



GROUNDWATER MONITORING REPORT JUNE 2022 SAMPLING EVENT

SANDOVAL COUNTY PUBLIC WORKS

**Sandoval County Landfill
Rio Rancho, New Mexico**

August | 2022

Parkhill Project # 01.8115.21

August 25, 2022

Ms. Erica Gordan, Water Resource Professional III
New Mexico Environment Department Solid Waste Bureau
PO Box 5469
Santa Fe, NM 87502

Re: 8115.21 Sandoval County Landfill: Groundwater Monitoring Report
June 2022 Sampling Event

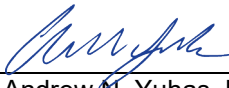
Dear Ms. Gordan:

On behalf of our client, Sandoval County, Parkhill is submitting groundwater monitoring results corresponding to samples collected at the Sandoval County Landfill (SCLF) on June 8, 2022. This event consisted of sample collection at each of the site's five active monitoring wells, as well as field blank documentation. In addition, laboratory analytical results are compared to the established assessment monitoring levels (AMLs) and upper tolerance limit values (UTLVs) approved by NMED on February 9, 2015. Approval was given by SWB on October 6, 2020 for established assessment monitoring levels AML and upper tolerance limit values (UTLV) from both MW-2 and MW-3 to transfer to their replacement wells MW-2R and MW-3R.

We appreciate the Department's ongoing review of the groundwater monitoring program for the Sandoval County Landfill. Please contact us with your questions or comments.

Sincerely,

PARKHILL

By 
Andrew N. Yuhas, PG
Professional Geologist

ANY/pg
Enclosures:

cc: Mr. Mark Hatzenbuhler, Sandoval County Public Works Manager
Mr. Chris Perea, Landfill Manager (Facility Operating Record)

TABLE OF CONTENTS

1.0 INTRODUCTION	1
2.0 GROUNDWATER MONITORING PROGRAM	1
3.0 SITE HYDROGEOLOGY	3
4.0 LABORATORY ANALYTICAL TEST RESULTS	3
5.0 SUMMARY AND CONCLUSIONS	5

EXHIBITS

EXHIBIT A: SITE LOCATION MAP
EXHIBIT B: APPROVED ALTERNATE PARAMETER LIST AND MONITORING SCHEDULE
EXHIBIT C: GROUNDWATER CONTOUR MAP (JUNE 8, 2022)
EXHIBIT D: FIELD DATA SUMMARY, MONITORING WELL DETAILS, AND FIELD NOTES
EXHIBIT E: SUMMARY OF INORGANIC PARAMETER ANALYTICAL RESULTS
EXHIBIT F: LABORATORY ANALYTICAL REPORT AND CHAIN-OF-CUSTODY DOCUMENTATION
EXHIBIT G: NMED CORRESPONDENCE
EXHIBIT G.1: NOTIFICATION OF POTENTIAL EXCEEDANCE (JULY 12, 2022)
EXHIBIT G.2: NMED APPROVAL OF GROUNDWATER MONITORING WELLS MW-2 AND MW-3 REPLACEMENT WORKPLAN (SEPTEMBER 18, 2019)
EXHIBIT G.3: NMED APPROVAL OF GROUNDWATER MONITORING WELLS MW-2R AND MW-3R INSTALLATION REPORT (AUGUST 19, 2020)
EXHIBIT G.4: NMED APPROVAL OF ANALYTICAL LIMITS FOR MW-2R AND MW-3R (OCTOBER 6, 2020)
EXHIBIT H: QUALIFIED GROUNDWATER SCIENTIST CERTIFICATION

TABLES

TABLE 1: INORGANIC PARAMETERS EXHIBITING ESTABLISHED AML OR UTLV EXCEEDANCES	4
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1.0 INTRODUCTION

On June 8, 2022 Parkhill performed annual groundwater monitoring at the Sandoval County Landfill (Exhibit A) in accordance with the site's existing Solid Waste Facility Permit (SWM-0123365). This event consisted of sample collection at each of the site's five active monitoring wells.

Samples collected from wells MW-2R, 3R, 5R, 6R, and 7R were analyzed for the current NMED-approved alternate list of parameters (Exhibit B). Laboratory analytical results were compared to the established assessment monitoring levels (AMLs) and upper tolerance limit values (UTLVs) approved by the NMED in 2015.

2.0 GROUNDWATER MONITORING PROGRAM

2.1 GROUNDWATER MONITORING NETWORK

The original monitoring well network at Sandoval County Landfill (SCLF) consisted of four monitoring wells (MW-1 through MW-4). Upgradient monitoring well MW-4 was decommissioned in June 2003 in advance of Cell 4A construction and replaced by upgradient monitoring well MW-5 in July/August 2003. On March 11, 2010, the Solid Waste Bureau (SWB) approved the exclusion of well MW-1 from sample collection due to steadily decreasing water levels. Two additional monitoring wells (MW-6 and MW-7) were installed in January and March 2004, respectively. On March 21, 2016, SWB approved the exclusion of well MW-5 from the sampling network, and the installation of well MW-5R as the replacement upgradient well. Well MW-5 was subsequently replaced by upgradient well MW-5R in April 2016 due to predictable declining recharge issues. On November 29, 2017, SWB approved the exclusion of wells MW-6 and MW-7 from the sampling network, and the installation of wells MW-6R and MW-7R as replacement downgradient wells. The field activities related to the installation of replacement monitoring wells MW-6R and MW-7R between February 22, 2018 and May 31, 2018 are documented in the Groundwater Monitoring Wells MW-6R and MW-7R Installation Report (Parkhill, June 25, 2018), which was approved by SWB on July 4, 2018.

On August 12, 2019, Parkhill submitted the Groundwater Monitoring Wells MW-2 and MW-3 Replacement Workplan (the Workplan) to NMED for review and approval. Due to insufficient flows and declining recharge rates observed during routine monitoring, the Workplan provided the rationale for the deactivation of wells MW-2 and MW-3 (i.e., exclusion from the groundwater monitoring network and conversion to piezometers) and replacement with new wells MW-2R and MW-3R. On September 18, 2019 SWB approved the Workplan and the removal of wells MW-2 and MW-3 from the groundwater monitoring network (Exhibit G.2). The field activities related to the installation of replacement monitoring wells MW-2R and MW-3R between March 20, 2020 and April 7, 2020 are documented in the Groundwater Monitoring Well Installation Report: Wells MW-2R and MW-3R (Parkhill, July 2, 2020), which was approved by SWB on August 19, 2020 (Exhibit G.3).

On October 6, 2020 (Exhibit G.4), SWB determined that the BCVs, AMLs and UTLVs already established for monitoring wells MW-2 and MW-3 were statistically consistent with the June 17, 2020 analytical results from monitoring wells MW-2R and MW-3R and approved the use of these existing thresholds for determination of exceedances for new wells MW-2R and MW-3R.

2.2 MONITORING SCHEDULE AND PARAMETERS

The current groundwater monitoring program for SCLF consists of the annual collection and analysis of samples for the NMED-approved alternate list of parameters (Exhibit B). Laboratory analytical results were compared to the established assessment monitoring levels (AMLs) and upper tolerance limit values (UTLVs) approved by the NMED in 2015. Consistent with the requirements of 20.9.9.11.B NMAC, samples collected from each well in 2024 will be analyzed for the entire suite of parameters listed in Subsections A&C of 20.9.9.20 NMAC (i.e., once every five years).

2.3 GROUNDWATER LEVEL MEASUREMENTS

Depth-to-water (DTW) measurements for all on-site wells were recorded on prior to purging and sampling, which were used to develop the groundwater contour map provided as Exhibit C. The measurements were recorded using a calibrated electronic tape that emits an audible signal when the water surface is penetrated. These event-specific measurements, along with the calculated groundwater elevation for each well, are summarized in Exhibit D.

2.4 MONITORING WELL PURGING AND SAMPLING

Monitoring wells MW-2R, 3R, 5R, 6R, and 7R are equipped with dedicated pump systems designed to control the flow and delivery of groundwater to the ground surface in order to produce the most representative sample of groundwater beneath the facility. The pump system for each well includes a dedicated Grundfos® Redi-Flo4™ submersible pump and motor used for both purging and sampling. The pump/motor combination is operated by a Redi-Flo® variable frequency drive (VFD) controller that allows the flow rate to be controlled at the ground surface as the groundwater exits the discharge tubing. A minimum of 3 well volumes of water were removed from wells MW-5R, MW-6R, and MW-7R prior to sampling. Due to low yield, a minimum of one well volume of water was removed from wells MW-2R and MW-3R prior to sampling using low-flow purging methods.

As presented in the *Groundwater Monitoring System Plan Update (Updated June 20, 2017)*, the objective of low-flow purge and sampling is to collect a sample of water from the natural, unimpeded flow of groundwater across the screened section of the well. The slow removal of water ensures that stagnant water above the screened water column, and/or highly turbid water settling in a sump below the screened section, is not captured with water passing naturally through the screened section.

In the practice of low-flow purge and sampling, purge volumes are dependent upon field parameter stabilization and the recharge rate of each well. Consistent with the low-flow purge/sampling protocol outlined in the *Groundwater Monitoring System Plan Update (Updated June 20, 2017)*, wells MW-2R and 3R were purged until field measurements of pH, temperature, and specific conductance (SC) had stabilized to within acceptable ranges for three successive readings.

Following collection, the groundwater samples were immediately placed in a cooler containing ice and maintained at approximately 4°C until delivery to the laboratory on June 8, 2022. Samples delivered to the laboratory were accompanied by the appropriate chain-of-custody documentation.

2.5 MONITORING WELL INSPECTION AND MAINTENANCE

Each monitoring well is equipped with a locking cap, and each well was found to be secured and in good condition. The protective casings, bollards, and concrete pads were also found to be in good condition at the time of sampling.

3.0 SITE HYDROGEOLOGY

The hydrogeology of the site is summarized in Section 3 of the *Application for Permit for the Sandoval County Landfill, Volume V, updated January 2005*. The following discussion of the site hydrogeology presents select information contained in the Application for Permit:

The landfill site is located on the western flank of the Albuquerque Basin at an elevation of approximately 5,280 to 5,430 feet. The landfill is underlain by a sequence of siltstones and mudstones belonging to the Arroyo Ojito Formation of the upper Santa Fe Group. In this area, the Santa Fe Group is over 4,000 feet thick. The Arroyo Ojito Formation consists of two members, the Loma Barbon and the Ceja, both of which are exposed at an outcrop near the east-central portion of the property. The Loma Barbon Member is the major unit within the Arroyo Ojito Formation, and underlies the entire facility. The Loma Barbon consists of well-consolidated, fine-grained, yellow-brown to red-brown silty sandstones with interbedded mudstones and scattered lenses of fluvial deposits of coarse-grained and cobbly sandstones.

The Ceja Member of the Arroyo Ojito Formation is a 40- to 60-foot-thick sequence of moderately consolidated, light red to red-brown medium to coarse-grained sandstones and gravels, with minor interbeds of siltstones and mudstones. This unit is present on the topographically highest portion of the property in the area of wells MW-3 and MW-6, and may be seen capping the hills immediately south of the Facility. Unconformably overlying the Arroyo Ojito Formation are thin (20-30 feet thick) Quaternary deposits of Pleistocene age.

3.1 GROUNDWATER FLOW DIRECTION AND VELOCITY

The direction of groundwater flow at SCLF has historically been to the east-northeast towards the Rio Grande, and groundwater contour modeling results from this event are consistent with the historical trend. Exhibit C presents the groundwater elevation contour map based on depth-to-water measurements recorded from the site's eleven existing groundwater monitoring wells for this event. As shown in Exhibit C, the current groundwater table ranges in elevation from 4988.65 feet above mean sea level (fmsl) in upgradient well MW-5 to 4971.15 fmsl in downgradient well MW-3. The groundwater flow direction is generally east-northeastward, following a hydraulic gradient of 0.0060 ft/ft (Exhibit C). Assuming a saturated hydraulic conductivity (K_{SAT}) of 3.28×10^{-7} ft/sec to 3.28×10^{-5} ft/sec (10^{-5} cm/sec to 10^{-3} cm/sec, Freeze and Cherry, 1979) and an effective porosity (n) of 0.45 (Domenico and Schwartz, 1998) for semi-consolidated silty sand, the average linear groundwater velocity ranges from approximately 0.1384 ft/year to 13.84 ft/year.

4.0 LABORATORY ANALYTICAL TEST RESULTS

Groundwater samples were analyzed by Hall Environmental Analysis Laboratory (HEAL) of Albuquerque, NM, using applicable EPA methods or their approved equivalents. A review of the quality assurance/quality control (QA/QC) data provided by the laboratory indicates that applicable QA/QC criteria have been met for this event. Laboratory analytical results for this event are summarized in Exhibit E. The corresponding laboratory reports and chain-of-custody documentation are provided in Exhibit F, which also provides the laboratory practical quantitation limits (PQLs).

4.1 LABORATORY QUALITY ASSURANCE/QUALITY CONTROL

The following quality assurance/quality control (QA/QC) samples were collected and analyzed for the volatile organic compounds (VOCs) listed in Subsection A of 20.9.9.20 NMAC to ensure field-sampling quality and laboratory reproducibility:

- | One field blank (labeled “Field Blank”) collected in the vicinity of well MW-5R
- | One duplicate sample (labeled “Dupe”) collected from well MW-5R

In addition, one trip blank, prepared and sealed by the laboratory, was included with the samples to ensure sample quality. The field blank was prepared by filling sample containers with VOC-free deionized water in proximity to the gasoline-powered generator. No VOCs were reported as detected in the duplicate or trip blank QA/QC samples. Toluene was reported as detected in the field blank at a concentration of 0.0017 mg/L, but was not detected in any other samples. The detection of toluene is likely the result of ambient impacts from generator exhaust.

4.2 LABORATORY ANALYTICAL RESULTS

4.2.1 Organic Parameters

Groundwater samples were analyzed for the alternate list of organic parameters provided in Exhibit B; and the laboratory analytical results were compared to the corresponding established AML. No organic parameter was reported as detected above the respective laboratory PQL in any of the groundwater samples.

4.2.2 Inorganic Parameters

Groundwater samples were also analyzed for the alternate list of inorganic parameters provided in Exhibit B; and the laboratory analytical results were compared to the corresponding established AML. With the exceptions of the parameters listed in Table 1, no inorganic parameter exceeded its respective, established AML. As required, preliminary notification of the exceedances was provided to NMED Solid Waste Bureau on July 13, 2022 (Exhibit G.1). Table 1 provides a summary of the inorganic parameters exhibiting apparent exceedances of the established AML. With exception of arsenic in well MW-7R, the data in Table 1 demonstrate that no statistically significant increase (SSI) is apparent for these constituents (i.e., the concentration is less than the established UTLV).

TABLE 1 - Inorganic Parameters Exhibiting Established AML or UTLV Exceedances

Well I.D.	Sampling Date	Parameter	Analytical Result (mg/L)	Established AML (mg/L)	Regulatory Presumptive AML (mg/L)	Established UTLV (mg/L)
MW-2R	06/08/22	Arsenic	0.0075	0.0057	0.0050	0.0079
MW-3R	06/08/22	Iron	1.70	0.91	0.75	6.135
MW-6R	06/08/22	Arsenic	0.0088	0.0086	0.0050	0.0110
MW-7R	06/08/22	Fluoride	0.88	0.86	0.80	0.9776
		Nitrate	6.2	5.0	5.0	N/A
		Arsenic	0.0071	0.0060	0.0050	0.0070

Notes:

- | N/A indicates UTLV not assigned
- | **Bold italics** indicates that Established UTLV has been met or exceeded

Arsenic**Well MW-7R**

The concentration of arsenic in well MW-7R exceeds the established AML and exceeds the established UTLV. Comparison to historical total and dissolved arsenic concentrations indicates that arsenic is still being detected at concentrations similar to historical ranges and is likely a result of natural fluctuations in groundwater quality monitored by this replacement well.

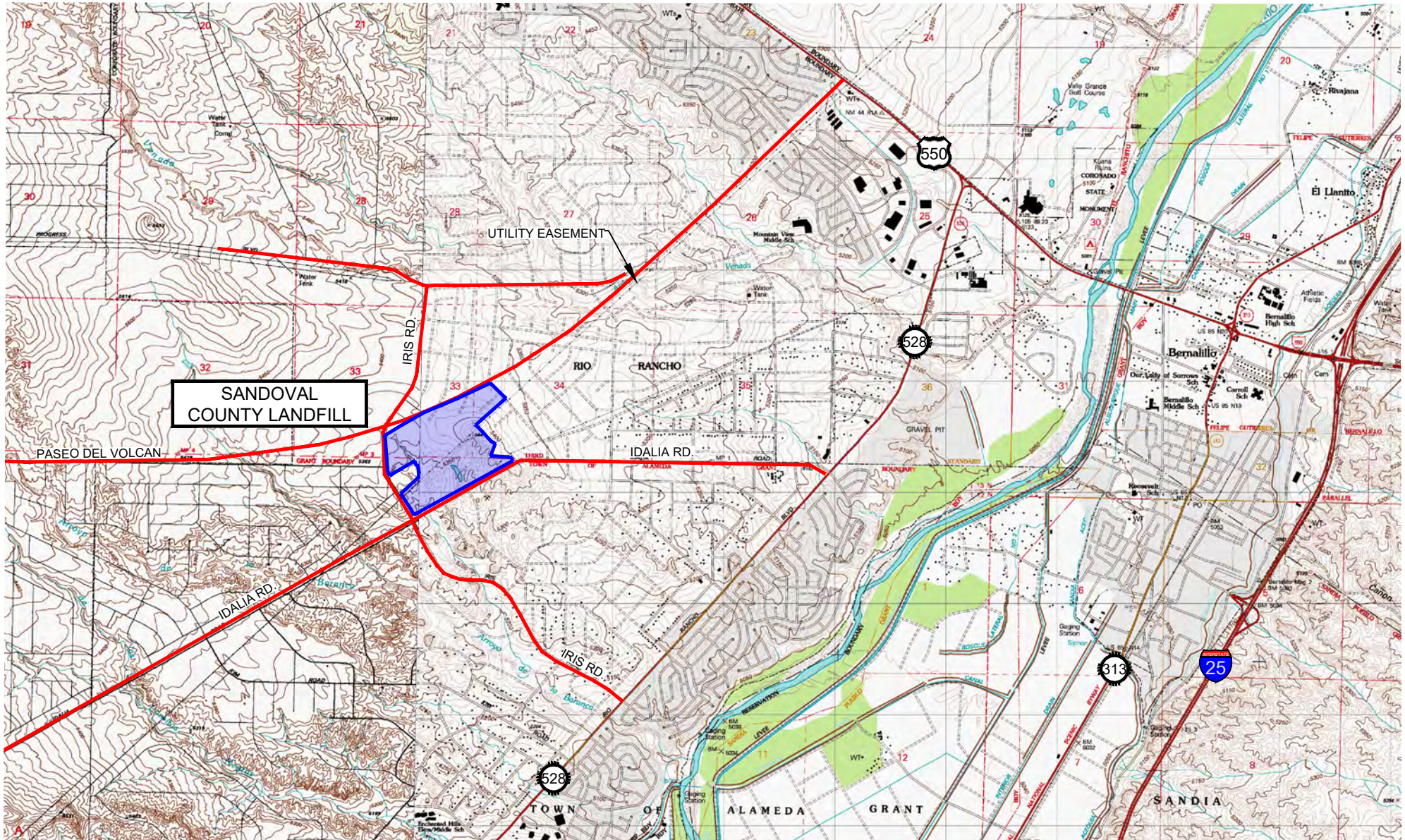
Nitrate**Well MW-7R**

The concentration of nitrate in well MW-7R exceeds the established AML but is below the GWPS of 10 mg/L. A UTLV has not been established for this parameter for well MW-7R. The June 2022 analytical result is likely a result of natural fluctuations in groundwater quality monitored by this well.

5.0 SUMMARY AND CONCLUSIONS

With the few exceptions noted above, the values of detected parameters are generally consistent with values reported for previous monitoring events; and the geochemical signature of site groundwater remains consistent with historical background water quality. Therefore, it is recommended that annual groundwater sampling at wells MW-2R, 3R, 5R, 6R, and 7R for the current approved alternate parameter list (Exhibit B) continue at the site. The analytical data evaluation and conclusions presented in this Report have been reviewed and verified by a Qualified Groundwater Scientist; and the Certification Statement of Mr. Andrew N. Yuhas, PG, is provided as Exhibit H.

Exhibit A: Site Location Map



Sandoval County Landfill Groundwater Monitoring June 8, 2022

Parkhill.com

Sandoval County
2708 Iris Road
Rio Rancho, NM 87144



SITE LOCATION MAP

Issue:	FINAL
Date:	07/12/2022
Project No:	8115.21
Sheet:	EXHIBIT A

Exhibit B: Approved Alternate Parameter List and Monitoring Schedule

Sandoval County Landfill
ALTERNATE PARAMETER LIST

Inorganic Parameters	EPA Method
Ammonia as N, NH ₃ -N	350.2
Bicarbonate, HCO ₃ ⁻ (as CaCO ₃)	310.1
Carbonate, CO ₃ ²⁻ (as CaCO ₃)	310.1
Nitrate as N, NO ₃ -N	300.0
Phosphate, PO ₄	300.0
Chloride, Cl ⁻	300.0
Fluoride, F	300.0
Sulfate, SO ₄ ²⁻	300.0
Total Dissolved Solids, TDS	160.1
Total Kjeldahl Nitrogen, TKN	351.3
Total Nitrogen, TN	Calculated
Total Organic Carbon, TOC	415.2
pH	
Specific Conductivity	
Aluminum, Al	200.7
Arsenic, As	200.8
Barium, Ba	200.7
Calcium, Ca	200.7
Chromium, Cr	200.7
Cobalt, Co	200.7
Iron, Fe	200.7
Lead, Pb	200.8
Magnesium, Mg	200.7
Manganese, Mn	200.7
Potassium, K	200.7
Sodium, Na	200.7
Uranium, U	200.8
Zinc, Zn	200.7
All Standard Landfill VOCs	8260
1,2-Dibromo-3-chloropropane	504
1,2-Dibromoethane	504
Total Phenolics	420.3/9067
Additional bottle Sets:	

8260 Field Blank (3 VOAs)

8260 Dupe (3 VOAs)

Trip Blank

Exhibit C: Groundwater Contour Map (June 8, 2022)

Issue: FINAL
Date: 07/12/2022
Project No: 8115.21
Sheet: EXHIBIT C

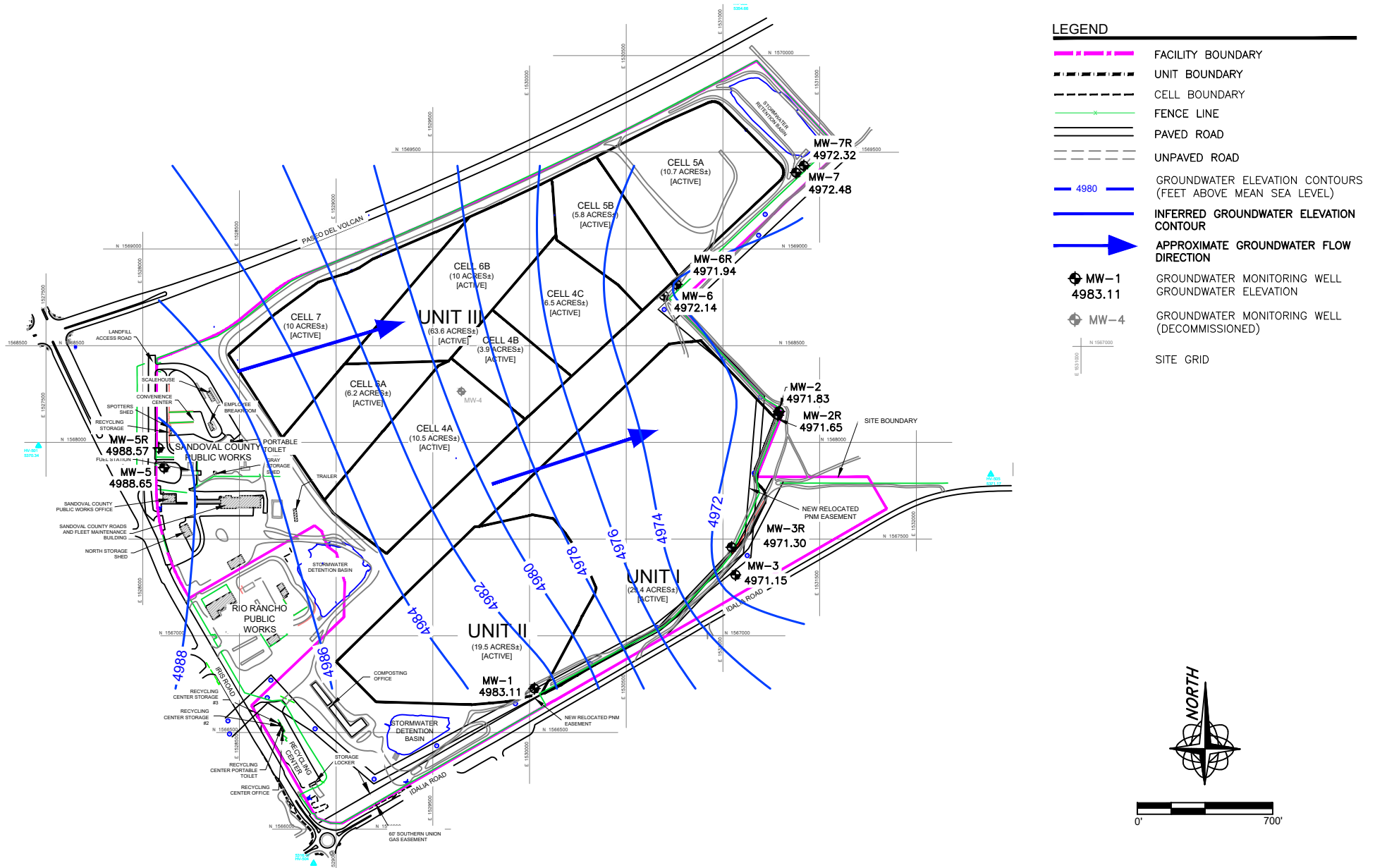


Exhibit D: Field Data Summary, Monitoring Well Details, and Field Notes

**Groundwater Monitoring Report
Sandoval County Landfill
June 2022 Sampling Event**

Exhibit D - Groundwater Monitoring Well and Field Data Summary

Groundwater Sampling Field Data

Well I.D.	Sampling Date	Top of Well Elevation⁽¹⁾ (fmsl)	Depth to Water⁽²⁾ (fbtow)	Temperature⁽³⁾ (°C)	pH⁽³⁾ (standard units)	Specific Conductivity⁽³⁾ (µS/cm)	Purge Volume⁽⁴⁾ (gal)	Groundwater Elevation (fmsl)
MW-1	NS	5324.82	341.71	NS	NS	NS	NS	4983.11
MW-2	NS	5416.19	444.36	NS	NS	NS	NS	4971.83
MW-2R	06/08/22	5417.39	445.74	23.8	7.90	798	30.0	4971.65
MW-3	NS	5376.25	405.10	NS	NS	NS	NS	4971.15
MW-3R	06/08/22	5380.42	409.12	21.9	7.70	808	33.0	4971.30
MW-5	NS	5364.40	375.75	NS	NS	NS	NS	4988.65
MW-5R	06/08/22	5366.52	377.95	21.0	7.80	973	95.0	4988.57
MW-6	NS	5423.65	451.51	NS	NS	NS	NS	4972.14
MW-6R	06/08/22	5421.99	450.05	20.2	7.90	830	110.0	4971.94
MW-7	NS	5363.96	391.48	NS	NS	NS	NS	4972.48
MW-7R	06/08/22	5363.32	391.00	19.4	8.10	655	110.0	4972.32

Notes:

⁽¹⁾ Survey data for wells MW-1 through MW-5 (03/26/2015); well MW-5R (06/21/2016); wells MW-6, 6R, and 7R (06/11/2018); and wells MW-2R, 3R, and 7 (05/26/2020).

⁽²⁾ Recorded prior to well purging.

⁽³⁾ Stabilized field parameter values recorded during purging.

⁽⁴⁾ Volume of water purged prior to sample collection.

fmsl: feet above mean sea level

fbtow: feet below top of well

► For wells MW-1, 2, 3, 5, 6, and 7, top of well is top of PVC well casing

► For wells MW-2R through MW-7R, top of well is top of sounding tube

NS: Not Sampled

**Groundwater Monitoring Report
Sandoval County Landfill
June 2022 Sampling Event**

Exhibit D - Groundwater Monitoring Well and Field Data Summary

Well I.D.	Well Construction Material	Well Diameter (in.)	Top of Well Elevation ^(1, 2) (fmsl)	Total Depth (fbtow)	Boring Depth (fbgs)	Screen Length (ft.)	Location ^(1, 2)		Well Completion Date
							Northing	Easting	
MW-1	Sch 80 PVC	4	5324.82	342.92	340	30	1566727.43	1530025.087	6/10/1993
MW-2	Sch 80 PVC	4	5416.19	450.64	448	30	1568159.39	1531290.849	4/12/1996
MW-2R	Sch 80 PVC	4.8	5417.39	476.39	484	40	1568140.73	1531284.39	4/7/2020
MW-3	Sch 80 PVC	4	5376.25	411.47	410	30	1567315.35	1531065.172	4/2/1996
MW-3R	Sch 80 PVC	4.8	5380.42	443.42	451	40	1567457.23	1531045.3	3/26/2020
MW-5	SDR 17 PVC	4.5	5364.40	381.57	384	30	1567869.08	1528110.294	8/11/2003
MW-5R	Sch 80 PVC	5	5366.52	411.12	430	40	1567970.78	1528082.99	4/15/2016
MW-6	Sch 40 PVC	4	5423.65	458.85	462	30	1568758.24	1530695.53	1/28/2004
MW-6R	Sch 80 PVC	5	5421.99	487.14	495	40	1568816.59	1530759.48	5/31/2018
MW-7	Sch 40 PVC	4	5363.96	399.89	404	30	1569394.01	1531377.30	3/5/2004
MW-7R	Sch 80 PVC	5	5363.32	427.93	430	40	1569430.16	1531418.57	3/19/2018

Notes:

⁽¹⁾ Survey data for wells MW-1 through MW-5 (03/26/2015); well MW-5R (06/21/2016); wells MW-6, 6R, and 7R (06/11/2018); and wells MW-2R, 3R, and 7 (05/26/2020).

⁽²⁾ Well elevation and location data:

- For wells MW-1, 2, 3, 5, 6, and 7, survey data recorded at top of PVC well casing (north side)
- For wells MW-2R through MW-7R, survey data recorded at top of sounding tube (north side)

fmsl: feet above mean sea level

fbtow: feet below top of well

- For wells MW-1, 2, 3, 5, 6, and 7, top of well is top of PVC well casing
- For wells MW-2R through MW-7R, top of well is top of sounding tube

fbgs: feet below ground surface

Site: Sandoval County LandfillSamplers: Lu/TEObservers: —Site/Well Condition: good, goodWell ID: MW 2RDepth-to-water: 445.74Total Depth: 476.39Measured from: —Date: 6-8-22Ambient Temperature: 85Wind Direction/Speed: 10 NWRecent Precipitation: —

Equipment Information

Sampling Method: low flow

One Well Volume (feet, gallons) $(476.39 - 445.74) = 30.65$ feet
 (Total Depth - DTW) = well column
 $30.65 \times 0.95 = 29.12$ gallons
 (Well Column $\times 0.95$) = 1 well-volume
 Three Well Volumes $29.12 \times 3 = 87.36$ gallons
 $1 \text{ well-volume} \times 3 = 3 \text{ well-volumes}$

Pump Make: Grundfos® Refi-Flo 4Pump On: 1042 Water Out: —

Generator Fuel:				Electric Pump
	Beginning	Mid	Final	
Hz	94	92	94	
disch. Rate				

Notes: —

Time	Gallons Removed	°C	pH	SC units <u>ugm</u>	Observations	Pumping Rate
1049	1.0	19.6	8.1	820	clear, sulfur odor	458.05
1053	4.25	19.1	8.0	800	clear, sulfur odor	458.80
1057	6.2	19.0	7.8	798	clear, less sulfur odor	459.40
1101	7.5	19.1	7.8	801	clear, slight sulfur	460.25
1105	9.4	19.1	7.8	796	clear, slight sulfur	460.70
1113	12.5	19.6	7.8	794	clear, slight sulfur	461.71
1121	15.5	20.0	7.8	800	clear, slight sulfur	462.40
1127	23.24	21.5	7.8	797	clear, slight sulfur	466.61
1131	26	22.5	7.9	797	—	468.25

1134 30 23.8 7.9 798
 Volume Purged: 30 gallons

Field Blank: —Sample Start: 1135Duplicate: —Sample End: 1137Filtered: NOSampler(s): Andy LukasName: —Signature: —Name: Tyler BeckSignature: —

Site: Sandoval County Landfill

Samplers: Hy 17E

Observers: -

Site/Well Condition: good, good

Well ID: MW-3R

Depth-to-water: 409.12

Total Depth: 443.42

Measured from: top of sounding wire

Date: 6/8/22

Ambient Temperature: 92°F

Wind Direction/Speed: 10-15 Southwest

Recent Precipitation: none

Equipment Information

Sampling Method:

One Well Volume (feet, gallons)	$(443.12 - 409.12) = 34$ feet	
	(Total Depth - DTW) = well column	
	$34 \times 0.95 = 32.3$ gallons	
	(Well Column x 0.95) = 1 well-volume	
Three Well Volumes	$32.3 \times 3 = 96.9$ gallons	
	1 well-volume x 3 = 3 well-volumes	

Pump Make: Grundfos® Refi-Flo 4

Pump On: 1227 Water Out: 1229

Generator Fuel:				Electric Pump
	Beginning	Mid	Final	
H ₂	92	—		
disch. Rate				

Notes: Fixed sounding tube alignment w/ band clamp (stainless steel)

Time	Gallons Removed	°C	pH	SC units <u>listen</u>	Observations	Pumping Rate
1230	1.0	20.0	7.9	872	clear, slight sulfur	420.98
1233	5.0	19.6	7.8	810	clear, slight sulfur	423.05
1237	4.5	19.8	7.5	744	clear, slight odor	425.16
1241	15.0	19.6	7.6	801	clear, slight sulfur	427.50
1245	18.0	19.9	7.9	806	clear, slight sulfur	429.28
1249	22.0	20.8	7.7	806	clear, slight sulfur	431.20
1253	25.0	21.2	7.7	810	clear, slight sulfur	432.51
1257	27.5	21.5	7.8	808	" "	433.90
1301	30.5	21.7	7.8	808	" "	434.95
1305	33.0	21.9	7.7	808	" "	436.10

Volume Purged: 33 gallons

Sample Start: 1308

Sample End: 1316

Sampler(s):

Name

Signature

Field Blank: -

Duplicate: -

Filtered: no

Name

Signature

DTW

Groundwater Monitoring Field Notes

Site: **Sandoval County Landfill**

Samplers: AY / TZ

Observers: _____

Site/Well Condition: good, good

Equipment Information

Sampling Method:

One Well Volume (feet, gallons)	<u>411.12</u> - <u>377.95</u> = <u>33.17</u> feet	
	(Total Depth - DTW) = well column	
	<u>33.17</u>	x 0.95 = <u>31.51</u> gallons
	(Well Column x 0.95) = 1 well-volume	
Three Well Volumes	<u>31.51</u>	x 3 = <u>94.53</u> gallons
	1 well-volume x 3 = 3 well-volumes	

Pump Make: **Grundfos® Refi-Flo 4**

Pump On: ~~0701~~ Water Out: ~~0701~~
0701 0701

Generator Fuel:				Electric Pump
	Beginning	Mid	Final	
H ₂	<u>90</u>	<u>90</u>	<u>90</u>	
disch. Rate				

Notes: _____

Well ID: MW-5R

Depth-to-water: 377.95

Total Depth: 411.12

Measured from: _____

Date: 6-8-22

Ambient Temperature: 70°

Wind Direction/Speed: Calm

Recent Precipitation: —

Time	Gallons Removed	°C	pH	SC units <u>1/100</u>	Observations	Pumping Rate
0704	5.0	18.0	7.3	1014	clear, no odor	—
0709	20	19.8	7.1	959	clear, no odor	379.33
0714	35	20.9	7.4	960	clear, no odor	—
0720	50	21.1	7.5	972	clear, no odor	379.34
0726	65	21.2	7.6	963	clear, no odor	—
0733	80	21.1	7.7	978	clear, no odor	—
0736	95	21.0	7.8	973	clear, no odor	379.35

DTW

Groundwater Monitoring Field Notes

Volume Purged: 95 gallons

Sample Start: 0741

Sample End: 0746

Sampler(s): Andy Yoha,
Name

Signature

Field Blank: 0748 ("FB")

Duplicate: 0743

Filtered: —

Tyler Zack
Name

Signature

Site: Sandoval County Landfill

Samplers: Ag/HZ

Observers: —

Site/Well Condition: good, good

Well ID: MW-6R

Depth-to-water: 450.05

Total Depth: 487.14

Measured from: Mark on dish.

Date: 6/8/22

Ambient Temperature: 80

Wind Direction/Speed: 5-10

Recent Precipitation: —

Equipment Information

Sampling Method:

One Well Volume (feet, gallons) 487.14 450.05 = 37.09 feet
(Total Depth - DTW) = well column

37.09 x 0.95 = 35.24 gallons
(Well Column x 0.95) = 1 well-volume

Three Well Volumes 35.24 x 3 = 105.72 gallons
1 well-volume x 3 = 3 well-volumes

Pump Make: Grundfos® Refi-Flo 4

Pump On: 0925 Water Out: 0927

Generator Fuel:				Electric Pump
	Beginning	Mid	Final	
Hz	<u>100</u>	<u>100</u>	<u>100</u>	
disch. Rate				

Notes: _____

Sampler(s): Andy Yuhua

Name

Signature

Field Blank: —

Duplicate: —

Filtered: No

Name

Signature

Time	Gallons Removed	°C	pH	SC units <u>µS</u>	Observations	Pumping Rate <u>DTW</u>
0929	5	18.1	7.9	830	clr no odor	451.55
0934	20	19.2	8.0	825	—	451.59
0940	40	20.0	8.0	827	—	451.64
0947	60	20.2	7.9	830	—	451.68
0954	80	21.2	7.9	829	—	451.70
1001	100	20.3	7.9	830	—	451.74
1004	110	20.2	7.9	830	—	451.76

Volume Purged: 110 gallons

Sample Start: 1006

Sample End: 1010

Exhibit E: Summary of Inorganic Parameter Analytical Results

Exhibit E - Summary of Organic Parameter Analytical Results

Notes for Summary of Inorganic Parameter Analytical Results

- (1) All parameter concentrations expressed in mg/L, except for Field pH (standard units), Field SC (µs/cm), Field Temperature (°C).

The following statistical parameters were updated on 07/03/14. The well/parameter-specific statistical values (i.e., calculated BCV, calculated/established UTLV, and calculated/established AML) included in **Attachment 5** were approved by NMED on 02/09/15.

Calculated BCV (2014) = Calculated Background Concentration Value

- The simple mean (i.e., arithmetic average) of the concentrations of each parameter reported as detected a minimum of 2 times within the background data set (1996 - 03/2014). If reported as detected only once, the BCV is assigned the value of the single detection. If reported as 100% non-detect, the BCV is assigned the value of the highest laboratory practical quantitation limit (PQL) within the background data set (1996 - 2014).

Regulatory Presumptive AML = Regulatory Presumptive Assessment Monitoring Level (Updated January 2020)

2014 Established AML = Established Assessment Monitoring Level

- Parameter and well-specific value defined as the greater of either the regulatory presumptive AML (05/05/10) or the calculated BCV for each well/parameter combination.

2014 Calculated UTLV = Calculated Upper Tolerance Limit Value

- Parameter and well-specific statistical value calculated via evaluation of applicable background monitoring analytical data by Sanitas®.
- Non-detects are assigned a value of ½ the laboratory PQL for UTLV statistical calculations with Sanitas™.

2014 Established UTLV = Established Upper Tolerance Limit Value

- Equals the Calculated UTLV if Calculated UTLV > Established AML
- Parameters for which the calculated UTLV ≤ the regulatory presumptive AML were not assigned an established UTLV.
- Parameters for which the background dataset contained 100% non-detects were not assigned an established UTLV.

N/A = UTLV not assigned


GWPS = Regulatory Groundwater Protection Standard (Updated January 2020)

Bold laboratory analytical values for the current event indicate an exceedance of the Established AML.

Bold italics laboratory analytical values for the current event indicate an exceedance of the Established UTLV.

Parenthetical values indicate the results of dissolved metals analyses.

 Indicates no sampling/analysis performed for corresponding monitoring date

 The D qualifier indicates the sample was diluted by the laboratory prior to analysis

 Field data not available. Laboratory data provided where available.


 Parenthetical values represent dissolved metals analytical results

Exhibit E - Summary of Inorganic Parameter Analytical Results

MW-2R	MW-2							MW-2R			2014 Calculated BCV	Regulatory Presumptive AML	2014 Calculated UTLV	2014 Established AML	2014 Established UTLV	GWPS
PARAMETER ⁽¹⁾	03/13/13	03/18/14	03/25/15	06/01/16	03/08/17	06/07/18	04/12/19	06/17/20	06/10/21	06/08/22						
Fluoride, F	0.75	0.78	0.72	0.76	0.77	0.66	<0.50	0.79	0.84	0.75	0.81	0.8	1.045	0.81	1.045	1.6
Chloride, Cl ⁻	74	73	76	74	82	69	79	100	87	74	83.18	187.5	89.36	187.5	N/A	250
Nitrate as N, NO ₃ -N	1.0	1.0	1.0	1.1	1.0	1.0	<0.50	<0.50	<0.50	0.22	0.94	5.0	1.4	5.0	N/A	10
Sulfate, SO ₄ ²⁻	50	51	52	52	51	47	38	96	56	54	58.56	450	69.76	450	N/A	600
Aluminum, Al	0.23	0.23	0.11	0.023	0.550	0.160	0.044	0.59	0.040	0.38	0.43	3.75	1.5	3.75	N/A	5.0
Barium, Ba	0.052	0.053	0.053	0.052	0.060	0.050	0.079	0.058	0.054	0.050	0.052	1.0	0.06729	0.5	N/A	2.0
Chromium, Cr	0.021	0.011	0.058	0.0070 (<0.0060)	0.0390	0.0160	0.026	0.0067	<0.0060	<0.0060	0.026	0.025	0.052	0.026	0.052	0.05
Cobalt, Co	<0.025	<0.0060	<0.0060	<0.0060	<0.0060	<0.0060	<0.0060	<0.0060	<0.0060	<0.0060	0.030	0.0375	0.015	0.0375	N/A	0.05
Iron, Fe	1.8	1.4	1.6	0.47 (<0.020)	3.5	1.3	2.3	0.55	0.20	0.34	1.43	0.75	6.654	1.43	6.654	1.0
Manganese, Mn	<0.03	0.012	0.0075	0.0053 (0.0039)	0.0027	0.0099	0.44	0.33	0.25	0.12	0.13	0.15	0.304	0.15	0.304	0.2
Zinc, Zn	<0.05	<0.010	0.013	<0.010	<0.010	<0.010	0.015	0.032	<0.010	0.011	0.071	7.5	0.0729	7.5	N/A	10
Arsenic, As	<0.005	0.0040	0.0041	0.0033 (0.0031)	0.0051	0.0041	0.012	0.0070	0.0058	0.0075	0.0057	0.005	0.0079	0.0057	0.0079	0.01
Lead, Pb	<0.01	<0.0010	0.0015	0.0057 (<0.00050)	0.0012	0.001	0.0013	0.0024	0.00056	0.00070	0.01	0.015	0.005	0.025	N/A	0.0075
Uranium, U	<0.015	0.0019	0.0024	0.0021	0.0020	0.0018	0.0013	0.0048	0.0029	0.0039	0.0036	0.015	1.25	0.015	1.25	0.03
Total Dissolved Solids, TDS	366	396	350	344	368	372	353	545	460	391	365.36	750	486	750	N/A	1,000
Field pH (standard units)	7.9	7.8	7.3	7.72	7.8	8.0	7.47	7.80	7.87	7.90	7.70	6 - 9	7.068 - 8.305	6 - 9	N/A	6 - 9
Subsection A Organic Parameter	03/13/13	03/18/14	03/25/15	06/01/16	03/08/17	06/07/18	04/12/19	06/17/20	06/10/21	06/08/22	2014 Calculated BCV	Regulatory Presumptive AML	2014 Calculated UTLV	2014 Established AML	2014 Established UTLV	GWPS
Phenolics (total)	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025	0.025	<0.025	<0.0025	0.005	0.00375	0.0025	0.00375	N/A	0.005
Subsection C Parameters	03/13/13	03/18/14	03/25/15	06/01/16	03/08/17	06/07/18	04/12/19	06/17/20	06/10/21	06/08/22	2014 Calculated BCV	Regulatory Presumptive AML	2014 Calculated UTLV	2014 Established AML	2014 Established UTLV	GWPS
Phosphorus, Orthophosphate (As P)	<0.5	<0.50	<0.50	<0.50	<2.5	<0.50	<2.5	<2.5	<2.5	<0.50	1.0	—	—	—	—	—
Calcium, Ca	36	38	35	38	41	37	42	41	39	38	41	—	—	—	—	—
Magnesium, Mg	4.2	4.2	4.0	4.4	4.6	4.3	4.9	5.8	5.3	4.9	4.8	—	—	—	—	—
Potassium, K	4.2	4.2	4.5	4.1	4.3	4.2	4.2	5.6	5.2	4.6	4.5	—	—	—	—	—
Sodium, Na	67	70	68	71	71	75	74	140	110	87	72	—	—	—	—	—
Total Organic Carbon, TOC	27	2.5	4.8	5.9	8.6	3.9	15	8.1	3.9	2.5	11.8	—	—	—	—	—
Ammonia as N, NH ₃ -N	<0.5	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	1.0	—	—	—	—	—
Total Nitrogen, TN	1.0	1.0	1.0	1.1	1.0	<1.0	<1.0	<1.0	<2.0	<1.0	1.0	—	—	—	—	—
Bicarbonate, HCO ₃ ⁻ (as CaCO ₃)	110	110	109.7	112.4	113.7	111.5	144.8	172.2	166.6	145.2	110	—	—	—	—	—
Carbonate, CO ₃ ²⁻ (as CaCO ₃)	<2.0	<2.0	<2.0	<2.000	<2.000	<2.000	<2.000	<2.000	<2.000	<2.000	2.0	—	—	—	—	—
Total Kjeldahl Nitrogen, TKN	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<2.0	<1.0	0.6	—	—	—	—	—
Field Temperature (°C)	20.2	19.9	20.7	22.6	22.2	23.3	19.1	22.9	24.0	23.8	19.0	—	—	—	—	—
Field SC (mS/cm)	598	556	617	546	574	573	648	944	766	798	550	—	—	—	—	—

Exhibit E - Summary of Inorganic Parameter Analytical Results

MW-3R	MW-3							MW-3R			2014 Calculated BCV	Regulatory Presumptive AML	2014 Calculated UTLV	2014 Established AML	2014 Established UTLV	GWPS
PARAMETER ⁽¹⁾	03/13/13	03/18/14	03/25/15	06/01/16	03/08/17	06/07/18	04/12/19	06/17/20	06/10/21	06/08/22						
Fluoride, F	0.65	0.73	0.68	0.71	0.68	<0.50	0.73	0.71	0.76	0.68	0.69	0.8	0.8	0.8	0.842	1.6
Chloride, Cl ⁻	76	76	81	76	74	78	82	120	88	74	80.93	187.5	87.5	187.5	N/A	250
Nitrate as N, NO ₃ -N	1.1	1.1	1.1	1.2	1.1	1.1	<0.50	<0.50	<0.50	<0.10	1.1	5.0	1.3	5	N/A	10
Sulfate, SO ₄ ²⁻	52	54	55	54	55	52	63	120	67	60	60.93	450	69	450	N/A	600
Aluminum, Al	0.35	0.038	0.022	0.36	0.22	2.00	0.14	0.41	0.40	2.40	0.33	3.75	1.50	3.75	N/A	5.0
Barium, Ba	0.056	0.047	0.049	0.060	0.052	0.056	0.070	0.066	0.054	0.061	0.05	1.0	0.1	0.5	N/A	2.0
Chromium, Cr	0.018	0.0074	<0.0060	0.16 (<0.0060)	0.018	0.042	0.10	<0.0060	<0.0060	<0.0060	0.027	0.025	0.078	0.0269	0.078	0.05
Cobalt, Co	<0.025	<0.0060	<0.0060	<0.0060	<0.0060	<0.0060	0.019	<0.0060	<0.0060	<0.0060	0.03	0.0375	0.0150	0.0375	N/A	0.05
Iron, Fe	2.20	0.27	0.32	3.5 (<0.020)	1.4	5.4	2.2	0.89	0.81	1.7	0.91	0.75	6.14	0.91224	6.135	1.0
Manganese, Mn	<0.03	0.0024	0.0039	0.057 (0.0021)	0.018	0.055	0.94	0.76	0.26	0.14	0.04	0.15	0.05	0.15	N/A	0.2
Zinc, Zn	<0.05	<0.010	<0.010	<0.010	<0.010	<0.010	0.013	0.034	0.028	0.075	0.06	7.5	0.1	7.5	N/A	10
Arsenic, As	0.0083	0.0057	0.0058	0.0080 (0.0050)	0.0056	0.0075	0.0085	0.0068	0.0046	0.0049	0.0069	0.005	0.010	0.0069	0.01	0.01
Lead, Pb	<0.01	<0.0010	<0.0010	0.0024 (<0.00050)	0.00072	0.0015	0.0016	0.0027	0.00079	0.0021	0.010	0.0150	0.005	0.025	N/A	0.0075
Uranium, U	<0.015	0.0020	0.0023	0.0025	0.0020	0.0020	0.0020	0.0046	0.0033	0.0029	0.0032	0.015	1.250	0.015	1.25	0.03
Total Dissolved Solids, TDS	368	382	358	344	360	366	361	661	512	415	363.20	750	385	750	N/A	1,000
Field pH (standard units)	7.8	7.8	7.5	7.73	7.9	7.9	7.57	7.63	7.74	7.70	7.77	6 - 9	7.378 - 8.314	6 - 9	N/A	6 - 9
Subsection A Organic Parameter	03/13/13	03/18/14	03/25/15	06/01/16	03/08/17	06/07/18	04/12/19	06/17/20	06/10/21	06/08/22	2014 Calculated BCV	Regulatory Presumptive AML	2014 Calculated UTLV	2014 Established AML	2014 Established UTLV	GWPS
Phenolics (total)	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025	0.04	<0.0025	<0.0025	0.0050	0.00375	0.00250	0.00375	N/A	0.005
Subsection C Parameters	03/13/13	03/18/14	03/25/15	06/01/16	03/08/17	06/07/18	04/12/19	06/17/20	06/10/21	06/08/22	2014 Calculated BCV	Regulatory Presumptive AML	2014 Calculated UTLV	2014 Established AML	2014 Established UTLV	GWPS
Phosphorus, Orthophosphate (As P)	<0.5	<0.50	<0.50	<0.50	<2.5	<2.5	<2.5	<2.5	<2.5	<0.50	1.0	—	—	—	—	—
Calcium, Ca	40	39	38	41	42	40	45	53	46	45	42	—	—	—	—	—
Magnesium, Mg	4.9	4.5	4.4	4.9	4.7	4.8	5.0	7.6	6.2	6.1	4.8	—	—	—	—	—
Potassium, K	4.5	4.0	4.6	4.4	4.1	4.5	4.3	5.9	5.2	5.3	4.3	—	—	—	—	—
Sodium, Na	69	67	70	70	68	72	68	140	100	88	74	—	—	—	—	—
Total Organic Carbon, TOC	30	7.1	13	13	1.7	2.1	6.1	21	27	7.5	8	—	—	—	—	—
Ammonia as N, NH ₃ -N	<0.5	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	1.0	—	—	—	—	—
Total Nitrogen, TN	1.1	1.1	1.1	1.2	1.1	1.1	<1.0	<1.0	<1.0	<1.0	1.1	—	—	—	—	—
Bicarbonate, HCO ₃ ⁻ (as CaCO ₃)	110	100	106.1	108.8	107.8	107.1	124.6	179.0	170.8	151.2	103	—	—	—	—	—
Carbonate, CO ₃ ²⁻ (as CaCO ₃)	<2.0	<2.0	<2.0	<2.000	<2.000	<2.000	<2.000	<2.000	<2.000	<2.000	2.0	—	—	—	—	—
Total Kjeldahl Nitrogen, TKN	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	1.0	—	—	—	—	—
Field Temperature (°C)	20.2	18.6	21.1	22.3	22.2	25.1	18.1	22.5	24.1	21.7	18.9	—	—	—	—	—
Field SC (mS/cm)	599	570	622	552	573	562	667	1,070	820	808	566	—	—	—	—	—

Exhibit E - Summary of Inorganic Parameter Analytical Results

MW-5R	MW-5			MW-5R							2014 Calculated BCV	Regulatory Presumptive AML	2014 Established AML	2014 Calculated UTLV	2014 Established UTLV	GWPS
PARAMETER ⁽¹⁾	03/13/13	03/18/14	03/25/15	06/01/16	04/13/17	06/07/18	04/04/19	06/17/20	06/10/21	06/08/22						
Fluoride, F	1.60	0.70	0.75	0.70	0.65	0.58	0.71	0.62	0.73	0.65	0.77	0.8	0.8	0.9399	0.940	1.6
Chloride, Cl ⁻	160	170	180	170	170	160	180	160	160	170	176.00	187.5	187.5	206.4	206.4	250
Nitrate as N, NO ₃ -N	<1.0	<0.10	<0.10	0.60	0.75	0.71	0.63	0.60	0.58	0.66	1.0	5.0	5.0	0.5	N/A	10
Sulfate, SO ₄ ²⁻	<5.0	27	1.3	32	29	31	34	32	28	35	29.84	450	450	47.94	N/A	600
Aluminum, Al	<0.15	0.086	0.050	<0.020	9.6 (<0.020)	<0.020	<0.020	<0.020	<0.020	<0.020	0.16	3.75	3.75	1.5	N/A	5.0
Barium, Ba	0.14	0.19	0.20	0.093	0.21	0.09	0.082	0.083	0.090	0.086	0.12	1.0	0.5	0.2291	N/A	2.0
Chromium, Cr	0.02	0.025	0.0064	0.015 (<0.0060)	0.045	<0.0060	<0.0060	<0.0060	0.0060	<0.0060	0.047	0.025	0.047	0.14	0.14	0.05
Cobalt, Co	<0.025	<0.0060	<0.0060	<0.0060	<0.0060	<0.0060	<0.0060	<0.0060	0.0060	<0.0060	0.03	0.0375	0.0375	0.015	N/A	0.05
Iron, Fe	0.82	1.4	0.83	0.15 (<0.020)	11 (0.020)	0.0220	0.022	<0.050	0.050	<0.050	1.20	0.75	1.20	1.649	1.649	1.0
Manganese, Mn	0.073	0.41	0.17	0.024 (0.023)	0.30	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	0.11	0.15	0.15	0.4475	0.4475	0.2
Zinc, Zn	0.95	1.2	2.0	0.015	0.029	<0.010	<0.010	<0.010	<0.010	<0.010	0.80	7.5	7.5	1.3	N/A	10
Arsenic, As	0.0091	0.0062	0.0067	0.0044 (0.0042)	0.011	0.0069	0.0073	0.0079	0.0084	0.0079	0.0080	0.005	0.008	0.012	0.012	0.01
Lead, Pb	0.013	0.011	0.025	0.00050 (<0.0005)	0.0060	<0.00050	<0.00050	<0.00050	0.0005	<0.00050	0.020	0.0015	0.025	0.017	N/A	0.0075
Uranium, U	<0.015	0.0012	0.0019	0.0024	0.0028	0.0019	0.0017	0.0018	0.0018	0.0020	0.0026	0.015	0.015	1.25	1.25	0.03
Total Dissolved Solids, TDS	472	490	454	460	473	473	462	466	469	442	478.47	750	750	545.5	N/A	1,000
Field pH (standard units)	7.4	7.5	7.5	7.69	8.2	8.0	7.67	7.82	7.80	7.80	7.53	6 - 9	6 - 9	6.622 - 8.435	N/A	6 - 9
Subsection A Organic Parameter	03/13/12	03/18/14	03/25/15	06/01/16	04/13/17	06/07/18	04/04/19	06/17/20	06/10/21	06/08/22	2014 Calculated BCV	Regulatory Presumptive AML	2014 Established AML	2014 Calculated UTLV	2014 Established UTLV	GWPS
Phenolics (total)	0.0049	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025	0.0041	0.00375	0.00407	0.0049	0.0049	0.005
Subsection C Parameters	03/13/12	03/18/14	03/25/15	06/01/16	04/13/17	06/07/18	04/04/19	06/17/20	06/10/21	06/08/22	2014 Calculated BCV	Regulatory Presumptive AML	2014 Established AML	2014 Calculated UTLV	2014 Established UTLV	GWPS
Phosphorus, Orthophosphate (As P)	<0.5	<0.50	<0.50	<0.50	<2.5	<0.50	<0.50	<0.50	<2.5	<0.50	1.0	—	—	—	—	—
Calcium, Ca	54	50	48	48	63	45	50	46	49	44	45	—	—	—	—	—
Magnesium, Mg	6.3	5.7	5.4	5.2	8.5	4.9	5.4	5.1	5.3	5.0	5.1	—	—	—	—	—
Potassium, K	6.6	6.6	6.7	5.3	7.3	5.2	5.6	5.1	5.5	5.0	6.0	—	—	—	—	—
Sodium, Na	94	97	100	110	110	110	110	120	100	110	105	—	—	—	—	—
Total Organic Carbon, TOC	9	6.5	1.8	4.0	<1.0	1.6	1.3	1.8	2.2	<1.0	8	—	—	—	—	—
Ammonia as N, NH ₃ -N	<0.5	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	1.0	—	—	—	—	—
Total Nitrogen, TN	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	1.8	—	—	—	—	—
Bicarbonate, HCO ₃ ⁻ (as CaCO ₃)	140	130	138.4	104.5	102.3	101.8	100.4	102.0	100.6	100.3	119	—	—	—	—	—
Carbonate, CO ₃ ²⁻ (as CaCO ₃)	<2.0	<2.0	<2.0	<2.000	<2.000	<2.000	<2.000	<2.0	<2.000	<2.000	2.0	—	—	—	—	—
Total Kjeldahl Nitrogen, TKN	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	1.4	—	—	—	—	—
Field Temperature (°C)	16.0	15.3	17.1	22.4	19.1	21.5	20.9	20.9	21.3	21.0	16.6	—	—	—	—	—
Field SC (mS/cm)	835	801	854	768	834	792	868	878	880	973	798	—	—	—	—	—

Exhibit E - Summary of Inorganic Parameter Analytical Results

MW-6R	MW-6					MW-6R						2014 Calculated BCV	Regulatory Presumptive AML	2014 Established AML	2014 Calculated UTLV	2014 Established UTLV	GWPS
PARAMETER ⁽¹⁾	03/12/12	03/13/13	03/18/14	03/25/15	03/09/17	06/07/18	04/04/19	06/17/20	06/10/21	06/08/22							
Fluoride, F	0.66	0.67	0.69	0.62	<0.50	0.53	0.65	0.55	0.62	0.58		0.70	0.8	0.8	0.8235	0.8235	1.6
Chloride, Cl ⁻	120	120	120	130	120	100	120	110	110	110		124.29	187.5	187.5	130	N/A	250
Nitrate as N, NO ₃ -N	<1.0	<1.0	0.74	0.60	<0.50	1.1	1.2	1.2	1.1	1.4		0.89	5.0	5.0	1.0	N/A	10
Sulfate, SO ₄ ²⁻	46	43	44	49	<2.5	42	48	44	45	48		48.86	450	450	53.59	N/A	600
Aluminum, Al	0.19	0.15	0.12	0.026	0.040	<0.020	<0.020	<0.020	0.035	0.036		0.15	3.75	3.75	1.5	N/A	5.0
Barium, Ba	0.061	0.056	0.055	0.069	0.10	0.050	0.050	0.050	0.052	0.049		0.053	1.0	0.5	0.06468	N/A	2.0
Chromium, Cr	<0.01	0.013	0.0064	<0.0060	0.024	<0.0060	<0.0060	<0.0060	<0.0060	<0.0060		0.012	0.025	0.025	0.016	N/A	0.05
Cobalt, Co	<0.025	<0.025	<0.0060	<0.0060	<0.0060	<0.0060	<0.0060	<0.0060	<0.0060	<0.0060		0.03	0.0375	0.0375	0.015	N/A	0.05
Iron, Fe	0.17	0.22	0.14	0.14	3.4 (2.9)	0.081	0.064	<0.050	0.052	0.064		0.17	0.75	0.75	0.22	N/A	1.0
Manganese, Mn	<0.03	<0.03	0.0079	0.025	0.35 (0.45)	0.0040	0.0032	<0.0020	<0.0020	0.0021		0.079	0.15	0.15	0.15	N/A	0.2
Zinc, Zn	<0.05	<0.05	0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010		0.030	7.5	7.5	0.05	N/A	10
Arsenic, As	0.0068	0.0078	0.0066	0.0056	0.0018	0.0062	0.0074	0.0082	0.0088	0.0088		0.0086	0.005	0.0086	0.011	0.011	0.01
Lead, Pb	<0.01	<0.01	<0.0010	<0.0010	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050		0.01	0.0015	0.025	0.005	N/A	0.0075
Total Dissolved Solids, TDS	433	439	224	424	537	407	409	422	420	391		414.50	750	750	453.4	N/A	1,000
Field pH (standard units)	7.8	7.8	7.7	7.5	7.0	8.1	7.64	7.84	7.80	7.90		7.84	6 - 9	6 - 9	7.555 - 8.217	N/A	6 - 9
Subsection A Organic Parameter	03/12/12	03/12/13	03/18/14	03/25/15	03/09/17	06/07/18	04/04/19	06/17/20	06/10/21	06/08/22		2014 Calculated BCV	Regulatory Presumptive AML	2014 Established AML	2014 Calculated UTLV	2014 Established UTLV	GWPS
Phenolics (total)	<0.0025	<0.0025	<0.0025	<0.0025	0.0058	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025		0.003	0.00375	0.00375	0.0015	N/A	0.005
Subsection C Parameters	03/12/12	03/12/13	03/18/14	03/25/15	03/09/17	06/07/18	04/04/19	06/17/20	06/10/21	06/08/22		2014 Calculated BCV	Regulatory Presumptive AML	2014 Established AML	2014 Calculated UTLV	2014 Established UTLV	GWPS
Phosphorus, Orthophosphate (As P)	<0.5	<0.5	<0.50	<0.50	<2.5	<0.50	<0.50	<0.50	<2.5	<0.50		1.0	—	—	—	—	—
Calcium, Ca	46	50	45	42	56	44	45	45	47	44		44	—	—	—	—	—
Magnesium, Mg	5.4	5.8	5.0	4.8	5.5	4.9	5.0	5.2	5.2	5.0		5.3	—	—	—	—	—
Potassium, K	4.9	5.4	4.5	5.1	4.6	4.8	4.7	4.8	5.0	4.8		4.7	—	—	—	—	—
Sodium, Na	93	92	90	88	90	80	82	86	86	84		91	—	—	—	—	—
Total Organic Carbon, TOC	<1.0	14	18	6.9	100	<1.0	<1.0	<1.0	5.5	7.7		11.2	—	—	—	—	—
Ammonia as N, NH ₃ -N	<0.5	<0.5	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0		1.0	—	—	—	—	—
Total Nitrogen, TN	<1.0	<1.0	<1.0	<1.0	<1.0	1.1	1.2	1.2	3.3	1.4		1.0	—	—	—	—	—
Bicarbonate, HCO ₃ ⁻ (as CaCO ₃)	110	110	110	118.0	150.4	102.4	102.2	104.0	102.4	103.9		109	—	—	—	—	—
Carbonate, CO ₃ ²⁻ (as CaCO ₃)	<2.0	<2.0	<2.0	<2.0	<2.000	<2.000	<2.000	<2.000	<2.000	<2.000		2.0	—	—	—	—	—
Total Kjeldahl Nitrogen, TKN	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	2.2	<1.0		1.0	—	—	—	—	—
Field Temperature (°C)	21.5	23.9	19.1	19.4	16.3	21.1	19.6	19.8	20.1	20.2		21.1	—	—	—	—	—
Field SC (mS/cm)	804	734	700	776	771	668	745	735	749	830		728	—	—	—	—	—

Exhibit E - Summary of Inorganic Parameter Analytical Results

MW-7R	MW-7					MW-7R					2014 Calculated BCV	Regulatory Presumptive AML	2014 Established AML	2014 Calculated UTLV	2014 Established UTLV	GWPS
PARAMETER ⁽¹⁾	03/13/13	03/18/14	03/25/15	05/24/16	03/08/17	06/07/18	04/04/19	06/17/20	06/10/21	06/08/22						
Fluoride, F	0.84	0.85	0.78	0.80	1.2	0.86	0.96	0.84	0.99	0.88	0.86	0.8	0.86	0.9776	0.9776	1.6
Chloride, Cl ⁻	41	42	42	40	49	48	49	49	53	53	43.43	187.5	187.5	48	N/A	250
Nitrate as N, NO ₃ -N	2.0	2.1	0.78	<1.0	<0.10	6.2	6.6	6.2	5.4	6.2	2.56	5.0	5.0	3.2	N/A	10
Sulfate, SO ₄ ²⁻	55	55	44	51	61	43	44	42	44	47	62.07	450	450	84.24	N/A	600
Aluminum, Al	0.20	0.19	1.0	0.36	0.58	0.085	0.39	0.11	0.35	0.16	0.19	3.75	3.75	1.5	N/A	5.0
Barium, Ba	0.062	0.061	0.060	0.061	0.065	0.051	0.059	0.53	0.057	0.054	0.060	1.0	0.5	0.08	N/A	2.0
Chromium, Cr	<0.01	0.011	0.016	0.0085 (<0.0060)	0.030	<0.0060	<0.030	<0.0060	<0.0060	<0.0060	0.017	0.025	0.025	0.028	0.028	0.05
Cobalt, Co	<0.025	<0.0060	<0.0060	<0.0060	<0.0060	<0.0060	<0.030	<0.0060	<0.0060	<0.0060	0.03	0.0375	0.0375	0.015	N/A	0.05
Iron, Fe	0.21	0.20	0.91	0.47 (0.037)	0.99 (0.48)	0.090	0.38	0.14	0.32	0.15	0.19	0.75	0.75	0.31	N/A	1.0
Manganese, Mn	<0.03	0.022	0.050	0.020 (0.015)	0.022	0.013	0.019	0.013	0.012	0.0069	0.074	0.15	0.15	0.19	0.190	0.2
Zinc, Zn	<0.05	<0.010	0.023	0.015	0.023	<0.010	<0.050	<0.010	<0.010	<0.010	0.050	7.5	7.5	0.025	N/A	10
Arsenic, As	0.0070	0.0059	0.0065	0.0055 (0.0052)	0.0068	0.0048	0.0064	0.0063	0.0070	0.0071	0.006	0.005	0.006	0.007	0.007	0.01
Lead, Pb	<0.01	<0.0010	0.0023	0.0015 (<0.00050)	0.0016	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	0.01	0.0150	0.025	0.005	N/A	0.0075
Uranium, U	<0.015	0.0028	0.0023	0.0022	0.0027	0.0020	0.0021	0.0018	0.0019	0.0019	0.0031	0.015	0.015	1.25	1.25	0.03
Total Dissolved Solids, TDS	333	172	313	297	324	332	314	316	342	327	322.64	750	750	358	N/A	1,000
Field pH (standard units)	7.9	7.9	7.5	7.79	7.7	8.0	7.67	7.91	7.90	8.10	7.86	6 - 9	6 - 9	7.639 - 8.211	N/A	6 - 9
Subsection A Organic Parameter	03/13/13	03/18/14	03/25/15	05/24/16	03/08/17	06/07/18	04/04/19	06/17/20	06/10/21	06/08/22	2014 Calculated BCV	Regulatory Presumptive AML	2014 Established AML	2014 Calculated UTLV	2014 Established UTLV	GWPS
Phenolics (total)	0.0032	<0.0025	<0.0025	<0.0025	0.0029	<2.5	<0.0025	<0.0025	<0.0025	<0.0025	0.003	0.00375	0.00375	0.0015	N/A	0.005
Subsection C Parameters	03/13/13	03/18/14	03/25/15	05/24/16	03/08/17	06/07/18	04/04/19	06/17/20	06/10/21	06/08/22	2014 Calculated BCV	Regulatory Presumptive AML	2014 Established AML	2014 Calculated UTLV	2014 Established UTLV	GWPS
Phosphorus, Orthophosphate (As P)	<0.5	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<2.5	<0.50	1.0	—	—	—	—	—
Calcium, Ca	39	39	36	41	44	35	36	36	38	36	37	—	—	—	—	—
Magnesium, Mg	4.8	4.7	4.7	5.2	5.1	4.2	4.6	4.4	4.7	4.4	4.9	—	—	—	—	—
Potassium, K	4.2	4.6	4.5	4.2	4.4	4.1	4.1	4.2	4.3	4.0	4.3	—	—	—	—	—
Sodium, Na	55	55	54	58	56	68	61	70	66	66	61	—	—	—	—	—
Total Organic Carbon, TOC	<1.0	3.3	76	4.6	54	<1.0	2.2	2.2	<1.0	<1.0	3.8	—	—	—	—	—
Ammonia as N, NH ₃ -N	<0.5	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	1.0	—	—	—	—	—
Total Nitrogen, TN	2.0	2.1	1.9	<1.0	<1.0	6.2	6.6	6.2	5.4	6.2	2.6	—	—	—	—	—
Bicarbonate, HCO ₃ ⁻ (as CaCO ₃)	120	120	137.2	135.7	127.9	107.8	107.1	107.8	105.7	105.3	119	—	—	—	—	—
Carbonate, CO ₃ ²⁻ (as CaCO ₃)	<2.0	<2.0	<2.0	<2.000	<2.000	<2.000	<2.000	<2.000	<2.000	<2.000	2.0	—	—	—	—	—
Total Kjeldahl Nitrogen, TKN	<1.0	<1.0	1.1	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	1.0	1.0	—	—	—	—	—
Field Temperature (°C)	21.4	19.3	17.4	19.9	17.5	19.8	19.4	19.3	19.3	19.4	21.1	—	—	—	—	—
Field SC (mS/cm)	519	493	535	488	511	511	570	570	579	655	512	—	—	—	—	—

Exhibit F: Laboratory Analytical Report and Chain-of-Custody Documentation



Hall Environmental Analysis Laboratory
4901 Hawkins NE
Albuquerque, NM 87109
TEL: 505-345-3975 FAX: 505-345-4107
Website: www.hallenvironmental.com

July 06, 2022

Mike Crepeau

Parkhill

333 Rio Rancho Blvd. N.E., Suite 400

Rio Rancho, NM 87124

TEL: (505) 867-6990

FAX:

RE: Sandoval County Landfill SCCF

OrderNo.: 2206470

Dear Mike Crepeau:

Hall Environmental Analysis Laboratory received 8 sample(s) on 6/8/2022 for the analyses presented in the following report.

These were analyzed according to EPA procedures or equivalent. To access our accredited tests please go to www.hallenvironmental.com or the state specific web sites. In order to properly interpret your results, it is imperative that you review this report in its entirety. See the sample checklist and/or the Chain of Custody for information regarding the sample receipt temperature and preservation. Data qualifiers or a narrative will be provided if the sample analysis or analytical quality control parameters require a flag. When necessary, data qualifiers are provided on both the sample analysis report and the QC summary report, both sections should be reviewed. All samples are reported, as received, unless otherwise indicated. Lab measurement of analytes considered field parameters that require analysis within 15 minutes of sampling such as pH and residual chlorine are qualified as being analyzed outside of the recommended holding time.

Please don't hesitate to contact HEAL for any additional information or clarifications.

ADHS Cert #AZ0682 -- NMED-DWB Cert #NM9425 -- NMED-Micro Cert #NM0901

Sincerely,

A handwritten signature in black ink, appearing to read "Andy Freeman", is written over a light blue horizontal line.

Andy Freeman

Laboratory Manager

4901 Hawkins NE

Albuquerque, NM 87109

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order **2206470**

Date Reported: **7/6/2022**

CLIENT: Parkhill

Client Sample ID: MW-2R

Project: Sandoval County Landfill SCCF

Collection Date: 6/8/2022 11:35:00 AM

Lab ID: 2206470-001

Matrix: AQUEOUS

Received Date: 6/8/2022 2:29:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 504.1: EDB/DBCP						Analyst: JME
1,2-Dibromo-3-chloropropane	ND	0.019		µg/L	1	6/13/2022 6:05:40 PM
1,2-Dibromoethane	ND	0.0095		µg/L	1	6/13/2022 6:05:40 PM
EPA METHOD 300.0: ANIONS						Analyst: LRN
Fluoride	0.75	0.10		mg/L	1	6/9/2022 6:02:28 PM
Chloride	74	10		mg/L	20	6/9/2022 6:41:04 PM
Nitrogen, Nitrite (As N)	ND	0.10		mg/L	1	6/9/2022 6:02:28 PM
Nitrogen, Nitrate (As N)	0.22	0.10		mg/L	1	6/9/2022 6:02:28 PM
Phosphorus, Orthophosphate (As P)	ND	0.50		mg/L	1	6/9/2022 6:02:28 PM
Sulfate	54	10		mg/L	20	6/9/2022 6:41:04 PM
EPA METHOD 200.7: METALS						Analyst: JLF
Aluminum	0.38	0.020	*	mg/L	1	6/14/2022 8:04:21 PM
Barium	0.050	0.0030		mg/L	1	6/15/2022 5:51:02 PM
Calcium	38	1.0		mg/L	1	6/14/2022 8:04:21 PM
Chromium	ND	0.0060		mg/L	1	6/14/2022 8:04:21 PM
Cobalt	ND	0.0060		mg/L	1	6/14/2022 8:04:21 PM
Iron	0.34	0.050	*	mg/L	1	6/14/2022 8:04:21 PM
Magnesium	4.9	1.0		mg/L	1	6/14/2022 8:04:21 PM
Manganese	0.12	0.0020	*	mg/L	1	6/14/2022 8:04:21 PM
Potassium	4.6	1.0		mg/L	1	6/14/2022 8:04:21 PM
Sodium	87	1.0		mg/L	1	6/14/2022 8:04:21 PM
Zinc	0.011	0.010		mg/L	1	6/14/2022 8:04:21 PM
EPA 200.8: METALS						Analyst: bcv
Arsenic	0.0075	0.0010		mg/L	1	6/14/2022 11:21:54 AM
Lead	0.00070	0.00050		mg/L	1	6/14/2022 11:21:54 AM
Uranium	0.0039	0.00050		mg/L	1	6/14/2022 2:03:47 PM
EPA METHOD 8260B: VOLATILES, TABLE I						Analyst: CCM
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	6/15/2022 5:54:00 PM
Benzene	ND	1.0		µg/L	1	6/15/2022 5:54:00 PM
Toluene	ND	1.0		µg/L	1	6/15/2022 5:54:00 PM
Ethylbenzene	ND	1.0		µg/L	1	6/15/2022 5:54:00 PM
Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	1	6/15/2022 5:54:00 PM
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	6/15/2022 5:54:00 PM
Acetone	ND	10		µg/L	1	6/15/2022 5:54:00 PM
Bromodichloromethane	ND	1.0		µg/L	1	6/15/2022 5:54:00 PM
Bromoform	ND	1.0		µg/L	1	6/15/2022 5:54:00 PM
Bromomethane	ND	2.0		µg/L	1	6/15/2022 5:54:00 PM
2-Butanone	ND	10		µg/L	1	6/15/2022 5:54:00 PM

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.
	D	Sample Diluted Due to Matrix
	H	Holding times for preparation or analysis exceeded
	ND	Not Detected at the Reporting Limit
	PQL	Practical Quantitative Limit
	S	% Recovery outside of range due to dilution or matrix interference

B	Analyte detected in the associated Method Blank
E	Estimated value
J	Analyte detected below quantitation limits
P	Sample pH Not In Range
RL	Reporting Limit

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order **2206470**

Date Reported: **7/6/2022**

CLIENT: Parkhill

Client Sample ID: MW-2R

Project: Sandoval County Landfill SCCF

Collection Date: 6/8/2022 11:35:00 AM

Lab ID: 2206470-001

Matrix: AQUEOUS

Received Date: 6/8/2022 2:29:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8260B: VOLATILES, TABLE I						Analyst: CCM
Carbon disulfide	ND	10		µg/L	1	6/15/2022 5:54:00 PM
Carbon Tetrachloride	ND	1.0		µg/L	1	6/15/2022 5:54:00 PM
Chlorobenzene	ND	1.0		µg/L	1	6/15/2022 5:54:00 PM
Chloroethane	ND	2.0		µg/L	1	6/15/2022 5:54:00 PM
Chloroform	ND	1.0		µg/L	1	6/15/2022 5:54:00 PM
Chloromethane	ND	1.0		µg/L	1	6/15/2022 5:54:00 PM
cis-1,2-DCE	ND	1.0		µg/L	1	6/15/2022 5:54:00 PM
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	6/15/2022 5:54:00 PM
Dibromochloromethane	ND	1.0		µg/L	1	6/15/2022 5:54:00 PM
Dibromomethane	ND	1.0		µg/L	1	6/15/2022 5:54:00 PM
1,2-Dichlorobenzene	ND	1.0		µg/L	1	6/15/2022 5:54:00 PM
1,4-Dichlorobenzene	ND	1.0		µg/L	1	6/15/2022 5:54:00 PM
Dichlorodifluoromethane	ND	1.0		µg/L	1	6/15/2022 5:54:00 PM
1,1-Dichloroethane	ND	1.0		µg/L	1	6/15/2022 5:54:00 PM
1,1-Dichloroethene	ND	1.0		µg/L	1	6/15/2022 5:54:00 PM
1,2-Dichloropropane	ND	1.0		µg/L	1	6/15/2022 5:54:00 PM
2-Hexanone	ND	10		µg/L	1	6/15/2022 5:54:00 PM
4-Methyl-2-pentanone	ND	10		µg/L	1	6/15/2022 5:54:00 PM
Methylene Chloride	ND	2.5		µg/L	1	6/15/2022 5:54:00 PM
Styrene	ND	1.0		µg/L	1	6/15/2022 5:54:00 PM
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	6/15/2022 5:54:00 PM
1,1,2,2-Tetrachloroethane	ND	1.0		µg/L	1	6/15/2022 5:54:00 PM
Tetrachloroethene (PCE)	ND	1.0		µg/L	1	6/15/2022 5:54:00 PM
trans-1,2-DCE	ND	1.0		µg/L	1	6/15/2022 5:54:00 PM
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	6/15/2022 5:54:00 PM
1,1,1-Trichloroethane	ND	1.0		µg/L	1	6/15/2022 5:54:00 PM
1,1,2-Trichloroethane	ND	1.0		µg/L	1	6/15/2022 5:54:00 PM
Trichloroethene (TCE)	ND	1.0		µg/L	1	6/15/2022 5:54:00 PM
Trichlorofluoromethane	ND	1.0		µg/L	1	6/15/2022 5:54:00 PM
1,2,3-Trichloropropane	ND	1.0		µg/L	1	6/15/2022 5:54:00 PM
Vinyl chloride	ND	1.0		µg/L	1	6/15/2022 5:54:00 PM
Xylenes, Total	ND	2.0		µg/L	1	6/15/2022 5:54:00 PM
Acrylonitrile	ND	10		µg/L	1	6/15/2022 5:54:00 PM
Bromochloromethane	ND	2.0		µg/L	1	6/15/2022 5:54:00 PM
Iodomethane	ND	10		µg/L	1	6/15/2022 5:54:00 PM
trans-1,4-Dichloro-2-butene	ND	10		µg/L	1	6/15/2022 5:54:00 PM
Vinyl acetate	ND	10		µg/L	1	6/15/2022 5:54:00 PM
Surr: 1,2-Dichloroethane-d4	91.5	70-130		%Rec	1	6/15/2022 5:54:00 PM
Surr: 4-Bromofluorobenzene	93.4	70-130		%Rec	1	6/15/2022 5:54:00 PM

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.
	D	Sample Diluted Due to Matrix
	H	Holding times for preparation or analysis exceeded
	ND	Not Detected at the Reporting Limit
	PQL	Practical Quantitative Limit
	S	% Recovery outside of range due to dilution or matrix interference

B	Analyte detected in the associated Method Blank
E	Estimated value
J	Analyte detected below quantitation limits
P	Sample pH Not In Range
RL	Reporting Limit

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order **2206470**

Date Reported: **7/6/2022**

CLIENT: Parkhill

Client Sample ID: MW-2R

Project: Sandoval County Landfill SCCF

Collection Date: 6/8/2022 11:35:00 AM

Lab ID: 2206470-001

Matrix: AQUEOUS

Received Date: 6/8/2022 2:29:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8260B: VOLATILES, TABLE I						Analyst: CCM
Surr: Dibromofluoromethane	102	70-130		%Rec	1	6/15/2022 5:54:00 PM
Surr: Toluene-d8	94.0	70-130		%Rec	1	6/15/2022 5:54:00 PM
TOTAL PHENOLICS BY SW-846 9067						Analyst: JPM
Phenolics	ND	2.5		µg/L	1	6/28/2022 2:54:00 PM
EPA METHOD 9060A TOC						Analyst: AG
Total Organic Carbon	2.5	1.0		mg/L	1	6/13/2022 1:15:43 PM
SM2510B: SPECIFIC CONDUCTANCE						Analyst: CAS
Conductivity	650	10		µmhos/c	1	6/13/2022 4:12:43 PM
SM 4500 NH3: AMMONIA						Analyst: CJS
Nitrogen, Ammonia	ND	1.0		mg/L	1	6/20/2022 1:43:00 PM
TOTAL NITROGEN						Analyst: CJS
Nitrogen, Total	ND	1.0		mg/L	1	7/1/2022 1:20:00 PM
SM4500-H+B / 9040C: PH						Analyst: CAS
pH	8.01		H	pH units	1	6/13/2022 4:12:43 PM
SM2320B: ALKALINITY						Analyst: CAS
Bicarbonate (As CaCO3)	145.2	20.00		mg/L Ca	1	6/13/2022 4:12:43 PM
Carbonate (As CaCO3)	ND	2.000		mg/L Ca	1	6/13/2022 4:12:43 PM
Total Alkalinity (as CaCO3)	145.2	20.00		mg/L Ca	1	6/13/2022 4:12:43 PM
SM2540C MOD: TOTAL DISSOLVED SOLIDS						Analyst: KS
Total Dissolved Solids	391	20.0		mg/L	1	6/15/2022 11:28:00 AM
SM 4500 NORG C: TKN						Analyst: EKM
Nitrogen, Kjeldahl, Total	ND	1.0		mg/L	1	6/29/2022 10:03:00 AM

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.
	D	Sample Diluted Due to Matrix
	H	Holding times for preparation or analysis exceeded
	ND	Not Detected at the Reporting Limit
	PQL	Practical Quantitative Limit
	S	% Recovery outside of range due to dilution or matrix interference

B	Analyte detected in the associated Method Blank
E	Estimated value
J	Analyte detected below quantitation limits
P	Sample pH Not In Range
RL	Reporting Limit

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order **2206470**

Date Reported: **7/6/2022**

CLIENT: Parkhill

Client Sample ID: MW-3R

Project: Sandoval County Landfill SCCF

Collection Date: 6/8/2022 1:08:00 PM

Lab ID: 2206470-002

Matrix: AQUEOUS

Received Date: 6/8/2022 2:29:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 504.1: EDB/DBCP						Analyst: JME
1,2-Dibromo-3-chloropropane	ND	0.019		µg/L	1	6/13/2022 6:21:05 PM
1,2-Dibromoethane	ND	0.0094		µg/L	1	6/13/2022 6:21:05 PM
EPA METHOD 300.0: ANIONS						Analyst: LRN
Fluoride	0.68	0.10		mg/L	1	6/9/2022 6:53:57 PM
Chloride	74	10		mg/L	20	6/9/2022 7:06:49 PM
Nitrogen, Nitrite (As N)	ND	0.10		mg/L	1	6/9/2022 6:53:57 PM
Nitrogen, Nitrate (As N)	ND	0.10		mg/L	1	6/9/2022 6:53:57 PM
Phosphorus, Orthophosphate (As P)	ND	0.50		mg/L	1	6/9/2022 6:53:57 PM
Sulfate	60	10		mg/L	20	6/9/2022 7:06:49 PM
EPA METHOD 200.7: METALS						Analyst: JLF
Aluminum	2.4	0.10	*	mg/L	5	6/14/2022 8:10:42 PM
Barium	0.061	0.0030		mg/L	1	6/15/2022 5:53:21 PM
Calcium	45	1.0		mg/L	1	6/14/2022 8:08:42 PM
Chromium	ND	0.0060		mg/L	1	6/14/2022 8:08:42 PM
Cobalt	ND	0.0060		mg/L	1	6/14/2022 8:08:42 PM
Iron	1.7	0.25	*	mg/L	5	6/14/2022 8:10:42 PM
Magnesium	6.1	1.0		mg/L	1	6/14/2022 8:08:42 PM
Manganese	0.14	0.0020	*	mg/L	1	6/14/2022 8:08:42 PM
Potassium	5.3	1.0		mg/L	1	6/14/2022 8:08:42 PM
Sodium	88	1.0		mg/L	1	6/14/2022 8:08:42 PM
Zinc	0.075	0.010		mg/L	1	6/14/2022 8:08:42 PM
EPA 200.8: METALS						Analyst: bcv
Arsenic	0.0049	0.0010		mg/L	1	6/14/2022 11:24:19 AM
Lead	0.0021	0.00050		mg/L	1	6/14/2022 11:24:19 AM
Uranium	0.0029	0.00050		mg/L	1	6/14/2022 2:08:14 PM
EPA METHOD 8260B: VOLATILES, TABLE I						Analyst: CCM
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	6/15/2022 6:18:00 PM
Benzene	ND	1.0		µg/L	1	6/15/2022 6:18:00 PM
Toluene	ND	1.0		µg/L	1	6/15/2022 6:18:00 PM
Ethylbenzene	ND	1.0		µg/L	1	6/15/2022 6:18:00 PM
Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	1	6/15/2022 6:18:00 PM
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	6/15/2022 6:18:00 PM
Acetone	ND	10		µg/L	1	6/15/2022 6:18:00 PM
Bromodichloromethane	ND	1.0		µg/L	1	6/15/2022 6:18:00 PM
Bromoform	ND	1.0		µg/L	1	6/15/2022 6:18:00 PM
Bromomethane	ND	2.0		µg/L	1	6/15/2022 6:18:00 PM
2-Butanone	ND	10		µg/L	1	6/15/2022 6:18:00 PM

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.
	D	Sample Diluted Due to Matrix
	H	Holding times for preparation or analysis exceeded
	ND	Not Detected at the Reporting Limit
	PQL	Practical Quantitative Limit
	S	% Recovery outside of range due to dilution or matrix interference

B	Analyte detected in the associated Method Blank
E	Estimated value
J	Analyte detected below quantitation limits
P	Sample pH Not In Range
RL	Reporting Limit

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order **2206470**

Date Reported: **7/6/2022**

CLIENT: Parkhill

Client Sample ID: MW-3R

Project: Sandoval County Landfill SCCF

Collection Date: 6/8/2022 1:08:00 PM

Lab ID: 2206470-002

Matrix: AQUEOUS

Received Date: 6/8/2022 2:29:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8260B: VOLATILES, TABLE I						Analyst: CCM
Carbon disulfide	ND	10		µg/L	1	6/15/2022 6:18:00 PM
Carbon Tetrachloride	ND	1.0		µg/L	1	6/15/2022 6:18:00 PM
Chlorobenzene	ND	1.0		µg/L	1	6/15/2022 6:18:00 PM
Chloroethane	ND	2.0		µg/L	1	6/15/2022 6:18:00 PM
Chloroform	ND	1.0		µg/L	1	6/15/2022 6:18:00 PM
Chloromethane	ND	1.0		µg/L	1	6/15/2022 6:18:00 PM
cis-1,2-DCE	ND	1.0		µg/L	1	6/15/2022 6:18:00 PM
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	6/15/2022 6:18:00 PM
Dibromochloromethane	ND	1.0		µg/L	1	6/15/2022 6:18:00 PM
Dibromomethane	ND	1.0		µg/L	1	6/15/2022 6:18:00 PM
1,2-Dichlorobenzene	ND	1.0		µg/L	1	6/15/2022 6:18:00 PM
1,4-Dichlorobenzene	ND	1.0		µg/L	1	6/15/2022 6:18:00 PM
Dichlorodifluoromethane	ND	1.0		µg/L	1	6/15/2022 6:18:00 PM
1,1-Dichloroethane	ND	1.0		µg/L	1	6/15/2022 6:18:00 PM
1,1-Dichloroethene	ND	1.0		µg/L	1	6/15/2022 6:18:00 PM
1,2-Dichloropropane	ND	1.0		µg/L	1	6/15/2022 6:18:00 PM
2-Hexanone	ND	10		µg/L	1	6/15/2022 6:18:00 PM
4-Methyl-2-pentanone	ND	10		µg/L	1	6/15/2022 6:18:00 PM
Methylene Chloride	ND	2.5		µg/L	1	6/15/2022 6:18:00 PM
Styrene	ND	1.0		µg/L	1	6/15/2022 6:18:00 PM
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	6/15/2022 6:18:00 PM
1,1,2,2-Tetrachloroethane	ND	1.0		µg/L	1	6/15/2022 6:18:00 PM
Tetrachloroethene (PCE)	ND	1.0		µg/L	1	6/15/2022 6:18:00 PM
trans-1,2-DCE	ND	1.0		µg/L	1	6/15/2022 6:18:00 PM
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	6/15/2022 6:18:00 PM
1,1,1-Trichloroethane	ND	1.0		µg/L	1	6/15/2022 6:18:00 PM
1,1,2-Trichloroethane	ND	1.0		µg/L	1	6/15/2022 6:18:00 PM
Trichloroethene (TCE)	ND	1.0		µg/L	1	6/15/2022 6:18:00 PM
Trichlorofluoromethane	ND	1.0		µg/L	1	6/15/2022 6:18:00 PM
1,2,3-Trichloropropane	ND	1.0		µg/L	1	6/15/2022 6:18:00 PM
Vinyl chloride	ND	1.0		µg/L	1	6/15/2022 6:18:00 PM
Xylenes, Total	ND	2.0		µg/L	1	6/15/2022 6:18:00 PM
Acrylonitrile	ND	10		µg/L	1	6/15/2022 6:18:00 PM
Bromochloromethane	ND	2.0		µg/L	1	6/15/2022 6:18:00 PM
Iodomethane	ND	10		µg/L	1	6/15/2022 6:18:00 PM
trans-1,4-Dichloro-2-butene	ND	10		µg/L	1	6/15/2022 6:18:00 PM
Vinyl acetate	ND	10		µg/L	1	6/15/2022 6:18:00 PM
Surr: 1,2-Dichloroethane-d4	92.2	70-130		%Rec	1	6/15/2022 6:18:00 PM
Surr: 4-Bromofluorobenzene	94.3	70-130		%Rec	1	6/15/2022 6:18:00 PM

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.
	D	Sample Diluted Due to Matrix
	H	Holding times for preparation or analysis exceeded
	ND	Not Detected at the Reporting Limit
	PQL	Practical Quantitative Limit
	S	% Recovery outside of range due to dilution or matrix interference

B	Analyte detected in the associated Method Blank
E	Estimated value
J	Analyte detected below quantitation limits
P	Sample pH Not In Range
RL	Reporting Limit

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order **2206470**

Date Reported: **7/6/2022**

CLIENT: Parkhill

Client Sample ID: MW-3R

Project: Sandoval County Landfill SCCF

Collection Date: 6/8/2022 1:08:00 PM

Lab ID: 2206470-002

Matrix: AQUEOUS

Received Date: 6/8/2022 2:29:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8260B: VOLATILES, TABLE I						Analyst: CCM
Surr: Dibromofluoromethane	101	70-130		%Rec	1	6/15/2022 6:18:00 PM
Surr: Toluene-d8	96.5	70-130		%Rec	1	6/15/2022 6:18:00 PM
TOTAL PHENOLICS BY SW-846 9067						Analyst: JPM
Phenolics	ND	2.5		µg/L	1	6/28/2022 2:54:00 PM
EPA METHOD 9060A TOC						Analyst: AG
Total Organic Carbon	7.5	1.0		mg/L	1	6/13/2022 1:31:24 PM
SM2510B: SPECIFIC CONDUCTANCE						Analyst: CAS
Conductivity	670	10		µmhos/c	1	6/13/2022 5:04:04 PM
SM 4500 NH3: AMMONIA						Analyst: CJS
Nitrogen, Ammonia	ND	1.0		mg/L	1	6/20/2022 1:43:00 PM
TOTAL NITROGEN						Analyst: CJS
Nitrogen, Total	ND	1.0		mg/L	1	7/1/2022 1:20:00 PM
SM4500-H+B / 9040C: PH						Analyst: CAS
pH	7.97		H	pH units	1	6/13/2022 5:04:04 PM
SM2320B: ALKALINITY						Analyst: CAS
Bicarbonate (As CaCO3)	151.2	20.00		mg/L Ca	1	6/13/2022 5:04:04 PM
Carbonate (As CaCO3)	ND	2.000		mg/L Ca	1	6/13/2022 5:04:04 PM
Total Alkalinity (as CaCO3)	151.2	20.00		mg/L Ca	1	6/13/2022 5:04:04 PM
SM2540C MOD: TOTAL DISSOLVED SOLIDS						Analyst: KS
Total Dissolved Solids	415	20.0		mg/L	1	6/15/2022 11:28:00 AM
SM 4500 NORG C: TKN						Analyst: EKM
Nitrogen, Kjeldahl, Total	ND	1.0		mg/L	1	6/29/2022 10:03:00 AM

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.
	D	Sample Diluted Due to Matrix
	H	Holding times for preparation or analysis exceeded
	ND	Not Detected at the Reporting Limit
	PQL	Practical Quantitative Limit
	S	% Recovery outside of range due to dilution or matrix interference

B	Analyte detected in the associated Method Blank
E	Estimated value
J	Analyte detected below quantitation limits
P	Sample pH Not In Range
RL	Reporting Limit

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order **2206470**

Date Reported: **7/6/2022**

CLIENT: Parkhill

Client Sample ID: MW-5R

Project: Sandoval County Landfill SCCF

Collection Date: 6/8/2022 7:41:00 AM

Lab ID: 2206470-003

Matrix: AQUEOUS

Received Date: 6/8/2022 2:29:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 504.1: EDB/DBCP						Analyst: JME
1,2-Dibromo-3-chloropropane	ND	0.019		µg/L	1	6/16/2022 1:05:53 PM
1,2-Dibromoethane	ND	0.0095		µg/L	1	6/16/2022 1:05:53 PM
EPA METHOD 300.0: ANIONS						Analyst: LRN
Fluoride	0.65	0.10		mg/L	1	6/9/2022 11:11:09 AM
Chloride	170	10		mg/L	20	6/9/2022 11:23:33 AM
Nitrogen, Nitrite (As N)	ND	0.10		mg/L	1	6/9/2022 11:11:09 AM
Nitrogen, Nitrate (As N)	0.66	0.10		mg/L	1	6/9/2022 11:11:09 AM
Phosphorus, Orthophosphate (As P)	ND	0.50		mg/L	1	6/9/2022 11:11:09 AM
Sulfate	35	0.50		mg/L	1	6/9/2022 11:11:09 AM
EPA METHOD 200.7: METALS						Analyst: JLF
Aluminum	ND	0.020		mg/L	1	6/15/2022 9:23:37 PM
Barium	0.086	0.0030		mg/L	1	6/15/2022 9:23:37 PM
Calcium	44	1.0		mg/L	1	6/15/2022 9:23:37 PM
Chromium	ND	0.0060		mg/L	1	6/15/2022 9:23:37 PM
Cobalt	ND	0.0060		mg/L	1	6/15/2022 9:23:37 PM
Iron	ND	0.050		mg/L	1	6/15/2022 9:23:37 PM
Magnesium	5.0	1.0		mg/L	1	6/15/2022 9:23:37 PM
Manganese	ND	0.0020		mg/L	1	6/15/2022 9:23:37 PM
Potassium	5.0	1.0		mg/L	1	6/15/2022 9:23:37 PM
Sodium	110	5.0		mg/L	5	6/16/2022 6:05:37 PM
Zinc	ND	0.010		mg/L	1	6/15/2022 9:23:37 PM
EPA 200.8: METALS						Analyst: bcb
Arsenic	0.0079	0.0010		mg/L	1	6/13/2022 12:31:36 PM
Lead	ND	0.00050		mg/L	1	6/13/2022 12:31:36 PM
Uranium	0.0020	0.00050		mg/L	1	6/16/2022 9:54:08 AM
EPA METHOD 8260B: VOLATILES, TABLE I						Analyst: CCM
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	6/15/2022 6:42:00 PM
Benzene	ND	1.0		µg/L	1	6/15/2022 6:42:00 PM
Toluene	ND	1.0		µg/L	1	6/15/2022 6:42:00 PM
Ethylbenzene	ND	1.0		µg/L	1	6/15/2022 6:42:00 PM
Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	1	6/15/2022 6:42:00 PM
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	6/15/2022 6:42:00 PM
Acetone	ND	10		µg/L	1	6/15/2022 6:42:00 PM
Bromodichloromethane	ND	1.0		µg/L	1	6/15/2022 6:42:00 PM
Bromoform	ND	1.0		µg/L	1	6/15/2022 6:42:00 PM
Bromomethane	ND	2.0		µg/L	1	6/15/2022 6:42:00 PM
2-Butanone	ND	10		µg/L	1	6/15/2022 6:42:00 PM

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.
	D	Sample Diluted Due to Matrix
	H	Holding times for preparation or analysis exceeded
	ND	Not Detected at the Reporting Limit
	PQL	Practical Quantitative Limit
	S	% Recovery outside of range due to dilution or matrix interference

B	Analyte detected in the associated Method Blank
E	Estimated value
J	Analyte detected below quantitation limits
P	Sample pH Not In Range
RL	Reporting Limit

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order **2206470**

Date Reported: **7/6/2022**

CLIENT: Parkhill

Client Sample ID: MW-5R

Project: Sandoval County Landfill SCCF

Collection Date: 6/8/2022 7:41:00 AM

Lab ID: 2206470-003

Matrix: AQUEOUS

Received Date: 6/8/2022 2:29:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8260B: VOLATILES, TABLE I						Analyst: CCM
Carbon disulfide	ND	10		µg/L	1	6/15/2022 6:42:00 PM
Carbon Tetrachloride	ND	1.0		µg/L	1	6/15/2022 6:42:00 PM
Chlorobenzene	ND	1.0		µg/L	1	6/15/2022 6:42:00 PM
Chloroethane	ND	2.0		µg/L	1	6/15/2022 6:42:00 PM
Chloroform	ND	1.0		µg/L	1	6/15/2022 6:42:00 PM
Chloromethane	ND	1.0		µg/L	1	6/15/2022 6:42:00 PM
cis-1,2-DCE	ND	1.0		µg/L	1	6/15/2022 6:42:00 PM
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	6/15/2022 6:42:00 PM
Dibromochloromethane	ND	1.0		µg/L	1	6/15/2022 6:42:00 PM
Dibromomethane	ND	1.0		µg/L	1	6/15/2022 6:42:00 PM
1,2-Dichlorobenzene	ND	1.0		µg/L	1	6/15/2022 6:42:00 PM
1,4-Dichlorobenzene	ND	1.0		µg/L	1	6/15/2022 6:42:00 PM
Dichlorodifluoromethane	ND	1.0		µg/L	1	6/15/2022 6:42:00 PM
1,1-Dichloroethane	ND	1.0		µg/L	1	6/15/2022 6:42:00 PM
1,1-Dichloroethene	ND	1.0		µg/L	1	6/15/2022 6:42:00 PM
1,2-Dichloropropane	ND	1.0		µg/L	1	6/15/2022 6:42:00 PM
2-Hexanone	ND	10		µg/L	1	6/15/2022 6:42:00 PM
4-Methyl-2-pentanone	ND	10		µg/L	1	6/15/2022 6:42:00 PM
Methylene Chloride	ND	2.5		µg/L	1	6/15/2022 6:42:00 PM
Styrene	ND	1.0		µg/L	1	6/15/2022 6:42:00 PM
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	6/15/2022 6:42:00 PM
1,1,2,2-Tetrachloroethane	ND	1.0		µg/L	1	6/15/2022 6:42:00 PM
Tetrachloroethene (PCE)	ND	1.0		µg/L	1	6/15/2022 6:42:00 PM
trans-1,2-DCE	ND	1.0		µg/L	1	6/15/2022 6:42:00 PM
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	6/15/2022 6:42:00 PM
1,1,1-Trichloroethane	ND	1.0		µg/L	1	6/15/2022 6:42:00 PM
1,1,2-Trichloroethane	ND	1.0		µg/L	1	6/15/2022 6:42:00 PM
Trichloroethene (TCE)	ND	1.0		µg/L	1	6/15/2022 6:42:00 PM
Trichlorofluoromethane	ND	1.0		µg/L	1	6/15/2022 6:42:00 PM
1,2,3-Trichloropropane	ND	1.0		µg/L	1	6/15/2022 6:42:00 PM
Vinyl chloride	ND	1.0		µg/L	1	6/15/2022 6:42:00 PM
Xylenes, Total	ND	2.0		µg/L	1	6/15/2022 6:42:00 PM
Acrylonitrile	ND	10		µg/L	1	6/15/2022 6:42:00 PM
Bromochloromethane	ND	2.0		µg/L	1	6/15/2022 6:42:00 PM
Iodomethane	ND	10		µg/L	1	6/15/2022 6:42:00 PM
trans-1,4-Dichloro-2-butene	ND	10		µg/L	1	6/15/2022 6:42:00 PM
Vinyl acetate	ND	10		µg/L	1	6/15/2022 6:42:00 PM
Surr: 1,2-Dichloroethane-d4	91.9	70-130		%Rec	1	6/15/2022 6:42:00 PM
Surr: 4-Bromofluorobenzene	94.3	70-130		%Rec	1	6/15/2022 6:42:00 PM

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.
	D	Sample Diluted Due to Matrix
	H	Holding times for preparation or analysis exceeded
	ND	Not Detected at the Reporting Limit
	PQL	Practical Quantitative Limit
	S	% Recovery outside of range due to dilution or matrix interference

B	Analyte detected in the associated Method Blank
E	Estimated value
J	Analyte detected below quantitation limits
P	Sample pH Not In Range
RL	Reporting Limit

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order **2206470**

Date Reported: **7/6/2022**

CLIENT: Parkhill

Client Sample ID: MW-5R

Project: Sandoval County Landfill SCCF

Collection Date: 6/8/2022 7:41:00 AM

Lab ID: 2206470-003

Matrix: AQUEOUS

Received Date: 6/8/2022 2:29:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8260B: VOLATILES, TABLE I						Analyst: CCM
Surr: Dibromofluoromethane	102	70-130		%Rec	1	6/15/2022 6:42:00 PM
Surr: Toluene-d8	95.6	70-130		%Rec	1	6/15/2022 6:42:00 PM
TOTAL PHENOLICS BY SW-846 9067						Analyst: JPM
Phenolics	ND	2.5		µg/L	1	6/28/2022 2:54:00 PM
EPA METHOD 9060A TOC						Analyst: AG
Total Organic Carbon	ND	1.0		mg/L	1	6/13/2022 1:47:30 PM
SM2510B: SPECIFIC CONDUCTANCE						Analyst: CAS
Conductivity	800	10		µmhos/c	1	6/13/2022 5:14:17 PM
SM 4500 NH3: AMMONIA						Analyst: CJS
Nitrogen, Ammonia	ND	1.0		mg/L	1	6/20/2022 1:43:00 PM
TOTAL NITROGEN						Analyst: CJS
Nitrogen, Total	ND	1.0		mg/L	1	7/1/2022 1:20:00 PM
SM4500-H+B / 9040C: PH						Analyst: CAS
pH	7.99		H	pH units	1	6/13/2022 5:14:17 PM
SM2320B: ALKALINITY						Analyst: CAS
Bicarbonate (As CaCO3)	100.3	20.00		mg/L Ca	1	6/13/2022 5:14:17 PM
Carbonate (As CaCO3)	ND	2.000		mg/L Ca	1	6/13/2022 5:14:17 PM
Total Alkalinity (as CaCO3)	100.3	20.00		mg/L Ca	1	6/13/2022 5:14:17 PM
SM2540C MOD: TOTAL DISSOLVED SOLIDS						Analyst: KS
Total Dissolved Solids	442	20.0		mg/L	1	6/15/2022 11:28:00 AM
SM 4500 NORG C: TKN						Analyst: EKM
Nitrogen, Kjeldahl, Total	ND	1.0		mg/L	1	6/29/2022 10:03:00 AM

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Estimated value
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix interference		

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order **2206470**

Date Reported: **7/6/2022**

CLIENT: Parkhill

Client Sample ID: MW-6R

Project: Sandoval County Landfill SCCF

Collection Date: 6/8/2022 10:06:00 AM

Lab ID: 2206470-004

Matrix: AQUEOUS

Received Date: 6/8/2022 2:29:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 504.1: EDB/DBCP						Analyst: JME
1,2-Dibromo-3-chloropropane	ND	0.019		µg/L	1	6/16/2022 1:21:04 PM
1,2-Dibromoethane	ND	0.0095		µg/L	1	6/16/2022 1:21:04 PM
EPA METHOD 300.0: ANIONS						Analyst: LRN
Fluoride	0.58	0.10		mg/L	1	6/9/2022 12:02:08 PM
Chloride	110	10		mg/L	20	6/9/2022 12:14:59 PM
Nitrogen, Nitrite (As N)	ND	0.10		mg/L	1	6/9/2022 12:02:08 PM
Nitrogen, Nitrate (As N)	1.4	0.10		mg/L	1	6/9/2022 12:02:08 PM
Phosphorus, Orthophosphate (As P)	ND	0.50		mg/L	1	6/9/2022 12:02:08 PM
Sulfate	48	10		mg/L	20	6/9/2022 12:14:59 PM
EPA METHOD 200.7: METALS						Analyst: JLF
Aluminum	0.036	0.020		mg/L	1	6/14/2022 8:19:53 PM
Barium	0.049	0.0030		mg/L	1	6/15/2022 5:55:28 PM
Calcium	44	1.0		mg/L	1	6/14/2022 8:19:53 PM
Chromium	ND	0.0060		mg/L	1	6/14/2022 8:19:53 PM
Cobalt	ND	0.0060		mg/L	1	6/14/2022 8:19:53 PM
Iron	0.064	0.050		mg/L	1	6/14/2022 8:19:53 PM
Magnesium	5.0	1.0		mg/L	1	6/14/2022 8:19:53 PM
Manganese	0.0021	0.0020		mg/L	1	6/14/2022 8:19:53 PM
Potassium	4.8	1.0		mg/L	1	6/14/2022 8:19:53 PM
Sodium	84	1.0		mg/L	1	6/14/2022 8:19:53 PM
Zinc	ND	0.010		mg/L	1	6/14/2022 8:19:53 PM
EPA 200.8: METALS						Analyst: bcv
Arsenic	0.0088	0.0010		mg/L	1	6/14/2022 11:26:46 AM
Lead	ND	0.00050		mg/L	1	6/14/2022 11:26:46 AM
Uranium	0.0020	0.00050		mg/L	1	6/14/2022 2:12:35 PM
EPA METHOD 8260B: VOLATILES, TABLE I						Analyst: CCM
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	6/15/2022 7:06:00 PM
Benzene	ND	1.0		µg/L	1	6/15/2022 7:06:00 PM
Toluene	ND	1.0		µg/L	1	6/15/2022 7:06:00 PM
Ethylbenzene	ND	1.0		µg/L	1	6/15/2022 7:06:00 PM
Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	1	6/15/2022 7:06:00 PM
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	6/15/2022 7:06:00 PM
Acetone	ND	10		µg/L	1	6/15/2022 7:06:00 PM
Bromodichloromethane	ND	1.0		µg/L	1	6/15/2022 7:06:00 PM
Bromoform	ND	1.0		µg/L	1	6/15/2022 7:06:00 PM
Bromomethane	ND	2.0		µg/L	1	6/15/2022 7:06:00 PM
2-Butanone	ND	10		µg/L	1	6/15/2022 7:06:00 PM

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.
	D	Sample Diluted Due to Matrix
	H	Holding times for preparation or analysis exceeded
	ND	Not Detected at the Reporting Limit
	PQL	Practical Quantitative Limit
	S	% Recovery outside of range due to dilution or matrix interference

B	Analyte detected in the associated Method Blank
E	Estimated value
J	Analyte detected below quantitation limits
P	Sample pH Not In Range
RL	Reporting Limit

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order **2206470**

Date Reported: **7/6/2022**

CLIENT: Parkhill

Client Sample ID: MW-6R

Project: Sandoval County Landfill SCCF

Collection Date: 6/8/2022 10:06:00 AM

Lab ID: 2206470-004

Matrix: AQUEOUS

Received Date: 6/8/2022 2:29:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8260B: VOLATILES, TABLE I						Analyst: CCM
Carbon disulfide	ND	10		µg/L	1	6/15/2022 7:06:00 PM
Carbon Tetrachloride	ND	1.0		µg/L	1	6/15/2022 7:06:00 PM
Chlorobenzene	ND	1.0		µg/L	1	6/15/2022 7:06:00 PM
Chloroethane	ND	2.0		µg/L	1	6/15/2022 7:06:00 PM
Chloroform	ND	1.0		µg/L	1	6/15/2022 7:06:00 PM
Chloromethane	ND	1.0		µg/L	1	6/15/2022 7:06:00 PM
cis-1,2-DCE	ND	1.0		µg/L	1	6/15/2022 7:06:00 PM
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	6/15/2022 7:06:00 PM
Dibromochloromethane	ND	1.0		µg/L	1	6/15/2022 7:06:00 PM
Dibromomethane	ND	1.0		µg/L	1	6/15/2022 7:06:00 PM
1,2-Dichlorobenzene	ND	1.0		µg/L	1	6/15/2022 7:06:00 PM
1,4-Dichlorobenzene	ND	1.0		µg/L	1	6/15/2022 7:06:00 PM
Dichlorodifluoromethane	ND	1.0		µg/L	1	6/15/2022 7:06:00 PM
1,1-Dichloroethane	ND	1.0		µg/L	1	6/15/2022 7:06:00 PM
1,1-Dichloroethene	ND	1.0		µg/L	1	6/15/2022 7:06:00 PM
1,2-Dichloropropane	ND	1.0		µg/L	1	6/15/2022 7:06:00 PM
2-Hexanone	ND	10		µg/L	1	6/15/2022 7:06:00 PM
4-Methyl-2-pentanone	ND	10		µg/L	1	6/15/2022 7:06:00 PM
Methylene Chloride	ND	2.5		µg/L	1	6/15/2022 7:06:00 PM
Styrene	ND	1.0		µg/L	1	6/15/2022 7:06:00 PM
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	6/15/2022 7:06:00 PM
1,1,2,2-Tetrachloroethane	ND	1.0		µg/L	1	6/15/2022 7:06:00 PM
Tetrachloroethene (PCE)	ND	1.0		µg/L	1	6/15/2022 7:06:00 PM
trans-1,2-DCE	ND	1.0		µg/L	1	6/15/2022 7:06:00 PM
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	6/15/2022 7:06:00 PM
1,1,1-Trichloroethane	ND	1.0		µg/L	1	6/15/2022 7:06:00 PM
1,1,2-Trichloroethane	ND	1.0		µg/L	1	6/15/2022 7:06:00 PM
Trichloroethene (TCE)	ND	1.0		µg/L	1	6/15/2022 7:06:00 PM
Trichlorofluoromethane	ND	1.0		µg/L	1	6/15/2022 7:06:00 PM
1,2,3-Trichloropropane	ND	1.0		µg/L	1	6/15/2022 7:06:00 PM
Vinyl chloride	ND	1.0		µg/L	1	6/15/2022 7:06:00 PM
Xylenes, Total	ND	2.0		µg/L	1	6/15/2022 7:06:00 PM
Acrylonitrile	ND	10		µg/L	1	6/15/2022 7:06:00 PM
Bromochloromethane	ND	2.0		µg/L	1	6/15/2022 7:06:00 PM
Iodomethane	ND	10		µg/L	1	6/15/2022 7:06:00 PM
trans-1,4-Dichloro-2-butene	ND	10		µg/L	1	6/15/2022 7:06:00 PM
Vinyl acetate	ND	10		µg/L	1	6/15/2022 7:06:00 PM
Surr: 1,2-Dichloroethane-d4	91.7	70-130		%Rec	1	6/15/2022 7:06:00 PM
Surr: 4-Bromofluorobenzene	96.4	70-130		%Rec	1	6/15/2022 7:06:00 PM

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.
	D	Sample Diluted Due to Matrix
	H	Holding times for preparation or analysis exceeded
	ND	Not Detected at the Reporting Limit
	PQL	Practical Quantitative Limit
	S	% Recovery outside of range due to dilution or matrix interference

B	Analyte detected in the associated Method Blank
E	Estimated value
J	Analyte detected below quantitation limits
P	Sample pH Not In Range
RL	Reporting Limit

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order **2206470**

Date Reported: 7/6/2022

CLIENT: Parkhill

Client Sample ID: MW-6R

Project: Sandoval County Landfill SCCF

Collection Date: 6/8/2022 10:06:00 AM

Lab ID: 2206470-004

Matrix: AQUEOUS

Received Date: 6/8/2022 2:29:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8260B: VOLATILES, TABLE I						Analyst: CCM
Surr: Dibromofluoromethane	101	70-130		%Rec	1	6/15/2022 7:06:00 PM
Surr: Toluene-d8	94.8	70-130		%Rec	1	6/15/2022 7:06:00 PM
TOTAL PHENOLICS BY SW-846 9067						Analyst: JPM
Phenolics	ND	2.5		µg/L	1	6/28/2022 2:54:00 PM
EPA METHOD 9060A TOC						Analyst: AG
Total Organic Carbon	7.7	1.0		mg/L	1	6/13/2022 2:02:19 PM
SM2510B: SPECIFIC CONDUCTANCE						Analyst: CAS
Conductivity	690	10		µmhos/c	1	6/13/2022 5:22:52 PM
SM 4500 NH3: AMMONIA						Analyst: CJS
Nitrogen, Ammonia	ND	1.0		mg/L	1	6/20/2022 1:43:00 PM
TOTAL NITROGEN						Analyst: CJS
Nitrogen, Total	1.4	1.0		mg/L	1	7/1/2022 1:20:00 PM
SM4500-H+B / 9040C: PH						Analyst: CAS
pH	7.99		H	pH units	1	6/13/2022 5:22:52 PM
SM2320B: ALKALINITY						Analyst: CAS
Bicarbonate (As CaCO3)	103.9	20.00		mg/L Ca	1	6/13/2022 5:22:52 PM
Carbonate (As CaCO3)	ND	2.000		mg/L Ca	1	6/13/2022 5:22:52 PM
Total Alkalinity (as CaCO3)	103.9	20.00		mg/L Ca	1	6/13/2022 5:22:52 PM
SM2540C MOD: TOTAL DISSOLVED SOLIDS						Analyst: KS
Total Dissolved Solids	391	20.0		mg/L	1	6/15/2022 11:28:00 AM
SM 4500 NORG C: TKN						Analyst: EKM
Nitrogen, Kjeldahl, Total	ND	1.0		mg/L	1	6/29/2022 10:03:00 AM

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Estimated value
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix interference		

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order **2206470**

Date Reported: **7/6/2022**

CLIENT: Parkhill

Client Sample ID: MW-7R

Project: Sandoval County Landfill SCCF

Collection Date: 6/8/2022 8:53:00 AM

Lab ID: 2206470-005

Matrix: AQUEOUS

Received Date: 6/8/2022 2:29:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 504.1: EDB/DBCP						Analyst: JME
1,2-Dibromo-3-chloropropane	ND	0.019		µg/L	1	6/16/2022 1:36:16 PM
1,2-Dibromoethane	ND	0.0095		µg/L	1	6/16/2022 1:36:16 PM
EPA METHOD 300.0: ANIONS						Analyst: LRN
Fluoride	0.88	0.10		mg/L	1	6/9/2022 12:27:51 PM
Chloride	53	10		mg/L	20	6/9/2022 12:40:43 PM
Nitrogen, Nitrite (As N)	ND	0.10		mg/L	1	6/9/2022 12:27:51 PM
Nitrogen, Nitrate (As N)	6.2	0.10		mg/L	1	6/9/2022 12:27:51 PM
Phosphorus, Orthophosphate (As P)	ND	0.50		mg/L	1	6/9/2022 12:27:51 PM
Sulfate	47	10		mg/L	20	6/9/2022 12:40:43 PM
EPA METHOD 200.7: METALS						Analyst: JLF
Aluminum	0.16	0.020		mg/L	1	6/14/2022 8:24:12 PM
Barium	0.054	0.0030		mg/L	1	6/15/2022 6:05:06 PM
Calcium	36	1.0		mg/L	1	6/14/2022 8:24:12 PM
Chromium	ND	0.0060		mg/L	1	6/14/2022 8:24:12 PM
Cobalt	ND	0.0060		mg/L	1	6/14/2022 8:24:12 PM
Iron	0.15	0.050		mg/L	1	6/14/2022 8:24:12 PM
Magnesium	4.4	1.0		mg/L	1	6/14/2022 8:24:12 PM
Manganese	0.0069	0.0020		mg/L	1	6/14/2022 8:24:12 PM
Potassium	4.0	1.0		mg/L	1	6/14/2022 8:24:12 PM
Sodium	66	1.0		mg/L	1	6/14/2022 8:24:12 PM
Zinc	ND	0.010		mg/L	1	6/14/2022 8:24:12 PM
EPA 200.8: METALS						Analyst: bcv
Arsenic	0.0071	0.0010		mg/L	1	6/14/2022 11:29:13 AM
Lead	ND	0.00050		mg/L	1	6/14/2022 11:29:13 AM
Uranium	0.0019	0.00050		mg/L	1	6/14/2022 2:16:09 PM
EPA METHOD 8260B: VOLATILES, TABLE I						Analyst: CCM
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	6/15/2022 7:30:00 PM
Benzene	ND	1.0		µg/L	1	6/15/2022 7:30:00 PM
Toluene	ND	1.0		µg/L	1	6/15/2022 7:30:00 PM
Ethylbenzene	ND	1.0		µg/L	1	6/15/2022 7:30:00 PM
Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	1	6/15/2022 7:30:00 PM
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	6/15/2022 7:30:00 PM
Acetone	ND	10		µg/L	1	6/15/2022 7:30:00 PM
Bromodichloromethane	ND	1.0		µg/L	1	6/15/2022 7:30:00 PM
Bromoform	ND	1.0		µg/L	1	6/15/2022 7:30:00 PM
Bromomethane	ND	2.0		µg/L	1	6/15/2022 7:30:00 PM
2-Butanone	ND	10		µg/L	1	6/15/2022 7:30:00 PM

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.
	D	Sample Diluted Due to Matrix
	H	Holding times for preparation or analysis exceeded
	ND	Not Detected at the Reporting Limit
	PQL	Practical Quantitative Limit
	S	% Recovery outside of range due to dilution or matrix interference

B	Analyte detected in the associated Method Blank
E	Estimated value
J	Analyte detected below quantitation limits
P	Sample pH Not In Range
RL	Reporting Limit

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order **2206470**

Date Reported: **7/6/2022**

CLIENT: Parkhill

Client Sample ID: MW-7R

Project: Sandoval County Landfill SCCF

Collection Date: 6/8/2022 8:53:00 AM

Lab ID: 2206470-005

Matrix: AQUEOUS

Received Date: 6/8/2022 2:29:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8260B: VOLATILES, TABLE I						Analyst: CCM
Carbon disulfide	ND	10		µg/L	1	6/15/2022 7:30:00 PM
Carbon Tetrachloride	ND	1.0		µg/L	1	6/15/2022 7:30:00 PM
Chlorobenzene	ND	1.0		µg/L	1	6/15/2022 7:30:00 PM
Chloroethane	ND	2.0		µg/L	1	6/15/2022 7:30:00 PM
Chloroform	ND	1.0		µg/L	1	6/15/2022 7:30:00 PM
Chloromethane	ND	1.0		µg/L	1	6/15/2022 7:30:00 PM
cis-1,2-DCE	ND	1.0		µg/L	1	6/15/2022 7:30:00 PM
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	6/15/2022 7:30:00 PM
Dibromochloromethane	ND	1.0		µg/L	1	6/15/2022 7:30:00 PM
Dibromomethane	ND	1.0		µg/L	1	6/15/2022 7:30:00 PM
1,2-Dichlorobenzene	ND	1.0		µg/L	1	6/15/2022 7:30:00 PM
1,4-Dichlorobenzene	ND	1.0		µg/L	1	6/15/2022 7:30:00 PM
Dichlorodifluoromethane	ND	1.0		µg/L	1	6/15/2022 7:30:00 PM
1,1-Dichloroethane	ND	1.0		µg/L	1	6/15/2022 7:30:00 PM
1,1-Dichloroethene	ND	1.0		µg/L	1	6/15/2022 7:30:00 PM
1,2-Dichloropropane	ND	1.0		µg/L	1	6/15/2022 7:30:00 PM
2-Hexanone	ND	10		µg/L	1	6/15/2022 7:30:00 PM
4-Methyl-2-pentanone	ND	10		µg/L	1	6/15/2022 7:30:00 PM
Methylene Chloride	ND	2.5		µg/L	1	6/15/2022 7:30:00 PM
Styrene	ND	1.0		µg/L	1	6/15/2022 7:30:00 PM
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	6/15/2022 7:30:00 PM
1,1,2,2-Tetrachloroethane	ND	1.0		µg/L	1	6/15/2022 7:30:00 PM
Tetrachloroethene (PCE)	ND	1.0		µg/L	1	6/15/2022 7:30:00 PM
trans-1,2-DCE	ND	1.0		µg/L	1	6/15/2022 7:30:00 PM
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	6/15/2022 7:30:00 PM
1,1,1-Trichloroethane	ND	1.0		µg/L	1	6/15/2022 7:30:00 PM
1,1,2-Trichloroethane	ND	1.0		µg/L	1	6/15/2022 7:30:00 PM
Trichloroethene (TCE)	ND	1.0		µg/L	1	6/15/2022 7:30:00 PM
Trichlorofluoromethane	ND	1.0		µg/L	1	6/15/2022 7:30:00 PM
1,2,3-Trichloropropane	ND	1.0		µg/L	1	6/15/2022 7:30:00 PM
Vinyl chloride	ND	1.0		µg/L	1	6/15/2022 7:30:00 PM
Xylenes, Total	ND	2.0		µg/L	1	6/15/2022 7:30:00 PM
Acrylonitrile	ND	10		µg/L	1	6/15/2022 7:30:00 PM
Bromochloromethane	ND	2.0		µg/L	1	6/15/2022 7:30:00 PM
Iodomethane	ND	10		µg/L	1	6/15/2022 7:30:00 PM
trans-1,4-Dichloro-2-butene	ND	10		µg/L	1	6/15/2022 7:30:00 PM
Vinyl acetate	ND	10		µg/L	1	6/15/2022 7:30:00 PM
Surr: 1,2-Dichloroethane-d4	92.7	70-130		%Rec	1	6/15/2022 7:30:00 PM
Surr: 4-Bromofluorobenzene	94.6	70-130		%Rec	1	6/15/2022 7:30:00 PM

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.
	D	Sample Diluted Due to Matrix
	H	Holding times for preparation or analysis exceeded
	ND	Not Detected at the Reporting Limit
	PQL	Practical Quantitative Limit
	S	% Recovery outside of range due to dilution or matrix interference

B	Analyte detected in the associated Method Blank
E	Estimated value
J	Analyte detected below quantitation limits
P	Sample pH Not In Range
RL	Reporting Limit

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order **2206470**

Date Reported: 7/6/2022

CLIENT: Parkhill

Client Sample ID: MW-7R

Project: Sandoval County Landfill SCCF

Collection Date: 6/8/2022 8:53:00 AM

Lab ID: 2206470-005

Matrix: AQUEOUS

Received Date: 6/8/2022 2:29:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8260B: VOLATILES, TABLE I						Analyst: CCM
Surr: Dibromofluoromethane	104	70-130		%Rec	1	6/15/2022 7:30:00 PM
Surr: Toluene-d8	92.9	70-130		%Rec	1	6/15/2022 7:30:00 PM
TOTAL PHENOLICS BY SW-846 9067						Analyst: JPM
Phenolics	ND	2.5		µg/L	1	6/29/2022 2:55:00 PM
EPA METHOD 9060A TOC						Analyst: AG
Total Organic Carbon	ND	1.0		mg/L	1	6/13/2022 2:49:16 PM
SM2510B: SPECIFIC CONDUCTANCE						Analyst: CAS
Conductivity	550	10		µmhos/c	1	6/13/2022 5:31:39 PM
SM 4500 NH3: AMMONIA						Analyst: CJS
Nitrogen, Ammonia	ND	1.0		mg/L	1	6/20/2022 1:43:00 PM
TOTAL NITROGEN						Analyst: CJS
Nitrogen, Total	6.2	1.0		mg/L	1	7/1/2022 1:20:00 PM
SM4500-H+B / 9040C: PH						Analyst: CAS
pH	8.03		H	pH units	1	6/13/2022 5:31:39 PM
SM2320B: ALKALINITY						Analyst: CAS
Bicarbonate (As CaCO3)	105.3	20.00		mg/L Ca	1	6/13/2022 5:31:39 PM
Carbonate (As CaCO3)	ND	2.000		mg/L Ca	1	6/13/2022 5:31:39 PM
Total Alkalinity (as CaCO3)	105.3	20.00		mg/L Ca	1	6/13/2022 5:31:39 PM
SM2540C MOD: TOTAL DISSOLVED SOLIDS						Analyst: KS
Total Dissolved Solids	327	20.0		mg/L	1	6/15/2022 11:28:00 AM
SM 4500 NORG C: TKN						Analyst: EKM
Nitrogen, Kjeldahl, Total	ND	1.0		mg/L	1	6/29/2022 10:03:00 AM

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.
	D	Sample Diluted Due to Matrix
	H	Holding times for preparation or analysis exceeded
	ND	Not Detected at the Reporting Limit
	PQL	Practical Quantitative Limit
	S	% Recovery outside of range due to dilution or matrix interference

B	Analyte detected in the associated Method Blank
E	Estimated value
J	Analyte detected below quantitation limits
P	Sample pH Not In Range
RL	Reporting Limit

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order **2206470**

Date Reported: **7/6/2022**

CLIENT: Parkhill

Client Sample ID: Field Blank

Project: Sandoval County Landfill SCCF

Collection Date: 6/8/2022 7:48:00 AM

Lab ID: 2206470-006

Matrix: AQUEOUS

Received Date: 6/8/2022 2:29:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8260B: VOLATILES, TABLE I						Analyst: CCM
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	6/15/2022 7:54:00 PM
Benzene	ND	1.0		µg/L	1	6/15/2022 7:54:00 PM
Toluene	1.7	1.0		µg/L	1	6/15/2022 7:54:00 PM
Ethylbenzene	ND	1.0		µg/L	1	6/15/2022 7:54:00 PM
Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	1	6/15/2022 7:54:00 PM
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	6/15/2022 7:54:00 PM
Acetone	ND	10		µg/L	1	6/15/2022 7:54:00 PM
Bromodichloromethane	ND	1.0		µg/L	1	6/15/2022 7:54:00 PM
Bromoform	ND	1.0		µg/L	1	6/15/2022 7:54:00 PM
Bromomethane	ND	2.0		µg/L	1	6/15/2022 7:54:00 PM
2-Butanone	ND	10		µg/L	1	6/15/2022 7:54:00 PM
Carbon disulfide	ND	10		µg/L	1	6/15/2022 7:54:00 PM
Carbon Tetrachloride	ND	1.0		µg/L	1	6/15/2022 7:54:00 PM
Chlorobenzene	ND	1.0		µg/L	1	6/15/2022 7:54:00 PM
Chloroethane	ND	2.0		µg/L	1	6/15/2022 7:54:00 PM
Chloroform	ND	1.0		µg/L	1	6/15/2022 7:54:00 PM
Chloromethane	ND	1.0		µg/L	1	6/15/2022 7:54:00 PM
cis-1,2-DCE	ND	1.0		µg/L	1	6/15/2022 7:54:00 PM
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	6/15/2022 7:54:00 PM
Dibromochloromethane	ND	1.0		µg/L	1	6/15/2022 7:54:00 PM
Dibromomethane	ND	1.0		µg/L	1	6/15/2022 7:54:00 PM
1,2-Dichlorobenzene	ND	1.0		µg/L	1	6/15/2022 7:54:00 PM
1,4-Dichlorobenzene	ND	1.0		µg/L	1	6/15/2022 7:54:00 PM
Dichlorodifluoromethane	ND	1.0		µg/L	1	6/15/2022 7:54:00 PM
1,1-Dichloroethane	ND	1.0		µg/L	1	6/15/2022 7:54:00 PM
1,1-Dichloroethene	ND	1.0		µg/L	1	6/15/2022 7:54:00 PM
1,2-Dichloropropane	ND	1.0		µg/L	1	6/15/2022 7:54:00 PM
2-Hexanone	ND	10		µg/L	1	6/15/2022 7:54:00 PM
4-Methyl-2-pentanone	ND	10		µg/L	1	6/15/2022 7:54:00 PM
Methylene Chloride	ND	2.5		µg/L	1	6/15/2022 7:54:00 PM
Styrene	ND	1.0		µg/L	1	6/15/2022 7:54:00 PM
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	6/15/2022 7:54:00 PM
1,1,2,2-Tetrachloroethane	ND	1.0		µg/L	1	6/15/2022 7:54:00 PM
Tetrachloroethene (PCE)	ND	1.0		µg/L	1	6/15/2022 7:54:00 PM
trans-1,2-DCE	ND	1.0		µg/L	1	6/15/2022 7:54:00 PM
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	6/15/2022 7:54:00 PM
1,1,1-Trichloroethane	ND	1.0		µg/L	1	6/15/2022 7:54:00 PM
1,1,2-Trichloroethane	ND	1.0		µg/L	1	6/15/2022 7:54:00 PM
Trichloroethene (TCE)	ND	1.0		µg/L	1	6/15/2022 7:54:00 PM

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.
	D	Sample Diluted Due to Matrix
	H	Holding times for preparation or analysis exceeded
	ND	Not Detected at the Reporting Limit
	PQL	Practical Quantitative Limit
	S	% Recovery outside of range due to dilution or matrix interference

B	Analyte detected in the associated Method Blank
E	Estimated value
J	Analyte detected below quantitation limits
P	Sample pH Not In Range
RL	Reporting Limit

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order **2206470**

Date Reported: 7/6/2022

CLIENT: Parkhill

Client Sample ID: Field Blank

Project: Sandoval County Landfill SCCF

Collection Date: 6/8/2022 7:48:00 AM

Lab ID: 2206470-006

Matrix: AQUEOUS

Received Date: 6/8/2022 2:29:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8260B: VOLATILES, TABLE I						Analyst: CCM
Trichlorofluoromethane	ND	1.0		µg/L	1	6/15/2022 7:54:00 PM
1,2,3-Trichloropropane	ND	1.0		µg/L	1	6/15/2022 7:54:00 PM
Vinyl chloride	ND	1.0		µg/L	1	6/15/2022 7:54:00 PM
Xylenes, Total	ND	2.0		µg/L	1	6/15/2022 7:54:00 PM
Acrylonitrile	ND	10		µg/L	1	6/15/2022 7:54:00 PM
Bromochloromethane	ND	2.0		µg/L	1	6/15/2022 7:54:00 PM
Iodomethane	ND	10		µg/L	1	6/15/2022 7:54:00 PM
trans-1,4-Dichloro-2-butene	ND	10		µg/L	1	6/15/2022 7:54:00 PM
Vinyl acetate	ND	10		µg/L	1	6/15/2022 7:54:00 PM
Surr: 1,2-Dichloroethane-d4	92.2	70-130		%Rec	1	6/15/2022 7:54:00 PM
Surr: 4-Bromofluorobenzene	94.8	70-130		%Rec	1	6/15/2022 7:54:00 PM
Surr: Dibromofluoromethane	101	70-130		%Rec	1	6/15/2022 7:54:00 PM
Surr: Toluene-d8	95.9	70-130		%Rec	1	6/15/2022 7:54:00 PM

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Estimated value
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix interference		

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order **2206470**

Date Reported: **7/6/2022**

CLIENT: Parkhill

Client Sample ID: Dupe

Project: Sandoval County Landfill SCCF

Collection Date: 6/8/2022 7:43:00 AM

Lab ID: 2206470-007

Matrix: AQUEOUS

Received Date: 6/8/2022 2:29:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8260B: VOLATILES, TABLE I						Analyst: CCM
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	6/15/2022 8:18:00 PM
Benzene	ND	1.0		µg/L	1	6/15/2022 8:18:00 PM
Toluene	ND	1.0		µg/L	1	6/15/2022 8:18:00 PM
Ethylbenzene	ND	1.0		µg/L	1	6/15/2022 8:18:00 PM
Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	1	6/15/2022 8:18:00 PM
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	6/15/2022 8:18:00 PM
Acetone	ND	10		µg/L	1	6/15/2022 8:18:00 PM
Bromodichloromethane	ND	1.0		µg/L	1	6/15/2022 8:18:00 PM
Bromoform	ND	1.0		µg/L	1	6/15/2022 8:18:00 PM
Bromomethane	ND	2.0		µg/L	1	6/15/2022 8:18:00 PM
2-Butanone	ND	10		µg/L	1	6/15/2022 8:18:00 PM
Carbon disulfide	ND	10		µg/L	1	6/15/2022 8:18:00 PM
Carbon Tetrachloride	ND	1.0		µg/L	1	6/15/2022 8:18:00 PM
Chlorobenzene	ND	1.0		µg/L	1	6/15/2022 8:18:00 PM
Chloroethane	ND	2.0		µg/L	1	6/15/2022 8:18:00 PM
Chloroform	ND	1.0		µg/L	1	6/15/2022 8:18:00 PM
Chloromethane	ND	1.0		µg/L	1	6/15/2022 8:18:00 PM
cis-1,2-DCE	ND	1.0		µg/L	1	6/15/2022 8:18:00 PM
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	6/15/2022 8:18:00 PM
Dibromochloromethane	ND	1.0		µg/L	1	6/15/2022 8:18:00 PM
Dibromomethane	ND	1.0		µg/L	1	6/15/2022 8:18:00 PM
1,2-Dichlorobenzene	ND	1.0		µg/L	1	6/15/2022 8:18:00 PM
1,4-Dichlorobenzene	ND	1.0		µg/L	1	6/15/2022 8:18:00 PM
Dichlorodifluoromethane	ND	1.0		µg/L	1	6/15/2022 8:18:00 PM
1,1-Dichloroethane	ND	1.0		µg/L	1	6/15/2022 8:18:00 PM
1,1-Dichloroethene	ND	1.0		µg/L	1	6/15/2022 8:18:00 PM
1,2-Dichloropropane	ND	1.0		µg/L	1	6/15/2022 8:18:00 PM
2-Hexanone	ND	10		µg/L	1	6/15/2022 8:18:00 PM
4-Methyl-2-pentanone	ND	10		µg/L	1	6/15/2022 8:18:00 PM
Methylene Chloride	ND	2.5		µg/L	1	6/15/2022 8:18:00 PM
Styrene	ND	1.0		µg/L	1	6/15/2022 8:18:00 PM
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	6/15/2022 8:18:00 PM
1,1,2,2-Tetrachloroethane	ND	1.0		µg/L	1	6/15/2022 8:18:00 PM
Tetrachloroethene (PCE)	ND	1.0		µg/L	1	6/15/2022 8:18:00 PM
trans-1,2-DCE	ND	1.0		µg/L	1	6/15/2022 8:18:00 PM
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	6/15/2022 8:18:00 PM
1,1,1-Trichloroethane	ND	1.0		µg/L	1	6/15/2022 8:18:00 PM
1,1,2-Trichloroethane	ND	1.0		µg/L	1	6/15/2022 8:18:00 PM
Trichloroethene (TCE)	ND	1.0		µg/L	1	6/15/2022 8:18:00 PM

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.
	D	Sample Diluted Due to Matrix
	H	Holding times for preparation or analysis exceeded
	ND	Not Detected at the Reporting Limit
	PQL	Practical Quantitative Limit
	S	% Recovery outside of range due to dilution or matrix interference

B	Analyte detected in the associated Method Blank
E	Estimated value
J	Analyte detected below quantitation limits
P	Sample pH Not In Range
RL	Reporting Limit

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order **2206470**

Date Reported: **7/6/2022**

CLIENT: Parkhill

Client Sample ID: Dupe

Project: Sandoval County Landfill SCCF

Collection Date: 6/8/2022 7:43:00 AM

Lab ID: 2206470-007

Matrix: AQUEOUS

Received Date: 6/8/2022 2:29:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8260B: VOLATILES, TABLE I						Analyst: CCM
Trichlorofluoromethane	ND	1.0		µg/L	1	6/15/2022 8:18:00 PM
1,2,3-Trichloropropane	ND	1.0		µg/L	1	6/15/2022 8:18:00 PM
Vinyl chloride	ND	1.0		µg/L	1	6/15/2022 8:18:00 PM
Xylenes, Total	ND	2.0		µg/L	1	6/15/2022 8:18:00 PM
Acrylonitrile	ND	10		µg/L	1	6/15/2022 8:18:00 PM
Bromochloromethane	ND	2.0		µg/L	1	6/15/2022 8:18:00 PM
Iodomethane	ND	10		µg/L	1	6/15/2022 8:18:00 PM
trans-1,4-Dichloro-2-butene	ND	10		µg/L	1	6/15/2022 8:18:00 PM
Vinyl acetate	ND	10		µg/L	1	6/15/2022 8:18:00 PM
Surr: 1,2-Dichloroethane-d4	94.1	70-130		%Rec	1	6/15/2022 8:18:00 PM
Surr: 4-Bromofluorobenzene	93.3	70-130		%Rec	1	6/15/2022 8:18:00 PM
Surr: Dibromofluoromethane	104	70-130		%Rec	1	6/15/2022 8:18:00 PM
Surr: Toluene-d8	94.1	70-130		%Rec	1	6/15/2022 8:18:00 PM

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Estimated value
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix interference		

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order **2206470**

Date Reported: **7/6/2022**

CLIENT: Parkhill

Client Sample ID: Trip Blank

Project: Sandoval County Landfill SCCF

Collection Date:

Lab ID: 2206470-008

Matrix: TRIP BLANK

Received Date: 6/8/2022 2:29:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 504.1: EDB/DBCP						Analyst: JME
1,2-Dibromo-3-chloropropane	ND	0.019		µg/L	1	6/16/2022 1:51:35 PM
1,2-Dibromoethane	ND	0.0095		µg/L	1	6/16/2022 1:51:35 PM
EPA METHOD 8260B: VOLATILES, TABLE I						Analyst: CCM
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	6/15/2022 8:41:00 PM
Benzene	ND	1.0		µg/L	1	6/15/2022 8:41:00 PM
Toluene	ND	1.0		µg/L	1	6/15/2022 8:41:00 PM
Ethylbenzene	ND	1.0		µg/L	1	6/15/2022 8:41:00 PM
Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	1	6/15/2022 8:41:00 PM
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	6/15/2022 8:41:00 PM
Acetone	ND	10		µg/L	1	6/15/2022 8:41:00 PM
Bromodichloromethane	ND	1.0		µg/L	1	6/15/2022 8:41:00 PM
Bromoform	ND	1.0		µg/L	1	6/15/2022 8:41:00 PM
Bromomethane	ND	2.0		µg/L	1	6/15/2022 8:41:00 PM
2-Butanone	ND	10		µg/L	1	6/15/2022 8:41:00 PM
Carbon disulfide	ND	10		µg/L	1	6/15/2022 8:41:00 PM
Carbon Tetrachloride	ND	1.0		µg/L	1	6/15/2022 8:41:00 PM
Chlorobenzene	ND	1.0		µg/L	1	6/15/2022 8:41:00 PM
Chloroethane	ND	2.0		µg/L	1	6/15/2022 8:41:00 PM
Chloroform	ND	1.0		µg/L	1	6/15/2022 8:41:00 PM
Chloromethane	ND	1.0		µg/L	1	6/15/2022 8:41:00 PM
cis-1,2-DCE	ND	1.0		µg/L	1	6/15/2022 8:41:00 PM
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	6/15/2022 8:41:00 PM
Dibromochloromethane	ND	1.0		µg/L	1	6/15/2022 8:41:00 PM
Dibromomethane	ND	1.0		µg/L	1	6/15/2022 8:41:00 PM
1,2-Dichlorobenzene	ND	1.0		µg/L	1	6/15/2022 8:41:00 PM
1,4-Dichlorobenzene	ND	1.0		µg/L	1	6/15/2022 8:41:00 PM
Dichlorodifluoromethane	ND	1.0		µg/L	1	6/15/2022 8:41:00 PM
1,1-Dichloroethane	ND	1.0		µg/L	1	6/15/2022 8:41:00 PM
1,1-Dichloroethene	ND	1.0		µg/L	1	6/15/2022 8:41:00 PM
1,2-Dichloropropane	ND	1.0		µg/L	1	6/15/2022 8:41:00 PM
2-Hexanone	ND	10		µg/L	1	6/15/2022 8:41:00 PM
4-Methyl-2-pentanone	ND	10		µg/L	1	6/15/2022 8:41:00 PM
Methylene Chloride	ND	2.5		µg/L	1	6/15/2022 8:41:00 PM
Styrene	ND	1.0		µg/L	1	6/15/2022 8:41:00 PM
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	6/15/2022 8:41:00 PM
1,1,2,2-Tetrachloroethane	ND	1.0		µg/L	1	6/15/2022 8:41:00 PM
Tetrachloroethene (PCE)	ND	1.0		µg/L	1	6/15/2022 8:41:00 PM
trans-1,2-DCE	ND	1.0		µg/L	1	6/15/2022 8:41:00 PM
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	6/15/2022 8:41:00 PM

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.
	D	Sample Diluted Due to Matrix
	H	Holding times for preparation or analysis exceeded
	ND	Not Detected at the Reporting Limit
	PQL	Practical Quantitative Limit
	S	% Recovery outside of range due to dilution or matrix interference

B	Analyte detected in the associated Method Blank
E	Estimated value
J	Analyte detected below quantitation limits
P	Sample pH Not In Range
RL	Reporting Limit

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order **2206470**

Date Reported: 7/6/2022

CLIENT: Parkhill

Client Sample ID: Trip Blank

Project: Sandoval County Landfill SCCF

Collection Date:

Lab ID: 2206470-008

Matrix: TRIP BLANK

Received Date: 6/8/2022 2:29:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8260B: VOLATILES, TABLE I						Analyst: CCM
1,1,1-Trichloroethane	ND	1.0		µg/L	1	6/15/2022 8:41:00 PM
1,1,2-Trichloroethane	ND	1.0		µg/L	1	6/15/2022 8:41:00 PM
Trichloroethene (TCE)	ND	1.0		µg/L	1	6/15/2022 8:41:00 PM
Trichlorofluoromethane	ND	1.0		µg/L	1	6/15/2022 8:41:00 PM
1,2,3-Trichloropropane	ND	1.0		µg/L	1	6/15/2022 8:41:00 PM
Vinyl chloride	ND	1.0		µg/L	1	6/15/2022 8:41:00 PM
Xylenes, Total	ND	2.0		µg/L	1	6/15/2022 8:41:00 PM
Acrylonitrile	ND	10		µg/L	1	6/15/2022 8:41:00 PM
Bromochloromethane	ND	2.0		µg/L	1	6/15/2022 8:41:00 PM
Iodomethane	ND	10		µg/L	1	6/15/2022 8:41:00 PM
trans-1,4-Dichloro-2-butene	ND	10		µg/L	1	6/15/2022 8:41:00 PM
Vinyl acetate	ND	10		µg/L	1	6/15/2022 8:41:00 PM
Surr: 1,2-Dichloroethane-d4	93.6	70-130		%Rec	1	6/15/2022 8:41:00 PM
Surr: 4-Bromofluorobenzene	93.6	70-130		%Rec	1	6/15/2022 8:41:00 PM
Surr: Dibromofluoromethane	102	70-130		%Rec	1	6/15/2022 8:41:00 PM
Surr: Toluene-d8	95.8	70-130		%Rec	1	6/15/2022 8:41:00 PM

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Estimated value
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix interference		

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 2206470

06-Jul-22

Client: Parkhill

Project: Sandoval County Landfill SCCF

Sample ID: MB-68054	SampType: MBLK	TestCode: EPA Method 200.7: Metals								
Client ID: PBW	Batch ID: 68054	RunNo: 88690								
Prep Date: 6/12/2022	Analysis Date: 6/13/2022	SeqNo: 3148366 Units: mg/L								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Barium	ND	0.0030								
Calcium	ND	1.0								
Chromium	ND	0.0060								
Cobalt	ND	0.0060								
Iron	ND	0.050								
Magnesium	ND	1.0								
Manganese	ND	0.0020								
Potassium	ND	1.0								
Sodium	ND	1.0								
Zinc	ND	0.010								

Sample ID: LCSLL-68054	SampType: LCSLL	TestCode: EPA Method 200.7: Metals								
Client ID: BatchQC	Batch ID: 68054	RunNo: 88690								
Prep Date: 6/12/2022	Analysis Date: 6/13/2022	SeqNo: 3148371 Units: mg/L								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Barium	ND	0.0030	0.002000	0	115	50	150			
Calcium	ND	1.0	0.5000	0	110	50	150			
Chromium	ND	0.0060	0.006000	0	85.9	50	150			
Cobalt	0.0061	0.0060	0.006000	0	101	50	150			
Iron	ND	0.050	0.02000	0	115	50	150			
Magnesium	ND	1.0	0.5000	0	110	50	150			
Manganese	ND	0.0020	0.002000	0	82.8	50	150			
Potassium	ND	1.0	0.5000	0	73.1	50	150			
Sodium	ND	1.0	0.5000	0	113	50	150			
Zinc	ND	0.010	0.01000	0	97.6	50	150			

Sample ID: LCS-68054	SampType: LCS	TestCode: EPA Method 200.7: Metals								
Client ID: LCSW	Batch ID: 68054	RunNo: 88690								
Prep Date: 6/12/2022	Analysis Date: 6/13/2022	SeqNo: 3148372 Units: mg/L								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Barium	0.50	0.0030	0.5000	0	101	85	115			
Calcium	52	1.0	50.00	0	103	85	115			
Chromium	0.49	0.0060	0.5000	0	98.1	85	115			
Cobalt	0.49	0.0060	0.5000	0	97.5	85	115			
Iron	0.49	0.050	0.5000	0	98.8	85	115			
Magnesium	51	1.0	50.00	0	103	85	115			
Manganese	0.49	0.0020	0.5000	0	97.1	85	115			
Potassium	51	1.0	50.00	0	102	85	115			

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Estimated value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quantitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix interference		

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 2206470

06-Jul-22

Client: Parkhill
Project: Sandoval County Landfill SCCF

Sample ID: LCS-68054	SampType: LCS		TestCode: EPA Method 200.7: Metals							
Client ID: LCSW	Batch ID: 68054		RunNo: 88690							
Prep Date: 6/12/2022	Analysis Date: 6/13/2022		SeqNo: 3148372		Units: mg/L					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Sodium	51	1.0	50.00	0	103	85	115			
Zinc	0.50	0.010	0.5000	0	99.1	85	115			

Sample ID: MB-68054	SampType: MBLK		TestCode: EPA Method 200.7: Metals							
Client ID: PBW	Batch ID: 68054		RunNo: 88744							
Prep Date: 6/12/2022	Analysis Date: 6/14/2022		SeqNo: 3150807		Units: mg/L					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Aluminum	ND	0.020								

Sample ID: LCSLL-68054	SampType: LCSLL		TestCode: EPA Method 200.7: Metals							
Client ID: BatchQC	Batch ID: 68054		RunNo: 88744							
Prep Date: 6/12/2022	Analysis Date: 6/14/2022		SeqNo: 3150808		Units: mg/L					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Aluminum	ND	0.020	0.01000	0	73.9	50	150			

Sample ID: LCS-68054	SampType: LCS		TestCode: EPA Method 200.7: Metals							
Client ID: LCSW	Batch ID: 68054		RunNo: 88744							
Prep Date: 6/12/2022	Analysis Date: 6/14/2022		SeqNo: 3150809		Units: mg/L					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Aluminum	0.48	0.020	0.5000	0	96.1	85	115			

Sample ID: MB-A	SampType: MBLK		TestCode: EPA Method 200.7: Metals							
Client ID: PBW	Batch ID: A88784		RunNo: 88784							
Prep Date:	Analysis Date: 6/15/2022		SeqNo: 3152377		Units: mg/L					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Aluminum	ND	0.020								
Barium	ND	0.0030								
Calcium	ND	1.0								
Chromium	ND	0.0060								
Cobalt	ND	0.0060								
Iron	ND	0.050								
Magnesium	ND	1.0								
Manganese	ND	0.0020								
Potassium	ND	1.0								
Zinc	ND	0.010								

Qualifiers:

* Value exceeds Maximum Contaminant Level.
D Sample Diluted Due to Matrix
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
PQL Practical Quantitative Limit
S % Recovery outside of range due to dilution or matrix interference

B Analyte detected in the associated Method Blank
E Estimated value
J Analyte detected below quantitation limits
P Sample pH Not In Range
RL Reporting Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 2206470

06-Jul-22

Client: Parkhill

Project: Sandoval County Landfill SCCF

Sample ID: LLCS-A	SampType: LCSLL		TestCode: EPA Method 200.7: Metals							
Client ID: BatchQC	Batch ID: A88784		RunNo: 88784							
Prep Date:	Analysis Date: 6/15/2022		SeqNo: 3152378		Units: mg/L					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Aluminum	ND	0.020	0.01000	0	83.1	50	150			
Barium	ND	0.0030	0.002000	0	101	50	150			
Calcium	ND	1.0	0.5000	0	111	50	150			
Chromium	ND	0.0060	0.006000	0	92.2	50	150			
Cobalt	0.0066	0.0060	0.006000	0	110	50	150			
Iron	ND	0.050	0.02000	0	111	50	150			
Magnesium	ND	1.0	0.5000	0	104	50	150			
Manganese	ND	0.0020	0.002000	0	86.3	50	150			
Potassium	ND	1.0	0.5000	0	89.0	50	150			
Zinc	0.013	0.010	0.01000	0	128	50	150			

Sample ID: LCS-A	SampType: LCS		TestCode: EPA Method 200.7: Metals							
Client ID: LCSW	Batch ID: A88784		RunNo: 88784							
Prep Date:	Analysis Date: 6/15/2022		SeqNo: 3152379		Units: mg/L					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Aluminum	0.55	0.020	0.5000	0	111	85	115			
Barium	0.49	0.0030	0.5000	0	98.3	85	115			
Calcium	50	1.0	50.00	0	100	85	115			
Chromium	0.50	0.0060	0.5000	0	99.1	85	115			
Cobalt	0.48	0.0060	0.5000	0	95.7	85	115			
Iron	0.49	0.050	0.5000	0	98.6	85	115			
Magnesium	51	1.0	50.00	0	101	85	115			
Manganese	0.49	0.0020	0.5000	0	97.0	85	115			
Potassium	50	1.0	50.00	0	99.9	85	115			
Zinc	0.47	0.010	0.5000	0	94.5	85	115			

Sample ID: 2206470-003FMS	SampType: MS		TestCode: EPA Method 200.7: Metals							
Client ID: MW-5R	Batch ID: A88784		RunNo: 88784							
Prep Date:	Analysis Date: 6/15/2022		SeqNo: 3152454		Units: mg/L					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Aluminum	0.58	0.020	0.5000	0	117	70	130			
Barium	0.60	0.0030	0.5000	0.08585	103	70	130			
Calcium	93	1.0	50.00	44.06	97.8	70	130			
Chromium	0.52	0.0060	0.5000	0.004697	102	70	130			
Cobalt	0.48	0.0060	0.5000	0	96.2	70	130			
Iron	0.54	0.050	0.5000	0.04665	99.3	70	130			
Magnesium	56	1.0	50.00	5.006	103	70	130			
Manganese	0.50	0.0020	0.5000	0.0006148	99.5	70	130			

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Estimated value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quantitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix interference		

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 2206470

06-Jul-22

Client: Parkhill
Project: Sandoval County Landfill SCCF

Sample ID: 2206470-003FMS	SampType: MS	TestCode: EPA Method 200.7: Metals								
Client ID: MW-5R	Batch ID: A88784	RunNo: 88784								
Prep Date:	Analysis Date: 6/15/2022	SeqNo: 3152454 Units: mg/L								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Potassium	56	1.0	50.00	5.012	101	70	130			
Zinc	0.49	0.010	0.5000	0.004831	96.6	70	130			

Sample ID: 2206470-003FMSD	SampType: MSD	TestCode: EPA Method 200.7: Metals								
Client ID: MW-5R	Batch ID: A88784	RunNo: 88784								
Prep Date:	Analysis Date: 6/15/2022	SeqNo: 3152455 Units: mg/L								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Aluminum	0.58	0.020	0.5000	0	117	70	130	0.0744	20	
Barium	0.61	0.0030	0.5000	0.08585	104	70	130	1.00	20	
Calcium	93	1.0	50.00	44.06	97.1	70	130	0.373	20	
Chromium	0.52	0.0060	0.5000	0.004697	103	70	130	1.27	20	
Cobalt	0.49	0.0060	0.5000	0	97.2	70	130	1.02	20	
Iron	0.55	0.050	0.5000	0.04665	100	70	130	0.947	20	
Magnesium	56	1.0	50.00	5.006	103	70	130	0.0294	20	
Manganese	0.50	0.0020	0.5000	0.0006148	100	70	130	0.691	20	
Potassium	56	1.0	50.00	5.012	101	70	130	0.0198	20	
Zinc	0.49	0.010	0.5000	0.004831	97.3	70	130	0.696	20	

Sample ID: MB-A	SampType: MBLK	TestCode: EPA Method 200.7: Metals								
Client ID: PBW	Batch ID: A88823	RunNo: 88823								
Prep Date:	Analysis Date: 6/16/2022	SeqNo: 3153662 Units: mg/L								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Sodium	ND	1.0								

Sample ID: LLCS-A	SampType: LCSLL	TestCode: EPA Method 200.7: Metals								
Client ID: BatchQC	Batch ID: A88823	RunNo: 88823								
Prep Date:	Analysis Date: 6/16/2022	SeqNo: 3153666 Units: mg/L								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Sodium	ND	1.0	0.5000	0	124	50	150			

Sample ID: LCS-A	SampType: LCS	TestCode: EPA Method 200.7: Metals								
Client ID: LCSW	Batch ID: A88823	RunNo: 88823								
Prep Date:	Analysis Date: 6/16/2022	SeqNo: 3153667 Units: mg/L								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Sodium	52	1.0	50.00	0	105	85	115			

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Estimated value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quantitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix interference		

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 2206470

06-Jul-22

Client: Parkhill

Project: Sandoval County Landfill SCCF

Sample ID: 2206470-003FMS	SampType: MS	TestCode: EPA Method 200.7: Metals
Client ID: MW-5R	Batch ID: A88823	RunNo: 88823
Prep Date:	Analysis Date: 6/16/2022	SeqNo: 3153690 Units: mg/L
Analyte	Result	PQL SPK value SPK Ref Val %REC LowLimit HighLimit %RPD RPDLimit Qual
Sodium	360	5.0 250.0 105.9 102 70 130

Sample ID: 2206470-003FMSD	SampType: MSD	TestCode: EPA Method 200.7: Metals
Client ID: MW-5R	Batch ID: A88823	RunNo: 88823
Prep Date:	Analysis Date: 6/16/2022	SeqNo: 3153693 Units: mg/L
Analyte	Result	PQL SPK value SPK Ref Val %REC LowLimit HighLimit %RPD RPDLimit Qual
Sodium	370	5.0 250.0 105.9 104 70 130 1.41 20

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Estimated value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quantitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix interference		

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 2206470

06-Jul-22

Client: Parkhill
Project: Sandoval County Landfill SCCF

Sample ID: MB	SampType: MBLK	TestCode: EPA 200.8: Metals
Client ID: PBW	Batch ID: B88688	RunNo: 88688
Prep Date:	Analysis Date: 6/13/2022	SeqNo: 3148256 Units: mg/L
Analyte	Result	PQL SPK value SPK Ref Val %REC LowLimit HighLimit %RPD RPDLimit Qual
Arsenic	ND	0.0010
Lead	ND	0.00050

Sample ID: LCSLL	SampType: LCSLL	TestCode: EPA 200.8: Metals
Client ID: BatchQC	Batch ID: B88688	RunNo: 88688
Prep Date:	Analysis Date: 6/13/2022	SeqNo: 3148257 Units: mg/L
Analyte	Result	PQL SPK value SPK Ref Val %REC LowLimit HighLimit %RPD RPDLimit Qual
Arsenic	0.0010	0.0010 0.001000 0 103 50 150
Lead	0.00054	0.00050 0.0005000 0 107 50 150

Sample ID: LCS	SampType: LCS	TestCode: EPA 200.8: Metals
Client ID: LCSW	Batch ID: B88688	RunNo: 88688
Prep Date:	Analysis Date: 6/13/2022	SeqNo: 3148258 Units: mg/L
Analyte	Result	PQL SPK value SPK Ref Val %REC LowLimit HighLimit %RPD RPDLimit Qual
Arsenic	0.025	0.0010 0.02500 0 101 85 115
Lead	0.012	0.00050 0.01250 0 98.4 85 115

Sample ID: MB-68054	SampType: MBLK	TestCode: EPA 200.8: Metals
Client ID: PBW	Batch ID: 68054	RunNo: 88722
Prep Date: 6/12/2022	Analysis Date: 6/14/2022	SeqNo: 3149868 Units: mg/L
Analyte	Result	PQL SPK value SPK Ref Val %REC LowLimit HighLimit %RPD RPDLimit Qual
Arsenic	ND	0.0010
Lead	ND	0.00050
Uranium	ND	0.00050

Sample ID: MSLCSLL-68054	SampType: LCSLL	TestCode: EPA 200.8: Metals
Client ID: BatchQC	Batch ID: 68054	RunNo: 88722
Prep Date: 6/12/2022	Analysis Date: 6/14/2022	SeqNo: 3149869 Units: mg/L
Analyte	Result	PQL SPK value SPK Ref Val %REC LowLimit HighLimit %RPD RPDLimit Qual
Arsenic	0.0010	0.0010 0.001000 0 101 50 150
Lead	0.00052	0.00050 0.0005000 0 104 50 150
Uranium	0.00051	0.00050 0.0005000 0 102 50 150

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Estimated value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quantitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix interference		

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 2206470

06-Jul-22

Client: Parkhill
Project: Sandoval County Landfill SCCF

Sample ID: MSLCS-68054	SampType: LCS	TestCode: EPA 200.8: Metals								
Client ID: LCSW	Batch ID: 68054	RunNo: 88722								
Prep Date: 6/12/2022	Analysis Date: 6/14/2022	SeqNo: 3149870 Units: mg/L								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Arsenic	0.024	0.0010	0.02500	0	96.7	85	115			
Lead	0.012	0.00050	0.01250	0	96.8	85	115			
Uranium	0.012	0.00050	0.01250	0	96.0	85	115			

Sample ID: MB	SampType: MBLK	TestCode: EPA 200.8: Metals								
Client ID: PBW	Batch ID: A88791	RunNo: 88791								
Prep Date:	Analysis Date: 6/16/2022	SeqNo: 3152692 Units: mg/L								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Uranium	ND	0.00050								

Sample ID: LLLCS	SampType: LCSLL	TestCode: EPA 200.8: Metals								
Client ID: BatchQC	Batch ID: A88791	RunNo: 88791								
Prep Date:	Analysis Date: 6/16/2022	SeqNo: 3152694 Units: mg/L								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Uranium	0.00051	0.00050	0.0005000	0	103	50	150			

Sample ID: LCS	SampType: LCS	TestCode: EPA 200.8: Metals								
Client ID: LCSW	Batch ID: A88791	RunNo: 88791								
Prep Date:	Analysis Date: 6/16/2022	SeqNo: 3152698 Units: mg/L								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Uranium	0.012	0.00050	0.01250	0	98.6	85	115			

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Estimated value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quantitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix interference		

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 2206470

06-Jul-22

Client: Parkhill
Project: Sandoval County Landfill SCCF

Sample ID: MB	SampType: mbk	TestCode: EPA Method 300.0: Anions								
Client ID: PBW	Batch ID: R88634	RunNo: 88634								
Prep Date:	Analysis Date: 6/9/2022	SeqNo: 3146002 Units: mg/L								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Fluoride	ND	0.10								
Chloride	ND	0.50								
Nitrogen, Nitrite (As N)	ND	0.10								
Nitrogen, Nitrate (As N)	ND	0.10								
Phosphorus, Orthophosphate (As P)	ND	0.50								
Sulfate	ND	0.50								

Sample ID: LCS	SampType: lcs	TestCode: EPA Method 300.0: Anions								
Client ID: LCSW	Batch ID: R88634	RunNo: 88634								
Prep Date:	Analysis Date: 6/9/2022	SeqNo: 3146003 Units: mg/L								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Fluoride	0.51	0.10	0.5000	0	103	90	110			
Chloride	4.8	0.50	5.000	0	95.8	90	110			
Nitrogen, Nitrite (As N)	1.0	0.10	1.000	0	99.8	90	110			
Nitrogen, Nitrate (As N)	2.6	0.10	2.500	0	104	90	110			
Phosphorus, Orthophosphate (As P)	4.7	0.50	5.000	0	93.9	90	110			
Sulfate	10	0.50	10.00	0	103	90	110			

Sample ID: 2206470-001EMS	SampType: ms	TestCode: EPA Method 300.0: Anions								
Client ID: MW-2R	Batch ID: R88634	RunNo: 88634								
Prep Date:	Analysis Date: 6/9/2022	SeqNo: 3146023 Units: mg/L								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Fluoride	1.2	0.10	0.5000	0.7478	95.5	79.7	110			
Nitrogen, Nitrite (As N)	0.95	0.10	1.000	0	94.8	83.4	105			
Nitrogen, Nitrate (As N)	2.8	0.10	2.500	0.2227	104	93.5	110			
Phosphorus, Orthophosphate (As P)	4.8	0.50	5.000	0	95.3	80.1	109			

Sample ID: 2206470-001EMSD	SampType: msd	TestCode: EPA Method 300.0: Anions								
Client ID: MW-2R	Batch ID: R88634	RunNo: 88634								
Prep Date:	Analysis Date: 6/9/2022	SeqNo: 3146024 Units: mg/L								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Fluoride	1.2	0.10	0.5000	0.7478	93.2	79.7	110	0.945	20	
Nitrogen, Nitrite (As N)	0.93	0.10	1.000	0	93.1	83.4	105	1.77	20	
Nitrogen, Nitrate (As N)	2.8	0.10	2.500	0.2227	102	93.5	110	1.74	20	
Phosphorus, Orthophosphate (As P)	4.7	0.50	5.000	0	93.7	80.1	109	1.66	20	

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Estimated value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quantitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix interference		

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 2206470

06-Jul-22

Client: Parkhill
Project: Sandoval County Landfill SCCF

Sample ID: MB-68039	SampType: MBLK	TestCode: EPA Method 504.1: EDB/DBCP								
Client ID: PBW	Batch ID: 68039	RunNo: 88682								
Prep Date: 6/13/2022	Analysis Date: 6/13/2022	SeqNo: 3148614 Units: µg/L								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
1,2-Dibromo-3-chloropropane	ND	0.020								
1,2-Dibromoethane	ND	0.010								

Sample ID: MB-68039	SampType: MBLK	TestCode: EPA Method 504.1: EDB/DBCP								
Client ID: PBW	Batch ID: 68039	RunNo: 88682								
Prep Date: 6/13/2022	Analysis Date: 6/13/2022	SeqNo: 3148615 Units: µg/L								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
1,2-Dibromo-3-chloropropane	ND	0.020								
1,2-Dibromoethane	ND	0.010								

Sample ID: LCS-68039	SampType: LCS	TestCode: EPA Method 504.1: EDB/DBCP								
Client ID: LCSW	Batch ID: 68039	RunNo: 88682								
Prep Date: 6/13/2022	Analysis Date: 6/13/2022	SeqNo: 3148616 Units: µg/L								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
1,2-Dibromo-3-chloropropane	0.11	0.020	0.1000	0	106	70	130			
1,2-Dibromoethane	0.11	0.010	0.1000	0	114	70	130			

Sample ID: MB-68144	SampType: MBLK	TestCode: EPA Method 504.1: EDB/DBCP								
Client ID: PBW	Batch ID: 68144	RunNo: 88772								
Prep Date: 6/16/2022	Analysis Date: 6/16/2022	SeqNo: 3153224 Units: µg/L								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
1,2-Dibromo-3-chloropropane	ND	0.020								
1,2-Dibromoethane	ND	0.010								

Sample ID: MB-68144	SampType: MBLK	TestCode: EPA Method 504.1: EDB/DBCP								
Client ID: PBW	Batch ID: 68144	RunNo: 88772								
Prep Date: 6/16/2022	Analysis Date: 6/16/2022	SeqNo: 3153228 Units: µg/L								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
1,2-Dibromo-3-chloropropane	ND	0.020								
1,2-Dibromoethane	ND	0.010								

Sample ID: LCS-68144	SampType: LCS	TestCode: EPA Method 504.1: EDB/DBCP								
Client ID: LCSW	Batch ID: 68144	RunNo: 88772								
Prep Date: 6/16/2022	Analysis Date: 6/16/2022	SeqNo: 3153229 Units: µg/L								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
1,2-Dibromo-3-chloropropane	ND	0.020								
1,2-Dibromoethane	ND	0.010								

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Estimated value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quantitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix interference		

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 2206470

06-Jul-22

Client: Parkhill
Project: Sandoval County Landfill SCCF

Sample ID: LCS-68144	SampType: LCS		TestCode: EPA Method 504.1: EDB/DBCP							
Client ID: LCSW	Batch ID: 68144		RunNo: 88772							
Prep Date: 6/16/2022	Analysis Date: 6/16/2022		SeqNo: 3153229	Units: µg/L						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
1,2-Dibromo-3-chloropropane	0.099	0.020	0.1000	0	98.5	70	130			
1,2-Dibromoethane	0.097	0.010	0.1000	0	97.0	70	130			

Sample ID: LCSD-68144	SampType: LCSD		TestCode: EPA Method 504.1: EDB/DBCP							
Client ID: LCSS02	Batch ID: 68144		RunNo: 88772							
Prep Date: 6/16/2022	Analysis Date: 6/16/2022		SeqNo: 3153230	Units: µg/L						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
1,2-Dibromo-3-chloropropane	0.093	0.020	0.1000	0	93.5	70	130	5.25	20	
1,2-Dibromoethane	0.097	0.010	0.1000	0	96.9	70	130	0.141	20	

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Estimated value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quantitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix interference		

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 2206470

06-Jul-22

Client: Parkhill
Project: Sandoval County Landfill SCCF

Sample ID: 100ng lcs	SampType: LCS		TestCode: EPA Method 8260B: Volatiles, Table I							
Client ID: LCSW	Batch ID: LF88743		RunNo: 88743							
Prep Date:	Analysis Date: 6/15/2022		SeqNo: 3152761		Units: µg/L					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	19	1.0	20.00	0	97.2	70	130			
Toluene	20	1.0	20.00	0	98.9	70	130			
Chlorobenzene	21	1.0	20.00	0	104	70	130			
1,1-Dichloroethene	18	1.0	20.00	0	89.9	70	130			
Trichloroethene (TCE)	19	1.0	20.00	0	96.5	70	130			
Surr: 1,2-Dichloroethane-d4	9.2		10.00		92.1	70	130			
Surr: 4-Bromofluorobenzene	9.7		10.00		97.3	70	130			
Surr: Dibromofluoromethane	10		10.00		105	70	130			
Surr: Toluene-d8	9.8		10.00		97.8	70	130			

Sample ID: mb	SampType: MBLK		TestCode: EPA Method 8260B: Volatiles, Table I							
Client ID: PBW	Batch ID: LF88743		RunNo: 88743							
Prep Date:	Analysis Date: 6/15/2022		SeqNo: 3152762		Units: µg/L					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	1.0								
Toluene	ND	1.0								
Ethylbenzene	ND	1.0								
Methyl tert-butyl ether (MTBE)	ND	1.0								
1,2-Dichloroethane (EDC)	ND	1.0								
Acetone	ND	10								
Bromodichloromethane	ND	1.0								
Bromoform	ND	1.0								
Bromomethane	ND	2.0								
2-Butanone	ND	10								
Carbon disulfide	ND	10								
Carbon Tetrachloride	ND	1.0								
Chlorobenzene	ND	1.0								
Chloroethane	ND	2.0								
Chloroform	ND	1.0								
Chloromethane	ND	1.0								
cis-1,2-DCE	ND	1.0								
cis-1,3-Dichloropropene	ND	1.0								
Dibromochloromethane	ND	1.0								
Dibromomethane	ND	1.0								
1,2-Dichlorobenzene	ND	1.0								
1,4-Dichlorobenzene	ND	1.0								
1,1-Dichloroethane	ND	1.0								
1,1-Dichloroethene	ND	1.0								

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Estimated value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quantitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix interference		

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 2206470

06-Jul-22

Client: Parkhill
Project: Sandoval County Landfill SCCF

Sample ID: mb	SampType: MBLK		TestCode: EPA Method 8260B: Volatiles, Table I							
Client ID: PBW	Batch ID: LF88743		RunNo: 88743							
Prep Date:	Analysis Date: 6/15/2022		SeqNo: 3152762		Units: µg/L					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
1,2-Dichloropropane	ND	1.0								
1,2,4-Trichlorobenzene	ND	1.0								
2-Hexanone	ND	10								
4-Methyl-2-pentanone	ND	10								
Methylene Chloride	ND	2.5								
Styrene	ND	1.0								
1,1,1,2-Tetrachloroethane	ND	1.0								
1,1,2,2-Tetrachloroethane	ND	1.0								
Tetrachloroethene (PCE)	ND	1.0								
trans-1,2-DCE	ND	1.0								
trans-1,3-Dichloropropene	ND	1.0								
1,1,1-Trichloroethane	ND	1.0								
1,1,2-Trichloroethane	ND	1.0								
Trichloroethene (TCE)	ND	1.0								
Trichlorofluoromethane	ND	1.0								
1,2,3-Trichloropropane	ND	1.0								
Vinyl chloride	ND	1.0								
Xylenes, Total	ND	2.0								
Acrylonitrile	ND	10								
Bromochloromethane	ND	2.0								
Iodomethane	ND	10								
trans-1,4-Dichloro-2-butene	ND	10								
Vinyl acetate	ND	10								
Surr: 1,2-Dichloroethane-d4	9.4		10.00		94.3	70	130			
Surr: 4-Bromofluorobenzene	9.6		10.00		95.9	70	130			
Surr: Dibromofluoromethane	10		10.00		105	70	130			
Surr: Toluene-d8	9.7		10.00		97.0	70	130			

Sample ID: 2206470-001ams	SampType: MS		TestCode: EPA Method 8260B: Volatiles, Table I							
Client ID: MW-2R	Batch ID: LF88743		RunNo: 88743							
Prep Date:	Analysis Date: 6/15/2022		SeqNo: 3152796		Units: µg/L					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	20	1.0	20.00	0	98.7	70	130			
Toluene	21	1.0	20.00	0.2540	102	70	130			
Chlorobenzene	22	1.0	20.00	0	108	70	130			
1,1-Dichloroethene	18	1.0	20.00	0	91.4	70	130			
Trichloroethene (TCE)	19	1.0	20.00	0	96.2	70	130			
Surr: 1,2-Dichloroethane-d4	9.0		10.00		89.6	70	130			

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Estimated value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quantitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix interference		

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 2206470

06-Jul-22

Client: Parkhill

Project: Sandoval County Landfill SCCF

Sample ID: 2206470-001ams		SampType: MS		TestCode: EPA Method 8260B: Volatiles, Table I						
Client ID: MW-2R		Batch ID: LF88743		RunNo: 88743						
Prep Date:		Analysis Date: 6/15/2022		SeqNo: 3152796			Units: µg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: 4-Bromofluorobenzene	9.7		10.00		96.9	70	130			
Surr: Dibromofluoromethane	10		10.00		101	70	130			
Surr: Toluene-d8	9.7		10.00		96.7	70	130			

Sample ID: 2206470-001amsd		SampType: MSD		TestCode: EPA Method 8260B: Volatiles, Table I						
Client ID: MW-2R		Batch ID: LF88743		RunNo: 88743						
Prep Date:		Analysis Date: 6/15/2022		SeqNo: 3152797		Units: µg/L				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	19	1.0	20.00	0	96.4	70	130	2.29	20	
Toluene	20	1.0	20.00	0.2540	98.0	70	130	3.80	20	
Chlorobenzene	21	1.0	20.00	0	104	70	130	3.49	20	
1,1-Dichloroethene	18	1.0	20.00	0	87.5	70	130	4.35	20	
Trichloroethene (TCE)	19	1.0	20.00	0	92.6	70	130	3.79	20	
Surr: 1,2-Dichloroethane-d4	9.2		10.00		91.5	70	130	0	0	
Surr: 4-Bromofluorobenzene	9.8		10.00		98.2	70	130	0	0	
Surr: Dibromofluoromethane	10		10.00		101	70	130	0	0	
Surr: Toluene-d8	9.5		10.00		94.6	70	130	0	0	

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Estimated value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quantitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix interference		

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 2206470

06-Jul-22

Client: Parkhill
Project: Sandoval County Landfill SCCF

Sample ID: MB	SampType: MBLK		TestCode: EPA Method 9060A TOC							
Client ID: PBW	Batch ID: R88696		RunNo: 88696							
Prep Date:	Analysis Date: 6/13/2022		SeqNo: 3149059		Units: mg/L					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Total Organic Carbon	ND	1.0								

Sample ID: LCS	SampType: LCS		TestCode: EPA Method 9060A TOC							
Client ID: LCSW	Batch ID: R88696		RunNo: 88696							
Prep Date:	Analysis Date: 6/13/2022		SeqNo: 3149060		Units: mg/L					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Total Organic Carbon	5.0	1.0	4.850	0	102	90	110			

Sample ID: 2206470-004cms	SampType: MS		TestCode: EPA Method 9060A TOC							
Client ID: MW-6R	Batch ID: R88696		RunNo: 88696							
Prep Date:	Analysis Date: 6/13/2022		SeqNo: 3149076		Units: mg/L					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Total Organic Carbon	12	1.0	4.650	7.702	95.0	85	115			

Sample ID: 2206470-004cmsd	SampType: MSD		TestCode: EPA Method 9060A TOC							
Client ID: MW-6R	Batch ID: R88696		RunNo: 88696							
Prep Date:	Analysis Date: 6/13/2022		SeqNo: 3149077		Units: mg/L					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Total Organic Carbon	12	1.0	4.650	7.702	93.3	85	115	0.662	15	

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Estimated value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quantitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix interference		

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 2206470

06-Jul-22

Client: Parkhill
Project: Sandoval County Landfill SCCF

Sample ID: MB-68414	SampType: MBLK		TestCode: Total Phenolics by SW-846 9067							
Client ID: PBW	Batch ID: 68414		RunNo: 89084							
Prep Date: 6/28/2022	Analysis Date: 6/28/2022		SeqNo: 3164829		Units: µg/L					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Phenolics	ND	2.5								

Sample ID: LCS-68414	SampType: LCS		TestCode: Total Phenolics by SW-846 9067							
Client ID: LCSW	Batch ID: 68414		RunNo: 89084							
Prep Date: 6/28/2022	Analysis Date: 6/28/2022		SeqNo: 3164830		Units: µg/L					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Phenolics	12	2.5	20.00	0	58.9	58.1	107			

Sample ID: MB-68443	SampType: MBLK		TestCode: Total Phenolics by SW-846 9067							
Client ID: PBW	Batch ID: 68443		RunNo: 89118							
Prep Date: 6/29/2022	Analysis Date: 6/29/2022		SeqNo: 3166816		Units: µg/L					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Phenolics	ND	2.5								

Sample ID: LCS-68443	SampType: LCS		TestCode: Total Phenolics by SW-846 9067							
Client ID: LCSW	Batch ID: 68443		RunNo: 89118							
Prep Date: 6/29/2022	Analysis Date: 6/29/2022		SeqNo: 3166817		Units: µg/L					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Phenolics	12	2.5	20.00	0	61.8	58.1	107			

Sample ID: LCSD-68443	SampType: LCSD		TestCode: Total Phenolics by SW-846 9067							
Client ID: LCSS02	Batch ID: 68443		RunNo: 89118							
Prep Date: 6/29/2022	Analysis Date: 6/29/2022		SeqNo: 3166818		Units: µg/L					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Phenolics	12	2.5	20.00	0	61.8	58.1	107	0	20	

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Estimated value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quantitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix interference		

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 2206470

06-Jul-22

Client: Parkhill
Project: Sandoval County Landfill SCCF

Sample ID: Ics-1 99.6uS eC	SampType: Ics		TestCode: SM2510B: Specific Conductance							
Client ID: LCSW	Batch ID: R88699		RunNo: 88699							
Prep Date:	Analysis Date: 6/13/2022		SeqNo: 3149378		Units: µmhos/cm					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Conductivity	100	10	99.60	0	103	85	115			

Sample ID: Ics-2 99.6 uS eC	SampType: Ics		TestCode: SM2510B: Specific Conductance							
Client ID: LCSW	Batch ID: R88699		RunNo: 88699							
Prep Date:	Analysis Date: 6/13/2022		SeqNo: 3149404		Units: µmhos/cm					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Conductivity	110	10	99.60	0	110	85	115			

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Estimated value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quantitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix interference		

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 2206470

06-Jul-22

Client: Parkhill
Project: Sandoval County Landfill SCCF

Sample ID: MB	SampType: MBLK		TestCode: SM 4500 NH3: Ammonia							
Client ID: PBW	Batch ID: R88878		RunNo: 88878							
Prep Date:	Analysis Date: 6/20/2022		SeqNo: 3155699		Units: mg/L					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Nitrogen, Ammonia	ND	1.0								

Sample ID: LCS	SampType: LCS		TestCode: SM 4500 NH3: Ammonia							
Client ID: LCSW	Batch ID: R88878		RunNo: 88878							
Prep Date:	Analysis Date: 6/20/2022		SeqNo: 3155700		Units: mg/L					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Nitrogen, Ammonia	10	1.0	10.00	0	101	80	120			

Qualifiers:

* Value exceeds Maximum Contaminant Level.
D Sample Diluted Due to Matrix
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
PQL Practical Quantitative Limit
S % Recovery outside of range due to dilution or matrix interference

B Analyte detected in the associated Method Blank
E Estimated value
J Analyte detected below quantitation limits
P Sample pH Not In Range
RL Reporting Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 2206470

06-Jul-22

Client: Parkhill
Project: Sandoval County Landfill SCCF

Sample ID: mb-1 alk	SampType: mblk		TestCode: SM2320B: Alkalinity							
Client ID: PBW	Batch ID: R88699		RunNo: 88699							
Prep Date:	Analysis Date: 6/13/2022		SeqNo: 3149291		Units: mg/L CaCO3					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Total Alkalinity (as CaCO3)	ND	20.00								

Sample ID: lcs-1 alk	SampType: lcs		TestCode: SM2320B: Alkalinity							
Client ID: LCSW	Batch ID: R88699		RunNo: 88699							
Prep Date:	Analysis Date: 6/13/2022		SeqNo: 3149292		Units: mg/L CaCO3					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Total Alkalinity (as CaCO3)	76.36	20.00	80.00	0	95.4	90	110			

Sample ID: mb-2 alk	SampType: mblk		TestCode: SM2320B: Alkalinity							
Client ID: PBW	Batch ID: R88699		RunNo: 88699							
Prep Date:	Analysis Date: 6/13/2022		SeqNo: 3149318		Units: mg/L CaCO3					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Total Alkalinity (as CaCO3)	ND	20.00								

Sample ID: lcs-2 alk	SampType: lcs		TestCode: SM2320B: Alkalinity							
Client ID: LCSW	Batch ID: R88699		RunNo: 88699							
Prep Date:	Analysis Date: 6/13/2022		SeqNo: 3149319		Units: mg/L CaCO3					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Total Alkalinity (as CaCO3)	75.60	20.00	80.00	0	94.5	90	110			

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Estimated value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quantitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix interference		

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 2206470

06-Jul-22

Client: Parkhill
Project: Sandoval County Landfill SCCF

Sample ID: MB-68071	SampType: MBLK		TestCode: SM2540C MOD: Total Dissolved Solids							
Client ID: PBW	Batch ID: 68071		RunNo: 88746							
Prep Date: 6/13/2022	Analysis Date: 6/15/2022		SeqNo: 3150952		Units: mg/L					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Total Dissolved Solids	ND	20.0								

Sample ID: LCS-68071	SampType: LCS		TestCode: SM2540C MOD: Total Dissolved Solids							
Client ID: LCSW	Batch ID: 68071		RunNo: 88746							
Prep Date: 6/13/2022	Analysis Date: 6/15/2022		SeqNo: 3150953		Units: mg/L					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Total Dissolved Solids	1000	20.0	1000	0	100	80	120			

Sample ID: 2206470-001EDUP	SampType: DUP		TestCode: SM2540C MOD: Total Dissolved Solids							
Client ID: MW-2R	Batch ID: 68071		RunNo: 88746							
Prep Date: 6/13/2022	Analysis Date: 6/15/2022		SeqNo: 3150971		Units: mg/L					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Total Dissolved Solids	382	20.0						2.33	10	

Qualifiers:

* Value exceeds Maximum Contaminant Level.
D Sample Diluted Due to Matrix
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
PQL Practical Quantitative Limit
S % Recovery outside of range due to dilution or matrix interference

B Analyte detected in the associated Method Blank
E Estimated value
J Analyte detected below quantitation limits
P Sample pH Not In Range
RL Reporting Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 2206470

06-Jul-22

Client: Parkhill
Project: Sandoval County Landfill SCCF

Sample ID: MB-68403	SampType: MBLK	TestCode: SM 4500 Norg C: TKN								
Client ID: PBW	Batch ID: 68403	RunNo: 89110								
Prep Date: 6/28/2022	Analysis Date: 6/29/2022	SeqNo: 3166654	Units: mg/L							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Nitrogen, Kjeldahl, Total	ND	1.0								

Sample ID: LCS-68403	SampType: LCS	TestCode: SM 4500 Norg C: TKN								
Client ID: LCSW	Batch ID: 68403	RunNo: 89110								
Prep Date: 6/28/2022	Analysis Date: 6/29/2022	SeqNo: 3166655	Units: mg/L							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Nitrogen, Kjeldahl, Total	10	1.0	10.00	0	101	80	120			

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Estimated value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quantitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix interference		

Sample Log-In Check List

Client Name: **Parkhill**

Work Order Number: **2206470**

RcptNo: 1

Received By: **Cheyenne Cason**

6/8/2022 2:29:00 PM

CC

Completed By: **Desiree Dominguez**

6/8/2022 2:58:36 PM

DD

Reviewed By: *6-8-22*

Chain of Custody

1. Is Chain of Custody complete? Yes ☒ No ☐ Not Present ☐
2. How was the sample delivered? Client

Log In

3. Was an attempt made to cool the samples? Yes ☒ No ☐ NA ☐
4. Were all samples received at a temperature of $>0^{\circ}\text{C}$ to 6.0°C ? Yes ☒ No ☐ NA ☐
5. Sample(s) in proper container(s)? Samples not frozen
Yes ☒ No ☐
6. Sufficient sample volume for indicated test(s)? Yes ☒ No ☐
7. Are samples (except VOA and ONG) properly preserved? Yes ☒ No ☐
8. Was preservative added to bottles? Yes ☐ No ☒ NA ☐
9. Received at least 1 vial with headspace $<1/4"$ for AQ VOA? Yes ☒ No ☐ NA ☐
10. Were any sample containers received broken? Yes ☐ No ☒
11. Does paperwork match bottle labels?
(Note discrepancies on chain of custody) Yes ☒ No ☐
12. Are matrices correctly identified on Chain of Custody? Yes ☒ No ☐
13. Is it clear what analyses were requested? Yes ☒ No ☐
14. Were all holding times able to be met?
(If no, notify customer for authorization.) Yes ☒ No ☐

of preserved bottles checked for pH: *(5)*
(<2 or >12 unless noted)

Adjusted? *no*

Checked by: *One Glan*

Special Handling (if applicable)

15. Was client notified of all discrepancies with this order? Yes ☐ No ☐ NA ☒

Person Notified: _____

Date: _____

By Whom: _____

Via: ☐ eMail ☐ Phone ☐ Fax ☐ In Person

Regarding: _____

Client Instructions: _____

16. Additional remarks:

17. Cooler Information

Cooler No	Temp $^{\circ}\text{C}$	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	1.1	Good				
2	3.0	Good				

Sandoval County Landfill
ALTERNATE PARAMETER LIST

Inorganic Parameters	EPA Method
Ammonia as N, NH ₃ -N	350.2
Bicarbonate, HCO ₃ ⁻ (as CaCO ₃)	310.1
Carbonate, CO ₃ ²⁻ (as CaCO ₃)	310.1
Nitrate as N, NO ₃ -N	300.0
Phosphate, PO ₄	300.0
Chloride, Cl ⁻	300.0
Fluoride, F	300.0
Sulfate, SO ₄ ²⁻	300.0
Total Dissolved Solids, TDS	160.1
Total Kjeldahl Nitrogen, TKN	351.3
Total Nitrogen, TN	Calculated
Total Organic Carbon, TOC	415.2
pH	
Specific Conductivity	
Aluminum, Al	200.7
Arsenic, As	200.8
Barium, Ba	200.7
Calcium, Ca	200.7
Chromium, Cr	200.7
Cobalt, Co	200.7
Iron, Fe	200.7
Lead, Pb	200.8
Magnesium, Mg	200.7
Manganese, Mn	200.7
Potassium, K	200.7
Sodium, Na	200.7
Uranium, U	200.8
Zinc, Zn	200.7
All Standard Landfill VOCs	8260
1,2-Dibromo-3-chloropropane	504
1,2-Dibromoethane	504
Total Phenolics	420.3/9067
Additional bottle Sets:	

8260 Field Blank (3 VOAs)

8260 Dupe (3 VOAs)

Trip Blank

Exhibit G: NMED Correspondence

Exhibit G.1: Notification of Potential Exceedance (July 12, 2022)

July 12, 2022

Ms. Erica Gordan
Water Resource Professional III
New Mexico Environment Department
Solid Waste Bureau
P.O. Box 5469
Santa Fe, NM 87502

Re: 8115.21 Sandoval County Landfill – Groundwater Monitoring Results:
Notification of Potential Exceedances

Dear Ms. Gordan:

On behalf of our client, Sandoval County, Parkhill is providing NMED Solid Waste Bureau (SWB) this correspondence summarizing preliminary laboratory analytical results for groundwater samples collected at Sandoval County Landfill (SCLF) on June 8, 2022 from wells MW-2R, MW-3R, MW-5R, MW-6R, and MW-7R.

TABLE 1
Parameters Exhibiting Established AML Exceedances

Well I.D.	Parameter	Analytical Result (mg/L)	Established AML (mg/L)	Regulatory Presumptive AML (mg/L)	Established UTLV (mg/L)
MW-2R	Arsenic	0.0075	0.0057	0.005	0.0079
MW-3R	Iron	1.7	0.912	0.75	6.135
MW-6R	Arsenic	0.0088	0.0086	0.005	0.011
MW-7R	Fluoride	0.88	0.86	0.8	0.9776
	Nitrate	6.2	5.0	5.0	N/A
	Arsenic	0.0071	0.006	0.005	0.007

Notes:

N/A: UTLV not assigned for this parameter

Bold italics indicates that Established UTLV has been met or exceeded

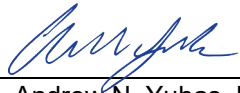
Preliminary results (received by Parkhill on July 6, 2022) summarized in Table 1 indicate a potential exceedance of well/parameter-specific established assessment monitoring levels (AMLs) for arsenic in well MW-2R; iron in well MW-3R; and nitrate and arsenic in MW-7R. It has been previously demonstrated that the presence of several total metals at this site is likely attributable to natural formation sediment suspended in the sample.

Consistent with reporting requirements, Parkhill will submit detailed results of the monitoring and analytical data for the 2022 sampling event to SWB on or before September 5, 2022. In accordance with requirements of 20.9.9.11.C(1) NMAC, a copy of this correspondence will also be provided to SCLF to be placed in the site's Facility Operating Record.

We appreciate the Bureau's review of the enclosed information. Please contact us with your questions or comments.

Sincerely,

PARKHILL

By 

Andrew N. Yuhas, PG
Professional Geologist

ANY/pg
Enclosures:

cc: Mr. Mark Hatzenbuhler, Sandoval County Public Works Manager
Mr. Andrew Yuhas, P.G., Parkhill

Exhibit G.2: NMED Approval of Groundwater Monitoring Wells MW-2 and MW-3
Replacement Workplan (September 18, 2019)



Michelle Lujan Grisham
Governor

Howie C. Morales
Lt. Governor

**NEW MEXICO
ENVIRONMENT DEPARTMENT**

Harold Runnels Building
1190 Saint Francis Drive, PO Box 5469
Santa Fe, NM 87502-5469
Telephone (505) 827-2855
www.env.nm.gov



James C. Kenney
Cabinet Secretary

Jennifer J. Pruett
Deputy Secretary

September 18, 2019

Mr. Clay Kilmer, P.G., Hydrologist
Gordon Environmental/PSC
333 Rio Rancho Blvd NE, Ste. 400
Rio Rancho, NM 87124
ckilmer@team-psc.com

Received

SEP 26 2019

Gordon Environmental / PSC

Re: Sandoval County Landfill; Work Plan for Replacement of Ground Water Monitoring Wells MW-2 and MW-3

Dear Mr. Kilmer:

The Solid Waste Bureau (Bureau) has reviewed the Monitoring Well MW-2 and MW-3 Decommissioning and Replacement Work Plan (Plan) for the Sandoval County Landfill (Landfill) submitted by Gordon Environmental/PSC on August 12, 2019. The Plan documents the steady decline of ground water elevations beneath the Landfill. In order to facilitate ground water sampling throughout the post-closure care period, the Plan seeks to extend the screened groundwater interval from the prescriptive 20 feet to 40 feet via replacement wells MW-2R and MW-3R.

The Bureau gives specific approval for the installation of monitoring wells MW-2R and MW-3R with 40-foot screened intervals. Per a phone conversation on September 11, 2019, between myself and Mike Crepeau, the Landfill requested moving the locations of each well approximately 50 feet from the proposed locations in the Plan. The Bureau approves the new locations proposed for monitoring wells MW-2R and MW-3R. Provide an update to the Plan showing the new locations of each replacement well.

The Bureau gives specific approval to discontinue ground water sampling of MW-2 and MW-3 upon construction of MW-2R and MW-3R and to convert MW-2 and MW-3 for use as piezometers. Provide an amendment to the Landfill's Ground Water Monitoring System Plan once the decommissioning of MW-2 and MW-3 and drilling of MW-2R and MW-3R have been completed.

Should you have any questions, please feel free to contact me at (505) 383-2078, or by e-mail at james.dyer@state.nm.us.

Sincerely,

James R. Dyer
Hydrologist-SWB

cc: Mr. Mike Crepeau, P.E., Gordon Environmental/PSC, mcrepeau@team-psc.com
George Schuman, Permit Section Manager, SWB
Paul Martinez, Enforcement Area I, SWB
Sandoval County Landfill Facility File
J. Dyer Reading File

1 - 10/1/14

1 - 10/1/14

1 - 10/1/14

Exhibit G.3: NMED Approval of Groundwater Monitoring Wells MW-2R and
MW-3R Installation Report (August 19, 2020)



Michelle Lujan Grisham
Governor

Howie C. Morales
Lt. Governor

**NEW MEXICO
ENVIRONMENT DEPARTMENT**

Solid Waste Bureau
1190 Saint Francis Drive, Room N-2150
PO Box 5469
Santa Fe, NM 87502-5469
Telephone (505) 827-0197
www.env.nm.gov/solid-waste/



James C. Kenney
Cabinet Secretary

Jennifer J. Pruett
Deputy Secretary

August 19, 2020

Mr. Andy Yuhas, Engineering Technologist
Gordon Environmental/PSC
333 Rio Rancho Blvd NE, Suite 400
Rio Rancho, NM 87124

Received

AUG 28 2020

Gordon Environmental / PSC

Re: Sandoval County Landfill, Ground Water Monitoring Wells MW-2R and MW-3R Installation Report

Dear Mr. Yuhas:

The Solid Waste Bureau (Bureau or SWB) has reviewed the Ground Water Monitoring Wells MW-2R and MW-3R Installation Report (Report) for the Sandoval County Landfill (Landfill), received by email on July 2, 2020. The Report summarizes field activities related to the installation of replacement monitoring wells MW-2R and MW-3R.

In a letter dated September 18, 2019 the Bureau gave specific approval for the installation of monitoring wells MW-2R and MW-3R, including a 40-foot screened interval and location. The installation of monitoring wells MW-2R and MW-3R and the associated Report comply with 20.9.9.9.E, F, and J NMAC.

Should you have any questions, please feel free to contact me by e-mail at james.dyer@state.nm.us.

Sincerely,

James Dyer

Digitally signed by James Dyer
Date: 2020.08.19 14:22:34
-06'00'

James R. Dyer
Hydrologist

cc: Mr., Mark Hatzenbuehler, Public Works Director, Sandoval County Landfill, 2708 Iris Road NE, Rio Rancho, NM 87144
Joan Snider, Chief, SWB
George Schuman, Permit Section Manager, SWB
Paul Martinez, Enforcement Area I, SWB
Sandoval County Landfill Facility File
J. Dyer Reading File

Exhibit G.4: NMED Approval of Analytical Limits for MW-2R and MW-3R
(October 6, 2020)



Michelle Lujan Grisham
Governor

Howie C. Morales
Lt. Governor

**NEW MEXICO
ENVIRONMENT DEPARTMENT**

Solid Waste Bureau
1190 Saint Francis Drive, Room N-2150
PO Box 5469
Santa Fe, NM 87502-5469
Telephone (505) 827-0197
www.env.nm.gov/solid-waste/



James C. Kenney
Cabinet Secretary

Jennifer J. Pruett
Deputy Secretary

October 6, 2020

Mr. Mark Hatzenbuehler, Director of Public Works
Sandoval County
2708 Iris Road NE
Rio Rancho, NM 87144

Re: Sandoval County Landfill, 2020 Annual Ground Water Monitoring Report

Dear Mr. Hatzenbuehler:

The Solid Waste Bureau (Bureau) has reviewed the 2020 Annual Groundwater Monitoring Report (Report) for the Sandoval County Landfill (Landfill), dated September 24, 2020. Samples were collected at monitoring wells MW-2R, MW-3R, MW-5R, MW-6R, and MW-7R at the Landfill on June 17, 2020. MW-2R and MW-3R are recent replacements for MW-2 and MW-3. The Report was not received within 90 days of sampling but was submitted prior to an extended submittal deadline approved by the Bureau.

In monitoring well MW-2R, arsenic, manganese, and total phenolics were detected at concentrations above their established Assessment Monitoring Levels (AML). The reported concentration for manganese was also above the established Upper Tolerance Limit Value (UTLV) and above the corresponding Ground Water Protection Standard (GWPS). Arsenic was detected at a higher concentration than the established AML but below the GWPS. Total phenolics were detected at a higher concentration than the established AML and the GWPS.

In monitoring well MW-3R, manganese was detected at a higher concentration than the established AML but below the GWPS. Total phenolics were detected at a higher concentration than the established AML and the GWPS.

Historical data indicates the elevated concentrations of manganese and arsenic are likely results of natural fluctuations in groundwater quality. A June 2016 demonstration showed that the past exceedances at MW-2 and MW-3 are due to naturally occurring concentrations in the water-bearing formation and maybe related to suspended sediments in water samples and not the result of Landfill operations. As MW-2R and MW-3R were recently installed, the Bureau will postpone the determination of assessment monitoring for total phenolics at MW-2R and MW-3R until reviewing results of the 2021 Report.

In replacement monitoring well MW-7R, nitrate was detected at a higher concentration than the established AML, but below the corresponding GWPS. The detected concentration of nitrate is within the range of historical results for this constituent. No further action is required at this time.

Included in the Report is the Landfill's request to adopt the background concentration values (BCVs), assessment monitoring levels (AMLs) and intrawell upper tolerance limit values (UTLVs) and reduced parameter list for replacement wells MW-2R and MW-3R that have already been established for wells MW-2 and MW-3.

The Report provided a comparison of water quality data for wells MW-2 and MW-3 to the analytical data for new wells MW-2R and MW-3R from the 06/17/20 sampling event. After careful review, it appears that the water quality results for wells MW-2R and MW-3R are statistically consistent with the historical water quality data for wells MW-2 and MW-3. As requested by the Landfill, the Bureau approves the BCVs, AMLs, and UTLVs from previous monitoring wells MW-2 and MW-3 be utilized for determination of exceedances for current monitoring wells MW-2R and MW-3R. Please submit the revised Groundwater Monitoring Plan and Groundwater Monitoring System Plan within 90 days of receipt of this letter.

The Report meets the requirements of 20.9.9 NMAC and your Ground Water Monitoring System Plan. Should you have any questions, please feel free to contact me by e-mail at james.dyer@state.nm.us.

Sincerely,

James Dyer

Digitally signed by James Dyer
Date: 2020.10.07 13:10:19 -06'00'

James R. Dyer

Hydrologist, NMED-SWB

cc: Mr. Diego Y. Ramirez, Civil Engineer, Parkhill, dramirez@parkhill.com
Mr. Michael J. Crepeau, P.E., Associate, Parkhill, mcrepeau@parkhill.com
Paul Martinez, Enforcement Area I, NMED-SWB
Sandoval County Landfill Groundwater Monitoring File
J. Dyer Reading File

Exhibit H: Qualified Groundwater Scientist Certification

Exhibit H

Qualified Groundwater Scientist Certification

This is to certify that, to the best of my knowledge and belief, the attached Groundwater Monitoring Report for the June 2022 sampling event at the Sandoval County Landfill is accurate and complete. Based on the information provided in the attached Report, the following exceedances of the established assessment monitoring levels (AMLs) are noted:

1. **Arsenic in Well MW-2R.** The concentration of arsenic in well MW-2R exceeds the established AML but remains below the established UTLV.
2. **Iron in Well MW-3R.** The concentration of iron in well MW-3R exceeds the established AML, but remains well below the established UTLV
3. **Arsenic in Well MW-6R.** The concentration of arsenic in well MW-6R exceeds the established AML but remains below the established UTLV.
4. **Fluoride in Well MW-7R.** The concentration of fluoride in well MW-7R exceeds the established AML but remains well below the established UTLV.
5. **Nitrate in Well MW-7R.** The concentration of nitrate in well MW-7R exceeds the established AML. A UTLV for this parameter has yet to be established.
6. **Arsenic in Well MW-7R.** The concentration of arsenic in well MW-7R exceeds the established AML and established UTLV, but remains below GWPS.

As noted in the attached Groundwater Monitoring Report, the exceedances noted above are likely attributable to natural fluctuations in natural groundwater quality, or a source other than the Landfill.


Signature of Qualified Groundwater Scientist

Date: 8-22-2022

Andrew N. Yuhas. P.G.
Professional Geologist
ayuhas@parkhill.com
333 Rio Rancho Blvd. N.E., Suite 400
Rio Rancho, NM 87124
(505) 504-7765