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30 December 2024

Rachel Caron
Washington State Department of Ecology
Toxics Cleanup Program
Central Regional Office
1250 W. Alder St.,
Union Gap, WA 98903-0009

Subject: **2024 Post-Injection Groundwater Compliance Data Transmittal**
Former Nachurs Alpine Solutions
101 North 1st Street, Sunnyside, Washington
Ecology Cleanup Site ID: 14601
Facility/Site ID: 29243

Dear Ms. Caron:

Geosyntec Consultants has prepared this 2024 Post-Injection Groundwater Compliance Data Transmittal (Data Transmittal) to present the results of groundwater monitoring completed in March and September 2024 at the Former Nachurs Alpine Solutions (NAS) Site (the Site) located in Sunnyside, Washington (Figure 1). This work was performed in accordance with the *Corrective Action Implementation – Injection Report and Compliance Monitoring Plan*,[1] approved by Washington Department of Ecology in 2023 (DOE).[2] This report is being submitted by Geosyntec Consultants on behalf of Wilbur-Ellis Holdings II, Inc. (Wilbur-Ellis), the direct parent company of NAS. This is the second post-injection groundwater compliance report, after remedial injections were completed at the Site in November 2022.

BACKGROUND

The Site is an approximately 0.35-acre property owned by Burlington Northern Santa Fe (BNSF). The Site is a vacant, unpaved lot located in an industrial area of Sunnyside, Washington. NAS

[1] Geosyntec, 2023. Corrective Action Implementation – Injection Report and Compliance Monitoring Plan. 11 July 2023.

[2] Ecology, 2023. Approved. Corrective Action Implementation – Injection Report and Compliance Monitoring Plan. Former Nachurs Alpine Solutions. State of Washington Department of Ecology. 2 August 2023.

operated at the Site from 1973 to 2017 and used the Site to receive fertilizer by rail spur and then distribute locally. In 2017, at the direction of BNSF, all structures were removed and while conducting requested environmental assessments at the Site, concentrations of constituents of potential concern (COPC) were identified in the subsurface at the Site. NAS subsequently entered the DOE's Voluntary Cleanup Program (VCP) in 2020.

Additional remedial investigation activities were conducted after entering the VCP. Based on these investigations, COPCs at the Site above background levels and MTCA cleanup levels in groundwater include nitrate as nitrogen, arsenic, cobalt, and molybdenum. No COPCs were identified above background levels or MTCA cleanup levels in soil. A *Remedial Investigation and Cleanup Action Plan* (RI-CAP)[3] was submitted to DOE on 22 September 2022. The RI-CAP recommended in situ denitrification with metals attenuation as the remedial approach to address COPCs in groundwater at the Site. DOE issued an Opinion on the Proposed Cleanup (Opinion Letter) dated 18 November 2022, stating that no further remedial action will be likely based on the corrective action presented in the RI-CAP.[4] In its Opinion Letter, DOE requested that, following injections, an additional monitoring well (MW-5) be installed to supplement the current well network and following installation an updated compliance monitoring plan be submitted.

In situ denitrification injections, utilizing emulsified vegetable oil and sodium lactate as electron donors, were completed in November 2022 at the areas shown in Figure 2. Injection field activities were performed in accordance with the engineering design presented in the RI-CAP and was documented in the *Corrective Action Implementation - Injection Report and Compliance Monitoring Plan*, submitted to DOE in July 2023.[5] Following injections, MW-5 was installed in May 2023. Documentation of the MW-5 well installation and the post injection compliance monitoring events conducted in December 2022 and January, February, and May 2023 were reported in the "*Post Injection Groundwater Compliance Data Transmittal and Monitoring Well Installation*" report, submitted to DOE in January 2024.[6] Geosyntec with approval from DOE is

[3] Geosyntec, 2022. Remedial Investigation and Cleanup Action Plan. Former Nachurs Alpine Solutions. 23 September 2022.
[4] Ecology, 2022. Opinion on Proposed Cleanup for the following Property associated with a contaminated Site. State of Washington Department of Ecology. 10 November 2022.
[5] Geosyntec, 2023. Corrective Action Implementation – Injection Report and Compliance Monitoring Plan. Former Nachurs Alpine Solutions. 11 July 2023.
[6] Geosyntec, 2024. Post-Injection Groundwater Compliance Data Transmittal and Monitoring Well Installation. Former Nachurs Alpine Solutions. 22 January 2024.

conducting monitoring events two to three times per year, depending on results and will continue at this frequency until COPC concentrations decrease to levels closer to cleanup objectives.

The post injection compliance monitoring showed reductions of nitrate as nitrogen, and influence of electron donors on the other COPCs in treatment areas at the Site. However, Geosyntec anticipates that due to the flat nature of the groundwater gradient at the site and slow groundwater flow rates, additional time is needed before we see the full effects of this remedy on COPC concentrations.

Based on site conditions and the 2022 and 2023 compliance monitoring results, two groundwater monitoring events were completed in March and September 2024, during which groundwater levels and groundwater samples were collected. In addition, one water level-only event was completed in May 2024 to confirm water levels at the Site based on an anomaly in March 2024 at MW-5. The results of these events are reported herein with comparisons to previous monitoring results and baseline conditions at the site.

2024 COMPLIANCE GROUNDWATER MONITORING

Scope of Work Completed

In 2024, two groundwater monitoring events were conducted on the five Site monitoring wells (MW-1 through MW-5) in March and September. During both events, groundwater samples were analyzed for the Site COPCs, as well as geochemical parameters (i.e., total and dissolved iron and manganese, sulfate, and dissolved organic carbon). During sampling, water level and field parameters, including dissolved oxygen, oxidation reduction potential (ORP), pH, conductivity, turbidity, and temperature, were measured.

In addition, groundwater levels were measured in May 2024 in the five monitoring wells, after an unexpected high-water level was observed during the March 2024 event in MW-5.

Groundwater monitoring field forms for these three events are provided in Attachment 1.

Results

The water level and groundwater elevation data are presented in Table 1, and the analytical data and field parameters are summarized in Table 2 with COPC concentrations compared to the Target Remediation Levels (TRLs) established in the RI-CAP. Groundwater Elevation and COPC concentrations overtime are shown in Figures 3 and 4, respectively. The laboratory analytical reports are included in Attachment 2.

The 2024 post injection groundwater monitoring results can be summarized, as follows:

- **Groundwater Levels:**
    - The groundwater gradient at the Site is east-southeast and remains consistent with past monitoring events, except for the water level in MW-5 during the March 2024 event. Typically, groundwater levels are highest in the upgradient well MW-1 decreasing in the east-southeast direction with the lowest levels in downgradient well MW-4. During the March 2024 event, the water level at MW-5 (onsite well) was unexpectedly high compared to the water level at MW-1 (upgradient well). Water levels during the May 2024 event were consistent with historical results, suggesting that this March 2024 measurement at MW-5 was a temporary anomaly (Figure 3).
    - Groundwater elevation data in 2024 averaged from approximately 739.8 feet North American Vertical Datum of 1988 (ft NAVD88) at upgradient well MW-1 to 738.2 ft NAVD88 at downgradient well MW-4. The overall difference in groundwater elevation across the site was relatively low at approximately 1.6 feet between upgradient well MW-1 and downgradient well MW-4, which are approximately 288 feet apart. This relatively low gradient is consistent with the flat ground surface at the site, only varying approximately 1 foot between MW-1 and MW-4.
    - As shown in Figure 3, groundwater elevations at the Site show seasonal fluctuations with water levels in the Winter/Spring approximately 0.40 feet higher than in the Summer/Fall.
- **Geochemical Parameters:**
    - Within the footprint of the injection area (MW-2 and MW-3), reducing conditions conducive to denitrification were observed in 2024. These conditions were evident by low dissolved oxygen (DO), low to negative ORP, low sulfate, and increased levels of dissolved iron and manganese compared to baseline conditions.
    - Downgradient or adjoining the injection footprint (MW-4 and MW-5), geochemical conditions are not as reduced. At MW-4, samples indicate an overall decline in sulfate from baseline conditions. In addition, at both MW-4 and MW-5, low DO, negative ORP, and increases in dissolved iron and manganese are observed

intermittently. Post injection results also generally indicate more reducing conditions than upgradient well, MW-1.

- **COPC Concentrations:**

  - Nitrate as Nitrogen – Prior to injections, nitrate as nitrogen concentrations were consistently higher than the TRL of 48 milligrams per liter (mg/L) in samples collected from onsite and downgradient wells (MW-2, MW-3, and MW-4) and was below the TRL at the upgradient well (MW-1). The nitrate as nitrogen concentration at MW-5 was also above the TRL following well installation. During post injection monitoring:

    - The nitrate as nitrogen concentration increased in samples from upgradient well MW-1 post injections, possibly due to the movement of groundwater due to the injections. During the 2024 sampling events, nitrate as nitrogen concentrations appear to have stabilized in samples from MW-1 and started to decline as of the September 2024 event.

    - Nitrate as nitrogen has decreased and remained below the TRL in samples collected from MW-2 and MW-3, which are both within the injection footprint.

    - At well MW-4, while nitrate as nitrogen concentration continued to be above the TRL, concentrations appear to have decreased in 2024.

    - At well MW-5, due to limited data, no trend is yet apparent in this well. Concentrations were above the TRL in 2024.

  - Total Arsenic – Prior to injections, arsenic concentrations were above the TRL of 71 micrograms per liter (µg/L) at two onsite wells, MW-2 and MW-3.

    - After injections, arsenic concentrations at MW-2 declined below the TRL and remained below the TRL in 2024. Arsenic concentrations at MW-1, MW-4, and MW-5 also continue to be below the TRL in 2024.

    - Arsenic in samples from MW-3 temporarily decreased to below the TRL following remedial injections, and by the January 2023 event, arsenic was

back to baseline concentrations and over the TRL. Concentrations in samples from this well appeared to have increased slightly in 2024.

- Total Cobalt – Cobalt concentrations prior to injections were above the TRL of 5 µg/L at MW-2 and MW-4 and were below the TRL at MW-1 and MW-3. Since the injections in 2022, cobalt concentrations at MW-2 started declining, and in 2024, were below the TRL. A similar trend was observed at MW-4, where cobalt concentrations started declining after injections and were observed to be at its lowest concentration in September 2024, slightly above the TRL. Due to the displacement of water during injections, cobalt concentration appeared to increase at MW-3 but started to decline in 2024 back to baseline concentrations, above the TRL. Cobalt concentrations in samples from MW-5 have remained below the TRL and were not detected in 2024.

- Total Molybdenum – Historically, concentrations of molybdenum in samples from MW-1, MW-2, and MW-3 has been below the TRL of 80 µg/L and remained below the TRL after injections. Molybdenum was above the TRL in samples from downgradient well MW-4 before injections, temporarily increased following injections, and in 2024, have returned to the baseline concentrations. At well MW-5, no trend is yet apparent in this well; concentrations have fluctuated above and below the TRL since well installation in May 2023.

Overall, geochemical, field parameters, and COPC concentrations continue to demonstrate influence from the addition of the electron donor amendments into the subsurface, particularly within the injection footprint. As anticipated, additional time and monitoring are needed to assess trends in upgradient well MW-1 and the recently installed MW-5, as well as assess the influence of the remedy within and downgradient of the injections.

CONCLUSIONS AND NEXT STEPS

The post injection monitoring shows positive signs of the influence of electron donors in treatment of COPCs at the Site. Initial changes in COPC concentrations following injections, such as nitrate as nitrogen concentrations at upgradient well MW-1, appear to have stabilized, and overall, we have observed reductions in the primary COPC of nitrate as nitrogen in most wells. However, due to a flat gradient at the site and slow groundwater flow, additional time and monitoring are needed to continue to assess remedial progress, particularly for the metal COPCs.

In 2025, Geosyntec anticipates conducting at least two compliance monitoring events, one in winter (late first quarter) and one in summer (third quarter) to evaluate seasonal trends and remedial progress. Results of these compliance monitoring events will be reported to DOE by mid-January 2026.

CLOSING

Please contact Melissa Asher at 206-496-1449, if you have questions regarding the information presented herein.

Sincerely,

Melissa Asher, P.E. (WA, CA, CO)
Senior Principal

Priyamvada Sharma, PhD.
Professional

Cc: BNSF Environmental Lease Team
Jan Thompson, Wilbur-Ellis

Attachments:

Table 1 – Groundwater Depth and Elevation Summary
Table 2 – Groundwater Sampling Results

Figure 1 – Site Location Map
Figure 2 – Groundwater Compliance Monitoring Well Locations
Figure 3 – Groundwater Elevation Hydrograph
Figure 4 – Constituents of Potential Concern in Wells

Attachment 1 - Groundwater Sampling Forms
Attachment 2 – Laboratory Analytical Reports

Tables

TABLE 1: GROUNDWATER DEPTH AND ELEVATION SUMMARY

Former Nachurs Alpine Solutions Facility, Sunnyside, WA

WELL ID.	MW-1		MW-2		MW-3		MW-4		MW-5	
DIAMETER (in)	2		2		2		2		2	
WELL DEPTH (ft)	15.00		15.00		15.00		15.00		15.00	
SCREEN INTERVAL (ft)	5-15		5-15		5-15		5-15		5-15	
TOC ELEVATION (ft)	743.33		744.40		744.41		744.40		744.26	
DATE	ELEV. (ft)	DTW (ft)	ELEV. (ft)	DTW (ft)	ELEV. (ft)	DTW (ft)	ELEV. (ft)	DTW (ft)	ELEV. (ft)	DTW (ft)
9/2/2020	740.35	2.98	739.42	4.98	738.99	5.42	738.62	5.78	--	--
12/9/2020	740.61	2.72	739.73	4.67	739.19	5.22	738.99	5.41	--	--
3/3/2021	740.28	3.05	739.45	4.95	739.23	5.18	739.08	5.32	--	--
6/9/2021	739.92	3.41	739.20	5.20	738.76	5.65	738.42	5.98	--	--
9/15/2021	740.13	3.20	739.37	5.03	739.01	5.40	738.70	5.70	--	--
6/8/2022*	740.58	2.75	740.09	4.31	739.29	5.12	738.90	5.50	--	--
12/14/2022	741.23	2.10	739.73	4.67	739.38	5.03	739.03	5.37	--	--
1/18/2023	739.27	4.06	739.59	4.81	739.55	4.86	739.31	5.09	--	--
2/15/2023	740.32	3.01	739.35	5.05	739.37	5.04	738.67	5.73	--	--
5/17/2023	740.10	3.23	739.23	5.17	738.87	5.54	738.48	5.92	739.55	4.71
3/13/2024	740.06	3.27	739.05	5.35	738.89	5.52	738.52	5.88	740.82	3.44
5/7/2024	739.63	3.70	738.85	5.55	738.74	5.67	738.28	6.12	739.51	4.75
9/27/2024	739.57	3.76	738.64	5.76	738.34	6.07	737.94	6.46	739.26	5.00

Notes:

* Baseline sampling event, pre-remedy implementation.

DTW = depth to water

ELEV = elevation (ft NAVD88)

ft = feet

in = inches

MW-5 was installed on 3 May 2023 and therefore had the first depth to water readings taken on 17 May 2023.

TABLE 2: GROUNDWATER SAMPLING RESULTS
Former Nachurs Alpine Solutions Facility, Sunnyside, WA

Location		Screen Interval Depth (ft)	Date Collected	Site-Specific Constituents of Potential Concern							Geochemical Parameters						Field Parameters					
				Nitrogen, Nitrate (mg/L)	Arsenic (µg/L)	Cobalt (µg/L)	Molybdenum (µg/L)	Arsenic (dissolved) (µg/L)	Cobalt (dissolved) (µg/L)	Molybdenum (dissolved) (µg/L)	Sulfate (mg/L)	Dissolved Organic Carbon (mg/L)	Iron (µg/L)	Manganese (µg/L)	Iron (dissolved) (µg/L)	Manganese (dissolved) (µg/L)	Dissolved Oxygen (mg/L)	Oxidation Reduction (mV)	pH (SU)	Conductivity mS/cm	Turbidity NTU	Temp (°C)
Target Remediation Levels[2]				48	71	5	80	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-1	Up-Gradient	5-15	09/02/20	68	NA[1]	NA[1]	NA[1]	14	< 1.0	29	NA	NA	NA	NA	NA	NA	0.59	117.13	7.40	1.20	34.67	19.44
			12/9/20	19	10	< 1.0	29	10	< 1.0	28	NA	NA	NA	NA	NA	NA	0.39	-43.73	7.74	1.17	32.00	13.73
			3/3/21	20	8.9	< 1.0	23	8.8	< 1.0	23	NA	NA	NA	NA	NA	NA	2.20	86.17	7.58	1.14	9.33	12.27
			6/9/21	14	11	1.4	22	10	< 1.0	27	NA	NA	NA	NA	NA	NA	0.63	-60.00	7.57	1.39	17.00	15.36
			9/15/21	13	11	< 1.0	29	11	< 1.0	30	NA	NA	NA	NA	NA	NA	1.11	-14.30	7.66	2.04	27.67	20.29
			6/8/2022*	15	11	0.8	28	10	0.067	27	229	3.2	1,340	28.0	2	2.1	1.78	101.5	7.70	1.41	46.7	16.4
			12/14/22	81[a]	10	< 1.0	25	9.4	< 1.0	24	240	3.1	570	1,200	< 50	140	2.42	79.0	7.55	1.46	13.9	14.6
			1/18/23	110	7.9	< 1.0	23	7.7	< 1.0	24	260	3.0	220	190	< 50	19	6.79	-34.1	7.51	0.45	3.00	6.47
			2/15/23	120	9.5	< 1.0	26	8.4	< 1.0	23	260	2.6	1,900	690	170	110	0.42	61.0	6.93	2.23	58.3	10.7
			5/17/23	190	10.0	1.9	27	8.7	< 1.0	26	480	2.7	3,700	650	450	130	2.80	185.1	6.47	2.39	54.3	14.98
			3/13/24	250	9.8	2.1	26	7.6	< 1.0	24	280	3.7	4,000	1,500	75	24	1.85	143.0	7.63	1.36	21.3	11.65
			9/27/24	130	12	2.0	43	11	<1.0	43	210	3.3	3,600	2,300	1100	990	2.22	78.9	8.32	1.49	15.7	21.17
MW-2	On-Site (southern central edge)	5-15	09/02/20	430	NA[1]	NA[1]	NA[1]	210	9	32	NA	NA	NA	NA	NA	NA	0.55	124.07	7.88	2.81	11.67	21.67
			12/9/20	89	130	7.5	28	130	7	28	NA	NA	NA	NA	NA	NA	0.98	-12.43	6.98	2.68	44.67	13.66
			3/3/21	98	110	10	41	110	9.7	39	NA	NA	NA	NA	NA	NA	1.09	145.40	7.61	1.91	11.67	10.43
			6/9/21	94	76	9.1	37	80	9.7	37	NA	NA	NA	NA	NA	NA	0.45	-62.50	7.76	3.05	10.00	16.13
			9/15/21	92	77	8.2	31	79	8.2	30	NA	NA	NA	NA	NA	NA	1.01	-17.00	7.84	4.81	15.67	22.41
			6/8/2022*	90	70	9.6	38	67	9.1	36	584	5.8	156.0	237	11.9	182.0	1.35	124.7	7.64	3.10	8.67	16.0
			12/14/22	< 0.15[a]	47	78	22	37	74	19	250	950	13,000	9,200	12,000	8,700	1.44	-86.3	5.83	2.82	58.4	12.8
			1/18/23	0.44	57	46	7.2	46	44	3.4	12	1,100	37,000	6,700	36,000	6,500	1.03	-81.6	5.93	0.91	30.7	6.04
			2/15/23	0.17	67	30	5.6	55	30	1.9	1.0	1,100	39,000	5,500	38,000	5,500	0.16	74.9	7.00	4.21	38.0	10.4
			5/17/23	< 0.15	80	14	3.6	70	14	< 1.0	0.32	990	29,000	3,200	29,000	3,300	0.31	212.1	6.78	4.62	33.0	15.0
			3/13/24	0.69	52	4.3	2.5	48	3.6	4.7	21	< 50	4,400	2,800	3,100	2,700	0.30	-1.9	7.05	2.71	21.3	11.7
			9/27/24	1.0	54	4.0	2.9	50	3.9	2.3	11	55	3,800	2,000	4,200	2,100	2.18	-8.6	7.88	3.56	35.0	20.8
MW-3	On-Site (Northeastern edge)	5-15	09/02/20	83	NA[1]	NA[1]	NA[1]	72	< 1.0	36	NA	NA	NA	NA	NA	NA	1.11	118.67	7.82	1.15	14.67	19.77
			12/9/20	22	81	<1.0	40	80	< 1.0	41	NA	NA	NA	NA	NA	NA	0.66	-35.60	7.65	1.06	18.00	14.52
			3/3/21	23	85	< 1.0	36	87	< 1.0	41	NA	NA	NA	NA	NA	NA	1.10	36.97	8.11	1.07	4.67	12.90
			6/9/21	27	71	< 1.0	50	71	< 1.0	50	NA	NA	NA	NA	NA	NA	0.59	-83.20	7.96	1.37	13.00	15.85
			9/15/21	19	60	< 1.0	45	60	< 1.0	42	NA	NA	NA	NA	NA	NA	1.54	-46.43	8.01	2.21	18.67	20.65
			6/8/2022*	15	72	0.7	32.8	73	0.325	33	131	2.9	127.0	597.0	30	173.0	0.51	140.0	0.51	1.18	9.33	16.3
			12/14/22	< 0.15[a]	51	100	7.5	41	100	3.3	36	950	52,000	13,000	52,000	13,000	1.32	-105.1	6.07	2.54	22.7	14.8
			1/18/23	0.49	73	96	15	73	100	12	0.69	700	50,000	12,000	53,000	12,000	1.01	-33.6	6.28	0.80	11.0	6.16
			2/15/23	0.57	74	84	9.6	73	82	8.4	0.74	580	61,000	12,000	61,000	12,000	0.13	-33.3	7.31	3.80	20.3	12.5
			5/17/23	< 0.15	78	38	13	76	37	12	0.27	250	48,000	7,700	47,000	7,400	0.22	165.7	6.82	3.70	19.7	17.6
			3/13/24	< 0.15	110	17	8.6	100	15	7.4	< 0.26	70	41,000	3,800	38,000	3,600	0.18	-24.1	6.72	1.89	13.7	13.1
			9/27/24	0.70	130	9.2	6.9	130	8.9	6.5	<0.26	38	25,000	1,700	25,000	1,700	2.23	-96.2	7.91	2.84	15.3	19.7
MW-4	On-Site (southeastern edge)	5-15	09/02/20	760	NA[1]	NA[1]	NA[1]	65	19	130	NA	NA	NA	NA	NA	NA	1.12	130.30	8.10	3.78	9.33	19.81
			12/9/20	160	68	15	120	66	15	120	NA	NA	NA	NA	NA	NA	0.76	-28.73	7.56	3.51	16.67	14.60
			3/3/21	160	67	18	130	69	18	130	NA	NA	NA	NA	NA	NA	0.97	76.73	7.68	2.88	14.33	13.20
			6/9/21	170	65	17	110	66	17	120	NA	NA	NA	NA	NA	NA	0.54	-73.87	7.69	3.87	11.33	15.41
			9/15/21	180	65	18	120	64	18	120	NA	NA	NA	NA	NA	NA	1.15	15.63	7.85	5.57	18.67	21.07
			6/8/2022*	185	58.3	18.8	133	59	18.3	135	667	7.4	458	237	33.6	203.0	1.09	234.5	7.98	3.79	20.7	16.7
			12/14/22	7[a]	46	21	140	45	21	140	6.5	9.4	320	420	< 50	350	1.39	-110.7	7.58	3.45	9.69	14.6
			1/18/23	360	46	15	210	48	15	210	480	12	< 50	380	< 50	370	0.96	321.2	7.79	0.86	3.00	7.40
			2/15/23	320	53	13	200	260	66	980	490	12	290	610	< 500	2,900	0.13	-24.4	7.20	4.37	17.3	12.5
			5/17/23	340	53	17	140	52	16	130	500	10	130	680	< 50	620	0.21	188.2	7.04	5.10	16.7	15.7
			3/13/24	140	46	11	110	47	11	110	300	11	140	490	< 50	480	0.17	-33.5	7.66	2.02	10.3	12.8
			9/27/24	110	44	6.9	110	50	7.3	120	230	8.7	59	460	<50	430	2.29	64.6	8.59	2.44	1.0	18.4
MW-5	On-Site (Western portion)	5-15	5/17/23	80	5.8	2.2	110	5.3	1.9	110	230	5.0	500	570	< 50	550	0.40	198.7	6.55	3.39	30.3	15.4
			3/13/24	220	8.1	< 1.0	69	7.8	< 1.0	69	400	7.1	830	79	240	24	0.90	157.8	7.30	2.15	10.3	11.6
			9/27/24	140	11	<1.0	130	11.0	<1.0	130	250	5.8	380	58	< 50	29	2.17	63.7	8.49	1.62	4.0	21.2

Notes:

* - Baseline sampling event, pre-remedy implementation.

[a] Data quality issues occurred on the first sample runs by the laboratory, and the samples were re-analyzed outside of the holding time.

1. Due to field staff oversight, total metals samples were inadvertently not collected from the monitoring wells on 2 September 2020.
2. Target Remediation Levels are based on groundwater samples from MW-1, SB-16, and SB-17 due to their upgradient locations and were established in the Remedial Investigation Cleanup Action Plan submitted by Geosyntec September 2022 (Geosyntec, 2022).

Acronyms:

< = Not detected above the reported laboratory method detection limit.

- = Data not included.

-- = No target Site-Specific Remediation Level selected or available (Geosyntec,2022).

µg/L = micrograms per liter

mg/L = milligrams per liter

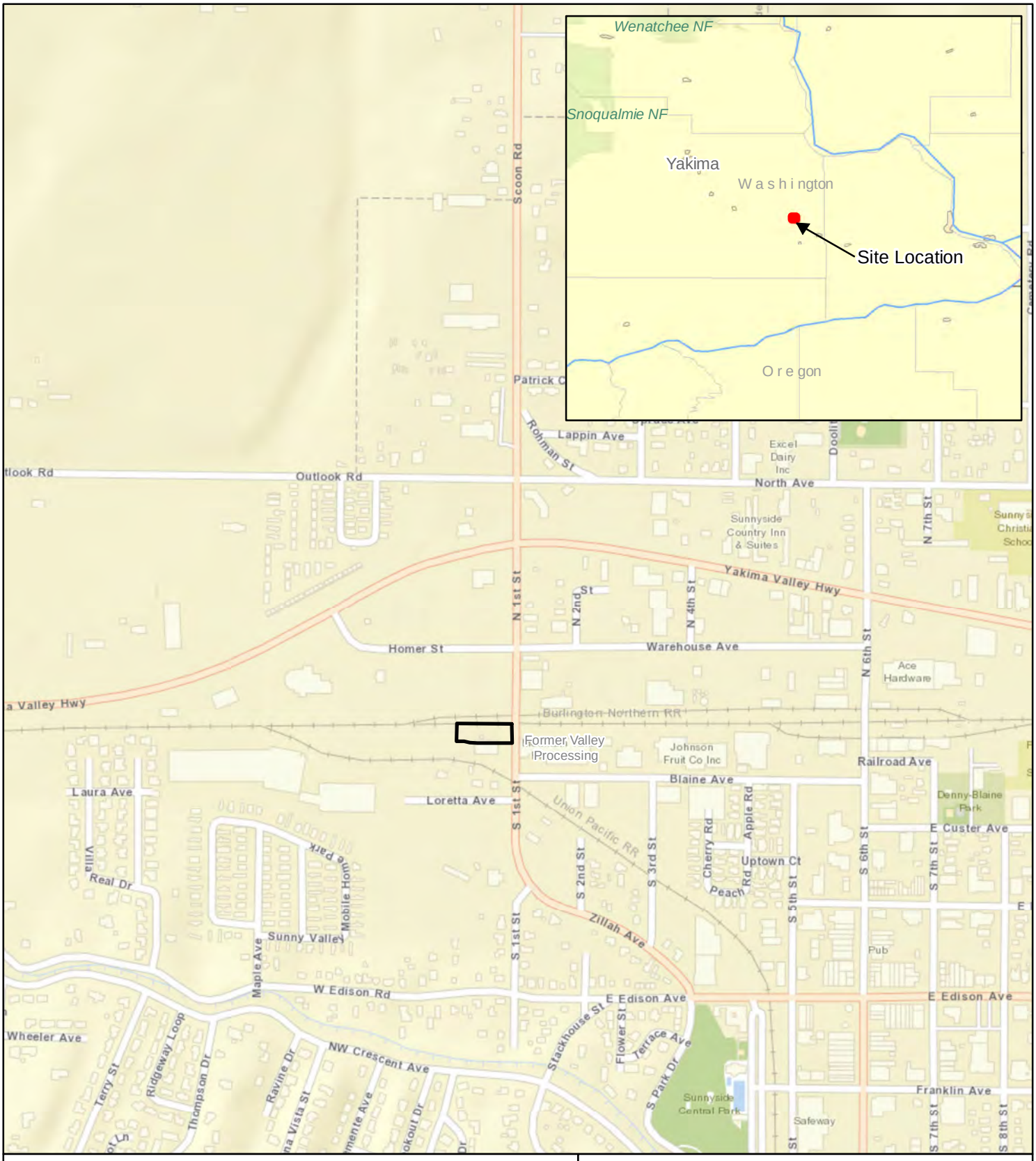
MW = monitoring wells

NA = Not Analyzed

Bold = Analyte was detected.

Highlight = Analyte was detected at concentrations that are greater than the Target Remediation Levels.

Figures



Legend

Site Location

N

Sources: Esri, HERE, Garmin, USGS, Intermap, INCREMENT P, NRCan, Esri Japan, METI, Esri China (Hong Kong), Esri Korea, Esri (Thailand), NGCC, (c) OpenStreetMap contributors, and the GIS User Community

0 0.05 0.1 0.2 0.3 Miles

Site Location Map

101 North 1st Street
Sunnyside, Washington

Geosyntec consultants

PNR0696E	November 2024

Figure 1

P:\CAD_GIS\Projects\PNR0696_Sunnyside\MXDs\Revisions111721\Figure 1 Site Location Map.mxd 12/7/2021 9:16:37 AM

Notes:
Map provided by ESRI Basemaps 2016.
MW=Monitoring Well
The Site Boundary is the approximate area leased by NAS from BNSF.
General groundwater flow direction based on gradients observed at MW-1, MW-2, MW-3, and MW-4 during the 2020 and 2021 quarterly groundwater sampling events.

Legend

- Monitoring Well Location
- General Groundwater Gradient
- Site Boundary
- Lower Concentration Subarea Injection Area
- Higher Concentration Subarea Injection Area

N

0 50 Feet

Groundwater Compliance Monitoring Well Locations

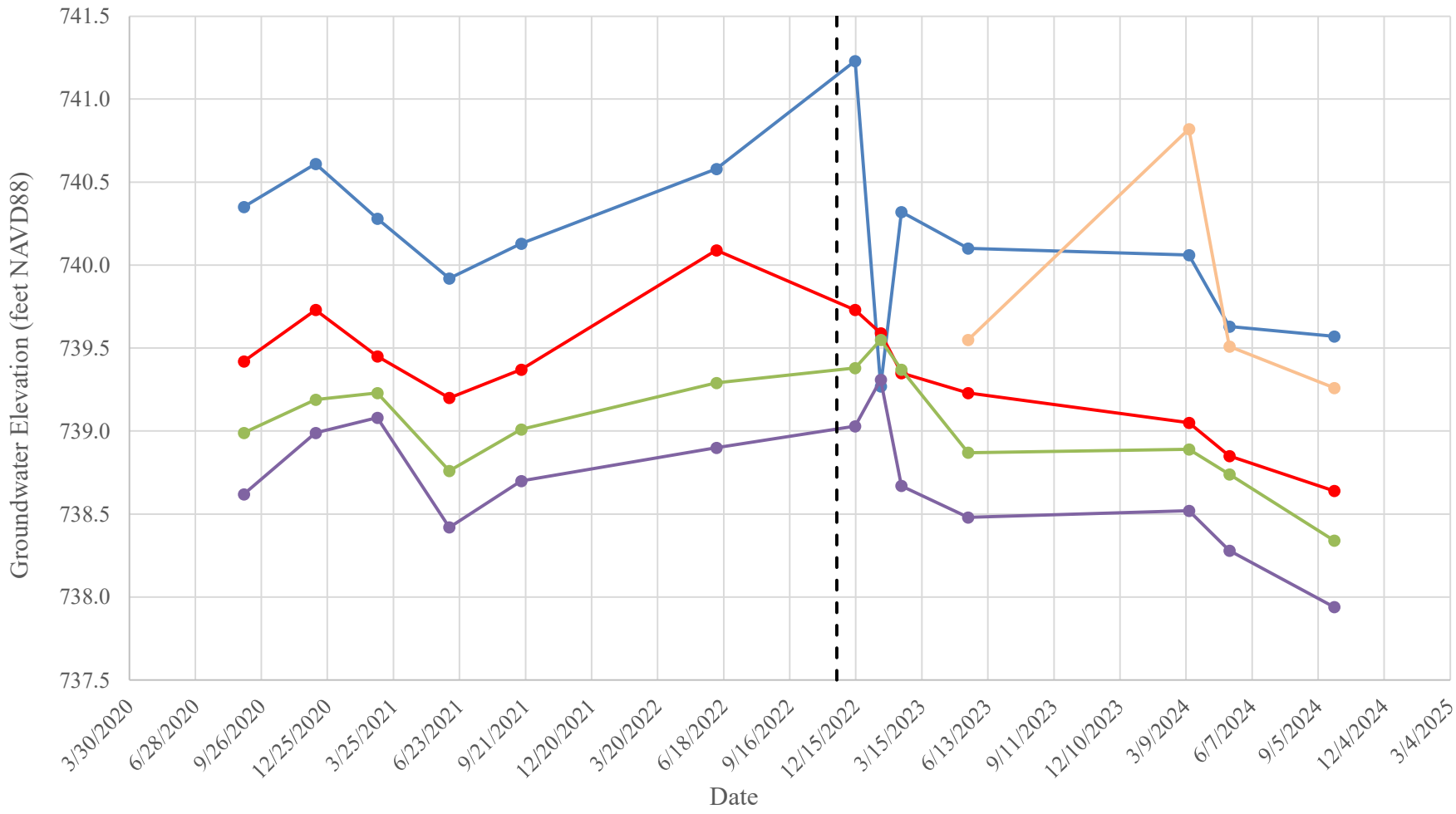
101 North 1st Street
Sunnyside, Washington

Geosyntec consultants

Figure 2

PNR0696E | November 2024

P:\CAD_GIS\Projects\PNR0696_Sunnyside\MXDs\Figure 2 Groundwater Compliance Monitoring.mxd 3/29/2024 4:41:29 AM



Legend

- MW-1
- MW-2
- MW-3
- MW-4
- MW-5
- In-Situ Dentrification Injections

Note:
NAVD88 - North American Vertical Datum 1988

Groundwater Elevation Hydrograph

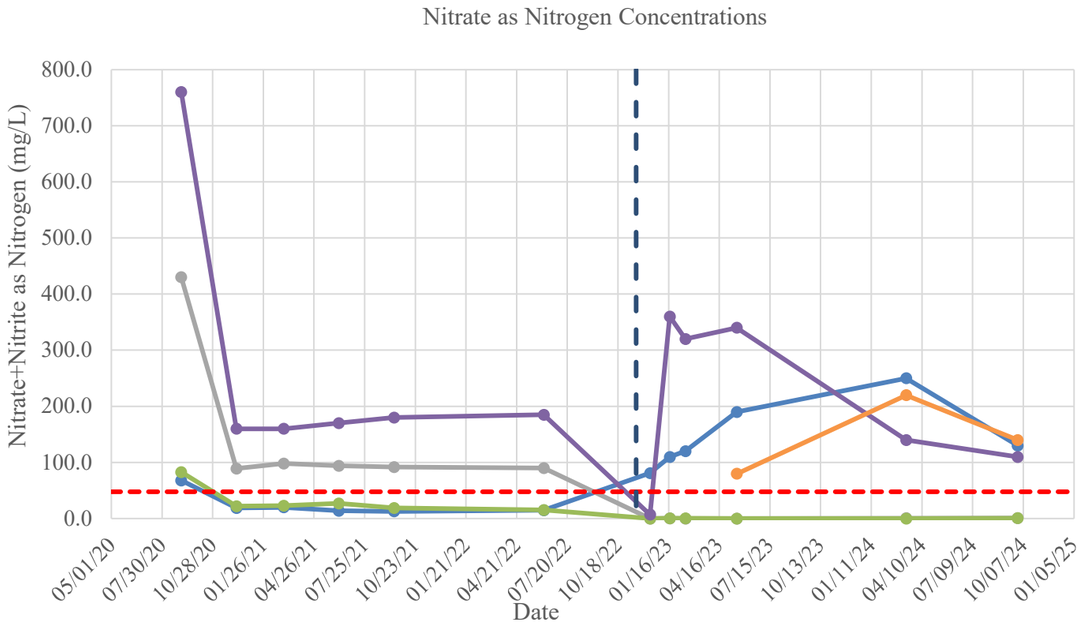
101 North 1st Street
Sunnyside, Washington

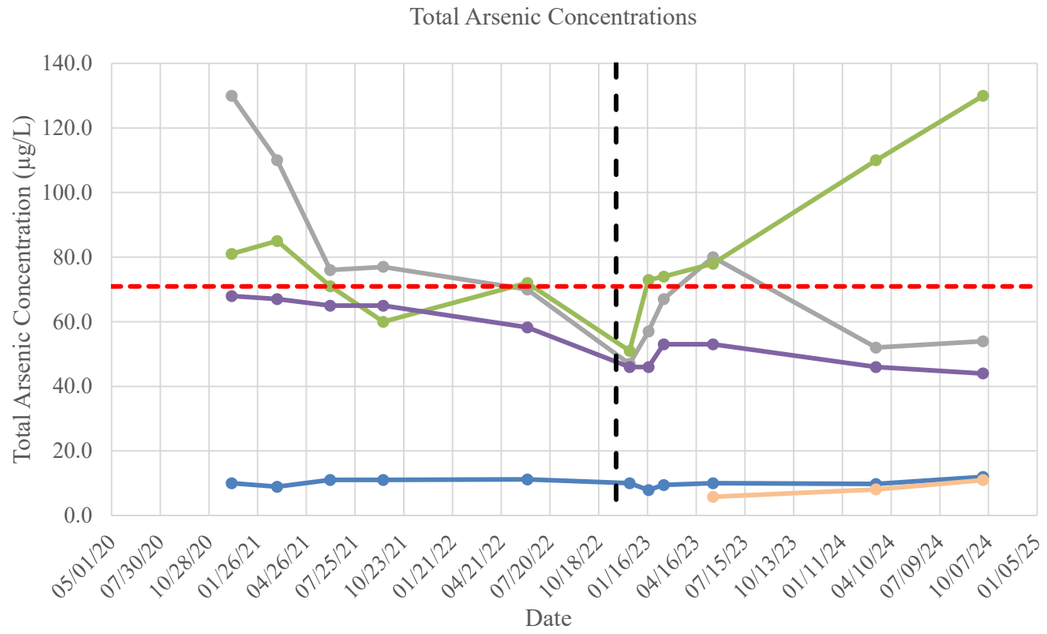
Geosyntec consultants

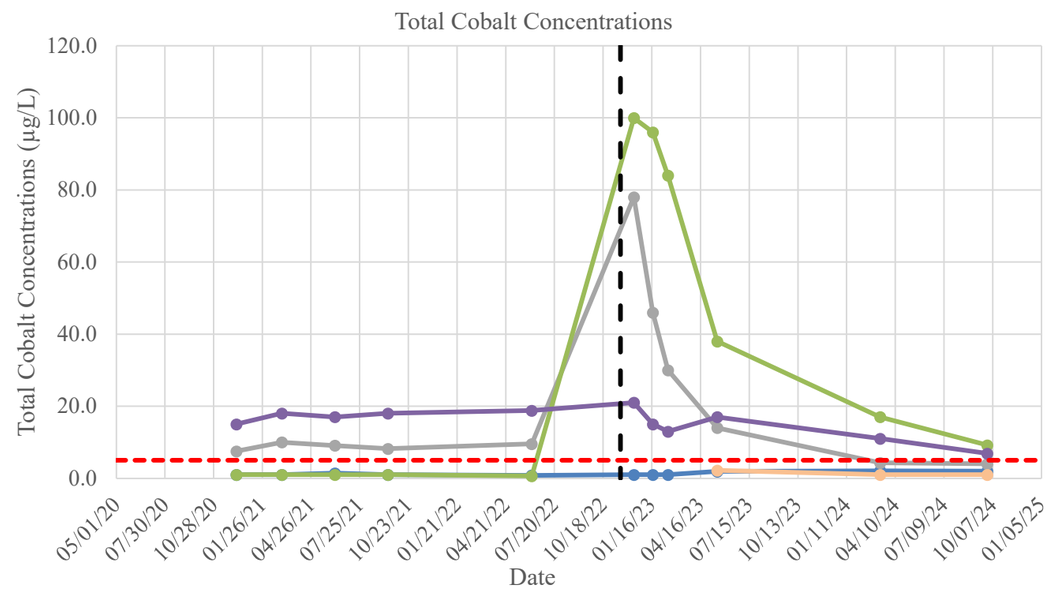
Figure 3

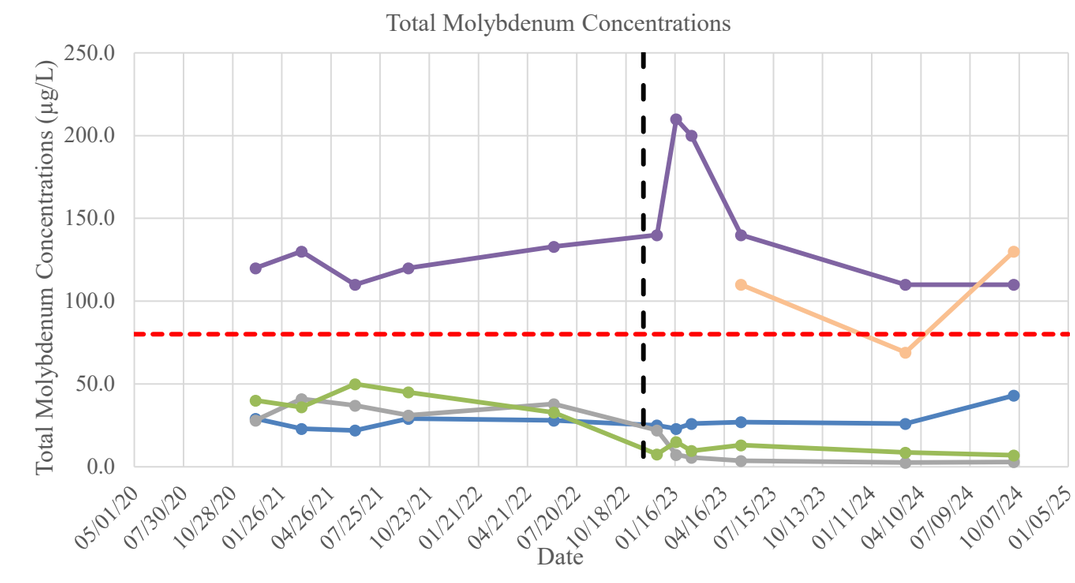
PNR0696E | December 2024

https://geosyntec-my.sharepoint.com/personal/mary_ratcliffe_aspectconsulting_com/Documents/Sharma Files/PNR0696E-01/[DRAFT_Figure 3_MMR_format.xlsx]









Legend

- MW-1
- MW-2
- MW-3
- MW-4
- MW-5
- Target Remedial Level (TRL)
- In-Situ Dentrification Injections

Note:
mg/L - milligrams per liter
µg/L - micrograms per liter

Constituents of Potential Concern in Wells

101 North 1st Street
Sunnyside, Washington

Geosyntec consultants

Figure 4

PNR0696E | December 2024

Attachment 1
Groundwater Sampling Forms

WELL GAUGING DATA

Project # 240313-KC1 Date 3/13/24 Client GeoSyntec

Site 101 N 1st St. Sunnyside WA

Well ID	Time	Well Size (in.)	Sheen / Odor	Depth to Immiscible Liquid (ft.)	Thickness of Immiscible Liquid (ft.)	Volume of Immiscibles Removed (ml)	Depth to water (ft.)	Depth to well bottom (ft.)	Survey Point: TOB or ~~TOC~~	Notes
MW-1	0757	2	—	—	—	—	3.27	14.90		
MW-2	0751	2	—	—	—	—	5.35	14.99		
MW-3	0745	2	—	—	—	—	5.52	14.91		
MW-4	0743	2	—	—	—	—	5.88	14.93		
MW-5	0753	2	—	—	—	—	3.44	14.57	↓	

LOW FLOW WELL MONITORING DATA SHEET

Project #: 240313-KC1	Client: GeoSyntec
Sampler: KC	Gauging Date: 3/13/24
Well I.D.: MW-1	Well Diameter (in.): (2) 3 4 6 8 ____
Total Well Depth (ft.): 14.90	Depth to Water (ft.): 3.27
Depth to Free Product: —	Thickness of Free Product (feet): —
Referenced to: (PVC) Grade	Flow Cell Type: HANNA

Purge Method: 2" Grundfos Pump | Peristaltic Pump | Bladder Pump
Sampling Method: (Dedicated Tubing) | New Tubing | Other____

Start Purge Time: 0814 Flow Rate: 200 mL/min Pump Depth: 9 Ft

Time	Temp. (°C or °F)	pH	Cond. (mS/cm or µS/cm)	Turbidity (NTUs)	D.O. (mg/L)	ORP (mV)	Water Removed (gals. or mL)	Depth to Water (ft.)
0817	10.48	8.47	1346	32	2.99	124.1	600	3.27
0820	10.91	8.12	1361	28	2.49	127.9	1200	3.29
0823	11.72	7.68	1363	22	1.90	139.5	1800	3.31
0826	11.63	7.61	1364	21	1.84	143.2	2400	3.33
0829	11.59	7.59	1366	21	1.81	146.3	3000	3.38

Did well dewater? Yes (No) Amount actually evacuated: 3000 mL

Sampling Time: 0832 Sampling Date: 3/13/24

Sample I.D.: GW-031324-MW-1 Laboratory: ALS

Analyzed for: TPH-G BTEX MTBE TPH-D Other: See COC

Equipment Blank I.D.: @ Time Duplicate I.D.: GW-031324-DUP-1

LOW FLOW WELL MONITORING DATA SHEET

Project #: 240313-KL 1	Client: GeoSyntec
Sampler: KL	Gauging Date: 3/13/24
Well I.D.: MW-2	Well Diameter (in.): (2) 3 4 6 8 ____
Total Well Depth (ft.): 14.99	Depth to Water (ft.): 5.35
Depth to Free Product: —	Thickness of Free Product (feet): —
Referenced to: (PVC) Grade	Flow Cell Type: HANNA

Purge Method: 2" Grundfos Pump (Peristaltic Pump) Bladder Pump
Sampling Method: (Dedicated Tubing) New Tubing Other ____

Start Purge Time: 0918 Flow Rate: 200mL/min Pump Depth: 10 ft

Time	Temp. (°C or °F)	pH	Cond. (mS/cm or (µS/cm))	Turbidity (NTUs)	D.O. (mg/L)	ORP (mV)	Water Removed (gals. or (mL))	Depth to Water (ft.)
0921	11.30	7.20	2655	43	1.41	68.4	600	5.38
0924	11.58	7.09	2688	23	0.64	19.7	1200	5.44
0927	11.65	7.06	2702	21	0.35	3.6	1800	5.51
0930	11.72	7.05	2711	22	0.29	-2.3	2400	5.62
0933	11.74	7.03	2714	21	0.27	-6.9	3000	5.69

Did well dewater? Yes (No) Amount actually evacuated: 3000mL

Sampling Time: 0936 Sampling Date: 3/13/24

Sample I.D.: GW-031324-MW-2 Laboratory: ALS

Analyzed for: TPH-G BTEX MTBE TPH-D Other: See COC

Equipment Blank I.D.: @ Time Duplicate I.D.: —

LOW FLOW WELL MONITORING DATA SHEET

Project #: 240313-KC1	Client: Geosyntec
Sampler: KL	Gauging Date: 3/13/24
Well I.D.: MW-3	Well Diameter (in.): (2) 3 4 6 8 ___
Total Well Depth (ft.): 14.91	Depth to Water (ft.): 5.52
Depth to Free Product: —	Thickness of Free Product (feet): —
Referenced to: (PVC) Grade	Flow Cell Type: HANNA

Purge Method: 2" Grundfos Pump (Peristaltic Pump) Bladder Pump
Sampling Method: (Dedicated Tubing) New Tubing Other ___

Start Purge Time: 1020 Flow Rate: 200 mL/min Pump Depth: 10 ft

Time	Temp. (°C or °F)	pH	Cond. (mS/cm or (µS/cm))	Turbidity (NTUs)	D.O. (mg/L)	ORP (mV)	Water Removed (gals. or (mL))	Depth to Water (ft.)
1023	12.67	7.44	1922	16	1.21	-22.0	600	5.54
1026	12.94	6.96	1898	14	0.44	-13.3	1200	5.60
1029	13.06	6.75	1890	14	0.21	-22.4	1800	5.63
1032	13.12	6.71	1888	13	0.18	-24.2	2400	5.67
1035	13.03	6.69	1887	14	0.16	-25.6	3000	5.72

Did well dewater? Yes (No)	Amount actually evacuated: 3000mL
Sampling Time: 1038	Sampling Date: 3/13/24
Sample I.D.: GW-031324-MW-3	Laboratory: ALS
Analyzed for: TPH-G BTEX MTBE TPH-D	Other: See COC
Equipment Blank I.D.: @ Time	Duplicate I.D.: —

LOW FLOW WELL MONITORING DATA SHEET

Project #: 240313-KC1	Client: Geosyntec
Sampler: KC	Gauging Date: 3/13/24
Well I.D.: MW-4	Well Diameter (in.): (2) 3 4 6 8 ___
Total Well Depth (ft.): 14.93	Depth to Water (ft.): 5.88
Depth to Free Product: —	Thickness of Free Product (feet): —
Referenced to: (PVC) Grade	Flow Cell Type: HANNA

Purge Method: 2" Grundfos Pump (Peristaltic Pump) Bladder Pump
Sampling Method: (Dedicated Tubing) New Tubing Other ___

Start Purge Time: 0950 Flow Rate: 200 mL/min Pump Depth: 10 ft

Time	Temp. (°C or °F)	pH	Cond. (mS/cm or µS/cm)	Turbidity (NTUs)	D.O. (mg/L)	ORP (mV)	Water Removed (gals. or mL)	Depth to Water (ft.)
0953	12.25	7.90	2043	17	1.03	-27.5	600	5.91
0956	12.52	7.76	2029	13	0.33	-30.1	1200	6.02
0959	12.77	7.68	2025	11	0.18	-32.2	1800	6.07
1002	12.81	7.66	2023	10	0.17	-33.4	2400	6.11
1005	12.86	7.65	2022	10	0.15	-34.8	3000	6.17

Did well dewater? Yes (No) Amount actually evacuated: 3000 mL

Sampling Time: 1008 Sampling Date: 3/13/24

Sample I.D.: GW-031324-MW-4 Laboratory: ALS

Analyzed for: TPH-G BTEX MTBE TPH-D Other: See COC

Equipment Blank I.D.: @ Time Duplicate I.D.: —

LOW FLOW WELL MONITORING DATA SHEET

Project #: 240313-KC1	Client: Geosyntec
Sampler: KC	Gauging Date: 3/13/24
Well I.D.: MW-5	Well Diameter (in.) : (2) 3 4 6 8 ___
Total Well Depth (ft.) : 14.57	Depth to Water (ft.) : 3.44
Depth to Free Product: —	Thickness of Free Product (feet): —
Referenced to: (PVC) Grade	Flow Cell Type: HANNA

Purge Method: 2" Grundfos Pump (Peristaltic Pump) Bladder Pump
Sampling Method: (Dedicated Tubing) New Tubing Other ___

Start Purge Time: 0848 Flow Rate: 200ml/min Pump Depth: 8ft

Time	Temp. (°C or °F)	pH	Cond. (mS/cm or µS/cm)	Turbidity (NTUs)	D.O. (mg/L)	ORP (mV)	Water Removed (gals. or mL)	Depth to Water (ft.)
0851	10.72	7.43	2052	18	1.87	162.9	600	3.45
0854	11.58	7.38	2128	13	1.14	161.3	1200	3.51
0857	11.59	7.32	2143	11	0.94	159.2	1800	3.54
0900	11.63	7.31	2146	11	0.90	157.9	2400	3.59
0903	11.60	7.28	2151	10	0.87	156.4	3000	3.62

Did well dewater? Yes (No) Amount actually evacuated: 3000ml

Sampling Time: 0906 Sampling Date: 3/13/24

Sample I.D.: GW-031324-MW-5 Laboratory: ALS

Analyzed for: TPH-G BTEX MTBE TPH-D Other: See COC

Equipment Blank I.D.: @ Time Duplicate I.D.: —

Chain of Custody

Laboratory 8620 Holly Drive, Everett, WA 98208 USA | +1 425 356 2600

(If viewing electronically, this is a drop down list - click on the address above - a drop down arrow will appear to the righ

Work Order No.: EV24030105

Project Manager:	Priyam Sharma			**Bill to:**	Priyam Sharma		
Client Name:	Geosyntec			**Company:**	Geosyntec		
Address:	520 Pike St, Suite 2600			**Address:**	520 Pike St, Suite 2600		
City, State ZIP:	Seattle, WA 98101			**City, State ZIP:**	Seattle, WA 98101		
Email:	priyam.sharma@Geosyntec.com	**Phone:**	(206) 496-1464	**Email:**	priyam.sharma@geosyntec.com	**PO#**	
Project Site:	101 N 1st St, Sunnyside	**State:**	WA				
Project Name:	Sunnyside						
Project Number:	PNR0696E						
P.O. Number:							
Sampler's Name:	Kendra Cutler						

SAMPLE RECEIPT

Temperature (°C):			Temp Blank Present		
Received Intact:	Yes	No	N/A	Wet Ice / Blue Ice	
Cooler Custody Seals:	Yes	No	N/A	Total Containers:	
Sample Custody Seals:	Yes	No	N/A		

REQUESTED ANALYSIS

Sample Identification	Matrix	Date Sampled	Time Sampled	Lab ID	No. of Containers	Total As, Co, Mo, Fe, Mn (EPA 200.8)	Dissolved As, Co, Mo,Fe, Mn (Field Filtered) (EPA 200.8)	Nitrate (EPA 300.0)	Sulfate (EPA 300.0)	Dissolved Organic Carbon (Field Filtered)(EPA 9060A)	Comments
GW-03132024-MW-1	W	3/13/24	0832		4	X	X	X	X	X	
GW-03132024-MW-2	W		0936		4	X	X	X	X	X	
GW-03132024-MW-3	W		1038		4	X	X	X	X	X	
GW-03132024-MW-4	W		1008		4	X	X	X	X	X	
GW-03132024-MW-5	W		0906		4	X	X	X	X	X	
GW-03132024-DUP-1	W		1200		4	X	X	X	X	X	

TAT

- ☐ Routine 10 Day
- ☐ 24 hours * 100%
- ☐ 48 hours* 80%
- ☐ 3 Day* 60%
- ☑ 5 day* 50%

* Please call for availability

Due Date:

Dissolved	As, Co, Fe, Mn, Mo
Total	As, Co, Fe, Mn, Mo

Additional Methods Available Upon Request

RELINQUISHED BY

Print Name	Signature	Date/Time
Kendra Cutler		3/13/24 1438

RECEIVED BY

Print Name	Signature	Date/Time
Ariel Villa		3/13/24 1451

Revised: 3/8/2024

WELLHEAD INSPECTION FORM

Client: GeoSyntec Site: 101 N 1st St, Sunnyside WA Date: 3/13/24

Job #: 240313-KC1 Technician: KC Page 1 of 1

Well ID	Well Inspected - No Corrective Action Required	Check indicates deficiency: Cap non-functional	Lock non-functional	Lock missing	Bolts missing (list qty)	Tabs stripped (list qty)	Tabs broken (list qty)	Annular seal incomplete	Apron damaged	Rim / Lid broken	Trip Hazard	Below Grade	Other (explain in notes)	Well Not Inspected (explain in notes)	Notes (list if cap or lick replaced, if there are access issues associated with repairs, if traffic control is required, if stand pipe damaged, or any specific details not covered by checklist)
MW-1				NL											
MW-2				NL											
MW-3				NL											
MW-4				NL											
MW-5				NL											
(															

NOTES:

TEST EQUIPMENT CALIBRATION LOG

PROJECT NAME 101 N 1st St. Sunnyside WA				PROJECT NUMBER 240313-KC1			
EQUIPMENT NAME	EQUIPMENT NUMBER	DATE/TIME OF TEST	STANDARDS USED	EQUIPMENT READING	CALIBRATED TO: OR WITHIN 10%:	TEMP.	INITIALS
HANNA	07460001100 1	3/13/24 @ 0650	pH 4 7 10	3.93 7.09 9.91	✓	14.3	KC
			Cond. 3900 ORP 237.5 D.O. 100	3894 237.1 92	✓	14.3	KC

PURGE DRUM INVENTORY LOG

CLIENT Geosyntec

SITE ADDRESS 101 N 1st St, Sunnyside, WA

STATUS OF DRUM(S) UPON ARRIVAL							
Number of drum(s) empty:	0	0	0	0	0	0	
Number of drum(s) 1/4 full:	0	0	1	1	0	0	
Number of drum(s) 1/2 full:	0	0	0	0	1	1	
Number of drum(s) 3/4 full:	0	0	0	0	0	0	
Number of drum(s) full:	0	0	0	0	0	0	
Total drum(s) on site:	0	0	1	1	1	1	
STATUS OF DRUM(S) UPON DEPARTURE							
Number of drum(s) empty:	0	0	0	0	0	0	
Number of drum(s) 1/4 full:	1	1	1	0	0	0	
Number of drum(s) 1/2 full:	0	0	0	1	1	1	
Number of drum(s) 3/4 full:	0	0	0	0	0	0	
Number of drum(s) full:	0	0	0	0	0	0	
Total drum(s) on site:	1	1	1	1	1	1	
LOCATION OF DRUM(S)							
Is/Are drum(s) at wellhead(s)?	Yes	Yes	Yes	Yes	yes	yes	
Describe location if drum(s) is/are located elsewhere:	~~At MW-2 at Post~~ Next to MW-3						
Label drum(s) properly:	Yes	Yes	yes	yes	yes	yes	
FINAL STATUS							
Number of new drum(s) left on site this event:	1	1	0	0	0	0	
Date of inspection:	6/8/22	01/18/23	2/15/23	05/16/23	5/17/23	3/13/24	
Logged by BTS Field Technician:	cm	FD	cm	mc		KL	
Office reviewed by:							

WELL GAUGING DATA

Project # 240927-LJ1 Date 9-27-24 Client Geosyntec

Site 101 N 1st St Sunnyside WA

Well ID	Time	Well Size (in.)	Sheen / Odor	Depth to Immiscible Liquid (ft.)	Thickness of Immiscible Liquid (ft.)	Volume of Immiscibles Removed (ml)	Depth to water (ft.)	Depth to well bottom (ft.)	Survey Point: TOB or TOC	Notes
MW-1	0701	2	—	—	—	—	3.76	14.89		
MW-2	0659	2	—	—	—	—	5.76	14.93		
MW-3	0656	2	—	—	—	—	6.07	15.06		
MW-4	0654	2	—	—	—	—	6.46	15.01		
MW-5	0700	2	—	—	—	—	5.00	14.58		

LOW FLOW WELL MONITORING DATA SHEET

Project #: 240927-LJ1	Client: Geosyntec
Sampler: LJ	Gauging Date: 9-27-24
Well I.D.: MW-1	Well Diameter (in.): (2) 3 4 6 8 ____
Total Well Depth (ft.): 14.89	Depth to Water (ft.): 3.76
Depth to Free Product: —	Thickness of Free Product (feet): —
Referenced to: (PVC) Grade	Flow Cell Type: Horiba

Purge Method: 2" Grundfos Pump | Peristaltic Pump | Bladder Pump
Sampling Method: Dedicated Tubing | New Tubing | Other ____

Start Purge Time: 0901 Flow Rate: 200 mL/min Pump Depth: 9.5'

Time	Temp. (°C or °F)	pH	Cond. (mS/cm or µS/cm)	Turbidity (NTUs)	D.O. (mg/L)	ORP (mV)	Water Removed (gals. or mL)	Depth to Water (ft.)
0904	20.56	8.59	1496	16	2.31	78.1	600	4.08
0907	20.92	8.43	1497	19	2.25	78.8	1200	4.08
0910	21.05	8.36	1496	16	2.23	79.2	1800	4.09
0913	21.21	8.31	1493	16	2.22	78.6	2400	4.09
0916	21.25	8.28	1489	15	2.21	78.8	3000	4.09

Did well dewater? Yes (No) Amount actually evacuated: 3000mL

Sampling Time: 0918 Sampling Date: 9-27-24

Sample I.D.: GW-09272024-MW-1 Laboratory: ALS

Analyzed for: TPH-G BTEX MTBE TPH-D Other: See COC

Equipment Blank I.D.: @ Time Duplicate I.D.:

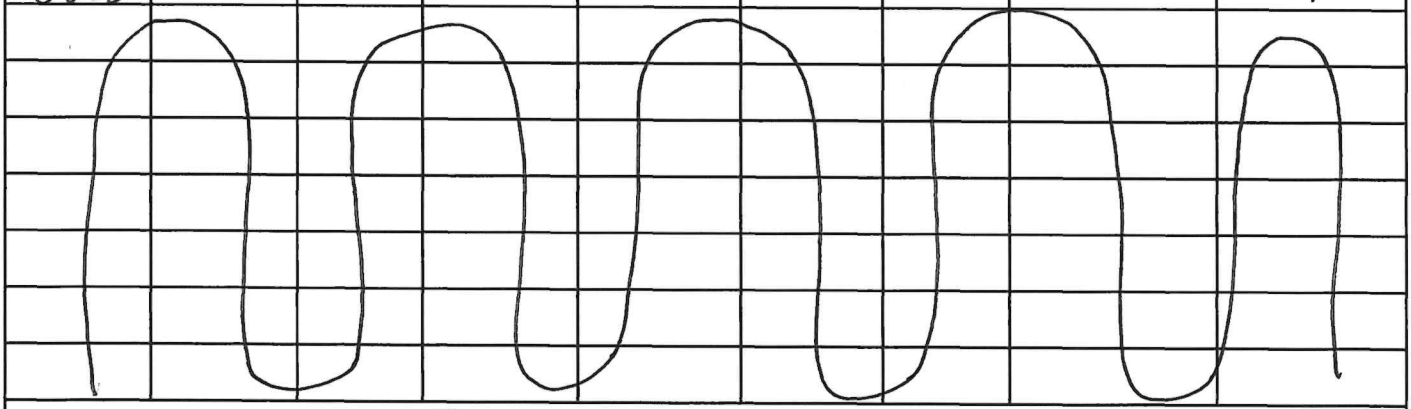
LOW FLOW WELL MONITORING DATA SHEET

Project #: 240927-LJ1	Client: Geosyntec
Sampler: LJ	Gauging Date: 9-27-24
Well I.D.: MW-2	Well Diameter (in.): (2) 3 4 6 8 ___
Total Well Depth (ft.): 14.93	Depth to Water (ft.): 5.76
Depth to Free Product: —	Thickness of Free Product (feet): —
Referenced to: (PVC) Grade	Flow Cell Type: Hanna

Purge Method: 2" Grundfos Pump | Peristaltic Pump | Bladder Pump
Sampling Method: Dedicated Tubing | New Tubing | Other ___

Start Purge Time: 0807 Flow Rate: 200mL/min Pump Depth: 10.5'

Time	Temp. (°C or °F)	pH	Cond. (mS/cm or µS/cm)	Turbidity (NTUs)	D.O. (mg/L)	ORP (mV)	Water Removed (gals. or mL)	Depth to Water (ft.)
0810	20.77	7.90	3511	37	2.32	-4.5	600	5.83
0813	20.94	7.89	3533	37	2.21	-15.6	1200	5.85
0816	20.86	7.89	3561	33	2.19	-12.4	1800	5.86
0819	20.86	7.89	3571	36	2.18	-7.6	2400	5.88
0822	20.70	7.87	3551	36	2.17	-5.7	3000	5.91



Did well dewater? Yes (No)	Amount actually evacuated: 3000mL
Sampling Time: 0823	Sampling Date: 9-27-24
Sample I.D.: GW-092720 24-MW-2	Laboratory: ALS
Analyzed for: TPH-G BTEX MTBE TPH-D	Other: See COC
Equipment Blank I.D.: @ Time	Duplicate I.D.:

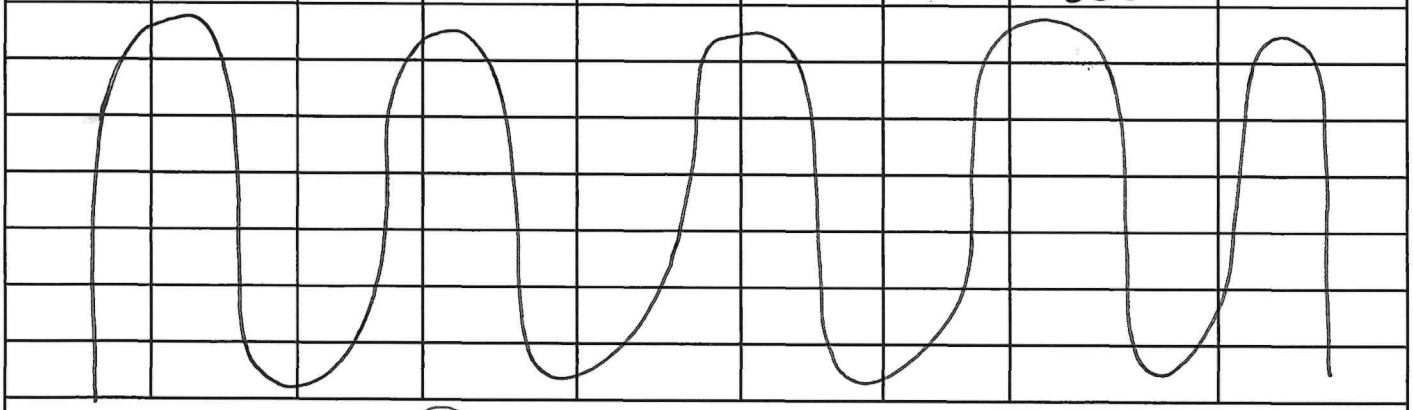
LOW FLOW WELL MONITORING DATA SHEET

Project #: 240927-LJ1	Client: Geosyntec
Sampler: LJ	Gauging Date: 9-27-24
Well I.D.: MW-3	Well Diameter (in.): (2) 3 4 6 8 ___
Total Well Depth (ft.): 15.06	Depth to Water (ft.): 6.07
Depth to Free Product: —	Thickness of Free Product (feet): —
Referenced to: (PVC) Grade	Flow Cell Type: Myron

Purge Method: 2" Grundfos Pump | Peristaltic Pump | Bladder Pump
Sampling Method: Dedicated Tubing | New Tubing | Other ___

Start Purge Time: 0740 Flow Rate: 200mL/min Pump Depth: 10.5'

Time	Temp. (°C or °F)	pH	Cond. (mS/cm or µS/cm)	Turbidity (NTUs)	D.O. (mg/L)	ORP (mV)	Water Removed (gals. or mL)	Depth to Water (ft.)
0743	19.36	8.36	2862	19	2.42	-91.4	600	6.10
0746	19.23	8.12	2803	18	2.29	-91.4	1200	6.10
0749	19.56	7.95	2831	16	2.25	-93.5	1800	6.10
0752	19.71	7.91	2839	15	2.24	-97.4	2400	6.10
0755	19.84	7.86	2843	15	2.21	-97.6	3000	6.10



Did well dewater? Yes (No) Amount actually evacuated: 3000mL

Sampling Time: 0757 Sampling Date: 9-27-24

Sample I.D.: GW-09272024-MW-3 Laboratory: ALS

Analyzed for: TPH-G BTEX MTBE TPH-D Other: See COC

Equipment Blank I.D.: @ Time Duplicate I.D.:

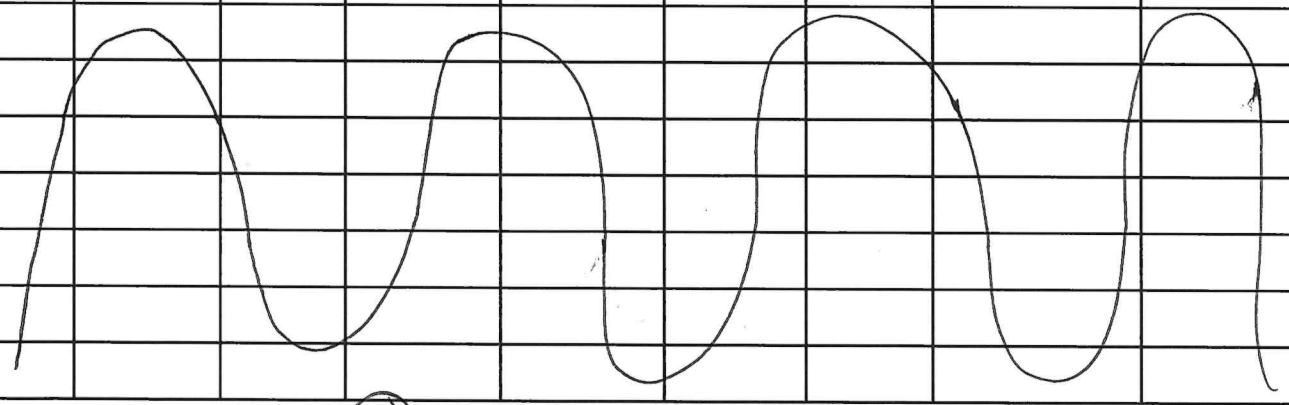
LOW FLOW WELL MONITORING DATA SHEET

Project #: 240927-LJ1	Client: Geosyntec
Sampler: LJ	Gauging Date: 9-27-24
Well I.D.: MW-4	Well Diameter (in.): (2) 3 4 6 8 ____
Total Well Depth (ft.): 15.01	Depth to Water (ft.): 6.46
Depth to Free Product: —	Thickness of Free Product (feet): —
Referenced to: (PVC) Grade	Flow Cell Type: Hanna

Purge Method: 2" Grundfos Pump | Peristaltic Pump | Bladder Pump
Sampling Method: Dedicated Tubing | New Tubing | Other ____

Start Purge Time: 0707 Flow Rate: 200 mL/min Pump Depth: 10.5'

Time	Temp. (°C or °F)	pH	Cond. (mS/cm or µS/cm)	Turbidity (NTUs)	D.O. (mg/L)	ORP (mV)	Water Removed (gals. or mL)	Depth to Water (ft.)
0710	17.70	8.79	2460	3	2.57	57.4	600	6.51
0713	18.34	8.68	2430	1	2.34	60.6	1200	6.52
0716	18.57	8.63	2432	1	2.30	62.2	1800	6.52
0719	18.43	8.59	2439	1	2.24	64.4	2400	6.52
0722	18.29	8.56	2440	1	2.29	67.3	3000	6.53



Did well dewater? Yes (No) Amount actually evacuated: 3000mL

Sampling Time: 0724 Sampling Date: 9-27-24

Sample I.D.: GW-0927 2024-MW-4 Laboratory: ALS

Analyzed for: TPH-G BTEX MTBE TPH-D Other: See COC

Equipment Blank I.D.: @ Time Duplicate I.D.: GW-0927 2024-DUP-1

LOW FLOW WELL MONITORING DATA SHEET

Project #: 240927-LJ1	Client: Geosynte
Sampler: LJ	Gauging Date: 9-27-24
Well I.D.: MW-5	Well Diameter (in.): (2) 3 4 6 8 ___
Total Well Depth (ft.): 14.58	Depth to Water (ft.): 5.00
Depth to Free Product: —	Thickness of Free Product (feet): —
Referenced to: (PVC) Grade	Flow Cell Type: Hanna

Purge Method: 2" Grundfos Pump | Peristaltic Pump | Bladder Pump
Sampling Method: Dedicated Tubing | New Tubing | Other ___

Start Purge Time: 0835 Flow Rate: 200 mL/min Pump Depth: 10'

Time	Temp. (°C or °F)	pH	Cond. (mS/cm or µS/cm)	Turbidity (NTUs)	D.O. (mg/L)	ORP (mV)	Water Removed (gals. or mL)	Depth to Water (ft.)
0838	20.00	8.59	1755	5	2.31	73.7	600	5.09
0841	20.73	8.51	1642	4	2.21	69.8	1200	5.09
0844	21.06	8.54	1634	4	2.18	64.8	1800	5.10
0847	21.20	8.47	1621	4	2.16	63.1	2400	5.10
0850	21.43	8.45	1613	4	2.16	63.2	3000	5.11

Did well dewater? Yes (No) Amount actually evacuated: 3000mL

Sampling Time: 0852 Sampling Date: 9-27-24

Sample I.D.: GW-09272024-MW-5 Laboratory: ALS

Analyzed for: TPH-G BTEX MTBE TPH-D Other: See COC

Equipment Blank I.D.: @ Time Duplicate I.D.:

Chain of Custody

Laboratory 8620 Holly Drive, Everett, WA 98208 USA | +1 425 356 2600

(If viewing electronically, this is a drop down list - click on the address above - a drop down arrow will appear to the right of the address)

Work Order No.:

Project Manager:	Priyam Sharma			**Bill to:**	Priyam Sharma		
Client Name:	Geosyntec			**Company:**	Geosyntec		
Address:	520 Pike St, Suite 2600			**Address:**	520 Pike St, Suite 2600		
City, State ZIP:	Seattle, WA 98101			**City, State ZIP:**	Seattle, WA 98101		
Email:	priyam.sharma@Geosyntec.com	**Phone:**	(206) 496-1464	**Email:**	priyam.sharma@geosyntec.co	**PO#**	100057265
Project Site:	101 N 1st St, Sunnyside	**State:**	WA				
Project Name:	Sunnyside						
Project Number:	PNR0696E						
P.O. Number:							
Sampler's Name:	Lydia Johnson						

SAMPLE RECEIPT

Temperature (°C):		Temp Blank Present			
Received Intact:	Yes	No	N/A	Wet Ice / Blue Ice	
Cooler Custody Seals:	Yes	No	N/A	Total Containers:	
Sample Custody Seals:	Yes	No	N/A		

REQUESTED ANALYSIS

Sample Identification	Matrix	Date Sampled	Time Sampled	Lab ID	No. of Containers		Total As, Co, Mo, Fe, Mn (EPA 200.8)	Dissolved As, Co, Mo,Fe, Mn (Field Filtered) (EPA 200.8)	Nitrate (EPA 300.0)	Sulfate (EPA 300.0)	Dissolved Organic Carbon (Field Filtered)(EPA 9060A)
GW-09272024-MW-1	W	9/27/2024	0918		4		X	X	X	X	X
GW-09272024-MW-2	W	9/27/2024	0823		4		X	X	X	X	X
GW-09272024-MW-3	W	9/27/2024	0757		4		X	X	X	X	X
GW-09272024-MW-4	W	9/27/2024	0724		4		X	X	X	X	X
GW-09272024-MW-5	W	9/27/2024	0852		4		X	X	X	X	X
GW-09272024-DUP-1	W	9/27/2024	1200		4		X	X	X	X	X
~~IDW-Water-09272024~~	~~W~~	~~9/27/2024~~	0934		1						

TAT

- [x] Routine 10 Day
- [ ] 24 hours * 100%
- [ ] 48 hours* 80%
- [ ] 3 Day* 60%
- [ ] 5 day* 50%

* Please call for availability

Due Date: Routine 10 days

Comments

Dissolved	As, Co, Fe, Mn, Mo
Total	As, Co, Fe, Mn, Mo

Additional Methods Available Upon Request

RELINQUISHED BY			RECEIVED BY		
Print Name	Signature	Date/Time	Print Name	Signature	Date/Time
Lydia Johnson		9-27-24 1311	Carl Nom		9/27/24 1311

Revised: 9/20/2024

WELLHEAD INSPECTION FORM

Client: Geosyntec Site: 101 N 1st St Sunnyside WA Date: 9-27-24

Job #: 240927-L01 Technician: CJ Page 1 of 1

Well ID	Well Inspected - No Corrective Action Required	Check indicates deficiency: Cap non-functional	Lock non-functional	Lock missing	Bolts missing (list qty)	Tabs stripped (list qty)	Tabs broken (list qty)	Annular seal incomplete	Apron damaged	Rim / Lid broken	Trip Hazard	Below Grade	Other (explain in notes)	Well Not Inspected (explain in notes)	Notes (list if cap or lick replaced, if there are access issues associated with repairs, if traffic control is required, if stand pipe damaged, or any specific details not covered by checklist)
MW-1	X														
MW-2	X														
MW-3	X														
MW-4	X														
MW-5	X														

NOTES:

TEST EQUIPMENT CALIBRATION LOG

PROJECT NAME ~~240~~ 101 N 1st St Sunnyside WA				PROJECT NUMBER 240427-LJ1			
EQUIPMENT NAME	EQUIPMENT NUMBER	DATE/TIME OF TEST	STANDARDS USED	EQUIPMENT READING	CALIBRATED TO: OR WITHIN 10%:	TEMP.	INITIALS
Hanna	07460003101	4-27-24 @0645	pH 4 7 10	3.98 6.94 10.03	✓	18.6	LJ
			ORP 237.5 Cond 3900 DO LOU	238.1 8911 96.4	✓	18.6	LJ

PURGE DRUM INVENTORY LOG

CLIENT Geosyntec

SITE ADDRESS 101 N 1st St Sumas, WA

STATUS OF DRUM(S) UPON ARRIVAL							
Number of drum(s) empty:	0						
Number of drum(s) 1/4 full:	1						
Number of drum(s) 1/2 full:	0						
Number of drum(s) 3/4 full:	0						
Number of drum(s) full:	0						
Total drum(s) on site:	1						
STATUS OF DRUM(S) UPON DEPARTURE							
Number of drum(s) empty:	0						
Number of drum(s) 1/4 full:	1						
Number of drum(s) 1/2 full:	0						
Number of drum(s) 3/4 full:	0						
Number of drum(s) full:	0						
Total drum(s) on site:	1						
LOCATION OF DRUM(S)							
Is/Are drum(s) at wellhead(s)?	yes						
Describe location if drum(s) is/are located elsewhere:	by MW-3						
Label drum(s) properly:	yes						
FINAL STATUS							
Number of new drum(s) left on site this event:	0						
Date of inspection:	9-27-24						
Logged by BTS Field Technician:	LJ						
Office reviewed by:							

Attachment 2
Laboratory Analytical Reports

March 20, 2024

Ms. Priyam Sharma
Geosyntec Consultants
520 Pike St, Suite 2600
Seattle, WA 98101

Dear Ms. Sharma,

On March 13th, 6 samples were received by our laboratory and assigned our laboratory project number EV24030105. The project was identified as your Sunnyside - PNR0696E. The sample identification and requested analyses are outlined on the attached chain of custody record.

No abnormalities or nonconformances were observed during the analyses of the project samples.

Please do not hesitate to call me if you have any questions or if I can be of further assistance.

Sincerely,

ALS Laboratory Group

Rob Greer
Laboratory Director

ADDRESS 8620 Holly Drive, Suite 100, Everett, WA 98208 | PHONE 425-356-2600 | FAX 425-356-2626
ALS Group USA, Corp dba ALS Environmental

CERTIFICATE OF ANALYSIS

CLIENT:	Geosyntec Consultants 520 Pike St, Suite 2600 Seattle, WA 98101	DATE: ALS JOB#: ALS SAMPLE#:	3/20/2024 EV24030105 EV24030105-01
CLIENT CONTACT:	Priyam Sharma	DATE RECEIVED:	03/13/2024
CLIENT PROJECT:	Sunnyside - PNR0696E	COLLECTION DATE:	3/13/2024 8:32:00 AM
CLIENT SAMPLE ID	GW-03132024-MW-1	WDOE ACCREDITATION:	C601

SAMPLE DATA RESULTS

ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS DATE	ANALYSIS BY
Nitrate	EPA-300.0	**250**	7.6	50	MG/L	03/13/2024	RAL
Sulfate	EPA-300.0	**280**	13	50	MG/L	03/13/2024	RAL
Arsenic	EPA-200.8	**9.8**	1.0	1	UG/L	03/20/2024	EBS
Cobalt	EPA-200.8	**2.1**	1.0	1	UG/L	03/20/2024	EBS
Iron	EPA-200.8	**4000**	50	1	UG/L	03/20/2024	EBS
Manganese	EPA-200.8	**1500**	2.0	1	UG/L	03/20/2024	EBS
Molybdenum	EPA-200.8	**26**	1.0	1	UG/L	03/20/2024	EBS
Arsenic (Dissolved)	EPA-200.8	**7.6**	1.0	1	UG/L	03/20/2024	EBS
Cobalt (Dissolved)	EPA-200.8	U	1.0	1	UG/L	03/20/2024	EBS
Iron (Dissolved)	EPA-200.8	**75**	50	1	UG/L	03/20/2024	EBS
Manganese (Dissolved)	EPA-200.8	**24**	2.0	1	UG/L	03/20/2024	EBS
Molybdenum (Dissolved)	EPA-200.8	**24**	1.0	1	UG/L	03/20/2024	EBS
Dissolved Organic Carbon (DOC)	EPA-9060	**3.7**	0.50	1	MG/L	03/18/2024	CAS

U - Analyte analyzed for but not detected at level above reporting limit.

ADDRESS 8620 Holly Drive, Suite 100, Everett, WA 98208 | PHONE 425-356-2600 | FAX 425-356-2626
ALS Group USA, Corp dba ALS Environmental

CERTIFICATE OF ANALYSIS

CLIENT:	Geosyntec Consultants 520 Pike St, Suite 2600 Seattle, WA 98101	DATE: ALS JOB#: ALS SAMPLE#:	3/20/2024 EV24030105 EV24030105-02
CLIENT CONTACT:	Priyam Sharma	DATE RECEIVED:	03/13/2024
CLIENT PROJECT:	Sunnyside - PNR0696E	COLLECTION DATE:	3/13/2024 9:36:00 AM
CLIENT SAMPLE ID	GW-03132024-MW-2	WDOE ACCREDITATION:	C601

SAMPLE DATA RESULTS

ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS DATE	ANALYSIS BY
Nitrate	EPA-300.0	**0.69**	0.31	2	MG/L	03/13/2024	RAL
Sulfate	EPA-300.0	**21**	0.52	2	MG/L	03/13/2024	RAL
Arsenic	EPA-200.8	**52**	1.0	1	UG/L	03/20/2024	EBS
Cobalt	EPA-200.8	**4.3**	1.0	1	UG/L	03/20/2024	EBS
Iron	EPA-200.8	**4400**	50	1	UG/L	03/20/2024	EBS
Manganese	EPA-200.8	**2800**	2.0	1	UG/L	03/20/2024	EBS
Molybdenum	EPA-200.8	**2.5**	1.0	1	UG/L	03/20/2024	EBS
Arsenic (Dissolved)	EPA-200.8	**48**	1.0	1	UG/L	03/20/2024	EBS
Cobalt (Dissolved)	EPA-200.8	**3.6**	1.0	1	UG/L	03/20/2024	EBS
Iron (Dissolved)	EPA-200.8	**3100**	50	1	UG/L	03/20/2024	EBS
Manganese (Dissolved)	EPA-200.8	**2700**	2.0	1	UG/L	03/20/2024	EBS
Molybdenum (Dissolved)	EPA-200.8	**4.7**	1.0	1	UG/L	03/20/2024	EBS
Dissolved Organic Carbon (DOC)	EPA-9060	U	50	10	MG/L	03/18/2024	CAS

U - Analyte analyzed for but not detected at level above reporting limit.

ADDRESS 8620 Holly Drive, Suite 100, Everett, WA 98208 | PHONE 425-356-2600 | FAX 425-356-2626
ALS Group USA, Corp dba ALS Environmental

CERTIFICATE OF ANALYSIS

CLIENT:	Geosyntec Consultants 520 Pike St, Suite 2600 Seattle, WA 98101	DATE: ALS JOB#: ALS SAMPLE#:	3/20/2024 EV24030105 EV24030105-03
CLIENT CONTACT:	Priyam Sharma	DATE RECEIVED:	03/13/2024
CLIENT PROJECT:	Sunnyside - PNR0696E	COLLECTION DATE:	3/13/2024 10:38:00 AM
CLIENT SAMPLE ID	GW-03132024-MW-3	WDOE ACCREDITATION:	C601

SAMPLE DATA RESULTS

ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS DATE	ANALYSIS BY
Nitrate	EPA-300.0	U	0.15	1	MG/L	03/13/2024	RAL
Sulfate	EPA-300.0	U	0.26	1	MG/L	03/13/2024	RAL
Arsenic	EPA-200.8	**110**	1.0	1	UG/L	03/20/2024	EBS
Cobalt	EPA-200.8	**17**	1.0	1	UG/L	03/20/2024	EBS
Iron	EPA-200.8	**41000**	50	1	UG/L	03/20/2024	EBS
Manganese	EPA-200.8	**3800**	2.0	1	UG/L	03/20/2024	EBS
Molybdenum	EPA-200.8	**8.6**	1.0	1	UG/L	03/20/2024	EBS
Arsenic (Dissolved)	EPA-200.8	**100**	1.0	1	UG/L	03/20/2024	EBS
Cobalt (Dissolved)	EPA-200.8	**15**	1.0	1	UG/L	03/20/2024	EBS
Iron (Dissolved)	EPA-200.8	**38000**	50	1	UG/L	03/20/2024	EBS
Manganese (Dissolved)	EPA-200.8	**3600**	2.0	1	UG/L	03/20/2024	EBS
Molybdenum (Dissolved)	EPA-200.8	**7.4**	1.0	1	UG/L	03/20/2024	EBS
Dissolved Organic Carbon (DOC)	EPA-9060	**70**	50	10	MG/L	03/18/2024	CAS

U - Analyte analyzed for but not detected at level above reporting limit.

ADDRESS 8620 Holly Drive, Suite 100, Everett, WA 98208 | PHONE 425-356-2600 | FAX 425-356-2626
ALS Group USA, Corp dba ALS Environmental

CERTIFICATE OF ANALYSIS

CLIENT:	Geosyntec Consultants 520 Pike St, Suite 2600 Seattle, WA 98101	DATE: ALS JOB#: ALS SAMPLE#:	3/20/2024 EV24030105 EV24030105-04
CLIENT CONTACT:	Priyam Sharma	DATE RECEIVED:	03/13/2024
CLIENT PROJECT:	Sunnyside - PNR0696E	COLLECTION DATE:	3/13/2024 10:08:00 AM
CLIENT SAMPLE ID	GW-03132024-MW-4	WDOE ACCREDITATION:	C601

SAMPLE DATA RESULTS

ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS DATE	ANALYSIS BY
Nitrate	EPA-300.0	**140**	7.6	50	MG/L	03/13/2024	RAL
Sulfate	EPA-300.0	**300**	13	50	MG/L	03/13/2024	RAL
Arsenic	EPA-200.8	**46**	1.0	1	UG/L	03/20/2024	EBS
Cobalt	EPA-200.8	**11**	1.0	1	UG/L	03/20/2024	EBS
Iron	EPA-200.8	**140**	50	1	UG/L	03/20/2024	EBS
Manganese	EPA-200.8	**490**	2.0	1	UG/L	03/20/2024	EBS
Molybdenum	EPA-200.8	**110**	1.0	1	UG/L	03/20/2024	EBS
Arsenic (Dissolved)	EPA-200.8	**47**	1.0	1	UG/L	03/20/2024	EBS
Cobalt (Dissolved)	EPA-200.8	**11**	1.0	1	UG/L	03/20/2024	EBS
Iron (Dissolved)	EPA-200.8	U	50	1	UG/L	03/20/2024	EBS
Manganese (Dissolved)	EPA-200.8	**480**	2.0	1	UG/L	03/20/2024	EBS
Molybdenum (Dissolved)	EPA-200.8	**110**	1.0	1	UG/L	03/20/2024	EBS
Dissolved Organic Carbon (DOC)	EPA-9060	**11**	0.50	1	MG/L	03/18/2024	CAS

U - Analyte analyzed for but not detected at level above reporting limit.

ADDRESS 8620 Holly Drive, Suite 100, Everett, WA 98208 | PHONE 425-356-2600 | FAX 425-356-2626
ALS Group USA, Corp dba ALS Environmental

CERTIFICATE OF ANALYSIS

CLIENT:	Geosyntec Consultants 520 Pike St, Suite 2600 Seattle, WA 98101	DATE: ALS JOB#: ALS SAMPLE#:	3/20/2024 EV24030105 EV24030105-05
CLIENT CONTACT:	Priyam Sharma	DATE RECEIVED:	03/13/2024
CLIENT PROJECT:	Sunnyside - PNR0696E	COLLECTION DATE:	3/13/2024 9:06:00 AM
CLIENT SAMPLE ID	GW-03132024-MW-5	WDOE ACCREDITATION:	C601

SAMPLE DATA RESULTS

ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS DATE	ANALYSIS BY
Nitrate	EPA-300.0	**220**	3.8	25	MG/L	03/13/2024	RAL
Sulfate	EPA-300.0	**400**	6.5	25	MG/L	03/13/2024	RAL
Arsenic	EPA-200.8	**8.1**	1.0	1	UG/L	03/20/2024	EBS
Cobalt	EPA-200.8	U	1.0	1	UG/L	03/20/2024	EBS
Iron	EPA-200.8	**830**	50	1	UG/L	03/20/2024	EBS
Manganese	EPA-200.8	**79**	2.0	1	UG/L	03/20/2024	EBS
Molybdenum	EPA-200.8	**69**	1.0	1	UG/L	03/20/2024	EBS
Arsenic (Dissolved)	EPA-200.8	**7.8**	1.0	1	UG/L	03/20/2024	EBS
Cobalt (Dissolved)	EPA-200.8	U	1.0	1	UG/L	03/20/2024	EBS
Iron (Dissolved)	EPA-200.8	**240**	50	1	UG/L	03/20/2024	EBS
Manganese (Dissolved)	EPA-200.8	**24**	2.0	1	UG/L	03/20/2024	EBS
Molybdenum (Dissolved)	EPA-200.8	**69**	1.0	1	UG/L	03/20/2024	EBS
Dissolved Organic Carbon (DOC)	EPA-9060	**7.1**	0.50	1	MG/L	03/18/2024	CAS

U - Analyte analyzed for but not detected at level above reporting limit.

ADDRESS 8620 Holly Drive, Suite 100, Everett, WA 98208 | PHONE 425-356-2600 | FAX 425-356-2626
ALS Group USA, Corp dba ALS Environmental

CERTIFICATE OF ANALYSIS

CLIENT:	Geosyntec Consultants 520 Pike St, Suite 2600 Seattle, WA 98101	DATE: ALS JOB#: ALS SAMPLE#:	3/20/2024 EV24030105 EV24030105-06
CLIENT CONTACT:	Priyam Sharma	DATE RECEIVED:	03/13/2024
CLIENT PROJECT:	Sunnyside - PNR0696E	COLLECTION DATE:	3/13/2024 12:00:00 PM
CLIENT SAMPLE ID	GW-03132024-DUP-1	WDOE ACCREDITATION:	C601

SAMPLE DATA RESULTS

ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS DATE	ANALYSIS BY
Nitrate	EPA-300.0	**260**	7.6	50	MG/L	03/13/2024	RAL
Sulfate	EPA-300.0	**290**	13	50	MG/L	03/13/2024	RAL
Arsenic	EPA-200.8	**9.6**	1.0	1	UG/L	03/20/2024	EBS
Cobalt	EPA-200.8	**1.8**	1.0	1	UG/L	03/20/2024	EBS
Iron	EPA-200.8	**3500**	50	1	UG/L	03/20/2024	EBS
Manganese	EPA-200.8	**1400**	2.0	1	UG/L	03/20/2024	EBS
Molybdenum	EPA-200.8	**27**	1.0	1	UG/L	03/20/2024	EBS
Arsenic (Dissolved)	EPA-200.8	**7.9**	1.0	1	UG/L	03/20/2024	EBS
Cobalt (Dissolved)	EPA-200.8	U	1.0	1	UG/L	03/20/2024	EBS
Iron (Dissolved)	EPA-200.8	**60**	50	1	UG/L	03/20/2024	EBS
Manganese (Dissolved)	EPA-200.8	**24**	2.0	1	UG/L	03/20/2024	EBS
Molybdenum (Dissolved)	EPA-200.8	**25**	1.0	1	UG/L	03/20/2024	EBS
Dissolved Organic Carbon (DOC)	EPA-9060	**3.2**	0.50	1	MG/L	03/18/2024	CAS

U - Analyte analyzed for but not detected at level above reporting limit.

ADDRESS 8620 Holly Drive, Suite 100, Everett, WA 98208 | PHONE 425-356-2600 | FAX 425-356-2626
ALS Group USA, Corp dba ALS Environmental

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CERTIFICATE OF ANALYSIS

CLIENT:	Geosyntec Consultants 520 Pike St, Suite 2600 Seattle, WA 98101	DATE:	3/20/2024
		ALS SDG#:	EV24030105
		WDOE ACCREDITATION:	C601
CLIENT CONTACT:	Priyam Sharma		
CLIENT PROJECT:	Sunnyside - PNR0696E		

LABORATORY BLANK RESULTS

MBLK-R461776 - Batch R461776 - Water by EPA-300.0

ANALYTE	METHOD	RESULTS	UNITS	REPORTING LIMITS	ANALYSIS DATE	ANALYSIS BY
Nitrate	EPA-300.0	U	MG/L	0.15	03/13/2024	RAL
Sulfate	EPA-300.0	U	MG/L	0.26	03/13/2024	RAL

U - Analyte analyzed for but not detected at level above reporting limit.

MB-031824W - Batch 209071 - Water by EPA-200.8

ANALYTE	METHOD	RESULTS	UNITS	REPORTING LIMITS	ANALYSIS DATE	ANALYSIS BY
Arsenic	EPA-200.8	U	UG/L	1.0	03/19/2024	EBS
Cobalt	EPA-200.8	U	UG/L	1.0	03/19/2024	EBS
Iron	EPA-200.8	U	UG/L	50	03/19/2024	EBS
Manganese	EPA-200.8	U	UG/L	2.0	03/19/2024	EBS
Molybdenum	EPA-200.8	U	UG/L	1.0	03/19/2024	EBS

U - Analyte analyzed for but not detected at level above reporting limit.

MB-031824W - Batch 209072 - Water by EPA-200.8

ANALYTE	METHOD	RESULTS	UNITS	REPORTING LIMITS	ANALYSIS DATE	ANALYSIS BY
Arsenic (Dissolved)	EPA-200.8	U	UG/L	1.0	03/19/2024	EBS
Cobalt (Dissolved)	EPA-200.8	U	UG/L	1.0	03/19/2024	EBS
Iron (Dissolved)	EPA-200.8	U	UG/L	50	03/19/2024	EBS
Manganese (Dissolved)	EPA-200.8	U	UG/L	2.0	03/19/2024	EBS
Molybdenum (Dissolved)	EPA-200.8	U	UG/L	1.0	03/19/2024	EBS

U - Analyte analyzed for but not detected at level above reporting limit.

MBLK-R461772 - Batch R461772 - Water by EPA-9060

ANALYTE	METHOD	RESULTS	UNITS	REPORTING LIMITS	ANALYSIS DATE	ANALYSIS BY
Dissolved Organic Carbon (DOC)	EPA-9060	U	MG/L	0.50	03/18/2024	CAS

U - Analyte analyzed for but not detected at level above reporting limit.

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ALS Group USA, Corp dba ALS Environmental

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CERTIFICATE OF ANALYSIS

CLIENT: Geosyntec Consultants
520 Pike St, Suite 2600
Seattle, WA 98101
CLIENT CONTACT: Priyam Sharma
CLIENT PROJECT: Sunnyside - PNR0696E

DATE: 3/20/2024
ALS SDG#: EV24030105
WDOE ACCREDITATION: C601

LABORATORY CONTROL SAMPLE RESULTS

ALS Test Batch ID: R461776 - Water by EPA-300.0

SPIKED COMPOUND	METHOD	%REC	RPD	QUAL	LIMITS MIN	LIMITS MAX	ANALYSIS DATE	ANALYSIS BY
Nitrate - BS	EPA-300.0	**96.0**			80	120	03/13/2024	RAL
Nitrate - BSD	EPA-300.0	**96.0**	**0**		80	120	03/13/2024	RAL
Sulfate - BS	EPA-300.0	**100**			80	120	03/13/2024	RAL
Sulfate - BSD	EPA-300.0	**101**	**1**		80	120	03/13/2024	RAL

ALS Test Batch ID: 209071 - Water by EPA-200.8

SPIKED COMPOUND	METHOD	%REC	RPD	QUAL	LIMITS MIN	LIMITS MAX	ANALYSIS DATE	ANALYSIS BY
Arsenic - BS	EPA-200.8	**102**			89.1	110	03/19/2024	EBS
Arsenic - BSD	EPA-200.8	**103**	**1**		89.1	110	03/19/2024	EBS
Cobalt - BS	EPA-200.8	**104**			85.8	108	03/19/2024	EBS
Cobalt - BSD	EPA-200.8	**105**	**2**		85.8	108	03/19/2024	EBS
Iron - BS	EPA-200.8	**102**			80	120	03/19/2024	EBS
Iron - BSD	EPA-200.8	**102**	**1**		80	120	03/19/2024	EBS
Manganese - BS	EPA-200.8	**96.0**			82.2	110	03/19/2024	EBS
Manganese - BSD	EPA-200.8	**96.0**	**0**		82.2	110	03/19/2024	EBS
Molybdenum - BS	EPA-200.8	**96.6**			90.3	113	03/19/2024	EBS
Molybdenum - BSD	EPA-200.8	**98.5**	**2**		90.3	113	03/19/2024	EBS

ALS Test Batch ID: 209072 - Water by EPA-200.8

SPIKED COMPOUND	METHOD	%REC	RPD	QUAL	LIMITS MIN	LIMITS MAX	ANALYSIS DATE	ANALYSIS BY
Arsenic (Dissolved) - BS	EPA-200.8	**102**			89.1	110	03/19/2024	EBS
Arsenic (Dissolved) - BSD	EPA-200.8	**103**	**1**		89.1	110	03/19/2024	EBS
Cobalt (Dissolved) - BS	EPA-200.8	**104**			85.8	108	03/19/2024	EBS
Cobalt (Dissolved) - BSD	EPA-200.8	**105**	**2**		85.8	108	03/19/2024	EBS
Iron (Dissolved) - BS	EPA-200.8	**102**			80	120	03/19/2024	EBS
Iron (Dissolved) - BSD	EPA-200.8	**102**	**1**		80	120	03/19/2024	EBS
Manganese (Dissolved) - BS	EPA-200.8	**96.0**			82.2	110	03/19/2024	EBS
Manganese (Dissolved) - BSD	EPA-200.8	**96.0**	**0**		82.2	110	03/19/2024	EBS
Molybdenum (Dissolved) - BS	EPA-200.8	**96.6**			90.3	113	03/19/2024	EBS
Molybdenum (Dissolved) - BSD	EPA-200.8	**98.5**	**2**		90.3	113	03/19/2024	EBS

ALS Test Batch ID: R461772 - Water by EPA-9060

SPIKED COMPOUND	METHOD	%REC	RPD	QUAL	LIMITS MIN	LIMITS MAX	ANALYSIS DATE	ANALYSIS BY
Dissolved Organic Carbon (DOC) - BS	EPA-9060	**98.8**			83	117	03/18/2024	CAS

ADDRESS 8620 Holly Drive, Suite 100, Everett, WA 98208 | PHONE 425-356-2600 | FAX 425-356-2626
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CERTIFICATE OF ANALYSIS

APPROVED BY

Rob Greer
Laboratory Director

ADDRESS 8620 Holly Drive, Suite 100, Everett, WA 98208 | PHONE 425-356-2600 | FAX 425-356-2626
ALS Group USA, Corp dba ALS Environmental

Chain of Custody

Laboratory 8620 Holly Drive, Everett, WA 98208 USA | +1 425 356 2600

(If viewing electronically, this is a drop down list - click on the address above - a drop down arrow will appear to the righ

Work Order No.: EV24030105

Project Manager:	Priyam Sharma			**Bill to:**	Priyam Sharma		
Client Name:	Geosyntec			**Company:**	Geosyntec		
Address:	520 Pike St, Suite 2600			**Address:**	520 Pike St, Suite 2600		
City, State ZIP:	Seattle, WA 98101			**City, State ZIP:**	Seattle, WA 98101		
Email:	priyam.sharma@Geosyntec.com	**Phone:**	(206) 496-1464	**Email:**	priyam.sharma@geosyntec.com	**PO#**	10005265
Project Site:	101 N 1st St, Sunnyside	**State:**	WA				
Project Name:	Sunnyside						
Project Number:	PNR0696E						
P.O. Number:							
Sampler's Name:	Kendra Cutler						

SAMPLE RECEIPT

Temperature (°C):		Temp Blank Present				
Received Intact:	Yes	No	N/A	Wet Ice / Blue Ice		
Cooler Custody Seals:	Yes	No	N/A	Total Containers:		
Sample Custody Seals:	Yes	No	N/A			

REQUESTED ANALYSIS

Sample Identification	Matrix	Date Sampled	Time Sampled	Lab ID	No. of Containers		Total As, Co, Mo, Fe, Mn (EPA 200.8)	Dissolved As, Co, Mo,Fe, Mn (Field Filtered) (EPA 200.8)	Nitrate (EPA 300.0)	Sulfate (EPA 300.0)	Dissolved Organic Carbon (Field Filtered)(EPA 9060A)
GW-03132024-MW-1	W	3/13/24	0832	1	4		X	X	X	X	X
GW-03132024-MW-2	W		0936	2	4		X	X	X	X	X
GW-03132024-MW-3	W		1038	3	4		X	X	X	X	X
GW-03132024-MW-4	W		1008	4	4		X	X	X	X	X
GW-03132024-MW-5	W		0906	5	4		X	X	X	X	X
GW-03132024-DUP-1	W		1200	6	4		X	X	X	X	X

TAT

- [ ] Routine 10 Day
- [ ] 24 hours * 100%
- [ ] 48 hours* 80%
- [ ] 3 Day* 60%
- [x] 5 day* 50%

* Please call for availability

Due Date:

Comments

Dissolved	As, Co, Fe, Mn, Mo
Total	As, Co, Fe, Mn, Mo

Additional Methods Available Upon Request

RELINQUISHED BY			RECEIVED BY		
Print Name	Signature	Date/Time	Print Name	Signature	Date/Time
Kendra Cutler		3/13/24 1438	Ariel Villa		3/13/24 1451

Revised : 3/8/2024

ALS ENVIRONMENTAL

Sample Receiving Checklist

Client: Geosyntec ALS Job#: EV2403010 5

Project: Sunnyside

Login Date: 3/13/24 Login Time: 1451 Login By: AV

Type of Shipping Container: Cooler ✓ Box ___ Other ___

Shipped via: FedEx Ground ___ UPS ___ Courier ___ Hand Delivered ✓ ALS Courier ___
FedEx Express ___

	Yes	No	N/A
Were custody seals on outside of shipping container? If yes, how many? ___ Where? ___ Custody seal date: ___ Seal name: ___	___	___	✓
Was Chain of Custody properly filled out (ink, signed, dated, etc.)?	✓	___	___
Did all bottles have labels?	✓	___	___
Did all bottle labels and tags agree with Chain of Custody?	✓	___	___
Were samples received within hold time?	✓	___	___
Did all bottles arrive in good condition (unbroken, etc.)?	✓	___	___
Was sufficient amount of sample sent for the tests indicated?	✓	___	___
Was correct preservation added to samples?	✓	___	___
Subcontract test containers added to Subcontract Bin?	✓	___	___
Wetchem test containers marked with required Tests?	___	___	✓
Short hold time test containers delivered to analysts?	___	___	✓
Were VOA vials checked for absence of air bubbles? Bubbles present in sample #: ___	___	___	✓
5035A kits received? # Low Kits: ___ # High Kits: ___	___	___	✓
5035A kits returned? # Low Kits: ___ # High Kits: ___			
Temperature of cooler upon receipt: 2.3 °C On ice?	✓	___	___

Explain any discrepancies:

Was client contacted? ___ Who was called? ___ By whom? ___ Date: ___

Outcome of call:

October 11, 2024

Ms. Priyam Sharma
Geosyntec Consultants
520 Pike St, Suite 2600
Seattle, WA 98101

Dear Ms. Sharma,

On September 27th, 6 samples were received by our laboratory and assigned our laboratory project number EV24090212. The project was identified as your Sunnyside - PNR0696E. The sample identification and requested analyses are outlined on the attached chain of custody record.

No abnormalities or nonconformances were observed during the analyses of the project samples.

Please do not hesitate to call me if you have any questions or if I can be of further assistance.

Sincerely,

ALS Laboratory Group

Carl Nott
Operations Manager

ADDRESS 8620 Holly Drive, Suite 100, Everett, WA 98208 | PHONE 425-356-2600 | FAX 425-356-2626
ALS Group USA, Corp dba ALS Environmental

ALS Environmental

CERTIFICATE OF ANALYSIS

CLIENT:	Geosyntec Consultants 520 Pike St, Suite 2600 Seattle, WA 98101	DATE:	10/11/2024
		ALS JOB#:	EV24090212
		ALS SAMPLE#:	EV24090212-01
CLIENT CONTACT:	Priyam Sharma	DATE RECEIVED:	09/27/2024
CLIENT PROJECT:	Sunnyside - PNR0696E	COLLECTION DATE:	9/27/2024 9:18:00 AM
CLIENT SAMPLE ID	GW-09272024-MW-1	WDOE ACCREDITATION:	C601

SAMPLE DATA RESULTS

ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS DATE	ANALYSIS BY
Nitrate	EPA-300.0	**130**	7.6	50	MG/L	09/27/2024	MJC
Sulfate	EPA-300.0	**210**	13	50	MG/L	09/27/2024	MJC
Arsenic	EPA-200.8	**12**	1.0	1	UG/L	10/02/2024	EBS
Cobalt	EPA-200.8	**2.0**	1.0	1	UG/L	10/02/2024	EBS
Iron	EPA-200.8	**3600**	50	1	UG/L	10/02/2024	EBS
Manganese	EPA-200.8	**2300**	2.0	1	UG/L	10/02/2024	EBS
Molybdenum	EPA-200.8	**43**	1.0	1	UG/L	10/02/2024	EBS
Arsenic (Dissolved)	EPA-200.8	**11**	1.0	1	UG/L	10/02/2024	EBS
Cobalt (Dissolved)	EPA-200.8	U	1.0	1	UG/L	10/02/2024	EBS
Iron (Dissolved)	EPA-200.8	**1100**	50	1	UG/L	10/02/2024	EBS
Manganese (Dissolved)	EPA-200.8	**990**	2.0	1	UG/L	10/02/2024	EBS
Molybdenum (Dissolved)	EPA-200.8	**43**	1.0	1	UG/L	10/02/2024	EBS
Dissolved Organic Carbon (DOC)	EPA-9060	**3.3**	0.50	1	MG/L	10/08/2024	CAS

U - Analyte analyzed for but not detected at level above reporting limit.

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CERTIFICATE OF ANALYSIS

CLIENT:	Geosyntec Consultants 520 Pike St, Suite 2600 Seattle, WA 98101	DATE:	10/11/2024
		ALS JOB#:	EV24090212
		ALS SAMPLE#:	EV24090212-02
CLIENT CONTACT:	Priyam Sharma	DATE RECEIVED:	09/27/2024
CLIENT PROJECT:	Sunnyside - PNR0696E	COLLECTION DATE:	9/27/2024 8:23:00 AM
CLIENT SAMPLE ID	GW-09272024-MW-2	WDOE ACCREDITATION:	C601

SAMPLE DATA RESULTS

ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS DATE	ANALYSIS BY
Nitrate	EPA-300.0	**1.0**	0.15	1	MG/L	09/27/2024	MJC
Sulfate	EPA-300.0	**11**	0.26	1	MG/L	09/27/2024	MJC
Arsenic	EPA-200.8	**54**	1.0	1	UG/L	10/02/2024	EBS
Cobalt	EPA-200.8	**4.0**	1.0	1	UG/L	10/02/2024	EBS
Iron	EPA-200.8	**3800**	50	1	UG/L	10/02/2024	EBS
Manganese	EPA-200.8	**2000**	2.0	1	UG/L	10/02/2024	EBS
Molybdenum	EPA-200.8	**2.9**	1.0	1	UG/L	10/02/2024	EBS
Arsenic (Dissolved)	EPA-200.8	**50**	1.0	1	UG/L	10/02/2024	EBS
Cobalt (Dissolved)	EPA-200.8	**3.9**	1.0	1	UG/L	10/02/2024	EBS
Iron (Dissolved)	EPA-200.8	**4200**	50	1	UG/L	10/02/2024	EBS
Manganese (Dissolved)	EPA-200.8	**2100**	2.0	1	UG/L	10/02/2024	EBS
Molybdenum (Dissolved)	EPA-200.8	**2.3**	1.0	1	UG/L	10/02/2024	EBS
Dissolved Organic Carbon (DOC)	EPA-9060	**55**	25	50	MG/L	10/08/2024	CAS

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ALS Group USA, Corp dba ALS Environmental

ALS Environmental

CERTIFICATE OF ANALYSIS

CLIENT:	Geosyntec Consultants 520 Pike St, Suite 2600 Seattle, WA 98101	DATE:	10/11/2024
		ALS JOB#:	EV24090212
		ALS SAMPLE#:	EV24090212-03
CLIENT CONTACT:	Priyam Sharma	DATE RECEIVED:	09/27/2024
CLIENT PROJECT:	Sunnyside - PNR0696E	COLLECTION DATE:	9/27/2024 7:57:00 AM
CLIENT SAMPLE ID	GW-09272024-MW-3	WDOE ACCREDITATION:	C601

SAMPLE DATA RESULTS

ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS DATE	ANALYSIS BY
Nitrate	EPA-300.0	**0.70**	0.15	1	MG/L	09/27/2024	MJC
Sulfate	EPA-300.0	U	0.26	1	MG/L	09/27/2024	MJC
Arsenic	EPA-200.8	**130**	1.0	1	UG/L	10/02/2024	EBS
Cobalt	EPA-200.8	**9.2**	1.0	1	UG/L	10/02/2024	EBS
Iron	EPA-200.8	**25000**	50	1	UG/L	10/02/2024	EBS
Manganese	EPA-200.8	**1700**	2.0	1	UG/L	10/02/2024	EBS
Molybdenum	EPA-200.8	**6.9**	1.0	1	UG/L	10/02/2024	EBS
Arsenic (Dissolved)	EPA-200.8	**130**	1.0	1	UG/L	10/02/2024	EBS
Cobalt (Dissolved)	EPA-200.8	**8.9**	1.0	1	UG/L	10/02/2024	EBS
Iron (Dissolved)	EPA-200.8	**25000**	50	1	UG/L	10/02/2024	EBS
Manganese (Dissolved)	EPA-200.8	**1700**	2.0	1	UG/L	10/02/2024	EBS
Molybdenum (Dissolved)	EPA-200.8	**6.5**	1.0	1	UG/L	10/02/2024	EBS
Dissolved Organic Carbon (DOC)	EPA-9060	**38**	10	20	MG/L	10/08/2024	CAS

U - Analyte analyzed for but not detected at level above reporting limit.

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CERTIFICATE OF ANALYSIS

CLIENT:	Geosyntec Consultants 520 Pike St, Suite 2600 Seattle, WA 98101	DATE:	10/11/2024
		ALS JOB#:	EV24090212
		ALS SAMPLE#:	EV24090212-04
CLIENT CONTACT:	Priyam Sharma	DATE RECEIVED:	09/27/2024
CLIENT PROJECT:	Sunnyside - PNR0696E	COLLECTION DATE:	9/27/2024 7:24:00 AM
CLIENT SAMPLE ID	GW-09272024-MW-4	WDOE ACCREDITATION:	C601

SAMPLE DATA RESULTS

ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS DATE	ANALYSIS BY
Nitrate	EPA-300.0	**110**	7.6	50	MG/L	09/27/2024	MJC
Sulfate	EPA-300.0	**230**	13	50	MG/L	09/27/2024	MJC
Arsenic	EPA-200.8	**44**	1.0	1	UG/L	10/02/2024	EBS
Cobalt	EPA-200.8	**6.9**	1.0	1	UG/L	10/02/2024	EBS
Iron	EPA-200.8	**59**	50	1	UG/L	10/02/2024	EBS
Manganese	EPA-200.8	**460**	2.0	1	UG/L	10/02/2024	EBS
Molybdenum	EPA-200.8	**110**	1.0	1	UG/L	10/02/2024	EBS
Arsenic (Dissolved)	EPA-200.8	**50**	1.0	1	UG/L	10/02/2024	EBS
Cobalt (Dissolved)	EPA-200.8	**7.3**	1.0	1	UG/L	10/02/2024	EBS
Iron (Dissolved)	EPA-200.8	U	50	1	UG/L	10/02/2024	EBS
Manganese (Dissolved)	EPA-200.8	**430**	2.0	1	UG/L	10/02/2024	EBS
Molybdenum (Dissolved)	EPA-200.8	**120**	1.0	1	UG/L	10/02/2024	EBS
Dissolved Organic Carbon (DOC)	EPA-9060	**8.7**	0.50	1	MG/L	10/08/2024	CAS

U - Analyte analyzed for but not detected at level above reporting limit.

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ALS Group USA, Corp dba ALS Environmental

ALS Environmental

CERTIFICATE OF ANALYSIS

CLIENT:	Geosyntec Consultants 520 Pike St, Suite 2600 Seattle, WA 98101	DATE:	10/11/2024
		ALS JOB#:	EV24090212
		ALS SAMPLE#:	EV24090212-05
CLIENT CONTACT:	Priyam Sharma	DATE RECEIVED:	09/27/2024
CLIENT PROJECT:	Sunnyside - PNR0696E	COLLECTION DATE:	9/27/2024 8:52:00 AM
CLIENT SAMPLE ID	GW-09272024-MW-5	WDOE ACCREDITATION:	C601

SAMPLE DATA RESULTS

ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS DATE	ANALYSIS BY
Nitrate	EPA-300.0	**140**	3.8	25	MG/L	09/27/2024	MJC
Sulfate	EPA-300.0	**250**	6.5	25	MG/L	09/27/2024	MJC
Arsenic	EPA-200.8	**11**	1.0	1	UG/L	10/02/2024	EBS
Cobalt	EPA-200.8	U	1.0	1	UG/L	10/02/2024	EBS
Iron	EPA-200.8	**380**	50	1	UG/L	10/02/2024	EBS
Manganese	EPA-200.8	**58**	2.0	1	UG/L	10/02/2024	EBS
Molybdenum	EPA-200.8	**130**	1.0	1	UG/L	10/02/2024	EBS
Arsenic (Dissolved)	EPA-200.8	**11**	1.0	1	UG/L	10/02/2024	EBS
Cobalt (Dissolved)	EPA-200.8	U	1.0	1	UG/L	10/02/2024	EBS
Iron (Dissolved)	EPA-200.8	U	50	1	UG/L	10/02/2024	EBS
Manganese (Dissolved)	EPA-200.8	**29**	2.0	1	UG/L	10/02/2024	EBS
Molybdenum (Dissolved)	EPA-200.8	**130**	1.0	1	UG/L	10/02/2024	EBS
Dissolved Organic Carbon (DOC)	EPA-9060	**5.8**	0.50	1	MG/L	10/08/2024	CAS

U - Analyte analyzed for but not detected at level above reporting limit.

ADDRESS 8620 Holly Drive, Suite 100, Everett, WA 98208 | PHONE 425-356-2600 | FAX 425-356-2626
ALS Group USA, Corp dba ALS Environmental

ALS Environmental

CERTIFICATE OF ANALYSIS

CLIENT:	Geosyntec Consultants 520 Pike St, Suite 2600 Seattle, WA 98101	DATE:	10/11/2024
		ALS JOB#:	EV24090212
		ALS SAMPLE#:	EV24090212-06
CLIENT CONTACT:	Priyam Sharma	DATE RECEIVED:	09/27/2024
CLIENT PROJECT:	Sunnyside - PNR0696E	COLLECTION DATE:	9/27/2024 12:00:00 PM
CLIENT SAMPLE ID	GW-09272024-DUP-1	WDOE ACCREDITATION:	C601

SAMPLE DATA RESULTS

ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS DATE	ANALYSIS BY
Nitrate	EPA-300.0	**110**	7.6	50	MG/L	09/27/2024	MJC
Sulfate	EPA-300.0	**230**	13	50	MG/L	09/27/2024	MJC
Arsenic	EPA-200.8	**45**	1.0	1	UG/L	10/02/2024	EBS
Cobalt	EPA-200.8	**6.9**	1.0	1	UG/L	10/02/2024	EBS
Iron	EPA-200.8	**120**	50	1	UG/L	10/02/2024	EBS
Manganese	EPA-200.8	**460**	2.0	1	UG/L	10/02/2024	EBS
Molybdenum	EPA-200.8	**110**	1.0	1	UG/L	10/02/2024	EBS
Arsenic (Dissolved)	EPA-200.8	**51**	1.0	1	UG/L	10/02/2024	EBS
Cobalt (Dissolved)	EPA-200.8	**7.1**	1.0	1	UG/L	10/02/2024	EBS
Iron (Dissolved)	EPA-200.8	U	50	1	UG/L	10/02/2024	EBS
Manganese (Dissolved)	EPA-200.8	**420**	2.0	1	UG/L	10/02/2024	EBS
Molybdenum (Dissolved)	EPA-200.8	**120**	1.0	1	UG/L	10/02/2024	EBS
Dissolved Organic Carbon (DOC)	EPA-9060	**8.5**	0.50	1	MG/L	10/08/2024	CAS

U - Analyte analyzed for but not detected at level above reporting limit.

ADDRESS 8620 Holly Drive, Suite 100, Everett, WA 98208 | PHONE 425-356-2600 | FAX 425-356-2626
ALS Group USA, Corp dba ALS Environmental

ALS Environmental

CERTIFICATE OF ANALYSIS

CLIENT: Geosyntec Consultants
520 Pike St, Suite 2600
Seattle, WA 98101
CLIENT CONTACT: Priyam Sharma
CLIENT PROJECT: Sunnyside - PNR0696E

DATE: 10/11/2024
ALS SDG#: EV24090212
WDOE ACCREDITATION: C601

LABORATORY BLANK RESULTS

MBLK-R479693 - Batch R479693 - Water by EPA-300.0

ANALYTE	METHOD	RESULTS	UNITS	REPORTING LIMITS	ANALYSIS DATE	ANALYSIS BY
Nitrate	EPA-300.0	U	MG/L	0.15	09/27/2024	MJC
Sulfate	EPA-300.0	U	MG/L	0.26	09/27/2024	MJC

U - Analyte analyzed for but not detected at level above reporting limit.

MB-093024W - Batch 218292 - Water by EPA-200.8

ANALYTE	METHOD	RESULTS	UNITS	REPORTING LIMITS	ANALYSIS DATE	ANALYSIS BY
Arsenic	EPA-200.8	U	UG/L	1.0	10/02/2024	EBS
Cobalt	EPA-200.8	U	UG/L	1.0	10/02/2024	EBS
Iron	EPA-200.8	U	UG/L	50	10/02/2024	EBS
Manganese	EPA-200.8	U	UG/L	2.0	10/02/2024	EBS
Molybdenum	EPA-200.8	U	UG/L	1.0	10/02/2024	EBS

U - Analyte analyzed for but not detected at level above reporting limit.

MB-093024W - Batch 218293 - Water by EPA-200.8

ANALYTE	METHOD	RESULTS	UNITS	REPORTING LIMITS	ANALYSIS DATE	ANALYSIS BY
Arsenic (Dissolved)	EPA-200.8	U	UG/L	1.0	10/02/2024	EBS
Cobalt (Dissolved)	EPA-200.8	U	UG/L	1.0	10/02/2024	EBS
Iron (Dissolved)	EPA-200.8	U	UG/L	50	10/02/2024	EBS
Manganese (Dissolved)	EPA-200.8	U	UG/L	2.0	10/02/2024	EBS
Molybdenum (Dissolved)	EPA-200.8	U	UG/L	1.0	10/02/2024	EBS

U - Analyte analyzed for but not detected at level above reporting limit.

MBLK-R479632 - Batch R479632 - Water by EPA-9060

ANALYTE	METHOD	RESULTS	UNITS	REPORTING LIMITS	ANALYSIS DATE	ANALYSIS BY
Dissolved Organic Carbon (DOC)	EPA-9060	U	MG/L	0.50	10/08/2024	CAS

U - Analyte analyzed for but not detected at level above reporting limit.

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ALS Environmental

CERTIFICATE OF ANALYSIS

CLIENT: Geosyntec Consultants
520 Pike St, Suite 2600
Seattle, WA 98101
CLIENT CONTACT: Priyam Sharma
CLIENT PROJECT: Sunnyside - PNR0696E

DATE: 10/11/2024
ALS SDG#: EV24090212
WDOE ACCREDITATION: C601

LABORATORY CONTROL SAMPLE RESULTS

ALS Test Batch ID: R479693 - Water by EPA-300.0

SPIKED COMPOUND	METHOD	%REC	RPD	QUAL	LIMITS MIN	LIMITS MAX	ANALYSIS DATE	ANALYSIS BY
Nitrate - BS	EPA-300.0	**100**			80	120	09/27/2024	MJC
Nitrate - BSD	EPA-300.0	**102**	**2**		80	120	09/27/2024	MJC
Sulfate - BS	EPA-300.0	**104**			80	120	09/27/2024	MJC
Sulfate - BSD	EPA-300.0	**105**	**1**		80	120	09/27/2024	MJC

ALS Test Batch ID: 218292 - Water by EPA-200.8

SPIKED COMPOUND	METHOD	%REC	RPD	QUAL	LIMITS MIN	LIMITS MAX	ANALYSIS DATE	ANALYSIS BY
Arsenic - BS	EPA-200.8	**99.3**			89.1	110	10/02/2024	EBS
Arsenic - BSD	EPA-200.8	**101**	**2**		89.1	110	10/02/2024	EBS
Cobalt - BS	EPA-200.8	**98.5**			85.8	108	10/02/2024	EBS
Cobalt - BSD	EPA-200.8	**99.8**	**1**		85.8	108	10/02/2024	EBS
Iron - BS	EPA-200.8	**101**			80	120	10/02/2024	EBS
Iron - BSD	EPA-200.8	**102**	**2**		80	120	10/02/2024	EBS
Manganese - BS	EPA-200.8	**100**			82.2	110	10/02/2024	EBS
Manganese - BSD	EPA-200.8	**102**	**1**		82.2	110	10/02/2024	EBS
Molybdenum - BS	EPA-200.8	**100**			90.3	113	10/02/2024	EBS
Molybdenum - BSD	EPA-200.8	**103**	**3**		90.3	113	10/02/2024	EBS

ALS Test Batch ID: 218293 - Water by EPA-200.8

SPIKED COMPOUND	METHOD	%REC	RPD	QUAL	LIMITS MIN	LIMITS MAX	ANALYSIS DATE	ANALYSIS BY
Arsenic (Dissolved) - BS	EPA-200.8	**99.3**			89.1	110	10/02/2024	EBS
Arsenic (Dissolved) - BSD	EPA-200.8	**101**	**2**		89.1	110	10/02/2024	EBS
Cobalt (Dissolved) - BS	EPA-200.8	**98.5**			85.8	108	10/02/2024	EBS
Cobalt (Dissolved) - BSD	EPA-200.8	**99.8**	**1**		85.8	108	10/02/2024	EBS
Iron (Dissolved) - BS	EPA-200.8	**101**			80	120	10/02/2024	EBS
Iron (Dissolved) - BSD	EPA-200.8	**102**	**2**		80	120	10/02/2024	EBS
Manganese (Dissolved) - BS	EPA-200.8	**100**			82.2	110	10/02/2024	EBS
Manganese (Dissolved) - BSD	EPA-200.8	**102**	**1**		82.2	110	10/02/2024	EBS
Molybdenum (Dissolved) - BS	EPA-200.8	**100**			90.3	113	10/02/2024	EBS
Molybdenum (Dissolved) - BSD	EPA-200.8	**103**	**3**		90.3	113	10/02/2024	EBS

ALS Test Batch ID: R479632 - Water by EPA-9060

SPIKED COMPOUND	METHOD	%REC	RPD	QUAL	LIMITS MIN	LIMITS MAX	ANALYSIS DATE	ANALYSIS BY
Dissolved Organic Carbon (DOC) - BS	EPA-9060	**98.0**			83	117	10/08/2024	CAS

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CERTIFICATE OF ANALYSIS

APPROVED BY

Carl Nott
Operations Manager

ADDRESS 8620 Holly Drive, Suite 100, Everett, WA 98208 | PHONE 425-356-2600 | FAX 425-356-2626
ALS Group USA, Corp dba ALS Environmental

Chain of Custody

Laboratory 8620 Holly Drive, Everett, WA 98208 USA | +1 425 356 2600

(If viewing electronically, this is a drop down list - click on the address above - a drop down arrow will appear to the right of the a

Work Order No.: EV24090212

Project Manager:	Priyam Sharma			**Bill to:**	Priyam Sharma		
Client Name:	Geosyntec			**Company:**	Geosyntec		
Address:	520 Pike St, Suite 2600			**Address:**	520 Pike St, Suite 2600		
City, State ZIP:	Seattle, WA 98101			**City, State ZIP:**	Seattle, WA 98101		
Email:	priyam.sharma@Geosyntec.com	**Phone:**	(206) 496-1464	**Email:**	priyam.sharma@geosyntec.co	**PO#**	100057265
Project Site:	101 N 1st St, Sunnyside	**State:**	WA				
Project Name:	Sunnyside						
Project Number:	PNR0696E						
P.O. Number:							
Sampler's Name:	Lydia Johnson						

SAMPLE RECEIPT

Temperature (°C):		Temp Blank Present				
Received Intact:	Yes	No	N/A	Wet Ice / Blue Ice		
Cooler Custody Seals:	Yes	No	N/A	Total Containers:		
Sample Custody Seals:	Yes	No	N/A			

REQUESTED ANALYSIS

Sample Identification	Matrix	Date Sampled	Time Sampled	Lab ID	No. of Containers	Total As, Co, Mo, Fe, Mn (EPA 200.8)	Dissolved As, Co, Mo,Fe, Mn (Field Filtered) (EPA 200.8)	Nitrate (EPA 300.0)	Sulfate (EPA 300.0)	Dissolved Organic Carbon (Field Filtered)(EPA 9060A)	Comments
GW-09272024-MW-1	W	9/27/2024	0918	1	4	X	X	X	X	X	
GW-09272024-MW-2	W	9/27/2024	0823	2	4	X	X	X	X	X	
GW-09272024-MW-3	W	9/27/2024	0757	3	4	X	X	X	X	X	
GW-09272024-MW-4	W	9/27/2024	0724	4	4	X	X	X	X	X	
GW-09272024-MW-5	W	9/27/2024	0852	5	4	X	X	X	X	X	
GW-09272024-DUP-1	W	9/27/2024	1200	6	4	X	X	X	X	X	
~~IDW-Water-09272024~~	~~W~~	~~9/27/2024~~	0934		1						

TAT

- [x] Routine 10 Day
- [ ] 24 hours * 100%
- [ ] 48 hours* 80%
- [ ] 3 Day* 60%
- [ ] 5 day* 50%

* Please call for availability

Due Date: Routine 10 days

Dissolved	As, Co, Fe, Mn, Mo
Total	As, Co, Fe, Mn, Mo

Additional Methods Available Upon Request

RELINQUISHED BY

Print Name	Signature	Date/Time
Lydia Johnson		9-27-24 1311

RECEIVED BY

Print Name	Signature	Date/Time
Carl Nom		9/27/24 1311

Revised : 9/20/2024

ALS Laboratory Group
ANALYTICAL CHEMISTRY & TESTING SERVICES

SAMPLE RECEIVING CHECKLIST

Client: Geosyntec
Project: Sunnyside

ALS Job #: EV2409021 2
Login Date: 9.27
Login Time: 13:11
Login By: MH

Type of Shipping Container:
- ☒ Cooler
- ☐ Box
- ☐ Other: _____

Shipped Via:
- ☐ FedEx Ground
- ☐ FedEx Express
- ☐ UPS
- ☐ External Courier
- ☐ ALS Courier
- ☒ Hand Delivered

	Yes	No	N/A
Were custody seals on the outside of the shipping container? How Many? ____ Where? ____ Date: ____ Name: ____			X
Was CoC filled out properly? (in ink, signed, dated, etc.)	X		
Did all bottles have labels?	X		
Did all bottle labels and tags agree with CoC?	X		
Were samples received within hold time?	X		
Did all bottles arrive in good condition?	X		
Was sufficient amount of sample sent for tests requested?	X		
Was correct preservation added to samples?	X		
Subcontract test containers added to subcontract bin?			X
Wetchem test containers marked with applicable tests?	X		
Short hold time test containers delivered to analysts?	X		
VOA vials checked for bubbles?			X
Bubbles in sample number(s): ____			
5035A kits received? Low kits: ____ High kits: ____			✓
5035A kits returned? Low kits: ____ High kits: ____			X

Temperature upon receipt: 4.0 °C
On ice? ✓
Thermometer ID: 189

Other discrepancies:

Was client contacted? ____ Who was called? ____ By whom? ____ Date: ____
Outcome of call:

ALS Environmental – Everett
8620 Holly Dr. STE 100
Everett, WA 98012
(425) 356 - 2600