February 11, 2025
File No. 04224002.02

Danielle Gibson
Washington Department of Ecology
Toxics Cleanup Program
PO Box 47775
Olympia, WA 98504-7775

Subject: **Semi-Annual Monitoring Report – January through June 2024**
Hidden Valley Landfill, Pierce County, Washington

Dear Danielle:

The following report provides a summary of monitoring activities performed at the closed Hidden Valley Landfill (HVL) during the semi-annual monitoring period of January through June of 2024. Site activities conducted during this period included groundwater monitoring, landfill gas monitoring, site inspections and maintenance, and recording of leachate volumes.

Groundwater Monitoring

Semi-Annual Groundwater Monitoring Event No. 1 was initially conducted on January 30 through 31 and February 2, 2024. Field activities performed for the monitoring event were consistent with the procedures described in the HVL Groundwater Monitoring Plan (GWMP) dated October 18, 2018.

Groundwater elevation measurements were collected on January 30 and 31, 2024. Groundwater potentiometric surface maps for the shallow perched aquifer, upper regional aquifer, and the lower regional aquifer are shown on enclosed Figure 1 through Figure 3, respectively.

Low-flow sampling techniques using dedicated pumps were employed to purge and collect samples from each monitoring well, except MW-12S, which was sampled with a disposable bailer. Field quality control samples consisted of one duplicate sample, one field blank, and six trip blanks. A water supply well sample was collected at the Paul Bunyan Rifle & Sportsman Club (WS-Paul Bunyan). Due to construction at the adjacent Corliss facility at the time of the monitoring event, the water supply well at the facility was not available for sample collection. Leachate and leak detection samples were collected from the east liner area leachate sump (Cell 1), side-slope liner leachate sump (Cell 2), side-slope liner leak detection system, and the east liner area hydraulic gradient control system on February 2, 2024. Samples were shipped to Eurofins TestAmerica Laboratories, Inc. in Denver, Colorado via FedEx at the end of each field day.

Groundwater results were reviewed and validated (see enclosed Data Validation Report). Field measurements and analytical data were uploaded into the Washington State Department of Ecology (Ecology) Environmental Information Management (EIM) System. Laboratory reports were provided to Ecology and the Tacoma-Pierce County Health Department (TPCHD) separately.

Field measurements and laboratory analytical results for this semi-annual monitoring event are summarized on the following enclosed tables: Table 1 – Main Sump and Side-Slope Liner Area Performance Data, Table 2 – Water Level Elevations, Table 3 – Field Parameters, Table 4 – Inorganic

Parameters, Table 5 – Dissolved Metals, Table 6 – Volatile Organic Compounds (VOC's), Table 7 – Duplicate Sample Evaluation, Table 8 – Water Supply Wells, Table 9 – Cation-Anion Balance, and Table 10 – Leachate.

Consistent with previous monitoring events, most of the samples displayed pH values less than the WAC 173-200 lower-level criteria of 6.5 pH units. Since the pH values at both background wells (MW-10S and MW-10D) have also been less than 6.5 on several occasions, these values are interpreted to be the result of natural background water quality.

Nitrate concentrations were equal to or below the site cleanup level of 10 mg/L. Wells MW-17S (11 mg/L) and FMMW-2 (13 mg/L) have slightly elevated nitrate concentrations. The reported concentrations of nitrate at MW-12S and FMMW-2 are typical of previous results during the wet season.

Dissolved manganese concentrations exceeded the site cleanup level of 0.05 mg/L at seven monitoring wells (MW-15S, MW-17S, MW-18S, MW-14D, MW-14R, and MW-26R). Dissolved iron concentrations exceeded the site cleanup level of 0.3 mg/L at two monitoring wells (MW-14D and MW-26R). The reported concentrations of dissolved manganese and iron are typical of previous water quality results.

One detection of tetrachloroethene (PCE) exceeding the WAC 173-200 criteria of 0.80 µg/L was reported in the sample collected from monitoring well MW-11D(2) at a concentration of 1.1 µg/L. The reported PCE concentration at MW-11D(2) is typical of previous water quality results.

A cation-anion balance was prepared based in milliequivalents per liter (meq/L) for each water sample to determine if it was electro-neutral (balanced cation and anion charges). A threshold of ten percent difference was used if the total sum of cations and anions were less than or equal to 5.0 meq/L, and a threshold of five percent difference was used if the total cation-anion sums was greater than 5.0 meq/L. The cation-anion balance was greater than the associated threshold at monitoring wells MW-10S, MW-11S, MW-12S, MW-29S, FMMW-2, MW-10D, MW-15D, and MW-20R. These threshold exceedances (in both downgradient and background wells) are typical of previous results.

Trilinear (or Piper) diagrams were prepared for groundwater sample results from each of the three water-bearing zones at the landfill (shallow perched aquifer, upper regional aquifer, and lower regional aquifer). As shown on the enclosed Trilinear Diagrams, the groundwater sample results from all three aquifers plot within a consistent area of the graph, while the leachate results plot in a second area. These plots demonstrate the inherent water quality differences between leachate and groundwater collected from the monitoring wells.

Leachate Collection System

Leachate volumes pumped from the east liner area sump (Cell 1) and side-slope liner sump (Cell 2), as well as rainfall totals from an on-site rain gauge, are recorded daily by on-site personnel. Volumes pumped from the side-slope liner leak detection system and the east liner area hydraulic gradient control system are recorded by site personnel when pumping occurs. A summary of the monthly volume data is provided in Table 1 and copies of the monthly reports are included with the Leachate Treatment System Data enclosure.

Samples were collected from the east liner area leachate sump (Cell 1), the side-slope liner leachate sump (Cell 2), the side-slope liner leak detection system and the east liner area hydraulic gradient control system on February 2, 2024. No significant changes in leachate quality were noted during this event. Consistent with previous monitoring events, water quality results from the side-slope liner leak detection system are similar to the leachate results, and water quality results from the hydraulic gradient control system are dissimilar to the leachate results.

Landfill Gas Monitoring

Monthly landfill gas monitoring was performed on January 16, February 13, March 11, April 26, May 15, and June 24, 2024. All gas probe measurements were observed to be less than 5 percent methane by volume.

On-site buildings were monitored for the presence of landfill gas on February 14, 2024 and June 26, 2024 using a flame ionization detector (FID). No detectable methane was recorded in the monitored buildings. A summary of monitoring data for the landfill gas probes, barometric pressure trends, and on-site buildings is enclosed with the report under Landfill Gas Monitoring Results enclosure.

Site Inspections and Maintenance

The landfill cover system and the condensate recirculation system were inspected on February 14, 2024 and June 26, 2024. Conditions observed during the inspections were typical for the site. During the February inspection, sumps 4 and 5 were observed to have positive pressure and not operating per design. However, by the June inspection, all sumps were observed to be operating per design.

The gas collection and control system (GCCS) was inspected and maintenance was performed monthly during the first six months of 2024. Additional documentation can be found in the enclosed GCCS Maintenance Reports.

If you have any questions regarding the monitoring results, please call (425) 681-2189.

Sincerely,

Greg Helland, LG, LHG
Project Director
SCS Engineers

Jovany Estrada
Staff Professional
SCS Engineers

cc: Rick Johnston, Pierce County (email)
Keith Johnston, TPCHD (email)
Trevor Priestley, TPCHD (email)
Peter Lyon, Ecology (email)
George Duvendack, LRI (email and hard copy)
Kevin Green, LRI (email)
Samantha Winkle, LRI (email)
Jody Snyder, LRI (email)
Maria Finley, LRI (email and CD)

Enclosure: Summary Data Tables (Tables 1 through 10)
Groundwater Potentiometric Surface Maps (Figures 1 through 3)
Trilinear Diagrams (Figures 4 through 7)
Field Sampling Data Sheets
Data Validation Report
Landfill Gas Monitoring Results
Site Inspection Reports
GCCS Maintenance Reports
Leachate Treatment System Data

Summary Data Tables

Table 1. Main Sump and Side-Slope Liner Performance Data
Semi-Annual Report 2024
Hidden Valley Landfill, Pierce County, Washington

Month	Main Sump Monthly Leachate Volume - Cell 1 (gallons)	Side-Slope Sump Monthly Leachate Volume - Cell 2 (gallons)	Side-Slope Sump Monthly Leakage Flow[a] - Cell 2 (gallons/month)	Monthly Rainfall (inches)
January	14,000	0	0	11.50
February	14,200	0	0	4.30
March	31,000	0	0	5.90
April	24,350	0	0	5.20
May	4,100	0	0	4.60
June	810	0	0	4.00
Year to date:	88,460	0	0	35.50

Notes:

a = Leakage is fluid pumped from the leak detection sump as recorded by LRI staff.

Table 2. Water Level Elevations
Semi-Annual Monitoring Event No. 1 - January 2024
Hidden Valley Landfill, Pierce County, Washington

Location	Well Casing Elevation	Depth to Water (FT)	Water Level Elevation
Shallow Perched Aquifer			
MW-10S	463.65	32.25	431.40
MW-11S	520.03	97.17	422.86
MW-12S	493.41	69.18	424.23
MW-13S	452.26	29.42	422.84
MW-14S	481.30	54.60	426.70
MW-15S	506.78	79.78	427.00
MW-17S	555.97	133.02	422.95
MW-18S	541.43	129.06	412.37
MW-29S	450.65	14.78	435.87
FMMW-1	546.03	139.63	406.40
FMMW-2	539.96	147.17	392.79
BC-4S	530.25	128.65	401.60
Upper Regional Aquifer			
MW-10D	464.09	29.57	434.52
MW-11D	520.10	91.32	428.78
MW-11D(2)	519.53	91.22	428.31
MW-12D	493.49	65.35	428.14
MW-13D	450.19	23.89	426.30
MW-14D	481.39	50.41	430.98
MW-15D	509.09	79.42	429.67
MW-18D	541.79	129.21	412.58
Lower Regional Aquifer			
MW-14R	480.26	116.84	363.42
MW-20R	472.90	105.15	367.75
MW-26R	485.40	69.45	415.95

Table 3. Field Parameters
Semi-Annual Monitoring Event No. 1 - January 2024
Hidden Valley Landfill, Pierce County, Washington

Location	Sample Number	Date	Method	pH	Specific Conductivity	Temperature
Units				(SU)	(µS/cm)	(°C)
HVL Cleanup Level				—	700	—
WAC 173-200				6.5-8.5	700[b]	—
Shallow Perched Aquifer						
(BG) MW-10S	HVL-013024-11	1/30/24	DP	**6.27**	313.4	13.6
MW-11S	HVL-013124-02	1/31/24	DP	**5.86**	265.3	13.9
MW-12S	HVL-013124-20	1/31/24	DB	**5.85**	205.5	17.4
MW-13S	HVL-013024-24	1/30/24	DP	**5.85**	151.0	11.8
MW-14S	HVL-013024-01	1/30/24	DP	**5.81**	95.7	12.7
MW-15S	HVL-013024-07	1/30/24	DP	**6.06**	311.1	15.3
MW-17S	HVL-013124-27	1/31/24	DP	**5.65**	312.5	17.2
MW-18S	HVL-013124-10	1/31/24	DP	**6.20**	387.9	15.0
MW-29S	HVL-013124-26	1/31/24	DP	**5.87**	188.8	11.9
FMMW-1	HVL-013124-23	1/31/24	DP	**6.22**	223.4	14.0
FMMW-2	HVL-013124-22	1/31/24	DP	**5.99**	438.8	15.5
Upper Regional Aquifer						
(BG) MW-10D	HVL-013024-16	1/30/24	DP	**6.36**	249.5	13.1
MW-11D(2)	HVL-013124-06	1/31/24	DP	6.75	209.8	13.3
MW-12D	HVL-013124-18	1/31/24	DP	6.54	393.9	16.9
MW-13D	HVL-013024-22	1/30/24	DP	**6.19**	217.5	12.3
MW-14D	HVL-013024-03	1/30/24	DP	**6.08**	241.9	13.3
MW-15D	HVL-013024-09	1/30/24	DP	**6.69**	293.0	14.0
MW-18D	HVL-013124-08	1/31/24	DP	6.60	264.7	14.9
Lower Regional Aquifer						
MW-14R	HVL-013024-05	1/30/24	DP	7.48	100.4	11.4
MW-20R	HVL-013124-14	1/31/24	DP	6.94	100.7	10.1
MW-26R	HVL-013024-12	1/30/24	DP	7.24	213.6	11.0

Notes:

Parameter concentrations that are greater than cleanup levels are shown in **bold**

b = Secondary Drinking Water Standard
BG = Background Monitoring Well
°C = degrees Celsius
DP = dedicated bladder pump
DB = disposable bailer
µS/cm = microsiemens per centimeter
— = not analyzed or not applicable

Table 4. Inorganic Parameters
Semi-Annual Monitoring Event No. 1 - January 2024
Hidden Valley Landfill, Pierce County, Washington

Location		Alkalinity, Total	Ammonia	Chloride	Nitrate	Sulfate	Total Dissolved Solids	Total Organic Carbon	Total Suspended Solids
Units		mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
MRL		10.0	0.10	0.2-1.2	0.20	0.2-1.0	10	1.0	4.0
HVL Cleanup Level		—	—	250	10	250	500	—	—
WAC 173-200 Criteria		—	—	250[b]	10[a]	250[b]	500[b]	—	—
Shallow Perched Aquifer									
(BG)	MW-10S	120	*	14.0	2.6	11	190	1	*
	MW-11S	77	*	18	5.5	13.0	160	*	*
	MW-12S	42	*	10	5.8	15	150	1.5	*
	MW-13S	44	*	15	0.9	8	100	*	*
	MW-14S	33	*	3	1.4	2.5	73	1.7	*
	MW-15S	130	2.7	13	1.9	6.9	180	1.6	*
	MW-17S	73	*	15	11	16	210	1.4	*
	MW-18S	63	*	12	0.6	12	120	1.2	7.2
	MW-29S	130	*	15	4	16	230	1.3	*
	FMMW-1	71	*	15.0	1.5	13	130	*	*
	FMMW-2	120	*	18	13	14.0	280	1.3	*
Upper Regional Aquifer									
(BG)	MW-10D	97	*	9.4	2.7	8.9	150	*	*
	MW-11D(2)	81	*	5.9	1.7	8.7	130	*	*
	MW-12D	180	*	11	0.56	8.5	220	*	*
	MW-13D	77	*	14	0.8	11	130	*	*
	MW-14D	100	2.7	9	*	5.1	140	2.1	*
	MW-15D	130	*	10	0.67	11	180	*	*
	MW-18D	110	*	7.8	1.5	8.2	160	*	*
Lower Regional Aquifer									
	MW-14R	49	*	1.6	*	4.0	82	*	*
	MW-20R	46	*	1.7	*	3.3	85	*	*
	MW-26R	96	*	5.4	*	12	130	*	*

Notes:

Parameter concentrations that are greater than cleanup levels are shown in **bold**

Analyses performed by Eurofins TestAmerica in Denver, Colorado

H = Due to a Fedex shipping delay, parameter analyzed outside specified holding time

— = not analyzed or not applicable

* = not reported at or above the MRL (Method Reporting Limit)

a = Primary Drinking Water Standard

b = Secondary Drinking Water Standard

BG = Background monitoring well

mg/L = milligrams per liter

Table 5. Dissolved Metals
Semi-Annual Monitoring Event No. 1 - January 2024
Hidden Valley Landfill, Pierce County, Washington

Location	Iron	Manganese	Calcium	Magnesium	Potassium	Sodium
Units	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
MRL	0.005	0.001	0.20	0.10	2.0	1.0
HVL Cleanup Level	0.30	0.05	—	—	—	—
WAC 173-200 Criteria	0.30[b]	0.05[b]	—	—	—	—
Shallow Perched Aquifer						
(BG) MW-10S	*	*	39	12	2.3	9.6
MW-11S	0.0058	*	26	7.6	5.5	17
MW-12S	0.017	0.013	15	4.1	8	14
MW-13S	*	*	15	4.1	2.3	8.6
MW-14S	0.0078	0.022	8	2.5	2.5	6
MW-15S	*	**1.2**	28	8.6	9.2	18
MW-17S	*	**0.5**	23	7.3	12	19
MW-18S	0.029	**0.23**	17	4.9	2.8	13
MW-29S	*	0.001	40	12	9.0	19
FMMW-1	*	*	19	5.5	2.9	18
FMMW-2	*	*	39	12	12	23
Upper Regional Aquifer						
(BG) MW-10D	*	*	30	9.6	*	8.2
MW-11D(2)	*	*	21	8.9	2.3	8.1
MW-12D	*	*	38	14	3.7	23
MW-13D	*	*	22	8.2	2.4	9.8
MW-14D	**3.3**	**1.2**	20	6.3	7.0	13
MW-15D	*	0.014	29	12	3.2	22
MW-18D	*	*	26	10	3.1	12
Lower Regional Aquifer						
MW-14R	0.053	**0.18**	8.4	4.8	2.1	5.4
MW-20R	*	*	8.2	4.2	2.1	5.9
MW-26R	**0.85**	**0.5**	23	10	2.5	7.0

Notes:

Parameter concentrations that are greater than site cleanup levels or WAC 173-200 criteria are shown in **bold**

Analyses performed by Eurofins TestAmerica in Denver, Colorado

BG = Background Monitoring Well

mg/L = milligrams per liter

* = not reported at or above the MRL (Method Reporting Limit)

— = not analyzed or not applicable

Table 6. Volatile Organic Compounds
Semi-Annual Monitoring Event No. 1 - January 2024
Hidden Valley Landfill, Pierce County, Washington

Location		Tetrachloroethene
Units		µg/L
MRL		0.5
HVL Cleanup Level		—
WAC 173-200 Criteria		0.80
Shallow Perched Aquifer		
(BG)	MW-10S	*
	MW-11S	*
	MW-12S	*
	MW-13S	*
	MW-14S	*
	MW-15S	*
	MW-17S	*
	MW-18S	*
	MW-29S	*
	FMMW-1	*
	FMMW-2	*
Upper Regional Aquifer		
(BG)	MW-10D	*
	MW-11D(2)	**1.1**
	MW-12D	*
	MW-13D	*
	MW-14D	*
	MW-15D	0.7
	MW-18D	*
Lower Regional Aquifer		
	MW-14R	*
	MW-20R	*
	MW-26R	*
Quality Control Samples		
	Field Blank	*
	Trip Blank	*

Notes:

Parameter concentrations that are greater than cleanup levels are shown in **bold**

Analyses performed by Eurofins TestAmerica in Denver, Colorado

Volatile organic compounds not listed were not present at concentrations exeeding the MRL

BG = Background

µg/L = micrograms per liter

* = not reported at or above the MRL (Method Reporting Limit)

— = not analyzed or not applicable

Table 7. Duplicate Sample Evaluation
Semi-Annual Monitoring Event No. 1 - January 2024
Hidden Valley Landfill, Pierce County, Washington

Parameter	MRL	MW-11S	MW-11S (Duplicate)	RPD (%)
Dissolved Metals (mg/L)				
Calcium	0.2	21	21	0
Iron	0.005	*	0.013	88.9
Magnesium	0.1	8.9	8.7	2.3
Potassium	2.0	2.3	2.2	4.4
Sodium	1.0	8.1	8	1.2
Inorganic Parameters (mg/L)				
Alkalinity	10.0	81	82	1.2
Chloride	0.6	5.9	6	1.7
Nitrate	0.2	1.7	1.7	0
Sulfate	0.5	8.7	8.7	0
Total Dissolved Solids	10	130	130	0
Volatile Organic Compounds (ug/L)				
Tetrachloroethene	0.05	1.1	1	9.5

Notes:

Analysis performed by Eurofins TestAmerica in Denver, Colorado

Analytes not listed were not present at concentrations exceeding the MRL

H = Parameter analyzed outside specified holding time

RPD = relative percent difference

mg/L = milligrams per liter

*= RPD based on result as compared to the Reporting Limit (RL) for a non-detection in the compared sample

Table 8. Water Supply Wells
Semi-Annual Monitoring Event No. 1 - January 2024
Hidden Valley Landfill, Pierce County, Washington

Parameter	Units	MRL	Corliss	Paul Bunyan
Field Parameters				
pH	SU	—	—	6.8
Specific Conductivity	µS/cm	—	—	286
Temperature	°C	—	—	11.9
Metals (total)				
Arsenic	mg/L	0.005	—	*
Iron	mg/L	0.01	—	0.190
Manganese	mg/L	0.001	—	0.0055
Zinc	mg/L	0.01	—	0.037
Inorganic Parameters				
Ammonia	mg/L	0.1	—	*
Chemical Oxygen Demand	mg/L	10	—	—
Chloride	mg/L	1.2	—	8.0
Nitrate	mg/L	0.2	—	1.9
Nitrite	mg/L	0.5	—	*
Sulfate	mg/L	0.2	—	13
Total Organic Carbon	mg/L	1.0	—	*
Other				
Color	PCU	5.0	—	5.0

Notes:

Sample at Corliss was not collected due to access issues.

Analyses performed by Eurofins TestAmerica in Denver, Colorado.

Analytes not listed are VOCs that were not detected above the reporting limit.

Color reported in color units

°C = degrees Celsius

mg/L = milligrams per liter

PCU = platinum-cobalt units

SU = Standard Units

µS/cm = microsiemens per centimeter

µg/L = micrograms per liter

* = not reported at or above the MRL (Method Reporting Limit)

— = Not Applicable

^ = The Paul Bunyon water supply well was resampled on 3/31/22

Table 9. Cation-Anion Balance
Semi-Annual Monitoring Event No. 1 - January 2024
Hidden Valley Landfill, Pierce County, Washington

Cations	mg/L					meq/L					% of Total		
	Ca	Mg	K	Na	Total	Ca	Mg	K	Na	Total	Na+K	Ca	Mg
MW-10S	39	12	2.3	9.6	62.90	1.95	0.99	0.06	0.42	3.41	14	57	29
MW-11S	26	7.6	5.5	17	56.10	1.30	0.63	0.14	0.74	2.80	31	46	22
MW-12S	15	4.1	7.7	14	40.80	0.75	0.34	0.20	0.61	1.89	43	40	18
MW-13S	15	4.1	2.3	8.6	30.00	0.75	0.34	0.06	0.37	1.52	29	49	22
MW-14S	8	2.5	2.5	6	19.10	0.40	0.21	0.06	0.27	0.93	35	43	22
MW-15S	28	8.6	9.2	18	63.80	1.40	0.71	0.24	0.78	3.12	33	45	23
MW-17S	23	7.3	12	19	61.30	1.15	0.60	0.31	0.83	2.88	39	40	21
MW-18S	17	4.9	2.8	13	37.70	0.85	0.40	0.07	0.57	1.89	34	45	21
MW-29S	40	12	9.0	19	80.00	2.00	0.99	0.23	0.83	4.04	26	49	24
FMMW-1	19	5.5	2.9	18	45.40	0.95	0.45	0.07	0.78	2.26	38	42	20
FMMW-2	39	12	12	23	86.00	1.95	0.99	0.31	1.00	4.24	31	46	23
MW-10D	30	9.6	2.0	8.2	49.80	1.50	0.79	0.05	0.36	2.69	15	56	29
MW-11D(2)	21	8.9	2.3	8.1	40.30	1.05	0.73	0.06	0.35	2.19	19	48	33
MW-12D	38	14	3.7	23	78.70	1.90	1.15	0.09	1.00	4.14	26	46	28
MW-13D	22	8.2	2.4	9.8	42.40	1.10	0.67	0.06	0.43	2.26	22	49	30
MW-14D	20	6.3	7.0	13	46.30	1.00	0.52	0.18	0.57	2.26	33	44	23
MW-15D	29	12	3.2	22	66.20	1.45	0.99	0.08	0.96	3.47	30	42	28
MW-18D	26	10	3.1	12	51.10	1.30	0.82	0.08	0.52	2.72	22	48	30
MW-14R	8.4	4.8	2.1	5.4	20.70	0.42	0.40	0.05	0.23	1.10	26	38	36
MW-20R	8.2	4.2	2.1	5.9	20.40	0.41	0.35	0.05	0.26	1.07	29	38	32
MW-26R	23	10	2.5	7.0	42.50	1.15	0.82	0.06	0.30	2.34	16	49	35

Anions	mg/L					meq/L					% of Total			Total Ions (meq/L)	Cation - Anion Balance	Applicable Ratio (%)	Ratio Exceedance
	Alk	Cl	NO_3	SO_4	Total	Alk	Cl	NO_3	SO_4	Total	Cl	Alk	SO_4				
MW-10S	144	14.0	2.60	11	171.60	2.36	0.39	0.04	0.23	3.03	13	78	8	6.44	5.95	5	Exceeds
MW-11S	92.4	18	5.5	13.0	128.90	1.52	0.51	0.09	0.27	2.38	21	64	11	5.19	8.12	5	Exceeds
MW-12S	50.4	10	5.8	15	81.20	0.83	0.28	0.09	0.31	1.51	19	55	21	3.41	11.10	10	Exceeds
MW-13S	52.8	15	0.92	7.6	76.32	0.87	0.42	0.01	0.16	1.46	29	59	11	2.98	1.92	10	-
MW-14S	39.6	2.5	1.40	2.5	46.00	0.65	0.07	0.02	0.05	0.79	9	82	7	1.73	8.09	10	-
MW-15S	156	13	1.90	6.9	177.80	2.56	0.37	0.03	0.14	3.10	12	83	5	6.22	0.39	5	-
MW-17S	87.6	15	11.00	16.0	129.60	1.44	0.42	0.18	0.33	2.37	18	61	14	5.25	9.76	5	Exceeds
MW-18S	75.6	12	0.62	12	100.22	1.24	0.34	0.01	0.25	1.84	18	67	14	3.73	1.37	10	-
MW-29S	156	15	4	16	191.00	2.56	0.42	0.06	0.33	3.38	13	76	10	7.42	8.92	5	Exceeds
FMMW-1	85.2	15.0	1.5	13	114.70	1.40	0.42	0.02	0.27	2.11	20	66	13	4.37	3.27	10	-
FMMW-2	144	18	13	14.0	189.00	2.36	0.51	0.21	0.29	3.37	15	70	9	7.61	11.45	5	Exceeds
MW-10D	116.4	9.4	2.7	8.9	137.40	1.91	0.27	0.04	0.19	2.40	11	79	8	5.10	5.74	5	Exceeds
MW-11D(2)	97.2	5.9	1.7	8.7	113.50	1.59	0.17	0.03	0.18	1.97	8	81	9	4.16	5.36	10	-
MW-12D	216	11.0	0.56	8.5	236.06	3.54	0.31	0.01	0.18	4.04	8	88	4	8.18	1.29	5	-
MW-13D	92.4	14	0.8	11	118.23	1.52	0.39	0.01	0.23	2.15	18	70	11	4.41	2.45	10	-
MW-14D	120	9	0.2	5.1	133.90	1.97	0.24	0.00	0.11	2.32	10	85	5	4.58	1.28	10	-
MW-15D	156	10	0.67	11	177.67	2.56	0.28	0.01	0.23	3.08	9	83	7	6.55	6.01	5	Exceeds
MW-18D	132	7.8	1.5	8.2	149.50	2.16	0.22	0.02	0.17	2.58	9	84	7	5.30	2.68	5	-
MW-14R	58.8	1.6	0.2	4	64.60	0.96	0.05	0.00	0.08	1.10	4	88	8	2.20	0.32	10	-
MW-20R	55.2	1.7	0.2	3.3	60.40	0.91	0.05	0.00	0.07	1.03	5	88	7	2.09	1.92	10	-
MW-26R	115.2	5.4	0.2	12.0	132.80	1.89	0.15	0.00	0.25	2.29	7	82	11	4.63	0.97	10	-

Notes:
mg/L = milligrams per liter
meq/L = milliequivalents per liter
Total alkalinity concentration, reported as calcium carbonate (CaCO3), is converted to the bicarbonate (HCO3-) ion by multiplying by a factor of 1.2.
Cation / anion balance equation is the equivalent percent difference in cations minus anions divided by the sum of cations and anions [(cations-anions)/(anions+cations)*100].
The MRL was used for analytes that were non-detect
A 10% difference threshold is used if the total cation-anion sums are < 5.0 meq/liter.
A 5% difference threshold is used if the total cation-anion sums are > or = to 5.0 meq/liter.
— = Not Applicable

Table 10. Leachate Monitoring Results
Semi-Annual Monitoring Event No. 1 - January 2023
Hidden Valley Landfill, Pierce County, Washington

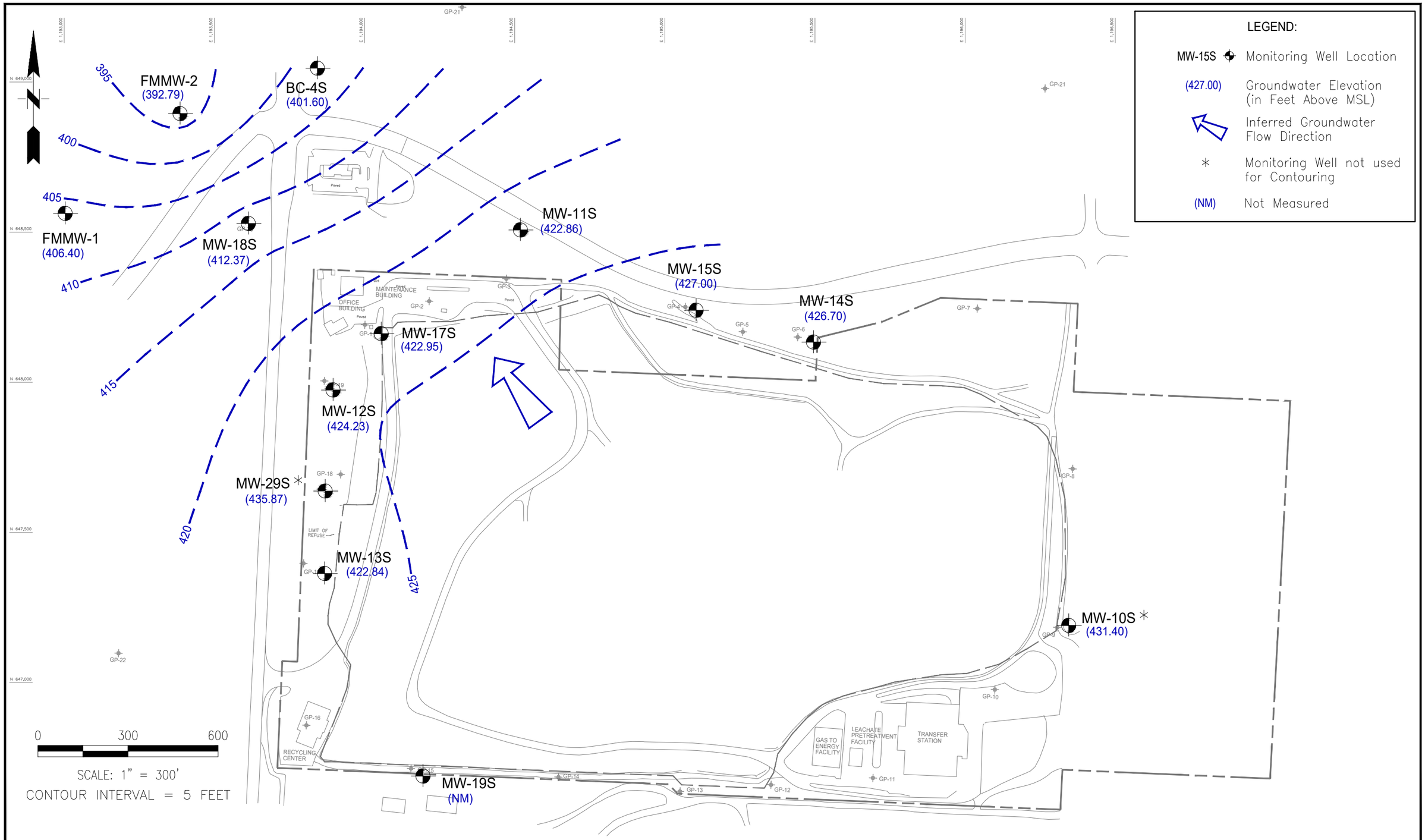
Parameters	MRL	Leachate-East Area	Leachate-Side Slope	Leak Detection-Side Slope	Hydraulic Gradient Control System
Volatile Organics (µg/L)					
1,4-Dichlorobenzene	0.5-0.8	2.5	*	*	*
2-Butanone (MEK)	6.0	*	59	*	*
Benzene	0.5-0.8	0.89	1.2	*	*
Carbon disulfide	0.5-0.84	1.6	*	*	*
Ethylbenzene	1.0	1.2	*	*	*
m-Xylene & p-Xylene	0.5-0.77	2.2	*	*	*
o-Xylene	0.5-0.95	1	*	*	*
Toluene	0.5-0.85	0.78	1.6	*	*
Total Metals (mg/L)					
Calcium	0.2-0.78	61	14	88	26
Iron	0.01-0.02	1.4	2.4	8.4	2.5
Magnesium	0.1-0.26	37	23	23	23
Manganese	0.005	1.3	0.11	3.4	0.22
Potassium	2-2.4	170	550	3.1	480.0
Sodium	1-3.7	1,700	7,200	16	5400
Inorganic Parameters (mg/L)					
Alkalinity	10	2,800	6,400	380	6400
Ammonia	0.1-2.2	180	280	*	360
Chloride	0.2-60	1,700	6,600	3	6100
Nitrate as N	0.5-0.9	6.2	5	*	*
Sulfate	0.2-5.0	81	530	11	210
Total Dissolved Solids	10-470	5,500	21,000	390	180000
Total Organic Carbon - Quad	1-35	300	850	2	730
Total Suspended Solids	4.0	24.0	4.4	25.0	*
Field Parameters					
Dissolved Oxygen (mg/L)	—	2.32	3.07	4.74	2.35
Oxidation Reduction Potential (mV)	—	-60.7	50.9	222.7	75
pH (SU)	—	7.54	7.91	6.08	7.88
Specific Conductivity (µS/cm)	—	9,604	31,360	329	25590
Temperature (°C)	—	16.5	17.5	13.2	18.1
Turbidity (NTU)	—	362	2995	42.8	472

Notes:

Analyses performed by Eurofins TestAmerica in Denver, Colorado.
Volatile organic compounds not listed were not present at concentrations exceeding the MRL
°C = degrees celcius
H = Sample was prepped or analyzed beyond specified holding time
mg/L = milligrams per liter
mV = millivolts
NTU = Nephelometric Turbidity Units
SU = standard units
µg/L = micrograms per liter
µS/cm = microsiemens per centimeter
— = not applicable or not analyzed

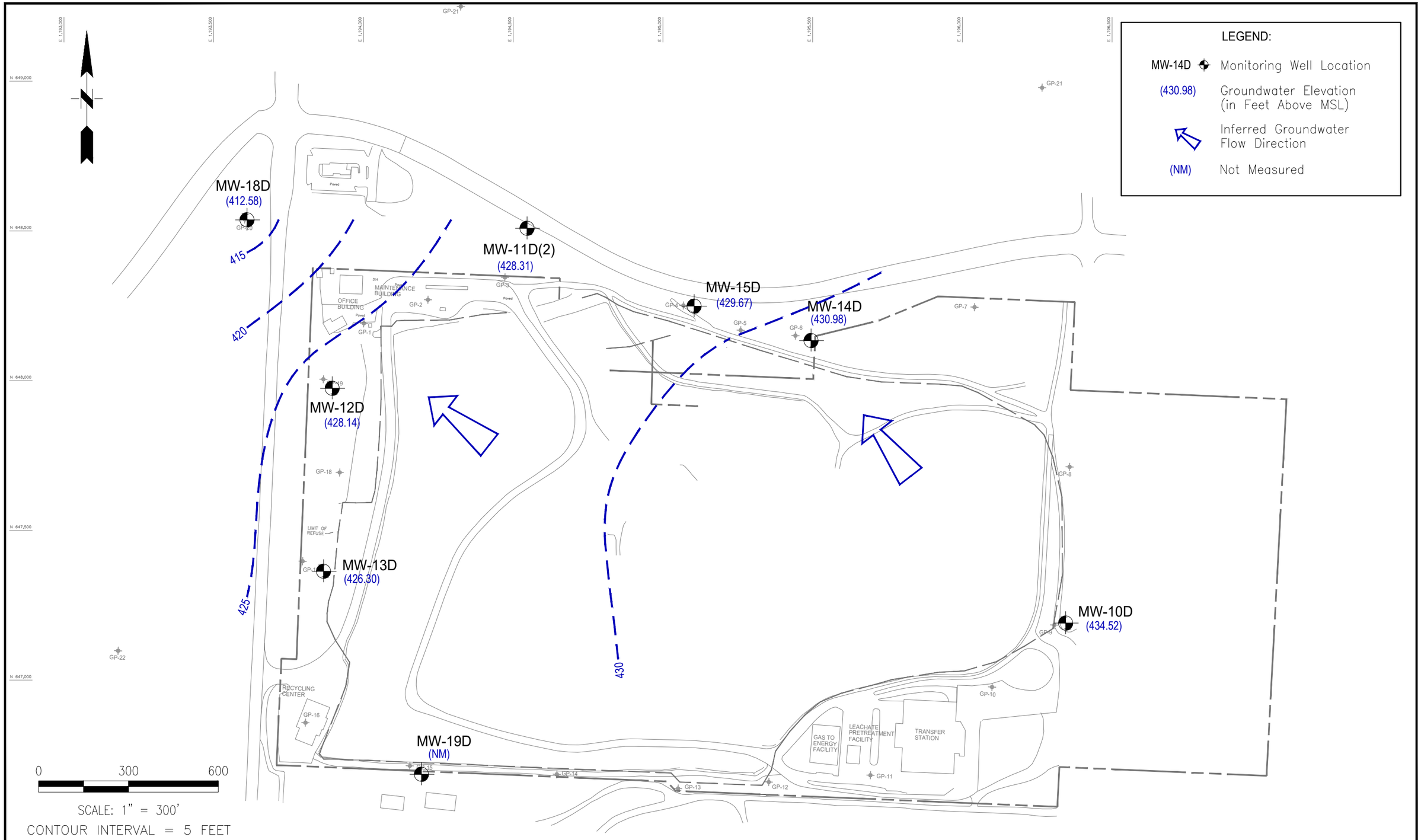
* = not reported at or above the MRL (Method Reporting Limit)

Groundwater Potentiometric Surface Maps



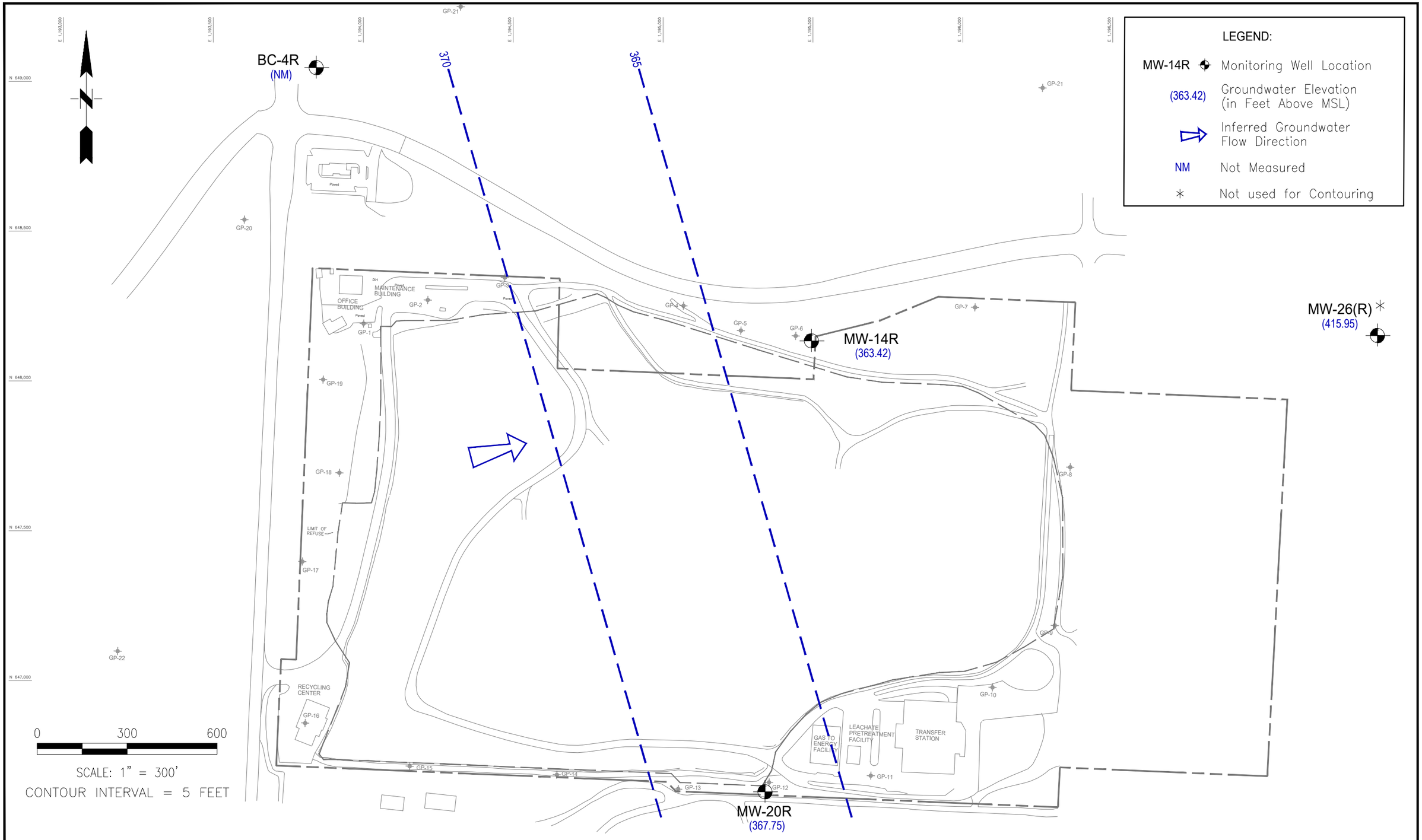
SCS ENGINEERS
Environmental Consultants and Contractors
2405 140th Avenue NE, Suite 107
Bellevue, Washington 98005
(425) 746-4600 FAX: (425) 746-6747

PROJECT NO. 04223002.02	DES BY J.E.	SHALLOW PERCHED AQUIFER WATER LEVEL MAP JANUARY 30, 2024	DATE JANUARY 2025
SCALE AS SHOWN	CHK BY D.V.	HIDDEN VALLEY LANDFILL PIERCE COUNTY, WASHINGTON	FIGURE 1
CAD FILE FIGURE 1	APP BY G.H.		



SCS ENGINEERS
Environmental Consultants and Contractors
2405 140th Avenue NE, Suite 107
Bellevue, Washington 98005
(425) 746-4600 FAX: (425) 746-6747

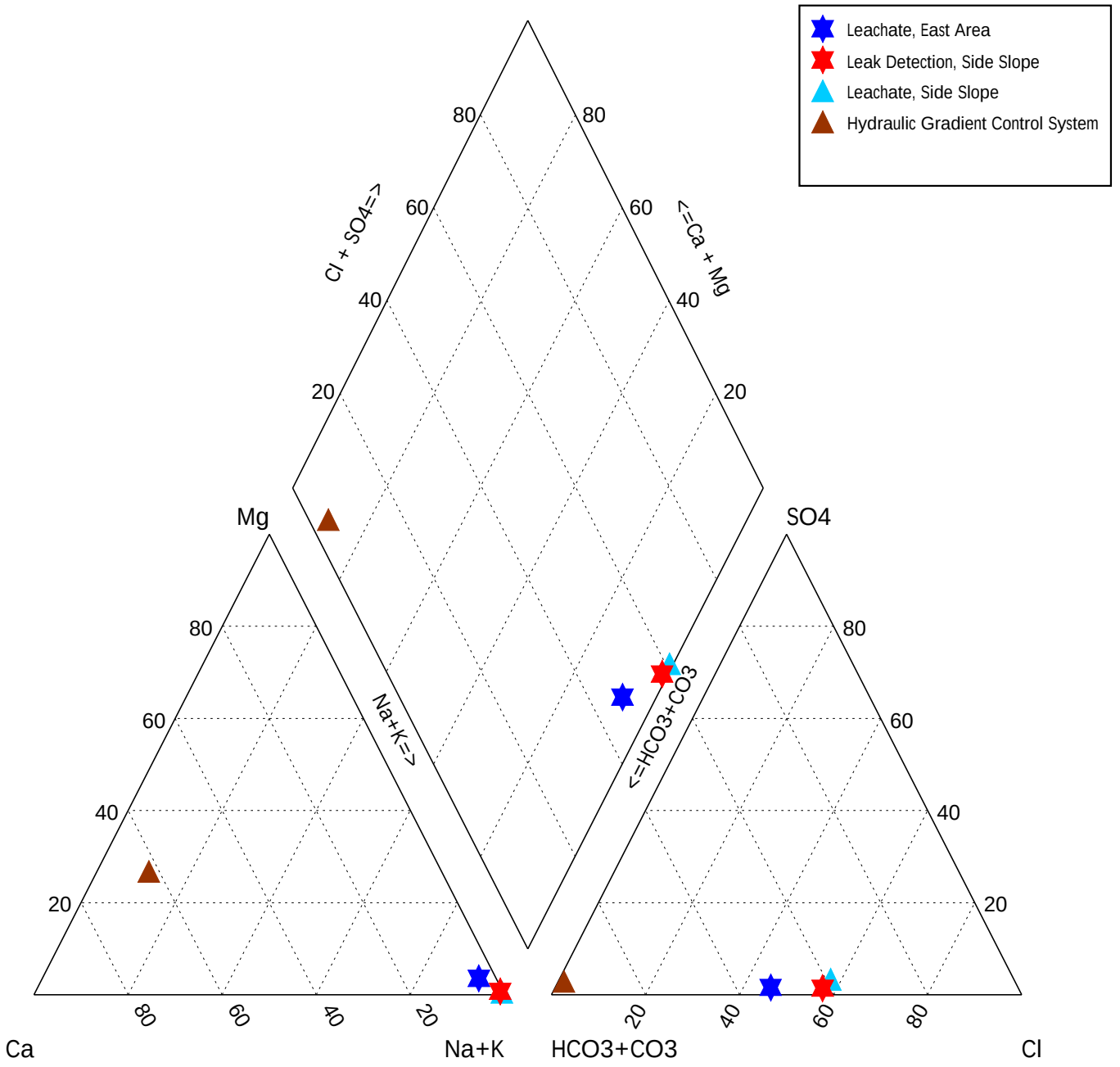
PROJECT NO. 04224002.02	DES BY J.E.	UPPER REGIONAL AQUIFER WATER LEVEL MAP JANUARY 30, 2024	DATE JANUARY 2025
SCALE AS SHOWN	CHK BY D.V.	HIDDEN VALLEY LANDFILL PIERCE COUNTY, WASHINGTON	FIGURE 2
CAD FILE FIGURE 2	APP BY G.H.		



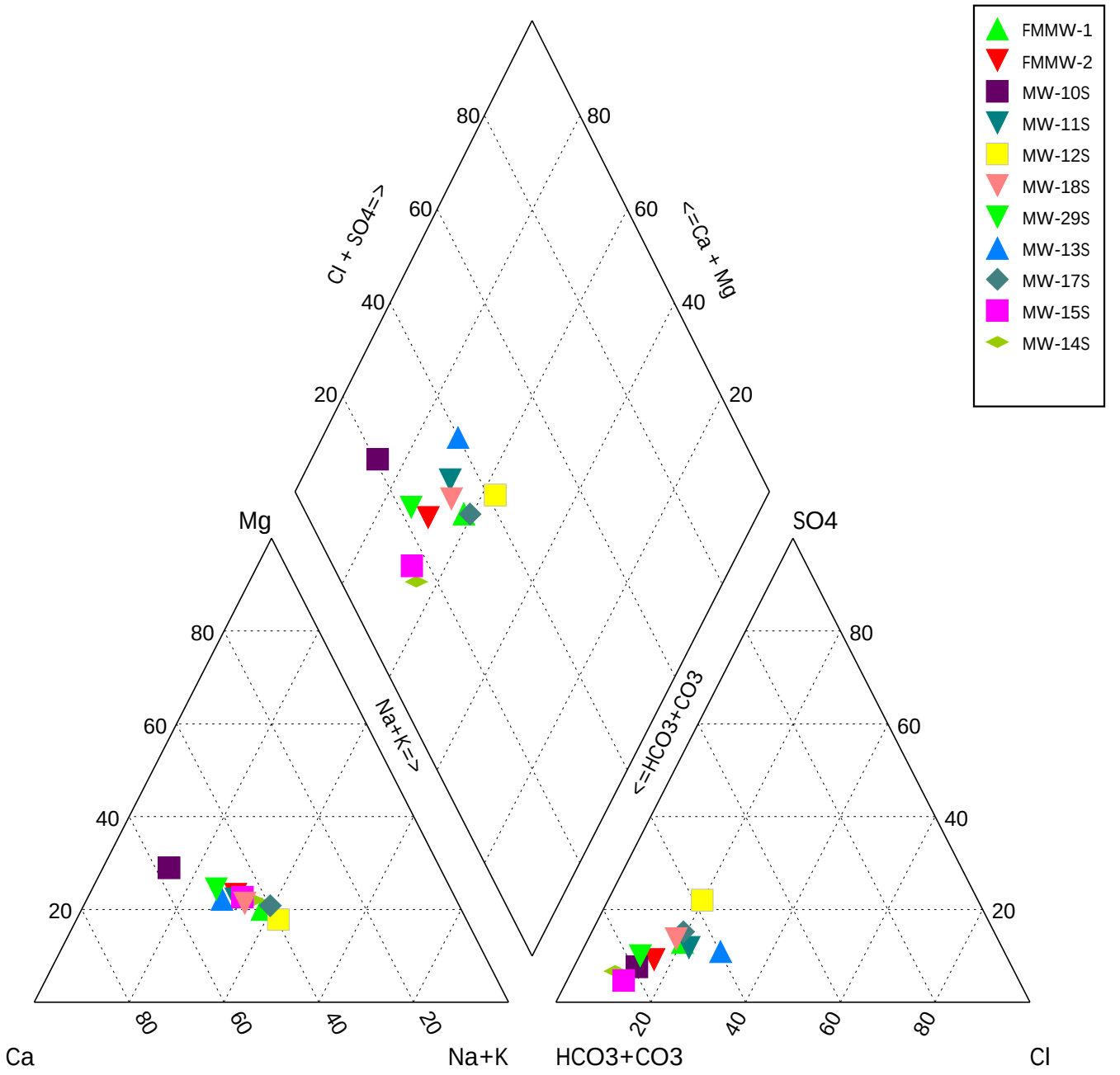
SCS ENGINEERS
Environmental Consultants and Contractors
2405 140th Avenue NE, Suite 107
Bellevue, Washington 98005
(425) 746-4600 FAX: (425) 746-6747

PROJECT NO. 04223002.02	DES BY J.E.	LOWER REGIONAL AQUIFER WATER LEVEL MAP JANUARY 30, 2024	DATE JANUARY 2025
SCALE AS SHOWN	CHK BY D.V.	HIDDEN VALLEY LANDFILL PIERCE COUNTY, WASHINGTON	FIGURE 3
CAD FILE FIGURE 3	APP BY G.H.		

Trilinear Diagrams

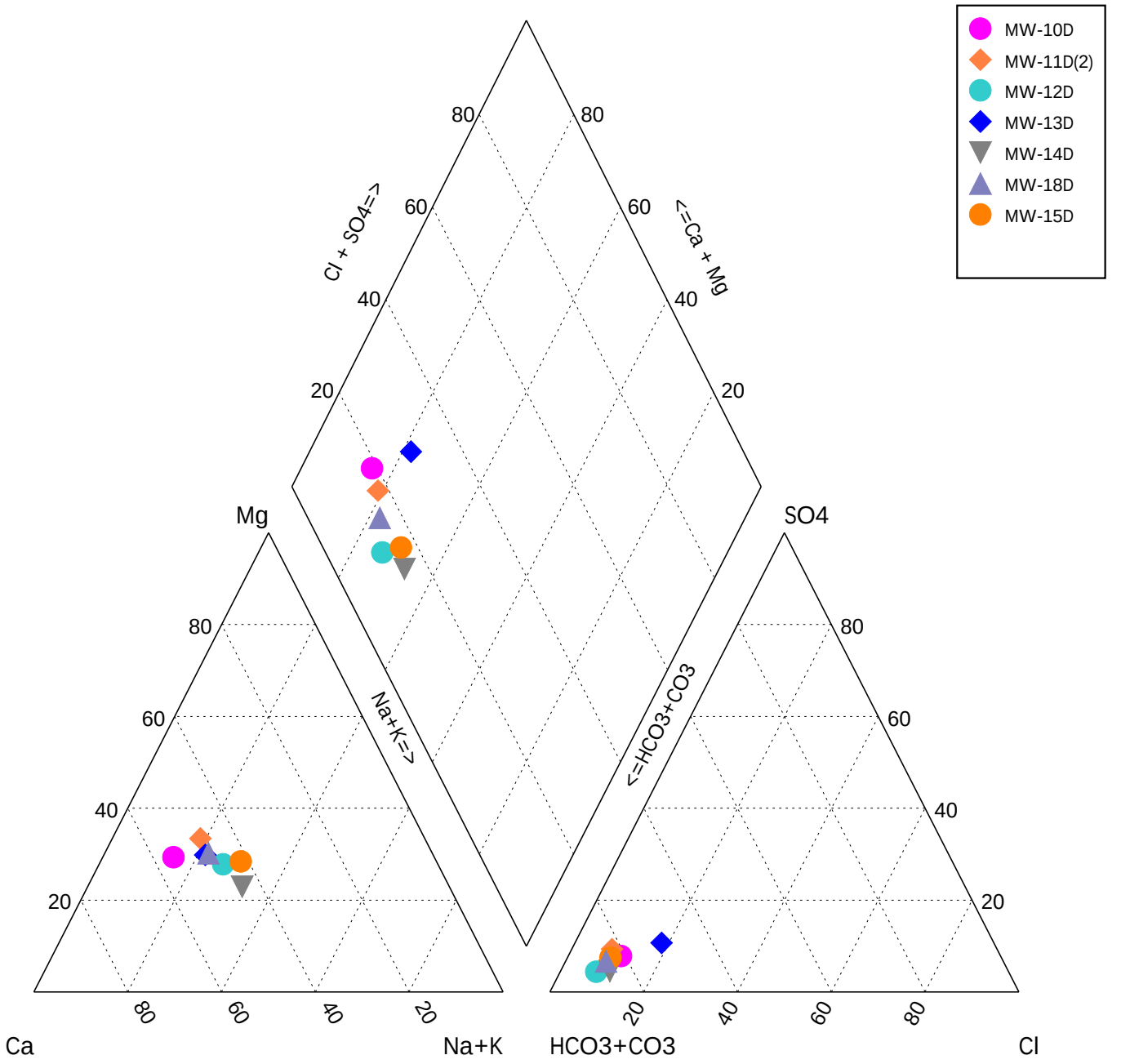


DESCRIPTION: Leachate and Leak Detection - Semi-annual Event No. 1, 2024		
	PROJECT: Hidden Valley Landfill	PROJECT NO: 04224002.02
	CLIENT: LRI Hidden Valley	DATE: January 2024



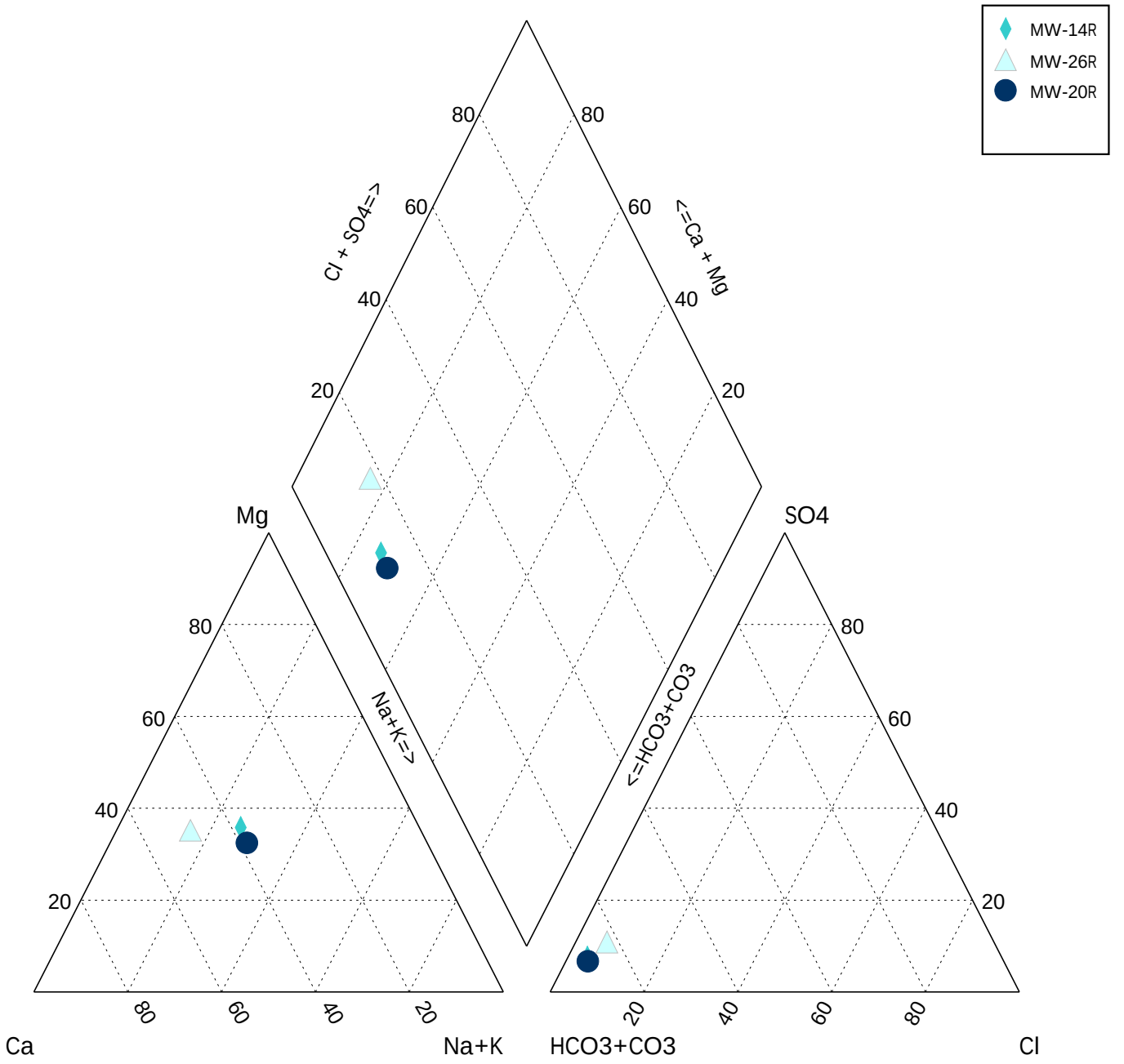
DESCRIPTION: Shallow Aquifer - Semi-annual Event No. 1, 2024

	PROJECT: Hidden Valley Landfill	PROJECT NO: 04224002.02
	CLIENT: LRI Hidden Valley	DATE: January 2024



DESCRIPTION: Upper Regional Aquifer - Semi-annual Event No. 1, 2024

	PROJECT: Hidden Valley Landfill	PROJECT NO: 04224002.02
	CLIENT: LRI Hidden Valley	DATE: January 2024



DESCRIPTION: Lower Regional Aquifer - Semi-annual Event No. 1, 2024		
	PROJECT: Hidden Valley Landfill	PROJECT NO: 04224002.02
	CLIENT: LRI Hidden Valley	DATE: January 2024

Field Sampling Data Sheets

February 9, 2024
File No. 04224002.02

Subject: **Semi – Annual Groundwater Monitoring Event No. 1 – January 2024**
Hidden Valley Landfill, Pierce County, Washington

NOTES/SAMPLE DECODING:

Event Dates: January 30-31, 2024
Field Staff: Jovany Estrada & Alex Deszo

- This event served as the semi-annual sampling event
- Dedicated pumps were used for purging and sampling wells MW-10S, MW-10D, MW-11S, MW-11D(2), MW 12D, MW-13S, MW-13D, MW-14S, MW-14D, MW-14R, MW-15S, MW-15D, MW-17S, MW-18S, MW-18D, MW-20R, MW-26R, MW-29S, FMMW-1, and FMMW-2.
- A disposable bailer was used to sample monitoring well MW-12S.
- Water supply well, Paul Bunyan, was collected as a grab sample. Water supply well, Corliss, was not accessable, therefore, no sample was taken.
- A field duplicate sample was collected at MW-11D(2).
- A complete round of water levels was completed between January 30-31, 2024.
- Field water quality meters were calibrated daily prior to sampling.
- A field blank sample was collected using deionized water provided by TestAmerica Laboratories in Tacoma, Washington.

Sample Date	Sample Number	Well ID
1/30/2024	HVL-013024-01	MW-14S
1/31/2024	HVL-013124-02	MW-11S
1/30/2024	HVL-013024-03	MW-14D
1/31/2024	HVL-013124-04	MW-11D(2) Duplicate
1/30/2024	HVL-013024-05	MW-14R
1/31/2024	HVL-013124-06	MW-11D(2)
1/30/2024	HVL-013024-07	MW-15S
1/31/2024	HVL-013124-08	MW-18D
1/30/2024	HVL-013024-09	MW-15D
1/31/2024	HVL-013124-10	MW-18S
1/30/2024	HVL-013024-11	MW-10S
1/30/2024	HVL-013024-12	MW-26R
1/31/2024	HVL-013124-14	MW-20R
1/30/2024	HVL-013024-16	MW-10D
1/31/2024	HVL-013124-18	MW-12D

1/31/2024	HVL-013124-20	MW-12S
1/30/2024	HVL-013024-22	MW-13D
1/31/2024	HVL-013124-22	FMMW-2
1/31/2024	HVL-013124-23	FMMW-1
1/30/2024	HVL-013024-24	MW-13S
1/31/2024	HVL-013124-25	Field Blank
1/31/2024	HVL-013124-26	MW-29S
1/31/2024	HVL-013124-27	MW-17S
1/31/2024	HVL-013124-28	Water Supply Well, Paul
2/8/2024	HVL-020824-01	Leak Detection, Main
2/8/2024	HVL-020824-02	Leachate, East Area (Leachate
2/8/2024	HVL-020824-03	Leachate, Side Slope
2/8/2024	HVL-020824-04	Leak Detection, Side Slope

SCS ENGINEERS
2405 140th ave NE #107
Bellevue, WA 98005 (425) 746-4600

Groundwater Sampling Data Sheet

Project #: 04224002.02
Site: HVL
Well ID: MW-145
Sample ID: HVL-013024-01
Date: 1/30/24
Weather: Cloudy

47.70 DTW
TOS
Intake
BOS
Total Depth

Sampling Method: Dedicated | 1.75" QED SamplePro | Bail | Peristaltic | Grab | Other
Meter: MP-20 YSI
CONTROL SETTINGS:
Refill 10.5
Discharge 4.5
Pressure 35
Flow

1 ft water = 0.62L 1L = 0.26 gallons
One Well Volume (liters)
Total Volume Bailed (liters)
Other:
Flow Setting:

Filtered? Y (N)
Locked? Y (N)
Water in Protector? Y (N)
Damage? Y (N)

Sample Containers:
1000 ml Poly | 500 ml Poly | 250 ml Poly | 125 ml Poly
500 ml HNO3 x2 | 500 ml H2SO4 x2 | 40 ml VOA x3 x6 | 1000 ml Amber
125 ml NaOH

TIME	DTW	Temp.	Sp.Cond.	DO	pH	Eh	Turbidity	Q / Vol.
0920		12.5	180.0	3.44	5.80	177.8	7.67	
0925		12.9	106.1	4.33	5.80	190.7	11.69	
0928		12.8	102.9	4.57	5.81	197.5	10.42	
0931		12.6	99.8	4.74	5.81	203.8	9.85	
0934		12.6	99.7	4.75	5.82	209.5	9.27	
0937		12.7	99.3	4.79	5.81	213.4	9.31	
0940		12.7	95.7	4.92	5.81	217.4	8.24	

Notes / Observations (color, odor, anomalies, etc):

Stabilization Parameters: pH/DO ± 0.2, SpC ± 10%, Temp ± 0.5°C, Turb. ± 10% or ≤ 5

SAMPLER: Alexander
Printed Name

AD
Signature

SCS ENGINEERS
2405 140th ave NE #107
Bellevue, WA 98005 (425) 746-4600

Groundwater Sampling Data Sheet

Project #: 0224002.C2
Site: HVL
Well ID: MW-11S
Sample ID: HVL-013125-G2
Date: 1/30/24
Weather: Cloudy

91.04 DTW
TOS
Intake
BOS
Total Depth

Sampling Method: Dedicated | 1.75" QED SamplePro | Bail | Peristaltic | Grab | Other

Meter: MP-20 YSI

CONTROL SETTINGS: 1 ft water = 0.62L 1L = 0.26 gallons

Refill: 8
Discharge: 7
Pressure: 60
Flow: 250 ml/min

One Well Volume (liters):
Total Volume Bailed (liters):
Other:
Flow Setting:

Filtered? Y N
Locked? Y N
Water in Protector? Y N
Damage? Y N

Sample Containers:

1000 ml Poly	500 ml Poly	250 ml Poly	125 ml Poly
500 ml HNO3 x2	500 ml H2SO4 x2	40 ml VOA x3 x6	1000 ml Amber
125 ml NaOH			

TIME	DTW	Temp.	Sp.Cond.	DO	pH	Eh	Turbidity	Q / Vol.
1404		13.6	267.1	3.40	5.94	212.5	3.04	
1409		13.7	266.0	2.04	5.84	229.1	2.84	
1412		13.8	265.7	1.94	5.84	235.2	2.82	
1416		13.8	265.3	1.88	5.84	242.9	2.76	
1418		13.8	265.3	1.86	5.84	248.3	2.77	
1421		13.9	265.3	1.83	5.85	253.9	2.76	
1424		13.9	265.3	1.82	5.86	261.2	2.68	

Notes / Observations (color, odor, anomalies, etc):

MW-11D 91.32

Stabilization Parameters: pH/DO ± 0.2, SpC ± 10%, Temp ± 0.5°C, Turb. ± 10% or ≤ 5

SAMPLER: Jovany Estrada
Printed Name

JC
Signature

SCS ENGINEERS
2405 140th ave NE #107
Bellevue, WA 98005 (425) 746-4600

Groundwater Sampling Data Sheet

Project #: 04224002.02
Site: HVL
Well ID: MW-14D
Sample ID: HVL-013024-03
Date: 1/30/24
Weather: Cloudy

50.41 DTW
TOS
Intake
BOS
Total Depth

Sampling Method: Dedicated | 1.75" QED SamplePro | Bail | Peristaltic | Grab | Other
Meter: MP-20 YSI

CONTROL SETTINGS:
Refill 9
Discharge 6
Pressure 50
Flow

1 ft water = 0.62L 1L = 0.26 gallons
One Well Volume (liters)
Total Volume Bailed (liters)
Other:
Flow Setting:

Filtered? Y N
Locked? Y N
Water in Protector? Y N
Damage? Y N

Sample Containers:
1000 ml Poly
500 ml Poly
250 ml Poly
125 ml Poly
500 ml HNO3 x2
500 ml H2SO4 x2
40 ml VOA x3 x6
1000 ml Amber
125 ml NaOH

TIME	DTW	Temp.	Sp.Cond.	DO	pH	Eh	Turbidity	Q / Vol.
1005		13.0	300.1	1.45	5.99	156.5	4.29	
1010		13.2	256.9	1.17	6.01	24.6	3.03	
1013		13.2	245.5	1.13	6.06	11.9	2.95	
1016		13.2	243.3	1.10	6.07	6.0	2.87	
1019		13.2	242.2	1.07	6.08	2.8	2.84	
1022		13.3	241.6	1.03	6.08	0.2	2.83	
1025		13.3	241.4	1.02	6.08	-1.3	2.89	

Notes / Observations (color, odor, anomalies, etc):

Stabilization Parameters: pH/DO ± 0.2, SpC ± 10%, Temp ± 0.5°C, Turb. ± 10% or ≤ 5

SAMPLER: Alex Deszo
Printed Name

Signature

SCS ENGINEERS

2405 140th ave NE #107
Bellevue, WA 98005 (425) 746-4600

Groundwater Sampling Data Sheet

Project #: 04224 002.02
Site: HVL
Well ID: MW-14R
Sample ID: HVL-013024-05
Date: 1/30/24
Weather: Cloudy

116.84 DTW
TOS
Intake
BOS
Total Depth

Sampling Method: Dedicated | 1.75" QED SamplePro | Bail | Peristaltic | Grab | Other

Meter: MP-20 (YSI)

CONTROL SETTINGS:
Refill: 8
Discharge: 7
Pressure: 90
Flow: 300 ml/min

1 ft water = 0.62L
1L = 0.26 gallons

One Well Volume (liters):
Total Volume Bailed (liters):
Other:
Flow Setting:

Filtered? (Y) N
Locked? (Y) N
Water in Protector? Y (N)
Damage? Y (N)

Sample Containers:

1000 ml Poly	500 ml Poly	250 ml Poly	125 ml Poly
500 ml HNO3 x2	500 ml H2SO4 x2	40 ml VOA x3 x6	1000 ml Amber
125 ml NaOH			

TIME	DTW	Temp.	Sp.Cond.	DO	pH	Eh	Turbidity	Q / Vol.
1143		11.4	101.2	10.23	7.19	286.5	3.4	
1148		11.8	99.7	1.79	6.81	218.0	3.5	
1151		11.6	100.1	0.83	7.00	181.7	3.4	
1154		11.5	100.1	0.40	7.22	173.5	3.2	
1157		11.5	100.4	0.25	7.36	167.1	3.3	
1200		11.4	100.4	0.23	7.43	157.3	3.2	
1203		11.4	100.4	0.19	7.48	142.5	3.1	

Notes / Observations (color, odor, anomalies, etc):

Stabilization Parameters: pH/DO ± 0.2, SpC ± 10%, Temp ± 0.5°C, Turb. ± 10% or ≤ 5

SAMPLER: Jovanni Estrada
Printed Name

Signature

SCS ENGINEERS
2405 140th ave NE #107
Bellevue, WA 98005 (425) 746-4600

Groundwater Sampling Data Sheet

Project #: ~~04209050.00~~ 0422402.02
Site: ~~Stafford Creek~~ HVL
Well ID: MW-11D(2)
Sample ID: HVL-013124-06
Date: 1/31/24
Weather: Cloudy

91.22 DTW
TOS
Intake
BOS
Total Depth

Sampling Method: Dedicated | 1.75" QED SamplePro | Bail | Peristaltic | Grab | Other

Meter: MP-20 (YSI)

CONTROL SETTINGS: 1 ft water = 0.62L 1L = 0.26 gallons

Refill: 9
Discharge: 6
Pressure: 90.
Flow: 330 ml/min

One Well Volume (liters):
Total Volume Bailed (liters):
Other:
Flow Setting:

Filtered? (Y) N
Locked? (Y) N
Water in Protector? Y (N)
Damage? Y (N)

Sample Containers:
1000 ml Poly | 500 ml Poly | 250 ml Poly | 125 ml Poly
500 ml HNO3 x2 | 500 ml H2SO4 x2 | 40 ml VOA x3 x6 | 1000 ml Amber
125 ml NaOH

TIME	DTW	Temp.	Sp.Cond.	DO	pH	Eh	Turbidity	Q / Vol.
1224		12.4	204.7	7.94	6.88	283.7	3.8	
1229		13.3	210.2	4.69	6.76	297.3	4.1	
1232		13.3	210.1	4.66	6.75	299.7	4.4	
1235		13.3	210.0	4.61	6.74	305.1	4.7	
1238		13.3	209.9	4.58	6.75	308.9	4.9	
1241		13.3	209.8	4.52	6.75	312.1	7.4	
1244		13.3	209.8	4.48	6.75	314.8	8.7	

Notes / Observations (color, odor, anomalies, etc):

Dup taken @ 1305

HVL-013124-04

Stabilization Parameters: pH/DO ± 0.2, SpC ± 10%, Temp ± 0.5°C, Turb. ± 10% or ≤ 5

SAMPLER: Jovany Estrada
Printed Name

Signature

SCS ENGINEERS
2405 140th ave NE #107
Bellevue, WA 98005 (425) 746-4600

Groundwater Sampling Data Sheet

Project #: 04224002.02
Site: HVL
Well ID: MW-155
Sample ID: HVL-013024-07
Date: 1/30/24
Weather: Rainy

73.45 DTW
TOS
Intake
BOS
Total Depth

Sampling Method: Dedicated | 1.75" QED SamplePro | Bail | Peristaltic | Grab | Other

Meter: MP-20 YSI

CONTROL SETTINGS:
Refill: X
Discharge: 7
Pressure: 55
Flow: 400ml/min

1 ft water = 0.62L
1L = 0.26 gallons
One Well Volume (liters):
Total Volume Bailed (liters):
Other:
Flow Setting:

Filtered? (Y) N
Locked? (Y) N
Water in Protector? Y (N)
Damage? Y (N)

Sample Containers:

1000 ml Poly	500 ml Poly	250 ml Poly	125 ml Poly
500 ml HNO3 x2	500 ml H2SO4 x2	40 ml VOA x3 x6	1000 ml Amber
125 ml NaOH			

TIME	DTW	Temp.	Sp.Cond.	DO	pH	Eh	Turbidity	Q / Vol.
1023		14.7	255.4	4.90	6.26	252.3	3.64	
1025		15.2	312.1	3.70	6.09	297.4	3.30	
1031		15.3	312.3	0.27	6.06	297.1	3.76	
1034		15.3	312.2	0.22	6.05	296.5	3.61	
1037		15.3	311.6	0.18	6.06	295.3	3.95	
1040		15.3	311.2	0.14	6.06	293.3	5.25	
1043		15.3	311.1	0.13	6.06	292.0	5.93	

Notes / Observations (color, odor, anomalies, etc):

Stabilization Parameters: pH/DO ± 0.2, SpC ± 10%, Temp ± 0.5°C, Turb. ± 10% or ≤ 5

SAMPLER: Jovani Estrada
Printed Name

JE
Signature

SCS ENGINEERS
2405 140th ave NE #107
Bellevue, WA 98005 (425) 746-4600

Groundwater Sampling Data Sheet

Project #: 04224002.02
Site: HVL
Well ID: MW-18D
Sample ID: HVL-013124-08
Date: 1/31/24
Weather: Cloudy

129.21 DTW
TOS
Intake
BOS
Total Depth

Sampling Method: Dedicated | 1.75" QED SamplePro | Bail | Peristaltic | Grab | Other

Meter: MP-20 (YSI)

CONTROL SETTINGS:

Refill	11
Discharge	9
Pressure	90
Flow	

1 ft water = 0.62L
1L = 0.26 gallons

One Well Volume (liters): ____ Other: ____
Flow Setting: ____
Total Volume Bailed (liters): ____

Filtered? Y (N)
Locked? (Y) N
Water in Protector? Y (N)
Damage? Y (N)

Sample Containers:

1000 ml Poly	500 ml Poly	250 ml Poly	125 ml Poly
500 ml HNO3 x2	500 ml H2SO4 x2	40 ml VOA x3 x6	1000 ml Amber
125 ml NaOH			

TIME	DTW	Temp.	Sp.Cond.	DO	pH	Eh	Turbidity	Q / Vol.
1239		12.3	259.4	8.75	6.91	117.8	3.30	
1244		13.1	257.0	7.03	6.56	179.1	3.35	
1247		13.1	257.2	7.00	6.55	176.2	3.08	
1250		14.6	261.6	3.88	6.53	180.2	2.99	
1253		14.7	264.1	3.25	6.57	182.8	2.95	
1256		14.8	264.6	3.17	6.59	185.3	2.96	
1259		14.9	264.7	3.18	6.60	187.7	2.94	

Notes / Observations (color, odor, anomalies, etc):

Stabilization Parameters: pH/DO ± 0.2, SpC ± 10%, Temp ± 0.5°C, Turb. ± 10% or ≤ 5

SAMPLER: Alex Deszo
Printed Name

AD
Signature

SCS ENGINEERS
2405 140th ave NE #107
Bellevue, WA 98005 (425) 746-4600

Groundwater Sampling Data Sheet

Project #: 04224002.02
Site: HVL
Well ID: MW-15D
Sample ID: HVL-013024-09
Date: 1/30/24
Weather: Cloudy

79.42 DTW
TOS
Intake
BOS
Total Depth

Sampling Method: Dedicated | 1.75" QED SamplePro | Bail | Peristaltic | Grab | Other
Meter: MP-20 (YSI)

CONTROL SETTINGS: 1 ft water = 0.62L 1L = 0.26 gallons
Refill: 8
Discharge: 7
Pressure: 60
Flow: 400 ml/min
One Well Volume (liters):
Total Volume Bailed (liters):
Other:
Flow Setting:

Filtered? (Y) N
Locked? (Y) N
Water in Protector? Y (N)
Damage? Y (N)

Sample Containers:

1000 ml Poly	500 ml Poly	250 ml Poly	125 ml Poly
500 ml HNO3 x2	500 ml H2SO4 x2	40 ml VOA x3 x6	1000 ml Amber
125 ml NaOH			

TIME	DTW	Temp.	Sp.Cond.	DO	pH	Eh	Turbidity	Q / Vol.
1058		13.8	276.2	9.17	6.98	268.0	10.2	
1103		14.1	292.7	0.81	6.68	273.0	6.6	
1106		14.1	293.1	0.64	6.68	271.1	5.8	
1109		14.1	293.3	0.57	6.68	269.6	5.9	
1112		14.1	293.1	0.53	6.69	267.5	5.0	
1115		14.0	293.0	0.51	6.69	265.4	4.5	
1118		14.0	293.0	0.49	6.69	263.4	3.9	

Notes / Observations (color, odor, anomalies, etc):

Stabilization Parameters: pH/DO ± 0.2, SpC ± 10%, Temp ± 0.5°C, Turb. ± 10% or ≤ 5

SAMPLER: Jovanny Estrada
Printed Name

Signature

SCS ENGINEERS
2405 140th ave NE #107
Bellevue, WA 98005 (425) 746-4600

Groundwater Sampling Data Sheet

Project #: 04224002.02
Site: HVL
Well ID: MW-185
Sample ID: HVL-013124-16
Date: 1/31/24
Weather: Cloudy

129.86 DTW
TOS
Intake
BOS
Total Depth

Sampling Method: Dedicated | 1.75" QED SamplePro | Bail | Peristaltic | Grab | Other

Meter: MP-20 YSI

CONTROL SETTINGS:
Refill 12
Discharge 8
Pressure 80
Flow

1 ft water = 0.62L
1L = 0.26 gallons

One Well Volume (liters)
Total Volume Bailed (liters)
Other:
Flow Setting:

Filtered? (Y) N
Locked? (Y) N
Water in Protector? Y (N)
Damage? Y (N)

Sample Containers:
1000 ml Poly
500 ml Poly
250 ml Poly
125 ml Poly
500 ml HNO3 x2
500 ml H2SO4 x2
40 ml VOA x3 x6
1000 ml Amber
125 ml NaOH

Notes / Observations (color, odor, anomalies, etc):

TIME	DTW	Temp.	Sp.Cond.	DO	pH	Eh	Turbidity	Q / Vol.
1202		12.4	270.2	6.46	6.15	203.8	3.59	
1207		14.8	384.0	3.38	6.17	213.3	3.43	
1210		14.9	387.4	3.32	6.18	214.2	3.40	
1213		14.9	387.8	3.30	6.19	215.2	3.39	
1216		15.0	387.9	3.28	6.19	216.3	3.41	
1219		15.0	387.9	3.26	6.19	217.3	3.38	
1222		15.0	387.9	3.25	6.20	218.2	3.37	

Stabilization Parameters: pH/DO ± 0.2, SpC ± 10%, Temp ± 0.5°C, Turb. ± 10% or ≤ 5

SAMPLER: Alex Oszo
Printed Name

AO
Signature

SCS ENGINEERS
2405 140th ave NE #107
Bellevue, WA 98005 (425) 746-4600

Groundwater Sampling Data Sheet

Project #: 04224002.02
Site: HVL
Well ID: MW-105
Sample ID: HVL-013024-11
Date: 1/30/24
Weather: Cloudy

25.98 DTW
TOS
Intake
BOS
Total Depth

Sampling Method: Dedicated | 1.75" QED SamplePro | Bail | Peristaltic | Grab | Other

Meter: MP-20 YSI

CONTROL SETTINGS:
Refill 9
Discharge 6
Pressure 30
Flow

1 ft water = 0.62L 1L = 0.26 gallons
One Well Volume (liters)
Total Volume Bailed (liters)
Other:
Flow Setting:

Filtered? (Y) N
Locked? Y (N)
Water in Protector? Y (N)
Damage? Y (N)

Sample Containers:
1000 ml Poly
500 ml Poly
250 ml Poly
125 ml Poly
500 ml HNO3 x2
500 ml H2SO4 x2
40 ml VOA x3 x6
1000 ml Amber
125 ml NaOH

TIME	DTW	Temp.	Sp.Cond.	DO	pH	Eh	Turbidity	Q / Vol.
1057		13.5	313.2	5.48	6.46	71.3	4.16	
1102		13.5	313.3	5.43	6.27	125.0	2.97	
1105		13.5	313.3	5.41	6.27	141.3	2.88	
1108		13.5	313.3	5.40	6.27	151.5	2.81	
1111		13.5	313.4	5.39	6.27	159.1	2.76	
1114		13.5	313.4	5.39	6.27	165.8	2.83	
1117		13.6	313.4	5.39	6.27	172.4	2.76	

Notes / Observations (color, odor, anomalies, etc):

Stabilization Parameters: pH/DO ± 0.2, SpC ± 10%, Temp ± 0.5°C, Turb. ± 10% or ≤ 5

SAMPLER: ALX DEGR
Printed Name

AD
Signature

SCS ENGINEERS
2405 140th ave NE #107
Bellevue, WA 98005 (425) 746-4600

Groundwater Sampling Data Sheet

Project #: 01224002.02
Site: HVL -
Well ID: MW-26R
Sample ID: HVL-013024-12
Date: 1/30/24
Weather: Cloudy

49.45 DTW
TOS
Intake
BOS
Total Depth

Sampling Method: Dedicated | 1.75" QED SamplePro | Bail | Peristaltic | Grab | Other

Meter: MP-20 YSI

CONTROL SETTINGS: 1 ft water = 0.62L 1L = 0.26 gallons

Refill 9
Discharge 6
Pressure 75
Flow 333 ml/min

One Well Volume (liters)
Total Volume Bailed (liters)
Other:
Flow Setting:

Filtered? (Y) N
Locked? (Y) N
Water in Protector? Y (N)
Damage? Y (N)

Sample Containers:

1000 ml Poly	500 ml Poly	250 ml Poly	125 ml Poly
500 ml HNO3 x2	500 ml H2SO4 x2	40 ml VOA x3 x6	1000 ml Amber
125 ml NaOH			

TIME	DTW	Temp.	Sp.Cond.	DO	pH	Eh	Turbidity	Q / Vol.
1243		10.7	206.8	6.00	7.06	216.2	4.4	
1248		11.0	213.7	0.67	7.14	142.7	3.2	
1251		11.0	213.3	0.27	7.15	27.0	3.25	
1254		11.0	213.3	0.20	7.18	-8.6	3.15	
1257		11.0	213.4	0.16	7.21	-25.9	3.1	
1300		11.0	213.6	0.13	7.23	-39.6	3.2	
1303		11.0	213.6	0.11	7.24	-45.7	3.2	

Notes / Observations (color, odor, anomalies, etc):

Stabilization Parameters: pH/DO ± 0.2, SpC ± 10%, Temp ± 0.5°C, Turb. ± 10% or ≤ 5

SAMPLER: Jovany Estrada
Printed Name

Signature

SCS ENGINEERS
2405 140th ave NE #107
Bellevue, WA 98005 (425) 746-4600

Groundwater Sampling Data Sheet

Project #: 0422460202
Site: HVL
Well ID: MW-20R
Sample ID: HVL-013124-14
Date: 1/31/24
Weather: Rainy

105.15 DTW
TOS
Intake
BOS
Total Depth

Sampling Method: Dedicated | 1.75" QED SamplePro | Bail | Peristaltic | Grab | Other
Meter: MP-20 YSI

CONTROL SETTINGS: 1 ft water = 0.62L 1L = 0.26 gallons
Refill: 9
Discharge: 6
Pressure: 70
Flow: 300 mL/min
One Well Volume (liters):
Total Volume Bailed (liters):
Other:
Flow Setting:

Filtered? Y N
Locked? Y N
Water in Protector? Y N
Damage? Y N

Sample Containers:
1000 ml Poly | 500 ml Poly | 250 ml Poly | 125 ml Poly
500 ml HNO3 x2 | 500 ml H2SO4 x2 | 40 ml VOA x3 x6 | 1000 ml Amber
125 ml NaOH

TIME	DTW	Temp.	Sp.Cond.	DO	pH	Eh	Turbidity	Q / Vol.
1345		11.8	101.8	8.24	7.02	288.8	5.11	
1350		10.3	101.0	3.35	6.95	303.5	6.8	
1353		10.2	100.9	2.38	6.96	305.5	7.34	
1356		10.1	100.8	2.03	6.97	306.0	8.02	
1359		10.1	100.8	1.91	6.94	307.7	8.33	
1402		10.1	100.7	1.71	6.93	308.7	9.14	
1405		10.1	100.7	1.57	6.94	308.2	9.77	

Notes / Observations (color, odor, anomalies, etc):

Stabilization Parameters: pH/DO ± 0.2, SpC ± 10%, Temp ± 0.5°C, Turb. ± 10% or ≤ 5

SAMPLER: Jovany Estrada
Printed Name

Signature

SCS ENGINEERS
2405 140th ave NE #107
Bellevue, WA 98005 (425) 746-4600

Groundwater Sampling Data Sheet

Project #: 04224002.02
Site: HVL
Well ID: MW-10D
Sample ID: HVL-01302124-16
Date: 1/30/21
Weather: Cloudy

29.57 DTW
TOS
Intake
BOS
Total Depth

Sampling Method: Dedicated | 1.75" QED SamplePro | Bail | Peristaltic | Grab | Other
Meter: MP-20 YSI
CONTROL SETTINGS:
Refill 9
Discharge 6
Pressure 46
Flow

1 ft water = 0.62L 1L = 0.26 gallons
One Well Volume (liters)
Total Volume Bailed (liters)
Other:
Flow Setting:

Filtered? Y N
Locked? Y N
Water in Protector? Y N
Damage? Y N

Sample Containers:

1000 ml Poly	500 ml Poly	250 ml Poly	125 ml Poly
500 ml HNO3 x2	500 ml H2SO4 x2	40 ml VOA x3 x6	1000 ml Amber
125 ml NaOH			

TIME	DTW	Temp.	Sp.Cond.	DO	pH	Eh	Turbidity	Q / Vol.
1132		13.1	303.9	4.89	6.65	171.3	3.60	
1137		13.2	237.7	3.48	6.22	180.1	3.86	
1146		13.2	231.8	3.55	6.25	181.0	3.88	
1143		13.3	232.8	3.82	6.27	182.3	4.10	
1146		13.2	240.5	4.60	6.30	184.8	6.55	
1149		13.1	248.0	5.30	6.34	188.4	6.25	
1152		13.1	249.5	5.47	6.36	190.8	7.16	

Notes / Observations (color, odor, anomalies, etc):

Stabilization Parameters: pH/DO ± 0.2, SpC ± 10%, Temp ± 0.5°C, Turb. ± 10% or ≤ 5

SAMPLER: Alex Diaz
Printed Name

AD
Signature

SCS ENGINEERS
2405 140th ave NE #107
Bellevue, WA 98005 (425) 746-4600

Groundwater Sampling Data Sheet

Project #: 04224002.02
Site: HVL
Well ID: MW-12D
Sample ID: HVL-013124-18
Date: 1131124
Weather: Cloudy

65.35 DTW
TOS
Intake
BOS
Total Depth

Sampling Method: Dedicated | 1.75" QED SamplePro | Bail | Peristaltic | Grab | Other

Meter: MP-20 YSI

CONTROL SETTINGS:
Refill 9
Discharge 6
Pressure 50
Flow 350 ml/min

1 ft water = 0.62L
1L = 0.26 gallons
One Well Volume (liters)
Total Volume Bailed (liters)
Other:
Flow Setting:

Filtered? (Y) N
Locked? Y (N)
Water in Protector? Y (N)
Damage? Y (N)

Sample Containers:

1000 ml Poly	500 ml Poly	250 ml Poly	125 ml Poly
500 ml HNO3 x2	500 ml H2SO4 x2	40 ml VOA x3 x6	1000 ml Amber
125 ml NaOH			

TIME	DTW	Temp.	Sp.Cond.	DO	pH	Eh	Turbidity	Q / Vol.
1014		13.7	361.8	6.42	6.26	221.1	2.73	
1019		16.2	377.2	1.78	6.19	221.1	2.65	
1022		16.3	387.8	1.51	6.34	216.5	2.60	
1025		16.3	392.2	1.35	6.46	212.7	2.57	
1028		16.3	393.4	1.29	6.51	210.6	2.58	
1031		16.4	393.7	1.24	6.53	209.2	2.59	
1034		16.4	393.4	1.19	6.54	207.9	2.59	

Notes / Observations (color, odor, anomalies, etc):

Stabilization Parameters: pH/DO ± 0.2, SpC ± 10%, Temp ± 0.5°C, Turb. ± 10% or ≤ 5

SAMPLER: Alex Dezso
Printed Name

AD
Signature

SCS ENGINEERS
2405 140th ave NE #107
Bellevue, WA 98005 (425) 746-4600

Groundwater Sampling Data Sheet

Project #: 04224002.02
Site: HVL
Well ID: MW - 125
Sample ID: HVL-013124-20
Date: 1/31/24
Weather: cloudy

62.72 DTW
TOS
Intake
BOS
76.00 Total Depth

Sampling Method: Dedicated | 1.75" QED SamplePro | Bail | Peristaltic | Grab | Other

Meter: MP-20 YSI

CONTROL SETTINGS:
Refill
Discharge
Pressure
Flow

1 ft water = 0.62L
1L = 0.26 gallons

One Well Volume (liters)
Other:
Flow Setting:
Total Volume Bailed (liters) 25

Filtered? (Y) N
Locked? Y (N)
Water in Protector? Y (N)
Damage? Y (N)

Sample Containers:

1000 ml Poly	500 ml Poly	250 ml Poly	125 ml Poly
500 ml HNO3 x2	500 ml H2SO4 x2	40 ml VOA x3 x6	1000 ml Amber
125 ml NaOH			

	TIME	DTW	Temp.	Sp.Cond.	DO	pH	Eh	Turbidity	Q / Vol.
1	1057		17.2	204.5	3.07	6.21	152.2	1.34	
13	1108		17.1	206.2	2.92	5.90	198.7	5.84	
25	1119		17.4	205.5	3.08	5.85	214.7	4.06	

Notes / Observations (color, odor, anomalies, etc):

76 - 62.72 = 13.28

$13.28' \times \frac{0.62L}{1ft} = 8.23$

$8.23 \times 3 = 24.7$

Stabilization Parameters: pH/DO ± 0.2, SpC ± 10%, Temp ± 0.5°C, Turb. ± 10% or ≤ 5

SAMPLER: Alex Dess
Printed Name

AD
Signature

SCS ENGINEERS
2405 140th ave NE #107
Bellevue, WA 98005 (425) 746-4600

Groundwater Sampling Data Sheet

Project #: 04224002.02
Site: HVL
Well ID: MW - 13D
Sample ID: HVL-013024-22
Date: 1/30/24
Weather: Cloudy

23.89 DTW
TOS
Intake
BOS
Total Depth

Sampling Method: Dedicated | 1.75" QED SamplePro | Bail | Peristaltic | Grab | Other

Meter: MP-20 YSI

CONTROL SETTINGS:
Refill 9
Discharge 6
Pressure 45
Flow

1 ft water = 0.62L
1L = 0.26 gallons

One Well Volume (liters)
Total Volume Bailed (liters)
Other:
Flow Setting:

Filtered? (Y) N
Locked? Y (N)
Water in Protector? Y (N)
Damage? Y (N)

Sample Containers:
1000 ml Poly
500 ml Poly
250 ml Poly
125 ml Poly
500 ml HNO3 x2
500 ml H2SO4 x2
40 ml VOA x3 x6
1000 ml Amber
125 ml NaOH

TIME	DTW	Temp.	Sp.Cond.	DO	pH	Eh	Turbidity	Q / Vol.
1300		11.6	218.8	3.17	6.33	128.3	2.84	
1305		12.1	218.9	3.81	6.16	164.9	2.84	
1308		12.2	218.6	4.13	6.18	178.0	2.80	
1311		12.2	218.3	4.16	6.18	187.0	2.76	
1314		12.2	218.1	4.17	6.18	192.5	2.77	
1317		12.3	217.8	4.19	6.19	199.4	2.74	
1320		12.3	217.5	4.19	6.19	203.1	2.74	

Notes / Observations (color, odor, anomalies, etc):

Stabilization Parameters: pH/DO ± 0.2, SpC ± 10%, Temp ± 0.5°C, Turb. ± 10% or ≤ 5

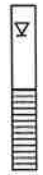
SAMPLER: Alex Deszo
Printed Name

AD
Signature

SCS ENGINEERS
2405 140th ave NE #107
Bellevue, WA 98005 (425) 746-4600

Groundwater Sampling Data Sheet

Project #: 04224002.02
Site: HVL
Well ID: FMMW-2
Sample ID: HVL-013124-22
Date: ~~Feb~~ 1/31/24
Weather: Cloudy



135.25 DTW
TOS
Intake
BOS
Total Depth

Sampling Method: Dedicated | 1.75" QED SamplePro | Bail | Peristaltic | Grab | Other

Meter: MP-20 YSI

CONTROL SETTINGS: 1 ft water = 0.62L 1L = 0.26 gallons

Refill: 9
Discharge: 6
Pressure: ~~40~~ 50
Flow: 250 ml/min

One Well Volume (liters):
Total Volume Bailed (liters):
Other:
Flow Setting:

Filtered? (Y) N
Locked? (Y) N
Water in Protector? Y (N)
Damage? Y (N)

Sample Containers:

1000 ml Poly	500 ml Poly	250 ml Poly	125 ml Poly
500 ml HNO3 x2	500 ml H2SO4 x2	40 ml VOA x3 x6	1000 ml Amber
125 ml NaOH			

TIME	DTW	Temp.	Sp.Cond.	DO	pH	Eh	Turbidity	Q / Vol.
1042		13.4	337.0	6.54	6.15	346.1	4.7	
1047		15.7	434.9	1.22	6.03	350.2	2.8	
1050		15.5	440.0	0.61	6.01	348.9	2.8	
1053		15.8	439.0	0.51	6.00	347.5	2.8	
1056		15.8	439.2	0.47	6.00	345.4	2.8	
1059		15.7	438.8	0.45	5.99	343.3	2.8	
1102		15.5	438.8	0.44	5.99	342.0	2.8	

Notes / Observations (color, odor, anomalies, etc):

Stabilization Parameters: pH/DO ± 0.2, SpC ± 10%, Temp ± 0.5°C, Turb. ± 10% or ≤ 5

SAMPLER: Jovany Estrada
Printed Name

Signature

SCS ENGINEERS
2405 140th ave NE #107
Bellevue, WA 98005 (425) 746-4600

Groundwater Sampling Data Sheet

Project #: 04224002-02
Site: HVL
Well ID: FMMW-1
Sample ID: HVL-01324-23
Date: 1/30/24
Weather: Cloudy

142.95 DTW
TOS
Intake
BOS
Total Depth

Sampling Method: Dedicated | 1.75" QED SamplePro | Bail | Peristaltic | Grab | Other
Meter: MP-20 (YSI)

CONTROL SETTINGS: 1 ft water = 0.62L 1L = 0.26 gallons

Refill	10	One Well Volume (liters)	Other:
Discharge	5		Flow Setting:
Pressure	85	Total Volume Bailed (liters)	
Flow	143 ml/min		

Filtered? (Y) N Locked? (Y) N Water in Protector? Y (N) Damage? Y (N)

Sample Containers:

1000 ml Poly	500 ml Poly	250 ml Poly	125 ml Poly
500 ml HNO3 x2	500 ml H2SO4 x2	40 ml VOA x3 x6	1000 ml Amber
125 ml NaOH			

TIME	DTW	Temp.	Sp.Cond.	DO	pH	Eh	Turbidity	Q / Vol.
0948		13.8	238.7	7.06	6.39	280.2	3.9	
0953		14.0	226.9	6.57	6.20	300.7	3.1	
0956		14.0	224.2	6.62	6.20	308.3	3.1	
0959		14.0	223.6	6.64	6.21	315.8	2.9	
1002		14.6	223.5	6.65	6.21	321.0	2.9	
1005		14.0	223.4	6.65	6.21	325.8	2.9	
1008		14.0	223.4	6.66	6.22	330.0	2.8	

Notes / Observations (color, odor, anomalies, etc):

Stabilization Parameters: pH/DO ± 0.2, SpC ± 10%, Temp ± 0.5°C, Turb. ± 10% or ≤ 5

SAMPLER: J. Estrada
Printed Name

Signature

SCS ENGINEERS
2405 140th ave NE #107
Bellevue, WA 98005 (425) 746-4600

Groundwater Sampling Data Sheet

Project #: 04224002.02
Site: HVL
Well ID: MW-13S
Sample ID: HVL-013024-24
Date: 1/30/24
Weather: Cloudy

Sampling Method: Dedicated | 1.75" QED SamplePro | Bail | Peristaltic | Grab | Other

Meter: MP-20 YSI

23.33 DTW
TOS
Intake
BOS
Total Depth

CONTROL SETTINGS:
Refill 9
Discharge 6
Pressure 40
Flow

1 ft water = 0.62L 1L = 0.26 gallons
One Well Volume (liters)
Other:
Flow Setting:
Total Volume Bailed (liters)

Filtered? Y N
Locked? Y N
Water in Protector? Y N
Damage? Y N

Sample Containers:
1000 ml Poly
500 ml Poly
250 ml Poly
125 ml Poly
500 ml HNO3 x2
500 ml H2SO4 x2
40 ml VOA x3 x6
1000 ml Amber
125 ml NaOH

TIME	DTW	Temp.	Sp.Cond.	DO	pH	Eh	Turbidity	Q / Vol.
1225		11.7	164.8	6.05	6.18	176.4	3.62	
1230		11.8	151.3	6.02	5.91	203.0	3.11	
1233		11.8	151.2	6.01	5.88	210.8	3.03	
1236		11.8	151.1	6.01	5.86	217.5	3.02	
1239		11.8	151.0	6.01	5.85	222.7	3.10	
1242		11.8	151.0	6.00	5.85	227.1	3.29	
1245		11.8	151.0	6.00	5.85	230.3	3.40	

Notes / Observations (color, odor, anomalies, etc):

Stabilization Parameters: pH/DO ± 0.2, SpC ± 10%, Temp ± 0.5°C, Turb. ± 10% or ≤ 5

SAMPLER: Alex Rego
Printed Name

AD
Signature

SCS ENGINEERS
2405 140th ave NE #107
Bellevue, WA 98005 (425) 746-4600

Groundwater Sampling Data Sheet

Project #: 04224002.02
Site: HVL
Well ID: FB
Sample ID: HVL-013124-25
Date: 1/31/24
Weather: Cloudy

DTW
TOS
Intake
BOS
Total Depth

Sampling Method: Dedicated | 1.75" QED SamplePro | Bail | Peristaltic | (Grab) | Other

Meter: MP-20 / (YSI)

CONTROL SETTINGS:
Refill
Discharge
Pressure
Flow

1 ft water = 0.62L
1L = 0.26 gallons

One Well Volume (liters)
Total Volume Bailed (liters)
Other:
Flow Setting:

Filtered? (Y) N
Locked? Y (N)
Water in Protector? Y (N)
Damage? Y (N)

Sample Containers:
1000 ml Poly
500 ml Poly
250 ml Poly
125 ml Poly
500 ml HNO3 x2
500 ml H2SO4 x2
40 ml VOA x3 x6
1000 ml Amber
125 ml NaOH

TIME	DTW	Temp.	Sp.Cond.	DO	pH	Eh	Turbidity	Q / Vol.
1335		13.8	5.3	7.59	8.37	108.0	0.21	

Notes / Observations (color, odor, anomalies, etc):

Stabilization Parameters: pH/DO ± 0.2, SpC ± 10%, Temp ± 0.5°C, Turb. ± 10% or ≤ 5

SAMPLER: Alex Deszo
Printed Name

AD
Signature

SCS ENGINEERS
2405 140th ave NE #107
Bellevue, WA 98005 (425) 746-4600

Groundwater Sampling Data Sheet

Project #: 04224002.02
Site: HVL
Well ID: MW-295
Sample ID: HVL-013124-26
Date: 1/31/24
Weather: Cloudy

14.78 DTW
TOS
Intake
BOS
Total Depth

Sampling Method: Dedicated | 1.75" QED SamplePro | Bail | Peristaltic | Grab | Other
Meter: MP-20 YSI

CONTROL SETTINGS: 1 ft water = 0.62L 1L = 0.26 gallons

Refill 10 One Well Volume (liters) Other:
Discharge 5 Flow Setting:
Pressure ~~30~~ 20 Total Volume Bailed (liters)
Flow

Filtered? (Y) N Locked? (Y) N Water in Protector? Y (N) Damage? Y (N)

Sample Containers:
1000 ml Poly | 500 ml Poly | 250 ml Poly | 125 ml Poly
500 ml HNO3 x2 | 500 ml H2SO4 x2 | 40 ml VOA x3 x6 | 1000 ml Amber
125 ml NaOH

Notes / Observations (color, odor, anomalies, etc):

TIME	DTW	Temp.	Sp.Cond.	DO	pH	Eh	Turbidity	Q / Vol.
0924		12.6	179.1	4.59	5.52	169.5	890	
0929		11.7	167.5	3.76	5.78	196.3	50	
0932		11.8	179.6	3.30	5.83	209.0	44	
0935		11.8	183.2	3.16	5.84	216.8	32	
0938		11.9	189.4	3.11	5.84	219.8	23	
0941		11.9	186.3	3.02	5.85	223.5	20	
0944		11.9	188.8	2.90	5.87	225.9	17	

Stabilization Parameters: pH/DO ± 0.2, SpC ± 10%, Temp ± 0.5°C, Turb. ± 10% or ≤ 5

SAMPLER: Alex Jesse
Printed Name

Signature

SCS ENGINEERS
2405 140th ave NE #107
Bellevue, WA 98005 (425) 746-4600

Groundwater Sampling Data Sheet

Project #: 01224002.02
Site: HVL
Well ID: HVL-013124-27
Sample ID: MW-175
Date: 1/31/24
Weather: Rainy

127.45 DTW
TOS
Intake
BOS
Total Depth

Sampling Method: Dedicated | 1.75" QED SamplePro | Bail | Peristaltic | Grab | Other

Meter: MP-20 YSI

CONTROL SETTINGS: 1 ft water = 0.62L 1L = 0.26 gallons

Refill: 8
Discharge: 7
Pressure: 80
Flow: 200ml/min

One Well Volume (liters):
Total Volume Bailed (liters):
Other:
Flow Setting:

Filtered? (Y) N
Locked? (Y) N
Water in Protector? Y (N)
Damage? Y (N)

Sample Containers:
1000 ml Poly
500 ml Poly
250 ml Poly
125 ml Poly
500 ml HNO3 x2
500 ml H2SO4 x2
40 ml VOA x3 x6
1000 ml Amber
125 ml NaOH

Notes / Observations (color, odor, anomalies, etc):

TIME	DTW	Temp.	Sp.Cond.	DO	pH	Eh	Turbidity	Q / Vol.
0854		13.7	321.3	7.58	6.48	257.6	5.5	
0859		16.8	3338	1.61	5.81	292.2	3.0	
0902		17.0	331.1	0.50	5.68	305.2	2.9	
0905		17.0	330.7	0.35	5.66	309.3	2.9	
0908		17.1	330.5	0.30	5.66	311.2	2.9	
0911		17.1	312.1	0.26	5.65	312.1	2.9	
0914		17.2	312.5	0.23	5.65	312.6	2.9	

Stabilization Parameters: pH/DO ± 0.2, SpC ± 10%, Temp ± 0.5°C, Turb. ± 10% or ≤ 5

SAMPLER: Jovany Estrada
Printed Name

Signature

SCS ENGINEERS
2405 140th ave NE #107
Bellevue, WA 98005 (425) 746-4600

Groundwater Sampling Data Sheet

Project #: 04224002.02
Site: HVL
Well ID: Paul Bunyon
Sample ID: HVL-013124-28
Date: 1/31/24
Weather: Cloudy

DTW
TOS
Intake
BOS
Total Depth

Sampling Method: Dedicated | 1.75" QED SamplePro | Bail | Peristaltic | Grab | Other

Meter: MP-20 YSI

CONTROL SETTINGS:
Refill
Discharge
Pressure
Flow

1 ft water = 0.62L
1L = 0.26 gallons

One Well Volume (liters)
Other :
Flow Setting :
Total Volume Bailed (liters)

Filtered? Y N
Locked? Y N
Water in Protector? Y N
Damage? Y N

Sample Containers:
1000 ml Poly
500 ml Poly
250 ml Poly
125 ml Poly
500 ml HNO3 x2
500 ml H2SO4 x2
40 ml VOA x3 x6
1000 ml Amber
125 ml NaOH

Notes / Observations (color, odor, anomalies, etc):

TIME	DTW	Temp.	Sp.Cond.	DO	pH	Eh	Turbidity	Q / Vol.
1440		11.9	285.8	4.55	6.80	312.7	2.48	

Stabilization Parameters: pH/DO ± 0.2, SpC ± 10%, Temp ± 0.5°C, Turb. ± 10% or ≤ 5

SAMPLER: Alex Dosso
Printed Name

AD
Signature

SCS ENGINEERS
2405 140th ave NE #107
Bellevue, WA 98005 (425) 746-4600

Groundwater Sampling Data Sheet

Project #: 04224002.02
Site: HVL
Well ID: Corliss
Sample ID: HVL-013124-29
Date: 1/31/24
Weather: Cloudy

DTW
TOS
Intake
BOS
Total Depth

Sampling Method : Dedicated | 1.75" QED SamplePro | Bail | Peristaltic | (Grab) | Other

Meter: MP-20 (YSI)

CONTROL SETTINGS:
Refill
Discharge
Pressure
Flow

1 ft water = 0.62L
1L = 0.26 gallons

One Well Volume (liters)
Total Volume Bailed (liters)
Other :
Flow Setting :

Filtered? (Y) N
Locked? Y (N)
Water in Protector? Y (N)
Damage? Y (N)

Sample Containers:
1000 ml Poly
500 ml Poly
250 ml Poly
125 ml Poly
500 ml HNO3 x2
500 ml H2SO4 x2
40 ml VOA x3 x6
1000 ml Amber
125 ml NaOH

TIME	DTW	Temp.	Sp.Cond.	DO	pH	Eh	Turbidity	Q / Vol.

Notes / Observations (color, odor, anomalies, etc):

Water shut off at facility. No Sample.

Stabilization Parameters: pH/DO ± 0.2, SpC ± 10%, Temp ± 0.5°C, Turb. ± 10% or ≤ 5

SAMPLER: Alex Pesce
Printed Name

AP
Signature

SCS ENGINEERS
2405 140th ave NE #107
Bellevue, WA 98005 (425) 746-4600

Groundwater Sampling Data Sheet

Project #: ~~04209050.00~~ 04224002.02
Site ~~Stafford Creek~~ HVL
Well ID: Leak Detection - Main
Sample ID: HVL-020524-01
Date: 2/5/24
Weather: Cloudy

Sampling Method: Dedicated | 1.75" QED SamplePro | Bail | Peristaltic | (Grab) | Other

Meter: MP-20 (YSI)

CONTROL SETTINGS:

DTW
TOS
Intake
BOS
Total Depth

Refill
Discharge
Pressure
Flow

1 ft water = 0.62L 1L = 0.26 gallons

One Well Volume (liters)
Total Volume Bailed (liters)
Other :
Flow Setting :

Filtered? Y (N) Locked? Y (N) Water in Protector? Y (N) Damage? Y (N)

Sample Containers:

1000 ml Poly	500 ml Poly	250 ml Poly	125 ml Poly
500 ml HNO3 x2	500 ml H2SO4 x2	40 ml VOA x3 x6	1000 ml Amber
125 ml NaOH			

Notes / Observations (color, odor, anomalies, etc):

TIME	DTW	Temp.	Sp.Cond.	DO	pH	Eh	Turbidity	Q / Vol.
1110		13.2	328.6	4.74	6.68	222.7	42.8	

Stabilization Parameters: pH/DO ± 0.2, SpC ± 10%, Temp ± 0.5°C, Turb. ± 10% or ≤ 5

SAMPLER: Jovany Estrada
Printed Name

Signature

SCS ENGINEERS
2405 140th ave NE #107
Bellevue, WA 98005 (425) 746-4600

Groundwater Sampling Data Sheet

Project #: 042240C2.02
Site: HVL
Well ID: Leachate - Main
Sample ID: HVL-020824-02
Date: 2/8/24
Weather: Cloudy

Sampling Method: Dedicated | 1.75" QED SamplePro | Bail | Peristaltic | Grab | Other

DTW
TOS
Intake
BOS
Total Depth

Meter: MP-20 YSI

CONTROL SETTINGS:
Refill
Discharge
Pressure
Flow

1 ft water = 0.62L
1L = 0.26 gallons

One Well Volume (liters)
Total Volume Bailed (liters)
Other :
Flow Setting :

Filtered? Y (N)
Locked? Y (N)
Water in Protector? Y (N)
Damage? Y (N)

Sample Containers:

1000 ml Poly	500 ml Poly	250 ml Poly	125 ml Poly
500 ml HNO3 x2	500 ml H2SO4 x2	40 ml VOA x3 x6	1000 ml Amber
125 ml NaOH			

Notes / Observations (color, odor, anomalies, etc):

TIME	DTW	Temp.	Sp.Cond.	DO	pH	Eh	Turbidity	Q / Vol.
1140		16.5	9604	2.32	7.54	-60.7	362.4	

Stabilization Parameters: pH/DO ± 0.2, SpC ± 10%, Temp ± 0.5°C, Turb. ± 10% or ≤ 5

SAMPLER: Jovany Estrada
Printed Name

JC
Signature

SCS ENGINEERS
2405 140th ave NE #107
Bellevue, WA 98005 (425) 746-4600

Groundwater Sampling Data Sheet

Project #: 04224002.02
Site: HVL
Well ID: ~~LW-2~~ Leachate-Side Slope
Sample ID: HVL-020824-03
Date: 2/8/24
Weather: Cloudy

Sampling Method: Dedicated | 1.75" QED SamplePro | Bail | Peristaltic | Grab | Other

DTW
TOS
Intake
BOS
Total Depth

Meter: MP-20 (YSI)

CONTROL SETTINGS:
Refill
Discharge
Pressure
Flow

1 ft water = 0.62L
1L = 0.26 gallons

One Well Volume (liters)
Total Volume Bailed (liters)
Other:
Flow Setting:

Filtered? Y (N)
Locked? Y (N)
Water in Protector? Y (N)
Damage? Y (N)

Sample Containers:

1000 ml Poly	500 ml Poly	250 ml Poly	125 ml Poly
500 ml HNO3 x2	500 ml H2SO4 x2	40 ml VOA x3 x6	1000 ml Amber
125 ml NaOH			

TIME	DTW	Temp.	Sp.Cond.	DO	pH	Eh	Turbidity	Q / Vol.
1155		17.5	31360	3.07	7.91	50.9	2995.7	

Notes / Observations (color, odor, anomalies, etc):

Stabilization Parameters: pH/DO ± 0.2, SpC ± 10%, Temp ± 0.5°C, Turb. ± 10% or ≤ 5

SAMPLER: Jovani Estrada
Printed Name

Signature

SCS ENGINEERS
2405 140th ave NE #107
Bellevue, WA 98005 (425) 746-4600

Groundwater Sampling Data Sheet

Project #: ~~04209050.00~~ 04224002.02
Site ~~Stafford Creek~~ HVL
Well ID: Leak Detection-Side Slope
Sample ID: HVL-020824-04
Date: 2/8/24
Weather: Cloudy

Sampling Method : Dedicated | 1.75" QED SamplePro | Bail | Peristaltic | Grab | Other

DTW
TOS
Intake
BOS
Total Depth

Meter: MP-20 YSI

CONTROL SETTINGS:
Refill
Discharge
Pressure
Flow

1 ft water = 0.62L 1L = 0.26 gallons

One Well Volume (liters)
Other :
Flow Setting :
Total Volume Bailed (liters)

Filtered? Y (N) Locked? Y (N) Water in Protector? Y (N) Damage? Y (N)

Sample Containers:

1000 ml Poly	500 ml Poly	250 ml Poly	125 ml Poly
500 ml HNO3 x2	500 ml H2SO4 x2	40 ml VOA x3 x6	1000 ml Amber
125 ml NaOH			

Notes / Observations (color, odor, anomalies, etc):

TIME	DTW	Temp.	Sp.Cond.	DO	pH	Eh	Turbidity	Q / Vol.
1215		15.1	25590	2.35	7.88	75.0	472.6	

Stabilization Parameters: pH/DO ± 0.2, SpC ± 10%, Temp ± 0.5°C, Turb. ± 10% or ≤ 5

SAMPLER: Jovanni Estrada
Printed Name

JE
Signature

SCS ENGINEERS

GROUNDWATER SAMPLING INSTRUMENT CALIBRATION DOCUMENTATION FORM

Date	11/30/21					
Time	825					
Weather (sky or precip, temp)	Cloudy, Rain, 52°F					
Parameter	Conductivity	pH 4	pH 7	D.O.	Turbidity	Comments/Exceptions
Type of Calibration	Standard	Standard	Standard	Standard	Standard	
Standard Value	1413	4.00	7.00	100% or ~8.5	1000, 10, 0.2 800, 100, 20, <0.1	
Pre-Cal Reading	1450	4.02	7.03	7.34	—	
Post Cal Reading	1413	4.00	7.00	8.5	—	
Descrepancy	NO					
Calib. Successful?	Yes					
Calibration by	AMD					
Instrument Type, ID	(YSI Pro DDS) / YSI 556 / Rental				(YSI Pro DDS / HACH2000)	
Calibration Location	HVL office					

* If Direct Reading is Unavailable, Assume pressure = 760 mm - 2.5 (altitude in ft/100)

SCS ENGINEERS

GROUNDWATER SAMPLING INSTRUMENT CALIBRATION DOCUMENTATION FORM

Date	1/30/24					
Time	1000					
Weather (sky or precip, temp)	Rainy					
Parameter	Conductivity	pH 4	pH 7	D.O.	Turbidity	Comments/Exceptions
Type of Calibration	Standard	Standard	Standard	Standard	Standard	
Standard Value	1413	4.00	7.00	100% or ~8.5	1000, 10, 0.2 800, 100, 20, <0.1	
Pre-Cal Reading	1711	4.07	7.09	10.2		
Post Cal Reading	1413	4.0	7.00	8.5		
Descrepancy	No-					
Calib. Successful?	YES					
Calibration by	J. Estrada					
Instrument Type, ID	YSI Pro DDS / YSI 556 / Rental				YSI Pro DDS / HACH2000	
Calibration Location	MW-15					

* If Direct Reading is Unavailable, Assume pressure = 760 mm - 2.5 (altitude in ft/100)

SCS ENGINEERS

GROUNDWATER SAMPLING INSTRUMENT CALIBRATION DOCUMENTATION FORM

Date	1/31/24					
Time	0830					
Weather (sky or precip, temp)	Rainy					
Parameter	Conductivity	pH 4	pH 7	D.O.	Turbidity	Comments/Exceptions
Type of Calibration	Standard	Standard	Standard	Standard	Standard	
Standard Value	1413	4.00	7.00	100% or ~8.5	1000, 10, 0.2 800, 100, 20, <0.1	
Pre-Cal Reading	1321	4.24	7.05	10.2		
Post Cal Reading	1413	4.00	7.00	8.5		
Descrepancy	No.					
Calib. Successful?	Yes					
Calibration by	T. Eshmon					
Instrument Type, ID	YSI Pro DDS / YSI 556 / Rental				YSI Pro DDS / HACH2000	
Calibration Location	OFFICE					

* If Direct Reading is Unavailable, Assume pressure = 760 mm - 2.5 (altitude in ft/100)

SCS ENGINEERS

GROUNDWATER SAMPLING INSTRUMENT CALIBRATION DOCUMENTATION FORM

Date	1/31/24					
Time	0900					
Weather (sky or precip, temp)	Cloudy 54° F					
Parameter	Conductivity	pH 4	pH 7	D.O.	Turbidity	Comments/Exceptions
Type of Calibration	Standard	Standard	Standard	Standard	Standard	
Standard Value	1413	4.00	7.00	100% or ~8.5	1000, 10, 0.2 800, 100, 20, <0.1	
Pre-Cal Reading	1363	4.02	6.99	8.57		
Post Cal Reading	1413	4.00	7.00	8.5		
Descrepancy	No					
Calib. Successful?	Yes					
Calibration by	AMD					
Instrument Type, ID	YSI Pro DDS / YSI 556 / Rental				YSI Pro DDS / HACH2000	
Calibration Location	HVL office					

* If Direct Reading is Unavailable, Assume pressure = 760 mm - 2.5 (altitude in ft/100)

SCS ENGINEERS

GROUNDWATER SAMPLING INSTRUMENT CALIBRATION DOCUMENTATION FORM

Date	2/5/2024					
Time	1030					
Weather (sky or precip, temp)	Cloudy					
Parameter	Conductivity	pH 4	pH 7	D.O.	Turbidity	Comments/Exceptions
Type of Calibration	Standard	Standard	Standard	Standard	Standard	
Standard Value	1413	4.00	7.00	100% or ~8.5	1000, 10, 0.2 800, 100, 20, <0.1	
Pre-Cal Reading	1426	4.08	7.03	9.23		
Post Cal Reading	1413	4.0	7.00	8.5		
Descrepancy	No					
Calib. Successful?	yes					
Calibration by	J. Estrada					
Instrument Type, ID	YSI Pro DDS / YSI 556 / Rental				YSI Pro DDS / HACH2000	
Calibration Location	MW-14					

* If Direct Reading is Unavailable, Assume pressure = 760 mm - 2.5 (altitude in ft/100)

Data Validation Report

SEMI-ANNUAL EVENT NO. 1 - 2024 DATA VALIDATION REPORT – HIDDEN VALLEY LANDFILL

Project Details

Project No.	04224002.02	**Site Name**	Hidden Valley Landfill
Data Validator	Alex Deszo	**Data Level**	Level 2
Date	5/8/24	**DV Tier**	Tier 1
QA Document	Hidden Valley Landfill Groundwater Monitoring Plan, October 18, 2018.		

Sample Login Summary

Sample Group	Sample Login Comments	Analytical Lab (Primary)
280-187169-1	No Comment.	Eurofins TestAmerica, Denver
280-187213-1	A trip blank was submitted for analysis with these samples; however, it was not listed on the Chain of Custody (COC).	Eurofins TestAmerica, Denver
280-187214-1	No Comment.	Eurofins TestAmerica, Denver

Analytical Summary

Sample Group	Analyses						
	TDS/Alk/ NO3	Metals	NH3/TOC	VOCs	Anions	TSS	COD and Color
280-187169-1	X	X[1]	X	X	X	X	--
280-187213-1	X	X[1]	X	X	X	X	--
280-187214-1	X[4]	X[2]	X	X	X	--	X

Notes:

1. Dissolved metals (Ca, Mg, Na, K, Fe, Mn)
2. Total metals only (As, Fe, Mn, Zn).
3. Total metals (Ca, Mg, Na, K, Fe, Mn)
4. NO3 and NO2 only.

Laboratory Quality Assurance Samples

Lab QA Samples	Results	Comments
Method Blank	Acceptable.	See case narratives.
LCS/LCSD	Acceptable.	See case narratives.
MS/MSD	Acceptable.	See case narratives.
Organics	Acceptable.	See case narratives.
General Comments	Acceptable.	See case narratives.

Field Quality Assurance Samples

Field QA Samples	Sample Group	Analytes	Notes
QC-TB	280-187213-1	None.	

Lab Quality Flags

Flag	Sample Groups	Comments
4	280-187169-1, 280-187214-1	MS, MSD: The analyte present in the original sample is greater than 4 times the matrix spike concentration; therefore, control limits are not applicable.
*1	280-187213-1	LCS/LCSD RPD exceeds control limits.
F2	280-187169-1	MS/MSD RPD exceeds control limits
F1	280-187169-1, 280-187213-1, 280-187214-1	MS and/or MSD recovery exceeds control limits.
J	280-187169-1, 280-187213-1, 280-187214-1	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
H	280-187213-1	Sample was prepped or analyzed beyond the specified holding time

Duplicate Evaluation

Analyte	Units	MW-11S (HVL-012523-02)	MW-11S DUP (HVL-012523-04)	RPD (%)
Alkalinity	mg/L	81	80	1.24
Calcium, Dissolved	mg/L	25	25	0.00
Chloride	mg/L	34	34	0.00
Iron, Total	mg/L	0.01	0.01	0.00
Magnesium, Dissolved	mg/L	7.5	7.6	1.32
Nitrate as N	mg/L	3.9	3.9	0.00
Potassium, Dissolved	mg/L	5.7	5.8	1.74
Sodium, Dissolved	mg/L	20	20	0.00
Sulfate	mg/L	8.4	8.4	0.00
Total Dissolved Solids	mg/L	32	140	125.58
Total Organic Carbon	mg/L	1.5	1.4	6.90

U = Non-detection. Reporting limit (RL) used for calculation of RPD when necessary.

Additional Data Flags

Flag	Description

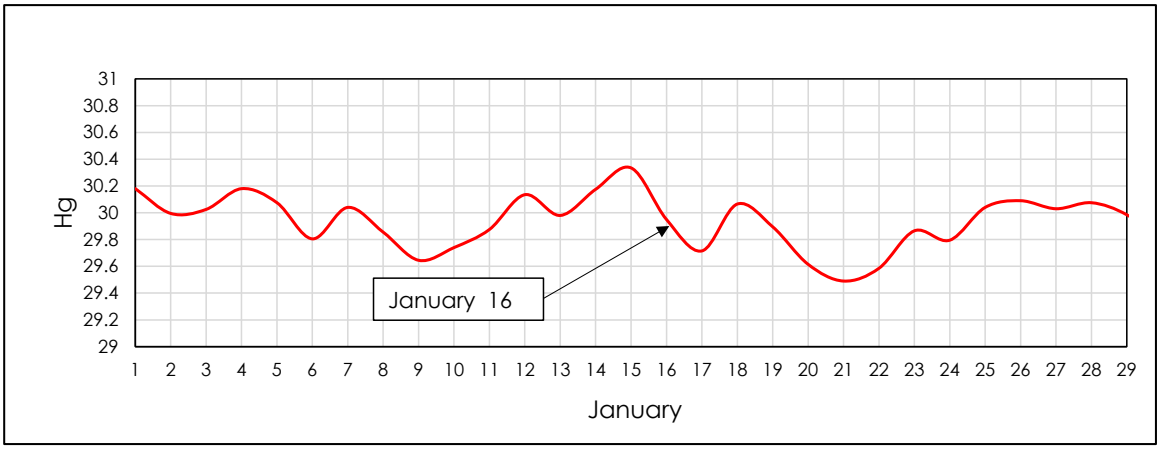
U	Not detected above the method reporting limit.

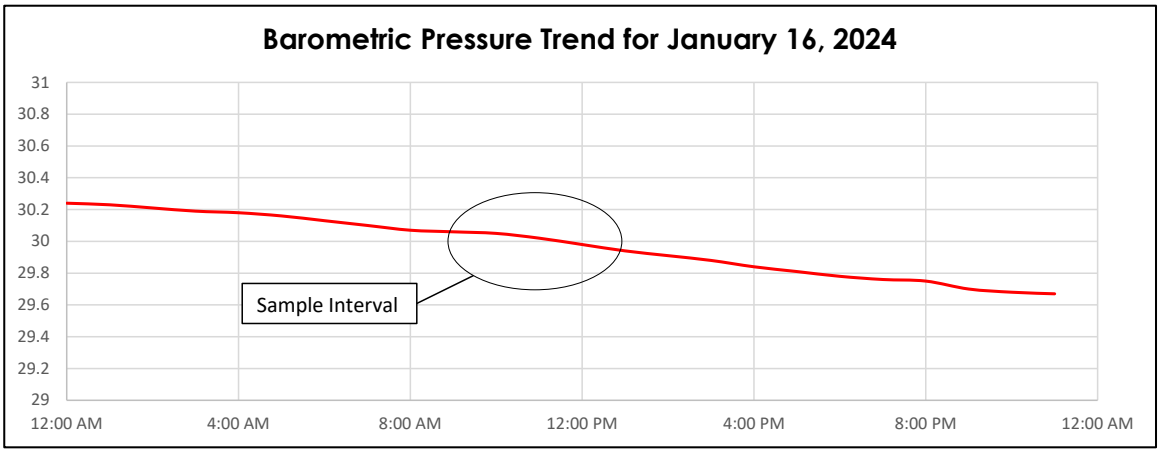
Qualified Data and Usability

Lab qualifiers are noted. All data, as qualified, are acceptable for use.

Landfill Gas Monitoring Results

Barometric Pressure Trend - January 2024
Hidden Valley Landfill, Pierce County, Washington





Monthly Data Source: Wunderground.com (South Hill, WA)
Lat: 47.10 Long: 122.27 Elev: 561 ft-AMSL
Data Source:
https://www.wunderground.com/dashboard/pws/KWASOUTH7/table/2024-01-16/2024-01-16/monthly

Daily Data Source: Wunderground.com (South Hill, WA)
Lat: 47.10 Long: 122.27 Elev: 561 ft-AMSL
Data Source:
https://www.wunderground.com/dashboard/pws/KWASOUTH7/table/2024-01-16/2024-01-16/monthly

Landfill Gas Probe Monitoring

SCS Engineers

Hidden Valley Landfill

4224002.03

PCRCD dba LRI

January 16, 2024

Location Reference Designation	Date	Time	Pressure (in. H_2O)	CH_4 (% vol.)	CO_2 (% vol.)	O_2 (% vol.)	Comments: Spike CH4 *Note 1* (% vol.)	Comments: Other
Gas Probes								
GP-1A	16-Jan-24	0:00	0.26	0.0	4.5	11.9	-	
GP-1B	16-Jan-24	0:00	0.26	0.0	5.5	16.6	-	
GP-1C	16-Jan-24	0:00	0.34	0.0	7.7	12.2	-	
GP-2A	16-Jan-24	0:00	0.33	0.1	11.6	7.7	0.1	
GP-2B	16-Jan-24	0:00	0.30	0.0	0.6	22.8	-	
GP-3S	16-Jan-24	0:00	0.24	0.0	4.2	11.9	-	
GP-3M	16-Jan-24	0:00	0.31	0.0	6.3	6.5	-	
GP-3D	16-Jan-24	0:00	0.29	0.0	5.8	10.3	-	
GP-4A	16-Jan-24	0:00	0.27	0.0	7.7	10.5	-	
GP-4B	16-Jan-24	0:00	0.24	0.0	0.6	22.4	-	
GP-5A	16-Jan-24	0:00	0.22	0.0	0.4	22.4	-	
GP-5B	16-Jan-24	0:00	0.24	0.0	0.2	22.5	-	
GP-6	16-Jan-24	0:00	0.26	0.0	0.3	22.4	-	
GP-7S	16-Jan-24	0:00	0.25	0.0	0.3	22.3	-	
GP-7D	16-Jan-24	0:00	0.23	0.0	0.5	22.0	-	
GP-8A	16-Jan-24	0:00	0.24	0.0	2.9	18.8	-	
GP-8B	16-Jan-24	0:00	0.20	0.0	0.8	21.2	-	
GP-9	16-Jan-24	0:00	0.25	0.0	4.2	15.9	-	
GP-10	16-Jan-24	0:00	0.28	0.0	0.4	21.5	-	
GP-11	16-Jan-24	0:00	0.09	0.0	3.6	16.5	-	
GP-12	16-Jan-24	0:00	0.25	0.0	2.7	17.4	-	
GP-13A	16-Jan-24	0:00	0.25	0.0	0.4	21.7	-	
GP-13B	16-Jan-24	0:00	0.19	0.0	0.2	21.8	-	
GP-14S	16-Jan-24	0:00	0.24	0.0	2.9	19.0	-	
GP-14D	16-Jan-24	0:00	0.13	0.0	4.5	10.3	-	
GP-15A	16-Jan-24	0:00	0.25	0.0	4.7	9.0	-	
GP-15B	16-Jan-24	0:00	0.16	0.3	13.0	0.5	0.3	
GP-16A	16-Jan-24	0:00	0.32	0.0	3.8	18.0	-	
GP-16B	16-Jan-24	0:00	0.21	0.0	3.3	18.4	-	
GP-17	16-Jan-24	0:00	0.20	0.0	0.3	21.6	-	
GP-18	16-Jan-24	0:00	0.24	0.0	0.8	21.0	-	
GP-19	16-Jan-24	0:00	0.20	0.0	3.7	19.2	-	
LFG-1							-	*Note 2*
LFG-2							-	*Note 2*
LFG-3							-	*Note 2*

General Data

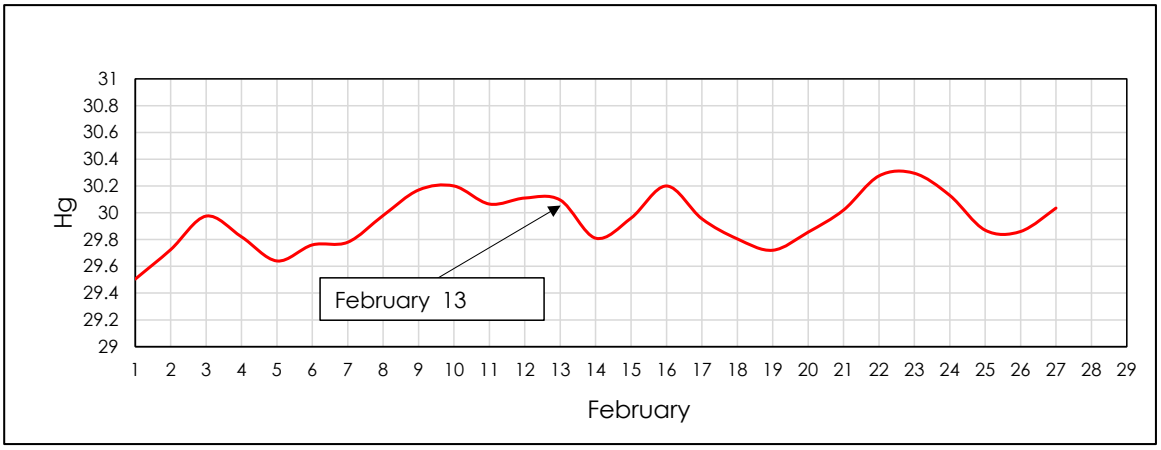
		Weather Conditions	
Monitored by:	T.Hanrahan	Sky Cover:	
Instruments:	GEM 2000	Wind / Rain / Snow:	
Calibration Date:	16-Jan-24	Temperature (°F):	

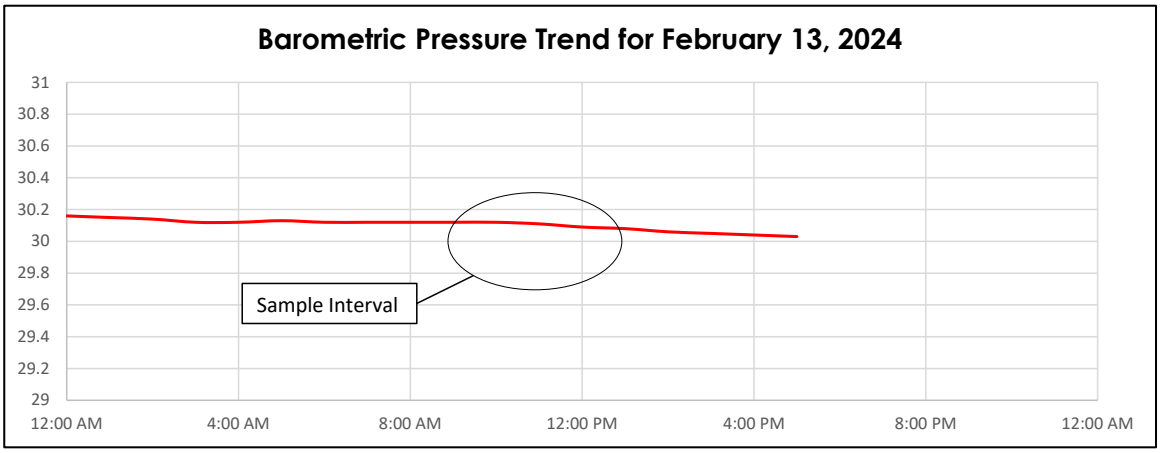
Notes

1. Measurement for spike concentrations of CH_4 and CO_2 are recorded if observed during sampling
2. Not monitored. Probe casing rusted shut.

GP = Gas Probe	CH_4 = Methane	S = shallow	A= shallow
NM = Not measured	CO_2 = Carbon Dioxide	M = medium	B = medium
equipment malfunction	O_2 = Oxygen	D = deep	C = deep

Barometric Pressure Trend - February 2024
Hidden Valley Landfill, Pierce County, Washington





Monthly Data Source: Wunderground.com (South Hill, WA)
Lat: 47.10 Long: 122.27 Elev: 561 ft-AMSL
Data Source:
https://www.wunderground.com/dashboard/pws/KWASOUTH7/table/2024-02-13/2024-02-13/monthly

Daily Data Source: Wunderground.com (South Hill, WA)
Lat: 47.10 Long: 122.27 Elev: 561 ft-AMSL
Data Source:
https://www.wunderground.com/dashboard/pws/KWASOUTH7/table/2024-02-13/2024-02-13/monthly

Landfill Gas Probe Monitoring

SCS Engineers

Hidden Valley Landfill

4224002.03

PCRCD dba LRI

February 13, 2024

Location Reference Designation	Date	Time	Pressure (in. H_2O)	CH_4 (% vol.)	CO_2 (% vol.)	O_2 (% vol.)	Comments: Spike CH4 *Note 1* (% vol.)	Comments: Other
Gas Probes								
GP-1A	13-Feb-24	0:00	0.16	0.0	4.6	11.2	-	
GP-1B	13-Feb-24	0:00	0.17	0.0	5.8	15.7	-	
GP-1C	13-Feb-24	0:00	0.07	0.0	2.9	18.1	-	
GP-2A	13-Feb-24	0:00	0.15	0.0	1.9	19.2	-	
GP-2B	13-Feb-24	0:00	0.15	0.0	2.0	21.8	-	
GP-3S	13-Feb-24	0:00	0.16	0.0	4.3	9.1	-	
GP-3M	13-Feb-24	0:00	0.09	0.0	6.1	3.9	-	
GP-3D	13-Feb-24	0:00	0.15	0.0	9.1	6.9	-	
GP-4A	13-Feb-24	0:00	0.16	0.0	0.3	21.9	-	
GP-4B	13-Feb-24	0:00	0.12	0.0	0.2	22.0	-	
GP-5A	13-Feb-24	0:00	0.17	0.0	0.1	21.9	-	
GP-5B	13-Feb-24	0:00	0.11	0.0	0.1	21.9	-	
GP-6	13-Feb-24	0:00	0.16	0.0	0.1	21.8	-	
GP-7S	13-Feb-24	0:00	0.17	0.0	0.5	21.3	-	
GP-7D	13-Feb-24	0:00	0.09	0.0	0.2	21.8	-	
GP-8A	13-Feb-24	0:00	0.17	0.0	3.0	18.2	-	
GP-8B	13-Feb-24	0:00	0.06	0.0	0.8	21.0	-	
GP-9	13-Feb-24	0:00	0.16	0.0	0.9	20.9	-	
GP-10	13-Feb-24	0:00	0.17	0.0	0.5	21.5	-	
GP-11	13-Feb-24	0:00	0.16	0.0	0.2	21.4	-	
GP-12	13-Feb-24	0:00	0.17	0.0	0.1	21.4	-	
GP-13A	13-Feb-24	0:00	0.15	0.0	0.1	21.6	-	
GP-13B	13-Feb-24	0:00	0.08	0.0	0.1	21.7	-	
GP-14S	13-Feb-24	0:00	0.11	0.0	3.3	17.3	-	
GP-14D	13-Feb-24	0:00	0.06	0.0	4.3	11.4	-	
GP-15A	13-Feb-24	0:00	0.16	0.0	2.6	15.3	-	
GP-15B	13-Feb-24	0:00	0.09	0.0	10.7	3.3	-	
GP-16A	13-Feb-24	0:00	0.16	0.0	0.9	20.8	-	
GP-16B	13-Feb-24	0:00	0.03	0.0	0.3	21.5	-	
GP-17	13-Feb-24	0:00	0.25	0.0	1.2	20.6	-	
GP-18	13-Feb-24	0:00	0.16	0.0	0.3	21.6	-	
GP-19	13-Feb-24	0:00	0.17	0.0	0.5	21.3	-	
LFG-1							-	*Note 2*
LFG-2							-	*Note 2*
LFG-3							-	*Note 2*

General Data

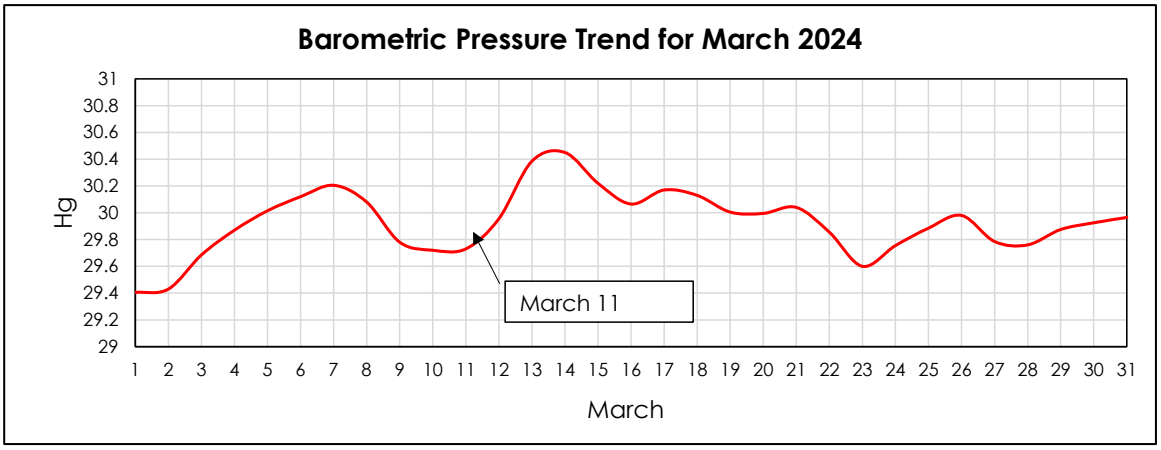
		Weather Conditions	
Monitored by:	T.Hanrahan	Sky Cover:	
Instruments:	GEM 2000	Wind / Rain / Snow:	
Calibration Date:	13-Feb-24	Temperature (°F):	

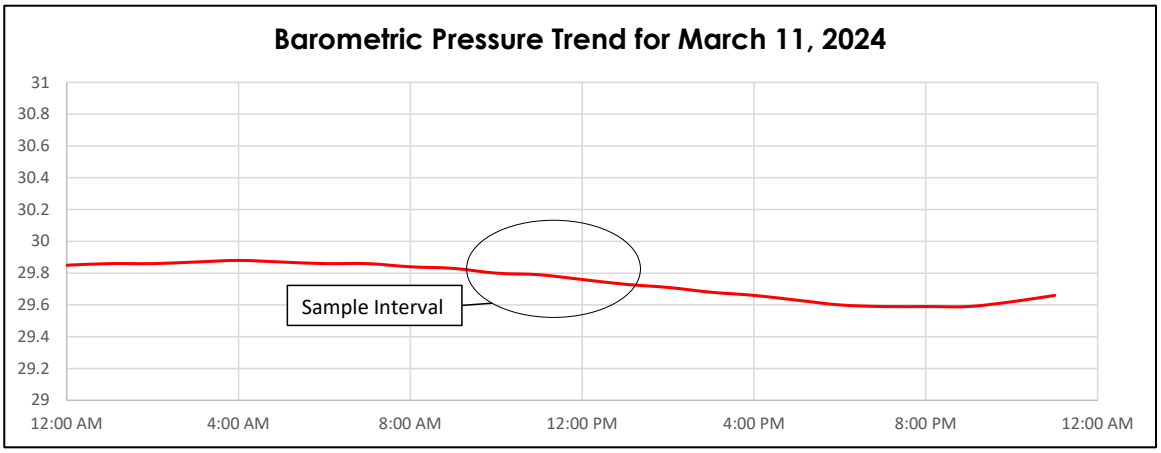
Notes

1. Measurement for spike concentrations of CH_4 and CO_2 are recorded if observed during sampling
2. Not monitored. Probe casing rusted shut.

GP = Gas Probe	CH_4 = Methane	S = shallow	A= shallow
NM = Not measured	CO_2 = Carbon Dioxide	M = medium	B = medium
equipment malfunction	O_2 = Oxygen	D = deep	C = deep

Barometric Pressure Trend - March 2024 Hidden Valley Landfill, Pierce County, Washington





Monthly Data Source: Wunderground.com (South Hill, WA)
Lat: 47.10 Long: 122.27 Elev: 561 ft-AMSL
Data Source:
https://www.wunderground.com/dashboard/pws/KWASOUTH7/table/2024-03-11/2024-03-11/monthly

Daily Data Source: Wunderground.com (South Hill, WA)
Lat: 47.10 Long: 122.27 Elev: 561 ft-AMSL
Data Source:
https://www.wunderground.com/dashboard/pws/KWASOUTH7/table/2024-03-11/2024-03-11/daily

Landfill Gas Probe Monitoring

SCS Engineers

Hidden Valley Landfill
PCRCD dba LRI

4224002.03
March 11, 2024

Location Reference Designation	Date	Time	Pressure (in. H_2O)	CH_4 (% vol.)	CO_2 (% vol.)	O_2 (% vol.)	Comments: Spike CH4 *Note 1* (% vol.)	Comments: Other
Gas Probes								
GP-1A	11-Mar-24	12:28	0.20	0.0	4.6	9.9	-	
GP-1B	11-Mar-24	12:31	-0.01	0.0	5.3	15.7	-	
GP-1C	11-Mar-24	12:35	NR	0.0	6.3	12.5	-	
GP-2A	11-Mar-24	12:39	0.19	0.0	5.0	11.4	-	
GP-2B	11-Mar-24	12:42	0.25	0.0	0.5	21.8	-	
GP-3S	11-Mar-24	12:47	0.05	0.0	4.3	6.7	-	
GP-3M	11-Mar-24	12:50	0.05	0.0	5.8	1.2	-	
GP-3D	11-Mar-24	12:53	0.06	0.0	9.0	2.9	-	
GP-4A	11-Mar-24	12:57	-0.01	0.0	3.7	15.3	-	
GP-4B	11-Mar-24	13:00	-0.01	0.0	0.1	22.0	-	
GP-5A	11-Mar-24	13:06	0.00	0.0	0.1	21.9	-	
GP-5B	11-Mar-24	13:09	0.00	0.0	1.9	18.3	-	
GP-6	11-Mar-24	13:13	0.00	0.0	0.1	22.0	-	
GP-7S	11-Mar-24	13:18	0.00	0.0	0.1	21.8	-	
GP-7D	11-Mar-24	13:21	0.00	0.0	0.1	21.5	-	
GP-8A	11-Mar-24	13:28	-0.01	0.0	2.2	19.3	-	
GP-8B	11-Mar-24	13:31	0.14	0.0	0.6	21.0	-	
GP-9	11-Mar-24	13:36	0.00	0.0	2.4	17.8	-	
GP-10	11-Mar-24	13:43	0.00	0.0	0.1	21.8	-	
GP-11	11-Mar-24	13:51	0.01	0.0	1.1	20.0	-	
GP-12	11-Mar-24	13:56	0.00	0.0	1.6	18.0	-	
GP-13A	11-Mar-24	14:00	0.00	0.0	0.1	21.7	-	
GP-13B	11-Mar-24	14:03	0.00	0.0	0.0	21.7	-	
GP-14S	11-Mar-24	14:09	0.01	0.0	3.5	18.1	-	
GP-14D	11-Mar-24	14:12	-0.04	0.0	3.4	11.3	-	
GP-15A	11-Mar-24	14:16	0.01	0.0	2.4	13.4	-	
GP-15B	11-Mar-24	14:19	0.00	0.0	11.3	1.3	-	
GP-16A	11-Mar-24	14:25	0.14	0.0	2.9	17.1	-	
GP-16B	11-Mar-24	14:28	0.00	0.0	1.9	18.7	-	
GP-17	11-Mar-24	14:34	-0.01	0.0	1.2	20.2	-	
GP-18	11-Mar-24	14:39	0.01	0.0	0.9	20.3	-	
GP-19	11-Mar-24	14:49	0.01	0.0	2.9	19.0	-	
LFG-1							-	*Note 2*
LFG-2							-	*Note 2*
LFG-3							-	*Note 2*

General Data

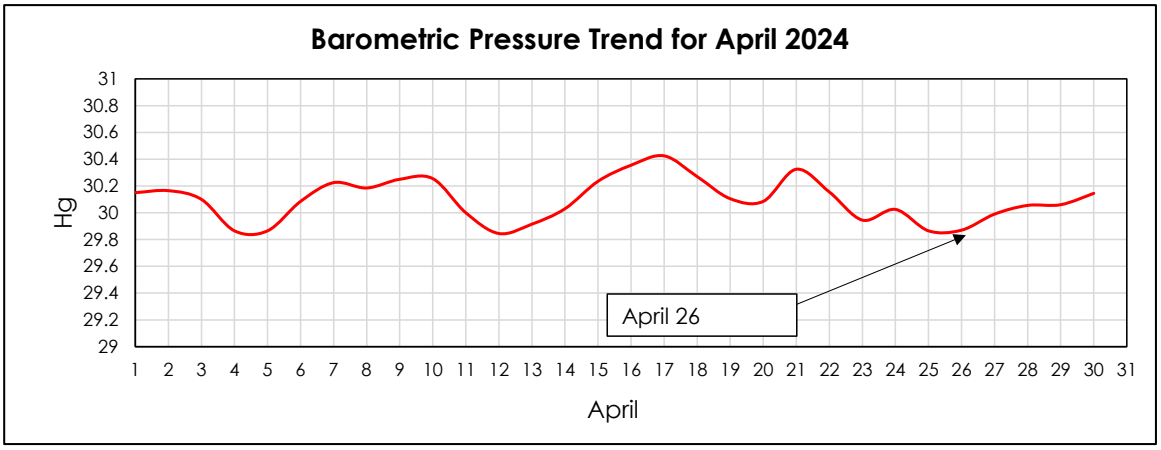
		Weather Conditions	
Monitored by:	T.Hanrahan	Sky Cover:	
Instruments:	GEM 2000	Wind / Rain / Snow:	
Calibration Date:	11-Mar-24	Temperature (°F):	

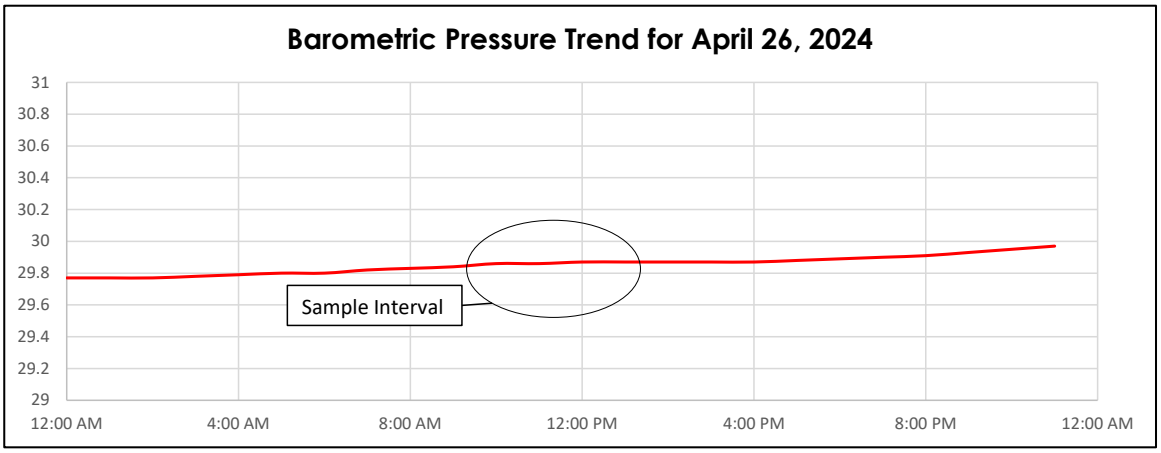
Notes

1. Measurement for spike concentrations of CH_4 and CO_2 are recorded if observed during sampling
2. Not monitored. Probe casing rusted shut.

GP = Gas Probe	CH_4 = Methane	S = shallow	A= shallow
NM = Not measured	CO_2 = Carbon Dioxide	M = medium	B = medium
equipment malfunction	O_2 = Oxygen	D = deep	C = deep

Barometric Pressure Trend - April 2024
Hidden Valley Landfill, Pierce County, Washington





Monthly Data Source: Wunderground.com (South Hill, WA)
Lat: 47.10 Long: 122.27 Elev: 561 ft-AMSL
Data Source:
https://www.wunderground.com/dashboard/pws/KWASOUTH7/table/2024-04-26/2024-04-26/monthly

Daily Data Source: Wunderground.com (South Hill, WA)
Lat: 47.10 Long: 122.27 Elev: 561 ft-AMSL
Data Source:
https://www.wunderground.com/dashboard/pws/KWASOUTH7/table/2024-04-26/2024-04-26/daily

Landfill Gas Probe Monitoring

SCS Engineers

Hidden Valley Landfill

4224002.03

PCRCD dba LRI

April 26, 2024

Location Reference Designation	Date	Time	Pressure (in. H_2O)	CH_4 (% vol.)	CO_2 (% vol.)	O_2 (% vol.)	Comments: Spike CH4 *Note 1* (% vol.)	Comments: Other
Gas Probes								
GP-1A	26-Apr-24	0:00	-0.13	0.0	4.7	13.6	-	
GP-1B	26-Apr-24	0:00	0.14	0.0	6.1	16.6	-	
GP-1C	26-Apr-24	0:00	0.13	0.0	3.5	18.2	-	
GP-2A	26-Apr-24	0:00	0.12	0.0	4.0	17.1	-	
GP-2B	26-Apr-24	0:00	-0.08	0.0	0.1	21.4	-	
GP-3S	26-Apr-24	0:00	-0.11	0.0	4.4	10.5	-	
GP-3M	26-Apr-24	0:00	-0.13	0.0	6.0	14.7	-	
GP-3D	26-Apr-24	0:00	-0.14	0.0	7.3	1.0	-	
GP-4A	26-Apr-24	0:00	-0.12	0.0	0.2	21.5	-	
GP-4B	26-Apr-24	0:00	-0.12	0.0	0.1	21.6	-	
GP-5A	26-Apr-24	0:00	-0.11	0.0	0.1	21.7	-	
GP-5B	26-Apr-24	0:00	-0.11	0.0	0.1	21.7	-	
GP-6	26-Apr-24	0:00	-0.11	0.0	0.1	21.7	-	
GP-7S	26-Apr-24	0:00	-0.09	0.0	0.2	21.4	-	
GP-7D	26-Apr-24	0:00	-0.11	0.0	0.9	21.0	-	
GP-8A	26-Apr-24	0:00	-0.13	0.0	4.6	15.8	-	
GP-8B	26-Apr-24	0:00	-0.11	0.0	4.3	16.5	-	
GP-9	26-Apr-24	0:00	-0.10	0.0	3.4	18.6	-	
GP-10	26-Apr-24	0:00	-0.10	0.0	0.2	21.5	-	
GP-11	26-Apr-24	0:00	-0.10	0.0	1.3	20.6	-	
GP-12	26-Apr-24	0:00	-0.10	0.0	0.2	21.5	-	
GP-13A	26-Apr-24	0:00	-0.11	0.0	0.1	21.6	-	
GP-13B	26-Apr-24	0:00	-0.10	0.0	0.1	21.6	-	
GP-14S	26-Apr-24	0:00	-0.10	0.0	0.1	21.5	-	
GP-14D	26-Apr-24	0:00	-0.09	0.0	0.1	21.6	-	
GP-15A	26-Apr-24	0:00	-0.08	0.0	3.7	16.5	-	
GP-15B	26-Apr-24	0:00	-0.09	0.0	11.7	2.8	-	
GP-16A	26-Apr-24	0:00	-0.09	0.0	0.3	21.5	-	
GP-16B	26-Apr-24	0:00	-0.09	0.0	0.2	21.6	-	
GP-17	26-Apr-24	0:00	0.06	0.0	2.4	19.7	-	
GP-18	26-Apr-24	0:00	0.01	0.0	0.1	21.7	-	
GP-19	26-Apr-24	0:00	-0.08	0.0	0.3	21.6	-	
LFG-1							-	*Note 2*
LFG-2							-	*Note 2*
LFG-3							-	*Note 2*

General Data

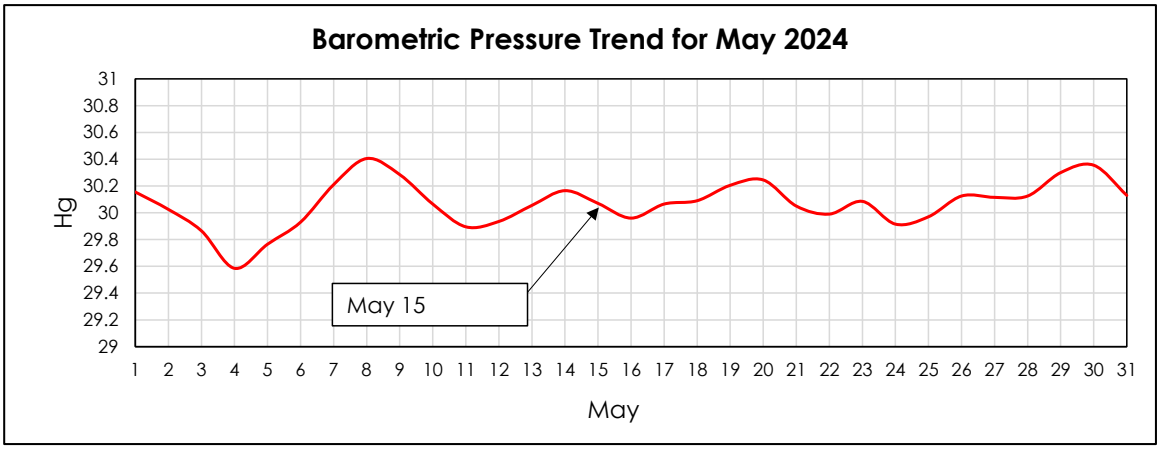
		Weather Conditions	
Monitored by:	T.Hanrahan	Sky Cover:	
Instruments:	GEM 2000	Wind / Rain / Snow:	
Calibration Date:	26-Apr-24	Temperature (°F):	

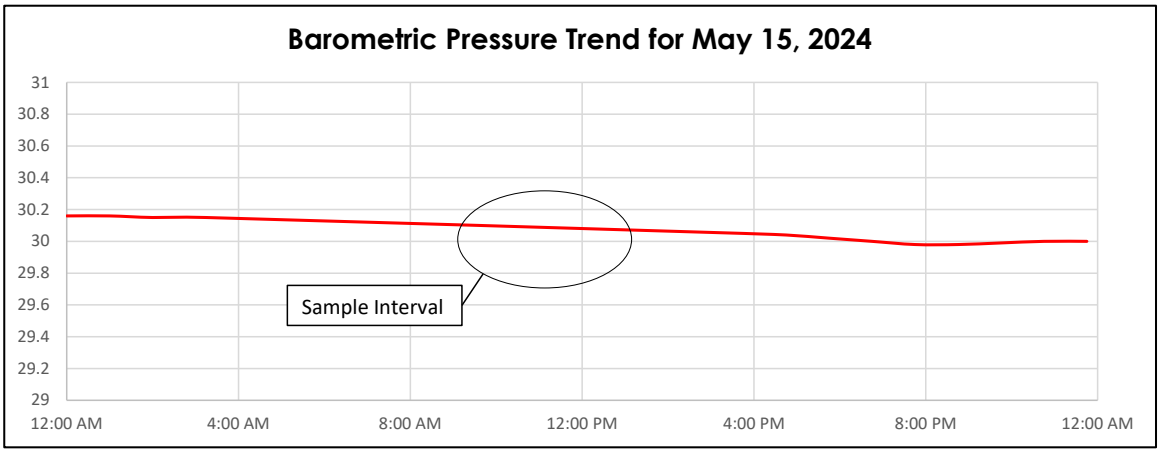
Notes

1. Measurement for spike concentrations of CH_4 and CO_2 are recorded if observed during sampling
2. Not monitored. Probe casing rusted shut.

GP = Gas Probe	CH_4 = Methane	S = shallow	A= shallow
NM = Not measured	CO_2 = Carbon Dioxide	M = medium	B = medium
equipment malfunction	O_2 = Oxygen	D = deep	C = deep

Barometric Pressure Trend - May 2024
Hidden Valley Landfill, Pierce County, Washington





Monthly Data Source: Wunderground.com (South Hill, WA)
Lat: 47.10 Long: 122.27 Elev: 561 ft-AMSL
Data Source:
https://www.wunderground.com/dashboard/pws/KWASOUTH7/table/2024-05-15/2024-05-15/monthly

Daily Data Source: Wunderground.com (South Hill, WA)
Lat: 47.10 Long: 122.27 Elev: 561 ft-AMSL
Data Source:
https://www.wunderground.com/dashboard/pws/KWASOUTH7/table/2024-05-15/2024-05-15/daily

Landfill Gas Probe Monitoring

SCS Engineers

Hidden Valley Landfill

4224002.03

PCRCD dba LRI

May 15, 2024

Location Reference Designation	Date	Time	Pressure (in. H_2O)	CH_4 (% vol.)	CO_2 (% vol.)	O_2 (% vol.)	Comments: Spike CH4 *Note 1* (% vol.)	Comments: Other
Gas Probes								
GP-1A	15-May-24	0:00	-0.12	0.0	3.9	15.5	-	
GP-1B	15-May-24	0:00	-0.13	0.0	5.6	16.8	-	
GP-1C	15-May-24	0:00	-0.11	0.0	1.1	20.1	-	
GP-2A	15-May-24	0:00	-0.09	0.0	0.5	20.6	-	
GP-2B	15-May-24	0:00	-0.05	0.0	0.2	20.7	-	
GP-3S	15-May-24	0:00	-0.13	0.0	2.5	14.8	-	
GP-3M	15-May-24	0:00	-0.08	0.0	5.0	14.4	-	
GP-3D	15-May-24	0:00	-0.09	0.0	5.4	4.6	-	
GP-4A	15-May-24	0:00	-0.07	0.0	0.3	20.9	-	
GP-4B	15-May-24	0:00	-0.07	0.0	0.3	20.7	-	
GP-5A	15-May-24	0:00	-0.03	0.0	3.9	15.6	-	
GP-5B	15-May-24	0:00	-0.09	0.0	0.1	20.9	-	
GP-6	15-May-24	0:00	-0.05	0.0	0.3	20.6	-	
GP-7S	15-May-24	0:00	-0.07	0.0	0.1	20.8	-	
GP-7D	15-May-24	0:00	-0.05	0.0	0.6	20.5	-	
GP-8A	15-May-24	0:00	-0.05	0.0	7.1	9.6	-	
GP-8B	15-May-24	0:00	-0.04	0.0	9.1	10.0	-	
GP-9	15-May-24	0:00	-0.05	0.0	2.7	18.0	-	
GP-10	15-May-24	0:00	-0.03	0.0	0.3	20.2	-	
GP-11	15-May-24	0:00	-0.03	0.0	1.3	20.1	-	
GP-12	15-May-24	0:00	-0.02	0.0	0.2	20.8	-	
GP-13A	15-May-24	0:00	-0.02	0.0	0.1	21.0	-	
GP-13B	15-May-24	0:00	-0.02	0.0	0.1	21.0	-	
GP-14S	15-May-24	0:00	-0.04	0.0	0.1	20.8	-	
GP-14D	15-May-24	0:00	-0.35	0.0	4.4	16.8	-	
GP-15A	15-May-24	0:00	-0.02	0.0	9.2	7.7	-	
GP-15B	15-May-24	0:00	-0.01	0.0	2.7	17.7	-	
GP-16A	15-May-24	0:00	-0.02	0.0	0.2	21.1	-	
GP-16B	15-May-24	0:00	-0.01	0.0	0.2	21.2	-	
GP-17	15-May-24	0:00	-0.02	0.0	0.2	19.2	-	
GP-18	15-May-24	0:00	-0.04	0.0	0.3	21.3	-	
GP-19	15-May-24	0:00	-0.03	0.0	0.1	20.8	-	
LFG-1							-	*Note 2*
LFG-2							-	*Note 2*
LFG-3							-	*Note 2*

General Data

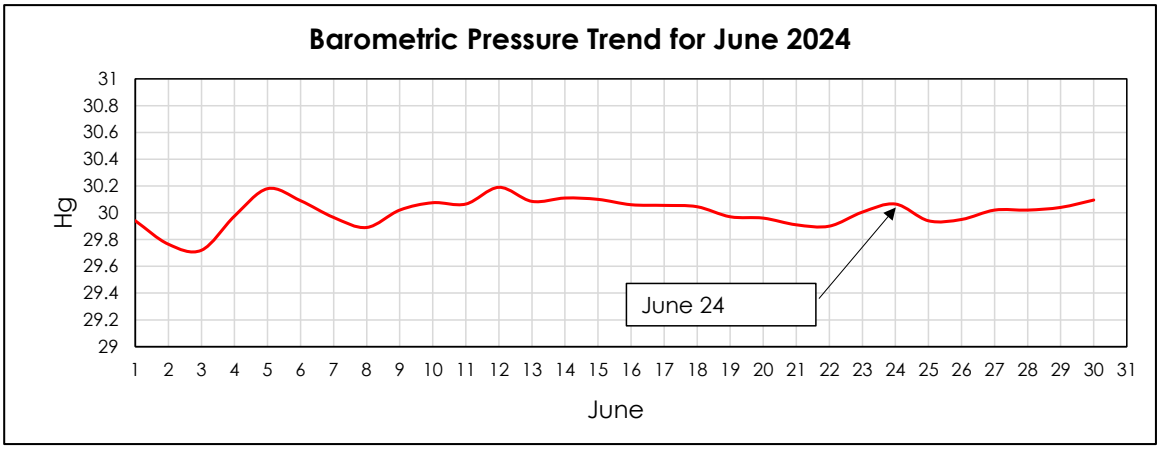
		Weather Conditions	
Monitored by:	T.Hanrahan	Sky Cover:	
Instruments:	GEM 2000	Wind / Rain / Snow:	
Calibration Date:	15-May-24	Temperature (°F):	

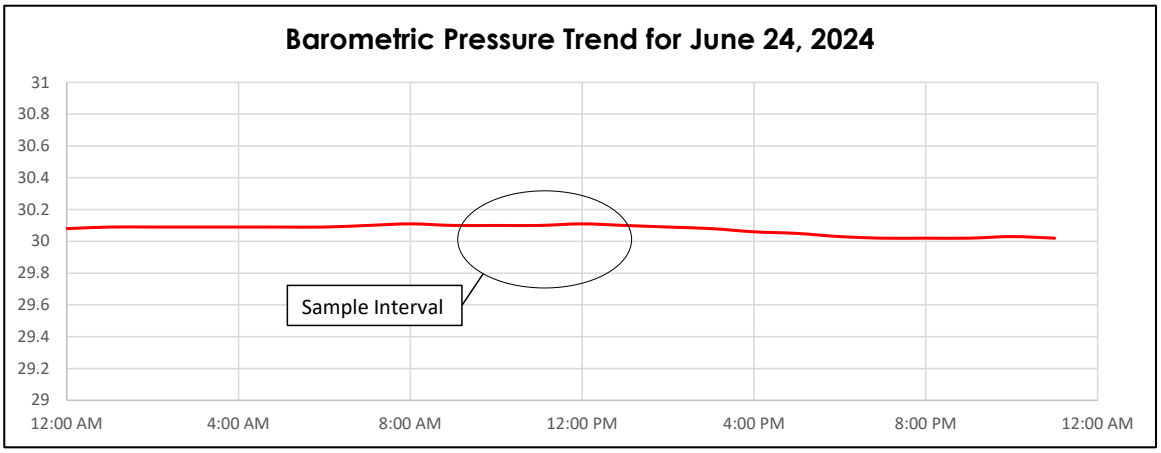
Notes

1. Measurement for spike concentrations of CH_4 and CO_2 are recorded if observed during sampling
2. Not monitored. Probe casing rusted shut.

GP = Gas Probe	CH_4 = Methane	S = shallow	A= shallow
NM = Not measured	CO_2 = Carbon Dioxide	M = medium	B = medium
equipment malfunction	O_2 = Oxygen	D = deep	C = deep

Barometric Pressure Trend - June 2024
Hidden Valley Landfill, Pierce County, Washington





Monthly Data Source: Wunderground.com (South Hill, WA)
Lat: 47.10 Long: 122.27 Elev: 561 ft-AMSL
Data Source:
https://www.wunderground.com/dashboard/pws/KWASOUTH7/table/2024-06-24/2024-06-24/monthly

Daily Data Source: Wunderground.com (South Hill, WA)
Lat: 47.10 Long: 122.27 Elev: 561 ft-AMSL
Data Source:
https://www.wunderground.com/dashboard/pws/KWASOUTH7/table/2024-06-24/2024-06-24/daily

Landfill Gas Probe Monitoring

SCS Engineers

Hidden Valley Landfill

4224002.03

PCRCD dba LRI

June 24, 2024

Location Reference Designation	Date	Time	Pressure (in. H_2O)	CH_4 (% vol.)	CO_2 (% vol.)	O_2 (% vol.)	Comments: Spike CH4 *Note 1* (% vol.)	Comments: Other
Gas Probes								
GP-1A	24-Jun-24	9:24	-0.09	0.0	4.1	13.9	-	
GP-1B	24-Jun-24	9:26	-0.09	0.0	5.6	16.8	-	
GP-1C	24-Jun-24	9:29	-0.08	0.0	1.3	19.9	-	
GP-2A	24-Jun-24	9:32	-0.07	0.0	0.5	20.5	-	
GP-2B	24-Jun-24	9:34	-0.06	0.0	0.2	21.0	-	
GP-3S	24-Jun-24	9:38	-0.09	0.0	2.0	16.5	-	
GP-3M	24-Jun-24	9:40	-0.08	0.0	5.8	6.1	-	
GP-3D	24-Jun-24	9:42	-0.06	0.0	4.9	15.7	-	
GP-4A	24-Jun-24	9:47	-0.05	0.0	0.3	21.0	-	
GP-4B	24-Jun-24	9:49	-0.05	0.0	0.2	21.0	-	
GP-5A	24-Jun-24	9:54	-0.05	0.0	0.5	20.5	-	
GP-5B	24-Jun-24	9:56	-0.04	0.0	0.3	20.5	-	
GP-6	24-Jun-24	10:00	-0.05	0.0	0.2	21.0	-	
GP-7S	24-Jun-24	10:05	-0.06	0.0	0.1	21.1	-	
GP-7D	24-Jun-24	10:07	-0.04	0.0	0.9	20.2	-	
GP-8A	24-Jun-24	10:14	-0.02	0.0	6.2	15.0	-	
GP-8B	24-Jun-24	10:16	-0.03	0.0	4.3	18.1	-	
GP-9	24-Jun-24	10:21	-0.04	0.0	0.3	21.1	-	
GP-10	24-Jun-24	10:27	-0.03	0.0	0.8	19.6	-	
GP-11	24-Jun-24	10:32	-0.04	0.0	1.3	20.1	-	
GP-12	24-Jun-24	10:38	-0.02	0.0	0.2	21.0	-	
GP-13A	24-Jun-24	10:42	-0.03	0.0	0.1	20.9	-	
GP-13B	24-Jun-24	10:45	-0.02	0.0	0.1	20.8	-	
GP-14S	24-Jun-24	10:50	-0.01	0.0	4.7	16.4	-	
GP-14D	24-Jun-24	10:52	-0.03	0.0	3.0	13.1	-	
GP-15A	24-Jun-24	10:56	-0.01	0.0	6.6	12.5	-	
GP-15B	24-Jun-24	10:59	0.00	0.0	1.2	19.7	-	
GP-16A	24-Jun-24	11:05	0.00	0.0	0.1	20.9	-	
GP-16B	24-Jun-24	11:08	0.00	0.0	0.1	21.0	-	
GP-17	24-Jun-24	11:15	0.00	0.0	2.9	17.3	-	
GP-18	24-Jun-24	11:19	0.00	0.0	4.8	14.4	-	
GP-19	24-Jun-24	11:25	0.00	0.0	0.1	21.4	-	
LFG-1							-	*Note 2*
LFG-2							-	*Note 2*
LFG-3							-	*Note 2*

General Data

		Weather Conditions	
Monitored by:	T.Hanrahan	Sky Cover:	
Instruments:	GEM 2000	Wind / Rain / Snow:	
Calibration Date:	24-Jun-24	Temperature (°F):	

Notes

1. Measurement for spike concentrations of CH_4 and CO_2 are recorded if observed during sampling
2. Not monitored. Probe casing rusted shut.

GP = Gas Probe	CH_4 = Methane	S = shallow	A= shallow
NM = Not measured	CO_2 = Carbon Dioxide	M = medium	B = medium
equipment malfunction	O_2 = Oxygen	D = deep	C = deep

Hidden Valley Landfill
Landfill Gas Monitoring of On-site Buildings

Date: 2-14-24
Weather Conditions: Overcast
Instrument: Micro FID
Measured By: JTF

The atmosphere inside buildings at the landfill were monitored for possible intrusion of methane gas. Per WAC 173-351, concentrations of methane in on-site structures must not exceed 25% of the lower explosive limit (LEL). If off-site gas migration is suspected, concentrations of methane in off-site structures must not exceed 100 ppm methane.

The areas monitored included:
- The general overall work area
- Floor drains
- Underground conduit protrusions
- Closed areas where landfill gas could collect, such as under cupboards and inside closets

The gas detection instrument must be calibrated using calibration gas containing methane equal to 50 % LEL. Calibration must be performed before and after the survey is completed.

Checked boxes indicate that the survey revealed **no detectable methane**.

- 1.4 ppm ☐ Main Office - individual office spaces, storage areas and within open crawl-space area.
- 0.1 ppm ☐ Repair Shop – survey atmosphere conditions throughout (lower height levels).
- 0.2 ppm ☐ Pay/Scale Booth – interior of building.
- 0.2 ppm ☐ Recycle Building – throughout facility and water drainage areas.
- 0.2 ppm ☐ Leachate Treatment Building – all lower level office spaces, restrooms, water drainage system and storage/equipment areas.
- 0.3 ppm ☐ Gas to Energy Building – central monitoring/control room, engine room and storage cabinets.
- 0.9 ppm ☐ Transfer Station Building – throughout entire building and lower levels.

Max

Signature

0 ppm upwind and downwind.

Condensate Recirculation Inspection Checklist

Hidden Valley Landfill, Pierce County, Washington

Name: John. Faill

Signature: John T. Faill

Date: 2-14-24

Weather: Overcast

Instructions: Inspect each sump for pump operation and measure condensate fluid level, which should be below the overflow drainage pipe. Note any unusual observations such as soil staining or air leaks in the comments section.

Sump	Operation per Design (Y or N)	(1) Depth to Condensate (ft)	(2) Depth to Bottom (ft)	Height of Condensate (ft) = (2) – (1)	Comments
Sump No. 1	Y	—	9.43	0	Dry
Sump No. 2	Y	6.49'	8.62	2.13'	
Sump No. 3	Y	—	8.90'	0	Dry
Sump No. 4	N	—	8.71'	0	positive pressure (bubbling)
Sump No. 5	N	7.66'	9.76'	2.10'	positive pressure in sump
Sump No. 6	Y	7.42'	9.06'	1.64'	
Sump No. 7	Y	—	9.08'	0	Dry
Sump No. 8	Y	7.94'	9.20'	1.26'	
Sump No. 9	Y	—	9.40'	0	Dry
Sump No. 10	Y	7.25'	9.35'	2.10'	Leak @ flange
Sump No. 11	Y	6.82'	9.27'	2.45'	

Other Remarks:

Facility Inspection Checklist

Hidden Valley Landfill, Pierce County, Washington

Name: J. Faille Date: 2-14-24

Signature: [signature] Weather: Overcast

Items	Yes	No	Comments
Cover System			
Settlement Depressions (sinkholes)		X	
Cracking of Cover Soils		X	
Inadequate Cover Soil or Rock		X	
Standing Water		X	
Vegetation			
Bare or Sparsely Vegetated Areas		X	
Areas of Dying Vegetation		X	
Large Root Vegetation (ex. Bushes)		X	
Stormwater Conveyance System			
Ditch Obstructions or Flat Areas	X		
Culvert Obstructions		X	
Catch Basin Debris or Silt Accumulation	X		
Stormwater Basin Debris or Silt		X	
Cover Erosion			
Gullies and/or Erosion Scars		X	
Presence of Seeps		X	
Vector Control			
Evidence of Ground Burrows		X	
Leachate Collection & Leak Detection Systems			
Piping or Valve Issues			N/A
Pump or Meter Issues			
Foaming at Pump			

Other Remarks:

Site Inspection Reports

Hidden Valley Landfill
Landfill Gas Monitoring of On-site Buildings

Date: 2-14-24
Weather Conditions: Overcast
Instrument: Micro FID
Measured By: JTF

The atmosphere inside buildings at the landfill were monitored for possible intrusion of methane gas. Per WAC 173-351, concentrations of methane in on-site structures must not exceed 25% of the lower explosive limit (LEL). If off-site gas migration is suspected, concentrations of methane in off-site structures must not exceed 100 ppm methane.

The areas monitored included:
- The general overall work area
- Floor drains
- Underground conduit protrusions
- Closed areas where landfill gas could collect, such as under cupboards and inside closets

The gas detection instrument must be calibrated using calibration gas containing methane equal to 50 % LEL. Calibration must be performed before and after the survey is completed.

Checked boxes indicate that the survey revealed **no detectable methane**.

- 1.4 ppm ☐ Main Office - individual office spaces, storage areas and within open crawl-space area.
- 0.1 ppm ☐ Repair Shop – survey atmosphere conditions throughout (lower height levels).
- 0.2 ppm ☐ Pay/Scale Booth – interior of building.
- 0.2 ppm ☐ Recycle Building – throughout facility and water drainage areas.
- 0.2 ppm ☐ Leachate Treatment Building – all lower level office spaces, restrooms, water drainage system and storage/equipment areas.
- 0.3 ppm ☐ Gas to Energy Building – central monitoring/control room, engine room and storage cabinets.
- 0.9 ppm ☐ Transfer Station Building – throughout entire building and lower levels.

Max

Signature

0 ppm upwind and downwind.

Condensate Recirculation Inspection Checklist

Hidden Valley Landfill, Pierce County, Washington

Name: John. Faill

Signature: John T. Faill

Date: 2-14-24

Weather: Overcast

Instructions: Inspect each sump for pump operation and measure condensate fluid level, which should be below the overflow drainage pipe. Note any unusual observations such as soil staining or air leaks in the comments section.

Sump	Operation per Design (Y or N)	(1) Depth to Condensate (ft)	(2) Depth to Bottom (ft)	Height of Condensate (ft) = (2) – (1)	Comments
Sump No. 1	Y	—	9.43	0	Dry
Sump No. 2	Y	6.49'	8.62	2.13'	
Sump No. 3	Y	—	8.90'	0	Dry
Sump No. 4	N	—	8.71'	0	positive pressure (bubbling)
Sump No. 5	N	7.66'	9.76'	2.10'	positive pressure in sump
Sump No. 6	Y	7.42'	9.06'	1.64'	
Sump No. 7	Y	—	9.08'	0	Dry
Sump No. 8	Y	7.94'	9.20'	1.26'	
Sump No. 9	Y	—	9.40'	0	Dry
Sump No. 10	Y	7.25'	9.35'	2.10'	Leak @ flange
Sump No. 11	Y	6.82'	9.27'	2.45'	

Other Remarks:

Facility Inspection Checklist

Hidden Valley Landfill, Pierce County, Washington

Name: J. Faille Date: 2-14-24

Signature: [signature] Weather: Overcast

Items	Yes	No	Comments
Cover System			
Settlement Depressions (sinkholes)		X	
Cracking of Cover Soils		X	
Inadequate Cover Soil or Rock		X	
Standing Water		X	
Vegetation			
Bare or Sparsely Vegetated Areas		X	
Areas of Dying Vegetation		X	
Large Root Vegetation (ex. Bushes)		X	
Stormwater Conveyance System			
Ditch Obstructions or Flat Areas	X		
Culvert Obstructions		X	
Catch Basin Debris or Silt Accumulation	X		
Stormwater Basin Debris or Silt		X	
Cover Erosion			
Gullies and/or Erosion Scars		X	
Presence of Seeps		X	
Vector Control			
Evidence of Ground Burrows		X	
Leachate Collection & Leak Detection Systems			
Piping or Valve Issues			N/A
Pump or Meter Issues			
Foaming at Pump			

Other Remarks:

Condensate Recirculation Inspection Checklist

Hidden Valley Landfill, Pierce County, Washington

Name: T. Hanrahan, J. Faille

Date: 6/26/24

Signature: 

Weather: Clear

Instructions: Inspect each sump for pump operation and measure condensate fluid level, which should be below the overflow drainage pipe. Note any unusual observations such as soil staining or air leaks in the comments section.

Sump	Operation per Design (Y or N)	(1) Depth to Condensate (ft)	(2) Depth to Bottom (ft)	Height of Condensate (ft) = (2) – (1)	Comments
Sump No. 1	Y	10.3	10.3	0	
Sump No. 2	Y	5.1	8.6	3.5	
Sump No. 3	Y	9.6	9.6	0	
Sump No. 4	Y	10.6	29.8	19.2	
Sump No. 5	Y	8.1	28.3	20.2	
Sump No. 6	Y	7.6	22.4	14.8	
Sump No. 7	Y	19.8	19.7	0	
Sump No. 8	Y	8.5	9.4	0.9	
Sump No. 9	Y	9.7	9.7	0	
Sump No. 10	Y	7.3	9.7	2.4	
Sump No. 11	Y	6.8	20.8	14	

Other Remarks:

GCCS Maintenance Reports

Hidden Valley Landfill
LFG System Monitoring & Maintenance
January 16, 17, 2024.

MAINTENANCE ITEMS COMPLETED THIS MONTH:

- Performed monthly extraction well monitoring on January 16th and 17th, 2024.
- Separated 8" Header at E2a on January 16th.

LANDFILL FLARE STATION

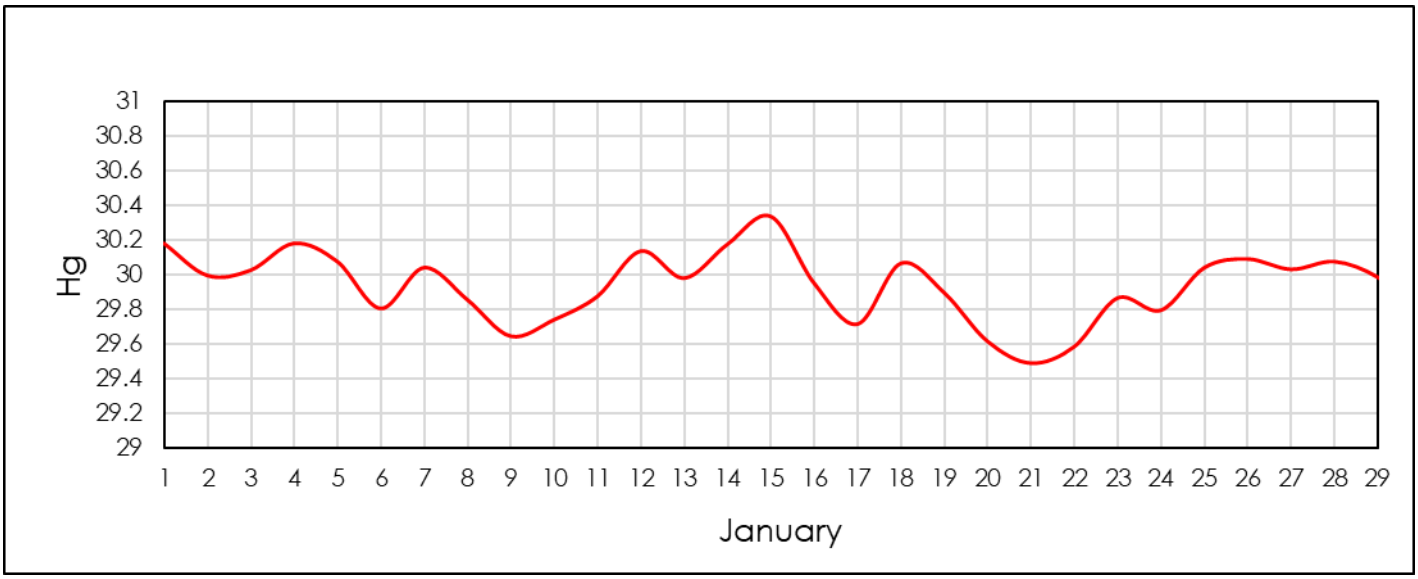
Before system maintenance

Date & Time	CH_4	CO_2	O_2	Balance	Init. Flow	Adj. Flow	Baro. Press.
	%	%	%	%	SCFM	SCFM	inches Hg
1/17/2024 8:30	43.1	21.5	3.3	32.1	172	172	28.82

After system maintenance

Date & Time	CH_4	CO_2	O_2	Balance	Init. Flow	Adj. Flow	Baro. Press.
	%	%	%	%	SCFM	SCFM	inches Hg
1/16/2024 14:56	37.7	18.9	5.2	38.2	188	188	29.25

Barometric Pressure Trends for January 2024



Data Source: https://www.wunderground.com/dashboard/pws/KWASOUTH7/table/2024-1-31/2024-1-31/monthly

Hidden Valley Landfill
LFG System Monitoring & Maintenance
February 6, 7, 14, 15, 2024.

MAINTENANCE ITEMS COMPLETED THIS MONTH:

- Performed monthly extraction well monitoring on February 6th, 7th, 14th, and 15th, 2024.

LANDFILL FLARE STATION

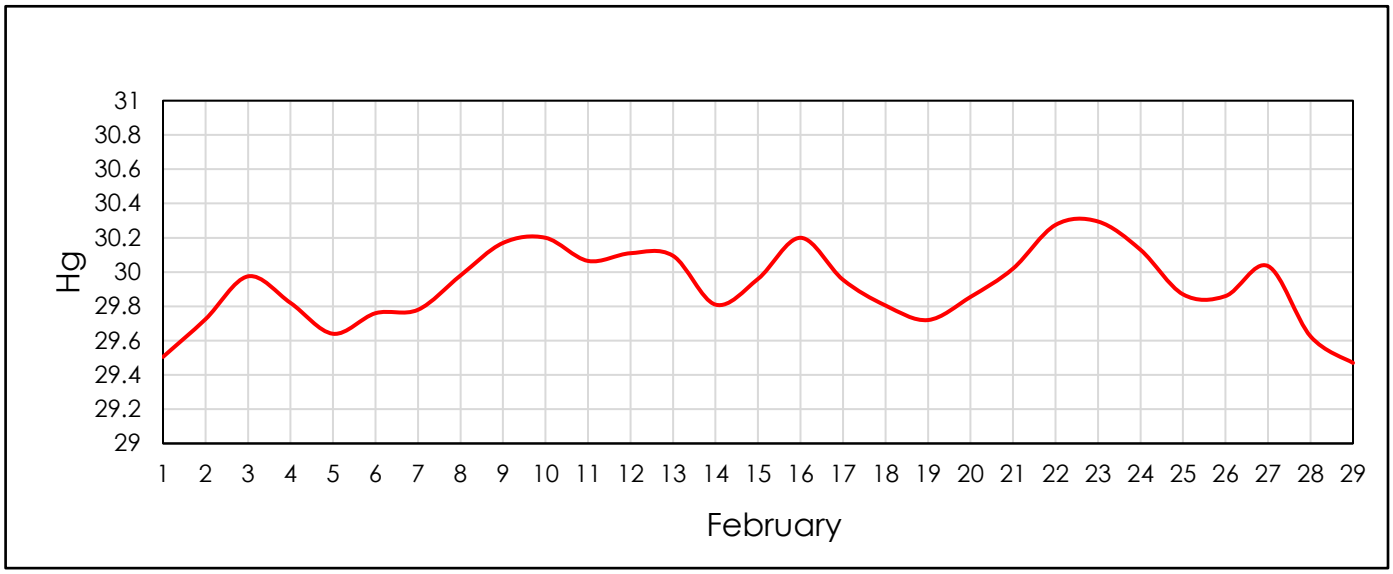
Before system maintenance

Date & Time	CH_4	CO_2	O_2	Balance	Init. Flow	Adj. Flow	Baro. Press.
	%	%	%	%	SCFM	SCFM	inches Hg
2/6/2024 8:49	37.2	20.4	2	40.4	188	188	29.2
2/7/2024 8:11	39	20.2	3.2	37.6	123	123	29.11
2/7/2024 11:23	37.4	20.1	3	39.5	122	122	29.15
2/15/2024 7:47	37.2	19.9	3.4	39.5	108	108	29.28

After system maintenance

Date & Time	CH_4	CO_2	O_2	Balance	Init. Flow	Adj. Flow	Baro. Press.
	%	%	%	%	SCFM	SCFM	inches Hg
2/6/2024 15:01	40.8	21.2	2.3	35.7	123	123	29.16

Barometric Pressure Trends for February 2024



Data Source: https://www.wunderground.com/dashboard/pws/KWASOUTH7/table/2024-2-29/2024-2-29/monthly

Hidden Valley Landfill
LFG System Monitoring & Maintenance
April 18, 19, 2024.

MAINTENANCE ITEMS COMPLETED THIS MONTH:

- Performed monthly extraction well monitoring on April 18th and 19th, 2024.

LANDFILL FLARE STATION

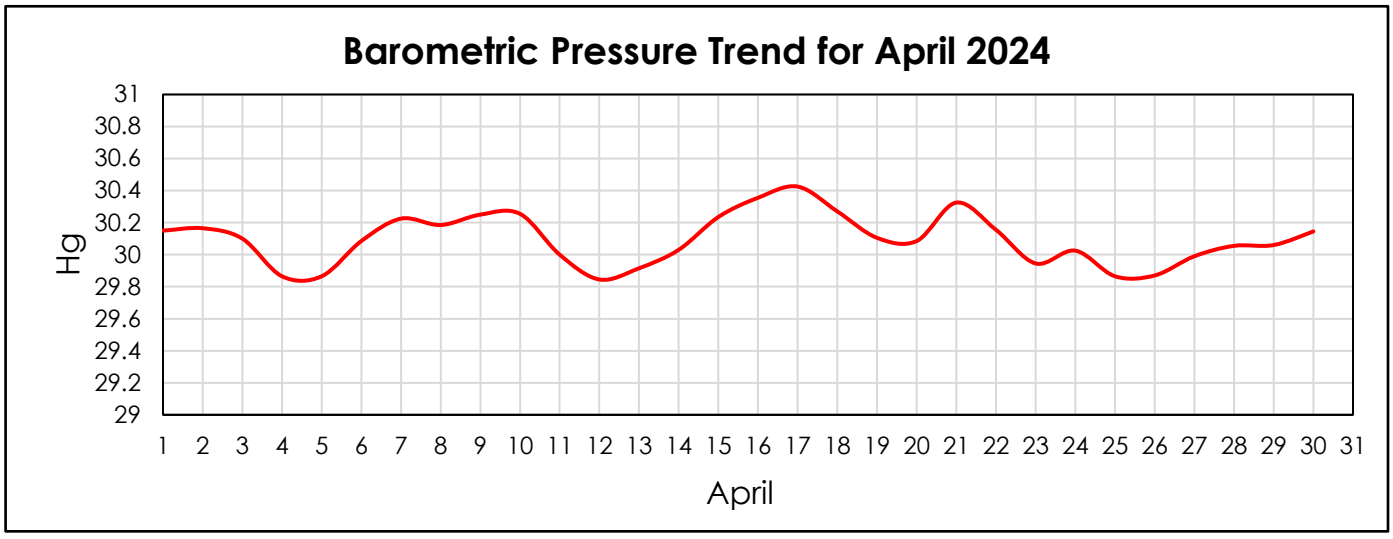
Before system maintenance

Date & Time	CH_4	CO_2	O_2	Balance	Init. Flow	Adj. Flow	Baro. Press.
	%	%	%	%	SCFM	SCFM	inches Hg
4/18/2024 8:29	27.7	16.6	5.1	50.6	158	158	29.7
4/19/2024 9:57	27.1	15.6	5.4	51.9	146	146	29.56

After system maintenance

Date & Time	CH_4	CO_2	O_2	Balance	Init. Flow	Adj. Flow	Baro. Press.
	%	%	%	%	SCFM	SCFM	inches Hg
4/18/2024 14:04	31.7	18.3	2.8	47.2	154	154	29.43

Barometric Pressure Trends for April 2024



Data Source: https://www.wunderground.com/dashboard/pws/KWASOUTH7/table/2024-4-29/2024-4-29/monthly

Hidden Valley Landfill
LFG System Monitoring & Maintenance
May 9, 15, 16, 22, 29, 2024.

MAINTENANCE ITEMS COMPLETED THIS MONTH:

- Performed monthly extraction well monitoring on May 9th, 15th, 16th, 22nd, and 29th, 2024.

LANDFILL FLARE STATION

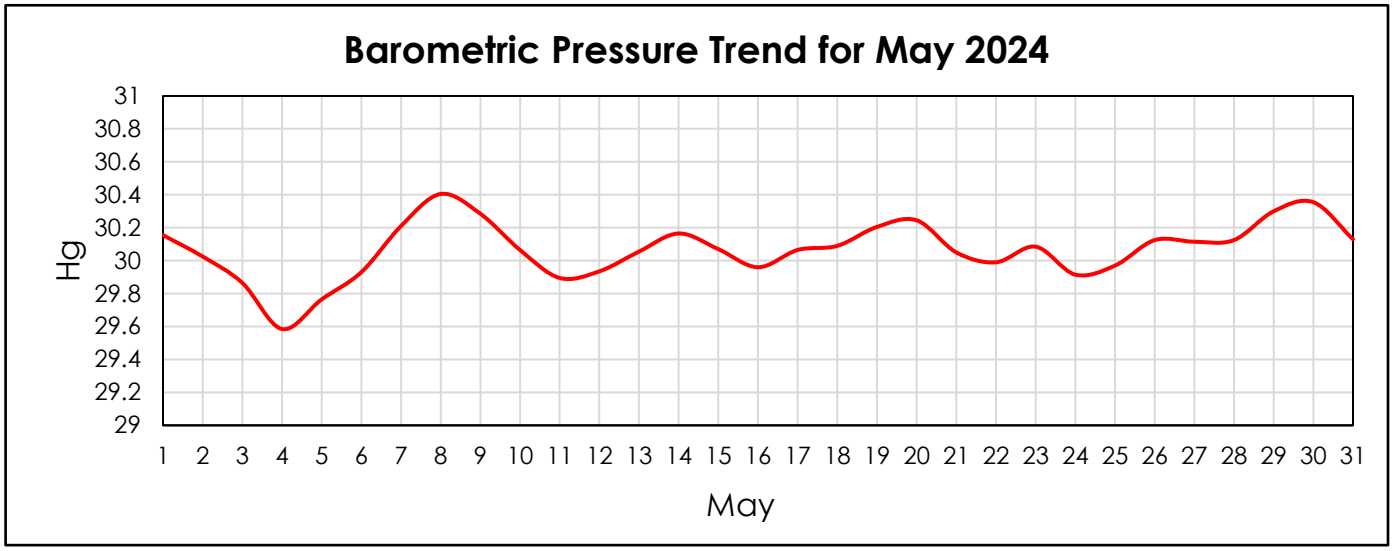
Before system maintenance

Date & Time	CH_4	CO_2	O_2	Balance	Init. Flow	Adj. Flow	Baro. Press.
	%	%	%	%	SCFM	SCFM	inches Hg
5/9/2024 11:34	30	18.3	1.4	50.3	170	170	29.72
5/16/2024 8:49	35.5	19.8	5.1	39.6	125	125	29.41
5/22/2024 11:15	45.8	24.5	1.6	28.1	144	144	29.3
5/29/2024 10:41	43.6	24.6	1.5	30.3	132	132	29.69

After system maintenance

Date & Time	CH_4	CO_2	O_2	Balance	Init. Flow	Adj. Flow	Baro. Press.
	%	%	%	%	SCFM	SCFM	inches Hg
5/9/2024 13:12	29	17.6	2.3	51.1	129	129	29.7
5/15/2024 13:16	42.9	24.5	2.9	29.7	148	148	29.51

Barometric Pressure Trends for May 2024



Data Source: https://www.wunderground.com/dashboard/pws/KWASOUTH7/table/2024-5-15/2024-5-15/monthly

Hidden Valley Landfill
LFG System Monitoring & Maintenance
June 5, 6, 13 2024.

MAINTENANCE ITEMS COMPLETED THIS MONTH:

- Performed monthly extraction well monitoring on June 5th and 6th and 13th, 2024.

LANDFILL FLARE STATION

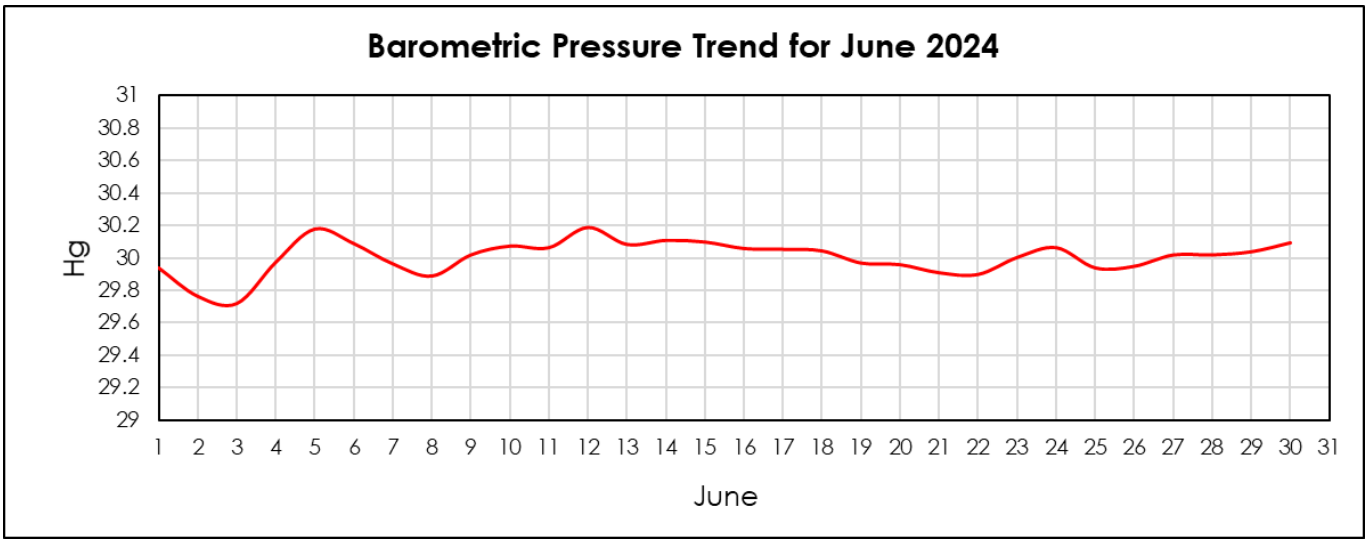
Before system maintenance

Date & Time	CH_4	CO_2	O_2	Balance	Init. Flow	Adj. Flow	Baro. Press.
	%	%	%	%	SCFM	SCFM	inches Hg
6/5/2024 11:06	31.8	18.1	2.5	47.6	133	133	29.62
6/6/2024 11:15	35.6	17.6	3.70	43.1	102	102	29.54

After system maintenance

Date & Time	CH_4	CO_2	O_2	Balance	Init. Flow	Adj. Flow	Baro. Press.
	%	%	%	%	SCFM	SCFM	inches Hg
6/5/2024 15:29	35.2	17.8	3.5	43.5	103	103	29.62

Barometric Pressure Trends for June 2024



Data Source: https://www.wunderground.com/dashboard/pws/KWASOUTH7/table/2024-6-15/2024-6-15/monthly

Leachate Treatment System Data

Month:________________________

LEACHATE DAILY LOG

Year:________________________

Date	Time	P15A	P15B	AG HRS	RAIN	E8 LVL	GP HRS	S-SL	CELL1	TS/GL	TRAN P	E PH	DAILY EFFLUENT
1	12AM												
2	12AM												
3	12AM												
4	12AM												
5	12AM												
6	12AM												
7	12AM												
8	12AM												
9	12AM												
10	12AM												
11	12AM												
12	12AM												
13	12AM												
14	12AM												
15	12AM												
16	12AM												
17	12AM												
18	12AM												
19	12AM												
20	12AM												
21	12AM												
22	12AM												
23	12AM												
24	12AM												
25	12AM												
26	12AM												
27	12AM												
28	12AM												
29	12AM												
30	12AM												
31	12AM												

Handwritten vertically in the columns:

- P15A: PUMP HOURS
- P15B: " "
- RAIN: RAIN
- E8 LVL: CELL 1 LEVEL
- S-SL: SIDE SLOPE GAL'S PUMPED
- CELL1: CELL 1 " "
- TS/GL: TRANSFER STA " "
- DAILY EFFLUENT: DAILY GAL'S PUMPED TO SEWER

Month: JUNE

Year: 2024

LEACHATE DAIL.

Date	Time	P15A	P15B	AC HRS	RAIN	L8 LVL	GR HRS	SSL	CELL	15/GL	TRAN		
1	12AM		5581	95086	.2	15.2	22044	153750	1385500	470685	1582		
2	12AM	7838	5595	95093	.8	15.2	22051	153750	1385500	470685	1592	7.05	
3	12AM	7864		95102	.6	15.4	22057	153750	1385500	470685	15.07	7.05	61603
4	12AM	7886		95108	.2	15.3	22057	153750	1385860	471482	15.98	6.92	61603
5	12AM	7908		95112	.05	15.3	22064	153750	1385860	471670	1576	6.91	61603
6	12AM	7926		95115	0	15.6	22071	"	"	"	1583	697	61602 *
7	12AM		5614	95118	0	15.6	22078	"	"	471699	1579	693	61603
8	12AM		5636	95122	0	15.6	22085	"	"	"	1585	701	61603
9	12AM		5658	95125	.2	15.7	"	"	"	471771	1577	702	61603
10	12AM		5684	95130	.0	15.8	22085	153750	1385860	471824	15.60	7.03	61603
11	12AM	7942	5691	95137	.0	15.8	22095	153750	1385860	471824	15.60	7.04	61603
12	12AM	7963		95144	.0	16.2	22106	153750	1385860	472069	15.89	7.02	61602 *
13	12AM	7984		95155	0	16.2	22113	153750	1385860	472093	15.89	7.04	61603
14	12AM	8003		95159	.05	16.1	"	"	"	472115	1588	701	61603
15	12AM	8024		95162	.7	16.1	22120	"	"	"	1597	705	61603
16	12AM		5713	95166	.0	16.2	22126	"	"	473110	1585	701	61603
17	12AM		5735	95173	.4	16.3	"	"	"	473213	1579	697	61603
18	12AM		5757	95178	.0	16.1	22126	153750	1385860	473213	15.81	7.00	61603
19	12AM		5783	95183	.0	16.1	22126	153750	1386310	473414	15.81	6.98	61603
20	12AM	8036	5789	95187	.0	16.1	22145	153750	1386310	473414	15.81	7.01	61602 *
21	12AM	8059		95192	0	16.1	22145	153750	1386310	473414	15.73	7.05	61603
22	12AM	8080		95196	0	16.4	22156	"	"	"	1573	701	61603
23	12AM	8102		95200	0	16.4	"	"	"	"	1569	705	61603
24	12AM	8122	5790	95202	0	16.5	22163	"	"	"	1576	704	61603
25	12AM		5812	95206	.0	16.7	"	"	"	"	1592	702	61602 *
26	12AM		5838	92209	.2	16.6	22163	153750	1386310	473414	15.89	6.98	61603
27	12AM	8140	5843	95212	.4	16.7	22163	153750	1386310	473414	15.77	7.02	61603
28	12AM	8162		95219	.2	16.7	22183	153750	1386310	473414	15.79	6.93	61603
29	12AM	8167	5860	95222	0	16.7	22183	153750	1386310	473414	15.79	6.97	61603
30	12AM	8167	5877	95226	0	16.7	22197	"	"	"	1578	701	61603
31	12AM						153						

Month: May 2024

Year: _____

LEACHATE DAILY LOG

Date	Time	P1SA	P1SPC	AGFRS	PAIN	LSLVL	GPMFS	SSL	CEEL	TSGE	TRANP	EPH	DAILY EFFLUENT
1	12AM	7534	5202	94925	.2	13.5	21873	153750	1381400	470683	15.72	6.97	61603
2	12AM		5223	94939	.0	13.5	21879	153750	1382100	470683	15.72	7.01	61603
3	12AM		5241	94934	.2	13.3	21891	153750	1382000	470683	16.06	7.00	61603
4	12AM		5268	94938	.4	13.5	21897	153750	1383000	470683	16.05	7.01	61603
5	12AM		5285	94942	.5	13.6	21903	"	"	"	15.59	7.18	61603
6	12AM		5299	94946	.4	13.6	21909	"	"	"	1585	7.1	61603
7	12AM	7564		94950	.35	13.4	21915	"	1383417	"	1581	7.6	61603
8	12AM	7586		94954	.0	13.7	21921	"	"	"	15.61	6.96	61603
9	12AM	7608		94965	.0	13.6	21927	153750	1383417	470683	15.77	7.04	61603
10	12AM	7631		94971	.0	13.6	21927	153750	1384000	470683	15.81	7.05	61603
11	12AM	7632	5318	94975	.0	13.6	21940	153750	1384000	470683	15.81	7.06	61603
12	12AM		5345	94981	0	13.6	21940	153750	1384000	470683	15.81	7.07	61603
13	12AM		5362	94984	0	14.1	21948	"	1384000	"	1566	707	61603
14	12AM		5384	94988	0	13.8	21954	"	1384750	"	1560	712	61603
15	12AM	7641	5397	94991	0	14	21960	"	"	"	1584	712	61603
16	12AM	7663		94997	.0	14.1	21966	"	"	"	1571	706	61603
17	12AM	7689		95005	.0	14.1	21966	153750	1384750	470683	15.71	7.10	61603
18	12AM	7706		95010	.4	14.0	21966	153750	1384750	470683	15.87	7.11	61603
19	12AM	7730	5400	95016	.0	14.1	21973	153750	1385500	470683	15.56	7.03	61603
20	12AM		5419	95021	.4	14.2	21986	153750	1385500	470683	15.74	7.08	61603
21	12AM		5439	95025	.7	14.4	21992	"	"	"	1589	703	61603
22	12AM		5460	95028	0	14.4	21993	"	"	"	1577	708	61603
23	12AM		5482	95036	0	14.5	22003	"	"	"	1571	702	61603
24	12AM	7740	5495	95041	.4	14.6	"	"	"	"	1584	694	61603
25	12AM	7761		95048	.6	14.6	22010	153750	1385500	470683	15.84	7.04	61603
26	12AM	7783		95054	.2	14.6	22017	153750	1385500	470683	15.84	7.06	61603
27	12AM	7810		95060	.0	14.8	22017	153750	1385500	470683	15.71	7.64	61603
28	12AM	7827		95065	.25	14.9	22030	153750	1385500	470683	15.70	7.01	61603
29	12AM	7828	5516	95069	0	15	"	"	"	"	1568	704	61603
30	12AM		5537	95073	0	15.1	22037	"	"	"	1573	704	61603
31	12AM		5559	95077	0	15.3	22044	"	"	"	1588	705	61603

Month: April

LEACHATE DAILY LOG

Year: 2024

Date	Time	P15A	P15B	AC HRS	RAIN	L8 LVL	GP HRS	S-SL	CELL 1	TS/GL	TRAN F	E-PH	DAILY EFFLUENT
1	12AM	7168		94780	.0	18.9	21732	153750	1357050	470661	15.46	7.05	61603
2	12AM	7190		94784	.15	18.9	21732	153750	1357050	470661	15.46	7.08	61604
3	12AM	7212	4907	94788	0	18.7	21738	11	1358200	470666	1542	7.09	61603
4	12AM	7234		94791	.45	18.8	21745	11	11	11	1595	7.09	61603
5	12AM	7240	4923	94796	0	18.2	21750	11	1359965	11	1585	704	61603
6	12AM		4944	94799	.0	17.6	11	11	1362388	11	1594	705	61603
7	12AM		4966	94805	.4	17.6	21750	153750	1363047	470669	15.94	7.05	61604
8	12AM		4992	94812	.2	17.8	21762	153750	1363047	470677	15.89	7.09	61603
9	12AM	7250	5005	94818	.4	17.9	21767	153750	1363047	47068	15.52	7.10	61603
10	12AM	7272		94822	.5	17.8	21767	153750	1363047	47068	15.78	7.10	61603
11	12AM	7289		94825	.05	17.2	21773	11	1365408	470681	1655	705	61603
12	12AM	7311		94828	0	16.5	21779	11	1367784	11	1585	706	61603
13	12AM	7333		94833	0	16.2	21785	11	1369300	11	1586	708	61603
14	12AM	7338	5021	94838	.0	16.5	11	11	11	470683	1573	705	61603
15	12AM		5043	94845	.0	16.4	21785	153750	1369300	470683	15.57	7.12	61603
16	12AM		5065	94852	.0	16.4	21796	153750	1369300	470683	15.57	6.97	61603
17	12AM		5088	94856	.0	16.4	21796	153750	1369300	470683	15.57	7.09	61603
18	12AM	7344	5103	94860	0	16.5	21796	153750	1369300	470683	15.83	7.08	61603
19	12AM	7366		94863	0	16.5	21815	11	1370000	11	16.22	707	61603
20	12AM	7388		94866	0	16.3	21819	11	1371050	11	1585	707	61603
21	12AM	7410		94870	.05	16.4	21824	11	11	11	1538	709	61603
22	12AM	7432		94874	.0	16.5	11	11	11	11	1598	707	61602
23	12AM	7436	5120	94878	.0	16.5	21824	153750	1372090	470683	16.00	7.11	61603
24	12AM		5142	94885	.2	15.7	21841	153750	1373000	470683	16.05	7.07	61603
25	12AM		5164	94892	.8	15.7	21841	153750	1374000	470683	16.16	7.10	61603
26	12AM		5189	94898	.8	15.5	21841	153750	1375100	470683	15.68	7.05	61603
27	12AM	7443	5201	94902	.1	15	21860	11	1376737	11	1567	707	61603
28	12AM	7465		94907	.1	14.5	11	11	1378177	11	1558	706	61603
29	12AM	7487		94911	.6	14.1	21866	11	1379608	11	16.01	707	61603
30	12AM	7509		94917	.4	13.6	21873	11	1381400	11	1577	708	61603
31	12AM												

Month: March

Year: 2024

LEACHATE DAILY LOG

Date	Time	P1 5A	P1 5B	AC HRS	RAIN	LS LVL	GP HRS	S.SL	CELL #	TS/GL	TRANS	E.PH	DAILY EFFLUENT
1	12AM	6844	4630	94653	1.8	23.5	21069	153750	1325000	470593	15.67	7.20	109909
2	12AM		4647	94656	0	23.2	21069	"	1326000	470599	16 12	723	109909
3	12AM		4669	94660	.4	23.3	"	"	"	470609	15.47	722	109909
4	12AM		4691	94663	.1	23.5	"	"	"	470612	1588	719	109909
5	12AM		4713	94668	.0	23.5	21100	"	"	470616	1551	721	109908
6	12AM		4715	94674	.0	23.3	21100	153750	1326000	470616	15,51	7.20	109909
7	12AM	6891		94682	.0	23.3	21100	153750	1326000	470619	15.53	7.13	109908
21 8	12AM	6915		94685	.4	23.3	21100	153750	1327000	470621	15.72	7.17	109903
15 9	12AM	6936			.3	23.3	21100	153750	1328000	470621	15.72	7.17	106381
21 10	12AM	6945	4722	94687	.1	23.5	21111	"	"	"	16.37	7.19	106928
23 11	12AM	6962	4726	94690	.2	23.1	21173	"	1328702	"	1550	7.19	109909
21 12	12AM		4749	94694	.3	22.7	21215	"	1331152	"	1555	7.19	109909
23 13	12AM		4770	94699	.0	22.6	"	"	1333000	470623	1535	720	109909
14	12AM	6941	4793	94705	.10	22.6	21215	153750	1336569	470623	15.35	7.13	109908
20 15	12AM	69800		94709	.0	21.0	21215	153750	1341041	470623	15.87	7.16	106679
19 16	12AM	7008		94712	.0	21.0	21215	153750	1342000	470625	15.87	7.14	103863
20 17	12AM	7026	"	94716	.0	21.0	21215	153750	1342000	470625	1585	7.17	90580
18 18	12AM	7044	"	94718	0	21.0	21346	"	1342878	"	15.87	7.20	367
0 19	12AM	" off	" off	94722	0	off	21657	"	1343002	"	off	717	201 off
0 20	12AM	"	"	94727	.2	20.4	"	"	1345333	"	1579	719	34223
8 21	12AM		4801	94731	.2	19.6	"	"	1349407	"	1548	719	61603
19 22	12AM	7055	4809	94735	.2	19.1	21657	153750	1351600	470625	16.13	7.20	40348
19 23	12AM	7072		94741	.2	19.1	21657	153750	1352800	470625	16.13	7.15	61603
24	12AM	7091		94747	0	19.1	21657	153750	1352300	470627	16.53	7.10	61603
22 25	12AM	7116		94750	.80	19.1	21670	153750	1352800	470625	15.71	7.10	61602
2 26	12AM	7135		94753	0	19.4	21698	"	"	"	1556	709	61602
27	12AM	7142	4824	94756	.5	19.2	21707	"	1354020	"	1615	706	61602
28	12AM		4846	94760	.2	19	21713	"	1355000	470657	1588	707	61603
29	12AM		4867	94766	.0	18.8	21720	"	1356000	"	1556	706	61603
30	12AM		4887	94722	.0	18.9	21723	153750	1356600	470657	1556	7.04	61603
31	12AM	7147	4907	94754	0	18.8	21723	153750	1356400	470657	15.46	7.03	61603

PLANT OFF

Month: FEB

Year: 2024

LEACHATE DAILY LOG

Date	Time	P45A	P45B	ACHRS	RAIN	LS VL	GPHRS	SGL	CELL	LS/GL	TRANR	GPH	DAILY EFFLUENT
1	12AM		4288	94541	.2	23.8	21005	153750	1310800	470035	1571	727	79905
2	12AM		4310	94545	.0	23.1	11	11	1314198	11	1581	716	79905
3	12AM	6553	4326	94550	.0	23.1	21005	153750	1316810	470035	1556	723	79903
4	12AM	6581		94555	.0	23.0	21005	153750	1316810	470035	1600	728	79904
5	12AM	6602		94558	.2	23.1	21005	153750	1316810	470035	1569	728	79906
6	12AM	6624		94561	.35	22.1	21005	153750	1316810	470035	1569	720	79904
7	12AM	6641		94563	0	23.1	11	11	1317260	470053	1598	710	79904
8	12AM	6645	4344	94566	0	23	11	11	1318100	11	1557	715	59104
9	12AM		4360	94571	0	22.9	11	11	1319100	11	1559	718	79904
2/10	12AM		4382	94574	.2	23	11	11	11	11	1557	719	79905
24 11	12AM		4408	94579	.4	23	21005	153750	1319100	470053	1556	716	79904
12	12AM	6652	4429	94583	.2	23.1	21005	153750	1319100	470091	1554	725	99907
13	12AM	6672		94587	.0	23.1	21005	153750	1319100	470091	1554	722	99908
14	12AM	6692		94591	.95	23.2	21005	153750	1319100	470091	1591	727	99907
15	12AM	6714		94595	.05	23.3	11	11	1319615	470262	1591	722	99908
16	12AM	6737		94598	0	23.1	11	11	1320800	470279	1549	723	99907
17	12AM	6743	4440	94601	0	22.9	11	11	1322000	11	1548	722	99907
18	12AM		4462	94604	0	23	11	11	11	11	1568	716	99908
19	12AM		4489	94608	.4	23.1	21005	153750	1322000	470279	1580	720	99908
20	12AM		4511	94615	.4	23.7	21005	153750	1322000	470279	1549	717	99906
21	12AM		4522	94618	.2	23.0		153750	1322000	470367	1564	723	99907
22	12AM	6776		94621	.7	22.8	21005	153750	1323100	470434	1541	721	99907
23	12AM	6792		94624	0	23	11	11	1323900	470455	1547	722	99908
24	12AM	6814		94627	0	23.1	11	11	11	11	1597	719	99907
25	12AM	6836		94630	.35	23.2	11	11	11	470501	1587	723	99907
26	12AM	6841	4540	94633	.4	23.3	11	11	11	470516	1559	722	109909
27	12AM		4563	94642		23.1	21005	153750	1325000	470546	1546	715	109907
28	12AM		4583	94646		23.1	21005	153750	1325000	470566	1590	720	109909
29	12AM		4606	94650		23.3	21069	153750	1325000	470585	1601	727	109908
30	12AM												
31	12AM												

Month: JANUARY

Year: 2024

LEACHATE DAILY LOG

Date	Time	P15A	P15B	ACHRS	RAIN	LS LVL	GPHRS	S-L	CELL	LS/GL	TRANPE	FLRH	DAILY EFFLUENT
8 1	12AM	6253	3960	94428		22.9	20936	153750	1295500	469413	1595	730	21806
11 2	12AM		3968	94434		22.9	20936	153750	1295500	469413	15.95	7.17	30719
21 3	12AM		3979	94437		24.0	20936	153750	1295500	469413	15.73	7.40	44589
22 4	12AM		4000	94440		24.0	20936	153750	1295500	469413	15.73	7.38	61617
14 5	12AM		4022	94443		24.0	20936	153750	1295500	469413	15.73	7.34	53334
15 6	12AM	6257	4032	94445	1.25	24.3	20936	"	"	"	1667	743	44362
18 7	12AM	6272		94448	.05	24.3	"	"	"	"	1625	745	50343
11 8	12AM	6290		94451	1.0	24.4	"	"	"	"	1586	743	29327
23 9	12AM	6301		94453	1.0	24.3	"	"	1296700	"	1585	7.37	61617
23 10	12AM	6224		94458	.6	24.3	20936	153750	1297800	469413	1585	7.33	61617
11	12AM	6347		94462	.2	24.1	20936	153750	1299050	469413	15.85	7.36	61617
21 12	12AM	6351	4049	94468		23.2	20936	153750	1302256	469413	15.57	7.39	61617
21 13	12AM		4065		0				1			7.40	58054
14	12AM		4090	94478	0	23.4	20975	"	1304400	"	1555	737	61617
23 15	12AM		4112	94480	0	23.6	"	"	"	"	1587	736	61617
16	12AM	6355	4130	94483	.2	23.6	"	"	"	"	1616	737	61617
17	12AM	6377		94488	.4	23.6	"	"	"	"	1620	735	61617
18	12AM	6399		94492	.4	23.6	20975	153750	1304400	469413	16.20	7.40	61616
19	12AM	6426		94495	.2	23.6	20975	153750	1304400	469413	16.20	7.45	61617
20	12AM	6443		94498	.4	23.6	21005	153760	1305800	469413	16.20	7.32	61617
20 21	12AM	6449	4151	94503	2.0	23.6	21005	153750	1305800	469413	16.20	7.35	61617
21 22	12AM		4167	94505	.5	23.7	"	"	"	"	1612	732	57633
23	12AM		4187	94509	.05	23.8	"	"	"	"	1598	731	59105
24	12AM		4209	94512	.4	23.6	21005	"	1307250	469749	1608	734	61617
25	12AM	6451	4228	94516	.8	23.3	"	"	1308750	469981	1562	718	61616
26	12AM	6475		94520	.4	23.3	21005	153760	1308750	469981	16.62	7.28	61617
27	12AM	6496		94525	.0	23.6	21005	153760	1309500	470035	15.97	7.16	61617
24 28	12AM	6523		94529		23.2	21005	153750	1309500	470035	16.08	7.25	61617
22 29	12AM	6545		94532	1.6	23.8	"	"	"	"	15.71	7.36	79905
23 30	12AM	6547	4243	94534	.05	23.8	"	"	"	470035	1574	718	79905
22 31	12AM		4266	94538		24	21005	153750	1309500	476035	1597	7.21	79905

4288

21?0

11:58