NM1-63

OWL Northern Delaware Basin Landfill

Vadose Zone Monitoring Report

December 23, 2024

Parkhill

December 23, 2024

Mr. Zack Ramos
President, NDBL
OWL Landfill Services, LLC
2029 W. NM Hwy 128
Jal, NM 88252

Re: 42881.24 Northern Delaware Basin Landfill
Surface Waste Disposal Facility – NMOSE Permit No. NM1-63
Vadose Zone Monitoring Well Data, October 8, 2024, Monitoring Event
Lea County, New Mexico

Dear Mr. Ramos:

Enclosed with this letter are copies of vadose water purging, testing, analytical, and soil vapor field screening data collected from vadose zone monitoring wells at the Northern Delaware Basin Landfill (NDBL) on October 8, 2024 (Exhibit A). Vadose water sample collection, field screening and analysis were triggered by the detection of water in vadose zone monitoring wells VZ-5 and VZ-6 during routine semiannual vadose zone monitoring (Exhibit B). This monitoring event represents the fifth time water has been detected in one or more vadose wells at NDBL in quantities sufficient for sampling, and the third detection of sampleable water in vadose well VZ-6.

Vadose water and soil vapor samples were collected and analyzed in accordance with requirements for Vadose Zone Monitoring set forth in Permit No. NM1-63 (August 17, 2017), and the Vadose Zone Monitoring Plan (Volume II.9) of the October 2016 facility Permit Application. Vadose water samples were collected from Wells VZ-5 and VZ-6, and soil vapor samples were collected from each of the 10 vadose zone wells in the well network (VZ-1 through VZ-10). Vadose water samples were delivered to Eurofins Environment Testing South Central (Eurofins) in Albuquerque, New Mexico on October 9, 2024, and analytical results were received on October 25, 2024.

Results of those soil vapor screenings are provided as Exhibit E. The instrument utilized in soil vapor sampling and analysis (LANDTEC GEM5000) indicated very low levels of hydrogen sulfide in several of the vadose wells as monitoring progressed throughout the monitoring day. The detections of H_2S in vapor samples analyzed are within the instrument's acceptable error of ±2% for this constituent or are a result of instrument drift as it continues to operate through the day and its sensors warm up during use.

VADOSE WATER MONITORING AND MEASUREMENT

Water was detected in vadose wells VZ-4, VZ-5, VZ-6, and VZ-8. Water detected in wells VZ-4 and VZ-8 was insufficient to collect a representative sample (i.e., water column ranging from 2.3 feet to less than 1.25 inches) and is believed to be a result of condensation collecting in the bottom of the well. Samples were collected from wells VZ-5 and VZ-6 and analyzed for Method 8260 volatile organic compounds (VOCs) as well as the list of analytes in the OWL Vadose Zone Monitoring Plan (Volume II.9 of the October 2016 Facility Permit Application). Vadose zone purge notes and field parameter measurements for wells VZ-5 and VZ-6 are provided as Exhibit C, and laboratory analytical results for samples collected on October 8, 2024, are provided as Exhibit D.

333 Rio Rancho Boulevard NE | Suite 400 | Rio Rancho, New Mexico 87124 | 505.867.6990 Parkhill.com

Well VZ-5
Consistent with depth to water (DTW) measured on February 23, 2020, May 24, 2023, and October 11, 2023. Analytical results remain consistent with results from samples collected since February 2020, and the water is believed to consist mainly of perched stormwater that regularly percolates through vadose soils and perches atop the largely impenetrable Chinle mudstone strata which are continuous at depths ranging from 35 to 60 feet below ground surface at NDBL.

Well VZ-6
Water was not present in VZ-6 upon installation in August 2019, and was not detected during the February 2020 vadose zone monitoring event by Parkhill. During the May 2023 monitoring event, perched water was detected at a depth of 33.2 feet BTOC. During a follow-up site visit by Parkhill on August 17, 2023, the suspected source of water in well VZ-6 was thought to be a persistent leak from a water supply line which is positioned approximately 50 feet east-northeast of VZ-6. The presence of moisture and indications of leakage from the supply line were observed and brought to the attention of NDBL management. The leak was stopped on August 19, 2023, and the ground surface in the area has remained dry. The supply line originates at the NDBL water supply well (McCloy Well) shown on Exhibit B and terminates at a storage tank used for on- site use (positioned approximately 125 feet north-northeast of the supply well). During the October 2024 monitoring event, perched water was detected at a depth of 56.00 feet BTOC in VZ-6.

Upon review of analytical results obtained from Eurofins on October 25, 2024 (Exhibit D), it was observed that the levels of multiple cations and anions in Well VZ-6 were elevated when compared to results from vadose well VZ-5 and other groundwater in the area. Results were very similar to those obtained during the May and October 2023 monitoring events. These analytes are indicative of normally dry arid desert soils (e.g., vadose zone soils, evaporites, playa deposits) and leaching/mobilization of those constituents by infiltrating surface waters (stormwater accumulation and infiltration) or introduced waters (i.e., leakage). The combination of historical supply line leakage proximal to well VZ-6, substantial seasonal rains over the 4 months preceding the sampling event, and ongoing facility grading and channeling of stormwater have likely contributed to detected and sampled waters found in well VZ-6.

The character of surface drainage on-site at NDBL has likely caused stormwater to accumulate in the vicinity of well VZ-6, and ultimately allows it to infiltrate through the normally dry vadose zone soils and accumulate atop the largely-impermeable Chinle mudstones present at depth ranging from 30 to 60 feet BGS at the NDBL. Additional efforts by facility management to divert stormwater away from the area surrounding well VZ-6 and prevent surface ponding of stormwater should remove another source of accumulated vadose water.

POTENTIAL SOURCES OF VADOSE WATER

Well VZ-5
Well VZ-5 is located in an area immediately adjacent to a natural depression that collects stormwater as a result of natural surface water flow and accumulation during storm events. This results in accumulation of surface water during storm events and subsequent infiltration into the vadose zone. The area is mapped with closed depressions, and aerial photos indicate the presence of well-established green vegetation.

Well VZ-6
Water in well VZ-6 is of very poor (brackish) quality, containing elevated levels of highly soluble and highly mobile cations and anions. Soluble minerals like those detected in vadose water samples have likely been leached from the overlying soils by leaking supply well water and accumulated seasonal stormwater infiltrating through the higher-permeability vadose zone soils and becoming perched atop and within the largely impermeable upper Chinle mudstones which occur site-wide at depths ranging from 30-60 feet BGS. Geology of the vadose zone at ground surface near VZ-6 may also contribute to perched vadose water quality. Surficial geology mapped near well VZ-6 is characterized as windblown fine-grained

sands, while higher-permeability Ogallala formation sands and gravels are mapped at Well VZ-5. The fine windblown sands which make up much of the vadose soils in the vicinity of VZ-6 have likely been mobilized from surface evaporite deposits, which are prominent in the region as shallow enclosed surface basins (playas), which are high in chloride, sulfate, calcium, magnesium, and sodium. Well VZ-6 is also hydraulically upgradient of the landfill waste disposal area footprint. Additionally, the water sampled from VZ-6 does not contain constituents potentially present in landfill waste (i.e., BTEX, TPH, volatiles, etc.). Therefore, the water sampled from well VZ-6 is not believed to be indicative of impacts from waste operations and is believed to be from a source other than the landfill.

NDBL will continue to monitor all vadose wells on site semiannually for the presence of water, and collect samples when water is detected in sufficient quantities. NDBL will also monitor for leakage in their water supply network, and make efforts to grade the site such that surface water is directed away from VZ-6 to prevent unnecessary infiltration of surface and supply waters into the vadose zone in the vicinity of the well.

Average annual rainfall in the area around NDBL is approximately 13.37 inches per year (1981-2010 average) as reported by the Western Regional Climate Center for the Jal, WIPP and Ochoa Co-op Stations. Two personal weather stations near NDBL (El Capitan and Red Hills) have recorded a 12-month total rainfall of less than 6 inches of precipitation through September 2024, which is significantly lower than annual average, but the Red Hills Station recorded a wetter than typical June through September (Exhibit F).

As required by 19.15.36.13.L.(1), NDBL has performed monthly inspection of the facility's leak detection sumps, and all have been found to be dry.

If you have any questions regarding this transmittal, feel free to contact me at 505.504.7765.

Sincerely,

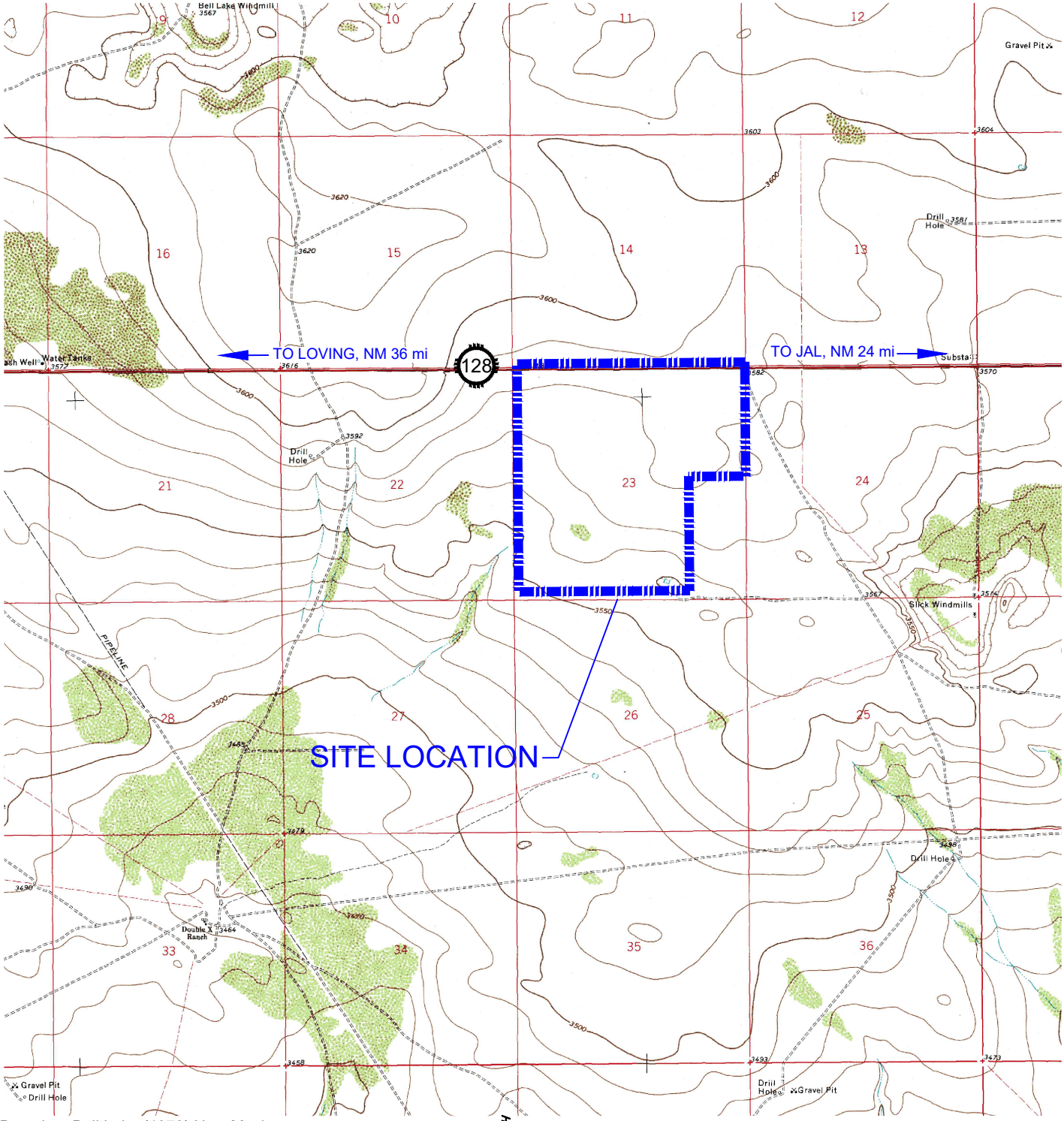
PARKHILL

By _____
Andy N. Yuhas, PG
Professional Geologist

ANY/pg
Enclosures:
Exhibit A: Site Location Map
Exhibit B: Site Plan/VZM Network Map
Exhibit C: VZM Purge Notes and Field Parameters
Exhibit D: Eurofins Environment Testing South Central Analytical Report
Exhibit E: VZM Well 1-10 Soil Vapor Screening Results
Exhibit F: Nearby Weather Station Precipitation Data

cc: Mr. Tyler Krueger, PE, Associate, Parkhill

EXHIBIT A: SITE LOCATION MAP



Based on Bell Lake (1973) New Mexico Quadrangle. USGS 7.5' Series (1:24,000 Scale).

NORTH

0' 1,000'

LEGEND

SITE BOUNDARY

FILE NAME: \\projects-dfs\projects\2024\42881.24\03_DSGN\01_DWG\050_CIVIL\02_CONTENT\EX-A_SITE-LOC-MAP.dwg PRINTED: Monday, December 16, 2024 - 10:27pm

Parkhill

Parkhill.com

SEMI-ANNUAL VADOSE ZONE MONITORING

OWL NDBL SWMF

JAL, NEW MEXICO

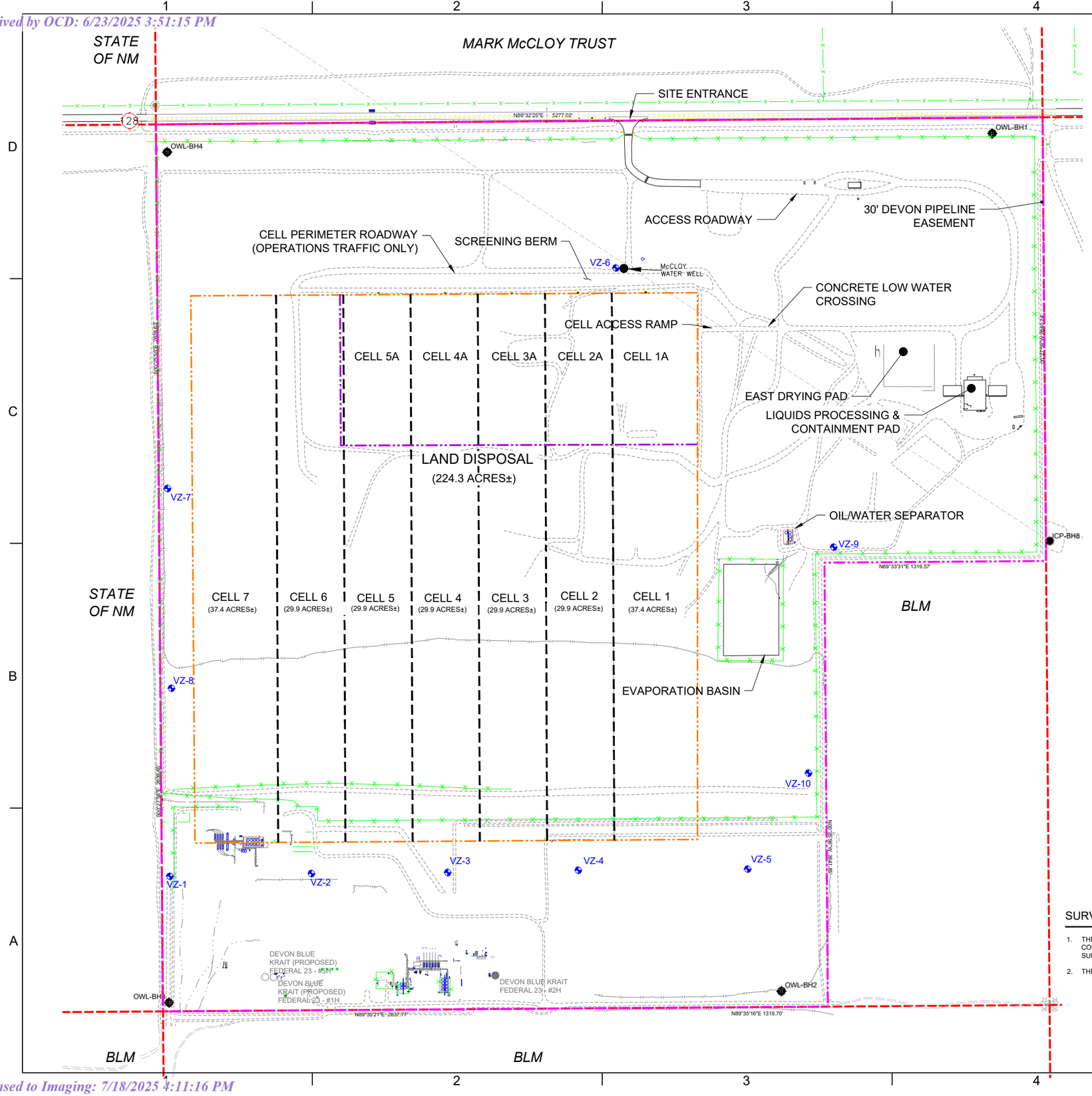
SITE LOCATION MAP

Date: 12/15/2024

Project No: 42881.24

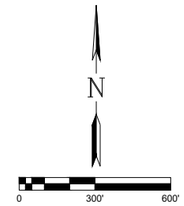
Sheet: EXHIBIT A

EXHIBIT B: SITE PLAN/VZM NETWORK MAP



LEGEND

- PROPERTY BOUNDARY
- SECTION BOUNDARY
- SOLID WASTE DISPOSAL BOUNDARY
- ACTIVE DISPOSAL AREA BOUNDARY
- CELL BOUNDARY
- BUILDING OUTLINE
- EXISTING FENCE
- EXISTING PIPELINE
- EXISTING UNPAVED ROADWAY
- EXISTING PAVED ROADWAY
- ICP-BH8 / OWL-BH1 — BORING/WELL LOCATION GEOTECHNICAL BORING LOCATION
- VZ-1 — VADOSE ZONE MONITORING WELL
- WATER WELL



VZ WELL DATA

WELL	NORTHING	EASTING
VZ-1	436667.301	783180.643
VZ-2	436683.626	784022.890
VZ-3	436689.942	784833.820
VZ-4	436703.381	785610.747
VZ-5	436710.311	786618.870
VZ-6	440286.617	785834.351
VZ-7	438974.816	783167.039
VZ-8	437786.271	783190.177
VZ-9	438625.583	787130.557
VZ-10	437281.261	786980.856

SURVEY NOTES:

1. THE COORDINATES FOR THE PROJECT WERE ESTABLISHED BY RUNNING A STATIC OBSERVATION ON A SINGLE CONTROL POINT (CP DUKE) FOR 4.5 HOURS, RTK SURVEY METHODS ON 9 PANEL POINTS SET BY JOHN WEST SURVEYING CO. AND 5 EXISTING POINTS SET BY HARCROW SURVEYING, INC. (SURVEY DATE AUGUST 7, 2020).
2. THE COORDINATE SYSTEM FOR THE PROJECT: STATE PLANE, NAD 83, NEW MEXICO EAST ZONE (3001), NAVD 88.

Parkhill

OWL NDBL SWMF ENVIRONMENTAL MONITORING NETWORK

OILFIELD WATER LOGISTICS

CLIENT
OWL LANDFILL SERVICES, LLC.
2029 W. NM Hwy 128
JAL, NM 88252
LEA COUNTY

PROJECT NO.
42881.24

#	DATE	DESCRIPTION
1	10/08/2024	MONITORING REPORT

SITE PLAN/ VZM NETWORK MAP

EXHIBIT B

EXHIBIT C: VZM PURGE NOTES AND FIELD PARAMETERS

Site: OWL NDBL SWMF

Samplers: AY

Observers: —

Site/Well Condition: good good

Well ID: VE-5

Depth-to-water: 43.40

Total Depth: 56.50

Measured from: mark on PVC

Date: 10/8/24

Ambient Temperature: 70°F

Wind Direction/Speed: calm

Recent Precipitation: none

Sampling Method: **BAILER**

One Well Volume (feet, gallons)

(56.50 - 43.40) = 13.10 feet

(Total Depth - DTW) = well column

13.10 x 0.163 = 2.14 gallons

(Well Column x 0.163) = 1 well-volume

Three Well Volumes

2.14 x 3 = 6.42 gallons

1 well-volume x 3 = 3 well-volumes

Equipment Information

Bailer or HydraSleeve™

New or Previously Installed

Capacity/Length: 1 L / 36"

Material/Source poly

Twine

New? Y or N

Appx Length 52'

Material/Source nylon

Time	Gallons Removed	°C	pH	SC units µS	Observations
0922	0.5	21.3	8.2	623	cloudy no odor
0927	1	21.0	7.8	603	— " —
0932	2	21.0	8.2	601	— " —
0934	2.5	21.1	8.1	597	— " —

Notes: Sample Time 0935

Field Blank: _____

Dupe: _____

Filtered: _____

Sampler(s): Andy Yuhas

Name

Signature

Name

Signature

Groundwater Monitoring Field Notes

Site: OWL NDBL SWMF

Samplers: AY

Observers: —

Site/Well Condition: good good

Well ID: VZ-6

Depth-to-water: 56.00

Total Depth: 62.10

Measured from: mark on pvc

Date: 10/8/24

Ambient Temperature: 75

Wind Direction/Speed: calm

Recent Precipitation: none

Sampling Method: **BAILER**

One Well Volume (feet, gallons) (62.10 - 56.00) = 6.10 feet
(Total Depth - DTW) = well column

6.10 x 0.163 = 0.99 gallons
(Well Column x 0.163) = 1 well-volume

Three Well Volumes 0.99 x 3 = 2.97 gallons
1 well-volume x 3 = 3 well-volumes

Equipment Information

Bailer or HydraSleeve™

New or Previously Installed
Capacity/Length: 1 L / 36"
Material/Source: poly

Twine
New? Y or N
Appx Length: 60'
Material/Source: nylon

Time	Gallons Removed	°C	pH	SC units mS	Observations
1130	1L	22.6	7.0	7.24	dr, no odor
1135	2L	21.3	7.2	7.00	— — —
1137	3L	20.8	7.1	6.83	— — —
1140	4L	21.6	7.3	6.83	— — —
1143	6L	21.1	7.2	6.89	— — —
1144	8L	20.7	7.3	6.92	— — —

Notes: Had been purged
Sample time 1145

Field Blank: —

Dupe: —

Filtered: —

Sampler(s): ANDY YUKAS
Name

Signature

Name

Signature

Groundwater Monitoring Field Notes

EXHIBIT D: EUROFINS ENVIRONMENT TESTING SOUTH CENTRAL ANALYTICAL REPORT

eurofins | Environment Testing

ANALYTICAL REPORT

PREPARED FOR

Attn: Mr. Andy Yuhas
Parkhill
333 Rio Rancho Blvd. N.E., Suite 400
Suite 400
Rio Rancho, New Mexico 87124

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JOB DESCRIPTION

NDBL Vadose Sampling

JOB NUMBER

885-13532-1

Eurofins Albuquerque
4901 Hawkins NE
Albuquerque NM 87109

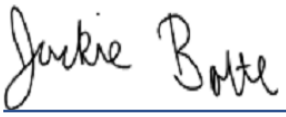
See page two for job notes and contact information.

Eurofins Albuquerque

Job Notes

The test results in this report relate only to the samples as received by the laboratory and will meet all requirements of the methodology, with any exceptions noted. This report shall not be reproduced except in full, without the express written approval of the laboratory. All questions should be directed to the Eurofins Environment Testing South Central, LLC Project Manager.

Authorization



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Authorized for release by
Jackie Bolte, Project Manager
jackie.bolte@et.eurofinsus.com
(505)345-3975

Client: Parkhill
Project/Site: NDBL Vadose Sampling

Laboratory Job ID: 885-13532-1

Table of Contents

Definitions/Glossary

Client: Parkhill
Project/Site: NDBL Vadose Sampling

Job ID: 885-13532-1

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

HPLC/IC

Qualifier	Qualifier Description
H	Sample was prepped or analyzed beyond the specified holding time. This does not meet regulatory requirements.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

Metals

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

General Chemistry

Qualifier	Qualifier Description
HF	Parameter with a holding time of 15 minutes. Test performed by laboratory at client's request. Sample was analyzed outside of hold time.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
☼	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

Case Narrative

Client: Parkhill
Project: NDBL Vadose Sampling

Job ID: 885-13532-1

Job ID: 885-13532-1 Eurofins Albuquerque

Job Narrative
885-13532-1

Analytical test results meet all requirements of the associated regulatory program listed on the Accreditation/Certification Summary Page unless otherwise noted under the individual analysis. Data qualifiers and/or narrative comments are included to explain any exceptions, if applicable.

- Matrix QC may not be reported if insufficient sample is provided or site-specific QC samples were not submitted. In these situations, to demonstrate precision and accuracy at a batch level, a LCS/LCSD may be performed, unless otherwise specified in the method.
- Surrogate and/or isotope dilution analyte recoveries (if applicable) which are outside of the QC window are confirmed unless attributed to a dilution or otherwise noted in the narrative.

Regulated compliance samples (e.g. SDWA, NPDES) must comply with the associated agency requirements/permits.

Receipt
The samples were received on 10/9/2024 1:24 PM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved and on ice. The temperature of the cooler at receipt time was 1.7°C.

GC/MS VOA
No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

Gasoline Range Organics
No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

Diesel Range Organics
No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

HPLC/IC
Method 300_OF_48H_PREC: The following sample(s) was received by wet chemistry with less than 2 days remaining on the holding time or less than one shift (8 hours) remaining on a test with a holding time of 48 hours or less. As such, the laboratory had insufficient time remaining to perform the analysis within holding time: VZ-5 (885-13532-1) and VZ-6 (885-13532-2).

No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

Metals
No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

General Chemistry
No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

Client Sample Results

Client: Parkhill
Project/Site: NDBL Vadose Sampling

Job ID: 885-13532-1

Client Sample ID: VZ-5
Date Collected: 10/08/24 09:35
Date Received: 10/09/24 13:24

Lab Sample ID: 885-13532-1
Matrix: Water

Method: SW846 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	<0.266		1.00	0.266	ug/L			10/21/24 13:20	1
1,1,1-Trichloroethane	<0.0811		1.00	0.0811	ug/L			10/21/24 13:20	1
1,1,2,2-Tetrachloroethane	<0.273		2.00	0.273	ug/L			10/21/24 13:20	1
1,1,2-Trichloroethane	<0.198		1.00	0.198	ug/L			10/21/24 13:20	1
1,1-Dichloroethane	<0.304		1.00	0.304	ug/L			10/21/24 13:20	1
1,1-Dichloroethene	<0.201		1.00	0.201	ug/L			10/21/24 13:20	1
1,1-Dichloropropene	<0.179		1.00	0.179	ug/L			10/21/24 13:20	1
1,2,3-Trichlorobenzene	<0.249		1.00	0.249	ug/L			10/21/24 13:20	1
1,2,3-Trichloropropane	<0.160		2.00	0.160	ug/L			10/21/24 13:20	1
1,2,4-Trichlorobenzene	<0.400		1.00	0.400	ug/L			10/21/24 13:20	1
1,2,4-Trimethylbenzene	<0.122		1.00	0.122	ug/L			10/21/24 13:20	1
1,2-Dibromo-3-Chloropropane	<0.587		2.00	0.587	ug/L			10/21/24 13:20	1
1,2-Dibromoethane (EDB)	<0.304		1.00	0.304	ug/L			10/21/24 13:20	1
1,2-Dichlorobenzene	<0.155		1.00	0.155	ug/L			10/21/24 13:20	1
1,2-Dichloroethane (EDC)	<0.302		1.00	0.302	ug/L			10/21/24 13:20	1
1,2-Dichloropropane	<0.200		1.00	0.200	ug/L			10/21/24 13:20	1
1,3,5-Trimethylbenzene	<0.182		1.00	0.182	ug/L			10/21/24 13:20	1
1,3-Dichlorobenzene	<0.161		1.00	0.161	ug/L			10/21/24 13:20	1
1,3-Dichloropropane	<0.181		1.00	0.181	ug/L			10/21/24 13:20	1
1,4-Dichlorobenzene	<0.103		1.00	0.103	ug/L			10/21/24 13:20	1
1-Methylnaphthalene	<2.00		4.00	2.00	ug/L			10/21/24 13:20	1
2,2-Dichloropropane	<0.261		2.00	0.261	ug/L			10/21/24 13:20	1
2-Butanone	<2.03		10.0	2.03	ug/L			10/21/24 13:20	1
2-Chlorotoluene	<0.132		1.00	0.132	ug/L			10/21/24 13:20	1
2-Hexanone	<1.79		10.0	1.79	ug/L			10/21/24 13:20	1
2-Methylnaphthalene	<2.00		4.00	2.00	ug/L			10/21/24 13:20	1
4-Chlorotoluene	<0.135		1.00	0.135	ug/L			10/21/24 13:20	1
4-Isopropyltoluene	<0.202		1.00	0.202	ug/L			10/21/24 13:20	1
4-Methyl-2-pentanone	<1.50		10.0	1.50	ug/L			10/21/24 13:20	1
Acetone	<2.52		10.0	2.52	ug/L			10/21/24 13:20	1
Benzene	<0.227		1.00	0.227	ug/L			10/21/24 13:20	1
Bromobenzene	<0.284		1.00	0.284	ug/L			10/21/24 13:20	1
Bromodichloromethane	<0.203		1.00	0.203	ug/L			10/21/24 13:20	1
Dibromochloromethane	<0.284		1.00	0.284	ug/L			10/21/24 13:20	1
Bromoform	<0.315		1.00	0.315	ug/L			10/21/24 13:20	1
Bromomethane	<1.00		3.00	1.00	ug/L			10/21/24 13:20	1
Carbon disulfide	<1.00		10.0	1.00	ug/L			10/21/24 13:20	1
Carbon tetrachloride	<0.175		1.00	0.175	ug/L			10/21/24 13:20	1
Chlorobenzene	<0.458		1.00	0.458	ug/L			10/21/24 13:20	1
Chloroethane	<0.377		2.00	0.377	ug/L			10/21/24 13:20	1
Chloroform	<0.250		1.00	0.250	ug/L			10/21/24 13:20	1
Chloromethane	<0.410		3.00	0.410	ug/L			10/21/24 13:20	1
cis-1,2-Dichloroethene	<0.388		1.00	0.388	ug/L			10/21/24 13:20	1
cis-1,3-Dichloropropene	<0.115		1.00	0.115	ug/L			10/21/24 13:20	1
Dibromomethane	<0.309		1.00	0.309	ug/L			10/21/24 13:20	1
Dichlorodifluoromethane	<0.256		1.00	0.256	ug/L			10/21/24 13:20	1
Ethylbenzene	<0.213		1.00	0.213	ug/L			10/21/24 13:20	1
Hexachlorobutadiene	<0.417		1.00	0.417	ug/L			10/21/24 13:20	1
Isopropylbenzene	<0.183		1.00	0.183	ug/L			10/21/24 13:20	1

Client Sample Results

Client: Parkhill
Project/Site: NDBL Vadose Sampling

Job ID: 885-13532-1

Client Sample ID: VZ-5
Date Collected: 10/08/24 09:35
Date Received: 10/09/24 13:24

Lab Sample ID: 885-13532-1
Matrix: Water

Method: SW846 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methyl-tert-butyl Ether (MTBE)	<0.393		1.00	0.393	ug/L			10/21/24 13:20	1
Methylene Chloride	<1.24		2.50	1.24	ug/L			10/21/24 13:20	1
n-Butylbenzene	<0.125		3.00	0.125	ug/L			10/21/24 13:20	1
N-Propylbenzene	<0.109		1.00	0.109	ug/L			10/21/24 13:20	1
Naphthalene	<0.240		2.00	0.240	ug/L			10/21/24 13:20	1
sec-Butylbenzene	<0.144		1.00	0.144	ug/L			10/21/24 13:20	1
Styrene	<0.136		1.00	0.136	ug/L			10/21/24 13:20	1
tert-Butylbenzene	<0.244		1.00	0.244	ug/L			10/21/24 13:20	1
Tetrachloroethene (PCE)	<0.178		1.00	0.178	ug/L			10/21/24 13:20	1
Toluene	<0.250		1.00	0.250	ug/L			10/21/24 13:20	1
trans-1,2-Dichloroethene	<0.193		1.00	0.193	ug/L			10/21/24 13:20	1
trans-1,3-Dichloropropene	<0.339		1.00	0.339	ug/L			10/21/24 13:20	1
Trichloroethene (TCE)	<0.204		1.00	0.204	ug/L			10/21/24 13:20	1
Trichlorofluoromethane	<0.159		1.00	0.159	ug/L			10/21/24 13:20	1
Vinyl chloride	<0.320		1.00	0.320	ug/L			10/21/24 13:20	1
Xylenes, Total	<0.374		1.50	0.374	ug/L			10/21/24 13:20	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*103*		*70 - 130*		*10/21/24 13:20*	*1*
Toluene-d8 (Surr)	*99*		*70 - 130*		*10/21/24 13:20*	*1*
4-Bromofluorobenzene (Surr)	*103*		*70 - 130*		*10/21/24 13:20*	*1*
Dibromofluoromethane (Surr)	*102*		*70 - 130*		*10/21/24 13:20*	*1*

Method: SW846 8015D - Gasoline Range Organics (GRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	<0.0132		0.0500	0.0132	mg/L			10/11/24 22:39	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*109*		*15 - 270*		*10/11/24 22:39*	*1*

Method: SW846 8015D - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	<0.580		1.00	0.580	mg/L		10/11/24 11:11	10/11/24 15:03	1
Motor Oil Range Organics [C28-C40]	<1.30		5.00	1.30	mg/L		10/11/24 11:11	10/11/24 15:03	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Di-n-octyl phthalate (Surr)	*99*		*46 - 159*	*10/11/24 11:11*	*10/11/24 15:03*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**4.44**		0.500	0.250	mg/L			10/10/24 17:11	1
Fluoride	**2.71**		0.100	0.0460	mg/L			10/10/24 17:11	1
Orthophosphate as P	<0.250	H	0.500	0.250	mg/L			10/10/24 17:11	1
Nitrate Nitrite as N	**7.20**		1.00	0.112	mg/L			10/14/24 22:41	5
Sulfate	**9.53**		0.500	0.250	mg/L			10/10/24 17:11	1

Method: SW846 6010B - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	**0.210**		0.00200	0.000950	mg/L		10/11/24 10:02	10/14/24 09:28	1
Cadmium	<0.00121		0.00200	0.00121	mg/L		10/11/24 10:02	10/14/24 09:28	1
Chromium	**0.00978**		0.00600	0.00115	mg/L		10/11/24 10:02	10/14/24 09:28	1

Eurofins Albuquerque

Client Sample Results

Client: Parkhill
Project/Site: NDBL Vadose Sampling

Job ID: 885-13532-1

Client Sample ID: VZ-5
Date Collected: 10/08/24 09:35
Date Received: 10/09/24 13:24

Lab Sample ID: 885-13532-1
Matrix: Water

Method: SW846 6010B - Metals (ICP) - Total Recoverable (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	<0.00130		0.00500	0.00130	mg/L		10/11/24 10:02	10/14/24 09:28	1
Calcium	**72.3**		1.00	0.0461	mg/L		10/11/24 10:02	10/14/24 09:28	1
Iron	**7.51**		0.500	0.260	mg/L		10/11/24 10:02	10/14/24 09:31	10
Magnesium	**24.0**		1.00	0.110	mg/L		10/11/24 10:02	10/14/24 09:28	1
Potassium	**5.95**		1.00	0.160	mg/L		10/11/24 10:02	10/14/24 09:28	1
Sodium	**13.3**		1.00	0.460	mg/L		10/11/24 10:02	10/14/24 09:28	1

Method: SW846 6020A - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	**0.0171**		0.0100	0.00500	mg/L		10/11/24 10:02	10/17/24 12:03	10
Lead	<0.00600		0.0100	0.00600	mg/L		10/11/24 10:02	10/17/24 12:03	10
Selenium	<0.00800		0.0100	0.00800	mg/L		10/11/24 10:02	10/17/24 12:03	10

Method: SW846 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.000120		0.000200	0.000120	mg/L		10/14/24 13:17	10/15/24 17:31	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids (SM 2540C)	**336**		50.0	25.0	mg/L			10/14/24 16:00	1
Specific Conductance (SM 2510B)	**466**		10.0	10.0	umhos/cm			10/15/24 16:41	1
pH (SM 4500 H+ B)	**8.0**	**HF**	0.1	0.1	SU			10/15/24 16:41	1

Client Sample Results

Client: Parkhill
Project/Site: NDBL Vadose Sampling

Job ID: 885-13532-1

Client Sample ID: VZ-6
Date Collected: 10/08/24 11:45
Date Received: 10/09/24 13:24

Lab Sample ID: 885-13532-2
Matrix: Water

Method: SW846 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	<0.266		1.00	0.266	ug/L			10/21/24 13:48	1
1,1,1-Trichloroethane	<0.0811		1.00	0.0811	ug/L			10/21/24 13:48	1
1,1,2,2-Tetrachloroethane	<0.273		2.00	0.273	ug/L			10/21/24 13:48	1
1,1,2-Trichloroethane	<0.198		1.00	0.198	ug/L			10/21/24 13:48	1
1,1-Dichloroethane	<0.304		1.00	0.304	ug/L			10/21/24 13:48	1
1,1-Dichloroethene	<0.201		1.00	0.201	ug/L			10/21/24 13:48	1
1,1-Dichloropropene	<0.179		1.00	0.179	ug/L			10/21/24 13:48	1
1,2,3-Trichlorobenzene	<0.249		1.00	0.249	ug/L			10/21/24 13:48	1
1,2,3-Trichloropropane	<0.160		2.00	0.160	ug/L			10/21/24 13:48	1
1,2,4-Trichlorobenzene	<0.400		1.00	0.400	ug/L			10/21/24 13:48	1
1,2,4-Trimethylbenzene	<0.122		1.00	0.122	ug/L			10/21/24 13:48	1
1,2-Dibromo-3-Chloropropane	<0.587		2.00	0.587	ug/L			10/21/24 13:48	1
1,2-Dibromoethane (EDB)	<0.304		1.00	0.304	ug/L			10/21/24 13:48	1
1,2-Dichlorobenzene	<0.155		1.00	0.155	ug/L			10/21/24 13:48	1
1,2-Dichloroethane (EDC)	<0.302		1.00	0.302	ug/L			10/21/24 13:48	1
1,2-Dichloropropane	<0.200		1.00	0.200	ug/L			10/21/24 13:48	1
1,3,5-Trimethylbenzene	<0.182		1.00	0.182	ug/L			10/21/24 13:48	1
1,3-Dichlorobenzene	<0.161		1.00	0.161	ug/L			10/21/24 13:48	1
1,3-Dichloropropane	<0.181		1.00	0.181	ug/L			10/21/24 13:48	1
1,4-Dichlorobenzene	<0.103		1.00	0.103	ug/L			10/21/24 13:48	1
1-Methylnaphthalene	<2.00		4.00	2.00	ug/L			10/21/24 13:48	1
2,2-Dichloropropane	<0.261		2.00	0.261	ug/L			10/21/24 13:48	1
2-Butanone	<2.03		10.0	2.03	ug/L			10/21/24 13:48	1
2-Chlorotoluene	<0.132		1.00	0.132	ug/L			10/21/24 13:48	1
2-Hexanone	<1.79		10.0	1.79	ug/L			10/21/24 13:48	1
2-Methylnaphthalene	<2.00		4.00	2.00	ug/L			10/21/24 13:48	1
4-Chlorotoluene	<0.135		1.00	0.135	ug/L			10/21/24 13:48	1
4-Isopropyltoluene	<0.202		1.00	0.202	ug/L			10/21/24 13:48	1
4-Methyl-2-pentanone	<1.50		10.0	1.50	ug/L			10/21/24 13:48	1
Acetone	**3.03**	**J**	10.0	2.52	ug/L			10/21/24 13:48	1
Benzene	<0.227		1.00	0.227	ug/L			10/21/24 13:48	1
Bromobenzene	<0.284		1.00	0.284	ug/L			10/21/24 13:48	1
Bromodichloromethane	<0.203		1.00	0.203	ug/L			10/21/24 13:48	1
Dibromochloromethane	<0.284		1.00	0.284	ug/L			10/21/24 13:48	1
Bromoform	<0.315		1.00	0.315	ug/L			10/21/24 13:48	1
Bromomethane	<1.00		3.00	1.00	ug/L			10/21/24 13:48	1
Carbon disulfide	<1.00		10.0	1.00	ug/L			10/21/24 13:48	1
Carbon tetrachloride	<0.175		1.00	0.175	ug/L			10/21/24 13:48	1
Chlorobenzene	<0.458		1.00	0.458	ug/L			10/21/24 13:48	1
Chloroethane	<0.377		2.00	0.377	ug/L			10/21/24 13:48	1
Chloroform	<0.250		1.00	0.250	ug/L			10/21/24 13:48	1
Chloromethane	<0.410		3.00	0.410	ug/L			10/21/24 13:48	1
cis-1,2-Dichloroethene	<0.388		1.00	0.388	ug/L			10/21/24 13:48	1
cis-1,3-Dichloropropene	<0.115		1.00	0.115	ug/L			10/21/24 13:48	1
Dibromomethane	<0.309		1.00	0.309	ug/L			10/21/24 13:48	1
Dichlorodifluoromethane	<0.256		1.00	0.256	ug/L			10/21/24 13:48	1
Ethylbenzene	<0.213		1.00	0.213	ug/L			10/21/24 13:48	1
Hexachlorobutadiene	<0.417		1.00	0.417	ug/L			10/21/24 13:48	1
Isopropylbenzene	<0.183		1.00	0.183	ug/L			10/21/24 13:48	1

Client Sample Results

Client: Parkhill
Project/Site: NDBL Vadose Sampling

Job ID: 885-13532-1

Client Sample ID: VZ-6
Date Collected: 10/08/24 11:45
Date Received: 10/09/24 13:24

Lab Sample ID: 885-13532-2
Matrix: Water

Method: SW846 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methyl-tert-butyl Ether (MTBE)	<0.393		1.00	0.393	ug/L			10/21/24 13:48	1
Methylene Chloride	<1.24		2.50	1.24	ug/L			10/21/24 13:48	1
n-Butylbenzene	<0.125		3.00	0.125	ug/L			10/21/24 13:48	1
N-Propylbenzene	<0.109		1.00	0.109	ug/L			10/21/24 13:48	1
Naphthalene	<0.240		2.00	0.240	ug/L			10/21/24 13:48	1
sec-Butylbenzene	<0.144		1.00	0.144	ug/L			10/21/24 13:48	1
Styrene	<0.136		1.00	0.136	ug/L			10/21/24 13:48	1
tert-Butylbenzene	<0.244		1.00	0.244	ug/L			10/21/24 13:48	1
Tetrachloroethene (PCE)	<0.178		1.00	0.178	ug/L			10/21/24 13:48	1
Toluene	<0.250		1.00	0.250	ug/L			10/21/24 13:48	1
trans-1,2-Dichloroethene	<0.193		1.00	0.193	ug/L			10/21/24 13:48	1
trans-1,3-Dichloropropene	<0.339		1.00	0.339	ug/L			10/21/24 13:48	1
Trichloroethene (TCE)	<0.204		1.00	0.204	ug/L			10/21/24 13:48	1
Trichlorofluoromethane	<0.159		1.00	0.159	ug/L			10/21/24 13:48	1
Vinyl chloride	<0.320		1.00	0.320	ug/L			10/21/24 13:48	1
Xylenes, Total	<0.374		1.50	0.374	ug/L			10/21/24 13:48	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*100*		*70 - 130*		*10/21/24 13:48*	*1*
Toluene-d8 (Surr)	*99*		*70 - 130*		*10/21/24 13:48*	*1*
4-Bromofluorobenzene (Surr)	*103*		*70 - 130*		*10/21/24 13:48*	*1*
Dibromofluoromethane (Surr)	*103*		*70 - 130*		*10/21/24 13:48*	*1*

Method: SW846 8015D - Gasoline Range Organics (GRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	<0.0132		0.0500	0.0132	mg/L			10/11/24 23:49	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*108*		*15 - 270*		*10/11/24 23:49*	*1*

Method: SW846 8015D - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	<0.580		1.00	0.580	mg/L		10/11/24 11:11	10/11/24 15:16	1
Motor Oil Range Organics [C28-C40]	<1.30		5.00	1.30	mg/L		10/11/24 11:11	10/11/24 15:16	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Di-n-octyl phthalate (Surr)	*97*		*46 - 159*	*10/11/24 11:11*	*10/11/24 15:16*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**1700**		100	50.0	mg/L			10/15/24 17:08	200
Fluoride	**0.902**		0.100	0.0460	mg/L			10/10/24 17:36	1
Orthophosphate as P	<0.250	H	0.500	0.250	mg/L			10/10/24 17:36	1
Nitrate Nitrite as N	**9.31**		1.00	0.112	mg/L			10/14/24 22:53	5
Sulfate	**766**		10.0	5.00	mg/L			10/10/24 17:48	20

Method: SW846 6010B - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	**0.267**		0.00200	0.000950	mg/L		10/11/24 10:02	10/14/24 09:33	1
Cadmium	<0.00121		0.00200	0.00121	mg/L		10/11/24 10:02	10/14/24 09:33	1
Chromium	<0.00115		0.00600	0.00115	mg/L		10/11/24 10:02	10/14/24 09:33	1

Client Sample Results

Client: Parkhill
Project/Site: NDBL Vadose Sampling

Job ID: 885-13532-1

Client Sample ID: VZ-6
Date Collected: 10/08/24 11:45
Date Received: 10/09/24 13:24

Lab Sample ID: 885-13532-2
Matrix: Water

Method: SW846 6010B - Metals (ICP) - Total Recoverable (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	0.00860		0.00500	0.00130	mg/L		10/11/24 10:02	10/14/24 09:33	1
Calcium	515		10.0	0.461	mg/L		10/11/24 10:02	10/14/24 09:35	10
Iron	2.79		0.500	0.260	mg/L		10/11/24 10:02	10/14/24 09:35	10
Magnesium	140		10.0	1.10	mg/L		10/11/24 10:02	10/14/24 09:35	10
Potassium	6.85		1.00	0.160	mg/L		10/11/24 10:02	10/14/24 09:33	1
Sodium	823		10.0	4.60	mg/L		10/11/24 10:02	10/14/24 09:35	10

Method: SW846 6020A - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	<0.00500		0.0100	0.00500	mg/L		10/11/24 10:02	10/16/24 13:01	10
Lead	<0.00600		0.0100	0.00600	mg/L		10/11/24 10:02	10/16/24 13:01	10
Selenium	0.0258		0.0100	0.00800	mg/L		10/11/24 10:02	10/16/24 13:01	10

Method: SW846 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.000120		0.000200	0.000120	mg/L		10/14/24 13:17	10/15/24 17:33	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids (SM 2540C)	4680		250	125	mg/L			10/14/24 16:00	1
Specific Conductance (SM 2510B)	6770		10.0	10.0	umhos/cm			10/15/24 16:45	1
pH (SM 4500 H+ B)	7.5	HF	0.1	0.1	SU			10/15/24 16:45	1

QC Sample Results

Client: Parkhill
Project/Site: NDBL Vadose Sampling

Job ID: 885-13532-1

Method: 8260B - Volatile Organic Compounds (GC/MS)

Lab Sample ID: MB 885-14587/5
Matrix: Water
Analysis Batch: 14587

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	<0.266		1.00	0.266	ug/L			10/21/24 11:58	1
1,1,1-Trichloroethane	<0.0811		1.00	0.0811	ug/L			10/21/24 11:58	1
1,1,2,2-Tetrachloroethane	<0.273		2.00	0.273	ug/L			10/21/24 11:58	1
1,1,2-Trichloroethane	<0.198		1.00	0.198	ug/L			10/21/24 11:58	1
1,1-Dichloroethane	<0.304		1.00	0.304	ug/L			10/21/24 11:58	1
1,1-Dichloroethene	<0.201		1.00	0.201	ug/L			10/21/24 11:58	1
1,1-Dichloropropene	<0.179		1.00	0.179	ug/L			10/21/24 11:58	1
1,2,3-Trichlorobenzene	<0.249		1.00	0.249	ug/L			10/21/24 11:58	1
1,2,3-Trichloropropane	<0.160		2.00	0.160	ug/L			10/21/24 11:58	1
1,2,4-Trichlorobenzene	<0.400		1.00	0.400	ug/L			10/21/24 11:58	1
1,2,4-Trimethylbenzene	<0.122		1.00	0.122	ug/L			10/21/24 11:58	1
1,2-Dibromo-3-Chloropropane	<0.587		2.00	0.587	ug/L			10/21/24 11:58	1
1,2-Dibromoethane (EDB)	<0.304		1.00	0.304	ug/L			10/21/24 11:58	1
1,2-Dichlorobenzene	<0.155		1.00	0.155	ug/L			10/21/24 11:58	1
1,2-Dichloroethane (EDC)	<0.302		1.00	0.302	ug/L			10/21/24 11:58	1
1,2-Dichloropropane	<0.200		1.00	0.200	ug/L			10/21/24 11:58	1
1,3,5-Trimethylbenzene	<0.182		1.00	0.182	ug/L			10/21/24 11:58	1
1,3-Dichlorobenzene	<0.161		1.00	0.161	ug/L			10/21/24 11:58	1
1,3-Dichloropropane	<0.181		1.00	0.181	ug/L			10/21/24 11:58	1
1,4-Dichlorobenzene	<0.103		1.00	0.103	ug/L			10/21/24 11:58	1
1-Methylnaphthalene	<2.00		4.00	2.00	ug/L			10/21/24 11:58	1
2,2-Dichloropropane	<0.261		2.00	0.261	ug/L			10/21/24 11:58	1
2-Butanone	<2.03		10.0	2.03	ug/L			10/21/24 11:58	1
2-Chlorotoluene	<0.132		1.00	0.132	ug/L			10/21/24 11:58	1
2-Hexanone	<1.79		10.0	1.79	ug/L			10/21/24 11:58	1
2-Methylnaphthalene	<2.00		4.00	2.00	ug/L			10/21/24 11:58	1
4-Chlorotoluene	<0.135		1.00	0.135	ug/L			10/21/24 11:58	1
4-Isopropyltoluene	<0.202		1.00	0.202	ug/L			10/21/24 11:58	1
4-Methyl-2-pentanone	<1.50		10.0	1.50	ug/L			10/21/24 11:58	1
Acetone	<2.52		10.0	2.52	ug/L			10/21/24 11:58	1
Benzene	<0.227		1.00	0.227	ug/L			10/21/24 11:58	1
Bromobenzene	<0.284		1.00	0.284	ug/L			10/21/24 11:58	1
Bromodichloromethane	<0.203		1.00	0.203	ug/L			10/21/24 11:58	1
Dibromochloromethane	<0.284		1.00	0.284	ug/L			10/21/24 11:58	1
Bromoform	<0.315		1.00	0.315	ug/L			10/21/24 11:58	1
Bromomethane	<1.00		3.00	1.00	ug/L			10/21/24 11:58	1
Carbon disulfide	<1.00		10.0	1.00	ug/L			10/21/24 11:58	1
Carbon tetrachloride	<0.175		1.00	0.175	ug/L			10/21/24 11:58	1
Chlorobenzene	<0.458		1.00	0.458	ug/L			10/21/24 11:58	1
Chloroethane	<0.377		2.00	0.377	ug/L			10/21/24 11:58	1
Chloroform	<0.250		1.00	0.250	ug/L			10/21/24 11:58	1
Chloromethane	<0.410		3.00	0.410	ug/L			10/21/24 11:58	1
cis-1,2-Dichloroethene	<0.388		1.00	0.388	ug/L			10/21/24 11:58	1
cis-1,3-Dichloropropene	<0.115		1.00	0.115	ug/L			10/21/24 11:58	1
Dibromomethane	<0.309		1.00	0.309	ug/L			10/21/24 11:58	1
Dichlorodifluoromethane	<0.256		1.00	0.256	ug/L			10/21/24 11:58	1
Ethylbenzene	<0.213		1.00	0.213	ug/L			10/21/24 11:58	1
Hexachlorobutadiene	<0.417		1.00	0.417	ug/L			10/21/24 11:58	1

QC Sample Results

Client: Parkhill
Project/Site: NDBL Vadose Sampling

Job ID: 885-13532-1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 885-14587/5
Matrix: Water
Analysis Batch: 14587

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Isopropylbenzene	<0.183		1.00	0.183	ug/L			10/21/24 11:58	1
Methyl-tert-butyl Ether (MTBE)	<0.393		1.00	0.393	ug/L			10/21/24 11:58	1
Methylene Chloride	<1.24		2.50	1.24	ug/L			10/21/24 11:58	1
n-Butylbenzene	<0.125		3.00	0.125	ug/L			10/21/24 11:58	1
N-Propylbenzene	<0.109		1.00	0.109	ug/L			10/21/24 11:58	1
Naphthalene	<0.240		2.00	0.240	ug/L			10/21/24 11:58	1
sec-Butylbenzene	<0.144		1.00	0.144	ug/L			10/21/24 11:58	1
Styrene	<0.136		1.00	0.136	ug/L			10/21/24 11:58	1
tert-Butylbenzene	<0.244		1.00	0.244	ug/L			10/21/24 11:58	1
Tetrachloroethene (PCE)	<0.178		1.00	0.178	ug/L			10/21/24 11:58	1
Toluene	<0.250		1.00	0.250	ug/L			10/21/24 11:58	1
trans-1,2-Dichloroethene	<0.193		1.00	0.193	ug/L			10/21/24 11:58	1
trans-1,3-Dichloropropene	<0.339		1.00	0.339	ug/L			10/21/24 11:58	1
Trichloroethene (TCE)	<0.204		1.00	0.204	ug/L			10/21/24 11:58	1
Trichlorofluoromethane	<0.159		1.00	0.159	ug/L			10/21/24 11:58	1
Vinyl chloride	<0.320		1.00	0.320	ug/L			10/21/24 11:58	1
Xylenes, Total	<0.374		1.50	0.374	ug/L			10/21/24 11:58	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*98*		*70 - 130*		*10/21/24 11:58*	*1*
Toluene-d8 (Surr)	*102*		*70 - 130*		*10/21/24 11:58*	*1*
4-Bromofluorobenzene (Surr)	*102*		*70 - 130*		*10/21/24 11:58*	*1*
Dibromofluoromethane (Surr)	*100*		*70 - 130*		*10/21/24 11:58*	*1*

Lab Sample ID: LCS 885-14587/4
Matrix: Water
Analysis Batch: 14587

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
1,1-Dichloroethene			20.1	19.33		ug/L		96	70 - 130		
Benzene			20.1	20.14		ug/L		100	70 - 130		
Chlorobenzene			20.1	20.37		ug/L		102	70 - 130		
Toluene			20.2	20.25		ug/L		100	70 - 130		
Trichloroethene (TCE)			20.2	19.20		ug/L		95	70 - 130		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*99*		*70 - 130*
Toluene-d8 (Surr)	*99*		*70 - 130*
4-Bromofluorobenzene (Surr)	*101*		*70 - 130*
Dibromofluoromethane (Surr)	*100*		*70 - 130*

QC Sample Results

Client: Parkhill
Project/Site: NDBL Vadose Sampling

Job ID: 885-13532-1

Method: 8015D - Gasoline Range Organics (GRO) (GC)

Lab Sample ID: MB 885-14209/13
Matrix: Water
Analysis Batch: 14209

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	<0.0132		0.0500	0.0132	mg/L			10/11/24 13:16	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*107*		*15 - 270*		*10/11/24 13:16*	*1*

Lab Sample ID: LCS 885-14209/12
Matrix: Water
Analysis Batch: 14209

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Gasoline Range Organics [C6 - C10]			0.500	0.5054		mg/L		101	70 - 130		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*214*		*15 - 270*

Lab Sample ID: 885-13532-1 MS
Matrix: Water
Analysis Batch: 14209

Client Sample ID: VZ-5
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Gasoline Range Organics [C6 - C10]	<0.0132		0.500	0.4985		mg/L		100	41 - 148		

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*219*		*15 - 270*

Lab Sample ID: 885-13532-1 MSD
Matrix: Water
Analysis Batch: 14209

Client Sample ID: VZ-5
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Gasoline Range Organics [C6 - C10]	<0.0132		0.500	0.4934		mg/L		99	41 - 148	1	20

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*218*		*15 - 270*

Method: 8015D - Diesel Range Organics (DRO) (GC)

Lab Sample ID: MB 885-14129/1-A
Matrix: Water
Analysis Batch: 14128

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 14129

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	<0.580		1.00	0.580	mg/L		10/11/24 11:11	10/11/24 13:39	1
Motor Oil Range Organics [C28-C40]	<1.30		5.00	1.30	mg/L		10/11/24 11:11	10/11/24 13:39	1

QC Sample Results

Client: Parkhill
Project/Site: NDBL Vadose Sampling

Job ID: 885-13532-1

Method: 8015D - Diesel Range Organics (DRO) (GC) (Continued)

Lab Sample ID: MB 885-14129/1-A
Matrix: Water
Analysis Batch: 14128

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 14129

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
Di-n-octyl phthalate (Surr)	106		46 - 159	10/11/24 11:11	10/11/24 13:39	1

Lab Sample ID: LCS 885-14129/2-A
Matrix: Water
Analysis Batch: 14128

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 14129

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Diesel Range Organics [C10-C28]	2.50	2.278		mg/L		91	57 - 147

Surrogate	LCS %Recovery	LCS Qualifier	Limits
Di-n-octyl phthalate (Surr)	105		46 - 159

Lab Sample ID: 885-13532-2 MS
Matrix: Water
Analysis Batch: 14128

Client Sample ID: VZ-6
Prep Type: Total/NA
Prep Batch: 14129

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Diesel Range Organics [C10-C28]	<0.580		2.50	2.410		mg/L		96	33 - 161

Surrogate	MS %Recovery	MS Qualifier	Limits
Di-n-octyl phthalate (Surr)	102		46 - 159

Lab Sample ID: 885-13532-2 MSD
Matrix: Water
Analysis Batch: 14128

Client Sample ID: VZ-6
Prep Type: Total/NA
Prep Batch: 14129

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Diesel Range Organics [C10-C28]	<0.580		2.50	2.413		mg/L		97	33 - 161	0	20

Surrogate	MSD %Recovery	MSD Qualifier	Limits
Di-n-octyl phthalate (Surr)	101		46 - 159

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 885-14184/4
Matrix: Water
Analysis Batch: 14184

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<0.250		0.500	0.250	mg/L			10/10/24 09:59	1
Fluoride	<0.0460		0.100	0.0460	mg/L			10/10/24 09:59	1
Sulfate	<0.250		0.500	0.250	mg/L			10/10/24 09:59	1

QC Sample Results

Client: Parkhill
Project/Site: NDBL Vadose Sampling

Job ID: 885-13532-1

Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: LCS 885-14184/5
Matrix: Water
Analysis Batch: 14184

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	5.00	4.732		mg/L		95	90 - 110
Fluoride	0.500	0.5148		mg/L		103	90 - 110
Sulfate	10.0	9.366		mg/L		94	90 - 110

Lab Sample ID: MRL 885-14184/3
Matrix: Water
Analysis Batch: 14184

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	MRL Result	MRL Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	0.500	0.5270		mg/L		105	50 - 150
Fluoride	0.100	0.1034		mg/L		103	50 - 150
Sulfate	0.500	0.4978	J	mg/L		100	50 - 150

Lab Sample ID: MB 885-14185/9
Matrix: Water
Analysis Batch: 14185

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Orthophosphate as P	<0.250		0.500	0.250	mg/L			10/10/24 09:59	1

Lab Sample ID: LCS 885-14185/10
Matrix: Water
Analysis Batch: 14185

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Orthophosphate as P	5.00	4.759		mg/L		95	90 - 110

Lab Sample ID: MRL 885-14185/8
Matrix: Water
Analysis Batch: 14185

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	MRL Result	MRL Qualifier	Unit	D	%Rec	%Rec Limits
Orthophosphate as P	0.500	0.5757		mg/L		115	50 - 150

Lab Sample ID: MB 885-14296/4
Matrix: Water
Analysis Batch: 14296

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<0.250		0.500	0.250	mg/L			10/15/24 16:13	1
Fluoride	<0.0460		0.100	0.0460	mg/L			10/15/24 16:13	1
Sulfate	<0.250		0.500	0.250	mg/L			10/15/24 16:13	1

Lab Sample ID: LCS 885-14296/5
Matrix: Water
Analysis Batch: 14296

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	5.00	4.692		mg/L		94	90 - 110
Fluoride	0.500	0.4853		mg/L		97	90 - 110

QC Sample Results

Client: Parkhill
Project/Site: NDBL Vadose Sampling

Job ID: 885-13532-1

Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: LCS 885-14296/5
Matrix: Water
Analysis Batch: 14296

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Sulfate	10.0	9.292		mg/L		93	90 - 110

Lab Sample ID: MRL 885-14296/3
Matrix: Water
Analysis Batch: 14296

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	MRL Result	MRL Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	0.500	0.5223		mg/L		104	50 - 150
Fluoride	0.100	0.09440	J	mg/L		94	50 - 150
Sulfate	0.500	0.4797	J	mg/L		96	50 - 150

Lab Sample ID: MB 885-14297/4
Matrix: Water
Analysis Batch: 14297

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Orthophosphate as P	<0.250		0.500	0.250	mg/L			10/15/24 16:13	1

Lab Sample ID: LCS 885-14297/5
Matrix: Water
Analysis Batch: 14297

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Orthophosphate as P	5.00	4.630		mg/L		93	90 - 110

Lab Sample ID: MRL 885-14297/3
Matrix: Water
Analysis Batch: 14297

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	MRL Result	MRL Qualifier	Unit	D	%Rec	%Rec Limits
Orthophosphate as P	0.500	0.4706	J	mg/L		94	50 - 150

Lab Sample ID: MB 885-14316/39
Matrix: Water
Analysis Batch: 14316

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<0.250		0.500	0.250	mg/L			10/14/24 21:51	1
Fluoride	<0.0460		0.100	0.0460	mg/L			10/14/24 21:51	1
Sulfate	<0.250		0.500	0.250	mg/L			10/14/24 21:51	1

Lab Sample ID: MB 885-14316/4
Matrix: Water
Analysis Batch: 14316

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<0.250		0.500	0.250	mg/L			10/14/24 14:39	1
Fluoride	<0.0460		0.100	0.0460	mg/L			10/14/24 14:39	1
Sulfate	<0.250		0.500	0.250	mg/L			10/14/24 14:39	1

QC Sample Results

Client: Parkhill
Project/Site: NDBL Vadose Sampling

Job ID: 885-13532-1

Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: LCS 885-14316/40
Matrix: Water
Analysis Batch: 14316

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	5.00	4.801		mg/L		96	90 - 110
Fluoride	0.500	0.5217		mg/L		104	90 - 110
Sulfate	10.0	9.556		mg/L		96	90 - 110

Lab Sample ID: LCS 885-14316/5
Matrix: Water
Analysis Batch: 14316

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	5.00	4.754		mg/L		95	90 - 110
Fluoride	0.500	0.5119		mg/L		102	90 - 110
Sulfate	10.0	9.489		mg/L		95	90 - 110

Lab Sample ID: MRL 885-14316/3
Matrix: Water
Analysis Batch: 14316

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	MRL Result	MRL Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	0.500	0.5272		mg/L		105	50 - 150
Fluoride	0.100	0.1009		mg/L		101	50 - 150
Sulfate	0.500	0.5318		mg/L		106	50 - 150

Lab Sample ID: MB 885-14317/39
Matrix: Water
Analysis Batch: 14317

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nitrate Nitrite as N	<0.0224		0.200	0.0224	mg/L			10/14/24 21:51	1

Lab Sample ID: LCS 885-14317/40
Matrix: Water
Analysis Batch: 14317

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Nitrate	2.50	2.548		mg/L		102	90 - 110
Nitrite	1.00	0.9365		mg/L		94	90 - 110

Lab Sample ID: MRL 885-14317/3
Matrix: Water
Analysis Batch: 14317

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	MRL Result	MRL Qualifier	Unit	D	%Rec	%Rec Limits
Nitrate	0.100	0.1051		mg/L		105	50 - 150
Nitrite	0.100	0.1032		mg/L		103	50 - 150

QC Sample Results

Client: Parkhill
Project/Site: NDBL Vadose Sampling

Job ID: 885-13532-1

Method: 6010B - Metals (ICP)

Lab Sample ID: MRL 885-14218/13
Matrix: Water
Analysis Batch: 14218

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	MRL Result	MRL Qualifier	Unit	D	%Rec	%Rec Limits
Barium	0.00200	0.002123		mg/L		106	50 - 150
Cadmium	0.00200	0.001656	J	mg/L		83	50 - 150
Chromium	0.00600	0.005470	J	mg/L		91	50 - 150
Silver	0.00500	0.004305	J	mg/L		86	50 - 150
Calcium	0.500	0.4917	J	mg/L		98	50 - 150
Iron	0.0200	<0.0260		mg/L		111	50 - 150
Magnesium	0.500	0.4999	J	mg/L		100	50 - 150
Potassium	0.500	0.5563	J	mg/L		111	50 - 150
Sodium	0.500	0.6524	J	mg/L		130	50 - 150

Lab Sample ID: MB 885-14118/1-A
Matrix: Water
Analysis Batch: 14218

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 14118

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	<0.000950		0.00200	0.000950	mg/L		10/11/24 10:00	10/14/24 08:22	1
Cadmium	<0.00121		0.00200	0.00121	mg/L		10/11/24 10:00	10/14/24 08:22	1
Chromium	<0.00115		0.00600	0.00115	mg/L		10/11/24 10:00	10/14/24 08:22	1
Silver	<0.00130		0.00500	0.00130	mg/L		10/11/24 10:00	10/14/24 08:22	1
Calcium	<0.0461		1.00	0.0461	mg/L		10/11/24 10:00	10/14/24 08:22	1
Iron	<0.0260		0.0500	0.0260	mg/L		10/11/24 10:00	10/14/24 08:22	1
Magnesium	<0.110		1.00	0.110	mg/L		10/11/24 10:00	10/14/24 08:22	1
Potassium	<0.160		1.00	0.160	mg/L		10/11/24 10:00	10/14/24 08:22	1
Sodium	<0.460		1.00	0.460	mg/L		10/11/24 10:00	10/14/24 08:22	1

Lab Sample ID: LCS 885-14118/5-A
Matrix: Water
Analysis Batch: 14218

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 14118

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Barium	0.500	0.4697		mg/L		94	80 - 120
Cadmium	0.500	0.4605		mg/L		92	80 - 120
Chromium	0.500	0.4562		mg/L		91	80 - 120
Silver	0.100	0.09574		mg/L		96	80 - 120
Calcium	50.0	50.94		mg/L		102	80 - 120
Iron	0.500	0.5058		mg/L		101	80 - 120
Magnesium	50.0	50.29		mg/L		101	80 - 120
Potassium	50.0	50.20		mg/L		100	80 - 120
Sodium	50.0	49.94		mg/L		100	80 - 120

Method: 6020A - Metals (ICP/MS)

Lab Sample ID: MRL 885-14379/14
Matrix: Water
Analysis Batch: 14379

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	MRL Result	MRL Qualifier	Unit	D	%Rec	%Rec Limits
Arsenic	0.00100	0.001089		mg/L		109	70 - 130
Lead	0.00100	0.0009608	J	mg/L		96	70 - 130

QC Sample Results

Client: Parkhill
Project/Site: NDBL Vadose Sampling

Job ID: 885-13532-1

Method: 6020A - Metals (ICP/MS) (Continued)

Lab Sample ID: MRL 885-14379/14
Matrix: Water
Analysis Batch: 14379

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	MRL Result	MRL Qualifier	Unit	D	%Rec	%Rec Limits
Selenium	0.00100	0.001159		mg/L		116	70 - 130

Lab Sample ID: MRL 885-14422/9
Matrix: Water
Analysis Batch: 14422

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	MRL Result	MRL Qualifier	Unit	D	%Rec	%Rec Limits
Arsenic	0.00100	0.0009769	J	mg/L		98	70 - 130
Lead	0.00100	0.0009451	J	mg/L		95	70 - 130
Selenium	0.00100	0.0009375	J	mg/L		94	70 - 130

Lab Sample ID: MRL 885-14519/9
Matrix: Water
Analysis Batch: 14519

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	MRL Result	MRL Qualifier	Unit	D	%Rec	%Rec Limits
Arsenic	0.00100	0.0009305	J	mg/L		93	70 - 130
Lead	0.00100	0.0009223	J	mg/L		92	70 - 130
Selenium	0.00100	0.0009210	J	mg/L		92	70 - 130

Lab Sample ID: MB 885-14118/1-A
Matrix: Water
Analysis Batch: 14379

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 14118

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	<0.00250		0.00500	0.00250	mg/L		10/11/24 10:00	10/15/24 11:31	5
Lead	<0.00300		0.00500	0.00300	mg/L		10/11/24 10:00	10/15/24 11:31	5

Lab Sample ID: MB 885-14118/1-A
Matrix: Water
Analysis Batch: 14422

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 14118

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	<0.00250		0.00500	0.00250	mg/L		10/11/24 10:00	10/16/24 10:19	5
Lead	<0.00300		0.00500	0.00300	mg/L		10/11/24 10:00	10/16/24 10:19	5
Selenium	<0.00400		0.00500	0.00400	mg/L		10/11/24 10:00	10/16/24 10:19	5

Lab Sample ID: LCS 885-14118/3-A
Matrix: Water
Analysis Batch: 14379

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 14118

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Arsenic	0.0500	0.05564		mg/L		111	80 - 120
Lead	0.0500	0.05066		mg/L		101	80 - 120

QC Sample Results

Client: Parkhill
Project/Site: NDBL Vadose Sampling

Job ID: 885-13532-1

Method: 6020A - Metals (ICP/MS) (Continued)

Lab Sample ID: LCS 885-14118/3-A
Matrix: Water
Analysis Batch: 14422

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 14118

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Arsenic			0.0500	0.05160		mg/L		103	80 - 120		
Lead			0.0500	0.05271		mg/L		105	80 - 120		
Selenium			0.0500	0.05197		mg/L		104	80 - 120		

Lab Sample ID: 885-13532-1 MS
Matrix: Water
Analysis Batch: 14519

Client Sample ID: VZ-5
Prep Type: Total Recoverable
Prep Batch: 14118

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Arsenic	0.0171		0.0500	0.06264		mg/L		91	75 - 125		
Lead	<0.00600		0.0500	0.05566		mg/L		111	75 - 125		
Selenium	<0.00800		0.0500	0.05126		mg/L		103	75 - 125		

Lab Sample ID: 885-13532-1 MSD
Matrix: Water
Analysis Batch: 14519

Client Sample ID: VZ-5
Prep Type: Total Recoverable
Prep Batch: 14118

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Arsenic	0.0171		0.0500	0.06504		mg/L		96	75 - 125	4	20
Lead	<0.00600		0.0500	0.05460		mg/L		109	75 - 125	2	20
Selenium	<0.00800		0.0500	0.05195		mg/L		104	75 - 125	1	20

Lab Sample ID: LLCS 885-14409/2-A
Matrix: Water
Analysis Batch: 14519

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 14409

Analyte			Spike Added	LLCS Result	LLCS Qualifier	Unit	D	%Rec	%Rec Limits		
Arsenic			0.00100	<0.00250		mg/L		158			
Lead			0.00100	<0.00300		mg/L		104			
Selenium			0.00100	<0.00400		mg/L		203			

Method: 7470A - Mercury (CVAA)

Lab Sample ID: MRL 885-14252/9-A
Matrix: Water
Analysis Batch: 14405

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 14252

Analyte			Spike Added	MRL Result	MRL Qualifier	Unit	D	%Rec	%Rec Limits		
Mercury			0.000150	<0.000122		mg/L		76	50 - 150		

Lab Sample ID: MB 885-14255/1-A
Matrix: Water
Analysis Batch: 14405

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 14255

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.000120		0.000200	0.000120	mg/L		10/14/24 13:17	10/15/24 14:10	1

QC Sample Results

Client: Parkhill
Project/Site: NDBL Vadose Sampling

Job ID: 885-13532-1

Method: 7470A - Mercury (CVAA) (Continued)

Lab Sample ID: LCS 885-14255/3-A
Matrix: Water
Analysis Batch: 14405

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 14255

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Mercury	0.00500	0.004875		mg/L		97	85 - 115

Lab Sample ID: LLCS 885-14255/2-A
Matrix: Water
Analysis Batch: 14405

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 14255

Analyte	Spike Added	LLCS Result	LLCS Qualifier	Unit	D	%Rec	%Rec Limits
Mercury	0.000150	0.0001386	J	mg/L		92	50 - 150

Method: 2540C - Solids, Total Dissolved (TDS)

Lab Sample ID: MB 885-14268/1
Matrix: Water
Analysis Batch: 14268

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	<25.0		50.0	25.0	mg/L			10/14/24 16:00	1

Lab Sample ID: LCS 885-14268/2
Matrix: Water
Analysis Batch: 14268

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Total Dissolved Solids	1000	1008		mg/L		101	80 - 120

QC Association Summary

Client: Parkhill
Project/Site: NDBL Vadose Sampling

Job ID: 885-13532-1

GC/MS VOA

Analysis Batch: 14587

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-13532-1	VZ-5	Total/NA	Water	8260B	
885-13532-2	VZ-6	Total/NA	Water	8260B	
MB 885-14587/5	Method Blank	Total/NA	Water	8260B	
LCS 885-14587/4	Lab Control Sample	Total/NA	Water	8260B	

GC VOA

Analysis Batch: 14209

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-13532-1	VZ-5	Total/NA	Water	8015D	
885-13532-2	VZ-6	Total/NA	Water	8015D	
MB 885-14209/13	Method Blank	Total/NA	Water	8015D	
LCS 885-14209/12	Lab Control Sample	Total/NA	Water	8015D	
885-13532-1 MS	VZ-5	Total/NA	Water	8015D	
885-13532-1 MSD	VZ-5	Total/NA	Water	8015D	

GC Semi VOA

Analysis Batch: 14128

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-13532-1	VZ-5	Total/NA	Water	8015D	14129
885-13532-2	VZ-6	Total/NA	Water	8015D	14129
MB 885-14129/1-A	Method Blank	Total/NA	Water	8015D	14129
LCS 885-14129/2-A	Lab Control Sample	Total/NA	Water	8015D	14129
885-13532-2 MS	VZ-6	Total/NA	Water	8015D	14129
885-13532-2 MSD	VZ-6	Total/NA	Water	8015D	14129

Prep Batch: 14129

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-13532-1	VZ-5	Total/NA	Water	3511	
885-13532-2	VZ-6	Total/NA	Water	3511	
MB 885-14129/1-A	Method Blank	Total/NA	Water	3511	
LCS 885-14129/2-A	Lab Control Sample	Total/NA	Water	3511	
885-13532-2 MS	VZ-6	Total/NA	Water	3511	
885-13532-2 MSD	VZ-6	Total/NA	Water	3511	

HPLC/IC

Analysis Batch: 14184

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-13532-1	VZ-5	Total/NA	Water	300.0	
885-13532-2	VZ-6	Total/NA	Water	300.0	
885-13532-2	VZ-6	Total/NA	Water	300.0	
MB 885-14184/4	Method Blank	Total/NA	Water	300.0	
LCS 885-14184/5	Lab Control Sample	Total/NA	Water	300.0	
MRL 885-14184/3	Lab Control Sample	Total/NA	Water	300.0	

Analysis Batch: 14185

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-13532-1	VZ-5	Total/NA	Water	300.0	
885-13532-2	VZ-6	Total/NA	Water	300.0	
MB 885-14185/9	Method Blank	Total/NA	Water	300.0	

QC Association Summary

Client: Parkhill
Project/Site: NDBL Vadose Sampling

Job ID: 885-13532-1

HPLC/IC (Continued)

Analysis Batch: 14185 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCS 885-14185/10	Lab Control Sample	Total/NA	Water	300.0	
MRL 885-14185/8	Lab Control Sample	Total/NA	Water	300.0	

Analysis Batch: 14296

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-13532-2	VZ-6	Total/NA	Water	300.0	
MB 885-14296/4	Method Blank	Total/NA	Water	300.0	
LCS 885-14296/5	Lab Control Sample	Total/NA	Water	300.0	
MRL 885-14296/3	Lab Control Sample	Total/NA	Water	300.0	

Analysis Batch: 14297

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 885-14297/4	Method Blank	Total/NA	Water	300.0	
LCS 885-14297/5	Lab Control Sample	Total/NA	Water	300.0	
MRL 885-14297/3	Lab Control Sample	Total/NA	Water	300.0	

Analysis Batch: 14316

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 885-14316/39	Method Blank	Total/NA	Water	300.0	
MB 885-14316/4	Method Blank	Total/NA	Water	300.0	
LCS 885-14316/40	Lab Control Sample	Total/NA	Water	300.0	
LCS 885-14316/5	Lab Control Sample	Total/NA	Water	300.0	
MRL 885-14316/3	Lab Control Sample	Total/NA	Water	300.0	

Analysis Batch: 14317

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-13532-1	VZ-5	Total/NA	Water	300.0	
885-13532-2	VZ-6	Total/NA	Water	300.0	
MB 885-14317/39	Method Blank	Total/NA	Water	300.0	
MB 885-14317/4	Method Blank	Total/NA	Water	300.0	
LCS 885-14317/40	Lab Control Sample	Total/NA	Water	300.0	
MRL 885-14317/3	Lab Control Sample	Total/NA	Water	300.0	

Metals

Prep Batch: 14118

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-13532-1	VZ-5	Total Recoverable	Water	3005A	
885-13532-2	VZ-6	Total Recoverable	Water	3005A	
MB 885-14118/1-A	Method Blank	Total Recoverable	Water	3005A	
LCS 885-14118/3-A	Lab Control Sample	Total Recoverable	Water	3005A	
LCS 885-14118/5-A	Lab Control Sample	Total Recoverable	Water	3005A	
885-13532-1 MS	VZ-5	Total Recoverable	Water	3005A	
885-13532-1 MSD	VZ-5	Total Recoverable	Water	3005A	

Analysis Batch: 14218

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-13532-1	VZ-5	Total Recoverable	Water	6010B	14118
885-13532-1	VZ-5	Total Recoverable	Water	6010B	14118
885-13532-2	VZ-6	Total Recoverable	Water	6010B	14118
885-13532-2	VZ-6	Total Recoverable	Water	6010B	14118

QC Association Summary

Client: Parkhill
Project/Site: NDBL Vadose Sampling

Job ID: 885-13532-1

Metals (Continued)

Analysis Batch: 14218 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 885-14118/1-A	Method Blank	Total Recoverable	Water	6010B	14118
LCS 885-14118/5-A	Lab Control Sample	Total Recoverable	Water	6010B	14118
MRL 885-14218/13	Lab Control Sample	Total/NA	Water	6010B	

Prep Batch: 14252

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MRL 885-14252/9-A	Lab Control Sample	Total/NA	Water	245.1	

Prep Batch: 14255

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-13532-1	VZ-5	Total/NA	Water	7470A	
885-13532-2	VZ-6	Total/NA	Water	7470A	
MB 885-14255/1-A	Method Blank	Total/NA	Water	7470A	
LCS 885-14255/3-A	Lab Control Sample	Total/NA	Water	7470A	
LLCS 885-14255/2-A	Lab Control Sample	Total/NA	Water	7470A	

Analysis Batch: 14379

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 885-14118/1-A	Method Blank	Total Recoverable	Water	6020A	14118
LCS 885-14118/3-A	Lab Control Sample	Total Recoverable	Water	6020A	14118
MRL 885-14379/14	Lab Control Sample	Total/NA	Water	6020A	

Analysis Batch: 14405

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-13532-1	VZ-5	Total/NA	Water	7470A	14255
885-13532-2	VZ-6	Total/NA	Water	7470A	14255
MB 885-14255/1-A	Method Blank	Total/NA	Water	7470A	14255
LCS 885-14255/3-A	Lab Control Sample	Total/NA	Water	7470A	14255
LLCS 885-14255/2-A	Lab Control Sample	Total/NA	Water	7470A	14255
MRL 885-14252/9-A	Lab Control Sample	Total/NA	Water	7470A	14252

Prep Batch: 14409

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LLCS 885-14409/2-A	Lab Control Sample	Total Recoverable	Water	3005A	

Analysis Batch: 14422

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-13532-2	VZ-6	Total Recoverable	Water	6020A	14118
MB 885-14118/1-A	Method Blank	Total Recoverable	Water	6020A	14118
LCS 885-14118/3-A	Lab Control Sample	Total Recoverable	Water	6020A	14118
MRL 885-14422/9	Lab Control Sample	Total/NA	Water	6020A	

Analysis Batch: 14519

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-13532-1	VZ-5	Total Recoverable	Water	6020A	14118
LLCS 885-14409/2-A	Lab Control Sample	Total Recoverable	Water	6020A	14409
MRL 885-14519/9	Lab Control Sample	Total/NA	Water	6020A	
885-13532-1 MS	VZ-5	Total Recoverable	Water	6020A	14118
885-13532-1 MSD	VZ-5	Total Recoverable	Water	6020A	14118

QC Association Summary

Client: Parkhill
Project/Site: NDBL Vadose Sampling

Job ID: 885-13532-1

General Chemistry

Analysis Batch: 14268

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-13532-1	VZ-5	Total/NA	Water	2540C	
885-13532-2	VZ-6	Total/NA	Water	2540C	
MB 885-14268/1	Method Blank	Total/NA	Water	2540C	
LCS 885-14268/2	Lab Control Sample	Total/NA	Water	2540C	

Analysis Batch: 14386

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-13532-1	VZ-5	Total/NA	Water	SM 2510B	
885-13532-2	VZ-6	Total/NA	Water	SM 2510B	

Analysis Batch: 14387

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-13532-1	VZ-5	Total/NA	Water	SM 4500 H+ B	
885-13532-2	VZ-6	Total/NA	Water	SM 4500 H+ B	

Lab Chronicle

Client: Parkhill
Project/Site: NDBL Vadose Sampling

Job ID: 885-13532-1

Client Sample ID: VZ-5
Date Collected: 10/08/24 09:35
Date Received: 10/09/24 13:24

Lab Sample ID: 885-13532-1
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260B		1	14587	JR	EET ALB	10/21/24 13:20
Total/NA	Analysis	8015D		1	14209	JP	EET ALB	10/11/24 22:39
Total/NA	Prep	3511			14129	DH	EET ALB	10/11/24 11:11
Total/NA	Analysis	8015D		1	14128	EM	EET ALB	10/11/24 15:03
Total/NA	Analysis	300.0		1	14184	RC	EET ALB	10/10/24 17:11
Total/NA	Analysis	300.0		1	14185	RC	EET ALB	10/10/24 17:11
Total/NA	Analysis	300.0		5	14317	RC	EET ALB	10/14/24 22:41
Total Recoverable	Prep	3005A			14118	JE	EET ALB	10/11/24 10:02
Total Recoverable	Analysis	6010B		1	14218	VP	EET ALB	10/14/24 09:28
Total Recoverable	Prep	3005A			14118	JE	EET ALB	10/11/24 10:02
Total Recoverable	Analysis	6010B		10	14218	VP	EET ALB	10/14/24 09:31
Total Recoverable	Prep	3005A			14118	JE	EET ALB	10/11/24 10:02
Total Recoverable	Analysis	6020A		10	14519	BV	EET ALB	10/17/24 12:03
Total/NA	Prep	7470A			14255	JR	EET ALB	10/14/24 13:17
Total/NA	Analysis	7470A		1	14405	JR	EET ALB	10/15/24 17:31
Total/NA	Analysis	2540C		1	14268	KB	EET ALB	10/14/24 16:00
Total/NA	Analysis	SM 2510B		1	14386	KB	EET ALB	10/15/24 16:41
Total/NA	Analysis	SM 4500 H+ B		1	14387	KB	EET ALB	10/15/24 16:41

Client Sample ID: VZ-6
Date Collected: 10/08/24 11:45
Date Received: 10/09/24 13:24

Lab Sample ID: 885-13532-2
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260B		1	14587	JR	EET ALB	10/21/24 13:48
Total/NA	Analysis	8015D		1	14209	JP	EET ALB	10/11/24 23:49
Total/NA	Prep	3511			14129	DH	EET ALB	10/11/24 11:11
Total/NA	Analysis	8015D		1	14128	EM	EET ALB	10/11/24 15:16
Total/NA	Analysis	300.0		200	14296	RC	EET ALB	10/15/24 17:08
Total/NA	Analysis	300.0		1	14184	RC	EET ALB	10/10/24 17:36
Total/NA	Analysis	300.0		1	14185	RC	EET ALB	10/10/24 17:36
Total/NA	Analysis	300.0		20	14184	RC	EET ALB	10/10/24 17:48
Total/NA	Analysis	300.0		5	14317	RC	EET ALB	10/14/24 22:53
Total Recoverable	Prep	3005A			14118	JE	EET ALB	10/11/24 10:02
Total Recoverable	Analysis	6010B		1	14218	VP	EET ALB	10/14/24 09:33
Total Recoverable	Prep	3005A			14118	JE	EET ALB	10/11/24 10:02
Total Recoverable	Analysis	6010B		10	14218	VP	EET ALB	10/14/24 09:35
Total Recoverable	Prep	3005A			14118	JE	EET ALB	10/11/24 10:02
Total Recoverable	Analysis	6020A		10	14422	BV	EET ALB	10/16/24 13:01
Total/NA	Prep	7470A			14255	JR	EET ALB	10/14/24 13:17
Total/NA	Analysis	7470A		1	14405	JR	EET ALB	10/15/24 17:33
Total/NA	Analysis	2540C		1	14268	KB	EET ALB	10/14/24 16:00
Total/NA	Analysis	SM 2510B		1	14386	KB	EET ALB	10/15/24 16:45

Lab Chronicle

Client: Parkhill
Project/Site: NDBL Vadose Sampling

Job ID: 885-13532-1

Client Sample ID: VZ-6
Date Collected: 10/08/24 11:45
Date Received: 10/09/24 13:24

Lab Sample ID: 885-13532-2
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	SM 4500 H+ B		1	14387	KB	EET ALB	10/15/24 16:45

Laboratory References:

EET ALB = Eurofins Albuquerque, 4901 Hawkins NE, Albuquerque, NM 87109, TEL (505)345-3975

Accreditation/Certification Summary

Client: Parkhill
Job ID: 885-13532-1
Project/Site: NDBL Vadose Sampling

Laboratory: Eurofins Albuquerque

Unless otherwise noted, all analytes for this laboratory were covered under each accreditation/certification below.

Authority	Program	Identification Number	Expiration Date
New Mexico	State	NM9425, NM0901	02-26-25

The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.

Analysis Method	Prep Method	Matrix	Analyte
2540C		Water	Total Dissolved Solids
300.0		Water	Chloride
300.0		Water	Fluoride
300.0		Water	Nitrate Nitrite as N
300.0		Water	Orthophosphate as P
300.0		Water	Sulfate
6010B	3005A	Water	Barium
6010B	3005A	Water	Cadmium
6010B	3005A	Water	Calcium
6010B	3005A	Water	Chromium
6010B	3005A	Water	Iron
6010B	3005A	Water	Magnesium
6010B	3005A	Water	Potassium
6010B	3005A	Water	Silver
6010B	3005A	Water	Sodium
6020A	3005A	Water	Arsenic
6020A	3005A	Water	Lead
6020A	3005A	Water	Selenium
7470A	7470A	Water	Mercury
8015D		Water	Gasoline Range Organics [C6 - C10]
8015D	3511	Water	Diesel Range Organics [C10-C28]
8015D	3511	Water	Motor Oil Range Organics [C28-C40]
8260B		Water	1,1,1,2-Tetrachloroethane
8260B		Water	1,1,1-Trichloroethane
8260B		Water	1,1,2,2-Tetrachloroethane
8260B		Water	1,1,2-Trichloroethane
8260B		Water	1,1-Dichloroethane
8260B		Water	1,1-Dichloroethene
8260B		Water	1,1-Dichloropropene
8260B		Water	1,2,3-Trichlorobenzene
8260B		Water	1,2,3-Trichloropropane
8260B		Water	1,2,4-Trichlorobenzene
8260B		Water	1,2,4-Trimethylbenzene
8260B		Water	1,2-Dibromo-3-Chloropropane
8260B		Water	1,2-Dibromoethane (EDB)
8260B		Water	1,2-Dichlorobenzene
8260B		Water	1,2-Dichloroethane (EDC)
8260B		Water	1,2-Dichloropropane
8260B		Water	1,3,5-Trimethylbenzene
8260B		Water	1,3-Dichlorobenzene
8260B		Water	1,3-Dichloropropane
8260B		Water	1,4-Dichlorobenzene
8260B		Water	1-Methylnaphthalene
8260B		Water	2,2-Dichloropropane
8260B		Water	2-Butanone

Accreditation/Certification Summary

Client: Parkhill
Project/Site: NDBL Vadose Sampling

Job ID: 885-13532-1

Laboratory: Eurofins Albuquerque (Continued)

Unless otherwise noted, all analytes for this laboratory were covered under each accreditation/certification below.

Authority	Program	Identification Number	Expiration Date
Oregon	NELAP	NM100001	02-26-25

The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.

Analysis Method	Prep Method	Matrix	Analyte
8260B		Water	2-Chlorotoluene
8260B		Water	2-Hexanone
8260B		Water	2-Methylnaphthalene
8260B		Water	4-Chlorotoluene
8260B		Water	4-Isopropyltoluene
8260B		Water	4-Methyl-2-pentanone
8260B		Water	Acetone
8260B		Water	Benzene
8260B		Water	Bromobenzene
8260B		Water	Bromodichloromethane
8260B		Water	Bromoform
8260B		Water	Bromomethane
8260B		Water	Carbon disulfide
8260B		Water	Carbon tetrachloride
8260B		Water	Chlorobenzene
8260B		Water	Chloroethane
8260B		Water	Chloroform
8260B		Water	Chloromethane
8260B		Water	cis-1,2-Dichloroethene
8260B		Water	cis-1,3-Dichloropropene
8260B		Water	Dibromochloromethane
8260B		Water	Dibromomethane
8260B		Water	Dichlorodifluoromethane
8260B		Water	Ethylbenzene
8260B		Water	Hexachlorobutadiene
8260B		Water	Isopropylbenzene
8260B		Water	Methylene Chloride
8260B		Water	Methyl-tert-butyl Ether (MTBE)
8260B		Water	Naphthalene
8260B		Water	n-Butylbenzene
8260B		Water	N-Propylbenzene
8260B		Water	sec-Butylbenzene
8260B		Water	Styrene
8260B		Water	tert-Butylbenzene
8260B		Water	Tetrachloroethene (PCE)
8260B		Water	Toluene
8260B		Water	trans-1,2-Dichloroethene
8260B		Water	trans-1,3-Dichloropropene
8260B		Water	Trichloroethene (TCE)
8260B		Water	Trichlorofluoromethane
8260B		Water	Vinyl chloride
8260B		Water	Xylenes, Total
SM 2510B		Water	Specific Conductance
SM 4500 H+ B		Water	pH

Chain-of-Custody Record

Client: Parkhill

333 Rio Rancho Blvd. NE #400

Mailing Address: Rio Rancho, NM 87124

Phone #: (505) 504-7765

email or Fax#: ayuhas@parkhill.com

QA/QC Package:

☑ Standard ☐ Level 4 (Full Validation)

Accreditation: ☐ Az Compliance

☑ NELAC ☐ Other

☐ EDD (Type)

Turn-Around Time:

☑ Standard ☐ **Rush**

Project Name: NOBL Vadose Sampling

Project #: 42881.24

Project Manager: Andy Yuhas

Sampler: ~~Matt Kingsley~~ Andy Yuhas

On Ice: ~~☑~~ Yes ☐ No

# of Coolers: 1 MOIO

Cooler Temp(including CF): 2.0-0.3=1.7 (°C)

HALL ENVIRONM
ANALYSIS LABOR
www.hallenvironmental.com
4901 Hawkins NE - Albuquerque, NM 87109
Tel. 505-345-3975 Fax 505-345-4107

885-13532 COC

Analysis Request

Date	Time	Matrix	Sample Name	Container Type and #	Preservative Type	HEAL No.	BTEX / MTBE / TMB's (8021)	TPH:8015D(GRO / DRO / MRO)	8081 Pesticides/8082 PCB's	EDB (Method 504.1)	PAHs by 8310 or 8270SIMS	RCRA 8 Metals	Cl, F, Br, NO_3, NO_2, PO_4, SO_4	8260 (VOA) 8260B	8270 (Semi-VOA)	Total Coliform (Present/Absent)	Attached List
10/8	0935	AQ	VZ-5	8 1	HCl 1	1								X			X
10/8	1145	AQ	VZ-6	8 1	HCl 1	2								X			X

Date	Time	Relinquished by:	Received by:	Via:	Date	Time
10/9	1324					
Date:	Time:	Relinquished by:	Received by:	Via:	Date	Time
				CDO	10/4/24	13:24

Remarks: please see attached analyte list for these samples.

If necessary, samples submitted to Hall Environmental may be subcontracted to other accredited laboratories. This serves as notice of this possibility. Any sub-contracted data will be clearly notated on the analytical report.

ALTERNATE PARAMETER LIST
OWL NDBL

Inorganic Parameters	EPA Method
Metals	
Arsenic, As	6020A
Lead, Pb	6020A
Selenium, Se	6020A
Barium, Ba	6010B
Cadmium, Cd	6010B
Calcium, Ca	6010B
Chromium, Cr	6010B
Iron, Fe	6010B
Magnesium, Mg	6010B
Potassium, K	6010B
Silver, Ag	6010B
Sodium, Na	6010B
Mercury, Hg	7470A
Other Inorganic Chemicals	
Fluoride, F	300.0
Chloride, Cl^-	300.0
Nitrate as N, NO_3-N	300.0
Phosphate, PO_4^{2-}	300.0
Sulfate, SO_4^{2-}	300.0
Physical Parameters	
Specific Conductance	SM 2510B
Total Dissolved Solids, TDS	SM 2540C
pH	SM 4500-H+B
Organic Parameters	
Volatile Oranic Compounds (VOCs)	8260B
Benzene	8260B
Ethylbenzene	8260B
Toluene	8260B
Xylenes (Total)	8260B
TPH	
Diesel Range Organics (DRO)	8015M/D
Motor Oil ange Organics (MRO)	8015M/D
Gasoline Range Organics (GRO)	8015D

Login Sample Receipt Checklist

Client: Parkhill Job Number: 885-13532-1

Login Number: 13532 **List Source: Eurofins Albuquerque**
List Number: 1
Creator: Casarrubias, Tracy

Question	Answer	Comment
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	False	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	

EXHIBIT E: VZM WELL 1-10 SOIL VAPOR SCREENING RESULTS

5619

Vadose Zone Well Vapor Monitoring Form

OWL Landfill Services, LLC

Monitoring Personnel Andy Yuhas **Date** 10/8/24

Weather Information

Date, Amount of Last Precipitation: 9/21/24; 0.04"

Temp: 59 °F
Wind Speed: Calm mph
Wind Direction: —
Barometric Pressure: 30.03 inches mercury (Hg)
Weather Conditions: clear, cool

Casing Volume (ft^3) = Radius $(ft)^2$ x π x TD (ft)

Calculated Casinng Volume	
Casing Diameter	Casing Vol/ft
2-inch	0.0218 ft^3/ft
4-inch	0.0873 ft^3/ft

Equipment Information

Monitoring Equipment Used: LandTEC GEM5000
Date and Time Last Calibrated: 10/8/24; 0730

Well I.D.	Well Diameter (inches)	Total Well Depth (ftbtoc)	Casing Volume (ft^3)	Purge Start Time	Elapsed Purge Time (min)	Well Vapor Measurements: Oxygen (%)	Carbon Dioxide (%)	Methane (%)	Hydrogen Sulfide Gas (%)	Comments
AMB	—	—	—	—	—	20.5	0.1	0.0	1	AMB 0740
VZ-9	2"	50.30'	—	0758	300	20.8	0.1	0.0	1	DRY
VZ-10	2"	52.30	—	0811	300	19.9	0.9	0.0	1	DRY
VZ-8	2"	37.60	—	0825	300	20.6	0.1	0.0	1	37.49? "DRY"
VZ-7	2"	44.77	—	0837	300	20.4	0.2	0.0	1	DRY
VZ-5	2"	56.50	—	0904	300	20.4	0.0	0.0	2	43.4' BTW
VZ-4	2"	50.50	—	1010	300	20.0	0.4	0.0	3	48.14
VZ-3	2"	42.09	—	1026	300	19.6	0.7	0.0	2	Dry
VZ-2	2"	43.99		1036	300	20.0	0.4	0.0	3	Dry
VZ-1	2"	51.23		1050	300	20.5	0.1	0.0	3	Dry
VZ-6	2"	62.10		1113	300	19.9	1.0	0.0	4	56.00
AMB	—	—	—	—	—	21.1	0.0	0.0	3	AMB 1125

EXHIBIT F: NEARBY WEATHER STATION PRECIPITATION DATA

Exhibit F

Nearby Weather Station Precipitation data, 2023-2024 Current and Historical Averages

Station	Dist. (mi) [1]	P.O.R.	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	ANN.[2]
Jal Co-op Station (294346)[3]	26.75	1981-2010	0.48	0.54	0.55	0.78	1.56	1.62	2.09	1.92	2.14	1.30	0.66	0.54	14.18
Ochoa Co-op Station (296281)[3]	17.94	1981-2010	0.46	0.54	0.56	0.63	1.38	1.60	2.06	1.90	1.85	1.37	0.64	0.52	13.51
WIPP Co-op Station (299569)[3]	18.60	1981-2010	0.47	0.52	0.58	0.64	1.17	1.74	2.22	2.01	1.96	1.11	0.34	0.61	13.37
Station	**(mi) [1]**	**P.O.R.**	**Jan**	**Feb**	**Mar**	**Apr**	**May**	**Jun**	**Jul**	**Aug**	**Sep**	**Oct 23**	**Nov 23**	**Dec 23**	**ANN.[2]**
El Capitan PWS (KNMJAL2)[4]	17.71	10/23 to 09/24	0.38	0.46	0.12	0.17	0.94	0.11	0.00	0.00	0.00	1.51	0.28	0.47	4.44
Red Hills PWS (KNMJAL7)[4]	2.22	10/23 to 09/24	0.12	0.21	0.00	0.00	0.00	0.60	0.85	0.36	1.43	1.37*	0.49	0.22	4.28

NOTES:

P.O.R.: Period of Record

[1]: "Dist." represents the distance from eachweather station to the NDBL Facility

[2]: "ANN" refers to annual average rainfall for historic data stations, and 12-month rolling total rainfall for nearby Personal Weather Stations (PWS)

[3]: Co-op station data are obtained from the Western Regional Climate Center (https://wrcc.dri.edu/Climate/west_coop_summaries.php)

[4]: Personal Weather Station data obtained from individual PWS web pages hosted by Weather Underground (https://www.wunderground.com/dashboard/pws/KNMJAL2 and https://www.wunderground.com/dashboard/pws/KNMJAL7)

*: Rainfall for October 2023 contains an outlier (12.32" rain recorded in 60 minutes on 10/3/2023) that coincides with an apparent instrument malfunction on that day. The anomalous value has been removed from this table.

From: Kennedy, Joseph, EMNRD
To: zramos@ndblandfill.com
Subject: Northern Delaware Basin Landfill (NDBL) NM1-63, operated by OWL Landfill Services Inc. Review of December 23, 2024, Vadose Zone monitoring Report
Date: Friday, July 18, 2025 3:46:00 PM
Attachments: image001.png

Dear Mr. Ramos:

On June 23, 2025, the Oil Conservation Division (OCD) received a December 23, 2024, Vadose Zone monitoring Report for Northern Delaware Basin Landfill (NDBL) NM1-63, operated by OWL Landfill Services Inc. It was noted that liquids were found in vadose zone monitoring wells VZ-5 and VZ-6 and the report included lab analysis reports from water samples collected 10/08/2024. The analysis of water samples resulted in elevated levels of major anions, cations and metals, but no organics. Due to the lack of organics, the OCD is open to the possibility put forward that "these analytes are indicative of normally dry arid desert soils (e.g., vadose zone soils, evaporites, playa deposits) and leaching/mobilization of those constituents by infiltrating surface waters (stormwater accumulation and infiltration) or introduced waters (i.e., leakage). The combination of historical supply line leakage proximal to well VZ-6, substantial seasonal rains over the 4 months preceding the sampling event, and ongoing facility grading and channeling of stormwater have likely contributed to detected and sampled waters found in well VZ-6." However, the level of chloride in VZ-6, 1700 mg/L, is of concern and something OCD will continue to evaluate.

Condition 6.F. of your permit specifies that: "If liquids or gases are found to be present, the operator shall notify the OCD immediately." **This report was received by the OCD eight months after the sample collection.** Going forward, if liquids are discovered in vadose zone wells, OWL **must** notify the OCD immediately to avoid violation of your permit. Please make your consultants aware of this requirement. Also, please include copies of these notifications in each annual report.

If there are any questions regarding this matter, please do not hesitate to contact me at (505) 549-5583 or Joseph.Kennedy@emnrd.nm.gov.

Respectfully,

Joe Kennedy ● Environmental Scientist Specialist - Advanced

Sante Fe Main Office
Phone: (505) 476-3441

General Information
Phone: (505) 629-6116

Online Phone Directory
https://www.emnrd.nm.gov/ocd/contact-us

State of New Mexico
Energy, Minerals and Natural Resources
Oil Conservation Division
1220 S. St Francis Dr.
Santa Fe, NM 87505

CONDITIONS

Action 478102

CONDITIONS

Operator: OWL LANDFILL SERVICES, LLC 3889 Maple Avenue Dallas, TX 75219	OGRID: 371820
	Action Number: 478102
	Action Type: [C-137] Non-Fee SWMF Submittal (SWMF NON-FEE SUBMITTAL)

CONDITIONS

Created By	Condition	Condition Date
joseph.kennedy	None	7/18/2025