysis by: Analytical Resources, LLC

Chlorinated Pesticides - Quality Control

Batch BNC0335 - EPA 8081B in Water

Instrument: ECD6 Analyst: RT/JGR

QC Sample/Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
LCS Dup (BNC0335-BSD1)		Prepared: 14-Mar-2025 Analyzed: 10-Apr-2025 13:56								
Endosulfan Sulfate [2C]	0.377	0.050	ug/L	0.400		94.2	56-120	0.66	30	
Endrin Ketone	0.348	0.050	ug/L	0.400		87.0	61-120	9.82	30	P1
Methoxychlor [2C]	1.98	0.250	ug/L	2.00		98.8	55-120	2.69	30	
Surrogate: Decachlorobiphenyl	0.250		ug/L	0.400		62.5	11-144			
Surrogate: Decachlorobiphenyl [2C]	0.285		ug/L	0.400		71.4	11-144			
Surrogate: Tetrachlorometaxylene	0.203		ug/L	0.400		50.8	30-120			
Surrogate: Tetrachlorometaxylene [2C]	0.244		ug/L	0.400		61.0	30-120			



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Project: Landsburg
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Project Manager: Gary Zimmerman

Reported:
22-Apr-2025 14:45

Analysis by: Analytical Resources, LLC

Aroclor PCB - Quality Control

Batch BNC0299 - EPA 8082A in Water

Instrument: ECD7 Analyst: NRB

QC Sample/Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Blank (BNC0299-BLK1) Prepared: 13-Mar-2025 Analyzed: 19-Mar-2025 16:58										
Aroclor 1016	ND	0.010	ug/L							U
Aroclor 1221	ND	0.010	ug/L							U
Aroclor 1232	ND	0.010	ug/L							U
Aroclor 1242	ND	0.010	ug/L							U
Aroclor 1248	ND	0.010	ug/L							U
Aroclor 1254	ND	0.010	ug/L							U
Aroclor 1260	ND	0.010	ug/L							U
Surrogate: Decachlorobiphenyl	0.0120		ug/L	0.0200		60.2	29-120			
Surrogate: Tetrachlorometaxylene	0.0165		ug/L	0.0200		82.6	32-120			
Surrogate: Decachlorobiphenyl [2C]	0.0167		ug/L	0.0200		83.6	29-120			
Surrogate: Tetrachlorometaxylene [2C]	0.0139		ug/L	0.0200		69.4	32-120			
LCS (BNC0299-BS1) Prepared: 13-Mar-2025 Analyzed: 19-Mar-2025 17:19										
Aroclor 1016	0.053	0.010	ug/L	0.0500		106	54-120			
Aroclor 1260	0.027	0.010	ug/L	0.0500		54.7	51-128			
Surrogate: Decachlorobiphenyl	0.00948		ug/L	0.0200		47.4	29-120			PI
Surrogate: Tetrachlorometaxylene	0.0155		ug/L	0.0200		77.3	32-120			
Surrogate: Decachlorobiphenyl [2C]	0.0152		ug/L	0.0200		76.0	29-120			PI
Surrogate: Tetrachlorometaxylene [2C]	0.0129		ug/L	0.0200		64.5	32-120			
LCS Dup (BNC0299-BSD1) Prepared: 13-Mar-2025 Analyzed: 19-Mar-2025 17:41										
Aroclor 1016	0.048	0.010	ug/L	0.0500		96.9	54-120	9.04	30	
Aroclor 1260	0.026	0.010	ug/L	0.0500		52.8	51-128	3.53	30	
Surrogate: Decachlorobiphenyl	0.00926		ug/L	0.0200		46.3	29-120			PI
Surrogate: Tetrachlorometaxylene	0.0145		ug/L	0.0200		72.6	32-120			
Surrogate: Decachlorobiphenyl [2C]	0.0142		ug/L	0.0200		71.0	29-120			PI
Surrogate: Tetrachlorometaxylene [2C]	0.0123		ug/L	0.0200		61.5	32-120			



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Project: Landsburg
Project Number: [none]
Project Manager: Gary Zimmerman

Reported:
22-Apr-2025 14:45

Analysis by: Analytical Resources, LLC

Metals and Metallic Compounds - Quality Control

Batch BNC0360 - EPA 6010D in Water

Instrument: ICP3 Analyst: SH

QC Sample/Analyte	Result	Detection Limit	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Blank (BNC0360-BLK1) Prepared: 14-Mar-2025 Analyzed: 19-Mar-2025 15:41											
Aluminum	ND	0.0210	0.0700	mg/L							U
Barium	ND	0.0007	0.0060	mg/L							U
Beryllium	ND	0.0002	0.0010	mg/L							U
Cadmium	ND	0.0005	0.0020	mg/L							U
Calcium	ND	0.0300	0.0500	mg/L							U
Chromium	ND	0.0020	0.0090	mg/L							U
Cobalt	ND	0.0025	0.0050	mg/L							U
Copper	ND	0.0030	0.0050	mg/L							U
Iron	ND	0.0540	0.100	mg/L							U
Magnesium	ND	0.0250	0.0500	mg/L							U
Manganese	0.0090	0.0020	0.0040	mg/L							
Nickel	ND	0.0050	0.0100	mg/L							U
Potassium	ND	0.250	0.500	mg/L							U
Silver	ND	0.0015	0.0030	mg/L							U
Sodium	ND	0.250	0.500	mg/L							U
Sodium	ND	25.0	50.0	mg/L							U
Vanadium	ND	0.0015	0.0030	mg/L							U
Zinc	ND	0.0150	0.0300	mg/L							U
Blank (BNC0360-BLK2) Prepared: 14-Mar-2025 Analyzed: 24-Mar-2025 22:45											
Aluminum	ND	0.0210	0.0700	mg/L							U
Barium	ND	0.0007	0.0060	mg/L							U
Beryllium	ND	0.0002	0.0010	mg/L							U
Cadmium	ND	0.0005	0.0020	mg/L							U
Calcium	ND	0.0300	0.0500	mg/L							U
Chromium	ND	0.0020	0.0090	mg/L							U
Cobalt	ND	0.0025	0.0050	mg/L							U
Copper	ND	0.0030	0.0050	mg/L							U
Iron	ND	0.0540	0.100	mg/L							U
Magnesium	ND	0.0250	0.0500	mg/L							U
Manganese	0.0082	0.0020	0.0040	mg/L							
Nickel	ND	0.0050	0.0100	mg/L							U
Potassium	ND	0.250	0.500	mg/L							U
Silver	ND	0.0015	0.0030	mg/L							U



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Project: Landsburg
Project Number: [none]
Project Manager: Gary Zimmerman

Reported:
22-Apr-2025 14:45

Analysis by: Analytical Resources, LLC

Metals and Metallic Compounds - Quality Control

Batch BNC0360 - EPA 6010D in Water

Instrument: ICP3 Analyst: SH

QC Sample/Analyte	Result	Detection Limit	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Blank (BNC0360-BLK2) Prepared: 14-Mar-2025 Analyzed: 24-Mar-2025 22:45											
Sodium	ND	0.250	0.500	mg/L							U
Sodium	ND	25.0	50.0	mg/L							U
Vanadium	ND	0.0015	0.0030	mg/L							U
Zinc	ND	0.0150	0.0300	mg/L							U
LCS (BNC0360-BS1) Prepared: 14-Mar-2025 Analyzed: 19-Mar-2025 15:44											
Aluminum	2.14	0.0210	0.0700	mg/L	2.00		107	80-120			
Barium	2.06	0.0007	0.0060	mg/L	2.00		103	80-120			
Beryllium	0.509	0.0002	0.0010	mg/L	0.500		102	80-120			
Cadmium	0.523	0.0005	0.0020	mg/L	0.500		105	80-120			
Calcium	10.6	0.0300	0.0500	mg/L	10.0		106	80-120			
Chromium	0.515	0.0020	0.0090	mg/L	0.500		103	80-120			
Cobalt	0.499	0.0025	0.0050	mg/L	0.500		99.7	80-120			
Copper	0.491	0.0030	0.0050	mg/L	0.500		98.2	80-120			
Iron	2.20	0.0540	0.100	mg/L	2.00		110	80-120			
Magnesium	10.5	0.0250	0.0500	mg/L	10.0		105	80-120			
Manganese	0.507	0.0020	0.0040	mg/L	0.500		101	80-120			B
Nickel	0.508	0.0050	0.0100	mg/L	0.500		102	80-120			
Potassium	10.5	0.250	0.500	mg/L	10.0		105	80-120			
Silver	0.506	0.0015	0.0030	mg/L	0.500		101	80-120			
Sodium	10.1	0.250	0.500	mg/L	10.0		101	80-120			
Sodium	ND	25.0	50.0	mg/L	10.0			80-120			U
Vanadium	0.516	0.0015	0.0030	mg/L	0.500		103	80-120			
Zinc	0.478	0.0150	0.0300	mg/L	0.500		95.6	80-120			
Duplicate (BNC0360-DUP1) Source: 25C0223-01 Prepared: 14-Mar-2025 Analyzed: 26-Mar-2025 17:32											
Aluminum	0.0333	0.0210	0.0700	mg/L		0.0309			7.48	20	J
Barium	0.129	0.0007	0.0060	mg/L		0.131			1.62	20	
Beryllium	ND	0.0002	0.0010	mg/L		ND				20	U
Cadmium	ND	0.0005	0.0020	mg/L		ND				20	U
Calcium	45.9	0.0300	0.0500	mg/L		47.2			2.94	20	
Chromium	ND	0.0020	0.0090	mg/L		ND				20	U
Cobalt	ND	0.0025	0.0050	mg/L		ND				20	U
Copper	ND	0.0030	0.0050	mg/L		ND				20	U
Iron	8.99	0.0540	0.100	mg/L		9.18			2.13	20	



WSP USA, Inc.
210 East 13th Street, Suite 300
Vancouver WA, 98660-3231

Project: Landsburg
Project Number: [none]
Project Manager: Gary Zimmerman

Reported:
22-Apr-2025 14:45

Analysis by: Analytical Resources, LLC

Metals and Metallic Compounds - Quality Control

Batch BNC0360 - EPA 6010D in Water

Instrument: ICP3 Analyst: SH

QC Sample/Analyte	Result	Detection Limit	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Duplicate (BNC0360-DUP1)		Source: 25C0223-01		Prepared: 14-Mar-2025		Analyzed: 26-Mar-2025 17:32					
Magnesium	26.7	0.0250	0.0500	mg/L		27.3			2.16	20	
Manganese	0.670	0.0020	0.0040	mg/L		0.688			2.68	20	B
Nickel	ND	0.0050	0.0100	mg/L		ND				20	U
Potassium	2.12	0.250	0.500	mg/L		2.15			1.55	20	
Silver	ND	0.0015	0.0030	mg/L		ND				20	U
Sodium	5.50	0.250	0.500	mg/L		5.62			2.07	20	
Vanadium	ND	0.0015	0.0030	mg/L		ND				20	U
Zinc	ND	0.0150	0.0300	mg/L		ND				20	U

Matrix Spike (BNC0360-MS1)		Source: 25C0223-01		Prepared: 14-Mar-2025		Analyzed: 26-Mar-2025 17:35					
Aluminum	2.11	0.0210	0.0700	mg/L	2.00	0.0309	104	75-125			
Barium	2.17	0.0007	0.0060	mg/L	2.00	0.131	102	75-125			
Beryllium	0.533	0.0002	0.0010	mg/L	0.500	ND	107	75-125			
Cadmium	0.524	0.0005	0.0020	mg/L	0.500	ND	105	75-125			
Calcium	55.2	0.0300	0.0500	mg/L	10.0	47.2	79.8	75-125			
Chromium	0.520	0.0020	0.0090	mg/L	0.500	ND	104	75-125			
Cobalt	0.499	0.0025	0.0050	mg/L	0.500	ND	99.9	75-125			
Copper	0.499	0.0030	0.0050	mg/L	0.500	ND	99.8	75-125			
Iron	10.8	0.0540	0.100	mg/L	2.00	9.18	83.2	75-125			
Magnesium	36.4	0.0250	0.0500	mg/L	10.0	27.3	91.4	75-125			
Manganese	1.15	0.0020	0.0040	mg/L	0.500	0.688	93.2	75-125			B
Nickel	0.516	0.0050	0.0100	mg/L	0.500	ND	103	75-125			
Potassium	12.5	0.250	0.500	mg/L	10.0	2.15	103	75-125			
Silver	0.527	0.0015	0.0030	mg/L	0.500	ND	105	75-125			
Sodium	15.9	0.250	0.500	mg/L	10.0	5.62	103	75-125			
Vanadium	0.531	0.0015	0.0030	mg/L	0.500	ND	106	75-125			
Zinc	0.497	0.0150	0.0300	mg/L	0.500	ND	99.4	75-125			

Recovery limits for target analytes in MS/MSD QC samples are advisory only.

Matrix Spike Dup (BNC0360-MSD1)		Source: 25C0223-01		Prepared: 14-Mar-2025		Analyzed: 26-Mar-2025 17:38					
Aluminum	2.19	0.0210	0.0700	mg/L	2.00	0.0309	108	75-125	4.06	20	
Barium	2.25	0.0007	0.0060	mg/L	2.00	0.131	106	75-125	3.64	20	
Beryllium	0.554	0.0002	0.0010	mg/L	0.500	ND	111	75-125	3.81	20	
Cadmium	0.543	0.0005	0.0020	mg/L	0.500	ND	109	75-125	3.62	20	
Calcium	57.8	0.0300	0.0500	mg/L	10.0	47.2	105	75-125	4.49	20	



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Project: Landsburg
Project Number: [none]
Project Manager: Gary Zimmerman

Reported:
22-Apr-2025 14:45

Analysis by: Analytical Resources, LLC

Metals and Metallic Compounds - Quality Control

Batch BNC0360 - EPA 6010D in Water

Instrument: ICP3 Analyst: SH

QC Sample/Analyte	Result	Detection Limit	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Matrix Spike Dup (BNC0360-MSD1)											
Source: 25C0223-01				Prepared: 14-Mar-2025 Analyzed: 26-Mar-2025 17:38							
Chromium	0.540	0.0020	0.0090	mg/L	0.500	ND	108	75-125	3.74	20	
Cobalt	0.519	0.0025	0.0050	mg/L	0.500	ND	104	75-125	3.77	20	
Copper	0.520	0.0030	0.0050	mg/L	0.500	ND	104	75-125	4.20	20	
Iron	11.3	0.0540	0.100	mg/L	2.00	9.18	106	75-125	4.04	20	
Magnesium	38.0	0.0250	0.0500	mg/L	10.0	27.3	107	75-125	4.16	20	
Manganese	1.20	0.0020	0.0040	mg/L	0.500	0.688	103	75-125	3.98	20	B
Nickel	0.535	0.0050	0.0100	mg/L	0.500	ND	107	75-125	3.50	20	
Potassium	13.0	0.250	0.500	mg/L	10.0	2.15	108	75-125	3.72	20	
Silver	0.548	0.0015	0.0030	mg/L	0.500	ND	110	75-125	3.89	20	
Sodium	16.6	0.250	0.500	mg/L	10.0	5.62	110	75-125	3.96	20	
Vanadium	0.552	0.0015	0.0030	mg/L	0.500	ND	110	75-125	3.80	20	
Zinc	0.522	0.0150	0.0300	mg/L	0.500	ND	104	75-125	4.95	20	

Recovery limits for target analytes in MS/MSD QC samples are advisory only.



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Project: Landsburg
Project Number: [none]
Project Manager: Gary Zimmerman

Reported:
22-Apr-2025 14:45

Analysis by: Analytical Resources, LLC

Metals and Metallic Compounds - Quality Control

Batch BNC0366 - EPA 7470A in Water

Instrument: HYDRA Analyst: AMS

QC Sample/Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Blank (BNC0366-BLK1)		Prepared: 16-Mar-2025 Analyzed: 19-Mar-2025 11:44								
Mercury	ND	0.00100	mg/L							U
LCS (BNC0366-BS1)		Prepared: 16-Mar-2025 Analyzed: 19-Mar-2025 11:47								
Mercury	0.00192	0.00100	mg/L	0.00200		95.8	80-120			
Duplicate (BNC0366-DUP1)		Source: 25C0223-01		Prepared: 16-Mar-2025 Analyzed: 19-Mar-2025 11:52						
Mercury	ND	0.00100	mg/L		ND			20		U
Matrix Spike (BNC0366-MS1)		Source: 25C0223-01		Prepared: 16-Mar-2025 Analyzed: 19-Mar-2025 11:54						
Mercury	0.00101	0.00100	mg/L	0.00100	ND	101	75-125			
Recovery limits for target analytes in MS/MSD QC samples are advisory only.										
Matrix Spike Dup (BNC0366-MSD1)		Source: 25C0223-01		Prepared: 16-Mar-2025 Analyzed: 19-Mar-2025 11:56						
Mercury	ND	0.00100	mg/L	0.00100	ND	98.5	75-125	20		U
Recovery limits for target analytes in MS/MSD QC samples are advisory only.										



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Project: Landsburg
Project Number: [none]
Project Manager: Gary Zimmerman

Reported:
22-Apr-2025 14:45

Analysis by: Analytical Resources, LLC

Metals and Metallic Compounds - Quality Control

Batch BNC0383 - EPA 200.8 in Water

Instrument: ICPMS2 Analyst: HAL

QC Sample/Analyte	Isotope	Result	Detection Limit	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Blank (BNC0383-BLK1)						Prepared: 15-Mar-2025 Analyzed: 20-Mar-2025 21:57						
Antimony	121	ND	0.150	3.00	ug/L							U
Arsenic UCT	75a UCT	ND	0.100	3.00	ug/L							U
Lead	208	ND	0.100	10.0	ug/L							U
Selenium UCT	78 UCT	ND	0.500	25.0	ug/L							U
Thallium	205	ND	0.100	2.00	ug/L							U
LCS (BNC0383-BS1)						Prepared: 15-Mar-2025 Analyzed: 20-Mar-2025 22:06						
Antimony	121	25.5	0.150	3.00	ug/L	25.0		102	85-115			
Arsenic UCT	75a UCT	25.1	0.100	3.00	ug/L	25.0		100	85-115			
Lead	208	27.7	0.100	10.0	ug/L	25.0		111	85-115			
Selenium UCT	78 UCT	77.7	0.500	25.0	ug/L	80.0		97.1	85-115			
Thallium	205	27.7	0.100	2.00	ug/L	25.0		111	85-115			
Duplicate (BNC0383-DUP1)						Source: 25C0223-01 Prepared: 15-Mar-2025 Analyzed: 21-Mar-2025 04:48						
Arsenic UCT	75a UCT	0.273	0.100	3.00	ug/L		0.364			28.60	20	L, J
Lead	208	ND	0.100	10.0	ug/L		0.101				20	U
Selenium UCT	78 UCT	ND	0.500	25.0	ug/L		ND				20	U
Thallium	205	ND	0.100	2.00	ug/L		ND				20	U
Matrix Spike (BNC0383-MS1)						Source: 25C0223-01 Prepared: 15-Mar-2025 Analyzed: 21-Mar-2025 04:53						
Arsenic UCT	75a UCT	24.6	0.100	3.00	ug/L	25.0	0.364	96.8	75-125			
Lead	208	25.3	0.100	10.0	ug/L	25.0	0.101	101	75-125			
Selenium UCT	78 UCT	76.5	0.500	25.0	ug/L	80.0	ND	95.6	75-125			
Thallium	205	25.7	0.100	2.00	ug/L	25.0	ND	103	75-125			
Recovery limits for target analytes in MS/MSD QC samples are advisory only.												
Matrix Spike Dup (BNC0383-MSD1)						Source: 25C0223-01 Prepared: 15-Mar-2025 Analyzed: 21-Mar-2025 04:58						
Arsenic UCT	75a UCT	25.8	0.100	3.00	ug/L	25.0	0.364	102	75-125	5.05	20	
Lead	208	25.1	0.100	10.0	ug/L	25.0	0.101	100	75-125	0.52	20	
Selenium UCT	78 UCT	74.9	0.500	25.0	ug/L	80.0	ND	93.6	75-125	2.07	20	
Thallium	205	25.4	0.100	2.00	ug/L	25.0	ND	102	75-125	1.14	20	

Recovery limits for target analytes in MS/MSD QC samples are advisory only.



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Project: Landsburg
Project Number: [none]
Project Manager: Gary Zimmerman

Reported:
22-Apr-2025 14:45

Analysis by: Analytical Resources, LLC

Metals and Metallic Compounds - Quality Control

Batch BNC0737 - EPA 6010D in Water

Instrument: ICP3 Analyst: SH

QC Sample/Analyte	Result	Detection Limit	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Blank (BNC0737-BLK1)					Prepared: 28-Mar-2025 Analyzed: 01-Apr-2025 17:30						
Manganese	ND	0.0020	0.0040	mg/L							U
LCS (BNC0737-BS1)					Prepared: 28-Mar-2025 Analyzed: 01-Apr-2025 17:33						
Manganese	0.544	0.0020	0.0040	mg/L	0.500		109	80-120			
Duplicate (BNC0737-DUP1)					Source: 25C0223-02RE1 Prepared: 28-Mar-2025 Analyzed: 07-Apr-2025 16:53						
Manganese	0.0314	0.0020	0.0040	mg/L		0.0305			2.91	20	
Matrix Spike (BNC0737-MS1)					Source: 25C0223-02RE1 Prepared: 28-Mar-2025 Analyzed: 07-Apr-2025 16:55						
Manganese	0.619	0.0020	0.0040	mg/L	0.500	0.0305	118	75-125			
Recovery limits for target analytes in MS/MSD QC samples are advisory only.											
Matrix Spike Dup (BNC0737-MSD1)					Source: 25C0223-02RE1 Prepared: 28-Mar-2025 Analyzed: 07-Apr-2025 16:58						
Manganese	0.624	0.0020	0.0040	mg/L	0.500	0.0305	119	75-125	0.89	20	
Recovery limits for target analytes in MS/MSD QC samples are advisory only.											



WSP USA, Inc.

210 East 13th Street, Suite 300

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Project: Landsburg

Project Number: [none]

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Reported:

22-Apr-2025 14:45

Uncertified Analytes included in this Report

Analysis Matrix & Analyte

None



WSP USA, Inc.
210 East 13th Street, Suite 300
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Project: Landsburg
Project Number: [none]
Project Manager: Gary Zimmerman

Reported:
22-Apr-2025 14:45

Certified Analyses included in this Report

Analysis Matrix & Analyte

Certification Codes

EPA 200.8 in Water

Antimony-121	DoD-ELAP,NELAP,WADOE
Arsenic-75a UCT	DoD-ELAP,NELAP,WADOE
Lead-208	DoD-ELAP,NELAP,WADOE
Selenium-78 UCT	DoD-ELAP,NELAP,WADOE
Thallium-205	DoD-ELAP,NELAP,WADOE

EPA 6010D in Water

Aluminum	DoD-ELAP,NELAP,WADOE
Barium	DoD-ELAP,NELAP,WADOE,ADEC
Beryllium	DoD-ELAP,NELAP,WADOE
Cadmium	DoD-ELAP,NELAP,WADOE,ADEC
Calcium	DoD-ELAP,NELAP,WADOE
Chromium	DoD-ELAP,NELAP,WADOE,ADEC
Cobalt	DoD-ELAP,NELAP,WADOE
Copper	DoD-ELAP,NELAP,WADOE
Iron	DoD-ELAP,NELAP,WADOE
Magnesium	DoD-ELAP,NELAP,WADOE
Manganese	DoD-ELAP,NELAP,WADOE
Nickel	DoD-ELAP,NELAP,WADOE,ADEC
Potassium	DoD-ELAP,NELAP,WADOE
Silver	DoD-ELAP,NELAP,WADOE
Sodium	DoD-ELAP,NELAP,WADOE
Sodium-1	DoD-ELAP
Vanadium	DoD-ELAP,NELAP,WADOE,ADEC
Zinc	DoD-ELAP,NELAP,WADOE

EPA 7470A in Water

Mercury	WADOE,NELAP,DoD-ELAP
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EPA 8081B in Water

alpha-BHC	DoD-ELAP,NELAP,WADOE
alpha-BHC [2C]	DoD-ELAP,NELAP,WADOE
beta-BHC	DoD-ELAP,NELAP,WADOE
beta-BHC [2C]	DoD-ELAP,NELAP,WADOE



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gamma-BHC (Lindane)	DoD-ELAP,NELAP,WADOE
gamma-BHC (Lindane) [2C]	DoD-ELAP,NELAP,WADOE
delta-BHC	DoD-ELAP,NELAP,WADOE
delta-BHC [2C]	DoD-ELAP,NELAP,WADOE
Heptachlor	DoD-ELAP,NELAP,WADOE
Heptachlor [2C]	DoD-ELAP,NELAP,WADOE
Aldrin	DoD-ELAP,NELAP,WADOE
Aldrin [2C]	DoD-ELAP,NELAP,WADOE
Heptachlor Epoxide	DoD-ELAP,NELAP,WADOE
Heptachlor Epoxide [2C]	DoD-ELAP,NELAP,WADOE
trans-Chlordane (beta-Chlordane)	DoD-ELAP,NELAP,WADOE
trans-Chlordane (beta-Chlordane)	DoD-ELAP,NELAP,WADOE
cis-Chlordane (alpha-chlordane)	DoD-ELAP,NELAP,WADOE
cis-Chlordane (alpha-chlordane)	DoD-ELAP,NELAP,WADOE
Endosulfan I	DoD-ELAP,NELAP,WADOE
Endosulfan I [2C]	DoD-ELAP,NELAP,WADOE
4,4'-DDE	DoD-ELAP,NELAP,WADOE
4,4'-DDE [2C]	DoD-ELAP,NELAP,WADOE
Dieldrin	DoD-ELAP,NELAP,WADOE
Dieldrin [2C]	DoD-ELAP,NELAP,WADOE
Endrin	DoD-ELAP,NELAP,WADOE
Endrin [2C]	DoD-ELAP,NELAP,WADOE
Endosulfan II	DoD-ELAP,NELAP,WADOE
Endosulfan II [2C]	DoD-ELAP,NELAP,WADOE
4,4'-DDD	DoD-ELAP,NELAP,WADOE
4,4'-DDD [2C]	DoD-ELAP,NELAP,WADOE
Endrin Aldehyde	DoD-ELAP,NELAP,WADOE
Endrin Aldehyde [2C]	DoD-ELAP,NELAP,WADOE
4,4'-DDT	DoD-ELAP,NELAP,WADOE
4,4'-DDT [2C]	DoD-ELAP,NELAP,WADOE
Endosulfan Sulfate	DoD-ELAP,NELAP,WADOE
Endosulfan Sulfate [2C]	DoD-ELAP,NELAP,WADOE
Endrin Ketone	DoD-ELAP,NELAP,WADOE
Endrin Ketone [2C]	DoD-ELAP,NELAP,WADOE
Methoxychlor	DoD-ELAP,NELAP,WADOE



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Methoxychlor [2C]

DoD-ELAP,NELAP,WADOE

Toxaphene

DoD-ELAP,NELAP,WADOE

Toxaphene [2C]

DoD-ELAP,NELAP,WADOE

EPA 8082A in Water

Aroclor 1016

WADOE,DoD-ELAP,NELAP,ADEC

Aroclor 1016 [2C]

WADOE,DoD-ELAP,NELAP,ADEC

Aroclor 1221

WADOE,DoD-ELAP,NELAP,ADEC

Aroclor 1221 [2C]

WADOE,DoD-ELAP,NELAP,ADEC

Aroclor 1232

WADOE,DoD-ELAP,NELAP,ADEC

Aroclor 1232 [2C]

WADOE,DoD-ELAP,NELAP,ADEC

Aroclor 1242

WADOE,DoD-ELAP,NELAP,ADEC

Aroclor 1242 [2C]

WADOE,DoD-ELAP,NELAP,ADEC

Aroclor 1248

WADOE,DoD-ELAP,NELAP,ADEC

Aroclor 1248 [2C]

WADOE,DoD-ELAP,NELAP,ADEC

Aroclor 1254

WADOE,DoD-ELAP,NELAP,ADEC

Aroclor 1254 [2C]

WADOE,DoD-ELAP,NELAP,ADEC

Aroclor 1260

WADOE,DoD-ELAP,NELAP,ADEC

Aroclor 1260 [2C]

WADOE,DoD-ELAP,NELAP,ADEC

EPA 8260D in Water

Chloromethane

ADEC,NELAP,WADOE,DoD-ELAP

Vinyl Chloride

ADEC,NELAP,WADOE,DoD-ELAP

Bromomethane

ADEC,NELAP,WADOE,DoD-ELAP

Chloroethane

ADEC,NELAP,WADOE,DoD-ELAP

Trichlorofluoromethane

ADEC,NELAP,WADOE,DoD-ELAP

Acrolein

NELAP,WADOE,DoD-ELAP

1,1,2-Trichloro-1,2,2-Trifluoroeth

ADEC,NELAP,WADOE,DoD-ELAP

Acetone

ADEC,NELAP,WADOE,DoD-ELAP

1,1-Dichloroethene

ADEC,NELAP,WADOE,DoD-ELAP

Iodomethane

NELAP,WADOE,DoD-ELAP

Methylene Chloride

ADEC,NELAP,WADOE,DoD-ELAP

Acrylonitrile

NELAP,WADOE,DoD-ELAP

Carbon Disulfide

NELAP,WADOE,DoD-ELAP

trans-1,2-Dichloroethene

ADEC,NELAP,WADOE,DoD-ELAP

Vinyl Acetate

NELAP,WADOE,DoD-ELAP

1,1-Dichloroethane

ADEC,NELAP,WADOE,DoD-ELAP



WSP USA, Inc.

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Project: Landsburg

Project Number: [none]

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22-Apr-2025 14:45

2-Butanone	NELAP,WADOE,DoD-ELAP
2,2-Dichloropropane	ADEC,NELAP,WADOE,DoD-ELAP
cis-1,2-Dichloroethene	ADEC,NELAP,WADOE,DoD-ELAP
Chloroform	ADEC,NELAP,WADOE,DoD-ELAP
Bromochloromethane	ADEC,NELAP,WADOE,DoD-ELAP
1,1,1-Trichloroethane	ADEC,NELAP,WADOE,DoD-ELAP
1,1-Dichloropropene	ADEC,NELAP,WADOE,DoD-ELAP
Carbon tetrachloride	ADEC,NELAP,WADOE,DoD-ELAP
1,2-Dichloroethane	ADEC,NELAP,WADOE,DoD-ELAP
Benzene	ADEC,NELAP,WADOE,DoD-ELAP
Trichloroethene	ADEC,NELAP,WADOE,DoD-ELAP
1,2-Dichloropropane	ADEC,NELAP,WADOE,DoD-ELAP
Bromodichloromethane	ADEC,NELAP,WADOE,DoD-ELAP
Dibromomethane	ADEC,NELAP,WADOE,DoD-ELAP
2-Chloroethyl vinyl ether	ADEC,NELAP,WADOE,DoD-ELAP
4-Methyl-2-Pentanone	NELAP,WADOE,DoD-ELAP
cis-1,3-Dichloropropene	ADEC,NELAP,WADOE,DoD-ELAP
Toluene	ADEC,NELAP,WADOE,DoD-ELAP
trans-1,3-Dichloropropene	ADEC,NELAP,WADOE,DoD-ELAP
2-Hexanone	NELAP,WADOE,DoD-ELAP
1,1,2-Trichloroethane	ADEC,NELAP,WADOE,DoD-ELAP
1,3-Dichloropropane	ADEC,NELAP,WADOE,DoD-ELAP
Tetrachloroethene	ADEC,NELAP,WADOE,DoD-ELAP
Dibromochloromethane	ADEC,NELAP,WADOE,DoD-ELAP
1,2-Dibromoethane	NELAP,WADOE,DoD-ELAP
Chlorobenzene	ADEC,NELAP,WADOE,DoD-ELAP
Ethylbenzene	ADEC,NELAP,WADOE,DoD-ELAP
1,1,1,2-Tetrachloroethane	ADEC,NELAP,WADOE,DoD-ELAP
m,p-Xylene	ADEC,NELAP,WADOE,DoD-ELAP
o-Xylene	ADEC,NELAP,WADOE,DoD-ELAP
Xylenes, total	ADEC,NELAP,WADOE,DoD-ELAP
Styrene	NELAP,WADOE,DoD-ELAP
Bromoform	NELAP,WADOE,DoD-ELAP
1,1,2,2-Tetrachloroethane	ADEC,NELAP,WADOE,DoD-ELAP
1,2,3-Trichloropropane	ADEC,NELAP,WADOE,DoD-ELAP



WSP USA, Inc.

210 East 13th Street, Suite 300

Vancouver WA, 98660-3231

Project: Landsburg

Project Number: [none]

Project Manager: Gary Zimmerman

Reported:

22-Apr-2025 14:45

trans-1,4-Dichloro 2-Butene	ADEC,NELAP,WADOE,DoD-ELAP
n-Propylbenzene	NELAP,WADOE,DoD-ELAP
Bromobenzene	NELAP,WADOE,DoD-ELAP
Isopropyl Benzene	NELAP,WADOE,DoD-ELAP
2-Chlorotoluene	ADEC,NELAP,WADOE,DoD-ELAP
4-Chlorotoluene	ADEC,NELAP,WADOE,DoD-ELAP
t-Butylbenzene	NELAP,WADOE,DoD-ELAP
1,3,5-Trimethylbenzene	NELAP,WADOE,DoD-ELAP
1,2,4-Trimethylbenzene	NELAP,WADOE,DoD-ELAP
s-Butylbenzene	NELAP,WADOE,DoD-ELAP
4-Isopropyl Toluene	NELAP,WADOE,DoD-ELAP
1,3-Dichlorobenzene	ADEC,NELAP,WADOE,DoD-ELAP
1,4-Dichlorobenzene	ADEC,NELAP,WADOE,DoD-ELAP
n-Butylbenzene	NELAP,WADOE,DoD-ELAP
1,2-Dichlorobenzene	ADEC,NELAP,WADOE,DoD-ELAP
1,2-Dibromo-3-chloropropane	ADEC,NELAP,WADOE,DoD-ELAP
1,2,4-Trichlorobenzene	ADEC,NELAP,WADOE,DoD-ELAP
Hexachloro-1,3-Butadiene	ADEC,NELAP,WADOE,DoD-ELAP
Naphthalene	ADEC,NELAP,WADOE,DoD-ELAP
1,2,3-Trichlorobenzene	ADEC,NELAP,WADOE,DoD-ELAP
Dichlorodifluoromethane	ADEC,NELAP,WADOE,DoD-ELAP

EPA 8270E in Water

1,4-Dioxane	WADOE,NELAP,DoD-ELAP
Phenol	DoD-ELAP,WADOE,NELAP
bis(2-chloroethyl) ether	DoD-ELAP,WADOE,NELAP
2-Chlorophenol	DoD-ELAP,WADOE,NELAP
1,3-Dichlorobenzene	DoD-ELAP,WADOE,NELAP
1,4-Dichlorobenzene	DoD-ELAP,WADOE,NELAP
Benzyl Alcohol	DoD-ELAP,WADOE,NELAP
1,2-Dichlorobenzene	DoD-ELAP,WADOE,NELAP
2-Methylphenol	DoD-ELAP,WADOE,NELAP
2,2'-Oxybis(1-chloropropane)	DoD-ELAP
4-Methylphenol	DoD-ELAP,WADOE,NELAP
N-Nitroso-di-n-Propylamine	DoD-ELAP,WADOE,NELAP
Hexachloroethane	DoD-ELAP,WADOE,NELAP



WSP USA, Inc.

210 East 13th Street, Suite 300

Vancouver WA, 98660-3231

Project: Landsburg

Project Number: [none]

Project Manager: Gary Zimmerman

Reported:

22-Apr-2025 14:45

Nitrobenzene	DoD-ELAP,WADOE,NELAP
Isophorone	DoD-ELAP,WADOE,NELAP
2-Nitrophenol	DoD-ELAP,WADOE,NELAP
2,4-Dimethylphenol	DoD-ELAP,WADOE,NELAP
Bis(2-Chloroethoxy)methane	DoD-ELAP,WADOE,NELAP
Benzoic acid	DoD-ELAP,WADOE,NELAP
2,4-Dichlorophenol	DoD-ELAP,WADOE,NELAP
1,2,4-Trichlorobenzene	DoD-ELAP,WADOE,NELAP
Naphthalene	DoD-ELAP,WADOE,ADEC,NELAP
4-Chloroaniline	DoD-ELAP,WADOE,NELAP
Hexachlorobutadiene	DoD-ELAP,WADOE,NELAP
4-Chloro-3-Methylphenol	DoD-ELAP,WADOE,NELAP
2-Methylnaphthalene	DoD-ELAP,WADOE,ADEC,NELAP
Hexachlorocyclopentadiene	DoD-ELAP,WADOE,NELAP
2,4,6-Trichlorophenol	DoD-ELAP,WADOE,NELAP
2,4,5-Trichlorophenol	DoD-ELAP,WADOE,NELAP
2-Chloronaphthalene	DoD-ELAP,WADOE,NELAP
2-Nitroaniline	DoD-ELAP,WADOE,NELAP
Dimethylphthalate	DoD-ELAP,WADOE,NELAP
Acenaphthylene	DoD-ELAP,WADOE,ADEC,NELAP
2,6-Dinitrotoluene	DoD-ELAP,WADOE,NELAP
3-Nitroaniline	DoD-ELAP,WADOE,NELAP
Acenaphthene	DoD-ELAP,WADOE,ADEC,NELAP
2,4-Dinitrophenol	DoD-ELAP,WADOE,NELAP
Dibenzofuran	DoD-ELAP,WADOE,ADEC,NELAP
4-Nitrophenol	DoD-ELAP,WADOE,NELAP
2,4-Dinitrotoluene	DoD-ELAP,WADOE,NELAP
Fluorene	DoD-ELAP,WADOE,ADEC,NELAP
Diethyl phthalate	DoD-ELAP,WADOE,NELAP
4-Chlorophenylphenyl ether	DoD-ELAP,WADOE,NELAP
4-Nitroaniline	DoD-ELAP,WADOE,NELAP
4,6-Dinitro-2-methylphenol	DoD-ELAP,WADOE,NELAP
N-Nitrosodiphenylamine	DoD-ELAP
4-Bromophenyl phenyl ether	DoD-ELAP,WADOE,NELAP
Hexachlorobenzene	DoD-ELAP,WADOE,NELAP



WSP USA, Inc.

210 East 13th Street, Suite 300

Vancouver WA, 98660-3231

Project: Landsburg

Project Number: [none]

Project Manager: Gary Zimmerman

Reported:

22-Apr-2025 14:45

Pentachlorophenol	DoD-ELAP,WADOE,NELAP
Phenanthrene	DoD-ELAP,WADOE,ADEC,NELAP
Anthracene	DoD-ELAP,WADOE,ADEC,NELAP
Carbazole	DoD-ELAP,WADOE,ADEC,NELAP
Di-n-Butylphthalate	DoD-ELAP,WADOE,NELAP
Fluoranthene	DoD-ELAP,WADOE,ADEC,NELAP
Pyrene	DoD-ELAP,WADOE,ADEC,NELAP
Butylbenzylphthalate	DoD-ELAP,WADOE,NELAP
Benzo(a)anthracene	DoD-ELAP,WADOE,ADEC,NELAP
3,3'-Dichlorobenzidine	DoD-ELAP
Chrysene	DoD-ELAP,WADOE,ADEC,NELAP
bis(2-Ethylhexyl)phthalate	DoD-ELAP,WADOE,NELAP
Di-n-Octylphthalate	DoD-ELAP,WADOE,NELAP
Benzofluoranthenes, Total	DoD-ELAP,WADOE,ADEC,NELAP
Benzo(a)pyrene	DoD-ELAP,WADOE,ADEC,NELAP
Indeno(1,2,3-cd)pyrene	DoD-ELAP,WADOE,ADEC,NELAP
Dibenzo(a,h)anthracene	DoD-ELAP,WADOE,ADEC,NELAP
Benzo(g,h,i)perylene	DoD-ELAP,WADOE,ADEC,NELAP
1-Methylnaphthalene	DoD-ELAP,WADOE,ADEC,NELAP

NWTPH-HCID in Water

Gasoline Range Organics (Tol-C	NELAP,DoD-ELAP,WADOE
Diesel Range Organics (C12-C2	NELAP,DoD-ELAP,WADOE
Motor Oil Range Organics (C24-	NELAP,DoD-ELAP,WADOE

Certifications

Code	Description	Number	Expires
ADEC	Alaska Dept of Environmental Conservation	17-015	02/28/2026
DoD-ELAP	DoD-Environmental Laboratory Accreditation Program, PJLA Testing	66169	01/31/2026
NELAP	ORELAP - Oregon Laboratory Accreditation Program	WA100006-012	05/12/2025
WADOE	WA Dept of Ecology	C558	06/30/2025
WA-DW	Ecology - Drinking Water	C558	06/30/2025



WSP USA, Inc.

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Project: Landsburg

Project Number: [none]

Project Manager: Gary Zimmerman

Reported:

22-Apr-2025 14:45

Notes and Definitions

*	Flagged value is not within established control limits.
B	This analyte was detected in the method blank.
D	The reported value is from a dilution
E	The analyte concentration exceeds the upper limit of the calibration range of the instrument established by the initial calibration (ICAL)
H	Hold time violation - Hold time was exceeded.
HC	The natural concentration of the spiked analyte is so much greater than the concentration spiked that an accurate determination of spike recovery is not possible
J	Estimated concentration value detected below the reporting limit.
L	Analyte concentration is ≤ 5 times the reporting limit and the replicate control limit defaults to $\pm$ RL instead of 20% RPD
M	Estimated value for a GC/MS analyte detected and confirmed by an analyst but with low spectral match parameters.
P1	The reported value is greater than 40% difference between the concentrations determined on two GC columns where applicable.
Q	Indicates a detected analyte with an initial or continuing calibration that does not meet established acceptance criteria ($< 20\%$ RSD, $< 20\%$ drift or minimum RRF)
U	This analyte is not detected above the reporting limit (RL) or if noted, not detected above the limit of detection (LOD).
DET	Analyte DETECTED
ND	Analyte NOT DETECTED at or above the reporting limit
NR	Not Reported
dry	Sample results reported on a dry weight basis
RPD	Relative Percent Difference
[2C]	Indicates this result was quantified on the second column on a dual column analysis.
!	Indicates that ARL is NOT ACCREDITED for this parameter in samples logged as 'Drinking Water'
#	Indicates that ARL is NOT ACCREDITED for this parameter in this analysis and matrix.



Analytical Resources, LLC
Analytical Chemists and Consultants
Tukwila, WA

15 April 2025

Gary Zimmerman
WSP USA, Inc.
210 East 13th Street, Suite 300
Vancouver, WA 98660-3231

RE: Landsburg (GL9231000007)

Please find enclosed sample receipt documentation and analytical results for samples from the project referenced above.

Sample analyses were performed according to ARI's Quality Assurance Plan and any provided project specific Quality Assurance Plan. Each analytical section of this report has been approved and reviewed by an analytical peer, the appropriate Laboratory Supervisor or qualified substitute, and a technical reviewer.

Should you have any questions or problems, please feel free to contact us at your convenience.

Associated Work Order(s)
25C0281

Associated SDG ID(s)
N/A

I certify that this data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed in the enclose Narrative. ARI, an accredited laboratory, certifies that the report results for which ARI is accredited meets all the requirements of the accrediting body. A list of certified analyses, accreditations, and expiration dates is included in this report.

Release of the data contained in this hardcopy data package has been authorized by the Laboratory Manager or his/her designee, as verified by the following signature.

Analytical Resources, LLC

Kelly Bottem, Client Services Manager

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.



Chain of Custody Record & Laboratory Analysis Request

PO#: P118412US001

PO# MUST BE INCLUDED ON ALL INVOICES

Analytical Resources, Incorporated

Analytical Chemists and Consultants

4611 South 134th Place, Suite 100

Tukwila, WA 98168

206-695-6200 206-695-6201 (fax)



ARI Assigned Number: 25C0281		Turn-around Requested: Standard			Date: 3/13/25								
ARI Client Company: WSP		Phone: 425-883-0777			Page: 1 of 1								
Client Contact: Gary Zimmerman/Autumn Pearson					No. of Coolers: 8 Cooler Temps: See CRF								
Client Project Name: Landsburg 2025-03 Sampling					Analysis Requested							Notes/Comments	
Client Project #: GL9231000007		Samplers: AP+SG			VOCs	1,4-Dioxane	Total Priority Metal	TPH-HCID (NWTPH)	TPH-DX + TPH-Gx (HOLD)	PCBs (8082A)	Organochlorine Pesticides (8081B)	SVOCs (8270E)	Analyze in accordance with MSA between Golder and ARI Ecology EIM EDD
Sample ID	Date	Time	Matrix	No. Containers									
LMW-6-0325	3/12/25	0910	W	18	X	X	X	X	X	X	X	X	
LMW-14-0325		1015		18	X	X	X	X	X	X	X	X	
LMW-15-0325		1135		18	X	X	X	X	X	X	X	X	
LMW-11-0325		1255		18	X	X	X	X	X	X	X	X	
LMW-FB1-0325		1345		18	X	X	X	X	X	X	X	X	
LMW-4-0325	3/13/25	0950		44	X	X	X	X	X	X	X	X	MS/MSD collected (except for -Dx, -Gx, & metals)
LMW-2-0325		1110		18	X	X	X	X	X	X	X	X	
LMW-2-0325-D		1120		18	X	X	X	X	X	X	X	X	
Trip Blank	-	-	W	6	X								
Comments/Special Instructions HOLD TPH FOLLOW-UPS. CLIENT SPECIFIC RLs/Analyte List					Relinquished by: (Signature) [Signature]		Received by: (Signature) [Signature]		Relinquished by: (Signature)		Received by: (Signature)		
					Printed Name: Autumn Pearson		Printed Name: Matthew Pearson		Printed Name:		Printed Name:		
					Company: WSP		Company: ARU		Company:		Company:		
					Date & Time: 3/13/25 1417		Date & Time: 03/13/25 1417		Date & Time:		Date & Time:		

Limits of Liability: ARI will perform all requested services in accordance with appropriate methodology following ARI Standard Operating Procedures and the ARI Quality Assurance Program. This program meets standards for the industry. The total liability of ARI, its officers, agents, employees, or successors, arising out of or in connection with the requested services, shall not exceed the Invoiced amount for said services. The acceptance by the client of a proposal for services by ARI release ARI from any liability in excess thereof, not withstanding any provision to the contrary in any contract, purchase order or co-signed agreement between ARI and the Client.

Sample Retention Policy: Unless specified by workorder or contract, all water/soil samples submitted to ARI will be discarded or returned, no sooner than 90 days after receipt or 60 days after submission of hardcopy data, whichever is longer. Sediment samples submitted under PSSDA/PSEP/SMS protocol will be stored frozen for up to one year and then discarded.



WSP USA, Inc.
210 East 13th Street, Suite 300
Vancouver WA, 98660-3231

Project: Landsburg
Project Number: GL9231000007
Project Manager: Gary Zimmerman

Reported:
15-Apr-2025 16:40

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
LMW-6-0325	25C0281-01	Water	12-Mar-2025 09:10	13-Mar-2025 14:17
LMW-14-0325	25C0281-02	Water	12-Mar-2025 10:15	13-Mar-2025 14:17
LMW-15-0325	25C0281-03	Water	12-Mar-2025 11:35	13-Mar-2025 14:17
LMW-11-0325	25C0281-04	Water	12-Mar-2025 12:55	13-Mar-2025 14:17
LMW-FB1-0325	25C0281-05	Water	12-Mar-2025 13:45	13-Mar-2025 14:17
LMW-4-0325	25C0281-06	Water	13-Mar-2025 09:50	13-Mar-2025 14:17
LMW-2-0325	25C0281-07	Water	13-Mar-2025 11:10	13-Mar-2025 14:17
LMW-2-0325-D	25C0281-08	Water	13-Mar-2025 11:20	13-Mar-2025 14:17
Trip Blank	25C0281-09	Water	12-Mar-2025 09:10	13-Mar-2025 14:17



WSP USA, Inc.
210 East 13th Street, Suite 300
Vancouver WA, 98660-3231

Project: Landsburg
Project Number: GL9231000007
Project Manager: Gary Zimmerman

Reported:
15-Apr-2025 16:40

Work Order Case Narrative

Client: WSP USA, Inc.
Project: Landsburg
Work Order: 25C0281

Sample receipt

Samples as listed on the preceding page were received 13-Mar-2025 14:17 under ARI work order 25C0281. For details regarding sample receipt, please refer to the Cooler Receipt Form.

Volatiles - EPA Method SW8260D

The sample(s) were analyzed within the recommended holding times.

Initial and continuing calibrations were within method requirements with the exception of all associated "Q" flagged analytes which are out of control high in the ICV. Samples that contain analyte have been flagged with a "Q" qualifier.

Internal standard areas were within limits.

The surrogate percent recoveries were within control limits.

The method blank(s) were clean at the reporting limits.

The blank spike and blank spike duplicate (BS/LCS and BSD/LCSD) spike recoveries and relative percent difference (RPD) were within control limits.

The matrix spike/matrix spike duplicate (MS/MSD) spike recoveries and relative percent difference (RPD) were within advisory control limits with the exception of analytes flagged on the associated forms.

1,4-Dioxane- EPA Method SW8270E

The sample(s) were extracted and analyzed within the recommended holding times.

Initial and continuing calibrations were within method requirements.

Internal standard areas were within limits.

The surrogate percent recoveries were within control limits.

The method blank(s) were clean at the reporting limits.

The blank spike (BS/LCS) percent recoveries were within control limits.



WSP USA, Inc.
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Project: Landsburg
Project Number: GL9231000007
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Reported:
15-Apr-2025 16:40

The matrix spike/matrix spike duplicate (MS/MSD) percent recoveries and relative percent difference (RPD) were within advisory control limits with the exception of analytes flagged on the associated forms.

Semivolatiles - EPA Method SW8270E

The sample(s) were extracted and analyzed within the recommended holding times.

Initial and continuing calibrations were within method requirements with the exception of all associated "Q" flagged analytes which are out of control low in the ICV and 4-Nitrophenol and Hexachlorocyclopentadiene are out of control high. Samples that contain analyte have been flagged with a "Q" qualifier.

Internal standard areas were within limits.

The surrogate percent recoveries were within control limits with the exception of surrogates flagged on the associated forms.

The method blank(s) were clean at the reporting limits.

The blank spike (BS/LCS) percent recoveries were within control limits.

The matrix spike/matrix spike duplicate (MS/MSD) percent recoveries and relative percent difference (RPD) were within advisory control limits with the exception of analytes flagged on the associated forms.

Pesticides - EPA Method SW8081B

The sample(s) were extracted and analyzed within the recommended holding times.

Initial and continuing calibrations were within method requirements with the exception of ICV4/CCV4: TCMX fails low on both columns, but has passing recoveries for DCB and the surrogates have passing recoveries in ICV1.

Internal standard areas were within limits.

The surrogate percent recoveries were within control limits.

The method blank(s) were clean at the reporting limits.

The blank spike (BS/LCS) percent recoveries were within control limits.

The matrix spike/matrix spike duplicate (MS/MSD) percent recoveries and relative percent difference (RPD) were within advisory control limits with the exception of analytes flagged on the associated forms.

PCB Aroclors - EPA Method SW8082A (low-level)



WSP USA, Inc.

210 East 13th Street, Suite 300

Vancouver WA, 98660-3231

Project: Landsburg

Project Number: GL9231000007

Project Manager: Gary Zimmerman

Reported:

15-Apr-2025 16:40

The sample(s) were extracted and analyzed within the recommended holding times.

Initial and continuing calibrations were within method requirements.

Internal standard areas were within limits.

The surrogate percent recoveries were within control limits.

The method blank(s) were clean at the reporting limits.

The blank spike (BS/LCS) percent recoveries were within control limits with the exception of analytes flagged on the associated forms.

The matrix spike/matrix spike duplicate (MS/MSD) percent recoveries and relative percent difference (RPD) were within advisory control limits.

Hydrocarbon Identification (HCID) - WA-Ecology Method NW-HCID

The sample(s) were extracted and analyzed within the recommended holding times.

Initial and continuing calibrations were within method requirements.

The surrogate percent recoveries were within control limits.

The method blank(s) were clean at the reporting limits.

Total Metals - EPA Method 200.8, 6010D and 7470A

The sample(s) were digested and analyzed within the recommended holding times.

Initial and continuing calibrations including interference checks were within method requirements for reported elements.

The method blank(s) were clean at the reporting limits.

The blank spike (BS/LCS) percent recoveries were within control limits.

The matrix spike (MS) percent recoveries and the duplicate (DUP) relative percent difference (RPD) were within advisory control limits.



WORK ORDER

25C0281

Client: WSP USA, Inc.

Project Manager: Kelly Bottem

Project: Landsburg

Project Number: GL9231000007

Preservation Confirmation

Container ID	Container Type	pH	pH Paper Lot#: <i>N000119</i>
25C0281-01 A	Glass NM, Amber, 1000 mL		
25C0281-01 B	Glass NM, Amber, 1000 mL		
25C0281-01 C	Glass NM, Amber, 1000 mL		
25C0281-01 D	Glass NM, Amber, 1000 mL		
25C0281-01 E	Glass NM, Amber, 1000 mL		
25C0281-01 F	Glass NM, Amber, 1000 mL		
25C0281-01 G	Glass NM, Amber, 500 mL		
25C0281-01 H	Glass NM, Amber, 500 mL		
25C0281-01 I	Glass NM, Amber, 500 mL		
25C0281-01 J	Glass NM, Amber, 500 mL		
25C0281-01 K	Glass NM, Amber, 500 mL		
25C0281-01 L	Glass NM, Amber, 500 mL		
25C0281-01 M	HDPE NM, 500 mL, 1:1 HNO ₃	<i>L2p</i>	
25C0281-01 N	VOA Vial, Clear, 40 mL, HCL		
25C0281-01 O	VOA Vial, Clear, 40 mL, HCL		
25C0281-01 P	VOA Vial, Clear, 40 mL, HCL		
25C0281-01 Q	VOA Vial, Clear, 40 mL, HCL		
25C0281-01 R	VOA Vial, Clear, 40 mL, HCL		
25C0281-02 A	Glass NM, Amber, 1000 mL		
25C0281-02 B	Glass NM, Amber, 1000 mL		
25C0281-02 C	Glass NM, Amber, 1000 mL		
25C0281-02 D	Glass NM, Amber, 1000 mL		
25C0281-02 E	Glass NM, Amber, 1000 mL		
25C0281-02 F	Glass NM, Amber, 1000 mL		
25C0281-02 G	Glass NM, Amber, 500 mL		
25C0281-02 H	Glass NM, Amber, 500 mL		
25C0281-02 I	Glass NM, Amber, 500 mL		
25C0281-02 J	Glass NM, Amber, 500 mL		
25C0281-02 K	Glass NM, Amber, 500 mL		
25C0281-02 L	Glass NM, Amber, 500 mL		
25C0281-02 M	HDPE NM, 500 mL, 1:1 HNO ₃	<i>L2p</i>	
25C0281-02 N	VOA Vial, Clear, 40 mL, HCL		



WORK ORDER

25C0281

Client: WSP USA, Inc.

Project Manager: Kelly Bottem

Project: Landsburg

Project Number: GL9231000007

25C0281-02 O	VOA Vial, Clear, 40 mL, HCL
25C0281-02 P	VOA Vial, Clear, 40 mL, HCL
25C0281-02 Q	VOA Vial, Clear, 40 mL, HCL
25C0281-02 R	VOA Vial, Clear, 40 mL, HCL
25C0281-03 A	Glass NM, Amber, 1000 mL
25C0281-03 B	Glass NM, Amber, 1000 mL
25C0281-03 C	Glass NM, Amber, 1000 mL
25C0281-03 D	Glass NM, Amber, 1000 mL
25C0281-03 E	Glass NM, Amber, 1000 mL
25C0281-03 F	Glass NM, Amber, 1000 mL
25C0281-03 G	Glass NM, Amber, 500 mL
25C0281-03 H	Glass NM, Amber, 500 mL
25C0281-03 I	Glass NM, Amber, 500 mL
25C0281-03 J	Glass NM, Amber, 500 mL
25C0281-03 K	Glass NM, Amber, 500 mL
25C0281-03 L	Glass NM, Amber, 500 mL
25C0281-03 M	HDPE NM, 500 mL, 1:1 HNO3
25C0281-03 N	VOA Vial, Clear, 40 mL, HCL
25C0281-03 O	VOA Vial, Clear, 40 mL, HCL
25C0281-03 P	VOA Vial, Clear, 40 mL, HCL
25C0281-03 Q	VOA Vial, Clear, 40 mL, HCL
25C0281-03 R	VOA Vial, Clear, 40 mL, HCL
25C0281-04 A	Glass NM, Amber, 1000 mL
25C0281-04 B	Glass NM, Amber, 1000 mL
25C0281-04 C	Glass NM, Amber, 1000 mL
25C0281-04 D	Glass NM, Amber, 1000 mL
25C0281-04 E	Glass NM, Amber, 1000 mL
25C0281-04 F	Glass NM, Amber, 1000 mL
25C0281-04 G	Glass NM, Amber, 500 mL
25C0281-04 H	Glass NM, Amber, 500 mL
25C0281-04 I	Glass NM, Amber, 500 mL
25C0281-04 J	Glass NM, Amber, 500 mL
25C0281-04 K	Glass NM, Amber, 500 mL
25C0281-04 L	Glass NM, Amber, 500 mL

L2p



WORK ORDER

25C0281

Client: WSP USA, Inc.

Project Manager: Kelly Bottem

Project: Landsburg

Project Number: GL9231000007

25C0281-04 M HDPE NM, 500 mL, 1:1 HNO₃

L2p

25C0281-04 N VOA Vial, Clear, 40 mL, HCL

25C0281-04 O VOA Vial, Clear, 40 mL, HCL

25C0281-04 P VOA Vial, Clear, 40 mL, HCL

25C0281-04 Q VOA Vial, Clear, 40 mL, HCL

25C0281-04 R VOA Vial, Clear, 40 mL, HCL

25C0281-05 A Glass NM, Amber, 1000 mL

25C0281-05 B Glass NM, Amber, 1000 mL

25C0281-05 C Glass NM, Amber, 1000 mL

25C0281-05 D Glass NM, Amber, 1000 mL

25C0281-05 E Glass NM, Amber, 1000 mL

25C0281-05 F Glass NM, Amber, 1000 mL

25C0281-05 G Glass NM, Amber, 500 mL

25C0281-05 H Glass NM, Amber, 500 mL

25C0281-05 I Glass NM, Amber, 500 mL

25C0281-05 J Glass NM, Amber, 500 mL

25C0281-05 K Glass NM, Amber, 500 mL

25C0281-05 L Glass NM, Amber, 500 mL

25C0281-05 M HDPE NM, 500 mL, 1:1 HNO₃

L2p

25C0281-05 N VOA Vial, Clear, 40 mL, HCL

25C0281-05 O VOA Vial, Clear, 40 mL, HCL

25C0281-05 P VOA Vial, Clear, 40 mL, HCL

25C0281-05 Q VOA Vial, Clear, 40 mL, HCL

25C0281-05 R VOA Vial, Clear, 40 mL, HCL

25C0281-06 A Glass NM, Amber, 1000 mL

25C0281-06 AA VOA Vial, Clear, 40 mL, HCL

25C0281-06 AB VOA Vial, Clear, 40 mL, HCL

25C0281-06 AC VOA Vial, Clear, 40 mL, HCL

25C0281-06 AD Glass NM, Amber, 500 mL

25C0281-06 AE Glass NM, Amber, 500 mL

25C0281-06 AF Glass NM, Amber, 500 mL

25C0281-06 AG Glass NM, Amber, 500 mL

25C0281-06 AH Glass NM, Amber, 500 mL

25C0281-06 AI Glass NM, Amber, 500 mL



WORK ORDER

25C0281

Client: WSP USA, Inc.

Project Manager: Kelly Bottem

Project: Landsburg

Project Number: GL9231000007

25C0281-06 AJ	Glass NM, Amber, 500 mL	
25C0281-06 AK	Glass NM, Amber, 500 mL	
25C0281-06 AL	Glass NM, Amber, 500 mL	
25C0281-06 AM	Glass NM, Amber, 500 mL	
25C0281-06 AN	Glass NM, Amber, 500 mL	
25C0281-06 AO	Glass NM, Amber, 500 mL	
25C0281-06 AP	Glass NM, Amber, 500 mL	
25C0281-06 AQ	Glass NM, Amber, 500 mL	
25C0281-06 AR	HDPE NM, 500 mL, 1:1 HNO ₃	L2p
25C0281-06 B	Glass NM, Amber, 1000 mL	
25C0281-06 C	Glass NM, Amber, 1000 mL	
25C0281-06 D	Glass NM, Amber, 1000 mL	
25C0281-06 E	Glass NM, Amber, 1000 mL	
25C0281-06 F	Glass NM, Amber, 1000 mL	
25C0281-06 G	Glass NM, Amber, 1000 mL	
25C0281-06 H	Glass NM, Amber, 1000 mL	
25C0281-06 I	Glass NM, Amber, 1000 mL	
25C0281-06 J	Glass NM, Amber, 1000 mL	
25C0281-06 K	Glass NM, Amber, 1000 mL	
25C0281-06 L	Glass NM, Amber, 1000 mL	
25C0281-06 M	Glass NM, Amber, 1000 mL	
25C0281-06 N	Glass NM, Amber, 1000 mL	
25C0281-06 O	Glass NM, Amber, 1000 mL	
25C0281-06 P	Glass NM, Amber, 1000 mL	
25C0281-06 Q	Glass NM, Amber, 1000 mL	
25C0281-06 R	Glass NM, Amber, 1000 mL	
25C0281-06 S	VOA Vial, Clear, 40 mL, HCL	
25C0281-06 T	VOA Vial, Clear, 40 mL, HCL	
25C0281-06 U	VOA Vial, Clear, 40 mL, HCL	
25C0281-06 V	VOA Vial, Clear, 40 mL, HCL	
25C0281-06 W	VOA Vial, Clear, 40 mL, HCL	
25C0281-06 X	VOA Vial, Clear, 40 mL, HCL	
25C0281-06 Y	VOA Vial, Clear, 40 mL, HCL	
25C0281-06 Z	VOA Vial, Clear, 40 mL, HCL	



WORK ORDER

25C0281

Client: WSP USA, Inc.

Project Manager: Kelly Bottem

Project: Landsburg

Project Number: GL9231000007

25C0281-07 A	Glass NM, Amber, 1000 mL	
25C0281-07 B	Glass NM, Amber, 1000 mL	
25C0281-07 C	Glass NM, Amber, 1000 mL	
25C0281-07 D	Glass NM, Amber, 1000 mL	
25C0281-07 E	Glass NM, Amber, 1000 mL	
25C0281-07 F	Glass NM, Amber, 1000 mL	
25C0281-07 G	Glass NM, Amber, 500 mL	
25C0281-07 H	Glass NM, Amber, 500 mL	
25C0281-07 I	Glass NM, Amber, 500 mL	
25C0281-07 J	Glass NM, Amber, 500 mL	
25C0281-07 K	Glass NM, Amber, 500 mL	
25C0281-07 L	Glass NM, Amber, 500 mL	
25C0281-07 M	HDPE NM, 500 mL, 1:1 HNO ₃	L2p
25C0281-07 N	VOA Vial, Clear, 40 mL, HCL	
25C0281-07 O	VOA Vial, Clear, 40 mL, HCL	
25C0281-07 P	VOA Vial, Clear, 40 mL, HCL	
25C0281-07 Q	VOA Vial, Clear, 40 mL, HCL	
25C0281-07 R	VOA Vial, Clear, 40 mL, HCL	
25C0281-08 A	Glass NM, Amber, 1000 mL	
25C0281-08 B	Glass NM, Amber, 1000 mL	
25C0281-08 C	Glass NM, Amber, 1000 mL	
25C0281-08 D	Glass NM, Amber, 1000 mL	
25C0281-08 E	Glass NM, Amber, 1000 mL	
25C0281-08 F	Glass NM, Amber, 1000 mL	
25C0281-08 G	Glass NM, Amber, 500 mL	
25C0281-08 H	Glass NM, Amber, 500 mL	
25C0281-08 I	Glass NM, Amber, 500 mL	
25C0281-08 J	Glass NM, Amber, 500 mL	
25C0281-08 K	Glass NM, Amber, 500 mL	
25C0281-08 L	Glass NM, Amber, 500 mL	
25C0281-08 M	HDPE NM, 500 mL, 1:1 HNO ₃	L2p
25C0281-08 N	VOA Vial, Clear, 40 mL, HCL	
25C0281-08 O	VOA Vial, Clear, 40 mL, HCL	
25C0281-08 P	VOA Vial, Clear, 40 mL, HCL	



WORK ORDER

25C0281

Client: WSP USA, Inc.

Project Manager: Kelly Bottem

Project: Landsburg

Project Number: GL9231000007

25C0281-08 Q VOA Vial, Clear, 40 mL, HCL

25C0281-08 R VOA Vial, Clear, 40 mL, HCL

25C0281-09 A VOA Vial, Clear, 40 mL, HCL

25C0281-09 B VOA Vial, Clear, 40 mL, HCL

25C0281-09 C VOA Vial, Clear, 40 mL, HCL

25C0281-09 D VOA Vial, Clear, 40 mL, HCL

25C0281-09 E VOA Vial, Clear, 40 mL, HCL

25C0281-09 F VOA Vial, Clear, 40 mL, HCL

SA

Preservation Confirmed By

3/13/25

Date



Cooler Receipt Form

ARI Client: WSP

Project Name: Landsbury

COC No(s): NA

Delivered by: Fed-Ex UPS Courier Hand Delivered Other: NA

Assigned ARI Job No: 25C0281

Tracking No: NA

Preliminary Examination Phase:

Were intact, properly signed and dated custody seals attached to the outside of the cooler? YES NO

Were custody papers included with the cooler? YES NO

Were custody papers properly filled out (ink, signed, etc.) YES NO

Temperature of Cooler(s) (°C) Time 1417 0.1°C 3.9°C 2.4°C 4.5°C 0.1°C 1.8°C Temp Gun ID#: J009708

Was a temperature blank included in the cooler? 3.8°C 5.0°C YES NO

Were coolers received between 0° - 6° (°C) YES NO

Was sufficient ice used (if appropriate)? NA YES NO

Cooler Accepted by: MD Date: 03/13/25 Time: 1417

Complete custody forms and attach all shipping documents

Log-In Phase:

What kind of packing material was used? Bubble Wrap Wet Ice Gel Packs Baggies Foam Block N/A Other: NA

Are any samples that were out of temperature compliance documented in LIMS? YES NO

How were bottles sealed in plastic bags? Individually Grouped Not

Did all bottles arrive in good condition (unbroken)? YES NO

Were all bottle labels complete and legible? YES NO

Did the number of containers listed on COC match with the number of containers received? YES NO

Did all bottle labels and tags agree with custody papers? YES NO

Were all bottles used correct for the requested analyses? YES NO

Do any of the analyses (bottles) require preservation? (attach preservation sheet, excluding VOCs) ... NA YES NO

Were all VOC vials free of air bubbles? NA YES NO

Was sufficient amount of sample sent in each bottle? SA 3/13/25 NA 2/24/25

Date VOC Trip Blank was made at ARI: 3/13/25

Were the sample(s) split by ARI? NA YES Date/Time: _____ Equipment: _____ Split by: _____

Samples Logged by: SA Date: 3/13/25 Time: 1556 Labels checked by: SA

**** Notify Project Manager of discrepancies or concerns ****

Additional Notes, Discrepancies, & Resolutions:

By: _____ Date: _____



WSP USA, Inc.
210 East 13th Street, Suite 300
Vancouver WA, 98660-3231

Project: Landsburg
Project Number: GL9231000007
Project Manager: Gary Zimmerman

Reported:
15-Apr-2025 16:40

LMW-6-0325
25C0281-01 (Water)

Volatile Organic Compounds

Method: EPA 8260D
Instrument: NT20 Analyst: FL

Sampled: 03/12/2025 09:10
Analyzed: 03/14/2025 15:01

Sample Preparation: Preparation Method: EPA 5030C (Purge and Trap)
Preparation Batch: BNC0352 Sample Size: 10 mL
Prepared: 03/14/2025 Final Volume: 10 mL

Extract ID: 25C0281-01 Q

Analyte	CAS Number	Dilution	Reporting Limit	Result	Units	Notes
Chloromethane	74-87-3	1	0.50	ND	ug/L	U
Vinyl Chloride	75-01-4	1	0.10	ND	ug/L	U
Bromomethane	74-83-9	1	1.00	ND	ug/L	U
Chloroethane	75-00-3	1	0.20	ND	ug/L	U
Trichlorofluoromethane	75-69-4	1	0.20	ND	ug/L	U
Acrolein	107-02-8	1	5.00	ND	ug/L	U
1,1,2-Trichloro-1,2,2-Trifluoroethane	76-13-1	1	0.20	ND	ug/L	U
Acetone	67-64-1	1	5.00	ND	ug/L	U
1,1-Dichloroethene	75-35-4	1	0.20	ND	ug/L	U
Iodomethane	74-88-4	1	1.00	ND	ug/L	U
Methylene Chloride	75-09-2	1	1.00	ND	ug/L	U
Acrylonitrile	107-13-1	1	1.00	ND	ug/L	U
Carbon Disulfide	75-15-0	1	0.20	ND	ug/L	U
trans-1,2-Dichloroethene	156-60-5	1	0.20	ND	ug/L	U
Vinyl Acetate	108-05-4	1	0.20	ND	ug/L	U
1,1-Dichloroethane	75-34-3	1	0.20	ND	ug/L	U
2-Butanone	78-93-3	1	5.00	ND	ug/L	U
2,2-Dichloropropane	594-20-7	1	0.20	ND	ug/L	U
cis-1,2-Dichloroethene	156-59-2	1	0.20	ND	ug/L	U
Chloroform	67-66-3	1	0.20	ND	ug/L	U
Bromochloromethane	74-97-5	1	0.20	ND	ug/L	U
1,1,1-Trichloroethane	71-55-6	1	0.20	ND	ug/L	U
1,1-Dichloropropene	563-58-6	1	0.10	ND	ug/L	U
Carbon tetrachloride	56-23-5	1	0.20	ND	ug/L	U
1,2-Dichloroethane	107-06-2	1	0.20	ND	ug/L	U
Benzene	71-43-2	1	0.20	ND	ug/L	U
Trichloroethene	79-01-6	1	0.20	ND	ug/L	U
1,2-Dichloropropane	78-87-5	1	0.20	ND	ug/L	U
Bromodichloromethane	75-27-4	1	0.20	ND	ug/L	U
Dibromomethane	74-95-3	1	0.20	ND	ug/L	U
2-Chloroethyl vinyl ether	110-75-8	1	1.00	ND	ug/L	U



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Project Manager: Gary Zimmerman

Reported:
15-Apr-2025 16:40

LMW-6-0325
25C0281-01 (Water)

Volatile Organic Compounds

Method: EPA 8260D

Sampled: 03/12/2025 09:10

Instrument: NT20 Analyst: FL

Analyzed: 03/14/2025 15:01

Analyte	CAS Number	Dilution	Reporting Limit	Result	Units	Notes
4-Methyl-2-Pentanone	108-10-1	1	2.50	ND	ug/L	U
cis-1,3-Dichloropropene	10061-01-5	1	0.20	ND	ug/L	U
Toluene	108-88-3	1	0.20	ND	ug/L	U
trans-1,3-Dichloropropene	10061-02-6	1	0.20	ND	ug/L	U
2-Hexanone	591-78-6	1	5.00	ND	ug/L	U
1,1,2-Trichloroethane	79-00-5	1	0.20	ND	ug/L	U
1,3-Dichloropropane	142-28-9	1	0.10	ND	ug/L	U
Tetrachloroethene	127-18-4	1	0.20	ND	ug/L	U
Dibromochloromethane	124-48-1	1	0.20	ND	ug/L	U
1,2-Dibromoethane	106-93-4	1	0.10	ND	ug/L	U
Chlorobenzene	108-90-7	1	0.20	ND	ug/L	U
Ethylbenzene	100-41-4	1	0.20	ND	ug/L	U
1,1,1,2-Tetrachloroethane	630-20-6	1	0.20	ND	ug/L	U
m,p-Xylene	179601-23-1	1	0.40	ND	ug/L	U
o-Xylene	95-47-6	1	0.20	ND	ug/L	U
Xylenes, total	1330-20-7	1	0.60	ND	ug/L	U
Styrene	100-42-5	1	0.20	ND	ug/L	U
Bromoform	75-25-2	1	0.20	ND	ug/L	U
1,1,2,2-Tetrachloroethane	79-34-5	1	0.20	ND	ug/L	U
1,2,3-Trichloropropane	96-18-4	1	0.25	ND	ug/L	U
trans-1,4-Dichloro 2-Butene	110-57-6	1	1.00	ND	ug/L	U
n-Propylbenzene	103-65-1	1	0.20	ND	ug/L	U
Bromobenzene	108-86-1	1	0.20	ND	ug/L	U
Isopropyl Benzene	98-82-8	1	0.20	ND	ug/L	U
2-Chlorotoluene	95-49-8	1	0.10	ND	ug/L	U
4-Chlorotoluene	106-43-4	1	0.20	ND	ug/L	U
t-Butylbenzene	98-06-6	1	0.20	ND	ug/L	U
1,3,5-Trimethylbenzene	108-67-8	1	0.20	ND	ug/L	U
1,2,4-Trimethylbenzene	95-63-6	1	0.20	ND	ug/L	U
s-Butylbenzene	135-98-8	1	0.20	ND	ug/L	U
4-Isopropyl Toluene	99-87-6	1	0.20	ND	ug/L	U
1,3-Dichlorobenzene	541-73-1	1	0.20	ND	ug/L	U
1,4-Dichlorobenzene	106-46-7	1	0.20	ND	ug/L	U
n-Butylbenzene	104-51-8	1	0.20	ND	ug/L	U
1,2-Dichlorobenzene	95-50-1	1	0.20	ND	ug/L	U



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LMW-6-0325
25C0281-01 (Water)

Volatile Organic Compounds

Method: EPA 8260D

Sampled: 03/12/2025 09:10

Instrument: NT20 Analyst: FL

Analyzed: 03/14/2025 15:01

Analyte	CAS Number	Dilution	Reporting Limit	Result	Units	Notes
1,2-Dibromo-3-chloropropane	96-12-8	1	0.50	ND	ug/L	U
1,2,4-Trichlorobenzene	120-82-1	1	0.50	ND	ug/L	U
Hexachloro-1,3-Butadiene	87-68-3	1	0.50	ND	ug/L	U
Naphthalene	91-20-3	1	0.50	ND	ug/L	U
1,2,3-Trichlorobenzene	87-61-6	1	0.50	ND	ug/L	U
Dichlorodifluoromethane	75-71-8	1	0.20	ND	ug/L	U
<i>Surrogate: 1,2-Dichloroethane-d4</i>			<i>80-129 %</i>	<i>105</i>	<i>%</i>	
<i>Surrogate: Toluene-d8</i>			<i>80-120 %</i>	<i>98.7</i>	<i>%</i>	
<i>Surrogate: 4-Bromofluorobenzene</i>			<i>80-120 %</i>	<i>93.3</i>	<i>%</i>	
<i>Surrogate: 1,2-Dichlorobenzene-d4</i>			<i>80-120 %</i>	<i>103</i>	<i>%</i>	



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Project: Landsburg
Project Number: GL9231000007
Project Manager: Gary Zimmerman

Reported:
15-Apr-2025 16:40

LMW-6-0325
25C0281-01 (Water)

Semivolatile Organic Compounds

Method: EPA 8270E
Instrument: NT10 Analyst: JZ

Sampled: 03/12/2025 09:10

Analyzed: 03/28/2025 16:34

Sample Preparation: Preparation Method: EPA 3520C (Liq Liq)
Preparation Batch: BNC0433
Prepared: 03/18/2025

Sample Size: 500 mL

Final Volume: 0.5 mL

Extract ID: 25C0281-01 J 01

Analyte	CAS Number	Dilution	Reporting Limit	Result	Units	Notes
Phenol	108-95-2	1	1.0	ND	ug/L	U
bis(2-chloroethyl) ether	111-44-4	1	1.0	ND	ug/L	U
2-Chlorophenol	95-57-8	1	1.0	ND	ug/L	U
1,3-Dichlorobenzene	541-73-1	1	1.0	ND	ug/L	U
1,4-Dichlorobenzene	106-46-7	1	1.0	ND	ug/L	U
Benzyl Alcohol	100-51-6	1	2.0	ND	ug/L	U
1,2-Dichlorobenzene	95-50-1	1	1.0	ND	ug/L	U
2-Methylphenol	95-48-7	1	1.0	ND	ug/L	U
2,2'-Oxybis(1-chloropropane)	108-60-1	1	1.0	ND	ug/L	U
4-Methylphenol	106-44-5	1	2.0	ND	ug/L	U
N-Nitroso-di-n-Propylamine	621-64-7	1	1.0	ND	ug/L	U
Hexachloroethane	67-72-1	1	2.0	ND	ug/L	U
Nitrobenzene	98-95-3	1	1.0	ND	ug/L	U
Isophorone	78-59-1	1	1.0	ND	ug/L	U
2-Nitrophenol	88-75-5	1	3.0	ND	ug/L	U
2,4-Dimethylphenol	105-67-9	1	3.0	ND	ug/L	U
Bis(2-Chloroethoxy)methane	111-91-1	1	1.0	ND	ug/L	U
Benzoic acid	65-85-0	1	10.0	ND	ug/L	U
2,4-Dichlorophenol	120-83-2	1	3.0	ND	ug/L	U
1,2,4-Trichlorobenzene	120-82-1	1	1.0	ND	ug/L	U
Naphthalene	91-20-3	1	1.0	ND	ug/L	U
4-Chloroaniline	106-47-8	1	5.0	ND	ug/L	U
Hexachlorobutadiene	87-68-3	1	3.0	ND	ug/L	U
4-Chloro-3-Methylphenol	59-50-7	1	3.0	ND	ug/L	U
2-Methylnaphthalene	91-57-6	1	1.0	ND	ug/L	U
Hexachlorocyclopentadiene	77-47-4	1	5.0	ND	ug/L	U
2,4,6-Trichlorophenol	88-06-2	1	3.0	ND	ug/L	U
2,4,5-Trichlorophenol	95-95-4	1	5.0	ND	ug/L	U
2-Chloronaphthalene	91-58-7	1	1.0	ND	ug/L	U
2-Nitroaniline	88-74-4	1	3.0	ND	ug/L	U
Dimethylphthalate	131-11-3	1	1.0	ND	ug/L	U
Acenaphthylene	208-96-8	1	1.0	ND	ug/L	U



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Project Manager: Gary Zimmerman

Reported:
15-Apr-2025 16:40

LMW-6-0325
25C0281-01 (Water)

Semivolatile Organic Compounds

Method: EPA 8270E

Sampled: 03/12/2025 09:10

Instrument: NT10 Analyst: JZ

Analyzed: 03/28/2025 16:34

Analyte	CAS Number	Dilution	Reporting Limit	Result	Units	Notes
2,6-Dinitrotoluene	606-20-2	1	3.0	ND	ug/L	U
3-Nitroaniline	99-09-2	1	3.0	ND	ug/L	U
Acenaphthene	83-32-9	1	1.0	ND	ug/L	U
2,4-Dinitrophenol	51-28-5	1	10.0	ND	ug/L	U
Dibenzofuran	132-64-9	1	1.0	ND	ug/L	U
4-Nitrophenol	100-02-7	1	5.0	ND	ug/L	U
2,4-Dinitrotoluene	121-14-2	1	3.0	ND	ug/L	U
Fluorene	86-73-7	1	1.0	ND	ug/L	U
Diethyl phthalate	84-66-2	1	1.0	ND	ug/L	U
4-Chlorophenylphenyl ether	7005-72-3	1	1.0	ND	ug/L	U
4-Nitroaniline	100-01-6	1	3.0	ND	ug/L	U
4,6-Dinitro-2-methylphenol	534-52-1	1	10.0	ND	ug/L	U
N-Nitrosodiphenylamine	86-30-6	1	1.0	ND	ug/L	U
4-Bromophenyl phenyl ether	101-55-3	1	1.0	ND	ug/L	U
Hexachlorobenzene	118-74-1	1	1.0	ND	ug/L	U
Pentachlorophenol	87-86-5	1	5.0	ND	ug/L	U
Phenanthrene	85-01-8	1	1.0	ND	ug/L	U
Anthracene	120-12-7	1	1.0	ND	ug/L	U
Carbazole	86-74-8	1	1.0	ND	ug/L	U
Di-n-Butylphthalate	84-74-2	1	1.0	ND	ug/L	U
Fluoranthene	206-44-0	1	1.0	ND	ug/L	U
Pyrene	129-00-0	1	1.0	ND	ug/L	U
Butylbenzylphthalate	85-68-7	1	1.0	ND	ug/L	U
Benzo(a)anthracene	56-55-3	1	1.0	ND	ug/L	U
3,3'-Dichlorobenzidine	91-94-1	1	10.0	ND	ug/L	U
Chrysene	218-01-9	1	1.0	ND	ug/L	U
bis(2-Ethylhexyl)phthalate	117-81-7	1	3.0	8.0	ug/L	
Di-n-Octylphthalate	117-84-0	1	1.0	ND	ug/L	U
Benzofluoranthenes, Total		1	2.0	ND	ug/L	U
Benzo(a)pyrene	50-32-8	1	1.0	ND	ug/L	U
Indeno(1,2,3-cd)pyrene	193-39-5	1	1.0	ND	ug/L	U
Dibenzo(a,h)anthracene	53-70-3	1	1.0	ND	ug/L	U
Benzo(g,h,i)perylene	191-24-2	1	1.0	ND	ug/L	U
1-Methylnaphthalene	90-12-0	1	1.0	ND	ug/L	U
Surrogate: 2-Fluorophenol			33-120 %	45.0	%	



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Reported:
15-Apr-2025 16:40

LMW-6-0325
25C0281-01 (Water)

Semivolatile Organic Compounds

Method: EPA 8270E

Sampled: 03/12/2025 09:10

Instrument: NT10 Analyst: JZ

Analyzed: 03/28/2025 16:34

Analyte	CAS Number	Recovery	Recovery	Units	Notes
		Limits			
Surrogate: Phenol-d5		38-120 %	32.7	%	*
Surrogate: 2-Chlorophenol-d4		41-120 %	45.6	%	
Surrogate: 1,2-Dichlorobenzene-d4		20-120 %	52.8	%	
Surrogate: Nitrobenzene-d5		27-120 %	60.6	%	
Surrogate: 2-Fluorobiphenyl		33-120 %	56.2	%	
Surrogate: 2,4,6-Tribromophenol		52-120 %	52.7	%	
Surrogate: p-Terphenyl-d14		28-120 %	75.4	%	



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Vancouver WA, 98660-3231

Project: Landsburg
Project Number: GL9231000007
Project Manager: Gary Zimmerman

Reported:
15-Apr-2025 16:40

LMW-6-0325
25C0281-01 (Water)

Semivolatile Organic Compounds

Method: EPA 8270E
Instrument: NT14 Analyst: RT

Sampled: 03/12/2025 09:10

Analyzed: 03/31/2025 12:14

Sample Preparation: Preparation Method: EPA 3520C (Liq Liq)
Preparation Batch: BNC0410
Prepared: 03/19/2025

Sample Size: 500 mL
Final Volume: 1 mL

Extract ID: 25C0281-01 H 01

Analyte	CAS Number	Dilution	Detection Limit	Reporting Limit	Result	Units	Notes
1,4-Dioxane	123-91-1	1	0.2	0.4	ND	ug/L	U
<i>Surrogate: 1,4-Dioxane-d8</i>				30-160 %	57.7	%	



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LMW-6-0325
25C0281-01 (Water)

Petroleum Hydrocarbons

Method: NWTPH-HCID
Instrument: FID4 Analyst: JR

Sampled: 03/12/2025 09:10

Analyzed: 03/17/2025 15:57

Sample Preparation: Preparation Method: EPA 3510C SepF
Preparation Batch: BNC0332
Prepared: 03/14/2025

Sample Size: 500 mL
Final Volume: 1 mL

Extract ID: 25C0281-01 G 01

Analyte	CAS Number	Dilution	Reporting Limit	Result	Units	Notes
Gasoline Range Organics (Tol-C12)	GRO	1	0.25	ND	mg/L	U
Diesel Range Organics (C12-C24)	DRO	1	0.50	ND	mg/L	U
Motor Oil Range Organics (C24-C38)	RRO	1	1.00	ND	mg/L	U
Surrogate: o-Terphenyl			50-150 %	106	%	
Surrogate: n-Triacontane			50-150 %	112	%	



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LMW-6-0325
25C0281-01 (Water)

Chlorinated Pesticides

Method: EPA 8081B
Instrument: ECD6 Analyst: RT

Sampled: 03/12/2025 09:10

Analyzed: 04/11/2025 14:53

Sample Preparation: Preparation Method: EPA 3510C SepF
Preparation Batch: BNC0429
Prepared: 03/18/2025

Sample Size: 500 mL
Final Volume: 5 mL

Extract ID: 25C0281-01 I 01

Sample Cleanup: Cleanup Method: Silica Gel
Cleanup Batch: CNC0126
Cleaned: 27-Mar-2025

Initial Volume: 5 uL
Final Volume: 5 uL

Extract ID: 25C0281-01 I 01

Analyte	CAS Number	Dilution	Reporting Limit	Result	Units	Notes
alpha-BHC	319-84-6	1	0.025	ND	ug/L	U
beta-BHC	319-85-7	1	0.025	ND	ug/L	U
gamma-BHC (Lindane)	58-89-9	1	0.025	ND	ug/L	U
delta-BHC	319-86-8	1	0.025	ND	ug/L	U
Heptachlor	76-44-8	1	0.025	ND	ug/L	U
Aldrin	309-00-2	1	0.025	ND	ug/L	U
Heptachlor Epoxide	1024-57-3	1	0.050	ND	ug/L	U
trans-Chlordane (beta-Chlordane)	5103-74-2	1	0.025	ND	ug/L	U
cis-Chlordane (alpha-chlordane)	5103-71-9	1	0.025	ND	ug/L	U
Endosulfan I	959-98-8	1	0.025	ND	ug/L	U
4,4'-DDE	72-55-9	1	0.050	ND	ug/L	U
Dieldrin	60-57-1	1	0.050	ND	ug/L	U
Endrin	72-20-8	1	0.050	ND	ug/L	U
Endosulfan II	33213-65-9	1	0.050	ND	ug/L	U
4,4'-DDD	72-54-8	1	0.050	ND	ug/L	U
Endrin Aldehyde	7421-93-4	1	0.050	ND	ug/L	U
4,4'-DDT	50-29-3	1	0.050	ND	ug/L	U
Endosulfan Sulfate	1031-07-8	1	0.050	ND	ug/L	U
Endrin Ketone	53494-70-5	1	0.050	ND	ug/L	U
Methoxychlor	72-43-5	1	0.250	ND	ug/L	U
Toxaphene	8001-35-2	1	1.25	ND	ug/L	U
Surrogate: Decachlorobiphenyl			11-144 %	70.6	%	
Surrogate: Decachlorobiphenyl [2C]			11-144 %	73.1	%	
Surrogate: Tetrachlorometaxylene			30-120 %	51.3	%	
Surrogate: Tetrachlorometaxylene [2C]			30-120 %	51.9	%	



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LMW-6-0325
25C0281-01 (Water)

Aroclor PCB

Method: EPA 8082A
Instrument: ECD7 Analyst: NRB

Sampled: 03/12/2025 09:10

Analyzed: 04/01/2025 12:33

Sample Preparation: Preparation Method: EPA 3510C SepF
Preparation Batch: BNC0407 Sample Size: 1000 mL
Prepared: 03/17/2025 Final Volume: 0.5 mL

Extract ID: 25C0281-01 A 01

Sample Cleanup: Cleanup Method: Sulfuric Acid
Cleanup Batch: CNC0139 Initial Volume: 0.5 uL
Cleaned: 31-Mar-2025 Final Volume: 0.5 uL

Extract ID: 25C0281-01 A 01

Sample Cleanup: Cleanup Method: Sulfur
Cleanup Batch: CNC0140 Initial Volume: 0.5 uL
Cleaned: 31-Mar-2025 Final Volume: 0.5 uL

Extract ID: 25C0281-01 A 01

Analyte	CAS Number	Dilution	Reporting Limit	Result	Units	Notes
Aroclor 1016	12674-11-2	1	0.010	ND	ug/L	U
Aroclor 1221	11104-28-2	1	0.010	ND	ug/L	U
Aroclor 1232	11141-16-5	1	0.010	ND	ug/L	U
Aroclor 1242	53469-21-9	1	0.010	ND	ug/L	U
Aroclor 1248	12672-29-6	1	0.010	ND	ug/L	U
Aroclor 1254	11097-69-1	1	0.010	ND	ug/L	U
Aroclor 1260	11096-82-5	1	0.010	ND	ug/L	U
Surrogate: Decachlorobiphenyl			29-120 %	63.1	%	
Surrogate: Tetrachlorometaxylene			32-120 %	75.5	%	
Surrogate: Decachlorobiphenyl [2C]			29-120 %	62.8	%	
Surrogate: Tetrachlorometaxylene [2C]			32-120 %	60.8	%	



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LMW-6-0325
25C0281-01 (Water)

Metals and Metallic Compounds

Method: EPA 200.8
Instrument: ICPMS2 Analyst: HAL

Sampled: 03/12/2025 09:10

Analyzed: 03/21/2025 05:34

Sample Preparation: Preparation Method: REN - EPA 3010A M
Preparation Batch: BNC0385 Sample Size: 25 mL
Prepared: 03/15/2025 Final Volume: 25 mL

Extract ID: 25C0281-01 M 01

Analyte	CAS Number	Dilution	Detection	Reporting	Result	Units	Notes
			Limit	Limit			
Antimony	7440-36-0	1	0.150	3.00	ND	ug/L	U
Arsenic UCT	7440-38-2	1	0.100	3.00	ND	ug/L	U
Lead	7439-92-1	1	0.100	10.0	ND	ug/L	U
Selenium UCT	7782-49-2	1	0.500	25.0	ND	ug/L	U
Thallium	7440-28-0	1	0.100	2.00	ND	ug/L	U



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Reported:
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LMW-6-0325
25C0281-01 (Water)

Metals and Metallic Compounds

Method: EPA 6010D
Instrument: ICP3 Analyst: SH

Sampled: 03/12/2025 09:10

Analyzed: 03/28/2025 17:49

Sample Preparation: Preparation Method: TWC EPA 3010A
Preparation Batch: BNC0390
Prepared: 03/17/2025

Sample Size: 25 mL
Final Volume: 25 mL

Extract ID: 25C0281-01 M 02

Analyte	CAS Number	Dilution	Detection Limit	Reporting Limit	Result	Units	Notes
Aluminum	7429-90-5	1	0.0210	0.0700	ND	mg/L	U
Barium	7440-39-3	1	0.0007	0.0060	0.109	mg/L	
Beryllium	7440-41-7	1	0.0002	0.0010	ND	mg/L	U
Cadmium	7440-43-9	1	0.0005	0.0020	ND	mg/L	U
Calcium	7440-70-2	1	0.0300	0.0500	26.7	mg/L	
Chromium	7440-47-3	1	0.0020	0.0090	ND	mg/L	U
Cobalt	7440-48-4	1	0.0025	0.0050	ND	mg/L	U
Copper	7440-50-8	1	0.0030	0.0050	ND	mg/L	U
Iron	7439-89-6	1	0.0540	0.100	1.53	mg/L	
Magnesium	7439-95-4	1	0.0250	0.0500	13.1	mg/L	
Manganese	7439-96-5	1	0.0020	0.0040	0.0189	mg/L	
Nickel	7440-02-0	1	0.0050	0.0100	ND	mg/L	U
Potassium	7440-09-7	1	0.250	0.500	0.614	mg/L	
Silver	7440-22-4	1	0.0015	0.0030	ND	mg/L	U
Sodium	7440-23-5	1	0.250	0.500	6.73	mg/L	
Vanadium	7440-62-2	1	0.0015	0.0030	ND	mg/L	U
Zinc	7440-66-6	1	0.0150	0.0300	ND	mg/L	U



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LMW-6-0325

25C0281-01 (Water)

Metals and Metallic Compounds

Method: EPA 7470A

Sampled: 03/12/2025 09:10

Instrument: HYDRA Analyst: AMS

Analyzed: 03/19/2025 13:15

Sample Preparation:

Preparation Method: TWM EPA 7470A

Extract ID: 25C0281-01 M

Preparation Batch: BNC0392

Sample Size: 20 mL

Prepared: 03/15/2025

Final Volume: 20 mL

Analyte	CAS Number	Dilution	Reporting Limit	Result	Units	Notes
Mercury	7439-97-6	1	0.00100	ND	mg/L	U



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Reported:
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LMW-6-0325
25C0281-01RE1 (Water)

Metals and Metallic Compounds

Method: EPA 200.8

Sampled: 03/12/2025 09:10

Instrument: ICPMS2 Analyst: HAL

Analyzed: 03/25/2025 22:57

Sample Preparation:

Preparation Method: REN - EPA 3010A M

Extract ID: 25C0281-01RE1 M 03

Preparation Batch: BNC0572

Sample Size: 25 mL

Prepared: 03/22/2025

Final Volume: 25 mL

Analyte	CAS Number	Dilution	Detection Limit	Reporting Limit	Result	Units	Notes
Antimony	7440-36-0	1	0.150	3.00	ND	ug/L	U



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LMW-14-0325
25C0281-02 (Water)

Volatile Organic Compounds

Method: EPA 8260D
Instrument: NT20 Analyst: FL

Sampled: 03/12/2025 10:15

Analyzed: 03/14/2025 15:24

Sample Preparation: Preparation Method: EPA 5030C (Purge and Trap)
Preparation Batch: BNC0352 Sample Size: 10 mL
Prepared: 03/14/2025 Final Volume: 10 mL

Extract ID: 25C0281-02 N

Analyte	CAS Number	Dilution	Reporting Limit	Result	Units	Notes
Chloromethane	74-87-3	1	0.50	ND	ug/L	U
Vinyl Chloride	75-01-4	1	0.10	ND	ug/L	U
Bromomethane	74-83-9	1	1.00	ND	ug/L	U
Chloroethane	75-00-3	1	0.20	ND	ug/L	U
Trichlorofluoromethane	75-69-4	1	0.20	ND	ug/L	U
Acrolein	107-02-8	1	5.00	ND	ug/L	U
1,1,2-Trichloro-1,2,2-Trifluoroethane	76-13-1	1	0.20	ND	ug/L	U
Acetone	67-64-1	1	5.00	ND	ug/L	U
1,1-Dichloroethene	75-35-4	1	0.20	ND	ug/L	U
Iodomethane	74-88-4	1	1.00	ND	ug/L	U
Methylene Chloride	75-09-2	1	1.00	ND	ug/L	U
Acrylonitrile	107-13-1	1	1.00	ND	ug/L	U
Carbon Disulfide	75-15-0	1	0.20	ND	ug/L	U
trans-1,2-Dichloroethene	156-60-5	1	0.20	ND	ug/L	U
Vinyl Acetate	108-05-4	1	0.20	ND	ug/L	U
1,1-Dichloroethane	75-34-3	1	0.20	ND	ug/L	U
2-Butanone	78-93-3	1	5.00	ND	ug/L	U
2,2-Dichloropropane	594-20-7	1	0.20	ND	ug/L	U
cis-1,2-Dichloroethene	156-59-2	1	0.20	ND	ug/L	U
Chloroform	67-66-3	1	0.20	ND	ug/L	U
Bromochloromethane	74-97-5	1	0.20	ND	ug/L	U
1,1,1-Trichloroethane	71-55-6	1	0.20	ND	ug/L	U
1,1-Dichloropropene	563-58-6	1	0.10	ND	ug/L	U
Carbon tetrachloride	56-23-5	1	0.20	ND	ug/L	U
1,2-Dichloroethane	107-06-2	1	0.20	ND	ug/L	U
Benzene	71-43-2	1	0.20	ND	ug/L	U
Trichloroethene	79-01-6	1	0.20	ND	ug/L	U
1,2-Dichloropropane	78-87-5	1	0.20	ND	ug/L	U
Bromodichloromethane	75-27-4	1	0.20	ND	ug/L	U
Dibromomethane	74-95-3	1	0.20	ND	ug/L	U
2-Chloroethyl vinyl ether	110-75-8	1	1.00	ND	ug/L	U
4-Methyl-2-Pentanone	108-10-1	1	2.50	ND	ug/L	U



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LMW-14-0325
25C0281-02 (Water)

Volatile Organic Compounds

Method: EPA 8260D

Sampled: 03/12/2025 10:15

Instrument: NT20 Analyst: FL

Analyzed: 03/14/2025 15:24

Analyte	CAS Number	Dilution	Reporting Limit	Result	Units	Notes
cis-1,3-Dichloropropene	10061-01-5	1	0.20	ND	ug/L	U
Toluene	108-88-3	1	0.20	ND	ug/L	U
trans-1,3-Dichloropropene	10061-02-6	1	0.20	ND	ug/L	U
2-Hexanone	591-78-6	1	5.00	ND	ug/L	U
1,1,2-Trichloroethane	79-00-5	1	0.20	ND	ug/L	U
1,3-Dichloropropane	142-28-9	1	0.10	ND	ug/L	U
Tetrachloroethene	127-18-4	1	0.20	ND	ug/L	U
Dibromochloromethane	124-48-1	1	0.20	ND	ug/L	U
1,2-Dibromoethane	106-93-4	1	0.10	ND	ug/L	U
Chlorobenzene	108-90-7	1	0.20	ND	ug/L	U
Ethylbenzene	100-41-4	1	0.20	ND	ug/L	U
1,1,1,2-Tetrachloroethane	630-20-6	1	0.20	ND	ug/L	U
m,p-Xylene	179601-23-1	1	0.40	ND	ug/L	U
o-Xylene	95-47-6	1	0.20	ND	ug/L	U
Xylenes, total	1330-20-7	1	0.60	ND	ug/L	U
Styrene	100-42-5	1	0.20	ND	ug/L	U
Bromoform	75-25-2	1	0.20	ND	ug/L	U
1,1,2,2-Tetrachloroethane	79-34-5	1	0.20	ND	ug/L	U
1,2,3-Trichloropropane	96-18-4	1	0.25	ND	ug/L	U
trans-1,4-Dichloro 2-Butene	110-57-6	1	1.00	ND	ug/L	U
n-Propylbenzene	103-65-1	1	0.20	ND	ug/L	U
Bromobenzene	108-86-1	1	0.20	ND	ug/L	U
Isopropyl Benzene	98-82-8	1	0.20	ND	ug/L	U
2-Chlorotoluene	95-49-8	1	0.10	ND	ug/L	U
4-Chlorotoluene	106-43-4	1	0.20	ND	ug/L	U
t-Butylbenzene	98-06-6	1	0.20	ND	ug/L	U
1,3,5-Trimethylbenzene	108-67-8	1	0.20	ND	ug/L	U
1,2,4-Trimethylbenzene	95-63-6	1	0.20	ND	ug/L	U
s-Butylbenzene	135-98-8	1	0.20	ND	ug/L	U
4-Isopropyl Toluene	99-87-6	1	0.20	ND	ug/L	U
1,3-Dichlorobenzene	541-73-1	1	0.20	ND	ug/L	U
1,4-Dichlorobenzene	106-46-7	1	0.20	ND	ug/L	U
n-Butylbenzene	104-51-8	1	0.20	ND	ug/L	U
1,2-Dichlorobenzene	95-50-1	1	0.20	ND	ug/L	U
1,2-Dibromo-3-chloropropane	96-12-8	1	0.50	ND	ug/L	U



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LMW-14-0325
25C0281-02 (Water)

Volatile Organic Compounds

Method: EPA 8260D

Sampled: 03/12/2025 10:15

Instrument: NT20 Analyst: FL

Analyzed: 03/14/2025 15:24

Analyte	CAS Number	Dilution	Reporting Limit	Result	Units	Notes
1,2,4-Trichlorobenzene	120-82-1	1	0.50	ND	ug/L	U
Hexachloro-1,3-Butadiene	87-68-3	1	0.50	ND	ug/L	U
Naphthalene	91-20-3	1	0.50	ND	ug/L	U
1,2,3-Trichlorobenzene	87-61-6	1	0.50	ND	ug/L	U
Dichlorodifluoromethane	75-71-8	1	0.20	ND	ug/L	U
<i>Surrogate: 1,2-Dichloroethane-d4</i>			<i>80-129 %</i>	<i>106</i>	<i>%</i>	
<i>Surrogate: Toluene-d8</i>			<i>80-120 %</i>	<i>98.8</i>	<i>%</i>	
<i>Surrogate: 4-Bromofluorobenzene</i>			<i>80-120 %</i>	<i>96.0</i>	<i>%</i>	
<i>Surrogate: 1,2-Dichlorobenzene-d4</i>			<i>80-120 %</i>	<i>101</i>	<i>%</i>	



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LMW-14-0325
25C0281-02 (Water)

Semivolatile Organic Compounds

Method: EPA 8270E
Instrument: NT10 Analyst: JZ

Sampled: 03/12/2025 10:15

Analyzed: 03/28/2025 17:15

Sample Preparation: Preparation Method: EPA 3520C (Liq Liq)
Preparation Batch: BNC0433
Prepared: 03/18/2025

Sample Size: 500 mL

Final Volume: 0.5 mL

Extract ID: 25C0281-02 J 01

Analyte	CAS Number	Dilution	Reporting Limit	Result	Units	Notes
Phenol	108-95-2	1	1.0	ND	ug/L	U
bis(2-chloroethyl) ether	111-44-4	1	1.0	ND	ug/L	U
2-Chlorophenol	95-57-8	1	1.0	ND	ug/L	U
1,3-Dichlorobenzene	541-73-1	1	1.0	ND	ug/L	U
1,4-Dichlorobenzene	106-46-7	1	1.0	ND	ug/L	U
Benzyl Alcohol	100-51-6	1	2.0	ND	ug/L	U
1,2-Dichlorobenzene	95-50-1	1	1.0	ND	ug/L	U
2-Methylphenol	95-48-7	1	1.0	ND	ug/L	U
2,2'-Oxybis(1-chloropropane)	108-60-1	1	1.0	ND	ug/L	U
4-Methylphenol	106-44-5	1	2.0	ND	ug/L	U
N-Nitroso-di-n-Propylamine	621-64-7	1	1.0	ND	ug/L	U
Hexachloroethane	67-72-1	1	2.0	ND	ug/L	U
Nitrobenzene	98-95-3	1	1.0	ND	ug/L	U
Isophorone	78-59-1	1	1.0	ND	ug/L	U
2-Nitrophenol	88-75-5	1	3.0	ND	ug/L	U
2,4-Dimethylphenol	105-67-9	1	3.0	ND	ug/L	U
Bis(2-Chloroethoxy)methane	111-91-1	1	1.0	ND	ug/L	U
Benzoic acid	65-85-0	1	10.0	ND	ug/L	U
2,4-Dichlorophenol	120-83-2	1	3.0	ND	ug/L	U
1,2,4-Trichlorobenzene	120-82-1	1	1.0	ND	ug/L	U
Naphthalene	91-20-3	1	1.0	ND	ug/L	U
4-Chloroaniline	106-47-8	1	5.0	ND	ug/L	U
Hexachlorobutadiene	87-68-3	1	3.0	ND	ug/L	U
4-Chloro-3-Methylphenol	59-50-7	1	3.0	ND	ug/L	U
2-Methylnaphthalene	91-57-6	1	1.0	ND	ug/L	U
Hexachlorocyclopentadiene	77-47-4	1	5.0	ND	ug/L	U
2,4,6-Trichlorophenol	88-06-2	1	3.0	ND	ug/L	U
2,4,5-Trichlorophenol	95-95-4	1	5.0	ND	ug/L	U
2-Chloronaphthalene	91-58-7	1	1.0	ND	ug/L	U
2-Nitroaniline	88-74-4	1	3.0	ND	ug/L	U
Dimethylphthalate	131-11-3	1	1.0	ND	ug/L	U
Acenaphthylene	208-96-8	1	1.0	ND	ug/L	U



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LMW-14-0325
25C0281-02 (Water)

Semivolatile Organic Compounds

Method: EPA 8270E

Sampled: 03/12/2025 10:15

Instrument: NT10 Analyst: JZ

Analyzed: 03/28/2025 17:15

Analyte	CAS Number	Dilution	Reporting Limit	Result	Units	Notes
2,6-Dinitrotoluene	606-20-2	1	3.0	ND	ug/L	U
3-Nitroaniline	99-09-2	1	3.0	ND	ug/L	U
Acenaphthene	83-32-9	1	1.0	ND	ug/L	U
2,4-Dinitrophenol	51-28-5	1	10.0	ND	ug/L	U
Dibenzofuran	132-64-9	1	1.0	ND	ug/L	U
4-Nitrophenol	100-02-7	1	5.0	ND	ug/L	U
2,4-Dinitrotoluene	121-14-2	1	3.0	ND	ug/L	U
Fluorene	86-73-7	1	1.0	ND	ug/L	U
Diethyl phthalate	84-66-2	1	1.0	ND	ug/L	U
4-Chlorophenylphenyl ether	7005-72-3	1	1.0	ND	ug/L	U
4-Nitroaniline	100-01-6	1	3.0	ND	ug/L	U
4,6-Dinitro-2-methylphenol	534-52-1	1	10.0	ND	ug/L	U
N-Nitrosodiphenylamine	86-30-6	1	1.0	ND	ug/L	U
4-Bromophenyl phenyl ether	101-55-3	1	1.0	ND	ug/L	U
Hexachlorobenzene	118-74-1	1	1.0	ND	ug/L	U
Pentachlorophenol	87-86-5	1	5.0	ND	ug/L	U
Phenanthrene	85-01-8	1	1.0	ND	ug/L	U
Anthracene	120-12-7	1	1.0	ND	ug/L	U
Carbazole	86-74-8	1	1.0	ND	ug/L	U
Di-n-Butylphthalate	84-74-2	1	1.0	ND	ug/L	U
Fluoranthene	206-44-0	1	1.0	ND	ug/L	U
Pyrene	129-00-0	1	1.0	ND	ug/L	U
Butylbenzylphthalate	85-68-7	1	1.0	ND	ug/L	U
Benzo(a)anthracene	56-55-3	1	1.0	ND	ug/L	U
3,3'-Dichlorobenzidine	91-94-1	1	10.0	ND	ug/L	U
Chrysene	218-01-9	1	1.0	ND	ug/L	U
bis(2-Ethylhexyl)phthalate	117-81-7	1	3.0	ND	ug/L	U
Di-n-Octylphthalate	117-84-0	1	1.0	ND	ug/L	U
Benzofluoranthenes, Total		1	2.0	ND	ug/L	U
Benzo(a)pyrene	50-32-8	1	1.0	ND	ug/L	U
Indeno(1,2,3-cd)pyrene	193-39-5	1	1.0	ND	ug/L	U
Dibenzo(a,h)anthracene	53-70-3	1	1.0	ND	ug/L	U
Benzo(g,h,i)perylene	191-24-2	1	1.0	ND	ug/L	U
1-Methylnaphthalene	90-12-0	1	1.0	ND	ug/L	U
Surrogate: 2-Fluorophenol			33-120 %	43.6	%	



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Project Manager: Gary Zimmerman

Reported:
15-Apr-2025 16:40

LMW-14-0325
25C0281-02 (Water)

Semivolatile Organic Compounds

Method: EPA 8270E

Sampled: 03/12/2025 10:15

Instrument: NT10 Analyst: JZ

Analyzed: 03/28/2025 17:15

Analyte	CAS Number	Recovery	Recovery	Units	Notes
		Limits			
Surrogate: Phenol-d5		38-120 %	37.5	%	*
Surrogate: 2-Chlorophenol-d4		41-120 %	43.0	%	
Surrogate: 1,2-Dichlorobenzene-d4		20-120 %	49.3	%	
Surrogate: Nitrobenzene-d5		27-120 %	55.5	%	
Surrogate: 2-Fluorobiphenyl		33-120 %	55.6	%	
Surrogate: 2,4,6-Tribromophenol		52-120 %	55.2	%	
Surrogate: p-Terphenyl-d14		28-120 %	71.2	%	



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Reported:
15-Apr-2025 16:40

LMW-14-0325
25C0281-02 (Water)

Semivolatile Organic Compounds

Method: EPA 8270E	Sampled: 03/12/2025 10:15	
Instrument: NT14 Analyst: RT	Analyzed: 03/31/2025 12:31	
Sample Preparation:	Preparation Method: EPA 3520C (Liq Liq)	Extract ID: 25C0281-02 H 01
	Preparation Batch: BNC0410	Sample Size: 500 mL
	Prepared: 03/19/2025	Final Volume: 1 mL

Analyte	CAS Number	Dilution	Detection Limit	Reporting Limit	Result	Units	Notes
1,4-Dioxane	123-91-1	1	0.2	0.4	ND	ug/L	U
<i>Surrogate: 1,4-Dioxane-d8</i>				30-160 %	62.9	%	



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Reported:
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LMW-14-0325
25C0281-02 (Water)

Petroleum Hydrocarbons

Method: NWTPH-HCID
Instrument: FID4 Analyst: JR

Sampled: 03/12/2025 10:15

Analyzed: 03/17/2025 16:17

Sample Preparation: Preparation Method: EPA 3510C SepF
Preparation Batch: BNC0332
Prepared: 03/14/2025

Sample Size: 500 mL
Final Volume: 1 mL

Extract ID: 25C0281-02 G 01

Analyte	CAS Number	Dilution	Reporting Limit	Result	Units	Notes
Gasoline Range Organics (Tol-C12)	GRO	1	0.25	ND	mg/L	U
Diesel Range Organics (C12-C24)	DRO	1	0.50	ND	mg/L	U
Motor Oil Range Organics (C24-C38)	RRO	1	1.00	ND	mg/L	U
Surrogate: o-Terphenyl			50-150 %	103	%	
Surrogate: n-Triacontane			50-150 %	108	%	



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Reported:

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LMW-14-0325
25C0281-02 (Water)

Chlorinated Pesticides

Method: EPA 8081B

Sampled: 03/12/2025 10:15

Instrument: ECD6 Analyst: RT

Analyzed: 04/11/2025 15:11

Sample Preparation:

Preparation Method: EPA 3510C SepF

Extract ID: 25C0281-02 I 01

Preparation Batch: BNC0429

Sample Size: 500 mL

Prepared: 03/18/2025

Final Volume: 5 mL

Sample Cleanup:

Cleanup Method: Silica Gel

Extract ID: 25C0281-02 I 01

Cleanup Batch: CNC0126

Initial Volume: 5 uL

Cleaned: 27-Mar-2025

Final Volume: 5 uL

Analyte	CAS Number	Dilution	Reporting Limit	Result	Units	Notes
alpha-BHC	319-84-6	1	0.025	ND	ug/L	U
beta-BHC	319-85-7	1	0.025	ND	ug/L	U
gamma-BHC (Lindane)	58-89-9	1	0.025	ND	ug/L	U
delta-BHC	319-86-8	1	0.025	ND	ug/L	U
Heptachlor	76-44-8	1	0.025	ND	ug/L	U
Aldrin	309-00-2	1	0.025	ND	ug/L	U
Heptachlor Epoxide	1024-57-3	1	0.050	ND	ug/L	U
trans-Chlordane (beta-Chlordane)	5103-74-2	1	0.025	ND	ug/L	U
cis-Chlordane (alpha-chlordane)	5103-71-9	1	0.025	ND	ug/L	U
Endosulfan I	959-98-8	1	0.025	ND	ug/L	U
4,4'-DDE	72-55-9	1	0.050	ND	ug/L	U
Dieldrin	60-57-1	1	0.050	ND	ug/L	U
Endrin	72-20-8	1	0.050	ND	ug/L	U
Endosulfan II	33213-65-9	1	0.050	ND	ug/L	U
4,4'-DDD	72-54-8	1	0.050	ND	ug/L	U
Endrin Aldehyde	7421-93-4	1	0.050	ND	ug/L	U
4,4'-DDT	50-29-3	1	0.050	ND	ug/L	U
Endosulfan Sulfate	1031-07-8	1	0.050	ND	ug/L	U
Endrin Ketone	53494-70-5	1	0.050	ND	ug/L	U
Methoxychlor	72-43-5	1	0.250	ND	ug/L	U
Toxaphene	8001-35-2	1	1.25	ND	ug/L	U
Surrogate: Decachlorobiphenyl			11-144 %	103	%	
Surrogate: Decachlorobiphenyl [2C]			11-144 %	107	%	
Surrogate: Tetrachlorometaxylene			30-120 %	63.2	%	
Surrogate: Tetrachlorometaxylene [2C]			30-120 %	77.9	%	



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Reported:
15-Apr-2025 16:40

LMW-14-0325
25C0281-02 (Water)

Aroclor PCB

Method: EPA 8082A			Sampled: 03/12/2025 10:15		
Instrument: ECD7 Analyst: NRB			Analyzed: 04/01/2025 12:53		
Sample Preparation:	Preparation Method: EPA 3510C SepF			Extract ID: 25C0281-02 A 01	
	Preparation Batch: BNC0407	Sample Size: 1000 mL			
	Prepared: 03/17/2025	Final Volume: 0.5 mL			
Sample Cleanup:	Cleanup Method: Sulfuric Acid			Extract ID: 25C0281-02 A 01	
	Cleanup Batch: CNC0139	Initial Volume: 0.5 uL			
	Cleaned: 31-Mar-2025	Final Volume: 0.5 uL			
Sample Cleanup:	Cleanup Method: Sulfur			Extract ID: 25C0281-02 A 01	
	Cleanup Batch: CNC0140	Initial Volume: 0.5 uL			
	Cleaned: 31-Mar-2025	Final Volume: 0.5 uL			

Analyte	CAS Number	Dilution	Reporting Limit	Result	Units	Notes
Aroclor 1016	12674-11-2	1	0.010	ND	ug/L	U
Aroclor 1221	11104-28-2	1	0.010	ND	ug/L	U
Aroclor 1232	11141-16-5	1	0.010	ND	ug/L	U
Aroclor 1242	53469-21-9	1	0.010	ND	ug/L	U
Aroclor 1248	12672-29-6	1	0.010	ND	ug/L	U
Aroclor 1254	11097-69-1	1	0.010	ND	ug/L	U
Aroclor 1260	11096-82-5	1	0.010	ND	ug/L	U
Surrogate: Decachlorobiphenyl			29-120 %	48.8	%	
Surrogate: Tetrachlorometaxylene			32-120 %	70.6	%	
Surrogate: Decachlorobiphenyl [2C]			29-120 %	49.5	%	
Surrogate: Tetrachlorometaxylene [2C]			32-120 %	53.8	%	



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Reported:
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LMW-14-0325
25C0281-02 (Water)

Metals and Metallic Compounds

Method: EPA 200.8
Instrument: ICPMS2 Analyst: HAL

Sampled: 03/12/2025 10:15

Analyzed: 03/21/2025 05:38

Sample Preparation: Preparation Method: REN - EPA 3010A M
Preparation Batch: BNC0385 Sample Size: 25 mL
Prepared: 03/15/2025 Final Volume: 25 mL

Extract ID: 25C0281-02 M 01

Analyte	CAS Number	Dilution	Detection Limit	Reporting Limit	Result	Units	Notes
Antimony	7440-36-0	1	0.150	3.00	ND	ug/L	U
Arsenic UCT	7440-38-2	1	0.100	3.00	1.42	ug/L	J
Lead	7439-92-1	1	0.100	10.0	ND	ug/L	U
Selenium UCT	7782-49-2	1	0.500	25.0	0.555	ug/L	J
Thallium	7440-28-0	1	0.100	2.00	ND	ug/L	U



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Reported:
15-Apr-2025 16:40

LMW-14-0325
25C0281-02 (Water)

Metals and Metallic Compounds

Method: EPA 6010D
Instrument: ICP3 Analyst: SH

Sampled: 03/12/2025 10:15

Analyzed: 03/28/2025 17:52

Sample Preparation: Preparation Method: TWC EPA 3010A
Preparation Batch: BNC0390
Prepared: 03/17/2025

Sample Size: 25 mL
Final Volume: 25 mL

Extract ID: 25C0281-02 M 02

Analyte	CAS Number	Dilution	Detection Limit	Reporting Limit	Result	Units	Notes
Aluminum	7429-90-5	1	0.0210	0.0700	ND	mg/L	U
Barium	7440-39-3	1	0.0007	0.0060	0.0478	mg/L	
Beryllium	7440-41-7	1	0.0002	0.0010	ND	mg/L	U
Cadmium	7440-43-9	1	0.0005	0.0020	ND	mg/L	U
Calcium	7440-70-2	1	0.0300	0.0500	178	mg/L	
Chromium	7440-47-3	1	0.0020	0.0090	ND	mg/L	U
Cobalt	7440-48-4	1	0.0025	0.0050	0.0101	mg/L	
Copper	7440-50-8	1	0.0030	0.0050	ND	mg/L	U
Iron	7439-89-6	1	0.0540	0.100	13.0	mg/L	
Magnesium	7439-95-4	1	0.0250	0.0500	82.0	mg/L	
Manganese	7439-96-5	1	0.0020	0.0040	0.755	mg/L	
Nickel	7440-02-0	1	0.0050	0.0100	0.0152	mg/L	
Potassium	7440-09-7	1	0.250	0.500	3.89	mg/L	
Silver	7440-22-4	1	0.0015	0.0030	ND	mg/L	U
Sodium	7440-23-5	1	0.250	0.500	15.5	mg/L	
Vanadium	7440-62-2	1	0.0015	0.0030	ND	mg/L	U
Zinc	7440-66-6	1	0.0150	0.0300	ND	mg/L	U



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Reported:
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LMW-14-0325
25C0281-02 (Water)

Metals and Metallic Compounds

Method: EPA 7470A	Sampled: 03/12/2025 10:15
Instrument: HYDRA Analyst: AMS	Analyzed: 03/19/2025 13:18
Sample Preparation:	Extract ID: 25C0281-02 M
Preparation Method: TWM EPA 7470A	
Preparation Batch: BNC0392	Sample Size: 20 mL
Prepared: 03/15/2025	Final Volume: 20 mL

Analyte	CAS Number	Dilution	Reporting Limit	Result	Units	Notes
Mercury	7439-97-6	1	0.00100	ND	mg/L	U



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Reported:
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LMW-14-0325
25C0281-02RE1 (Water)

Metals and Metallic Compounds

Method: EPA 200.8

Sampled: 03/12/2025 10:15

Instrument: ICPMS2 Analyst: HAL

Analyzed: 03/25/2025 23:01

Sample Preparation:

Preparation Method: REN - EPA 3010A M

Extract ID: 25C0281-02RE1 M 03

Preparation Batch: BNC0572

Sample Size: 25 mL

Prepared: 03/22/2025

Final Volume: 25 mL

Analyte	CAS Number	Dilution	Detection Limit	Reporting Limit	Result	Units	Notes
Antimony	7440-36-0	1	0.150	3.00	ND	ug/L	U



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Project Manager: Gary Zimmerman

Reported:
15-Apr-2025 16:40

LMW-15-0325
25C0281-03 (Water)

Volatile Organic Compounds

Method: EPA 8260D
Instrument: NT20 Analyst: FL

Sampled: 03/12/2025 11:35

Analyzed: 03/14/2025 15:47

Sample Preparation: Preparation Method: EPA 5030C (Purge and Trap)
Preparation Batch: BNC0352 Sample Size: 10 mL
Prepared: 03/14/2025 Final Volume: 10 mL

Extract ID: 25C0281-03 N

Analyte	CAS Number	Dilution	Reporting Limit	Result	Units	Notes
Chloromethane	74-87-3	1	0.50	ND	ug/L	U
Vinyl Chloride	75-01-4	1	0.10	ND	ug/L	U
Bromomethane	74-83-9	1	1.00	ND	ug/L	U
Chloroethane	75-00-3	1	0.20	ND	ug/L	U
Trichlorofluoromethane	75-69-4	1	0.20	ND	ug/L	U
Acrolein	107-02-8	1	5.00	ND	ug/L	U
1,1,2-Trichloro-1,2,2-Trifluoroethane	76-13-1	1	0.20	ND	ug/L	U
Acetone	67-64-1	1	5.00	ND	ug/L	U
1,1-Dichloroethene	75-35-4	1	0.20	ND	ug/L	U
Iodomethane	74-88-4	1	1.00	ND	ug/L	U
Methylene Chloride	75-09-2	1	1.00	ND	ug/L	U
Acrylonitrile	107-13-1	1	1.00	ND	ug/L	U
Carbon Disulfide	75-15-0	1	0.20	ND	ug/L	U
trans-1,2-Dichloroethene	156-60-5	1	0.20	ND	ug/L	U
Vinyl Acetate	108-05-4	1	0.20	ND	ug/L	U
1,1-Dichloroethane	75-34-3	1	0.20	ND	ug/L	U
2-Butanone	78-93-3	1	5.00	ND	ug/L	U
2,2-Dichloropropane	594-20-7	1	0.20	ND	ug/L	U
cis-1,2-Dichloroethene	156-59-2	1	0.20	ND	ug/L	U
Chloroform	67-66-3	1	0.20	ND	ug/L	U
Bromochloromethane	74-97-5	1	0.20	ND	ug/L	U
1,1,1-Trichloroethane	71-55-6	1	0.20	ND	ug/L	U
1,1-Dichloropropene	563-58-6	1	0.10	ND	ug/L	U
Carbon tetrachloride	56-23-5	1	0.20	ND	ug/L	U
1,2-Dichloroethane	107-06-2	1	0.20	ND	ug/L	U
Benzene	71-43-2	1	0.20	ND	ug/L	U
Trichloroethene	79-01-6	1	0.20	ND	ug/L	U
1,2-Dichloropropane	78-87-5	1	0.20	ND	ug/L	U
Bromodichloromethane	75-27-4	1	0.20	ND	ug/L	U
Dibromomethane	74-95-3	1	0.20	ND	ug/L	U
2-Chloroethyl vinyl ether	110-75-8	1	1.00	ND	ug/L	U
4-Methyl-2-Pentanone	108-10-1	1	2.50	ND	ug/L	U



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Reported:
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LMW-15-0325
25C0281-03 (Water)

Volatile Organic Compounds

Method: EPA 8260D

Sampled: 03/12/2025 11:35

Instrument: NT20 Analyst: FL

Analyzed: 03/14/2025 15:47

Analyte	CAS Number	Dilution	Reporting Limit	Result	Units	Notes
cis-1,3-Dichloropropene	10061-01-5	1	0.20	ND	ug/L	U
Toluene	108-88-3	1	0.20	ND	ug/L	U
trans-1,3-Dichloropropene	10061-02-6	1	0.20	ND	ug/L	U
2-Hexanone	591-78-6	1	5.00	ND	ug/L	U
1,1,2-Trichloroethane	79-00-5	1	0.20	ND	ug/L	U
1,3-Dichloropropane	142-28-9	1	0.10	ND	ug/L	U
Tetrachloroethene	127-18-4	1	0.20	ND	ug/L	U
Dibromochloromethane	124-48-1	1	0.20	ND	ug/L	U
1,2-Dibromoethane	106-93-4	1	0.10	ND	ug/L	U
Chlorobenzene	108-90-7	1	0.20	ND	ug/L	U
Ethylbenzene	100-41-4	1	0.20	ND	ug/L	U
1,1,1,2-Tetrachloroethane	630-20-6	1	0.20	ND	ug/L	U
m,p-Xylene	179601-23-1	1	0.40	ND	ug/L	U
o-Xylene	95-47-6	1	0.20	ND	ug/L	U
Xylenes, total	1330-20-7	1	0.60	ND	ug/L	U
Styrene	100-42-5	1	0.20	ND	ug/L	U
Bromoform	75-25-2	1	0.20	ND	ug/L	U
1,1,2,2-Tetrachloroethane	79-34-5	1	0.20	ND	ug/L	U
1,2,3-Trichloropropane	96-18-4	1	0.25	ND	ug/L	U
trans-1,4-Dichloro 2-Butene	110-57-6	1	1.00	ND	ug/L	U
n-Propylbenzene	103-65-1	1	0.20	ND	ug/L	U
Bromobenzene	108-86-1	1	0.20	ND	ug/L	U
Isopropyl Benzene	98-82-8	1	0.20	ND	ug/L	U
2-Chlorotoluene	95-49-8	1	0.10	ND	ug/L	U
4-Chlorotoluene	106-43-4	1	0.20	ND	ug/L	U
t-Butylbenzene	98-06-6	1	0.20	ND	ug/L	U
1,3,5-Trimethylbenzene	108-67-8	1	0.20	ND	ug/L	U
1,2,4-Trimethylbenzene	95-63-6	1	0.20	ND	ug/L	U
s-Butylbenzene	135-98-8	1	0.20	ND	ug/L	U
4-Isopropyl Toluene	99-87-6	1	0.20	ND	ug/L	U
1,3-Dichlorobenzene	541-73-1	1	0.20	ND	ug/L	U
1,4-Dichlorobenzene	106-46-7	1	0.20	ND	ug/L	U
n-Butylbenzene	104-51-8	1	0.20	ND	ug/L	U
1,2-Dichlorobenzene	95-50-1	1	0.20	ND	ug/L	U
1,2-Dibromo-3-chloropropane	96-12-8	1	0.50	ND	ug/L	U



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Reported:
15-Apr-2025 16:40

LMW-15-0325
25C0281-03 (Water)

Volatile Organic Compounds

Method: EPA 8260D

Sampled: 03/12/2025 11:35

Instrument: NT20 Analyst: FL

Analyzed: 03/14/2025 15:47

Analyte	CAS Number	Dilution	Reporting Limit	Result	Units	Notes
1,2,4-Trichlorobenzene	120-82-1	1	0.50	ND	ug/L	U
Hexachloro-1,3-Butadiene	87-68-3	1	0.50	ND	ug/L	U
Naphthalene	91-20-3	1	0.50	ND	ug/L	U
1,2,3-Trichlorobenzene	87-61-6	1	0.50	ND	ug/L	U
Dichlorodifluoromethane	75-71-8	1	0.20	ND	ug/L	U
Surrogate: 1,2-Dichloroethane-d4			80-129 %	107	%	
Surrogate: Toluene-d8			80-120 %	98.1	%	
Surrogate: 4-Bromofluorobenzene			80-120 %	93.1	%	
Surrogate: 1,2-Dichlorobenzene-d4			80-120 %	104	%	



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Project: Landsburg
Project Number: GL9231000007
Project Manager: Gary Zimmerman

Reported:
15-Apr-2025 16:40

LMW-15-0325
25C0281-03 (Water)

Semivolatile Organic Compounds

Method: EPA 8270E
Instrument: NT10 Analyst: JZ

Sampled: 03/12/2025 11:35

Analyzed: 03/28/2025 17:56

Sample Preparation: Preparation Method: EPA 3520C (Liq Liq)
Preparation Batch: BNC0433
Prepared: 03/18/2025

Sample Size: 500 mL

Final Volume: 0.5 mL

Extract ID: 25C0281-03 J 01

Analyte	CAS Number	Dilution	Reporting Limit	Result	Units	Notes
Phenol	108-95-2	1	1.0	ND	ug/L	U
bis(2-chloroethyl) ether	111-44-4	1	1.0	ND	ug/L	U
2-Chlorophenol	95-57-8	1	1.0	ND	ug/L	U
1,3-Dichlorobenzene	541-73-1	1	1.0	ND	ug/L	U
1,4-Dichlorobenzene	106-46-7	1	1.0	ND	ug/L	U
Benzyl Alcohol	100-51-6	1	2.0	ND	ug/L	U
1,2-Dichlorobenzene	95-50-1	1	1.0	ND	ug/L	U
2-Methylphenol	95-48-7	1	1.0	ND	ug/L	U
2,2'-Oxybis(1-chloropropane)	108-60-1	1	1.0	ND	ug/L	U
4-Methylphenol	106-44-5	1	2.0	ND	ug/L	U
N-Nitroso-di-n-Propylamine	621-64-7	1	1.0	ND	ug/L	U
Hexachloroethane	67-72-1	1	2.0	ND	ug/L	U
Nitrobenzene	98-95-3	1	1.0	ND	ug/L	U
Isophorone	78-59-1	1	1.0	ND	ug/L	U
2-Nitrophenol	88-75-5	1	3.0	ND	ug/L	U
2,4-Dimethylphenol	105-67-9	1	3.0	ND	ug/L	U
Bis(2-Chloroethoxy)methane	111-91-1	1	1.0	ND	ug/L	U
Benzoic acid	65-85-0	1	10.0	ND	ug/L	U
2,4-Dichlorophenol	120-83-2	1	3.0	ND	ug/L	U
1,2,4-Trichlorobenzene	120-82-1	1	1.0	ND	ug/L	U
Naphthalene	91-20-3	1	1.0	ND	ug/L	U
4-Chloroaniline	106-47-8	1	5.0	ND	ug/L	U
Hexachlorobutadiene	87-68-3	1	3.0	ND	ug/L	U
4-Chloro-3-Methylphenol	59-50-7	1	3.0	ND	ug/L	U
2-Methylnaphthalene	91-57-6	1	1.0	ND	ug/L	U
Hexachlorocyclopentadiene	77-47-4	1	5.0	ND	ug/L	U
2,4,6-Trichlorophenol	88-06-2	1	3.0	ND	ug/L	U
2,4,5-Trichlorophenol	95-95-4	1	5.0	ND	ug/L	U
2-Chloronaphthalene	91-58-7	1	1.0	ND	ug/L	U
2-Nitroaniline	88-74-4	1	3.0	ND	ug/L	U
Dimethylphthalate	131-11-3	1	1.0	ND	ug/L	U
Acenaphthylene	208-96-8	1	1.0	ND	ug/L	U



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LMW-15-0325
25C0281-03 (Water)

Semivolatile Organic Compounds

Method: EPA 8270E

Sampled: 03/12/2025 11:35

Instrument: NT10 Analyst: JZ

Analyzed: 03/28/2025 17:56

Analyte	CAS Number	Dilution	Reporting Limit	Result	Units	Notes
2,6-Dinitrotoluene	606-20-2	1	3.0	ND	ug/L	U
3-Nitroaniline	99-09-2	1	3.0	ND	ug/L	U
Acenaphthene	83-32-9	1	1.0	ND	ug/L	U
2,4-Dinitrophenol	51-28-5	1	10.0	ND	ug/L	U
Dibenzofuran	132-64-9	1	1.0	ND	ug/L	U
4-Nitrophenol	100-02-7	1	5.0	ND	ug/L	U
2,4-Dinitrotoluene	121-14-2	1	3.0	ND	ug/L	U
Fluorene	86-73-7	1	1.0	ND	ug/L	U
Diethyl phthalate	84-66-2	1	1.0	ND	ug/L	U
4-Chlorophenylphenyl ether	7005-72-3	1	1.0	ND	ug/L	U
4-Nitroaniline	100-01-6	1	3.0	ND	ug/L	U
4,6-Dinitro-2-methylphenol	534-52-1	1	10.0	ND	ug/L	U
N-Nitrosodiphenylamine	86-30-6	1	1.0	ND	ug/L	U
4-Bromophenyl phenyl ether	101-55-3	1	1.0	ND	ug/L	U
Hexachlorobenzene	118-74-1	1	1.0	ND	ug/L	U
Pentachlorophenol	87-86-5	1	5.0	ND	ug/L	U
Phenanthrene	85-01-8	1	1.0	ND	ug/L	U
Anthracene	120-12-7	1	1.0	ND	ug/L	U
Carbazole	86-74-8	1	1.0	ND	ug/L	U
Di-n-Butylphthalate	84-74-2	1	1.0	ND	ug/L	U
Fluoranthene	206-44-0	1	1.0	ND	ug/L	U
Pyrene	129-00-0	1	1.0	ND	ug/L	U
Butylbenzylphthalate	85-68-7	1	1.0	ND	ug/L	U
Benzo(a)anthracene	56-55-3	1	1.0	ND	ug/L	U
3,3'-Dichlorobenzidine	91-94-1	1	10.0	ND	ug/L	U
Chrysene	218-01-9	1	1.0	ND	ug/L	U
bis(2-Ethylhexyl)phthalate	117-81-7	1	3.0	ND	ug/L	U
Di-n-Octylphthalate	117-84-0	1	1.0	ND	ug/L	U
Benzofluoranthenes, Total		1	2.0	ND	ug/L	U
Benzo(a)pyrene	50-32-8	1	1.0	ND	ug/L	U
Indeno(1,2,3-cd)pyrene	193-39-5	1	1.0	ND	ug/L	U
Dibenzo(a,h)anthracene	53-70-3	1	1.0	ND	ug/L	U
Benzo(g,h,i)perylene	191-24-2	1	1.0	ND	ug/L	U
1-Methylnaphthalene	90-12-0	1	1.0	ND	ug/L	U
Surrogate: 2-Fluorophenol			33-120 %	43.9	%	



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LMW-15-0325
25C0281-03 (Water)

Semivolatile Organic Compounds

Method: EPA 8270E

Sampled: 03/12/2025 11:35

Instrument: NT10 Analyst: JZ

Analyzed: 03/28/2025 17:56

Analyte	CAS Number	Recovery	Recovery	Units	Notes
		Limits			
Surrogate: Phenol-d5		38-120 %	32.4	%	*
Surrogate: 2-Chlorophenol-d4		41-120 %	45.1	%	
Surrogate: 1,2-Dichlorobenzene-d4		20-120 %	51.8	%	
Surrogate: Nitrobenzene-d5		27-120 %	60.5	%	
Surrogate: 2-Fluorobiphenyl		33-120 %	54.2	%	
Surrogate: 2,4,6-Tribromophenol		52-120 %	54.2	%	
Surrogate: p-Terphenyl-d14		28-120 %	71.5	%	



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Reported:
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LMW-15-0325
25C0281-03 (Water)

Semivolatile Organic Compounds

Method: EPA 8270E	Sampled: 03/12/2025 11:35
Instrument: NT14 Analyst: RT	Analyzed: 03/31/2025 12:48
Sample Preparation:	Preparation Method: EPA 3520C (Liq Liq)
	Preparation Batch: BNC0410
	Prepared: 03/19/2025
	Sample Size: 500 mL
	Final Volume: 1 mL
	Extract ID: 25C0281-03 H 01

Analyte	CAS Number	Dilution	Detection Limit	Reporting Limit	Result	Units	Notes
1,4-Dioxane	123-91-1	1	0.2	0.4	ND	ug/L	U
<i>Surrogate: 1,4-Dioxane-d8</i>				30-160 %	71.5	%	



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Reported:
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LMW-15-0325
25C0281-03 (Water)

Petroleum Hydrocarbons

Method: NWTPH-HCID
Instrument: FID4 Analyst: JR

Sampled: 03/12/2025 11:35

Analyzed: 03/17/2025 16:37

Sample Preparation: Preparation Method: EPA 3510C SepF
Preparation Batch: BNC0332
Prepared: 03/14/2025

Sample Size: 500 mL
Final Volume: 1 mL

Extract ID: 25C0281-03 G 01

Analyte	CAS Number	Dilution	Reporting Limit	Result	Units	Notes
Gasoline Range Organics (Tol-C12)	GRO	1	0.25	ND	mg/L	U
Diesel Range Organics (C12-C24)	DRO	1	0.50	ND	mg/L	U
Motor Oil Range Organics (C24-C38)	RRO	1	1.00	ND	mg/L	U
Surrogate: o-Terphenyl			50-150 %	108	%	
Surrogate: n-Triacontane			50-150 %	112	%	



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Reported:
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LMW-15-0325
25C0281-03 (Water)

Chlorinated Pesticides

Method: EPA 8081B
Instrument: ECD6 Analyst: RT

Sampled: 03/12/2025 11:35

Analyzed: 04/11/2025 15:29

Sample Preparation: Preparation Method: EPA 3510C SepF
Preparation Batch: BNC0429
Prepared: 03/18/2025

Sample Size: 500 mL
Final Volume: 5 mL

Extract ID: 25C0281-03 I 01

Sample Cleanup: Cleanup Method: Silica Gel
Cleanup Batch: CNC0126
Cleaned: 27-Mar-2025

Initial Volume: 5 uL
Final Volume: 5 uL

Extract ID: 25C0281-03 I 01

Analyte	CAS Number	Dilution	Reporting Limit	Result	Units	Notes
alpha-BHC	319-84-6	1	0.025	ND	ug/L	U
beta-BHC	319-85-7	1	0.025	ND	ug/L	U
gamma-BHC (Lindane)	58-89-9	1	0.025	ND	ug/L	U
delta-BHC	319-86-8	1	0.025	ND	ug/L	U
Heptachlor	76-44-8	1	0.025	ND	ug/L	U
Aldrin	309-00-2	1	0.025	ND	ug/L	U
Heptachlor Epoxide	1024-57-3	1	0.050	ND	ug/L	U
trans-Chlordane (beta-Chlordane)	5103-74-2	1	0.025	ND	ug/L	U
cis-Chlordane (alpha-chlordane)	5103-71-9	1	0.025	ND	ug/L	U
Endosulfan I	959-98-8	1	0.025	ND	ug/L	U
4,4'-DDE	72-55-9	1	0.050	ND	ug/L	U
Dieldrin	60-57-1	1	0.050	ND	ug/L	U
Endrin	72-20-8	1	0.050	ND	ug/L	U
Endosulfan II	33213-65-9	1	0.050	ND	ug/L	U
4,4'-DDD	72-54-8	1	0.050	ND	ug/L	U
Endrin Aldehyde	7421-93-4	1	0.050	ND	ug/L	U
4,4'-DDT	50-29-3	1	0.050	ND	ug/L	U
Endosulfan Sulfate	1031-07-8	1	0.050	ND	ug/L	U
Endrin Ketone	53494-70-5	1	0.050	ND	ug/L	U
Methoxychlor	72-43-5	1	0.250	ND	ug/L	U
Toxaphene	8001-35-2	1	1.25	ND	ug/L	U
Surrogate: Decachlorobiphenyl			11-144 %	86.3	%	
Surrogate: Decachlorobiphenyl [2C]			11-144 %	89.4	%	
Surrogate: Tetrachlorometaxylene			30-120 %	58.0	%	
Surrogate: Tetrachlorometaxylene [2C]			30-120 %	60.6	%	



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Project Manager: Gary Zimmerman

Reported:

15-Apr-2025 16:40

LMW-15-0325
25C0281-03 (Water)

Aroclor PCB

Method: EPA 8082A

Sampled: 03/12/2025 11:35

Instrument: ECD7 Analyst: NRB

Analyzed: 04/01/2025 13:14

Sample Preparation:	Preparation Method: EPA 3510C SepF	Sample Size: 1000 mL	Extract ID: 25C0281-03 A 01
	Preparation Batch: BNC0407		
	Prepared: 03/17/2025		
Sample Cleanup:	Cleanup Method: Sulfuric Acid	Initial Volume: 0.5 uL	Extract ID: 25C0281-03 A 01
	Cleanup Batch: CNC0139		
	Cleaned: 31-Mar-2025		
Sample Cleanup:	Cleanup Method: Sulfur	Initial Volume: 0.5 uL	Extract ID: 25C0281-03 A 01
	Cleanup Batch: CNC0140		
	Cleaned: 31-Mar-2025		

Analyte	CAS Number	Dilution	Reporting Limit	Result	Units	Notes
Aroclor 1016	12674-11-2	1	0.010	ND	ug/L	U
Aroclor 1221	11104-28-2	1	0.010	ND	ug/L	U
Aroclor 1232	11141-16-5	1	0.010	ND	ug/L	U
Aroclor 1242	53469-21-9	1	0.010	ND	ug/L	U
Aroclor 1248	12672-29-6	1	0.010	ND	ug/L	U
Aroclor 1254	11097-69-1	1	0.010	ND	ug/L	U
Aroclor 1260	11096-82-5	1	0.010	ND	ug/L	U
Surrogate: Decachlorobiphenyl			29-120 %	59.3	%	
Surrogate: Tetrachlorometaxylene			32-120 %	92.3	%	
Surrogate: Decachlorobiphenyl [2C]			29-120 %	61.6	%	
Surrogate: Tetrachlorometaxylene [2C]			32-120 %	68.2	%	



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LMW-15-0325
25C0281-03 (Water)

Metals and Metallic Compounds

Method: EPA 200.8

Sampled: 03/12/2025 11:35

Instrument: ICPMS2 Analyst: HAL

Analyzed: 03/21/2025 06:19

Sample Preparation:

Preparation Method: REN - EPA 3010A M

Extract ID: 25C0281-03 M 01

Preparation Batch: BNC0385

Sample Size: 25 mL

Prepared: 03/15/2025

Final Volume: 25 mL

Analyte	CAS Number	Dilution	Detection Limit	Reporting Limit	Result	Units	Notes
Antimony	7440-36-0	1	0.150	3.00	ND	ug/L	U
Arsenic UCT	7440-38-2	1	0.100	3.00	3.27	ug/L	
Lead	7439-92-1	1	0.100	10.0	ND	ug/L	U
Selenium UCT	7782-49-2	1	0.500	25.0	ND	ug/L	U
Thallium	7440-28-0	1	0.100	2.00	ND	ug/L	U



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Reported:
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LMW-15-0325
25C0281-03 (Water)

Metals and Metallic Compounds

Method: EPA 6010D
Instrument: ICP3 Analyst: SH

Sampled: 03/12/2025 11:35

Analyzed: 03/28/2025 17:55

Sample Preparation: Preparation Method: TWC EPA 3010A
Preparation Batch: BNC0390 Sample Size: 25 mL
Prepared: 03/17/2025 Final Volume: 25 mL

Extract ID: 25C0281-03 M 02

Analyte	CAS Number	Dilution	Detection Limit	Reporting Limit	Result	Units	Notes
Aluminum	7429-90-5	1	0.0210	0.0700	ND	mg/L	U
Barium	7440-39-3	1	0.0007	0.0060	0.212	mg/L	
Beryllium	7440-41-7	1	0.0002	0.0010	ND	mg/L	U
Cadmium	7440-43-9	1	0.0005	0.0020	ND	mg/L	U
Calcium	7440-70-2	1	0.0300	0.0500	60.5	mg/L	
Chromium	7440-47-3	1	0.0020	0.0090	ND	mg/L	U
Cobalt	7440-48-4	1	0.0025	0.0050	ND	mg/L	U
Copper	7440-50-8	1	0.0030	0.0050	ND	mg/L	U
Iron	7439-89-6	1	0.0540	0.100	3.98	mg/L	
Magnesium	7439-95-4	1	0.0250	0.0500	25.1	mg/L	
Manganese	7439-96-5	1	0.0020	0.0040	0.356	mg/L	
Nickel	7440-02-0	1	0.0050	0.0100	ND	mg/L	U
Potassium	7440-09-7	1	0.250	0.500	1.81	mg/L	
Silver	7440-22-4	1	0.0015	0.0030	ND	mg/L	U
Sodium	7440-23-5	1	0.250	0.500	12.6	mg/L	
Vanadium	7440-62-2	1	0.0015	0.0030	ND	mg/L	U
Zinc	7440-66-6	1	0.0150	0.0300	ND	mg/L	U



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Reported:
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LMW-15-0325
25C0281-03 (Water)

Metals and Metallic Compounds

Method: EPA 7470A

Sampled: 03/12/2025 11:35

Instrument: HYDRA Analyst: AMS

Analyzed: 03/19/2025 13:20

Sample Preparation:

Preparation Method: TWM EPA 7470A

Extract ID: 25C0281-03 M

Preparation Batch: BNC0392

Sample Size: 20 mL

Prepared: 03/15/2025

Final Volume: 20 mL

Analyte	CAS Number	Dilution	Reporting Limit	Result	Units	Notes
Mercury	7439-97-6	1	0.00100	ND	mg/L	U



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Reported:
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LMW-15-0325
25C0281-03RE1 (Water)

Metals and Metallic Compounds

Method: EPA 200.8

Sampled: 03/12/2025 11:35

Instrument: ICPMS2 Analyst: HAL

Analyzed: 03/25/2025 23:06

Sample Preparation:

Preparation Method: REN - EPA 3010A M

Extract ID: 25C0281-03RE1 M 03

Preparation Batch: BNC0572

Sample Size: 25 mL

Prepared: 03/22/2025

Final Volume: 25 mL

Analyte	CAS Number	Dilution	Detection Limit	Reporting Limit	Result	Units	Notes
Antimony	7440-36-0	1	0.150	3.00	ND	ug/L	U



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Reported:
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LMW-11-0325
25C0281-04 (Water)

Volatile Organic Compounds

Method: EPA 8260D
Instrument: NT20 Analyst: FL

Sampled: 03/12/2025 12:55

Analyzed: 03/14/2025 16:10

Sample Preparation: Preparation Method: EPA 5030C (Purge and Trap)
Preparation Batch: BNC0352 Sample Size: 10 mL
Prepared: 03/14/2025 Final Volume: 10 mL

Extract ID: 25C0281-04 N

Analyte	CAS Number	Dilution	Reporting Limit	Result	Units	Notes
Chloromethane	74-87-3	1	0.50	ND	ug/L	U
Vinyl Chloride	75-01-4	1	0.10	ND	ug/L	U
Bromomethane	74-83-9	1	1.00	ND	ug/L	U
Chloroethane	75-00-3	1	0.20	ND	ug/L	U
Trichlorofluoromethane	75-69-4	1	0.20	ND	ug/L	U
Acrolein	107-02-8	1	5.00	ND	ug/L	U
1,1,2-Trichloro-1,2,2-Trifluoroethane	76-13-1	1	0.20	ND	ug/L	U
Acetone	67-64-1	1	5.00	ND	ug/L	U
1,1-Dichloroethene	75-35-4	1	0.20	ND	ug/L	U
Iodomethane	74-88-4	1	1.00	ND	ug/L	U
Methylene Chloride	75-09-2	1	1.00	ND	ug/L	U
Acrylonitrile	107-13-1	1	1.00	ND	ug/L	U
Carbon Disulfide	75-15-0	1	0.20	ND	ug/L	U
trans-1,2-Dichloroethene	156-60-5	1	0.20	ND	ug/L	U
Vinyl Acetate	108-05-4	1	0.20	ND	ug/L	U
1,1-Dichloroethane	75-34-3	1	0.20	ND	ug/L	U
2-Butanone	78-93-3	1	5.00	ND	ug/L	U
2,2-Dichloropropane	594-20-7	1	0.20	ND	ug/L	U
cis-1,2-Dichloroethene	156-59-2	1	0.20	ND	ug/L	U
Chloroform	67-66-3	1	0.20	ND	ug/L	U
Bromochloromethane	74-97-5	1	0.20	ND	ug/L	U
1,1,1-Trichloroethane	71-55-6	1	0.20	ND	ug/L	U
1,1-Dichloropropene	563-58-6	1	0.10	ND	ug/L	U
Carbon tetrachloride	56-23-5	1	0.20	ND	ug/L	U
1,2-Dichloroethane	107-06-2	1	0.20	ND	ug/L	U
Benzene	71-43-2	1	0.20	ND	ug/L	U
Trichloroethene	79-01-6	1	0.20	ND	ug/L	U
1,2-Dichloropropane	78-87-5	1	0.20	ND	ug/L	U
Bromodichloromethane	75-27-4	1	0.20	ND	ug/L	U
Dibromomethane	74-95-3	1	0.20	ND	ug/L	U
2-Chloroethyl vinyl ether	110-75-8	1	1.00	ND	ug/L	U
4-Methyl-2-Pentanone	108-10-1	1	2.50	ND	ug/L	U



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Reported:
15-Apr-2025 16:40

LMW-11-0325
25C0281-04 (Water)

Volatile Organic Compounds

Method: EPA 8260D

Sampled: 03/12/2025 12:55

Instrument: NT20 Analyst: FL

Analyzed: 03/14/2025 16:10

Analyte	CAS Number	Dilution	Reporting Limit	Result	Units	Notes
cis-1,3-Dichloropropene	10061-01-5	1	0.20	ND	ug/L	U
Toluene	108-88-3	1	0.20	ND	ug/L	U
trans-1,3-Dichloropropene	10061-02-6	1	0.20	ND	ug/L	U
2-Hexanone	591-78-6	1	5.00	ND	ug/L	U
1,1,2-Trichloroethane	79-00-5	1	0.20	ND	ug/L	U
1,3-Dichloropropane	142-28-9	1	0.10	ND	ug/L	U
Tetrachloroethene	127-18-4	1	0.20	ND	ug/L	U
Dibromochloromethane	124-48-1	1	0.20	ND	ug/L	U
1,2-Dibromoethane	106-93-4	1	0.10	ND	ug/L	U
Chlorobenzene	108-90-7	1	0.20	ND	ug/L	U
Ethylbenzene	100-41-4	1	0.20	ND	ug/L	U
1,1,1,2-Tetrachloroethane	630-20-6	1	0.20	ND	ug/L	U
m,p-Xylene	179601-23-1	1	0.40	ND	ug/L	U
o-Xylene	95-47-6	1	0.20	ND	ug/L	U
Xylenes, total	1330-20-7	1	0.60	ND	ug/L	U
Styrene	100-42-5	1	0.20	ND	ug/L	U
Bromoform	75-25-2	1	0.20	ND	ug/L	U
1,1,2,2-Tetrachloroethane	79-34-5	1	0.20	ND	ug/L	U
1,2,3-Trichloropropane	96-18-4	1	0.25	ND	ug/L	U
trans-1,4-Dichloro 2-Butene	110-57-6	1	1.00	ND	ug/L	U
n-Propylbenzene	103-65-1	1	0.20	ND	ug/L	U
Bromobenzene	108-86-1	1	0.20	ND	ug/L	U
Isopropyl Benzene	98-82-8	1	0.20	ND	ug/L	U
2-Chlorotoluene	95-49-8	1	0.10	ND	ug/L	U
4-Chlorotoluene	106-43-4	1	0.20	ND	ug/L	U
t-Butylbenzene	98-06-6	1	0.20	ND	ug/L	U
1,3,5-Trimethylbenzene	108-67-8	1	0.20	ND	ug/L	U
1,2,4-Trimethylbenzene	95-63-6	1	0.20	ND	ug/L	U
s-Butylbenzene	135-98-8	1	0.20	ND	ug/L	U
4-Isopropyl Toluene	99-87-6	1	0.20	ND	ug/L	U
1,3-Dichlorobenzene	541-73-1	1	0.20	ND	ug/L	U
1,4-Dichlorobenzene	106-46-7	1	0.20	ND	ug/L	U
n-Butylbenzene	104-51-8	1	0.20	ND	ug/L	U
1,2-Dichlorobenzene	95-50-1	1	0.20	ND	ug/L	U
1,2-Dibromo-3-chloropropane	96-12-8	1	0.50	ND	ug/L	U



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Project: Landsburg
Project Number: GL9231000007
Project Manager: Gary Zimmerman

Reported:
15-Apr-2025 16:40

LMW-11-0325
25C0281-04 (Water)

Volatile Organic Compounds

Method: EPA 8260D

Sampled: 03/12/2025 12:55

Instrument: NT20 Analyst: FL

Analyzed: 03/14/2025 16:10

Analyte	CAS Number	Dilution	Reporting Limit	Result	Units	Notes
1,2,4-Trichlorobenzene	120-82-1	1	0.50	ND	ug/L	U
Hexachloro-1,3-Butadiene	87-68-3	1	0.50	ND	ug/L	U
Naphthalene	91-20-3	1	0.50	ND	ug/L	U
1,2,3-Trichlorobenzene	87-61-6	1	0.50	ND	ug/L	U
Dichlorodifluoromethane	75-71-8	1	0.20	ND	ug/L	U
<i>Surrogate: 1,2-Dichloroethane-d4</i>			<i>80-129 %</i>	<i>107</i>	<i>%</i>	
<i>Surrogate: Toluene-d8</i>			<i>80-120 %</i>	<i>98.7</i>	<i>%</i>	
<i>Surrogate: 4-Bromofluorobenzene</i>			<i>80-120 %</i>	<i>93.5</i>	<i>%</i>	
<i>Surrogate: 1,2-Dichlorobenzene-d4</i>			<i>80-120 %</i>	<i>104</i>	<i>%</i>	



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Reported:
15-Apr-2025 16:40

LMW-11-0325
25C0281-04 (Water)

Semivolatile Organic Compounds

Method: EPA 8270E
Instrument: NT10 Analyst: JZ

Sampled: 03/12/2025 12:55

Analyzed: 03/26/2025 15:08

Sample Preparation: Preparation Method: EPA 3520C (Liq Liq)
Preparation Batch: BNC0437
Prepared: 03/19/2025

Sample Size: 500 mL
Final Volume: 0.5 mL

Extract ID: 25C0281-04 J 01

Analyte	CAS Number	Dilution	Reporting Limit	Result	Units	Notes
Phenol	108-95-2	1	1.0	ND	ug/L	U
bis(2-chloroethyl) ether	111-44-4	1	1.0	ND	ug/L	U
2-Chlorophenol	95-57-8	1	1.0	ND	ug/L	U
1,3-Dichlorobenzene	541-73-1	1	1.0	ND	ug/L	U
1,4-Dichlorobenzene	106-46-7	1	1.0	ND	ug/L	U
Benzyl Alcohol	100-51-6	1	2.0	ND	ug/L	U
1,2-Dichlorobenzene	95-50-1	1	1.0	ND	ug/L	U
2-Methylphenol	95-48-7	1	1.0	ND	ug/L	U
2,2'-Oxybis(1-chloropropane)	108-60-1	1	1.0	ND	ug/L	U
4-Methylphenol	106-44-5	1	2.0	ND	ug/L	U
N-Nitroso-di-n-Propylamine	621-64-7	1	1.0	ND	ug/L	U
Hexachloroethane	67-72-1	1	2.0	ND	ug/L	U
Nitrobenzene	98-95-3	1	1.0	ND	ug/L	U
Isophorone	78-59-1	1	1.0	ND	ug/L	U
2-Nitrophenol	88-75-5	1	3.0	ND	ug/L	U
2,4-Dimethylphenol	105-67-9	1	3.0	ND	ug/L	U
Bis(2-Chloroethoxy)methane	111-91-1	1	1.0	ND	ug/L	U
Benzoic acid	65-85-0	1	10.0	ND	ug/L	U
2,4-Dichlorophenol	120-83-2	1	3.0	ND	ug/L	U
1,2,4-Trichlorobenzene	120-82-1	1	1.0	ND	ug/L	U
Naphthalene	91-20-3	1	1.0	ND	ug/L	U
4-Chloroaniline	106-47-8	1	5.0	ND	ug/L	U
Hexachlorobutadiene	87-68-3	1	3.0	ND	ug/L	U
4-Chloro-3-Methylphenol	59-50-7	1	3.0	ND	ug/L	U
2-Methylnaphthalene	91-57-6	1	1.0	ND	ug/L	U
Hexachlorocyclopentadiene	77-47-4	1	5.0	ND	ug/L	U
2,4,6-Trichlorophenol	88-06-2	1	3.0	ND	ug/L	U
2,4,5-Trichlorophenol	95-95-4	1	5.0	ND	ug/L	U
2-Chloronaphthalene	91-58-7	1	1.0	ND	ug/L	U
2-Nitroaniline	88-74-4	1	3.0	ND	ug/L	U
Dimethylphthalate	131-11-3	1	1.0	ND	ug/L	U
Acenaphthylene	208-96-8	1	1.0	ND	ug/L	U



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LMW-11-0325
25C0281-04 (Water)

Semivolatile Organic Compounds

Method: EPA 8270E

Sampled: 03/12/2025 12:55

Instrument: NT10 Analyst: JZ

Analyzed: 03/26/2025 15:08

Analyte	CAS Number	Dilution	Reporting Limit	Result	Units	Notes
2,6-Dinitrotoluene	606-20-2	1	3.0	ND	ug/L	U
3-Nitroaniline	99-09-2	1	3.0	ND	ug/L	U
Acenaphthene	83-32-9	1	1.0	ND	ug/L	U
2,4-Dinitrophenol	51-28-5	1	10.0	ND	ug/L	U
Dibenzofuran	132-64-9	1	1.0	ND	ug/L	U
4-Nitrophenol	100-02-7	1	5.0	ND	ug/L	U
2,4-Dinitrotoluene	121-14-2	1	3.0	ND	ug/L	U
Fluorene	86-73-7	1	1.0	ND	ug/L	U
Diethyl phthalate	84-66-2	1	1.0	ND	ug/L	U
4-Chlorophenylphenyl ether	7005-72-3	1	1.0	ND	ug/L	U
4-Nitroaniline	100-01-6	1	3.0	ND	ug/L	U
4,6-Dinitro-2-methylphenol	534-52-1	1	10.0	ND	ug/L	U
N-Nitrosodiphenylamine	86-30-6	1	1.0	ND	ug/L	U
4-Bromophenyl phenyl ether	101-55-3	1	1.0	ND	ug/L	U
Hexachlorobenzene	118-74-1	1	1.0	ND	ug/L	U
Pentachlorophenol	87-86-5	1	5.0	ND	ug/L	U
Phenanthrene	85-01-8	1	1.0	ND	ug/L	U
Anthracene	120-12-7	1	1.0	ND	ug/L	U
Carbazole	86-74-8	1	1.0	ND	ug/L	U
Di-n-Butylphthalate	84-74-2	1	1.0	ND	ug/L	U
Fluoranthene	206-44-0	1	1.0	ND	ug/L	U
Pyrene	129-00-0	1	1.0	ND	ug/L	U
Butylbenzylphthalate	85-68-7	1	1.0	ND	ug/L	U
Benzo(a)anthracene	56-55-3	1	1.0	ND	ug/L	U
3,3'-Dichlorobenzidine	91-94-1	1	10.0	ND	ug/L	U
Chrysene	218-01-9	1	1.0	ND	ug/L	U
bis(2-Ethylhexyl)phthalate	117-81-7	1	3.0	ND	ug/L	U
Di-n-Octylphthalate	117-84-0	1	1.0	ND	ug/L	U
Benzofluoranthenes, Total		1	2.0	ND	ug/L	U
Benzo(a)pyrene	50-32-8	1	1.0	ND	ug/L	U
Indeno(1,2,3-cd)pyrene	193-39-5	1	1.0	ND	ug/L	U
Dibenzo(a,h)anthracene	53-70-3	1	1.0	ND	ug/L	U
Benzo(g,h,i)perylene	191-24-2	1	1.0	ND	ug/L	U
1-Methylnaphthalene	90-12-0	1	1.0	ND	ug/L	U
Surrogate: 2-Fluorophenol			33-120 %	56.6	%	



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LMW-11-0325
25C0281-04 (Water)

Semivolatile Organic Compounds

Method: EPA 8270E

Sampled: 03/12/2025 12:55

Instrument: NT10 Analyst: JZ

Analyzed: 03/26/2025 15:08

Analyte	CAS Number	Recovery	Recovery	Units	Notes
		Limits			
Surrogate: Phenol-d5		38-120 %	49.8	%	
Surrogate: 2-Chlorophenol-d4		41-120 %	61.0	%	
Surrogate: 1,2-Dichlorobenzene-d4		20-120 %	64.7	%	
Surrogate: Nitrobenzene-d5		27-120 %	73.6	%	
Surrogate: 2-Fluorobiphenyl		33-120 %	65.9	%	
Surrogate: 2,4,6-Tribromophenol		52-120 %	68.4	%	
Surrogate: p-Terphenyl-d14		28-120 %	85.5	%	



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LMW-11-0325
25C0281-04 (Water)

Semivolatile Organic Compounds

Method: EPA 8270E	Sampled: 03/12/2025 12:55	
Instrument: NT14 Analyst: RT	Analyzed: 03/31/2025 13:04	
Sample Preparation:	Preparation Method: EPA 3520C (Liq Liq)	Extract ID: 25C0281-04 H 01
	Preparation Batch: BNC0410	Sample Size: 500 mL
	Prepared: 03/19/2025	Final Volume: 1 mL

Analyte	CAS Number	Dilution	Detection Limit	Reporting Limit	Result	Units	Notes
1,4-Dioxane	123-91-1	1	0.2	0.4	ND	ug/L	U
<i>Surrogate: 1,4-Dioxane-d8</i>				30-160 %	67.2	%	



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Reported:
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LMW-11-0325
25C0281-04 (Water)

Petroleum Hydrocarbons

Method: NWTPH-HCID
Instrument: FID4 Analyst: JR

Sampled: 03/12/2025 12:55

Analyzed: 03/17/2025 16:57

Sample Preparation: Preparation Method: EPA 3510C SepF
Preparation Batch: BNC0332
Prepared: 03/14/2025

Sample Size: 500 mL
Final Volume: 1 mL

Extract ID: 25C0281-04 G 01

Analyte	CAS Number	Dilution	Reporting Limit	Result	Units	Notes
Gasoline Range Organics (Tol-C12)	GRO	1	0.25	ND	mg/L	U
Diesel Range Organics (C12-C24)	DRO	1	0.50	ND	mg/L	U
Motor Oil Range Organics (C24-C38)	RRO	1	1.00	ND	mg/L	U
Surrogate: o-Terphenyl			50-150 %	106	%	
Surrogate: n-Triacontane			50-150 %	111	%	



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Reported:
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LMW-11-0325
25C0281-04 (Water)

Chlorinated Pesticides

Method: EPA 8081B
Instrument: ECD6 Analyst: RT

Sampled: 03/12/2025 12:55

Analyzed: 04/11/2025 15:47

Sample Preparation: Preparation Method: EPA 3510C SepF
Preparation Batch: BNC0429
Prepared: 03/18/2025

Sample Size: 500 mL

Final Volume: 5 mL

Extract ID: 25C0281-04 I 01

Sample Cleanup: Cleanup Method: Silica Gel
Cleanup Batch: CNC0126
Cleaned: 27-Mar-2025

Initial Volume: 5 uL

Final Volume: 5 uL

Extract ID: 25C0281-04 I 01

Analyte	CAS Number	Dilution	Reporting Limit	Result	Units	Notes
alpha-BHC	319-84-6	1	0.025	ND	ug/L	U
beta-BHC	319-85-7	1	0.025	ND	ug/L	U
gamma-BHC (Lindane)	58-89-9	1	0.025	ND	ug/L	U
delta-BHC	319-86-8	1	0.025	ND	ug/L	U
Heptachlor	76-44-8	1	0.025	ND	ug/L	U
Aldrin	309-00-2	1	0.025	ND	ug/L	U
Heptachlor Epoxide	1024-57-3	1	0.050	ND	ug/L	U
trans-Chlordane (beta-Chlordane)	5103-74-2	1	0.025	ND	ug/L	U
cis-Chlordane (alpha-chlordane)	5103-71-9	1	0.025	ND	ug/L	U
Endosulfan I	959-98-8	1	0.025	ND	ug/L	U
4,4'-DDE	72-55-9	1	0.050	ND	ug/L	U
Dieldrin	60-57-1	1	0.050	ND	ug/L	U
Endrin	72-20-8	1	0.050	ND	ug/L	U
Endosulfan II	33213-65-9	1	0.050	ND	ug/L	U
4,4'-DDD	72-54-8	1	0.050	ND	ug/L	U
Endrin Aldehyde	7421-93-4	1	0.050	ND	ug/L	U
4,4'-DDT	50-29-3	1	0.050	ND	ug/L	U
Endosulfan Sulfate	1031-07-8	1	0.050	ND	ug/L	U
Endrin Ketone	53494-70-5	1	0.050	ND	ug/L	U
Methoxychlor	72-43-5	1	0.250	ND	ug/L	U
Toxaphene	8001-35-2	1	1.25	ND	ug/L	U
Surrogate: Decachlorobiphenyl			11-144 %	81.3	%	
Surrogate: Decachlorobiphenyl [2C]			11-144 %	84.1	%	
Surrogate: Tetrachlorometaxylene			30-120 %	44.3	%	
Surrogate: Tetrachlorometaxylene [2C]			30-120 %	48.7	%	



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Reported:
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LMW-11-0325
25C0281-04 (Water)

Aroclor PCB

Method: EPA 8082A			Sampled: 03/12/2025 12:55
Instrument: ECD7 Analyst: NRB			Analyzed: 04/01/2025 13:35
Sample Preparation:	Preparation Method: EPA 3510C SepF		Extract ID: 25C0281-04 A 01
	Preparation Batch: BNC0407		
	Sample Size: 1000 mL		
	Prepared: 03/17/2025		Final Volume: 0.5 mL
Sample Cleanup:	Cleanup Method: Sulfuric Acid		Extract ID:25C0281-04 A 01
	Cleanup Batch: CNC0139		
	Initial Volume: 0.5 uL		
	Cleaned: 31-Mar-2025		Final Volume: 0.5 uL
Sample Cleanup:	Cleanup Method: Sulfur		Extract ID:25C0281-04 A 01
	Cleanup Batch: CNC0140		
	Initial Volume: 0.5 uL		
	Cleaned: 31-Mar-2025		Final Volume: 0.5 uL

Analyte	CAS Number	Dilution	Reporting Limit	Result	Units	Notes
Aroclor 1016	12674-11-2	1	0.010	ND	ug/L	U
Aroclor 1221	11104-28-2	1	0.010	ND	ug/L	U
Aroclor 1232	11141-16-5	1	0.010	ND	ug/L	U
Aroclor 1242	53469-21-9	1	0.010	ND	ug/L	U
Aroclor 1248	12672-29-6	1	0.010	ND	ug/L	U
Aroclor 1254	11097-69-1	1	0.010	ND	ug/L	U
Aroclor 1260	11096-82-5	1	0.010	ND	ug/L	U
Surrogate: Decachlorobiphenyl			29-120 %	62.0	%	
Surrogate: Tetrachlorometaxylene			32-120 %	90.0	%	
Surrogate: Decachlorobiphenyl [2C]			29-120 %	61.6	%	
Surrogate: Tetrachlorometaxylene [2C]			32-120 %	64.9	%	



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LMW-11-0325
25C0281-04 (Water)

Metals and Metallic Compounds

Method: EPA 200.8
Instrument: ICPMS2 Analyst: HAL

Sampled: 03/12/2025 12:55

Analyzed: 03/21/2025 06:24

Sample Preparation: Preparation Method: REN - EPA 3010A M
Preparation Batch: BNC0385 Sample Size: 25 mL
Prepared: 03/15/2025 Final Volume: 25 mL

Extract ID: 25C0281-04 M 01

Analyte	CAS Number	Dilution	Detection Limit	Reporting Limit	Result	Units	Notes
Antimony	7440-36-0	1	0.150	3.00	ND	ug/L	U
Arsenic UCT	7440-38-2	1	0.100	3.00	8.72	ug/L	
Lead	7439-92-1	1	0.100	10.0	ND	ug/L	U
Selenium UCT	7782-49-2	1	0.500	25.0	ND	ug/L	U
Thallium	7440-28-0	1	0.100	2.00	ND	ug/L	U



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Reported:
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LMW-11-0325
25C0281-04 (Water)

Metals and Metallic Compounds

Method: EPA 6010D
Instrument: ICP3 Analyst: SH

Sampled: 03/12/2025 12:55

Analyzed: 03/28/2025 17:58

Sample Preparation: Preparation Method: TWC EPA 3010A
Preparation Batch: BNC0390
Prepared: 03/17/2025

Sample Size: 25 mL
Final Volume: 25 mL

Extract ID: 25C0281-04 M 02

Analyte	CAS Number	Dilution	Detection Limit	Reporting Limit	Result	Units	Notes
Aluminum	7429-90-5	1	0.0210	0.0700	ND	mg/L	U
Barium	7440-39-3	1	0.0007	0.0060	0.317	mg/L	
Beryllium	7440-41-7	1	0.0002	0.0010	ND	mg/L	U
Cadmium	7440-43-9	1	0.0005	0.0020	ND	mg/L	U
Calcium	7440-70-2	1	0.0300	0.0500	61.0	mg/L	
Chromium	7440-47-3	1	0.0020	0.0090	ND	mg/L	U
Cobalt	7440-48-4	1	0.0025	0.0050	ND	mg/L	U
Copper	7440-50-8	1	0.0030	0.0050	ND	mg/L	U
Iron	7439-89-6	1	0.0540	0.100	0.512	mg/L	
Magnesium	7439-95-4	1	0.0250	0.0500	26.2	mg/L	
Manganese	7439-96-5	1	0.0020	0.0040	0.177	mg/L	
Nickel	7440-02-0	1	0.0050	0.0100	ND	mg/L	U
Potassium	7440-09-7	1	0.250	0.500	2.04	mg/L	
Silver	7440-22-4	1	0.0015	0.0030	ND	mg/L	U
Sodium	7440-23-5	1	0.250	0.500	21.8	mg/L	
Vanadium	7440-62-2	1	0.0015	0.0030	ND	mg/L	U
Zinc	7440-66-6	1	0.0150	0.0300	ND	mg/L	U



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Reported:
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LMW-11-0325
25C0281-04 (Water)

Metals and Metallic Compounds

Method: EPA 7470A	Sampled: 03/12/2025 12:55
Instrument: HYDRA Analyst: AMS	Analyzed: 03/19/2025 13:23
Sample Preparation:	Preparation Method: TWM EPA 7470A
	Preparation Batch: BNC0392
	Prepared: 03/15/2025
	Sample Size: 20 mL
	Final Volume: 20 mL
	Extract ID: 25C0281-04 M

Analyte	CAS Number	Dilution	Reporting Limit	Result	Units	Notes
Mercury	7439-97-6	1	0.00100	ND	mg/L	U



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Reported:
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LMW-11-0325
25C0281-04RE1 (Water)

Metals and Metallic Compounds

Method: EPA 200.8

Sampled: 03/12/2025 12:55

Instrument: ICPMS2 Analyst: HAL

Analyzed: 03/25/2025 23:10

Sample Preparation:

Preparation Method: REN - EPA 3010A M

Extract ID: 25C0281-04RE1 M 03

Preparation Batch: BNC0572

Sample Size: 25 mL

Prepared: 03/22/2025

Final Volume: 25 mL

Analyte	CAS Number	Dilution	Detection Limit	Reporting Limit	Result	Units	Notes
Antimony	7440-36-0	1	0.150	3.00	ND	ug/L	U



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Project: Landsburg
Project Number: GL9231000007
Project Manager: Gary Zimmerman

Reported:
15-Apr-2025 16:40

LMW-FB1-0325
25C0281-05 (Water)

Volatile Organic Compounds

Method: EPA 8260D
Instrument: NT20 Analyst: FL

Sampled: 03/12/2025 13:45

Analyzed: 03/14/2025 16:34

Sample Preparation: Preparation Method: EPA 5030C (Purge and Trap)
Preparation Batch: BNC0352 Sample Size: 10 mL
Prepared: 03/14/2025 Final Volume: 10 mL

Extract ID: 25C0281-05 N

Analyte	CAS Number	Dilution	Reporting Limit	Result	Units	Notes
Chloromethane	74-87-3	1	0.50	ND	ug/L	U
Vinyl Chloride	75-01-4	1	0.10	ND	ug/L	U
Bromomethane	74-83-9	1	1.00	ND	ug/L	U
Chloroethane	75-00-3	1	0.20	ND	ug/L	U
Trichlorofluoromethane	75-69-4	1	0.20	ND	ug/L	U
Acrolein	107-02-8	1	5.00	ND	ug/L	U
1,1,2-Trichloro-1,2,2-Trifluoroethane	76-13-1	1	0.20	ND	ug/L	U
Acetone	67-64-1	1	5.00	6.58	ug/L	
1,1-Dichloroethene	75-35-4	1	0.20	ND	ug/L	U
Iodomethane	74-88-4	1	1.00	ND	ug/L	U
Methylene Chloride	75-09-2	1	1.00	ND	ug/L	U
Acrylonitrile	107-13-1	1	1.00	ND	ug/L	U
Carbon Disulfide	75-15-0	1	0.20	ND	ug/L	U
trans-1,2-Dichloroethene	156-60-5	1	0.20	ND	ug/L	U
Vinyl Acetate	108-05-4	1	0.20	ND	ug/L	U
1,1-Dichloroethane	75-34-3	1	0.20	ND	ug/L	U
2-Butanone	78-93-3	1	5.00	ND	ug/L	U
2,2-Dichloropropane	594-20-7	1	0.20	ND	ug/L	U
cis-1,2-Dichloroethene	156-59-2	1	0.20	ND	ug/L	U
Chloroform	67-66-3	1	0.20	ND	ug/L	U
Bromochloromethane	74-97-5	1	0.20	ND	ug/L	U
1,1,1-Trichloroethane	71-55-6	1	0.20	ND	ug/L	U
1,1-Dichloropropene	563-58-6	1	0.10	ND	ug/L	U
Carbon tetrachloride	56-23-5	1	0.20	ND	ug/L	U
1,2-Dichloroethane	107-06-2	1	0.20	ND	ug/L	U
Benzene	71-43-2	1	0.20	ND	ug/L	U
Trichloroethene	79-01-6	1	0.20	ND	ug/L	U
1,2-Dichloropropane	78-87-5	1	0.20	ND	ug/L	U
Bromodichloromethane	75-27-4	1	0.20	ND	ug/L	U
Dibromomethane	74-95-3	1	0.20	ND	ug/L	U
2-Chloroethyl vinyl ether	110-75-8	1	1.00	ND	ug/L	U
4-Methyl-2-Pentanone	108-10-1	1	2.50	ND	ug/L	U



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LMW-FB1-0325
25C0281-05 (Water)

Volatile Organic Compounds

Method: EPA 8260D

Sampled: 03/12/2025 13:45

Instrument: NT20 Analyst: FL

Analyzed: 03/14/2025 16:34

Analyte	CAS Number	Dilution	Reporting Limit	Result	Units	Notes
cis-1,3-Dichloropropene	10061-01-5	1	0.20	ND	ug/L	U
Toluene	108-88-3	1	0.20	ND	ug/L	U
trans-1,3-Dichloropropene	10061-02-6	1	0.20	ND	ug/L	U
2-Hexanone	591-78-6	1	5.00	ND	ug/L	U
1,1,2-Trichloroethane	79-00-5	1	0.20	ND	ug/L	U
1,3-Dichloropropane	142-28-9	1	0.10	ND	ug/L	U
Tetrachloroethene	127-18-4	1	0.20	ND	ug/L	U
Dibromochloromethane	124-48-1	1	0.20	ND	ug/L	U
1,2-Dibromoethane	106-93-4	1	0.10	ND	ug/L	U
Chlorobenzene	108-90-7	1	0.20	ND	ug/L	U
Ethylbenzene	100-41-4	1	0.20	ND	ug/L	U
1,1,1,2-Tetrachloroethane	630-20-6	1	0.20	ND	ug/L	U
m,p-Xylene	179601-23-1	1	0.40	ND	ug/L	U
o-Xylene	95-47-6	1	0.20	ND	ug/L	U
Xylenes, total	1330-20-7	1	0.60	ND	ug/L	U
Styrene	100-42-5	1	0.20	ND	ug/L	U
Bromoform	75-25-2	1	0.20	ND	ug/L	U
1,1,2,2-Tetrachloroethane	79-34-5	1	0.20	ND	ug/L	U
1,2,3-Trichloropropane	96-18-4	1	0.25	ND	ug/L	U
trans-1,4-Dichloro 2-Butene	110-57-6	1	1.00	ND	ug/L	U
n-Propylbenzene	103-65-1	1	0.20	ND	ug/L	U
Bromobenzene	108-86-1	1	0.20	ND	ug/L	U
Isopropyl Benzene	98-82-8	1	0.20	ND	ug/L	U
2-Chlorotoluene	95-49-8	1	0.10	ND	ug/L	U
4-Chlorotoluene	106-43-4	1	0.20	ND	ug/L	U
t-Butylbenzene	98-06-6	1	0.20	ND	ug/L	U
1,3,5-Trimethylbenzene	108-67-8	1	0.20	ND	ug/L	U
1,2,4-Trimethylbenzene	95-63-6	1	0.20	ND	ug/L	U
s-Butylbenzene	135-98-8	1	0.20	ND	ug/L	U
4-Isopropyl Toluene	99-87-6	1	0.20	ND	ug/L	U
1,3-Dichlorobenzene	541-73-1	1	0.20	ND	ug/L	U
1,4-Dichlorobenzene	106-46-7	1	0.20	ND	ug/L	U
n-Butylbenzene	104-51-8	1	0.20	ND	ug/L	U
1,2-Dichlorobenzene	95-50-1	1	0.20	ND	ug/L	U
1,2-Dibromo-3-chloropropane	96-12-8	1	0.50	ND	ug/L	U



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LMW-FB1-0325
25C0281-05 (Water)

Volatile Organic Compounds

Method: EPA 8260D

Sampled: 03/12/2025 13:45

Instrument: NT20 Analyst: FL

Analyzed: 03/14/2025 16:34

Analyte	CAS Number	Dilution	Reporting Limit	Result	Units	Notes
1,2,4-Trichlorobenzene	120-82-1	1	0.50	ND	ug/L	U
Hexachloro-1,3-Butadiene	87-68-3	1	0.50	ND	ug/L	U
Naphthalene	91-20-3	1	0.50	ND	ug/L	U
1,2,3-Trichlorobenzene	87-61-6	1	0.50	ND	ug/L	U
Dichlorodifluoromethane	75-71-8	1	0.20	ND	ug/L	U
Surrogate: 1,2-Dichloroethane-d4			80-129 %	106	%	
Surrogate: Toluene-d8			80-120 %	98.0	%	
Surrogate: 4-Bromofluorobenzene			80-120 %	94.4	%	
Surrogate: 1,2-Dichlorobenzene-d4			80-120 %	103	%	



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LMW-FB1-0325
25C0281-05 (Water)

Semivolatile Organic Compounds

Method: EPA 8270E
Instrument: NT10 Analyst: JZ

Sampled: 03/12/2025 13:45

Analyzed: 03/26/2025 15:49

Sample Preparation: Preparation Method: EPA 3520C (Liq Liq)
Preparation Batch: BNC0437
Prepared: 03/19/2025

Sample Size: 500 mL
Final Volume: 0.5 mL

Extract ID: 25C0281-05 J 01

Analyte	CAS Number	Dilution	Reporting Limit	Result	Units	Notes
Phenol	108-95-2	1	1.0	ND	ug/L	U
bis(2-chloroethyl) ether	111-44-4	1	1.0	ND	ug/L	U
2-Chlorophenol	95-57-8	1	1.0	ND	ug/L	U
1,3-Dichlorobenzene	541-73-1	1	1.0	ND	ug/L	U
1,4-Dichlorobenzene	106-46-7	1	1.0	ND	ug/L	U
Benzyl Alcohol	100-51-6	1	2.0	ND	ug/L	U
1,2-Dichlorobenzene	95-50-1	1	1.0	ND	ug/L	U
2-Methylphenol	95-48-7	1	1.0	ND	ug/L	U
2,2'-Oxybis(1-chloropropane)	108-60-1	1	1.0	ND	ug/L	U
4-Methylphenol	106-44-5	1	2.0	ND	ug/L	U
N-Nitroso-di-n-Propylamine	621-64-7	1	1.0	ND	ug/L	U
Hexachloroethane	67-72-1	1	2.0	ND	ug/L	U
Nitrobenzene	98-95-3	1	1.0	ND	ug/L	U
Isophorone	78-59-1	1	1.0	ND	ug/L	U
2-Nitrophenol	88-75-5	1	3.0	ND	ug/L	U
2,4-Dimethylphenol	105-67-9	1	3.0	ND	ug/L	U
Bis(2-Chloroethoxy)methane	111-91-1	1	1.0	ND	ug/L	U
Benzoic acid	65-85-0	1	10.0	ND	ug/L	U
2,4-Dichlorophenol	120-83-2	1	3.0	ND	ug/L	U
1,2,4-Trichlorobenzene	120-82-1	1	1.0	ND	ug/L	U
Naphthalene	91-20-3	1	1.0	ND	ug/L	U
4-Chloroaniline	106-47-8	1	5.0	ND	ug/L	U
Hexachlorobutadiene	87-68-3	1	3.0	ND	ug/L	U
4-Chloro-3-Methylphenol	59-50-7	1	3.0	ND	ug/L	U
2-Methylnaphthalene	91-57-6	1	1.0	ND	ug/L	U
Hexachlorocyclopentadiene	77-47-4	1	5.0	ND	ug/L	U
2,4,6-Trichlorophenol	88-06-2	1	3.0	ND	ug/L	U
2,4,5-Trichlorophenol	95-95-4	1	5.0	ND	ug/L	U
2-Chloronaphthalene	91-58-7	1	1.0	ND	ug/L	U
2-Nitroaniline	88-74-4	1	3.0	ND	ug/L	U
Dimethylphthalate	131-11-3	1	1.0	ND	ug/L	U
Acenaphthylene	208-96-8	1	1.0	ND	ug/L	U



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LMW-FB1-0325
25C0281-05 (Water)

Semivolatile Organic Compounds

Method: EPA 8270E

Sampled: 03/12/2025 13:45

Instrument: NT10 Analyst: JZ

Analyzed: 03/26/2025 15:49

Analyte	CAS Number	Dilution	Reporting Limit	Result	Units	Notes
2,6-Dinitrotoluene	606-20-2	1	3.0	ND	ug/L	U
3-Nitroaniline	99-09-2	1	3.0	ND	ug/L	U
Acenaphthene	83-32-9	1	1.0	ND	ug/L	U
2,4-Dinitrophenol	51-28-5	1	10.0	ND	ug/L	U
Dibenzofuran	132-64-9	1	1.0	ND	ug/L	U
4-Nitrophenol	100-02-7	1	5.0	ND	ug/L	U
2,4-Dinitrotoluene	121-14-2	1	3.0	ND	ug/L	U
Fluorene	86-73-7	1	1.0	ND	ug/L	U
Diethyl phthalate	84-66-2	1	1.0	ND	ug/L	U
4-Chlorophenylphenyl ether	7005-72-3	1	1.0	ND	ug/L	U
4-Nitroaniline	100-01-6	1	3.0	ND	ug/L	U
4,6-Dinitro-2-methylphenol	534-52-1	1	10.0	ND	ug/L	U
N-Nitrosodiphenylamine	86-30-6	1	1.0	ND	ug/L	U
4-Bromophenyl phenyl ether	101-55-3	1	1.0	ND	ug/L	U
Hexachlorobenzene	118-74-1	1	1.0	ND	ug/L	U
Pentachlorophenol	87-86-5	1	5.0	ND	ug/L	U
Phenanthrene	85-01-8	1	1.0	ND	ug/L	U
Anthracene	120-12-7	1	1.0	ND	ug/L	U
Carbazole	86-74-8	1	1.0	ND	ug/L	U
Di-n-Butylphthalate	84-74-2	1	1.0	ND	ug/L	U
Fluoranthene	206-44-0	1	1.0	ND	ug/L	U
Pyrene	129-00-0	1	1.0	ND	ug/L	U
Butylbenzylphthalate	85-68-7	1	1.0	ND	ug/L	U
Benzo(a)anthracene	56-55-3	1	1.0	ND	ug/L	U
3,3'-Dichlorobenzidine	91-94-1	1	10.0	ND	ug/L	U
Chrysene	218-01-9	1	1.0	ND	ug/L	U
bis(2-Ethylhexyl)phthalate	117-81-7	1	3.0	ND	ug/L	U
Di-n-Octylphthalate	117-84-0	1	1.0	ND	ug/L	U
Benzofluoranthenes, Total		1	2.0	ND	ug/L	U
Benzo(a)pyrene	50-32-8	1	1.0	ND	ug/L	U
Indeno(1,2,3-cd)pyrene	193-39-5	1	1.0	ND	ug/L	U
Dibenzo(a,h)anthracene	53-70-3	1	1.0	ND	ug/L	U
Benzo(g,h,i)perylene	191-24-2	1	1.0	ND	ug/L	U
1-Methylnaphthalene	90-12-0	1	1.0	ND	ug/L	U
Surrogate: 2-Fluorophenol			33-120 %	45.3	%	



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LMW-FB1-0325
25C0281-05 (Water)

Semivolatile Organic Compounds

Method: EPA 8270E

Sampled: 03/12/2025 13:45

Instrument: NT10 Analyst: JZ

Analyzed: 03/26/2025 15:49

Analyte	CAS Number	Recovery	Recovery	Units	Notes
		Limits			
Surrogate: Phenol-d5		38-120 %	41.0	%	
Surrogate: 2-Chlorophenol-d4		41-120 %	51.1	%	
Surrogate: 1,2-Dichlorobenzene-d4		20-120 %	57.8	%	
Surrogate: Nitrobenzene-d5		27-120 %	58.8	%	
Surrogate: 2-Fluorobiphenyl		33-120 %	60.8	%	
Surrogate: 2,4,6-Tribromophenol		52-120 %	57.7	%	
Surrogate: p-Terphenyl-d14		28-120 %	76.9	%	



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LMW-FB1-0325
25C0281-05 (Water)

Semivolatile Organic Compounds

Method: EPA 8270E
Instrument: NT14 Analyst: RT

Sampled: 03/12/2025 13:45

Analyzed: 03/31/2025 13:21

Sample Preparation: Preparation Method: EPA 3520C (Liq Liq)
Preparation Batch: BNC0410
Prepared: 03/19/2025

Sample Size: 500 mL
Final Volume: 1 mL

Extract ID: 25C0281-05 H 01

Analyte	CAS Number	Dilution	Detection Limit	Reporting Limit	Result	Units	Notes
1,4-Dioxane	123-91-1	1	0.2	0.4	ND	ug/L	U
<i>Surrogate: 1,4-Dioxane-d8</i>				30-160 %	59.9	%	



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LMW-FB1-0325
25C0281-05 (Water)

Petroleum Hydrocarbons

Method: NWTPH-HCID
Instrument: FID4 Analyst: VD

Sampled: 03/12/2025 13:45

Analyzed: 03/17/2025 17:16

Sample Preparation: Preparation Method: EPA 3510C SepF
Preparation Batch: BNC0332
Prepared: 03/14/2025

Sample Size: 500 mL
Final Volume: 1 mL

Extract ID: 25C0281-05 G 01

Analyte	CAS Number	Dilution	Reporting Limit	Result	Units	Notes
Gasoline Range Organics (Tol-C12)	GRO	1	0.25	ND	mg/L	U
Diesel Range Organics (C12-C24)	DRO	1	0.50	ND	mg/L	U
Motor Oil Range Organics (C24-C38)	RRO	1	1.00	ND	mg/L	U
Surrogate: o-Terphenyl			50-150 %	104	%	
Surrogate: n-Triacontane			50-150 %	112	%	



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LMW-FB1-0325
25C0281-05 (Water)

Chlorinated Pesticides

Method: EPA 8081B
Instrument: ECD6 Analyst: RT

Sampled: 03/12/2025 13:45

Analyzed: 04/11/2025 16:06

Sample Preparation: Preparation Method: EPA 3510C SepF
Preparation Batch: BNC0429
Prepared: 03/18/2025

Sample Size: 500 mL
Final Volume: 5 mL

Extract ID: 25C0281-05 I 01

Sample Cleanup: Cleanup Method: Silica Gel
Cleanup Batch: CNC0126
Cleaned: 27-Mar-2025

Initial Volume: 5 uL
Final Volume: 5 uL

Extract ID: 25C0281-05 I 01

Analyte	CAS Number	Dilution	Reporting Limit	Result	Units	Notes
alpha-BHC	319-84-6	1	0.025	ND	ug/L	U
beta-BHC	319-85-7	1	0.025	ND	ug/L	U
gamma-BHC (Lindane)	58-89-9	1	0.025	ND	ug/L	U
delta-BHC	319-86-8	1	0.025	ND	ug/L	U
Heptachlor	76-44-8	1	0.025	ND	ug/L	U
Aldrin	309-00-2	1	0.025	ND	ug/L	U
Heptachlor Epoxide	1024-57-3	1	0.050	ND	ug/L	U
trans-Chlordane (beta-Chlordane)	5103-74-2	1	0.025	ND	ug/L	U
cis-Chlordane (alpha-chlordane)	5103-71-9	1	0.025	ND	ug/L	U
Endosulfan I	959-98-8	1	0.025	ND	ug/L	U
4,4'-DDE	72-55-9	1	0.050	ND	ug/L	U
Dieldrin	60-57-1	1	0.050	ND	ug/L	U
Endrin	72-20-8	1	0.050	ND	ug/L	U
Endosulfan II	33213-65-9	1	0.050	ND	ug/L	U
4,4'-DDD	72-54-8	1	0.050	ND	ug/L	U
Endrin Aldehyde	7421-93-4	1	0.050	ND	ug/L	U
4,4'-DDT	50-29-3	1	0.050	ND	ug/L	U
Endosulfan Sulfate	1031-07-8	1	0.050	ND	ug/L	U
Endrin Ketone	53494-70-5	1	0.050	ND	ug/L	U
Methoxychlor	72-43-5	1	0.250	ND	ug/L	U
Toxaphene	8001-35-2	1	1.25	ND	ug/L	U
Surrogate: Decachlorobiphenyl			11-144 %	51.2	%	
Surrogate: Decachlorobiphenyl [2C]			11-144 %	53.0	%	
Surrogate: Tetrachlorometaxylene			30-120 %	53.4	%	
Surrogate: Tetrachlorometaxylene [2C]			30-120 %	62.2	%	



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LMW-FB1-0325
25C0281-05 (Water)

Aroclor PCB

Method: EPA 8082A			Sampled: 03/12/2025 13:45
Instrument: ECD7 Analyst: NRB			Analyzed: 04/01/2025 13:55
Sample Preparation:	Preparation Method: EPA 3510C SepF		Extract ID: 25C0281-05 A 01
	Preparation Batch: BNC0407		
	Sample Size: 1000 mL		
	Prepared: 03/17/2025	Final Volume: 0.5 mL	
Sample Cleanup:	Cleanup Method: Sulfuric Acid		Extract ID:25C0281-05 A 01
	Cleanup Batch: CNC0139		
	Initial Volume: 0.5 uL		
	Cleaned: 31-Mar-2025	Final Volume: 0.5 uL	
Sample Cleanup:	Cleanup Method: Sulfur		Extract ID:25C0281-05 A 01
	Cleanup Batch: CNC0140		
	Initial Volume: 0.5 uL		
	Cleaned: 31-Mar-2025	Final Volume: 0.5 uL	

Analyte	CAS Number	Dilution	Reporting Limit	Result	Units	Notes
Aroclor 1016	12674-11-2	1	0.010	ND	ug/L	U
Aroclor 1221	11104-28-2	1	0.010	ND	ug/L	U
Aroclor 1232	11141-16-5	1	0.010	ND	ug/L	U
Aroclor 1242	53469-21-9	1	0.010	ND	ug/L	U
Aroclor 1248	12672-29-6	1	0.010	ND	ug/L	U
Aroclor 1254	11097-69-1	1	0.010	ND	ug/L	U
Aroclor 1260	11096-82-5	1	0.010	ND	ug/L	U
Surrogate: Decachlorobiphenyl			29-120 %	45.1	%	
Surrogate: Tetrachlorometaxylene			32-120 %	86.8	%	
Surrogate: Decachlorobiphenyl [2C]			29-120 %	46.4	%	
Surrogate: Tetrachlorometaxylene [2C]			32-120 %	63.9	%	



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LMW-FB1-0325
25C0281-05 (Water)

Metals and Metallic Compounds

Method: EPA 200.8

Sampled: 03/12/2025 13:45

Instrument: ICPMS2 Analyst: HAL

Analyzed: 03/21/2025 06:29

Sample Preparation:

Preparation Method: REN - EPA 3010A M

Extract ID: 25C0281-05 M 01

Preparation Batch: BNC0385

Sample Size: 25 mL

Prepared: 03/15/2025

Final Volume: 25 mL

Analyte	CAS Number	Dilution	Detection Limit	Reporting Limit	Result	Units	Notes
Antimony	7440-36-0	1	0.150	3.00	ND	ug/L	U
Arsenic UCT	7440-38-2	1	0.100	3.00	ND	ug/L	U
Lead	7439-92-1	1	0.100	10.0	ND	ug/L	U
Selenium UCT	7782-49-2	1	0.500	25.0	ND	ug/L	U
Thallium	7440-28-0	1	0.100	2.00	ND	ug/L	U



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Project: Landsburg
Project Number: GL9231000007
Project Manager: Gary Zimmerman

Reported:
15-Apr-2025 16:40

LMW-FB1-0325
25C0281-05 (Water)

Metals and Metallic Compounds

Method: EPA 6010D
Instrument: ICP3 Analyst: SH

Sampled: 03/12/2025 13:45

Analyzed: 03/28/2025 18:01

Sample Preparation: Preparation Method: TWC EPA 3010A
Preparation Batch: BNC0390
Prepared: 03/17/2025

Sample Size: 25 mL
Final Volume: 25 mL

Extract ID: 25C0281-05 M 02

Analyte	CAS Number	Dilution	Detection Limit	Reporting Limit	Result	Units	Notes
Aluminum	7429-90-5	1	0.0210	0.0700	ND	mg/L	U
Barium	7440-39-3	1	0.0007	0.0060	ND	mg/L	U
Beryllium	7440-41-7	1	0.0002	0.0010	ND	mg/L	U
Cadmium	7440-43-9	1	0.0005	0.0020	ND	mg/L	U
Calcium	7440-70-2	1	0.0300	0.0500	0.0743	mg/L	
Chromium	7440-47-3	1	0.0020	0.0090	ND	mg/L	U
Cobalt	7440-48-4	1	0.0025	0.0050	ND	mg/L	U
Copper	7440-50-8	1	0.0030	0.0050	ND	mg/L	U
Iron	7439-89-6	1	0.0540	0.100	ND	mg/L	U
Magnesium	7439-95-4	1	0.0250	0.0500	ND	mg/L	U
Manganese	7439-96-5	1	0.0020	0.0040	ND	mg/L	U
Nickel	7440-02-0	1	0.0050	0.0100	ND	mg/L	U
Potassium	7440-09-7	1	0.250	0.500	ND	mg/L	U
Silver	7440-22-4	1	0.0015	0.0030	ND	mg/L	U
Sodium	7440-23-5	1	0.250	0.500	ND	mg/L	U
Vanadium	7440-62-2	1	0.0015	0.0030	ND	mg/L	U
Zinc	7440-66-6	1	0.0150	0.0300	ND	mg/L	U



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Reported:
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LMW-FB1-0325
25C0281-05 (Water)

Metals and Metallic Compounds

Method: EPA 7470A	Sampled: 03/12/2025 13:45
Instrument: HYDRA Analyst: AMS	Analyzed: 03/19/2025 13:26
Sample Preparation:	Extract ID: 25C0281-05 M
Preparation Method: TWM EPA 7470A	
Preparation Batch: BNC0392	Sample Size: 20 mL
Prepared: 03/15/2025	Final Volume: 20 mL

Analyte	CAS Number	Dilution	Reporting Limit	Result	Units	Notes
Mercury	7439-97-6	1	0.00100	ND	mg/L	U



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Reported:
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LMW-FB1-0325
25C0281-05RE1 (Water)

Metals and Metallic Compounds

Method: EPA 200.8

Sampled: 03/12/2025 13:45

Instrument: ICPMS2 Analyst: HAL

Analyzed: 03/25/2025 23:31

Sample Preparation:

Preparation Method: REN - EPA 3010A M

Extract ID: 25C0281-05RE1 M 03

Preparation Batch: BNC0572

Sample Size: 25 mL

Prepared: 03/22/2025

Final Volume: 25 mL

Analyte	CAS Number	Dilution	Detection Limit	Reporting Limit	Result	Units	Notes
Antimony	7440-36-0	1	0.150	3.00	ND	ug/L	U



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Reported:
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LMW-4-0325
25C0281-06 (Water)

Volatile Organic Compounds

Method: EPA 8260D
Instrument: NT20 Analyst: FL

Sampled: 03/13/2025 09:50

Analyzed: 03/14/2025 14:38

Sample Preparation: Preparation Method: EPA 5030C (Purge and Trap)
Preparation Batch: BNC0352 Sample Size: 10 mL
Prepared: 03/14/2025 Final Volume: 10 mL

Extract ID: 25C0281-06 S

Analyte	CAS Number	Dilution	Reporting Limit	Result	Units	Notes
Chloromethane	74-87-3	1	0.50	ND	ug/L	U
Vinyl Chloride	75-01-4	1	0.10	ND	ug/L	U
Bromomethane	74-83-9	1	1.00	ND	ug/L	U
Chloroethane	75-00-3	1	0.20	ND	ug/L	U
Trichlorofluoromethane	75-69-4	1	0.20	ND	ug/L	U
Acrolein	107-02-8	1	5.00	ND	ug/L	U
1,1,2-Trichloro-1,2,2-Trifluoroethane	76-13-1	1	0.20	ND	ug/L	U
Acetone	67-64-1	1	5.00	5.41	ug/L	
1,1-Dichloroethene	75-35-4	1	0.20	ND	ug/L	U
Iodomethane	74-88-4	1	1.00	ND	ug/L	U
Methylene Chloride	75-09-2	1	1.00	ND	ug/L	U
Acrylonitrile	107-13-1	1	1.00	ND	ug/L	U
Carbon Disulfide	75-15-0	1	0.20	ND	ug/L	U
trans-1,2-Dichloroethene	156-60-5	1	0.20	ND	ug/L	U
Vinyl Acetate	108-05-4	1	0.20	ND	ug/L	U
1,1-Dichloroethane	75-34-3	1	0.20	ND	ug/L	U
2-Butanone	78-93-3	1	5.00	ND	ug/L	U
2,2-Dichloropropane	594-20-7	1	0.20	ND	ug/L	U
cis-1,2-Dichloroethene	156-59-2	1	0.20	ND	ug/L	U
Chloroform	67-66-3	1	0.20	ND	ug/L	U
Bromochloromethane	74-97-5	1	0.20	ND	ug/L	U
1,1,1-Trichloroethane	71-55-6	1	0.20	ND	ug/L	U
1,1-Dichloropropene	563-58-6	1	0.10	ND	ug/L	U
Carbon tetrachloride	56-23-5	1	0.20	ND	ug/L	U
1,2-Dichloroethane	107-06-2	1	0.20	ND	ug/L	U
Benzene	71-43-2	1	0.20	ND	ug/L	U
Trichloroethene	79-01-6	1	0.20	ND	ug/L	U
1,2-Dichloropropane	78-87-5	1	0.20	ND	ug/L	U
Bromodichloromethane	75-27-4	1	0.20	ND	ug/L	U
Dibromomethane	74-95-3	1	0.20	ND	ug/L	U
2-Chloroethyl vinyl ether	110-75-8	1	1.00	ND	ug/L	U
4-Methyl-2-Pentanone	108-10-1	1	2.50	ND	ug/L	U



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LMW-4-0325
25C0281-06 (Water)

Volatile Organic Compounds

Method: EPA 8260D

Sampled: 03/13/2025 09:50

Instrument: NT20 Analyst: FL

Analyzed: 03/14/2025 14:38

Analyte	CAS Number	Dilution	Reporting Limit	Result	Units	Notes
cis-1,3-Dichloropropene	10061-01-5	1	0.20	ND	ug/L	U
Toluene	108-88-3	1	0.20	ND	ug/L	U
trans-1,3-Dichloropropene	10061-02-6	1	0.20	ND	ug/L	U
2-Hexanone	591-78-6	1	5.00	ND	ug/L	U
1,1,2-Trichloroethane	79-00-5	1	0.20	ND	ug/L	U
1,3-Dichloropropane	142-28-9	1	0.10	ND	ug/L	U
Tetrachloroethene	127-18-4	1	0.20	ND	ug/L	U
Dibromochloromethane	124-48-1	1	0.20	ND	ug/L	U
1,2-Dibromoethane	106-93-4	1	0.10	ND	ug/L	U
Chlorobenzene	108-90-7	1	0.20	ND	ug/L	U
Ethylbenzene	100-41-4	1	0.20	ND	ug/L	U
1,1,1,2-Tetrachloroethane	630-20-6	1	0.20	ND	ug/L	U
m,p-Xylene	179601-23-1	1	0.40	ND	ug/L	U
o-Xylene	95-47-6	1	0.20	ND	ug/L	U
Xylenes, total	1330-20-7	1	0.60	ND	ug/L	U
Styrene	100-42-5	1	0.20	ND	ug/L	U
Bromoform	75-25-2	1	0.20	ND	ug/L	U
1,1,2,2-Tetrachloroethane	79-34-5	1	0.20	ND	ug/L	U
1,2,3-Trichloropropane	96-18-4	1	0.25	ND	ug/L	U
trans-1,4-Dichloro 2-Butene	110-57-6	1	1.00	ND	ug/L	U
n-Propylbenzene	103-65-1	1	0.20	ND	ug/L	U
Bromobenzene	108-86-1	1	0.20	ND	ug/L	U
Isopropyl Benzene	98-82-8	1	0.20	ND	ug/L	U
2-Chlorotoluene	95-49-8	1	0.10	ND	ug/L	U
4-Chlorotoluene	106-43-4	1	0.20	ND	ug/L	U
t-Butylbenzene	98-06-6	1	0.20	ND	ug/L	U
1,3,5-Trimethylbenzene	108-67-8	1	0.20	ND	ug/L	U
1,2,4-Trimethylbenzene	95-63-6	1	0.20	ND	ug/L	U
s-Butylbenzene	135-98-8	1	0.20	ND	ug/L	U
4-Isopropyl Toluene	99-87-6	1	0.20	ND	ug/L	U
1,3-Dichlorobenzene	541-73-1	1	0.20	ND	ug/L	U
1,4-Dichlorobenzene	106-46-7	1	0.20	ND	ug/L	U
n-Butylbenzene	104-51-8	1	0.20	ND	ug/L	U
1,2-Dichlorobenzene	95-50-1	1	0.20	ND	ug/L	U
1,2-Dibromo-3-chloropropane	96-12-8	1	0.50	ND	ug/L	U



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LMW-4-0325
25C0281-06 (Water)

Volatile Organic Compounds

Method: EPA 8260D

Sampled: 03/13/2025 09:50

Instrument: NT20 Analyst: FL

Analyzed: 03/14/2025 14:38

Analyte	CAS Number	Dilution	Reporting Limit	Result	Units	Notes
1,2,4-Trichlorobenzene	120-82-1	1	0.50	ND	ug/L	U
Hexachloro-1,3-Butadiene	87-68-3	1	0.50	ND	ug/L	U
Naphthalene	91-20-3	1	0.50	ND	ug/L	U
1,2,3-Trichlorobenzene	87-61-6	1	0.50	ND	ug/L	U
Dichlorodifluoromethane	75-71-8	1	0.20	ND	ug/L	U
Surrogate: 1,2-Dichloroethane-d4			80-129 %	109	%	
Surrogate: Toluene-d8			80-120 %	99.0	%	
Surrogate: 4-Bromofluorobenzene			80-120 %	96.5	%	
Surrogate: 1,2-Dichlorobenzene-d4			80-120 %	102	%	



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LMW-4-0325
25C0281-06 (Water)

Semivolatile Organic Compounds

Method: EPA 8270E
Instrument: NT10 Analyst: JZ

Sampled: 03/13/2025 09:50

Analyzed: 03/26/2025 19:14

Sample Preparation: Preparation Method: EPA 3520C (Liq Liq)
Preparation Batch: BNC0438
Prepared: 03/20/2025

Sample Size: 500 mL

Final Volume: 0.5 mL

Extract ID: 25C0281-06 AM 01

Analyte	CAS Number	Dilution	Reporting Limit	Result	Units	Notes
Phenol	108-95-2	1	1.0	ND	ug/L	U
bis(2-chloroethyl) ether	111-44-4	1	1.0	ND	ug/L	U
2-Chlorophenol	95-57-8	1	1.0	ND	ug/L	U
1,3-Dichlorobenzene	541-73-1	1	1.0	ND	ug/L	U
1,4-Dichlorobenzene	106-46-7	1	1.0	ND	ug/L	U
Benzyl Alcohol	100-51-6	1	2.0	ND	ug/L	U
1,2-Dichlorobenzene	95-50-1	1	1.0	ND	ug/L	U
2-Methylphenol	95-48-7	1	1.0	ND	ug/L	U
2,2'-Oxybis(1-chloropropane)	108-60-1	1	1.0	ND	ug/L	U
4-Methylphenol	106-44-5	1	2.0	ND	ug/L	U
N-Nitroso-di-n-Propylamine	621-64-7	1	1.0	ND	ug/L	U
Hexachloroethane	67-72-1	1	2.0	ND	ug/L	U
Nitrobenzene	98-95-3	1	1.0	ND	ug/L	U
Isophorone	78-59-1	1	1.0	ND	ug/L	U
2-Nitrophenol	88-75-5	1	3.0	ND	ug/L	U
2,4-Dimethylphenol	105-67-9	1	3.0	ND	ug/L	U
Bis(2-Chloroethoxy)methane	111-91-1	1	1.0	ND	ug/L	U
Benzoic acid	65-85-0	1	10.0	ND	ug/L	U
2,4-Dichlorophenol	120-83-2	1	3.0	ND	ug/L	U
1,2,4-Trichlorobenzene	120-82-1	1	1.0	ND	ug/L	U
Naphthalene	91-20-3	1	1.0	ND	ug/L	U
4-Chloroaniline	106-47-8	1	5.0	ND	ug/L	U
Hexachlorobutadiene	87-68-3	1	3.0	ND	ug/L	U
4-Chloro-3-Methylphenol	59-50-7	1	3.0	ND	ug/L	U
2-Methylnaphthalene	91-57-6	1	1.0	ND	ug/L	U
Hexachlorocyclopentadiene	77-47-4	1	5.0	ND	ug/L	U
2,4,6-Trichlorophenol	88-06-2	1	3.0	ND	ug/L	U
2,4,5-Trichlorophenol	95-95-4	1	5.0	ND	ug/L	U
2-Chloronaphthalene	91-58-7	1	1.0	ND	ug/L	U
2-Nitroaniline	88-74-4	1	3.0	ND	ug/L	U
Dimethylphthalate	131-11-3	1	1.0	ND	ug/L	U
Acenaphthylene	208-96-8	1	1.0	ND	ug/L	U



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Reported:
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LMW-4-0325
25C0281-06 (Water)

Semivolatile Organic Compounds

Method: EPA 8270E

Sampled: 03/13/2025 09:50

Instrument: NT10 Analyst: JZ

Analyzed: 03/26/2025 19:14

Analyte	CAS Number	Dilution	Reporting Limit	Result	Units	Notes
2,6-Dinitrotoluene	606-20-2	1	3.0	ND	ug/L	U
3-Nitroaniline	99-09-2	1	3.0	ND	ug/L	U
Acenaphthene	83-32-9	1	1.0	ND	ug/L	U
2,4-Dinitrophenol	51-28-5	1	10.0	ND	ug/L	U
Dibenzofuran	132-64-9	1	1.0	ND	ug/L	U
4-Nitrophenol	100-02-7	1	5.0	ND	ug/L	U
2,4-Dinitrotoluene	121-14-2	1	3.0	ND	ug/L	U
Fluorene	86-73-7	1	1.0	ND	ug/L	U
Diethyl phthalate	84-66-2	1	1.0	ND	ug/L	U
4-Chlorophenylphenyl ether	7005-72-3	1	1.0	ND	ug/L	U
4-Nitroaniline	100-01-6	1	3.0	ND	ug/L	U
4,6-Dinitro-2-methylphenol	534-52-1	1	10.0	ND	ug/L	U
N-Nitrosodiphenylamine	86-30-6	1	1.0	ND	ug/L	U
4-Bromophenyl phenyl ether	101-55-3	1	1.0	ND	ug/L	U
Hexachlorobenzene	118-74-1	1	1.0	ND	ug/L	U
Pentachlorophenol	87-86-5	1	5.0	ND	ug/L	U
Phenanthrene	85-01-8	1	1.0	ND	ug/L	U
Anthracene	120-12-7	1	1.0	ND	ug/L	U
Carbazole	86-74-8	1	1.0	ND	ug/L	U
Di-n-Butylphthalate	84-74-2	1	1.0	ND	ug/L	U
Fluoranthene	206-44-0	1	1.0	ND	ug/L	U
Pyrene	129-00-0	1	1.0	ND	ug/L	U
Butylbenzylphthalate	85-68-7	1	1.0	ND	ug/L	U
Benzo(a)anthracene	56-55-3	1	1.0	ND	ug/L	U
3,3'-Dichlorobenzidine	91-94-1	1	10.0	ND	ug/L	U
Chrysene	218-01-9	1	1.0	ND	ug/L	U
bis(2-Ethylhexyl)phthalate	117-81-7	1	3.0	ND	ug/L	U
Di-n-Octylphthalate	117-84-0	1	1.0	ND	ug/L	U
Benzofluoranthenes, Total		1	2.0	ND	ug/L	U
Benzo(a)pyrene	50-32-8	1	1.0	ND	ug/L	U
Indeno(1,2,3-cd)pyrene	193-39-5	1	1.0	ND	ug/L	U
Dibenzo(a,h)anthracene	53-70-3	1	1.0	ND	ug/L	U
Benzo(g,h,i)perylene	191-24-2	1	1.0	ND	ug/L	U
1-Methylnaphthalene	90-12-0	1	1.0	ND	ug/L	U
Surrogate: 2-Fluorophenol			33-120 %	55.4	%	



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LMW-4-0325
25C0281-06 (Water)

Semivolatile Organic Compounds

Method: EPA 8270E

Sampled: 03/13/2025 09:50

Instrument: NT10 Analyst: JZ

Analyzed: 03/26/2025 19:14

Analyte	CAS Number	Recovery	Recovery	Units	Notes
		Limits			
Surrogate: Phenol-d5		38-120 %	42.4	%	
Surrogate: 2-Chlorophenol-d4		41-120 %	56.3	%	
Surrogate: 1,2-Dichlorobenzene-d4		20-120 %	63.5	%	
Surrogate: Nitrobenzene-d5		27-120 %	74.0	%	
Surrogate: 2-Fluorobiphenyl		33-120 %	66.9	%	
Surrogate: 2,4,6-Tribromophenol		52-120 %	65.5	%	
Surrogate: p-Terphenyl-d14		28-120 %	76.0	%	



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Reported:
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LMW-4-0325
25C0281-06 (Water)

Semivolatile Organic Compounds

Method: EPA 8270E
Instrument: NT14 Analyst: RT

Sampled: 03/13/2025 09:50

Analyzed: 03/28/2025 05:03

Sample Preparation: Preparation Method: EPA 3520C (Liq Liq) Sample Size: 500 mL
Preparation Batch: BNC0436 Final Volume: 1 mL
Prepared: 03/20/2025 Extract ID: 25C0281-06 AJ 01

Analyte	CAS Number	Dilution	Detection Limit	Reporting Limit	Result	Units	Notes
1,4-Dioxane	123-91-1	1	0.2	0.4	3.4	ug/L	
Surrogate: 1,4-Dioxane-d8				30-160 %	69.7	%	



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LMW-4-0325
25C0281-06 (Water)

Petroleum Hydrocarbons

Method: NWTPH-HCID
Instrument: FID4 Analyst: VD

Sampled: 03/13/2025 09:50

Analyzed: 03/17/2025 17:36

Sample Preparation: Preparation Method: EPA 3510C SepF
Preparation Batch: BNC0332
Prepared: 03/14/2025

Sample Size: 500 mL
Final Volume: 1 mL

Extract ID: 25C0281-06 AD 01

Analyte	CAS Number	Dilution	Reporting Limit	Result	Units	Notes
Gasoline Range Organics (Tol-C12)	GRO	1	0.25	ND	mg/L	U
Diesel Range Organics (C12-C24)	DRO	1	0.50	ND	mg/L	U
Motor Oil Range Organics (C24-C38)	RRO	1	1.00	ND	mg/L	U
Surrogate: o-Terphenyl			50-150 %	103	%	
Surrogate: n-Triacontane			50-150 %	109	%	



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Reported:
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LMW-4-0325
25C0281-06 (Water)

Chlorinated Pesticides

Method: EPA 8081B
Instrument: ECD6 Analyst: RT

Sampled: 03/13/2025 09:50

Analyzed: 04/11/2025 16:24

Sample Preparation: Preparation Method: EPA 3510C SepF
Preparation Batch: BNC0429
Prepared: 03/18/2025

Sample Size: 500 mL
Final Volume: 5 mL

Extract ID: 25C0281-06 AG 01

Sample Cleanup: Cleanup Method: Silica Gel
Cleanup Batch: CNC0126
Cleaned: 27-Mar-2025

Initial Volume: 5 uL
Final Volume: 5 uL

Extract ID: 25C0281-06 AG 01

Analyte	CAS Number	Dilution	Reporting Limit	Result	Units	Notes
alpha-BHC	319-84-6	1	0.025	ND	ug/L	U
beta-BHC	319-85-7	1	0.025	ND	ug/L	U
gamma-BHC (Lindane)	58-89-9	1	0.025	ND	ug/L	U
delta-BHC	319-86-8	1	0.025	ND	ug/L	U
Heptachlor	76-44-8	1	0.025	ND	ug/L	U
Aldrin	309-00-2	1	0.025	ND	ug/L	U
Heptachlor Epoxide	1024-57-3	1	0.050	ND	ug/L	U
trans-Chlordane (beta-Chlordane)	5103-74-2	1	0.025	ND	ug/L	U
cis-Chlordane (alpha-chlordane)	5103-71-9	1	0.025	ND	ug/L	U
Endosulfan I	959-98-8	1	0.025	ND	ug/L	U
4,4'-DDE	72-55-9	1	0.050	ND	ug/L	U
Dieldrin	60-57-1	1	0.050	ND	ug/L	U
Endrin	72-20-8	1	0.050	ND	ug/L	U
Endosulfan II	33213-65-9	1	0.050	ND	ug/L	U
4,4'-DDD	72-54-8	1	0.050	ND	ug/L	U
Endrin Aldehyde	7421-93-4	1	0.050	ND	ug/L	U
4,4'-DDT	50-29-3	1	0.050	ND	ug/L	U
Endosulfan Sulfate	1031-07-8	1	0.050	ND	ug/L	U
Endrin Ketone	53494-70-5	1	0.050	ND	ug/L	U
Methoxychlor	72-43-5	1	0.250	ND	ug/L	U
Toxaphene	8001-35-2	1	1.25	ND	ug/L	U
Surrogate: Decachlorobiphenyl			11-144 %	81.3	%	
Surrogate: Decachlorobiphenyl [2C]			11-144 %	83.0	%	
Surrogate: Tetrachlorometaxylene			30-120 %	58.3	%	
Surrogate: Tetrachlorometaxylene [2C]			30-120 %	58.7	%	



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Vancouver WA, 98660-3231

Project: Landsburg
Project Number: GL9231000007
Project Manager: Gary Zimmerman

Reported:
15-Apr-2025 16:40

LMW-4-0325
25C0281-06 (Water)

Aroclor PCB

Method: EPA 8082A			Sampled: 03/13/2025 09:50
Instrument: ECD7 Analyst: NRB			Analyzed: 04/01/2025 14:57
Sample Preparation:	Preparation Method: EPA 3510C SepF		Extract ID: 25C0281-06 A 01
	Preparation Batch: BNC0407		
	Sample Size: 1000 mL		
	Prepared: 03/17/2025		Final Volume: 0.5 mL
Sample Cleanup:	Cleanup Method: Sulfuric Acid		Extract ID:25C0281-06 A 01
	Cleanup Batch: CNC0139		
	Initial Volume: 0.5 uL		
	Cleaned: 31-Mar-2025		Final Volume: 0.5 uL
Sample Cleanup:	Cleanup Method: Sulfur		Extract ID:25C0281-06 A 01
	Cleanup Batch: CNC0140		
	Initial Volume: 0.5 uL		
	Cleaned: 31-Mar-2025		Final Volume: 0.5 uL

Analyte	CAS Number	Dilution	Reporting Limit	Result	Units	Notes
Aroclor 1016	12674-11-2	1	0.010	ND	ug/L	U
Aroclor 1221	11104-28-2	1	0.010	ND	ug/L	U
Aroclor 1232	11141-16-5	1	0.010	ND	ug/L	U
Aroclor 1242	53469-21-9	1	0.010	ND	ug/L	U
Aroclor 1248	12672-29-6	1	0.010	ND	ug/L	U
Aroclor 1254	11097-69-1	1	0.010	ND	ug/L	U
Aroclor 1260	11096-82-5	1	0.010	ND	ug/L	U
Surrogate: Decachlorobiphenyl			29-120 %	47.6	%	
Surrogate: Tetrachlorometaxylene			32-120 %	89.9	%	P1
Surrogate: Decachlorobiphenyl [2C]			29-120 %	51.5	%	
Surrogate: Tetrachlorometaxylene [2C]			32-120 %	64.2	%	P1



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Reported:
15-Apr-2025 16:40

LMW-4-0325
25C0281-06 (Water)

Metals and Metallic Compounds

Method: EPA 200.8
Instrument: ICPMS2 Analyst: HAL

Sampled: 03/13/2025 09:50

Analyzed: 03/21/2025 05:43

Sample Preparation: Preparation Method: REN - EPA 3010A M
Preparation Batch: BNC0385 Sample Size: 25 mL
Prepared: 03/15/2025 Final Volume: 25 mL

Extract ID: 25C0281-06 AR 01

Analyte	CAS Number	Dilution	Detection	Reporting	Result	Units	Notes
			Limit	Limit			
Antimony	7440-36-0	1	0.150	3.00	ND	ug/L	U
Arsenic UCT	7440-38-2	1	0.100	3.00	ND	ug/L	U
Lead	7439-92-1	1	0.100	10.0	ND	ug/L	U
Selenium UCT	7782-49-2	1	0.500	25.0	ND	ug/L	U
Thallium	7440-28-0	1	0.100	2.00	ND	ug/L	U



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Reported:
15-Apr-2025 16:40

LMW-4-0325
25C0281-06 (Water)

Metals and Metallic Compounds

Method: EPA 6010D
Instrument: ICP3 Analyst: SH

Sampled: 03/13/2025 09:50

Analyzed: 03/28/2025 17:26

Sample Preparation: Preparation Method: TWC EPA 3010A
Preparation Batch: BNC0390
Prepared: 03/17/2025

Sample Size: 25 mL
Final Volume: 25 mL

Extract ID: 25C0281-06 AR 02

Analyte	CAS Number	Dilution	Detection Limit	Reporting Limit	Result	Units	Notes
Aluminum	7429-90-5	1	0.0210	0.0700	ND	mg/L	U
Barium	7440-39-3	1	0.0007	0.0060	0.410	mg/L	
Beryllium	7440-41-7	1	0.0002	0.0010	ND	mg/L	U
Cadmium	7440-43-9	1	0.0005	0.0020	ND	mg/L	U
Calcium	7440-70-2	1	0.0300	0.0500	114	mg/L	
Chromium	7440-47-3	1	0.0020	0.0090	ND	mg/L	U
Cobalt	7440-48-4	1	0.0025	0.0050	ND	mg/L	U
Copper	7440-50-8	1	0.0030	0.0050	ND	mg/L	U
Iron	7439-89-6	1	0.0540	0.100	0.724	mg/L	
Magnesium	7439-95-4	1	0.0250	0.0500	66.9	mg/L	
Manganese	7439-96-5	1	0.0020	0.0040	0.191	mg/L	
Nickel	7440-02-0	1	0.0050	0.0100	ND	mg/L	U
Potassium	7440-09-7	1	0.250	0.500	3.72	mg/L	
Silver	7440-22-4	1	0.0015	0.0030	ND	mg/L	U
Sodium	7440-23-5	1	0.250	0.500	24.5	mg/L	
Vanadium	7440-62-2	1	0.0015	0.0030	ND	mg/L	U
Zinc	7440-66-6	1	0.0150	0.0300	ND	mg/L	U



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Reported:
15-Apr-2025 16:40

LMW-4-0325
25C0281-06 (Water)

Metals and Metallic Compounds

Method: EPA 7470A	Sampled: 03/13/2025 09:50
Instrument: HYDRA Analyst: AMS	Analyzed: 03/19/2025 13:01
Sample Preparation:	Preparation Method: TWM EPA 7470A
	Preparation Batch: BNC0392
	Prepared: 03/15/2025
	Sample Size: 20 mL
	Final Volume: 20 mL
	Extract ID: 25C0281-06 AR

Analyte	CAS Number	Dilution	Reporting Limit	Result	Units	Notes
Mercury	7439-97-6	1	0.00100	ND	mg/L	U



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Project Manager: Gary Zimmerman

Reported:
15-Apr-2025 16:40

LMW-4-0325
25C0281-06RE1 (Water)

Metals and Metallic Compounds

Method: EPA 200.8

Sampled: 03/13/2025 09:50

Instrument: ICPMS2 Analyst: HAL

Analyzed: 03/25/2025 23:57

Sample Preparation:

Preparation Method: REN - EPA 3010A M

Extract ID: 25C0281-06RE1 AR 03

Preparation Batch: BNC0572

Sample Size: 25 mL

Prepared: 03/22/2025

Final Volume: 25 mL

Analyte	CAS Number	Dilution	Detection Limit	Reporting Limit	Result	Units	Notes
Antimony	7440-36-0	1	0.150	3.00	ND	ug/L	U



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Reported:
15-Apr-2025 16:40

LMW-2-0325
25C0281-07 (Water)

Volatile Organic Compounds

Method: EPA 8260D
Instrument: NT20 Analyst: FL

Sampled: 03/13/2025 11:10

Analyzed: 03/14/2025 16:57

Sample Preparation: Preparation Method: EPA 5030C (Purge and Trap)
Preparation Batch: BNC0352 Sample Size: 10 mL
Prepared: 03/14/2025 Final Volume: 10 mL

Extract ID: 25C0281-07 N

Analyte	CAS Number	Dilution	Reporting Limit	Result	Units	Notes
Chloromethane	74-87-3	1	0.50	ND	ug/L	U
Vinyl Chloride	75-01-4	1	0.10	ND	ug/L	U
Bromomethane	74-83-9	1	1.00	ND	ug/L	U
Chloroethane	75-00-3	1	0.20	ND	ug/L	U
Trichlorofluoromethane	75-69-4	1	0.20	ND	ug/L	U
Acrolein	107-02-8	1	5.00	ND	ug/L	U
1,1,2-Trichloro-1,2,2-Trifluoroethane	76-13-1	1	0.20	ND	ug/L	U
Acetone	67-64-1	1	5.00	ND	ug/L	U
1,1-Dichloroethene	75-35-4	1	0.20	ND	ug/L	U
Iodomethane	74-88-4	1	1.00	ND	ug/L	U
Methylene Chloride	75-09-2	1	1.00	ND	ug/L	U
Acrylonitrile	107-13-1	1	1.00	ND	ug/L	U
Carbon Disulfide	75-15-0	1	0.20	ND	ug/L	U
trans-1,2-Dichloroethene	156-60-5	1	0.20	ND	ug/L	U
Vinyl Acetate	108-05-4	1	0.20	ND	ug/L	U
1,1-Dichloroethane	75-34-3	1	0.20	ND	ug/L	U
2-Butanone	78-93-3	1	5.00	ND	ug/L	U
2,2-Dichloropropane	594-20-7	1	0.20	ND	ug/L	U
cis-1,2-Dichloroethene	156-59-2	1	0.20	ND	ug/L	U
Chloroform	67-66-3	1	0.20	ND	ug/L	U
Bromochloromethane	74-97-5	1	0.20	ND	ug/L	U
1,1,1-Trichloroethane	71-55-6	1	0.20	ND	ug/L	U
1,1-Dichloropropene	563-58-6	1	0.10	ND	ug/L	U
Carbon tetrachloride	56-23-5	1	0.20	ND	ug/L	U
1,2-Dichloroethane	107-06-2	1	0.20	ND	ug/L	U
Benzene	71-43-2	1	0.20	ND	ug/L	U
Trichloroethene	79-01-6	1	0.20	ND	ug/L	U
1,2-Dichloropropane	78-87-5	1	0.20	ND	ug/L	U
Bromodichloromethane	75-27-4	1	0.20	ND	ug/L	U
Dibromomethane	74-95-3	1	0.20	ND	ug/L	U
2-Chloroethyl vinyl ether	110-75-8	1	1.00	ND	ug/L	U
4-Methyl-2-Pentanone	108-10-1	1	2.50	ND	ug/L	U



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Reported:
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LMW-2-0325
25C0281-07 (Water)

Volatile Organic Compounds

Method: EPA 8260D

Sampled: 03/13/2025 11:10

Instrument: NT20 Analyst: FL

Analyzed: 03/14/2025 16:57

Analyte	CAS Number	Dilution	Reporting Limit	Result	Units	Notes
cis-1,3-Dichloropropene	10061-01-5	1	0.20	ND	ug/L	U
Toluene	108-88-3	1	0.20	ND	ug/L	U
trans-1,3-Dichloropropene	10061-02-6	1	0.20	ND	ug/L	U
2-Hexanone	591-78-6	1	5.00	ND	ug/L	U
1,1,2-Trichloroethane	79-00-5	1	0.20	ND	ug/L	U
1,3-Dichloropropane	142-28-9	1	0.10	ND	ug/L	U
Tetrachloroethene	127-18-4	1	0.20	ND	ug/L	U
Dibromochloromethane	124-48-1	1	0.20	ND	ug/L	U
1,2-Dibromoethane	106-93-4	1	0.10	ND	ug/L	U
Chlorobenzene	108-90-7	1	0.20	ND	ug/L	U
Ethylbenzene	100-41-4	1	0.20	ND	ug/L	U
1,1,1,2-Tetrachloroethane	630-20-6	1	0.20	ND	ug/L	U
m,p-Xylene	179601-23-1	1	0.40	ND	ug/L	U
o-Xylene	95-47-6	1	0.20	ND	ug/L	U
Xylenes, total	1330-20-7	1	0.60	ND	ug/L	U
Styrene	100-42-5	1	0.20	ND	ug/L	U
Bromoform	75-25-2	1	0.20	ND	ug/L	U
1,1,2,2-Tetrachloroethane	79-34-5	1	0.20	ND	ug/L	U
1,2,3-Trichloropropane	96-18-4	1	0.25	ND	ug/L	U
trans-1,4-Dichloro 2-Butene	110-57-6	1	1.00	ND	ug/L	U
n-Propylbenzene	103-65-1	1	0.20	ND	ug/L	U
Bromobenzene	108-86-1	1	0.20	ND	ug/L	U
Isopropyl Benzene	98-82-8	1	0.20	ND	ug/L	U
2-Chlorotoluene	95-49-8	1	0.10	ND	ug/L	U
4-Chlorotoluene	106-43-4	1	0.20	ND	ug/L	U
t-Butylbenzene	98-06-6	1	0.20	ND	ug/L	U
1,3,5-Trimethylbenzene	108-67-8	1	0.20	ND	ug/L	U
1,2,4-Trimethylbenzene	95-63-6	1	0.20	ND	ug/L	U
s-Butylbenzene	135-98-8	1	0.20	ND	ug/L	U
4-Isopropyl Toluene	99-87-6	1	0.20	ND	ug/L	U
1,3-Dichlorobenzene	541-73-1	1	0.20	ND	ug/L	U
1,4-Dichlorobenzene	106-46-7	1	0.20	ND	ug/L	U
n-Butylbenzene	104-51-8	1	0.20	ND	ug/L	U
1,2-Dichlorobenzene	95-50-1	1	0.20	ND	ug/L	U
1,2-Dibromo-3-chloropropane	96-12-8	1	0.50	ND	ug/L	U



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LMW-2-0325
25C0281-07 (Water)

Volatile Organic Compounds

Method: EPA 8260D

Sampled: 03/13/2025 11:10

Instrument: NT20 Analyst: FL

Analyzed: 03/14/2025 16:57

Analyte	CAS Number	Dilution	Reporting Limit	Result	Units	Notes
1,2,4-Trichlorobenzene	120-82-1	1	0.50	ND	ug/L	U
Hexachloro-1,3-Butadiene	87-68-3	1	0.50	ND	ug/L	U
Naphthalene	91-20-3	1	0.50	ND	ug/L	U
1,2,3-Trichlorobenzene	87-61-6	1	0.50	ND	ug/L	U
Dichlorodifluoromethane	75-71-8	1	0.20	ND	ug/L	U
Surrogate: 1,2-Dichloroethane-d4			80-129 %	107	%	
Surrogate: Toluene-d8			80-120 %	98.2	%	
Surrogate: 4-Bromofluorobenzene			80-120 %	93.9	%	
Surrogate: 1,2-Dichlorobenzene-d4			80-120 %	103	%	



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Reported:
15-Apr-2025 16:40

LMW-2-0325
25C0281-07 (Water)

Semivolatile Organic Compounds

Method: EPA 8270E
Instrument: NT10 Analyst: JZ

Sampled: 03/13/2025 11:10

Analyzed: 03/26/2025 16:30

Sample Preparation: Preparation Method: EPA 3520C (Liq Liq)
Preparation Batch: BNC0437
Prepared: 03/19/2025

Sample Size: 500 mL
Final Volume: 0.5 mL

Extract ID: 25C0281-07 K 01

Analyte	CAS Number	Dilution	Reporting Limit	Result	Units	Notes
Phenol	108-95-2	1	1.0	ND	ug/L	U
bis(2-chloroethyl) ether	111-44-4	1	1.0	ND	ug/L	U
2-Chlorophenol	95-57-8	1	1.0	ND	ug/L	U
1,3-Dichlorobenzene	541-73-1	1	1.0	ND	ug/L	U
1,4-Dichlorobenzene	106-46-7	1	1.0	ND	ug/L	U
Benzyl Alcohol	100-51-6	1	2.0	ND	ug/L	U
1,2-Dichlorobenzene	95-50-1	1	1.0	ND	ug/L	U
2-Methylphenol	95-48-7	1	1.0	ND	ug/L	U
2,2'-Oxybis(1-chloropropane)	108-60-1	1	1.0	ND	ug/L	U
4-Methylphenol	106-44-5	1	2.0	ND	ug/L	U
N-Nitroso-di-n-Propylamine	621-64-7	1	1.0	ND	ug/L	U
Hexachloroethane	67-72-1	1	2.0	ND	ug/L	U
Nitrobenzene	98-95-3	1	1.0	ND	ug/L	U
Isophorone	78-59-1	1	1.0	ND	ug/L	U
2-Nitrophenol	88-75-5	1	3.0	ND	ug/L	U
2,4-Dimethylphenol	105-67-9	1	3.0	ND	ug/L	U
Bis(2-Chloroethoxy)methane	111-91-1	1	1.0	ND	ug/L	U
Benzoic acid	65-85-0	1	10.0	ND	ug/L	U
2,4-Dichlorophenol	120-83-2	1	3.0	ND	ug/L	U
1,2,4-Trichlorobenzene	120-82-1	1	1.0	ND	ug/L	U
Naphthalene	91-20-3	1	1.0	ND	ug/L	U
4-Chloroaniline	106-47-8	1	5.0	ND	ug/L	U
Hexachlorobutadiene	87-68-3	1	3.0	ND	ug/L	U
4-Chloro-3-Methylphenol	59-50-7	1	3.0	ND	ug/L	U
2-Methylnaphthalene	91-57-6	1	1.0	ND	ug/L	U
Hexachlorocyclopentadiene	77-47-4	1	5.0	ND	ug/L	U
2,4,6-Trichlorophenol	88-06-2	1	3.0	ND	ug/L	U
2,4,5-Trichlorophenol	95-95-4	1	5.0	ND	ug/L	U
2-Chloronaphthalene	91-58-7	1	1.0	ND	ug/L	U
2-Nitroaniline	88-74-4	1	3.0	ND	ug/L	U
Dimethylphthalate	131-11-3	1	1.0	ND	ug/L	U
Acenaphthylene	208-96-8	1	1.0	ND	ug/L	U



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LMW-2-0325
25C0281-07 (Water)

Semivolatile Organic Compounds

Method: EPA 8270E

Sampled: 03/13/2025 11:10

Instrument: NT10 Analyst: JZ

Analyzed: 03/26/2025 16:30

Analyte	CAS Number	Dilution	Reporting Limit	Result	Units	Notes
2,6-Dinitrotoluene	606-20-2	1	3.0	ND	ug/L	U
3-Nitroaniline	99-09-2	1	3.0	ND	ug/L	U
Acenaphthene	83-32-9	1	1.0	ND	ug/L	U
2,4-Dinitrophenol	51-28-5	1	10.0	ND	ug/L	U
Dibenzofuran	132-64-9	1	1.0	ND	ug/L	U
4-Nitrophenol	100-02-7	1	5.0	ND	ug/L	U
2,4-Dinitrotoluene	121-14-2	1	3.0	ND	ug/L	U
Fluorene	86-73-7	1	1.0	ND	ug/L	U
Diethyl phthalate	84-66-2	1	1.0	ND	ug/L	U
4-Chlorophenylphenyl ether	7005-72-3	1	1.0	ND	ug/L	U
4-Nitroaniline	100-01-6	1	3.0	ND	ug/L	U
4,6-Dinitro-2-methylphenol	534-52-1	1	10.0	ND	ug/L	U
N-Nitrosodiphenylamine	86-30-6	1	1.0	ND	ug/L	U
4-Bromophenyl phenyl ether	101-55-3	1	1.0	ND	ug/L	U
Hexachlorobenzene	118-74-1	1	1.0	ND	ug/L	U
Pentachlorophenol	87-86-5	1	5.0	ND	ug/L	U
Phenanthrene	85-01-8	1	1.0	ND	ug/L	U
Anthracene	120-12-7	1	1.0	ND	ug/L	U
Carbazole	86-74-8	1	1.0	ND	ug/L	U
Di-n-Butylphthalate	84-74-2	1	1.0	ND	ug/L	U
Fluoranthene	206-44-0	1	1.0	ND	ug/L	U
Pyrene	129-00-0	1	1.0	ND	ug/L	U
Butylbenzylphthalate	85-68-7	1	1.0	ND	ug/L	U
Benzo(a)anthracene	56-55-3	1	1.0	ND	ug/L	U
3,3'-Dichlorobenzidine	91-94-1	1	10.0	ND	ug/L	U
Chrysene	218-01-9	1	1.0	ND	ug/L	U
bis(2-Ethylhexyl)phthalate	117-81-7	1	3.0	ND	ug/L	U
Di-n-Octylphthalate	117-84-0	1	1.0	ND	ug/L	U
Benzofluoranthenes, Total		1	2.0	ND	ug/L	U
Benzo(a)pyrene	50-32-8	1	1.0	ND	ug/L	U
Indeno(1,2,3-cd)pyrene	193-39-5	1	1.0	ND	ug/L	U
Dibenzo(a,h)anthracene	53-70-3	1	1.0	ND	ug/L	U
Benzo(g,h,i)perylene	191-24-2	1	1.0	ND	ug/L	U
1-Methylnaphthalene	90-12-0	1	1.0	ND	ug/L	U
Surrogate: 2-Fluorophenol			33-120 %	43.7	%	



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Project: Landsburg
Project Number: GL9231000007
Project Manager: Gary Zimmerman

Reported:
15-Apr-2025 16:40

LMW-2-0325
25C0281-07 (Water)

Semivolatile Organic Compounds

Method: EPA 8270E

Sampled: 03/13/2025 11:10

Instrument: NT10 Analyst: JZ

Analyzed: 03/26/2025 16:30

Analyte	CAS Number	Recovery	Recovery	Units	Notes
		Limits			
Surrogate: Phenol-d5		38-120 %	39.3	%	
Surrogate: 2-Chlorophenol-d4		41-120 %	49.9	%	
Surrogate: 1,2-Dichlorobenzene-d4		20-120 %	54.3	%	
Surrogate: Nitrobenzene-d5		27-120 %	61.3	%	
Surrogate: 2-Fluorobiphenyl		33-120 %	58.9	%	
Surrogate: 2,4,6-Tribromophenol		52-120 %	60.0	%	
Surrogate: p-Terphenyl-d14		28-120 %	69.8	%	



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Project Manager: Gary Zimmerman

Reported:
15-Apr-2025 16:40

LMW-2-0325
25C0281-07 (Water)

Semivolatile Organic Compounds

Method: EPA 8270E
Instrument: NT14 Analyst: RT

Sampled: 03/13/2025 11:10

Analyzed: 03/28/2025 05:53

Sample Preparation: Preparation Method: EPA 3520C (Liq Liq)
Preparation Batch: BNC0436
Prepared: 03/20/2025

Sample Size: 500 mL

Final Volume: 1 mL

Extract ID: 25C0281-07 J 01

Analyte	CAS Number	Dilution	Detection Limit	Reporting Limit	Result	Units	Notes
1,4-Dioxane	123-91-1	1	0.2	0.4	3.5	ug/L	
Surrogate: 1,4-Dioxane-d8				30-160 %	63.2	%	



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LMW-2-0325

25C0281-07 (Water)

Petroleum Hydrocarbons

Method: NWTPH-HCID

Sampled: 03/13/2025 11:10

Instrument: FID4 Analyst: VD

Analyzed: 03/17/2025 18:36

Sample Preparation:

Preparation Method: EPA 3510C SepF

Extract ID: 25C0281-07 G 01

Preparation Batch: BNC0332

Sample Size: 500 mL

Prepared: 03/14/2025

Final Volume: 1 mL

Analyte	CAS Number	Dilution	Reporting Limit	Result	Units	Notes
Gasoline Range Organics (Tol-C12)	GRO	1	0.25	ND	mg/L	U
Diesel Range Organics (C12-C24)	DRO	1	0.50	ND	mg/L	U
Motor Oil Range Organics (C24-C38)	RRO	1	1.00	ND	mg/L	U
Surrogate: o-Terphenyl			50-150 %	106	%	
Surrogate: n-Triacontane			50-150 %	112	%	



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LMW-2-0325
25C0281-07 (Water)

Chlorinated Pesticides

Method: EPA 8081B
Instrument: ECD6 Analyst: RT

Sampled: 03/13/2025 11:10

Analyzed: 04/11/2025 16:42

Sample Preparation: Preparation Method: EPA 3510C SepF
Preparation Batch: BNC0429
Prepared: 03/18/2025

Sample Size: 500 mL
Final Volume: 5 mL

Extract ID: 25C0281-07 I 01

Sample Cleanup: Cleanup Method: Silica Gel
Cleanup Batch: CNC0126
Cleaned: 27-Mar-2025

Initial Volume: 5 uL
Final Volume: 5 uL

Extract ID: 25C0281-07 I 01

Analyte	CAS Number	Dilution	Reporting Limit	Result	Units	Notes
alpha-BHC	319-84-6	1	0.025	ND	ug/L	U
beta-BHC	319-85-7	1	0.025	ND	ug/L	U
gamma-BHC (Lindane)	58-89-9	1	0.025	ND	ug/L	U
delta-BHC	319-86-8	1	0.025	ND	ug/L	U
Heptachlor	76-44-8	1	0.025	ND	ug/L	U
Aldrin	309-00-2	1	0.025	ND	ug/L	U
Heptachlor Epoxide	1024-57-3	1	0.050	ND	ug/L	U
trans-Chlordane (beta-Chlordane)	5103-74-2	1	0.025	ND	ug/L	U
cis-Chlordane (alpha-chlordane)	5103-71-9	1	0.025	ND	ug/L	U
Endosulfan I	959-98-8	1	0.025	ND	ug/L	U
4,4'-DDE	72-55-9	1	0.050	ND	ug/L	U
Dieldrin	60-57-1	1	0.050	ND	ug/L	U
Endrin	72-20-8	1	0.050	ND	ug/L	U
Endosulfan II	33213-65-9	1	0.050	ND	ug/L	U
4,4'-DDD	72-54-8	1	0.050	ND	ug/L	U
Endrin Aldehyde	7421-93-4	1	0.050	ND	ug/L	U
4,4'-DDT	50-29-3	1	0.050	ND	ug/L	U
Endosulfan Sulfate	1031-07-8	1	0.050	ND	ug/L	U
Endrin Ketone	53494-70-5	1	0.050	ND	ug/L	U
Methoxychlor	72-43-5	1	0.250	ND	ug/L	U
Toxaphene	8001-35-2	1	1.25	ND	ug/L	U
Surrogate: Decachlorobiphenyl			11-144 %	79.1	%	
Surrogate: Decachlorobiphenyl [2C]			11-144 %	81.1	%	
Surrogate: Tetrachlorometaxylene			30-120 %	51.3	%	
Surrogate: Tetrachlorometaxylene [2C]			30-120 %	57.2	%	



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Reported:

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LMW-2-0325

25C0281-07 (Water)

Aroclor PCB

Method: EPA 8082A

Sampled: 03/13/2025 11:10

Instrument: ECD7 Analyst: NRB

Analyzed: 04/01/2025 15:18

Sample Preparation:	Preparation Method: EPA 3510C SepF Preparation Batch: BNC0407 Prepared: 03/17/2025	Sample Size: 1000 mL Final Volume: 0.5 mL	Extract ID: 25C0281-07 A 01
Sample Cleanup:	Cleanup Method: Sulfuric Acid Cleanup Batch: CNC0139 Cleaned: 31-Mar-2025	Initial Volume: 0.5 uL Final Volume: 0.5 uL	Extract ID: 25C0281-07 A 01
Sample Cleanup:	Cleanup Method: Sulfur Cleanup Batch: CNC0140 Cleaned: 31-Mar-2025	Initial Volume: 0.5 uL Final Volume: 0.5 uL	Extract ID: 25C0281-07 A 01

Analyte	CAS Number	Dilution	Reporting Limit	Result	Units	Notes
Aroclor 1016	12674-11-2	1	0.010	ND	ug/L	U
Aroclor 1221	11104-28-2	1	0.010	ND	ug/L	U
Aroclor 1232	11141-16-5	1	0.010	ND	ug/L	U
Aroclor 1242	53469-21-9	1	0.010	ND	ug/L	U
Aroclor 1248	12672-29-6	1	0.010	ND	ug/L	U
Aroclor 1254	11097-69-1	1	0.010	ND	ug/L	U
Aroclor 1260	11096-82-5	1	0.010	ND	ug/L	U
Surrogate: Decachlorobiphenyl			29-120 %	67.4	%	
Surrogate: Tetrachlorometaxylene			32-120 %	85.9	%	
Surrogate: Decachlorobiphenyl [2C]			29-120 %	71.8	%	
Surrogate: Tetrachlorometaxylene [2C]			32-120 %	63.6	%	



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Reported:
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LMW-2-0325
25C0281-07 (Water)

Metals and Metallic Compounds

Method: EPA 200.8
Instrument: ICPMS2 Analyst: HAL

Sampled: 03/13/2025 11:10

Analyzed: 03/21/2025 06:33

Sample Preparation: Preparation Method: REN - EPA 3010A M
Preparation Batch: BNC0385 Sample Size: 25 mL
Prepared: 03/15/2025 Final Volume: 25 mL

Extract ID: 25C0281-07 M 01

Analyte	CAS Number	Dilution	Detection	Reporting	Result	Units	Notes
			Limit	Limit			
Antimony	7440-36-0	1	0.150	3.00	ND	ug/L	U
Arsenic UCT	7440-38-2	1	0.100	3.00	ND	ug/L	U
Lead	7439-92-1	1	0.100	10.0	ND	ug/L	U
Selenium UCT	7782-49-2	1	0.500	25.0	ND	ug/L	U
Thallium	7440-28-0	1	0.100	2.00	ND	ug/L	U



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Reported:
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LMW-2-0325
25C0281-07 (Water)

Metals and Metallic Compounds

Method: EPA 6010D
Instrument: ICP3 Analyst: SH

Sampled: 03/13/2025 11:10

Analyzed: 03/28/2025 18:04

Sample Preparation: Preparation Method: TWC EPA 3010A
Preparation Batch: BNC0390
Prepared: 03/17/2025

Sample Size: 25 mL
Final Volume: 25 mL

Extract ID: 25C0281-07 M 02

Analyte	CAS Number	Dilution	Detection Limit	Reporting Limit	Result	Units	Notes
Aluminum	7429-90-5	1	0.0210	0.0700	ND	mg/L	U
Barium	7440-39-3	1	0.0007	0.0060	0.416	mg/L	
Beryllium	7440-41-7	1	0.0002	0.0010	ND	mg/L	U
Cadmium	7440-43-9	1	0.0005	0.0020	ND	mg/L	U
Calcium	7440-70-2	1	0.0300	0.0500	116	mg/L	
Chromium	7440-47-3	1	0.0020	0.0090	ND	mg/L	U
Cobalt	7440-48-4	1	0.0025	0.0050	ND	mg/L	U
Copper	7440-50-8	1	0.0030	0.0050	ND	mg/L	U
Iron	7439-89-6	1	0.0540	0.100	0.368	mg/L	
Magnesium	7439-95-4	1	0.0250	0.0500	68.6	mg/L	
Manganese	7439-96-5	1	0.0020	0.0040	0.244	mg/L	
Nickel	7440-02-0	1	0.0050	0.0100	ND	mg/L	U
Potassium	7440-09-7	1	0.250	0.500	3.54	mg/L	
Silver	7440-22-4	1	0.0015	0.0030	ND	mg/L	U
Sodium	7440-23-5	1	0.250	0.500	20.6	mg/L	
Vanadium	7440-62-2	1	0.0015	0.0030	ND	mg/L	U
Zinc	7440-66-6	1	0.0150	0.0300	ND	mg/L	U



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LMW-2-0325
25C0281-07 (Water)

Metals and Metallic Compounds

Method: EPA 7470A	Sampled: 03/13/2025 11:10
Instrument: HYDRA Analyst: AMS	Analyzed: 03/19/2025 13:28
Sample Preparation:	Preparation Method: TWM EPA 7470A
	Preparation Batch: BNC0392
	Prepared: 03/15/2025
	Sample Size: 20 mL
	Final Volume: 20 mL
	Extract ID: 25C0281-07 M

Analyte	CAS Number	Dilution	Reporting Limit	Result	Units	Notes
Mercury	7439-97-6	1	0.00100	ND	mg/L	U



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Reported:
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LMW-2-0325
25C0281-07RE1 (Water)

Metals and Metallic Compounds

Method: EPA 200.8

Sampled: 03/13/2025 11:10

Instrument: ICPMS2 Analyst: HAL

Analyzed: 03/25/2025 23:35

Sample Preparation:

Preparation Method: REN - EPA 3010A M

Extract ID: 25C0281-07RE1 M 03

Preparation Batch: BNC0572

Sample Size: 25 mL

Prepared: 03/22/2025

Final Volume: 25 mL

Analyte	CAS Number	Dilution	Detection Limit	Reporting Limit	Result	Units	Notes
Antimony	7440-36-0	1	0.150	3.00	ND	ug/L	U



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Reported:
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LMW-2-0325-D
25C0281-08 (Water)

Volatile Organic Compounds

Method: EPA 8260D
Instrument: NT20 Analyst: FL

Sampled: 03/13/2025 11:20

Analyzed: 03/14/2025 17:20

Sample Preparation: Preparation Method: EPA 5030C (Purge and Trap)
Preparation Batch: BNC0352 Sample Size: 10 mL
Prepared: 03/14/2025 Final Volume: 10 mL

Extract ID: 25C0281-08 N

Analyte	CAS Number	Dilution	Reporting Limit	Result	Units	Notes
Chloromethane	74-87-3	1	0.50	ND	ug/L	U
Vinyl Chloride	75-01-4	1	0.10	ND	ug/L	U
Bromomethane	74-83-9	1	1.00	ND	ug/L	U
Chloroethane	75-00-3	1	0.20	ND	ug/L	U
Trichlorofluoromethane	75-69-4	1	0.20	ND	ug/L	U
Acrolein	107-02-8	1	5.00	ND	ug/L	U
1,1,2-Trichloro-1,2,2-Trifluoroethane	76-13-1	1	0.20	ND	ug/L	U
Acetone	67-64-1	1	5.00	ND	ug/L	U
1,1-Dichloroethene	75-35-4	1	0.20	ND	ug/L	U
Iodomethane	74-88-4	1	1.00	ND	ug/L	U
Methylene Chloride	75-09-2	1	1.00	ND	ug/L	U
Acrylonitrile	107-13-1	1	1.00	ND	ug/L	U
Carbon Disulfide	75-15-0	1	0.20	ND	ug/L	U
trans-1,2-Dichloroethene	156-60-5	1	0.20	ND	ug/L	U
Vinyl Acetate	108-05-4	1	0.20	ND	ug/L	U
1,1-Dichloroethane	75-34-3	1	0.20	ND	ug/L	U
2-Butanone	78-93-3	1	5.00	ND	ug/L	U
2,2-Dichloropropane	594-20-7	1	0.20	ND	ug/L	U
cis-1,2-Dichloroethene	156-59-2	1	0.20	ND	ug/L	U
Chloroform	67-66-3	1	0.20	ND	ug/L	U
Bromochloromethane	74-97-5	1	0.20	ND	ug/L	U
1,1,1-Trichloroethane	71-55-6	1	0.20	ND	ug/L	U
1,1-Dichloropropene	563-58-6	1	0.10	ND	ug/L	U
Carbon tetrachloride	56-23-5	1	0.20	ND	ug/L	U
1,2-Dichloroethane	107-06-2	1	0.20	ND	ug/L	U
Benzene	71-43-2	1	0.20	ND	ug/L	U
Trichloroethene	79-01-6	1	0.20	ND	ug/L	U
1,2-Dichloropropane	78-87-5	1	0.20	ND	ug/L	U
Bromodichloromethane	75-27-4	1	0.20	ND	ug/L	U
Dibromomethane	74-95-3	1	0.20	ND	ug/L	U
2-Chloroethyl vinyl ether	110-75-8	1	1.00	ND	ug/L	U
4-Methyl-2-Pentanone	108-10-1	1	2.50	ND	ug/L	U



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LMW-2-0325-D
25C0281-08 (Water)

Volatile Organic Compounds

Method: EPA 8260D

Sampled: 03/13/2025 11:20

Instrument: NT20 Analyst: FL

Analyzed: 03/14/2025 17:20

Analyte	CAS Number	Dilution	Reporting Limit	Result	Units	Notes
cis-1,3-Dichloropropene	10061-01-5	1	0.20	ND	ug/L	U
Toluene	108-88-3	1	0.20	ND	ug/L	U
trans-1,3-Dichloropropene	10061-02-6	1	0.20	ND	ug/L	U
2-Hexanone	591-78-6	1	5.00	ND	ug/L	U
1,1,2-Trichloroethane	79-00-5	1	0.20	ND	ug/L	U
1,3-Dichloropropane	142-28-9	1	0.10	ND	ug/L	U
Tetrachloroethene	127-18-4	1	0.20	ND	ug/L	U
Dibromochloromethane	124-48-1	1	0.20	ND	ug/L	U
1,2-Dibromoethane	106-93-4	1	0.10	ND	ug/L	U
Chlorobenzene	108-90-7	1	0.20	ND	ug/L	U
Ethylbenzene	100-41-4	1	0.20	ND	ug/L	U
1,1,1,2-Tetrachloroethane	630-20-6	1	0.20	ND	ug/L	U
m,p-Xylene	179601-23-1	1	0.40	ND	ug/L	U
o-Xylene	95-47-6	1	0.20	ND	ug/L	U
Xylenes, total	1330-20-7	1	0.60	ND	ug/L	U
Styrene	100-42-5	1	0.20	ND	ug/L	U
Bromoform	75-25-2	1	0.20	ND	ug/L	U
1,1,2,2-Tetrachloroethane	79-34-5	1	0.20	ND	ug/L	U
1,2,3-Trichloropropane	96-18-4	1	0.25	ND	ug/L	U
trans-1,4-Dichloro 2-Butene	110-57-6	1	1.00	ND	ug/L	U
n-Propylbenzene	103-65-1	1	0.20	ND	ug/L	U
Bromobenzene	108-86-1	1	0.20	ND	ug/L	U
Isopropyl Benzene	98-82-8	1	0.20	ND	ug/L	U
2-Chlorotoluene	95-49-8	1	0.10	ND	ug/L	U
4-Chlorotoluene	106-43-4	1	0.20	ND	ug/L	U
t-Butylbenzene	98-06-6	1	0.20	ND	ug/L	U
1,3,5-Trimethylbenzene	108-67-8	1	0.20	ND	ug/L	U
1,2,4-Trimethylbenzene	95-63-6	1	0.20	ND	ug/L	U
s-Butylbenzene	135-98-8	1	0.20	ND	ug/L	U
4-Isopropyl Toluene	99-87-6	1	0.20	ND	ug/L	U
1,3-Dichlorobenzene	541-73-1	1	0.20	ND	ug/L	U
1,4-Dichlorobenzene	106-46-7	1	0.20	ND	ug/L	U
n-Butylbenzene	104-51-8	1	0.20	ND	ug/L	U
1,2-Dichlorobenzene	95-50-1	1	0.20	ND	ug/L	U
1,2-Dibromo-3-chloropropane	96-12-8	1	0.50	ND	ug/L	U



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LMW-2-0325-D
25C0281-08 (Water)

Volatile Organic Compounds

Method: EPA 8260D

Sampled: 03/13/2025 11:20

Instrument: NT20 Analyst: FL

Analyzed: 03/14/2025 17:20

Analyte	CAS Number	Dilution	Reporting Limit	Result	Units	Notes
1,2,4-Trichlorobenzene	120-82-1	1	0.50	ND	ug/L	U
Hexachloro-1,3-Butadiene	87-68-3	1	0.50	ND	ug/L	U
Naphthalene	91-20-3	1	0.50	ND	ug/L	U
1,2,3-Trichlorobenzene	87-61-6	1	0.50	ND	ug/L	U
Dichlorodifluoromethane	75-71-8	1	0.20	ND	ug/L	U
Surrogate: 1,2-Dichloroethane-d4			80-129 %	109	%	
Surrogate: Toluene-d8			80-120 %	98.9	%	
Surrogate: 4-Bromofluorobenzene			80-120 %	92.2	%	
Surrogate: 1,2-Dichlorobenzene-d4			80-120 %	105	%	



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LMW-2-0325-D
25C0281-08 (Water)

Semivolatile Organic Compounds

Method: EPA 8270E
Instrument: NT10 Analyst: JZ

Sampled: 03/13/2025 11:20

Analyzed: 03/26/2025 21:16

Sample Preparation: Preparation Method: EPA 3520C (Liq Liq)
Preparation Batch: BNC0438
Prepared: 03/20/2025

Sample Size: 500 mL

Final Volume: 0.5 mL

Extract ID: 25C0281-08 K 01

Analyte	CAS Number	Dilution	Reporting Limit	Result	Units	Notes
Phenol	108-95-2	1	1.0	ND	ug/L	U
bis(2-chloroethyl) ether	111-44-4	1	1.0	ND	ug/L	U
2-Chlorophenol	95-57-8	1	1.0	ND	ug/L	U
1,3-Dichlorobenzene	541-73-1	1	1.0	ND	ug/L	U
1,4-Dichlorobenzene	106-46-7	1	1.0	ND	ug/L	U
Benzyl Alcohol	100-51-6	1	2.0	ND	ug/L	U
1,2-Dichlorobenzene	95-50-1	1	1.0	ND	ug/L	U
2-Methylphenol	95-48-7	1	1.0	ND	ug/L	U
2,2'-Oxybis(1-chloropropane)	108-60-1	1	1.0	ND	ug/L	U
4-Methylphenol	106-44-5	1	2.0	ND	ug/L	U
N-Nitroso-di-n-Propylamine	621-64-7	1	1.0	ND	ug/L	U
Hexachloroethane	67-72-1	1	2.0	ND	ug/L	U
Nitrobenzene	98-95-3	1	1.0	ND	ug/L	U
Isophorone	78-59-1	1	1.0	ND	ug/L	U
2-Nitrophenol	88-75-5	1	3.0	ND	ug/L	U
2,4-Dimethylphenol	105-67-9	1	3.0	ND	ug/L	U
Bis(2-Chloroethoxy)methane	111-91-1	1	1.0	ND	ug/L	U
Benzoic acid	65-85-0	1	10.0	ND	ug/L	U
2,4-Dichlorophenol	120-83-2	1	3.0	ND	ug/L	U
1,2,4-Trichlorobenzene	120-82-1	1	1.0	ND	ug/L	U
Naphthalene	91-20-3	1	1.0	ND	ug/L	U
4-Chloroaniline	106-47-8	1	5.0	ND	ug/L	U
Hexachlorobutadiene	87-68-3	1	3.0	ND	ug/L	U
4-Chloro-3-Methylphenol	59-50-7	1	3.0	ND	ug/L	U
2-Methylnaphthalene	91-57-6	1	1.0	ND	ug/L	U
Hexachlorocyclopentadiene	77-47-4	1	5.0	ND	ug/L	U
2,4,6-Trichlorophenol	88-06-2	1	3.0	ND	ug/L	U
2,4,5-Trichlorophenol	95-95-4	1	5.0	ND	ug/L	U
2-Chloronaphthalene	91-58-7	1	1.0	ND	ug/L	U
2-Nitroaniline	88-74-4	1	3.0	ND	ug/L	U
Dimethylphthalate	131-11-3	1	1.0	ND	ug/L	U
Acenaphthylene	208-96-8	1	1.0	ND	ug/L	U



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Project: Landsburg
Project Number: GL9231000007
Project Manager: Gary Zimmerman

Reported:
15-Apr-2025 16:40

LMW-2-0325-D
25C0281-08 (Water)

Semivolatile Organic Compounds

Method: EPA 8270E

Sampled: 03/13/2025 11:20

Instrument: NT10 Analyst: JZ

Analyzed: 03/26/2025 21:16

Analyte	CAS Number	Dilution	Reporting Limit	Result	Units	Notes
2,6-Dinitrotoluene	606-20-2	1	3.0	ND	ug/L	U
3-Nitroaniline	99-09-2	1	3.0	ND	ug/L	U
Acenaphthene	83-32-9	1	1.0	ND	ug/L	U
2,4-Dinitrophenol	51-28-5	1	10.0	ND	ug/L	U
Dibenzofuran	132-64-9	1	1.0	ND	ug/L	U
4-Nitrophenol	100-02-7	1	5.0	ND	ug/L	U
2,4-Dinitrotoluene	121-14-2	1	3.0	ND	ug/L	U
Fluorene	86-73-7	1	1.0	ND	ug/L	U
Diethyl phthalate	84-66-2	1	1.0	ND	ug/L	U
4-Chlorophenylphenyl ether	7005-72-3	1	1.0	ND	ug/L	U
4-Nitroaniline	100-01-6	1	3.0	ND	ug/L	U
4,6-Dinitro-2-methylphenol	534-52-1	1	10.0	ND	ug/L	U
N-Nitrosodiphenylamine	86-30-6	1	1.0	ND	ug/L	U
4-Bromophenyl phenyl ether	101-55-3	1	1.0	ND	ug/L	U
Hexachlorobenzene	118-74-1	1	1.0	ND	ug/L	U
Pentachlorophenol	87-86-5	1	5.0	ND	ug/L	U
Phenanthrene	85-01-8	1	1.0	ND	ug/L	U
Anthracene	120-12-7	1	1.0	ND	ug/L	U
Carbazole	86-74-8	1	1.0	ND	ug/L	U
Di-n-Butylphthalate	84-74-2	1	1.0	ND	ug/L	U
Fluoranthene	206-44-0	1	1.0	ND	ug/L	U
Pyrene	129-00-0	1	1.0	ND	ug/L	U
Butylbenzylphthalate	85-68-7	1	1.0	ND	ug/L	U
Benzo(a)anthracene	56-55-3	1	1.0	ND	ug/L	U
3,3'-Dichlorobenzidine	91-94-1	1	10.0	ND	ug/L	U
Chrysene	218-01-9	1	1.0	ND	ug/L	U
bis(2-Ethylhexyl)phthalate	117-81-7	1	3.0	ND	ug/L	U
Di-n-Octylphthalate	117-84-0	1	1.0	ND	ug/L	U
Benzofluoranthenes, Total		1	2.0	ND	ug/L	U
Benzo(a)pyrene	50-32-8	1	1.0	ND	ug/L	U
Indeno(1,2,3-cd)pyrene	193-39-5	1	1.0	ND	ug/L	U
Dibenzo(a,h)anthracene	53-70-3	1	1.0	ND	ug/L	U
Benzo(g,h,i)perylene	191-24-2	1	1.0	ND	ug/L	U
1-Methylnaphthalene	90-12-0	1	1.0	ND	ug/L	U
Surrogate: 2-Fluorophenol			33-120 %	48.9	%	



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LMW-2-0325-D
25C0281-08 (Water)

Semivolatile Organic Compounds

Method: EPA 8270E

Sampled: 03/13/2025 11:20

Instrument: NT10 Analyst: JZ

Analyzed: 03/26/2025 21:16

Analyte	CAS Number	Recovery	Recovery	Units	Notes
		Limits			
Surrogate: Phenol-d5		38-120 %	35.6	%	*
Surrogate: 2-Chlorophenol-d4		41-120 %	52.3	%	
Surrogate: 1,2-Dichlorobenzene-d4		20-120 %	57.1	%	
Surrogate: Nitrobenzene-d5		27-120 %	61.5	%	
Surrogate: 2-Fluorobiphenyl		33-120 %	61.4	%	
Surrogate: 2,4,6-Tribromophenol		52-120 %	60.2	%	
Surrogate: p-Terphenyl-d14		28-120 %	74.1	%	



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Reported:
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LMW-2-0325-D
25C0281-08 (Water)

Semivolatile Organic Compounds

Method: EPA 8270E
Instrument: NT14 Analyst: RT

Sampled: 03/13/2025 11:20

Analyzed: 03/28/2025 06:09

Sample Preparation: Preparation Method: EPA 3520C (Liq Liq)
Preparation Batch: BNC0436
Prepared: 03/20/2025

Sample Size: 500 mL

Final Volume: 1 mL

Extract ID: 25C0281-08 J 01

Analyte	CAS Number	Dilution	Detection Limit	Reporting Limit	Result	Units	Notes
1,4-Dioxane	123-91-1	1	0.2	0.4	3.4	ug/L	
Surrogate: 1,4-Dioxane-d8				30-160 %	58.2	%	



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Reported:
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LMW-2-0325-D
25C0281-08 (Water)

Petroleum Hydrocarbons

Method: NWTPH-HCID
Instrument: FID4 Analyst: VD

Sampled: 03/13/2025 11:20

Analyzed: 03/17/2025 18:56

Sample Preparation: Preparation Method: EPA 3510C SepF
Preparation Batch: BNC0332
Prepared: 03/14/2025

Sample Size: 500 mL
Final Volume: 1 mL

Extract ID: 25C0281-08 G 01

Analyte	CAS Number	Dilution	Reporting Limit	Result	Units	Notes
Gasoline Range Organics (Tol-C12)	GRO	1	0.25	ND	mg/L	U
Diesel Range Organics (C12-C24)	DRO	1	0.50	ND	mg/L	U
Motor Oil Range Organics (C24-C38)	RRO	1	1.00	ND	mg/L	U
Surrogate: o-Terphenyl			50-150 %	89.3	%	
Surrogate: n-Triacontane			50-150 %	91.6	%	



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LMW-2-0325-D
25C0281-08 (Water)

Chlorinated Pesticides

Method: EPA 8081B
Instrument: ECD6 Analyst: RT

Sampled: 03/13/2025 11:20

Analyzed: 04/11/2025 17:00

Sample Preparation: Preparation Method: EPA 3510C SepF
Preparation Batch: BNC0429
Prepared: 03/18/2025

Sample Size: 500 mL
Final Volume: 5 mL

Extract ID: 25C0281-08 I 01

Sample Cleanup: Cleanup Method: Silica Gel
Cleanup Batch: CNC0126
Cleaned: 27-Mar-2025

Initial Volume: 5 uL
Final Volume: 5 uL

Extract ID: 25C0281-08 I 01

Analyte	CAS Number	Dilution	Reporting Limit	Result	Units	Notes
alpha-BHC	319-84-6	1	0.025	ND	ug/L	U
beta-BHC	319-85-7	1	0.025	ND	ug/L	U
gamma-BHC (Lindane)	58-89-9	1	0.025	ND	ug/L	U
delta-BHC	319-86-8	1	0.025	ND	ug/L	U
Heptachlor	76-44-8	1	0.025	ND	ug/L	U
Aldrin	309-00-2	1	0.025	ND	ug/L	U
Heptachlor Epoxide	1024-57-3	1	0.050	ND	ug/L	U
trans-Chlordane (beta-Chlordane)	5103-74-2	1	0.025	ND	ug/L	U
cis-Chlordane (alpha-chlordane)	5103-71-9	1	0.025	ND	ug/L	U
Endosulfan I	959-98-8	1	0.025	ND	ug/L	U
4,4'-DDE	72-55-9	1	0.050	ND	ug/L	U
Dieldrin	60-57-1	1	0.050	ND	ug/L	U
Endrin	72-20-8	1	0.050	ND	ug/L	U
Endosulfan II	33213-65-9	1	0.050	ND	ug/L	U
4,4'-DDD	72-54-8	1	0.050	ND	ug/L	U
Endrin Aldehyde	7421-93-4	1	0.050	ND	ug/L	U
4,4'-DDT	50-29-3	1	0.050	ND	ug/L	U
Endosulfan Sulfate	1031-07-8	1	0.050	ND	ug/L	U
Endrin Ketone	53494-70-5	1	0.050	ND	ug/L	U
Methoxychlor	72-43-5	1	0.250	ND	ug/L	U
Toxaphene	8001-35-2	1	1.25	ND	ug/L	U
Surrogate: Decachlorobiphenyl			11-144 %	80.2	%	
Surrogate: Decachlorobiphenyl [2C]			11-144 %	83.1	%	
Surrogate: Tetrachlorometaxylene			30-120 %	50.5	%	
Surrogate: Tetrachlorometaxylene [2C]			30-120 %	57.7	%	



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Reported:
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LMW-2-0325-D
25C0281-08 (Water)

Aroclor PCB

Method: EPA 8082A			Sampled: 03/13/2025 11:20
Instrument: ECD7 Analyst: NRB			Analyzed: 04/01/2025 15:38
Sample Preparation:	Preparation Method: EPA 3510C SepF		Extract ID: 25C0281-08 A 01
	Preparation Batch: BNC0407		
	Sample Size: 1000 mL		
	Prepared: 03/17/2025		Final Volume: 0.5 mL
Sample Cleanup:	Cleanup Method: Sulfuric Acid		Extract ID:25C0281-08 A 01
	Cleanup Batch: CNC0139		
	Initial Volume: 0.5 uL		
	Cleaned: 31-Mar-2025		Final Volume: 0.5 uL
Sample Cleanup:	Cleanup Method: Sulfur		Extract ID:25C0281-08 A 01
	Cleanup Batch: CNC0140		
	Initial Volume: 0.5 uL		
	Cleaned: 31-Mar-2025		Final Volume: 0.5 uL

Analyte	CAS Number	Dilution	Reporting Limit	Result	Units	Notes
Aroclor 1016	12674-11-2	1	0.010	ND	ug/L	U
Aroclor 1221	11104-28-2	1	0.010	ND	ug/L	U
Aroclor 1232	11141-16-5	1	0.010	ND	ug/L	U
Aroclor 1242	53469-21-9	1	0.010	ND	ug/L	U
Aroclor 1248	12672-29-6	1	0.010	ND	ug/L	U
Aroclor 1254	11097-69-1	1	0.010	ND	ug/L	U
Aroclor 1260	11096-82-5	1	0.010	ND	ug/L	U
Surrogate: Decachlorobiphenyl			29-120 %	64.0	%	
Surrogate: Tetrachlorometaxylene			32-120 %	90.1	%	
Surrogate: Decachlorobiphenyl [2C]			29-120 %	70.4	%	
Surrogate: Tetrachlorometaxylene [2C]			32-120 %	66.1	%	



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Reported:
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LMW-2-0325-D
25C0281-08 (Water)

Metals and Metallic Compounds

Method: EPA 200.8
Instrument: ICPMS2 Analyst: HAL

Sampled: 03/13/2025 11:20

Analyzed: 03/21/2025 06:38

Sample Preparation: Preparation Method: REN - EPA 3010A M
Preparation Batch: BNC0385
Prepared: 03/15/2025

Sample Size: 25 mL
Final Volume: 25 mL

Extract ID: 25C0281-08 M 01

Analyte	CAS Number	Dilution	Detection Limit	Reporting Limit	Result	Units	Notes
Antimony	7440-36-0	1	0.150	3.00	ND	ug/L	U
Arsenic UCT	7440-38-2	1	0.100	3.00	ND	ug/L	U
Lead	7439-92-1	1	0.100	10.0	ND	ug/L	U
Selenium UCT	7782-49-2	1	0.500	25.0	ND	ug/L	U
Thallium	7440-28-0	1	0.100	2.00	ND	ug/L	U



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Reported:
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LMW-2-0325-D
25C0281-08 (Water)

Metals and Metallic Compounds

Method: EPA 6010D
Instrument: ICP3 Analyst: SH

Sampled: 03/13/2025 11:20

Analyzed: 03/28/2025 18:07

Sample Preparation: Preparation Method: TWC EPA 3010A
Preparation Batch: BNC0390
Prepared: 03/17/2025

Sample Size: 25 mL
Final Volume: 25 mL

Extract ID: 25C0281-08 M 02

Analyte	CAS Number	Dilution	Detection Limit	Reporting Limit	Result	Units	Notes
Aluminum	7429-90-5	1	0.0210	0.0700	ND	mg/L	U
Barium	7440-39-3	1	0.0007	0.0060	0.410	mg/L	
Beryllium	7440-41-7	1	0.0002	0.0010	ND	mg/L	U
Cadmium	7440-43-9	1	0.0005	0.0020	ND	mg/L	U
Calcium	7440-70-2	1	0.0300	0.0500	114	mg/L	
Chromium	7440-47-3	1	0.0020	0.0090	ND	mg/L	U
Cobalt	7440-48-4	1	0.0025	0.0050	ND	mg/L	U
Copper	7440-50-8	1	0.0030	0.0050	ND	mg/L	U
Iron	7439-89-6	1	0.0540	0.100	0.355	mg/L	
Magnesium	7439-95-4	1	0.0250	0.0500	67.6	mg/L	
Manganese	7439-96-5	1	0.0020	0.0040	0.241	mg/L	
Nickel	7440-02-0	1	0.0050	0.0100	ND	mg/L	U
Potassium	7440-09-7	1	0.250	0.500	3.51	mg/L	
Silver	7440-22-4	1	0.0015	0.0030	ND	mg/L	U
Sodium	7440-23-5	1	0.250	0.500	20.3	mg/L	
Vanadium	7440-62-2	1	0.0015	0.0030	ND	mg/L	U
Zinc	7440-66-6	1	0.0150	0.0300	ND	mg/L	U



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LMW-2-0325-D
25C0281-08 (Water)

Metals and Metallic Compounds

Method: EPA 7470A	Sampled: 03/13/2025 11:20
Instrument: HYDRA Analyst: AMS	Analyzed: 03/19/2025 13:31
Sample Preparation:	Preparation Method: TWM EPA 7470A
	Preparation Batch: BNC0392
	Prepared: 03/15/2025
	Sample Size: 20 mL
	Final Volume: 20 mL
	Extract ID: 25C0281-08 M

Analyte	CAS Number	Dilution	Reporting Limit	Result	Units	Notes
Mercury	7439-97-6	1	0.00100	ND	mg/L	U



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LMW-2-0325-D
25C0281-08RE1 (Water)

Metals and Metallic Compounds

Method: EPA 200.8

Sampled: 03/13/2025 11:20

Instrument: ICPMS2 Analyst: HAL

Analyzed: 03/25/2025 23:40

Sample Preparation:

Preparation Method: REN - EPA 3010A M

Extract ID: 25C0281-08RE1 M 03

Preparation Batch: BNC0572

Sample Size: 25 mL

Prepared: 03/22/2025

Final Volume: 25 mL

Analyte	CAS Number	Dilution	Detection Limit	Reporting Limit	Result	Units	Notes
Antimony	7440-36-0	1	0.150	3.00	ND	ug/L	U



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Reported:
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Trip Blank
25C0281-09 (Water)

Volatile Organic Compounds

Method: EPA 8260D
Instrument: NT20 Analyst: FL

Sampled: 03/12/2025 09:10

Analyzed: 03/14/2025 13:52

Sample Preparation: Preparation Method: EPA 5030C (Purge and Trap)
Preparation Batch: BNC0352 Sample Size: 10 mL
Prepared: 03/14/2025 Final Volume: 10 mL

Extract ID: 25C0281-09 C

Analyte	CAS Number	Dilution	Reporting Limit	Result	Units	Notes
Chloromethane	74-87-3	1	0.50	ND	ug/L	U
Vinyl Chloride	75-01-4	1	0.10	ND	ug/L	U
Bromomethane	74-83-9	1	1.00	ND	ug/L	U
Chloroethane	75-00-3	1	0.20	ND	ug/L	U
Trichlorofluoromethane	75-69-4	1	0.20	ND	ug/L	U
Acrolein	107-02-8	1	5.00	ND	ug/L	U
1,1,2-Trichloro-1,2,2-Trifluoroethane	76-13-1	1	0.20	ND	ug/L	U
Acetone	67-64-1	1	5.00	7.13	ug/L	
1,1-Dichloroethene	75-35-4	1	0.20	ND	ug/L	U
Iodomethane	74-88-4	1	1.00	ND	ug/L	U
Methylene Chloride	75-09-2	1	1.00	ND	ug/L	U
Acrylonitrile	107-13-1	1	1.00	ND	ug/L	U
Carbon Disulfide	75-15-0	1	0.20	ND	ug/L	U
trans-1,2-Dichloroethene	156-60-5	1	0.20	ND	ug/L	U
Vinyl Acetate	108-05-4	1	0.20	ND	ug/L	U
1,1-Dichloroethane	75-34-3	1	0.20	ND	ug/L	U
2-Butanone	78-93-3	1	5.00	ND	ug/L	U
2,2-Dichloropropane	594-20-7	1	0.20	ND	ug/L	U
cis-1,2-Dichloroethene	156-59-2	1	0.20	ND	ug/L	U
Chloroform	67-66-3	1	0.20	ND	ug/L	U
Bromochloromethane	74-97-5	1	0.20	ND	ug/L	U
1,1,1-Trichloroethane	71-55-6	1	0.20	ND	ug/L	U
1,1-Dichloropropene	563-58-6	1	0.10	ND	ug/L	U
Carbon tetrachloride	56-23-5	1	0.20	ND	ug/L	U
1,2-Dichloroethane	107-06-2	1	0.20	ND	ug/L	U
Benzene	71-43-2	1	0.20	ND	ug/L	U
Trichloroethene	79-01-6	1	0.20	ND	ug/L	U
1,2-Dichloropropane	78-87-5	1	0.20	ND	ug/L	U
Bromodichloromethane	75-27-4	1	0.20	ND	ug/L	U
Dibromomethane	74-95-3	1	0.20	ND	ug/L	U
2-Chloroethyl vinyl ether	110-75-8	1	1.00	ND	ug/L	U
4-Methyl-2-Pentanone	108-10-1	1	2.50	ND	ug/L	U



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Trip Blank
25C0281-09 (Water)

Volatile Organic Compounds

Method: EPA 8260D

Sampled: 03/12/2025 09:10

Instrument: NT20 Analyst: FL

Analyzed: 03/14/2025 13:52

Analyte	CAS Number	Dilution	Reporting Limit	Result	Units	Notes
cis-1,3-Dichloropropene	10061-01-5	1	0.20	ND	ug/L	U
Toluene	108-88-3	1	0.20	ND	ug/L	U
trans-1,3-Dichloropropene	10061-02-6	1	0.20	ND	ug/L	U
2-Hexanone	591-78-6	1	5.00	ND	ug/L	U
1,1,2-Trichloroethane	79-00-5	1	0.20	ND	ug/L	U
1,3-Dichloropropane	142-28-9	1	0.10	ND	ug/L	U
Tetrachloroethene	127-18-4	1	0.20	ND	ug/L	U
Dibromochloromethane	124-48-1	1	0.20	ND	ug/L	U
1,2-Dibromoethane	106-93-4	1	0.10	ND	ug/L	U
Chlorobenzene	108-90-7	1	0.20	ND	ug/L	U
Ethylbenzene	100-41-4	1	0.20	ND	ug/L	U
1,1,1,2-Tetrachloroethane	630-20-6	1	0.20	ND	ug/L	U
m,p-Xylene	179601-23-1	1	0.40	ND	ug/L	U
o-Xylene	95-47-6	1	0.20	ND	ug/L	U
Xylenes, total	1330-20-7	1	0.60	ND	ug/L	U
Styrene	100-42-5	1	0.20	ND	ug/L	U
Bromoform	75-25-2	1	0.20	ND	ug/L	U
1,1,2,2-Tetrachloroethane	79-34-5	1	0.20	ND	ug/L	U
1,2,3-Trichloropropane	96-18-4	1	0.25	ND	ug/L	U
trans-1,4-Dichloro 2-Butene	110-57-6	1	1.00	ND	ug/L	U
n-Propylbenzene	103-65-1	1	0.20	ND	ug/L	U
Bromobenzene	108-86-1	1	0.20	ND	ug/L	U
Isopropyl Benzene	98-82-8	1	0.20	ND	ug/L	U
2-Chlorotoluene	95-49-8	1	0.10	ND	ug/L	U
4-Chlorotoluene	106-43-4	1	0.20	ND	ug/L	U
t-Butylbenzene	98-06-6	1	0.20	ND	ug/L	U
1,3,5-Trimethylbenzene	108-67-8	1	0.20	ND	ug/L	U
1,2,4-Trimethylbenzene	95-63-6	1	0.20	ND	ug/L	U
s-Butylbenzene	135-98-8	1	0.20	ND	ug/L	U
4-Isopropyl Toluene	99-87-6	1	0.20	ND	ug/L	U
1,3-Dichlorobenzene	541-73-1	1	0.20	ND	ug/L	U
1,4-Dichlorobenzene	106-46-7	1	0.20	ND	ug/L	U
n-Butylbenzene	104-51-8	1	0.20	ND	ug/L	U
1,2-Dichlorobenzene	95-50-1	1	0.20	ND	ug/L	U
1,2-Dibromo-3-chloropropane	96-12-8	1	0.50	ND	ug/L	U



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Project Manager: Gary Zimmerman

Reported:
15-Apr-2025 16:40

Trip Blank
25C0281-09 (Water)

Volatile Organic Compounds

Method: EPA 8260D

Sampled: 03/12/2025 09:10

Instrument: NT20 Analyst: FL

Analyzed: 03/14/2025 13:52

Analyte	CAS Number	Dilution	Reporting Limit	Result	Units	Notes
1,2,4-Trichlorobenzene	120-82-1	1	0.50	ND	ug/L	U
Hexachloro-1,3-Butadiene	87-68-3	1	0.50	ND	ug/L	U
Naphthalene	91-20-3	1	0.50	ND	ug/L	U
1,2,3-Trichlorobenzene	87-61-6	1	0.50	ND	ug/L	U
Dichlorodifluoromethane	75-71-8	1	0.20	ND	ug/L	U
Surrogate: 1,2-Dichloroethane-d4			80-129 %	103	%	
Surrogate: Toluene-d8			80-120 %	99.1	%	
Surrogate: 4-Bromofluorobenzene			80-120 %	95.1	%	
Surrogate: 1,2-Dichlorobenzene-d4			80-120 %	102	%	



WSP USA, Inc.
210 East 13th Street, Suite 300
Vancouver WA, 98660-3231

Project: Landsburg
Project Number: GL9231000007
Project Manager: Gary Zimmerman

Reported:
15-Apr-2025 16:40

Analysis by: Analytical Resources, LLC

Volatile Organic Compounds - Quality Control

Batch BNC0352 - EPA 8260D in Water

Instrument: NT20 Analyst: FL

QC Sample/Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Blank (BNC0352-BLK1)		Prepared: 14-Mar-2025 Analyzed: 14-Mar-2025 13:29								
Chloromethane	ND	0.50	ug/L							U
Vinyl Chloride	ND	0.10	ug/L							U
Bromomethane	ND	1.00	ug/L							U
Chloroethane	ND	0.20	ug/L							U
Trichlorofluoromethane	ND	0.20	ug/L							U
Acrolein	ND	5.00	ug/L							U
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	0.20	ug/L							U
Acetone	ND	5.00	ug/L							U
1,1-Dichloroethene	ND	0.20	ug/L							U
Iodomethane	ND	1.00	ug/L							U
Methylene Chloride	ND	1.00	ug/L							U
Acrylonitrile	ND	1.00	ug/L							U
Carbon Disulfide	ND	0.20	ug/L							U
trans-1,2-Dichloroethene	ND	0.20	ug/L							U
Vinyl Acetate	ND	0.20	ug/L							U
1,1-Dichloroethane	ND	0.20	ug/L							U
2-Butanone	ND	5.00	ug/L							U
2,2-Dichloropropane	ND	0.20	ug/L							U
cis-1,2-Dichloroethene	ND	0.20	ug/L							U
Chloroform	ND	0.20	ug/L							U
Bromochloromethane	ND	0.20	ug/L							U
1,1,1-Trichloroethane	ND	0.20	ug/L							U
1,1-Dichloropropene	ND	0.10	ug/L							U
Carbon tetrachloride	ND	0.20	ug/L							U
1,2-Dichloroethane	ND	0.20	ug/L							U
Benzene	ND	0.20	ug/L							U
Trichloroethene	ND	0.20	ug/L							U
1,2-Dichloropropane	ND	0.20	ug/L							U
Bromodichloromethane	ND	0.20	ug/L							U
Dibromomethane	ND	0.20	ug/L							U
2-Chloroethyl vinyl ether	ND	1.00	ug/L							U
4-Methyl-2-Pentanone	ND	2.50	ug/L							U
cis-1,3-Dichloropropene	ND	0.20	ug/L							U
Toluene	ND	0.20	ug/L							U



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Analysis by: Analytical Resources, LLC

Volatile Organic Compounds - Quality Control

Batch BNC0352 - EPA 8260D in Water

Instrument: NT20 Analyst: FL

QC Sample/Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Blank (BNC0352-BLK1)		Prepared: 14-Mar-2025 Analyzed: 14-Mar-2025 13:29								
trans-1,3-Dichloropropene	ND	0.20	ug/L							U
2-Hexanone	ND	5.00	ug/L							U
1,1,2-Trichloroethane	ND	0.20	ug/L							U
1,3-Dichloropropane	ND	0.10	ug/L							U
Tetrachloroethene	ND	0.20	ug/L							U
Dibromochloromethane	ND	0.20	ug/L							U
1,2-Dibromoethane	ND	0.10	ug/L							U
Chlorobenzene	ND	0.20	ug/L							U
Ethylbenzene	ND	0.20	ug/L							U
1,1,1,2-Tetrachloroethane	ND	0.20	ug/L							U
m,p-Xylene	ND	0.40	ug/L							U
o-Xylene	ND	0.20	ug/L							U
Xylenes, total	ND	0.60	ug/L							U
Styrene	ND	0.20	ug/L							U
Bromoform	ND	0.20	ug/L							U
1,1,2,2-Tetrachloroethane	ND	0.20	ug/L							U
1,2,3-Trichloropropane	ND	0.25	ug/L							U
trans-1,4-Dichloro 2-Butene	ND	1.00	ug/L							U
n-Propylbenzene	ND	0.20	ug/L							U
Bromobenzene	ND	0.20	ug/L							U
Isopropyl Benzene	ND	0.20	ug/L							U
2-Chlorotoluene	ND	0.10	ug/L							U
4-Chlorotoluene	ND	0.20	ug/L							U
t-Butylbenzene	ND	0.20	ug/L							U
1,3,5-Trimethylbenzene	ND	0.20	ug/L							U
1,2,4-Trimethylbenzene	ND	0.20	ug/L							U
s-Butylbenzene	ND	0.20	ug/L							U
4-Isopropyl Toluene	ND	0.20	ug/L							U
1,3-Dichlorobenzene	ND	0.20	ug/L							U
1,4-Dichlorobenzene	ND	0.20	ug/L							U
n-Butylbenzene	ND	0.20	ug/L							U
1,2-Dichlorobenzene	ND	0.20	ug/L							U
1,2-Dibromo-3-chloropropane	ND	0.50	ug/L							U
1,2,4-Trichlorobenzene	ND	0.50	ug/L							U



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Analysis by: Analytical Resources, LLC

Volatile Organic Compounds - Quality Control

Batch BNC0352 - EPA 8260D in Water

Instrument: NT20 Analyst: FL

QC Sample/Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Blank (BNC0352-BLK1) Prepared: 14-Mar-2025 Analyzed: 14-Mar-2025 13:29										
Hexachloro-1,3-Butadiene	ND	0.50	ug/L							U
Naphthalene	ND	0.50	ug/L							U
1,2,3-Trichlorobenzene	ND	0.50	ug/L							U
Dichlorodifluoromethane	ND	0.20	ug/L							U
Surrogate: 1,2-Dichloroethane-d4	5.17		ug/L	5.00		103	80-129			
Surrogate: Toluene-d8	4.90		ug/L	5.00		98.0	80-120			
Surrogate: 4-Bromofluorobenzene	4.82		ug/L	5.00		96.5	80-120			
Surrogate: 1,2-Dichlorobenzene-d4	5.01		ug/L	5.00		100	80-120			
LCS (BNC0352-BS1) Prepared: 14-Mar-2025 Analyzed: 14-Mar-2025 11:56										
Chloromethane	9.59	0.50	ug/L	10.0		95.9	60-138			
Vinyl Chloride	10.0	0.10	ug/L	10.0		100	66-133			
Bromomethane	9.83	1.00	ug/L	10.0		98.3	72-131			
Chloroethane	10.3	0.20	ug/L	10.0		103	60-155			
Trichlorofluoromethane	10.2	0.20	ug/L	10.0		102	62-141			
Acrolein	45.8	5.00	ug/L	50.0		91.7	52-190			
1,1,2-Trichloro-1,2,2-Trifluoroethane	9.71	0.20	ug/L	10.0		97.1	76-129			
Acetone	43.6	5.00	ug/L	50.0		87.2	58-142			
1,1-Dichloroethene	9.84	0.20	ug/L	10.0		98.4	69-135			
Iodomethane	9.58	1.00	ug/L	10.0		95.8	56-147			
Methylene Chloride	9.35	1.00	ug/L	10.0		93.5	65-135			
Acrylonitrile	9.28	1.00	ug/L	10.0		92.8	64-134			
Carbon Disulfide	9.44	0.20	ug/L	10.0		94.4	78-125			
trans-1,2-Dichloroethene	9.86	0.20	ug/L	10.0		98.6	78-128			
Vinyl Acetate	9.61	0.20	ug/L	10.0		96.1	55-138			
1,1-Dichloroethane	9.66	0.20	ug/L	10.0		96.6	76-124			
2-Butanone	45.9	5.00	ug/L	50.0		91.7	61-140			
2,2-Dichloropropane	9.37	0.20	ug/L	10.0		93.7	66-147			
cis-1,2-Dichloroethene	9.96	0.20	ug/L	10.0		99.6	80-121			
Chloroform	9.61	0.20	ug/L	10.0		96.1	80-122			
Bromochloromethane	9.56	0.20	ug/L	10.0		95.6	80-121			
1,1,1-Trichloroethane	9.16	0.20	ug/L	10.0		91.6	79-123			
1,1-Dichloropropene	10.1	0.10	ug/L	10.0		101	80-127			
Carbon tetrachloride	9.38	0.20	ug/L	10.0		93.8	53-137			
1,2-Dichloroethane	9.89	0.20	ug/L	10.0		98.9	75-123			



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Reported:
15-Apr-2025 16:40

Analysis by: Analytical Resources, LLC

Volatile Organic Compounds - Quality Control

Batch BNC0352 - EPA 8260D in Water

Instrument: NT20 Analyst: FL

QC Sample/Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
LCS (BNC0352-BS1)		Prepared: 14-Mar-2025 Analyzed: 14-Mar-2025 11:56								
Benzene	10.0	0.20	ug/L	10.0		100	80-120			
Trichloroethene	9.58	0.20	ug/L	10.0		95.8	80-120			
1,2-Dichloropropane	9.48	0.20	ug/L	10.0		94.8	80-120			
Bromodichloromethane	9.60	0.20	ug/L	10.0		96.0	80-121			
Dibromomethane	9.38	0.20	ug/L	10.0		93.8	80-120			
2-Chloroethyl vinyl ether	9.47	1.00	ug/L	10.0		94.7	64-120			
4-Methyl-2-Pentanone	48.3	2.50	ug/L	50.0		96.7	67-133			
cis-1,3-Dichloropropene	9.90	0.20	ug/L	10.0		99.0	80-124			
Toluene	9.72	0.20	ug/L	10.0		97.2	80-120			
trans-1,3-Dichloropropene	9.91	0.20	ug/L	10.0		99.1	71-127			
2-Hexanone	46.2	5.00	ug/L	50.0		92.4	69-133			
1,1,2-Trichloroethane	9.59	0.20	ug/L	10.0		95.9	80-121			
1,3-Dichloropropane	9.46	0.10	ug/L	10.0		94.6	80-120			
Tetrachloroethene	9.73	0.20	ug/L	10.0		97.3	80-120			
Dibromochloromethane	9.53	0.20	ug/L	10.0		95.3	65-135			
1,2-Dibromoethane	9.45	0.10	ug/L	10.0		94.5	80-121			
Chlorobenzene	9.66	0.20	ug/L	10.0		96.6	80-120			
Ethylbenzene	9.80	0.20	ug/L	10.0		98.0	80-120			
1,1,1,2-Tetrachloroethane	9.66	0.20	ug/L	10.0		96.6	80-120			
m,p-Xylene	20.5	0.40	ug/L	20.0		103	80-121			
o-Xylene	10.1	0.20	ug/L	10.0		101	80-121			
Xylenes, total	30.6	0.60	ug/L	30.0		102	76-127			
Styrene	10.6	0.20	ug/L	10.0		106	80-124			
Bromoform	9.35	0.20	ug/L	10.0		93.5	51-134			
1,1,2,2-Tetrachloroethane	9.43	0.20	ug/L	10.0		94.3	77-123			
1,2,3-Trichloropropane	9.31	0.25	ug/L	10.0		93.1	76-125			
trans-1,4-Dichloro 2-Butene	9.71	1.00	ug/L	10.0		97.1	55-129			
n-Propylbenzene	10.3	0.20	ug/L	10.0		103	78-130			
Bromobenzene	9.64	0.20	ug/L	10.0		96.4	80-120			
Isopropyl Benzene	10.4	0.20	ug/L	10.0		104	80-128			
2-Chlorotoluene	9.85	0.10	ug/L	10.0		98.5	78-122			
4-Chlorotoluene	9.88	0.20	ug/L	10.0		98.8	80-121			
t-Butylbenzene	10.3	0.20	ug/L	10.0		103	78-125			
1,3,5-Trimethylbenzene	10.4	0.20	ug/L	10.0		104	80-129			



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Project: Landsburg
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Reported:
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Analysis by: Analytical Resources, LLC

Volatile Organic Compounds - Quality Control

Batch BNC0352 - EPA 8260D in Water

Instrument: NT20 Analyst: FL

QC Sample/Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
LCS (BNC0352-BS1)		Prepared: 14-Mar-2025 Analyzed: 14-Mar-2025 11:56								
1,2,4-Trimethylbenzene	10.7	0.20	ug/L	10.0		107	80-127			
s-Butylbenzene	10.4	0.20	ug/L	10.0		104	78-129			
4-Isopropyl Toluene	10.7	0.20	ug/L	10.0		107	79-130			
1,3-Dichlorobenzene	9.83	0.20	ug/L	10.0		98.3	80-120			
1,4-Dichlorobenzene	9.42	0.20	ug/L	10.0		94.2	80-120			
n-Butylbenzene	10.3	0.20	ug/L	10.0		103	74-129			
1,2-Dichlorobenzene	9.42	0.20	ug/L	10.0		94.2	80-120			
1,2-Dibromo-3-chloropropane	9.56	0.50	ug/L	10.0		95.6	62-123			
1,2,4-Trichlorobenzene	9.50	0.50	ug/L	10.0		95.0	64-124			
Hexachloro-1,3-Butadiene	9.53	0.50	ug/L	10.0		95.3	65-145			
Naphthalene	9.17	0.50	ug/L	10.0		91.7	50-134			Q
1,2,3-Trichlorobenzene	9.48	0.50	ug/L	10.0		94.8	49-133			
Dichlorodifluoromethane	8.91	0.20	ug/L	10.0		89.1	48-147			
Surrogate: 1,2-Dichloroethane-d4	4.89		ug/L	5.00		97.8	80-129			
Surrogate: Toluene-d8	5.06		ug/L	5.00		101	80-120			
Surrogate: 4-Bromofluorobenzene	5.10		ug/L	5.00		102	80-120			
Surrogate: 1,2-Dichlorobenzene-d4	4.95		ug/L	5.00		99.1	80-120			
LCS Dup (BNC0352-BS1)		Prepared: 14-Mar-2025 Analyzed: 14-Mar-2025 12:43								
Chloromethane	9.90	0.50	ug/L	10.0		99.0	60-138	3.20	30	
Vinyl Chloride	10.4	0.10	ug/L	10.0		104	66-133	4.02	30	
Bromomethane	10.3	1.00	ug/L	10.0		103	72-131	4.83	30	
Chloroethane	10.8	0.20	ug/L	10.0		108	60-155	4.84	30	
Trichlorofluoromethane	10.5	0.20	ug/L	10.0		105	62-141	3.31	30	
Acrolein	49.4	5.00	ug/L	50.0		98.8	52-190	7.51	30	
1,1,2-Trichloro-1,2,2-Trifluoroethane	10.1	0.20	ug/L	10.0		101	76-129	3.49	30	
Acetone	47.8	5.00	ug/L	50.0		95.6	58-142	9.23	30	
1,1-Dichloroethene	10.3	0.20	ug/L	10.0		103	69-135	4.35	30	
Iodomethane	10.1	1.00	ug/L	10.0		101	56-147	5.35	30	
Methylene Chloride	10.1	1.00	ug/L	10.0		101	65-135	7.45	30	
Acrylonitrile	10.2	1.00	ug/L	10.0		102	64-134	9.87	30	
Carbon Disulfide	10.1	0.20	ug/L	10.0		101	78-125	6.58	30	
trans-1,2-Dichloroethene	10.3	0.20	ug/L	10.0		103	78-128	4.67	30	
Vinyl Acetate	10.6	0.20	ug/L	10.0		106	55-138	9.40	30	
1,1-Dichloroethane	10.3	0.20	ug/L	10.0		103	76-124	5.96	30	



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Project: Landsburg
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Reported:
15-Apr-2025 16:40

Analysis by: Analytical Resources, LLC

Volatile Organic Compounds - Quality Control

Batch BNC0352 - EPA 8260D in Water

Instrument: NT20 Analyst: FL

QC Sample/Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
LCS Dup (BNC0352-BSD1)		Prepared: 14-Mar-2025 Analyzed: 14-Mar-2025 12:43								
2-Butanone	50.1	5.00	ug/L	50.0		100	61-140	8.79	30	
2,2-Dichloropropane	10.1	0.20	ug/L	10.0		101	66-147	7.03	30	
cis-1,2-Dichloroethene	10.5	0.20	ug/L	10.0		105	80-121	4.91	30	
Chloroform	10.3	0.20	ug/L	10.0		103	80-122	7.27	30	
Bromochloromethane	10.1	0.20	ug/L	10.0		101	80-121	5.74	30	
1,1,1-Trichloroethane	9.85	0.20	ug/L	10.0		98.5	79-123	7.27	30	
1,1-Dichloropropene	10.7	0.10	ug/L	10.0		107	80-127	6.05	30	
Carbon tetrachloride	10.2	0.20	ug/L	10.0		102	53-137	7.91	30	
1,2-Dichloroethane	10.4	0.20	ug/L	10.0		104	75-123	5.15	30	
Benzene	10.7	0.20	ug/L	10.0		107	80-120	6.26	30	
Trichloroethene	10.3	0.20	ug/L	10.0		103	80-120	7.27	30	
1,2-Dichloropropane	10.3	0.20	ug/L	10.0		103	80-120	7.87	30	
Bromodichloromethane	10.2	0.20	ug/L	10.0		102	80-121	6.01	30	
Dibromomethane	10.2	0.20	ug/L	10.0		102	80-120	8.22	30	
2-Chloroethyl vinyl ether	10.4	1.00	ug/L	10.0		104	64-120	9.03	30	
4-Methyl-2-Pentanone	52.5	2.50	ug/L	50.0		105	67-133	8.31	30	
cis-1,3-Dichloropropene	10.6	0.20	ug/L	10.0		106	80-124	6.91	30	
Toluene	10.3	0.20	ug/L	10.0		103	80-120	6.21	30	
trans-1,3-Dichloropropene	10.6	0.20	ug/L	10.0		106	71-127	7.07	30	
2-Hexanone	51.5	5.00	ug/L	50.0		103	69-133	10.90	30	
1,1,2-Trichloroethane	10.3	0.20	ug/L	10.0		103	80-121	6.83	30	
1,3-Dichloropropane	10.3	0.10	ug/L	10.0		103	80-120	8.95	30	
Tetrachloroethene	10.4	0.20	ug/L	10.0		104	80-120	6.36	30	
Dibromochloromethane	10.4	0.20	ug/L	10.0		104	65-135	8.56	30	
1,2-Dibromoethane	10.3	0.10	ug/L	10.0		103	80-121	8.22	30	
Chlorobenzene	10.4	0.20	ug/L	10.0		104	80-120	7.50	30	
Ethylbenzene	10.6	0.20	ug/L	10.0		106	80-120	8.01	30	
1,1,1,2-Tetrachloroethane	10.3	0.20	ug/L	10.0		103	80-120	6.65	30	
m,p-Xylene	22.1	0.40	ug/L	20.0		111	80-121	7.52	30	
o-Xylene	10.9	0.20	ug/L	10.0		109	80-121	7.35	30	
Xylenes, total	33.0	0.60	ug/L	30.0		110	76-127	7.47	30	
Styrene	11.4	0.20	ug/L	10.0		114	80-124	7.32	30	
Bromoform	9.98	0.20	ug/L	10.0		99.8	51-134	6.47	30	
1,1,2,2-Tetrachloroethane	10.0	0.20	ug/L	10.0		100	77-123	6.19	30	



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Reported:
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Analysis by: Analytical Resources, LLC

Volatile Organic Compounds - Quality Control

Batch BNC0352 - EPA 8260D in Water

Instrument: NT20 Analyst: FL

QC Sample/Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
LCS Dup (BNC0352-BSD1)		Prepared: 14-Mar-2025 Analyzed: 14-Mar-2025 12:43								
1,2,3-Trichloropropane	10.1	0.25	ug/L	10.0		101	76-125	8.40	30	
trans-1,4-Dichloro 2-Butene	9.94	1.00	ug/L	10.0		99.4	55-129	2.33	30	
n-Propylbenzene	11.1	0.20	ug/L	10.0		111	78-130	7.75	30	
Bromobenzene	10.3	0.20	ug/L	10.0		103	80-120	7.09	30	
Isopropyl Benzene	11.2	0.20	ug/L	10.0		112	80-128	7.98	30	
2-Chlorotoluene	10.5	0.10	ug/L	10.0		105	78-122	6.73	30	
4-Chlorotoluene	10.8	0.20	ug/L	10.0		108	80-121	8.51	30	
t-Butylbenzene	11.2	0.20	ug/L	10.0		112	78-125	7.89	30	
1,3,5-Trimethylbenzene	11.2	0.20	ug/L	10.0		112	80-129	7.69	30	
1,2,4-Trimethylbenzene	11.4	0.20	ug/L	10.0		114	80-127	6.68	30	
s-Butylbenzene	11.3	0.20	ug/L	10.0		113	78-129	8.21	30	
4-Isopropyl Toluene	11.6	0.20	ug/L	10.0		116	79-130	8.16	30	
1,3-Dichlorobenzene	10.5	0.20	ug/L	10.0		105	80-120	6.35	30	
1,4-Dichlorobenzene	10.1	0.20	ug/L	10.0		101	80-120	6.59	30	
n-Butylbenzene	11.2	0.20	ug/L	10.0		112	74-129	9.03	30	
1,2-Dichlorobenzene	10.2	0.20	ug/L	10.0		102	80-120	8.03	30	
1,2-Dibromo-3-chloropropane	10.4	0.50	ug/L	10.0		104	62-123	8.15	30	
1,2,4-Trichlorobenzene	10.6	0.50	ug/L	10.0		106	64-124	11.20	30	
Hexachloro-1,3-Butadiene	10.1	0.50	ug/L	10.0		101	65-145	5.45	30	
Naphthalene	12.0	0.50	ug/L	10.0		120	50-134	27.00	30	Q
1,2,3-Trichlorobenzene	10.8	0.50	ug/L	10.0		108	49-133	12.80	30	
Dichlorodifluoromethane	8.56	0.20	ug/L	10.0		85.6	48-147	4.01	30	
Surrogate: 1,2-Dichloroethane-d4	4.90		ug/L	5.00		98.0	80-129			
Surrogate: Toluene-d8	5.03		ug/L	5.00		101	80-120			
Surrogate: 4-Bromofluorobenzene	5.13		ug/L	5.00		103	80-120			
Surrogate: 1,2-Dichlorobenzene-d4	5.01		ug/L	5.00		100	80-120			
Matrix Spike (BNC0352-MS1)		Source: 25C0281-06 Prepared: 14-Mar-2025 Analyzed: 14-Mar-2025 17:43								
Chloromethane	9.63	0.50	ug/L	10.0	ND	96.3	60-138			
Vinyl Chloride	9.68	0.10	ug/L	10.0	ND	96.8	66-133			
Bromomethane	10.4	1.00	ug/L	10.0	ND	104	72-131			
Chloroethane	12.1	0.20	ug/L	10.0	ND	121	60-155			
Trichlorofluoromethane	10.1	0.20	ug/L	10.0	ND	101	62-141			
Acrolein	46.4	5.00	ug/L	50.0	ND	92.8	52-190			
1,1,2-Trichloro-1,2,2-Trifluoroethane	9.66	0.20	ug/L	10.0	ND	96.6	76-129			



WSP USA, Inc.
210 East 13th Street, Suite 300
Vancouver WA, 98660-3231

Project: Landsburg
Project Number: GL9231000007
Project Manager: Gary Zimmerman

Reported:
15-Apr-2025 16:40

Analysis by: Analytical Resources, LLC

Volatile Organic Compounds - Quality Control

Batch BNC0352 - EPA 8260D in Water

Instrument: NT20 Analyst: FL

QC Sample/Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Matrix Spike (BNC0352-MS1)		Source: 25C0281-06		Prepared: 14-Mar-2025		Analyzed: 14-Mar-2025 17:43				
Acetone	57.4	5.00	ug/L	50.0	5.41	104	58-142			
1,1-Dichloroethene	9.98	0.20	ug/L	10.0	ND	99.8	69-135			
Iodomethane	9.90	1.00	ug/L	10.0	ND	99.0	56-147			
Methylene Chloride	9.11	1.00	ug/L	10.0	ND	91.1	65-135			
Acrylonitrile	10.1	1.00	ug/L	10.0	ND	101	64-134			
Carbon Disulfide	9.93	0.20	ug/L	10.0	ND	99.3	78-125			
trans-1,2-Dichloroethene	10.5	0.20	ug/L	10.0	ND	105	78-128			
Vinyl Acetate	9.17	0.20	ug/L	10.0	ND	91.7	55-138			
1,1-Dichloroethane	10.0	0.20	ug/L	10.0	ND	100	76-124			
2-Butanone	50.5	5.00	ug/L	50.0	ND	101	61-140			
2,2-Dichloropropane	9.80	0.20	ug/L	10.0	ND	98.0	66-147			
cis-1,2-Dichloroethene	10.1	0.20	ug/L	10.0	ND	101	80-121			
Chloroform	9.90	0.20	ug/L	10.0	ND	99.0	80-122			
Bromochloromethane	10.4	0.20	ug/L	10.0	ND	104	80-121			
1,1,1-Trichloroethane	9.76	0.20	ug/L	10.0	ND	97.6	79-123			
1,1-Dichloropropene	10.0	0.10	ug/L	10.0	ND	100	80-127			
Carbon tetrachloride	9.82	0.20	ug/L	10.0	ND	98.2	53-137			
1,2-Dichloroethane	9.92	0.20	ug/L	10.0	ND	99.2	75-123			
Benzene	10.3	0.20	ug/L	10.0	ND	103	80-120			
Trichloroethene	9.90	0.20	ug/L	10.0	ND	99.0	80-120			
1,2-Dichloropropane	9.93	0.20	ug/L	10.0	ND	99.3	80-120			
Bromodichloromethane	9.81	0.20	ug/L	10.0	ND	98.1	80-121			
Dibromomethane	9.90	0.20	ug/L	10.0	ND	99.0	80-120			
2-Chloroethyl vinyl ether	ND	1.00	ug/L	10.0	ND		64-120			*, U
4-Methyl-2-Pentanone	51.2	2.50	ug/L	50.0	ND	102	67-133			
cis-1,3-Dichloropropene	9.91	0.20	ug/L	10.0	ND	99.1	80-124			
Toluene	10.1	0.20	ug/L	10.0	ND	101	80-120			
trans-1,3-Dichloropropene	10.3	0.20	ug/L	10.0	ND	103	71-127			
2-Hexanone	49.4	5.00	ug/L	50.0	ND	98.9	69-133			
1,1,2-Trichloroethane	10.0	0.20	ug/L	10.0	ND	100	80-121			
1,3-Dichloropropane	9.82	0.10	ug/L	10.0	ND	98.2	80-120			
Tetrachloroethene	9.87	0.20	ug/L	10.0	ND	98.7	80-120			
Dibromochloromethane	10.0	0.20	ug/L	10.0	ND	100	65-135			
1,2-Dibromoethane	9.87	0.10	ug/L	10.0	ND	98.7	80-121			



WSP USA, Inc.
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Project: Landsburg
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Project Manager: Gary Zimmerman

Reported:
15-Apr-2025 16:40

Analysis by: Analytical Resources, LLC

Volatile Organic Compounds - Quality Control

Batch BNC0352 - EPA 8260D in Water

Instrument: NT20 Analyst: FL

QC Sample/Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Matrix Spike (BNC0352-MS1)		Source: 25C0281-06		Prepared: 14-Mar-2025		Analyzed: 14-Mar-2025 17:43				
Chlorobenzene	10.1	0.20	ug/L	10.0	ND	101	80-120			
Ethylbenzene	10.2	0.20	ug/L	10.0	ND	102	80-120			
1,1,1,2-Tetrachloroethane	10.2	0.20	ug/L	10.0	ND	102	80-120			
m,p-Xylene	21.2	0.40	ug/L	20.0	ND	106	80-121			
o-Xylene	10.4	0.20	ug/L	10.0	ND	104	80-121			
Xylenes, total	31.6	0.60	ug/L	30.0	ND	105	76-127			
Styrene	10.9	0.20	ug/L	10.0	ND	109	80-124			
Bromoform	9.48	0.20	ug/L	10.0	ND	94.8	51-134			
1,1,2,2-Tetrachloroethane	9.67	0.20	ug/L	10.0	ND	96.7	77-123			
1,2,3-Trichloropropane	9.37	0.25	ug/L	10.0	ND	93.7	76-125			
trans-1,4-Dichloro 2-Butene	9.85	1.00	ug/L	10.0	ND	98.5	55-129			
n-Propylbenzene	10.4	0.20	ug/L	10.0	ND	104	78-130			
Bromobenzene	9.65	0.20	ug/L	10.0	ND	96.5	80-120			
Isopropyl Benzene	10.4	0.20	ug/L	10.0	ND	104	80-128			
2-Chlorotoluene	9.91	0.10	ug/L	10.0	ND	99.1	78-122			
4-Chlorotoluene	10.1	0.20	ug/L	10.0	ND	101	80-121			
t-Butylbenzene	10.3	0.20	ug/L	10.0	ND	103	78-125			
1,3,5-Trimethylbenzene	10.6	0.20	ug/L	10.0	ND	106	80-129			
1,2,4-Trimethylbenzene	10.8	0.20	ug/L	10.0	ND	108	80-127			
s-Butylbenzene	10.6	0.20	ug/L	10.0	ND	106	78-129			
4-Isopropyl Toluene	10.9	0.20	ug/L	10.0	ND	109	79-130			
1,3-Dichlorobenzene	9.99	0.20	ug/L	10.0	ND	99.9	80-120			
1,4-Dichlorobenzene	9.73	0.20	ug/L	10.0	ND	97.3	80-120			
n-Butylbenzene	10.7	0.20	ug/L	10.0	ND	107	74-129			
1,2-Dichlorobenzene	9.87	0.20	ug/L	10.0	ND	98.7	80-120			
1,2-Dibromo-3-chloropropane	10.3	0.50	ug/L	10.0	ND	103	62-123			
1,2,4-Trichlorobenzene	10.3	0.50	ug/L	10.0	ND	103	64-124			
Hexachloro-1,3-Butadiene	9.72	0.50	ug/L	10.0	ND	97.2	65-145			
Naphthalene	11.6	0.50	ug/L	10.0	ND	116	50-134			Q
1,2,3-Trichlorobenzene	10.7	0.50	ug/L	10.0	ND	107	49-133			
Dichlorodifluoromethane	7.10	0.20	ug/L	10.0	ND	71.0	48-147			
Surrogate: 1,2-Dichloroethane-d4	5.16		ug/L	5.00	5.44	103	80-129			
Surrogate: Toluene-d8	5.08		ug/L	5.00	4.95	102	80-120			
Surrogate: 4-Bromofluorobenzene	5.06		ug/L	5.00	4.83	101	80-120			



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Project: Landsburg
Project Number: GL9231000007
Project Manager: Gary Zimmerman

Reported:
15-Apr-2025 16:40

Analysis by: Analytical Resources, LLC

Volatile Organic Compounds - Quality Control

Batch BNC0352 - EPA 8260D in Water

Instrument: NT20 Analyst: FL

QC Sample/Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Matrix Spike (BNC0352-MS1)		Source: 25C0281-06		Prepared: 14-Mar-2025		Analyzed: 14-Mar-2025 17:43				
Surrogate: 1,2-Dichlorobenzene-d4	5.03		ug/L	5.00	5.12	101	80-120			

Recovery limits for target analytes in MS/MSD QC samples are advisory only.

Matrix Spike Dup (BNC0352-MSD1)		Source: 25C0281-06		Prepared: 14-Mar-2025		Analyzed: 14-Mar-2025 18:06				
Chloromethane	10.1	0.50	ug/L	10.0	ND	101	60-138	5.14	30	
Vinyl Chloride	10.3	0.10	ug/L	10.0	ND	103	66-133	5.73	30	
Bromomethane	10.7	1.00	ug/L	10.0	ND	107	72-131	3.32	30	
Chloroethane	12.7	0.20	ug/L	10.0	ND	127	60-155	5.06	30	
Trichlorofluoromethane	10.6	0.20	ug/L	10.0	ND	106	62-141	4.29	30	
Acrolein	48.6	5.00	ug/L	50.0	ND	97.2	52-190	4.64	30	
1,1,2-Trichloro-1,2,2-Trifluoroethane	10.2	0.20	ug/L	10.0	ND	102	76-129	5.31	30	
Acetone	55.0	5.00	ug/L	50.0	5.41	99.2	58-142	4.23	30	
1,1-Dichloroethene	10.5	0.20	ug/L	10.0	ND	105	69-135	4.64	30	
Iodomethane	10.3	1.00	ug/L	10.0	ND	103	56-147	4.39	30	
Methylene Chloride	9.44	1.00	ug/L	10.0	ND	94.4	65-135	3.48	30	
Acrylonitrile	10.5	1.00	ug/L	10.0	ND	105	64-134	3.73	30	
Carbon Disulfide	10.3	0.20	ug/L	10.0	ND	103	78-125	3.85	30	
trans-1,2-Dichloroethene	10.7	0.20	ug/L	10.0	ND	107	78-128	1.84	30	
Vinyl Acetate	9.73	0.20	ug/L	10.0	ND	97.3	55-138	5.97	30	
1,1-Dichloroethane	10.5	0.20	ug/L	10.0	ND	105	76-124	4.90	30	
2-Butanone	53.3	5.00	ug/L	50.0	ND	107	61-140	5.47	30	
2,2-Dichloropropane	10.0	0.20	ug/L	10.0	ND	100	66-147	2.19	30	
cis-1,2-Dichloroethene	10.5	0.20	ug/L	10.0	ND	105	80-121	4.06	30	
Chloroform	10.7	0.20	ug/L	10.0	ND	107	80-122	8.09	30	
Bromochloromethane	10.6	0.20	ug/L	10.0	ND	106	80-121	1.67	30	
1,1,1-Trichloroethane	10.2	0.20	ug/L	10.0	ND	102	79-123	4.22	30	
1,1-Dichloropropene	10.4	0.10	ug/L	10.0	ND	104	80-127	3.69	30	
Carbon tetrachloride	9.95	0.20	ug/L	10.0	ND	99.5	53-137	1.28	30	
1,2-Dichloroethane	10.2	0.20	ug/L	10.0	ND	102	75-123	3.05	30	
Benzene	10.3	0.20	ug/L	10.0	ND	103	80-120	0.20	30	
Trichloroethene	10.2	0.20	ug/L	10.0	ND	102	80-120	2.93	30	
1,2-Dichloropropane	10.2	0.20	ug/L	10.0	ND	102	80-120	2.55	30	
Bromodichloromethane	10.3	0.20	ug/L	10.0	ND	103	80-121	5.28	30	
Dibromomethane	10.2	0.20	ug/L	10.0	ND	102	80-120	2.83	30	



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Project: Landsburg
Project Number: GL9231000007
Project Manager: Gary Zimmerman

Reported:
15-Apr-2025 16:40

Analysis by: Analytical Resources, LLC

Volatile Organic Compounds - Quality Control

Batch BNC0352 - EPA 8260D in Water

Instrument: NT20 Analyst: FL

QC Sample/Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Matrix Spike Dup (BNC0352-MSD1)		Source: 25C0281-06		Prepared: 14-Mar-2025		Analyzed: 14-Mar-2025 18:06				
2-Chloroethyl vinyl ether	ND	1.00	ug/L	10.0	ND		64-120		30	*, U
4-Methyl-2-Pentanone	52.9	2.50	ug/L	50.0	ND	106	67-133	3.19	30	
cis-1,3-Dichloropropene	10.4	0.20	ug/L	10.0	ND	104	80-124	4.77	30	
Toluene	10.3	0.20	ug/L	10.0	ND	103	80-120	2.76	30	
trans-1,3-Dichloropropene	10.9	0.20	ug/L	10.0	ND	109	71-127	5.25	30	
2-Hexanone	52.8	5.00	ug/L	50.0	ND	106	69-133	6.51	30	
1,1,2-Trichloroethane	10.5	0.20	ug/L	10.0	ND	105	80-121	4.92	30	
1,3-Dichloropropane	10.4	0.10	ug/L	10.0	ND	104	80-120	5.59	30	
Tetrachloroethene	10.3	0.20	ug/L	10.0	ND	103	80-120	3.81	30	
Dibromochloromethane	10.4	0.20	ug/L	10.0	ND	104	65-135	3.96	30	
1,2-Dibromoethane	10.3	0.10	ug/L	10.0	ND	103	80-121	4.33	30	
Chlorobenzene	10.5	0.20	ug/L	10.0	ND	105	80-120	3.88	30	
Ethylbenzene	10.6	0.20	ug/L	10.0	ND	106	80-120	3.48	30	
1,1,1,2-Tetrachloroethane	10.5	0.20	ug/L	10.0	ND	105	80-120	2.69	30	
m,p-Xylene	22.0	0.40	ug/L	20.0	ND	110	80-121	3.43	30	
o-Xylene	10.9	0.20	ug/L	10.0	ND	109	80-121	5.01	30	
Xylenes, total	32.9	0.60	ug/L	30.0	ND	110	76-127	3.95	30	
Styrene	11.4	0.20	ug/L	10.0	ND	114	80-124	4.99	30	
Bromoform	10.2	0.20	ug/L	10.0	ND	102	51-134	7.76	30	
1,1,2,2-Tetrachloroethane	10.3	0.20	ug/L	10.0	ND	103	77-123	6.46	30	
1,2,3-Trichloropropane	10.1	0.25	ug/L	10.0	ND	101	76-125	7.52	30	
trans-1,4-Dichloro 2-Butene	10.3	1.00	ug/L	10.0	ND	103	55-129	4.68	30	
n-Propylbenzene	11.0	0.20	ug/L	10.0	ND	110	78-130	5.39	30	
Bromobenzene	10.2	0.20	ug/L	10.0	ND	102	80-120	5.60	30	
Isopropyl Benzene	10.9	0.20	ug/L	10.0	ND	109	80-128	5.34	30	
2-Chlorotoluene	10.4	0.10	ug/L	10.0	ND	104	78-122	4.88	30	
4-Chlorotoluene	10.6	0.20	ug/L	10.0	ND	106	80-121	5.06	30	
t-Butylbenzene	10.8	0.20	ug/L	10.0	ND	108	78-125	4.74	30	
1,3,5-Trimethylbenzene	11.1	0.20	ug/L	10.0	ND	111	80-129	5.35	30	
1,2,4-Trimethylbenzene	11.4	0.20	ug/L	10.0	ND	114	80-127	5.21	30	
s-Butylbenzene	11.2	0.20	ug/L	10.0	ND	112	78-129	5.07	30	
4-Isopropyl Toluene	11.5	0.20	ug/L	10.0	ND	115	79-130	4.54	30	
1,3-Dichlorobenzene	10.6	0.20	ug/L	10.0	ND	106	80-120	5.48	30	
1,4-Dichlorobenzene	10.3	0.20	ug/L	10.0	ND	103	80-120	5.68	30	



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Project: Landsburg
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Project Manager: Gary Zimmerman

Reported:
15-Apr-2025 16:40

Analysis by: Analytical Resources, LLC

Volatile Organic Compounds - Quality Control

Batch BNC0352 - EPA 8260D in Water

Instrument: NT20 Analyst: FL

QC Sample/Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Matrix Spike Dup (BNC0352-MSD1)		Source: 25C0281-06		Prepared: 14-Mar-2025		Analyzed: 14-Mar-2025 18:06				
n-Butylbenzene	11.2	0.20	ug/L	10.0	ND	112	74-129	4.03	30	
1,2-Dichlorobenzene	10.4	0.20	ug/L	10.0	ND	104	80-120	5.09	30	
1,2-Dibromo-3-chloropropane	11.0	0.50	ug/L	10.0	ND	110	62-123	6.52	30	
1,2,4-Trichlorobenzene	11.1	0.50	ug/L	10.0	ND	111	64-124	7.66	30	
Hexachloro-1,3-Butadiene	10.2	0.50	ug/L	10.0	ND	102	65-145	4.67	30	
Naphthalene	12.6	0.50	ug/L	10.0	ND	126	50-134	8.28	30	Q
1,2,3-Trichlorobenzene	11.6	0.50	ug/L	10.0	ND	116	49-133	8.16	30	
Dichlorodifluoromethane	7.53	0.20	ug/L	10.0	ND	75.3	48-147	5.79	30	
Surrogate: 1,2-Dichloroethane-d4	5.08		ug/L	5.00	5.44	102	80-129			
Surrogate: Toluene-d8	5.04		ug/L	5.00	4.95	101	80-120			
Surrogate: 4-Bromofluorobenzene	5.17		ug/L	5.00	4.83	103	80-120			
Surrogate: 1,2-Dichlorobenzene-d4	4.94		ug/L	5.00	5.12	98.8	80-120			

Recovery limits for target analytes in MS/MSD QC samples are advisory only.



WSP USA, Inc.
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Project: Landsburg
Project Number: GL9231000007
Project Manager: Gary Zimmerman

Reported:
15-Apr-2025 16:40

Analysis by: Analytical Resources, LLC

Semivolatile Organic Compounds - Quality Control

Batch BNC0410 - EPA 8270E in Water

Instrument: NT14 Analyst: RT

QC Sample/Analyte	Result	Detection Limit	Reporting Limit	Units	Spike Level	Source Result	%REC Limits	RPD	RPD Limit	Notes
Blank (BNC0410-BLK1)					Prepared: 19-Mar-2025 Analyzed: 27-Mar-2025 22:22					
1,4-Dioxane	ND	0.2	0.4	ug/L						U
Surrogate: 1,4-Dioxane-d8	7.60			ug/L	10.0		76.0 30-160			
LCS (BNC0410-BS1)					Prepared: 19-Mar-2025 Analyzed: 27-Mar-2025 22:39					
1,4-Dioxane	14.8	0.2	0.4	ug/L	10.0		148 30-160			
Surrogate: 1,4-Dioxane-d8	7.25			ug/L	10.0		72.5 30-160			
LCS Dup (BNC0410-BSD1)					Prepared: 19-Mar-2025 Analyzed: 27-Mar-2025 22:56					
1,4-Dioxane	15.8	0.2	0.4	ug/L	10.0		158 30-160	6.35	30	
Surrogate: 1,4-Dioxane-d8	7.92			ug/L	10.0		79.2 30-160			



WSP USA, Inc.
210 East 13th Street, Suite 300
Vancouver WA, 98660-3231

Project: Landsburg
Project Number: GL9231000007
Project Manager: Gary Zimmerman

Reported:
15-Apr-2025 16:40

Analysis by: Analytical Resources, LLC

Semivolatile Organic Compounds - Quality Control

Batch BNC0433 - EPA 8270E in Water

Instrument: NT10 Analyst: JZ

QC Sample/Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Blank (BNC0433-BLK1)		Prepared: 18-Mar-2025 Analyzed: 28-Mar-2025 14:33								
Phenol	ND	1.0	ug/L							U
bis(2-chloroethyl) ether	ND	1.0	ug/L							U
2-Chlorophenol	ND	1.0	ug/L							U
1,3-Dichlorobenzene	ND	1.0	ug/L							U
1,4-Dichlorobenzene	ND	1.0	ug/L							U
Benzyl Alcohol	ND	2.0	ug/L							U
1,2-Dichlorobenzene	ND	1.0	ug/L							U
2-Methylphenol	ND	1.0	ug/L							U
2,2'-Oxybis(1-chloropropane)	ND	1.0	ug/L							U
4-Methylphenol	ND	2.0	ug/L							U
N-Nitroso-di-n-Propylamine	ND	1.0	ug/L							U
Hexachloroethane	ND	2.0	ug/L							U
Nitrobenzene	ND	1.0	ug/L							U
Isophorone	ND	1.0	ug/L							U
2-Nitrophenol	ND	3.0	ug/L							U
2,4-Dimethylphenol	ND	3.0	ug/L							U
Bis(2-Chloroethoxy)methane	ND	1.0	ug/L							U
Benzoic acid	ND	10.0	ug/L							U
2,4-Dichlorophenol	ND	3.0	ug/L							U
1,2,4-Trichlorobenzene	ND	1.0	ug/L							U
Naphthalene	ND	1.0	ug/L							U
4-Chloroaniline	ND	5.0	ug/L							U
Hexachlorobutadiene	ND	3.0	ug/L							U
4-Chloro-3-Methylphenol	ND	3.0	ug/L							U
2-Methylnaphthalene	ND	1.0	ug/L							U
Hexachlorocyclopentadiene	ND	5.0	ug/L							U
2,4,6-Trichlorophenol	ND	3.0	ug/L							U
2,4,5-Trichlorophenol	ND	5.0	ug/L							U
2-Chloronaphthalene	ND	1.0	ug/L							U
2-Nitroaniline	ND	3.0	ug/L							U
Dimethylphthalate	ND	1.0	ug/L							U
Acenaphthylene	ND	1.0	ug/L							U
2,6-Dinitrotoluene	ND	3.0	ug/L							U
3-Nitroaniline	ND	3.0	ug/L							U



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Analysis by: Analytical Resources, LLC

Semivolatile Organic Compounds - Quality Control

Batch BNC0433 - EPA 8270E in Water

Instrument: NT10 Analyst: JZ

QC Sample/Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Blank (BNC0433-BLK1)		Prepared: 18-Mar-2025 Analyzed: 28-Mar-2025 14:33								
Acenaphthene	ND	1.0	ug/L							U
2,4-Dinitrophenol	ND	10.0	ug/L							U
Dibenzofuran	ND	1.0	ug/L							U
4-Nitrophenol	ND	5.0	ug/L							U
2,4-Dinitrotoluene	ND	3.0	ug/L							U
Fluorene	ND	1.0	ug/L							U
Diethyl phthalate	ND	1.0	ug/L							U
4-Chlorophenylphenyl ether	ND	1.0	ug/L							U
4-Nitroaniline	ND	3.0	ug/L							U
4,6-Dinitro-2-methylphenol	ND	10.0	ug/L							U
N-Nitrosodiphenylamine	ND	1.0	ug/L							U
4-Bromophenyl phenyl ether	ND	1.0	ug/L							U
Hexachlorobenzene	ND	1.0	ug/L							U
Pentachlorophenol	ND	5.0	ug/L							U
Phenanthrene	ND	1.0	ug/L							U
Anthracene	ND	1.0	ug/L							U
Carbazole	ND	1.0	ug/L							U
Di-n-Butylphthalate	ND	1.0	ug/L							U
Fluoranthene	ND	1.0	ug/L							U
Pyrene	ND	1.0	ug/L							U
Butylbenzylphthalate	ND	1.0	ug/L							U
Benzo(a)anthracene	ND	1.0	ug/L							U
3,3'-Dichlorobenzidine	ND	10.0	ug/L							U
Chrysene	ND	1.0	ug/L							U
bis(2-Ethylhexyl)phthalate	ND	3.0	ug/L							U
Di-n-Octylphthalate	ND	1.0	ug/L							U
Benzo(a)fluoranthene, Total	ND	2.0	ug/L							U
Benzo(a)pyrene	ND	1.0	ug/L							U
Indeno(1,2,3-cd)pyrene	ND	1.0	ug/L							U
Dibenzo(a,h)anthracene	ND	1.0	ug/L							U
Benzo(g,h,i)perylene	ND	1.0	ug/L							U
1-Methylnaphthalene	ND	1.0	ug/L							U
Surrogate: 2-Fluorophenol	9.47		ug/L	18.8		50.5	33-120			
Surrogate: Phenol-d5	8.71		ug/L	18.8		46.4	38-120			



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Analysis by: Analytical Resources, LLC

Semivolatile Organic Compounds - Quality Control

Batch BNC0433 - EPA 8270E in Water

Instrument: NT10 Analyst: JZ

QC Sample/Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Blank (BNC0433-BLK1)		Prepared: 18-Mar-2025 Analyzed: 28-Mar-2025 14:33								
Surrogate: 2-Chlorophenol-d4	9.56		ug/L	18.8		51.0	41-120			
Surrogate: 1,2-Dichlorobenzene-d4	7.27		ug/L	12.5		58.1	20-120			
Surrogate: Nitrobenzene-d5	7.86		ug/L	12.5		62.9	27-120			
Surrogate: 2-Fluorobiphenyl	7.74		ug/L	12.5		61.9	33-120			
Surrogate: 2,4,6-Tribromophenol	10.4		ug/L	18.8		55.4	52-120			
Surrogate: p-Terphenyl-d14	9.51		ug/L	12.5		76.1	28-120			
LCS (BNC0433-BS1)		Prepared: 18-Mar-2025 Analyzed: 31-Mar-2025 18:34								
Phenol	17.1	1.0	ug/L	20.0		85.5	35-120			
bis(2-chloroethyl) ether	15.6	1.0	ug/L	20.0		78.0	46.5-120			
2-Chlorophenol	18.6	1.0	ug/L	20.0		92.9	48-120			
1,3-Dichlorobenzene	10.4	1.0	ug/L	20.0		51.9	34.2-120			
1,4-Dichlorobenzene	10.9	1.0	ug/L	20.0		54.4	36-120			
Benzyl Alcohol	19.8	2.0	ug/L	20.0		99.2	27.4-120			
1,2-Dichlorobenzene	11.6	1.0	ug/L	20.0		58.0	38.4-120			
2-Methylphenol	18.4	1.0	ug/L	20.0		92.0	47.8-120			
2,2'-Oxybis(1-chloropropane)	14.4	1.0	ug/L	20.0		72.0	40.4-120			Q
4-Methylphenol	18.9	2.0	ug/L	20.0		94.7	52.3-120			
N-Nitroso-di-n-Propylamine	17.4	1.0	ug/L	20.0		87.2	51.4-120			
Hexachloroethane	8.8	2.0	ug/L	20.0		44.2	29.5-120			
Nitrobenzene	18.3	1.0	ug/L	20.0		91.4	51.5-120			
Isophorone	18.1	1.0	ug/L	20.0		90.4	62.3-128			Q
2-Nitrophenol	19.2	3.0	ug/L	20.0		96.1	58.6-124			
2,4-Dimethylphenol	55.4	3.0	ug/L	60.0		92.3	38.5-120			
Bis(2-Chloroethoxy)methane	15.1	1.0	ug/L	20.0		75.6	52.9-120			
Benzoic acid	92.3	10.0	ug/L	90.0		103	38.2-120			
2,4-Dichlorophenol	65.8	3.0	ug/L	60.0		110	43.6-120			
1,2,4-Trichlorobenzene	11.2	1.0	ug/L	20.0		56.0	38.6-120			
Naphthalene	14.7	1.0	ug/L	20.0		73.5	40.5-120			
4-Chloroaniline	20.0	5.0	ug/L	60.0		33.3	42.7-120			*
Hexachlorobutadiene	8.9	3.0	ug/L	20.0		44.5	32.3-120			
2-Methylnaphthalene	13.3	1.0	ug/L	20.0		66.4	47.3-120			
Hexachlorocyclopentadiene	46.0	5.0	ug/L	60.0		76.6	23.3-120			Q
2,4,6-Trichlorophenol	68.8	3.0	ug/L	60.0		115	47-120			
2,4,5-Trichlorophenol	64.1	5.0	ug/L	60.0		107	48.4-120			



WSP USA, Inc.
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Project: Landsburg
Project Number: GL9231000007
Project Manager: Gary Zimmerman

Reported:
15-Apr-2025 16:40

Analysis by: Analytical Resources, LLC

Semivolatile Organic Compounds - Quality Control

Batch BNC0433 - EPA 8270E in Water

Instrument: NT10 Analyst: JZ

QC Sample/Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
LCS (BNC0433-BS1)		Prepared: 18-Mar-2025 Analyzed: 31-Mar-2025 18:34								
2-Chloronaphthalene	15.8	1.0	ug/L	20.0		79.1	47.7-123			
2-Nitroaniline	66.3	3.0	ug/L	60.0		110	56.8-120			
Dimethylphthalate	19.3	1.0	ug/L	20.0		96.3	65.2-125			
Acenaphthylene	15.4	1.0	ug/L	20.0		77.2	44.1-120			
2,6-Dinitrotoluene	54.5	3.0	ug/L	60.0		90.9	69.3-140			
3-Nitroaniline	50.9	3.0	ug/L	60.0		84.8	60.9-120			
Acenaphthene	15.8	1.0	ug/L	20.0		79.2	50.4-120			
2,4-Dinitrophenol	105	10.0	ug/L	110		95.8	33.7-183			
Dibenzofuran	18.3	1.0	ug/L	20.0		91.7	49.9-120			
4-Nitrophenol	153	5.0	ug/L	60.0		255	50.2-136			*, Q, E
2,4-Dinitrotoluene	57.9	3.0	ug/L	60.0		96.5	66.8-132			
Fluorene	16.0	1.0	ug/L	20.0		79.9	57.8-120			
Diethyl phthalate	18.0	1.0	ug/L	20.0		89.8	68.1-120			
4-Chlorophenylphenyl ether	17.0	1.0	ug/L	20.0		84.9	59.1-127			
4-Nitroaniline	67.0	3.0	ug/L	60.0		112	56-122			
4,6-Dinitro-2-methylphenol	128	10.0	ug/L	110		116	37.9-162			
N-Nitrosodiphenylamine	19.5	1.0	ug/L	20.0		97.4	59.6-120			
4-Bromophenyl phenyl ether	17.5	1.0	ug/L	20.0		87.4	59.6-120			
Hexachlorobenzene	15.9	1.0	ug/L	20.0		79.7	53.7-120			
Pentachlorophenol	63.8	5.0	ug/L	60.0		106	40.3-128			
Phenanthrene	16.9	1.0	ug/L	20.0		84.7	58.8-120			
Anthracene	17.3	1.0	ug/L	20.0		86.4	60.5-120			
Carbazole	17.9	1.0	ug/L	20.0		89.6	59.7-120			
Di-n-Butylphthalate	18.4	1.0	ug/L	20.0		92.0	71-120			
Fluoranthene	17.3	1.0	ug/L	20.0		86.3	66.7-120			
Pyrene	17.6	1.0	ug/L	20.0		88.2	62.7-127			
Butylbenzylphthalate	18.0	1.0	ug/L	20.0		90.1	67.4-128			
Benzo(a)anthracene	18.9	1.0	ug/L	20.0		94.4	58.3-128			
3,3'-Dichlorobenzidine	ND	10.0	ug/L	40.0		14.1	34.1-120			*, U
Chrysene	19.3	1.0	ug/L	20.0		96.7	58.9-120			
bis(2-Ethylhexyl)phthalate	20.7	3.0	ug/L	20.0		104	68.3-123			
Di-n-Octylphthalate	19.9	1.0	ug/L	20.0		99.6	61.5-120			
Benzo(a)fluoranthene, Total	38.2	2.0	ug/L	40.0		95.6	66.5-120			
Benzo(a)pyrene	23.5	1.0	ug/L	20.0		118	70.6-120			



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Reported:
15-Apr-2025 16:40

Analysis by: Analytical Resources, LLC

Semivolatile Organic Compounds - Quality Control

Batch BNC0433 - EPA 8270E in Water

Instrument: NT10 Analyst: JZ

QC Sample/Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
LCS (BNC0433-BS1) Prepared: 18-Mar-2025 Analyzed: 31-Mar-2025 18:34										
Indeno(1,2,3-cd)pyrene	25.7	1.0	ug/L	20.0		128	46.5-120			*
Dibenzo(a,h)anthracene	23.7	1.0	ug/L	20.0		119	49.6-120			
Benzo(g,h,i)perylene	24.7	1.0	ug/L	20.0		123	37-120			*
1-Methylnaphthalene	15.9	1.0	ug/L	20.0		79.3	46.9-120			
Surrogate: 2-Fluorophenol	15.9		ug/L	18.8		84.6	33-120			
Surrogate: Phenol-d5	17.3		ug/L	18.8		92.3	38-120			
Surrogate: 2-Chlorophenol-d4	18.3		ug/L	18.8		97.7	41-120			
Surrogate: 1,2-Dichlorobenzene-d4	10.4		ug/L	12.5		82.8	20-120			
Surrogate: Nitrobenzene-d5	13.1		ug/L	12.5		105	27-120			
Surrogate: 2-Fluorobiphenyl	11.8		ug/L	12.5		94.3	33-120			
Surrogate: 2,4,6-Tribromophenol	16.8		ug/L	18.8		89.5	52-120			
Surrogate: p-Terphenyl-d14	14.2		ug/L	12.5		113	28-120			
LCS Dup (BNC0433-BS1) Prepared: 18-Mar-2025 Analyzed: 31-Mar-2025 19:15										
Phenol	19.0	1.0	ug/L	20.0		95.1	35-120	10.70	30	
bis(2-chloroethyl) ether	16.9	1.0	ug/L	20.0		84.3	46.5-120	7.81	30	
2-Chlorophenol	19.8	1.0	ug/L	20.0		98.9	48-120	6.24	30	
1,3-Dichlorobenzene	12.9	1.0	ug/L	20.0		64.3	34.2-120	21.40	30	
1,4-Dichlorobenzene	13.3	1.0	ug/L	20.0		66.4	36-120	19.90	30	
Benzyl Alcohol	21.2	2.0	ug/L	20.0		106	27.4-120	6.49	30	
1,2-Dichlorobenzene	13.5	1.0	ug/L	20.0		67.7	38.4-120	15.40	30	
2-Methylphenol	19.6	1.0	ug/L	20.0		97.9	47.8-120	6.24	30	
2,2'-Oxybis(1-chloropropane)	15.3	1.0	ug/L	20.0		76.4	40.4-120	5.94	30	Q
4-Methylphenol	20.2	2.0	ug/L	20.0		101	52.3-120	6.55	30	
N-Nitroso-di-n-Propylamine	18.4	1.0	ug/L	20.0		92.0	51.4-120	5.36	30	
Hexachloroethane	12.4	2.0	ug/L	20.0		62.0	29.5-120	33.70	30	*
Nitrobenzene	19.8	1.0	ug/L	20.0		98.9	51.5-120	7.84	30	
Isophorone	20.2	1.0	ug/L	20.0		101	62.3-128	10.90	30	Q
2-Nitrophenol	20.0	3.0	ug/L	20.0		100	58.6-124	4.17	30	
2,4-Dimethylphenol	60.2	3.0	ug/L	60.0		100	38.5-120	8.35	30	
Bis(2-Chloroethoxy)methane	17.2	1.0	ug/L	20.0		85.8	52.9-120	12.70	30	
Benzoic acid	95.3	10.0	ug/L	90.0		106	38.2-120	3.20	30	
2,4-Dichlorophenol	72.0	3.0	ug/L	60.0		120	43.6-120	9.05	30	
1,2,4-Trichlorobenzene	14.6	1.0	ug/L	20.0		73.0	38.6-120	26.40	30	
Naphthalene	16.3	1.0	ug/L	20.0		81.4	40.5-120	10.10	30	



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Analysis by: Analytical Resources, LLC

Semivolatle Organic Compounds - Quality Control

Batch BNC0433 - EPA 8270E in Water

Instrument: NT10 Analyst: JZ

QC Sample/Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
LCS Dup (BNC0433-BSD1)		Prepared: 18-Mar-2025 Analyzed: 31-Mar-2025 19:15								
4-Chloroaniline	22.9	5.0	ug/L	60.0		38.1	42.7-120	13.60	30	*
Hexachlorobutadiene	13.6	3.0	ug/L	20.0		68.0	32.3-120	41.60	30	*
4-Chloro-3-Methylphenol	72.8	3.0	ug/L	60.0		121	51.9-120	6.40	30	*
2-Methylnaphthalene	15.3	1.0	ug/L	20.0		76.7	47.3-120	14.40	30	
Hexachlorocyclopentadiene	65.7	5.0	ug/L	60.0		109	23.3-120	35.30	30	*, Q
2,4,6-Trichlorophenol	73.7	3.0	ug/L	60.0		123	47-120	6.94	30	*
2,4,5-Trichlorophenol	69.6	5.0	ug/L	60.0		116	48.4-120	8.18	30	
2-Chloronaphthalene	17.7	1.0	ug/L	20.0		88.3	47.7-123	11.00	30	
2-Nitroaniline	72.1	3.0	ug/L	60.0		120	56.8-120	8.44	30	
Dimethylphthalate	21.6	1.0	ug/L	20.0		108	65.2-125	11.60	30	
Acenaphthylene	16.9	1.0	ug/L	20.0		84.6	44.1-120	9.12	30	
2,6-Dinitrotoluene	60.2	3.0	ug/L	60.0		100	69.3-140	9.84	30	
3-Nitroaniline	54.6	3.0	ug/L	60.0		91.0	60.9-120	7.06	30	
Acenaphthene	16.8	1.0	ug/L	20.0		84.2	50.4-120	6.10	30	
2,4-Dinitrophenol	110	10.0	ug/L	110		99.9	33.7-183	4.28	30	
Dibenzofuran	20.0	1.0	ug/L	20.0		99.9	49.9-120	8.54	30	
4-Nitrophenol	167	5.0	ug/L	60.0		279	50.2-136	8.99	30	*, Q, E
2,4-Dinitrotoluene	62.6	3.0	ug/L	60.0		104	66.8-132	7.85	30	
Fluorene	17.4	1.0	ug/L	20.0		87.2	57.8-120	8.68	30	
Diethyl phthalate	19.7	1.0	ug/L	20.0		98.4	68.1-120	9.08	30	
4-Chlorophenylphenyl ether	17.9	1.0	ug/L	20.0		89.3	59.1-127	5.04	30	
4-Nitroaniline	67.0	3.0	ug/L	60.0		112	56-122	0.04	30	
4,6-Dinitro-2-methylphenol	136	10.0	ug/L	110		123	37.9-162	5.85	30	
N-Nitrosodiphenylamine	21.7	1.0	ug/L	20.0		109	59.6-120	10.90	30	
4-Bromophenyl phenyl ether	18.9	1.0	ug/L	20.0		94.4	59.6-120	7.72	30	
Hexachlorobenzene	17.0	1.0	ug/L	20.0		84.8	53.7-120	6.13	30	
Pentachlorophenol	67.7	5.0	ug/L	60.0		113	40.3-128	6.00	30	
Phenanthrene	17.9	1.0	ug/L	20.0		89.5	58.8-120	5.55	30	
Anthracene	18.5	1.0	ug/L	20.0		92.7	60.5-120	6.98	30	
Carbazole	18.5	1.0	ug/L	20.0		92.6	59.7-120	3.29	30	
Di-n-Butylphthalate	18.9	1.0	ug/L	20.0		94.7	71-120	2.89	30	
Fluoranthene	16.9	1.0	ug/L	20.0		84.3	66.7-120	2.31	30	
Pyrene	17.3	1.0	ug/L	20.0		86.6	62.7-127	1.85	30	
Butylbenzylphthalate	17.9	1.0	ug/L	20.0		89.4	67.4-128	0.74	30	



WSP USA, Inc.
210 East 13th Street, Suite 300
Vancouver WA, 98660-3231

Project: Landsburg
Project Number: GL9231000007
Project Manager: Gary Zimmerman

Reported:
15-Apr-2025 16:40

Analysis by: Analytical Resources, LLC

Semivolatile Organic Compounds - Quality Control

Batch BNC0433 - EPA 8270E in Water

Instrument: NT10 Analyst: JZ

QC Sample/Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
LCS Dup (BNC0433-BSD1)		Prepared: 18-Mar-2025 Analyzed: 31-Mar-2025 19:15								
Benzo(a)anthracene	19.0	1.0	ug/L	20.0		94.8	58.3-128	0.35	30	
3,3'-Dichlorobenzidine	ND	10.0	ug/L	40.0		19.1	34.1-120	30.00	30	*, U
Chrysene	19.6	1.0	ug/L	20.0		98.1	58.9-120	1.47	30	
bis(2-Ethylhexyl)phthalate	21.8	3.0	ug/L	20.0		109	68.3-123	4.89	30	
Di-n-Octylphthalate	20.7	1.0	ug/L	20.0		103	61.5-120	3.60	30	
Benzo(a)fluoranthene, Total	39.5	2.0	ug/L	40.0		98.7	66.5-120	3.22	30	
Benzo(a)pyrene	23.6	1.0	ug/L	20.0		118	70.6-120	0.23	30	
Indeno(1,2,3-cd)pyrene	27.9	1.0	ug/L	20.0		139	46.5-120	8.33	30	*
Dibenzo(a,h)anthracene	25.8	1.0	ug/L	20.0		129	49.6-120	8.33	30	*
Benzo(g,h,i)perylene	26.9	1.0	ug/L	20.0		135	37-120	8.70	30	*
1-Methylnaphthalene	17.8	1.0	ug/L	20.0		89.2	46.9-120	11.80	30	
Surrogate: 2-Fluorophenol	16.7		ug/L	18.8		89.3	33-120			
Surrogate: Phenol-d5	17.7		ug/L	18.8		94.6	38-120			
Surrogate: 2-Chlorophenol-d4	18.5		ug/L	18.8		98.6	41-120			
Surrogate: 1,2-Dichlorobenzene-d4	10.8		ug/L	12.5		86.5	20-120			
Surrogate: Nitrobenzene-d5	13.1		ug/L	12.5		105	27-120			
Surrogate: 2-Fluorobiphenyl	11.8		ug/L	12.5		94.3	33-120			
Surrogate: 2,4,6-Tribromophenol	16.9		ug/L	18.8		90.0	52-120			
Surrogate: p-Terphenyl-d14	14.5		ug/L	12.5		116	28-120			



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Reported:
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Analysis by: Analytical Resources, LLC

Semivolatile Organic Compounds - Quality Control

Batch BNC0436 - EPA 8270E in Water

Instrument: NT14 Analyst: RT

QC Sample/Analyte	Result	Detection Limit	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Blank (BNC0436-BLK1)					Prepared: 20-Mar-2025 Analyzed: 28-Mar-2025 04:13						
1,4-Dioxane	ND	0.2	0.4	ug/L							U
Surrogate: 1,4-Dioxane-d8	6.92			ug/L	10.0		69.2	30-160			
LCS (BNC0436-BS1)					Prepared: 20-Mar-2025 Analyzed: 28-Mar-2025 04:30						
1,4-Dioxane	15.0	0.2	0.4	ug/L	10.0		150	30-160			
Surrogate: 1,4-Dioxane-d8	7.49			ug/L	10.0		74.9	30-160			
LCS Dup (BNC0436-BSD1)					Prepared: 20-Mar-2025 Analyzed: 28-Mar-2025 04:46						
1,4-Dioxane	14.9	0.2	0.4	ug/L	10.0		149	30-160	0.89	30	
Surrogate: 1,4-Dioxane-d8	6.81			ug/L	10.0		68.1	30-160			
Matrix Spike (BNC0436-MS1)					Source: 25C0281-06 Prepared: 20-Mar-2025 Analyzed: 28-Mar-2025 05:20						
1,4-Dioxane	19.7	0.2	0.4	ug/L	10.0	3.4	163	30-160			*
Surrogate: 1,4-Dioxane-d8	6.92			ug/L	10.0	6.97	69.2	30-160			
Recovery limits for target analytes in MS/MSD QC samples are advisory only.											
Matrix Spike Dup (BNC0436-MSD1)					Source: 25C0281-06 Prepared: 20-Mar-2025 Analyzed: 28-Mar-2025 05:36						
1,4-Dioxane	18.8	0.2	0.4	ug/L	10.0	3.4	154	30-160	4.90	30	
Surrogate: 1,4-Dioxane-d8	6.67			ug/L	10.0	6.97	66.7	30-160			

Recovery limits for target analytes in MS/MSD QC samples are advisory only.



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Analysis by: Analytical Resources, LLC

Semivolatile Organic Compounds - Quality Control

Batch BNC0437 - EPA 8270E in Water

Instrument: NT10 Analyst: JZ

QC Sample/Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Blank (BNC0437-BLK1)		Prepared: 19-Mar-2025 Analyzed: 26-Mar-2025 13:04								
Phenol	ND	1.0	ug/L							U
bis(2-chloroethyl) ether	ND	1.0	ug/L							U
2-Chlorophenol	ND	1.0	ug/L							U
1,3-Dichlorobenzene	ND	1.0	ug/L							U
1,4-Dichlorobenzene	ND	1.0	ug/L							U
Benzyl Alcohol	ND	2.0	ug/L							U
1,2-Dichlorobenzene	ND	1.0	ug/L							U
2-Methylphenol	ND	1.0	ug/L							U
2,2'-Oxybis(1-chloropropane)	ND	1.0	ug/L							U
4-Methylphenol	ND	2.0	ug/L							U
N-Nitroso-di-n-Propylamine	ND	1.0	ug/L							U
Hexachloroethane	ND	2.0	ug/L							U
Nitrobenzene	ND	1.0	ug/L							U
Isophorone	ND	1.0	ug/L							U
2-Nitrophenol	ND	3.0	ug/L							U
2,4-Dimethylphenol	ND	3.0	ug/L							U
Bis(2-Chloroethoxy)methane	ND	1.0	ug/L							U
Benzoic acid	ND	10.0	ug/L							U
2,4-Dichlorophenol	ND	3.0	ug/L							U
1,2,4-Trichlorobenzene	ND	1.0	ug/L							U
Naphthalene	ND	1.0	ug/L							U
4-Chloroaniline	ND	5.0	ug/L							U
Hexachlorobutadiene	ND	3.0	ug/L							U
4-Chloro-3-Methylphenol	ND	3.0	ug/L							U
2-Methylnaphthalene	ND	1.0	ug/L							U
Hexachlorocyclopentadiene	ND	5.0	ug/L							U
2,4,6-Trichlorophenol	ND	3.0	ug/L							U
2,4,5-Trichlorophenol	ND	5.0	ug/L							U
2-Chloronaphthalene	ND	1.0	ug/L							U
2-Nitroaniline	ND	3.0	ug/L							U
Dimethylphthalate	ND	1.0	ug/L							U
Acenaphthylene	ND	1.0	ug/L							U
2,6-Dinitrotoluene	ND	3.0	ug/L							U
3-Nitroaniline	ND	3.0	ug/L							U



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Analysis by: Analytical Resources, LLC

Semivolatile Organic Compounds - Quality Control

Batch BNC0437 - EPA 8270E in Water

Instrument: NT10 Analyst: JZ

QC Sample/Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Blank (BNC0437-BLK1)		Prepared: 19-Mar-2025 Analyzed: 26-Mar-2025 13:04								
Acenaphthene	ND	1.0	ug/L							U
2,4-Dinitrophenol	ND	10.0	ug/L							U
Dibenzofuran	ND	1.0	ug/L							U
4-Nitrophenol	ND	5.0	ug/L							U
2,4-Dinitrotoluene	ND	3.0	ug/L							U
Fluorene	ND	1.0	ug/L							U
Diethyl phthalate	ND	1.0	ug/L							U
4-Chlorophenylphenyl ether	ND	1.0	ug/L							U
4-Nitroaniline	ND	3.0	ug/L							U
4,6-Dinitro-2-methylphenol	ND	10.0	ug/L							U
N-Nitrosodiphenylamine	ND	1.0	ug/L							U
4-Bromophenyl phenyl ether	ND	1.0	ug/L							U
Hexachlorobenzene	ND	1.0	ug/L							U
Pentachlorophenol	ND	5.0	ug/L							U
Phenanthrene	ND	1.0	ug/L							U
Anthracene	ND	1.0	ug/L							U
Carbazole	ND	1.0	ug/L							U
Di-n-Butylphthalate	ND	1.0	ug/L							U
Fluoranthene	ND	1.0	ug/L							U
Pyrene	ND	1.0	ug/L							U
Butylbenzylphthalate	ND	1.0	ug/L							U
Benzo(a)anthracene	ND	1.0	ug/L							U
3,3'-Dichlorobenzidine	ND	10.0	ug/L							U
Chrysene	ND	1.0	ug/L							U
bis(2-Ethylhexyl)phthalate	ND	3.0	ug/L							U
Di-n-Octylphthalate	ND	1.0	ug/L							U
Benzo(a)fluoranthene, Total	ND	2.0	ug/L							U
Benzo(a)pyrene	ND	1.0	ug/L							U
Indeno(1,2,3-cd)pyrene	ND	1.0	ug/L							U
Dibenzo(a,h)anthracene	ND	1.0	ug/L							U
Benzo(g,h,i)perylene	ND	1.0	ug/L							U
1-Methylnaphthalene	ND	1.0	ug/L							U
Surrogate: 2-Fluorophenol	11.1		ug/L	18.8		59.0	33-120			
Surrogate: Phenol-d5	9.74		ug/L	18.8		52.0	38-120			



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Analysis by: Analytical Resources, LLC

Semivolatile Organic Compounds - Quality Control

Batch BNC0437 - EPA 8270E in Water

Instrument: NT10 Analyst: JZ

QC Sample/Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Blank (BNC0437-BLK1)		Prepared: 19-Mar-2025 Analyzed: 26-Mar-2025 13:04								
Surrogate: 2-Chlorophenol-d4	12.0		ug/L	18.8		64.2	41-120			
Surrogate: 1,2-Dichlorobenzene-d4	8.83		ug/L	12.5		70.6	20-120			
Surrogate: Nitrobenzene-d5	10.4		ug/L	12.5		83.1	27-120			
Surrogate: 2-Fluorobiphenyl	9.14		ug/L	12.5		73.1	33-120			
Surrogate: 2,4,6-Tribromophenol	13.1		ug/L	18.8		69.9	52-120			
Surrogate: p-Terphenyl-d14	10.1		ug/L	12.5		80.9	28-120			
LCS (BNC0437-BS1)		Prepared: 19-Mar-2025 Analyzed: 26-Mar-2025 13:45								
Phenol	10.8	1.0	ug/L	20.0		53.8	35-120			
bis(2-chloroethyl) ether	10.4	1.0	ug/L	20.0		51.8	46.5-120			
2-Chlorophenol	12.6	1.0	ug/L	20.0		62.9	48-120			
1,3-Dichlorobenzene	10.2	1.0	ug/L	20.0		51.2	34.2-120			
1,4-Dichlorobenzene	10.3	1.0	ug/L	20.0		51.6	36-120			
Benzyl Alcohol	14.4	2.0	ug/L	20.0		72.2	27.4-120			
1,2-Dichlorobenzene	10.2	1.0	ug/L	20.0		51.0	38.4-120			
2-Methylphenol	13.0	1.0	ug/L	20.0		65.0	47.8-120			
2,2'-Oxybis(1-chloropropane)	9.6	1.0	ug/L	20.0		47.9	40.4-120			
4-Methylphenol	12.9	2.0	ug/L	20.0		64.6	52.3-120			
N-Nitroso-di-n-Propylamine	12.5	1.0	ug/L	20.0		62.7	51.4-120			
Hexachloroethane	11.3	2.0	ug/L	20.0		56.7	29.5-120			
Nitrobenzene	13.5	1.0	ug/L	20.0		67.4	51.5-120			
Isophorone	13.9	1.0	ug/L	20.0		69.5	62.3-128			
2-Nitrophenol	13.2	3.0	ug/L	20.0		66.0	58.6-124			
2,4-Dimethylphenol	48.0	3.0	ug/L	60.0		80.0	38.5-120			
Bis(2-Chloroethoxy)methane	9.1	1.0	ug/L	20.0		45.4	52.9-120			*
Benzoic acid	69.1	10.0	ug/L	90.0		76.8	38.2-120			
2,4-Dichlorophenol	47.7	3.0	ug/L	60.0		79.4	43.6-120			
1,2,4-Trichlorobenzene	10.9	1.0	ug/L	20.0		54.4	38.6-120			
Naphthalene	11.3	1.0	ug/L	20.0		56.4	40.5-120			
4-Chloroaniline	23.3	5.0	ug/L	60.0		38.9	42.7-120			*
Hexachlorobutadiene	11.6	3.0	ug/L	20.0		57.8	32.3-120			
4-Chloro-3-Methylphenol	48.6	3.0	ug/L	60.0		81.0	51.9-120			
2-Methylnaphthalene	11.1	1.0	ug/L	20.0		55.7	47.3-120			
Hexachlorocyclopentadiene	52.3	5.0	ug/L	60.0		87.2	23.3-120			Q
2,4,6-Trichlorophenol	46.8	3.0	ug/L	60.0		77.9	47-120			



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Project: Landsburg
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Analysis by: Analytical Resources, LLC

Semivolatile Organic Compounds - Quality Control

Batch BNC0437 - EPA 8270E in Water

Instrument: NT10 Analyst: JZ

QC Sample/Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
LCS (BNC0437-BS1)		Prepared: 19-Mar-2025 Analyzed: 26-Mar-2025 13:45								
2,4,5-Trichlorophenol	43.5	5.0	ug/L	60.0		72.5	48.4-120			
2-Chloronaphthalene	11.8	1.0	ug/L	20.0		59.2	47.7-123			
2-Nitroaniline	48.6	3.0	ug/L	60.0		81.0	56.8-120			
Dimethylphthalate	13.5	1.0	ug/L	20.0		67.4	65.2-125			
Acenaphthylene	12.0	1.0	ug/L	20.0		60.2	44.1-120			
2,6-Dinitrotoluene	42.7	3.0	ug/L	60.0		71.2	69.3-140			
3-Nitroaniline	38.1	3.0	ug/L	60.0		63.5	60.9-120			
Acenaphthene	11.6	1.0	ug/L	20.0		58.2	50.4-120			
2,4-Dinitrophenol	69.5	10.0	ug/L	110		63.2	33.7-183			
Dibenzofuran	13.5	1.0	ug/L	20.0		67.6	49.9-120			
4-Nitrophenol	101	5.0	ug/L	60.0		169	50.2-136			*, E
2,4-Dinitrotoluene	44.9	3.0	ug/L	60.0		74.9	66.8-132			
Fluorene	12.1	1.0	ug/L	20.0		60.5	57.8-120			
Diethyl phthalate	14.3	1.0	ug/L	20.0		71.7	68.1-120			
4-Chlorophenylphenyl ether	12.1	1.0	ug/L	20.0		60.6	59.1-127			
4-Nitroaniline	41.1	3.0	ug/L	60.0		68.5	56-122			
4,6-Dinitro-2-methylphenol	85.9	10.0	ug/L	110		78.1	37.9-162			
N-Nitrosodiphenylamine	13.0	1.0	ug/L	20.0		65.0	59.6-120			
4-Bromophenyl phenyl ether	12.2	1.0	ug/L	20.0		61.0	59.6-120			
Hexachlorobenzene	11.0	1.0	ug/L	20.0		55.2	53.7-120			
Pentachlorophenol	45.0	5.0	ug/L	60.0		74.9	40.3-128			
Phenanthrene	12.3	1.0	ug/L	20.0		61.5	58.8-120			
Anthracene	13.3	1.0	ug/L	20.0		66.3	60.5-120			
Carbazole	11.8	1.0	ug/L	20.0		58.9	59.7-120			*
Di-n-Butylphthalate	13.5	1.0	ug/L	20.0		67.4	71-120			*
Fluoranthene	12.8	1.0	ug/L	20.0		64.0	66.7-120			*
Pyrene	13.0	1.0	ug/L	20.0		65.1	62.7-127			
Butylbenzylphthalate	10.5	1.0	ug/L	20.0		52.7	67.4-128			*
Benzo(a)anthracene	12.8	1.0	ug/L	20.0		64.1	58.3-128			
3,3'-Dichlorobenzidine	ND	10.0	ug/L	40.0		23.7	34.1-120			*, U
Chrysene	13.2	1.0	ug/L	20.0		66.2	58.9-120			
bis(2-Ethylhexyl)phthalate	12.4	3.0	ug/L	20.0		62.2	68.3-123			*
Di-n-Octylphthalate	12.2	1.0	ug/L	20.0		61.2	61.5-120			*
Benzofluoranthenes, Total	25.7	2.0	ug/L	40.0		64.2	66.5-120			*



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Analysis by: Analytical Resources, LLC

Semivolatile Organic Compounds - Quality Control

Batch BNC0437 - EPA 8270E in Water

Instrument: NT10 Analyst: JZ

QC Sample/Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
LCS (BNC0437-BS1) Prepared: 19-Mar-2025 Analyzed: 26-Mar-2025 13:45										
Benzo(a)pyrene	14.5	1.0	ug/L	20.0		72.3	70.6-120			
Indeno(1,2,3-cd)pyrene	14.4	1.0	ug/L	20.0		71.9	46.5-120			
Dibenzo(a,h)anthracene	13.5	1.0	ug/L	20.0		67.5	49.6-120			
Benzo(g,h,i)perylene	13.1	1.0	ug/L	20.0		65.6	37-120			
1-Methylnaphthalene	12.9	1.0	ug/L	20.0		64.5	46.9-120			
Surrogate: 2-Fluorophenol	10.7		ug/L	18.8		57.1	33-120			
Surrogate: Phenol-d5	11.4		ug/L	18.8		61.0	38-120			
Surrogate: 2-Chlorophenol-d4	12.7		ug/L	18.8		67.6	41-120			
Surrogate: 1,2-Dichlorobenzene-d4	8.02		ug/L	12.5		64.2	20-120			
Surrogate: Nitrobenzene-d5	9.44		ug/L	12.5		75.5	27-120			
Surrogate: 2-Fluorobiphenyl	8.53		ug/L	12.5		68.2	33-120			
Surrogate: 2,4,6-Tribromophenol	13.7		ug/L	18.8		73.0	52-120			
Surrogate: p-Terphenyl-d14	8.86		ug/L	12.5		70.9	28-120			
LCS Dup (BNC0437-BS1) Prepared: 19-Mar-2025 Analyzed: 26-Mar-2025 14:26										
Phenol	11.8	1.0	ug/L	20.0		58.8	35-120	8.74	30	
bis(2-chloroethyl) ether	11.0	1.0	ug/L	20.0		55.2	46.5-120	6.48	30	
2-Chlorophenol	13.0	1.0	ug/L	20.0		65.2	48-120	3.67	30	
1,3-Dichlorobenzene	11.4	1.0	ug/L	20.0		56.9	34.2-120	10.50	30	
1,4-Dichlorobenzene	11.4	1.0	ug/L	20.0		57.2	36-120	10.30	30	
Benzyl Alcohol	ND	2.0	ug/L	20.0		5.6	27.4-120	171.00	30	*, U
1,2-Dichlorobenzene	11.3	1.0	ug/L	20.0		56.5	38.4-120	10.40	30	
2-Methylphenol	12.7	1.0	ug/L	20.0		63.7	47.8-120	1.99	30	
2,2'-Oxybis(1-chloropropane)	9.9	1.0	ug/L	20.0		49.7	40.4-120	3.64	30	
4-Methylphenol	12.4	2.0	ug/L	20.0		62.0	52.3-120	4.11	30	
N-Nitroso-di-n-Propylamine	13.6	1.0	ug/L	20.0		68.0	51.4-120	8.02	30	
Hexachloroethane	12.9	2.0	ug/L	20.0		64.5	29.5-120	12.90	30	
Nitrobenzene	14.6	1.0	ug/L	20.0		72.8	51.5-120	7.67	30	
Isophorone	14.6	1.0	ug/L	20.0		73.0	62.3-128	4.83	30	
2-Nitrophenol	14.4	3.0	ug/L	20.0		71.9	58.6-124	8.50	30	
2,4-Dimethylphenol	52.0	3.0	ug/L	60.0		86.6	38.5-120	7.89	30	
Bis(2-Chloroethoxy)methane	ND	1.0	ug/L	20.0			52.9-120		30	*, U
Benzoic acid	70.8	10.0	ug/L	90.0		78.7	38.2-120	2.36	30	
2,4-Dichlorophenol	51.7	3.0	ug/L	60.0		86.2	43.6-120	8.20	30	
1,2,4-Trichlorobenzene	12.1	1.0	ug/L	20.0		60.3	38.6-120	10.30	30	



WSP USA, Inc.
210 East 13th Street, Suite 300
Vancouver WA, 98660-3231

Project: Landsburg
Project Number: GL9231000007
Project Manager: Gary Zimmerman

Reported:
15-Apr-2025 16:40

Analysis by: Analytical Resources, LLC

Semivolatile Organic Compounds - Quality Control

Batch BNC0437 - EPA 8270E in Water

Instrument: NT10 Analyst: JZ

QC Sample/Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
LCS Dup (BNC0437-BSD1)		Prepared: 19-Mar-2025 Analyzed: 26-Mar-2025 14:26								
Naphthalene	12.4	1.0	ug/L	20.0		62.0	40.5-120	9.53	30	
4-Chloroaniline	ND	5.0	ug/L	60.0			42.7-120		30	*, U
Hexachlorobutadiene	13.2	3.0	ug/L	20.0		65.9	32.3-120	13.00	30	
4-Chloro-3-Methylphenol	50.2	3.0	ug/L	60.0		83.7	51.9-120	3.25	30	
2-Methylnaphthalene	12.0	1.0	ug/L	20.0		60.1	47.3-120	7.49	30	
Hexachlorocyclopentadiene	60.3	5.0	ug/L	60.0		101	23.3-120	14.20	30	Q
2,4,6-Trichlorophenol	51.2	3.0	ug/L	60.0		85.3	47-120	9.01	30	
2,4,5-Trichlorophenol	46.4	5.0	ug/L	60.0		77.4	48.4-120	6.49	30	
2-Chloronaphthalene	13.1	1.0	ug/L	20.0		65.4	47.7-123	9.93	30	
2-Nitroaniline	48.6	3.0	ug/L	60.0		81.0	56.8-120	0.03	30	
Dimethylphthalate	12.5	1.0	ug/L	20.0		62.7	65.2-125	7.14	30	*
Acenaphthylene	ND	1.0	ug/L	20.0		2.8	44.1-120	182.00	30	*, U
2,6-Dinitrotoluene	44.3	3.0	ug/L	60.0		73.8	69.3-140	3.66	30	
3-Nitroaniline	ND	3.0	ug/L	60.0			60.9-120		30	*, U
Acenaphthene	11.2	1.0	ug/L	20.0		56.0	50.4-120	3.75	30	
2,4-Dinitrophenol	78.6	10.0	ug/L	110		71.4	33.7-183	12.30	30	
Dibenzofuran	14.4	1.0	ug/L	20.0		72.0	49.9-120	6.33	30	
4-Nitrophenol	102	5.0	ug/L	60.0		170	50.2-136	0.63	30	*, E
2,4-Dinitrotoluene	47.3	3.0	ug/L	60.0		78.8	66.8-132	5.08	30	
Fluorene	12.5	1.0	ug/L	20.0		62.4	57.8-120	3.05	30	
Diethyl phthalate	11.4	1.0	ug/L	20.0		57.0	68.1-120	22.80	30	*
4-Chlorophenylphenyl ether	12.9	1.0	ug/L	20.0		64.5	59.1-127	6.39	30	
4-Nitroaniline	7.7	3.0	ug/L	60.0		12.8	56-122	137.00	30	*
4,6-Dinitro-2-methylphenol	96.0	10.0	ug/L	110		87.2	37.9-162	11.00	30	
N-Nitrosodiphenylamine	6.0	1.0	ug/L	20.0		29.9	59.6-120	74.00	30	*
4-Bromophenyl phenyl ether	13.4	1.0	ug/L	20.0		66.8	59.6-120	9.09	30	
Hexachlorobenzene	12.1	1.0	ug/L	20.0		60.6	53.7-120	9.36	30	
Pentachlorophenol	48.7	5.0	ug/L	60.0		81.1	40.3-128	7.93	30	
Phenanthrene	12.9	1.0	ug/L	20.0		64.4	58.8-120	4.53	30	
Anthracene	11.3	1.0	ug/L	20.0		56.6	60.5-120	15.80	30	*
Carbazole	ND	1.0	ug/L	20.0			59.7-120		30	*, U
Di-n-Butylphthalate	8.4	1.0	ug/L	20.0		41.9	71-120	46.60	30	*
Fluoranthene	11.4	1.0	ug/L	20.0		56.9	66.7-120	11.70	30	*
Pyrene	3.3	1.0	ug/L	20.0		16.6	62.7-127	119.00	30	*



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Reported:
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Analysis by: Analytical Resources, LLC

Semivolatile Organic Compounds - Quality Control

Batch BNC0437 - EPA 8270E in Water

Instrument: NT10 Analyst: JZ

QC Sample/Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
LCS Dup (BNC0437-BSD1)		Prepared: 19-Mar-2025 Analyzed: 26-Mar-2025 14:26								
Butylbenzylphthalate	ND	1.0	ug/L	20.0			67.4-128		30	*, U
Benzo(a)anthracene	10.2	1.0	ug/L	20.0		50.8	58.3-128	23.20	30	*
3,3'-Dichlorobenzidine	ND	10.0	ug/L	40.0			34.1-120		30	*, U
Chrysene	11.9	1.0	ug/L	20.0		59.6	58.9-120	10.50	30	
bis(2-Ethylhexyl)phthalate	10.5	3.0	ug/L	20.0		52.4	68.3-123	17.00	30	*
Di-n-Octylphthalate	11.1	1.0	ug/L	20.0		55.3	61.5-120	10.10	30	*
Benzofluoranthenes, Total	19.8	2.0	ug/L	40.0		49.4	66.5-120	26.00	30	*
Benzo(a)pyrene	1.6	1.0	ug/L	20.0		8.1	70.6-120	160.00	30	*
Indeno(1,2,3-cd)pyrene	5.3	1.0	ug/L	20.0		26.7	46.5-120	91.70	30	*
Dibenzo(a,h)anthracene	11.6	1.0	ug/L	20.0		58.0	49.6-120	15.30	30	
Benzo(g,h,i)perylene	3.1	1.0	ug/L	20.0		15.6	37-120	123.00	30	*
1-Methylnaphthalene	13.7	1.0	ug/L	20.0		68.5	46.9-120	6.05	30	
Surrogate: 2-Fluorophenol	10.6		ug/L	18.8		56.5	33-120			
Surrogate: Phenol-d5	6.78		ug/L	18.8		36.2	38-120			*
Surrogate: 2-Chlorophenol-d4	12.6		ug/L	18.8		67.0	41-120			
Surrogate: 1,2-Dichlorobenzene-d4	8.02		ug/L	12.5		64.2	20-120			
Surrogate: Nitrobenzene-d5	9.47		ug/L	12.5		75.7	27-120			
Surrogate: 2-Fluorobiphenyl	8.59		ug/L	12.5		68.7	33-120			
Surrogate: 2,4,6-Tribromophenol	13.2		ug/L	18.8		70.5	52-120			
Surrogate: p-Terphenyl-d14	8.78		ug/L	12.5		70.2	28-120			



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Analysis by: Analytical Resources, LLC

Semivolatile Organic Compounds - Quality Control

Batch BNC0438 - EPA 8270E in Water

Instrument: NT10 Analyst: JZ

QC Sample/Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Blank (BNC0438-BLK1)		Prepared: 20-Mar-2025 Analyzed: 26-Mar-2025 17:11								
Phenol	ND	1.0	ug/L							U
bis(2-chloroethyl) ether	ND	1.0	ug/L							U
2-Chlorophenol	ND	1.0	ug/L							U
1,3-Dichlorobenzene	ND	1.0	ug/L							U
1,4-Dichlorobenzene	ND	1.0	ug/L							U
Benzyl Alcohol	ND	2.0	ug/L							U
1,2-Dichlorobenzene	ND	1.0	ug/L							U
2-Methylphenol	ND	1.0	ug/L							U
2,2'-Oxybis(1-chloropropane)	ND	1.0	ug/L							U
4-Methylphenol	ND	2.0	ug/L							U
N-Nitroso-di-n-Propylamine	ND	1.0	ug/L							U
Hexachloroethane	ND	2.0	ug/L							U
Nitrobenzene	ND	1.0	ug/L							U
Isophorone	ND	1.0	ug/L							U
2-Nitrophenol	ND	3.0	ug/L							U
2,4-Dimethylphenol	ND	3.0	ug/L							U
Bis(2-Chloroethoxy)methane	ND	1.0	ug/L							U
Benzoic acid	ND	10.0	ug/L							U
2,4-Dichlorophenol	ND	3.0	ug/L							U
1,2,4-Trichlorobenzene	ND	1.0	ug/L							U
Naphthalene	ND	1.0	ug/L							U
4-Chloroaniline	ND	5.0	ug/L							U
Hexachlorobutadiene	ND	3.0	ug/L							U
4-Chloro-3-Methylphenol	ND	3.0	ug/L							U
2-Methylnaphthalene	ND	1.0	ug/L							U
Hexachlorocyclopentadiene	ND	5.0	ug/L							U
2,4,6-Trichlorophenol	ND	3.0	ug/L							U
2,4,5-Trichlorophenol	ND	5.0	ug/L							U
2-Chloronaphthalene	ND	1.0	ug/L							U
2-Nitroaniline	ND	3.0	ug/L							U
Dimethylphthalate	ND	1.0	ug/L							U
Acenaphthylene	ND	1.0	ug/L							U
2,6-Dinitrotoluene	ND	3.0	ug/L							U
3-Nitroaniline	ND	3.0	ug/L							U



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Analysis by: Analytical Resources, LLC

Semivolatile Organic Compounds - Quality Control

Batch BNC0438 - EPA 8270E in Water

Instrument: NT10 Analyst: JZ

QC Sample/Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Blank (BNC0438-BLK1)		Prepared: 20-Mar-2025 Analyzed: 26-Mar-2025 17:11								
Acenaphthene	ND	1.0	ug/L							U
2,4-Dinitrophenol	ND	10.0	ug/L							U
Dibenzofuran	ND	1.0	ug/L							U
4-Nitrophenol	ND	5.0	ug/L							U
2,4-Dinitrotoluene	ND	3.0	ug/L							U
Fluorene	ND	1.0	ug/L							U
Diethyl phthalate	ND	1.0	ug/L							U
4-Chlorophenylphenyl ether	ND	1.0	ug/L							U
4-Nitroaniline	ND	3.0	ug/L							U
4,6-Dinitro-2-methylphenol	ND	10.0	ug/L							U
N-Nitrosodiphenylamine	ND	1.0	ug/L							U
4-Bromophenyl phenyl ether	ND	1.0	ug/L							U
Hexachlorobenzene	ND	1.0	ug/L							U
Pentachlorophenol	ND	5.0	ug/L							U
Phenanthrene	ND	1.0	ug/L							U
Anthracene	ND	1.0	ug/L							U
Carbazole	ND	1.0	ug/L							U
Di-n-Butylphthalate	ND	1.0	ug/L							U
Fluoranthene	ND	1.0	ug/L							U
Pyrene	ND	1.0	ug/L							U
Butylbenzylphthalate	ND	1.0	ug/L							U
Benzo(a)anthracene	ND	1.0	ug/L							U
3,3'-Dichlorobenzidine	ND	10.0	ug/L							U
Chrysene	ND	1.0	ug/L							U
bis(2-Ethylhexyl)phthalate	ND	3.0	ug/L							U
Di-n-Octylphthalate	ND	1.0	ug/L							U
Benzo(a)fluoranthene, Total	ND	2.0	ug/L							U
Benzo(a)pyrene	ND	1.0	ug/L							U
Indeno(1,2,3-cd)pyrene	ND	1.0	ug/L							U
Dibenzo(a,h)anthracene	ND	1.0	ug/L							U
Benzo(g,h,i)perylene	ND	1.0	ug/L							U
1-Methylnaphthalene	ND	1.0	ug/L							U
Surrogate: 2-Fluorophenol	10.5		ug/L	18.8		56.0	33-120			
Surrogate: Phenol-d5	9.05		ug/L	18.8		48.3	38-120			



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Analysis by: Analytical Resources, LLC

Semivolatile Organic Compounds - Quality Control

Batch BNC0438 - EPA 8270E in Water

Instrument: NT10 Analyst: JZ

QC Sample/Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Blank (BNC0438-BLK1)		Prepared: 20-Mar-2025 Analyzed: 26-Mar-2025 17:11								
Surrogate: 2-Chlorophenol-d4	11.1		ug/L	18.8		59.4	41-120			
Surrogate: 1,2-Dichlorobenzene-d4	7.77		ug/L	12.5		62.2	20-120			
Surrogate: Nitrobenzene-d5	9.19		ug/L	12.5		73.5	27-120			
Surrogate: 2-Fluorobiphenyl	8.21		ug/L	12.5		65.7	33-120			
Surrogate: 2,4,6-Tribromophenol	12.6		ug/L	18.8		67.4	52-120			
Surrogate: p-Terphenyl-d14	9.62		ug/L	12.5		76.9	28-120			
LCS (BNC0438-BS1)		Prepared: 20-Mar-2025 Analyzed: 26-Mar-2025 17:52								
Phenol	10.3	1.0	ug/L	20.0		51.3	35-120			
bis(2-chloroethyl) ether	9.5	1.0	ug/L	20.0		47.5	46.5-120			
2-Chlorophenol	11.5	1.0	ug/L	20.0		57.3	48-120			
1,3-Dichlorobenzene	9.5	1.0	ug/L	20.0		47.4	34.2-120			
1,4-Dichlorobenzene	9.8	1.0	ug/L	20.0		48.9	36-120			
Benzyl Alcohol	12.9	2.0	ug/L	20.0		64.4	27.4-120			
1,2-Dichlorobenzene	9.5	1.0	ug/L	20.0		47.6	38.4-120			
2-Methylphenol	11.5	1.0	ug/L	20.0		57.6	47.8-120			
2,2'-Oxybis(1-chloropropane)	8.8	1.0	ug/L	20.0		44.2	40.4-120			
4-Methylphenol	11.7	2.0	ug/L	20.0		58.5	52.3-120			
N-Nitroso-di-n-Propylamine	11.3	1.0	ug/L	20.0		56.3	51.4-120			
Hexachloroethane	10.5	2.0	ug/L	20.0		52.3	29.5-120			
Nitrobenzene	12.6	1.0	ug/L	20.0		63.0	51.5-120			
Isophorone	13.3	1.0	ug/L	20.0		66.3	62.3-128			
2-Nitrophenol	12.7	3.0	ug/L	20.0		63.5	58.6-124			
2,4-Dimethylphenol	44.8	3.0	ug/L	60.0		74.7	38.5-120			
Bis(2-Chloroethoxy)methane	4.0	1.0	ug/L	20.0		20.1	52.9-120			*
Benzoic acid	69.5	10.0	ug/L	90.0		77.2	38.2-120			
2,4-Dichlorophenol	45.4	3.0	ug/L	60.0		75.7	43.6-120			
1,2,4-Trichlorobenzene	10.4	1.0	ug/L	20.0		51.9	38.6-120			
Naphthalene	10.8	1.0	ug/L	20.0		54.1	40.5-120			
4-Chloroaniline	15.0	5.0	ug/L	60.0		25.1	42.7-120			*
Hexachlorobutadiene	11.6	3.0	ug/L	20.0		58.1	32.3-120			
4-Chloro-3-Methylphenol	46.1	3.0	ug/L	60.0		76.8	51.9-120			
2-Methylnaphthalene	10.6	1.0	ug/L	20.0		53.1	47.3-120			
Hexachlorocyclopentadiene	50.5	5.0	ug/L	60.0		84.2	23.3-120			Q
2,4,6-Trichlorophenol	46.0	3.0	ug/L	60.0		76.6	47-120			



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Project: Landsburg
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Reported:
15-Apr-2025 16:40

Analysis by: Analytical Resources, LLC

Semivolatile Organic Compounds - Quality Control

Batch BNC0438 - EPA 8270E in Water

Instrument: NT10 Analyst: JZ

QC Sample/Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
LCS (BNC0438-BS1)		Prepared: 20-Mar-2025 Analyzed: 26-Mar-2025 17:52								
2,4,5-Trichlorophenol	42.0	5.0	ug/L	60.0		69.9	48.4-120			
2-Chloronaphthalene	11.5	1.0	ug/L	20.0		57.5	47.7-123			
2-Nitroaniline	46.4	3.0	ug/L	60.0		77.3	56.8-120			
Dimethylphthalate	12.8	1.0	ug/L	20.0		64.2	65.2-125			*
Acenaphthylene	11.4	1.0	ug/L	20.0		56.8	44.1-120			
2,6-Dinitrotoluene	40.4	3.0	ug/L	60.0		67.4	69.3-140			*
3-Nitroaniline	35.6	3.0	ug/L	60.0		59.3	60.9-120			*
Acenaphthene	11.4	1.0	ug/L	20.0		56.8	50.4-120			
2,4-Dinitrophenol	66.4	10.0	ug/L	110		60.4	33.7-183			
Dibenzofuran	13.1	1.0	ug/L	20.0		65.4	49.9-120			
4-Nitrophenol	97.3	5.0	ug/L	60.0		162	50.2-136			*, E
2,4-Dinitrotoluene	42.3	3.0	ug/L	60.0		70.6	66.8-132			
Fluorene	11.7	1.0	ug/L	20.0		58.3	57.8-120			
Diethyl phthalate	13.3	1.0	ug/L	20.0		66.5	68.1-120			*
4-Chlorophenylphenyl ether	11.8	1.0	ug/L	20.0		58.8	59.1-127			*
4-Nitroaniline	38.8	3.0	ug/L	60.0		64.7	56-122			
4,6-Dinitro-2-methylphenol	84.8	10.0	ug/L	110		77.1	37.9-162			
N-Nitrosodiphenylamine	10.4	1.0	ug/L	20.0		52.0	59.6-120			*
4-Bromophenyl phenyl ether	12.2	1.0	ug/L	20.0		61.1	59.6-120			
Hexachlorobenzene	11.1	1.0	ug/L	20.0		55.4	53.7-120			
Pentachlorophenol	43.0	5.0	ug/L	60.0		71.7	40.3-128			
Phenanthrene	11.9	1.0	ug/L	20.0		59.6	58.8-120			
Anthracene	12.1	1.0	ug/L	20.0		60.6	60.5-120			
Carbazole	10.3	1.0	ug/L	20.0		51.7	59.7-120			*
Di-n-Butylphthalate	11.6	1.0	ug/L	20.0		58.1	71-120			*
Fluoranthene	11.8	1.0	ug/L	20.0		58.8	66.7-120			*
Pyrene	11.7	1.0	ug/L	20.0		58.5	62.7-127			*
Butylbenzylphthalate	9.1	1.0	ug/L	20.0		45.4	67.4-128			*
Benzo(a)anthracene	12.1	1.0	ug/L	20.0		60.6	58.3-128			
3,3'-Dichlorobenzidine	ND	10.0	ug/L	40.0		19.3	34.1-120			*, U
Chrysene	12.7	1.0	ug/L	20.0		63.6	58.9-120			
bis(2-Ethylhexyl)phthalate	12.3	3.0	ug/L	20.0		61.3	68.3-123			*
Di-n-Octylphthalate	12.5	1.0	ug/L	20.0		62.4	61.5-120			
Benzofluoranthenes, Total	23.8	2.0	ug/L	40.0		59.5	66.5-120			*



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Reported:
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Analysis by: Analytical Resources, LLC

Semivolatile Organic Compounds - Quality Control

Batch BNC0438 - EPA 8270E in Water

Instrument: NT10 Analyst: JZ

QC Sample/Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
LCS (BNC0438-BS1)		Prepared: 20-Mar-2025 Analyzed: 26-Mar-2025 17:52								
Benzo(a)pyrene	13.4	1.0	ug/L	20.0		66.8	70.6-120			*
Indeno(1,2,3-cd)pyrene	14.3	1.0	ug/L	20.0		71.6	46.5-120			
Dibenzo(a,h)anthracene	13.3	1.0	ug/L	20.0		66.6	49.6-120			
Benzo(g,h,i)perylene	13.1	1.0	ug/L	20.0		65.7	37-120			
1-Methylnaphthalene	12.5	1.0	ug/L	20.0		62.3	46.9-120			
Surrogate: 2-Fluorophenol	10.1		ug/L	18.8		53.9	33-120			
Surrogate: Phenol-d5	10.5		ug/L	18.8		55.8	38-120			
Surrogate: 2-Chlorophenol-d4	12.3		ug/L	18.8		65.4	41-120			
Surrogate: 1,2-Dichlorobenzene-d4	7.97		ug/L	12.5		63.7	20-120			
Surrogate: Nitrobenzene-d5	9.30		ug/L	12.5		74.4	27-120			
Surrogate: 2-Fluorobiphenyl	8.70		ug/L	12.5		69.6	33-120			
Surrogate: 2,4,6-Tribromophenol	14.2		ug/L	18.8		75.6	52-120			
Surrogate: p-Terphenyl-d14	9.15		ug/L	12.5		73.2	28-120			
LCS Dup (BNC0438-BSD1)		Prepared: 20-Mar-2025 Analyzed: 26-Mar-2025 18:33								
Phenol	11.7	1.0	ug/L	20.0		58.4	35-120	12.80	30	
bis(2-chloroethyl) ether	11.0	1.0	ug/L	20.0		55.1	46.5-120	14.90	30	
2-Chlorophenol	13.1	1.0	ug/L	20.0		65.4	48-120	13.10	30	
1,3-Dichlorobenzene	10.5	1.0	ug/L	20.0		52.5	34.2-120	10.20	30	
1,4-Dichlorobenzene	10.7	1.0	ug/L	20.0		53.7	36-120	9.41	30	
Benzyl Alcohol	15.0	2.0	ug/L	20.0		75.2	27.4-120	15.40	30	
1,2-Dichlorobenzene	10.8	1.0	ug/L	20.0		54.0	38.4-120	12.50	30	
2-Methylphenol	13.6	1.0	ug/L	20.0		67.9	47.8-120	16.40	30	
2,2'-Oxybis(1-chloropropane)	10.1	1.0	ug/L	20.0		50.7	40.4-120	13.50	30	
4-Methylphenol	13.8	2.0	ug/L	20.0		68.8	52.3-120	16.10	30	
N-Nitroso-di-n-Propylamine	13.0	1.0	ug/L	20.0		65.0	51.4-120	14.30	30	
Hexachloroethane	11.7	2.0	ug/L	20.0		58.7	29.5-120	11.70	30	
Nitrobenzene	14.6	1.0	ug/L	20.0		73.2	51.5-120	15.10	30	
Isophorone	14.5	1.0	ug/L	20.0		72.6	62.3-128	9.00	30	
2-Nitrophenol	14.4	3.0	ug/L	20.0		72.1	58.6-124	12.70	30	
2,4-Dimethylphenol	49.2	3.0	ug/L	60.0		82.1	38.5-120	9.35	30	
Bis(2-Chloroethoxy)methane	11.3	1.0	ug/L	20.0		56.7	52.9-120	95.10	30	*
Benzoic acid	78.2	10.0	ug/L	90.0		86.8	38.2-120	11.80	30	
2,4-Dichlorophenol	51.5	3.0	ug/L	60.0		85.9	43.6-120	12.60	30	
1,2,4-Trichlorobenzene	11.5	1.0	ug/L	20.0		57.6	38.6-120	10.40	30	



WSP USA, Inc.
210 East 13th Street, Suite 300
Vancouver WA, 98660-3231

Project: Landsburg
Project Number: GL9231000007
Project Manager: Gary Zimmerman

Reported:
15-Apr-2025 16:40

Analysis by: Analytical Resources, LLC

Semivolatile Organic Compounds - Quality Control

Batch BNC0438 - EPA 8270E in Water

Instrument: NT10 Analyst: JZ

QC Sample/Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
LCS Dup (BNC0438-BSD1)		Prepared: 20-Mar-2025 Analyzed: 26-Mar-2025 18:33								
Naphthalene	12.0	1.0	ug/L	20.0		60.1	40.5-120	10.40	30	
4-Chloroaniline	26.1	5.0	ug/L	60.0		43.4	42.7-120	53.70	30	*
Hexachlorobutadiene	12.3	3.0	ug/L	20.0		61.7	32.3-120	6.06	30	
4-Chloro-3-Methylphenol	52.6	3.0	ug/L	60.0		87.7	51.9-120	13.20	30	
2-Methylnaphthalene	12.1	1.0	ug/L	20.0		60.3	47.3-120	12.70	30	
Hexachlorocyclopentadiene	57.4	5.0	ug/L	60.0		95.6	23.3-120	12.70	30	Q
2,4,6-Trichlorophenol	51.9	3.0	ug/L	60.0		86.5	47-120	12.10	30	
2,4,5-Trichlorophenol	47.6	5.0	ug/L	60.0		79.4	48.4-120	12.60	30	
2-Chloronaphthalene	12.9	1.0	ug/L	20.0		64.3	47.7-123	11.20	30	
2-Nitroaniline	52.8	3.0	ug/L	60.0		88.0	56.8-120	13.00	30	
Dimethylphthalate	14.5	1.0	ug/L	20.0		72.6	65.2-125	12.30	30	
Acenaphthylene	13.0	1.0	ug/L	20.0		65.0	44.1-120	13.40	30	
2,6-Dinitrotoluene	45.4	3.0	ug/L	60.0		75.7	69.3-140	11.70	30	
3-Nitroaniline	44.3	3.0	ug/L	60.0		73.8	60.9-120	21.70	30	
Acenaphthene	12.5	1.0	ug/L	20.0		62.6	50.4-120	9.67	30	
2,4-Dinitrophenol	75.1	10.0	ug/L	110		68.3	33.7-183	12.30	30	
Dibenzofuran	14.8	1.0	ug/L	20.0		74.0	49.9-120	12.40	30	
4-Nitrophenol	120	5.0	ug/L	60.0		201	50.2-136	21.30	30	*, E
2,4-Dinitrotoluene	47.8	3.0	ug/L	60.0		79.7	66.8-132	12.10	30	
Fluorene	12.9	1.0	ug/L	20.0		64.4	57.8-120	9.99	30	
Diethyl phthalate	15.4	1.0	ug/L	20.0		77.0	68.1-120	14.50	30	
4-Chlorophenylphenyl ether	13.0	1.0	ug/L	20.0		65.1	59.1-127	10.20	30	
4-Nitroaniline	44.0	3.0	ug/L	60.0		73.3	56-122	12.50	30	
4,6-Dinitro-2-methylphenol	95.5	10.0	ug/L	110		86.8	37.9-162	11.90	30	
N-Nitrosodiphenylamine	15.1	1.0	ug/L	20.0		75.7	59.6-120	37.00	30	*
4-Bromophenyl phenyl ether	13.7	1.0	ug/L	20.0		68.7	59.6-120	11.70	30	
Hexachlorobenzene	12.2	1.0	ug/L	20.0		61.1	53.7-120	9.74	30	
Pentachlorophenol	49.3	5.0	ug/L	60.0		82.1	40.3-128	13.60	30	
Phenanthrene	13.2	1.0	ug/L	20.0		66.1	58.8-120	10.30	30	
Anthracene	13.8	1.0	ug/L	20.0		69.0	60.5-120	13.10	30	
Carbazole	12.7	1.0	ug/L	20.0		63.5	59.7-120	20.50	30	
Di-n-Butylphthalate	14.5	1.0	ug/L	20.0		72.4	71-120	22.00	30	
Fluoranthene	13.0	1.0	ug/L	20.0		65.0	66.7-120	9.97	30	*
Pyrene	13.1	1.0	ug/L	20.0		65.3	62.7-127	11.00	30	



WSP USA, Inc.
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Project: Landsburg
Project Number: GL9231000007
Project Manager: Gary Zimmerman

Reported:
15-Apr-2025 16:40

Analysis by: Analytical Resources, LLC

Semivolatile Organic Compounds - Quality Control

Batch BNC0438 - EPA 8270E in Water

Instrument: NT10 Analyst: JZ

QC Sample/Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
LCS Dup (BNC0438-BSD1)										
					Prepared: 20-Mar-2025 Analyzed: 26-Mar-2025 18:33					
Butylbenzylphthalate	15.1	1.0	ug/L	20.0		75.5	67.4-128	49.80	30	*
Benzo(a)anthracene	13.8	1.0	ug/L	20.0		68.8	58.3-128	12.70	30	
3,3'-Dichlorobenzidine	12.3	10.0	ug/L	40.0		30.8	34.1-120	46.00	30	*
Chrysene	14.3	1.0	ug/L	20.0		71.6	58.9-120	11.90	30	
bis(2-Ethylhexyl)phthalate	14.0	3.0	ug/L	20.0		69.9	68.3-123	13.20	30	
Di-n-Octylphthalate	14.2	1.0	ug/L	20.0		71.1	61.5-120	13.00	30	
Benzo(a)fluoranthene, Total	27.1	2.0	ug/L	40.0		67.7	66.5-120	12.80	30	
Benzo(a)pyrene	15.6	1.0	ug/L	20.0		78.2	70.6-120	15.60	30	
Indeno(1,2,3-cd)pyrene	15.9	1.0	ug/L	20.0		79.5	46.5-120	10.40	30	
Dibenzo(a,h)anthracene	14.9	1.0	ug/L	20.0		74.7	49.6-120	11.40	30	
Benzo(g,h,i)perylene	14.5	1.0	ug/L	20.0		72.5	37-120	9.74	30	
1-Methylnaphthalene	13.6	1.0	ug/L	20.0		68.0	46.9-120	8.78	30	
Surrogate: 2-Fluorophenol	10.4		ug/L	18.8		55.2	33-120			
Surrogate: Phenol-d5	10.9		ug/L	18.8		58.2	38-120			
Surrogate: 2-Chlorophenol-d4	12.4		ug/L	18.8		66.3	41-120			
Surrogate: 1,2-Dichlorobenzene-d4	7.83		ug/L	12.5		62.7	20-120			
Surrogate: Nitrobenzene-d5	9.46		ug/L	12.5		75.7	27-120			
Surrogate: 2-Fluorobiphenyl	8.47		ug/L	12.5		67.8	33-120			
Surrogate: 2,4,6-Tribromophenol	13.3		ug/L	18.8		70.7	52-120			
Surrogate: p-Terphenyl-d14	8.97		ug/L	12.5		71.7	28-120			
Matrix Spike (BNC0438-MS1)										
		Source: 25C0281-06		Prepared: 20-Mar-2025 Analyzed: 26-Mar-2025 19:55						
Phenol	10.6	1.0	ug/L	20.0	ND	53.2	35-120			
bis(2-chloroethyl) ether	10.4	1.0	ug/L	20.0	ND	52.0	46.5-120			
2-Chlorophenol	12.1	1.0	ug/L	20.0	ND	60.5	48-120			
1,3-Dichlorobenzene	10.3	1.0	ug/L	20.0	ND	51.5	34.2-120			
1,4-Dichlorobenzene	10.7	1.0	ug/L	20.0	ND	53.3	36-120			
Benzyl Alcohol	13.5	2.0	ug/L	20.0	ND	67.5	27.4-120			
1,2-Dichlorobenzene	10.6	1.0	ug/L	20.0	ND	52.9	38.4-120			
2-Methylphenol	12.2	1.0	ug/L	20.0	ND	60.9	47.8-120			
2,2'-Oxybis(1-chloropropane)	9.4	1.0	ug/L	20.0	ND	47.0	40.4-120			
4-Methylphenol	12.8	2.0	ug/L	20.0	ND	63.8	52.3-120			
N-Nitroso-di-n-Propylamine	12.0	1.0	ug/L	20.0	ND	60.0	51.4-120			
Hexachloroethane	11.8	2.0	ug/L	20.0	ND	58.8	29.5-120			
Nitrobenzene	13.5	1.0	ug/L	20.0	ND	67.7	51.5-120			



WSP USA, Inc.
210 East 13th Street, Suite 300
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Project: Landsburg
Project Number: GL9231000007
Project Manager: Gary Zimmerman

Reported:
15-Apr-2025 16:40

Analysis by: Analytical Resources, LLC

Semivolatile Organic Compounds - Quality Control

Batch BNC0438 - EPA 8270E in Water

Instrument: NT10 Analyst: JZ

QC Sample/Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Matrix Spike (BNC0438-MS1)		Source: 25C0281-06		Prepared: 20-Mar-2025		Analyzed: 26-Mar-2025 19:55				
Isophorone	13.7	1.0	ug/L	20.0	ND	68.6	62.3-120			
2-Nitrophenol	14.0	3.0	ug/L	20.0	ND	69.8	58.6-124			
2,4-Dimethylphenol	43.8	3.0	ug/L	60.0	ND	73.0	38.5-120			
Bis(2-Chloroethoxy)methane	11.0	1.0	ug/L	20.0	ND	55.1	52.9-120			
Benzoic acid	66.6	10.0	ug/L	90.0	ND	74.0	38.2-120			
2,4-Dichlorophenol	48.7	3.0	ug/L	60.0	ND	81.1	43.6-120			
1,2,4-Trichlorobenzene	11.7	1.0	ug/L	20.0	ND	58.3	28.6-120			
Naphthalene	11.9	1.0	ug/L	20.0	ND	59.3	40.5-120			
4-Chloroaniline	21.3	5.0	ug/L	60.0	ND	35.6	42.7-132			*
Hexachlorobutadiene	13.1	3.0	ug/L	20.0	ND	65.4	32.3-120			
4-Chloro-3-Methylphenol	50.0	3.0	ug/L	60.0	ND	83.3	51.9-120			
2-Methylnaphthalene	11.5	1.0	ug/L	20.0	ND	57.7	47.3-120			
Hexachlorocyclopentadiene	52.5	5.0	ug/L	60.0	ND	87.4	23.3-120			Q
2,4,6-Trichlorophenol	50.0	3.0	ug/L	60.0	ND	83.3	47-120			
2,4,5-Trichlorophenol	45.3	5.0	ug/L	60.0	ND	75.5	48.4-120			
2-Chloronaphthalene	12.7	1.0	ug/L	20.0	ND	63.4	47.7-123			
2-Nitroaniline	49.8	3.0	ug/L	60.0	ND	83.1	56.8-120			
Dimethylphthalate	13.9	1.0	ug/L	20.0	ND	69.3	65.2-125			
Acenaphthylene	12.4	1.0	ug/L	20.0	ND	61.9	44.1-120			
2,6-Dinitrotoluene	43.3	3.0	ug/L	60.0	ND	72.2	69.3-140			
3-Nitroaniline	36.1	3.0	ug/L	60.0	ND	60.2	60.9-120			*
Acenaphthene	12.1	1.0	ug/L	20.0	ND	60.7	50.4-120			
2,4-Dinitrophenol	77.7	10.0	ug/L	110	ND	70.6	33.7-183			
Dibenzofuran	14.1	1.0	ug/L	20.0	ND	70.4	49.9-120			
4-Nitrophenol	108	5.0	ug/L	60.0	ND	180	50.2-136			*, E
2,4-Dinitrotoluene	45.0	3.0	ug/L	60.0	ND	75.0	66.8-132			
Fluorene	12.3	1.0	ug/L	20.0	ND	61.4	57.8-120			
Diethyl phthalate	14.9	1.0	ug/L	20.0	ND	74.3	68.1-120			
4-Chlorophenylphenyl ether	12.6	1.0	ug/L	20.0	ND	63.0	59.1-127			
4-Nitroaniline	42.3	3.0	ug/L	60.0	ND	70.5	56-122			
4,6-Dinitro-2-methylphenol	93.1	10.0	ug/L	110	ND	84.6	37.9-162			
N-Nitrosodiphenylamine	14.5	1.0	ug/L	20.0	ND	72.3	59.6-120			
4-Bromophenyl phenyl ether	13.0	1.0	ug/L	20.0	ND	64.8	59.6-120			
Hexachlorobenzene	11.9	1.0	ug/L	20.0	ND	59.4	53.7-120			



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Project: Landsburg
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Analysis by: Analytical Resources, LLC

Semivolatile Organic Compounds - Quality Control

Batch BNC0438 - EPA 8270E in Water

Instrument: NT10 Analyst: JZ

QC Sample/Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Matrix Spike (BNC0438-MS1)		Source: 25C0281-06		Prepared: 20-Mar-2025		Analyzed: 26-Mar-2025 19:55				
Pentachlorophenol	47.6	5.0	ug/L	60.0	ND	79.4	40.3-128			
Phenanthrene	12.7	1.0	ug/L	20.0	ND	63.7	58.8-120			
Anthracene	13.4	1.0	ug/L	20.0	ND	66.8	60.5-120			
Carbazole	12.5	1.0	ug/L	20.0	ND	62.4	59.7-120			
Di-n-Butylphthalate	14.2	1.0	ug/L	20.0	ND	71.1	71-120			
Fluoranthene	12.7	1.0	ug/L	20.0	ND	63.4	66.7-120			*
Pyrene	13.0	1.0	ug/L	20.0	ND	65.0	62.7-127			
Butylbenzylphthalate	15.0	1.0	ug/L	20.0	ND	74.8	67.4-128			
Benzo(a)anthracene	13.0	1.0	ug/L	20.0	ND	65.1	58.3-128			
3,3'-Dichlorobenzidine	ND	10.0	ug/L	40.0	ND		34.1-120			*, U
Chrysene	13.6	1.0	ug/L	20.0	ND	68.1	58.9-120			
bis(2-Ethylhexyl)phthalate	13.3	3.0	ug/L	20.0	ND	66.6	68.3-120			*
Di-n-Octylphthalate	13.8	1.0	ug/L	20.0	ND	69.2	61.5-120			
Benzo(a)fluoranthene, Total	25.7	2.0	ug/L	40.0	ND	64.2	66.5-120			*
Benzo(a)pyrene	14.9	1.0	ug/L	20.0	ND	74.3	70.6-120			
Indeno(1,2,3-cd)pyrene	15.5	1.0	ug/L	20.0	ND	77.3	46.5-120			
Dibenzo(a,h)anthracene	14.3	1.0	ug/L	20.0	ND	71.5	49.6-120			
Benzo(g,h,i)perylene	14.3	1.0	ug/L	20.0	ND	71.6	37-120			
1-Methylnaphthalene	13.2	1.0	ug/L	20.0	ND	66.2	46.9-120			
Surrogate: 2-Fluorophenol	10.2		ug/L	18.8	10.4	54.4	33-120			
Surrogate: Phenol-d5	10.6		ug/L	18.8	7.95	56.7	38-120			
Surrogate: 2-Chlorophenol-d4	12.3		ug/L	18.8	10.6	65.8	41-120			
Surrogate: 1,2-Dichlorobenzene-d4	7.92		ug/L	12.5	7.93	63.4	20-120			
Surrogate: Nitrobenzene-d5	9.48		ug/L	12.5	9.25	75.9	27-120			
Surrogate: 2-Fluorobiphenyl	8.66		ug/L	12.5	8.37	69.3	33-120			
Surrogate: 2,4,6-Tribromophenol	13.4		ug/L	18.8	12.3	71.6	52-120			
Surrogate: p-Terphenyl-d14	8.90		ug/L	12.5	9.50	71.2	28-120			

Recovery limits for target analytes in MS/MSD QC samples are advisory only.

Matrix Spike Dup (BNC0438-MSD1)		Source: 25C0281-06		Prepared: 20-Mar-2025		Analyzed: 26-Mar-2025 20:36				
Phenol	10.3	1.0	ug/L	20.0	ND	51.7	35-120	2.86	30	
bis(2-chloroethyl) ether	10.2	1.0	ug/L	20.0	ND	51.1	46.5-120	1.75	30	
2-Chlorophenol	12.1	1.0	ug/L	20.0	ND	60.6	48-120	0.11	30	
1,3-Dichlorobenzene	9.7	1.0	ug/L	20.0	ND	48.5	34.2-120	6.06	30	
1,4-Dichlorobenzene	9.8	1.0	ug/L	20.0	ND	48.9	36-120	8.56	30	



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Project: Landsburg
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Reported:
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Analysis by: Analytical Resources, LLC

Semivolatle Organic Compounds - Quality Control

Batch BNC0438 - EPA 8270E in Water

Instrument: NT10 Analyst: JZ

QC Sample/Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Matrix Spike Dup (BNC0438-MSD1)		Source: 25C0281-06		Prepared: 20-Mar-2025		Analyzed: 26-Mar-2025 20:36				
Benzyl Alcohol	13.6	2.0	ug/L	20.0	ND	68.1	27.4-120	0.85	30	
1,2-Dichlorobenzene	9.9	1.0	ug/L	20.0	ND	49.6	38.4-120	6.46	30	
2-Methylphenol	12.1	1.0	ug/L	20.0	ND	60.6	47.8-120	0.56	30	
2,2'-Oxybis(1-chloropropane)	9.3	1.0	ug/L	20.0	ND	46.4	40.4-120	1.26	30	
4-Methylphenol	12.1	2.0	ug/L	20.0	ND	60.5	52.3-120	5.27	30	
N-Nitroso-di-n-Propylamine	12.1	1.0	ug/L	20.0	ND	60.6	51.4-120	1.05	30	
Hexachloroethane	10.6	2.0	ug/L	20.0	ND	52.9	29.5-120	10.60	30	
Nitrobenzene	14.1	1.0	ug/L	20.0	ND	70.4	51.5-120	3.79	30	
Isophorone	14.1	1.0	ug/L	20.0	ND	70.3	62.3-120	2.41	30	
2-Nitrophenol	14.3	3.0	ug/L	20.0	ND	71.4	58.6-124	2.15	30	
2,4-Dimethylphenol	43.4	3.0	ug/L	60.0	ND	72.4	38.5-120	0.78	30	
Bis(2-Chloroethoxy)methane	11.5	1.0	ug/L	20.0	ND	57.7	52.9-120	4.59	30	
Benzoic acid	68.5	10.0	ug/L	90.0	ND	76.1	38.2-120	2.84	30	
2,4-Dichlorophenol	49.6	3.0	ug/L	60.0	ND	82.6	43.6-120	1.81	30	
1,2,4-Trichlorobenzene	11.4	1.0	ug/L	20.0	ND	56.8	28.6-120	2.54	30	
Naphthalene	11.7	1.0	ug/L	20.0	ND	58.6	40.5-120	1.13	30	
4-Chloroaniline	21.2	5.0	ug/L	60.0	ND	35.4	42.7-132	0.41	30	*
Hexachlorobutadiene	12.3	3.0	ug/L	20.0	ND	61.7	32.3-120	5.76	30	
4-Chloro-3-Methylphenol	49.8	3.0	ug/L	60.0	ND	82.9	51.9-120	0.41	30	
2-Methylnaphthalene	11.7	1.0	ug/L	20.0	ND	58.3	47.3-120	1.14	30	
Hexachlorocyclopentadiene	54.7	5.0	ug/L	60.0	ND	91.2	23.3-120	4.16	30	Q
2,4,6-Trichlorophenol	49.7	3.0	ug/L	60.0	ND	82.9	47-120	0.56	30	
2,4,5-Trichlorophenol	45.2	5.0	ug/L	60.0	ND	75.3	48.4-120	0.32	30	
2-Chloronaphthalene	12.5	1.0	ug/L	20.0	ND	62.5	47.7-123	1.46	30	
2-Nitroaniline	50.8	3.0	ug/L	60.0	ND	84.7	56.8-120	1.97	30	
Dimethylphthalate	13.7	1.0	ug/L	20.0	ND	68.7	65.2-125	0.88	30	
Acenaphthylene	12.4	1.0	ug/L	20.0	ND	61.8	44.1-120	0.10	30	
2,6-Dinitrotoluene	43.2	3.0	ug/L	60.0	ND	72.0	69.3-140	0.35	30	
3-Nitroaniline	35.5	3.0	ug/L	60.0	ND	59.1	60.9-120	1.81	30	*
Acenaphthene	12.0	1.0	ug/L	20.0	ND	60.0	50.4-120	1.13	30	
2,4-Dinitrophenol	77.9	10.0	ug/L	110	ND	70.8	33.7-183	0.20	30	
Dibenzofuran	14.0	1.0	ug/L	20.0	ND	70.0	49.9-120	0.65	30	
4-Nitrophenol	102	5.0	ug/L	60.0	ND	170	50.2-136	5.90	30	*, E
2,4-Dinitrotoluene	45.6	3.0	ug/L	60.0	ND	76.0	66.8-132	1.41	30	



WSP USA, Inc.
210 East 13th Street, Suite 300
Vancouver WA, 98660-3231

Project: Landsburg
Project Number: GL9231000007
Project Manager: Gary Zimmerman

Reported:
15-Apr-2025 16:40

Analysis by: Analytical Resources, LLC

Semivolatile Organic Compounds - Quality Control

Batch BNC0438 - EPA 8270E in Water

Instrument: NT10 Analyst: JZ

QC Sample/Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Matrix Spike Dup (BNC0438-MSD1)		Source: 25C0281-06		Prepared: 20-Mar-2025		Analyzed: 26-Mar-2025 20:36				
Fluorene	12.3	1.0	ug/L	20.0	ND	61.7	57.8-120	0.45	30	
Diethyl phthalate	14.8	1.0	ug/L	20.0	ND	74.0	68.1-120	0.45	30	
4-Chlorophenylphenyl ether	12.6	1.0	ug/L	20.0	ND	62.8	59.1-127	0.44	30	
4-Nitroaniline	37.6	3.0	ug/L	60.0	ND	62.7	56-122	11.80	30	
4,6-Dinitro-2-methylphenol	93.4	10.0	ug/L	110	ND	84.9	37.9-162	0.32	30	
N-Nitrosodiphenylamine	14.0	1.0	ug/L	20.0	ND	70.0	59.6-120	3.29	30	
4-Bromophenyl phenyl ether	13.0	1.0	ug/L	20.0	ND	65.2	59.6-120	0.53	30	
Hexachlorobenzene	11.9	1.0	ug/L	20.0	ND	59.7	53.7-120	0.52	30	
Pentachlorophenol	47.5	5.0	ug/L	60.0	ND	79.2	40.3-128	0.17	30	
Phenanthrene	12.9	1.0	ug/L	20.0	ND	64.4	58.8-120	1.19	30	
Anthracene	13.2	1.0	ug/L	20.0	ND	66.1	60.5-120	1.07	30	
Carbazole	12.1	1.0	ug/L	20.0	ND	60.7	59.7-120	2.71	30	
Di-n-Butylphthalate	14.3	1.0	ug/L	20.0	ND	71.4	71-120	0.40	30	
Fluoranthene	12.7	1.0	ug/L	20.0	ND	63.4	66.7-120	0.04	30	*
Pyrene	13.0	1.0	ug/L	20.0	ND	64.8	62.7-127	0.36	30	
Butylbenzylphthalate	13.6	1.0	ug/L	20.0	ND	68.2	67.4-128	9.21	30	
Benzo(a)anthracene	13.4	1.0	ug/L	20.0	ND	67.1	58.3-128	2.99	30	
3,3'-Dichlorobenzidine	ND	10.0	ug/L	40.0	ND		34.1-120		30	*, U
Chrysene	14.2	1.0	ug/L	20.0	ND	70.9	58.9-120	3.96	30	
bis(2-Ethylhexyl)phthalate	13.3	3.0	ug/L	20.0	ND	66.4	68.3-120	0.18	30	*
Di-n-Octylphthalate	13.9	1.0	ug/L	20.0	ND	69.4	61.5-120	0.21	30	
Benzo(a)fluoranthene, Total	26.4	2.0	ug/L	40.0	ND	66.0	66.5-120	2.84	30	*
Benzo(a)pyrene	15.2	1.0	ug/L	20.0	ND	75.8	70.6-120	2.02	30	
Indeno(1,2,3-cd)pyrene	15.8	1.0	ug/L	20.0	ND	79.0	46.5-120	2.05	30	
Dibenzo(a,h)anthracene	14.7	1.0	ug/L	20.0	ND	73.3	49.6-120	2.39	30	
Benzo(g,h,i)perylene	14.5	1.0	ug/L	20.0	ND	72.3	37-120	1.08	30	
1-Methylnaphthalene	13.3	1.0	ug/L	20.0	ND	66.7	46.9-120	0.79	30	
Surrogate: 2-Fluorophenol	9.94		ug/L	18.8	10.4	53.0	33-120			
Surrogate: Phenol-d5	9.82		ug/L	18.8	7.95	52.4	38-120			
Surrogate: 2-Chlorophenol-d4	11.7		ug/L	18.8	10.6	62.2	41-120			
Surrogate: 1,2-Dichlorobenzene-d4	7.39		ug/L	12.5	7.93	59.2	20-120			
Surrogate: Nitrobenzene-d5	9.21		ug/L	12.5	9.25	73.7	27-120			
Surrogate: 2-Fluorobiphenyl	8.24		ug/L	12.5	8.37	65.9	33-120			
Surrogate: 2,4,6-Tribromophenol	13.0		ug/L	18.8	12.3	69.4	52-120			



WSP USA, Inc.

210 East 13th Street, Suite 300

Vancouver WA, 98660-3231

Project: Landsburg

Project Number: GL9231000007

Project Manager: Gary Zimmerman

Reported:

15-Apr-2025 16:40

Instrument: NT10 Analyst: JZ

QC Sample/Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Matrix Spike Dup (BNC0438-MSD1)										
Source: 25C0281-06			Prepared: 20-Mar-2025 Analyzed: 26-Mar-2025 20:36							
Surrogate: <i>p-Terphenyl-d14</i>	8.60		ug/L	12.5	9.50	68.8	28-120			

Recovery limits for target analytes in MS/MSD QC samples are advisory only.



WSP USA, Inc.
210 East 13th Street, Suite 300
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Project: Landsburg
Project Number: GL9231000007
Project Manager: Gary Zimmerman

Reported:
15-Apr-2025 16:40

Analysis by: Analytical Resources, LLC

Petroleum Hydrocarbons - Quality Control

Batch BNC0332 - NWTPH-HCID in Water

Instrument: FID4 Analyst: JR/VTJ/JW

QC Sample/Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Blank (BNC0332-BLK1)		Prepared: 14-Mar-2025 Analyzed: 17-Mar-2025 14:56								
Gasoline Range Organics (Tol-C12)	ND	0.25	mg/L							U
Diesel Range Organics (C12-C24)	ND	0.50	mg/L							U
Motor Oil Range Organics (C24-C38)	ND	1.00	mg/L							U
Surrogate: o-Terphenyl	0.228		mg/L	0.225		101	50-150			
Surrogate: n-Triacontane	0.240		mg/L	0.225		107	50-150			



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Project: Landsburg
Project Number: GL9231000007
Project Manager: Gary Zimmerman

Reported:
15-Apr-2025 16:40

Analysis by: Analytical Resources, LLC

Chlorinated Pesticides - Quality Control

Batch BNC0429 - EPA 8081B in Water

Instrument: ECD6 Analyst: RT

QC Sample/Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Blank (BNC0429-BLK1)		Prepared: 18-Mar-2025 Analyzed: 11-Apr-2025 13:22								
alpha-BHC	ND	0.025	ug/L							U
beta-BHC	ND	0.025	ug/L							U
gamma-BHC (Lindane)	ND	0.025	ug/L							U
delta-BHC	ND	0.025	ug/L							U
Heptachlor	ND	0.025	ug/L							U
Aldrin	ND	0.025	ug/L							U
Heptachlor Epoxide	ND	0.050	ug/L							U
trans-Chlordane (beta-Chlordane)	ND	0.025	ug/L							U
cis-Chlordane (alpha-chlordane)	ND	0.025	ug/L							U
Endosulfan I	ND	0.025	ug/L							U
4,4'-DDE	ND	0.050	ug/L							U
Dieldrin	ND	0.050	ug/L							U
Endrin	ND	0.050	ug/L							U
Endosulfan II	ND	0.050	ug/L							U
4,4'-DDD	ND	0.050	ug/L							U
Endrin Aldehyde	ND	0.050	ug/L							U
4,4'-DDT	ND	0.050	ug/L							U
Endosulfan Sulfate	ND	0.050	ug/L							U
Endrin Ketone	ND	0.050	ug/L							U
Methoxychlor	ND	0.250	ug/L							U
Toxaphene	ND	1.25	ug/L							U
Surrogate: Decachlorobiphenyl	0.229		ug/L	0.400		57.2	11-144			
Surrogate: Decachlorobiphenyl [2C]	0.244		ug/L	0.400		61.0	11-144			
Surrogate: Tetrachlorometaxylene	0.214		ug/L	0.400		53.6	30-120			
Surrogate: Tetrachlorometaxylene [2C]	0.253		ug/L	0.400		63.2	30-120			
LCS (BNC0429-BS1)		Prepared: 18-Mar-2025 Analyzed: 11-Apr-2025 13:40								
alpha-BHC [2C]	0.143	0.025	ug/L	0.200		71.3	54-124			
beta-BHC [2C]	0.142	0.025	ug/L	0.200		71.1	53-123			
gamma-BHC (Lindane) [2C]	0.149	0.025	ug/L	0.200		74.6	53-127			
delta-BHC [2C]	0.154	0.025	ug/L	0.200		77.2	53-122			
Heptachlor [2C]	0.157	0.025	ug/L	0.200		78.7	50-120			
Aldrin [2C]	0.150	0.025	ug/L	0.200		74.9	47-120			
Heptachlor Epoxide [2C]	0.159	0.050	ug/L	0.200		79.7	50-127			
trans-Chlordane (beta-Chlordane) [2C]	0.150	0.025	ug/L	0.200		74.9	47-127			



WSP USA, Inc.
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Project: Landsburg
Project Number: GL9231000007
Project Manager: Gary Zimmerman

Reported:
15-Apr-2025 16:40

Analysis by: Analytical Resources, LLC

Chlorinated Pesticides - Quality Control

Batch BNC0429 - EPA 8081B in Water

Instrument: ECD6 Analyst: RT

QC Sample/Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
LCS (BNC0429-BS1)		Prepared: 18-Mar-2025 Analyzed: 11-Apr-2025 13:40								
cis-Chlordane (alpha-chlordane) [2C]	0.146	0.025	ug/L	0.200		73.0	51-132			
Endosulfan I [2C]	0.149	0.025	ug/L	0.200		74.6	48-137			P1
4,4'-DDE	0.313	0.050	ug/L	0.400		78.4	47-133			
Dieldrin [2C]	0.311	0.050	ug/L	0.400		77.6	55-130			
Endrin	0.394	0.050	ug/L	0.400		98.4	52-121			
Endosulfan II	0.351	0.050	ug/L	0.400		87.9	60-120			
4,4'-DDD	0.342	0.050	ug/L	0.400		85.4	60-120			
Endrin Aldehyde [2C]	0.316	0.050	ug/L	0.400		79.1	53-120			
4,4'-DDT	0.405	0.050	ug/L	0.400		101	57-122			
Endosulfan Sulfate	0.345	0.050	ug/L	0.400		86.4	56-120			
Endrin Ketone	0.318	0.050	ug/L	0.400		79.4	61-120			P1
Methoxychlor [2C]	1.71	0.250	ug/L	2.00		85.5	55-120			
Surrogate: Decachlorobiphenyl	0.214		ug/L	0.400		53.5	11-144			
Surrogate: Decachlorobiphenyl [2C]	0.227		ug/L	0.400		56.9	11-144			
Surrogate: Tetrachlorometaxylene	0.217		ug/L	0.400		54.2	30-120			
Surrogate: Tetrachlorometaxylene [2C]	0.230		ug/L	0.400		57.6	30-120			
LCS Dup (BNC0429-BSD1)		Prepared: 18-Mar-2025 Analyzed: 11-Apr-2025 13:58								
alpha-BHC [2C]	0.140	0.025	ug/L	0.200		70.2	54-124	1.59	30	
beta-BHC [2C]	0.142	0.025	ug/L	0.200		71.0	53-123	0.15	30	
gamma-BHC (Lindane) [2C]	0.147	0.025	ug/L	0.200		73.7	53-127	1.28	30	
delta-BHC [2C]	0.157	0.025	ug/L	0.200		78.3	53-122	1.34	30	
Heptachlor [2C]	0.155	0.025	ug/L	0.200		77.4	50-120	1.67	30	
Aldrin [2C]	0.153	0.025	ug/L	0.200		76.5	47-120	2.14	30	
Heptachlor Epoxide [2C]	0.158	0.050	ug/L	0.200		78.8	50-127	1.11	30	
trans-Chlordane (beta-Chlordane) [2C]	0.154	0.025	ug/L	0.200		77.0	47-127	2.80	30	
cis-Chlordane (alpha-chlordane) [2C]	0.143	0.025	ug/L	0.200		71.4	51-132	2.26	30	P1
Endosulfan I [2C]	0.147	0.025	ug/L	0.200		73.3	48-137	1.76	30	P1
4,4'-DDE	0.307	0.050	ug/L	0.400		76.8	47-133	2.05	30	
Dieldrin [2C]	0.306	0.050	ug/L	0.400		76.5	55-130	1.50	30	
Endrin [2C]	0.395	0.050	ug/L	0.400		98.8	52-121	4.83	30	
Endosulfan II	0.338	0.050	ug/L	0.400		84.6	60-120	3.82	30	
4,4'-DDD [2C]	0.353	0.050	ug/L	0.400		88.4	60-120	3.62	30	
Endrin Aldehyde [2C]	0.320	0.050	ug/L	0.400		79.9	53-120	1.02	30	
4,4'-DDT	0.399	0.050	ug/L	0.400		99.7	57-122	1.47	30	



WSP USA, Inc.
210 East 13th Street, Suite 300
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Project: Landsburg
Project Number: GL9231000007
Project Manager: Gary Zimmerman

Reported:
15-Apr-2025 16:40

Analysis by: Analytical Resources, LLC

Chlorinated Pesticides - Quality Control

Batch BNC0429 - EPA 8081B in Water

Instrument: ECD6 Analyst: RT

QC Sample/Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
LCS Dup (BNC0429-BSD1)		Prepared: 18-Mar-2025 Analyzed: 11-Apr-2025 13:58								
Endosulfan Sulfate [2C]	0.352	0.050	ug/L	0.400		88.1	56-120	3.64	30	
Endrin Ketone	0.310	0.050	ug/L	0.400		77.6	61-120	2.26	30	P1
Methoxychlor [2C]	1.74	0.250	ug/L	2.00		86.9	55-120	1.66	30	
Surrogate: Decachlorobiphenyl	0.214		ug/L	0.400		53.6	11-144			
Surrogate: Decachlorobiphenyl [2C]	0.220		ug/L	0.400		55.1	11-144			
Surrogate: Tetrachlorometaxylene	0.204		ug/L	0.400		50.9	30-120			
Surrogate: Tetrachlorometaxylene [2C]	0.229		ug/L	0.400		57.3	30-120			
Matrix Spike (BNC0429-MS1)		Source: 25C0281-06 Prepared: 18-Mar-2025 Analyzed: 11-Apr-2025 14:17								
alpha-BHC	0.130	0.025	ug/L	0.200	ND	64.9	54-124			
beta-BHC	0.143	0.025	ug/L	0.200	ND	71.5	53-123			
gamma-BHC (Lindane)	0.137	0.025	ug/L	0.200	ND	68.7	53-127			
delta-BHC	0.134	0.025	ug/L	0.200	ND	66.8	53-122			
Heptachlor	0.145	0.025	ug/L	0.200	ND	72.6	50-120			
Aldrin	0.127	0.025	ug/L	0.200	ND	63.5	47-120			
Heptachlor Epoxide	0.130	0.050	ug/L	0.200	ND	65.0	50-127			
trans-Chlordane (beta-Chlordane)	0.121	0.025	ug/L	0.200	ND	60.7	47-127			
cis-Chlordane (alpha-chlordane)	0.104	0.025	ug/L	0.200	ND	51.8	51-132			
Endosulfan I	0.088	0.025	ug/L	0.200	ND	44.2	48-137			*, P1
4,4'-DDE	0.283	0.050	ug/L	0.400	ND	70.8	47-133			
Dieldrin	0.252	0.050	ug/L	0.400	ND	63.0	55-130			
Endrin	0.318	0.050	ug/L	0.400	ND	79.5	52-121			
Endosulfan II	0.314	0.050	ug/L	0.400	ND	78.5	60-120			
4,4'-DDD	0.313	0.050	ug/L	0.400	ND	78.3	60-120			
Endrin Aldehyde	0.171	0.050	ug/L	0.400	ND	42.6	53-120			*
4,4'-DDT	0.371	0.050	ug/L	0.400	ND	92.8	57-122			
Endosulfan Sulfate	0.303	0.050	ug/L	0.400	ND	75.7	56-120			
Endrin Ketone	0.270	0.050	ug/L	0.400	ND	67.5	61-120			P1
Methoxychlor	1.65	0.250	ug/L	2.00	ND	82.4	55-120			
Surrogate: Decachlorobiphenyl	0.372		ug/L	0.400		93.0	11-144			
Surrogate: Decachlorobiphenyl [2C]	0.371		ug/L	0.400		92.7	11-144			
Surrogate: Tetrachlorometaxylene	0.224		ug/L	0.400		56.0	30-120			
Surrogate: Tetrachlorometaxylene [2C]	0.243		ug/L	0.400		60.8	30-120			

Recovery limits for target analytes in MS/MSD QC samples are advisory only.



WSP USA, Inc.
210 East 13th Street, Suite 300
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Project: Landsburg
Project Number: GL9231000007
Project Manager: Gary Zimmerman

Reported:
15-Apr-2025 16:40

Analysis by: Analytical Resources, LLC

Chlorinated Pesticides - Quality Control

Batch BNC0429 - EPA 8081B in Water

Instrument: ECD6 Analyst: RT

QC Sample/Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Matrix Spike Dup (BNC0429-MSD1)		Source: 25C0281-06		Prepared: 18-Mar-2025 Analyzed: 11-Apr-2025 14:35						
alpha-BHC	0.124	0.025	ug/L	0.200	ND	61.9	54-124	4.72	30	
beta-BHC	0.124	0.025	ug/L	0.200	ND	61.9	53-123	14.10	30	
gamma-BHC (Lindane)	0.128	0.025	ug/L	0.200	ND	63.9	53-127	7.19	30	
delta-BHC	0.131	0.025	ug/L	0.200	ND	65.5	53-122	1.88	30	
Heptachlor	0.143	0.025	ug/L	0.200	ND	71.3	50-120	1.73	30	
Aldrin	0.129	0.025	ug/L	0.200	ND	64.3	47-120	1.24	30	
Heptachlor Epoxide	0.134	0.050	ug/L	0.200	ND	66.9	50-127	2.84	30	
trans-Chlordane (beta-Chlordane)	0.123	0.025	ug/L	0.200	ND	61.3	47-127	0.97	30	
cis-Chlordane (alpha-chlordane)	0.102	0.025	ug/L	0.200	ND	50.8	51-132	1.98	30	*
Endosulfan I	0.091	0.025	ug/L	0.200	ND	45.6	48-137	3.06	30	*, P1
4,4'-DDE	0.298	0.050	ug/L	0.400	ND	74.5	47-133	5.14	30	
Dieldrin	0.220	0.050	ug/L	0.400	ND	54.9	55-130	13.90	30	*
Endrin	0.362	0.050	ug/L	0.400	ND	90.5	52-121	12.70	30	
Endosulfan II	0.304	0.050	ug/L	0.400	ND	76.1	60-120	3.14	30	
4,4'-DDD	0.307	0.050	ug/L	0.400	ND	76.8	60-120	1.93	30	
Endrin Aldehyde	0.149	0.050	ug/L	0.400	ND	37.3	53-120	13.50	30	*
4,4'-DDT	0.355	0.050	ug/L	0.400	ND	88.8	57-122	4.49	30	
Endosulfan Sulfate	0.271	0.050	ug/L	0.400	ND	67.8	56-120	11.10	30	
Endrin Ketone	0.273	0.050	ug/L	0.400	ND	68.3	61-120	1.08	30	P1
Methoxychlor	1.59	0.250	ug/L	2.00	ND	79.5	55-120	3.22	30	
Surrogate: Decachlorobiphenyl	0.362		ug/L	0.400		90.6	11-144			
Surrogate: Decachlorobiphenyl [2C]	0.355		ug/L	0.400		88.7	11-144			
Surrogate: Tetrachlorometaxylene	0.207		ug/L	0.400		51.8	30-120			
Surrogate: Tetrachlorometaxylene [2C]	0.225		ug/L	0.400		56.4	30-120			

Recovery limits for target analytes in MS/MSD QC samples are advisory only.



WSP USA, Inc.
210 East 13th Street, Suite 300
Vancouver WA, 98660-3231

Project: Landsburg
Project Number: GL9231000007
Project Manager: Gary Zimmerman

Reported:
15-Apr-2025 16:40

Analysis by: Analytical Resources, LLC

Aroclor PCB - Quality Control

Batch BNC0407 - EPA 8082A in Water

Instrument: ECD7 Analyst: NRB

QC Sample/Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Blank (BNC0407-BLK1)		Prepared: 17-Mar-2025 Analyzed: 01-Apr-2025 10:49								
Aroclor 1016	ND	0.010	ug/L							U
Aroclor 1221	ND	0.010	ug/L							U
Aroclor 1232	ND	0.010	ug/L							U
Aroclor 1242	ND	0.010	ug/L							U
Aroclor 1248	ND	0.010	ug/L							U
Aroclor 1254	ND	0.010	ug/L							U
Aroclor 1260	ND	0.010	ug/L							U
Surrogate: Decachlorobiphenyl	0.0138		ug/L	0.0200		68.9	29-120			
Surrogate: Tetrachlorometaxylene	0.0124		ug/L	0.0200		62.1	32-120			
Surrogate: Decachlorobiphenyl [2C]	0.0122		ug/L	0.0200		61.0	29-120			
Surrogate: Tetrachlorometaxylene [2C]	0.0108		ug/L	0.0200		53.9	32-120			
LCS (BNC0407-BS1)		Prepared: 17-Mar-2025 Analyzed: 01-Apr-2025 11:10								
Aroclor 1016	0.051	0.010	ug/L	0.0500		102	54-120			
Aroclor 1260	0.037	0.010	ug/L	0.0500		74.1	51-128			
Surrogate: Decachlorobiphenyl	0.0151		ug/L	0.0200		75.6	29-120			
Surrogate: Tetrachlorometaxylene	0.0160		ug/L	0.0200		79.9	32-120			
Surrogate: Decachlorobiphenyl [2C]	0.0135		ug/L	0.0200		67.3	29-120			
Surrogate: Tetrachlorometaxylene [2C]	0.0122		ug/L	0.0200		60.8	32-120			
LCS Dup (BNC0407-BSD1)		Prepared: 17-Mar-2025 Analyzed: 01-Apr-2025 11:31								
Aroclor 1016	0.046	0.010	ug/L	0.0500		92.6	54-120	9.28	30	
Aroclor 1260	0.036	0.010	ug/L	0.0500		71.1	51-128	4.20	30	
Surrogate: Decachlorobiphenyl	0.0149		ug/L	0.0200		74.7	29-120			
Surrogate: Tetrachlorometaxylene	0.0144		ug/L	0.0200		72.1	32-120			
Surrogate: Decachlorobiphenyl [2C]	0.0140		ug/L	0.0200		70.0	29-120			
Surrogate: Tetrachlorometaxylene [2C]	0.0113		ug/L	0.0200		56.3	32-120			
Matrix Spike (BNC0407-MS1)		Source: 25C0281-06	Prepared: 17-Mar-2025 Analyzed: 01-Apr-2025 11:51							
Aroclor 1016	0.054	0.010	ug/L	0.0500	ND	108	54-120			
Aroclor 1260	0.034	0.010	ug/L	0.0500	ND	68.0	51-128			P1
Surrogate: Decachlorobiphenyl	0.0140		ug/L	0.0200		70.0	29-120			
Surrogate: Tetrachlorometaxylene	0.0164		ug/L	0.0200		81.8	32-120			
Surrogate: Decachlorobiphenyl [2C]	0.0133		ug/L	0.0200		66.3	29-120			
Surrogate: Tetrachlorometaxylene [2C]	0.0124		ug/L	0.0200		61.9	32-120			

Recovery limits for target analytes in MS/MSD QC samples are advisory only.



WSP USA, Inc.
210 East 13th Street, Suite 300
Vancouver WA, 98660-3231

Project: Landsburg
Project Number: GL9231000007
Project Manager: Gary Zimmerman

Reported:
15-Apr-2025 16:40

Analysis by: Analytical Resources, LLC

Aroclor PCB - Quality Control

Batch BNC0407 - EPA 8082A in Water

Instrument: ECD7 Analyst: NRB

QC Sample/Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Matrix Spike Dup (BNC0407-MSD1)		Source: 25C0281-06		Prepared: 17-Mar-2025		Analyzed: 01-Apr-2025 12:12				
Aroclor 1016	0.051	0.010	ug/L	0.0500	ND	102	54-120	5.37	30	
Aroclor 1260	0.035	0.010	ug/L	0.0500	ND	70.0	51-128	2.40	30	P1
Surrogate: Decachlorobiphenyl	0.0134		ug/L	0.0200		67.0	29-120			
Surrogate: Tetrachlorometaxylene	0.0146		ug/L	0.0200		72.8	32-120			
Surrogate: Decachlorobiphenyl [2C]	0.0130		ug/L	0.0200		64.9	29-120			
Surrogate: Tetrachlorometaxylene [2C]	0.0125		ug/L	0.0200		62.5	32-120			

Recovery limits for target analytes in MS/MSD QC samples are advisory only.



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Project: Landsburg
Project Number: GL9231000007
Project Manager: Gary Zimmerman

Reported:
15-Apr-2025 16:40

Analysis by: Analytical Resources, LLC

Metals and Metallic Compounds - Quality Control

Batch BNC0385 - EPA 200.8 in Water

Instrument: ICPMS2 Analyst: HAL

QC Sample/Analyte	Isotope	Result	Detection Limit	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Blank (BNC0385-BLK1)						Prepared: 15-Mar-2025 Analyzed: 20-Mar-2025 21:47						
Antimony	121	ND	0.150	3.00	ug/L							U
Arsenic UCT	75a UCT	ND	0.100	3.00	ug/L							U
Lead	208	ND	0.100	10.0	ug/L							U
Selenium UCT	78 UCT	ND	0.500	25.0	ug/L							U
Thallium	205	ND	0.100	2.00	ug/L							U
LCS (BNC0385-BS1)						Prepared: 15-Mar-2025 Analyzed: 20-Mar-2025 21:52						
Arsenic UCT	75a UCT	24.7	0.100	3.00	ug/L	25.0		98.9	85-115			
Lead	208	27.1	0.100	10.0	ug/L	25.0		108	85-115			
Selenium UCT	78 UCT	75.9	0.500	25.0	ug/L	80.0		94.9	85-115			
Thallium	205	26.7	0.100	2.00	ug/L	25.0		107	85-115			
Duplicate (BNC0385-DUP1)						Source: 25C0281-06 Prepared: 15-Mar-2025 Analyzed: 21-Mar-2025 05:48						
Arsenic UCT	75a UCT	ND	0.100	3.00	ug/L		ND			20		U
Lead	208	ND	0.100	10.0	ug/L		ND			20		U
Selenium UCT	78 UCT	ND	0.500	25.0	ug/L		ND			20		U
Thallium	205	ND	0.100	2.00	ug/L		ND			20		U
Matrix Spike (BNC0385-MS1)						Source: 25C0281-06 Prepared: 15-Mar-2025 Analyzed: 21-Mar-2025 05:53						
Arsenic UCT	75a UCT	24.7	0.100	3.00	ug/L	25.0	ND	98.6	75-125			
Lead	208	23.6	0.100	10.0	ug/L	25.0	ND	94.6	75-125			
Selenium UCT	78 UCT	72.4	0.500	25.0	ug/L	80.0	ND	90.5	75-125			
Thallium	205	23.9	0.100	2.00	ug/L	25.0	ND	95.5	75-125			
Recovery limits for target analytes in MS/MSD QC samples are advisory only.												
Matrix Spike Dup (BNC0385-MSD1)						Source: 25C0281-06 Prepared: 15-Mar-2025 Analyzed: 21-Mar-2025 05:57						
Arsenic UCT	75a UCT	23.0	0.100	3.00	ug/L	25.0	ND	92.0	75-125	6.93	20	
Lead	208	22.8	0.100	10.0	ug/L	25.0	ND	91.1	75-125	3.80	20	
Selenium UCT	78 UCT	70.2	0.500	25.0	ug/L	80.0	ND	87.7	75-125	3.11	20	
Thallium	205	23.0	0.100	2.00	ug/L	25.0	ND	91.9	75-125	3.80	20	
Recovery limits for target analytes in MS/MSD QC samples are advisory only.												



WSP USA, Inc.
210 East 13th Street, Suite 300
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Project: Landsburg
Project Number: GL9231000007
Project Manager: Gary Zimmerman

Reported:
15-Apr-2025 16:40

Analysis by: Analytical Resources, LLC

Metals and Metallic Compounds - Quality Control

Batch BNC0390 - EPA 6010D in Water

Instrument: ICP3 Analyst: SH

QC Sample/Analyte	Result	Detection Limit	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Blank (BNC0390-BLK1)											
Prepared: 17-Mar-2025 Analyzed: 28-Mar-2025 17:09											
Aluminum	ND	0.0210	0.0700	mg/L							U
Barium	0.0022	0.0007	0.0060	mg/L							J
Beryllium	ND	0.0002	0.0010	mg/L							U
Cadmium	ND	0.0005	0.0020	mg/L							U
Calcium	ND	0.0300	0.0500	mg/L							U
Chromium	ND	0.0020	0.0090	mg/L							U
Cobalt	ND	0.0025	0.0050	mg/L							U
Copper	ND	0.0030	0.0050	mg/L							U
Iron	ND	0.0540	0.100	mg/L							U
Magnesium	ND	0.0250	0.0500	mg/L							U
Manganese	ND	0.0020	0.0040	mg/L							U
Nickel	ND	0.0050	0.0100	mg/L							U
Potassium	ND	0.250	0.500	mg/L							U
Silver	ND	0.0015	0.0030	mg/L							U
Sodium	ND	0.250	0.500	mg/L							U
Vanadium	ND	0.0015	0.0030	mg/L							U
Zinc	ND	0.0150	0.0300	mg/L							U
LCS (BNC0390-BS1)											
Prepared: 17-Mar-2025 Analyzed: 28-Mar-2025 17:12											
Aluminum	2.02	0.0210	0.0700	mg/L	2.00		101	80-120			
Barium	2.00	0.0007	0.0060	mg/L	2.00		99.8	80-120			
Beryllium	0.494	0.0002	0.0010	mg/L	0.500		98.7	80-120			
Cadmium	0.501	0.0005	0.0020	mg/L	0.500		100	80-120			
Calcium	10.0	0.0300	0.0500	mg/L	10.0		100	80-120			
Chromium	0.494	0.0020	0.0090	mg/L	0.500		98.7	80-120			
Cobalt	0.485	0.0025	0.0050	mg/L	0.500		97.0	80-120			
Copper	0.493	0.0030	0.0050	mg/L	0.500		98.7	80-120			
Iron	2.07	0.0540	0.100	mg/L	2.00		104	80-120			
Magnesium	9.82	0.0250	0.0500	mg/L	10.0		98.2	80-120			
Manganese	0.490	0.0020	0.0040	mg/L	0.500		98.0	80-120			
Nickel	0.493	0.0050	0.0100	mg/L	0.500		98.7	80-120			
Potassium	9.88	0.250	0.500	mg/L	10.0		98.8	80-120			
Silver	0.496	0.0015	0.0030	mg/L	0.500		99.2	80-120			
Sodium	10.0	0.250	0.500	mg/L	10.0		100	80-120			



WSP USA, Inc.
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Project: Landsburg
Project Number: GL9231000007
Project Manager: Gary Zimmerman

Reported:
15-Apr-2025 16:40

Analysis by: Analytical Resources, LLC

Metals and Metallic Compounds - Quality Control

Batch BNC0390 - EPA 6010D in Water

Instrument: ICP3 Analyst: SH

QC Sample/Analyte	Result	Detection Limit	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
LCS (BNC0390-BS1)						Prepared: 17-Mar-2025 Analyzed: 28-Mar-2025 17:12					
Vanadium	0.503	0.0015	0.0030	mg/L	0.500		101	80-120			
Zinc	0.486	0.0150	0.0300	mg/L	0.500		97.2	80-120			
Duplicate (BNC0390-DUP1)						Source: 25C0281-06 Prepared: 17-Mar-2025 Analyzed: 28-Mar-2025 17:29					
Aluminum	ND	0.0210	0.0700	mg/L		ND			20		U
Barium	0.418	0.0007	0.0060	mg/L		0.410			1.83	20	
Beryllium	ND	0.0002	0.0010	mg/L		ND				20	U
Cadmium	ND	0.0005	0.0020	mg/L		ND				20	U
Calcium	117	0.0300	0.0500	mg/L		114			2.61	20	
Chromium	ND	0.0020	0.0090	mg/L		ND				20	U
Cobalt	ND	0.0025	0.0050	mg/L		ND				20	U
Copper	ND	0.0030	0.0050	mg/L		ND				20	U
Iron	0.736	0.0540	0.100	mg/L		0.724			1.66	20	
Magnesium	68.5	0.0250	0.0500	mg/L		66.9			2.27	20	
Manganese	0.195	0.0020	0.0040	mg/L		0.191			2.23	20	
Nickel	ND	0.0050	0.0100	mg/L		ND				20	U
Potassium	3.74	0.250	0.500	mg/L		3.72			0.61	20	
Silver	ND	0.0015	0.0030	mg/L		ND				20	U
Sodium	24.9	0.250	0.500	mg/L		24.5			1.68	20	
Vanadium	ND	0.0015	0.0030	mg/L		ND				20	U
Zinc	ND	0.0150	0.0300	mg/L		ND				20	U
Matrix Spike (BNC0390-MS1)						Source: 25C0281-06 Prepared: 17-Mar-2025 Analyzed: 28-Mar-2025 17:32					
Aluminum	2.06	0.0210	0.0700	mg/L	2.00	ND	103	75-125			
Barium	2.46	0.0007	0.0060	mg/L	2.00	0.410	102	75-125			
Beryllium	0.506	0.0002	0.0010	mg/L	0.500	ND	101	75-125			
Cadmium	0.497	0.0005	0.0020	mg/L	0.500	ND	99.5	75-125			
Calcium	126	0.0300	0.0500	mg/L	10.0	114	122	75-125			
Chromium	0.497	0.0020	0.0090	mg/L	0.500	ND	99.3	75-125			
Cobalt	0.477	0.0025	0.0050	mg/L	0.500	ND	95.4	75-125			
Copper	0.510	0.0030	0.0050	mg/L	0.500	ND	102	75-125			
Iron	2.82	0.0540	0.100	mg/L	2.00	0.724	105	75-125			
Magnesium	77.8	0.0250	0.0500	mg/L	10.0	66.9	109	75-125			
Manganese	0.688	0.0020	0.0040	mg/L	0.500	0.191	99.5	75-125			
Nickel	0.486	0.0050	0.0100	mg/L	0.500	ND	97.2	75-125			



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Project: Landsburg
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Reported:
15-Apr-2025 16:40

Analysis by: Analytical Resources, LLC

Metals and Metallic Compounds - Quality Control

Batch BNC0390 - EPA 6010D in Water

Instrument: ICP3 Analyst: SH

QC Sample/Analyte	Result	Detection Limit	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Matrix Spike (BNC0390-MS1)		Source: 25C0281-06		Prepared: 17-Mar-2025		Analyzed: 28-Mar-2025 17:32					
Potassium	14.2	0.250	0.500	mg/L	10.0	3.72	105	75-125			
Silver	0.506	0.0015	0.0030	mg/L	0.500	ND	101	75-125			
Sodium	34.9	0.250	0.500	mg/L	10.0	24.5	104	75-125			
Vanadium	0.513	0.0015	0.0030	mg/L	0.500	ND	103	75-125			
Zinc	0.501	0.0150	0.0300	mg/L	0.500	ND	100	75-125			

Recovery limits for target analytes in MS/MSD QC samples are advisory only.

Matrix Spike Dup (BNC0390-MSD1)		Source: 25C0281-06		Prepared: 17-Mar-2025		Analyzed: 28-Mar-2025 17:35					
Aluminum	2.07	0.0210	0.0700	mg/L	2.00	ND	104	75-125	0.32	20	
Barium	2.45	0.0007	0.0060	mg/L	2.00	0.410	102	75-125	0.20	20	
Beryllium	0.508	0.0002	0.0010	mg/L	0.500	ND	102	75-125	0.30	20	
Cadmium	0.499	0.0005	0.0020	mg/L	0.500	ND	99.8	75-125	0.34	20	
Calcium	123	0.0300	0.0500	mg/L	10.0	114	93.0	75-125	2.32	20	
Chromium	0.499	0.0020	0.0090	mg/L	0.500	ND	99.7	75-125	0.40	20	
Cobalt	0.479	0.0025	0.0050	mg/L	0.500	ND	95.7	75-125	0.34	20	
Copper	0.515	0.0030	0.0050	mg/L	0.500	ND	103	75-125	0.99	20	
Iron	2.81	0.0540	0.100	mg/L	2.00	0.724	104	75-125	0.36	20	
Magnesium	76.4	0.0250	0.0500	mg/L	10.0	66.9	94.4	75-125	1.88	20	
Manganese	0.682	0.0020	0.0040	mg/L	0.500	0.191	98.4	75-125	0.83	20	
Nickel	0.486	0.0050	0.0100	mg/L	0.500	ND	97.2	75-125	0.02	20	
Potassium	14.1	0.250	0.500	mg/L	10.0	3.72	103	75-125	0.89	20	
Silver	0.508	0.0015	0.0030	mg/L	0.500	ND	102	75-125	0.55	20	
Sodium	34.3	0.250	0.500	mg/L	10.0	24.5	98.5	75-125	1.61	20	
Vanadium	0.514	0.0015	0.0030	mg/L	0.500	ND	103	75-125	0.35	20	
Zinc	0.486	0.0150	0.0300	mg/L	0.500	ND	97.2	75-125	2.96	20	

Recovery limits for target analytes in MS/MSD QC samples are advisory only.



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Project: Landsburg
Project Number: GL9231000007
Project Manager: Gary Zimmerman

Reported:
15-Apr-2025 16:40

Analysis by: Analytical Resources, LLC

Metals and Metallic Compounds - Quality Control

Batch BNC0392 - EPA 7470A in Water

Instrument: HYDRA Analyst: AMS

QC Sample/Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Blank (BNC0392-BLK1)		Prepared: 15-Mar-2025 Analyzed: 19-Mar-2025 12:55								
Mercury	ND	0.00100	mg/L							U
LCS (BNC0392-BS1)		Prepared: 15-Mar-2025 Analyzed: 19-Mar-2025 12:58								
Mercury	0.00175	0.00100	mg/L	0.00200		87.4	80-120			
Duplicate (BNC0392-DUP1)		Source: 25C0281-06		Prepared: 15-Mar-2025 Analyzed: 19-Mar-2025 13:03						
Mercury	ND	0.00100	mg/L		ND			20		U
Matrix Spike (BNC0392-MS1)		Source: 25C0281-06		Prepared: 15-Mar-2025 Analyzed: 19-Mar-2025 13:11						
Mercury	ND	0.00100	mg/L	0.00100	ND	91.6	75-125			U
Recovery limits for target analytes in MS/MSD QC samples are advisory only.										
Matrix Spike Dup (BNC0392-MSD1)		Source: 25C0281-06		Prepared: 15-Mar-2025 Analyzed: 19-Mar-2025 13:13						
Mercury	ND	0.00100	mg/L	0.00100	ND	89.3	75-125	20		U
Recovery limits for target analytes in MS/MSD QC samples are advisory only.										



WSP USA, Inc.
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Project: Landsburg
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Reported:
15-Apr-2025 16:40

Analysis by: Analytical Resources, LLC

Metals and Metallic Compounds - Quality Control

Batch BNC0572 - EPA 200.8 in Water

Instrument: ICPMS2 Analyst: HAL

QC Sample/Analyte	Isotope	Result	Detection Limit	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Blank (BNC0572-BLK2)						Prepared: 22-Mar-2025 Analyzed: 25-Mar-2025 18:42						
Antimony	121	ND	0.150	3.00	ug/L							U
LCS (BNC0572-BS2)						Prepared: 22-Mar-2025 Analyzed: 25-Mar-2025 18:46						
Antimony	121	24.0	0.150	3.00	ug/L	25.0		95.8	85-115			



WSP USA, Inc.

210 East 13th Street, Suite 300

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Project: Landsburg

Project Number: GL9231000007

Project Manager: Gary Zimmerman

Reported:

15-Apr-2025 16:40

Uncertified Analytes included in this Report

Analysis Matrix & Analyte

None



WSP USA, Inc.
210 East 13th Street, Suite 300
Vancouver WA, 98660-3231

Project: Landsburg
Project Number: GL9231000007
Project Manager: Gary Zimmerman

Reported:
15-Apr-2025 16:40

Certified Analyses included in this Report

Analysis Matrix & Analyte

Certification Codes

EPA 200.8 in Water

Antimony-121	NELAP,DoD-ELAP,WADOE
Arsenic-75a UCT	NELAP,DoD-ELAP,WADOE
Lead-208	NELAP,DoD-ELAP,WADOE
Selenium-78 UCT	NELAP,DoD-ELAP,WADOE
Thallium-205	NELAP,DoD-ELAP,WADOE

EPA 6010D in Water

Aluminum	DoD-ELAP,NELAP,WADOE
Barium	DoD-ELAP,NELAP,WADOE,ADEC
Beryllium	DoD-ELAP,NELAP,WADOE
Cadmium	DoD-ELAP,NELAP,WADOE,ADEC
Calcium	DoD-ELAP,NELAP,WADOE
Chromium	DoD-ELAP,NELAP,WADOE,ADEC
Cobalt	DoD-ELAP,NELAP,WADOE
Copper	DoD-ELAP,NELAP,WADOE
Iron	DoD-ELAP,NELAP,WADOE
Magnesium	DoD-ELAP,NELAP,WADOE
Manganese	DoD-ELAP,NELAP,WADOE
Nickel	DoD-ELAP,NELAP,WADOE,ADEC
Potassium	DoD-ELAP,NELAP,WADOE
Silver	DoD-ELAP,NELAP,WADOE
Sodium	DoD-ELAP,NELAP,WADOE
Vanadium	DoD-ELAP,NELAP,WADOE,ADEC
Zinc	DoD-ELAP,NELAP,WADOE

EPA 7470A in Water

Mercury	WADOE,NELAP,DoD-ELAP
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EPA 8081B in Water

alpha-BHC	DoD-ELAP,NELAP,WADOE
alpha-BHC [2C]	DoD-ELAP,NELAP,WADOE
beta-BHC	DoD-ELAP,NELAP,WADOE
beta-BHC [2C]	DoD-ELAP,NELAP,WADOE
gamma-BHC (Lindane)	DoD-ELAP,NELAP,WADOE



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gamma-BHC (Lindane) [2C]	DoD-ELAP,NELAP,WADOE
delta-BHC	DoD-ELAP,NELAP,WADOE
delta-BHC [2C]	DoD-ELAP,NELAP,WADOE
Heptachlor	DoD-ELAP,NELAP,WADOE
Heptachlor [2C]	DoD-ELAP,NELAP,WADOE
Aldrin	DoD-ELAP,NELAP,WADOE
Aldrin [2C]	DoD-ELAP,NELAP,WADOE
Heptachlor Epoxide	DoD-ELAP,NELAP,WADOE
Heptachlor Epoxide [2C]	DoD-ELAP,NELAP,WADOE
trans-Chlordane (beta-Chlordane)	DoD-ELAP,NELAP,WADOE
trans-Chlordane (beta-Chlordane)	DoD-ELAP,NELAP,WADOE
cis-Chlordane (alpha-chlordane)	DoD-ELAP,NELAP,WADOE
cis-Chlordane (alpha-chlordane)	DoD-ELAP,NELAP,WADOE
Endosulfan I	DoD-ELAP,NELAP,WADOE
Endosulfan I [2C]	DoD-ELAP,NELAP,WADOE
4,4'-DDE	DoD-ELAP,NELAP,WADOE
4,4'-DDE [2C]	DoD-ELAP,NELAP,WADOE
Dieldrin	DoD-ELAP,NELAP,WADOE
Dieldrin [2C]	DoD-ELAP,NELAP,WADOE
Endrin	DoD-ELAP,NELAP,WADOE
Endrin [2C]	DoD-ELAP,NELAP,WADOE
Endosulfan II	DoD-ELAP,NELAP,WADOE
Endosulfan II [2C]	DoD-ELAP,NELAP,WADOE
4,4'-DDD	DoD-ELAP,NELAP,WADOE
4,4'-DDD [2C]	DoD-ELAP,NELAP,WADOE
Endrin Aldehyde	DoD-ELAP,NELAP,WADOE
Endrin Aldehyde [2C]	DoD-ELAP,NELAP,WADOE
4,4'-DDT	DoD-ELAP,NELAP,WADOE
4,4'-DDT [2C]	DoD-ELAP,NELAP,WADOE
Endosulfan Sulfate	DoD-ELAP,NELAP,WADOE
Endosulfan Sulfate [2C]	DoD-ELAP,NELAP,WADOE
Endrin Ketone	DoD-ELAP,NELAP,WADOE
Endrin Ketone [2C]	DoD-ELAP,NELAP,WADOE
Methoxychlor	DoD-ELAP,NELAP,WADOE
Methoxychlor [2C]	DoD-ELAP,NELAP,WADOE



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Toxaphene

DoD-ELAP,NELAP,WADOE

Toxaphene [2C]

DoD-ELAP,NELAP,WADOE

EPA 8082A in Water

Aroclor 1016

WADOE,DoD-ELAP,NELAP,ADEC

Aroclor 1016 [2C]

WADOE,DoD-ELAP,NELAP,ADEC

Aroclor 1221

WADOE,DoD-ELAP,NELAP,ADEC

Aroclor 1221 [2C]

WADOE,DoD-ELAP,NELAP,ADEC

Aroclor 1232

WADOE,DoD-ELAP,NELAP,ADEC

Aroclor 1232 [2C]

WADOE,DoD-ELAP,NELAP,ADEC

Aroclor 1242

WADOE,DoD-ELAP,NELAP,ADEC

Aroclor 1242 [2C]

WADOE,DoD-ELAP,NELAP,ADEC

Aroclor 1248

WADOE,DoD-ELAP,NELAP,ADEC

Aroclor 1248 [2C]

WADOE,DoD-ELAP,NELAP,ADEC

Aroclor 1254

WADOE,DoD-ELAP,NELAP,ADEC

Aroclor 1254 [2C]

WADOE,DoD-ELAP,NELAP,ADEC

Aroclor 1260

WADOE,DoD-ELAP,NELAP,ADEC

Aroclor 1260 [2C]

WADOE,DoD-ELAP,NELAP,ADEC

EPA 8260D in Water

Chloromethane

ADEC,NELAP,WADOE,DoD-ELAP

Vinyl Chloride

ADEC,NELAP,WADOE,DoD-ELAP

Bromomethane

ADEC,NELAP,WADOE,DoD-ELAP

Chloroethane

ADEC,NELAP,WADOE,DoD-ELAP

Trichlorofluoromethane

ADEC,NELAP,WADOE,DoD-ELAP

Acrolein

NELAP,WADOE,DoD-ELAP

1,1,2-Trichloro-1,2,2-Trifluoroeth

ADEC,NELAP,WADOE,DoD-ELAP

Acetone

ADEC,NELAP,WADOE,DoD-ELAP

1,1-Dichloroethene

ADEC,NELAP,WADOE,DoD-ELAP

Iodomethane

NELAP,WADOE,DoD-ELAP

Methylene Chloride

ADEC,NELAP,WADOE,DoD-ELAP

Acrylonitrile

NELAP,WADOE,DoD-ELAP

Carbon Disulfide

NELAP,WADOE,DoD-ELAP

trans-1,2-Dichloroethene

ADEC,NELAP,WADOE,DoD-ELAP

Vinyl Acetate

NELAP,WADOE,DoD-ELAP

1,1-Dichloroethane

ADEC,NELAP,WADOE,DoD-ELAP

2-Butanone

NELAP,WADOE,DoD-ELAP



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2,2-Dichloropropane	ADEC,NELAP,WADOE,DoD-ELAP
cis-1,2-Dichloroethene	ADEC,NELAP,WADOE,DoD-ELAP
Chloroform	ADEC,NELAP,WADOE,DoD-ELAP
Bromochloromethane	ADEC,NELAP,WADOE,DoD-ELAP
1,1,1-Trichloroethane	ADEC,NELAP,WADOE,DoD-ELAP
1,1-Dichloropropene	ADEC,NELAP,WADOE,DoD-ELAP
Carbon tetrachloride	ADEC,NELAP,WADOE,DoD-ELAP
1,2-Dichloroethane	ADEC,NELAP,WADOE,DoD-ELAP
Benzene	ADEC,NELAP,WADOE,DoD-ELAP
Trichloroethene	ADEC,NELAP,WADOE,DoD-ELAP
1,2-Dichloropropane	ADEC,NELAP,WADOE,DoD-ELAP
Bromodichloromethane	ADEC,NELAP,WADOE,DoD-ELAP
Dibromomethane	ADEC,NELAP,WADOE,DoD-ELAP
2-Chloroethyl vinyl ether	ADEC,NELAP,WADOE,DoD-ELAP
4-Methyl-2-Pentanone	NELAP,WADOE,DoD-ELAP
cis-1,3-Dichloropropene	ADEC,NELAP,WADOE,DoD-ELAP
Toluene	ADEC,NELAP,WADOE,DoD-ELAP
trans-1,3-Dichloropropene	ADEC,NELAP,WADOE,DoD-ELAP
2-Hexanone	NELAP,WADOE,DoD-ELAP
1,1,2-Trichloroethane	ADEC,NELAP,WADOE,DoD-ELAP
1,3-Dichloropropane	ADEC,NELAP,WADOE,DoD-ELAP
Tetrachloroethene	ADEC,NELAP,WADOE,DoD-ELAP
Dibromochloromethane	ADEC,NELAP,WADOE,DoD-ELAP
1,2-Dibromoethane	NELAP,WADOE,DoD-ELAP
Chlorobenzene	ADEC,NELAP,WADOE,DoD-ELAP
Ethylbenzene	ADEC,NELAP,WADOE,DoD-ELAP
1,1,1,2-Tetrachloroethane	ADEC,NELAP,WADOE,DoD-ELAP
m,p-Xylene	ADEC,NELAP,WADOE,DoD-ELAP
o-Xylene	ADEC,NELAP,WADOE,DoD-ELAP
Xylenes, total	ADEC,NELAP,WADOE,DoD-ELAP
Styrene	NELAP,WADOE,DoD-ELAP
Bromoform	NELAP,WADOE,DoD-ELAP
1,1,2,2-Tetrachloroethane	ADEC,NELAP,WADOE,DoD-ELAP
1,2,3-Trichloropropane	ADEC,NELAP,WADOE,DoD-ELAP
trans-1,4-Dichloro 2-Butene	ADEC,NELAP,WADOE,DoD-ELAP



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n-Propylbenzene	NELAP,WADOE,DoD-ELAP
Bromobenzene	NELAP,WADOE,DoD-ELAP
Isopropyl Benzene	NELAP,WADOE,DoD-ELAP
2-Chlorotoluene	ADEC,NELAP,WADOE,DoD-ELAP
4-Chlorotoluene	ADEC,NELAP,WADOE,DoD-ELAP
t-Butylbenzene	NELAP,WADOE,DoD-ELAP
1,3,5-Trimethylbenzene	NELAP,WADOE,DoD-ELAP
1,2,4-Trimethylbenzene	NELAP,WADOE,DoD-ELAP
s-Butylbenzene	NELAP,WADOE,DoD-ELAP
4-Isopropyl Toluene	NELAP,WADOE,DoD-ELAP
1,3-Dichlorobenzene	ADEC,NELAP,WADOE,DoD-ELAP
1,4-Dichlorobenzene	ADEC,NELAP,WADOE,DoD-ELAP
n-Butylbenzene	NELAP,WADOE,DoD-ELAP
1,2-Dichlorobenzene	ADEC,NELAP,WADOE,DoD-ELAP
1,2-Dibromo-3-chloropropane	ADEC,NELAP,WADOE,DoD-ELAP
1,2,4-Trichlorobenzene	ADEC,NELAP,WADOE,DoD-ELAP
Hexachloro-1,3-Butadiene	ADEC,NELAP,WADOE,DoD-ELAP
Naphthalene	ADEC,NELAP,WADOE,DoD-ELAP
1,2,3-Trichlorobenzene	ADEC,NELAP,WADOE,DoD-ELAP
Dichlorodifluoromethane	ADEC,NELAP,WADOE,DoD-ELAP

EPA 8270E in Water

1,4-Dioxane	WADOE,NELAP,DoD-ELAP
Phenol	DoD-ELAP,WADOE,NELAP
bis(2-chloroethyl) ether	DoD-ELAP,WADOE,NELAP
2-Chlorophenol	DoD-ELAP,WADOE,NELAP
1,3-Dichlorobenzene	DoD-ELAP,WADOE,NELAP
1,4-Dichlorobenzene	DoD-ELAP,WADOE,NELAP
Benzyl Alcohol	DoD-ELAP,WADOE,NELAP
1,2-Dichlorobenzene	DoD-ELAP,WADOE,NELAP
2-Methylphenol	DoD-ELAP,WADOE,NELAP
2,2'-Oxybis(1-chloropropane)	DoD-ELAP
4-Methylphenol	DoD-ELAP,WADOE,NELAP
N-Nitroso-di-n-Propylamine	DoD-ELAP,WADOE,NELAP
Hexachloroethane	DoD-ELAP,WADOE,NELAP
Nitrobenzene	DoD-ELAP,WADOE,NELAP



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Isophorone	DoD-ELAP,WADOE,NELAP
2-Nitrophenol	DoD-ELAP,WADOE,NELAP
2,4-Dimethylphenol	DoD-ELAP,WADOE,NELAP
Bis(2-Chloroethoxy)methane	DoD-ELAP,WADOE,NELAP
Benzoic acid	DoD-ELAP,WADOE,NELAP
2,4-Dichlorophenol	DoD-ELAP,WADOE,NELAP
1,2,4-Trichlorobenzene	DoD-ELAP,WADOE,NELAP
Naphthalene	DoD-ELAP,WADOE,ADEC,NELAP
4-Chloroaniline	DoD-ELAP,WADOE,NELAP
Hexachlorobutadiene	DoD-ELAP,WADOE,NELAP
4-Chloro-3-Methylphenol	DoD-ELAP,WADOE,NELAP
2-Methylnaphthalene	DoD-ELAP,WADOE,ADEC,NELAP
Hexachlorocyclopentadiene	DoD-ELAP,WADOE,NELAP
2,4,6-Trichlorophenol	DoD-ELAP,WADOE,NELAP
2,4,5-Trichlorophenol	DoD-ELAP,WADOE,NELAP
2-Chloronaphthalene	DoD-ELAP,WADOE,NELAP
2-Nitroaniline	DoD-ELAP,WADOE,NELAP
Dimethylphthalate	DoD-ELAP,WADOE,NELAP
Acenaphthylene	DoD-ELAP,WADOE,ADEC,NELAP
2,6-Dinitrotoluene	DoD-ELAP,WADOE,NELAP
3-Nitroaniline	DoD-ELAP,WADOE,NELAP
Acenaphthene	DoD-ELAP,WADOE,ADEC,NELAP
2,4-Dinitrophenol	DoD-ELAP,WADOE,NELAP
Dibenzofuran	DoD-ELAP,WADOE,ADEC,NELAP
4-Nitrophenol	DoD-ELAP,WADOE,NELAP
2,4-Dinitrotoluene	DoD-ELAP,WADOE,NELAP
Fluorene	DoD-ELAP,WADOE,ADEC,NELAP
Diethyl phthalate	DoD-ELAP,WADOE,NELAP
4-Chlorophenylphenyl ether	DoD-ELAP,WADOE,NELAP
4-Nitroaniline	DoD-ELAP,WADOE,NELAP
4,6-Dinitro-2-methylphenol	DoD-ELAP,WADOE,NELAP
N-Nitrosodiphenylamine	DoD-ELAP
4-Bromophenyl phenyl ether	DoD-ELAP,WADOE,NELAP
Hexachlorobenzene	DoD-ELAP,WADOE,NELAP
Pentachlorophenol	DoD-ELAP,WADOE,NELAP



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Phenanthrene	DoD-ELAP,WADOE,ADEC,NELAP
Anthracene	DoD-ELAP,WADOE,ADEC,NELAP
Carbazole	DoD-ELAP,WADOE,ADEC,NELAP
Di-n-Butylphthalate	DoD-ELAP,WADOE,NELAP
Fluoranthene	DoD-ELAP,WADOE,ADEC,NELAP
Pyrene	DoD-ELAP,WADOE,ADEC,NELAP
Butylbenzylphthalate	DoD-ELAP,WADOE,NELAP
Benzo(a)anthracene	DoD-ELAP,WADOE,ADEC,NELAP
3,3'-Dichlorobenzidine	DoD-ELAP
Chrysene	DoD-ELAP,WADOE,ADEC,NELAP
bis(2-Ethylhexyl)phthalate	DoD-ELAP,WADOE,NELAP
Di-n-Octylphthalate	DoD-ELAP,WADOE,NELAP
Benzo(a)fluoranthene, Total	DoD-ELAP,WADOE,ADEC,NELAP
Benzo(a)pyrene	DoD-ELAP,WADOE,ADEC,NELAP
Indeno(1,2,3-cd)pyrene	DoD-ELAP,WADOE,ADEC,NELAP
Dibenzo(a,h)anthracene	DoD-ELAP,WADOE,ADEC,NELAP
Benzo(g,h,i)perylene	DoD-ELAP,WADOE,ADEC,NELAP
1-Methylnaphthalene	DoD-ELAP,WADOE,ADEC,NELAP

NWTPH-HCID in Water

Gasoline Range Organics (Tol-C	NELAP,DoD-ELAP,WADOE
Diesel Range Organics (C12-C2	NELAP,DoD-ELAP,WADOE
Motor Oil Range Organics (C24-	NELAP,DoD-ELAP,WADOE

Certifications

Code	Description	Number	Expires
ADEC	Alaska Dept of Environmental Conservation	17-015	02/28/2026
DoD-ELAP	DoD-Environmental Laboratory Accreditation Program, PJLA Testing	66169	01/31/2026
NELAP	ORELAP - Oregon Laboratory Accreditation Program	WA100006-012	05/12/2025
WADOE	WA Dept of Ecology	C558	06/30/2025
WA-DW	Ecology - Drinking Water	C558	06/30/2025



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Notes and Definitions

*	Flagged value is not within established control limits.
D	The reported value is from a dilution
D1	Surrogate was not detected due to sample extract dilution
E	The analyte concentration exceeds the upper limit of the calibration range of the instrument established by the initial calibration (ICAL)
J	Estimated concentration value detected below the reporting limit.
L	Analyte concentration is ≤ 5 times the reporting limit and the replicate control limit defaults to $\pm$ RL instead of 20% RPD
P1	The reported value is greater than 40% difference between the concentrations determined on two GC columns where applicable.
Q	Indicates a detected analyte with an initial or continuing calibration that does not meet established acceptance criteria ($<20\%$ RSD, $<20\%$ drift or minimum RRF)
U	This analyte is not detected above the reporting limit (RL) or if noted, not detected above the limit of detection (LOD).
DET	Analyte DETECTED
ND	Analyte NOT DETECTED at or above the reporting limit
NR	Not Reported
dry	Sample results reported on a dry weight basis
RPD	Relative Percent Difference
[2C]	Indicates this result was quantified on the second column on a dual column analysis.
!	Indicates that ARL is NOT ACCREDITED for this parameter in this analysis and matrix.
#	Indicates that ARL is NOT ACCREDITED for this parameter in samples logged as 'Drinking Water'

APPENDIX C

**Sample Integrity Data Sheets
(SIDS)**

SAMPLE INTEGRITY DATA SHEET

Plant/Site Landsburg Mine Site **Project No.** 923-1000-007.2025

Site Location Ravensdale, WA **Sample ID** LMW-2

Sampling Location Groundwater Monitoring Well - end dedicated sampling tube

Technical Procedure Reference(s) Landsburg Mine Site Compliance Monitoring Plan (2017)

Type of Sampler Dedicated Pump Grundfos

Date March 13, 2025 **Time** 11:10

Media Water **Station** LMW-2

Sample Type: grab time composite space composite

Sample Acquisition Measurements (depth, volume of static well water and purged water, etc.)

Static Water Level: 6.33 ft BTOC

Screened Interval: 27.9' - 38.1' BGS

Sand Pack Interval: 24.8' - 38.1' BGS

Packer Depth: N/A

Sample Description Clear, slight sulfur odor, no sheen.

Field Measurements on Sample (pH, conductivity, etc.) SEE FIELD PARAMETERS SHEET

Aliquot Amount	Analysis	Container	Preservation / Amount
3-40 mL	VOA	VOA vial	HCl
1-500 mL	Total Metals	HDPE	HNO3
4-500 mL	TPH-HCID, -Dx (HOLD)	Glass amber	None
2-40 mL	TPH-Gx (HOLD)	VOA vial	HCl
2-1000 mL	PCBs	Glass amber	None
2-1000 mL	Pesticides	Glass amber	None
2-1000 mL	SVOCs	Glass amber	None
2-500 mL	1,4-dioxane	500 mL amber bottles	None

x2 for duplicate

SAMPLE INTEGRITY DATA SHEET

Well ID LMW-2

Date 03/13/2025

Time Begin Purge 10:34

Time Collect Sample 11:10

Water Level (ft bmp)	Time	pH	Cond. (uS/cm)	Temp (°C)	DO (mg/L)	ORP (rel mV)	Turbidity (NTU)
6.33	10:35	6.75	1,015	9.3	1.62	28.1	1.82
6.33	10:40	6.46	1,018	10.4	0.24	12.9	0.29
6.35	10:45	6.45	1,019	10.7	0.11	4.2	0.58
6.35	10:50	6.44	1,018	10.8	0.05	-3.7	0.64
6.35	10:55	6.44	1,018	10.8	0.02	-9.5	0.23
6.35	11:00	6.44	1,017	10.9	0.01	-14.7	0.85
6.35	11:05	6.44	1,017	10.9	1,017	-17.4	0.19
6.35	11:10	6.44	1,017	10.9	0.03	-20.5	0.24

Comments:

Duplicate LMW-2-0325-D taken at 1120

Grundfos: ~80 Hz

Packer: N/A

Tank: N/A

Throttle: N/A

CPM: N/A

CID: N/A

Flow Rate: 1000 mL/min

Sampler 

Date March 13, 2025

Supervisor _____

Date _____

SAMPLE INTEGRITY DATA SHEET

Plant/Site Landsburg Mine Site **Project No.** 923-1000-007.2025

Site Location Ravensdale, WA **Sample ID** LMW-3

Sampling Location Groundwater Monitoring Well - end dedicated sampling tube

Technical Procedure Reference(s) Landsburg Mine Site Compliance Monitoring Plan (2017)

Type of Sampler Dedicated Pump Grundfos

Date March 11, 2025 **Time** 11:10

Media Water **Station** LMW-3

Sample Type: grab time composite space composite

Sample Acquisition Measurements (depth, volume of static well water and purged water, etc.)

Static Water Level: 10.98 ft BTOC

Screened Interval: 49.8' - 64.8' BGS

Sand Pack Interval: 47.1' - 64.8' BGS

Packer Depth: 39.33' BGS

Sample Description Clear, no odor, no sheen.

Field Measurements on Sample (pH, conductivity, etc.) SEE FIELD PARAMETERS SHEET

Aliquot Amount	Analysis	Container	Preservation / Amount
3-40 mL	VOA	VOA vial	HCl
1-500 mL	Total Metals	HDPE	HNO3
4-500 mL	TPH-HCID, -Dx (HOLD)	Glass amber	None
2-40 mL	TPH-Gx (HOLD)	VOA vial	HCl
2-1000 mL	PCBs	Glass amber	None
2-1000 mL	Pesticides	Glass amber	None
2-1000 mL	SVOCs	Glass amber	None
2-500 mL	1,4-dioxane	500 mL amber bottles	None

SAMPLE INTEGRITY DATA SHEET

Well ID LMW-3

Date 03/11/2025

Time Begin Purge 10:46

Time Collect Sample 11:10

Water Level (ft bmp)	Time	pH	Cond. (uS/cm)	Temp (°C)	DO (mg/L)	ORP (rel mV)	Turbidity (NTU)
15.9	10:50	7.73	307.9	10.8	5.08	40.6	0.35
18.06	10:53	7.58	311.9	10.9	3.74	40.0	0.77
18.2	10:56	7.51	314.2	10.9	0.78	38.3	0.81
18.49	10:59	7.5	313.6	10.9	0.59	33.0	0.45
18.56	11:02	7.49	314.1	10.9	0.46	28.1	0.88
18.68	11:05	7.49	314.2	10.9	0.36	23.1	0.58
18.77	11:08	7.47	314.5	10.9	0.22	11.3	0.62

Comments:

Grundfos: ~135 Hz

Packer: 130 psi

Tank: N/A

Throttle: N/A

CPM: N/A

CID: N/A

Flow Rate: 3000 mL/min

Sampler 

Date March 11, 2025

Supervisor _____

Date _____

Plant/Site Landsburg Mine Site

Project No. 923-1000-007.2025

Site Location Ravensdale, WA

Sample ID LMW-4

Sampling Location Groundwater Monitoring Well - end dedicated sampling tube

SAMPLE INTEGRITY DATA SHEET

Technical Procedure Reference(s) Landsburg Mine Site Compliance Monitoring Plan (2017)

Type of Sampler Dedicated Pump Grundfos

Date March 13, 2025

Time 09:50

Media Water

Station LMW-4

Sample Type: grab time composite space composite

Sample Acquisition Measurements (depth, volume of static well water and purged water, etc.)

Static Water Level: 8.21 ft BTOC

Screened Interval: 195' - 209.7' BGS

Sand Pack Interval: 189' - 209.7' BGS

Packer Depth: 187.3' BGS

Sample Description Clear, slight sulfur odor, no sheen.

Field Measurements on Sample (pH, conductivity, etc.) SEE FIELD PARAMETERS SHEET

Aliquot Amount	Analysis	Container	Preservation / Amount
3-40 mL	VOA	VOA vial	HCl
1-500 mL	Total Metals	HDPE	HNO3
4-500 mL	TPH-HCID, -Dx (HOLD)	Glass amber	None
2-40 mL	TPH-Gx (HOLD)	VOA vial	HCl
2-1000 mL	PCBs	Glass amber	None
2-1000 mL	Pesticides	Glass amber	None
2-1000 mL	SVOCs	Glass amber	None
2-500 mL	1,4-dioxane	500 mL amber bottles	None

x3 for MS/MSD except for -Gx, -Dx, and total metals.

SAMPLE INTEGRITY DATA SHEET

Well ID LMW-4

Date 03/13/2025

Time Begin Purge 09:00

Time Collect Sample 09:50

Water Level (ft bmp)	Time	pH	Cond. (uS/cm)	Temp (°C)	DO (mg/L)	ORP (rel mV)	Turbidity (NTU)
8.2	09:02	6.69	1,024	9.3	2.09	117.1	0.70
8.2	09:05	6.54	1,027	9.6	1.09	56.8	0.28
8.2	09:10	6.51	1,026	9.8	0.84	23.2	0.15
8.2	09:15	6.49	1,027	9.9	0.22	7.0	0.28
8.2	09:20	6.48	1,027	9.9	0.1	-2.1	0.36
8.2	09:25	6.48	1,026	9.9	0.06	-10.0	0.11
8.2	09:30	6.48	1,026	9.9	0.04	-16.1	0.23
8.2	09:35	6.48	1,025	9.9	0.03	-21.3	0.16
8.2	09:40	6.47	1,024	10	0.02	-25.6	0.12

Comments:

MS/MSD collected, except for -Dx, -Gx, and total metals.

Grundfos: 80 Hz

Packer: 110 psi

Tank: N/A

Throttle: N/A

CPM: N/A

CID: N/A

Flow Rate: 1000 mL/min

Sampler 

Date March 13, 2025

Supervisor _____

Date _____

SAMPLE INTEGRITY DATA SHEET

Plant/Site Landsburg Mine Site **Project No.** 923-1000-007.2025

Site Location Ravensdale, WA **Sample ID** LMW-5

Sampling Location Groundwater Monitoring Well - end dedicated sampling tube

Technical Procedure Reference(s) Landsburg Mine Site Compliance Monitoring Plan (2017)

Type of Sampler Dedicated Pump Grundfos

Date March 11, 2025 **Time** 12:05

Media Water **Station** LMW-5

Sample Type: grab time composite space composite

Sample Acquisition Measurements (depth, volume of static well water and purged water, etc.)

Static Water Level: 12.5 ft BTOC

Screened Interval: 231.8' - 241.8' BGS

Sand Pack Interval: 231.8' - 241.8' BGS

Packer Depth: 222.11' BGS

Sample Description Clear, slight sulfur odor, no sheen.

Field Measurements on Sample (pH, conductivity, etc.) SEE FIELD PARAMETERS SHEET

Aliquot Amount	Analysis	Container	Preservation / Amount
3-40 mL	VOA	VOA vial	HCl
1-500 mL	Total Metals	HDPE	HNO3
4-500 mL	TPH-HCID, -Dx (HOLD)	Glass amber	None
2-40 mL	TPH-Gx (HOLD)	VOA vial	HCl
2-1000 mL	PCBs	Glass amber	None
2-1000 mL	Pesticides	Glass amber	None
2-1000 mL	SVOCs	Glass amber	None
2-500 mL	1,4-dioxane	500 mL amber bottles	None

SAMPLE INTEGRITY DATA SHEET

Well ID LMW-5

Date 03/11/2025

Time Begin Purge 11:43

Time Collect Sample 12:05

Water Level (ft bmp)	Time	pH	Cond. (uS/cm)	Temp (°C)	DO (mg/L)	ORP (rel mV)	Turbidity (NTU)
12.5	11:45	6.63	682	10.1	0.43	31.5	7.54
12.5	11:48	6.54	683	10.4	0.15	4.9	6.84
12.5	11:51	6.53	683	10.5	0.1	-2.2	8.76
12.5	11:54	6.52	684	10.5	0.06	-8.7	2.40
12.5	11:57	6.52	684	10.6	0.03	-13.9	7.23
12.5	12:00	6.51	685	10.6	0.01	-17.6	5.35
12.5	12:03	6.51	685	10.6	0.01	-19.8	8.78

Comments:

Grundfos: ~135 Hz

Packer: 110 psi

Tank: N/A

Throttle: N/A

CPM: N/A

CID: N/A

Flow Rate: 3000 mL/min

Sampler 

Date March 11, 2025

Supervisor _____

Date _____

SAMPLE INTEGRITY DATA SHEET

Plant/Site Landsburg Mine Site **Project No.** 923-1000-007.2025
Site Location Ravensdale, WA **Sample ID** LMW-6
Sampling Location Groundwater Monitoring Well - end dedicated sampling tube

Technical Procedure Reference(s) Landsburg Mine Site Compliance Monitoring Plan (2017)

Type of Sampler Dedicated Pump Grundfos

Date March 12, 2025 **Time** 09:10

Media Water **Station** LMW-6

Sample Type: grab time composite space composite

Sample Acquisition Measurements (depth, volume of static well water and purged water, etc.)

Static Water Level: 22.85 ft BTOC

Screened Interval: 90.9' - 105.9' BGS

Sand Pack Interval: 82.5' - 105.9' BGS

Packer Depth: 81.22' BGS

Sample Description Clear, no odor, no sheen.

Field Measurements on Sample (pH, conductivity, etc.) SEE FIELD PARAMETERS SHEET

Aliquot Amount	Analysis	Container	Preservation / Amount
3-40 mL	VOA	VOA vial	HCl
1-500 mL	Total Metals	HDPE	HNO3
4-500 mL	TPH-HCID, -Dx (HOLD)	Glass amber	None
2-40 mL	TPH-Gx (HOLD)	VOA vial	HCl
2-1000 mL	PCBs	Glass amber	None
2-1000 mL	Pesticides	Glass amber	None
2-1000 mL	SVOCs	Glass amber	None
2-500 mL	1,4-dioxane	500 mL amber bottles	None

SAMPLE INTEGRITY DATA SHEET

Well ID LMW-6

Date 03/12/2025

Time Begin Purge 08:39

Time Collect Sample 09:10

Water Level (ft bmp)	Time	pH	Cond. (uS/cm)	Temp (°C)	DO (mg/L)	ORP (rel mV)	Turbidity (NTU)
30.56	08:41	6.32	250.1	9.1	1.22	185.3	14.3
31.1	08:46	6.38	252.2	9.4	0.72	167.7	13.9
32.78	08:49	6.45	252.1	9.5	0.62	143.2	14.3
34.26	08:52	6.49	252.6	9.5	0.54	108.9	8.49
35.05	08:55	6.51	253	9.6	0.49	89.1	4.91
36.04	08:58	6.53	253.3	9.6	0.42	66.5	3.50
2.65	09:01	6.54	253.7	9.6	0.38	55.8	36.47
37.18	09:04	6.55	253.9	9.6	0.34	40.6	1.95
37.94	09:07	6.56	254.5	9.6	0.28	34.4	1.46

Comments:

Lowered to 157 Hz

Grundfos: 180 Hz

Packer: 110 psi

Tank: N/A

Throttle: N/A

CPM: N/A

CID: N/A

Flow Rate: 3600 mL/min

Sampler 

Date March 12, 2025

Supervisor _____

Date _____

SAMPLE INTEGRITY DATA SHEET

Plant/Site Landsburg Mine Site **Project No.** 923-1000-007.2025

Site Location Ravensdale, WA **Sample ID** LMW-7

Sampling Location Groundwater Monitoring Well - end dedicated sampling tube

Technical Procedure Reference(s) Landsburg Mine Site Compliance Monitoring Plan (2017)

Type of Sampler Dedicated Pump Grundfos

Date March 11, 2025 **Time** 14:40

Media Water **Station** LMW-7

Sample Type: grab time composite space composite

Sample Acquisition Measurements (depth, volume of static well water and purged water, etc.)

Static Water Level: 225.36 ft BTOC

Screened Interval: 239.6' - 253.7' BGS

Sand Pack Interval: N/A

Packer Depth: N/A

Sample Description Clear, no odor, no sheen.

Field Measurements on Sample (pH, conductivity, etc.) SEE FIELD PARAMETERS SHEET

Aliquot Amount	Analysis	Container	Preservation / Amount
3-40 mL	VOA	VOA vial	HCl
1-500 mL	Total Metals	HDPE	HNO3
4-500 mL	TPH-HCID, -Dx (HOLD)	Glass amber	None
2-40 mL	TPH-Gx (HOLD)	VOA vial	HCl
2-1000 mL	PCBs	Glass amber	None
2-1000 mL	Pesticides	Glass amber	None
2-1000 mL	SVOCs	Glass amber	None
2-500 mL	1,4-dioxane	500 mL amber bottles	None

SAMPLE INTEGRITY DATA SHEET

Well ID LMW-7

Date 03/11/2025

Time Begin Purge 14:13

Time Collect Sample 14:40

Water Level (ft bmp)	Time	pH	Cond. (uS/cm)	Temp (°C)	DO (mg/L)	ORP (rel mV)	Turbidity (NTU)
225.36	14:15	6.91	465.4	11.9	0.68	56.9	7.91
225.36	14:18	6.9	465.6	12.2	0.59	56.5	6.84
225.36	14:21	6.85	468.8	12.8	0.63	49.2	2.26
225.36	14:24	6.82	472.4	13.2	0.46	14.7	3.78
225.36	14:27	6.83	473.3	13.4	0.37	-19.9	1.46
225.36	14:30	6.83	473.9	13.4	0.29	-39.0	1.30
225.36	14:33	6.83	474	13.4	0.29	-40.6	0.8
225.36	14:36	6.83	474.2	13.5	0.26	-45.5	0.99

Comments:

Grundfos set to 340 Hz

Grundfos: 320 Hz

Packer: N/A

Tank: N/A

Throttle: N/A

CPM: N/A

CID: N/A

Flow Rate: 2100 mL/min

Sampler 

Date March 11, 2025

Supervisor _____

Date _____

SAMPLE INTEGRITY DATA SHEET

Plant/Site Landsburg Mine Site **Project No.** 923-1000-007.2025

Site Location Ravensdale, WA **Sample ID** LMW-8

Sampling Location Groundwater Monitoring Well - end dedicated sampling tube

Technical Procedure Reference(s) Landsburg Mine Site Compliance Monitoring Plan (2017)

Type of Sampler New Tubing and Peristaltic Pump

Date March 11, 2025 **Time** 13:05

Media Water **Station** LMW-8

Sample Type: grab time composite space composite

Sample Acquisition Measurements (depth, volume of static well water and purged water, etc.)

Static Water Level: 3.21 ft BTOC

Screened Interval: 8' - 13' BGS

Sand Pack Interval: 6' - 13' BGS

Packer Depth: N/A

Sample Description No odor, no sheen, iron bacteria at first.

Field Measurements on Sample (pH, conductivity, etc.) SEE FIELD PARAMETERS SHEET

Aliquot Amount	Analysis	Container	Preservation / Amount
3-40 mL	VOA	VOA vial	HCl
1-500 mL	Total Metals	HDPE	HNO3
4-500 mL	TPH-HCID, -Dx (HOLD)	Glass amber	None
2-40 mL	TPH-Gx (HOLD)	VOA vial	HCl
2-1000 mL	PCBs	Glass amber	None
2-1000 mL	Pesticides	Glass amber	None
2-1000 mL	SVOCs	Glass amber	None
2-500 mL	1,4-dioxane	500 mL amber bottles	None

SAMPLE INTEGRITY DATA SHEET

Well ID LMW-8

Date 03/11/2025

Time Begin Purge 12:34

Time Collect Sample 13:05

Water Level (ft bmp)	Time	pH	Cond. (uS/cm)	Temp (°C)	DO (mg/L)	ORP (rel mV)	Turbidity (NTU)
4.38	12:35	6.51	556	9.3	1.01	-61.8	361
5.81	12:40	6.39	552	9.3	0.19	-57.6	228
6.26	12:45	6.38	553	9.3	0.12	-57.8	50.9
6.64	12:50	6.36	555	9.5	0.06	-59.4	25.2
6.84	12:55	6.37	562	9.4	0.04	-61.6	20.4
7.02	13:00	6.37	565	9.5	0.02	-64.3	10.6
7.12	13:05	6.36	561	9.6	0.01	-65.6	8.9

Comments:

Grundfos: N/A

Packer: N/A

Tank: N/A

Throttle: N/A

CPM: N/A

CID: N/A

Flow Rate: 300 mL/min

Sampler 

Date March 11, 2025

Supervisor _____

Date _____

SAMPLE INTEGRITY DATA SHEET

Plant/Site Landsburg Mine Site **Project No.** 923-1000-007.2025

Site Location Ravensdale, WA **Sample ID** LMW-9

Sampling Location Groundwater Monitoring Well - end dedicated sampling tube

Technical Procedure Reference(s) Landsburg Mine Site Compliance Monitoring Plan (2017)

Type of Sampler Dedicated QED Bladder

Date March 11, 2025 **Time** 09:45

Media Water **Station** LMW-9

Sample Type: grab time composite space composite

Sample Acquisition Measurements (depth, volume of static well water and purged water, etc.)

Static Water Level: 97.5 ft BTOC

Screened Interval: 149' - 159' BGS

Sand Pack Interval: 143.5' - 159' BGS

Packer Depth: N/A

Sample Description Clear, no odor, no sheen.

Field Measurements on Sample (pH, conductivity, etc.) SEE FIELD PARAMETERS SHEET

Aliquot Amount	Analysis	Container	Preservation / Amount
3-40 mL	VOA	VOA vial	HCl
1-500 mL	Total Metals	HDPE	HNO3
4-500 mL	TPH-HCID, -Dx (HOLD)	Glass amber	None
2-40 mL	TPH-Gx (HOLD)	VOA vial	HCl
2-1000 mL	PCBs	Glass amber	None
2-1000 mL	Pesticides	Glass amber	None
2-1000 mL	SVOCs	Glass amber	None
2-500 mL	1,4-dioxane	500 mL amber bottles	None

SAMPLE INTEGRITY DATA SHEET

Well ID LMW-9

Date 03/11/2025

Time Begin Purge 09:11

Time Collect Sample 09:45

Water Level (ft bmp)	Time	pH	Cond. (uS/cm)	Temp (°C)	DO (mg/L)	ORP (rel mV)	Turbidity (NTU)
97.5	09:15	6.46	671	10	0.92	190.1	2.93
97.5	09:20	6.53	670	10	0.47	81.2	1.57
97.5	09:25	6.56	670	10.1	0.35	12.5	1.03
97.5	09:30	6.58	669	10.1	0.31	-12.9	.7
97.5	09:35	6.59	669	10.1	0.29	-21.5	.96
97.5	09:40	6.6	669	10.1	0.26	-31.2	1.34

Comments:

Grundfos: N/A

Packer: N/A

Tank: 130

Throttle: 95

CPM: 2

CID: 51

Flow Rate: 500 mL/min

Sampler AKR

Date March 11, 2025

Supervisor _____

Date _____

SAMPLE INTEGRITY DATA SHEET

Plant/Site Landsburg Mine Site **Project No.** 923-1000-007.2025

Site Location Ravensdale, WA **Sample ID** LMW-10

Sampling Location Groundwater Monitoring Well - end dedicated sampling tube

Technical Procedure Reference(s) Landsburg Mine Site Compliance Monitoring Plan (2017)

Type of Sampler Dedicated QED Bladder

Date March 10, 2025 **Time** 14:45

Media Water **Station** LMW-10

Sample Type: grab time composite space composite

Sample Acquisition Measurements (depth, volume of static well water and purged water, etc.)

Static Water Level: 0.06 ft BTOC

Screened Interval: 267' - 289' BGS

Sand Pack Interval: 258' - 289' BGS

Packer Depth: N/A

Sample Description Clear, no odor, no sheen.

Field Measurements on Sample (pH, conductivity, etc.) SEE FIELD PARAMETERS SHEET

Aliquot Amount	Analysis	Container	Preservation / Amount
3-40 mL	VOA	VOA vial	HCl
1-500 mL	Total Metals	HDPE	HNO3
4-500 mL	TPH-HCID, -Dx (HOLD)	Glass amber	None
2-40 mL	TPH-Gx (HOLD)	VOA vial	HCl
2-1000 mL	PCBs	Glass amber	None
2-1000 mL	Pesticides	Glass amber	None
2-1000 mL	SVOCs	Glass amber	None
2-500 mL	1,4-dioxane	500 mL amber bottles	None

SAMPLE INTEGRITY DATA SHEET

Well ID LMW-10

Date 03/10/2025

Time Begin Purge 14:06

Time Collect Sample 14:45

Water Level (ft bmp)	Time	pH	Cond. (uS/cm)	Temp (°C)	DO (mg/L)	ORP (rel mV)	Turbidity (NTU)
1.61	14:10	8.66	698	8.9	0.23	-49.5	0.57
2.1	14:15	8.67	700	9	0.08	-81.6	0.30
2.54	14:20	8.67	700	9	0.02	-105.7	0.40
3.09	14:25	8.66	700	9.1	0.01	-126.0	0.28
3.61	14:30	8.66	700	9	0.01	-135.9	0.24
4.12	14:35	8.66	700	9	0.01	-145.4	0.27
4.5	14:40	8.66	701	9	0.01	-153.9	0.24

Comments:

Grundfos: N/A

Packer: N/A

Tank: 110

Throttle: 40

CPM: 2

CID: 50

Flow Rate: 300 mL/min

Sampler WJ

Date March 10, 2025

Supervisor _____

Date _____

SAMPLE INTEGRITY DATA SHEET

Plant/Site Landsburg Mine Site **Project No.** 923-1000-007.2025

Site Location Ravensdale, WA **Sample ID** LMW-11

Sampling Location Groundwater Monitoring Well - end dedicated sampling tube

Technical Procedure Reference(s) Landsburg Mine Site Compliance Monitoring Plan (2017)

Type of Sampler Dedicated QED Bladder

Date March 12, 2025 **Time** 12:55

Media Water **Station** LMW-11

Sample Type: grab time composite space composite

Sample Acquisition Measurements (depth, volume of static well water and purged water, etc.)

Static Water Level: 155.54 ft BTOC

Screened Interval: 696' - 707' BGS

Sand Pack Interval: 688' - 707' BGS

Packer Depth: N/A

Sample Description Clear, no odor, no sheen.

Field Measurements on Sample (pH, conductivity, etc.) SEE FIELD PARAMETERS SHEET

Aliquot Amount	Analysis	Container	Preservation / Amount
3-40 mL	VOA	VOA vial	HCl
1-500 mL	Total Metals	HDPE	HNO3
4-500 mL	TPH-HCID, -Dx (HOLD)	Glass amber	None
2-40 mL	TPH-Gx (HOLD)	VOA vial	HCl
2-1000 mL	PCBs	Glass amber	None
2-1000 mL	Pesticides	Glass amber	None
2-1000 mL	SVOCs	Glass amber	None
2-500 mL	1,4-dioxane	500 mL amber bottles	None

SAMPLE INTEGRITY DATA SHEET

Well ID LMW-11

Date 03/12/2025

Time Begin Purge 12:18

Time Collect Sample 12:55

Water Level (ft bmp)	Time	pH	Cond. (uS/cm)	Temp (°C)	DO (mg/L)	ORP (rel mV)	Turbidity (NTU)
155.55	12:20	7.94	487	9.9	9.15	29.9	0.92
155.55	12:25	7.13	544	9.9	1.74	3.8	0.89
155.55	12:30	7.07	545	9.9	0.83	-25.1	1.13
155.55	12:35	7.06	547	9.8	0.59	-39.9	2.43
155.55	12:40	7.06	548	9.9	0.55	-47.9	1.48
155.55	12:45	7.05	548	9.8	0.43	-54.4	1.25
155.55	12:50	7.05	548	9.9	0.41	-57.9	0.73

Comments:

Grundfos: N/A

Packer: N/A

Tank: 130

Throttle: 110

CPM: 1

CID: 15

Flow Rate: 400 mL/min

Sampler LMW

Date March 12, 2025

Supervisor _____

Date _____

SAMPLE INTEGRITY DATA SHEET

Plant/Site Landsburg Mine Site **Project No.** 923-1000-007.2025

Site Location Ravensdale, WA **Sample ID** LMW-12

Sampling Location Groundwater Monitoring Well - end dedicated sampling tube

Technical Procedure Reference(s) Landsburg Mine Site Compliance Monitoring Plan (2017)

Type of Sampler Dedicated QED Bladder

Date March 10, 2025 **Time** 11:05

Media Water **Station** LMW-12

Sample Type: grab time composite space composite

Sample Acquisition Measurements (depth, volume of static well water and purged water, etc.)

Static Water Level: 6.65 ft BTOC

Screened Interval: 15' - 25' BGS

Sand Pack Interval: 11' - 25' BGS

Packer Depth: N/A

Sample Description clear, slight sulfur odor, no sheen

Field Measurements on Sample (pH, conductivity, etc.) SEE FIELD PARAMETERS SHEET

Aliquot Amount	Analysis	Container	Preservation / Amount
3-40 mL	VOA	VOA vial	HCl
1-500 mL	Total Metals	HDPE	HNO3
4-500 mL	TPH-HCID, -Dx (HOLD)	Glass amber	None
2-40 mL	TPH-Gx (HOLD)	VOA vial	HCl
2-1000 mL	PCBs	Glass amber	None
2-1000 mL	Pesticides	Glass amber	None
2-1000 mL	SVOCs	Glass amber	None
2-500 mL	1,4-dioxane	500 mL amber bottles	None

SAMPLE INTEGRITY DATA SHEET

Well ID LMW-12

Date 03/10/2025

Time Begin Purge 09:37

Time Collect Sample 11:05

Water Level (ft bmp)	Time	pH	Cond. (uS/cm)	Temp (°C)	DO (mg/L)	ORP (rel mV)	Turbidity (NTU)
6.67	09:45	6.38	570	7.8	0.57	188.8	21.2
6.66	09:50	6.36	550	7.9	0.33	151.8	17.5
6.66	09:55	6.36	549	8	0.26	103.2	17.3
6.5	10:00	6.38	548	8	0.19	43.8	16.2
6.8	10:05	6.38	548	8	0.14	21.6	17.5
6.7	10:10	6.4	549	8	0.13	10.4	14.6
6.68	10:15	6.41	558	8	0.09	-2.1	20.2
6.67	10:20	6.42	564	8.1	0.08	-10.4	27.1
6.67	10:25	6.43	569	8.1	0.07	-17.2	28.1
6.68	10:30	6.43	578	8.2	0.05	-21.3	29.7
6.68	10:35	6.47	650	8.3	0.04	-29.1	25.9
6.68	10:40	6.5	704	8.4	0.03	-35.1	16.1
6.68	10:45	6.52	754	8.4	0.02	-41.5	9.95
6.68	10:50	6.54	784	8.5	0.01	-46.6	7.09
6.68	10:55	6.56	797	8.5	0.01	-49.8	6.33
6.68	11:00	6.57	815	8.5	0	-53.5	4.87

SAMPLE INTEGRITY DATA SHEET

Comments:

Grundfos: N/A

Packer: N/A

Tank: 110

Throttle: 20

CPM: 2

CID: 47

Flow Rate: 300 mL/min

Sampler *Ch W*

Date March 10, 2025

Supervisor _____

Date _____

SAMPLE INTEGRITY DATA SHEET

Plant/Site Landsburg Mine Site **Project No.** 923-1000-007.2025

Site Location Ravensdale, WA **Sample ID** LMW-13R

Sampling Location Groundwater Monitoring Well - end dedicated sampling tube

Technical Procedure Reference(s) Landsburg Mine Site Compliance Monitoring Plan (2017)

Type of Sampler Dedicated QED Bladder

Date March 10, 2025 **Time** 12:45

Media Water **Station** LMW-13R

Sample Type: grab time composite space composite

Sample Acquisition Measurements (depth, volume of static well water and purged water, etc.)

Static Water Level: 8.1 ft BTOC

Screened Interval: 115' - 140' BGS

Sand Pack Interval: 110' - 150' BGS

Packer Depth: N/A

Sample Description clear, slight sulfur odor, no sheen

Field Measurements on Sample (pH, conductivity, etc.) SEE FIELD PARAMETERS SHEET

Aliquot Amount	Analysis	Container	Preservation / Amount
3-40 mL	VOA	VOA vial	HCl
1-500 mL	Total Metals	HDPE	HNO3
4-500 mL	TPH-HCID, -Dx (HOLD)	Glass amber	None
2-40 mL	TPH-Gx (HOLD)	VOA vial	HCl
2-1000 mL	PCBs	Glass amber	None
2-1000 mL	Pesticides	Glass amber	None
2-1000 mL	SVOCs	Glass amber	None
2-500 mL	1,4-dioxane	500 mL amber bottles	None

SAMPLE INTEGRITY DATA SHEET

Well ID LMW-13R

Date 03/10/2025

Time Begin Purge 11:48

Time Collect Sample 12:45

Water Level (ft bmp)	Time	pH	Cond. (uS/cm)	Temp (°C)	DO (mg/L)	ORP (rel mV)	Turbidity (NTU)
7.23	12:05	7.39	1,713	8.2	3.61	-.9	7.49
7.26	12:10	7.34	1,743	8.1	2.17	-17.7	3.31
7.23	12:15	7.33	1,736	7.9	2.14	-25.2	2.34
7.28	12:20	7.32	1,737	8.4	1.96	-48.4	4.36
7.23	12:25	7.32	1,742	8.3	1.84	-61.5	2.81
7.24	12:30	7.32	1,741	8.3	1.28	-68.1	2.71
7.23	12:35	7.32	1,740	8.3	1.21	-72.8	2.55
7.23	12:40	7.32	1,740	8.4	1.18	-74.2	2.32

Comments:

Grundfos: N/A

Packer: N/A

Tank: 110

Throttle: 35

CPM: 2

CID: 48

Flow Rate: 200 mL/min

Sampler WU

Date March 10, 2025

Supervisor _____

Date _____

SAMPLE INTEGRITY DATA SHEET

Plant/Site Landsburg Mine Site **Project No.** 923-1000-007.2025

Site Location Ravensdale, WA **Sample ID** LMW-14

Sampling Location Groundwater Monitoring Well - end dedicated sampling tube

Technical Procedure Reference(s) Landsburg Mine Site Compliance Monitoring Plan (2017)

Type of Sampler Dedicated QED Bladder

Date March 12, 2025 **Time** 10:15

Media Water **Station** LMW-14

Sample Type: grab time composite space composite

Sample Acquisition Measurements (depth, volume of static well water and purged water, etc.)

Static Water Level: 163.52 ft BTOC

Screened Interval: 156.5' - 172.3' BGS

Sand Pack Interval: 152.5' - 175.8' BGS

Packer Depth: N/A

Sample Description Clear, no odor, no sheen.

Field Measurements on Sample (pH, conductivity, etc.) SEE FIELD PARAMETERS SHEET

Aliquot Amount	Analysis	Container	Preservation / Amount
3-40 mL	VOA	VOA vial	HCl
1-500 mL	Total Metals	HDPE	HNO3
4-500 mL	TPH-HCID, -Dx (HOLD)	Glass amber	None
2-40 mL	TPH-Gx (HOLD)	VOA vial	HCl
2-1000 mL	PCBs	Glass amber	None
2-1000 mL	Pesticides	Glass amber	None
2-1000 mL	SVOCs	Glass amber	None
2-500 mL	1,4-dioxane	500 mL amber bottles	None

SAMPLE INTEGRITY DATA SHEET

Well ID LMW-14

Date 03/12/2025

Time Begin Purge 09:48

Time Collect Sample 10:15

Water Level (ft bmp)	Time	pH	Cond. (uS/cm)	Temp (°C)	DO (mg/L)	ORP (rel mV)	Turbidity (NTU)
163.9	09:50	6.43	995	10.3	2.53	96.5	1.03
163.9	09:53	6.28	1,399	10	0.52	75.4	6.27
163.9	09:56	6.33	1,499	10	0.25	34.5	4.57
163.9	09:59	6.35	1,477	10	0.19	15.0	3.83
163.9	10:02	6.36	1,453	9.9	0.15	2.7	3.50
163.9	10:05	6.36	1,435	9.9	0.13	-5.2	3.51
163.9	10:08	6.36	1,444	9.9	0.12	-12.7	2.51
163.9	10:11	6.37	1,429	9.9	0.11	-16.4	2.59

Comments:

Grundfos: N/A

Packer: N/A

Tank: 140

Throttle: 115

CPM: 2

CID: 49

Flow Rate: 500 mL/min

Sampler 

Date March 12, 2025

Supervisor _____

Date _____

SAMPLE INTEGRITY DATA SHEET

Plant/Site Landsburg Mine Site **Project No.** 923-1000-007.2025

Site Location Ravensdale, WA **Sample ID** LMW-15

Sampling Location Groundwater Monitoring Well - end dedicated sampling tube

Technical Procedure Reference(s) Landsburg Mine Site Compliance Monitoring Plan (2017)

Type of Sampler Dedicated QED Bladder

Date March 12, 2025 **Time** 11:35

Media Water **Station** LMW-15

Sample Type: grab time composite space composite

Sample Acquisition Measurements (depth, volume of static well water and purged water, etc.)

Static Water Level: 149.54 ft BTOC

Screened Interval: 235' - 245' BGS

Sand Pack Interval: 231' - 245' BGS

Packer Depth: N/A

Sample Description Clear, no odor, no sheen.

Field Measurements on Sample (pH, conductivity, etc.) SEE FIELD PARAMETERS SHEET

Aliquot Amount	Analysis	Container	Preservation / Amount
3-40 mL	VOA	VOA vial	HCl
1-500 mL	Total Metals	HDPE	HNO3
4-500 mL	TPH-HCID, -Dx (HOLD)	Glass amber	None
2-40 mL	TPH-Gx (HOLD)	VOA vial	HCl
2-1000 mL	PCBs	Glass amber	None
2-1000 mL	Pesticides	Glass amber	None
2-1000 mL	SVOCs	Glass amber	None
2-500 mL	1,4-dioxane	500 mL amber bottles	None

SAMPLE INTEGRITY DATA SHEET

Well ID LMW-15

Date 03/12/2025

Time Begin Purge 11:07

Time Collect Sample 11:35

Water Level (ft bmp)	Time	pH	Cond. (uS/cm)	Temp (°C)	DO (mg/L)	ORP (rel mV)	Turbidity (NTU)
149.54	11:10	7.31	507	9	6.22	66.7	4.37
149.54	11:13	7.07	494.7	9.3	1.63	-25.8	2.65
149.54	11:16	7.09	497.3	9.3	1.16	-57.1	1.59
149.54	11:19	7.13	506	9.2	0.72	-83.5	1.25
149.54	11:22	7.14	508	9.2	0.63	-92.2	1.11
149.54	11:25	7.15	510	9.2	0.56	-98.2	1.24
149.54	11:28	7.16	511	9.3	0.49	-102.7	1.15
149.54	11:31	7.16	512	9.3	0.46	-106.4	1.19

Comments:

Grundfos: N/A

Packer: N/A

Tank: 130

Throttle: 95

CPM: 2

CID: 53

Flow Rate: 400 mL/min

Sampler 

Date March 12, 2025

Supervisor _____

Date _____

SAMPLE INTEGRITY DATA SHEET

Plant/Site Landsburg Mine Site **Project No.** GL923-1000-007
Site Location Ravensdale, WA **Sample ID** LMW-FB-0325 and LMW-FB1-0325
Sampling Location Direct pour/end of dedicated sampling tube

Technical Procedure Reference(s) Landsburg Mine Site Compliance Monitoring Plan (2017)

Type of Sampler Direct Pour/Peristaltic Pump with New Tubing

Date March 11, 2025 / March 12, 2025 **Time** 09:35 / 13:45

Media Lab-provided DI **Station** N/A

Sample Type: grab time composite space composite

Sample Acquisition Measurements (depth, volume of static well water and purged water, etc.)

Static Water Level: N/A

Screened Interval: N/A

Sand Pack Interval: N/A

Packer Depth: N/A

Sample Description Lab-provided DI water poured directly into sample containers.

Field Measurements on Sample (pH, conductivity, etc.) SEE FIELD PARAMETERS SHEET

Aliquot Amount	Analysis	Container	Preservation / Amount
3-40 mL	VOA	VOA vial	HCl
1-500 mL	Total Metals	HDPE	HNO3
4-500 mL	TPH-HCID, -Dx (HOLD)	Glass amber	None
2-40 mL	TPH-Gx (HOLD)	VOA vial	HCl
2-1000 mL	PCBs	Glass amber	None
2-1000 mL	Pesticides	Glass amber	None
2-1000 mL	SVOCs	Glass amber	None
2-500 mL	1,4-dioxane	500 mL amber bottles	None

x2 for two field blanks.

SAMPLE INTEGRITY DATA SHEET

Well ID LMW-FB

Date 03/11/2025 and 3/12/2025

Time Begin Purge N/A

Time Collect Sample 09:35 /13:45

Water Level (ft bmp)	Time	pH	Cond. (uS/cm)	Temp (°C)	DO (mg/L)	ORP (rel mV)	Turbidity (NTU)
Parameters not applicable.							

Comments:

Grundfos: N/A
Packer: N/A
Tank: N/A
Throttle: N/A
CPM: N/A
CID: N/A
Flow Rate: N/A mL/min

Sampler 

Date March 11, 2025 and March 12, 2025

Supervisor _____

Date _____



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