

22 January 2024

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

Subject: Post-Injection Groundwater Compliance Data Transmittal and Monitoring Well Installation
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 Post-Injection Groundwater Compliance Data Transmittal (Data Transmittal) to present the results of groundwater monitoring completed between December 2022 and May 2023, as well as installation of the monitoring well, MW-5, at the Former Nachurs Alpine Solutions (NAS) Site (the Site) located in Sunnyside, Washington (Figure 1). This work is being performed in accordance with the Corrective Action Implementation – Injection Report and Compliance Monitoring Plan¹ and is being submitted by Geosyntec Consultants on behalf of Wilbur-Ellis Holdings II, Inc. (Wilbur-Ellis), the direct parent company of NAS.

BACKGROUND

The Site is an approximately 0.35-acre property owned by Burlington Northern Santa Fe (BNSF). The Site is currently a vacant, unpaved lot and located in an industrial area of Sunnyside, Washington. NAS operated at the Site from 1973 to 2017 and used the Site to receive fertilizer by rail spur and then distribute locally. While closing operations at the Site, concentrations of

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

constituents of potential concern (COPC) were identified in the subsurface at the Site, and NAS entered into the Department of Ecology's (Ecology's) Voluntary Cleanup Program (VCP) in 2020.

Additional remedial investigation activities were conducted after entering in the VCP. Based on these investigations, COPCs at the Site above background levels and MTCA cleanup levels in groundwater and include nitrate, arsenic, cobalt, and molybdenum. A *Remedial Investigation and Cleanup Action Plan* (RI-CAP)² was submitted to Ecology on 22 September 2022 and recommended in situ denitrification with metals attenuation as the remedial approach to address COPCs in groundwater at the Site. Ecology issued an Opinion on 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.³ In its Opinion Letter, Ecology also requested that, following injections, an additional well (MW-5) be installed to supplement the current well network and that an updated compliance monitoring plan be submitted.

In situ denitrification injections were completed in November 2022, in accordance with the engineering design presented in the RI-CAP, this included injections of emulsified vegetable oil and sodium lactate electron donors at the areas shown in Figure 2. Injection field activities were documented in the *Corrective Action Implementation - Injection Report and Compliance Monitoring Plan*, submitted to Ecology on 11 July 2023.⁴ Documentation of the MW-5 well installation and initial post injection compliance monitoring events in 2023 are documented herein.

MONITORING WELL MW-5 INSTALLATION

An additional monitoring well, MW-5, was installed at the location shown in Figure 2. The purpose of this well is to monitor Site COPCs in the western portion of the Site after the injections that were completed in November 2022.

The new monitoring well, MW-5, was installed on May 3, 2023 by Holocene Drilling, Inc, of Puyallup, Washington, (Holocene) under direct supervision of a Geosyntec field geologist. The well was installed in the first encountered groundwater. A direct push drill rig was used to advance

² Geosyntec, 2022. Remedial Investigation and Cleanup Action Plan. Former Nachurs Alpine Solutions. 23 September 2022.

³ Ecology, 2022. Opinion on Proposed Cleanup for the following Property associated with a contaminated Site. State of Washington Department of Ecology. 10 November 2022.

⁴ Geosyntec, 2023. Corrective Action Implementation – Injection Report and Compliance Monitoring Plan. Former Nachurs Alpine Solutions. 11 July 2023.

a borehole to 15 feet below ground surface (ft bgs) to install this well, which was constructed similar to existing monitoring wells on the Site with the screen interval placed at 5 to 15 ft bgs as shown in Attachment 1. MW-5 was then developed by Blaine Tech Services of Auburn, Washington and surveyed by PLSA Surveying of Yakima, Washington on May 10, 2023. Development and surveying were also completed under direct supervision of a Geosyntec field geologist.

COMPLIANCE GROUNDWATER MONITORING

Scope of Work Completed in 2023

Following the injections conducted in November 2022, Geosyntec conducted four groundwater monitoring events – December 2022 and January, February, and May 2023. During the December 2022, January 2023, and February 2023 monitoring events four monitoring wells (MW-1 through MW-4) were sampled. Five monitoring wells (MW-1 through MW-5) were sampled following the installation of MW-5 in May 2023. The 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.

Results

The water level data is 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. The groundwater sampling logs and laboratory analytical reports are included in Attachment 2 and Attachment 3, respectively.

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

- The groundwater gradient at the Site is east-southeast and remains consistent with past monitoring events. Groundwater elevation data ranged/averaged from 740.10 feet North American Vertical Datum of 1988 (ft NAVD88) at upgradient well MW-1 to 738.46 at downgradient well MW-4.
- Nitrate as nitrogen is below the TRL of 48 milligrams per liter (mg/L) in samples collected from MW-2 and MW-3. However, nitrate remains above the TRL in samples collected from MW-1, MW-4, and MW-5.

- Concentrations of arsenic in samples collected at MW-1, MW-4, and MW-5 are below the TRL of 71 micrograms per liter (µg/L). Arsenic in samples from MW-2 and MW-3 temporarily decreased to below the TRL following remedial injections, and by the May 2023 event was back to baseline concentrations and slightly over the TRL.
- Concentrations of cobalt at MW-1 and MW-5 are below the TRL of 5 µg/L. Cobalt concentrations in samples from MW-2, MW-3, and MW-4 increased following remedial injections, but concentrations have shown a steady decrease in the May 2023 event.
- Concentrations of molybdenum in samples from MW-1, MW-2, and MW-3 are below the TRL of 80 µg/L. Molybdenum is above the TRL in samples from MW-4 and MW-5. Similar to cobalt, molybdenum concentrations temporarily increased following injections in samples from MW-4.
- Geochemical and field parameters demonstrated initial influence from the addition of the electron donor amendments into the subsurface. This was evidenced by the changes within the injection area (primarily MW-2 and MW-3), including increase in dissolved organic carbon, decreases in sulfate, increases in iron and manganese (particularly the dissolved phase), decreases in DO and ORP, and increase in conductivity.

CONCLUSIONS AND NEXT STEPS

Overall, the initial monitoring post injection is showing positive signs of the initial influence of electron donor in treatment COPCs at the Site, as well as reductions in the primary COPC of nitrate as nitrogen. However, additional time and monitoring is needed to continue to assess remedial progress following injections. Because this remedy is in its early stages, Geosyntec in discussions with Ecology paused the groundwater sampling following the May 2023 event, and the schedule was approved by Ecology on August 2, 2023⁵, to allow for more time for subsurface conditions to stabilize following injections.

⁵ 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.

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In 2024, Geosyntec anticipates conducting at least two compliance monitoring events, one in winter (likely late first quarter) and one in summer (likely third quarter). Results of these compliance monitoring events will be reported to Ecology by the end of 2024.

CLOSING

Please contact either Melissa Asher or David Parkinson at 206-496-1449 and 206-496-1446, respectively, if you have questions regarding the information presented herein.

Sincerely,



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



David L. Parkinson, PhD., P.G. (WA, TX)
Principal

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

Attachment 1 - Borehole Log of MW-5
Attachment 2 - Groundwater Sampling Forms
Attachment 3 – Laboratory Analytical Reports

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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

Notes:

* Baseline sampling event, pre-remedy implementation.

DTW = depth to water

ELEV = elevation (ft NAVD88)

ft = feet

in = inches

TABLE 2: GROUNDWATER SAMPLING RESULTS AND SCREENING LEVELS
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)
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	-	-	-	-	-	-
			12/9/20	19	10	< 1.0	29	10	< 1.0	28	NA	NA	NA	NA	NA	NA	-	-	-	-	-	-
			3/3/21	20	8.9	< 1.0	23	8.8	< 1.0	23	NA	NA	NA	NA	NA	NA	-	-	-	-	-	-
			6/9/21	14	11	1.4	22	10	< 1.0	27	NA	NA	NA	NA	NA	NA	-	-	-	-	-	-
			9/15/21	13	11	< 1.0	29	11	< 1.0	30	NA	NA	NA	NA	NA	NA	-	-	-	-	-	-
			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			
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	-	-	-	-	-	-
			12/9/20	89	130	7.5	28	130	7	28	NA	NA	NA	NA	NA	NA	-	-	-	-	-	-
			3/3/21	98	110	10	41	110	9.7	39	NA	NA	NA	NA	NA	NA	-	-	-	-	-	-
			6/9/21	94	76	9.1	37	80	9.7	37	NA	NA	NA	NA	NA	NA	-	-	-	-	-	-
			9/15/21	92	77	8.2	31	79	8.2	30	NA	NA	NA	NA	NA	NA	-	-	-	-	-	-
			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			
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	-	-	-	-	-	-
			12/9/20	22	81	< 1.0	40	80	< 1.0	41	NA	NA	NA	NA	NA	NA	-	-	-	-	-	-
			3/3/21	23	85	< 1.0	36	87	< 1.0	41	NA	NA	NA	NA	NA	NA	-	-	-	-	-	-
			6/9/21	27	71	< 1.0	50	71	< 1.0	50	NA	NA	NA	NA	NA	NA	-	-	-	-	-	-
			9/15/21	19	60	< 1.0	45	60	< 1.0	42	NA	NA	NA	NA	NA	NA	-	-	-	-	-	-
			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			
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	-	-	-	-	-	-
			12/9/20	160	68	15	120	66	15	120	NA	NA	NA	NA	NA	NA	-	-	-	-	-	-
			3/3/21	160	67	18	130	69	18	130	NA	NA	NA	NA	NA	NA	-	-	-	-	-	-
			6/9/21	170	65	17	110	66	17	120	NA	NA	NA	NA	NA	NA	-	-	-	-	-	-
			9/15/21	180	65	18	120	64	18	120	NA	NA	NA	NA	NA	NA	-	-	-	-	-	-
			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			
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
Target Remediation Levels ²				48	71	5	80	--	--	--	--	--	--	--	--	--	--	--	--	--	--	

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



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

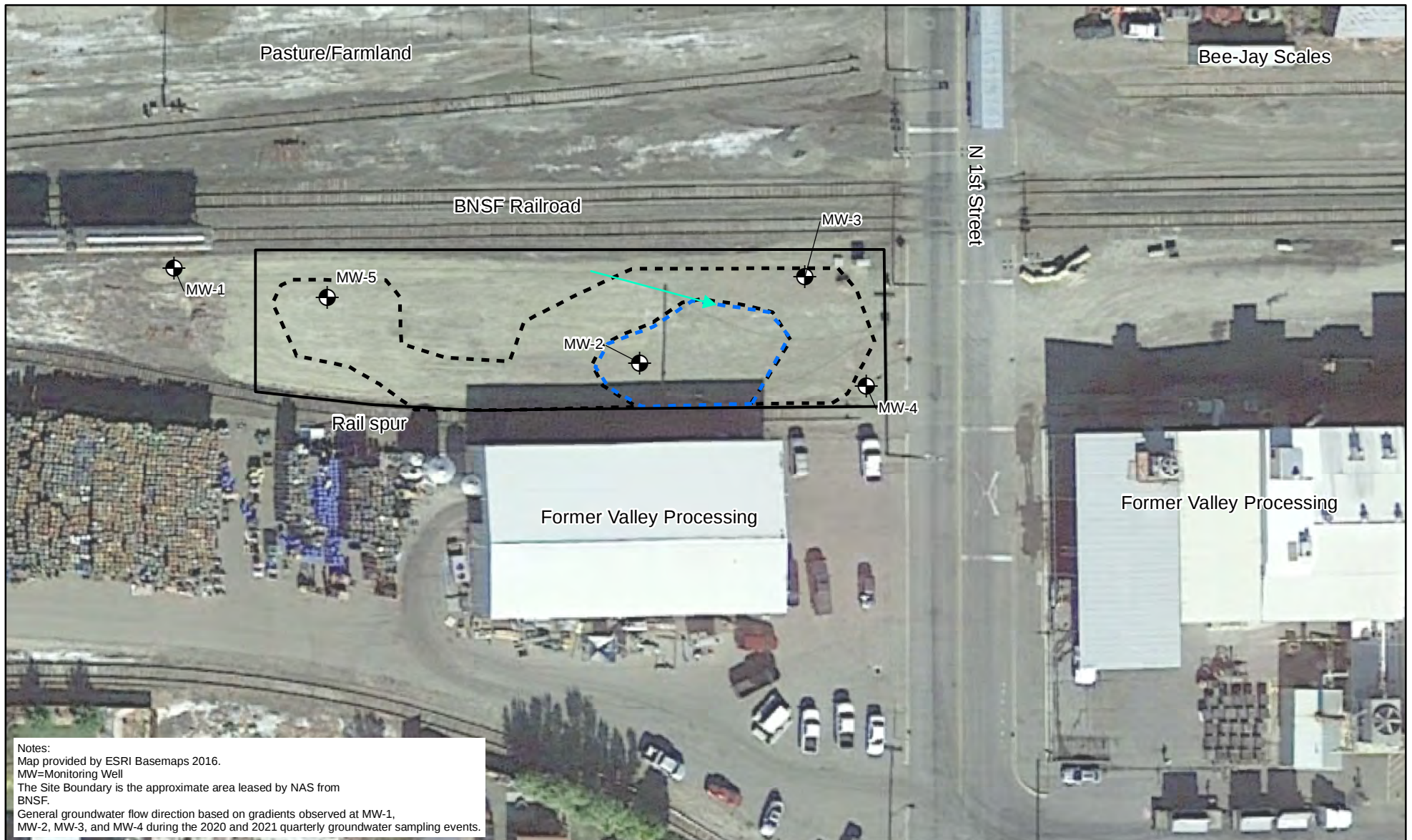
Geosyntec
consultants

Figure

1

PNR0696D

December 2023



Legend

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



0 50 Feet

Groundwater Compliance Monitoring Well Locations

101 North 1st Street
Sunnyside, Washington

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PNR0696D

December 2023

Figure

2

Attachment 1

GS FORM:
CORE3 10/00

LOG OF MW-5

DEPTH (ft)	MATERIAL DESCRIPTION SOIL NAME (USCS SYMBOL): Color, Moisture, Grain Size and Percentage, Plasticity, Consistency/Density, Other (Odor, Dry Strength, Mineral Content)	SYMBOLIC LOG	WELL LOG	Well Construction Material	SAMPLES				TIME	COMMENTS
					BLOW COUNT	TYPE	RECOVERY (%)	PID READING (ppm)		
	Gravel, fill, and silty sand observed in the hand auger cuttings.			Cement Grout [Quickcrete]						
	Silty SAND (SM): Brown, moist, medium dense, fine sand.			Bentonite Seal [Haliburton Hole Plug]						
							100			Drillers collected a short interval to return to regular 5ft intervals.
5	SILT with sand (ML): Grayish-brown, moist, stiff, fine sand.			Sand Pack [Industrial Sand]						
				Slotted Well Screen (0.010)						
	Silty SAND (SM): Brown, moist to wet, medium dense, medium to fine sand.						100			Static water level at 7.79 ft bgs.
10	SILT with sand (ML): Brown, wet, stiff, fine sand.									
	SILT with sand (ML): Brown, wet, stiff, fine sand.						80			
15	End of boring @ 15 ft bgs									

CONTRACTOR Holocene
EQUIPMENT Geoprobe 7800
DRILL MTHD Direct Push
DIAMETER (in) 4
LOGGER M. Elliott
REVIEWER D. Jensen

NORTHING
EASTING
ANGLE Vertical
BEARING -----
PRINTED 12/08/23

REMARKS: Hand auger to approximately 2 ft bgs. Observed sandy silt
with some gravel.

COORDINATE SYSTEM:
SEE KEY SHEET FOR SYMBOLS AND ABBREVIATIONS

Attachment 2

Project Name:

Project Number: PNR0696C

Page 1 of 1

Date: 12/14/22

Location: Sunnyside, WA

Logged By: Sam Scherer

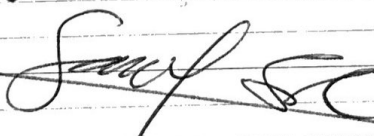
Weather Conditions:

cloudy, high 20°Fs

Tailgate Safety Meeting Time:

Contractor:

Personnel: Name	Company	Time In	Time Out
Sam Scherer	Geosyntec	1030	1621

Time	Activities
1030	arrived on site, and prepping for sampling
1049	checking YSI calibration 100% DO: post cal value: 98.9 instrument reading: 98.4 specific conductance post cal value: 1413 $\mu\text{S}/\text{cm}$ instrument reading: 1498
1110	mobilized to MW-1. See attached sheet.
1215	mobilized to MW-2. Covered in snow - attempting to locate ss based on pictures.
1221	called Priyam Sharma for assistance locating MW-2.
1242	setting up on MW-2
1447	collected "GW-12142022-MW-1"
1308	collected "GW-12142022-MW-2"
1435	collected "GW-12142022-MW-3"
1534	collected "GW-12142022-MW-4"
1313	collected "GW-12142022-DUP-1"
1621	SS left site
 12.14.22	

Copy to:

Total Hrs.:

Signature:



Groundwater Purging and Sampling Log

Project No: PNR 0696C Task No: _____ Project Name: _____ Date: 12 / 14 / 22

Site Location: _____ Depth to Water (DTW)(ft): 2.10 Measurements Referenced to: TOC

Well ID: MW-1 Total Well Depth (ft): 14.98 OVM (ppm) = _____

Screen Interval (ft): _____ Well Diameter (inch): 2 Casing Volume: _____

Pump Placement (ft): 8.75 DTW After Purge (ft): _____ 3 Casing Volumes: _____

Sampler(s): Sam Schurer

Purging Equipment:

() Disposable Bailer

() Electric Submersible Pump

() Bladder Pump

(x) peristaltic pump

Type of Water Quality Meter Used:

(x) Low-Flow/Micro Purging

() Purge at least 3 well volumes

Sampling Equipment:

() Disposable Bailer

(x) Dedicated Tubing

() Other: _____

Volume of Schedule 40 PVC Pipe	
Well Diameter (inches)	gal/linear ft.
1.00	0.041
<u>2.00</u>	0.163
3.00	0.367
4.00	0.653
5.00	1.023
6.00	1.469

Time (24 hrs)	Water Level (ft TOC)	Turbidity (NTUs)	DO (mg/l)	pH (units)	Spec.Cond. (uS/cm)	ORP (mv)	Temp. (°C or °F)	Rate (ml/min)	Total Volume
---	---	(± 10%)	(± 0.3)	(± 0.1)	(± 3%)	(± 10mV)	---	---	---
1129	2.10	24.74	2.83	7.49	1464	121.6	14.5	200	0
1132	2.41	20.27	2.57	7.52	1462	108.5	14.4	200	0.6
1135	2.41	17.18	2.50	7.52	1461	100.6	14.4	200	1.2
1138	2.42	16.03	2.44	7.52	1459	94.6	14.4	200	1.8
1141	2.43	14.56	2.45	7.54	1462	84.2	14.5	200	2.4
1144	2.43	13.92	2.41	7.55	1460	78.0	14.6	200	3.0
1147	2.44	13.34	2.39	7.56	1455	74.9	14.7	200	3.6

Notes:

sample time: 11 47

Total Gallons Purged:

3.6 L

Presence of Sheen in groundwater sample (yes/no):

no

Sample ID and Analysis:

"GW-12142022-MW-1"

Duplicate Sample:

no

Equipment Blank:

no

Field Blank:

no

Groundwater Purging and Sampling Log

Project No: <u>PNR 0696</u>	Task No:	Project Name:	Date: <u>12 / 14 / 22</u>
Site Location:	Depth to Water (DTW)(ft): <u>4.67</u>	Measurements Referenced to: TOC	
Well ID: <u>MW-2</u>	Total Well Depth (ft): <u>15.14</u>	OVM (ppm) =	
Screen Interval (ft):	Well Diameter (inch): <u>2</u>	Casing Volume:	
Pump Placement (ft): <u>9.0</u>	DTW After Purge (ft):	3 Casing Volumes:	
Sampler(s): <u>Sam Scherer</u>			

Purging Equipment:

() Disposable Bailer

() Electric Submersible Pump

() Bladder Pump

Sampling Equipment:

() Disposable Bailer

() Dedicated Tubing

() Other: _____

Type of Water Quality Meter Used:

(X) Low-Flow/Micro Purging

() Purge at least 3 well volumes

Volume of Schedule 40 PVC Pipe

Well Diameter (inches)	gal/linear ft.
1.00	0.041
<u>2.00</u>	0.163
3.00	0.367
4.00	0.653
5.00	1.023
6.00	1.469

Time (24 hrs)	Water Level (ft TOC)	Turbidity (NTUs)	DO (mg/l)	pH (units)	Spec.Cond. (uS/cm)	ORP (mv)	Temp. (°C or °F)	Rate (ml/min)	Total Volume
---	<u>4.67</u>	(± 10%)	(± 0.3)	(± 0.1)	(± 3%)	(± 10mV)	---	---	---
1256	<u>15.44^{SS}</u>	<u>70.27</u>	<u>1.86</u>	<u>5.87</u>	<u>2787</u>	<u>-76.0</u>	<u>12.9</u>	<u>200</u>	<u>0</u>
1259	<u>5.08</u>	<u>67.92</u>	<u>1.58</u>	<u>5.84</u>	<u>2798</u>	<u>-82.4</u>	<u>12.8</u>	<u>200</u>	<u>0.6</u>
1302	<u>5.15</u>	<u>61.65</u>	<u>1.49</u>	<u>5.83</u>	<u>2805</u>	<u>-84.5</u>	<u>12.9</u>	<u>200</u>	<u>1.2</u>
1305	<u>5.18</u>	<u>58.89</u>	<u>1.44</u>	<u>5.83</u>	<u>2815</u>	<u>-86.4</u>	<u>12.8</u>	<u>200</u>	<u>1.8</u>
1308	<u>5.21</u>	<u>54.60</u>	<u>1.40</u>	<u>5.83</u>	<u>2829</u>	<u>-88.0</u>	<u>12.8</u>	<u>200</u>	<u>2.4</u>

Notes:

sample time: 1308

Total Gallons Purged:

2.4 L

Presence of Sheen in groundwater sample (yes/no):

yes some silver swirls

Sample ID and Analysis:

"GW-12142022-MW-2"

Duplicate Sample:

yes "GW-12142022-DUP-1" time: 1313

Equipment Blank:

no

Field Blank:

no

Groundwater Purging and Sampling Log

520 Pike Street, Suite 2600
Seattle, Washington 98101
PH 510 836 3034
FAX 510 836 3036

Project No: <u>PNK06966</u>	Task No:	Project Name:	Date: <u>12/14/22</u>
Site Location:	Depth to Water (DTW)(ft): <u>5.03</u>	Measurements Referenced to: TOC	
Well ID: <u>MW-3</u>	Total Well Depth (ft): <u>15.04</u>	OVM (ppm) =	
Screen Interval (ft):	Well Diameter (inch): <u>2</u>	Casing Volume:	
Pump Placement (ft): <u>10</u>	DTW After Purge (ft):	3 Casing Volumes:	
Sampler(s): <u>Sam Scherer</u>			

Purging Equipment:

- () Disposable Bailer
() Electric Submersible Pump
() Bladder Pump

Sampling Equipment:

- () Disposable Bailer
() Dedicated Tubing
() Other: _____

x peristaltic pump

Type of Water Quality Meter Used:

- (X) Low-Flow/Micro Purging
() Purge at least 3 well volumes

Volume of Schedule 40 PVC Pipe

Well Diameter (inches)	gal/linear ft.
1.00	0.041
2.00	0.163
3.00	0.367
4.00	0.653
5.00	1.023
6.00	1.469

Time (24 hrs)	Water Level (ft TOC)	Turbidity (NTUs)	DO (mg/l)	pH (units)	Spec. Cond. (uS/cm)	ORP (mv)	Temp. (°C or °F)	Rate (ml/min)	Total Volume
---	---	(± 10%)	(± 0.3)	(± 0.1)	(± 3%)	(± 10mV)	---	---	---
1423	5.03	23.75	1.69	6.06	2482	-109.6	14.8	200	0
1426	5.25	24.53	1.43	6.06	2514	-105.6	15.0	200	0.6
1429	5.25	23.80	1.36	6.07	2537	-105.2	14.7	200	1.2
1432	5.25	24.41	1.32	6.07	2536	-105.0	14.8	200	1.8
1435	5.27	19.83	1.29	6.07	2550	-105.2	14.8	200	2.4

Notes:

sample time: 1435

Total Gallons Purged:

Presence of Sheen in groundwater sample (yes/no):

Sample ID and Analysis: "GW-12142022-MW-3"

Duplicate Sample: no

Equipment Blank: no

Field Blank: no

Groundwater Purging and Sampling Log

Project No: <u>PNR06766</u>	Task No:	Project Name:	Date: <u>12 / 14 / 22</u>
Site Location: <u>Sunnyside, WA</u>		Depth to Water (DTW)(ft): <u>5.37</u>	Measurements Referenced to: TOC
Well ID: <u>MW-4</u>	Total Well Depth (ft): <u>15.00</u>	OVM (ppm) =	
Screen Interval (ft):	Well Diameter (inch): <u>2</u>	Casing Volume:	
Pump Placement (ft): <u>10</u>	DTW After Purge (ft):	3 Casing Volumes:	
Sampler(s): <u>Sam Schurer</u>			

Purging Equipment:

- () Disposable Bailer
() Electric Submersible Pump
() Bladder Pump

Sampling Equipment:

- () Disposable Bailer
() Dedicated Tubing
(X) Other: disposable tubing

x peristaltic
Type of Water Quality Meter Used: _____
(X) Low-Flow/Micro Purging
() Purge at least 3 well volumes

Volume of Schedule 40 PVC Pipe	
Well Diameter (inches)	gal/linear ft.
1.00	0.041
<u>2.00</u>	0.163
3.00	0.367
4.00	0.653
5.00	1.023
6.00	1.469

Time (24 hrs)	Water Level (ft TOC)	Turbidity (NTUs)	DO (mg/l)	pH (units)	Spec.Cond. (uS/cm)	ORP (mv)	Temp. (°C or °F)	Rate (ml/min)	Total Volume
---	---	(± 10%)	(± 0.3)	(± 0.1)	(± 3%)	(± 10mV)	---	---	---
1522	5.37	5.26	1.99	7.36	3399	-101.5	14.2	200	0
1525	5.46	6.03	1.52	7.49	3452	-108.8	14.5	200	0.6
1528	5.46	7.71	1.44	7.55	3453	-110.5	14.5	200	1.2
1531	5.46	9.71	1.39	7.58	3451	-111.0	14.6	200	1.8
1534	5.46	11.65	1.35	7.60	3442	-110.6	14.7	200	2.4

Notes: sample time: 1534

Total Gallons Purged: 2.4 L

Presence of Sheen in groundwater sample (yes/no):

Sample ID and Analysis: GW-12142022-MW-4

Duplicate Sample: no

Equipment Blank: no

Field Blank: no



ALS Job# (Laboratory Use Only)

Date 12/4/22 Page 1 Of 1

[illegible]

SPECIAL INSTRUCTIONS total and dissolved metals, dissolved metals and dissolved organic carbon were
field filtered w/ 0.45-µm filter.

SIGNATURES (Name, Company, Date, Time):

SIGNATURES (Name, Company, Date, Title):

1. Relinquished By: Sarah Scherer / L Greenpeace, 12-15-22 1349

Received By: ACS 12/15/22 1349

2. Relinquished By: _____

Received By: _____

TURNAROUND REQUESTED in Business Days*

OTHER:

Organic, Metals & Inorganic Analysis

~~10~~ 5 3 2 1 SAME DAY

Fuels & Hydrocarbon Analysis

~~5~~ 3 1 SAM
Standard DAY

Specify: _____

**Turnaround request less than standard may incur Rush Charges*

WELL GAUGING DATA

Project # 230118-FD1 Date 01/18/23 Client GeoSynTec

Site Sunnyside, WA - 101 N 1st St

[illegible]

LOW FLOW WELL MONITORING DATA SHEET

Project #: 230118-FDL	Client: Geosyntec
Sampler: FO	Gauging Date: 01/18/23
Well I.D.: MW-1	Well Diameter (in.): 2 3 4 6 8
Total Well Depth (ft.): 14.79	Depth to Water (ft.): 4.06
Depth to Free Product: —	Thickness of Free Product (feet): —
Referenced to: PVC Grade	Flow Cell Type: YSI 556

Purge Method: 2" Grundfos Pump

Sampling Method: Dedicated Tubing

Peristaltic Pump

New Tubing

Bladder Pump

Other

Start Purge Time: 1235

Flow Rate: 200 mL/min

Pump Depth: 10 F+

[illegible]

Did well dewater? Yes ☐ No ☒

Amount actually evacuated: 3000mL

Sampling Time: 1255

Sampling Date: 01/18/23

Sample I.D.: 6W-011923-MW-1

Laboratory: ALS

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

Equipment Blank I.D.:

a

Time

Duplicate I.D.:

LOW FLOW WELL MONITORING DATA SHEET

Project #: 230118-F01	Client: GeoSyntec
Sampler: Fp	Gauging Date: 01/18/23
Well I.D.: 11W-2	Well Diameter (in.): ② 3 4 6 8
Total Well Depth (ft.): 14.95	Depth to Water (ft.): 4.81
Depth to Free Product: —	Thickness of Free Product (feet): —
Referenced to: PVC Grade	Flow Cell Type: YSI 556

Purge Method: 2" Grundfos Pump

Sampling Method: Dedicated Tubing

Peristaltic Pump

New Tubing

Bladder Pump

Other

Start Purge Time: 1152

Flow Rate: 200 mL/min

Pump Depth: 10 ft

[illegible]

Did well dewater? Yes ☐ No ☒

Amount actually evacuated: 3000 mL

Sampling Time: 1212

Sampling Date: 01/18/23

Sample I.D.: 6W-011823- MW-2

Laboratory: ALS

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

Equipment Blank I.D.:

a Time

Duplicate I.D.: GW-011823-DVP-1

LOW FLOW WELL MONITORING DATA SHEET

Project #: 230118-F01	Client: GeoSyntec
Sampler: FD	Gauging Date: 01/18/23
Well I.D.: MW-3	Well Diameter (in.): 2 3 4 6 8
Total Well Depth (ft.): 14.91	Depth to Water (ft.): 4.86
Depth to Free Product: —	Thickness of Free Product (feet): —
Referenced to: PVC Grade	Flow Cell Type: YSI 556

Purge Method: 2" Grundfos Pump Peristaltic Pump Bladder Pump
Sampling Method: Dedicated Tubing New Tubing Other _____
Start Purge Time: 117 Flow Rate: 200 mL/min Pump Depth: 10 ft

[illegible]

Did well dewater? Yes <u>No</u>	Amount actually evacuated: 3000mL
Sampling Time: 1135	Sampling Date: 6/1/23
Sample I.D.: 6W-011823-MW-3	Laboratory: ALS
Analyzed for: TPH-G BTEX MTBE TPH-D	Other: <u>see loc</u>
Equipment Blank I.D.: @ Time	Duplicate I.D.:

LOW FLOW WELL MONITORING DATA SHEET

Project #: 230118-FDL	Client: GeoSyntec
Sampler: FD	Gauging Date: 01/18/23
Well I.D.: MW-4	Well Diameter (in.): 2 3 4 6 8
Total Well Depth (ft.): 14.93	Depth to Water (ft.): 5.09
Depth to Free Product: —	Thickness of Free Product (feet): —
Referenced to: PVC Grade	Flow Cell Type: YSI 556

Purge Method: 2" Grundfos Pump

Sampling Method: Dedicated Tubing

Peristaltic Pump

Bladder Pump

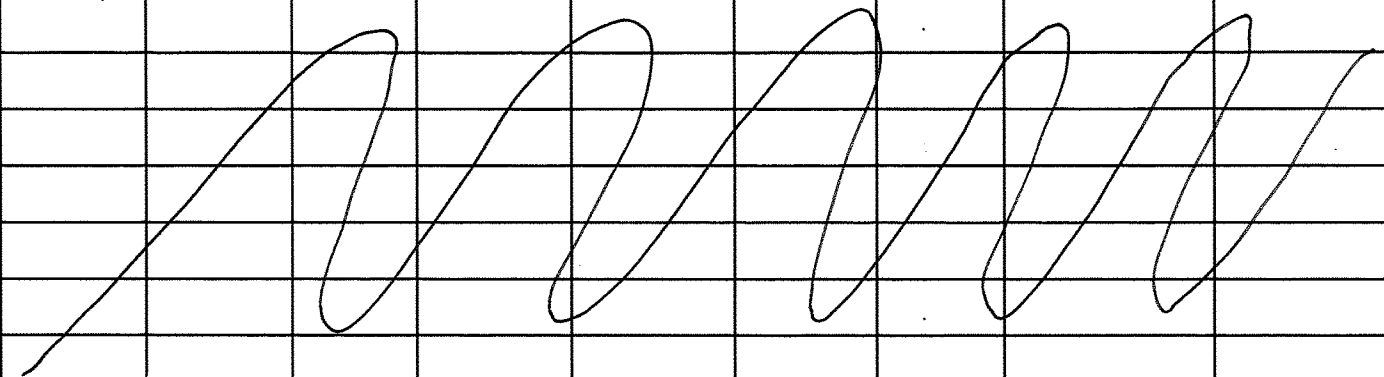
New Tubing

Other

Start Purge Time: 1044

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.)
1047	7.18	7.79	0.861	77	1.45	332.4	600	5.11
1050	7.23	7.79	0.860	29	1.17	327.4	1200	5.24
1053	7.43	7.79	0.861	3	0.99	322.2	1800	5.27
1056	7.37	7.79	0.863	3	0.96	321.6	2400	5.27
1059	7.41	7.79	0.861	3	0.93	319.8	3000	5.27
								

Did well dewater? Yes No

Amount actually evacuated: 3000 mL

Sampling Time: 1103

Sampling Date: 01/18/23

Sample I.D.: 6W-011823-MW-4

Laboratory: ALS

Analyzed for:	TPH-G	BTEX	MTBE	TPH-D
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Other: get loc

Equipment Blank I.D.: _____ @ _____ Time

Duplicate I.D.:

Blaine Tech Services, Inc. 1680 Rogers Ave., San Jose, CA 95112 (408) 573-0555

Chain of Custody

(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.:

[illegible]

WELLHEAD INSPECTION FORM

Client: GeoSyntec Site: Sunnyside, WA - 10th 1st St Date: 01/18/23

Job #: 230118-FD1 Technician: FD Page 1 of 1

Well ID	Well Inspected - No Corrective Action Required	Check indicates deficiency											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)	
		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)
MW-1	X														
MW-2	X														
MW-3	X														
MW-4	X														

NOTES: _____

TEST EQUIPMENT CALIBRATION LOG

[illegible]

PURGE DRUM INVENTORY LOG

CLIENT Geosyntec

SITE ADDRESS 161 N 1st St, Sunnyside, WA

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

WELL GAUGING DATA

Project # 230215-cmi Date 2/15/23 Client Geosyntec

Site 101 N 1st St Sunnyside, WA

[illegible]

LOW FLOW WELL MONITORING DATA SHEET

Project #: 230215-cm1	Client: Geosyntec
Sampler: cm	Gauging Date: 2/15/23
Well I.D.: MW-1	Well Diameter (in.): ② 3 4 6 8
Total Well Depth (ft.): 14.97	Depth to Water (ft.): 3.01
Depth to Free Product: —	Thickness of Free Product (feet): —
Referenced to: (PVC) Grade	Flow Cell Type: YSL-556

Purge Method: 2" Grundfos Pump

Peristaltic Pump

Bladder Pump

Sampling Method: Dedicated Tubing

New Tubing

Other_

Start Purge Time: 1000

Flow Rate: 200 mL/min

Pump Depth: 9 ft

[illegible]

Did well dewater? Yes ☐ No ☒

Amount actually evacuated: 3000 mL

Sampling Time: 10\8

Sampling Date: 2/15/23

Sample I.D.: GW-021523-MW-1

Laboratory: ALS

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

Equipment Blank I.D.:

a

Time

Duplicate I.D.: GW-021523-Dup-1 (a) Dup

② D_{40}

LOW FLOW WELL MONITORING DATA SHEET

Project #: 230215-cm1	Client: Geosyntec
Sampler: Cm	Gauging Date: 2/15/23
Well I.D.: MW-2	Well Diameter (in.): 2 3 4 6 8
Total Well Depth (ft.): 15.07	Depth to Water (ft.): 5.05
Depth to Free Product: -	Thickness of Free Product (feet): -
Referenced to: PVC Grade	Flow Cell Type: YSI-556

Purge Method: 2" Grundfos Pump Peristaltic Pump Bladder Pump
 Sampling Method: Dedicated Tubing New Tubing Other
 Start Purge Time: 1033 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.)
1036	9.97	6.76	4.069	56	0.32	94.1	600	5.80
1039	10.38	6.98	4.166	43	0.20	73.0	1200	5.80
1042	10.33	7.00	4.197	39	0.17	76.3	1800	5.80
1045	10.40	7.00	4.210	38	0.16	75.5	2400	5.80
1048	10.41	7.00	4.215	37	0.16	72.9	3000	5.80

Did well dewater? Yes <u>No</u>	Amount actually evacuated: 3000 mL
Sampling Time: 1051	Sampling Date: 2/15/23
Sample I.D.: GW-021523-mw-2	Laboratory: ALS
Analyzed for: TPH-G BTEX MTBE TPH-D	<u>Other:</u> See COC
Equipment Blank I.D.: @	Duplicate I.D.:

LOW FLOW WELL MONITORING DATA SHEET

Project #: 230215-cm1	Client: Geosyntec
Sampler: cm	Gauging Date: 2/15/23
Well I.D.: MW-3	Well Diameter (in.): ② 3 4 6 8
Total Well Depth (ft.): 15.03	Depth to Water (ft.): 5.04
Depth to Free Product: —	Thickness of Free Product (feet): —
Referenced to: PVC Grade	Flow Cell Type: YSI-SS6

Purge Method: 2" Grundfos Pump Peristaltic Pump Bladder Pump
 Sampling Method: Dedicated Tubing New Tubing Other _____
 Start Purge Time: 1129 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.)
1132	12.32	7.30	3.808	22	0.17	-45.0	600	5.66
1135	12.40	7.30	3.800	21	0.15	-41.2	1200	5.66
1138	12.50	7.31	3.798	21	0.13	-36.8	1800	5.66
1141	12.47	7.31	3.802	20	0.13	-31.8	2400	5.66
1144	12.48	7.31	3.805	20	0.13	-31.4	3000	5.66

Did well dewater? Yes ☒ No	Amount actually evacuated: 3000 mL
Sampling Time: 1147	Sampling Date: 2/15/23
Sample I.D.: GW-021523-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 #: <u>230215-cm1</u>	Client: <u>Geosyntec</u>
Sampler: <u>cm</u>	Gauging Date: <u>2/15/23</u>
Well I.D.: <u>MW-4</u>	Well Diameter (in.): <u>2</u> 3 4 6 8
Total Well Depth (ft.): <u>15.07</u>	Depth to Water (ft.): <u>5.73</u>
Depth to Free Product: <u>-</u>	Thickness of Free Product (feet): <u>-</u>
Referenced to: <u>PVC</u> Grade	Flow Cell Type: <u>YSI-556</u>

Purge Method: 2" Grundfos Pump Peristaltic Pump Bladder Pump
 Sampling Method: Dedicated Tubing New Tubing Other
 Start Purge Time: 1101 Flow Rate: 200 mL/min Pump Depth: 10.25 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.)
1104	11.29	7.19	4.227	22	0.16	-11.8	600	5.81
1107	12.39	7.21	4.342	20	0.14	-22.0	1200	5.81
1110	12.46	7.20	4.361	18	0.13	-23.6	1800	5.81
1113	12.48	7.20	4.369	17	0.13	-25.0	2400	5.81
1116	12.42	7.20	4.373	17	0.12	-24.6	3000	5.81

Did well dewater? Yes <u>No</u>	Amount actually evacuated: <u>3000 mL</u>
Sampling Time: <u>1119</u>	Sampling Date: <u>2/15/23</u>
Sample I.D.: <u>GW-021523-mw-4</u>	Laboratory: <u>ALS</u>
Analyzed for: <u>TPH-G BTEX MTBE TPH-D</u>	<u>Other: See COC</u>
Equipment Blank I.D.: <u>@</u> Time	Duplicate I.D.:

Laboratory

(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)

Chain of Custody

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

Work Order No.: EV23020099

[illegible]

WELLHEAD INSPECTION FORM

Client: Geosyntec Site: 101 N 1st St Sunnyside, WA Date: 2/15/23
 Job #: 230215-CM1 Technician: cm Page 1 of 1

Well ID	Well Inspected - No Corrective Action Required	Check indicates deficiency											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)	
		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)
MW-1				X											
MW-2				X											
MW-3				X											
MW-4				X											

NOTES: _____

TEST EQUIPMENT CALIBRATION LOG

[illegible]

PURGE DRUM INVENTORY LOG

CLIENT Geosyntec

SITE ADDRESS 161 N 1st St, Sunnyside, WA

STATUS OF DRUM(S) UPON ARRIVAL							
Number of drum(s) empty:	0	0	0				
Number of drum(s) 1/4 full:	0	0	1				
Number of drum(s) 1/2 full:	0	0	0				
Number of drum(s) 3/4 full:	0	0	0				
Number of drum(s) full:	0	0	0				
Total drum(s) on site:	0	0	1				
STATUS OF DRUM(S) UPON DEPARTURE							
Number of drum(s) empty:	0	0	0				
Number of drum(s) 1/4 full:	1	1	1				
Number of drum(s) 1/2 full:	0	0	0				
Number of drum(s) 3/4 full:	0	0	0				
Number of drum(s) full:	0	0	0				
Total drum(s) on site:	1	1	1				
LOCATION OF DRUM(S)							
Is/Are drum(s) at wellhead(s)?	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				
FINAL STATUS							
Number of new drum(s) left on site this event:	1	1	0				
Date of inspection:	6/8/22	01/18/23	2/15/23				
Logged by BTS Field Technician:	cm	FD	cm				
Office reviewed by:							

Project # 230517-001 Date 5/17/23 Client Geosyntec

[illegible]

LOW FLOW WELL MONITORING DATA SHEET

Project #: <u>230517-001</u>	Client: <u>Geosyntec</u>
Sampler: <u>DO</u>	Gauging Date: <u>5/17/23</u>
Well I.D.: <u>MW-1</u>	Well Diameter (in.): <u>2</u> 3 4 6 8
Total Well Depth (ft.): <u>14.94</u>	Depth to Water (ft.): <u>3.23</u>
Depth to Free Product: <u> </u>	Thickness of Free Product (feet): <u> </u>
Referenced to: <u>PVC</u> Grade	Flow Cell Type: <u>YSI-556</u>

Purge Method: 2" Grundfos Pump Peristaltic Pump Bladder Pump
 Sampling Method: Dedicated Tubing New Tubing Other
 Start Purge Time: 0758 Flow Rate: 200 mL/min Pump Depth: 9ft

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.)
0801	15.31	6.12	2.217	62	2.89	195.4	600	3.23
0804	15.09	6.28	2.255	59	2.81	192.6	1200	3.29
0807	14.93	6.47	2.386	55	2.83	189.3	1800	3.31
0810	15.01	6.46	2.394	54	2.78	183.6	2400	3.32
0813	15.00	6.49	2.390	54	2.78	182.4	3000	3.36

Did well dewater? Yes <u>No</u>	Amount actually evacuated: <u>3000</u>
Sampling Time: <u>0816</u>	Sampling Date: <u>5/17/23</u>
Sample I.D.: <u>GW-051723-MW-1</u>	Laboratory: <u>ALS</u>
Analyzed for: <u>TPH-G BTEX MTBE TPH-D</u>	Other: <u>See LOC</u>
Equipment Blank I.D.: <u>@</u>	Duplicate I.D.: <u> </u>

LOW FLOW WELL MONITORING DATA SHEET

Project #: 230517-001	Client: Geosyntec
Sampler: DD	Gauging Date: 5/17/23
Well I.D.: MW-2	Well Diameter (in.): 2 3 4 6 8
Total Well Depth (ft.): 15.00	Depth to Water (ft.): 5.17
Depth to Free Product:	Thickness of Free Product (feet):
Referenced to: PVC Grade	Flow Cell Type: 451-556

Purge Method: 2" Grundfos Pump

Sampling Method: ~~Dedicated Tubing~~

Start Purge Time: 0917

Flow Rate:

Peristaltic Pump

New Tubing

200 mL/min

Bladder Pump

Other

Pump Depth: 10ft

[illegible]

Did well dewater? Yes ☐ No ☒

Amount actually evacuated: 3000

Sampling Time: 0935

Sampling Date: 5/17/23

Sample I.D.: GW-15177.3-MW-2

Laboratory: ALS

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

Equipment Blank I.D.: _____ @ _____ Time

Duplicate I.D.:

LOW FLOW WELL MONITORING DATA SHEET

Project #: 230517-001	Client: SA Greosynter
Sampler: 00	Gauging Date: 5/17/23
Well I.D.: MW-3	Well Diameter (in.): (2) 3 4 6 8
Total Well Depth (ft.): 14.99	Depth to Water (ft.): 5.81
Depth to Free Product: —	Thickness of Free Product (feet): —
Referenced to: (PVC) Grade	Flow Cell Type: YSI-556

Purge Method: 2" Grundfos Pump Peristaltic Pump Bladder Pump
 Sampling Method: Dedicated Tubing New Tubing Other
 Start Purge Time: 1015 Flow Rate: 200 mL/min Pump Depth: 10.5 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.)
1018	16.45	6.99	3.641	23	1.22	159.3	600	5.67
1021	17.06	6.86	3.668	21	0.29	174.6	1200	5.74
1024	17.54	6.82	3.698	20	0.22	168.4	1800	5.81
1027	17.59	6.82	3.698	20	0.22	165.2	2400	5.89
1030	17.60	6.82	3.699	19	0.22	163.5	3000	5.96

Did well dewater? Yes ☐ No ☒	Amount actually evacuated: 3000
Sampling Time: 1033	Sampling Date: 5/17/23
Sample I.D.: GW-051723-MW-3	Laboratory: SA ALS
Analyzed for: TPH-G BTEX MTBE TPH-D	Other: See LOC
Equipment Blank I.D.: @	Duplicate I.D.:

Blaine Tech Services, Inc. 1680 Rogers Ave., San Jose, CA 95112 (408) 573-0555

LOW FLOW WELL MONITORING DATA SHEET

Project #: <u>230517-001</u>	Client: <u>Geosyntec</u>
Sampler: <u>00</u>	Gauging Date: <u>5/17/23</u>
Well I.D.: <u>MW-4</u>	Well Diameter (in.): <u>(2)</u> 3 4 6 8
Total Well Depth (ft.): <u>15.02</u>	Depth to Water (ft.): <u>5.92</u>
Depth to Free Product: <u>—</u>	Thickness of Free Product (feet): <u>—</u>
Referenced to: <u>PVC</u> Grade	Flow Cell Type: <u>451-556</u>

Purge Method: 2" Grundfos Pump Peristaltic Pump Bladder Pump
 Sampling Method: Dedicated Tubing New Tubing Other
 Start Purge Time: 0952 Flow Rate: 200 mL/min Pump Depth: 10.5 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.)
0955	16.01	6.86	5.24	25	1.60	224.9	600	6.04
0958	15.95	6.89	5.164	18	0.43	207.8	1200	6.13
0958 1001	15.73	7.00	5.050	17	0.21	193.0	1800	6.18
1004	15.69	7.05	5.024	17	0.23	186.5	2400	6.25
1007	15.68	7.07	5.22	16	0.20	185.0	3000	6.28

Did well dewater? Yes <u>No</u>	Amount actually evacuated: <u>3000</u>
Sampling Time: <u>1010</u>	Sampling Date: <u>5/17/23</u>
Sample I.D.: <u>GW-051723-MW-4</u>	Laboratory: <u>ALS</u>
Analyzed for: <u>TPH-G BTEX MTBE TPH-D</u>	Other: <u>See COL</u>
Equipment Blank I.D.: <u>@</u>	Duplicate I.D.: <u>Time</u>

Blaine Tech Services, Inc. 1680 Rogers Ave., San Jose, CA 95112 (408) 573-0555

LOW FLOW WELL MONITORING DATA SHEET

Project #: 230517-001	Client: Greosyntec
Sampler: DO	Gauging Date: 5/17/23
Well I.D.: MW-5	Well Diameter (in.): (2) 3 4 6 8
Total Well Depth (ft.): 14.61	Depth to Water (ft.): 4.71
Depth to Free Product: —	Thickness of Free Product (feet): —
Referenced to: (PVC) Grade	Flow Cell Type: YSI-556

Purge Method: 2" Grundfos Pump Peristaltic Pump Bladder Pump
 Sampling Method: Dedicated Tubing New Tubing Other
 Start Purge Time: 0842 Flow Rate: 200 mL/min Pump Depth: 10ft

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.)
0845	14.11	6.67	3.278	27	1.29	207.2	600	4.75
0848	15.54	6.56	3.407	30	0.56	197.2	1200	4.79
0851	15.41	6.57	3.401	31	0.40	194.4	1800	4.82
0854	15.36	6.55	3.391	30	0.41	201.3	2400	4.87
0857	15.32	6.52	3.390	30	0.39	206.4	3000	4.89

Did well dewater? Yes (No)	Amount actually evacuated: 3000
Sampling Time: 0900	Sampling Date: 5/17/23
Sample I.D.: GW-051723-MW-5	Laboratory: ALS
Analyzed for: TPH-G BTEX MTBE TPH-D	Other: See COL
Equipment Blank I.D.: @ Time	Duplicate I.D.: GW-051723-DUP-1

WELLHEAD INSPECTION FORM

Client: Geosyntec Site: 101 N 1st St, Sunnyvale, WA Date: 5/17/23
 Job #: 230517-D01 Technician: DO Page 1 of 1

Well ID	Well Inspected - No Corrective Action Required	Check indicates deficiency											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)	
		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)
MW-1	X			X											
MW-2	X			X											
MW-3	X			X											
MW-4	X			X											
MW-5	X			X											

NOTES: _____

TEST EQUIPMENT CALIBRATION LOG

[illegible]

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		
Number of drum(s) 1/4 full:	0	0	1	1	0		
Number of drum(s) 1/2 full:	0	0	0	0	1		
Number of drum(s) 3/4 full:	0	0	0	0	0		
Number of drum(s) full:	0	0	0	0	0		
Total drum(s) on site:	0	0	1	1	1		

STATUS OF DRUM(S)

UPON DEPARTURE

Number of drum(s) empty:	0	0	0	0	0		
Number of drum(s) 1/4 full:	1	1	1	0	0		
Number of drum(s) 1/2 full:	0	0	0	1	1		
Number of drum(s) 3/4 full:	0	0	0	0	0		
Number of drum(s) full:	0	0	0	0	0		
Total drum(s) on site:	1	1	1	1	1		

LOCATION OF DRUM(S)

Is/Are drum(s) at wellhead(s)?	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		

FINAL STATUS

Number of new drum(s) left on site this event:	1	1	0	0	0		
Date of inspection:	6/8/22	01/18/23	2/15/23	05/10/23	5/17/23		
Logged by BTS Field Technician:	cm	FD	cm	mc			
Office reviewed by:							

Attachment 3



December 29, 2022

Mr. Luke Smith
Geosyntec Consultants
520 Pike St, Suite 2600
Seattle, WA 98101

Dear Mr. Smith,

On December 15th, 5 samples were received by our laboratory and assigned our laboratory project number EV22120104. The project was identified as your PNR0696C. 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

Glen Perry
Laboratory Director



CERTIFICATE OF ANALYSIS

CLIENT: Geosyntec Consultants DATE: 12/29/2022
520 Pike St, Suite 2600 ALS JOB#: EV22120104
Seattle, WA 98101 ALS SAMPLE#: EV22120104-01
CLIENT CONTACT: Luke Smith DATE RECEIVED: 12/15/2022
CLIENT PROJECT: PNR0696C COLLECTION DATE: 12/14/2022 11:47:00 AM
CLIENT SAMPLE ID: GW-12142022-MW-1 WDOE ACCREDITATION: C601

SAMPLE DATA RESULTS

ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS	ANALYSIS
						DATE	BY
Nitrate	EPA-300.0	81 H	0.15	1	MG/L	12/16/2022	RAL
Sulfate	EPA-300.0	240	0.26	1	MG/L	12/16/2022	RAL
Arsenic	EPA-200.8	10	1.0	1	UG/L	12/19/2022	EBS
Cobalt	EPA-200.8	U	1.0	1	UG/L	12/19/2022	EBS
Iron	EPA-200.8	570	50	1	UG/L	12/19/2022	EBS
Manganese	EPA-200.8	1200	2.0	1	UG/L	12/19/2022	EBS
Molybdenum	EPA-200.8	25	1.0	1	UG/L	12/19/2022	EBS
Arsenic (Dissolved)	EPA-200.8	9.4	1.0	1	UG/L	12/19/2022	EBS
Cobalt (Dissolved)	EPA-200.8	U	1.0	1	UG/L	12/19/2022	EBS
Iron (Dissolved)	EPA-200.8	U	50	1	UG/L	12/19/2022	EBS
Manganese (Dissolved)	EPA-200.8	140	2.0	1	UG/L	12/19/2022	EBS
Molybdenum (Dissolved)	EPA-200.8	24	1.0	1	UG/L	12/19/2022	EBS
Dissolved Organic Carbon (DOC)	EPA-415.1	3.1	0.25	1	MG/L	12/22/2022	CAS

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

H - Sample analyzed outside of hold time.



CERTIFICATE OF ANALYSIS

CLIENT:	Geosyntec Consultants	DATE:	12/29/2022
	520 Pike St, Suite 2600	ALS JOB#:	EV22120104
	Seattle, WA 98101	ALS SAMPLE#:	EV22120104-02
CLIENT CONTACT:	Luke Smith	DATE RECEIVED:	12/15/2022
CLIENT PROJECT:	PNR0696C	COLLECTION DATE:	12/14/2022 1:08:00 PM
CLIENT SAMPLE ID	GW-12142022-MW-2	WDOE ACCREDITATION:	C601

SAMPLE DATA RESULTS

ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS	ANALYSIS
						DATE	BY
Nitrate	EPA-300.0	U, H	0.15	1	MG/L	12/16/2022	RAL
Sulfate	EPA-300.0	250	0.26	1	MG/L	12/16/2022	RAL
Arsenic	EPA-200.8	47	5.0	5	UG/L	12/19/2022	EBS
Cobalt	EPA-200.8	78	5.0	5	UG/L	12/19/2022	EBS
Iron	EPA-200.8	13000	250	5	UG/L	12/19/2022	EBS
Manganese	EPA-200.8	9200	10	5	UG/L	12/19/2022	EBS
Molybdenum	EPA-200.8	22	5.0	5	UG/L	12/19/2022	EBS
Arsenic (Dissolved)	EPA-200.8	37	5.0	5	UG/L	12/19/2022	EBS
Cobalt (Dissolved)	EPA-200.8	74	5.0	5	UG/L	12/19/2022	EBS
Iron (Dissolved)	EPA-200.8	12000	250	5	UG/L	12/19/2022	EBS
Manganese (Dissolved)	EPA-200.8	8700	10	5	UG/L	12/19/2022	EBS
Molybdenum (Dissolved)	EPA-200.8	19	5.0	5	UG/L	12/19/2022	EBS
Dissolved Organic Carbon (DOC)	EPA-415.1	950	0.25	1	MG/L	12/22/2022	CAS

H - Sample analyzed outside of hold time.



CERTIFICATE OF ANALYSIS

CLIENT:	Geosyntec Consultants	DATE:	12/29/2022
	520 Pike St, Suite 2600	ALS JOB#:	EV22120104
	Seattle, WA 98101	ALS SAMPLE#:	EV22120104-03
CLIENT CONTACT:	Luke Smith	DATE RECEIVED:	12/15/2022
CLIENT PROJECT:	PNR0696C	COLLECTION DATE:	12/14/2022 1:13:00 PM
CLIENT SAMPLE ID	GW-12142022-DUP-1	WDOE ACCREDITATION:	C601

SAMPLE DATA RESULTS

ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS	ANALYSIS
						DATE	BY
Nitrate	EPA-300.0	U, H	0.15	1	MG/L	12/16/2022	RAL
Sulfate	EPA-300.0	260	0.26	1	MG/L	12/16/2022	RAL
Arsenic	EPA-200.8	49	5.0	5	UG/L	12/19/2022	EBS
Cobalt	EPA-200.8	78	5.0	5	UG/L	12/19/2022	EBS
Iron	EPA-200.8	14000	250	5	UG/L	12/19/2022	EBS
Manganese	EPA-200.8	9100	10	5	UG/L	12/19/2022	EBS
Molybdenum	EPA-200.8	23	5.0	5	UG/L	12/19/2022	EBS
Arsenic (Dissolved)	EPA-200.8	44	5.0	5	UG/L	12/19/2022	EBS
Cobalt (Dissolved)	EPA-200.8	73	5.0	5	UG/L	12/19/2022	EBS
Iron (Dissolved)	EPA-200.8	13000	250	5	UG/L	12/19/2022	EBS
Manganese (Dissolved)	EPA-200.8	8400	10	5	UG/L	12/19/2022	EBS
Molybdenum (Dissolved)	EPA-200.8	21	5.0	5	UG/L	12/19/2022	EBS
Dissolved Organic Carbon (DOC)	EPA-415.1	960	0.25	1	MG/L	12/22/2022	CAS

H - Sample analyzed outside of hold time.

CERTIFICATE OF ANALYSIS

CLIENT:	Geosyntec Consultants 520 Pike St, Suite 2600 Seattle, WA 98101	DATE:	12/29/2022
		ALS JOB#:	EV22120104
CLIENT CONTACT:	Luke Smith	ALS SAMPLE#:	EV22120104-04
CLIENT PROJECT:	PNR0696C	DATE RECEIVED:	12/15/2022
CLIENT SAMPLE ID	GW-12142022-MW-3	COLLECTION DATE:	12/14/2022 2:35:00 PM
		WDOE ACCREDITATION:	C601

SAMPLE DATA RESULTS

ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS DATE	ANALYSIS BY
Nitrate	EPA-300.0	U, H	0.15	1	MG/L	12/16/2022	RAL
Sulfate	EPA-300.0	36	0.26	1	MG/L	12/16/2022	RAL
Arsenic	EPA-200.8	51	1.0	1	UG/L	12/19/2022	EBS
Cobalt	EPA-200.8	100	1.0	1	UG/L	12/19/2022	EBS
Iron	EPA-200.8	52000	50	1	UG/L	12/19/2022	EBS
Manganese	EPA-200.8	13000	10	5	UG/L	12/19/2022	EBS
Molybdenum	EPA-200.8	7.5	1.0	1	UG/L	12/19/2022	EBS
Arsenic (Dissolved)	EPA-200.8	41	1.0	1	UG/L	12/19/2022	EBS
Cobalt (Dissolved)	EPA-200.8	100	1.0	1	UG/L	12/19/2022	EBS
Iron (Dissolved)	EPA-200.8	52000	50	1	UG/L	12/19/2022	EBS
Manganese (Dissolved)	EPA-200.8	13000	10	5	UG/L	12/19/2022	EBS
Molybdenum (Dissolved)	EPA-200.8	3.3	1.0	1	UG/L	12/19/2022	EBS
Dissolved Organic Carbon (DOC)	EPA-415.1	950	0.25	1	MG/L	12/22/2022	CAS

H - Sample analyzed outside of hold time.



CERTIFICATE OF ANALYSIS

CLIENT:	Geosyntec Consultants	DATE:	12/29/2022
	520 Pike St, Suite 2600	ALS JOB#:	EV22120104
	Seattle, WA 98101	ALS SAMPLE#:	EV22120104-05
CLIENT CONTACT:	Luke Smith	DATE RECEIVED:	12/15/2022
CLIENT PROJECT:	PNR0696C	COLLECTION DATE:	12/14/2022 3:34:00 PM
CLIENT SAMPLE ID	GW-12142022-MW-4	WDOE ACCREDITATION:	C601

SAMPLE DATA RESULTS

ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS	ANALYSIS
						DATE	BY
Nitrate	EPA-300.0	7.0 H	0.15	1	MG/L	12/16/2022	RAL
Sulfate	EPA-300.0	6.5	0.26	1	MG/L	12/16/2022	RAL
Arsenic	EPA-200.8	46	1.0	1	UG/L	12/19/2022	EBS
Cobalt	EPA-200.8	21	1.0	1	UG/L	12/19/2022	EBS
Iron	EPA-200.8	320	50	1	UG/L	12/19/2022	EBS
Manganese	EPA-200.8	420	2.0	1	UG/L	12/19/2022	EBS
Molybdenum	EPA-200.8	140	1.0	1	UG/L	12/19/2022	EBS
Arsenic (Dissolved)	EPA-200.8	45	1.0	1	UG/L	12/19/2022	EBS
Cobalt (Dissolved)	EPA-200.8	21	1.0	1	UG/L	12/19/2022	EBS
Iron (Dissolved)	EPA-200.8	U	50	1	UG/L	12/19/2022	EBS
Manganese (Dissolved)	EPA-200.8	350	2.0	1	UG/L	12/19/2022	EBS
Molybdenum (Dissolved)	EPA-200.8	140	1.0	1	UG/L	12/19/2022	EBS
Dissolved Organic Carbon (DOC)	EPA-415.1	9.4	0.25	1	MG/L	12/22/2022	CAS

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

H - Sample analyzed outside of hold time.



CERTIFICATE OF ANALYSIS

CLIENT: Geosyntec Consultants
520 Pike St, Suite 2600
Seattle, WA 98101

DATE: 12/29/2022
ALS SDG#: EV22120104
WDOE ACCREDITATION: C601

CLIENT CONTACT: Luke Smith
CLIENT PROJECT: PNR0696C

LABORATORY BLANK RESULTS

MBLK-R424690 - Batch R424690 - Water by EPA-300.0

ANALYTE	METHOD	RESULTS	UNITS	REPORTING LIMITS	ANALYSIS DATE	ANALYSIS BY
Nitrate	EPA-300.0	U	MG/L	0.15	12/16/2022	RAL
Sulfate	EPA-300.0	U	MG/L	0.26	12/16/2022	RAL

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

MB-121922W - Batch 187539 - Water by EPA-200.8

ANALYTE	METHOD	RESULTS	UNITS	REPORTING LIMITS	ANALYSIS DATE	ANALYSIS BY
Arsenic	EPA-200.8	U	UG/L	1.0	12/19/2022	EBS
Cobalt	EPA-200.8	U	UG/L	1.0	12/19/2022	EBS
Iron	EPA-200.8	U	UG/L	50	12/19/2022	EBS
Manganese	EPA-200.8	U	UG/L	2.0	12/19/2022	EBS
Molybdenum	EPA-200.8	U	UG/L	1.0	12/19/2022	EBS

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

MB-121922W - Batch 187540 - 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	12/19/2022	EBS
Cobalt (Dissolved)	EPA-200.8	U	UG/L	1.0	12/19/2022	EBS
Iron (Dissolved)	EPA-200.8	U	UG/L	50	12/19/2022	EBS
Manganese (Dissolved)	EPA-200.8	U	UG/L	2.0	12/19/2022	EBS
Molybdenum (Dissolved)	EPA-200.8	U	UG/L	1.0	12/19/2022	EBS

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

MBLK-R424988 - Batch R424988 - Water by EPA-415.1

ANALYTE	METHOD	RESULTS	UNITS	REPORTING LIMITS	ANALYSIS DATE	ANALYSIS BY
Dissolved Organic Carbon (DOC)	EPA-415.1	U	MG/L	0.25	12/22/2022	CAS

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



CERTIFICATE OF ANALYSIS

CLIENT:	Geosyntec Consultants 520 Pike St, Suite 2600 Seattle, WA 98101	DATE:	12/29/2022
		ALS SDG#:	EV22120104
		WDOE ACCREDITATION:	C601
CLIENT CONTACT:	Luke Smith		
CLIENT PROJECT:	PNR0696C		

LABORATORY CONTROL SAMPLE RESULTS

ALS Test Batch ID: R424690 - Water by EPA-300.0

SPIKED COMPOUND	METHOD	%REC	RPD	QUAL	LIMITS		ANALYSIS DATE	ANALYSIS BY
					MIN	MAX		
Nitrate - BS	EPA-300.0	104			80	120	12/16/2022	RAL
Nitrate - BSD	EPA-300.0	103	1		80	120	12/16/2022	RAL
Sulfate - BS	EPA-300.0	100			80	120	12/16/2022	RAL
Sulfate - BSD	EPA-300.0	100	0		80	120	12/16/2022	RAL

ALS Test Batch ID: 187539 - Water by EPA-200.8

SPIKED COMPOUND	METHOD	%REC	RPD	QUAL	LIMITS		ANALYSIS DATE	ANALYSIS BY
					MIN	MAX		
Arsenic - BS	EPA-200.8	104			89.1	110	12/19/2022	EBS
Arsenic - BSD	EPA-200.8	104	0		89.1	110	12/19/2022	EBS
Cobalt - BS	EPA-200.8	102			85.8	108	12/19/2022	EBS
Cobalt - BSD	EPA-200.8	102	1		85.8	108	12/19/2022	EBS
Iron - BS	EPA-200.8	103			80	120	12/19/2022	EBS
Iron - BSD	EPA-200.8	103	0		80	120	12/19/2022	EBS
Manganese - BS	EPA-200.8	100			82.2	110	12/19/2022	EBS
Manganese - BSD	EPA-200.8	101	0		82.2	110	12/19/2022	EBS
Molybdenum - BS	EPA-200.8	102			90.3	113	12/19/2022	EBS
Molybdenum - BSD	EPA-200.8	101	1		90.3	113	12/19/2022	EBS

ALS Test Batch ID: 187540 - Water by EPA-200.8

SPIKED COMPOUND	METHOD	%REC	RPD	QUAL	LIMITS		ANALYSIS DATE	ANALYSIS BY
					MIN	MAX		
Arsenic (Dissolved) - BS	EPA-200.8	104			89.1	110	12/19/2022	EBS
Arsenic (Dissolved) - BSD	EPA-200.8	104	0		89.1	110	12/19/2022	EBS
Cobalt (Dissolved) - BS	EPA-200.8	102			85.8	108	12/19/2022	EBS
Cobalt (Dissolved) - BSD	EPA-200.8	102	1		85.8	108	12/19/2022	EBS
Iron (Dissolved) - BS	EPA-200.8	103			80	120	12/19/2022	EBS
Iron (Dissolved) - BSD	EPA-200.8	103	0		80	120	12/19/2022	EBS
Manganese (Dissolved) - BS	EPA-200.8	100			82.2	110	12/19/2022	EBS
Manganese (Dissolved) - BSD	EPA-200.8	101	0		82.2	110	12/19/2022	EBS
Molybdenum (Dissolved) - BS	EPA-200.8	102			90.3	113	12/19/2022	EBS
Molybdenum (Dissolved) - BSD	EPA-200.8	101	1		90.3	113	12/19/2022	EBS

ALS Test Batch ID: R424988 - Water by EPA-415.1

SPIKED COMPOUND	METHOD	%REC	RPD	QUAL	LIMITS		ANALYSIS DATE	ANALYSIS BY
					MIN	MAX		
Dissolved Organic Carbon (DOC) - BS	EPA-415.1	98.8			80	120	12/22/2022	CAS

CERTIFICATE OF ANALYSIS

APPROVED BY



Laboratory Director



ALS Job# _____ (Laboratory Use Only)

<http://www.alsglobal.com>

Date 12-14-22 Page 1 Of 1

6/22/2019

SIGNATURES (Name, Company, Date, Time):

SIGNATURES (Name, Company, Date, Time):	TURNAROUND REQUESTED in Business Days*
Sam Scherer Smith Bellinquinshold Bv	1349 Organic, Metals & Inorganic Analysis OTHER: 17:15-22

Received By: As 22/3/2013

2. Relinquished By: _____

Received By: _____

TURNAROUND

Organic, Metals & Inorganic Analysis

☒	0
☐	5
☐	3
☐	2
☐	1
☐	SAME DAY

Fuels & Hydrocarbon Analysis

☒	5
☐	3
☐	1
☐	SAME DAY

**Turnaround request less than standard may incur Rush Charges*



January 31, 2023

Mr. Luke Smith
Geosyntec Consultants
520 Pike St, Suite 2600
Seattle, WA 98101

Dear Mr. Smith,

On January 19th, 5 samples were received by our laboratory and assigned our laboratory project number EV23010114. The project was identified as your Sunnyside. 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



CERTIFICATE OF ANALYSIS

CLIENT: Geosyntec Consultants
520 Pike St, Suite 2600
Seattle, WA 98101
DATE: 1/31/2023
ALS JOB#: EV23010114
ALS SAMPLE#: EV23010114-01
CLIENT CONTACT: Luke Smith
DATE RECEIVED: 01/19/2023
CLIENT PROJECT: Sunnyside
COLLECTION DATE: 1/18/2023 12:55:00 PM
CLIENT SAMPLE ID: GW-011823-MW-1
WDOE ACCREDITATION: C601

SAMPLE DATA RESULTS

ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS	ANALYSIS
						DATE	BY
Nitrate	EPA-300.0	110	0.15	1	MG/L	01/19/2023	RAL
Sulfate	EPA-300.0	260	0.26	1	MG/L	01/19/2023	RAL
Arsenic	EPA-200.8	7.9	1.0	1	UG/L	01/23/2023	EBS
Cobalt	EPA-200.8	U	1.0	1	UG/L	01/23/2023	EBS
Iron	EPA-200.8	220	50	1	UG/L	01/23/2023	EBS
Manganese	EPA-200.8	190	2.0	1	UG/L	01/23/2023	EBS
Molybdenum	EPA-200.8	23	1.0	1	UG/L	01/23/2023	EBS
Arsenic (Dissolved)	EPA-200.8	7.7	1.0	1	UG/L	01/23/2023	EBS
Cobalt (Dissolved)	EPA-200.8	U	1.0	1	UG/L	01/23/2023	EBS
Iron (Dissolved)	EPA-200.8	U	50	1	UG/L	01/23/2023	EBS
Manganese (Dissolved)	EPA-200.8	19	2.0	1	UG/L	01/23/2023	EBS
Molybdenum (Dissolved)	EPA-200.8	24	1.0	1	UG/L	01/23/2023	EBS
Dissolved Organic Carbon (DOC)	EPA-415.1	3.0	0.50	1	MG/L	01/27/2023	CAS

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

CERTIFICATE OF ANALYSIS

CLIENT:	Geosyntec Consultants 520 Pike St, Suite 2600 Seattle, WA 98101	DATE:	1/31/2023
		ALS JOB#:	EV23010114
		ALS SAMPLE#:	EV23010114-02
CLIENT CONTACT:	Luke Smith	DATE RECEIVED:	01/19/2023
CLIENT PROJECT:	Sunnyside	COLLECTION DATE:	1/18/2023 12:12:00 PM
CLIENT SAMPLE ID	GW-011823-MW-2	WDOE ACCREDITATION:	C601

SAMPLE DATA RESULTS

ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS DATE	ANALYSIS BY
Nitrate	EPA-300.0	0.44	0.15	1	MG/L	01/19/2023	RAL
Sulfate	EPA-300.0	12	0.26	1	MG/L	01/19/2023	RAL
Arsenic	EPA-200.8	57	1.0	1	UG/L	01/23/2023	EBS
Cobalt	EPA-200.8	46	1.0	1	UG/L	01/23/2023	EBS
Iron	EPA-200.8	37000	50	1	UG/L	01/23/2023	EBS
Manganese	EPA-200.8	6700	10	5	UG/L	01/23/2023	EBS
Molybdenum	EPA-200.8	7.2	1.0	1	UG/L	01/23/2023	EBS
Arsenic (Dissolved)	EPA-200.8	46	1.0	1	UG/L	01/23/2023	EBS
Cobalt (Dissolved)	EPA-200.8	44	1.0	1	UG/L	01/23/2023	EBS
Iron (Dissolved)	EPA-200.8	36000	50	1	UG/L	01/23/2023	EBS
Manganese (Dissolved)	EPA-200.8	6500	10	5	UG/L	01/23/2023	EBS
Molybdenum (Dissolved)	EPA-200.8	3.4	1.0	1	UG/L	01/23/2023	EBS
Dissolved Organic Carbon (DOC)	EPA-415.1	1100	25	50	MG/L	01/27/2023	CAS

CERTIFICATE OF ANALYSIS

CLIENT:	Geosyntec Consultants	DATE:	1/31/2023
	520 Pike St, Suite 2600	ALS JOB#:	EV23010114
	Seattle, WA 98101	ALS SAMPLE#:	EV23010114-03
CLIENT CONTACT:	Luke Smith	DATE RECEIVED:	01/19/2023
CLIENT PROJECT:	Sunnyside	COLLECTION DATE:	1/18/2023 11:35:00 AM
CLIENT SAMPLE ID	GW-011823-MW-3	WDOE ACCREDITATION:	C601

SAMPLE DATA RESULTS

ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS DATE	ANALYSIS BY
Nitrate	EPA-300.0	0.49	0.15	1	MG/L	01/19/2023	RAL
Sulfate	EPA-300.0	0.69	0.26	1	MG/L	01/19/2023	RAL
Arsenic	EPA-200.8	73	1.0	1	UG/L	01/23/2023	EBS
Cobalt	EPA-200.8	96	1.0	1	UG/L	01/23/2023	EBS
Iron	EPA-200.8	50000	50	1	UG/L	01/23/2023	EBS
Manganese	EPA-200.8	12000	20	10	UG/L	01/23/2023	EBS
Molybdenum	EPA-200.8	15	1.0	1	UG/L	01/23/2023	EBS
Arsenic (Dissolved)	EPA-200.8	73	1.0	1	UG/L	01/23/2023	EBS
Cobalt (Dissolved)	EPA-200.8	100	1.0	1	UG/L	01/23/2023	EBS
Iron (Dissolved)	EPA-200.8	53000	50	1	UG/L	01/23/2023	EBS
Manganese (Dissolved)	EPA-200.8	12000	20	10	UG/L	01/23/2023	EBS
Molybdenum (Dissolved)	EPA-200.8	12	1.0	1	UG/L	01/23/2023	EBS
Dissolved Organic Carbon (DOC)	EPA-415.1	700	25	50	MG/L	01/27/2023	CAS



CERTIFICATE OF ANALYSIS

CLIENT:	Geosyntec Consultants	DATE:	1/31/2023
	520 Pike St, Suite 2600	ALS JOB#:	EV23010114
	Seattle, WA 98101	ALS SAMPLE#:	EV23010114-04
CLIENT CONTACT:	Luke Smith	DATE RECEIVED:	01/19/2023
CLIENT PROJECT:	Sunnyside	COLLECTION DATE:	1/18/2023 11:03:00 AM
CLIENT SAMPLE ID	GW-011823-MW-4	WDOE ACCREDITATION:	C601

SAMPLE DATA RESULTS

ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS DATE	ANALYSIS BY
Nitrate	EPA-300.0	360	0.15	1	MG/L	01/19/2023	RAL
Sulfate	EPA-300.0	480	0.26	1	MG/L	01/19/2023	RAL
Arsenic	EPA-200.8	46	1.0	1	UG/L	01/23/2023	EBS
Cobalt	EPA-200.8	15	1.0	1	UG/L	01/23/2023	EBS
Iron	EPA-200.8	U	50	1	UG/L	01/23/2023	EBS
Manganese	EPA-200.8	380	2.0	1	UG/L	01/23/2023	EBS
Molybdenum	EPA-200.8	210	1.0	1	UG/L	01/23/2023	EBS
Arsenic (Dissolved)	EPA-200.8	48	1.0	1	UG/L	01/23/2023	EBS
Cobalt (Dissolved)	EPA-200.8	15	1.0	1	UG/L	01/23/2023	EBS
Iron (Dissolved)	EPA-200.8	U	50	1	UG/L	01/23/2023	EBS
Manganese (Dissolved)	EPA-200.8	370	2.0	1	UG/L	01/23/2023	EBS
Molybdenum (Dissolved)	EPA-200.8	210	1.0	1	UG/L	01/23/2023	EBS
Dissolved Organic Carbon (DOC)	EPA-415.1	12	0.50	1	MG/L	01/27/2023	CAS

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

CERTIFICATE OF ANALYSIS

CLIENT:	Geosyntec Consultants 520 Pike St, Suite 2600 Seattle, WA 98101	DATE:	1/31/2023
		ALS JOB#:	EV23010114
		ALS SAMPLE#:	EV23010114-05
CLIENT CONTACT:	Luke Smith	DATE RECEIVED:	01/19/2023
CLIENT PROJECT:	Sunnyside	COLLECTION DATE:	1/18/2023 12:00:00 PM
CLIENT SAMPLE ID	GW-011823-DUP-1	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	01/19/2023	RAL
Sulfate	EPA-300.0	12	0.26	1	MG/L	01/19/2023	RAL
Arsenic	EPA-200.8	54	1.0	1	UG/L	01/23/2023	EBS
Cobalt	EPA-200.8	47	1.0	1	UG/L	01/23/2023	EBS
Iron	EPA-200.8	36000	50	1	UG/L	01/23/2023	EBS
Manganese	EPA-200.8	6800	10	5	UG/L	01/23/2023	EBS
Molybdenum	EPA-200.8	7.2	1.0	1	UG/L	01/23/2023	EBS
Arsenic (Dissolved)	EPA-200.8	50	1.0	1	UG/L	01/23/2023	EBS
Cobalt (Dissolved)	EPA-200.8	43	1.0	1	UG/L	01/23/2023	EBS
Iron (Dissolved)	EPA-200.8	37000	50	1	UG/L	01/23/2023	EBS
Manganese (Dissolved)	EPA-200.8	6500	10	5	UG/L	01/23/2023	EBS
Molybdenum (Dissolved)	EPA-200.8	5.0	1.0	1	UG/L	01/23/2023	EBS
Dissolved Organic Carbon (DOC)	EPA-415.1	1100	25	50	MG/L	01/27/2023	CAS

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



CERTIFICATE OF ANALYSIS

CLIENT: Geosyntec Consultants
520 Pike St, Suite 2600
Seattle, WA 98101

DATE: 1/31/2023
ALS SDG#: EV23010114
WDOE ACCREDITATION: C601

CLIENT CONTACT: Luke Smith
CLIENT PROJECT: Sunnyside

LABORATORY BLANK RESULTS

MBLK-R426578 - Batch R426578 - Water by EPA-300.0

ANALYTE	METHOD	RESULTS	UNITS	REPORTING LIMITS	ANALYSIS DATE	ANALYSIS BY
Nitrate	EPA-300.0	U	MG/L	0.15	01/19/2023	RAL
Sulfate	EPA-300.0	U	MG/L	0.26	01/19/2023	RAL

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

MB-012323W - Batch 188793 - Water by EPA-200.8

ANALYTE	METHOD	RESULTS	UNITS	REPORTING LIMITS	ANALYSIS DATE	ANALYSIS BY
Arsenic	EPA-200.8	U	UG/L	1.0	01/23/2023	EBS
Cobalt	EPA-200.8	U	UG/L	1.0	01/23/2023	EBS
Iron	EPA-200.8	U	UG/L	50	01/23/2023	EBS
Manganese	EPA-200.8	U	UG/L	2.0	01/23/2023	EBS
Molybdenum	EPA-200.8	U	UG/L	1.0	01/23/2023	EBS

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

MB-012323W - Batch 188797 - 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	01/23/2023	EBS
Cobalt (Dissolved)	EPA-200.8	U	UG/L	1.0	01/23/2023	EBS
Iron (Dissolved)	EPA-200.8	U	UG/L	50	01/23/2023	EBS
Manganese (Dissolved)	EPA-200.8	U	UG/L	2.0	01/23/2023	EBS
Molybdenum (Dissolved)	EPA-200.8	U	UG/L	1.0	01/23/2023	EBS

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

MBLK-R426977 - Batch R426977 - Water by EPA-415.1

ANALYTE	METHOD	RESULTS	UNITS	REPORTING LIMITS	ANALYSIS DATE	ANALYSIS BY
Dissolved Organic Carbon (DOC)	EPA-415.1	U	MG/L	0.50	01/27/2023	CAS

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



CERTIFICATE OF ANALYSIS

CLIENT: Geosyntec Consultants
520 Pike St, Suite 2600
Seattle, WA 98101

DATE: 1/31/2023
ALS SDG#: EV23010114
WDOE ACCREDITATION: C601

CLIENT CONTACT: Luke Smith
CLIENT PROJECT: Sunnyside

LABORATORY CONTROL SAMPLE RESULTS

ALS Test Batch ID: R426578 - Water by EPA-300.0

SPIKED COMPOUND	METHOD	%REC	RPD	QUAL	LIMITS		ANALYSIS DATE	ANALYSIS BY
					MIN	MAX		
Nitrate - BS	EPA-300.0	102			80	120	01/19/2023	RAL
Nitrate - BSD	EPA-300.0	102	0		80	120	01/19/2023	RAL
Sulfate - BS	EPA-300.0	94.0			80	120	01/19/2023	RAL
Sulfate - BSD	EPA-300.0	96.0	2		80	120	01/19/2023	RAL

ALS Test Batch ID: 188793 - Water by EPA-200.8

SPIKED COMPOUND	METHOD	%REC	RPD	QUAL	LIMITS		ANALYSIS DATE	ANALYSIS BY
					MIN	MAX		
Arsenic - BS	EPA-200.8	94.8			89.1	110	01/23/2023	EBS
Arsenic - BSD	EPA-200.8	94.2	1		89.1	110	01/23/2023	EBS
Cobalt - BS	EPA-200.8	101			85.8	108	01/23/2023	EBS
Cobalt - BSD	EPA-200.8	99.5	2		85.8	108	01/23/2023	EBS
Iron - BS	EPA-200.8	96.2			80	120	01/23/2023	EBS
Iron - BSD	EPA-200.8	96.0	0		80	120	01/23/2023	EBS
Manganese - BS	EPA-200.8	92.2			82.2	110	01/23/2023	EBS
Manganese - BSD	EPA-200.8	91.8	0		82.2	110	01/23/2023	EBS
Molybdenum - BS	EPA-200.8	99.0			90.3	113	01/23/2023	EBS
Molybdenum - BSD	EPA-200.8	98.4	1		90.3	113	01/23/2023	EBS

ALS Test Batch ID: 188797 - Water by EPA-200.8

SPIKED COMPOUND	METHOD	%REC	RPD	QUAL	LIMITS		ANALYSIS DATE	ANALYSIS BY
					MIN	MAX		
Arsenic (Dissolved) - BS	EPA-200.8	94.8			89.1	110	01/23/2023	EBS
Arsenic (Dissolved) - BSD	EPA-200.8	94.2	1		89.1	110	01/23/2023	EBS
Cobalt (Dissolved) - BS	EPA-200.8	101			85.8	108	01/23/2023	EBS
Cobalt (Dissolved) - BSD	EPA-200.8	99.5	2		85.8	108	01/23/2023	EBS
Iron (Dissolved) - BS	EPA-200.8	96.2			80	120	01/23/2023	EBS
Iron (Dissolved) - BSD	EPA-200.8	96.0	0		80	120	01/23/2023	EBS
Manganese (Dissolved) - BS	EPA-200.8	92.2			82.2	110	01/23/2023	EBS
Manganese (Dissolved) - BSD	EPA-200.8	91.8	0		82.2	110	01/23/2023	EBS
Molybdenum (Dissolved) - BS	EPA-200.8	99.0			90.3	113	01/23/2023	EBS
Molybdenum (Dissolved) - BSD	EPA-200.8	98.4	1		90.3	113	01/23/2023	EBS

ALS Test Batch ID: R426977 - Water by EPA-415.1

SPIKED COMPOUND	METHOD	%REC	RPD	QUAL	LIMITS		ANALYSIS DATE	ANALYSIS BY
					MIN	MAX		
Dissolved Organic Carbon (DOC) - BS	EPA-415.1	99.6			83	117	01/27/2023	CAS

CERTIFICATE OF ANALYSIS

APPROVED BY

Rob Greer
Laboratory Director

Work Order No.:

Project Manager: Luke Smith						Bill to: Luke Smith						
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: Luke.Smith@Geosyntec.com						Email: luke.smith@geosyntec.com						
Phone: (206) 496-1452						PO#:						
State: WA												
Project Site: 101 N 1st St, Sunnyside												
Project Name: Sunnyside												
Project Number:												
P.O. Number:												
Sampler's Name: Fonda DeSantos												
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								
Sample Identification		Matrix		Date Sampled	Time Sampled	Lab ID						
GW-011823-MW-1		GW		01/18/23	1255	1						
GW-011823-MW-2		↓		↓	1212	2						
GW-011823-MW-3		↓		↓	1135	3						
GW-011823-MW-4		↓		↓	1103	4						
GW-011823-DVP-1		↓		↓	1200	5						
Dissolved							Ag, Al, As, B, Ba, Be, Ca, Cd, Co, Cr, Cu, Fe, K, Li, Mg, Mn, Mo, Na, Ni, P, Pb, Sb, Se, Si, Sn, Sr, Ti, V, Zn, Zr					
Total							Ag, Al, As, B, Ba, Be, Ca, Cd, Co, Cr, Cu, Fe, K, Li, Mg, Mn, Mo, Na, Ni, P, Pb, Sb, Se, Si, Sn, Sr, Ti, V, Zn, Zr					
RELINQUISHED BY							RECEIVED BY					
Print Name		Signature		Date/Time		Print Name		Signature		Date/Time		
Fonda De Santos		<i>Fonda De Santos</i>		01/18/23 @ 1710		Rich Palmer		<i>Rich Palmer</i>		1/18/23 @ 1710		
Rich Palmer		<i>Rich Palmer</i>		1/18/23 @ 0823		Shawn Robinson		<i>Shawn Robinson</i>		1/19/23 @ 0823		



February 28, 2023

Mr. Luke Smith
Geosyntec Consultants
520 Pike St, Suite 2600
Seattle, WA 98101

Dear Mr. Smith,

On February 15th, 5 samples were received by our laboratory and assigned our laboratory project number EV23020099. The project was identified as your Sunnyside. 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



CERTIFICATE OF ANALYSIS

CLIENT: Geosyntec Consultants
520 Pike St, Suite 2600
Seattle, WA 98101

DATE: 2/28/2023

ALS JOB#: EV23020099

ALS SAMPLE#: EV23020099-01

CLIENT CONTACT: Luke Smith

DATE RECEIVED: 02/15/2023

CLIENT PROJECT: Sunnyside

COLLECTION DATE: 2/15/2023 10:18:00 AM

CLIENT SAMPLE ID: GW-021523-MW-1

WDOE ACCREDITATION: C601

SAMPLE DATA RESULTS

ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS	ANALYSIS
						DATE	BY
Nitrate	EPA-300.0	120	3.8	25	MG/L	02/16/2023	EBS
Sulfate	EPA-300.0	260	6.5	25	MG/L	02/16/2023	EBS
Arsenic	EPA-200.8	9.5	1.0	1	UG/L	02/17/2023	EBS
Cobalt	EPA-200.8	U	1.0	1	UG/L	02/17/2023	EBS
Iron	EPA-200.8	1900	100	1	UG/L	02/17/2023	EBS
Manganese	EPA-200.8	690	2.0	1	UG/L	02/17/2023	EBS
Molybdenum	EPA-200.8	26	1.0	1	UG/L	02/17/2023	EBS
Arsenic (Dissolved)	EPA-200.8	8.4	1.0	1	UG/L	02/17/2023	EBS
Cobalt (Dissolved)	EPA-200.8	U	1.0	1	UG/L	02/17/2023	EBS
Iron (Dissolved)	EPA-200.8	170	100	1	UG/L	02/17/2023	EBS
Manganese (Dissolved)	EPA-200.8	110	2.0	1	UG/L	02/17/2023	EBS
Molybdenum (Dissolved)	EPA-200.8	23	1.0	1	UG/L	02/17/2023	EBS
Dissolved Organic Carbon (DOC)	EPA-9060	2.6	0.50	1	MG/L	02/23/2023	CAS

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

CERTIFICATE OF ANALYSIS

CLIENT:	Geosyntec Consultants 520 Pike St, Suite 2600 Seattle, WA 98101	DATE:	2/28/2023
		ALS JOB#:	EV23020099
CLIENT CONTACT:	Luke Smith	ALS SAMPLE#:	EV23020099-02
CLIENT PROJECT:	Sunnyside	DATE RECEIVED:	02/15/2023
CLIENT SAMPLE ID	GW-021523-MW-2	COLLECTION DATE:	2/15/2023 10:51:00 AM
		WDOE ACCREDITATION:	C601

SAMPLE DATA RESULTS

ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS DATE	ANALYSIS BY
Nitrate	EPA-300.0	0.17	0.15	1	MG/L	02/16/2023	EBS
Sulfate	EPA-300.0	1.0	0.26	1	MG/L	02/16/2023	EBS
Arsenic	EPA-200.8	67	1.0	1	UG/L	02/17/2023	EBS
Cobalt	EPA-200.8	30	1.0	1	UG/L	02/17/2023	EBS
Iron	EPA-200.8	39000	100	1	UG/L	02/17/2023	EBS
Manganese	EPA-200.8	5500	2.0	1	UG/L	02/17/2023	EBS
Molybdenum	EPA-200.8	5.6	1.0	1	UG/L	02/17/2023	EBS
Arsenic (Dissolved)	EPA-200.8	55	1.0	1	UG/L	02/17/2023	EBS
Cobalt (Dissolved)	EPA-200.8	30	1.0	1	UG/L	02/17/2023	EBS
Iron (Dissolved)	EPA-200.8	38000	100	1	UG/L	02/17/2023	EBS
Manganese (Dissolved)	EPA-200.8	5500	2.0	1	UG/L	02/17/2023	EBS
Molybdenum (Dissolved)	EPA-200.8	1.9	1.0	1	UG/L	02/17/2023	EBS
Dissolved Organic Carbon (DOC)	EPA-9060	1100	50	100	MG/L	02/23/2023	CAS



CERTIFICATE OF ANALYSIS

CLIENT:	Geosyntec Consultants	DATE:	2/28/2023
	520 Pike St, Suite 2600	ALS JOB#:	EV23020099
	Seattle, WA 98101	ALS SAMPLE#:	EV23020099-03
CLIENT CONTACT:	Luke Smith	DATE RECEIVED:	02/15/2023
CLIENT PROJECT:	Sunnyside	COLLECTION DATE:	2/15/2023 11:47:00 AM
CLIENT SAMPLE ID	GW-021523-MW-3	WDOE ACCREDITATION:	C601

SAMPLE DATA RESULTS

ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS DATE	ANALYSIS BY
Nitrate	EPA-300.0	0.57	0.15	1	MG/L	02/16/2023	EBS
Sulfate	EPA-300.0	0.78	0.26	1	MG/L	02/16/2023	EBS
Arsenic	EPA-200.8	74	1.0	1	UG/L	02/17/2023	EBS
Cobalt	EPA-200.8	84	1.0	1	UG/L	02/17/2023	EBS
Iron	EPA-200.8	61000	100	1	UG/L	02/17/2023	EBS
Manganese	EPA-200.8	12000	10	5	UG/L	02/17/2023	EBS
Molybdenum	EPA-200.8	9.6	1.0	1	UG/L	02/17/2023	EBS
Arsenic (Dissolved)	EPA-200.8	73	1.0	1	UG/L	02/17/2023	EBS
Cobalt (Dissolved)	EPA-200.8	82	1.0	1	UG/L	02/17/2023	EBS
Iron (Dissolved)	EPA-200.8	61000	100	1	UG/L	02/17/2023	EBS
Manganese (Dissolved)	EPA-200.8	12000	10	5	UG/L	02/17/2023	EBS
Molybdenum (Dissolved)	EPA-200.8	8.4	1.0	1	UG/L	02/17/2023	EBS
Dissolved Organic Carbon (DOC)	EPA-9060	580	50	100	MG/L	02/23/2023	CAS



CERTIFICATE OF ANALYSIS

CLIENT:	Geosyntec Consultants	DATE:	2/28/2023
	520 Pike St, Suite 2600	ALS JOB#:	EV23020099
	Seattle, WA 98101	ALS SAMPLE#:	EV23020099-04
CLIENT CONTACT:	Luke Smith	DATE RECEIVED:	02/15/2023
CLIENT PROJECT:	Sunnyside	COLLECTION DATE:	2/15/2023 11:19:00 AM
CLIENT SAMPLE ID	GW-021523-MW-4	WDOE ACCREDITATION:	C601

SAMPLE DATA RESULTS

ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS DATE	ANALYSIS BY
Nitrate	EPA-300.0	320	15	100	MG/L	02/16/2023	EBS
Sulfate	EPA-300.0	490	26	100	MG/L	02/16/2023	EBS
Arsenic	EPA-200.8	53	1.0	1	UG/L	02/17/2023	EBS
Cobalt	EPA-200.8	13	1.0	1	UG/L	02/17/2023	EBS
Iron	EPA-200.8	290	100	1	UG/L	02/17/2023	EBS
Manganese	EPA-200.8	610	2.0	1	UG/L	02/17/2023	EBS
Molybdenum	EPA-200.8	200	1.0	1	UG/L	02/17/2023	EBS
Arsenic (Dissolved)	EPA-200.8	260	5.0	5	UG/L	02/17/2023	EBS
Cobalt (Dissolved)	EPA-200.8	66	5.0	5	UG/L	02/17/2023	EBS
Iron (Dissolved)	EPA-200.8	U	500	5	UG/L	02/17/2023	EBS
Manganese (Dissolved)	EPA-200.8	2900	10	5	UG/L	02/17/2023	EBS
Molybdenum (Dissolved)	EPA-200.8	980	5.0	5	UG/L	02/17/2023	EBS
Dissolved Organic Carbon (DOC)	EPA-9060	12	0.50	1	MG/L	02/23/2023	CAS

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



CERTIFICATE OF ANALYSIS

CLIENT:	Geosyntec Consultants	DATE:	2/28/2023
	520 Pike St, Suite 2600	ALS JOB#:	EV23020099
	Seattle, WA 98101	ALS SAMPLE#:	EV23020099-05
CLIENT CONTACT:	Luke Smith	DATE RECEIVED:	02/15/2023
CLIENT PROJECT:	Sunnyside	COLLECTION DATE:	2/15/2023 12:00:00 PM
CLIENT SAMPLE ID	GW-021523-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	3.8	25	MG/L	02/16/2023	EBS
Sulfate	EPA-300.0	250	6.5	25	MG/L	02/16/2023	EBS
Arsenic	EPA-200.8	9.3	1.0	1	UG/L	02/17/2023	EBS
Cobalt	EPA-200.8	U	1.0	1	UG/L	02/17/2023	EBS
Iron	EPA-200.8	1700	100	1	UG/L	02/17/2023	EBS
Manganese	EPA-200.8	550	2.0	1	UG/L	02/17/2023	EBS
Molybdenum	EPA-200.8	24	1.0	1	UG/L	02/17/2023	EBS
Arsenic (Dissolved)	EPA-200.8	8.5	1.0	1	UG/L	02/17/2023	EBS
Cobalt (Dissolved)	EPA-200.8	U	1.0	1	UG/L	02/17/2023	EBS
Iron (Dissolved)	EPA-200.8	U	100	1	UG/L	02/17/2023	EBS
Manganese (Dissolved)	EPA-200.8	21	2.0	1	UG/L	02/17/2023	EBS
Molybdenum (Dissolved)	EPA-200.8	25	1.0	1	UG/L	02/17/2023	EBS
Dissolved Organic Carbon (DOC)	EPA-9060	2.9	0.50	1	MG/L	02/23/2023	CAS

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

CERTIFICATE OF ANALYSIS

CLIENT:	Geosyntec Consultants 520 Pike St, Suite 2600 Seattle, WA 98101	DATE:	2/28/2023
CLIENT CONTACT:	Luke Smith	ALS SDG#:	EV23020099
CLIENT PROJECT:	Sunnyside	WDOE ACCREDITATION:	C601

LABORATORY BLANK RESULTS
MBLK-R428989 - Batch R428989 - Water by EPA-300.0

ANALYTE	METHOD	RESULTS	UNITS	REPORTING LIMITS	ANALYSIS DATE	ANALYSIS BY
Nitrate	EPA-300.0	U	MG/L	0.15	02/16/2023	EBS
Sulfate	EPA-300.0	U	MG/L	0.26	02/16/2023	EBS

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

MB-021623W - Batch 189857 - Water by EPA-200.8

ANALYTE	METHOD	RESULTS	UNITS	REPORTING LIMITS	ANALYSIS DATE	ANALYSIS BY
Arsenic	EPA-200.8	U	UG/L	1.0	02/17/2023	EBS
Cobalt	EPA-200.8	U	UG/L	1.0	02/17/2023	EBS
Iron	EPA-200.8	U	UG/L	100	02/17/2023	EBS
Manganese	EPA-200.8	U	UG/L	2.0	02/17/2023	EBS
Molybdenum	EPA-200.8	U	UG/L	1.0	02/17/2023	EBS

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

MB-021623W - Batch 189858 - 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	02/17/2023	EBS
Cobalt (Dissolved)	EPA-200.8	U	UG/L	1.0	02/17/2023	EBS
Iron (Dissolved)	EPA-200.8	U	UG/L	100	02/17/2023	EBS
Manganese (Dissolved)	EPA-200.8	U	UG/L	2.0	02/17/2023	EBS
Molybdenum (Dissolved)	EPA-200.8	U	UG/L	1.0	02/17/2023	EBS

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

MBLK-428992 - Batch R428992 - 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	02/23/2023	CAS

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



CERTIFICATE OF ANALYSIS

CLIENT:	Geosyntec Consultants 520 Pike St, Suite 2600 Seattle, WA 98101	DATE:	2/28/2023
		ALS SDG#:	EV23020099
		WDOE ACCREDITATION:	C601
CLIENT CONTACT:	Luke Smith		
CLIENT PROJECT:	Sunnyside		

LABORATORY CONTROL SAMPLE RESULTS

ALS Test Batch ID: R428989 - Water by EPA-300.0

SPIKED COMPOUND	METHOD	%REC	RPD	QUAL	LIMITS		ANALYSIS DATE	ANALYSIS BY
					MIN	MAX		
Nitrate - BS	EPA-300.0	101			80	120	02/16/2023	EBS
Nitrate - BSD	EPA-300.0	102	0		80	120	02/16/2023	EBS
Sulfate - BS	EPA-300.0	99.0			80	120	02/16/2023	EBS
Sulfate - BSD	EPA-300.0	100	1		80	120	02/16/2023	EBS

ALS Test Batch ID: 189857 - Water by EPA-200.8

SPIKED COMPOUND	METHOD	%REC	RPD	QUAL	LIMITS		ANALYSIS DATE	ANALYSIS BY
					MIN	MAX		
Arsenic - BS	EPA-200.8	97.3			89.1	110	02/17/2023	EBS
Arsenic - BSD	EPA-200.8	98.4	1		89.1	110	02/17/2023	EBS
Cobalt - BS	EPA-200.8	101			85.8	108	02/17/2023	EBS
Cobalt - BSD	EPA-200.8	99.7	2		85.8	108	02/17/2023	EBS
Iron - BS	EPA-200.8	98.7			80	120	02/17/2023	EBS
Iron - BSD	EPA-200.8	99.4	1		80	120	02/17/2023	EBS
Manganese - BS	EPA-200.8	94.2			82.2	110	02/17/2023	EBS
Manganese - BSD	EPA-200.8	95.7	2		82.2	110	02/17/2023	EBS
Molybdenum - BS	EPA-200.8	100			90.3	113	02/17/2023	EBS
Molybdenum - BSD	EPA-200.8	102	2		90.3	113	02/17/2023	EBS

ALS Test Batch ID: 189858 - Water by EPA-200.8

SPIKED COMPOUND	METHOD	%REC	RPD	QUAL	LIMITS		ANALYSIS DATE	ANALYSIS BY
					MIN	MAX		
Arsenic (Dissolved) - BS	EPA-200.8	97.3			89.1	110	02/17/2023	EBS
Arsenic (Dissolved) - BSD	EPA-200.8	98.4	1		89.1	110	02/17/2023	EBS
Cobalt (Dissolved) - BS	EPA-200.8	101			85.8	108	02/17/2023	EBS
Cobalt (Dissolved) - BSD	EPA-200.8	99.7	2		85.8	108	02/17/2023	EBS
Iron (Dissolved) - BS	EPA-200.8	98.7			80	120	02/17/2023	EBS
Iron (Dissolved) - BSD	EPA-200.8	99.4	1		80	120	02/17/2023	EBS
Manganese (Dissolved) - BS	EPA-200.8	94.2			82.2	110	02/17/2023	EBS
Manganese (Dissolved) - BSD	EPA-200.8	95.7	2		82.2	110	02/17/2023	EBS
Molybdenum (Dissolved) - BS	EPA-200.8	100			90.3	113	02/17/2023	EBS
Molybdenum (Dissolved) - BSD	EPA-200.8	102	2		90.3	113	02/17/2023	EBS

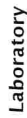
ALS Test Batch ID: R428992 - Water by EPA-9060

SPIKED COMPOUND	METHOD	%REC	RPD	QUAL	LIMITS		ANALYSIS DATE	ANALYSIS BY
					MIN	MAX		
Dissolved Organic Carbon (DOC) - BS	EPA-9060	98.8			83	117	02/23/2023	CAS

CERTIFICATE OF ANALYSIS

APPROVED BY

Rob Greer
Laboratory Director



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.: EV23020099

[illegible]



May 30, 2023

Mr. Luke Smith
Geosyntec Consultants
520 Pike St, Suite 2600
Seattle, WA 98101

Dear Mr. Smith,

On May 17th, 6 samples were received by our laboratory and assigned our laboratory project number EV23050130. The project was identified as your Sunnyside - PNR0696D. 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



CERTIFICATE OF ANALYSIS

CLIENT: Geosyntec Consultants
520 Pike St, Suite 2600
Seattle, WA 98101

CLIENT CONTACT: Luke Smith
CLIENT PROJECT: Sunnyside - PNR0696D
CLIENT SAMPLE ID: GW-051723-MW-1

DATE: 5/30/2023
ALS JOB#: EV23050130
ALS SAMPLE#: EV23050130-01
DATE RECEIVED: 05/17/2023
COLLECTION DATE: 5/17/2023 8:16:00 AM
WDOE ACCREDITATION: C601

SAMPLE DATA RESULTS

ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS DATE	ANALYSIS BY
Nitrate	EPA-300.0	190	7.6	50	MG/L	05/17/2023	RAL
Sulfate	EPA-300.0	480	13	50	MG/L	05/17/2023	RAL
Arsenic	EPA-200.8	10	1.0	1	UG/L	05/23/2023	EBS
Cobalt	EPA-200.8	1.9	1.0	1	UG/L	05/23/2023	EBS
Iron	EPA-200.8	3700	50	1	UG/L	05/23/2023	EBS
Manganese	EPA-200.8	650	2.0	1	UG/L	05/23/2023	EBS
Molybdenum	EPA-200.8	27	1.0	1	UG/L	05/23/2023	EBS
Arsenic (Dissolved)	EPA-200.8	8.7	1.0	1	UG/L	05/23/2023	EBS
Cobalt (Dissolved)	EPA-200.8	U	1.0	1	UG/L	05/23/2023	EBS
Iron (Dissolved)	EPA-200.8	450	50	1	UG/L	05/23/2023	EBS
Manganese (Dissolved)	EPA-200.8	130	2.0	1	UG/L	05/23/2023	EBS
Molybdenum (Dissolved)	EPA-200.8	26	1.0	1	UG/L	05/23/2023	EBS
Dissolved Organic Carbon (DOC)	EPA-9060	2.7	0.50	1	MG/L	05/22/2023	CAS

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



CERTIFICATE OF ANALYSIS

CLIENT:	Geosyntec Consultants	DATE:	5/30/2023
	520 Pike St, Suite 2600	ALS JOB#:	EV23050130
	Seattle, WA 98101	ALS SAMPLE#:	EV23050130-02
CLIENT CONTACT:	Luke Smith	DATE RECEIVED:	05/17/2023
CLIENT PROJECT:	Sunnyside - PNR0696D	COLLECTION DATE:	5/17/2023 9:35:00 AM
CLIENT SAMPLE ID	GW-051723-MW-2	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	05/17/2023	RAL
Sulfate	EPA-300.0	0.32	0.26	1	MG/L	05/17/2023	RAL
Arsenic	EPA-200.8	80	1.0	1	UG/L	05/23/2023	EBS
Cobalt	EPA-200.8	14	1.0	1	UG/L	05/23/2023	EBS
Iron	EPA-200.8	29000	50	1	UG/L	05/23/2023	EBS
Manganese	EPA-200.8	3200	2.0	1	UG/L	05/23/2023	EBS
Molybdenum	EPA-200.8	3.6	1.0	1	UG/L	05/23/2023	EBS
Arsenic (Dissolved)	EPA-200.8	70	1.0	1	UG/L	05/23/2023	EBS
Cobalt (Dissolved)	EPA-200.8	14	1.0	1	UG/L	05/23/2023	EBS
Iron (Dissolved)	EPA-200.8	29000	50	1	UG/L	05/23/2023	EBS
Manganese (Dissolved)	EPA-200.8	3300	2.0	1	UG/L	05/23/2023	EBS
Molybdenum (Dissolved)	EPA-200.8	U	1.0	1	UG/L	05/23/2023	EBS
Dissolved Organic Carbon (DOC)	EPA-9060	990	50	100	MG/L	05/22/2023	CAS

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

CERTIFICATE OF ANALYSIS

CLIENT:	Geosyntec Consultants 520 Pike St, Suite 2600 Seattle, WA 98101	DATE:	5/30/2023
		ALS JOB#:	EV23050130
CLIENT CONTACT:	Luke Smith	ALS SAMPLE#:	EV23050130-03
CLIENT PROJECT:	Sunnyside - PNR0696D	DATE RECEIVED:	05/17/2023
CLIENT SAMPLE ID	GW-051723-MW-3	COLLECTION DATE:	5/17/2023 10:33:00 AM
		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	05/17/2023	RAL
Sulfate	EPA-300.0	0.27	0.26	1	MG/L	05/17/2023	RAL
Arsenic	EPA-200.8	78	1.0	1	UG/L	05/23/2023	EBS
Cobalt	EPA-200.8	38	1.0	1	UG/L	05/23/2023	EBS
Iron	EPA-200.8	48000	50	1	UG/L	05/23/2023	EBS
Manganese	EPA-200.8	7700	10	5	UG/L	05/23/2023	EBS
Molybdenum	EPA-200.8	13	1.0	1	UG/L	05/23/2023	EBS
Arsenic (Dissolved)	EPA-200.8	76	1.0	1	UG/L	05/23/2023	EBS
Cobalt (Dissolved)	EPA-200.8	37	1.0	1	UG/L	05/23/2023	EBS
Iron (Dissolved)	EPA-200.8	47000	50	1	UG/L	05/23/2023	EBS
Manganese (Dissolved)	EPA-200.8	7400	10	5	UG/L	05/23/2023	EBS
Molybdenum (Dissolved)	EPA-200.8	12	1.0	1	UG/L	05/23/2023	EBS
Dissolved Organic Carbon (DOC)	EPA-9060	250	25	50	MG/L	05/22/2023	CAS

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

CERTIFICATE OF ANALYSIS

CLIENT:	Geosyntec Consultants 520 Pike St, Suite 2600 Seattle, WA 98101	DATE:	5/30/2023
		ALS JOB#:	EV23050130
CLIENT CONTACT:	Luke Smith	ALS SAMPLE#:	EV23050130-04
CLIENT PROJECT:	Sunnyside - PNR0696D	DATE RECEIVED:	05/17/2023
CLIENT SAMPLE ID	GW-051723-MW-4	COLLECTION DATE:	5/17/2023 10:10:00 AM
		WDOE ACCREDITATION:	C601

SAMPLE DATA RESULTS

ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS DATE	ANALYSIS BY
Nitrate	EPA-300.0	340	15	100	MG/L	05/17/2023	RAL
Sulfate	EPA-300.0	500	26	100	MG/L	05/17/2023	RAL
Arsenic	EPA-200.8	53	1.0	1	UG/L	05/23/2023	EBS
Cobalt	EPA-200.8	17	1.0	1	UG/L	05/23/2023	EBS
Iron	EPA-200.8	130	50	1	UG/L	05/23/2023	EBS
Manganese	EPA-200.8	680	2.0	1	UG/L	05/23/2023	EBS
Molybdenum	EPA-200.8	140	1.0	1	UG/L	05/23/2023	EBS
Arsenic (Dissolved)	EPA-200.8	52	1.0	1	UG/L	05/23/2023	EBS
Cobalt (Dissolved)	EPA-200.8	16	1.0	1	UG/L	05/23/2023	EBS
Iron (Dissolved)	EPA-200.8	U	50	1	UG/L	05/23/2023	EBS
Manganese (Dissolved)	EPA-200.8	620	2.0	1	UG/L	05/23/2023	EBS
Molybdenum (Dissolved)	EPA-200.8	130	1.0	1	UG/L	05/23/2023	EBS
Dissolved Organic Carbon (DOC)	EPA-9060	10	0.50	1	MG/L	05/22/2023	CAS

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

CERTIFICATE OF ANALYSIS

CLIENT:	Geosyntec Consultants 520 Pike St, Suite 2600 Seattle, WA 98101	DATE:	5/30/2023
		ALS JOB#:	EV23050130
CLIENT CONTACT:	Luke Smith	ALS SAMPLE#:	EV23050130-05
CLIENT PROJECT:	Sunnyside - PNR0696D	DATE RECEIVED:	05/17/2023
CLIENT SAMPLE ID	GW-051723-MW-5	COLLECTION DATE:	5/17/2023 9:00:00 AM
		WDOE ACCREDITATION:	C601

SAMPLE DATA RESULTS

ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS DATE	ANALYSIS BY
Nitrate	EPA-300.0	80	3.8	25	MG/L	05/17/2023	RAL
Sulfate	EPA-300.0	230	6.5	25	MG/L	05/17/2023	RAL
Arsenic	EPA-200.8	5.8	1.0	1	UG/L	05/23/2023	EBS
Cobalt	EPA-200.8	2.2	1.0	1	UG/L	05/23/2023	EBS
Iron	EPA-200.8	500	50	1	UG/L	05/23/2023	EBS
Manganese	EPA-200.8	570	2.0	1	UG/L	05/23/2023	EBS
Molybdenum	EPA-200.8	110	1.0	1	UG/L	05/23/2023	EBS
Arsenic (Dissolved)	EPA-200.8	5.3	1.0	1	UG/L	05/23/2023	EBS
Cobalt (Dissolved)	EPA-200.8	1.9	1.0	1	UG/L	05/23/2023	EBS
Iron (Dissolved)	EPA-200.8	U	50	1	UG/L	05/23/2023	EBS
Manganese (Dissolved)	EPA-200.8	550	2.0	1	UG/L	05/23/2023	EBS
Molybdenum (Dissolved)	EPA-200.8	110	1.0	1	UG/L	05/23/2023	EBS
Dissolved Organic Carbon (DOC)	EPA-9060	5.0	0.50	1	MG/L	05/22/2023	CAS

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



CERTIFICATE OF ANALYSIS

CLIENT: Geosyntec Consultants
520 Pike St, Suite 2600
Seattle, WA 98101
DATE: 5/30/2023
ALS JOB#: EV23050130
ALS SAMPLE#: EV23050130-06
CLIENT CONTACT: Luke Smith
DATE RECEIVED: 05/17/2023
CLIENT PROJECT: Sunnyside - PNR0696D
COLLECTION DATE: 5/17/2023 12:00:00 PM
CLIENT SAMPLE ID: GW-051723-DUP-1
WDOE ACCREDITATION: C601

SAMPLE DATA RESULTS

ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS DATE	ANALYSIS BY
Nitrate	EPA-300.0	84	3.8	25	MG/L	05/17/2023	RAL
Sulfate	EPA-300.0	230	6.5	25	MG/L	05/17/2023	RAL
Arsenic	EPA-200.8	5.4	1.0	1	UG/L	05/23/2023	EBS
Cobalt	EPA-200.8	2.0	1.0	1	UG/L	05/23/2023	EBS
Iron	EPA-200.8	330	50	1	UG/L	05/23/2023	EBS
Manganese	EPA-200.8	550	2.0	1	UG/L	05/23/2023	EBS
Molybdenum	EPA-200.8	110	1.0	1	UG/L	05/23/2023	EBS
Arsenic (Dissolved)	EPA-200.8	5.4	1.0	1	UG/L	05/23/2023	EBS
Cobalt (Dissolved)	EPA-200.8	1.9	1.0	1	UG/L	05/23/2023	EBS
Iron (Dissolved)	EPA-200.8	U	50	1	UG/L	05/23/2023	EBS
Manganese (Dissolved)	EPA-200.8	550	2.0	1	UG/L	05/23/2023	EBS
Molybdenum (Dissolved)	EPA-200.8	110	1.0	1	UG/L	05/23/2023	EBS
Dissolved Organic Carbon (DOC)	EPA-9060	5.2	0.50	1	MG/L	05/22/2023	CAS

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

CERTIFICATE OF ANALYSIS

CLIENT: Geosyntec Consultants
520 Pike St, Suite 2600
Seattle, WA 98101

DATE: 5/30/2023
ALS SDG#: EV23050130
WDOE ACCREDITATION: C601

CLIENT CONTACT: Luke Smith
CLIENT PROJECT: Sunnyside - PNR0696D

LABORATORY BLANK RESULTS
MBLK-R436604 - Batch R436604 - Water by EPA-300.0

ANALYTE	METHOD	RESULTS	UNITS	REPORTING LIMITS	ANALYSIS DATE	ANALYSIS BY
Nitrate	EPA-300.0	U	MG/L	0.15	05/17/2023	RAL
Sulfate	EPA-300.0	U	MG/L	0.26	05/17/2023	RAL

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

MB-052023W - Batch 194240 - Water by EPA-200.8

ANALYTE	METHOD	RESULTS	UNITS	REPORTING LIMITS	ANALYSIS DATE	ANALYSIS BY
Arsenic	EPA-200.8	U	UG/L	1.0	05/23/2023	EBS
Cobalt	EPA-200.8	U	UG/L	1.0	05/23/2023	EBS
Iron	EPA-200.8	U	UG/L	50	05/23/2023	EBS
Manganese	EPA-200.8	U	UG/L	2.0	05/23/2023	EBS
Molybdenum	EPA-200.8	U	UG/L	1.0	05/23/2023	EBS

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

MB-052023W - Batch 194241 - 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	05/23/2023	EBS
Cobalt (Dissolved)	EPA-200.8	U	UG/L	1.0	05/23/2023	EBS
Iron (Dissolved)	EPA-200.8	U	UG/L	50	05/23/2023	EBS
Manganese (Dissolved)	EPA-200.8	U	UG/L	2.0	05/23/2023	EBS
Molybdenum (Dissolved)	EPA-200.8	U	UG/L	1.0	05/23/2023	EBS

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

MBLK-R436607 - Batch R436607 - 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	05/22/2023	CAS

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



CERTIFICATE OF ANALYSIS

CLIENT: Geosyntec Consultants
520 Pike St, Suite 2600
Seattle, WA 98101

DATE: 5/30/2023
ALS SDG#: EV23050130
WDOE ACCREDITATION: C601

CLIENT CONTACT: Luke Smith
CLIENT PROJECT: Sunnyside - PNR0696D

LABORATORY CONTROL SAMPLE RESULTS

ALS Test Batch ID: R436604 - Water by EPA-300.0

SPIKED COMPOUND	METHOD	%REC	RPD	QUAL	LIMITS		ANALYSIS DATE	ANALYSIS BY
					MIN	MAX		
Nitrate - BS	EPA-300.0	92.0			80	120	05/17/2023	RAL
Nitrate - BSD	EPA-300.0	94.5	3		80	120	05/17/2023	RAL
Sulfate - BS	EPA-300.0	93.0			80	120	05/17/2023	RAL
Sulfate - BSD	EPA-300.0	93.5	1		80	120	05/17/2023	RAL

ALS Test Batch ID: 194240 - Water by EPA-200.8

SPIKED COMPOUND	METHOD	%REC	RPD	QUAL	LIMITS		ANALYSIS DATE	ANALYSIS BY
					MIN	MAX		
Arsenic - BS	EPA-200.8	96.9			89.1	110	05/23/2023	EBS
Arsenic - BSD	EPA-200.8	97.5	1		89.1	110	05/23/2023	EBS
Cobalt - BS	EPA-200.8	102			85.8	108	05/23/2023	EBS
Cobalt - BSD	EPA-200.8	104	1		85.8	108	05/23/2023	EBS
Iron - BS	EPA-200.8	101			80	120	05/23/2023	EBS
Iron - BSD	EPA-200.8	100	0		80	120	05/23/2023	EBS
Manganese - BS	EPA-200.8	97.4			82.2	110	05/23/2023	EBS
Manganese - BSD	EPA-200.8	97.7	0		82.2	110	05/23/2023	EBS
Molybdenum - BS	EPA-200.8	103			90.3	113	05/23/2023	EBS
Molybdenum - BSD	EPA-200.8	105	2		90.3	113	05/23/2023	EBS

ALS Test Batch ID: 194241 - Water by EPA-200.8

SPIKED COMPOUND	METHOD	%REC	RPD	QUAL	LIMITS		ANALYSIS DATE	ANALYSIS BY
					MIN	MAX		
Arsenic (Dissolved) - BS	EPA-200.8	96.9			89.1	110	05/23/2023	EBS
Arsenic (Dissolved) - BSD	EPA-200.8	97.5	1		89.1	110	05/23/2023	EBS
Cobalt (Dissolved) - BS	EPA-200.8	102			85.8	108	05/23/2023	EBS
Cobalt (Dissolved) - BSD	EPA-200.8	104	1		85.8	108	05/23/2023	EBS
Iron (Dissolved) - BS	EPA-200.8	101			80	120	05/23/2023	EBS
Iron (Dissolved) - BSD	EPA-200.8	100	0		80	120	05/23/2023	EBS
Manganese (Dissolved) - BS	EPA-200.8	97.4			82.2	110	05/23/2023	EBS
Manganese (Dissolved) - BSD	EPA-200.8	97.7	0		82.2	110	05/23/2023	EBS
Molybdenum (Dissolved) - BS	EPA-200.8	103			90.3	113	05/23/2023	EBS
Molybdenum (Dissolved) - BSD	EPA-200.8	105	2		90.3	113	05/23/2023	EBS

ALS Test Batch ID: R436607 - Water by EPA-9060

SPIKED COMPOUND	METHOD	%REC	RPD	QUAL	LIMITS		ANALYSIS DATE	ANALYSIS BY
					MIN	MAX		
Dissolved Organic Carbon (DOC) - BS	EPA-9060	98.0			83	117	05/22/2023	CAS

CERTIFICATE OF ANALYSIS

APPROVED BY



Rob Greer
Laboratory Director

