



**REPORT**

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

Submitted to:

**Washington Department of Ecology**

15700 Dayton Ave. N., Shoreline WA 98133

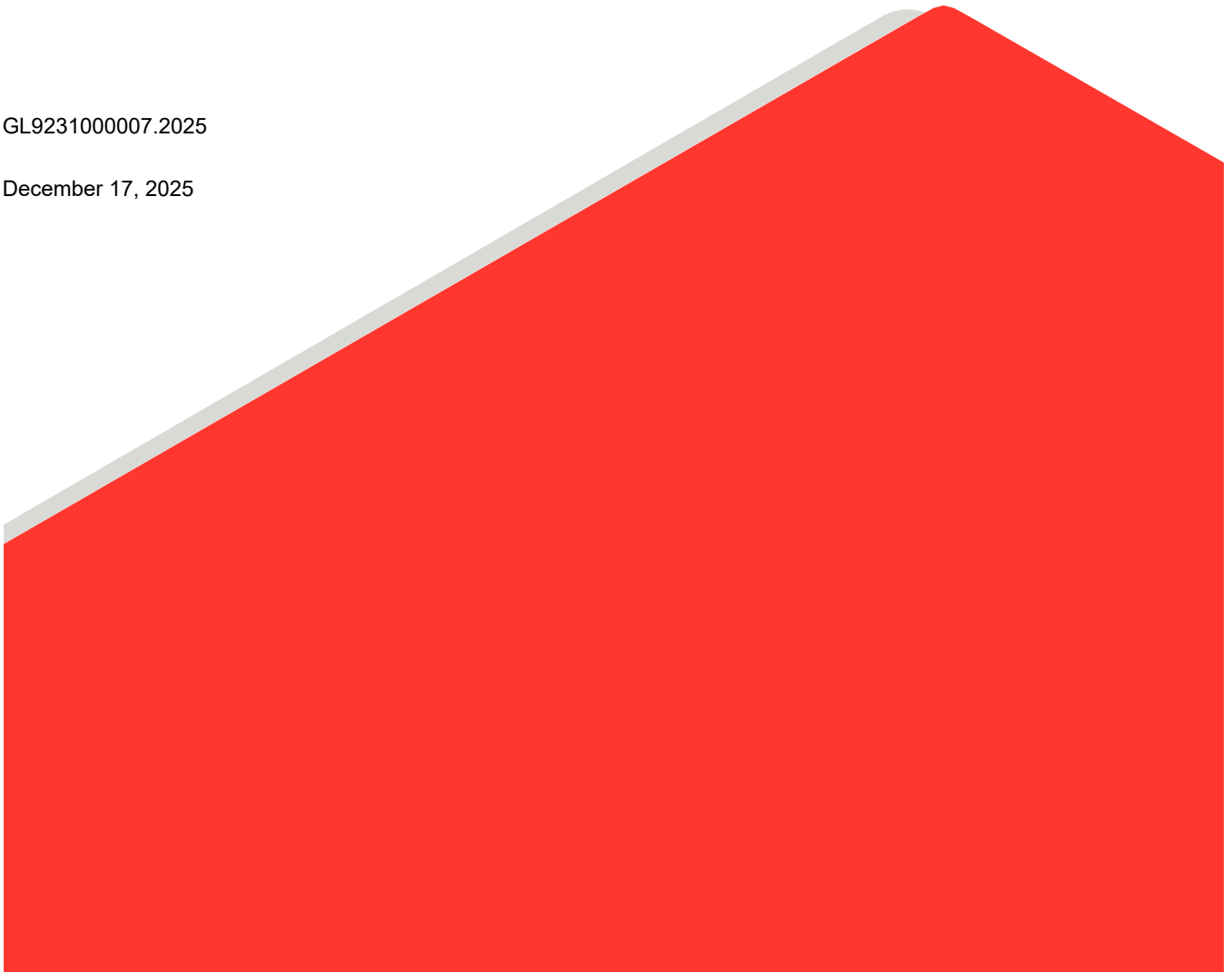
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# Distribution List

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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 September 2025 confirmational monitoring event, which is the second semi-annual sampling event completed in 2025.

The fall semi-annual event was conducted on September 23 to 26, 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.

Sampling of the off-Site Private Well, the Landsburg Estates Well, was also scheduled to occur during this sampling round, but repeated attempts to contact the property owner were unsuccessful and the well was not sampled. Attempts to contact the homeowner included emails and cell phone calls. This private well has been sampled several times in the past, including in 2021 and 2022, with no analytes detected above drinking water standards.

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
  - Total Petroleum Hydrocarbons (TPHs) by NWTPH-HCID
  - 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 (ARI) 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 result for 2-chloroethyl vinyl ether for LMW-4-0925 was 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 result for 2-chloroethyl vinyl ether for LMW-4-0925 was rejected. 2-chloroethyl vinyl ether has never been detected at the Site.

Data qualifiers are defined, and all data qualifiers assigned under the data validation process are presented in Appendix A data validation memorandum.

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 September 2025 groundwater monitoring results are summarized below:

- Laboratory analyses did not detect TPH above the laboratory reporting limits in any of the groundwater samples.
- There were no VOCs detected in groundwater above the trigger level concentrations prescribed in the CMP (Ecology 2017).
- 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-12 where iron was reported at 16.4 mg/L. 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 September 2025 sampling event are within the range of typical concentrations reported during previous groundwater monitoring events at the Site.
  - Arsenic was detected in groundwater from LMW-3, LMW-7, LMW-8, LMW-9, LMW-10, LMW-11, LMW-12, LMW-13R, LMW-14, and LMW-15 at concentrations below both the MTCA Method A groundwater cleanup level (0.005 mg/L) and the Washington State primary drinking water MCL (0.01 mg/L); except the groundwater sample from LMW-11 that contained total arsenic at a concentration of 0.00753 mg/L, slightly above the MTCA Method A groundwater cleanup level, but less than the Washington State primary drinking water MCL. Studies conducted by the Washington State Department of Ecology determined that natural background concentration of arsenic in groundwaters within the Puget

Sound region is 0.008 mg/L (Ecology 2022). Arsenic has been detected in groundwater from LMW-11 near or below natural background and slightly 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.

#### 4.0 NEXT SAMPLING EVENT

Per the Compliance Monitoring plan, semi-annual compliance monitoring ceased in 2025 and shifts to annual starting in 2026 through 2030. The first annual monitoring event is scheduled for March 2026, and will include sampling of all Site groundwater monitoring wells: LMW-2 through LMW-15.

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## 5.0 REFERENCES

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- Ecology. 2021. Amendment to Cleanup Action Plan Landsburg Mine Site MTCA Remediation Project, Ravensdale, Washington. March 26.
- Ecology. 2022. Natural Background Groundwater Arsenic Concentrations in Washington State, Study Results, by Charles San Juan. January 2022.
- WSP. 2023. 1,4-Dioxane Trend Analysis and Groundwater Monitoring Frequency at the Landsburg Mine Site. May.

## Tables

**Table 1: Groundwater Elevation Data, Landsburg Mine Site, September 23, 2025**

	LMW-1	LMW-2	LMW-3	LMW-4 <sup>1</sup>	LMW-5	LMW-6	LMW-7 <sup>1</sup>	LMW-8	LMW-9	LMW-10	LMW-11	LMW-12	LMW-13R	LMW-14 <sup>1</sup>	LMW-15 <sup>2</sup>
<b>Water Depths</b>															
Date of data collection	9/23/2025	9/23/2025	9/23/2025	9/23/2025	9/23/2025	9/23/2025	9/23/2025	9/25/2025	9/23/2025	9/23/2025	9/23/2025	9/23/2025	9/23/2025	9/23/2025	9/23/2025
Time of data collection	1:49 PM	10:13 AM	1:08 PM	12:11 PM	1:02 PM	1:38 PM	12:35 PM	2:16 PM	1:15 PM	12:07 PM	2:01 PM	12:02 PM	9:47 AM	3:15 PM	2:54 PM
Measured to Top of PVC (ft btc)	145.12	7.86	13.74	9.94	15.18	45.33	214.61	5.30	100.24	0.45	158.04	12.62	13.15	161.04	152.15
<b>Surveyed Elevation</b>															
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
<b>Corrected Water Elevation</b>															
Using PVC elevation (ft NAVD88)	<b>620.24</b>	<b>609.93</b>	<b>643.01</b>	<b>609.33</b>	<b>643.09</b>	<b>587.00</b>	<b>556.90</b>	<b>641.67</b>	<b>643.75</b>	<b>618.53</b>	<b>644.15</b>	<b>612.73</b>	<b>612.71</b>	<b>644.08</b>	<b>644.31</b>

Notes:

<sup>1</sup> Data corrected to accommodate well inclination from vertical

<sup>2</sup> Groundwater Level from the Sample Integrity Data Sheet

NA = Not applicable

NC = Data not collected

ft btc = feet below top of casing

ft NAVD88 = elevation in feet NAVD88

Table 2: September 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	Trip Blank	
		9/23/2025	9/23/2025	9/25/2025	9/24/2025	9/25/2025	9/25/2025	9/26/2025	9/25/2025	9/25/2025	9/23/2025	9/24/2025	9/23/2025	9/23/2025	9/24/2025	9/24/2025	9/26/2025	-	
<b>Field Parameter</b>																			
Temperature	°C	11.4	-	11.9	10.7	10.6	10.1	14.8	13.5	10.4	11.5	10.7	9.8	10.5	12.5	10.7	-	-	
pH	stnd	6.64	-	7.6	6.66	6.71	6.61	7.03	6.69	6.81	8.58	7.1	6.63	7.22	6.37	7.2	-	-	
Specific Conductance	uS/cm	901	-	606	892	1073	556	6087	1032	1118	361.4	466.6	538	732	839	422.2	-	-	
Dissolved Oxygen	mg/L	7.7	-	6.84	6.46	6.27	7.89	0.42	-	6.51	6.34	6.43	6.49	7.13	5.4	5.44	-	-	
ORP	mV	205.4	-	17.1	110.8	60.4	230.7	-110.8	-11.3	53.9	-47.2	57.5	31.3	45.7	66.6	-30.8	-	-	
Turbidity	NTU	0.54	-	0.67	0.79	0.51	0.68	6.37	0.9	1.46	0.65	1.24	3.67	2.26	1.14	0.85	-	-	
<b>Metals (Total)</b>																			
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	0.021 U	0.021 U	0.021 U	0.021 U	0.021 U	0.021 U	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
Arsenic	mg/L	0.0001 U	0.0001 U	<b>0.000631</b>	0.0001 U	0.0001 U	0.0001 U	<b>0.00184</b>	<b>0.00304</b>	<b>0.000215</b>	<b>0.000163</b>	<b>0.00753</b>	<b>0.0005</b>	<b>0.000318</b>	<b>0.00123</b>	<b>0.00304</b>	0.0001 U	NA	
Barium	mg/L	<b>0.395</b>	<b>0.4</b>	<b>0.0671</b>	<b>0.355</b>	<b>0.24</b>	<b>0.106</b>	<b>0.366</b>	<b>0.0542</b>	<b>0.28</b>	<b>0.0324</b>	<b>0.323</b>	<b>0.191</b>	<b>0.3</b>	<b>0.037</b>	<b>0.205</b>	0.0007 U	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
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
Calcium	mg/L	<b>109</b>	<b>108</b>	<b>34.4</b>	<b>105</b>	<b>78.6</b>	<b>27.2</b>	<b>40.4</b>	<b>65.8</b>	<b>77.7</b>	<b>6.55</b>	<b>58.3</b>	<b>69.2</b>	<b>76.3</b>	<b>131</b>	<b>56.6</b>	0.03 U	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
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	0.0025 U	<b>0.0091</b>	0.0025 U	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
Iron	mg/L	<b>0.316</b>	<b>0.326</b>	0.054 U	<b>1.4</b>	<b>0.282</b>	<b>1.45</b>	<b>0.875</b>	<b>10.9</b>	<b>1.39</b>	0.054 U	<b>0.414</b>	<b>16.4</b>	<b>1.05</b>	<b>9.93</b>	<b>3.78</b>	0.054 U	NA	
Lead	mg/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
Magnesium	mg/L	<b>66.1</b>	<b>66.4</b>	<b>14.8</b>	<b>62</b>	<b>41.9</b>	<b>13.8</b>	<b>18.5</b>	<b>36.3</b>	<b>40.3</b>	<b>2.79</b>	<b>26.5</b>	<b>40.9</b>	<b>35.9</b>	<b>58.7</b>	<b>24.6</b>	0.025 U	NA	
Manganese	mg/L	<b>0.239</b>	<b>0.234</b>	0.002 U	<b>0.139</b>	<b>0.202</b>	<b>0.0193</b>	<b>0.0916</b>	<b>0.437</b>	<b>0.174</b>	<b>0.0087</b>	<b>0.183</b>	<b>1.01</b>	<b>0.0253</b>	<b>0.645</b>	<b>0.339</b>	0.002 U	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
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	0.005 U	0.005 U	<b>0.0138</b>	0.005 U	NA
Potassium	mg/L	<b>3.47</b>	<b>3.49</b>	<b>1.59</b>	<b>3.66</b>	<b>2.29</b>	<b>0.622</b>	<b>2.4</b>	<b>1.95</b>	<b>2.27</b>	<b>1.08</b>	<b>2.05</b>	<b>2.8</b>	<b>2.84</b>	<b>3.37</b>	<b>1.8</b>	0.25 U	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	0.0005 U	0.0005 U	0.0005 U	0.0005 U	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
Sodium	mg/L	<b>21 J-</b>	<b>21.1 J-</b>	<b>10 J-</b>	<b>36.1 J-</b>	<b>13.8 J-</b>	<b>6.98 J-</b>	<b>43.6 J-</b>	<b>13 J-</b>	<b>14.2 J-</b>	<b>79.7 J-</b>	<b>24.4 J-</b>	<b>7.41 J-</b>	<b>68.8 J-</b>	<b>10 J-</b>	<b>12.9 J-</b>	0.25 U	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
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
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	0.015 U	0.015 U	0.015 U	0.015 U	0.015 U	NA
<b>Volatile Organic Compounds (VOCs)</b>																			
Acetone	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
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
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
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
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
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
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
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
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
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
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
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
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
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
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
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
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
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

Table 2: September 2025 Groundwater Analytical Results Landsburg Mine Site

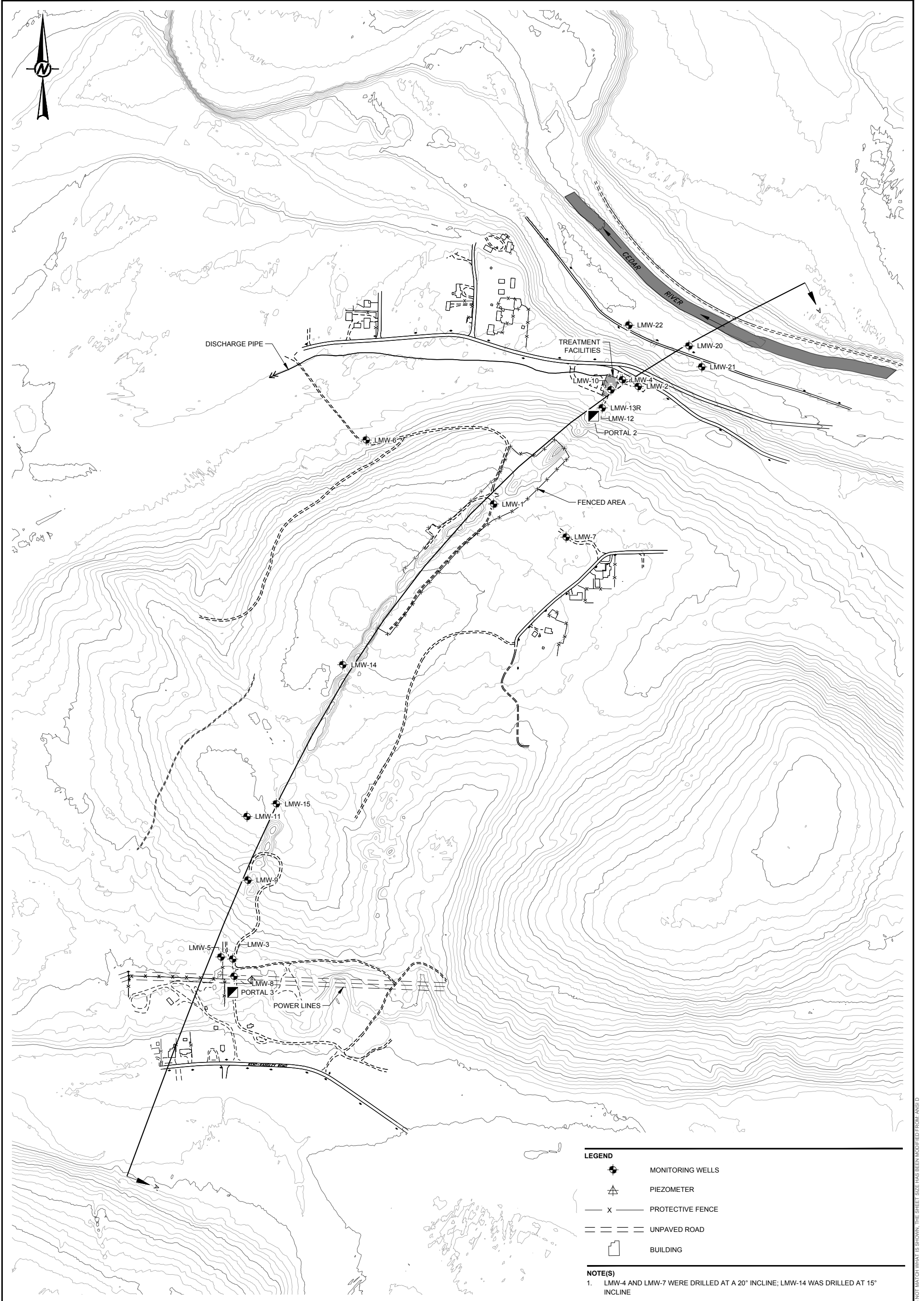
ANALYTE	UNITS	LMW-2	LMW-2 Duplicate	LMW-3	LMW-4	LMW-5	LMW-6	LMW-7	LMW-8	LMW-9	LMW-10	LMW-11	LMW-12	LMW-13R	LMW-14	LMW-15	Field Blank	Trip Blank
		9/23/2025	9/23/2025	9/25/2025	9/24/2025	9/25/2025	9/25/2025	9/26/2025	9/25/2025	9/25/2025	9/23/2025	9/24/2025	9/23/2025	9/23/2025	9/24/2025	9/24/2025	9/26/2025	-
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
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
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
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
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
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
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
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
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
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
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
1,1-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
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
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
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
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
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
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
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
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
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
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
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
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
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
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
Cumene (isopropyl 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
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
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
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
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
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
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
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
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
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
1,1,1,2,2-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
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
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
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
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
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
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
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
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
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
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
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
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
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

**Table 2: September 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	Trip Blank	
		9/23/2025	9/23/2025	9/25/2025	9/24/2025	9/25/2025	9/25/2025	9/26/2025	9/25/2025	9/25/2025	9/23/2025	9/24/2025	9/23/2025	9/23/2025	9/24/2025	9/24/2025	9/26/2025	-	
<b>Hydrocarbon Identification</b>																			
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
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
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

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.  
 W - Considered non-detect, see data validation narrative.  
**Bold** values indicate detections above the RL.  
 NA - Not Applicable

## Figures



**LEGEND**

	MONITORING WELLS
	PIEZOMETER
	PROTECTIVE FENCE
	UNPAVED ROAD
	BUILDING

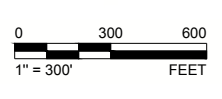
**NOTE(S)**  
 1. LMW-4 AND LMW-7 WERE DRILLED AT A 20° INCLINE; LMW-14 WAS DRILLED AT 15° INCLINE

CLIENT  
 LANDSBURG MINE SITE PLP GROUP

PROJECT  
 LANDSBURG MINE SITE  
 MTCA REMEDIAL ACTION

CONSULTANT	YYYY-MM-DD	2019-05-06
	DESIGNED	REDMOND
	PREPARED	JX
	REVIEWED	JX
	APPROVED	GZ

TITLE  
**GROUNDWATER MONITORING LOCATIONS**



PROJECT NO.	PHASE	REV.	FIGURE
9231000005	1200	A	1

IF THIS MEASUREMENT DOES NOT MATCH WHAT IS SHOWN, THE SHEET SIZE HAS BEEN MODIFIED FROM ANS/D



**APPENDIX A**

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



## TECHNICAL MEMORANDUM

**DATE** December 17, 2025

**Project No.** GL923-1000-007.2025

**TO** Bill Kombol  
Palmer Coking Coal Company

**FROM** Autumn Pearson (WSP)

**EMAIL** autumn.pearson@wsp.com

### LANDSBURG MINE SITE SEPTEMBER 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 September 23 to 26, 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 that could affect the use of the sample data for decision making purposes.

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

- Volatile Organic Compounds (VOCs) following United States Environmental Protection Agency (USEPA) USEPA SW-846<sup>1</sup> Method 8260D, Volatile Organic Compounds by Gas Chromatography/Mass Spectrometry (GC/MS)
- 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 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 2020a<sup>2</sup>) and Inorganic Review (USEPA 2020b<sup>3</sup>), modified to include method-specific

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<sup>1</sup> 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>

<sup>2</sup> 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.

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

requirements of the laboratory, and laboratory standard operating procedures. Where there was 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 that 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 includes 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

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. 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 were rejected (R) in LMW-4. 2-chloroethyl vinyl ether was not detected during the September 2025 sampling round and has never been detected at the Site. 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 September 2025 sampling round and have never been detected at the Site.

For hydrocarbon identification, the laboratory narrative stated that sample LMW-13R-0925 was lost during the initial extraction. The sample was re-extracted outside of the holding time and flagged with an “H” qualifier. The extraction exceeded hold time by one day and following guidelines, the sample results were qualified as estimated, J/UJ. Laboratory-applied U-qualifiers were retained unless other qualifications were indicated as noted above.

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 Landsburg Mine Water Sampling Investigation September 2025

Table 2: Qualifier Summary Table Landsburg Mine Water Sampling Investigation September 2025

Table 3: MS/MSD Recoveries

Table 4: LCS/LCSD Recoveries

##### Attachment B Level 2A Data Validation Checklist

**ATTACHMENT A**

## Tables

**Table 1: Sample Collection and Analysis Summary  
Semi-annual Groundwater Sampling - September 2025**

SDG	Field Identification	Collection Date	Lab Identification	Matrix	QC Samples	Analyses/Parameters					
						VOCs by 8260D	Total Priority Metal (6010D)	NWTPH HCID	TPH-DX+TPH-GX	Metals (200.8 UCT-KED, 200.8)	Mercury (7470A)
25I0560	LMW-2-0925	9/23/2025	25I0560-01	GW	-	X	X	X	X	X	X
25I0560	LMW-2-0925-D	9/23/2025	25I0560-02	GW	FD (LMW-2-0925)	X	X	X	X	X	X
25I0560	LMW-3-0925	9/25/2025	25I0560-03	GW	-	X	X	X	X	X	X
25I0560	LMW-4-0925	9/24/2025	25I0560-04	GW	MS/MSD	X	X	X	X	X	X
25I0560	LMW-5-0925	9/25/2025	25I0560-05	GW	-	X	X	X	X	X	X
25I0560	LMW-6-0925	9/25/2025	25I0560-06	GW	-	X	X	X	X	X	X
25I0560	LMW-7-0925	9/26/2025	25I0560-07	GW	-	X	X	X	X	X	X
25I0560	LMW-8-0925	9/25/2025	25I0560-08	GW	-	X	X	X	X	X	X
25I0560	LMW-9-0925	9/25/2025	25I0560-09	GW	-	X	X	X	X	X	X
25I0560	LMW-10-0925	9/23/2025	25I0560-10	GW	-	X	X	X	X	X	X
25I0560	LMW-11-0925	9/24/2025	25I0560-11	GW	-	X	X	X	X	X	X
25I0560	LMW-12-0925	9/23/2025	25I0560-12	GW	-	X	X	X	X	X	X
25I0560	LMW-13R-0925	9/23/2025	25I0560-13	GW	-	X	X	X	X	X	X
25I0560	LMW-14-0925	9/24/2025	25I0560-14	GW	-	X	X	X	X	X	X
25I0560	LMW-15-0925	9/24/2025	25I0560-15	GW	-	X	X	X	X	X	X
25I0560	LMW-FB-0925	9/26/2025	25I0560-16	WQ	FB	X	X	X	X	X	X
25I0560	Trip Blank	9/23/2025	25I0560-17	WQ	TB	X	-	-	-	-	-

**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

**Notes:**

All analyses performed by Analytical Resources, Incorporated (ARI), Tukwila WA.

**Table 2: Qualifier Summary Table**  
**Semi-annual Groundwater Sampling - September 2025**

SDG	Sample Name	Constituent	New Result	New MDL	New RL	Qualifier	Reason
25I0560	LMW-13R-0925	Gasoline Range Organics	--	--	--	UJ	Hold time exceeded.
25I0560	LMW-13R-0925	Diesel Range Organics	--	--	--	UJ	Hold time exceeded.
25I0560	LMW-13R-0925	Lube Oil	--	--	--	UJ	Hold time exceeded.
25I0560	All samples	Acrolein	--	--	--	UJ	Improper sample preservation
25I0560	All samples	Acrylonitrile	--	--	--	UJ	Improper sample preservation
25I0560	All samples	2-Chloroethyl vinyl ether	--	--	--	UJ	Improper sample preservation
25I0560	LMW-4-0925	2-chloroethyl vinyl ether	--	--	--	R	MS/MSD %R below lower control limit (not recovered); Improper sample preservation
25I0560	LMW-2-0925	Sodium	--	--	--	J-	LCS recovery below QC criteria.
25I0560	LMW-2-0925-D	Sodium	--	--	--	J-	LCS recovery below QC criteria.
25I0560	LMW-3-0925	Sodium	--	--	--	J-	LCS recovery below QC criteria.
25I0560	LMW-4-0925	Sodium	--	--	--	J-	LCS recovery below QC criteria.
25I0560	LMW-5-0925	Sodium	--	--	--	J-	LCS recovery below QC criteria.
25I0560	LMW-6-0925	Sodium	--	--	--	J-	LCS recovery below QC criteria.
25I0560	LMW-7-0925	Sodium	--	--	--	J-	LCS recovery below QC criteria.
25I0560	LMW-8-0925	Sodium	--	--	--	J-	LCS recovery below QC criteria.
25I0560	LMW-9-0925	Sodium	--	--	--	J-	LCS recovery below QC criteria.
25I0560	LMW-10-0925	Sodium	--	--	--	J-	LCS recovery below QC criteria.
25I0560	LMW-11-0925	Sodium	--	--	--	J-	LCS recovery below QC criteria.
25I0560	LMW-12-0925	Sodium	--	--	--	J-	LCS recovery below QC criteria.
25I0560	LMW-13R-0925	Sodium	--	--	--	J-	LCS recovery below QC criteria.
25I0560	LMW-14-0925	Sodium	--	--	--	J-	LCS recovery below QC criteria.
25I0560	LMW-15-0925	Sodium	--	--	--	J-	LCS recovery below QC criteria.
All SDGs	All Samples	All Results	--	--	--	--	Laboratory applied U-qualifiers are retained unless other qualifications are indicated in this table. All other laboratory qualifiers are removed.

**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  
Semi-annual Groundwater Sampling - September 2025**

<b>SDG</b>	<b>Sample Name</b>	<b>Parameter</b>	<b>Analyte</b>	<b>MS/MSD %R</b>	<b>RPD</b>	<b>%R/RPD Criteria</b>	<b>Sample&gt;4x spike value</b>
25I0560	LMW-4-0925	8260D	2-Chloroethyl vinyl ether	NR/NR	NR	64-120/30	Yes
25I0560	LMW-4-0925	8260D	Chloroethane	82.0/113	31.8	60-155/30	No
25I0560	LMW-4-0925	6010D	Calcium	<b>160/98.6</b>	5.22	75-125/20	Yes
25I0560	LMW-4-0925	6010D	Magnesium	<b>128/126</b>	0.36	75-125/20	Yes
25I0560	LMW-4-0925	6010D	Sodium	<b>128/135</b>	1.37	75-125/20	Yes

**Abbreviations:**

MS - Matrix Spike

MSD - Matrix Spike Duplicate

NR - No Recovery

SDG - Sample Delivery Group

%R - Percent Recovery

RPD - Relative Percent Difference

**Table 4: LCS/LCSD Recoveries**  
**Semi-annual Groundwater Sampling - September 2025**

<b>SDG</b>	<b>Sample Name</b>	<b>Parameter</b>	<b>Analyte</b>	<b>LCS/LCSD% R</b>	<b>RPD</b>	<b>%R/RPD Criteria</b>
25I0560	BNJ0014-BS1	6010D	Sodium	0/--	--	80-120/--

**Abbreviations**

LCS- Lab Control Spike  
LCSD - Lab Control Spike Duplicate  
SDG - Sample Delivery Group  
%R - 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-Palmer/Landsburg 2021 Env Rem/ GL9231000007 Task 2025.LBR-GW Mont & Reporting LBR

**Reviewing Company:** WSP

**Project Manager:** Gary Zimmerman

**Data Evaluator:** Thomas Hinton

**Data Evaluation Date:** 10/22/2025

**Checked by:** Michael Shadle

**Review Date:** October 31, 2025

**Laboratory:** Analytical Resources, Inc., Tukwila, WA

**Lab SDG #:** 2510560

**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.

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

<b>Data Package Information</b>	<b>YES</b>	<b>NO</b>	<b>NA</b>	<b>COMMENT</b>
a) Laboratory name and location documented?	<input checked="" type="checkbox"/>	<input type="checkbox"/>		
b) All samples on COC reported in data package?	<input checked="" type="checkbox"/>	<input type="checkbox"/>		
c) Requested analytical methods used?	<input checked="" type="checkbox"/>	<input type="checkbox"/>		
d) Requested sample preparation methods used?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
e) Requested analyte list reported?	<input checked="" type="checkbox"/>	<input type="checkbox"/>		
f) Requested units reported?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
g) Did the laboratory define the qualifiers used?	<input checked="" type="checkbox"/>	<input type="checkbox"/>		
h) Data package contains all information necessary to complete the data quality review?	<input checked="" type="checkbox"/>	<input type="checkbox"/>		

<b>Analytical Assessment</b>	<b>YES</b>	<b>NO</b>	<b>NA</b>	<b>COMMENT</b>
a) Solid samples reported on a dry-weight basis?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
b) Were solid samples percent moisture criteria acceptable?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
c) Were sample dilutions noted?	<input type="checkbox"/>	<input checked="" type="checkbox"/>		
d) Were detected concentrations less than the QL qualified by the laboratory?	<input type="checkbox"/>	<input checked="" type="checkbox"/>		

Analytical Assessment	YES	NO	NA	COMMENT
e) Were detected concentrations above the calibration range reported by the laboratory?	<input type="checkbox"/>	<input checked="" type="checkbox"/>		
f) Did the laboratory satisfy the requested sensitivity requirements?	<input checked="" type="checkbox"/>	<input type="checkbox"/>		

Laboratory Case Narrative	YES	NO	NA	COMMENT
a) Do the laboratory narrative or laboratory qualifiers indicate deficiencies?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	See Notes below
b) Were all deficiencies noted in the laboratory qualifiers or narrative?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	

Sample Preservation and Holding Time	YES	NO	NA	COMMENT
a) Were samples properly preserved?	<input type="checkbox"/>	<input checked="" type="checkbox"/>		See Note 2
b) Were holding times met for sample preparation?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	See Note 3
c) Were holding times met for sample analysis?	<input checked="" type="checkbox"/>	<input type="checkbox"/>		

Blanks	YES	NO	NA	COMMENTS
a) Were blanks analyzed at the appropriate frequency?	<input checked="" type="checkbox"/>	<input type="checkbox"/>		
b) Were any analytes detected in the associated preparation/method blank?	<input type="checkbox"/>	<input checked="" type="checkbox"/>		
c) Were any analytes detected in the associated trip blanks?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
d) Were any analytes detected in the associated field or equipment/rinsate blanks?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
e) Were any analytes detected in the associated storage blanks?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	

Surrogates or Deuterated Monitoring Compounds	YES	NO	NA	COMMENTS
a) Were the correct surrogate compounds added to each sample?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
b) Were surrogate recoveries within control limits?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
c) If not, were samples analyzed at dilution factors of 20x or greater?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	

LCS/LCSD	YES	NO	NA	COMMENTS
a) Were LCS/LCSD reported at the appropriate frequency?	<input checked="" type="checkbox"/>	<input type="checkbox"/>		
b) Were proper analytes included in the LCS/LCSD?	<input checked="" type="checkbox"/>	<input type="checkbox"/>		
c) Were LCS/LCSD recoveries within control limits?	<input type="checkbox"/>	<input checked="" type="checkbox"/>		See Note 4
d) Were RPD values within control limits (if LCSD was analyzed)?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	

MS/MSDs	YES	NO	NA	COMMENTS
a) Were project-specific MS (and MSD) reported?	<input checked="" type="checkbox"/>	<input type="checkbox"/>		LMW-4-0925
b) Were proper analytes reported in the MS/MSD?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	

MS/MSDs	YES	NO	NA	COMMENTS
c) Were project-specific MS/MSD recoveries within control limits?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	See Note 5
d) If not, were sample concentrations greater than 4x the spiking concentration?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	See Note 5
e) Was the RPD or absolute difference within control limits (if project-specific MSD analyzed)?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	See Note 5
f) Were project-specific post-digestion spikes analyzed?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
g) Were project-specific post-digestion spike recoveries within control limits?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	

Duplicates	YES	NO	NA	COMMENTS
a) Were project-specific laboratory duplicates reported?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
b) Was laboratory duplicate RPD or absolute difference criteria acceptable?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
c) Were field duplicates reported?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	LMW-2-0925/LMW-2-0925-D
d) Was field duplicate RPD or absolute difference criteria acceptable?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	

ICP Serial Dilution (SD)	YES	NO	NA	COMMENTS
a) Was project-specific ICP SD data provided?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
b) Were project-specific ICP SD within acceptable criteria?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	

Overall Evaluation	YES	NO	NA	COMMENTS
a) Were there any other technical problems not previously addressed?	<input type="checkbox"/>	<input checked="" type="checkbox"/>		
b) Were data acceptable and usable, except where noted?	<input checked="" type="checkbox"/>	<input type="checkbox"/>		

**Comments/Notes:**

1. The cooler receipt form stated that a bubble was present in one of the VOA vials for sample LMW-9-0925. There is no indication that the bubble was significant or if the VOA vial was used for analysis. There is no other action but to note.
2. Samples for analysis of 2-chloroethyl vinyl ether, acrolein, and acrylonitrile were collected in preserved VOA vials and the recoveries were potentially lost due to the acid-liable 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, not-detects are qualified as 'UJ'.
3. For hydrocarbon identification, the laboratory narrative stated that sample LMW-13R-0925 was lost during the initial extraction. The sample was re-extracted outside of the holding time and flagged with an "H" qualifier. The extraction exceeded hold time by one day and following guidelines, the sample results were qualified as estimated, J/UJ.
4. 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).

5. MS/MSD recoveries were outside of acceptance criteria for select analytes as indicated 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, qualification was not 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).

**Data qualification:** See Table 2.

**APPENDIX B**

## Laboratory Analytical Report



**Analytical Resources, LLC**  
Analytical Chemists and Consultants  
Tukwila, WA

10 October 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)  
25I0560

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 enclosed 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.

A handwritten signature in blue ink that reads "Kelly Bottem".

Kelly Bottem, Client Services Manager



**Chain of Custody Record & Laboratory Analysis Request**

\*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: **2510560**  
 Turn-around Requested: **Standard**  
 ARI Client Company: **WSP** Phone: **425-883-0777**  
 Client Contact: **Gary Zimmerman/Autumn Pearson**

Date: **9/26/25**  
 Page: **1** of **2**  
 No. of Coolers: \_\_\_\_\_ Cooler Temps: \_\_\_\_\_

Client Project Name: **Landsburg 2025-09 Sampling**  
 Client Project #: **GL9231000007** Samplers: **A. Weiser**

Analysis Requested										Notes/Comments
VOCs	1,4-Dioxane	Total Priority Metal	TPH-HCID (NWTPH)	TPH-DX + TPH-Gx (HOLD)						Analyze in accordance with MSA between Golder and ARI Ecology EIM EDD

Sample ID	Date	Time	Matrix	No. Containers
LMW-2-0925	9/23/25	1055	W	8
LMW-2-0925-D	9/25/25	1100	W	8
LMW-3-0925	9/25/25	1255	W	8
LMW-4-0925	9/24/25	1125	W	18
LMW-5-0925	9/25/25	1400	W	8
LMW-6-0925	9/25/25	0940	W	8
LMW-7-0925	9/26/25	1040	W	8
LMW-8-0925	9/25/25	1510	W	8
LMW-9-0925	9/25/25	1050	W	8
LMW-10-0925	9/23/25	1540	W	8

X	X	X	X	X						
X	X	X	X	X						
X	X	X	X	X						
X	X	X	X	X						MS/MSD (Except for Ground-Water)
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 <b>HOLD TPH FOLLOW-UPS. CLIENT-SPECIFIC RLs/Analyte List</b>	Relinquished by: (Signature) <i>[Signature]</i>	Received by: (Signature) <i>[Signature]</i>	Relinquished by: (Signature)	Received by: (Signature)
	Printed Name: <b>Andrew Weiser</b>	Printed Name: <b>Sydney Acevedo</b>	Printed Name:	Printed Name:
	Company: <b>WSP</b>	Company: <b>AR LLC</b>	Company:	Company:
	Date & Time: <b>9/26/25 1225</b>	Date & Time: <b>9/26/25 1225</b>	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, notwithstanding 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.

**Chain of Custody Record & Laboratory Analysis Request**

\*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: **2510560**  
 Turn-around Requested: **Standard**

Date: **9/26/25**

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

Page: **2** of **2**

Client Contact: **Gary Zimmerman/Autumn Pearson**

No. of Coolers:   
 Cooler Temps:

Client Project Name: **Landsburg 2025-09 Sampling**

Analysis Requested

Client Project #: **GL9231000007**  
 Samplers: **A. Waser**

Notes/Comments
Analyze in accordance with MSA between Golder and ARI Ecology EIM EDD

Sample ID	Date	Time	Matrix	No. Containers
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Sample ID	Date	Time	Matrix	No. Containers
LMW-11-0925	9/24/25	1435	W	8
LMW-12-0925	9/23/25	1420	W	8
LMW-13R-0925	9/23/25	1310	W	8
LMW-14-0925	9/24/25	1315	W	8
LMW-15-0925	9/24/25	1605	W	8
LMW-FB-0925	9/26/25	1110	W	8
Trip Blank	9/26/25	1115	W	3

VOCs	1,4-Dioxane	Total Priority Metal	TPH-HCID (NWTPH)	TPH-DX + TPH-Gx (HOLD)
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**

Relinquished by: (Signature) <i>[Signature]</i>	Received by: (Signature) <i>[Signature]</i>
Printed Name: <b>Andrew Waser</b>	Printed Name: <b>Sydney Acevedo</b>
Company: <b>WSP</b>	Company: <b>AR LLC</b>
Date & Time: <b>9/26/25 1225</b>	Date & Time: <b>9/26/25 1225</b>

**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, notwithstanding 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 PSDDA/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:**  
10-Oct-2025 09:37

**ANALYTICAL REPORT FOR SAMPLES**

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
LMW-2-0925	25I0560-01	Water	23-Sep-2025 10:55	26-Sep-2025 12:25
LMW-2-0925-D	25I0560-02	Water	23-Sep-2025 11:00	26-Sep-2025 12:25
LMW-3-0925	25I0560-03	Water	25-Sep-2025 12:55	26-Sep-2025 12:25
LMW-4-0925	25I0560-04	Water	24-Sep-2025 11:25	26-Sep-2025 12:25
LMW-5-0925	25I0560-05	Water	25-Sep-2025 14:00	26-Sep-2025 12:25
LMW-6-0925	25I0560-06	Water	25-Sep-2025 09:40	26-Sep-2025 12:25
LMW-7-0925	25I0560-07	Water	26-Sep-2025 10:40	26-Sep-2025 12:25
LMW-8-0925	25I0560-08	Water	25-Sep-2025 15:10	26-Sep-2025 12:25
LMW-9-0925	25I0560-09	Water	25-Sep-2025 10:50	26-Sep-2025 12:25
LMW-10-0925	25I0560-10	Water	23-Sep-2025 15:40	26-Sep-2025 12:25
LMW-11-0925	25I0560-11	Water	24-Sep-2025 14:35	26-Sep-2025 12:25
LMW-12-0925	25I0560-12	Water	23-Sep-2025 14:20	26-Sep-2025 12:25
LMW-13R-0925	25I0560-13	Water	23-Sep-2025 13:10	26-Sep-2025 12:25
LMW-14-0925	25I0560-14	Water	24-Sep-2025 13:15	26-Sep-2025 12:25
LMW-15-0925	25I0560-15	Water	24-Sep-2025 16:05	26-Sep-2025 12:25
LMW-FB-0925	25I0560-16	Water	26-Sep-2025 11:10	26-Sep-2025 12:25
Trip Blank	25I0560-17	Water	23-Sep-2025 10:55	26-Sep-2025 12:25



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

Reported:  
10-Oct-2025 09:37

## Work Order Case Narrative

**Client:** WSP USA, Inc.  
**Project:** Landsburg  
**Work Order:** 2510560

### Sample receipt

Samples as listed on the preceding page were received 26-Sep-2025 12:25 under ARI work order 2510560. 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.

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.

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

The sample(s) were extracted and analyzed within the recommended holding times with the exception of 2510560-13 which was lost during the original extraction and was re-extracted outside of the holding time. The data has been flagged with an "H" qualifier.

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, 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.



WSP USA, Inc.  
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Project: Landsburg  
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**Reported:**  
10-Oct-2025 09:37

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 with the exception of analytes flagged on the associated forms.



WORK ORDER

25I0560

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>
25I0560-01 A	Glass NM, Amber, 1000 mL		
25I0560-01 B	Glass NM, Amber, 1000 mL		
25I0560-01 C	HDPE NM, 500 mL, 1:1 HNO3	<2 P	
25I0560-01 D	VOA Vial, Amber, 40 mL, HCL		
25I0560-01 E	VOA Vial, Amber, 40 mL, HCL		
25I0560-01 F	VOA Vial, Amber, 40 mL, HCL		
25I0560-01 G	VOA Vial, Amber, 40 mL, HCL		
25I0560-01 H	VOA Vial, Amber, 40 mL, HCL		
25I0560-02 A	Glass NM, Amber, 1000 mL		
25I0560-02 B	Glass NM, Amber, 1000 mL		
25I0560-02 C	HDPE NM, 500 mL, 1:1 HNO3	<2 P	
25I0560-02 D	VOA Vial, Amber, 40 mL, HCL		
25I0560-02 E	VOA Vial, Amber, 40 mL, HCL		
25I0560-02 F	VOA Vial, Amber, 40 mL, HCL		
25I0560-02 G	VOA Vial, Amber, 40 mL, HCL		
25I0560-02 H	VOA Vial, Amber, 40 mL, HCL		
25I0560-03 A	Glass NM, Amber, 1000 mL		
25I0560-03 B	Glass NM, Amber, 1000 mL		
25I0560-03 C	HDPE NM, 500 mL, 1:1 HNO3	<2 P	
25I0560-03 D	VOA Vial, Amber, 40 mL, HCL		
25I0560-03 E	VOA Vial, Amber, 40 mL, HCL		
25I0560-03 F	VOA Vial, Amber, 40 mL, HCL		
25I0560-03 G	VOA Vial, Amber, 40 mL, HCL		
25I0560-03 H	VOA Vial, Amber, 40 mL, HCL		
25I0560-04 A	Glass NM, Amber, 1000 mL		
25I0560-04 B	Glass NM, Amber, 1000 mL		
25I0560-04 C	Glass NM, Amber, 1000 mL		
25I0560-04 D	Glass NM, Amber, 1000 mL		
25I0560-04 E	HDPE NM, 500 mL, 1:1 HNO3	<2 P	
25I0560-04 F	HDPE NM, 500 mL, 1:1 HNO3	<2 P	
25I0560-04 G	HDPE NM, 500 mL, 1:1 HNO3	<2 P	
25I0560-04 H	VOA Vial, Amber, 40 mL, HCL		



WORK ORDER

25I0560

Client: WSP USA, Inc.	Project Manager: Kelly Bottem
Project: Landsburg	Project Number: [none]

25I0560-04 I	VOA Vial, Amber, 40 mL, HCL	
25I0560-04 J	VOA Vial, Amber, 40 mL, HCL	
25I0560-04 K	VOA Vial, Amber, 40 mL, HCL	
25I0560-04 L	VOA Vial, Amber, 40 mL, HCL	
25I0560-04 M	VOA Vial, Amber, 40 mL, HCL	
25I0560-04 N	VOA Vial, Amber, 40 mL, HCL	
25I0560-04 O	VOA Vial, Amber, 40 mL, HCL	
25I0560-04 P	VOA Vial, Amber, 40 mL, HCL	
25I0560-04 Q	VOA Vial, Amber, 40 mL, HCL	
25I0560-04 R	VOA Vial, Amber, 40 mL, HCL	
25I0560-05 A	Glass NM, Amber, 1000 mL	
25I0560-05 B	Glass NM, Amber, 1000 mL	
25I0560-05 C	HDPE NM, 500 mL, 1:1 HNO3	<2 P
25I0560-05 D	VOA Vial, Amber, 40 mL, HCL	
25I0560-05 E	VOA Vial, Amber, 40 mL, HCL	
25I0560-05 F	VOA Vial, Amber, 40 mL, HCL	
25I0560-05 G	VOA Vial, Amber, 40 mL, HCL	
25I0560-05 H	VOA Vial, Amber, 40 mL, HCL	Bubble
25I0560-06 A	Glass NM, Amber, 1000 mL	
25I0560-06 B	Glass NM, Amber, 1000 mL	
25I0560-06 C	HDPE NM, 500 mL, 1:1 HNO3	<2 P
25I0560-06 D	VOA Vial, Amber, 40 mL, HCL	
25I0560-06 E	VOA Vial, Amber, 40 mL, HCL	
25I0560-06 F	VOA Vial, Amber, 40 mL, HCL	
25I0560-06 G	VOA Vial, Amber, 40 mL, HCL	
25I0560-06 H	VOA Vial, Amber, 40 mL, HCL	
25I0560-07 A	Glass NM, Amber, 1000 mL	
25I0560-07 B	Glass NM, Amber, 1000 mL	
25I0560-07 C	HDPE NM, 500 mL, 1:1 HNO3	<2 P
25I0560-07 D	VOA Vial, Amber, 40 mL, HCL	
25I0560-07 E	VOA Vial, Amber, 40 mL, HCL	
25I0560-07 F	VOA Vial, Amber, 40 mL, HCL	
25I0560-07 G	VOA Vial, Amber, 40 mL, HCL	
25I0560-07 H	VOA Vial, Amber, 40 mL, HCL	



WORK ORDER

25I0560

<b>Client:</b> WSP USA, Inc.	<b>Project Manager:</b> Kelly Bottem
<b>Project:</b> Landsburg	<b>Project Number:</b> [none]

25I0560-08 A	Glass NM, Amber, 1000 mL	
25I0560-08 B	Glass NM, Amber, 1000 mL	
25I0560-08 C	HDPE NM, 500 mL, 1:1 HNO3	<2 P
25I0560-08 D	VOA Vial, Amber, 40 mL, HCL	
25I0560-08 E	VOA Vial, Amber, 40 mL, HCL	
25I0560-08 F	VOA Vial, Amber, 40 mL, HCL	
25I0560-08 G	VOA Vial, Amber, 40 mL, HCL	
25I0560-08 H	VOA Vial, Amber, 40 mL, HCL	
25I0560-09 A	Glass NM, Amber, 1000 mL	
25I0560-09 B	Glass NM, Amber, 1000 mL	
25I0560-09 C	HDPE NM, 500 mL, 1:1 HNO3	<2 P
25I0560-09 D	VOA Vial, Amber, 40 mL, HCL	
25I0560-09 E	VOA Vial, Amber, 40 mL, HCL	
25I0560-09 F	VOA Vial, Amber, 40 mL, HCL	
25I0560-09 G	VOA Vial, Amber, 40 mL, HCL	
25I0560-09 H	VOA Vial, Amber, 40 mL, HCL	
25I0560-10 A	Glass NM, Amber, 1000 mL	
25I0560-10 B	Glass NM, Amber, 1000 mL	
25I0560-10 C	HDPE NM, 500 mL, 1:1 HNO3	<2 P
25I0560-10 D	VOA Vial, Amber, 40 mL, HCL	
25I0560-10 E	VOA Vial, Amber, 40 mL, HCL	
25I0560-10 F	VOA Vial, Amber, 40 mL, HCL	
25I0560-10 G	VOA Vial, Amber, 40 mL, HCL	
25I0560-10 H	VOA Vial, Amber, 40 mL, HCL	
25I0560-11 A	Glass NM, Amber, 1000 mL	
25I0560-11 B	Glass NM, Amber, 1000 mL	
25I0560-11 C	HDPE NM, 500 mL, 1:1 HNO3	<2 P
25I0560-11 D	VOA Vial, Amber, 40 mL, HCL	
25I0560-11 E	VOA Vial, Amber, 40 mL, HCL	
25I0560-11 F	VOA Vial, Amber, 40 mL, HCL	
25I0560-11 G	VOA Vial, Amber, 40 mL, HCL	
25I0560-11 H	VOA Vial, Amber, 40 mL, HCL	
25I0560-12 A	Glass NM, Amber, 1000 mL	
25I0560-12 B	Glass NM, Amber, 1000 mL	



WORK ORDER

25I0560

<b>Client:</b> WSP USA, Inc.	<b>Project Manager:</b> Kelly Bottem
<b>Project:</b> Landsburg	<b>Project Number:</b> [none]

25I0560-12 C	HDPE NM, 500 mL, 1:1 HNO3	<2 P
25I0560-12 D	VOA Vial, Amber, 40 mL, HCL	
25I0560-12 E	VOA Vial, Amber, 40 mL, HCL	
25I0560-12 F	VOA Vial, Amber, 40 mL, HCL	
25I0560-12 G	VOA Vial, Amber, 40 mL, HCL	
25I0560-12 H	VOA Vial, Amber, 40 mL, HCL	
25I0560-13 A	Glass NM, Amber, 1000 mL	
25I0560-13 B	Glass NM, Amber, 1000 mL	
25I0560-13 C	HDPE NM, 500 mL, 1:1 HNO3	<2 P
25I0560-13 D	VOA Vial, Amber, 40 mL, HCL	
25I0560-13 E	VOA Vial, Amber, 40 mL, HCL	
25I0560-13 F	VOA Vial, Amber, 40 mL, HCL	
25I0560-13 G	VOA Vial, Amber, 40 mL, HCL	
25I0560-13 H	VOA Vial, Amber, 40 mL, HCL	
25I0560-14 A	Glass NM, Amber, 1000 mL	
25I0560-14 B	Glass NM, Amber, 1000 mL	
25I0560-14 C	HDPE NM, 500 mL, 1:1 HNO3	<2 P
25I0560-14 D	VOA Vial, Amber, 40 mL, HCL	
25I0560-14 E	VOA Vial, Amber, 40 mL, HCL	
25I0560-14 F	VOA Vial, Amber, 40 mL, HCL	
25I0560-14 G	VOA Vial, Amber, 40 mL, HCL	
25I0560-14 H	VOA Vial, Amber, 40 mL, HCL	
25I0560-15 A	Glass NM, Amber, 1000 mL	
25I0560-15 B	Glass NM, Amber, 1000 mL	
25I0560-15 C	HDPE NM, 500 mL, 1:1 HNO3	<2 P
25I0560-15 D	VOA Vial, Amber, 40 mL, HCL	
25I0560-15 E	VOA Vial, Amber, 40 mL, HCL	
25I0560-15 F	VOA Vial, Amber, 40 mL, HCL	
25I0560-15 G	VOA Vial, Amber, 40 mL, HCL	
25I0560-15 H	VOA Vial, Amber, 40 mL, HCL	
25I0560-16 A	Glass NM, Amber, 1000 mL	
25I0560-16 B	Glass NM, Amber, 1000 mL	
25I0560-16 C	HDPE NM, 500 mL, 1:1 HNO3	<2 P
25I0560-16 D	VOA Vial, Amber, 40 mL, HCL	



WORK ORDER

25I0560

<b>Client:</b> WSP USA, Inc.	<b>Project Manager:</b> Kelly Bottem
<b>Project:</b> Landsburg	<b>Project Number:</b> [none]

25I0560-16 E	VOA Vial, Amber, 40 mL, HCL
25I0560-16 F	VOA Vial, Amber, 40 mL, HCL
25I0560-16 G	VOA Vial, Amber, 40 mL, HCL
25I0560-16 H	VOA Vial, Amber, 40 mL, HCL
25I0560-17 A	VOA Vial, Amber, 40 mL, HCL
25I0560-17 B	VOA Vial, Amber, 40 mL, HCL
25I0560-17 C	VOA Vial, Amber, 40 mL, HCL

NR

Preservation Confirmed By

09/26/25

Date

# Cooler Receipt Form

ARI Client: WSP

Project Name: Landsburg

COC No(s): \_\_\_\_\_ (NA)

Delivered by: Fed-Ex UPS Courier Hand Delivered Other: \_\_\_\_\_

Assigned ARI Job No: 2510560

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 1225 4.4 2.3 5.0 2.4 3.3 Temp Gun ID#: 8117

Was a temperature blank included in the cooler? YES (NO)

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

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

Cooler Accepted by: SA Date: 7/26/25 Time: 1225

**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: \_\_\_\_\_

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: NA 9/16/25

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

Samples Logged by: NR Date: 09/26/25 Time: 1439 Labels checked by: NR

**\*\* 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: [none]  
Project Manager: Gary Zimmerman

Reported:  
10-Oct-2025 09:37

**LMW-2-0925**  
**25I0560-01 (Water)**

**Volatile Organic Compounds**

Method: EPA 8260D

Sampled: 09/23/2025 10:55

Instrument: NT20 Analyst: LNH

Analyzed: 10/01/2025 19:02

Sample Preparation: Preparation Method: EPA 5030C (Purge and Trap)

Extract ID: 25I0560-01 F

Preparation Batch: BNJ0016

Sample Size: 10 mL

Prepared: 10/01/2025

Final Volume: 10 mL

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
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



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

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

Reported:  
10-Oct-2025 09:37

LMW-2-0925  
25I0560-01 (Water)

Volatile Organic Compounds

Method: EPA 8260D

Sampled: 09/23/2025 10:55

Instrument: NT20 Analyst: LNH

Analyzed: 10/01/2025 19:02

Analyte	CAS Number	Dilution	Reporting Limit	Result	Units	Notes
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
1,1,1,2-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
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>			80-129 %	98.5	%	
<i>Surrogate: Toluene-d8</i>			80-120 %	100	%	
<i>Surrogate: 4-Bromofluorobenzene</i>			80-120 %	99.5	%	
<i>Surrogate: 1,2-Dichlorobenzene-d4</i>			80-120 %	101	%	



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**LMW-2-0925**  
**25I0560-01 (Water)**

**Petroleum Hydrocarbons**

Method: NWTPH-HCID Sampled: 09/23/2025 10:55  
Instrument: FID4 Analyst: VTD Analyzed: 10/02/2025 17:19  
Sample Preparation: Extract ID: 25I0560-01 A 01  
Preparation Method: EPA 3510C SepF  
Preparation Batch: BNI0643 Sample Size: 500 mL  
Prepared: 09/30/2025 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
<i>Surrogate: o-Terphenyl</i>			50-150 %	92.6	%	
<i>Surrogate: n-Triacontane</i>			50-150 %	92.7	%	



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**LMW-2-0925**  
**25I0560-01 (Water)**

**Metals and Metallic Compounds**

Method: EPA 200.8	Preparation Method: REN - EPA 3010A M	Sampled: 09/23/2025 10:55
Instrument: ICPMS1 Analyst: HAL	Preparation Batch: BNI0635	Analyzed: 10/02/2025 02:12
Sample Preparation:	Prepared: 09/30/2025	Extract ID: 25I0560-01 C 02
	Sample Size: 25 mL	
	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
Thallium	7440-28-0	1	0.100	2.00	ND	ug/L	U



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Project Manager: Gary Zimmerman

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**LMW-2-0925**  
**25I0560-01 (Water)**

**Metals and Metallic Compounds**

Method: EPA 6010D

Sampled: 09/23/2025 10:55

Instrument: ICP3 Analyst: SH

Analyzed: 10/08/2025 06:23

Sample Preparation:

Preparation Method: TWC EPA 3010A

Extract ID: 25I0560-01 C 02

Preparation Batch: BNJ0014

Sample Size: 25 mL

Prepared: 10/01/2025

Final Volume: 25 mL

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	0.395	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	109	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	0.316	mg/L	
Magnesium	7439-95-4	1	0.0250	0.0500	66.1	mg/L	
Manganese	7439-96-5	1	0.0020	0.0040	0.239	mg/L	
Nickel	7440-02-0	1	0.0050	0.0100	ND	mg/L	U
Potassium	7440-09-7	1	0.250	0.500	3.47	mg/L	
Silver	7440-22-4	1	0.0015	0.0030	ND	mg/L	U
Sodium	7440-23-5	1	0.250	0.500	21.0	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-2-0925**  
**25I0560-01 (Water)**

**Metals and Metallic Compounds**

Method: EPA 7470A	Preparation Method: TWM EPA 7470A	Sampled: 09/23/2025 10:55
Instrument: HYDRA Analyst: ML	Preparation Batch: BNJ0074	Analyzed: 10/08/2025 10:59
Sample Preparation:	Prepared: 10/03/2025	Extract ID: 25I0560-01 C
	Sample Size: 20 mL	
	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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**LMW-2-0925**  
**25I0560-01RE1 (Water)**

**Metals and Metallic Compounds**

Method: EPA 200.8	Instrument: ICPMS1	Analyst: HAL	Sampled: 09/23/2025 10:55	Analyzed: 10/02/2025 20:22
Sample Preparation:	Preparation Method: REN - EPA 3010A M	Preparation Batch: BNI0635	Sample Size: 25 mL	Final Volume: 25 mL
	Prepared: 09/30/2025		Extract ID: 25I0560-01RE1 C 02	

Analyte	CAS Number	Dilution	Detection Limit	Reporting Limit	Result	Units	Notes
Selenium UCT	7782-49-2	1	0.500	25.0	ND	ug/L	U



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Project Manager: Gary Zimmerman

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**LMW-2-0925-D**  
**25I0560-02 (Water)**

**Volatile Organic Compounds**

Method: EPA 8260D Sampled: 09/23/2025 11:00  
Instrument: NT20 Analyst: LNH Analyzed: 10/01/2025 19:25

Sample Preparation: Preparation Method: EPA 5030C (Purge and Trap) Extract ID: 25I0560-02 D  
Preparation Batch: BNJ0016 Sample Size: 10 mL  
Prepared: 10/01/2025 Final Volume: 10 mL

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
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



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**LMW-2-0925-D**  
**25I0560-02 (Water)**

**Volatile Organic Compounds**

Method: EPA 8260D

Sampled: 09/23/2025 11:00

Instrument: NT20 Analyst: LNH

Analyzed: 10/01/2025 19:25

Analyte	CAS Number	Dilution	Reporting Limit	Result	Units	Notes
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
1,1,1,2-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
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>			80-129 %	98.4	%	
<i>Surrogate: Toluene-d8</i>			80-120 %	99.0	%	
<i>Surrogate: 4-Bromofluorobenzene</i>			80-120 %	98.3	%	
<i>Surrogate: 1,2-Dichlorobenzene-d4</i>			80-120 %	100	%	



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**LMW-2-0925-D**  
**25I0560-02 (Water)**

**Petroleum Hydrocarbons**

Method: NWTPH-HCID Sampled: 09/23/2025 11:00  
Instrument: FID4 Analyst: VTD Analyzed: 10/02/2025 17:41  
Sample Preparation: Extract ID: 25I0560-02 A 01  
Preparation Method: EPA 3510C SepF  
Preparation Batch: BNI0643 Sample Size: 500 mL  
Prepared: 09/30/2025 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
<i>Surrogate: o-Terphenyl</i>			50-150 %	86.7	%	
<i>Surrogate: n-Triacontane</i>			50-150 %	89.0	%	



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**LMW-2-0925-D**  
**25I0560-02 (Water)**

**Metals and Metallic Compounds**

Method: EPA 200.8	Preparation Method: REN - EPA 3010A M	Sampled: 09/23/2025 11:00
Instrument: ICPMS1 Analyst: HAL	Preparation Batch: BNI0635	Analyzed: 10/02/2025 02:17
Sample Preparation:	Prepared: 09/30/2025	Extract ID: 25I0560-02 C 02
	Sample Size: 25 mL	
	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
Thallium	7440-28-0	1	0.100	2.00	ND	ug/L	U



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**LMW-2-0925-D**  
**25I0560-02 (Water)**

**Metals and Metallic Compounds**

Method: EPA 6010D

Sampled: 09/23/2025 11:00

Instrument: ICP3 Analyst: SH

Analyzed: 10/08/2025 06:26

Sample Preparation: Preparation Method: TWC EPA 3010A  
Preparation Batch: BNJ0014  
Prepared: 10/01/2025

Sample Size: 25 mL  
Final Volume: 25 mL

Extract ID: 25I0560-02 C 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	0.400	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	108	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	0.326	mg/L	
Magnesium	7439-95-4	1	0.0250	0.0500	66.4	mg/L	
Manganese	7439-96-5	1	0.0020	0.0040	0.234	mg/L	
Nickel	7440-02-0	1	0.0050	0.0100	ND	mg/L	U
Potassium	7440-09-7	1	0.250	0.500	3.49	mg/L	
Silver	7440-22-4	1	0.0015	0.0030	ND	mg/L	U
Sodium	7440-23-5	1	0.250	0.500	21.1	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-2-0925-D**  
**25I0560-02 (Water)**

**Metals and Metallic Compounds**

Method: EPA 7470A	Preparation Method: TWM EPA 7470A	Sampled: 09/23/2025 11:00
Instrument: HYDRA Analyst: ML	Preparation Batch: BNJ0074	Analyzed: 10/08/2025 11:02
Sample Preparation:	Prepared: 10/03/2025	Extract ID: 25I0560-02 C
	Sample Size: 20 mL	
	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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**LMW-2-0925-D**  
**25I0560-02RE1 (Water)**

**Metals and Metallic Compounds**

Method: EPA 200.8	Sampled: 09/23/2025 11:00
Instrument: ICPMS1 Analyst: HAL	Analyzed: 10/02/2025 20:27
Sample Preparation: Preparation Method: REN - EPA 3010A M Preparation Batch: BNI0635 Prepared: 09/30/2025	Sample Size: 25 mL Final Volume: 25 mL Extract ID: 25I0560-02RE1 C 02

Analyte	CAS Number	Dilution	Detection Limit	Reporting Limit	Result	Units	Notes
Selenium UCT	7782-49-2	1	0.500	25.0	ND	ug/L	U



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

Reported:  
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**LMW-3-0925**  
**25I0560-03 (Water)**

**Volatile Organic Compounds**

Method: EPA 8260D

Sampled: 09/25/2025 12:55

Instrument: NT20 Analyst: LNH

Analyzed: 10/01/2025 19:49

Sample Preparation:

Preparation Method: EPA 5030C (Purge and Trap)

Extract ID: 25I0560-03 D

Preparation Batch: BNJ0016

Sample Size: 10 mL

Prepared: 10/01/2025

Final Volume: 10 mL

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
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



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

Reported:  
10-Oct-2025 09:37

**LMW-3-0925**  
**25I0560-03 (Water)**

**Volatile Organic Compounds**

Method: EPA 8260D

Sampled: 09/25/2025 12:55

Instrument: NT20 Analyst: LNH

Analyzed: 10/01/2025 19:49

Analyte	CAS Number	Dilution	Reporting Limit	Result	Units	Notes
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
1,1,1,2-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
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>			80-129 %	101	%	
<i>Surrogate: Toluene-d8</i>			80-120 %	100	%	
<i>Surrogate: 4-Bromofluorobenzene</i>			80-120 %	97.0	%	
<i>Surrogate: 1,2-Dichlorobenzene-d4</i>			80-120 %	99.5	%	



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**LMW-3-0925**  
**25I0560-03 (Water)**

**Metals and Metallic Compounds**

Method: EPA 200.8	Preparation Method: REN - EPA 3010A M	Sampled: 09/25/2025 12:55
Instrument: ICPMS1 Analyst: HAL	Preparation Batch: BNI0635	Analyzed: 10/02/2025 02:22
Sample Preparation:	Prepared: 09/30/2025	Extract ID: 25I0560-03 C 02
	Sample Size: 25 mL	
	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	0.631	ug/L	J
Lead	7439-92-1	1	0.100	10.0	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:  
10-Oct-2025 09:37

**LMW-3-0925**  
**25I0560-03 (Water)**

**Metals and Metallic Compounds**

Method: EPA 6010D

Sampled: 09/25/2025 12:55

Instrument: ICP3 Analyst: SH

Analyzed: 10/08/2025 06:46

Sample Preparation:

Preparation Method: TWC EPA 3010A

Extract ID: 25I0560-03 C 02

Preparation Batch: BNJ0014

Sample Size: 25 mL

Prepared: 10/01/2025

Final Volume: 25 mL

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	0.0671	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	34.4	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	14.8	mg/L	
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	1.59	mg/L	
Silver	7440-22-4	1	0.0015	0.0030	ND	mg/L	U
Sodium	7440-23-5	1	0.250	0.500	10.0	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-3-0925**  
**25I0560-03 (Water)**

**Metals and Metallic Compounds**

Method: EPA 7470A	Preparation Method: TWM EPA 7470A	Sampled: 09/25/2025 12:55
Instrument: HYDRA Analyst: ML	Preparation Batch: BNJ0074	Analyzed: 10/08/2025 11:04
Sample Preparation:	Prepared: 10/03/2025	Extract ID: 25I0560-03 C
	Sample Size: 20 mL	
	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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**LMW-3-0925**  
**25I0560-03RE1 (Water)**

**Petroleum Hydrocarbons**

Method: NWTPH-HCID Sampled: 09/25/2025 12:55  
Instrument: FID4 Analyst: VTD Analyzed: 10/02/2025 20:15

Sample Preparation: Preparation Method: EPA 3510C SepF Extract ID: 25I0560-03RE1 A 02  
Preparation Batch: BNJ0006 Sample Size: 500 mL  
Prepared: 10/01/2025 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
<i>Surrogate: o-Terphenyl</i>			50-150 %	104	%	
<i>Surrogate: n-Triacontane</i>			50-150 %	105	%	



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**LMW-3-0925**  
**25I0560-03RE1 (Water)**

**Metals and Metallic Compounds**

Method: EPA 200.8	Sampled: 09/25/2025 12:55
Instrument: ICPMS1 Analyst: HAL	Analyzed: 10/02/2025 20:32
Sample Preparation: Preparation Method: REN - EPA 3010A M Preparation Batch: BNI0635 Prepared: 09/30/2025	Extract ID: 25I0560-03RE1 C 02 Sample Size: 25 mL Final Volume: 25 mL

Analyte	CAS Number	Dilution	Detection Limit	Reporting Limit	Result	Units	Notes
Selenium UCT	7782-49-2	1	0.500	25.0	ND	ug/L	U



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

Reported:  
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**LMW-4-0925**  
**25I0560-04 (Water)**

**Volatile Organic Compounds**

Method: EPA 8260D Sampled: 09/24/2025 11:25  
Instrument: NT20 Analyst: LNH Analyzed: 10/01/2025 20:12

Sample Preparation: Preparation Method: EPA 5030C (Purge and Trap) Extract ID: 25I0560-04 H  
Preparation Batch: BNJ0016 Sample Size: 10 mL  
Prepared: 10/01/2025 Final Volume: 10 mL

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
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



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

Reported:  
10-Oct-2025 09:37

**LMW-4-0925**  
**25I0560-04 (Water)**

**Volatile Organic Compounds**

Method: EPA 8260D

Sampled: 09/24/2025 11:25

Instrument: NT20 Analyst: LNH

Analyzed: 10/01/2025 20:12

Analyte	CAS Number	Dilution	Reporting Limit	Result	Units	Notes
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
1,1,1,2-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
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>			80-129 %	99.0	%	
<i>Surrogate: Toluene-d8</i>			80-120 %	101	%	
<i>Surrogate: 4-Bromofluorobenzene</i>			80-120 %	98.6	%	
<i>Surrogate: 1,2-Dichlorobenzene-d4</i>			80-120 %	99.5	%	



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**LMW-4-0925**  
**25I0560-04 (Water)**

**Petroleum Hydrocarbons**

Method: NWTPH-HCID Sampled: 09/24/2025 11:25  
Instrument: FID4 Analyst: VTD Analyzed: 10/02/2025 20:37  
Sample Preparation: Preparation Method: EPA 3510C SepF Extract ID: 25I0560-04 A 02  
Preparation Batch: BNJ0006 Sample Size: 500 mL  
Prepared: 10/01/2025 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
<i>Surrogate: o-Terphenyl</i>			50-150 %	107	%	
<i>Surrogate: n-Triacontane</i>			50-150 %	106	%	



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**LMW-4-0925**  
**25I0560-04 (Water)**

**Metals and Metallic Compounds**

Method: EPA 200.8	Preparation Method: REN - EPA 3010A M	Sampled: 09/24/2025 11:25
Instrument: ICPMS1 Analyst: HAL	Preparation Batch: BNI0635	Analyzed: 10/02/2025 02:27
Sample Preparation:	Prepared: 09/30/2025	Extract ID: 25I0560-04 E 02
	Sample Size: 25 mL	
	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
Thallium	7440-28-0	1	0.100	2.00	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	<b>Reported:</b> 10-Oct-2025 09:37
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**LMW-4-0925**  
**25I0560-04 (Water)**

**Metals and Metallic Compounds**

Method: EPA 6010D	Sampled: 09/24/2025 11:25
Instrument: ICP3 Analyst: SH	Analyzed: 10/08/2025 06:29
Sample Preparation: Preparation Method: TWC EPA 3010A	Extract ID: 25I0560-04 E 02
Preparation Batch: BNJ0014	Sample Size: 25 mL
Prepared: 10/01/2025	Final Volume: 25 mL

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	0.355	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	105	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	1.40	mg/L	
Magnesium	7439-95-4	1	0.0250	0.0500	62.0	mg/L	
Manganese	7439-96-5	1	0.0020	0.0040	0.139	mg/L	
Nickel	7440-02-0	1	0.0050	0.0100	ND	mg/L	U
Potassium	7440-09-7	1	0.250	0.500	3.66	mg/L	
Silver	7440-22-4	1	0.0015	0.0030	ND	mg/L	U
Sodium	7440-23-5	1	0.250	0.500	36.1	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



WSP USA, Inc. 210 East 13th Street, Suite 300 Vancouver WA, 98660-3231	Project: Landsburg Project Number: [none] Project Manager: Gary Zimmerman	<b>Reported:</b> 10-Oct-2025 09:37
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**LMW-4-0925**  
**25I0560-04 (Water)**

**Metals and Metallic Compounds**

Method: EPA 7470A	Preparation Method: TWM EPA 7470A	Sample Size: 20 mL	Sampled: 09/24/2025 11:25
Instrument: HYDRA Analyst: ML	Preparation Batch: BNJ0074	Final Volume: 20 mL	Analyzed: 10/08/2025 10:45
Sample Preparation:	Prepared: 10/03/2025		Extract ID: 25I0560-04 E

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-4-0925**  
**25I0560-04RE1 (Water)**

**Metals and Metallic Compounds**

Method: EPA 200.8	Sampled: 09/24/2025 11:25
Instrument: ICPMS1 Analyst: HAL	Analyzed: 10/02/2025 20:43
Sample Preparation:	Preparation Method: REN - EPA 3010A M
	Preparation Batch: BNI0635
	Prepared: 09/30/2025
	Sample Size: 25 mL
	Final Volume: 25 mL
	Extract ID: 25I0560-04RE1 E 02

Analyte	CAS Number	Dilution	Detection Limit	Reporting Limit	Result	Units	Notes
Selenium UCT	7782-49-2	1	0.500	25.0	ND	ug/L	U



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

Reported:  
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**LMW-5-0925**  
**25I0560-05 (Water)**

**Volatile Organic Compounds**

Method: EPA 8260D Sampled: 09/25/2025 14:00  
Instrument: NT20 Analyst: LNH Analyzed: 10/01/2025 20:35

Sample Preparation: Preparation Method: EPA 5030C (Purge and Trap) Extract ID: 25I0560-05 D  
Preparation Batch: BNJ0016 Sample Size: 10 mL  
Prepared: 10/01/2025 Final Volume: 10 mL

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
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



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Project: Landsburg  
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Project Manager: Gary Zimmerman

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**LMW-5-0925**  
**25I0560-05 (Water)**

**Volatile Organic Compounds**

Method: EPA 8260D

Sampled: 09/25/2025 14:00

Instrument: NT20 Analyst: LNH

Analyzed: 10/01/2025 20:35

Analyte	CAS Number	Dilution	Reporting Limit	Result	Units	Notes
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
1,1,1,2-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
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>			80-129 %	101	%	
<i>Surrogate: Toluene-d8</i>			80-120 %	100	%	
<i>Surrogate: 4-Bromofluorobenzene</i>			80-120 %	97.5	%	
<i>Surrogate: 1,2-Dichlorobenzene-d4</i>			80-120 %	102	%	



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**LMW-5-0925**  
**25I0560-05 (Water)**

**Petroleum Hydrocarbons**

Method: NWTPH-HCID Sampled: 09/25/2025 14:00  
Instrument: FID4 Analyst: VTD Analyzed: 10/03/2025 00:17  
Sample Preparation: Extract ID: 25I0560-05 A 01  
Preparation Method: EPA 3510C SepF  
Preparation Batch: BNJ0045 Sample Size: 500 mL  
Prepared: 10/02/2025 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
<i>Surrogate: o-Terphenyl</i>			50-150 %	94.9	%	
<i>Surrogate: n-Triacontane</i>			50-150 %	95.4	%	



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**LMW-5-0925**  
**25I0560-05 (Water)**

**Metals and Metallic Compounds**

Method: EPA 200.8	Preparation Method: REN - EPA 3010A M	Sampled: 09/25/2025 14:00
Instrument: ICPMS1 Analyst: HAL	Preparation Batch: BNI0635	Analyzed: 10/02/2025 03:21
Sample Preparation:	Prepared: 09/30/2025	Extract ID: 25I0560-05 C 02
	Sample Size: 25 mL	
	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: [none]  
Project Manager: Gary Zimmerman

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**LMW-5-0925**  
**25I0560-05 (Water)**

**Metals and Metallic Compounds**

Method: EPA 6010D Sampled: 09/25/2025 14:00  
Instrument: ICP3 Analyst: SH Analyzed: 10/08/2025 06:49

Sample Preparation: Preparation Method: TWC EPA 3010A Extract ID: 25I0560-05 C 02  
Preparation Batch: BNJ0014 Sample Size: 25 mL  
Prepared: 10/01/2025 Final Volume: 25 mL

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	0.240	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	78.6	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	0.282	mg/L	
Magnesium	7439-95-4	1	0.0250	0.0500	41.9	mg/L	
Manganese	7439-96-5	1	0.0020	0.0040	0.202	mg/L	
Nickel	7440-02-0	1	0.0050	0.0100	ND	mg/L	U
Potassium	7440-09-7	1	0.250	0.500	2.29	mg/L	
Silver	7440-22-4	1	0.0015	0.0030	ND	mg/L	U
Sodium	7440-23-5	1	0.250	0.500	13.8	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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**LMW-5-0925**  
**25I0560-05 (Water)**

**Metals and Metallic Compounds**

Method: EPA 7470A	Preparation Method: TWM EPA 7470A	Sampled: 09/25/2025 14:00
Instrument: HYDRA Analyst: ML	Preparation Batch: BNJ0074	Analyzed: 10/08/2025 11:06
Sample Preparation:	Prepared: 10/03/2025	Extract ID: 25I0560-05 C
	Sample Size: 20 mL	
	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

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**LMW-6-0925**  
**25I0560-06 (Water)**

**Volatile Organic Compounds**

Method: EPA 8260D Sampled: 09/25/2025 09:40  
Instrument: NT20 Analyst: LNH Analyzed: 10/01/2025 20:59

Sample Preparation: Preparation Method: EPA 5030C (Purge and Trap) Extract ID: 25I0560-06 D  
Preparation Batch: BNJ0016 Sample Size: 10 mL  
Prepared: 10/01/2025 Final Volume: 10 mL

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
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



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

Reported:  
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**LMW-6-0925**  
**25I0560-06 (Water)**

**Volatile Organic Compounds**

Method: EPA 8260D

Sampled: 09/25/2025 09:40

Instrument: NT20 Analyst: LNH

Analyzed: 10/01/2025 20:59

Analyte	CAS Number	Dilution	Reporting Limit	Result	Units	Notes
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
1,1,1,2-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
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>			80-129 %	102	%	
<i>Surrogate: Toluene-d8</i>			80-120 %	99.0	%	
<i>Surrogate: 4-Bromofluorobenzene</i>			80-120 %	98.3	%	
<i>Surrogate: 1,2-Dichlorobenzene-d4</i>			80-120 %	100	%	



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**LMW-6-0925**  
**25I0560-06 (Water)**

**Petroleum Hydrocarbons**

Method: NWTPH-HCID Sampled: 09/25/2025 09:40  
Instrument: FID4 Analyst: VTD Analyzed: 10/03/2025 00:39  
Sample Preparation: Preparation Method: EPA 3510C SepF Extract ID: 25I0560-06 A 01  
Preparation Batch: BNJ0045  
Prepared: 10/02/2025 Sample Size: 500 mL  
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
<i>Surrogate: o-Terphenyl</i>			50-150 %	95.0	%	
<i>Surrogate: n-Triacontane</i>			50-150 %	94.9	%	



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**LMW-6-0925**  
**25I0560-06 (Water)**

**Metals and Metallic Compounds**

Method: EPA 200.8	Preparation Method: REN - EPA 3010A M	Sampled: 09/25/2025 09:40
Instrument: ICPMS1 Analyst: HAL	Preparation Batch: BNI0635	Analyzed: 10/02/2025 03:25
Sample Preparation:	Prepared: 09/30/2025	Extract ID: 25I0560-06 C 02
	Sample Size: 25 mL	
	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: [none]  
Project Manager: Gary Zimmerman

**Reported:**  
10-Oct-2025 09:37

**LMW-6-0925**  
**25I0560-06 (Water)**

**Metals and Metallic Compounds**

Method: EPA 6010D

Sampled: 09/25/2025 09:40

Instrument: ICP3 Analyst: SH

Analyzed: 10/08/2025 06:52

Sample Preparation:

Preparation Method: TWC EPA 3010A

Extract ID: 25I0560-06 C 02

Preparation Batch: BNJ0014

Sample Size: 25 mL

Prepared: 10/01/2025

Final Volume: 25 mL

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	0.106	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	27.2	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	1.45	mg/L	
Magnesium	7439-95-4	1	0.0250	0.0500	13.8	mg/L	
Manganese	7439-96-5	1	0.0020	0.0040	0.0193	mg/L	
Nickel	7440-02-0	1	0.0050	0.0100	ND	mg/L	U
Potassium	7440-09-7	1	0.250	0.500	0.622	mg/L	
Silver	7440-22-4	1	0.0015	0.0030	ND	mg/L	U
Sodium	7440-23-5	1	0.250	0.500	6.98	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-6-0925**  
**25I0560-06 (Water)**

**Metals and Metallic Compounds**

Method: EPA 7470A	Preparation Method: TWM EPA 7470A	Sampled: 09/25/2025 09:40
Instrument: HYDRA Analyst: ML	Preparation Batch: BNJ0074	Analyzed: 10/08/2025 11:09
Sample Preparation:	Prepared: 10/03/2025	Extract ID: 25I0560-06 C
	Sample Size: 20 mL	
	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:  
10-Oct-2025 09:37

**LMW-7-0925**  
**25I0560-07 (Water)**

**Volatile Organic Compounds**

Method: EPA 8260D Sampled: 09/26/2025 10:40  
Instrument: NT20 Analyst: LNH Analyzed: 10/01/2025 21:23

Sample Preparation: Preparation Method: EPA 5030C (Purge and Trap) Extract ID: 25I0560-07 D  
Preparation Batch: BNJ0016 Sample Size: 10 mL  
Prepared: 10/01/2025 Final Volume: 10 mL

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
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



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

Reported:  
10-Oct-2025 09:37

**LMW-7-0925**  
**25I0560-07 (Water)**

**Volatile Organic Compounds**

Method: EPA 8260D

Sampled: 09/26/2025 10:40

Instrument: NT20 Analyst: LNH

Analyzed: 10/01/2025 21:23

Analyte	CAS Number	Dilution	Reporting Limit	Result	Units	Notes
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
1,1,1,2-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
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>			80-129 %	103	%	
<i>Surrogate: Toluene-d8</i>			80-120 %	97.7	%	
<i>Surrogate: 4-Bromofluorobenzene</i>			80-120 %	97.1	%	
<i>Surrogate: 1,2-Dichlorobenzene-d4</i>			80-120 %	100	%	



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**LMW-7-0925**  
**25I0560-07 (Water)**

**Petroleum Hydrocarbons**

Method: NWTPH-HCID Sampled: 09/26/2025 10:40  
Instrument: FID4 Analyst: JR Analyzed: 10/03/2025 07:56  
Sample Preparation: Extract ID: 25I0560-07 A 01  
Preparation Method: EPA 3510C SepF  
Preparation Batch: BNJ0045 Sample Size: 500 mL  
Prepared: 10/02/2025 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
<i>Surrogate: o-Terphenyl</i>			50-150 %	99.7	%	
<i>Surrogate: n-Triacontane</i>			50-150 %	97.4	%	



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**LMW-7-0925**  
**25I0560-07 (Water)**

**Metals and Metallic Compounds**

Method: EPA 200.8	Preparation Method: REN - EPA 3010A M	Sampled: 09/26/2025 10:40
Instrument: ICPMS1 Analyst: HAL	Preparation Batch: BNI0635	Analyzed: 10/02/2025 03:30
Sample Preparation:	Prepared: 09/30/2025	Extract ID: 25I0560-07 C 02
	Sample Size: 25 mL	
	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	1.84	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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**LMW-7-0925**  
**25I0560-07 (Water)**

**Metals and Metallic Compounds**

Method: EPA 6010D	Sampled: 09/26/2025 10:40
Instrument: ICP3 Analyst: SH	Analyzed: 10/08/2025 06:55
Sample Preparation: Preparation Method: TWC EPA 3010A	Extract ID: 25I0560-07 C 02
Preparation Batch: BNJ0014	Sample Size: 25 mL
Prepared: 10/01/2025	Final Volume: 25 mL

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	0.366	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	40.4	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	0.875	mg/L	
Magnesium	7439-95-4	1	0.0250	0.0500	18.5	mg/L	
Manganese	7439-96-5	1	0.0020	0.0040	0.0916	mg/L	
Nickel	7440-02-0	1	0.0050	0.0100	ND	mg/L	U
Potassium	7440-09-7	1	0.250	0.500	2.40	mg/L	
Silver	7440-22-4	1	0.0015	0.0030	ND	mg/L	U
Sodium	7440-23-5	1	0.250	0.500	43.6	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-7-0925**  
**25I0560-07 (Water)**

**Metals and Metallic Compounds**

Method: EPA 7470A	Preparation Method: TWM EPA 7470A	Sampled: 09/26/2025 10:40
Instrument: HYDRA Analyst: ML	Preparation Batch: BNJ0074	Analyzed: 10/08/2025 11:11
Sample Preparation:	Prepared: 10/03/2025	Extract ID: 25I0560-07 C
	Sample Size: 20 mL	
	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:  
10-Oct-2025 09:37

**LMW-8-0925**  
**25I0560-08 (Water)**

**Volatile Organic Compounds**

Method: EPA 8260D

Sampled: 09/25/2025 15:10

Instrument: NT20 Analyst: LNH

Analyzed: 10/01/2025 21:47

Sample Preparation:

Preparation Method: EPA 5030C (Purge and Trap)

Extract ID: 25I0560-08 D

Preparation Batch: BNJ0016

Sample Size: 10 mL

Prepared: 10/01/2025

Final Volume: 10 mL

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
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



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

Reported:  
10-Oct-2025 09:37

**LMW-8-0925**  
**25I0560-08 (Water)**

**Volatile Organic Compounds**

Method: EPA 8260D

Sampled: 09/25/2025 15:10

Instrument: NT20 Analyst: LNH

Analyzed: 10/01/2025 21:47

Analyte	CAS Number	Dilution	Reporting Limit	Result	Units	Notes
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
1,1,1,2-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
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>			80-129 %	100	%	
<i>Surrogate: Toluene-d8</i>			80-120 %	99.8	%	
<i>Surrogate: 4-Bromofluorobenzene</i>			80-120 %	96.5	%	
<i>Surrogate: 1,2-Dichlorobenzene-d4</i>			80-120 %	102	%	



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**LMW-8-0925**  
**25I0560-08 (Water)**

**Petroleum Hydrocarbons**

Method: NWTPH-HCID Sampled: 09/25/2025 15:10  
 Instrument: FID4 Analyst: VTD Analyzed: 10/03/2025 01:23  
 Sample Preparation: Preparation Method: EPA 3510C SepF Extract ID: 25I0560-08 A 01  
 Preparation Batch: BNJ0045  
 Prepared: 10/02/2025 Sample Size: 500 mL  
 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
<i>Surrogate: o-Terphenyl</i>			50-150 %	96.8	%	
<i>Surrogate: n-Triacontane</i>			50-150 %	96.0	%	



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**LMW-8-0925**  
**25I0560-08 (Water)**

**Metals and Metallic Compounds**

Method: EPA 200.8	Preparation Method: REN - EPA 3010A M	Sampled: 09/25/2025 15:10
Instrument: ICPMS1 Analyst: HAL	Preparation Batch: BNI0635	Analyzed: 10/02/2025 03:35
Sample Preparation:	Prepared: 09/30/2025	Extract ID: 25I0560-08 C 02
	Sample Size: 25 mL	
	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	3.04	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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Project: Landsburg  
Project Number: [none]  
Project Manager: Gary Zimmerman

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**LMW-8-0925**  
**25I0560-08 (Water)**

**Metals and Metallic Compounds**

Method: EPA 6010D

Sampled: 09/25/2025 15:10

Instrument: ICP3 Analyst: SH

Analyzed: 10/08/2025 06:58

Sample Preparation:

Preparation Method: TWC EPA 3010A

Extract ID: 25I0560-08 C 02

Preparation Batch: BNJ0014

Sample Size: 25 mL

Prepared: 10/01/2025

Final Volume: 25 mL

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	0.0542	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	65.8	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	10.9	mg/L	
Magnesium	7439-95-4	1	0.0250	0.0500	36.3	mg/L	
Manganese	7439-96-5	1	0.0020	0.0040	0.437	mg/L	
Nickel	7440-02-0	1	0.0050	0.0100	ND	mg/L	U
Potassium	7440-09-7	1	0.250	0.500	1.95	mg/L	
Silver	7440-22-4	1	0.0015	0.0030	ND	mg/L	U
Sodium	7440-23-5	1	0.250	0.500	13.0	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-8-0925**  
**25I0560-08 (Water)**

**Metals and Metallic Compounds**

Method: EPA 7470A	Preparation Method: TWM EPA 7470A	Sampled: 09/25/2025 15:10
Instrument: HYDRA Analyst: ML	Preparation Batch: BNJ0074	Analyzed: 10/08/2025 11:13
Sample Preparation:	Prepared: 10/03/2025	Extract ID: 25I0560-08 C
	Sample Size: 20 mL	
	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

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**LMW-9-0925**  
**25I0560-09 (Water)**

**Volatile Organic Compounds**

Method: EPA 8260D Sampled: 09/25/2025 10:50  
Instrument: NT20 Analyst: LNH Analyzed: 10/01/2025 22:12

Sample Preparation: Preparation Method: EPA 5030C (Purge and Trap) Extract ID: 25I0560-09 D  
Preparation Batch: BNJ0016 Sample Size: 10 mL  
Prepared: 10/01/2025 Final Volume: 10 mL

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
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



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

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**LMW-9-0925**  
**25I0560-09 (Water)**

**Volatile Organic Compounds**

Method: EPA 8260D

Sampled: 09/25/2025 10:50

Instrument: NT20 Analyst: LNH

Analyzed: 10/01/2025 22:12

Analyte	CAS Number	Dilution	Reporting Limit	Result	Units	Notes
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
1,1,1,2-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
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>			80-129 %	101	%	
<i>Surrogate: Toluene-d8</i>			80-120 %	100	%	
<i>Surrogate: 4-Bromofluorobenzene</i>			80-120 %	98.2	%	
<i>Surrogate: 1,2-Dichlorobenzene-d4</i>			80-120 %	100	%	



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**LMW-9-0925**  
**25I0560-09 (Water)**

**Petroleum Hydrocarbons**

Method: NWTPH-HCID Sampled: 09/25/2025 10:50  
Instrument: FID4 Analyst: VTD Analyzed: 10/03/2025 01:45  
Sample Preparation: Extract ID: 25I0560-09 A 01  
Preparation Method: EPA 3510C SepF  
Preparation Batch: BNJ0045 Sample Size: 500 mL  
Prepared: 10/02/2025 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
<i>Surrogate: o-Terphenyl</i>			50-150 %	96.0	%	
<i>Surrogate: n-Triacontane</i>			50-150 %	96.4	%	



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**LMW-9-0925**  
**25I0560-09 (Water)**

**Metals and Metallic Compounds**

Method: EPA 200.8	Preparation Method: REN - EPA 3010A M	Sampled: 09/25/2025 10:50
Instrument: ICPMS1 Analyst: HAL	Preparation Batch: BNI0635	Analyzed: 10/02/2025 03:39
Sample Preparation:	Prepared: 09/30/2025	Extract ID: 25I0560-09 C 02
	Sample Size: 25 mL	
	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	0.215	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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**LMW-9-0925**  
**25I0560-09 (Water)**

**Metals and Metallic Compounds**

Method: EPA 6010D	Preparation Method: TWC EPA 3010A	Sampled: 09/25/2025 10:50
Instrument: ICP3 Analyst: SH	Preparation Batch: BNJ0014	Analyzed: 10/08/2025 07:01
Sample Preparation:	Prepared: 10/01/2025	Extract ID: 25I0560-09 C 02
	Sample Size: 25 mL	
	Final Volume: 25 mL	

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	0.280	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	77.7	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	1.39	mg/L	
Magnesium	7439-95-4	1	0.0250	0.0500	40.3	mg/L	
Manganese	7439-96-5	1	0.0020	0.0040	0.174	mg/L	
Nickel	7440-02-0	1	0.0050	0.0100	ND	mg/L	U
Potassium	7440-09-7	1	0.250	0.500	2.27	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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**LMW-9-0925**  
**25I0560-09 (Water)**

**Metals and Metallic Compounds**

Method: EPA 7470A	Preparation Method: TWM EPA 7470A	Sampled: 09/25/2025 10:50
Instrument: HYDRA Analyst: ML	Preparation Batch: BNJ0074	Analyzed: 10/08/2025 11:16
Sample Preparation:	Prepared: 10/03/2025	Extract ID: 25I0560-09 C
	Sample Size: 20 mL	
	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

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**LMW-10-0925**  
**25I0560-10 (Water)**

**Volatile Organic Compounds**

Method: EPA 8260D Sampled: 09/23/2025 15:40  
Instrument: NT20 Analyst: LNH Analyzed: 10/01/2025 22:36

Sample Preparation: Preparation Method: EPA 5030C (Purge and Trap) Extract ID: 25I0560-10 D  
Preparation Batch: BNJ0016 Sample Size: 10 mL  
Prepared: 10/01/2025 Final Volume: 10 mL

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
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



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

Reported:  
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**LMW-10-0925**  
**25I0560-10 (Water)**

**Volatile Organic Compounds**

Method: EPA 8260D

Sampled: 09/23/2025 15:40

Instrument: NT20 Analyst: LNH

Analyzed: 10/01/2025 22:36

Analyte	CAS Number	Dilution	Reporting Limit	Result	Units	Notes
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
1,1,1,2-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
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>			80-129 %	104	%	
<i>Surrogate: Toluene-d8</i>			80-120 %	99.2	%	
<i>Surrogate: 4-Bromofluorobenzene</i>			80-120 %	99.4	%	
<i>Surrogate: 1,2-Dichlorobenzene-d4</i>			80-120 %	101	%	



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**LMW-10-0925**  
**25I0560-10 (Water)**

**Petroleum Hydrocarbons**

Method: NWTPH-HCID	Preparation Method: EPA 3510C SepF	Sample Size: 500 mL	Sampled: 09/23/2025 15:40
Instrument: FID4 Analyst: VTD	Preparation Batch: BNI0643	Final Volume: 1 mL	Analyzed: 10/02/2025 18:03
Sample Preparation:	Prepared: 09/30/2025		Extract ID: 25I0560-10 A 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
<i>Surrogate: o-Terphenyl</i>			50-150 %	84.1	%	
<i>Surrogate: n-Triacontane</i>			50-150 %	87.1	%	



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**LMW-10-0925**  
**25I0560-10 (Water)**

**Metals and Metallic Compounds**

Method: EPA 200.8	Preparation Method: REN - EPA 3010A M	Sampled: 09/23/2025 15:40
Instrument: ICPMS1 Analyst: HAL	Preparation Batch: BNI0635	Analyzed: 10/02/2025 03:44
Sample Preparation:	Prepared: 09/30/2025	Extract ID: 25I0560-10 C 02
	Sample Size: 25 mL	
	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	0.163	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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**LMW-10-0925**  
**25I0560-10 (Water)**

**Metals and Metallic Compounds**

Method: EPA 6010D

Sampled: 09/23/2025 15:40

Instrument: ICP3 Analyst: SH

Analyzed: 10/08/2025 07:22

Sample Preparation: Preparation Method: TWC EPA 3010A  
Preparation Batch: BNJ0014  
Prepared: 10/01/2025

Sample Size: 25 mL  
Final Volume: 25 mL

Extract ID: 25I0560-10 C 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	0.0324	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	6.55	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	2.79	mg/L	
Manganese	7439-96-5	1	0.0020	0.0040	0.0087	mg/L	
Nickel	7440-02-0	1	0.0050	0.0100	ND	mg/L	U
Potassium	7440-09-7	1	0.250	0.500	1.08	mg/L	
Silver	7440-22-4	1	0.0015	0.0030	ND	mg/L	U
Sodium	7440-23-5	1	25.0	50.0	79.7	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-10-0925**  
**25I0560-10 (Water)**

**Metals and Metallic Compounds**

Method: EPA 7470A	Preparation Method: TWM EPA 7470A	Sampled: 09/23/2025 15:40
Instrument: HYDRA Analyst: ML	Preparation Batch: BNJ0074	Analyzed: 10/08/2025 11:23
Sample Preparation:	Prepared: 10/03/2025	Extract ID: 25I0560-10 C
	Sample Size: 20 mL	
	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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**LMW-11-0925**  
**25I0560-11 (Water)**

**Volatile Organic Compounds**

Method: EPA 8260D

Sampled: 09/24/2025 14:35

Instrument: NT20 Analyst: LNH

Analyzed: 10/01/2025 23:01

Sample Preparation:

Preparation Method: EPA 5030C (Purge and Trap)

Extract ID: 25I0560-11 D

Preparation Batch: BNJ0016

Sample Size: 10 mL

Prepared: 10/01/2025

Final Volume: 10 mL

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
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



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

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**LMW-11-0925**  
**25I0560-11 (Water)**

**Volatile Organic Compounds**

Method: EPA 8260D

Sampled: 09/24/2025 14:35

Instrument: NT20 Analyst: LNH

Analyzed: 10/01/2025 23:01

Analyte	CAS Number	Dilution	Reporting Limit	Result	Units	Notes
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
1,1,1,2-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
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>			80-129 %	101	%	
<i>Surrogate: Toluene-d8</i>			80-120 %	99.9	%	
<i>Surrogate: 4-Bromofluorobenzene</i>			80-120 %	97.1	%	
<i>Surrogate: 1,2-Dichlorobenzene-d4</i>			80-120 %	102	%	



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**LMW-11-0925**  
**25I0560-11 (Water)**

**Petroleum Hydrocarbons**

Method: NWTPH-HCID Sampled: 09/24/2025 14:35  
 Instrument: FID4 Analyst: VTD Analyzed: 10/02/2025 20:59  
 Sample Preparation: Extract ID: 25I0560-11 A 02  
 Preparation Method: EPA 3510C SepF  
 Preparation Batch: BNJ0006 Sample Size: 500 mL  
 Prepared: 10/01/2025 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
<i>Surrogate: o-Terphenyl</i>			50-150 %	92.6	%	
<i>Surrogate: n-Triacontane</i>			50-150 %	91.4	%	



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**LMW-11-0925**  
**25I0560-11 (Water)**

**Metals and Metallic Compounds**

Method: EPA 200.8	Preparation Method: REN - EPA 3010A M	Sampled: 09/24/2025 14:35
Instrument: ICPMS1 Analyst: HAL	Preparation Batch: BNI0635	Analyzed: 10/02/2025 03:49
Sample Preparation:	Prepared: 09/30/2025	Extract ID: 25I0560-11 C 02
	Sample Size: 25 mL	
	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	7.53	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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**LMW-11-0925**  
**25I0560-11 (Water)**

**Metals and Metallic Compounds**

Method: EPA 6010D

Sampled: 09/24/2025 14:35

Instrument: ICP3 Analyst: SH

Analyzed: 10/08/2025 07:25

Sample Preparation:

Preparation Method: TWC EPA 3010A

Extract ID: 25I0560-11 C 02

Preparation Batch: BNJ0014

Sample Size: 25 mL

Prepared: 10/01/2025

Final Volume: 25 mL

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	0.323	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	58.3	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	0.414	mg/L	
Magnesium	7439-95-4	1	0.0250	0.0500	26.5	mg/L	
Manganese	7439-96-5	1	0.0020	0.0040	0.183	mg/L	
Nickel	7440-02-0	1	0.0050	0.0100	ND	mg/L	U
Potassium	7440-09-7	1	0.250	0.500	2.05	mg/L	
Silver	7440-22-4	1	0.0015	0.0030	ND	mg/L	U
Sodium	7440-23-5	1	0.250	0.500	24.4	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-11-0925**  
**25I0560-11 (Water)**

**Metals and Metallic Compounds**

Method: EPA 7470A	Preparation Method: TWM EPA 7470A	Sampled: 09/24/2025 14:35
Instrument: HYDRA Analyst: ML	Preparation Batch: BNJ0074	Analyzed: 10/08/2025 11:25
Sample Preparation:	Prepared: 10/03/2025	Extract ID: 25I0560-11 C
	Sample Size: 20 mL	
	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 Number: [none]  
Project Manager: Gary Zimmerman

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**LMW-12-0925**  
**25I0560-12 (Water)**

**Volatile Organic Compounds**

Method: EPA 8260D Sampled: 09/23/2025 14:20  
Instrument: NT20 Analyst: LNH Analyzed: 10/01/2025 23:25

Sample Preparation: Preparation Method: EPA 5030C (Purge and Trap) Extract ID: 25I0560-12 G  
Preparation Batch: BNJ0016 Sample Size: 10 mL  
Prepared: 10/01/2025 Final Volume: 10 mL

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
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



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Vancouver WA, 98660-3231

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

Reported:  
10-Oct-2025 09:37

**LMW-12-0925**  
**25I0560-12 (Water)**

**Volatile Organic Compounds**

Method: EPA 8260D

Sampled: 09/23/2025 14:20

Instrument: NT20 Analyst: LNH

Analyzed: 10/01/2025 23:25

Analyte	CAS Number	Dilution	Reporting Limit	Result	Units	Notes
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
1,1,1,2-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
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>			80-129 %	105	%	
<i>Surrogate: Toluene-d8</i>			80-120 %	100	%	
<i>Surrogate: 4-Bromofluorobenzene</i>			80-120 %	99.5	%	
<i>Surrogate: 1,2-Dichlorobenzene-d4</i>			80-120 %	101	%	



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**LMW-12-0925**  
**25I0560-12 (Water)**

**Petroleum Hydrocarbons**

Method: NWTPH-HCID Sampled: 09/23/2025 14:20  
Instrument: FID4 Analyst: VTD Analyzed: 10/02/2025 18:25  
Sample Preparation: Extract ID: 25I0560-12 A 01  
Preparation Method: EPA 3510C SepF  
Preparation Batch: BNI0643 Sample Size: 500 mL  
Prepared: 09/30/2025 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
<i>Surrogate: o-Terphenyl</i>			50-150 %	87.9	%	
<i>Surrogate: n-Triacontane</i>			50-150 %	87.8	%	



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**LMW-12-0925**  
**25I0560-12 (Water)**

**Metals and Metallic Compounds**

Method: EPA 200.8	Preparation Method: REN - EPA 3010A M	Sampled: 09/23/2025 14:20
Instrument: ICPMS1 Analyst: HAL	Preparation Batch: BNI0635	Analyzed: 10/02/2025 03:54
Sample Preparation:	Prepared: 09/30/2025	Extract ID: 25I0560-12 C 02
	Sample Size: 25 mL	
	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	0.500	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



WSP USA, Inc. 210 East 13th Street, Suite 300 Vancouver WA, 98660-3231	Project: Landsburg Project Number: [none] Project Manager: Gary Zimmerman	<b>Reported:</b> 10-Oct-2025 09:37
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**LMW-12-0925**  
**25I0560-12 (Water)**

**Metals and Metallic Compounds**

Method: EPA 6010D	Sampled: 09/23/2025 14:20
Instrument: ICP3 Analyst: SH	Analyzed: 10/08/2025 07:28
Sample Preparation: Preparation Method: TWC EPA 3010A	Extract ID: 25I0560-12 C 02
Preparation Batch: BNJ0014	Sample Size: 25 mL
Prepared: 10/01/2025	Final Volume: 25 mL

Analyte	CAS Number	Dilution	Detection Limit	Reporting Limit	Result	Units	Notes
Aluminum	7429-90-5	1	0.0210	0.0700	0.0273	mg/L	J
Barium	7440-39-3	1	0.0007	0.0060	0.191	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	69.2	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	16.4	mg/L	
Magnesium	7439-95-4	1	0.0250	0.0500	40.9	mg/L	
Manganese	7439-96-5	1	0.0020	0.0040	1.01	mg/L	
Nickel	7440-02-0	1	0.0050	0.0100	ND	mg/L	U
Potassium	7440-09-7	1	0.250	0.500	2.80	mg/L	
Silver	7440-22-4	1	0.0015	0.0030	ND	mg/L	U
Sodium	7440-23-5	1	0.250	0.500	7.41	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-12-0925**  
**25I0560-12 (Water)**

**Metals and Metallic Compounds**

Method: EPA 7470A	Preparation Method: TWM EPA 7470A	Sampled: 09/23/2025 14:20
Instrument: HYDRA Analyst: ML	Preparation Batch: BNJ0074	Analyzed: 10/08/2025 11:27
Sample Preparation:	Prepared: 10/03/2025	Extract ID: 25I0560-12 C
	Sample Size: 20 mL	
	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:  
10-Oct-2025 09:37

**LMW-13R-0925**  
**25I0560-13 (Water)**

**Volatile Organic Compounds**

Method: EPA 8260D

Sampled: 09/23/2025 13:10

Instrument: NT20 Analyst: LNH

Analyzed: 10/01/2025 23:50

Sample Preparation:

Preparation Method: EPA 5030C (Purge and Trap)

Extract ID: 25I0560-13 G

Preparation Batch: BNJ0016

Sample Size: 10 mL

Prepared: 10/01/2025

Final Volume: 10 mL

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
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



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

Reported:  
10-Oct-2025 09:37

**LMW-13R-0925**  
**25I0560-13 (Water)**

**Volatile Organic Compounds**

Method: EPA 8260D

Sampled: 09/23/2025 13:10

Instrument: NT20 Analyst: LNH

Analyzed: 10/01/2025 23:50

Analyte	CAS Number	Dilution	Reporting Limit	Result	Units	Notes
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
1,1,1,2-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
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>			80-129 %	104	%	
<i>Surrogate: Toluene-d8</i>			80-120 %	98.4	%	
<i>Surrogate: 4-Bromofluorobenzene</i>			80-120 %	96.6	%	
<i>Surrogate: 1,2-Dichlorobenzene-d4</i>			80-120 %	101	%	



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**LMW-13R-0925**  
**25I0560-13 (Water)**

**Metals and Metallic Compounds**

Method: EPA 200.8	Preparation Method: REN - EPA 3010A M	Sampled: 09/23/2025 13:10
Instrument: ICPMS1 Analyst: HAL	Preparation Batch: BNI0635	Analyzed: 10/02/2025 03:58
Sample Preparation:	Prepared: 09/30/2025	Extract ID: 25I0560-13 C 02
	Sample Size: 25 mL	
	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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Project: Landsburg  
Project Number: [none]  
Project Manager: Gary Zimmerman

**Reported:**  
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**LMW-13R-0925**  
**25I0560-13 (Water)**

**Metals and Metallic Compounds**

Method: EPA 6010D

Sampled: 09/23/2025 13:10

Instrument: ICP3 Analyst: SH

Analyzed: 10/08/2025 06:11

Sample Preparation:

Preparation Method: TWC EPA 3010A

Extract ID: 25I0560-13 C 02

Preparation Batch: BNJ0014

Sample Size: 25 mL

Prepared: 10/01/2025

Final Volume: 25 mL

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	0.300	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	76.3	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	1.05	mg/L	
Magnesium	7439-95-4	1	0.0250	0.0500	35.9	mg/L	
Manganese	7439-96-5	1	0.0020	0.0040	0.0253	mg/L	
Nickel	7440-02-0	1	0.0050	0.0100	ND	mg/L	U
Potassium	7440-09-7	1	0.250	0.500	2.84	mg/L	
Silver	7440-22-4	1	0.0015	0.0030	ND	mg/L	U
Sodium	7440-23-5	1	25.0	50.0	68.8	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



WSP USA, Inc. 210 East 13th Street, Suite 300 Vancouver WA, 98660-3231	Project: Landsburg Project Number: [none] Project Manager: Gary Zimmerman	<b>Reported:</b> 10-Oct-2025 09:37
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**LMW-13R-0925**  
**25I0560-13 (Water)**

**Metals and Metallic Compounds**

Method: EPA 7470A	Preparation Method: TWM EPA 7470A	Sampled: 09/23/2025 13:10
Instrument: HYDRA Analyst: ML	Preparation Batch: BNJ0074	Analyzed: 10/08/2025 11:30
Sample Preparation:	Prepared: 10/03/2025	Extract ID: 25I0560-13 C
	Sample Size: 20 mL	
	Final Volume: 20 mL	

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



WSP USA, Inc. 210 East 13th Street, Suite 300 Vancouver WA, 98660-3231	Project: Landsburg Project Number: [none] Project Manager: Gary Zimmerman	<b>Reported:</b> 10-Oct-2025 09:37
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**LMW-13R-0925**  
**25I0560-13RE1 (Water)**

**Petroleum Hydrocarbons**

Method: NWTPH-HCID Sampled: 09/23/2025 13:10  
Instrument: FID4 Analyst: VTD Analyzed: 10/02/2025 21:21

Sample Preparation: Preparation Method: EPA 3510C SepF Extract ID: 25I0560-13RE1 A 02  
Preparation Batch: BNJ0006 Sample Size: 500 mL  
Prepared: 10/01/2025 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	H, U
Diesel Range Organics (C12-C24)	DRO	1	0.50	ND	mg/L	H, U
Motor Oil Range Organics (C24-C38)	RRO	1	1.00	ND	mg/L	H, U
<i>Surrogate: o-Terphenyl</i>			50-150 %	105	%	H
<i>Surrogate: n-Triacontane</i>			50-150 %	106	%	H



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

Reported:  
10-Oct-2025 09:37

**LMW-14-0925**  
**25I0560-14 (Water)**

**Volatile Organic Compounds**

Method: EPA 8260D Sampled: 09/24/2025 13:15  
Instrument: NT20 Analyst: LNH Analyzed: 10/02/2025 00:15

Sample Preparation: Preparation Method: EPA 5030C (Purge and Trap) Extract ID: 25I0560-14 G  
Preparation Batch: BNJ0016 Sample Size: 10 mL  
Prepared: 10/01/2025 Final Volume: 10 mL

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
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



WSP USA, Inc.  
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Vancouver WA, 98660-3231

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

Reported:  
10-Oct-2025 09:37

**LMW-14-0925**  
**25I0560-14 (Water)**

**Volatile Organic Compounds**

Method: EPA 8260D

Sampled: 09/24/2025 13:15

Instrument: NT20 Analyst: LNH

Analyzed: 10/02/2025 00:15

Analyte	CAS Number	Dilution	Reporting Limit	Result	Units	Notes
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
1,1,1,2-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
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>			80-129 %	104	%	
<i>Surrogate: Toluene-d8</i>			80-120 %	99.2	%	
<i>Surrogate: 4-Bromofluorobenzene</i>			80-120 %	99.2	%	
<i>Surrogate: 1,2-Dichlorobenzene-d4</i>			80-120 %	100	%	



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**LMW-14-0925**  
**25I0560-14 (Water)**

**Petroleum Hydrocarbons**

Method: NWTPH-HCID Sampled: 09/24/2025 13:15  
Instrument: FID4 Analyst: VTD Analyzed: 10/02/2025 21:43  
Sample Preparation: Extract ID: 25I0560-14 A 02  
Preparation Method: EPA 3510C SepF  
Preparation Batch: BNJ0006 Sample Size: 500 mL  
Prepared: 10/01/2025 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
<i>Surrogate: o-Terphenyl</i>			50-150 %	92.1	%	
<i>Surrogate: n-Triacontane</i>			50-150 %	92.9	%	



WSP USA, Inc. 210 East 13th Street, Suite 300 Vancouver WA, 98660-3231	Project: Landsburg Project Number: [none] Project Manager: Gary Zimmerman	<b>Reported:</b> 10-Oct-2025 09:37
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**LMW-14-0925**  
**25I0560-14 (Water)**

**Metals and Metallic Compounds**

Method: EPA 200.8	Preparation Method: REN - EPA 3010A M	Sampled: 09/24/2025 13:15
Instrument: ICPMS1 Analyst: HAL	Preparation Batch: BNI0635	Analyzed: 10/02/2025 04:21
Sample Preparation:	Prepared: 09/30/2025	Extract ID: 25I0560-14 C 01
	Sample Size: 25 mL	
	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	1.23	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:**  
10-Oct-2025 09:37

**LMW-14-0925**  
**25I0560-14 (Water)**

**Metals and Metallic Compounds**

Method: EPA 6010D

Sampled: 09/24/2025 13:15

Instrument: ICP3 Analyst: SH

Analyzed: 10/08/2025 06:14

Sample Preparation:

Preparation Method: TWC EPA 3010A

Extract ID: 25I0560-14 C 02

Preparation Batch: BNJ0014

Sample Size: 25 mL

Prepared: 10/01/2025

Final Volume: 25 mL

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	0.0370	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	131	mg/L	
Chromium	7440-47-3	1	0.0020	0.0090	ND	mg/L	U
Cobalt	7440-48-4	1	0.0025	0.0050	0.0091	mg/L	
Copper	7440-50-8	1	0.0030	0.0050	ND	mg/L	U
Iron	7439-89-6	1	0.0540	0.100	9.93	mg/L	
Magnesium	7439-95-4	1	0.0250	0.0500	58.7	mg/L	
Manganese	7439-96-5	1	0.0020	0.0040	0.645	mg/L	
Nickel	7440-02-0	1	0.0050	0.0100	0.0138	mg/L	
Potassium	7440-09-7	1	0.250	0.500	3.37	mg/L	
Silver	7440-22-4	1	0.0015	0.0030	ND	mg/L	U
Sodium	7440-23-5	1	0.250	0.500	10.0	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-14-0925**  
**25I0560-14 (Water)**

**Metals and Metallic Compounds**

Method: EPA 7470A	Preparation Method: TWM EPA 7470A	Sampled: 09/24/2025 13:15
Instrument: HYDRA Analyst: ML	Preparation Batch: BNJ0074	Analyzed: 10/08/2025 11:32
Sample Preparation:	Prepared: 10/03/2025	Extract ID: 25I0560-14 C
	Sample Size: 20 mL	
	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:  
10-Oct-2025 09:37

**LMW-15-0925**  
**25I0560-15 (Water)**

**Volatile Organic Compounds**

Method: EPA 8260D

Sampled: 09/24/2025 16:05

Instrument: NT20 Analyst: LNH

Analyzed: 10/02/2025 10:12

Sample Preparation:

Preparation Method: EPA 5030C (Purge and Trap)

Extract ID: 25I0560-15 H

Preparation Batch: BNJ0044

Sample Size: 10 mL

Prepared: 10/02/2025

Final Volume: 10 mL

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
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



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

Reported:  
10-Oct-2025 09:37

**LMW-15-0925**  
**25I0560-15 (Water)**

**Volatile Organic Compounds**

Method: EPA 8260D

Sampled: 09/24/2025 16:05

Instrument: NT20 Analyst: LNH

Analyzed: 10/02/2025 10:12

Analyte	CAS Number	Dilution	Reporting Limit	Result	Units	Notes
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
1,1,1,2-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
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>			80-129 %	99.9	%	
<i>Surrogate: Toluene-d8</i>			80-120 %	99.6	%	
<i>Surrogate: 4-Bromofluorobenzene</i>			80-120 %	98.0	%	
<i>Surrogate: 1,2-Dichlorobenzene-d4</i>			80-120 %	101	%	



WSP USA, Inc. 210 East 13th Street, Suite 300 Vancouver WA, 98660-3231	Project: Landsburg Project Number: [none] Project Manager: Gary Zimmerman	<b>Reported:</b> 10-Oct-2025 09:37
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**LMW-15-0925**  
**25I0560-15 (Water)**

**Petroleum Hydrocarbons**

Method: NWTPH-HCID Sampled: 09/24/2025 16:05  
Instrument: FID4 Analyst: VTD Analyzed: 10/02/2025 22:05  
Sample Preparation: Extract ID: 25I0560-15 A 02  
Preparation Method: EPA 3510C SepF  
Preparation Batch: BNJ0006 Sample Size: 500 mL  
Prepared: 10/01/2025 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
<i>Surrogate: o-Terphenyl</i>			50-150 %	94.3	%	
<i>Surrogate: n-Triacontane</i>			50-150 %	94.3	%	



WSP USA, Inc. 210 East 13th Street, Suite 300 Vancouver WA, 98660-3231	Project: Landsburg Project Number: [none] Project Manager: Gary Zimmerman	<b>Reported:</b> 10-Oct-2025 09:37
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**LMW-15-0925**  
**25I0560-15 (Water)**

**Metals and Metallic Compounds**

Method: EPA 200.8	Preparation Method: REN - EPA 3010A M	Sampled: 09/24/2025 16:05
Instrument: ICPMS1 Analyst: HAL	Preparation Batch: BNI0635	Analyzed: 10/02/2025 04:26
Sample Preparation:	Prepared: 09/30/2025	Extract ID: 25I0560-15 C 01
	Sample Size: 25 mL	
	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	3.04	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



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

**Reported:**  
10-Oct-2025 09:37

**LMW-15-0925**  
**25I0560-15 (Water)**

**Metals and Metallic Compounds**

Method: EPA 6010D

Sampled: 09/24/2025 16:05

Instrument: ICP3 Analyst: SH

Analyzed: 10/08/2025 06:17

Sample Preparation:

Preparation Method: TWC EPA 3010A

Extract ID: 25I0560-15 C 02

Preparation Batch: BNJ0014

Sample Size: 25 mL

Prepared: 10/01/2025

Final Volume: 25 mL

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	0.205	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	56.6	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	3.78	mg/L	
Magnesium	7439-95-4	1	0.0250	0.0500	24.6	mg/L	
Manganese	7439-96-5	1	0.0020	0.0040	0.339	mg/L	
Nickel	7440-02-0	1	0.0050	0.0100	ND	mg/L	U
Potassium	7440-09-7	1	0.250	0.500	1.80	mg/L	
Silver	7440-22-4	1	0.0015	0.0030	ND	mg/L	U
Sodium	7440-23-5	1	0.250	0.500	12.9	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-15-0925**  
**25I0560-15 (Water)**

**Metals and Metallic Compounds**

Method: EPA 7470A	Preparation Method: TWM EPA 7470A	Sampled: 09/24/2025 16:05
Instrument: HYDRA Analyst: ML	Preparation Batch: BNJ0074	Analyzed: 10/08/2025 11:35
Sample Preparation:	Prepared: 10/03/2025	Extract ID: 25I0560-15 C
	Sample Size: 20 mL	
	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:  
10-Oct-2025 09:37

**LMW-FB-0925**  
**25I0560-16 (Water)**

**Volatile Organic Compounds**

Method: EPA 8260D

Sampled: 09/26/2025 11:10

Instrument: NT20 Analyst: LNH

Analyzed: 10/02/2025 10:35

Sample Preparation:

Preparation Method: EPA 5030C (Purge and Trap)

Extract ID: 25I0560-16 D

Preparation Batch: BNJ0044

Sample Size: 10 mL

Prepared: 10/02/2025

Final Volume: 10 mL

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
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



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

Reported:  
10-Oct-2025 09:37

**LMW-FB-0925**  
**25I0560-16 (Water)**

**Volatile Organic Compounds**

Method: EPA 8260D

Sampled: 09/26/2025 11:10

Instrument: NT20 Analyst: LNH

Analyzed: 10/02/2025 10:35

Analyte	CAS Number	Dilution	Reporting Limit	Result	Units	Notes
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
1,1,1,2-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
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>			80-129 %	102	%	
<i>Surrogate: Toluene-d8</i>			80-120 %	98.7	%	
<i>Surrogate: 4-Bromofluorobenzene</i>			80-120 %	95.1	%	
<i>Surrogate: 1,2-Dichlorobenzene-d4</i>			80-120 %	102	%	



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**LMW-FB-0925**  
**25I0560-16 (Water)**

**Petroleum Hydrocarbons**

Method: NWTPH-HCID Sampled: 09/26/2025 11:10  
Instrument: FID4 Analyst: VTD Analyzed: 10/03/2025 02:06  
Sample Preparation: Preparation Method: EPA 3510C SepF Extract ID: 25I0560-16 A 01  
Preparation Batch: BNJ0045 Sample Size: 500 mL  
Prepared: 10/02/2025 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
<i>Surrogate: o-Terphenyl</i>			50-150 %	101	%	
<i>Surrogate: n-Triacontane</i>			50-150 %	100	%	



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**LMW-FB-0925**  
**25I0560-16 (Water)**

**Metals and Metallic Compounds**

Method: EPA 200.8	Preparation Method: REN - EPA 3010A M	Sampled: 09/26/2025 11:10
Instrument: ICPMS1 Analyst: HAL	Preparation Batch: BNI0635	Analyzed: 10/02/2025 04:31
Sample Preparation:	Prepared: 09/30/2025	Extract ID: 25I0560-16 C 01
	Sample Size: 25 mL	
	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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**LMW-FB-0925**  
**25I0560-16 (Water)**

**Metals and Metallic Compounds**

Method: EPA 6010D	Preparation Method: TWC EPA 3010A	Sample Size: 25 mL	Sampled: 09/26/2025 11:10
Instrument: ICP3 Analyst: SH	Preparation Batch: BNJ0014	Final Volume: 25 mL	Analyzed: 10/08/2025 06:20
Sample Preparation:	Prepared: 10/01/2025		Extract ID: 25I0560-16 C 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	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



WSP USA, Inc. 210 East 13th Street, Suite 300 Vancouver WA, 98660-3231	Project: Landsburg Project Number: [none] Project Manager: Gary Zimmerman	<b>Reported:</b> 10-Oct-2025 09:37
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**LMW-FB-0925**  
**25I0560-16 (Water)**

**Metals and Metallic Compounds**

Method: EPA 7470A	Preparation Method: TWM EPA 7470A	Sampled: 09/26/2025 11:10
Instrument: HYDRA Analyst: ML	Preparation Batch: BNJ0074	Analyzed: 10/08/2025 11:37
Sample Preparation:	Prepared: 10/03/2025	Extract ID: 25I0560-16 C
	Sample Size: 20 mL	
	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:  
10-Oct-2025 09:37

**Trip Blank**  
**25I0560-17 (Water)**

**Volatile Organic Compounds**

Method: EPA 8260D Sampled: 09/23/2025 10:55  
Instrument: NT20 Analyst: LNH Analyzed: 10/02/2025 09:25

Sample Preparation: Preparation Method: EPA 5030C (Purge and Trap) Extract ID: 25I0560-17 B  
Preparation Batch: BNJ0044 Sample Size: 10 mL  
Prepared: 10/02/2025 Final Volume: 10 mL

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
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



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

Reported:  
10-Oct-2025 09:37

**Trip Blank**  
**25I0560-17 (Water)**

**Volatile Organic Compounds**

Method: EPA 8260D

Sampled: 09/23/2025 10:55

Instrument: NT20 Analyst: LNH

Analyzed: 10/02/2025 09:25

Analyte	CAS Number	Dilution	Reporting Limit	Result	Units	Notes
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
1,1,1,2-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
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>			80-129 %	99.0	%	
<i>Surrogate: Toluene-d8</i>			80-120 %	101	%	
<i>Surrogate: 4-Bromofluorobenzene</i>			80-120 %	97.7	%	
<i>Surrogate: 1,2-Dichlorobenzene-d4</i>			80-120 %	100	%	



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

**Reported:**  
10-Oct-2025 09:37

**Analysis by: Analytical Resources, LLC**

**Volatile Organic Compounds - Quality Control**

**Batch BNJ0016 - EPA 8260D in Water**

Instrument: NT20 Analyst: LNH

QC Sample/Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
<b>Blank (BNJ0016-BLK1)</b>										
Prepared: 01-Oct-2025 Analyzed: 01-Oct-2025 16:14										
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
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



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

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

**Reported:**  
10-Oct-2025 09:37

**Analysis by: Analytical Resources, LLC**

**Volatile Organic Compounds - Quality Control**

**Batch BNJ0016 - EPA 8260D in Water**

Instrument: NT20 Analyst: LNH

QC Sample/Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
<b>Blank (BNJ0016-BLK1)</b>										
Prepared: 01-Oct-2025 Analyzed: 01-Oct-2025 16:14										
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
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
<i>Surrogate: 1,2-Dichloroethane-d4</i>	6.49		ug/L	6.25		104	80-129			
<i>Surrogate: Toluene-d8</i>	6.15		ug/L	6.25		98.5	80-120			
<i>Surrogate: 4-Bromofluorobenzene</i>	6.03		ug/L	6.25		96.4	80-120			
<i>Surrogate: 1,2-Dichlorobenzene-d4</i>	5.12		ug/L	5.00		102	80-120			
<b>LCS (BNJ0016-BS1)</b>										
Prepared: 01-Oct-2025 Analyzed: 01-Oct-2025 14:38										
Chloromethane	9.92	0.50	ug/L	10.0		99.2	60-138			
Vinyl Chloride	10.5	0.10	ug/L	10.0		105	66-133			
Bromomethane	10.2	1.00	ug/L	10.0		102	72-131			
Chloroethane	10.4	0.20	ug/L	10.0		104	60-155			
Trichlorofluoromethane	10.1	0.20	ug/L	10.0		101	62-141			



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

**Reported:**  
10-Oct-2025 09:37

**Analysis by: Analytical Resources, LLC**

**Volatile Organic Compounds - Quality Control**

**Batch BNJ0016 - EPA 8260D in Water**

Instrument: NT20 Analyst: LNH

QC Sample/Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
<b>LCS (BNJ0016-BS1)</b>										
						Prepared: 01-Oct-2025 Analyzed: 01-Oct-2025 14:38				
Acrolein	51.2	5.00	ug/L	50.0		102	52-190			
1,1,2-Trichloro-1,2,2-Trifluoroethane	10.5	0.20	ug/L	10.0		105	76-129			
Acetone	51.0	5.00	ug/L	50.0		102	58-142			
1,1-Dichloroethene	10.1	0.20	ug/L	10.0		101	69-135			
Iodomethane	9.72	1.00	ug/L	10.0		97.2	56-147			
Methylene Chloride	10.2	1.00	ug/L	10.0		102	65-135			
Acrylonitrile	9.90	1.00	ug/L	10.0		99.0	64-134			
Carbon Disulfide	9.58	0.20	ug/L	10.0		95.8	78-125			
trans-1,2-Dichloroethene	9.89	0.20	ug/L	10.0		98.9	78-128			
Vinyl Acetate	8.98	0.20	ug/L	10.0		89.8	55-138			
1,1-Dichloroethane	9.92	0.20	ug/L	10.0		99.2	76-124			
2-Butanone	48.8	5.00	ug/L	50.0		97.7	61-140			
2,2-Dichloropropane	9.27	0.20	ug/L	10.0		92.7	66-147			
cis-1,2-Dichloroethene	10.2	0.20	ug/L	10.0		102	80-121			
Chloroform	10.2	0.20	ug/L	10.0		102	80-122			
Bromochloromethane	10.3	0.20	ug/L	10.0		103	80-121			
1,1,1-Trichloroethane	10.1	0.20	ug/L	10.0		101	79-123			
1,1-Dichloropropene	10.1	0.10	ug/L	10.0		101	80-127			
Carbon tetrachloride	10.0	0.20	ug/L	10.0		100	53-137			
1,2-Dichloroethane	9.88	0.20	ug/L	10.0		98.8	75-123			
Benzene	10.2	0.20	ug/L	10.0		102	80-120			
Trichloroethene	10.5	0.20	ug/L	10.0		105	80-120			
1,2-Dichloropropane	10.1	0.20	ug/L	10.0		101	80-120			
Bromodichloromethane	10.3	0.20	ug/L	10.0		103	80-121			
Dibromomethane	10.6	0.20	ug/L	10.0		106	80-120			
2-Chloroethyl vinyl ether	10.2	1.00	ug/L	10.0		102	64-120			
4-Methyl-2-Pentanone	52.0	2.50	ug/L	50.0		104	67-133			
cis-1,3-Dichloropropene	10.1	0.20	ug/L	10.0		101	80-124			
Toluene	9.94	0.20	ug/L	10.0		99.4	80-120			
trans-1,3-Dichloropropene	10.2	0.20	ug/L	10.0		102	71-127			
2-Hexanone	49.9	5.00	ug/L	50.0		99.8	69-133			
1,1,2-Trichloroethane	10.3	0.20	ug/L	10.0		103	80-121			
1,3-Dichloropropane	10.2	0.10	ug/L	10.0		102	80-120			
Tetrachloroethene	9.95	0.20	ug/L	10.0		99.5	80-120			
Dibromochloromethane	10.1	0.20	ug/L	10.0		101	65-135			
1,2-Dibromoethane	10.5	0.10	ug/L	10.0		105	80-121			
Chlorobenzene	10.1	0.20	ug/L	10.0		101	80-120			
Ethylbenzene	10.2	0.20	ug/L	10.0		102	80-120			
1,1,1,2-Tetrachloroethane	10.3	0.20	ug/L	10.0		103	80-120			
m,p-Xylene	20.1	0.40	ug/L	20.0		101	80-121			
o-Xylene	10.4	0.20	ug/L	10.0		104	80-121			



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

**Reported:**  
10-Oct-2025 09:37

**Analysis by: Analytical Resources, LLC**

**Volatile Organic Compounds - Quality Control**

**Batch BNJ0016 - EPA 8260D in Water**

Instrument: NT20 Analyst: LNH

QC Sample/Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
<b>LCS (BNJ0016-BS1)</b>										
					Prepared: 01-Oct-2025 Analyzed: 01-Oct-2025 14:38					
Xylenes, total	30.5	0.60	ug/L	30.0		102	76-127			
Styrene	10.3	0.20	ug/L	10.0		103	80-124			
Bromoform	10.6	0.20	ug/L	10.0		106	51-134			
1,1,2,2-Tetrachloroethane	10.2	0.20	ug/L	10.0		102	77-123			
1,2,3-Trichloropropane	9.96	0.25	ug/L	10.0		99.6	76-125			
trans-1,4-Dichloro 2-Butene	10.0	1.00	ug/L	10.0		100	55-129			
n-Propylbenzene	10.1	0.20	ug/L	10.0		101	78-130			
Bromobenzene	10.2	0.20	ug/L	10.0		102	80-120			
Isopropyl Benzene	10.3	0.20	ug/L	10.0		103	80-128			
2-Chlorotoluene	9.93	0.10	ug/L	10.0		99.3	78-122			
4-Chlorotoluene	10.0	0.20	ug/L	10.0		100	80-121			
t-Butylbenzene	9.96	0.20	ug/L	10.0		99.6	78-125			
1,3,5-Trimethylbenzene	10.2	0.20	ug/L	10.0		102	80-129			
1,2,4-Trimethylbenzene	10.3	0.20	ug/L	10.0		103	80-127			
s-Butylbenzene	9.98	0.20	ug/L	10.0		99.8	78-129			
4-Isopropyl Toluene	10.0	0.20	ug/L	10.0		100	79-130			
1,3-Dichlorobenzene	9.89	0.20	ug/L	10.0		98.9	80-120			
1,4-Dichlorobenzene	9.72	0.20	ug/L	10.0		97.2	80-120			
n-Butylbenzene	9.63	0.20	ug/L	10.0		96.3	74-129			
1,2-Dichlorobenzene	9.78	0.20	ug/L	10.0		97.8	80-120			
1,2-Dibromo-3-chloropropane	10.9	0.50	ug/L	10.0		109	62-123			
1,2,4-Trichlorobenzene	9.50	0.50	ug/L	10.0		95.0	64-124			
Hexachloro-1,3-Butadiene	9.21	0.50	ug/L	10.0		92.1	65-145			
Naphthalene	9.20	0.50	ug/L	10.0		92.0	50-134			
1,2,3-Trichlorobenzene	9.48	0.50	ug/L	10.0		94.8	49-133			
Dichlorodifluoromethane	9.89	0.20	ug/L	10.0		98.9	48-147			
Surrogate: 1,2-Dichloroethane-d4	6.29		ug/L	6.25		101	80-129			
Surrogate: Toluene-d8	6.25		ug/L	6.25		100	80-120			
Surrogate: 4-Bromofluorobenzene	6.37		ug/L	6.25		102	80-120			
Surrogate: 1,2-Dichlorobenzene-d4	5.11		ug/L	5.00		102	80-120			

<b>LCS Dup (BNJ0016-BSD1)</b>										
					Prepared: 01-Oct-2025 Analyzed: 01-Oct-2025 15:26					
Chloromethane	9.02	0.50	ug/L	10.0		90.2	60-138	9.51	30	
Vinyl Chloride	9.99	0.10	ug/L	10.0		99.9	66-133	4.96	30	
Bromomethane	9.69	1.00	ug/L	10.0		96.9	72-131	4.95	30	
Chloroethane	10.3	0.20	ug/L	10.0		103	60-155	1.52	30	
Trichlorofluoromethane	10.0	0.20	ug/L	10.0		100	62-141	1.09	30	
Acrolein	52.9	5.00	ug/L	50.0		106	52-190	3.29	30	
1,1,2-Trichloro-1,2,2-Trifluoroethane	10.1	0.20	ug/L	10.0		101	76-129	3.88	30	
Acetone	52.2	5.00	ug/L	50.0		104	58-142	2.38	30	
1,1-Dichloroethene	9.75	0.20	ug/L	10.0		97.5	69-135	3.06	30	
Iodomethane	9.60	1.00	ug/L	10.0		96.0	56-147	1.27	30	



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

Reported:  
10-Oct-2025 09:37

Analysis by: Analytical Resources, LLC

Volatile Organic Compounds - Quality Control

Batch BNJ0016 - EPA 8260D in Water

Instrument: NT20 Analyst: LNH

QC Sample/Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
<b>LCS Dup (BNJ0016-BSD1)</b>		Prepared: 01-Oct-2025 Analyzed: 01-Oct-2025 15:26								
Methylene Chloride	10.2	1.00	ug/L	10.0		102	65-135	0.66	30	
Acrylonitrile	10.2	1.00	ug/L	10.0		102	64-134	3.31	30	
Carbon Disulfide	9.73	0.20	ug/L	10.0		97.3	78-125	1.54	30	
trans-1,2-Dichloroethene	9.87	0.20	ug/L	10.0		98.7	78-128	0.16	30	
Vinyl Acetate	8.71	0.20	ug/L	10.0		87.1	55-138	3.07	30	
1,1-Dichloroethane	10.0	0.20	ug/L	10.0		100	76-124	0.96	30	
2-Butanone	51.0	5.00	ug/L	50.0		102	61-140	4.38	30	
2,2-Dichloropropane	8.96	0.20	ug/L	10.0		89.6	66-147	3.44	30	
cis-1,2-Dichloroethene	10.2	0.20	ug/L	10.0		102	80-121	0.41	30	
Chloroform	9.97	0.20	ug/L	10.0		99.7	80-122	2.01	30	
Bromochloromethane	10.2	0.20	ug/L	10.0		102	80-121	0.46	30	
1,1,1-Trichloroethane	9.98	0.20	ug/L	10.0		99.8	79-123	1.00	30	
1,1-Dichloropropene	9.72	0.10	ug/L	10.0		97.2	80-127	3.48	30	
Carbon tetrachloride	9.86	0.20	ug/L	10.0		98.6	53-137	1.55	30	
1,2-Dichloroethane	9.69	0.20	ug/L	10.0		96.9	75-123	1.89	30	
Benzene	9.99	0.20	ug/L	10.0		99.9	80-120	2.17	30	
Trichloroethene	10.2	0.20	ug/L	10.0		102	80-120	2.44	30	
1,2-Dichloropropane	9.91	0.20	ug/L	10.0		99.1	80-120	1.78	30	
Bromodichloromethane	10.1	0.20	ug/L	10.0		101	80-121	2.71	30	
Dibromomethane	10.4	0.20	ug/L	10.0		104	80-120	1.87	30	
2-Chloroethyl vinyl ether	9.96	1.00	ug/L	10.0		99.6	64-120	2.47	30	
4-Methyl-2-Pentanone	52.2	2.50	ug/L	50.0		104	67-133	0.50	30	
cis-1,3-Dichloropropene	10.1	0.20	ug/L	10.0		101	80-124	0.11	30	
Toluene	9.69	0.20	ug/L	10.0		96.9	80-120	2.50	30	
trans-1,3-Dichloropropene	10.0	0.20	ug/L	10.0		100	71-127	1.68	30	
2-Hexanone	50.5	5.00	ug/L	50.0		101	69-133	1.07	30	
1,1,2-Trichloroethane	10.3	0.20	ug/L	10.0		103	80-121	0.02	30	
1,3-Dichloropropane	10.1	0.10	ug/L	10.0		101	80-120	1.00	30	
Tetrachloroethene	9.70	0.20	ug/L	10.0		97.0	80-120	2.53	30	
Dibromochloromethane	9.86	0.20	ug/L	10.0		98.6	65-135	2.24	30	
1,2-Dibromoethane	10.3	0.10	ug/L	10.0		103	80-121	1.48	30	
Chlorobenzene	9.84	0.20	ug/L	10.0		98.4	80-120	3.03	30	
Ethylbenzene	9.87	0.20	ug/L	10.0		98.7	80-120	2.89	30	
1,1,1,2-Tetrachloroethane	10.2	0.20	ug/L	10.0		102	80-120	0.65	30	
m,p-Xylene	19.5	0.40	ug/L	20.0		97.5	80-121	3.26	30	
o-Xylene	10.2	0.20	ug/L	10.0		102	80-121	2.12	30	
Xylenes, total	29.7	0.60	ug/L	30.0		98.9	76-127	2.87	30	
Styrene	10.1	0.20	ug/L	10.0		101	80-124	1.62	30	
Bromoform	10.3	0.20	ug/L	10.0		103	51-134	2.94	30	
1,1,2,2-Tetrachloroethane	9.94	0.20	ug/L	10.0		99.4	77-123	2.94	30	
1,2,3-Trichloropropane	10.2	0.25	ug/L	10.0		102	76-125	2.34	30	



WSP USA, Inc.  
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Vancouver WA, 98660-3231

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

**Reported:**  
10-Oct-2025 09:37

**Analysis by: Analytical Resources, LLC**

**Volatile Organic Compounds - Quality Control**

**Batch BNJ0016 - EPA 8260D in Water**

Instrument: NT20 Analyst: LNH

QC Sample/Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
<b>LCS Dup (BNJ0016-BSD1)</b>										
					Prepared: 01-Oct-2025 Analyzed: 01-Oct-2025 15:26					
trans-1,4-Dichloro 2-Butene	9.96	1.00	ug/L	10.0		99.6	55-129	0.69	30	
n-Propylbenzene	9.66	0.20	ug/L	10.0		96.6	78-130	4.56	30	
Bromobenzene	9.71	0.20	ug/L	10.0		97.1	80-120	4.57	30	
Isopropyl Benzene	9.88	0.20	ug/L	10.0		98.8	80-128	3.98	30	
2-Chlorotoluene	9.50	0.10	ug/L	10.0		95.0	78-122	4.45	30	
4-Chlorotoluene	9.68	0.20	ug/L	10.0		96.8	80-121	3.35	30	
t-Butylbenzene	9.70	0.20	ug/L	10.0		97.0	78-125	2.55	30	
1,3,5-Trimethylbenzene	9.80	0.20	ug/L	10.0		98.0	80-129	4.40	30	
1,2,4-Trimethylbenzene	9.85	0.20	ug/L	10.0		98.5	80-127	4.01	30	
s-Butylbenzene	9.73	0.20	ug/L	10.0		97.3	78-129	2.57	30	
4-Isopropyl Toluene	9.78	0.20	ug/L	10.0		97.8	79-130	2.67	30	
1,3-Dichlorobenzene	9.45	0.20	ug/L	10.0		94.5	80-120	4.58	30	
1,4-Dichlorobenzene	9.26	0.20	ug/L	10.0		92.6	80-120	4.80	30	
n-Butylbenzene	9.35	0.20	ug/L	10.0		93.5	74-129	2.99	30	
1,2-Dichlorobenzene	9.46	0.20	ug/L	10.0		94.6	80-120	3.32	30	
1,2-Dibromo-3-chloropropane	11.3	0.50	ug/L	10.0		113	62-123	3.66	30	
1,2,4-Trichlorobenzene	9.71	0.50	ug/L	10.0		97.1	64-124	2.19	30	
Hexachloro-1,3-Butadiene	9.16	0.50	ug/L	10.0		91.6	65-145	0.50	30	
Naphthalene	10.3	0.50	ug/L	10.0		103	50-134	11.20	30	
1,2,3-Trichlorobenzene	9.75	0.50	ug/L	10.0		97.5	49-133	2.86	30	
Dichlorodifluoromethane	9.56	0.20	ug/L	10.0		95.6	48-147	3.47	30	
Surrogate: 1,2-Dichloroethane-d4	6.38		ug/L	6.25		102	80-129			
Surrogate: Toluene-d8	6.24		ug/L	6.25		99.8	80-120			
Surrogate: 4-Bromofluorobenzene	6.31		ug/L	6.25		101	80-120			
Surrogate: 1,2-Dichlorobenzene-d4	5.07		ug/L	5.00		101	80-120			

<b>Matrix Spike (BNJ0016-MS1)</b>										
					Source: 25I0560-04 Prepared: 01-Oct-2025 Analyzed: 02-Oct-2025 01:29					
Chloromethane	8.21	0.50	ug/L	10.0	ND	82.1	60-138			
Vinyl Chloride	9.40	0.10	ug/L	10.0	ND	94.0	66-133			
Bromomethane	9.74	1.00	ug/L	10.0	ND	97.4	72-131			
Chloroethane	8.20	0.20	ug/L	10.0	ND	82.0	60-155			
Trichlorofluoromethane	10.0	0.20	ug/L	10.0	ND	100	62-141			
Acrolein	45.5	5.00	ug/L	50.0	ND	91.0	52-190			
1,1,2-Trichloro-1,2,2-Trifluoroethane	10.2	0.20	ug/L	10.0	ND	102	76-129			
Acetone	49.6	5.00	ug/L	50.0	ND	99.1	58-142			
1,1-Dichloroethene	9.97	0.20	ug/L	10.0	ND	99.7	69-135			
Iodomethane	9.82	1.00	ug/L	10.0	ND	98.2	56-147			
Methylene Chloride	10.3	1.00	ug/L	10.0	ND	103	65-135			
Acrylonitrile	10.2	1.00	ug/L	10.0	ND	102	64-134			
Carbon Disulfide	9.91	0.20	ug/L	10.0	ND	99.1	78-125			
trans-1,2-Dichloroethene	9.91	0.20	ug/L	10.0	ND	99.1	78-128			
Vinyl Acetate	7.23	0.20	ug/L	10.0	ND	72.3	55-138			



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

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

Reported:  
10-Oct-2025 09:37

Analysis by: Analytical Resources, LLC

Volatile Organic Compounds - Quality Control

Batch BNJ0016 - EPA 8260D in Water

Instrument: NT20 Analyst: LNH

QC Sample/Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
<b>Matrix Spike (BNJ0016-MS1)</b>										
		<b>Source: 2510560-04</b>			Prepared: 01-Oct-2025		Analyzed: 02-Oct-2025 01:29			
1,1-Dichloroethane	10.2	0.20	ug/L	10.0	ND	102	76-124			
2-Butanone	50.7	5.00	ug/L	50.0	ND	101	61-140			
2,2-Dichloropropane	7.55	0.20	ug/L	10.0	ND	75.5	66-147			
cis-1,2-Dichloroethene	9.83	0.20	ug/L	10.0	ND	98.3	80-121			
Chloroform	10.3	0.20	ug/L	10.0	ND	103	80-122			
Bromochloromethane	10.5	0.20	ug/L	10.0	ND	105	80-121			
1,1,1-Trichloroethane	10.3	0.20	ug/L	10.0	ND	103	79-123			
1,1-Dichloropropene	10.4	0.10	ug/L	10.0	ND	104	80-127			
Carbon tetrachloride	11.0	0.20	ug/L	10.0	ND	110	53-137			
1,2-Dichloroethane	10.3	0.20	ug/L	10.0	ND	103	75-123			
Benzene	10.3	0.20	ug/L	10.0	ND	103	80-120			
Trichloroethene	10.7	0.20	ug/L	10.0	ND	107	80-120			
1,2-Dichloropropane	10.5	0.20	ug/L	10.0	ND	105	80-120			
Bromodichloromethane	10.8	0.20	ug/L	10.0	ND	108	80-121			
Dibromomethane	10.8	0.20	ug/L	10.0	ND	108	80-120			
2-Chloroethyl vinyl ether	ND	1.00	ug/L	10.0	ND		64-120			*, U
4-Methyl-2-Pentanone	53.4	2.50	ug/L	50.0	ND	107	67-133			
cis-1,3-Dichloropropene	10.1	0.20	ug/L	10.0	ND	101	80-124			
Toluene	10.4	0.20	ug/L	10.0	ND	104	80-120			
trans-1,3-Dichloropropene	10.1	0.20	ug/L	10.0	ND	101	71-127			
2-Hexanone	51.3	5.00	ug/L	50.0	ND	103	69-133			
1,1,2-Trichloroethane	10.9	0.20	ug/L	10.0	ND	109	80-121			
1,3-Dichloropropane	10.4	0.10	ug/L	10.0	ND	104	80-120			
Tetrachloroethene	10.6	0.20	ug/L	10.0	ND	106	80-120			
Dibromochloromethane	10.7	0.20	ug/L	10.0	ND	107	65-135			
1,2-Dibromoethane	10.9	0.10	ug/L	10.0	ND	109	80-121			
Chlorobenzene	10.6	0.20	ug/L	10.0	ND	106	80-120			
Ethylbenzene	10.6	0.20	ug/L	10.0	ND	106	80-120			
1,1,1,2-Tetrachloroethane	11.0	0.20	ug/L	10.0	ND	110	80-120			
m,p-Xylene	21.0	0.40	ug/L	20.0	ND	105	80-121			
o-Xylene	10.8	0.20	ug/L	10.0	ND	108	80-121			
Xylenes, total	31.7	0.60	ug/L	30.0	ND	106	76-127			
Styrene	10.7	0.20	ug/L	10.0	ND	107	80-124			
Bromoform	11.1	0.20	ug/L	10.0	ND	111	51-134			
1,1,2,2-Tetrachloroethane	10.5	0.20	ug/L	10.0	ND	105	77-123			
1,2,3-Trichloropropane	10.4	0.25	ug/L	10.0	ND	104	76-125			
trans-1,4-Dichloro 2-Butene	9.52	1.00	ug/L	10.0	ND	95.2	55-129			
n-Propylbenzene	10.3	0.20	ug/L	10.0	ND	103	78-130			
Bromobenzene	10.4	0.20	ug/L	10.0	ND	104	80-120			
Isopropyl Benzene	10.6	0.20	ug/L	10.0	ND	106	80-128			
2-Chlorotoluene	10.4	0.10	ug/L	10.0	ND	104	78-122			



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

Reported:  
10-Oct-2025 09:37

Analysis by: Analytical Resources, LLC

Volatile Organic Compounds - Quality Control

Batch BNJ0016 - EPA 8260D in Water

Instrument: NT20 Analyst: LNH

QC Sample/Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
<b>Matrix Spike (BNJ0016-MS1)</b>										
		<b>Source: 25I0560-04</b>		Prepared: 01-Oct-2025		Analyzed: 02-Oct-2025 01:29				
4-Chlorotoluene	10.6	0.20	ug/L	10.0	ND	106	80-121			
t-Butylbenzene	10.5	0.20	ug/L	10.0	ND	105	78-125			
1,3,5-Trimethylbenzene	10.7	0.20	ug/L	10.0	ND	107	80-129			
1,2,4-Trimethylbenzene	10.7	0.20	ug/L	10.0	ND	107	80-127			
s-Butylbenzene	10.5	0.20	ug/L	10.0	ND	105	78-129			
4-Isopropyl Toluene	10.6	0.20	ug/L	10.0	ND	106	79-130			
1,3-Dichlorobenzene	10.5	0.20	ug/L	10.0	ND	105	80-120			
1,4-Dichlorobenzene	10.4	0.20	ug/L	10.0	ND	104	80-120			
n-Butylbenzene	10.5	0.20	ug/L	10.0	ND	105	74-129			
1,2-Dichlorobenzene	10.4	0.20	ug/L	10.0	ND	104	80-120			
1,2-Dibromo-3-chloropropane	11.5	0.50	ug/L	10.0	ND	115	62-123			
1,2,4-Trichlorobenzene	11.0	0.50	ug/L	10.0	ND	110	64-124			
Hexachloro-1,3-Butadiene	10.3	0.50	ug/L	10.0	ND	103	65-145			
Naphthalene	11.0	0.50	ug/L	10.0	ND	110	50-134			
1,2,3-Trichlorobenzene	11.3	0.50	ug/L	10.0	ND	113	49-133			
Dichlorodifluoromethane	7.96	0.20	ug/L	10.0	ND	79.6	48-147			
Surrogate: 1,2-Dichloroethane-d4	6.16		ug/L	6.25	6.19	98.5	80-129			
Surrogate: Toluene-d8	6.27		ug/L	6.25	6.29	100	80-120			
Surrogate: 4-Bromofluorobenzene	6.46		ug/L	6.25	6.16	103	80-120			
Surrogate: 1,2-Dichlorobenzene-d4	5.14		ug/L	5.00	4.97	103	80-120			

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

<b>Matrix Spike Dup (BNJ0016-MSD1)</b>										
		<b>Source: 25I0560-04</b>		Prepared: 01-Oct-2025		Analyzed: 02-Oct-2025 01:53				
Chloromethane	8.86	0.50	ug/L	10.0	ND	88.6	60-138	7.59	30	
Vinyl Chloride	9.93	0.10	ug/L	10.0	ND	99.3	66-133	5.47	30	
Bromomethane	10.2	1.00	ug/L	10.0	ND	102	72-131	4.51	30	
Chloroethane	11.3	0.20	ug/L	10.0	ND	113	60-155	31.80	30	*
Trichlorofluoromethane	10.3	0.20	ug/L	10.0	ND	103	62-141	2.16	30	
Acrolein	45.0	5.00	ug/L	50.0	ND	89.9	52-190	1.23	30	
1,1,2-Trichloro-1,2,2-Trifluoroethane	10.6	0.20	ug/L	10.0	ND	106	76-129	4.03	30	
Acetone	55.5	5.00	ug/L	50.0	ND	111	58-142	11.40	30	
1,1-Dichloroethene	10.2	0.20	ug/L	10.0	ND	102	69-135	2.16	30	
Iodomethane	10.1	1.00	ug/L	10.0	ND	101	56-147	2.47	30	
Methylene Chloride	10.6	1.00	ug/L	10.0	ND	106	65-135	2.62	30	
Acrylonitrile	10.7	1.00	ug/L	10.0	ND	107	64-134	5.51	30	
Carbon Disulfide	10.0	0.20	ug/L	10.0	ND	100	78-125	1.20	30	
trans-1,2-Dichloroethene	10.1	0.20	ug/L	10.0	ND	101	78-128	1.96	30	
Vinyl Acetate	7.25	0.20	ug/L	10.0	ND	72.5	55-138	0.26	30	
1,1-Dichloroethane	10.4	0.20	ug/L	10.0	ND	104	76-124	1.40	30	
2-Butanone	52.1	5.00	ug/L	50.0	ND	104	61-140	2.64	30	
2,2-Dichloropropane	7.61	0.20	ug/L	10.0	ND	76.1	66-147	0.69	30	
cis-1,2-Dichloroethene	10.1	0.20	ug/L	10.0	ND	101	80-121	2.77	30	



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

**Reported:**  
10-Oct-2025 09:37

**Analysis by: Analytical Resources, LLC**

**Volatile Organic Compounds - Quality Control**

**Batch BNJ0016 - EPA 8260D in Water**

Instrument: NT20 Analyst: LNH

QC Sample/Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
<b>Matrix Spike Dup (BNJ0016-MSD1)</b>										
		<b>Source: 25I0560-04</b>			Prepared: 01-Oct-2025		Analyzed: 02-Oct-2025 01:53			
Chloroform	10.8	0.20	ug/L	10.0	ND	108	80-122	4.47	30	
Bromochloromethane	10.7	0.20	ug/L	10.0	ND	107	80-121	2.33	30	
1,1,1-Trichloroethane	10.5	0.20	ug/L	10.0	ND	105	79-123	2.27	30	
1,1-Dichloropropene	10.3	0.10	ug/L	10.0	ND	103	80-127	0.67	30	
Carbon tetrachloride	10.6	0.20	ug/L	10.0	ND	106	53-137	3.11	30	
1,2-Dichloroethane	10.2	0.20	ug/L	10.0	ND	102	75-123	0.47	30	
Benzene	10.2	0.20	ug/L	10.0	ND	102	80-120	0.99	30	
Trichloroethene	10.2	0.20	ug/L	10.0	ND	102	80-120	4.37	30	
1,2-Dichloropropane	10.6	0.20	ug/L	10.0	ND	106	80-120	0.49	30	
Bromodichloromethane	11.0	0.20	ug/L	10.0	ND	110	80-121	1.63	30	
Dibromomethane	11.0	0.20	ug/L	10.0	ND	110	80-120	2.54	30	
2-Chloroethyl vinyl ether	ND	1.00	ug/L	10.0	ND		64-120		30	*, U
4-Methyl-2-Pentanone	54.2	2.50	ug/L	50.0	ND	108	67-133	1.43	30	
cis-1,3-Dichloropropene	10.1	0.20	ug/L	10.0	ND	101	80-124	0.67	30	
Toluene	10.4	0.20	ug/L	10.0	ND	104	80-120	0.71	30	
trans-1,3-Dichloropropene	10.5	0.20	ug/L	10.0	ND	105	71-127	3.65	30	
2-Hexanone	52.5	5.00	ug/L	50.0	ND	105	69-133	2.18	30	
1,1,2-Trichloroethane	11.0	0.20	ug/L	10.0	ND	110	80-121	0.46	30	
1,3-Dichloropropane	10.5	0.10	ug/L	10.0	ND	105	80-120	1.64	30	
Tetrachloroethene	10.6	0.20	ug/L	10.0	ND	106	80-120	0.18	30	
Dibromochloromethane	10.9	0.20	ug/L	10.0	ND	109	65-135	1.55	30	
1,2-Dibromoethane	11.2	0.10	ug/L	10.0	ND	112	80-121	1.94	30	
Chlorobenzene	10.6	0.20	ug/L	10.0	ND	106	80-120	0.51	30	
Ethylbenzene	10.6	0.20	ug/L	10.0	ND	106	80-120	0.78	30	
1,1,1,2-Tetrachloroethane	11.1	0.20	ug/L	10.0	ND	111	80-120	0.79	30	
m,p-Xylene	21.2	0.40	ug/L	20.0	ND	106	80-121	1.21	30	
o-Xylene	10.8	0.20	ug/L	10.0	ND	108	80-121	0.18	30	
Xylenes, total	32.0	0.60	ug/L	30.0	ND	107	76-127	0.86	30	
Styrene	10.9	0.20	ug/L	10.0	ND	109	80-124	2.30	30	
Bromoform	11.0	0.20	ug/L	10.0	ND	110	51-134	0.96	30	
1,1,1,2,2-Tetrachloroethane	10.7	0.20	ug/L	10.0	ND	107	77-123	1.80	30	
1,2,3-Trichloropropane	10.5	0.25	ug/L	10.0	ND	105	76-125	1.72	30	
trans-1,4-Dichloro 2-Butene	8.68	1.00	ug/L	10.0	ND	86.8	55-129	9.16	30	
n-Propylbenzene	10.3	0.20	ug/L	10.0	ND	103	78-130	0.10	30	
Bromobenzene	10.3	0.20	ug/L	10.0	ND	103	80-120	0.42	30	
Isopropyl Benzene	10.4	0.20	ug/L	10.0	ND	104	80-128	1.43	30	
2-Chlorotoluene	10.2	0.10	ug/L	10.0	ND	102	78-122	2.18	30	
4-Chlorotoluene	10.6	0.20	ug/L	10.0	ND	106	80-121	0.54	30	
t-Butylbenzene	10.4	0.20	ug/L	10.0	ND	104	78-125	0.84	30	
1,3,5-Trimethylbenzene	10.6	0.20	ug/L	10.0	ND	106	80-129	1.43	30	
1,2,4-Trimethylbenzene	10.7	0.20	ug/L	10.0	ND	107	80-127	0.37	30	



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

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

**Reported:**  
10-Oct-2025 09:37

**Analysis by: Analytical Resources, LLC**

**Volatile Organic Compounds - Quality Control**

**Batch BNJ0016 - EPA 8260D in Water**

Instrument: NT20 Analyst: LNH

QC Sample/Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
<b>Matrix Spike Dup (BNJ0016-MSD1)</b>										
		<b>Source: 25I0560-04</b>		Prepared: 01-Oct-2025		Analyzed: 02-Oct-2025 01:53				
s-Butylbenzene	10.4	0.20	ug/L	10.0	ND	104	78-129	1.07	30	
4-Isopropyl Toluene	10.7	0.20	ug/L	10.0	ND	107	79-130	0.40	30	
1,3-Dichlorobenzene	10.4	0.20	ug/L	10.0	ND	104	80-120	0.27	30	
1,4-Dichlorobenzene	10.3	0.20	ug/L	10.0	ND	103	80-120	0.32	30	
n-Butylbenzene	10.4	0.20	ug/L	10.0	ND	104	74-129	0.66	30	
1,2-Dichlorobenzene	10.4	0.20	ug/L	10.0	ND	104	80-120	0.25	30	
1,2-Dibromo-3-chloropropane	11.2	0.50	ug/L	10.0	ND	112	62-123	2.34	30	
1,2,4-Trichlorobenzene	10.9	0.50	ug/L	10.0	ND	109	64-124	0.25	30	
Hexachloro-1,3-Butadiene	10.4	0.50	ug/L	10.0	ND	104	65-145	1.38	30	
Naphthalene	11.2	0.50	ug/L	10.0	ND	112	50-134	1.63	30	
1,2,3-Trichlorobenzene	11.2	0.50	ug/L	10.0	ND	112	49-133	1.42	30	
Dichlorodifluoromethane	8.10	0.20	ug/L	10.0	ND	81.0	48-147	1.69	30	
<i>Surrogate: 1,2-Dichloroethane-d4</i>	6.41		ug/L	6.25	6.19	103	80-129			
<i>Surrogate: Toluene-d8</i>	6.33		ug/L	6.25	6.29	101	80-120			
<i>Surrogate: 4-Bromofluorobenzene</i>	6.48		ug/L	6.25	6.16	104	80-120			
<i>Surrogate: 1,2-Dichlorobenzene-d4</i>	5.12		ug/L	5.00	4.97	102	80-120			

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: [none] Project Manager: Gary Zimmerman	<b>Reported:</b> 10-Oct-2025 09:37
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**Analysis by: Analytical Resources, LLC**

**Volatile Organic Compounds - Quality Control**

**Batch BNJ0044 - EPA 8260D in Water**

Instrument: NT20 Analyst: LNH

QC Sample/Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC %REC	Limits	RPD	RPD Limit	Notes
<b>Blank (BNJ0044-BLK1)</b>										
Prepared: 02-Oct-2025 Analyzed: 02-Oct-2025 09:01										
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
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



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

**Reported:**  
10-Oct-2025 09:37

**Analysis by: Analytical Resources, LLC**

**Volatile Organic Compounds - Quality Control**

**Batch BNJ0044 - EPA 8260D in Water**

Instrument: NT20 Analyst: LNH

QC Sample/Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
<b>Blank (BNJ0044-BLK1)</b>										
Prepared: 02-Oct-2025 Analyzed: 02-Oct-2025 09:01										
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
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
<i>Surrogate: 1,2-Dichloroethane-d4</i>	6.48		ug/L	6.25		104	80-129			
<i>Surrogate: Toluene-d8</i>	6.23		ug/L	6.25		99.7	80-120			
<i>Surrogate: 4-Bromofluorobenzene</i>	6.24		ug/L	6.25		99.8	80-120			
<i>Surrogate: 1,2-Dichlorobenzene-d4</i>	4.99		ug/L	5.00		99.8	80-120			
<b>LCS (BNJ0044-BS1)</b>										
Prepared: 02-Oct-2025 Analyzed: 02-Oct-2025 07:28										
Chloromethane	9.70	0.50	ug/L	10.0		97.0	60-138			
Vinyl Chloride	10.8	0.10	ug/L	10.0		108	66-133			
Bromomethane	10.6	1.00	ug/L	10.0		106	72-131			
Chloroethane	10.6	0.20	ug/L	10.0		106	60-155			
Trichlorofluoromethane	10.7	0.20	ug/L	10.0		107	62-141			



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

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

**Reported:**  
10-Oct-2025 09:37

**Analysis by: Analytical Resources, LLC**

**Volatile Organic Compounds - Quality Control**

**Batch BNJ0044 - EPA 8260D in Water**

Instrument: NT20 Analyst: LNH

QC Sample/Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
<b>LCS (BNJ0044-BS1)</b>										
						Prepared: 02-Oct-2025 Analyzed: 02-Oct-2025 07:28				
Acrolein	49.0	5.00	ug/L	50.0		98.1	52-190			
1,1,2-Trichloro-1,2,2-Trifluoroethane	11.3	0.20	ug/L	10.0		113	76-129			
Acetone	50.7	5.00	ug/L	50.0		101	58-142			
1,1-Dichloroethene	10.5	0.20	ug/L	10.0		105	69-135			
Iodomethane	10.5	1.00	ug/L	10.0		105	56-147			
Methylene Chloride	10.5	1.00	ug/L	10.0		105	65-135			
Acrylonitrile	10.0	1.00	ug/L	10.0		100	64-134			
Carbon Disulfide	9.96	0.20	ug/L	10.0		99.6	78-125			
trans-1,2-Dichloroethene	10.5	0.20	ug/L	10.0		105	78-128			
Vinyl Acetate	10.5	0.20	ug/L	10.0		105	55-138			
1,1-Dichloroethane	10.2	0.20	ug/L	10.0		102	76-124			
2-Butanone	49.4	5.00	ug/L	50.0		98.7	61-140			
2,2-Dichloropropane	10.4	0.20	ug/L	10.0		104	66-147			
cis-1,2-Dichloroethene	10.0	0.20	ug/L	10.0		100	80-121			
Chloroform	10.6	0.20	ug/L	10.0		106	80-122			
Bromochloromethane	10.5	0.20	ug/L	10.0		105	80-121			
1,1,1-Trichloroethane	10.6	0.20	ug/L	10.0		106	79-123			
1,1-Dichloropropene	10.3	0.10	ug/L	10.0		103	80-127			
Carbon tetrachloride	10.7	0.20	ug/L	10.0		107	53-137			
1,2-Dichloroethane	10.4	0.20	ug/L	10.0		104	75-123			
Benzene	10.4	0.20	ug/L	10.0		104	80-120			
Trichloroethene	10.7	0.20	ug/L	10.0		107	80-120			
1,2-Dichloropropane	10.4	0.20	ug/L	10.0		104	80-120			
Bromodichloromethane	10.7	0.20	ug/L	10.0		107	80-121			
Dibromomethane	10.9	0.20	ug/L	10.0		109	80-120			
2-Chloroethyl vinyl ether	9.65	1.00	ug/L	10.0		96.5	64-120			
4-Methyl-2-Pentanone	52.1	2.50	ug/L	50.0		104	67-133			
cis-1,3-Dichloropropene	10.5	0.20	ug/L	10.0		105	80-124			
Toluene	10.2	0.20	ug/L	10.0		102	80-120			
trans-1,3-Dichloropropene	10.8	0.20	ug/L	10.0		108	71-127			
2-Hexanone	48.6	5.00	ug/L	50.0		97.3	69-133			
1,1,2-Trichloroethane	10.5	0.20	ug/L	10.0		105	80-121			
1,3-Dichloropropane	10.2	0.10	ug/L	10.0		102	80-120			
Tetrachloroethene	10.5	0.20	ug/L	10.0		105	80-120			
Dibromochloromethane	10.4	0.20	ug/L	10.0		104	65-135			
1,2-Dibromoethane	10.7	0.10	ug/L	10.0		107	80-121			
Chlorobenzene	10.4	0.20	ug/L	10.0		104	80-120			
Ethylbenzene	10.4	0.20	ug/L	10.0		104	80-120			
1,1,1,2-Tetrachloroethane	10.8	0.20	ug/L	10.0		108	80-120			
m,p-Xylene	20.7	0.40	ug/L	20.0		103	80-121			
o-Xylene	10.6	0.20	ug/L	10.0		106	80-121			



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

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

**Reported:**  
10-Oct-2025 09:37

**Analysis by: Analytical Resources, LLC**

**Volatile Organic Compounds - Quality Control**

**Batch BNJ0044 - EPA 8260D in Water**

Instrument: NT20 Analyst: LNH

QC Sample/Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
<b>LCS (BNJ0044-BS1)</b>										
					Prepared: 02-Oct-2025 Analyzed: 02-Oct-2025 07:28					
Xylenes, total	31.3	0.60	ug/L	30.0		104	76-127			
Styrene	10.6	0.20	ug/L	10.0		106	80-124			
Bromoform	11.1	0.20	ug/L	10.0		111	51-134			
1,1,2,2-Tetrachloroethane	10.6	0.20	ug/L	10.0		106	77-123			
1,2,3-Trichloropropane	10.6	0.25	ug/L	10.0		106	76-125			
trans-1,4-Dichloro 2-Butene	10.6	1.00	ug/L	10.0		106	55-129			
n-Propylbenzene	10.6	0.20	ug/L	10.0		106	78-130			
Bromobenzene	10.6	0.20	ug/L	10.0		106	80-120			
Isopropyl Benzene	10.7	0.20	ug/L	10.0		107	80-128			
2-Chlorotoluene	10.4	0.10	ug/L	10.0		104	78-122			
4-Chlorotoluene	10.7	0.20	ug/L	10.0		107	80-121			
t-Butylbenzene	10.5	0.20	ug/L	10.0		105	78-125			
1,3,5-Trimethylbenzene	10.8	0.20	ug/L	10.0		108	80-129			
1,2,4-Trimethylbenzene	10.8	0.20	ug/L	10.0		108	80-127			
s-Butylbenzene	10.7	0.20	ug/L	10.0		107	78-129			
4-Isopropyl Toluene	10.9	0.20	ug/L	10.0		109	79-130			
1,3-Dichlorobenzene	10.5	0.20	ug/L	10.0		105	80-120			
1,4-Dichlorobenzene	10.3	0.20	ug/L	10.0		103	80-120			
n-Butylbenzene	10.6	0.20	ug/L	10.0		106	74-129			
1,2-Dichlorobenzene	10.2	0.20	ug/L	10.0		102	80-120			
1,2-Dibromo-3-chloropropane	10.4	0.50	ug/L	10.0		104	62-123			
1,2,4-Trichlorobenzene	10.4	0.50	ug/L	10.0		104	64-124			
Hexachloro-1,3-Butadiene	10.6	0.50	ug/L	10.0		106	65-145			
Naphthalene	9.31	0.50	ug/L	10.0		93.1	50-134			
1,2,3-Trichlorobenzene	10.1	0.50	ug/L	10.0		101	49-133			
Dichlorodifluoromethane	10.3	0.20	ug/L	10.0		103	48-147			
Surrogate: 1,2-Dichloroethane-d4	6.33		ug/L	6.25		101	80-129			
Surrogate: Toluene-d8	6.30		ug/L	6.25		101	80-120			
Surrogate: 4-Bromofluorobenzene	6.38		ug/L	6.25		102	80-120			
Surrogate: 1,2-Dichlorobenzene-d4	5.04		ug/L	5.00		101	80-120			
<b>LCS Dup (BNJ0044-BSD1)</b>										
					Prepared: 02-Oct-2025 Analyzed: 02-Oct-2025 08:14					
Chloromethane	9.64	0.50	ug/L	10.0		96.4	60-138	0.61	30	
Vinyl Chloride	10.2	0.10	ug/L	10.0		102	66-133	6.00	30	
Bromomethane	10.2	1.00	ug/L	10.0		102	72-131	4.12	30	
Chloroethane	10.7	0.20	ug/L	10.0		107	60-155	0.88	30	
Trichlorofluoromethane	10.8	0.20	ug/L	10.0		108	62-141	0.64	30	
Acrolein	51.5	5.00	ug/L	50.0		103	52-190	4.86	30	
1,1,2-Trichloro-1,2,2-Trifluoroethane	11.0	0.20	ug/L	10.0		110	76-129	3.25	30	
Acetone	47.6	5.00	ug/L	50.0		95.1	58-142	6.40	30	
1,1-Dichloroethene	10.5	0.20	ug/L	10.0		105	69-135	0.15	30	
Iodomethane	10.2	1.00	ug/L	10.0		102	56-147	2.02	30	



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

Reported:  
10-Oct-2025 09:37

Analysis by: Analytical Resources, LLC

Volatile Organic Compounds - Quality Control

Batch BNJ0044 - EPA 8260D in Water

Instrument: NT20 Analyst: LNH

QC Sample/Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
<b>LCS Dup (BNJ0044-BSD1)</b>										
					Prepared: 02-Oct-2025 Analyzed: 02-Oct-2025 08:14					
Methylene Chloride	10.6	1.00	ug/L	10.0		106	65-135	0.91	30	
Acrylonitrile	10.4	1.00	ug/L	10.0		104	64-134	3.89	30	
Carbon Disulfide	9.99	0.20	ug/L	10.0		99.9	78-125	0.24	30	
trans-1,2-Dichloroethene	10.4	0.20	ug/L	10.0		104	78-128	0.72	30	
Vinyl Acetate	10.9	0.20	ug/L	10.0		109	55-138	3.89	30	
1,1-Dichloroethane	10.3	0.20	ug/L	10.0		103	76-124	1.03	30	
2-Butanone	51.3	5.00	ug/L	50.0		103	61-140	3.78	30	
2,2-Dichloropropane	10.6	0.20	ug/L	10.0		106	66-147	1.70	30	
cis-1,2-Dichloroethene	10.0	0.20	ug/L	10.0		100	80-121	0.11	30	
Chloroform	10.6	0.20	ug/L	10.0		106	80-122	0.41	30	
Bromochloromethane	10.7	0.20	ug/L	10.0		107	80-121	1.61	30	
1,1,1-Trichloroethane	10.4	0.20	ug/L	10.0		104	79-123	1.76	30	
1,1-Dichloropropene	10.7	0.10	ug/L	10.0		107	80-127	3.76	30	
Carbon tetrachloride	10.7	0.20	ug/L	10.0		107	53-137	0.24	30	
1,2-Dichloroethane	10.7	0.20	ug/L	10.0		107	75-123	2.00	30	
Benzene	10.7	0.20	ug/L	10.0		107	80-120	2.45	30	
Trichloroethene	10.8	0.20	ug/L	10.0		108	80-120	0.23	30	
1,2-Dichloropropane	10.6	0.20	ug/L	10.0		106	80-120	1.82	30	
Bromodichloromethane	11.0	0.20	ug/L	10.0		110	80-121	2.73	30	
Dibromomethane	11.3	0.20	ug/L	10.0		113	80-120	3.73	30	
2-Chloroethyl vinyl ether	10.6	1.00	ug/L	10.0		106	64-120	9.00	30	
4-Methyl-2-Pentanone	54.4	2.50	ug/L	50.0		109	67-133	4.30	30	
cis-1,3-Dichloropropene	10.9	0.20	ug/L	10.0		109	80-124	4.07	30	
Toluene	10.4	0.20	ug/L	10.0		104	80-120	1.68	30	
trans-1,3-Dichloropropene	11.1	0.20	ug/L	10.0		111	71-127	2.99	30	
2-Hexanone	52.7	5.00	ug/L	50.0		105	69-133	8.02	30	
1,1,2-Trichloroethane	11.1	0.20	ug/L	10.0		111	80-121	6.16	30	
1,3-Dichloropropane	10.8	0.10	ug/L	10.0		108	80-120	5.75	30	
Tetrachloroethene	10.9	0.20	ug/L	10.0		109	80-120	4.04	30	
Dibromochloromethane	11.0	0.20	ug/L	10.0		110	65-135	5.52	30	
1,2-Dibromoethane	11.1	0.10	ug/L	10.0		111	80-121	3.45	30	
Chlorobenzene	10.7	0.20	ug/L	10.0		107	80-120	3.12	30	
Ethylbenzene	10.9	0.20	ug/L	10.0		109	80-120	4.43	30	
1,1,1,2-Tetrachloroethane	11.1	0.20	ug/L	10.0		111	80-120	3.14	30	
m,p-Xylene	21.5	0.40	ug/L	20.0		108	80-121	3.91	30	
o-Xylene	10.9	0.20	ug/L	10.0		109	80-121	3.24	30	
Xylenes, total	32.4	0.60	ug/L	30.0		108	76-127	3.68	30	
Styrene	11.1	0.20	ug/L	10.0		111	80-124	4.19	30	
Bromoform	11.5	0.20	ug/L	10.0		115	51-134	3.59	30	
1,1,2,2-Tetrachloroethane	10.8	0.20	ug/L	10.0		108	77-123	2.43	30	
1,2,3-Trichloropropane	10.8	0.25	ug/L	10.0		108	76-125	2.38	30	



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

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

**Reported:**  
10-Oct-2025 09:37

**Analysis by: Analytical Resources, LLC**

**Volatile Organic Compounds - Quality Control**

**Batch BNJ0044 - EPA 8260D in Water**

Instrument: NT20 Analyst: LNH

QC Sample/Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
<b>LCS Dup (BNJ0044-BSD1)</b>										
					Prepared: 02-Oct-2025 Analyzed: 02-Oct-2025 08:14					
trans-1,4-Dichloro 2-Butene	10.8	1.00	ug/L	10.0		108	55-129	1.83	30	
n-Propylbenzene	10.6	0.20	ug/L	10.0		106	78-130	0.19	30	
Bromobenzene	10.7	0.20	ug/L	10.0		107	80-120	1.29	30	
Isopropyl Benzene	10.8	0.20	ug/L	10.0		108	80-128	0.34	30	
2-Chlorotoluene	10.4	0.10	ug/L	10.0		104	78-122	0.42	30	
4-Chlorotoluene	10.6	0.20	ug/L	10.0		106	80-121	0.86	30	
t-Butylbenzene	10.6	0.20	ug/L	10.0		106	78-125	0.47	30	
1,3,5-Trimethylbenzene	10.8	0.20	ug/L	10.0		108	80-129	0.01	30	
1,2,4-Trimethylbenzene	10.8	0.20	ug/L	10.0		108	80-127	0.32	30	
s-Butylbenzene	10.6	0.20	ug/L	10.0		106	78-129	0.54	30	
4-Isopropyl Toluene	10.8	0.20	ug/L	10.0		108	79-130	0.66	30	
1,3-Dichlorobenzene	10.5	0.20	ug/L	10.0		105	80-120	0.02	30	
1,4-Dichlorobenzene	10.2	0.20	ug/L	10.0		102	80-120	0.93	30	
n-Butylbenzene	10.4	0.20	ug/L	10.0		104	74-129	1.79	30	
1,2-Dichlorobenzene	10.3	0.20	ug/L	10.0		103	80-120	0.58	30	
1,2-Dibromo-3-chloropropane	11.0	0.50	ug/L	10.0		110	62-123	5.77	30	
1,2,4-Trichlorobenzene	10.2	0.50	ug/L	10.0		102	64-124	2.01	30	
Hexachloro-1,3-Butadiene	10.3	0.50	ug/L	10.0		103	65-145	2.45	30	
Naphthalene	9.38	0.50	ug/L	10.0		93.8	50-134	0.70	30	
1,2,3-Trichlorobenzene	10.2	0.50	ug/L	10.0		102	49-133	0.84	30	
Dichlorodifluoromethane	9.95	0.20	ug/L	10.0		99.5	48-147	3.35	30	
Surrogate: 1,2-Dichloroethane-d4	6.29		ug/L	6.25		101	80-129			
Surrogate: Toluene-d8	6.21		ug/L	6.25		99.3	80-120			
Surrogate: 4-Bromofluorobenzene	6.43		ug/L	6.25		103	80-120			
Surrogate: 1,2-Dichlorobenzene-d4	5.05		ug/L	5.00		101	80-120			



WSP USA, Inc. 210 East 13th Street, Suite 300 Vancouver WA, 98660-3231	Project: Landsburg Project Number: [none] Project Manager: Gary Zimmerman	<b>Reported:</b> 10-Oct-2025 09:37
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Analysis by: Analytical Resources, LLC

**Petroleum Hydrocarbons - Quality Control**

**Batch BNI0643 - NWTPH-HCID in Water**

Instrument: FID4 Analyst: VTD

QC Sample/Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
<b>Blank (BNI0643-BLK1)</b>		Prepared: 30-Sep-2025 Analyzed: 02-Oct-2025 15:51								
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
<i>Surrogate: o-Terphenyl</i>	0.183		mg/L	0.224		81.9	50-150			
<i>Surrogate: n-Triacontane</i>	0.188		mg/L	0.224		84.0	50-150			



WSP USA, Inc. 210 East 13th Street, Suite 300 Vancouver WA, 98660-3231	Project: Landsburg Project Number: [none] Project Manager: Gary Zimmerman	<b>Reported:</b> 10-Oct-2025 09:37
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**Analysis by: Analytical Resources, LLC**

**Petroleum Hydrocarbons - Quality Control**

**Batch BNJ0006 - NWTPH-HCID in Water**

Instrument: FID4 Analyst: VTD

QC Sample/Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
<b>Blank (BNJ0006-BLK1)</b>		Prepared: 01-Oct-2025 Analyzed: 02-Oct-2025 18:47								
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
<i>Surrogate: o-Terphenyl</i>	0.202		mg/L	0.224		90.3	50-150			
<i>Surrogate: n-Triacontane</i>	0.203		mg/L	0.224		90.5	50-150			



WSP USA, Inc. 210 East 13th Street, Suite 300 Vancouver WA, 98660-3231	Project: Landsburg Project Number: [none] Project Manager: Gary Zimmerman	<b>Reported:</b> 10-Oct-2025 09:37
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Analysis by: Analytical Resources, LLC

**Petroleum Hydrocarbons - Quality Control**

**Batch BNJ0045 - NWTPH-HCID in Water**

Instrument: FID4 Analyst: VTD

QC Sample/Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
<b>Blank (BNJ0045-BLK1)</b>		Prepared: 02-Oct-2025 Analyzed: 02-Oct-2025 23:11								
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: <i>o</i> -Terphenyl	0.233		mg/L	0.224		104	50-150			
Surrogate: <i>n</i> -Triacontane	0.226		mg/L	0.224		101	50-150			



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

**Reported:**  
10-Oct-2025 09:37

**Analysis by: Analytical Resources, LLC**

**Metals and Metallic Compounds - Quality Control**

**Batch BNI0635 - EPA 200.8 in Water**

Instrument: ICPMS1 Analyst: HAL

QC Sample/Analyte	Isotope	Result	Detection Limit	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
<b>Blank (BNI0635-BLK1)</b>						Prepared: 30-Sep-2025 Analyzed: 30-Sep-2025 16:57						
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
<b>Blank (BNI0635-BLK2)</b>						Prepared: 30-Sep-2025 Analyzed: 01-Oct-2025 19:25						
Antimony	121	ND	0.150	3.00	ug/L							U
<b>LCS (BNI0635-BS1)</b>						Prepared: 30-Sep-2025 Analyzed: 30-Sep-2025 17:02						
Arsenic UCT	75a UCT	25.0	0.100	3.00	ug/L	25.0		100	85-115			
Lead	208	26.3	0.100	10.0	ug/L	25.0		105	85-115			
Selenium UCT	78 UCT	83.7	0.500	25.0	ug/L	80.0		105	85-115			
Thallium	205	25.2	0.100	2.00	ug/L	25.0		101	85-115			
<b>LCS (BNI0635-BS2)</b>						Prepared: 30-Sep-2025 Analyzed: 01-Oct-2025 19:30						
Antimony	121	24.6	0.150	3.00	ug/L	25.0		98.2	85-115			
<b>Duplicate (BNI0635-DUP1)</b>						Source: 25I0560-04 Prepared: 30-Sep-2025 Analyzed: 02-Oct-2025 02:31						
Antimony	121	ND	0.150	3.00	ug/L		ND			20		U
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
Thallium	205	ND	0.100	2.00	ug/L		ND			20		U
<b>Duplicate (BNI0635-DUP2)</b>						Source: 25I0560-04RE1 Prepared: 30-Sep-2025 Analyzed: 02-Oct-2025 20:48						
Selenium UCT	78 UCT	ND	0.500	25.0	ug/L		ND			20		U
<b>Matrix Spike (BNI0635-MS1)</b>						Source: 25I0560-04 Prepared: 30-Sep-2025 Analyzed: 02-Oct-2025 02:36						
Antimony	121	24.4	0.150	3.00	ug/L	25.0	ND	97.6	75-125			
Arsenic UCT	75a UCT	24.5	0.100	3.00	ug/L	25.0	ND	98.1	75-125			
Lead	208	23.9	0.100	10.0	ug/L	25.0	ND	95.7	75-125			
Thallium	205	24.3	0.100	2.00	ug/L	25.0	ND	97.1	75-125			
Recovery limits for target analytes in MS/MSD QC samples are advisory only.												
<b>Matrix Spike (BNI0635-MS2)</b>						Source: 25I0560-04RE1 Prepared: 30-Sep-2025 Analyzed: 02-Oct-2025 20:53						
Selenium UCT	78 UCT	78.8	0.500	25.0	ug/L	80.0	ND	98.5	75-125			
Recovery limits for target analytes in MS/MSD QC samples are advisory only.												
<b>Matrix Spike Dup (BNI0635-MSD1)</b>						Source: 25I0560-04 Prepared: 30-Sep-2025 Analyzed: 02-Oct-2025 02:41						
Antimony	121	24.9	0.150	3.00	ug/L	25.0	ND	99.4	75-125	1.89	20	
Arsenic UCT	75a UCT	24.6	0.100	3.00	ug/L	25.0	ND	98.3	75-125	0.18	20	
Lead	208	23.9	0.100	10.0	ug/L	25.0	ND	95.8	75-125	0.08	20	
Thallium	205	24.3	0.100	2.00	ug/L	25.0	ND	97.2	75-125	0.12	20	
Recovery limits for target analytes in MS/MSD QC samples are advisory only.												



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Instrument: ICPMS1 Analyst: HAL

QC Sample/Analyte	Isotope	Result	Detection Limit	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
<b>Matrix Spike Dup (BNI0635-MSD2)</b>		<b>Source: 25I0560-04RE1</b>		Prepared: 30-Sep-2025		Analyzed: 02-Oct-2025 20:58						
Selenium UCT	78 UCT	78.4	0.500	25.0	ug/L	80.0	ND	98.0	75-125	0.51	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:  
10-Oct-2025 09:37

Analysis by: Analytical Resources, LLC

Metals and Metallic Compounds - Quality Control

Batch BNJ0014 - 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
<b>Blank (BNJ0014-BLK1)</b>											
						Prepared: 01-Oct-2025 Analyzed: 08-Oct-2025 05:38					
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	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
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

<b>LCS (BNJ0014-BS1)</b>											
						Prepared: 01-Oct-2025 Analyzed: 08-Oct-2025 05:44					
Aluminum	2.21	0.0210	0.0700	mg/L	2.00		110	80-120			
Barium	2.16	0.0007	0.0060	mg/L	2.00		108	80-120			
Beryllium	0.559	0.0002	0.0010	mg/L	0.500		112	80-120			
Cadmium	0.553	0.0005	0.0020	mg/L	0.500		111	80-120			
Calcium	10.9	0.0300	0.0500	mg/L	10.0		109	80-120			
Chromium	0.544	0.0020	0.0090	mg/L	0.500		109	80-120			
Cobalt	0.541	0.0025	0.0050	mg/L	0.500		108	80-120			
Copper	0.547	0.0030	0.0050	mg/L	0.500		109	80-120			
Iron	2.26	0.0540	0.100	mg/L	2.00		113	80-120			
Magnesium	10.7	0.0250	0.0500	mg/L	10.0		107	80-120			
Manganese	0.551	0.0020	0.0040	mg/L	0.500		110	80-120			
Nickel	0.558	0.0050	0.0100	mg/L	0.500		112	80-120			
Potassium	10.8	0.250	0.500	mg/L	10.0		108	80-120			
Silver	0.551	0.0015	0.0030	mg/L	0.500		110	80-120			
Sodium	11.4	0.250	0.500	mg/L	10.0		114	80-120			
Sodium	ND	25.0	50.0	mg/L	10.0			80-120			U
Vanadium	0.548	0.0015	0.0030	mg/L	0.500		110	80-120			
Zinc	0.508	0.0150	0.0300	mg/L	0.500		102	80-120			

<b>Duplicate (BNJ0014-DUP1)</b>											
			Source: 25I0560-04			Prepared: 01-Oct-2025 Analyzed: 08-Oct-2025 06:32					
Aluminum	ND	0.0210	0.0700	mg/L		ND				20	U
Barium	0.361	0.0007	0.0060	mg/L		0.355			1.68	20	



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

**Reported:**  
10-Oct-2025 09:37

**Analysis by: Analytical Resources, LLC**

**Metals and Metallic Compounds - Quality Control**

**Batch BNJ0014 - 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
<b>Duplicate (BNJ0014-DUP1)</b>											
Source: 25I0560-04 Prepared: 01-Oct-2025 Analyzed: 08-Oct-2025 06:32											
Beryllium	ND	0.0002	0.0010	mg/L		ND				20	U
Cadmium	ND	0.0005	0.0020	mg/L		ND				20	U
Calcium	109	0.0300	0.0500	mg/L		105			3.46	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	1.41	0.0540	0.100	mg/L		1.40			0.97	20	
Magnesium	62.5	0.0250	0.0500	mg/L		62.0			0.86	20	
Manganese	0.142	0.0020	0.0040	mg/L		0.139			2.27	20	
Nickel	ND	0.0050	0.0100	mg/L		ND				20	U
Potassium	3.74	0.250	0.500	mg/L		3.66			2.33	20	
Silver	ND	0.0015	0.0030	mg/L		ND				20	U
Sodium	36.7	0.250	0.500	mg/L		36.1			1.72	20	
Vanadium	ND	0.0015	0.0030	mg/L		ND				20	U
Zinc	ND	0.0150	0.0300	mg/L		ND				20	U

<b>Matrix Spike (BNJ0014-MS1)</b>											
Source: 25I0560-04 Prepared: 01-Oct-2025 Analyzed: 08-Oct-2025 06:35											
Aluminum	2.17	0.0210	0.0700	mg/L	2.00	ND	109	75-125			
Barium	2.50	0.0007	0.0060	mg/L	2.00	0.355	107	75-125			
Beryllium	0.556	0.0002	0.0010	mg/L	0.500	ND	111	75-125			
Cadmium	0.536	0.0005	0.0020	mg/L	0.500	ND	107	75-125			
Calcium	121	0.0300	0.0500	mg/L	10.0	105	160	75-125			*
Chromium	0.532	0.0020	0.0090	mg/L	0.500	ND	106	75-125			
Cobalt	0.521	0.0025	0.0050	mg/L	0.500	ND	104	75-125			
Copper	0.545	0.0030	0.0050	mg/L	0.500	ND	109	75-125			
Iron	3.66	0.0540	0.100	mg/L	2.00	1.40	113	75-125			
Magnesium	74.8	0.0250	0.0500	mg/L	10.0	62.0	128	75-125			*
Manganese	0.682	0.0020	0.0040	mg/L	0.500	0.139	109	75-125			
Nickel	0.536	0.0050	0.0100	mg/L	0.500	ND	107	75-125			
Potassium	14.9	0.250	0.500	mg/L	10.0	3.66	112	75-125			
Silver	0.550	0.0015	0.0030	mg/L	0.500	ND	110	75-125			
Sodium	48.9	0.250	0.500	mg/L	10.0	36.1	128	75-125			*
Vanadium	0.543	0.0015	0.0030	mg/L	0.500	ND	109	75-125			
Zinc	0.496	0.0150	0.0300	mg/L	0.500	ND	99.1	75-125			

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

<b>Matrix Spike Dup (BNJ0014-MSD1)</b>											
Source: 25I0560-04 Prepared: 01-Oct-2025 Analyzed: 08-Oct-2025 06:38											
Aluminum	2.12	0.0210	0.0700	mg/L	2.00	ND	106	75-125	2.49	20	
Barium	2.49	0.0007	0.0060	mg/L	2.00	0.355	107	75-125	0.25	20	
Beryllium	0.546	0.0002	0.0010	mg/L	0.500	ND	109	75-125	1.87	20	
Cadmium	0.527	0.0005	0.0020	mg/L	0.500	ND	105	75-125	1.84	20	
Calcium	115	0.0300	0.0500	mg/L	10.0	105	98.6	75-125	5.22	20	



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**Analysis by: Analytical Resources, LLC**

**Metals and Metallic Compounds - Quality Control**

**Batch BNJ0014 - 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
<b>Matrix Spike Dup (BNJ0014-MSD1)</b>											
		<b>Source: 25I0560-04</b>					Prepared: 01-Oct-2025 Analyzed: 08-Oct-2025 06:38				
Chromium	0.522	0.0020	0.0090	mg/L	0.500	ND	104	75-125	1.90	20	
Cobalt	0.511	0.0025	0.0050	mg/L	0.500	ND	102	75-125	1.92	20	
Copper	0.538	0.0030	0.0050	mg/L	0.500	ND	108	75-125	1.37	20	
Iron	3.62	0.0540	0.100	mg/L	2.00	1.40	111	75-125	1.10	20	
Magnesium	74.6	0.0250	0.0500	mg/L	10.0	62.0	126	75-125	0.36	20	
Manganese	0.653	0.0020	0.0040	mg/L	0.500	0.139	103	75-125	4.39	20	
Nickel	0.527	0.0050	0.0100	mg/L	0.500	ND	105	75-125	1.71	20	
Potassium	14.8	0.250	0.500	mg/L	10.0	3.66	112	75-125	0.27	20	
Silver	0.541	0.0015	0.0030	mg/L	0.500	ND	108	75-125	1.69	20	
Sodium	49.5	0.250	0.500	mg/L	10.0	36.1	135	75-125	1.37	20	
Vanadium	0.535	0.0015	0.0030	mg/L	0.500	ND	107	75-125	1.41	20	
Zinc	0.446	0.0150	0.0300	mg/L	0.500	ND	89.1	75-125	10.60	20	

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



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**Analysis by: Analytical Resources, LLC**

**Metals and Metallic Compounds - Quality Control**

**Batch BNJ0074 - EPA 7470A in Water**

Instrument: HYDRA Analyst: ML

QC Sample/Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
<b>Blank (BNJ0074-BLK1)</b>					Prepared: 03-Oct-2025 Analyzed: 08-Oct-2025 10:41					
Mercury	ND	0.00100	mg/L							U
<b>LCS (BNJ0074-BS1)</b>					Prepared: 03-Oct-2025 Analyzed: 08-Oct-2025 10:43					
Mercury	0.00203	0.00100	mg/L	0.00200		102	80-120			
<b>Duplicate (BNJ0074-DUP1)</b>					Source: 25I0560-04 Prepared: 03-Oct-2025 Analyzed: 08-Oct-2025 10:48					
Mercury	ND	0.00100	mg/L		ND			20		U
<b>Matrix Spike (BNJ0074-MS1)</b>					Source: 25I0560-04 Prepared: 03-Oct-2025 Analyzed: 08-Oct-2025 10:55					
Mercury	ND	0.00100	mg/L	0.00100	ND	91.7	75-125			U
Recovery limits for target analytes in MS/MSD QC samples are advisory only.										
<b>Matrix Spike Dup (BNJ0074-MSD1)</b>					Source: 25I0560-04 Prepared: 03-Oct-2025 Analyzed: 08-Oct-2025 10:57					
Mercury	ND	0.00100	mg/L	0.00100	ND	99.1	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

Project Number: [none]

Project Manager: Gary Zimmerman

**Reported:**

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**Uncertified Analytes included in this Report**

**Analysis Matrix & Analyte**

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None

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

**Reported:**  
10-Oct-2025 09:37

**Certified Analyses included in this Report**

<b>Analysis Matrix &amp; Analyte</b>	<b>Certification Codes</b>
<b><i>EPA 200.8 in Water</i></b>	
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
<b><i>EPA 6010D in Water</i></b>	
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
<b><i>EPA 7470A in Water</i></b>	
Mercury	WADOE,NELAP,DoD-ELAP
<b><i>EPA 8260D in Water</i></b>	
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



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

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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
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



WSP USA, Inc. 210 East 13th Street, Suite 300 Vancouver WA, 98660-3231	Project: Landsburg Project Number: [none] Project Manager: Gary Zimmerman	<b>Reported:</b> 10-Oct-2025 09:37
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1,2,3-Trichloropropane	ADEC,NELAP,WADOE,DoD-ELAP
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
<b>NWTPH-HCID in Water</b>	
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	WA100006-018	05/12/2026
WADOE	WA Dept of Ecology	C558	06/30/2026



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

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

**Reported:**  
10-Oct-2025 09:37

**Notes and Definitions**

- \* Flagged value is not within established control limits.
- D The reported value is from a dilution
- H Hold time violation - Hold time was exceeded.
- J Estimated concentration value detected below the reporting limit.
- 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.

**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-2-0925 / LMW-2-0925-D  
**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** September 23, 2025

**Time** 10:55 / 11:00 duplicate

**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: 7.86 ft BTOC

Screened Interval: 27.9' - 38.1' BGS

Sand Pack Interval: 24.8' - 38.1' 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

## SAMPLE INTEGRITY DATA SHEET

Well ID LMW-2

Date 09/23/2025

Time Begin Purge 10:28

Time Collect Sample 10:55 / 11:00 duplicate

Water Level (ft bmp)	Time	pH	Cond. (uS/cm)	Temp (°C)	DO (mg/L)	ORP (rel mV)	Turbidity (NTU)
7.88	10:30	6.63	955	11.3	9.54	215.9	1.55
7.88	10:35	6.61	943	11.3	9.18	220.7	0.78
7.88	10:40	6.62	928	11.3	8.7	221.1	0.85
7.88	10:45	6.63	919	11.4	8.25	216.9	0.52
7.88	10:50	6.63	912	11.4	7.95	211.4	0.48
7.88	10:55	6.64	901	11.4	7.7	205.4	0.54

**Comments:**

Sampled duplicate LMW-2-0925-D at 11:00

Grundfos: ~80 Hz

Packer: N/A


Tank: N/A

Throttle: N/A

CPM: N/A

CID: N/A

Flow Rate: 1500 mL/min

Sampler 

Date September 23, 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-3-0925

**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** September 25, 2025 **Time** 12:55

**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: 13.78 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

## SAMPLE INTEGRITY DATA SHEET

Well ID LMW-3

Date 09/25/2025

Time Begin Purge 12:22

Time Collect Sample 12:55

Water Level (ft bmp)	Time	pH	Cond. (uS/cm)	Temp (°C)	DO (mg/L)	ORP (rel mV)	Turbidity (NTU)
14.1	12:25	7.73	598	11.2	19.8	19.8	0.61
14.43	12:30	7.7	598	11.3	7.82	20.7	0.59
14.54	12:35	7.66	602	11.8	7.6	21.1	0.20
15	12:40	7.62	605	11.9	7.28	20.2	0.43
15.41	12:45	7.6	606	11.9	7.01	18.5	0.40
15.51	12:50	7.6	606	11.9	6.84	17.1	0.67

Comments:

Grundfos: ~135 Hz

Packer: 130 psi

Tank: N/A

Throttle: N/A

CPM: N/A

CID: N/A

Flow Rate: 1500 mL/min

Sampler 

Date September 24, 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-4-0925

**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** September 24, 2025 **Time** 11:25

**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: 9.93 ft BTOC

Screened Interval: 195' - 209.7' BGS

Sand Pack Interval: 189' - 209.7' BGS

Packer Depth: 187.3' 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

x3 for MS/MSD except for -Gx and -Dx holds

## SAMPLE INTEGRITY DATA SHEET

Well ID     LMW-4    

Date     09/24/2025    

Time Begin Purge     10:04    

Time Collect Sample     11:25    

Water Level (ft bmp)	Time	pH	Cond. (uS/cm)	Temp (°C)	DO (mg/L)	ORP (rel mV)	Turbidity (NTU)
10.69	10:10	7.09	1,013	10.4	9.43	207.9	0.42
10.69	10:15	6.71	1,000	10.4	8.95	222.0	0.66
10.69	10:20	6.67	987	10.5	8.51	221.8	0.15
10.69	10:25	6.66	972	10.5	8.17	216.7	0.41
10.69	10:30	6.66	962	10.5	7.92	210.4	0.36
10.69	10:35	6.67	953	10.6	7.7	201.8	0.69
10.69	10:40	6.66	944	10.6	7.5	192.0	0.27
10.69	10:45	6.66	934	10.6	7.33	181.1	0.37
10.69	10:50	6.66	928	10.7	7.17	170.5	0.43
10.69	10:55	6.66	920	10.7	7.02	158.5	0.26
10.69	11:00	6.66	913	10.7	6.88	146.7	0.61
10.69	11:05	6.66	907	10.7	6.77	136.9	0.26
10.69	11:08	6.66	905	10.7	6.7	130.6	1.09
10.69	11:11	6.66	900	10.7	6.63	125.4	0.54
10.69	11:14	6.66	898	10.7	6.56	119.8	0.19
10.69	11:17	6.66	895	10.7	6.51	115.2	0.55
10.69	11:20	6.66	892	10.7	6.46	110.8	0.79

# SAMPLE INTEGRITY DATA SHEET

Comments:

MS/MSD collected

Grundfos: 80 Hz

Packer: 110 psi

Tank: N/A

Throttle: N/A

CPM: N/A

CID: N/A

Flow Rate: 500 mL/min

Sampler 

Date September 24, 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-5-0925

**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** September 25, 2025 **Time** 14:00

**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: 15.2 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, 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

## SAMPLE INTEGRITY DATA SHEET

Well ID LMW-5

Date 09/25/2025

Time Begin Purge 13:31

Time Collect Sample 14:00

Water Level (ft bmp)	Time	pH	Cond. (uS/cm)	Temp (°C)	DO (mg/L)	ORP (rel mV)	Turbidity (NTU)
15.15	13:35	6.73	1,090	10.4	7.26	74.4	0.65
15.15	13:40	6.92	1,086	10.5	6.9	70.5	0.31
15.15	13:45	6.71	1,082	10.6	6.6	66.0	0.31
15.15	13:50	6.71	1,077	10.6	6.42	62.9	0.61
15.15	13:55	6.71	1,073	10.6	6.27	60.4	0.51

Comments:

Grundfos: ~135 Hz

Packer: 110 psi

Tank: N/A

Throttle: N/A

CPM: N/A

CID: N/A

Flow Rate: 500 mL/min

Sampler 

Date September 25, 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-6-0925

**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** September 25, 2025 **Time** 09:40

**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: 45.4 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

## SAMPLE INTEGRITY DATA SHEET

Well ID LMW-6

Date 09/25/2025

Time Begin Purge 09:12

Time Collect Sample 09:40

Water Level (ft bmp)	Time	pH	Cond. (uS/cm)	Temp (°C)	DO (mg/L)	ORP (rel mV)	Turbidity (NTU)
48.25	09:15	6.89	552	9.4	9.32	219.3	3.40
50.08	09:20	6.74	556	9.7	8.84	228.0	3.91
51.35	09:25	6.66	559	10	8.39	233.3	2.06
52.15	09:30	6.63	559	10.1	8.11	233.2	1.61
52.81	09:35	6.61	556	10.1	7.89	230.7	0.68

Comments:

Grundfos: 180 Hz

Packer: 110 psi

Tank: N/A

Throttle: N/A

CPM: N/A

CID: N/A

Flow Rate: 500 mL/min

Sampler 

Date September 25, 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-7-0925

**Sampling Location** Groundwater Monitoring Well - end dedicated sampling tube

**Technical Procedure Reference(s)** Landsburg Mine Site Compliance Monitoring Plan (2017)

**Type of Sampler** \_\_\_\_\_

**Date** September 26, 2025 **Time** 10:40

**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:** 228.94 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

## SAMPLE INTEGRITY DATA SHEET

Well ID     LMW-7    

Date     09/26/2025    

Time Begin Purge     09:20    

Time Collect Sample     10:40    

Water Level (ft bmp)	Time	pH	Cond. (uS/cm)	Temp (°C)	DO (mg/L)	ORP (rel mV)	Turbidity (NTU)
218.82	09:25	7.09	5,475	10.2	1.43	171.0	98.2
217.52	09:30	7.01	5,456	12.3	1.22	154.7	31.1
217.52	09:35	7.05	5,461	14	0.99	138.4	12.6
217.52	09:40	7.07	5,458	14.2	0.87	125.6	7.98
217.52	09:45	7.09	5,461	14.4	0.78	96.7	6.00
217.52	09:50	7.1	5,457	14.7	0.7	29.4	6.98
217.52	09:55	7.12	5,460	14.6	0.65	8.0	5.68
217.52	10:00	7.13	5,462	14.6	0.61	-4.8	6.32
217.52	10:05	7.14	5,500	14.7	0.57	-25.6	7.33
217.52	10:10	7.12	5,620	14.7	0.53	-57.0	6.00
217.52	10:15	7.09	5,714	14.8	0.51	-78.6	5.72
217.52	10:20	7.07	5,835	14.8	0.49	-91.7	6.36
217.52	10:25	7.06	5,915	14.8	0.47	-101.4	7.02
217.52	10:30	7.05	5,980	14.8	0.45	-106.8	6.23
217.52	10:33	7.04	6,017	14.8	0.44	-108.8	6.02
217.52	10:36	7.03	6,087	14.8	0.42	-110.8	6.37

# SAMPLE INTEGRITY DATA SHEET

Comments:

Grundfos: 320 Hz

Packer: N/A

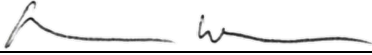
Tank: N/A

Throttle: N/A

CPM: N/A

CID: N/A

Flow Rate: 1500 mL/min

Sampler 

Date September 26, 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-8-0925

**Sampling Location** Groundwater Monitoring Well - end dedicated sampling tube

**Technical Procedure Reference(s)** Landsburg Mine Site Compliance Monitoring Plan (2017)

**Type of Sampler** \_\_\_\_\_

**Date** September 25, 2025 **Time** 15:10

**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:** 0 ft BTOC

**Screened Interval:** 8' - 13' BGS

**Sand Pack Interval:** 6' - 13' 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

## SAMPLE INTEGRITY DATA SHEET

Well ID LMW-8

Date 09/25/2025

Time Begin Purge 14:30

Time Collect Sample 15:10

Water Level (ft bmp)	Time	pH	Cond. (uS/cm)	Temp (°C)	DO (mg/L)	ORP (rel mV)	Turbidity (NTU)
6.42	14:30	6.71	1,028	14.7		62.5	1.08
7.09	14:35	6.72	998	14.1		27.5	
6.41	14:50	6.68	1,059	13.6		2.3	1.57
6.63	14:55	6.68	1,046	13.7		-4.3	1.55
6.85	15:00	6.69	1,050	13.7		-8.5	1.04
7.02	15:05	6.69	1,032	13.5		-11.3	0.90

Comments:

Grundfos: N/A  
 Packer: N/A  
 Tank: N/A  
 Throttle: N/A  
 CPM: N/A  
 CID: N/A  
 Flow Rate: 150 mL/min

Sampler 

Date September 25, 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-9-0925

**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** September 25, 2025 **Time** 11:50

**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: 100.28 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

## SAMPLE INTEGRITY DATA SHEET

Well ID     LMW-9    

Date     09/25/2025    

Time Begin Purge     10:40    

Time Collect Sample     11:50    

Water Level (ft bmp)	Time	pH	Cond. (uS/cm)	Temp (°C)	DO (mg/L)	ORP (rel mV)	Turbidity (NTU)
100.28	10:45	7.12	1,193	10.4	9.2	125.2	0.67
100.28	10:50	6.76	1,182	10.4	8.46	130.5	0.80
100.28	10:55	6.76	1,176	10.4	8.21	126.7	0.58
100.28	11:00	6.77	1,169	10.5	7.88	118.5	1.16
100.25	11:05	6.78	1,161	10.5	7.61	109.3	0.41
100.28	11:10	6.78	1,155	10.5	7.41	100.6	1.02
100.28	11:15	6.79	1,149	10.5	7.24	92.3	0.55
110.28	11:20	6.79	1,144	10.5	7.07	83.8	0.38
110.28	11:25	6.79	1,138	10.5	6.95	76.6	0.42
100.28	11:30	6.83	1,133	10.5	6.83	69.9	0.74
100.28	11:35	6.8	1,128	10.5	6.7	63.6	0.54
100.28	11:40	6.8	1,123	10.5	6.6	58.5	0.69
110.28	11:45	6.81	1,118	10.4	6.51	53.9	1.46

# SAMPLE INTEGRITY DATA SHEET

Comments:

Grundfos: N/A

Packer: N/A

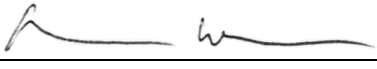
Tank: 130

Throttle: 95

CPM: 2

CID: 51

Flow Rate: 300 mL/min

Sampler 

Date September 25, 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-11-0925

**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** September 24, 2025 **Time** 14:35

**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: 158.08 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

## SAMPLE INTEGRITY DATA SHEET

Well ID LMW-11

Date 09/24/2025

Time Begin Purge 13:58

Time Collect Sample 14:35

Water Level (ft bmp)	Time	pH	Cond. (uS/cm)	Temp (°C)	DO (mg/L)	ORP (rel mV)	Turbidity (NTU)
158.02	14:00	8.19	439.1	12	8.34	37.0	0.58
158.02	14:05	7.3	467.6	11.2	7.95	67.0	
158.02	14:10	7.18	470.7	10.8	7.58	71.4	0.19
158.02	14:15	7.13	469.8	10.7	7.19	70.0	0.45
158.02	14:20	7.12	468.4	10.7	6.88	66.4	0.45
158.02	14:25	7.11	467.3	10.6	6.64	62.1	0.40
158.02	14:30	7.1	466.6	10.7	6.43	57.5	1.24

**Comments:**

Grundfos: N/A  
 Packer: N/A  
 Tank: 130  
 Throttle: 110  
 CPM: 1  
 CID: 15  
 Flow Rate: 500 mL/min

Sampler 

Date September 24, 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-10-0925

**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** September 23, 2025 **Time** 15:40

**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 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

## SAMPLE INTEGRITY DATA SHEET

Well ID LMW-10

Date 09/23/2025

Time Begin Purge 15:08

Time Collect Sample 15:40

Water Level (ft bmp)	Time	pH	Cond. (uS/cm)	Temp (°C)	DO (mg/L)	ORP (rel mV)	Turbidity (NTU)
1.2	15:10	8.38	363.4	11.7	7.99	13.4	0.64
1.5	15:15	8.53	360.1	11.6	7.57	-9.8	0.38
2.05	15:20	8.57	359.4	11.6	7.22	-21.9	0.14
2.75	15:25	8.58	360	11.5	6.89	-31.5	0.54
3.1	15:30	8.58	360.1	11.5	6.73	-36	0.51
3.75	15:35	8.58	361.1	11.4	6.51	-42.3	0.95
3.95	15:40	8.58	361.4	11.5	6.34	-47.2	0.65

Comments:

Grundfos: N/A

Packer: N/A

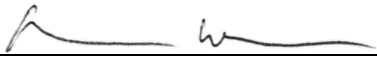
Tank: 110

Throttle: 40

CPM: 2

CID: 50

Flow Rate: 300 mL/min

Sampler 

Date September 23, 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-12-0925

**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** September 23, 2025 **Time** 14:20

**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: 12.55 ft BTOC

Screened Interval: 15' - 25' BGS

Sand Pack Interval: 11' - 25' 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

## SAMPLE INTEGRITY DATA SHEET

Well ID LMW-12

Date 09/23/2025

Time Begin Purge 13:48

Time Collect Sample 14:20

Water Level (ft bmp)	Time	pH	Cond. (uS/cm)	Temp (°C)	DO (mg/L)	ORP (rel mV)	Turbidity (NTU)
12.55	13:50	7	484.5	11	7.83	24.9	15.8
12.55	13:55	6.65	500	10	7.51	48.2	10.9
12.55	14:00	6.61	500	10	7.05	44.1	7.05
13.55	14:05	6.61	523	9.9	6.88	40.0	5.72
12.55	14:10	6.62	540	9.9	6.64	35.6	4.44
12.55	14:15	6.63	539	9.9	6.51	33.2	4.18
12.55	14:20	6.63	538	9.8	6.49	31.3	3.67

**Comments:**

Grundfos: N/A  
 Packer: N/A  
 Tank: 110  
 Throttle: 20  
 CPM: 2  
 CID: 47  
 Flow Rate: 300 mL/min

Sampler 

Date September 23, 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-0925

**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** September 23, 2025 **Time** 13:10

**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: 13.15 ft BTOC

Screened Interval: 115' - 140' BGS

Sand Pack Interval: 110' - 150' 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

## SAMPLE INTEGRITY DATA SHEET

Well ID LMW-13R

Date 09/23/2025

Time Begin Purge 12:25

Time Collect Sample 13:10

Water Level (ft bmp)	Time	pH	Cond. (uS/cm)	Temp (°C)	DO (mg/L)	ORP (rel mV)	Turbidity (NTU)
13.35	12:30	7.25	745	10.2	9.15	129.4	3.26
13.35	12:35	7.22	740	10.2	8.66	129.3	2.54
13.35	12:40	7.22	736	10.2	8.26	117.3	1.80
13.35	12:45	7.21	726	11.2	7.76	93.6	1.30
13.35	12:50	7.22	747	10.8	7.67	82.6	1.48
13.35	12:55	7.22	735	10.5	7.46	65.6	1.97
13.35	13:00	7.22	733	10.5	7.29	55.2	2.22
13.35	13:05	7.22	732	10.5	7.13	45.7	2.26

Comments:

Grundfos: N/A

Packer: N/A


Tank: 110

Throttle: 35

CPM: 2

CID: 48

Flow Rate: 200 mL/min

Sampler 

Date September 23, 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-14-0925

**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** September 24, 2025 **Time** 13:15

**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: 166.79 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

## SAMPLE INTEGRITY DATA SHEET

Well ID LMW-14

Date 09/24/2025

Time Begin Purge 12:28

Time Collect Sample 13:15

Water Level (ft bmp)	Time	pH	Cond. (uS/cm)	Temp (°C)	DO (mg/L)	ORP (rel mV)	Turbidity (NTU)
166.85	12:30	6.44	1,130	13.4	8.17	101.8	0.66
167.1	12:35	6.38	992	12.6	7.46	111.1	1.56
166.89	12:40	6.39	923	12.4	6.96	105.7	1.43
166.9	12:45	6.38	893	12.2	6.6	97.4	2.05
167.15	12:50	6.38	872	12.3	6.24	89.7	1.61
166.89	12:55	6.38	855	12.5	5.94	81.3	1.49
166.92	13:00	6.38	851	12.2	5.75	75.2	1.12
167	13:05	6.38	846	12.3	5.59	70.8	1.39
166.82	13:10	6.37	839	12.5	5.4	66.6	1.14

Comments:

Grundfos: N/A

Packer: N/A

Tank: 140

Throttle: 115

CPM: 2

CID: 49

Flow Rate: 200 mL/min

Sampler 

Date September 24, 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-15-0925

**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** September 24, 2025 **Time** 16:05

**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: 152.15 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

## SAMPLE INTEGRITY DATA SHEET

Well ID LMW-15

Date 09/24/2025

Time Begin Purge 15:09

Time Collect Sample 16:05

Water Level (ft bmp)	Time	pH	Cond. (uS/cm)	Temp (°C)	DO (mg/L)	ORP (rel mV)	Turbidity (NTU)
152.16	15:15	7.14	435.6	11.4	8.31	70.3	1.24
152.12	15:25	7.11	425.4	11.1	7.13	41.4	1.25
152.15	15:30	7.14	426.6	11	6.69	18.9	1.60
152.15	15:35	7.16	427.2	10.8	6.39	3.7	0.61
152.15	15:40	7.17	424.3	10.7	6.14	-7.6	1.02
152.15	15:45	7.18	425	10.6	5.92	-15.8	0.81
152.15	15:50	7.19	422.6	10.5	5.81	-21.3	0.71
152.15	15:55	7.19	422.2	11	5.6	-26.5	0.70
152.15	16:00	7.2	422.2	10.7	5.44	-30.8	0.85

Comments:

Grundfos: N/A

Packer: N/A


Tank: 130

Throttle: 95

CPM: 2

CID: 53

Flow Rate: 300 mL/min

Sampler 

Date September 24, 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-FB-0925

**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** September 26, 2025 **Time** 11:10

**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

# SAMPLE INTEGRITY DATA SHEET

Well ID LMW-FB

Date 09/26/2025

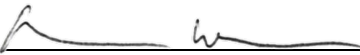
Time Begin Purge N/A

Time Collect Sample 11:10

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 September 26, 2025

Supervisor \_\_\_\_\_

Date \_\_\_\_\_



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