November 26, 2021

Leigh Barr
Jim Griswold
New Mexico Oil Conservation Division
1220 South St. Francis Drive
Santa Fe, New Mexico 87505

RE: Landfarm Monitoring and Sampling Report – 2020
And Treatment Zone Closure Sampling (Cell 1 and 4);
Permit # NM-02-0004
BMG's Centralized Surface Waste Management Facility
Rio Arriba County, New Mexico

Dear Ms. Barr and Mr. Griswold:

Between March and December 2020, Animas Environmental Services, LLC (AES) completed quarterly evaporation pond groundwater monitoring and sampling at the Benson-Montin-Greer Drilling Corporation (BMG) Centralized Surface Waste Management Facility (Landfarm), which is located in the NW¼ NW¼ Section 20, T25N, R1E, Rio Arriba County, New Mexico. In addition, in April 2020, AES conducted landfarm treatment zone soil sampling and landfarm vadose zone soil sampling in accordance with NMAC 19.15.36.15 for treatment zone and NMAC 19.15.26.20.A and 19.15.36.15 for the vadose zone. Routine and regularly scheduled sampling was not completed later in 2020 because of public health restrictions and considerations.

1.0 Site History

1.1 2008 Site Investigation

In April 2008, AES personnel confirmed the presence of liquid within the Interstitial Well at the Landfarm evaporation pond of the BMG Surface Waste Management Facility. Site investigation activities conducted in May 2008 confirmed that although the primary liner had failed, the integrity of the secondary liner was not compromised, and no release to the environment had occurred. As a precautionary measure, NMOCD requested that four groundwater monitor wells (MW-1 through MW-4) be installed around the evaporation pond and monitored quarterly in conjunction with ongoing Landfarm sampling. BMG installed a replacement 69 mil high density polyethylene (HDPE) primary liner over the existing secondary liner in late September 2008.

1.2 Monitoring and Sampling, 2014 to 2019 (January 2020)

AES personnel conducted quarterly groundwater and landfarm sampling at the facility between March 2014 and 2019 (sampled in January 2020).

1.2.1 Background Sampling

On December 2, 2014, at the request of and in consultation with Brad Jones of the NMOCD, AES personnel collected three background vadose soil composite samples from separate locations found outside active operations areas at the Landfarm. Note that when the Landfarm was originally permitted, background sampling consisted of a limited list of parameters.

Samples were submitted for laboratory analysis. Sample locations are included on Figure 1 and Background Soil Sampling Analytical Results are included as Table 1. Proposed background thresholds were provided via email by Jim Griswold of NMOCD on October 6, 2016, and subsequent acceptance of background threshold concentrations was confirmed by BMG in October 2016. Background sample concentrations and associated approved NMOCD background levels are included in Table 1.

1.2.2 Evaporation Pond Groundwater Monitoring and Sampling

Groundwater analytical results from monitor wells MW-1 through MW-4 (located around the Evaporation Pond) have remained below laboratory detection limits for BTEX and TPH for all sampling events between 2014 and January 2020.

1.2.3 Landfarm Treatment Zone Sampling

Landfarm treatment zone samples had TPH concentrations below NMOCD Closure Action Levels for all events in Cell 2 and for several events in Cells 1, 3, and 4. Chloride concentrations were below the applicable NMOCD Closure Action Level for all sampling events between 2014 and January 2020.

1.2.4 Landfarm Vadose Zone Sampling

Vadose zone analytical results reported concentrations exceeding the NMOCD approved background threshold concentrations in all cells for various parameters, including TPH and chlorides. Additional exceedances have also been noted for fluoride, nitrate, sulfate, arsenic, barium, chromium, copper, iron, lead, manganese, and zinc.

Landfarm sampling results from 2014 to 2018 are detailed in the *Landfarm Monitoring and Sampling Report* dated April 19, 2019. Year 2019 including January 2020 sampling results are found in the *Landfarm Monitoring and Sampling Report* dated March 2, 2020.

2.0 Evaporation Pond Groundwater Monitoring and Sampling, Q1 through Q4 2020

In accordance with the 2008 Sampling and Analysis Plan, groundwater monitoring and sampling of the evaporation pond monitor wells MW-1 through MW-4 (located around the perimeter of the Evaporation Pond) was conducted on:

- Q1 - March 26, 2020
- Q2 – June 24, 2020
- Q3 - September 29, 2020; and
- Q4 – December 8, 2020.

Samples were not collected from the Interstitial Well due to low yield.

All groundwater samples were submitted for laboratory analysis at Hall Environmental Analysis Laboratory (Hall) in Albuquerque, New Mexico, for the following parameters:

- Benzene, toluene, ethylbenzene, and xylene (BTEX) per USEPA Method 8260B;
- Total Petroleum Hydrocarbons (TPH) – Gasoline Range Organics (GRO), Diesel Range Organics (DRO), and Motor Oil Range Organics (MRO) per USEPA Method 8015B;
- Chlorides per USEPA Method 300.0; and
- Total Dissolved Solids (TDS) – Standard Method 2540C.

2..1 Groundwater Measurement Data

Prior to sample collection from the groundwater monitor wells, AES measured depth to water and recorded temperature, conductivity, dissolved oxygen (DO), pH, and oxidation reduction potential (ORP) for each well. Depth to water, when measurable, was recorded in the Interstitial Well. All data was recorded on Water Sample Collection Forms. A summary of water quality data is included in Table 2, and Water Sample Collection Forms are included in the Appendix.

2.3 Laboratory Analytical Results

All laboratory analytical results for MW-1 through MW-4 during each sampling event were below laboratory detection limits for BTEX and TPH (GRO, DRO, and MRO), except for MW-1 on September 29, 2020, which had a DRO concentration of 5.4 milligrams per liter (mg/L). Laboratory analytical results for the monitor well groundwater samples are presented on Table 3 and on Figure 2. Groundwater analytical laboratory reports are included in the Appendix.

3.0 Landfarm Treatment Zones 2020

In accordance with the landfarm permit, BMG continues to till landfarm cells on a regular basis. However, BMG has not added any contaminated soils to any of the landfarm cells for at least 15 years, and they are working towards meeting requirements for closure of treatment cells.

3.1 Semi-Annual Treatment Zone Sampling

3.1.1 Treatment Zone Soil Sampling

In accordance with NMAC 19.15.36.15.D, AES personnel collected composite soil samples created from four randomly selected discrete samples from Cells 1 through 4 on April 2, 2020. Samples were collected from 0.5- to 1-foot below the treatment zone (TZ) surface.

Note that because of COVID restrictions, landfarm sampling was not completed in Q3 2020. Sampling dates, periods, sample IDs, and analysis parameters are included as follows:

Treatment Zone Semi-Annual Soil Sampling

Cells Sampled	Sampling Date	Sampling Period	Sample ID	Parameter(s) and USEPA Method(s)
1-4	April 2, 2020	SA1 2020	TZ-Cell #1 through #4	TPH - GRO/DRO/MRO (8015); Chloride (300.0)

3.1.2 Treatment Zone Analytical Results – Semi-Annual Sampling

For the April 2020 sampling event, TPH and chloride laboratory analytical results were below NMOCD Closure Action Levels in Cells 1 through 4.

3.2 Treatment Zone Closure Request Sampling, Cells 1 and 4

Cells 1 and 4 have been inactive for at least 15 years, and treatment zone soils in these cells have been below closure action levels for TPH and chloride since March 2016 and September 2014, respectively.

Treatment Zone Closure Action Levels are as follows:

- Benzene – 0.2 milligrams per kilogram (mg/kg)
- Total BTEX – 50 mg/kg
- Chloride – 500 mg/kg
- TPH (GRO, DRO, MRO) – 2,500 mg/kg

- TPH (GRO and DRO) – 500 mg/kg

In accordance with NMAC 19.15.36.F(2), samples were collected from Cells 1 and 4 on April 2, 2020, in anticipation of requesting cell closure.

3.2.1 Treatment Zone Closure Sampling, Cells 1 and 4

Sampling dates, IDs, and analysis parameters are included as follows:

Treatment Zone Closure Sampling, Cells 1 and 4 (NMAC 19.15.36.F(2))

Cells Sampled	Sampling Date	Sample ID	Parameter(s) and USEPA Method(s) NMAC 20.6.2.3103 (A and B)
1, 4	April 2, 2020	Cell 1 (CS-1), Cell 4 (CS-4)	Ethylene dibromide (EDB) 8011/504.1; PCBs 8082A; GRO/DRO/MRO 8015; PAHs 8310; Anions 300.0; Mercury 7471; Soil Metals 6010B; VOCs 8260B (including BTEX); pH 9040C

3.2.2 Treatment Zone Closure Sampling Results, Cells 1 and 4

VOCs, PAHs, and TPH (GRO/DRO/MRO) were not detected in soil samples collected from Cell 1 and 4 treatment zones. However, the following 11 parameters were detected *above* their respective laboratory practical quantitation limits (PQLs) with the following concentrations:

- Barium - 73 mg/kg in Cell 1 (CS-1) and 110 mg/kg in Cell 4 (CS-4;
- Chromium - 6.4 mg/kg (Cell 1) and 10 mg/kg (Cell 4);
- Copper – 5.3 mg/kg (Cell 1) and 8.8 mg/kg (Cell 4);
- Fluoride – 1.9 mg/kg (Cell 1) and 1.6 mg/kg (Cell 4);
- Iron - 11,000 mg/kg (Cell 1) and 16,000 mg/kg (Cell 4);
- Lead - 2.4 mg/kg (Cell 1) and 3.7 mg/kg (Cell 4);
- Manganese - 240 mg/kg (Cell 1) and 270 mg/kg (Cell 4);
- Nitrate – 5.9 mg/kg (Cell 1) and 6.2 mg/kg (Cell 4);
- Radioactivity (Combined Radium 226 & 228) – 1.670 (Cell 1) and 1.524 (Cell 4);
- Sulfate – 9.9 mg/kg (Cell 1) and 12 mg/kg (Cell 4); and
- Zinc - 23 mg/kg (Cell 1) and 32 mg/kg (Cell 4).

Treatment zone sample locations from 2020 along with BTEX, TPH, and chloride analytical results are presented on Table 4 and on Figure 3. Laboratory analytical reports are presented in the Appendix.

3.2.3 Risk Assessment Discussion, Cells 1 and 4

According to NMAC 20.6.2.3103, if concentrations exceed the PQL or approved background concentrations, then a risk assessment will be conducted to ensure that there are no impacts to fresh water, public health or the environment.

Comparison to NMOCD Approved Background Soil Concentrations

Each of the 11 parameters above PQLs also exceeded the NMOCD approved vadose zone background levels. However, when reviewing the range of vadose zone concentrations collected in 2014 and approved in 2016, the treatment zone concentrations fell within the range observed in background vadose zone concentrations. Treatment zone concentrations, the range of 2014 background vadose zone concentrations, and NMOCD approved background levels are included in Table 4B. Laboratory analytical reports are included in the Appendix.

Comparison to New Mexico Environment Department (NMED) Soil Screening Levels (SSLs)

Treatment zone soil analytical results from Cells 1 and 4 were also compared with New Mexico Environment Department (NMED) Soil Screening Levels (SSLs) for Soil Leaching (SL) to Groundwater with a dilution attenuation factor (DAF) of 20 (*NMED SSG Summary Table A-1 June 2019)*. All 11 parameters that exceeded laboratory PQLs were found to be *below* NMED SSLs for leaching to groundwater. Parameters exceeding PQLs, associated concentrations, and the applicable NMED SSLs are presented in Table 4B.

Proposed Response Action for Closure of Treatment Cells 1 and 4

Treatment zone concentrations are believed to be protective of human health and the environment. No further response actions for Cells 1 and 4 are proposed.

4.0 Landfarm Vadose Zone

4.1 Vadose Zone Sampling

4.1.1 Quarterly/Semi-Annual

In accordance with NMAC 19.15.36.20.A (Transitional Provisions) for the existing permit and NMAC 19.15.36.15.E.2, four discrete and random soil samples were collected on April 2, 2020, from each of the four cells (Cells #1 through #4) at depths of 2.0 to 2.25 feet below the top of native ground surface. Each sample collection point was filled in with bentonite following sampling. The sampling date, period, cells, IDs, and analysis parameters are presented below.

4.1.2 Annual Sampling

In accordance with the existing permit as well as transitional conditions outlined in NMAC 19.15.36.20.A, one random sample was collected in April 2020 from each cell for laboratory analyses of major cations/anions and RCRA 8 metals.

Vadose Zone Quarterly and Annual Sampling

Sampling Period	Sampling Date	Sample ID	Parameter(s) and USEPA Method(s)
Q1/SA1* 2020	April 2, 2020	Cell #1 VZ S1 – S4 Cell #2 VZ S1 – S4 Cell #3 VZ S1 – S4 Cell #4 VZ S1 – S4	TPH (418.1) BTEX (8260) Chloride (300.0)
Annual Sampling	April 2, 2020	Cell #1 VZ S-1, Cell #2 VZ S-1, Cell #3 VZ S-1, Cell #4 VZ S-1	Cations/Anions (300.0); RCRA Metals (6010B); Mercury (7471)

*Samples only collected in April 2020 because of public health restrictions and considerations.

Vadose zone laboratory analytical results from 2020 are summarized in Table 5. Sample locations are presented on Figure 4. Laboratory reports are presented in the Appendix.

4.2 Vadose Zone Sampling Results

4.2.1 BTEX, TPH, Chloride

- BTEX – concentrations below laboratory detection limit all cells;
- TPH – Cell #3 exceedances, with concentrations ranging from 20 to 59 mg/kg; and
- Chloride – Cell #1 exceedances (220 and 240 mg/kg).

4.2.2 Cations/Anions and Metals

Vadose Zone Cations/Anions and Metals –
Concentrations Above Approved Background Levels – April 2020

Parameter	***Cell 1 (mg/kg)***	***Cell 2 (mg/kg)***	***Cell 3 (mg/kg)***	***Cell 4 (mg/kg)***
Fluoride	--	--	--	2.4
Nitrate	4.1	5.8	2.4	18
Sulfate	14	22	12	15
Arsenic	--	6.5	--	--
Barium	75	110	74	110
Chromium	10	7.9		17
Lead	3.0	3.1	2.4	5.7

4.2.3 Risk Assessment Discussion, Vadose Zone

Comparison to NMOCD Approved Background Soil Concentrations

Each of the seven parameters listed in 4.2.2 are above NMOCD approved vadose zone background levels. However, when reviewing the range of vadose zone concentrations collected in 2014 and approved in 2016, the 2020 vadose zone concentrations fell within the range observed in background vadose zone concentrations, with the exception of arsenic in Cell 2. Vadose zone concentrations, the range of 2014 background vadose zone concentrations, and NMOCD approved background levels are included in Table 5B. Laboratory analytical reports are included in the Appendix.

Comparison to New Mexico Environment Department (NMED) Soil Screening Levels (SSLs)

Vadose zone concentrations were also compared with New Mexico Environment Department (NMED) Soil Screening Levels (SSLs) for Soil Leaching (SL) to Groundwater with a dilution attenuation factor (DAF) of 20 (*NMED SSG Summary Table A-1 June 2019)*. All seven parameters that exceeded laboratory PQLs and NMOCD background levels were found to be *below* NMED SSLs for leaching to groundwater, with the exception of arsenic in Cell 2. Parameters exceeding PQLs, associated concentrations, and the applicable NMED SSLs are presented in Table 5B.

Proposed Response Action for Vadose Zone (Cell 2)

Further sampling for arsenic in Cell 2 is recommended as a response action. Note that 5 year monitoring of the vadose zone is planned and will include arsenic.

5.0 Conclusions and Recommendations

5.1 Conclusions

AES personnel conducted quarterly groundwater and landfarm sampling at the BMG Surface Waste Management Facility in 2020. Groundwater was sampled quarterly throughout 2020; the landfarm was sampled in April 2020.

Groundwater analytical results from monitor wells MW-1 through MW-4 (located around the Evaporation Pond) have remained below laboratory detection limits for BTEX and TPH for all sampling events in 2020, with the exception of MW-1 which had a TPH-DRO concentration of 5.4 mg/L on September 29, 2020. The December 2020 sampling event reported a DRO concentration below detection limits in MW-1.

Landfarm treatment zone samples had TPH and chloride concentrations below NMOCD Closure Action Levels in Cells 1 through 4. Additionally, Cells 1 and 4 also had BTEX concentrations below laboratory detection limits. Samples from Cells 1 and 4 were laboratory analyzed for parameters included in NMAC 20.6.2.3103 (A and B), and results showed concentrations above detection limits and above NMOCD approved background levels detections for 11 different parameters. However, all were shown to be below NMED SSLs for soil leaching to groundwater (DAF 20). Therefore, treatment zone concentrations are believed to be protective of human health and the environment, and closure of Treatment Cells 1 and 4 are anticipated.

Vadose zone analytical results reported concentrations exceeding the NMOCD approved background threshold concentrations for TPH and chlorides, as well as seven different parameters in the vadose zone below the landfarm cells.

5.2 Recommendations and Scheduled Activities

- **Groundwater** – Quarterly groundwater monitoring and sampling will continue according to the Sampling and Analysis Plan; AES will evaluate chloride and TDS concentrations in monitor wells along with changes in groundwater elevations to determine if concentrations have increased over time.
- **Treatment Zone** –
  - **Cells 1 and 4** - AES recommends no further sampling since these cells meet closure criteria;
  - **Cells 2 and 3** – AES recommends sampling for TPH, BTEX, chlorides and the full parameter list from NMAC 20.6.2.3103 (A and B) in order to confirm whether these cells meet closure criteria.
- **Vadose Zone** – Complete quarterly and semi-annual sampling for TPH, BTEX and chlorides. Additionally, as required in NMAC 19.15.36.15.E(3), 5-year monitoring and sampling should be scheduled to include a minimum of four randomly

selected, independent samples from the vadose zone, for the constituents listed in Subsections A and B of NMAC 20.6.2.3103. Ensure that vadose zone sampling is done when landfarm is dry, and there is no chance that treatment zone soils or rain/snow can inadvertently migrate into the vadose zone test holes.

The next quarterly sampling event at the BMG Landfarm is scheduled for January 2022 (to cover Quarter 4 of 2021). Sampling events from 2021 will be discussed in the upcoming 2021 annual report.

If you have any questions regarding the site conditions or sampling results, please do not hesitate to contact Angela Ledgerwood (720) Elizabeth McNally at (505) 564-2281.

Sincerely,

David J. Reese
Environmental Scientist

Elizabeth McNally, P.E.
Principal

Tables

Table 1. Background Soil Sampling Analytical Results
Table 2. Summary of Groundwater Measurement and Water Quality Data
Table 3. Summary of Groundwater Analytical Results
Table 4. Treatment Zone Soil Analytical Results
Table 4B. Treatment Zone Concentrations, NMOCD Approved Background Levels & NMED SSLs
Table 5. Vadose Zone Soil Analytical Results
Table 5B. Vadose Zone Concentrations, NMOCD Approved Background Levels & NMED SSLs

Figures

Appendix

Cc: Matt Dimond
Benson-Montin-Greer Drilling Corporation
4900 College Blvd
Farmington, NM 87402

Shared Documents/Landfarm/Reports/2021.09.27 BMG Landfarm 2020 Report DR2 AL EM.docx

TABLE 1
APPROVED BACKGROUND SOIL LEVELS
BMG Landfarm, Rio Arriba County, New Mexico

Parameter	*USEPA Method*	*PQL (mg/kg)* [+]	*BS-SC-1 (mg/kg)*	*BS-SC-2 (mg/kg)*	*BS-SC-3 (mg/kg)*	*NMOCD Approved Background Value (mg/kg)*
		Date Sampled	12/2/2014	12/2/2014	12/2/2014	***2016***
TPH	418.1	20	<20	<20	<20	20
Benzene	8260	0.05	<0.048	<0.048	<0.048	0.05
Toluene	8260	0.05	<0.048	<0.048	<0.048	0.05
Ethylbenzene	8260	0.05	<0.048	<0.048	<0.048	0.05
Xylenes (OMP)	8260	0.05	<0.095	<0.096	<0.096	0.1
Chlorides	300.0	1.5	<7.5*	<1.5	6.1	25
NMAC 20.6.2.3103 (A and B)						
Arsenic	6010B	2.5	<2.5	<2.5	<13*	2.5
Barium	6010B	0.1	42	69	130*	42
Cadmium	6010B	0.1	<0.10	<0.10	<0.52*	0.1
Chromium	6010B	0.3	4.4	4.6	19*	4.4
Hexavalent Chromium	A 3500 Cr D	2	<2.0	<2.0	<2.0	2
Cyanide	9012B		<0.25	<0.25	<0.25	2.5
Fluoride	300.0	0.3	<1.5*	0.59	3.0	0.6
Lead	6010B	0.25	2.1	2.7	8.4*	2.1
Total Mercury	7471	0.03	<0.032	<0.032	<0.033	0.03
Nitrate (NO3 as N)	300.0	0.3	<1.5*	<0.30	0.45	0.3
Selenium	6010B	2.5	<2.5	<2.5	<13*	2.5
Silver	6010B	0.25	<0.25	<0.25	<1.3*	0.25
Uranium	6010B	2	<5.0	<5.1	<26*	5.0
Radioactivity (Combined Radium 226&228)	901.1 Gamma Spec	1.0 pCi/g	1.297	1.592	3.455	1.3
PCBs	8082	0.1	<0.14	<0.14	<0.14	0.14
Carbon Tetrachloride	8260	0.05	<0.048	<0.048	<0.048	0.05
1,2-dichloroethane (EDC)	8260	0.05	<0.048	<0.048	<0.048	0.05
1,1-dichloroethylene (1,1-DCE)	8260	0.05	<0.048	<0.048	<0.048	0.05
1,1,2,2-tetrachloroethylene (PCE)	8260	0.05	<0.048	<0.048	<0.048	0.05
1,1,2-trichloroethylene (TCE)	8260	0.05	<0.048	<0.048	<0.048	0.05
Methylene chloride (chloromethane)	8260	0.15	<0.14	<0.14	<0.14	0.15
Chloroform	8260	0.05	<0.048	<0.048	<0.048	0.05
1,1-dichloroethane	8260	0.05	<0.048	<0.048	<0.048	0.05
Ethylene dibromide (EDB)	8260	0.05	<0.048	<0.048	<0.048	0.05
1,1,1-trichloroethane	8260	0.05	<0.048	<0.048	<0.048	0.05
1,1,2-trichloroethane	8260	0.05	<0.048	<0.048	<0.048	0.05
1,1,2,2-tetrachloroethane	8260	0.05	<0.048	<0.048	<0.048	0.05
Vinyl chloride	8260	0.05	<0.048	<0.048	<0.048	0.05
Total naphthalene	8260	0.1	<0.095	<0.095	<0.095	0.1
1-methylnaphthalene	8260	0.2	<0.19	<0.19	<0.19	0.2
2-methylnaphthalene	8260	0.2	<0.19	<0.19	<0.19	0.2
Benzo-a-pyrene	8310	0.01	<0.010	<0.010	<0.010	0.01
Copper	6010B	0.3	3.4	5.4	14*	3.4
Iron	6010B	2.5	6,500*	10,000*	25,000*	6,500
Magnesium	6010B	25	960	980*	3,100*	na
Manganese	6010B	0.1	140	170	310*	140
Phenols	9066	0.67	<0.67	0.82	<0.67	0.67
Sulfate	300.0	1.5	<7.5*	<1.5	16	1.5
Total Dissolved Solids (TDS)	Cannot be performed on soil	na	na	na	na	
Zinc	6010B	2.5	13	19	56*	13
pH	SM4500 H+B	na	8.42	7.78	7.95	

Notes:
[+]Practical Quantitation Limit
*Sample was diluted - final PQL is multiplied by Dilution Factor
Samples analyzed at Hall Environmental Analysis Laboratory, Albuquerque, NM

TABLE 2
SUMMARY OF GROUNDWATER MEASUREMENT AND WATER QUALITY DATA
BMG Landfarm, Rio Arriba County, New Mexico

Well ID	Date Measured	Top of Casing Elevation (ft amsl)	Depth to Water (ft)	Water Level Elevation (ft amsl)	Temp. (°C)	Specific Conduct. (mS)	Dissolved Oxygen (mg/L)	pH	ORP (mV)
MW-1	29-Mar-13	NS	40.52	-40.52	12.09	0.707	6.60	7.36	20.5
MW-1	01-Jul-13	NS	41.70	-41.70	13.05	0.868	5.06	7.23	225.5
MW-1	09-Oct-13	NS	40.52	-40.52	12.59	0.831	17.23	7.02	205.5
MW-1	31-Mar-14	NS	40.51	-40.51	11.50	0.734	2.52	7.46	167.7
MW-1	30-Sep-14	NS	39.70	-39.70	12.92	0.901	NM	8.29	297.3
MW-1	02-Dec-14	NS	39.59	-39.59	11.66	0.928	NM	8.14	157.3
MW-1	26-Mar-15	NS	39.45	-39.45	11.99	0.853	2.36	7.53	210.9
MW-1	23-Jun-15	NS	39.50	-39.50	14.52	0.993	NM	7.44	127.8
MW-1	24-Sep-15	NS	39.57	-39.57	12.68	0.877	NM	7.30	85.9
MW-1	10-Dec-15	NS	39.39	-39.39	11.79	0.892	4.27	7.80	-192.0
MW-1	04-Mar-16	NS	39.36	-39.36	12.19	0.023	4.18	7.09	188.1
MW-1	17-Jun-16	NS	39.54	-39.54	12.50	1.242	8.79	6.95	118.2
MW-1	23-Sep-16	NS	39.66	-39.66	11.31	1.108	8.59	7.47	167.0
MW-1	19-Dec-16	NS	39.81	-39.81	10.93	0.995	5.06	7.59	168.6
MW-1	13-Apr-17	NS	39.82	-39.82	NM	NM	NM	NM	NM
MW-1	20-Jun-17	NS	39.88	-39.88	13.23	1.017	5.95	7.35	130.2
MW-1	14-Sep-17	NS	39.95	-39.95	14.11	1.007	7.90	7.35	190.8
MW-1	14-Dec-17	NS	39.64	-39.64	10.09	1.027	4.87	7.56	159.8
MW-1	14-Mar-18	NS	39.70	-39.70	12.09	0.832	6.10	7.52	87.8
MW-1	12-Jun-18	NS	39.93	-39.93	12.3	0.79	4.64	7.23	148.5
MW-1	17-Sep-18	NS	40.02	-40.02	12.7	0.686	4.86	7.49	153.3
MW-1	19-Dec-18	NS	40.12	-40.12	11.5	0.565	3.13	7.55	154.4
MW-1	28-Mar-19	NS	40.22	-40.22	12.3	0.863	6.75	7.35	220.2
MW-1	03-Jul-19	NS	39.04	-39.04	13.5	0.818	3.16	7.48	139.4
MW-1	30-Sep-19	NS	38.89	-38.89	12.6	0.846	3.09	6.66	163.8
MW-1	30-Jan-20	NS	38.88	-38.88	10.7	1.031	7.08	7.71	163.2
MW-1	26-Mar-20	NS	38.94	-38.94	11.8	1.02	5.45	7.34	184.8
MW-1	24-Jun-20	NS	39.11	-39.11	13.0	1.01	4.52	7.30	173.6
MW-1	29-Sep-20	NS	39.26	-39.26	15.7	0.864	5.14	7.40	168.2
MW-1	08-Dec-20	NS	39.37	-39.37	13.0	0.748	3.33	7.39	159.7
MW-2	29-Mar-13	NS	41.54	-41.54	11.84	1.268	3.74	7.42	20.4
MW-2	01-Jul-13	NS	41.70	-41.70	16.20	0.855	4.83	7.46	175.5
MW-2	09-Oct-13	NS	41.56	-41.56	11.89	0.830	17.26	6.96	208.9
MW-2	31-Mar-14	NS	41.70	-41.70	11.56	0.760	5.51	7.63	94.7

TABLE 2
SUMMARY OF GROUNDWATER MEASUREMENT AND WATER QUALITY DATA
BMG Landfarm, Rio Arriba County, New Mexico

Well ID	Date Measured	Top of Casing Elevation (ft amsl)	Depth to Water (ft)	Water Level Elevation (ft amsl)	Temp. (°C)	Specific Conduct. (mS)	Dissolved Oxygen (mg/L)	pH	ORP (mV)
MW-2	01-Oct-14	NS	40.82	-40.82	11.36	0.947	NM	8.18	294.0
MW-2	02-Dec-14	NS	40.68	-40.68	11.18	0.959	NM	8.76	135.2
MW-2	26-Mar-15	NS	40.62	-40.62	11.40	0.907	2.07	7.42	219.3
MW-2	23-Jun-15	NS	40.62	-40.62	13.42	1.004	NM	7.48	136.8
MW-2	24-Sep-15	NS	40.65	-40.65	12.81	0.961	NM	7.34	92.6
MW-2	10-Dec-15	NS	40.51	-40.51	11.46	1.050	5.17	7.85	-165.5
MW-2	04-Mar-16	NS	40.53	-40.53	12.02	1.751	6.41	7.31	176.3
MW-2	17-Jun-16	NS	40.62	-40.62	12.80	2.209	13.70	7.15	111.0
MW-2	23-Sep-16	NS	40.75	-40.75	11.10	1.987	7.93	7.41	183.4
MW-2	19-Dec-16	NS	40.86	-40.86	10.22	2.209	6.80	7.64	171.6
MW-2	13-Apr-17	NS	40.90	-40.90	NM	NM	NM	NM	NM
MW-2	20-Jun-17	NS	40.94	-40.94	13.04	2.808	8.50	7.36	150.9
MW-2	14-Sep-17	NS	41.01	-41.01	14.25	3.053	10.29	7.37	168.0
MW-2	14-Dec-17	NS	40.70	-40.70	9.87	2.189	6.87	7.53	198.7
MW-2	14-Mar-18	NS	40.74	-40.74	11.76	2.650	8.17	7.54	85.5
MW-2	12-Jun-18	NS	40.97	-40.97	12.1	2.18	7.86	7.24	168.5
MW-2	17-Sep-18	NS	41.06	-41.06	14.1	0.895	7.39	7.54	155.3
MW-2	19-Dec-18	NS	41.14	-41.14	11.0	1.540	5.60	7.43	151.2
MW-2	28-Mar-19	NS	40.52	-40.52	12.1	2.388	3.52	7.22	230.8
MW-2	03-Jul-19	NS	41.25	-41.25	13.0	1.423	4.53	7.57	142.8
MW-2	30-Sep-19	NS	39.93	-39.93	11.9	1.121	4.32	6.63	163.5
MW-2	30-Jan-20	NS	39.94	-39.94	10.7	1.522	9.04	7.74	177.8
MW-2	26-Mar-20	NS	40.01	-40.01	11.4	1.45	6.92	7.40	202.3
MW-2	24-Jun-20	NS	40.15	-40.15	14.0	1.79	6.35	7.32	174.7
MW-2	29-Sep-20	NS	40.31	-40.31	12.1	1.168	6.11	7.36	162.8
MW-2	08-Dec-20	NS	40.40	-40.40	11.8	1.114	6.70	7.40	162.0
MW-3	29-Mar-13	NS	40.77	-40.77	12.33	1.298	3.82	7.45	16.0
MW-3	01-Jul-13	NS	40.92	-40.92	14.02	0.427	6.21	7.32	131.5
MW-3	09-Oct-13	NS	40.83	-40.83	12.86	0.815	15.23	7.00	210.2
MW-3	31-Mar-14	NS	40.83	-40.83	11.38	0.729	5.33	7.51	144.6
MW-3	30-Sep-14	NS	40.13	-40.13	12.86	0.895	NM	7.96	339.0
MW-3	02-Dec-14	NS	39.98	-39.98	11.21	0.922	NM	8.39	145.9
MW-3	26-Mar-15	NS	39.92	-39.92	11.40	0.878	3.50	7.43	229.2
MW-3	23-Jun-15	NS	39.89	-39.89	13.39	0.919	NM	7.29	145.2

TABLE 2
SUMMARY OF GROUNDWATER MEASUREMENT AND WATER QUALITY DATA
BMG Landfarm, Rio Arriba County, New Mexico

Well ID	Date Measured	Top of Casing Elevation (ft amsl)	Depth to Water (ft)	Water Level Elevation (ft amsl)	Temp. (°C)	Specific Conduct. (mS)	Dissolved Oxygen (mg/L)	pH	ORP (mV)
MW-3	24-Sep-15	NS	39.98	-39.98	12.78	0.799	NM	6.24	132.7
MW-3	10-Dec-15	NS	39.81	-39.81	11.22	0.728	3.98	7.66	-147.7
MW-3	04-Mar-16	NS	39.82	-39.82	11.88	0.901	5.71	7.26	164.0
MW-3	17-Jun-16	NS	39.90	-39.90	12.94	0.922	8.04	6.86	92.9
MW-3	23-Sep-16	NS	40.03	-40.03	11.87	0.904	7.74	6.90	236.5
MW-3	19-Dec-16	NS	40.15	-40.15	9.84	0.884	6.33	7.54	166.4
MW-3	13-Apr-17	NS	40.18	-40.18	NM	NM	NM	NM	NM
MW-3	20-Jun-17	NS	40.23	-40.23	13.03	0.961	7.66	7.30	140.7
MW-3	14-Sep-17	NS	40.31	-40.31	13.20	0.982	7.30	7.31	160.5
MW-3	14-Dec-17	NS	40.01	-40.01	11.11	0.923	4.23	6.79	195.7
MW-3	14-Mar-18	NS	40.04	-40.04	12.09	0.825	6.63	7.49	84.9
MW-3	12-Jun-18	NS	40.25	-40.25	12.0	0.81	5.99	7.14	119.9
MW-3	17-Sep-18	NS	40.36	-40.36	13.4	0.770	4.75	7.42	155.9
MW-3	19-Dec-18	NS	40.43	-40.43	11.3	0.92	3.67	7.48	149.4
MW-3	28-Mar-19	NS	39.80	-39.80	12.7	0.898	1.17	7.24	222.7
MW-3	03-Jul-19	NS	39.45	-39.45	12.9	0.959	3.55	7.60	135.0
MW-3	30-Sep-19	NS	39.27	-39.27	13.1	1.017	3.65	6.67	146.4
MW-3	30-Jan-20	NS	39.24	-39.24	11.0	1.314	7.90	7.70	166.8
MW-3	26-Mar-20	NS	39.29	-39.29	11.9	1.35	5.26	7.30	204.0
MW-3	24-Jun-20	NS	39.45	-39.45	12.9	1.51	3.76	7.21	180.9
MW-3	29-Sep-20	NS	39.59	-39.59	13.0	1.295	5.56	7.27	165.0
MW-3	08-Dec-20	NS	39.69	-39.69	12.0	1.273	6.08	7.35	155.7
MW-4	29-Mar-13	NS	41.32	-41.32	11.25	1.388	7.14	7.32	20.6
MW-4	01-Jul-13	NS	41.47	-41.47	13.81	0.890	6.27	6.38	197.7
MW-4	09-Oct-13	NS	41.35	-41.35	12.82	0.840	20.23	7.05	215.1
MW-4	31-Mar-14	NS	41.34	-41.34	12.09	0.757	5.17	7.68	163.1
MW-4	30-Sep-14	NS	40.55	-40.55	12.24	0.940	NM	8.17	276.5
MW-4	02-Dec-14	NS	40.43	-40.43	11.48	0.938	NM	7.96	156.6
MW-4	26-Mar-15	NS	40.34	-40.34	12.08	0.902	2.81	7.33	217.1
MW-4	23-Jun-15	NS	40.36	-40.36	14.12	1.021	NM	7.32	147.3
MW-4	24-Sep-15	NS	40.43	-40.43	12.76	0.931	NM	7.18	99.7
MW-4	10-Dec-15	NS	40.26	-40.26	11.70	1.091	3.91	7.71	-190.2
MW-4	04-Mar-16	NS	40.24	-40.24	11.99	1.279	6.52	7.28	162.8
MW-4	17-Jun-16	NS	40.41	-40.41	12.78	1.537	12.28	6.95	104.4

TABLE 2
SUMMARY OF GROUNDWATER MEASUREMENT AND WATER QUALITY DATA
BMG Landfarm, Rio Arriba County, New Mexico

Well ID	Date Measured	Top of Casing Elevation (ft amsl)	Depth to Water (ft)	Water Level Elevation (ft amsl)	Temp. (°C)	Specific Conduct. (mS)	Dissolved Oxygen (mg/L)	pH	ORP (mV)
MW-4	23-Sep-16	NS	40.53	-40.53	11.47	1.589	9.68	7.51	174.8
MW-4	19-Dec-16	NS	40.67	-40.67	10.64	1.355	5.98	7.51	170.3
MW-4	13-Apr-17	NS	40.68	-40.68	NM	NM	NM	NM	NM
MW-4	20-Jun-17	NS	40.75	-40.75	13.89	1.336	7.70	7.29	141.9
MW-4	14-Sep-17	NS	40.83	-40.83	14.32	1.354	8.25	7.21	194.3
MW-4	14-Dec-17	NS	40.51	-40.51	10.18	1.387	5.52	7.37	193.6
MW-4	14-Mar-18	NS	40.56	-40.56	12.02	1.089	6.70	7.55	85.1
MW-4	12-Jun-18	NS	40.80	-40.80	12.1	1.03	5.59	7.16	141.6
MW-4	17-Sep-18	NS	40.90	-40.90	14.6	1.18	4.29	7.14	152.7
MW-4	19-Dec-18	NS	40.98	-40.98	11.8	0.94	3.84	7.38	134.7
MW-4	28-Mar-19	NS	39.40	-39.40	12.5	0.712	2.81	7.41	217.3
MW-4	03-Jul-19	NS	39.89	-39.89	12.2	0.760	4.59	7.77	133.4
MW-4	30-Sep-19	NS	39.78	-39.78	12.0	0.829	4.22	6.93	162.6
MW-4	30-Jan-20	NS	39.75	-39.75	10.6	1.129	7.66	7.67	153.9
MW-4	26-Mar-20	NS	39.81	-39.81	11.4	1.15	6.31	7.25	208.8
MW-4	24-Jun-20	NS	39.96	-39.96	12.3	1.05	5.20	7.11	198.1
MW-4	29-Sep-20	NS	40.11	-40.11	11.9	0.812	4.64	7.03	164.4
MW-4	08-Dec-20	NS	40.22	-40.22	11.7	0.811	4.25	7.32	174.0
Intstl Well	29-Mar-13	NS	9.77	-9.77	8.84	261.3	0.84	6.56	9.7
Intstl Well	01-Jul-13	NS	9.70	-9.70	18.31	86.76	3.79	7.14	9.6
Intstl Well	09-Oct-13	NS	9.82	-9.82	16.84	148.2	3.60	6.57	34.5
Intstl Well	31-Mar-14	NS	9.92	-9.92	7.65	139.2	2.01	6.68	93.9
Intstl Well	01-Oct-14	NS	9.50	-9.50	NM	NM	NM	NM	NM
Intstl Well	26-Mar-15	NS	9.83	-9.83	NM	NM	NM	NM	NM
Intstl Well	23-Jun-15	NS	10.66	-10.66	18.36	139.0	0.00	6.82	97.6
Intstl Well	24-Sep-15	NS	11.33	-11.33	20.42	139.3	2.87	7.06	73.4
Intstl Well	23-Sep-16	NS	NM	NM	NM	NM	NM	NM	NM
Intstl Well	19-Dec-16	NS	NM	NM	NM	NM	NM	NM	NM
Intstl Well	13-Apr-17	NS	10.16	-10.16	NM	NM	NM	NM	NM
Intstl Well	20-Jun-17	NS	NM	NM	NM	NM	NM	NM	NM
Intstl Well	14-Sep-17	NS	NM	NM	NM	NM	NM	NM	NM
Intstl Well	14-Dec-17	NS	NM	NM	NM	NM	NM	NM	NM
Intstl Well	14-Mar-18	NS	11.12	NM	NM	NM	NM	NM	NM
Intstl Well	12-Jun-18	NS	10.35	NM	NM	NM	NM	NM	NM

TABLE 2
SUMMARY OF GROUNDWATER MEASUREMENT AND WATER QUALITY DATA
BMG Landfarm, Rio Arriba County, New Mexico

Well ID	Date Measured	Top of Casing Elevation (ft amsl)	Depth to Water (ft)	Water Level Elevation (ft amsl)	Temp. (°C)	Specific Conduct. (mS)	Dissolved Oxygen (mg/L)	pH	ORP (mV)
Intstl Well	17-Sep-18	NS	10.74	NM	NM	NM	NM	NM	NM
Intstl Well	19-Dec-18	NS	10.18	NM	NM	NM	NM	NM	NM
Intstl Well	28-Mar-19	NS	10.71	-10.71	NM - Minimal Water Recharge				
Intstl Well	30-Sep-19	NS	9.91	-9.91	NM - Minimal Water Recharge				
Intstl Well	30-Jan-20	NS	11.15	-11.15	NM - Insufficient Water				
Intstl Well	26-Mar-20	NS	11.12	-11.12	NM - Insufficient Water				
Intstl Well	24-Jun-20	NS	10.58	-10.58	NM - Insufficient Water				
Intstl Well	29-Sep-20	NS	10.61	-10.61	NM - Insufficient Water				
Intstl Well	08-Dec-20	NS	10.49	-10.49	NM - Insufficient Water				

Notes: NM - Not Measured
NS - Not Surveyed

TABLE 3
SUMMARY OF GROUNDWATER ANALYTICAL RESULTS
BMG Landfarm, Rio Arriba County, New Mexico

Well ID	Date	Benzene (µg/L)	Toluene (µg/L)	Ethyl-Benzene (µg/L)	Total Xylenes (µg/L)	GRO (mg/L)	DRO (mg/L)	MRO (mg/L)	Chloride (mg/L)	TDS (mg/L)
	Method	8021B	8021B	8021B	8021B	8015D	8015D	8015D	300.0	SM2540C
NM WQCC STANDARD		5	1,000	700	620	0.0101*	0.0167*	NE	250**	1000**
MW-1	18-Sep-12	<2.0	<2.0	<2.0	<4.0	<0.10	<1.0	NA	11	654
MW-1	6-Dec-12	<1.0	<1.0	<1.0	<2.0	<0.050	<1.0	<5.0	10	610
MW-1	29-Mar-13	<2.0	<2.0	<2.0	<4.0	<0.10	<1.0	<5.0	9.6	810
MW-1	1-Jul-13	<2.0	<2.0	<2.0	<4.0	<0.10	<1.0	<5.0	9.2	640
MW-1	9-Oct-13	<1.0	<1.0	<1.0	<2.0	<0.050	<1.0	<5.0	9.7	690
MW-1	31-Mar-14	<1.0	<1.0	<1.0	<2.0	<0.050	<1.0	<5.0	9.2	612
MW-1	30-Sep-14	<1.0	<1.0	<1.0	<2.0	<0.050	<1.0	<5.0	10	614
MW-1	2-Dec-14	<1.0	<1.0	<1.0	<2.0	<0.050	<1.0	<5.0	14	660
MW-1	26-Mar-15	<1.0	<1.0	<1.0	<2.0	<0.050	<1.0	<5.0	14	580
MW-1	23-Jun-15	<2.0	<2.0	<2.0	<4.0	<0.10	<1.0	<5.0	61	720
MW-1	24-Sep-15	<1.0	<1.0	<1.0	<2.0	<0.050	<1.0	<5.0	38	710
MW-1	10-Dec-15	<1.0	<1.0	<1.0	<2.0	<0.050	<1.0	<5.0	43	627
MW-1	04-Mar-16	<1.0	<1.0	<1.0	<2.0	<0.050	<1.0	<5.0	68	666
MW-1	17-Jun-16	<1.0	<1.0	<1.0	<1.5	<0.050	<1.0	<5.0	96	769
MW-1	23-Sep-16	<1.0	<1.0	<1.0	<2.0	<0.050	<1.0	<5.0	60	687
MW-1	19-Dec-16	<1.0	<1.0	<1.0	<1.5	<0.050	<1.0	<5.0	48	658
MW-1	13-Apr-17	<1.0	<1.0	<1.0	<1.5	<0.050	<1.0	<5.0	26	690
MW-1	20-Jun-17	<1.0	<1.0	<1.0	<1.5	<0.050	<1.0	<5.0	25	662
MW-1	14-Sep-17	<1.0	<1.0	<1.0	<2.0	<0.050	<1.0	<5.0	23	615
MW-1	14-Dec-17	<1.0	<1.0	<1.0	<1.5	<0.050	<1.0	<5.0	22	620
MW-1	14-Mar-18	<1.0	<1.0	<1.0	<2.0	<0.050	<1.0	<5.0	26	642
MW-1	12-Jun-18	<1.0	<1.0	<1.0	<1.5	<0.050	1.5	<5.0	19	620
MW-1	17-Sep-18	<1.0	<1.0	<1.0	<2.0	<0.050	<1.0	<5.0	16	570

TABLE 3
SUMMARY OF GROUNDWATER ANALYTICAL RESULTS
BMG Landfarm, Rio Arriba County, New Mexico

Well ID	Date	Benzene (µg/L)	Toluene (µg/L)	Ethyl-Benzene (µg/L)	Total Xylenes (µg/L)	GRO (mg/L)	DRO (mg/L)	MRO (mg/L)	Chloride (mg/L)	TDS (mg/L)
	Method	8021B	8021B	8021B	8021B	8015D	8015D	8015D	300.0	SM2540C
NM WQCC STANDARD		5	1,000	700	620	0.0101*	0.0167*	NE	250**	1000**
MW-1	19-Dec-18	<1.0	<1.0	<1.0	<2.0	<0.050	<1.0	<5.0	16	595
MW-1	28-Mar-19	<1.0	<1.0	<1.0	<1.5	<0.050	<1.0	<5.0	120	714
MW-1	03-Jul-19	<1.0	<1.0	<1.0	<2.0	<0.050	<1.0	<5.0	31	715
MW-1	30-Sep-19	<1.0	<1.0	<1.0	<2.0	<0.050	<1.0	<5.0	45	716
MW-1	30-Jan-20	<1.0	<1.0	<1.0	<2.0	<0.050	<1.0	<5.0	28	730
MW-1	26-Mar-20	<1.0	<1.0	<1.0	<1.5	<0.050	<1.0	<5.0	23	642
MW-1	24-Jun-20	<1.0	<1.0	<1.0	<1.5	<0.050	<1.0	<5.0	18	648
MW-1	29-Sep-20	<1.0	<1.0	<1.0	<1.5	<0.050	5.4	<5.0	21	614
MW-1	08-Dec-20	<1.0	<1.0	<1.0	<1.5	<0.050	<1.0	<5.0	22	634
MW-2	18-Sep-12	<2.0	<2.0	<2.0	<4.0	<0.10	<1.0	NA	30	615
MW-2	6-Dec-12	<2.0	<2.0	<2.0	<4.0	<0.10	<1.0	<5.0	32	500
MW-2	29-Mar-13	<2.0	<2.0	<2.0	<4.0	<0.10	<1.0	<5.0	28	590
MW-2	1-Jul-13	<1.0	<1.0	<1.0	<2.0	<0.050	<1.0	<5.0	26	580
MW-2	9-Oct-13	<1.0	<1.0	<1.0	<2.0	<0.050	<1.0	<5.0	26	790
MW-2	31-Mar-14	<1.0	<1.0	<1.0	<2.0	<0.050	<1.0	<5.0	30	630
MW-2	1-Oct-14	<1.0	<1.0	<1.0	<2.0	<0.050	<1.0	<5.0	31	632
MW-2	2-Dec-14	<1.0	<1.0	<1.0	<2.0	<0.050	<1.0	<5.0	34	780
MW-2	26-Mar-15	<1.0	<1.0	<1.0	<2.0	<0.050	<1.0	<5.0	33	600
MW-2	23-Jun-15	<2.0	<2.0	<2.0	<4.0	<0.10	<1.0	<5.0	33	720
MW-2	24-Sep-15	<1.0	<1.0	<1.0	<2.0	<0.050	<1.0	<5.0	48	740
MW-2	10-Dec-15	<1.0	<1.0	<1.0	<2.0	<0.050	<1.0	<5.0	170	902
MW-2	04-Mar-16	<1.0	<1.0	<1.0	<2.0	<0.050	<1.0	<5.0	280	1,040

TABLE 3
SUMMARY OF GROUNDWATER ANALYTICAL RESULTS
BMG Landfarm, Rio Arriba County, New Mexico

Well ID	Date	Benzene (µg/L)	Toluene (µg/L)	Ethyl-Benzene (µg/L)	Total Xylenes (µg/L)	GRO (mg/L)	DRO (mg/L)	MRO (mg/L)	Chloride (mg/L)	TDS (mg/L)
	Method	8021B	8021B	8021B	8021B	8015D	8015D	8015D	300.0	SM2540C
NM WQCC STANDARD		5	1,000	700	620	0.0101*	0.0167*	NE	250**	1000**
MW-2	17-Jun-16	<1.0	<1.0	<1.0	<1.5	<0.050	<1.0	<5.0	460	1,400
MW-2	23-Sep-16	<1.0	<1.0	<1.0	<2.0	<0.050	<1.0	<5.0	380	1,230
MW-2	19-Dec-16	<1.0	<1.0	<1.0	<2.0	<0.050	<1.0	<5.0	470	1,370
MW-2	13-Apr-17	<1.0	<1.0	<1.0	<1.5	<0.050	<1.0	<5.0	520	1,770
MW-2	20-Jun-17	<1.0	<1.0	<1.0	<1.5	<0.050	<1.0	<5.0	770	2,160
MW-2	14-Sep-17	<1.0	<1.0	<1.0	<2.0	<0.050	<1.0	<5.0	700	2,030
MW-2	14-Dec-17	<1.0	<1.0	<1.0	<1.5	<0.050	<1.0	<5.0	770	2,400
MW-2	14-Mar-18	<1.0	<1.0	<1.0	<2.0	<0.050	<1.0	<5.0	790	1,980
MW-2	12-Jun-18	<1.0	<1.0	<1.0	<1.5	<0.050	1.3	<5.0	620	1,890
MW-2	17-Sep-18	<1.0	<1.0	<1.0	<2.0	<0.050	<1.0	<5.0	580	1,750
MW-2	19-Dec-18	<1.0	<1.0	<1.0	<2.0	<0.050	<1.0	<5.0	600	1,420
MW-2	28-Mar-19	<1.0	<1.0	<1.0	<1.5	<0.050	<1.0	<5.0	840	2,020
MW-2	03-Jul-19	<1.0	<1.0	<1.0	<2.0	<0.050	<1.0	<5.0	310	1,060
MW-2	30-Sep-19	<1.0	<1.0	<1.0	<2.0	<0.050	<1.0	<5.0	240	1,040
MW-2	30-Jan-20	<1.0	<1.0	<1.0	<2.0	<0.050	<1.0	<5.0	240	950
MW-2	26-Mar-20	<1.0	<1.0	<1.0	<1.5	<0.050	<1.0	<5.0	250	898
MW-2	24-Jun-20	<1.0	<1.0	<1.0	<1.5	<0.050	<1.0	<5.0	310	1,030
MW-2	29-Sep-20	<1.0	<1.0	<1.0	<1.5	<0.050	<1.0	<5.0	270	1,140
MW-2	08-Dec-20	<1.0	<1.0	<1.0	<1.5	<0.050	<1.0	<5.0	300	902
MW-3	18-Sep-12	<1.0	<1.0	<1.0	<2.0	<0.050	<1.0	NA	23	690
MW-3	6-Dec-12	<2.0	<2.0	<2.0	<4.0	<0.10	<1.0	<5.0	22	600
MW-3	29-Mar-13	<2.0	<2.0	<2.0	<4.0	<0.10	<1.0	<5.0	20	680

TABLE 3
SUMMARY OF GROUNDWATER ANALYTICAL RESULTS
BMG Landfarm, Rio Arriba County, New Mexico

Well ID	Date	Benzene (µg/L)	Toluene (µg/L)	Ethyl-Benzene (µg/L)	Total Xylenes (µg/L)	GRO (mg/L)	DRO (mg/L)	MRO (mg/L)	Chloride (mg/L)	TDS (mg/L)
	Method	8021B	8021B	8021B	8021B	8015D	8015D	8015D	300.0	SM2540C
NM WQCC STANDARD		5	1,000	700	620	0.0101*	0.0167*	NE	250**	1000**
MW-3	1-Jul-13	<2.0	<2.0	<2.0	<4.0	<0.10	<1.0	<5.0	20	630
MW-3	9-Oct-13	<1.0	<1.0	<1.0	<2.0	<0.050	<1.0	<5.0	21	620
MW-3	31-Mar-14	<1.0	<1.0	<1.0	<2.0	<0.050	<1.0	<5.0	18	544
MW-3	30-Sep-14	<1.0	<1.0	<1.0	<2.0	<0.050	<1.0	<5.0	19	574
MW-3	2-Dec-14	<1.0	<1.0	<1.0	<2.0	<0.050	<1.0	<5.0	21	580
MW-3	26-Mar-15	<1.0	<1.0	<1.0	<2.0	<0.050	<1.0	<5.0	23	601
MW-3	23-Jun-15	<2.0	<2.0	<2.0	<4.0	<0.10	<1.0	<5.0	24	680
MW-3	24-Sep-15	<1.0	<1.0	<1.0	<2.0	<0.050	<1.0	<5.0	23	570
MW-3	10-Dec-15	<1.0	<1.0	<1.0	<2.0	<0.050	<1.0	<5.0	22	540
MW-3	04-Mar-16	<1.0	<1.0	<1.0	<2.0	<0.050	<1.0	<5.0	21	620
MW-3	17-Jun-16	<1.0	<1.0	<1.0	<1.5	<0.050	<1.0	<5.0	22	600
MW-3	23-Sep-16	<1.0	<1.0	<1.0	<2.0	<0.050	<1.0	<5.0	23	561
MW-3	19-Dec-16	<1.0	<1.0	<1.0	<2.0	<0.050	<1.0	<5.0	24	534
MW-3	13-Apr-17	<1.0	<1.0	<1.0	<1.5	<0.050	<1.0	<5.0	25	655
MW-3	20-Jun-17	<1.0	<1.0	<1.0	<1.5	<0.050	<1.0	<5.0	28	590
MW-3	14-Sep-17	<1.0	<1.0	<1.0	<2.0	<0.050	<1.0	<5.0	30	595
MW-3	14-Dec-17	<1.0	<1.0	<1.0	<1.5	<0.050	<1.0	<5.0	32	598
MW-3	14-Mar-18	<1.0	<1.0	<1.0	<2.0	<0.050	<1.0	<5.0	33	612
MW-3	12-Jun-18	<1.0	<1.0	<1.0	<1.5	<0.050	<1.0	<5.0	37	626
MW-3	17-Sep-18	<1.0	<1.0	<1.0	<2.0	<0.050	<1.0	<5.0	62	640
MW-3	19-Dec-18	<1.0	<1.0	<1.0	<2.0	<0.050	<1.0	<5.0	76	688
MW-3	28-Mar-19	<1.0	<1.0	<1.0	<1.5	<0.050	<1.0	<5.0	85	734
MW-3	03-Jul-19	<1.0	<1.0	<1.0	<2.0	<0.050	<1.0	<5.0	120	780

TABLE 3
SUMMARY OF GROUNDWATER ANALYTICAL RESULTS
BMG Landfarm, Rio Arriba County, New Mexico

Well ID	Date	Benzene (µg/L)	Toluene (µg/L)	Ethyl-Benzene (µg/L)	Total Xylenes (µg/L)	GRO (mg/L)	DRO (mg/L)	MRO (mg/L)	Chloride (mg/L)	TDS (mg/L)
	Method	8021B	8021B	8021B	8021B	8015D	8015D	8015D	300.0	SM2540C
NM WQCC STANDARD		5	1,000	700	620	0.0101*	0.0167*	NE	250**	1000**
MW-3	30-Sep-19	<1.0	<1.0	<1.0	<2.0	<0.050	<1.0	<5.0	150	855
MW-3	30-Jan-20	<1.0	<1.0	<1.0	<2.0	<0.050	<1.0	<5.0	160	920
MW-3	26-Mar-20	<1.0	<1.0	<1.0	<1.5	<0.050	<1.0	<5.0	170	772
MW-3	24-Jun-20	<1.0	<1.0	<1.0	<1.0	<0.050	<1.0	<5.0	200	850
MW-3	29-Sep-20	<1.0	<1.0	<1.0	<1.5	<0.050	<1.0	<5.0	240	1100
MW-3	08-Dec-20	<1.0	<1.0	<1.0	<1.5	<0.050	<1.0	<5.0	290	960
MW-4	18-Sep-12	<1.0	<1.0	<1.0	<2.0	<0.050	<1.0	NA	16	660
MW-4	6-Dec-12	<1.0	<1.0	<1.0	<2.0	<0.050	<1.0	<5.0	14	760
MW-4	29-Mar-13	<2.0	<2.0	<2.0	<4.0	<0.10	<1.0	<5.0	12	750
MW-4	1-Jul-13	<1.0	<1.0	<1.0	<2.0	<0.050	<1.0	<5.0	10	608
MW-4	9-Oct-13	<1.0	<1.0	<1.0	<2.0	<0.050	<1.0	<5.0	11	690
MW-4	31-Mar-14	<1.0	<1.0	<1.0	<2.0	<0.050	<1.0	<5.0	12	600
MW-4	30-Sep-14	<1.0	<1.0	<1.0	<2.0	<0.050	<1.0	<5.0	15	618
MW-4	2-Dec-14	<2.0	<2.0	<2.0	<4.0	<0.10	<1.0	<5.0	21	770
MW-4	26-Mar-15	<1.0	<1.0	<1.0	<2.0	<0.050	<1.0	<5.0	34	615
MW-4	23-Jun-15	<2.0	<2.0	<2.0	<4.0	<0.10	<1.0	<5.0	73	1090
MW-4	24-Sep-15	<1.0	<1.0	<1.0	<2.0	<0.050	<1.0	<5.0	97	635
MW-4	10-Dec-15	<1.0	<1.0	<1.0	<2.0	<0.050	<1.0	<5.0	250	782
MW-4	04-Mar-16	<1.0	<1.0	<1.0	<2.0	<0.050	<1.0	<5.0	170	721
MW-4	17-Jun-16	<1.0	<1.0	<1.0	<1.5	<0.050	<1.0	<5.0	290	938
MW-4	23-Sep-16	<1.0	<1.0	<1.0	<2.0	<0.050	<1.0	<5.0	250	879
MW-4	19-Dec-16	<1.0	<1.0	<1.0	<2.0	<0.050	<1.0	<5.0	250	800

TABLE 3
SUMMARY OF GROUNDWATER ANALYTICAL RESULTS
BMG Landfarm, Rio Arriba County, New Mexico

Well ID	Date	Benzene (µg/L)	Toluene (µg/L)	Ethyl-Benzene (µg/L)	Total Xylenes (µg/L)	GRO (mg/L)	DRO (mg/L)	MRO (mg/L)	Chloride (mg/L)	TDS (mg/L)
	Method	8021B	8021B	8021B	8021B	8015D	8015D	8015D	300.0	SM2540C
NM WQCC STANDARD		5	1,000	700	620	0.0101*	0.0167*	NE	250**	1000**
MW-4	13-Apr-17	<1.0	<1.0	<1.0	<1.5	<0.050	<1.0	<5.0	180	790
MW-4	20-Jun-17	<1.0	<1.0	<1.0	<1.5	<0.050	<1.0	<5.0	180	744
MW-4	14-Sep-17	<1.0	<1.0	<1.0	<2.0	<0.050	<1.0	<5.0	170	775
MW-4	14-Dec-17	<1.0	<1.0	<1.0	<1.5	<0.050	<1.0	<5.0	170	754
MW-4	14-Mar-18	<1.0	<1.0	<1.0	<2.0	<0.050	<1.0	<5.0	160	694
MW-4	12-Jun-18	<1.0	<1.0	<1.0	<1.5	<0.050	<1.0	<5.0	150	751
MW-4	17-Sep-18	<1.0	<1.0	<1.0	<2.0	<0.050	<1.0	<5.0	110	930
MW-4	19-Dec-18	<1.0	<1.0	<1.0	<2.0	<0.050	<1.0	<5.0	94	644
MW-4	28-Mar-19	<1.0	<1.0	<1.0	<1.5	<0.050	<1.0	<5.0	19	594
MW-4	03-Jul-19	<1.0	<1.0	<1.0	<2.0	<0.050	<1.0	<5.0	84	620
MW-4	30-Sep-19	<1.0	<1.0	<1.0	<2.0	<0.050	<1.0	<5.0	99	750
MW-4	30-Jan-20	<1.0	<1.0	<1.0	<2.0	<0.050	<1.0	<5.0	110	790
MW-4	26-Mar-20	<1.0	<1.0	<1.0	<1.5	<0.050	<1.0	<5.0	100	930
MW-4	24-Jun-20	<1.0	<1.0	<1.0	<1.5	<0.050	<1.0	<5.0	63	840
MW-4	29-Sep-20	<1.0	<1.0	<1.0	<1.5	<0.050	<1.0	<5.0	53	690
MW-4	08-Dec-20	<1.0	<1.0	<1.0	<1.5	<0.050	<1.0	<5.0	59	676
Intstl Well	18-Sep-12	<5.0	<5.0	<5.0	<10	<0.25	<3.0	NA	120,000	170,000
Intstl Well	6-Dec-12	<10	<10	<10	<20	<0.50	6.9	<5.0	110,000	159,000
Intstl Well	29-Mar-13	<10	<10	<10	<20	<0.50	3.8	<5.0	98,000	154,000
Intstl Well	1-Jul-13	<10	<10	<10	<20	<0.50	4.6	<5.0	80,000	145,000
Intstl Well	9-Oct-13	<10	<10	<10	<20	<0.50	36	9.5	90,000	144,000
Intstl Well	31-Mar-14	<1.0	<1.0	<1.0	<2.0	<0.050	3.1	<5.0	69,000	146,000

TABLE 3
SUMMARY OF GROUNDWATER ANALYTICAL RESULTS
BMG Landfarm, Rio Arriba County, New Mexico

Well ID	Date	Benzene (µg/L)	Toluene (µg/L)	Ethyl-Benzene (µg/L)	Total Xylenes (µg/L)	GRO (mg/L)	DRO (mg/L)	MRO (mg/L)	Chloride (mg/L)	TDS (mg/L)
Method		8021B	8021B	8021B	8021B	8015D	8015D	8015D	300.0	SM2540C
NM WQCC STANDARD		5	1,000	700	620	0.0101*	0.0167*	NE	250**	1000**
Intstl Well	3-Dec-14	<1.0	<1.0	<1.0	<2.0	0.087	6	<5.0	98,000	133,000
Intstl Well	24-Sep-15	<1.0	<1.0	<1.0	<2.0	0.074	2.8	<5.0	100,000	141,000
Intstl Well	23-Sep-16	<10	<10	<10	<20	<0.50	3.8	<5.0	88,000	138,000
Intstl Well	19-Dec-16	<5.0	<5.0	<5.0	<7.5	<0.25	2.9	<5.0	130,000	147,000
Intstl Well	14-Sep-17	<1.0	<1.0	<1.0	<2.0	<0.050	4.5	<5.0	97,000	118,000
Intstl Well	14-Dec-17	<1.0	<1.0	<1.0	<1.5	0.062	3.8	<5.0	67,000	126,000
Intstl Well	14-Mar-18	<5.0	<5.0	<5.0	<10	<0.25	4.2	<5.0	75,000	122,000
Intstl Well	12-Jun-18	<1.0	<1.0	<1.0	<1.5	0.11	3.7	<5.0	75,000	180,000
Intstl Well	17-Sep-18	<1.0	<1.0	<1.0	<2.0	0.13	3.5	<5.0	80,000	135,000
Intstl Well	19-Dec-18	<1.0	<1.0	<1.0	<2.0	0.052	2.8	<5.0	70,000	133,000
Evap Pond	3-Dec-14	190	240	14	88	1.2	9.2	<5.0	74,000	105,000
Evap Pond	24-Sep-15	13	13	1.0	5.6	0.11	2.9	<5.0	87,000	136,000
Evap Pond	19-Dec-16	4.3	23	<5.0	<7.5	0.87	6.1	<5.0	110,000	169,000
Evap Pond	14-Dec-17	44	43	3.9	22	0.53	9.6	<5.0	86,000	164,000
Evap Pond	17-Sep-18	<5.0	<5.0	<5.0	<10	<0.25	9.7	<5.0	180,000	295,000

Notes: *NMED Groundwater Screening Level source: Risk Assessment Guidance for Site Investigations & Remediation Vol. I, Table

**WQCC Standard for Domestic Water Supply

< Analyte not detected above listed method limit
NA Not Analyzed
NE Not Established
TPH Total Petroleum Hydrocarbons
GRO Gasoline Range Organics
DRO Diesel Range Organics
MRO Motor Oil Range Organics

TABLE 4
TREATMENT ZONE SOIL ANALYTICAL RESULTS
BMG Landfarm, Rio Arriba County, New Mexico

Treatment Zone Cell	Date	TPH (mg/kg)	GRO (mg/kg)	DRO (mg/kg)	MRO (mg/kg)	Benzene (mg/kg)	Toluene (mg/kg)	Ethyl-Benzene (mg/kg)	Total Xylenes (mg/kg)	Chloride (mg/kg)
Method		418.1	8015	8015D	8015D	8021B/ 8260B	8021B/ 8260B	8021B/ 8260B	8021B/ 8260B	300.0
NMOCD Closure Action Levels (NMAC		2,500	2,500 GRO/DRO/MRO 500 GRO/DRO			0.2 (Benzene) / 50 (BTEX)				500
1	06-May-14	26	NM	NM	NM	NM	NM	NM	NM	120
1	30-Sep-14	NM	<4.7	620	2,200	NM	NM	NM	NM	140
1	02-Dec-14	NM	150	4,500	5,700	NM	NM	NM	NM	56
1	27-Mar-15	5,600	NM	NM	NM	NM	NM	NM	NM	<30
1	24-Sep-15	1,400	NM	NM	NM	NM	NM	NM	NM	<30
1	07-Mar-16	1,300	NM	NM	NM	NM	NM	NM	NM	45
1	22-Sep-16	1,100	NM	NM	NM	NM	NM	NM	NM	44
1	13-Apr-17	NM	<4.6	190	690	NM	NM	NM	NM	100
1	20-Sep-17	NM	<4.8	320	700	NM	NM	NM	NM	<30
1	13-Mar-18	NM	<4.9	49	160	NM	NM	NM	NM	240
1	17-Sep-18	NM	<4.9	<9.6	<48	NM	NM	NM	NM	110
1	02-Apr-20	NM	<4.9	18	65	<0.025	<0.049	<0.049	<0.099	18
2	6-May-14	780	NM	NM	NM	NM	NM	NM	NM	50
2	30-Sep-14	NM	<4.6	530	880	NM	NM	NM	NM	47
2	2-Dec-14	NM	6.2	1,400	1,200	NM	NM	NM	NM	13
2	27-Mar-15	160	NM	NM	NM	NM	NM	NM	NM	<30
2	24-Sep-15	1,100	NM	NM	NM	NM	NM	NM	NM	32
2	07-Mar-16	2,600	NM	NM	NM	NM	NM	NM	NM	<30
2	22-Sep-16	4,600	NM	NM	NM	NM	NM	NM	NM	38
2	13-Apr-17	NM	<4.7	1,100	2,000	NM	NM	NM	NM	<30
2	20-Sep-17	NM	<4.9	990	1,500	NM	NM	NM	NM	<30

TABLE 4
TREATMENT ZONE SOIL ANALYTICAL RESULTS
BMG Landfarm, Rio Arriba County, New Mexico

Treatment Zone Cell	Date	TPH (mg/kg)	GRO (mg/kg)	DRO (mg/kg)	MRO (mg/kg)	Benzene (mg/kg)	Toluene (mg/kg)	Ethyl-Benzene (mg/kg)	Total Xylenes (mg/kg)	Chloride (mg/kg)
Method		418.1	8015	8015D	8015D	8021B/ 8260B	8021B/ 8260B	8021B/ 8260B	8021B/ 8260B	300.0
NMOCD Closure Action Levels (NMAC		2,500	2,500 GRO/DRO/MRO 500 GRO/DRO			0.2 (Benzene) / 50 (BTEX)				500
2	13-Mar-18	NM	<4.8	1,500	2,200	NM	NM	NM	NM	<30
2	17-Sep-18	NM	32	2,000	2,600	NM	NM	NM	NM	<30
2	28-Mar-19	NM	<4.6	190	370	NM	NM	NM	NM	<60
2	02-Apr-20	NM	<4.9	630	1,000	NM	NM	NM	NM	<60
3	6-May-14	2,300	NM	NM	NM	NM	NM	NM	NM	<30
3	30-Sep-14	NM	10	1,800	2,100	NM	NM	NM	NM	<30
3	2-Dec-14	NM	<4.7	450	640	NM	NM	NM	NM	10
3	27-Mar-15	98	NM	NM	NM	NM	NM	NM	NM	<30
3	24-Sep-15	1,100	NM	NM	NM	NM	NM	NM	NM	<30
3	07-Mar-16	2,900	NM	NM	NM	NM	NM	NM	NM	<30
3	22-Sep-16	2,000	NM	NM	NM	NM	NM	NM	NM	<30
3	13-Apr-17	NM	<4.8	360	790	NM	NM	NM	NM	<30
3	20-Sep-17	NM	<4.7	660	1,400	NM	NM	NM	NM	<30
3	13-Mar-18	NM	<5.0	720	1,200	NM	NM	NM	NM	<30
3	17-Sep-18	NM	<4.6	240	420	NM	NM	NM	NM	<30
3	28-Mar-19	NM	<4.7	48	98	NM	NM	NM	NM	<60
3	02-Apr-20	NM	<4.9	630	1,000	NM	NM	NM	NM	<60
4	30-Sep-14	NM	<4.7	190	190	NM	NM	NM	NM	<30
4	2-Dec-14	NM	<4.6	130	190	NM	NM	NM	NM	29
4	27-Mar-15	2,200	NM	NM	NM	NM	NM	NM	NM	<30

TABLE 4
TREATMENT ZONE SOIL ANALYTICAL RESULTS
BMG Landfarm, Rio Arriba County, New Mexico

Treatment Zone Cell	Date	TPH (mg/kg)	GRO (mg/kg)	DRO (mg/kg)	MRO (mg/kg)	Benzene (mg/kg)	Toluene (mg/kg)	Ethyl-Benzene (mg/kg)	Total Xylenes (mg/kg)	Chloride (mg/kg)
Method		418.1	8015	8015D	8015D	8021B/ 8260B	8021B/ 8260B	8021B/ 8260B	8021B/ 8260B	300.0
NMOCD Closure Action Levels (NMAC		2,500	2,500 GRO/DRO/MRO 500 GRO/DRO			0.2 (Benzene) / 50 (BTEX)				500
4	24-Sep-15	370	NM	NM	NM	NM	NM	NM	NM	<30
4	07-Mar-16	190	NM	NM	NM	NM	NM	NM	NM	<30
4	22-Sep-16	410	NM	NM	NM	NM	NM	NM	NM	<30
4	13-Apr-17	NM	<5.0	650	1,000	NM	NM	NM	NM	<30
4	20-Sep-17	NM	<4.6	160	270	NM	NM	NM	NM	<30
4	13-Mar-18	NM	<5.0	83	140	NM	NM	NM	NM	<30
4	17-Sep-18	NM	<4.9	10	<46	NM	NM	NM	NM	<30
4	02-Apr-20	NM	<4.9	<9.2	<46	<0.024	<0.049	<0.049	<0.098	<7.5

Notes:
< Analyte not detected above listed method limit
NM Not Measured
TPH Total Petroleum Hydrocarbons

TABLE 4B
TREATMENT ZONE CONCENTRATIONS, NMOCD BACKGROUND LEVELS, AND NMED SSLs
BMG Landfarm, Rio Arriba County, New Mexico

Parameter	*USEPA Method*	*TZ Cell #1 (mg/kg)*	*TZ Cell #4 (mg/kg)*	*Vadose Zone Background Concentration Ranges*	*NMOCD Approved Vadose Zone Background Value (mg/kg)*	*NMED SSL Leaching to GW DAF 20 (mg/kg)*
	Date Sampled	4/2/2020	4/2/2020	2014	2016	2019
NMAC 20.6.2.3103 (A and B)						
Barium	6010B	73	110	42 - 130	42	2.70E+03
Chromium	6010B	6.4	10	4.4 - 19	4.4	2.05E+05
Copper	6010B	5.3	8.8	3.4 - 14	3.4	9.15E+02
Fluoride	300.0	1.9	1.6	0.6 - 3.0	0.6	1.20E+04
Iron	6010B	11,000	16,000	6,500 - 25,000	6,500	6.96E+03
Lead	6010B	2.4	3.7	2.1 - 8.4	2.1	2.70E+02
Manganese	6010B	240	270	140 - 310	140	2.63E+03
Nitrate (NO3 as N)	300.0	5.9	6.2	0.45	0.3	4.25E+02
Radioactivity (Combined Ra 226&228)	901.1 Gamma Spec	1.670	1.524	1.3 - 3.5	1.3	--
Sulfate	300.0	9.9	12	1.5 - 16	1.5	--
Zinc	6010B	23	32	13 - 56	13	7.41E+03

Notes:
Samples analyzed at Hall Environmental Analysis Laboratory, Albuquerque, NM

TABLE 5
VADOSE ZONE SOIL ANALYTICAL RESULTS
BMG Landfarm, Rio Arriba County, New Mexico

Vadose Zone Sample ID	Date	TPH mg/kg	GRO mg/kg	DRO mg/kg	MRO mg/kg	Benzene mg/kg	Toluene mg/kg	Ethyl-Benzene mg/kg	Total Xylenes mg/kg	Chloride mg/kg	Fluoride mg/kg
Analytical Method		418.1	8015D	8015M/D	8015M/D	8021B/ 8260B	8021B/ 8260B	8021B/ 8260B	8021B/ 8260B	300.0	300.0
Approved Background		20	20			0.05	0.05	0.05	0.1	25	0.6
Cell #1 S-1	13-Mar-18	<19	NM	NM	NM	<0.025	<0.050	<0.050	<0.10	630	NM
Cell #1 S-1	24-Jul-18	NM	<4.7	<9.8	<49	<0.023	<0.047	<0.047	<0.093	NM	NM
Cell #1 S-1	17-Sep-18	<19	NM	NM	NM	<0.025	<0.050	<0.050	<0.099	370	1.6
Cell #1 S-1	19-Dec-18	NM	<4.9	<9.8	68	<0.024	<0.049	<0.049	<0.097	NM	NM
Cell #1 S-1	28-Mar-19	<20	NM	NM	NM	<0.024	<0.047	<0.047	<0.095	210	NM
Cell #1 S-1	02-Apr-20	<17	NM	NM	NM	<0.025	<0.049	<0.049	<0.099	220	<1.5
Cell #1 S-2	13-Mar-18	<19	NM	NM	NM	<0.023	<0.047	<0.047	<0.094	<30	NM
Cell #1 S-2	24-Jul-18	NM	<4.9	<9.8	<49	<0.025	<0.049	<0.049	<0.098	NM	NM
Cell #1 S-2	17-Sep-18	<19	NM	NM	NM	<0.024	<0.047	<0.047	<0.095	36	1.9
Cell #1 S-2	19-Dec-18	NM	<4.9	<9.5	<47	<0.025	<0.049	<0.049	<0.099	NM	NM
Cell #1 S-2	28-Mar-19	<19	NM	NM	NM	<0.025	<0.050	<0.050	<0.10	66	NM
Cell #1 S-2	02-Apr-20	<18	NM	NM	NM	<0.024	<0.049	<0.049	<0.097	240	NM
Cell #1 S-3	13-Mar-18	<19	NM	NM	NM	<0.024	<0.048	<0.048	<0.096	<30	NM
Cell #1 S-3	24-Jul-18	NM	<4.9	<9.8	<49	<0.025	<0.049	<0.049	<0.099	NM	NM
Cell #1 S-3	17-Sep-18	<19	NM	NM	NM	<0.024	<0.048	<0.048	<0.096	<7.5	<1.5
Cell #1 S-3	19-Dec-18	NM	<4.8	<9.9	<4.9	<0.024	<0.048	<0.048	<0.096	NM	NM
Cell #1 S-3	28-Mar-19	<20	NM	NM	NM	<0.025	<0.049	<0.049	<0.099	<60	NM
Cell #1 S-3	02-Apr-20	<19	NM	NM	NM	<0.024	<0.049	<0.049	<0.098	<60	NM
Cell #1 S-4	13-Mar-18	<19	NM	NM	NM	<0.024	<0.049	<0.049	<0.097	<30	NM
Cell #1 S-4	24-Jul-18	NM	<5.0	<9.8	<49	<0.025	<0.050	<0.050	<0.099	NM	NM
Cell #1 S-4	17-Sep-18	<19	NM	NM	NM	<0.023	<0.046	<0.046	<0.092	<7.5	<1.5

TABLE 5
VADOSE ZONE SOIL ANALYTICAL RESULTS
BMG Landfarm, Rio Arriba County, New Mexico

Vadose Zone Sample ID	Date	TPH mg/kg	GRO mg/kg	DRO mg/kg	MRO mg/kg	Benzene mg/kg	Toluene mg/kg	Ethyl-Benzene mg/kg	Total Xylenes mg/kg	Chloride mg/kg	Fluoride mg/kg
Analytical Method		418.1	8015D	8015M/D	8015M/D	8021B/ 8260B	8021B/ 8260B	8021B/ 8260B	8021B/ 8260B	300.0	300.0
Approved Background		20	20			0.05	0.05	0.05	0.1	25	0.6
Cell #1 S-4	19-Dec-18	NM	<4.7	<9.6	<48	<0.024	<0.047	<0.047	<0.094	NM	NM
Cell #1 S-4	28-Mar-19	<20	NM	NM	NM	<0.025	<0.049	<0.049	<0.099	<60	NM
Cell #1 S-4	02-Apr-20	<19	NM	NM	NM	<0.025	<0.049	<0.049	<0.099	<60	NM
Cell #2 S-1	13-Mar-18	550	NM	NM	NM	<0.025	<0.049	<0.049	<0.098	<30	NM
Cell #2 S-1	24-Jul-18	NM	<5.0	<9.3	<46	<0.025	<0.050	<0.050	<0.10	NM	NM
Cell #2 S-1	17-Sep-18	<19	NM	NM	NM	<0.024	<0.047	<0.047	<0.094	10	<1.5
Cell #2 S-1	19-Dec-18	NM	<4.8	<9.8	<49	<0.024	<0.048	<0.048	<0.095	NM	NM
Cell #2 S-1	28-Mar-19	<19	NM	NM	NM	<0.024	<0.048	<0.048	<0.097	<60	NM
Cell #2 S-1	02-Apr-20	<19	NM	NM	NM	<0.025	<0.049	<0.049	<0.099	12	<1.5
Cell #2 S-2	13-Mar-18	<19	NM	NM	NM	<0.024	<0.049	<0.049	<0.098	<30	NM
Cell #2 S-2	24-Jul-18	NM	<4.6	<9.6	<48	<0.023	<0.046	<0.046	<0.092	NM	NM
Cell #2 S-2	17-Sep-18	<19	NM	NM	NM	<0.024	<0.049	<0.049	<0.098	12	<1.5
Cell #2 S-2	19-Dec-18	NM	<4.9	<9.6	<48	<0.024	<0.049	<0.049	<0.098	NM	NM
Cell #2 S-2	28-Mar-19	<20	NM	NM	NM	<0.024	<0.048	<0.048	<0.096	<59	NM
Cell #2 S-2	02-Apr-20	<20	NM	NM	NM	<0.024	<0.048	<0.048	<0.097	<60	NM
Cell #2 S-3	13-Mar-18	<19	NM	NM	NM	<0.024	<0.049	<0.049	<0.097	<30	NM
Cell #2 S-3	24-Jul-18	NM	4.7	<9.4	<47	<0.024	<0.047	<0.047	<0.094	NM	NM
Cell #2 S-3	17-Sep-18	<20	NM	NM	NM	<0.025	<0.050	<0.050	<0.099	10	<1.5
Cell #2 S-3	19-Dec-18	NM	<4.8	<9.5	<48	<0.024	<0.048	<0.048	<0.096	NM	NM
Cell #2 S-3	28-Mar-19	<20	NM	NM	NM	<0.024	<0.048	<0.048	<0.097	<60	NM

TABLE 5
VADOSE ZONE SOIL ANALYTICAL RESULTS
BMG Landfarm, Rio Arriba County, New Mexico

Vadose Zone Sample ID	Date	TPH mg/kg	GRO mg/kg	DRO mg/kg	MRO mg/kg	Benzene mg/kg	Toluene mg/kg	Ethyl-Benzene mg/kg	Total Xylenes mg/kg	Chloride mg/kg	Fluoride mg/kg
Analytical Method		418.1	8015D	8015M/D	8015M/D	8021B/ 8260B	8021B/ 8260B	8021B/ 8260B	8021B/ 8260B	300.0	300.0
Approved Background		20	20			0.05	0.05	0.05	0.1	25	0.6
Cell #2 S-3	02-Apr-20	<19	NM	NM	NM	<0.025	<0.050	<0.050	<0.10	<60	NM
Cell #2 S-4	13-Mar-18	<18	NM	NM	NM	<0.024	<0.047	<0.047	<0.095	<30	NM
Cell #2 S-4	24-Jul-18	NM	<5.0	<9.4	<47	<0.025	<0.050	<0.050	<0.10	NM	NM
Cell #2 S-4	17-Sep-18	<20	NM	NM	NM	<0.025	<0.049	<0.049	<0.099	40	0.35
Cell #2 S-4	19-Dec-18	NM	<4.7	17	<50	<0.024	<0.047	<0.047	<0.095	NM	NM
Cell #2 S-4	28-Mar-19	<20	NM	NM	NM	<0.025	<0.049	<0.049	<0.098	<61	NM
Cell #2 S-4	02-Apr-20	<19	NM	NM	NM	<0.025	<0.049	<0.049	<0.099	<60	NM
Cell #3 S-1	13-Mar-18	<19	NM	NM	NM	<0.024	<0.048	<0.048	<0.097	<30	NM
Cell #3 S-1	24-Jul-18	NM	<4.7	<9.3	<46	<0.024	<0.047	<0.047	<0.094	NM	NM
Cell #3 S-1	17-Sep-18	<20	NM	NM	NM	<0.024	<0.047	<0.047	<0.094	<7.5	<1.5
Cell #3 S-1	19-Dec-18	NM	<4.8	<10	<50	<0.024	<0.048	<0.048	<0.097	NM	NM
Cell #3 S-1	28-Mar-19	<19	NM	NM	NM	<0.024	<0.048	<0.048	<0.096	<60	NM
Cell #3 S-1	02-Apr-20	59	NM	NM	NM	<0.025	<0.050	<0.050	<0.10	11	<1.5
Cell #3 S-2	13-Mar-18	<19	NM	NM	NM	<0.024	<0.049	<0.049	<0.097	<30	NM
Cell #3 S-2	24-Jul-18	NM	<4.7	<9.2	<46	<0.023	<0.047	<0.047	<0.094	NM	NM
Cell #3 S-2	17-Sep-18	<20	NM	NM	NM	<0.024	<0.048	<0.048	<0.095	9.5	1.6
Cell #3 S-2	19-Dec-18	NM	<4.7	<9.7	<48	<0.023	<0.047	<0.047	<0.094	NM	NM
Cell #3 S-2	28-Mar-19	<19	NM	NM	NM	<0.024	<0.048	<0.048	<0.095	<60	NM
Cell #3 S-2	02-Apr-20	20	NM	NM	NM	<0.025	<0.050	<0.050	<0.099	<60	NM

TABLE 5
VADOSE ZONE SOIL ANALYTICAL RESULTS
BMG Landfarm, Rio Arriba County, New Mexico

Vadose Zone Sample ID	Date	TPH mg/kg	GRO mg/kg	DRO mg/kg	MRO mg/kg	Benzene mg/kg	Toluene mg/kg	Ethyl-Benzene mg/kg	Total Xylenes mg/kg	Chloride mg/kg	Fluoride mg/kg
Analytical Method		418.1	8015D	8015M/D	8015M/D	8021B/ 8260B	8021B/ 8260B	8021B/ 8260B	8021B/ 8260B	300.0	300.0
Approved Background		20	20			0.05	0.05	0.05	0.1	25	0.6
Cell #3 S-3	13-Mar-18	<19	NM	NM	NM	<0.023	<0.047	<0.047	<0.094	<30	NM
Cell #3 S-3	24-Jul-18	NM	<5.0	<9.7	<48	<0.025	<0.050	<0.050	<0.10	NM	NM
Cell #3 S-3	17-Sep-18	<19	NM	NM	NM	<0.024	<0.048	<0.048	<0.096	8.0	4.0
Cell #3 S-3	19-Dec-18	NM	<5.0	<9.7	<49	<0.025	<0.050	<0.050	<0.099	NM	NM
Cell #3 S-3	28-Mar-19	<20	NM	NM	NM	<0.023	<0.047	<0.047	<0.094	<60	NM
Cell #3 S-3	02-Apr-20	50	NM	NM	NM	<0.025	<0.049	<0.049	<0.098	<60	NM
Cell #3 S-4	13-Mar-18	<18	NM	NM	NM	<0.023	<0.046	<0.046	<0.093	<30	NM
Cell #3 S-4	24-Jul-18	NM	<4.8	<10	<50	<0.024	<0.048	<0.048	<0.095	NM	NM
Cell #3 S-4	17-Sep-18	<20	NM	NM	NM	<0.024	<0.047	<0.047	<0.095	8.0	<1.5
Cell #3 S-4	19-Dec-18	NM	<4.9	<10	<50	<0.024	<0.049	<0.049	<0.098	NM	NM
Cell #3 S-4	28-Mar-19	<18	NM	NM	NM	<0.025	<0.050	<0.050	<0.099	<60	NM
Cell #3 S-4	02-Apr-20	<18	NM	NM	NM	<0.024	<0.049	<0.049	<0.097	<60	NM
Cell #4 S-1	13-Mar-18	<18	NM	NM	NM	<0.024	<0.047	<0.047	<0.094	32	NM
Cell #4 S-1	24-Jul-18	NM	<4.6	<9.8	<49	<0.023	<0.046	<0.046	<0.092	NM	NM
Cell #4 S-1	17-Sep-18	<19	NM	NM	NM	<0.025	<0.049	<0.049	<0.099	<7.5	1.5
Cell #4 S-1	19-Dec-18	NM	<4.7	<9.5	<47	<0.024	<0.047	<0.047	<0.094	NM	NM
Cell #4 S-1	28-Mar-19	<19	NM	NM	NM	<0.023	<0.047	<0.047	<0.093	<60	NM
Cell #4 S-1	02-Apr-20	<19	NM	NM	NM	<0.025	<0.050	<0.050	<0.099	<7.5	2.4
Cell #4 S-2	13-Mar-18	<18	NM	NM	NM	<0.023	<0.046	<0.046	<0.092	<30	NM
Cell #4 S-2	24-Jul-18	NM	<4.9	<9.3	<47	<0.024	<0.049	<0.049	<0.098	NM	NM

TABLE 5
VADOSE ZONE SOIL ANALYTICAL RESULTS
BMG Landfarm, Rio Arriba County, New Mexico

Vadose Zone Sample ID	Date	TPH mg/kg	GRO mg/kg	DRO mg/kg	MRO mg/kg	Benzene mg/kg	Toluene mg/kg	Ethyl-Benzene mg/kg	Total Xylenes mg/kg	Chloride mg/kg	Fluoride mg/kg
Analytical Method		418.1	8015D	8015M/D	8015M/D	8021B/ 8260B	8021B/ 8260B	8021B/ 8260B	8021B/ 8260B	300.0	300.0
Approved Background		20	20			0.05	0.05	0.05	0.1	25	0.6
Cell #4 S-2	17-Sep-18	<19	NM	NM	NM	<0.024	<0.048	<0.048	<0.097	<7.5	3.3
Cell #4 S-2	19-Dec-18	NM	<4.7	<9.5	<48	<0.023	<0.047	<0.047	<0.093	NM	NM
Cell #4 S-2	28-Mar-19	<19	NM	NM	NM	<0.023	<0.047	<0.047	<0.093	<60	NM
Cell #4 S-2	02-Apr-20	<19	NM	NM	NM	<0.025	<0.050	<0.050	<0.10	<60	NM
Cell #4 S-3	13-Mar-18	<20	NM	NM	NM	<0.023	<0.047	<0.047	<0.093	<30	NM
Cell #4 S-3	24-Jul-18	NM	<4.8	<9.2	<46	<0.024	<0.048	<0.048	<0.097	NM	NM
Cell #4 S-3	17-Sep-18	<20	NM	NM	NM	<0.023	<0.046	<0.046	<0.092	<7.5	1.8
Cell #4 S-3	19-Dec-18	NM	<4.7	<9.7	<49	<0.024	<0.047	<0.047	<0.094	NM	NM
Cell #4 S-3	28-Mar-19	<19	NM	NM	NM	<0.024	<0.048	<0.048	<0.097	<60	NM
Cell #4 S-3	02-Apr-20	<18	NM	NM	NM	<0.025	<0.049	<0.049	<0.099	<60	NM
Cell #4 S-4	13-Mar-18	<20	NM	NM	NM	<0.025	<0.049	<0.049	<0.098	<30	NM
Cell #4 S-4	24-Jul-18	NM	<4.8	<9.6	<48	<0.024	<0.048	<0.048	<0.096	NM	NM
Cell #4 S-4	17-Sep-18	<19	NM	NM	NM	<0.024	<0.049	<0.049	<0.098	12	3.7
Cell #4 S-4	19-Dec-18	NM	<4.7	<9.9	<49	<0.023	<0.047	<0.047	<0.093	NM	NM
Cell #4 S-4	28-Mar-19	<20	NM	NM	NM	<0.023	<0.046	<0.046	<0.092	<60	NM
Cell #4 S-4	02-Apr-20	<18	NM	NM	NM	<0.025	<0.049	<0.049	<0.099	<60	NM

Notes:
< Analyte not detected above listed method limit
NA Not Applicable
NM Not Measured

TABLE 5
VADOSE ZONE SOIL ANALYTICAL RESULTS
BMG Landfarm, Rio Arriba County, New Mexico

Vadose Zone Sample ID	Date	Nitrate mg/kg	Sulfate mg/kg	Mercury mg/kg	Arsenic mg/kg	Barium mg/kg	Cadmium mg/kg	Calcium mg/kg	Chromium mg/kg	Copper mg/kg	Iron mg/kg	Lead mg/kg
Analytical Method		300.0	300.0	7471	6010B	6010B	6010B	6010B	6010B	6010B	6010B	6010B
Approved Background		0.3	1.5	0.03	2.5	42	0.1	NA	4.4	3.4	6500	2.1
Cell #1 S-1	13-Mar-18	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
Cell #1 S-1	24-Jul-18	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
Cell #1 S-1	17-Sep-18	5.8	9.6	<0.033	<12	130	<0.20	5,600	14	NM	NM	3.3
Cell #1 S-1	19-Dec-18	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
Cell #1 S-1	28-Mar-19	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
Cell #1 S-1	02-Apr-20	4.1	14	<0.033	<5.0	75	<0.20	5,600	10	NM	NM	3.0
Cell #1 S-2	13-Mar-18	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
Cell #1 S-2	24-Jul-18	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
Cell #1 S-2	17-Sep-18	6.4	18	<0.032	<4.8	120	<0.19	5,100	13	NM	NM	3.3
Cell #1 S-2	19-Dec-18	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
Cell #1 S-2	28-Mar-19	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
Cell #1 S-2	02-Apr-20	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
Cell #1 S-3	13-Mar-18	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
Cell #1 S-3	24-Jul-18	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
Cell #1 S-3	17-Sep-18	10	13	<0.033	<12	120	<0.20	4,400	12	NM	NM	3.9
Cell #1 S-3	19-Dec-18	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
Cell #1 S-3	28-Mar-19	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
Cell #1 S-3	02-Apr-20	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
Cell #1 S-4	13-Mar-18	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
Cell #1 S-4	24-Jul-18	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
Cell #1 S-4	17-Sep-18	24	28	<0.032	<4.9	78	<0.097	2,500	6.9	NM	NM	2.2

TABLE 5
VADOSE ZONE SOIL ANALYTICAL RESULTS
BMG Landfarm, Rio Arriba County, New Mexico

Vadose Zone Sample ID	Date	Nitrate mg/kg	Sulfate mg/kg	Mercury mg/kg	Arsenic mg/kg	Barium mg/kg	Cadmium mg/kg	Calcium mg/kg	Chromium mg/kg	Copper mg/kg	Iron mg/kg	Lead mg/kg
Analytical Method		300.0	300.0	7471	6010B	6010B	6010B	6010B	6010B	6010B	6010B	6010B
Approved Background		0.3	1.5	0.03	2.5	42	0.1	NA	4.4	3.4	6500	2.1
Cell #1 S-4	19-Dec-18	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
Cell #1 S-4	28-Mar-19	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
Cell #1 S-4	02-Apr-20	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
Cell #2 S-1	13-Mar-18	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
Cell #2 S-1	24-Jul-18	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
Cell #2 S-1	17-Sep-18	2.7	70	<0.032	3.2	82	<0.099	1,800	4.4	NM	NM	2.3
Cell #2 S-1	19-Dec-18	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
Cell #2 S-1	28-Mar-19	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
Cell #2 S-1	02-Apr-20	5.8	22	<0.033	6.5	110	<0.20	4,000	7.9	NM	NM	3.1
Cell #2 S-2	13-Mar-18	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
Cell #2 S-2	24-Jul-18	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
Cell #2 S-2	17-Sep-18	8.2	90	<0.033	<5.0	95	<0.10	1,800	5.0	NM	NM	2.9
Cell #2 S-2	19-Dec-18	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
Cell #2 S-2	28-Mar-19	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
Cell #2 S-2	02-Apr-20	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
Cell #2 S-3	13-Mar-18	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
Cell #2 S-3	24-Jul-18	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
Cell #2 S-3	17-Sep-18	9.1	8.7	<0.033	<2.5	71	<0.10	1,300	4.4	NM	NM	1.9
Cell #2 S-3	19-Dec-18	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
Cell #2 S-3	28-Mar-19	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM

TABLE 5
VADOSE ZONE SOIL ANALYTICAL RESULTS
BMG Landfarm, Rio Arriba County, New Mexico

Vadose Zone Sample ID	Date	Nitrate mg/kg	Sulfate mg/kg	Mercury mg/kg	Arsenic mg/kg	Barium mg/kg	Cadmium mg/kg	Calcium mg/kg	Chromium mg/kg	Copper mg/kg	Iron mg/kg	Lead mg/kg
Analytical Method		300.0	300.0	7471	6010B	6010B	6010B	6010B	6010B	6010B	6010B	6010B
Approved Background		0.3	1.5	0.03	2.5	42	0.1	NA	4.4	3.4	6500	2.1
Cell #2 S-3	02-Apr-20	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
Cell #2 S-4	13-Mar-18	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
Cell #2 S-4	24-Jul-18	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
Cell #2 S-4	17-Sep-18	<0.30	51	<0.031	2.8	86	<0.099	4,200	4.0	NM	NM	2.7
Cell #2 S-4	19-Dec-18	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
Cell #2 S-4	28-Mar-19	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
Cell #2 S-4	02-Apr-20	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
Cell #3 S-1	13-Mar-18	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
Cell #3 S-1	24-Jul-18	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
Cell #3 S-1	17-Sep-18	4.6	8.5	<0.033	<2.4	55	<0.097	920	3.4	NM	NM	1.8
Cell #3 S-1	19-Dec-18	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
Cell #3 S-1	28-Mar-19	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
Cell #3 S-1	02-Apr-20	2.4	12	<0.033	<5.0	74	<0.20	1,100	3.8	NM	NM	2.4
Cell #3 S-2	13-Mar-18	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
Cell #3 S-2	24-Jul-18	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
Cell #3 S-2	17-Sep-18	1.9	64	<0.031	<5.0	67	<0.099	2,000	9.8	NM	NM	2.6
Cell #3 S-2	19-Dec-18	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
Cell #3 S-2	28-Mar-19	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
Cell #3 S-2	02-Apr-20	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM

TABLE 5
VADOSE ZONE SOIL ANALYTICAL RESULTS
BMG Landfarm, Rio Arriba County, New Mexico

Vadose Zone Sample ID	Date	Nitrate mg/kg	Sulfate mg/kg	Mercury mg/kg	Arsenic mg/kg	Barium mg/kg	Cadmium mg/kg	Calcium mg/kg	Chromium mg/kg	Copper mg/kg	Iron mg/kg	Lead mg/kg
Analytical Method		300.0	300.0	7471	6010B	6010B	6010B	6010B	6010B	6010B	6010B	6010B
Approved Background		0.3	1.5	0.03	2.5	42	0.1	NA	4.4	3.4	6500	2.1
Cell #3 S-3	13-Mar-18	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
Cell #3 S-3	24-Jul-18	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
Cell #3 S-3	17-Sep-18	2.6	190	<0.033	<12	100	<0.19	6,200	17	NM	NM	4.6
Cell #3 S-3	19-Dec-18	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
Cell #3 S-3	28-Mar-19	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
Cell #3 S-3	02-Apr-20	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
Cell #3 S-4	13-Mar-18	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
Cell #3 S-4	24-Jul-18	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
Cell #3 S-4	17-Sep-18	8.8	160	<0.032	<2.4	73	<0.097	2,000	7.1	NM	NM	2.7
Cell #3 S-4	19-Dec-18	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
Cell #3 S-4	28-Mar-19	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
Cell #3 S-4	02-Apr-20	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
Cell #4 S-1	13-Mar-18	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
Cell #4 S-1	24-Jul-18	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
Cell #4 S-1	17-Sep-18	10	11	<0.032	<5.0	80	<0.20	3,400	11	NM	NM	4.5
Cell #4 S-1	19-Dec-18	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
Cell #4 S-1	28-Mar-19	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
Cell #4 S-1	02-Apr-20	18	15	<0.033	<12	110	<0.49	5,400	17	NM	NM	5.7
Cell #4 S-2	13-Mar-18	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
Cell #4 S-2	24-Jul-18	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM

TABLE 5
VADOSE ZONE SOIL ANALYTICAL RESULTS
BMG Landfarm, Rio Arriba County, New Mexico

Vadose Zone Sample ID	Date	Nitrate mg/kg	Sulfate mg/kg	Mercury mg/kg	Arsenic mg/kg	Barium mg/kg	Cadmium mg/kg	Calcium mg/kg	Chromium mg/kg	Copper mg/kg	Iron mg/kg	Lead mg/kg
Analytical Method		300.0	300.0	7471	6010B	6010B	6010B	6010B	6010B	6010B	6010B	6010B
Approved Background		0.3	1.5	0.03	2.5	42	0.1	NA	4.4	3.4	6500	2.1
Cell #4 S-2	17-Sep-18	5.9	14	<0.031	<4.8	80	<0.19	4,200	13	NM	NM	4.7
Cell #4 S-2	19-Dec-18	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
Cell #4 S-2	28-Mar-19	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
Cell #4 S-2	02-Apr-20	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
Cell #4 S-3	13-Mar-18	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
Cell #4 S-3	24-Jul-18	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
Cell #4 S-3	17-Sep-18	7.4	11	<0.032	<12	95	<0.19	5,500	15	NM	NM	5.1
Cell #4 S-3	19-Dec-18	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
Cell #4 S-3	28-Mar-19	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
Cell #4 S-3	02-Apr-20	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
Cell #4 S-4	13-Mar-18	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
Cell #4 S-4	24-Jul-18	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
Cell #4 S-4	17-Sep-18	3.7	24	<0.032	<5.0	170	<0.20	5,300	16	NM	NM	4.5
Cell #4 S-4	19-Dec-18	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
Cell #4 S-4	28-Mar-19	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
Cell #4 S-4	02-Apr-20	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM

TABLE 5
VADOSE ZONE SOIL ANALYTICAL RESULTS
BMG Landfarm, Rio Arriba County, New Mexico

Vadose Zone Sample ID	Date	Magnesium mg/kg	Potassium mg/kg	Selenium mg/kg	Silver mg/kg	Sodium mg/kg
Analytical Method		6010B	6010B	6010B	6010B	6010B
Approved Background		NA	NA	2.5	0.25	NA
Cell #1 S-1	13-Mar-18	NM	NM	NM	NM	NM
Cell #1 S-1	24-Jul-18	NM	NM	NM	NM	NM
Cell #1 S-1	17-Sep-18	3,300	2,600	<12	<1.2	460
Cell #1 S-1	19-Dec-18	NM	NM	NM	NM	NM
Cell #1 S-1	28-Mar-19	NM	NM	NM	NM	NM
Cell #1 S-1	02-Apr-20	NM	1,600	<5.0	<0.50	270
Cell #1 S-2	13-Mar-18	NM	NM	NM	NM	NM
Cell #1 S-2	24-Jul-18	NM	NM	NM	NM	NM
Cell #1 S-2	17-Sep-18	2,600	2,100	<4.8	<0.48	160
Cell #1 S-2	19-Dec-18	NM	NM	NM	NM	NM
Cell #1 S-2	28-Mar-19	NM	NM	NM	NM	NM
Cell #1 S-2	02-Apr-20	NM	NM	NM	NM	NM
Cell #1 S-3	13-Mar-18	NM	NM	NM	NM	NM
Cell #1 S-3	24-Jul-18	NM	NM	NM	NM	NM
Cell #1 S-3	17-Sep-18	3,000	2,400	<12	<0.50	130
Cell #1 S-3	19-Dec-18	NM	NM	NM	NM	NM
Cell #1 S-3	28-Mar-19	NM	NM	NM	NM	NM
Cell #1 S-3	02-Apr-20	NM	NM	NM	NM	NM
Cell #1 S-4	13-Mar-18	NM	NM	NM	NM	NM
Cell #1 S-4	24-Jul-18	NM	NM	NM	NM	NM
Cell #1 S-4	17-Sep-18	1,900	1,400	<4.9	<0.24	87

TABLE 5
VADOSE ZONE SOIL ANALYTICAL RESULTS
BMG Landfarm, Rio Arriba County, New Mexico

Vadose Zone Sample ID	Date	Magnesium mg/kg	Potassium mg/kg	Selenium mg/kg	Silver mg/kg	Sodium mg/kg
Analytical Method		6010B	6010B	6010B	6010B	6010B
Approved Background		NA	NA	2.5	0.25	NA
Cell #1 S-4	19-Dec-18	NM	NM	NM	NM	NM
Cell #1 S-4	28-Mar-19	NM	NM	NM	NM	NM
Cell #1 S-4	02-Apr-20	NM	NM	NM	NM	NM
Cell #2 S-1	13-Mar-18	NM	NM	NM	NM	NM
Cell #2 S-1	24-Jul-18	NM	NM	NM	NM	NM
Cell #2 S-1	17-Sep-18	1,100	710	<2.5	<0.25	89
Cell #2 S-1	19-Dec-18	NM	NM	NM	NM	NM
Cell #2 S-1	28-Mar-19	NM	NM	NM	NM	NM
Cell #2 S-1	02-Apr-20	NM	1,500	<5.0	<0.50	160
Cell #2 S-2	13-Mar-18	NM	NM	NM	NM	NM
Cell #2 S-2	24-Jul-18	NM	NM	NM	NM	NM
Cell #2 S-2	17-Sep-18	1,200	750	<2.5	<0.25	90
Cell #2 S-2	19-Dec-18	NM	NM	NM	NM	NM
Cell #2 S-2	28-Mar-19	NM	NM	NM	NM	NM
Cell #2 S-2	02-Apr-20	NM	NM	NM	NM	NM
Cell #2 S-3	13-Mar-18	NM	NM	NM	NM	NM
Cell #2 S-3	24-Jul-18	NM	NM	NM	NM	NM
Cell #2 S-3	17-Sep-18	990	860	<2.5	<0.25	63
Cell #2 S-3	19-Dec-18	NM	NM	NM	NM	NM
Cell #2 S-3	28-Mar-19	NM	NM	NM	NM	NM

TABLE 5
VADOSE ZONE SOIL ANALYTICAL RESULTS
BMG Landfarm, Rio Arriba County, New Mexico

Vadose Zone Sample ID	Date	Magnesium mg/kg	Potassium mg/kg	Selenium mg/kg	Silver mg/kg	Sodium mg/kg
Analytical Method		6010B	6010B	6010B	6010B	6010B
Approved Background		NA	NA	2.5	0.25	NA
Cell #2 S-3	02-Apr-20	NM	NM	NM	NM	NM
Cell #2 S-4	13-Mar-18	NM	NM	NM	NM	NM
Cell #2 S-4	24-Jul-18	NM	NM	NM	NM	NM
Cell #2 S-4	17-Sep-18	1,000	620	<2.5	<0.25	120
Cell #2 S-4	19-Dec-18	NM	NM	NM	NM	NM
Cell #2 S-4	28-Mar-19	NM	NM	NM	NM	NM
Cell #2 S-4	02-Apr-20	NM	NM	NM	NM	NM
Cell #3 S-1	13-Mar-18	NM	NM	NM	NM	NM
Cell #3 S-1	24-Jul-18	NM	NM	NM	NM	NM
Cell #3 S-1	17-Sep-18	820	730	<2.4	<0.24	82
Cell #3 S-1	19-Dec-18	NM	NM	NM	NM	NM
Cell #3 S-1	28-Mar-19	NM	NM	NM	NM	NM
Cell #3 S-1	02-Apr-20	NM	730	<5.0	<0.50	110
Cell #3 S-2	13-Mar-18	NM	NM	NM	NM	NM
Cell #3 S-2	24-Jul-18	NM	NM	NM	NM	NM
Cell #3 S-2	17-Sep-18	1,900	1,700	<5.0	<0.25	100
Cell #3 S-2	19-Dec-18	NM	NM	NM	NM	NM
Cell #3 S-2	28-Mar-19	NM	NM	NM	NM	NM
Cell #3 S-2	02-Apr-20	NM	NM	NM	NM	NM

TABLE 5
VADOSE ZONE SOIL ANALYTICAL RESULTS
BMG Landfarm, Rio Arriba County, New Mexico

Vadose Zone Sample ID	Date	Magnesium mg/kg	Potassium mg/kg	Selenium mg/kg	Silver mg/kg	Sodium mg/kg
Analytical Method		6010B	6010B	6010B	6010B	6010B
Approved Background		NA	NA	2.5	0.25	NA
Cell #3 S-3	13-Mar-18	NM	NM	NM	NM	NM
Cell #3 S-3	24-Jul-18	NM	NM	NM	NM	NM
Cell #3 S-3	17-Sep-18	3,100	2,500	<4.9	<0.49	160
Cell #3 S-3	19-Dec-18	NM	NM	NM	NM	NM
Cell #3 S-3	28-Mar-19	NM	NM	NM	NM	NM
Cell #3 S-3	02-Apr-20	NM	NM	NM	NM	NM
Cell #3 S-4	13-Mar-18	NM	NM	NM	NM	NM
Cell #3 S-4	24-Jul-18	NM	NM	NM	NM	NM
Cell #3 S-4	17-Sep-18	1,500	1,200	<2.4	<0.24	110
Cell #3 S-4	19-Dec-18	NM	NM	NM	NM	NM
Cell #3 S-4	28-Mar-19	NM	NM	NM	NM	NM
Cell #3 S-4	02-Apr-20	NM	NM	NM	NM	NM
Cell #4 S-1	13-Mar-18	NM	NM	NM	NM	NM
Cell #4 S-1	24-Jul-18	NM	NM	NM	NM	NM
Cell #4 S-1	17-Sep-18	1,700	1,600	<5.0	<0.50	75
Cell #4 S-1	19-Dec-18	NM	NM	NM	NM	NM
Cell #4 S-1	28-Mar-19	NM	NM	NM	NM	NM
Cell #4 S-1	02-Apr-20	NM	2,600	<12	<1.2	190
Cell #4 S-2	13-Mar-18	NM	NM	NM	NM	NM
Cell #4 S-2	24-Jul-18	NM	NM	NM	NM	NM

TABLE 5
VADOSE ZONE SOIL ANALYTICAL RESULTS
BMG Landfarm, Rio Arriba County, New Mexico

Vadose Zone Sample ID	Date	Magnesium mg/kg	Potassium mg/kg	Selenium mg/kg	Silver mg/kg	Sodium mg/kg
Analytical Method		6010B	6010B	6010B	6010B	6010B
Approved Background		NA	NA	2.5	0.25	NA
Cell #4 S-2	17-Sep-18	1,800	1,600	<4.8	<0.48	85
Cell #4 S-2	19-Dec-18	NM	NM	NM	NM	NM
Cell #4 S-2	28-Mar-19	NM	NM	NM	NM	NM
Cell #4 S-2	02-Apr-20	NM	NM	NM	NM	NM
Cell #4 S-3	13-Mar-18	NM	NM	NM	NM	NM
Cell #4 S-3	24-Jul-18	NM	NM	NM	NM	NM
Cell #4 S-3	17-Sep-18	2,200	1,800	<4.8	<0.48	130
Cell #4 S-3	19-Dec-18	NM	NM	NM	NM	NM
Cell #4 S-3	28-Mar-19	NM	NM	NM	NM	NM
Cell #4 S-3	02-Apr-20	NM	NM	NM	NM	NM
Cell #4 S-4	13-Mar-18	NM	NM	NM	NM	NM
Cell #4 S-4	24-Jul-18	NM	NM	NM	NM	NM
Cell #4 S-4	17-Sep-18	2,300	2,200	<5.0	<0.50	120
Cell #4 S-4	19-Dec-18	NM	NM	NM	NM	NM
Cell #4 S-4	28-Mar-19	NM	NM	NM	NM	NM
Cell #4 S-4	02-Apr-20	NM	NM	NM	NM	NM

TABLE 5B
VADOSE ZONE CONCENTRATIONS, NMOCD APPROVED BACKGROUND LEVELS, NMED SSLs
BMG Landfarm, Rio Arriba County, New Mexico

Parameter	*USEPA Method*	*VZ Cell #1 (mg/kg)*	*VZ Cell #2 (mg/kg)*	*VZ Cell #3 (mg/kg)*	*VZ Cell #4 (mg/kg)*	*NMOCD Approved Vadose Zone Background Levels (mg/kg)*	*Vadose Zone Background Concentration Ranges*	*NMED SSL Leaching to GW DAF 20 (mg/kg)*
Date Sampled		4/2/2020	4/2/2020	4/2/2020	4/2/2020	2016	2014	2019
TPH	418.1	<17	<19	59	19	20	<PQL	4.61E+03*
Chloride	300.0	220	12	11	<7.5	25	1.5-6.5	NE
NMAC 20.6.2.3103 (A and B)								
Arsenic	6010B	--	6.5	--	--	2.5	2.5	5.83E+00
Barium	6010B	75	110	74	110	42	42 - 130	2.70E+03
Chromium	6010B	10	7.9	--	17	4.4	4.4 - 19	2.05E+05
Fluoride	300.0	--	--	--	2.4	0.6	0.6 - 3.0	1.20E+04
Lead	6010B	3.0	3.1	2.4	5.7	2.1	2.1 - 8.4	6.96E+03
Nitrate (NO3 as N)	300.0	4.1	5.8	2.4	18	0.3 (PQL)	0.45	4.25E+02
Sulfate	300.0	14	22	12	15	1.5	1.5 - 16	NE

Notes:
*Unknown Oil - Table 6-4. Groundwater and SL-SSLs for TPH Mixtures, Risk Assessment Guidance for Investigations and Remediation (NMED 2019)
Samples analyzed at Hall Environmental Analysis Laboratory, Albuquerque, NM
Approved by NMOCD 2016

FIGURE 1

BACKGROUND SOIL SAMPLES
BMG CENTRALIZED SURFACE WASTE MANAGEMENT FACILITY
NW¼ NW¼, SECTION 19, T25N, R1E
NW¼ NW¼, SECTION 20, T25N, R1E
LLAVES, RIO ARRIBA COUNTY, NEW MEXICO

animas environmental services
Farmington, NM • Durango, CO
animasenvironmental.com

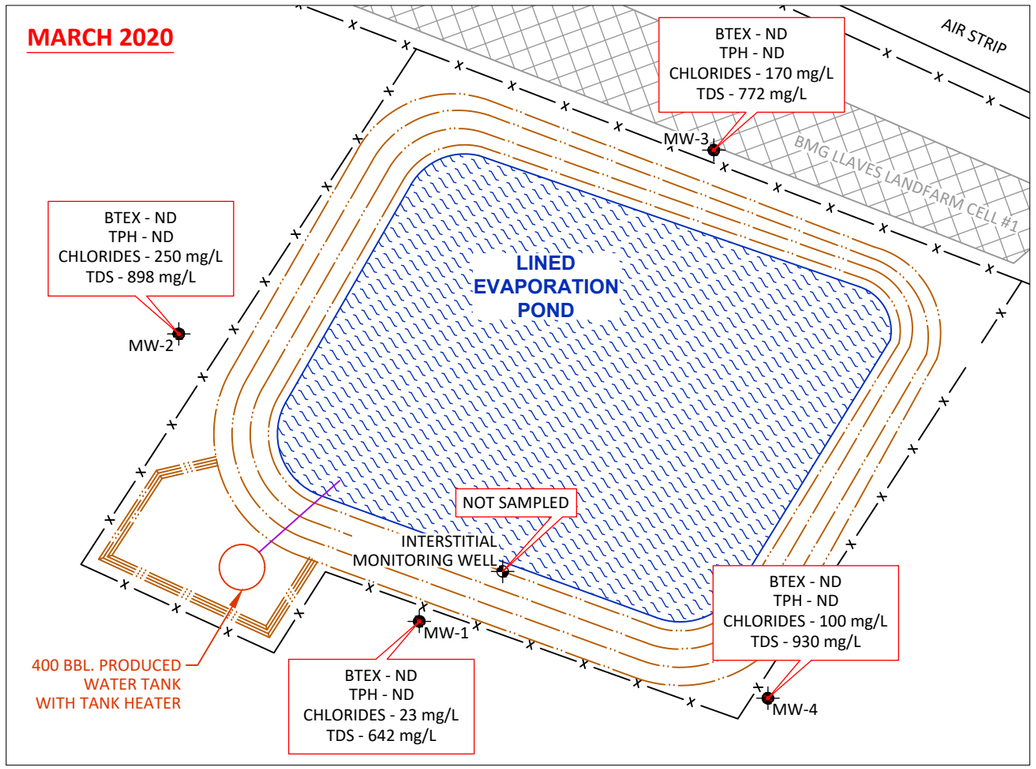
DRAWN BY:	DATE DRAWN:
C. Lameman	November 15, 2018
REVISIONS BY:	**DATE REVISED:**
C. Lameman	August 3, 2021
CHECKED BY:	**DATE CHECKED:**
D. Reese	August 3, 2021
APPROVED BY:	**DATE APPROVED:**
E. McNally	August 3, 2021

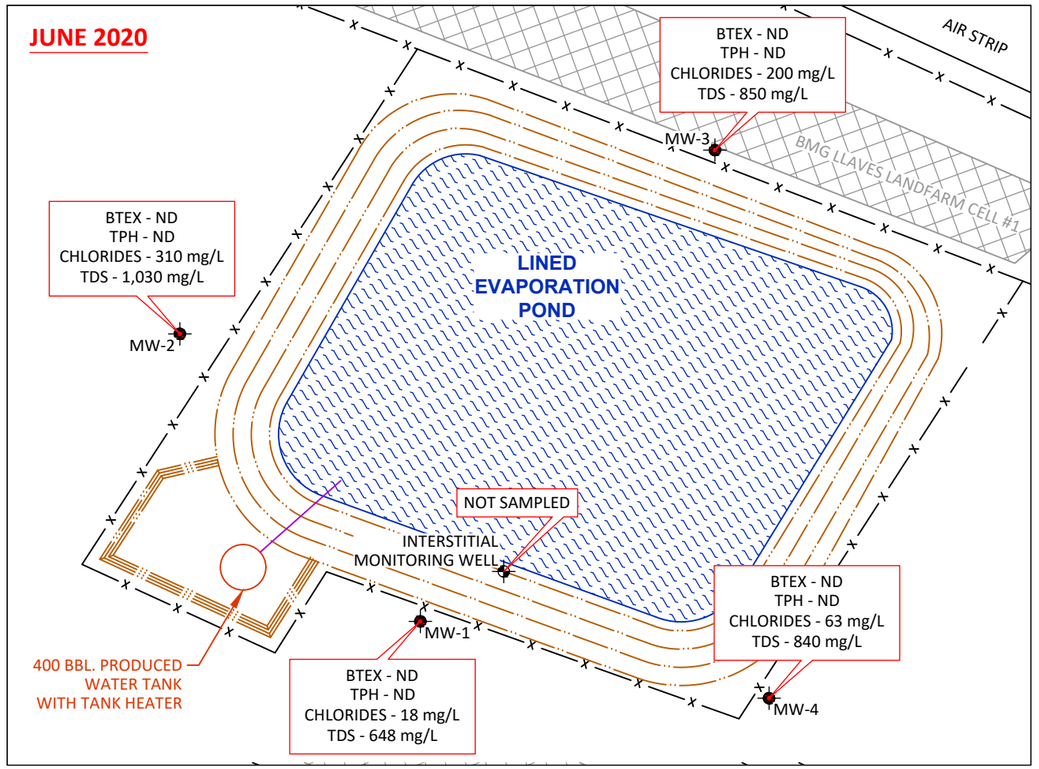
LEGEND

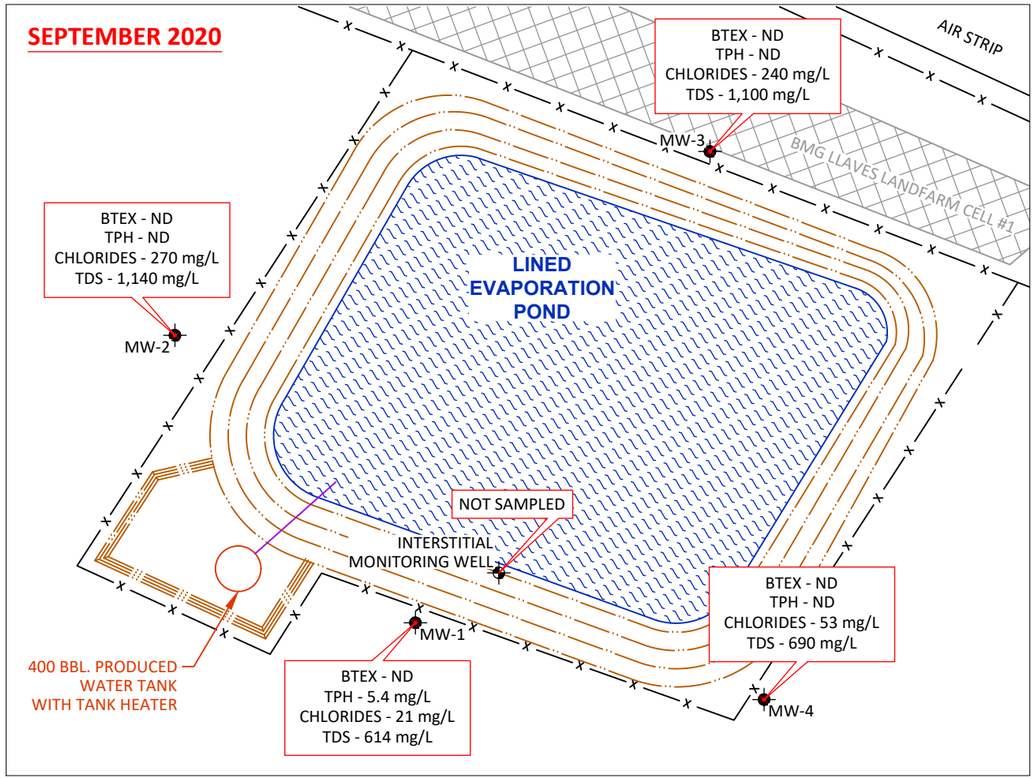
● DECEMBER 2014 SAMPLE LOCATIONS

N

SCALE
500 300 0 500
100
(1 INCH = 500 FEET)







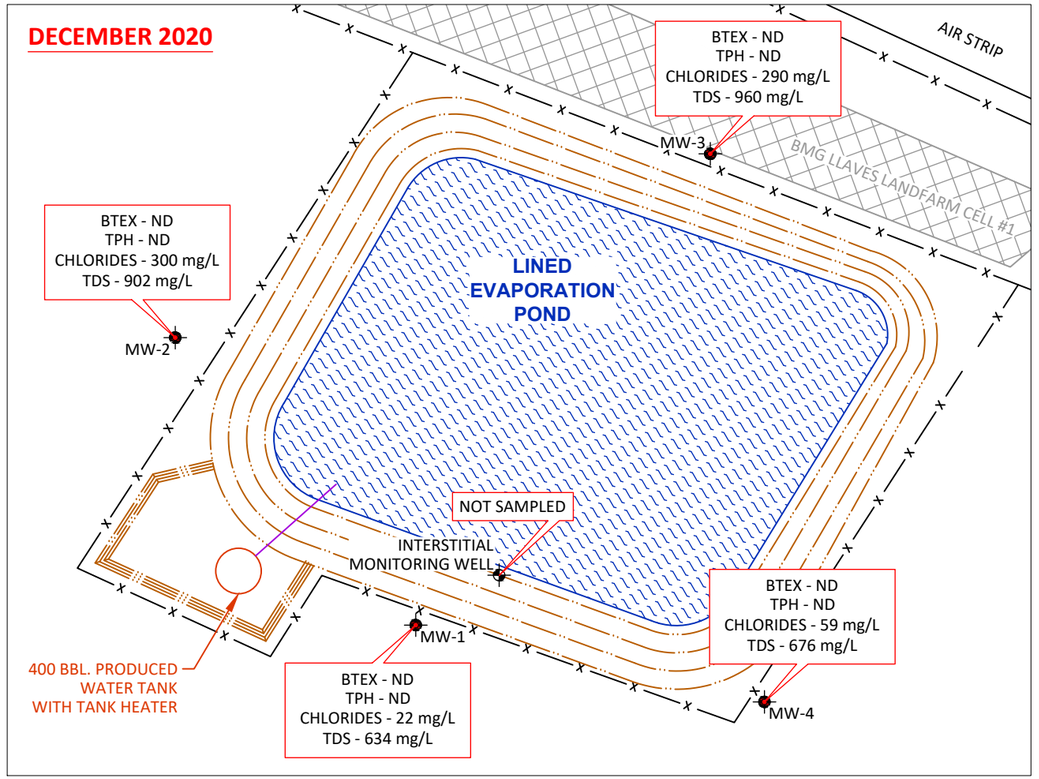


FIGURE 2

BENSON-MONTIN-GREER
CENTRALIZED SURFACE WASTE
MANAGEMENT FACILITY EVAPORATION POND
AND MONITOR WELL LOCATIONS
2020 CONCENTRATIONS

NW¼ NW¼, SECTION 20, T25N, R1E
LLAVES, RIO ARRIBA COUNTY, NEW MEXICO

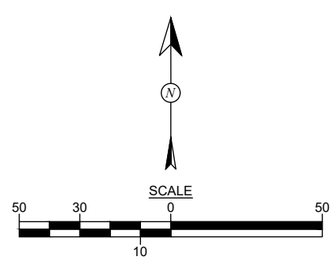
animas environmental services
Farmington, NM • Durango, CO
animasenvironmental.com

DRAWN BY:	DATE DRAWN:
C. Lameman	January 11, 2013
REVISIONS BY:	**DATE REVISED:**
C. Lameman	August 3, 2021
CHECKED BY:	**DATE CHECKED:**
D. Reese	August 3, 2021
APPROVED BY:	**DATE APPROVED:**
E. McNally	August 3, 2021

LEGEND

x	FENCE
	EARTH BERM (SECONDARY CONTAINMENT)
	EXISTING POND LINER INTERSTITIAL MONITOR WELL
	GROUNDWATER MONITOR WELL
B	BENZENE
T	TOLUENE
E	ETHYLBENZENE
X	TOTAL XYLENE
TPH	TOTAL PETROLEUM HYDROCARBONS
TDS	TOTAL DISSOLVED SOLIDS
ND	NOT DETECTED
mg/L	PARTS PER MILLION

NOTE: SAMPLES WERE COLLECTED ON MARCH 26, JUNE 24, SEPTEMBER 29 AND DECEMBER 8, 2020. ALL SAMPLES ANALYZED PER EPA METHOD 8015B, 8021B, SM 2540C, AND 300.0.



TREATMENT ZONE MONITORING LOCATIONS, APRIL 2020							
SAMPLE ID	**SAMPLE LOCATION**	**SAMPLE DATE**	**SAMPLE DEPTH (ft)**	**GRO (mg/kg)**	**DRO (mg/kg)**	**MRO (mg/kg)**	**CHLORIDE (mg/kg)**
NMOCD CLOSURE ACTION LEVELS (NMAC 19.15.36.15)				**2,500 GRO/DRO/MRO 500 GRO/DRO**			**500**
TZ-Cell #1	CELL #1	2-Apr-20	0.5	<4.9	18	65	18
TZ-Cell #2	CELL #2	2-Apr-20	0.5	**<4.9**	**630**	1,000	<60
TZ-Cell #3	CELL #3	2-Apr-20	0.5	**<4.9**	**870**	1,600	<60
TZ-Cell #4	CELL #4	2-Apr-20	0.5	<4.9	<9.2	<46	<7.5
ALL SAMPLES WERE COMPOSITE SAMPLES.							

ANALYTICAL RESULTS FOR THE EDC, PCB, PAH, AND METAL ANALYSES ARE PRESENTED ON TABLE 4B.

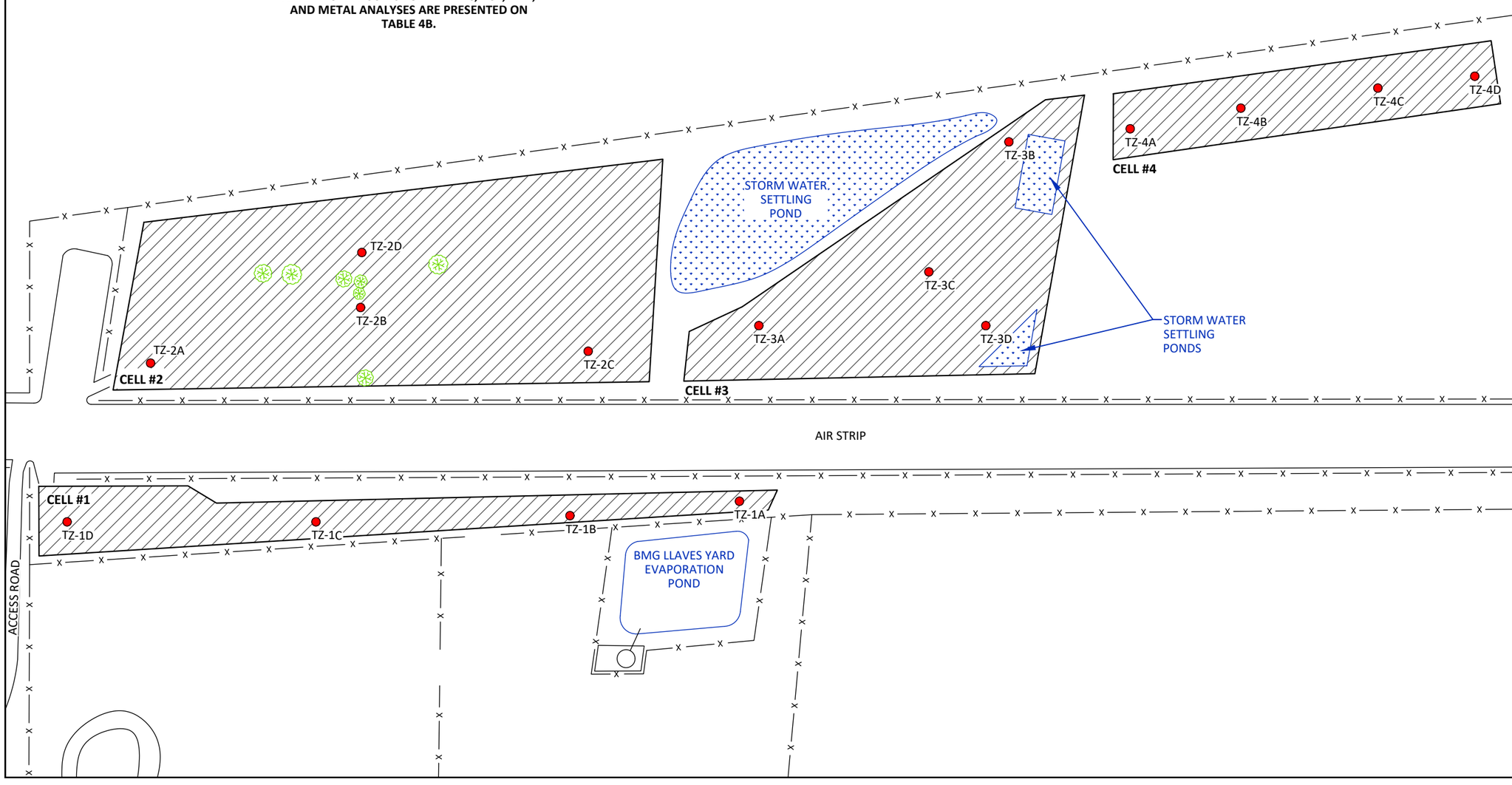


FIGURE 3

BENSON-MONTIN-GREER TREATMENT ZONE MONITORING LOCATIONS AND RESULTS 2020

NW¼ NW¼, SECTION 20, T25N, R12E
LLAVES, RIO ARRIBA COUNTY, NEW MEXICO

animas environmental services
Farmington, NM • Durango, CO
animasenvironmental.com

DRAWN BY: C. Lameman	**DATE DRAWN:** January 11, 2013
REVISIONS BY: C. Lameman	**DATE REVISED:** February 28, 2020
CHECKED BY: D. Reese	**DATE CHECKED:** February 28, 2020
APPROVED BY: E. McNally	**DATE APPROVED:** February 28, 2020

LEGEND

● APRIL 2020 SAMPLE LOCATIONS (FOR COMPOSITE SAMPLING)

N

SCALE
150 90 0 150
30
(1 INCH = 150 FEET)

SEE TABLE 5 FOR LABORATORY ANALYTICAL RESULTS

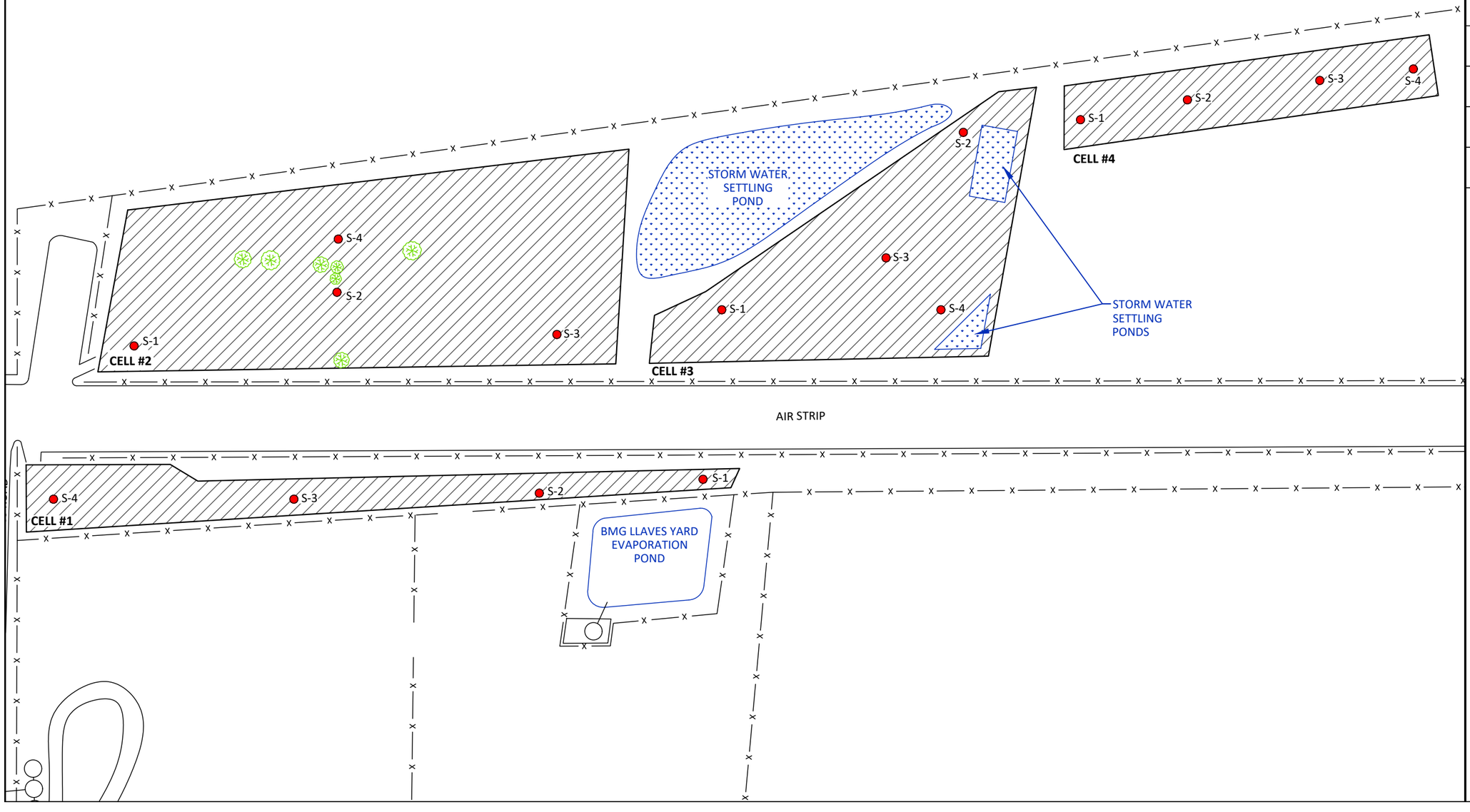


FIGURE 4

BENSON-MONTIN-GREER VADOSE ZONE MONITORING LOCATIONS, 2020

NW¼ NW¼, SECTION 20, T25N, R12E
LLAVES, RIO ARRIBA COUNTY, NEW MEXICO

animas environmental services
Farmington, NM • Durango, CO
animasenvironmental.com

DRAWN BY: C. Lameman	**DATE DRAWN:** January 11, 2013
REVISIONS BY: C. Lameman	**DATE REVISED:** August 3, 2021
CHECKED BY: D. Reese	**DATE CHECKED:** August 3, 2021
APPROVED BY: E. McNally	**DATE APPROVED:** August 3, 2021

LEGEND

- APRIL 2020+ SAMPLE LOCATIONS

N

SCALE
150 90 0 150
30
(1 INCH = 150 FEET)

DEPTH TO GROUNDWATER MEASUREMENT FORM

Animas Environmental Services
624 E. Comanche St, Farmington NM 87
Tel. (505) 564-2281 animasenvironment

Project: Groundwater Monitoring and Sampling
Site: Evaporation Pond
Location: BMG
Tech: CL/GB

Project No.:
Date: 3-26-20
Time: 925 - 1125
Form:

Well ID	Depth to NAPL (ft)	Depth to Water (ft)	NAPL Thickness (ft)	Notes / Observations
MW-1	~~9.42~~ a	38.94	—	
MW-2	—	40.01	—	
MW-3	—	39.29	—	
MW-4	—	39.81	—	
Interstitial Well	—	11.12	—	

Wells measured with KECK water level or KECK interface tape, decontaminated between each well measurement.

MONITORING WELL SAMPLING RECORD

Monitor Well No: MW-1

Animas Environmental Services
624 E. Comanche St., Farmington NM 87401
Tel. (505) 564-2281 Fax (505) 324-2022

Site: Evaporation Pond
Location: BMG Land Farm
Project: Groundwater Monitoring and Sampling
Sampling Technician: CL/GB
Purge / No Purge: Purge
Well Diameter (in): 2
Initial D.T.W. (ft): 38.94 **Time:** 9:40 *(taken at initial gauging of all wells)*
Confirm D.T.W. (ft): 38.94 **Time:** 9:42 *(taken prior to purging well)*
Final D.T.W. (ft): 44.80 **Time:** 9:56 *(taken after sample collection)*
If NAPL Present: D.T.P.: — D.T.W.: — Thickness: — Time: —

Project No.: AES
Date: 3-26-20
Arrival Time: 9:38
Air Temp: 46°F Cloudy
T.O.C. Elev. (ft):
Total Well Depth (ft): 45.61

Water Quality Parameters - Recorded During Well Purging Calibrated: YSI 2 3-26-20 GB

Time	Temp (deg C)	Conductivity (µS) (mS)	DO (mg/L)	pH	ORP (mV)	PURGED VOLUME (see reverse for calc.)	Notes/Observations
9:46	12.5	1.04	4.38	7.30	191.9	Initial	Clear / No Odor
9:48	12.0	1.03	4.70	7.21	183.5	1.0	Turbid Tanned / No Odor
9:50	11.8	1.02	5.45	7.34	184.8	2.0	Turbid Tanned / No Odor
9:54							Samples Collected
							Low Recharge

Analytical Parameters (include analysis method and number and type of sample containers)

Full VOCs per EPA Method 8260B (3 - 40 mL Vials w/ HgCl2 preserve)

~~EDB per EPA Method 504.1 (2 - 40 mL Vial w/ Na2S2O3 preserve)~~ ~~OL~~

Disposal of Purged Water: On Ground - No drainage to storm drain
Collected Samples Stored on Ice in Cooler: Yes
Chain of Custody Record Complete: Yes
Analytical Laboratory: Hall Environmental Analysis Laboratory, Albuquerque, NM
Equipment Used During Sampling: Keck Water Level or Keck Interface Level, YSI Water Quality Meter and New Disposable Bailer

Notes/Comments: Calculated Purge Volume ≈ 3.25

MONITORING WELL SAMPLING RECORD

Monitor Well No: MW-2

Animas Environmental Services
624 E. Comanche St., Farmington NM 87401
Tel. (505) 564-2281 Fax (505) 324-2022

Site: Evaporation Pond
Location: BMG Land Farm Yard
Project: Groundwater Monitoring and Sampling
Sampling Technician: CL/GB
Purge / No Purge: Purge
Well Diameter (in): 2
Initial D.T.W. (ft): 39.99 **Time:** 10:21 *(taken at initial gauging of all wells)*
Confirm D.T.W. (ft): 340.01 **Time:** 10:23 *(taken prior to purging well)*
Final D.T.W. (ft): 43.82 **Time:** 10:36 *(taken after sample collection)*
If NAPL Present: D.T.P.: — D.T.W.: — Thickness: — Time: —

Project No.: AES
Date: 3-26-20
Arrival Time: 10:19
Air Temp: 46°F Cloudy
T.O.C. Elev. (ft):
Total Well Depth (ft): 45.56

Water Quality Parameters - Recorded During Well Purging Calibrated = 451.2 3-26-20 GB

Time	Temp (deg C)	Conductivity (µS) (mS)	DO (mg/L)	pH	ORP (mV)	PURGED VOLUME (see reverse for calc.)	Notes/Observations
10:26	11.6	1.59	6.30	7.39	202.3	Initial	Clear / No Odor
10:28	11.4	1.50	6.55	7.34	202.6	1.0	Turbid Tan Sed / No Odor
10:30	11.4	1.45	6.92	7.40	202.3	2.0	Turbid Tan Sed / No Odor
10:34	—	—	—	—	—	—	Samples Collected
							Low Recharge

Analytical Parameters (include analysis method and number and type of sample containers)

~~Full VOCs~~ BTEX per EPA Method ~~8260B~~ 8021 (3 - 40 mL Vials w/ HgCl2 preserve) and TPH (GRO, DRO, MRO) per EPA 8015 (1-250 mL Amber cool)

~~EDB per EPA Method 504.1 (2 - 40 mL Vial w/ Na2S2O3 preserve)~~ a

TDS (SM2540C) and Chlorides (300.0) - (1-500mL plastic (cool))

Disposal of Purged Water: On Ground - No drainage to Storm drains
Collected Samples Stored on Ice in Cooler: Yes
Chain of Custody Record Complete: Yes
Analytical Laboratory: Hall Environmental Analysis Laboratory, Albuquerque, NM
Equipment Used During Sampling: Keck Water Level or ~~Keck Interface Level~~, YSI Water Quality Meter and New Disposable Bailer

Notes/Comments: Calculated Purge Volume ≈ 2.75 Gallons

MONITORING WELL SAMPLING RECORD

Monitor Well No: MW-3

Animas Environmental Services
624 E. Comanche St., Farmington NM 87401
Tel. (505) 564-2281 Fax (505) 324-2022

Site: Evaporation Pond
Location: BMG
Project: Groundwater Monitoring and Sampling
Sampling Technician: CL/GB
Purge / No Purge: Purge
Well Diameter (in): 2
Initial D.T.W. (ft): 39.29 **Time:** 10:42 *(taken at initial gauging of all wells)*
Confirm D.T.W. (ft): 39.29 **Time:** 10:44 *(taken prior to purging well)*
Final D.T.W. (ft): 44.84 **Time:** 10:53 *(taken after sample collection)*
If NAPL Present: D.T.P.: — D.T.W.: — Thickness: — Time: —

Project No.: AES
Date: 3-26-20
Arrival Time: 10:41
Air Temp: 47°F Cloudy
T.O.C. Elev. (ft):
Total Well Depth (ft): 45.61

Water Quality Parameters - Recorded During Well Purging Calibrated: YSI 2 3-26-20 GB

Time	Temp (deg C)	Conductivity (µS) (~~mS~~)	DO (mg/L)	pH	ORP (mV)	PURGED VOLUME (see reverse for calc.)	Notes/Observations
10:46	12.0	1.33	4.35	7.37	202.6	Initial	Clear / No Odor
10:48	12.0	1.34	4.99	7.29	203.2	1.0	Turbid Tan Sed / No Odor
10:49	11.9	1.35	5.26	7.30	204.0	2.0	Turbid Tan Sed. / No Odor
10:52	—	—	—	—	—	—	Samples Collected
							Low Recharge

Analytical Parameters (include analysis method and number and type of sample containers)

~~Full VOCs~~ BTEX 8021 per EPA Method ~~8260B~~ (3 - 40 mL Vials w/ HgCl2 preserve) & TPH (GRO, DRO, MRO) per 8015 (1-250mL Amber (Cool))

~~EDB per EPA Method 504.1 (2 - 40 mL Vial w/ Na2S2O3 preserve)~~ OR

TDS per EPA Method SM2540C and Chlorides per EPA Method 300.0 (1-500mL plastic (Cool))

Disposal of Purged Water: On Ground - No drainage to Storm drains
Collected Samples Stored on Ice in Cooler: Yes
Chain of Custody Record Complete: Yes
Analytical Laboratory: Hall Environmental Analysis Laboratory, Albuquerque, NM
Equipment Used During Sampling: Keck Water Level or Keck Interface Level, YSI Water Quality Meter and New Disposable Bailer

Notes/Comments: Calculated Purge Volume ≈ 3 Gallons

MONITORING WELL SAMPLING RECORD

Monitor Well No: MW-4

Animas Environmental Services
624 E. Comanche St., Farmington NM 87401
Tel. (505) 564-2281 Fax (505) 324-2022

Site: Evaporation Pond
Location: BMG Land ~~Farm~~ Yard
Project: Groundwater Monitoring and Sampling
Sampling Technician: CL/GB
Purge / No Purge: Purge
Well Diameter (in): 2
Initial D.T.W. (ft): 39.81 **Time:** 11:00 *(taken at initial gauging of all wells)*
Confirm D.T.W. (ft): 39.81 **Time:** 11:02 *(taken prior to purging well)*
Final D.T.W. (ft): 39.96 **Time:** 11:17 *(taken after sample collection)*
If NAPL Present: D.T.P.: — D.T.W.: — Thickness: — Time: —

Project No.: AES
Date: 3-26-20
Arrival Time: 10:59
Air Temp: 49°F Cloudy
T.O.C. Elev. (ft):
Total Well Depth (ft): 45.64

Water Quality Parameters - Recorded During Well Purging Calibrated: YSI2 3-26-20 GB

Time	Temp (deg C)	Conductivity (µS) (mS)	DO (mg/L)	pH	ORP (mV)	PURGED VOLUME (see reverse for calc.)	Notes/Observations
11:04	11.5	1.14	5.51	7.34	205.3	Initial	Turbid Tan Sed. / No Odor
11:05	11.4	1.13	5.74	7.25	207.5	1.0	V. Turbid Brown Sed. / No Odor
11:07	11.5	1.15	6.29	7.25	208.1	2.0	V. Turbid Brown Sed. / No Odor
11:09	11.4	1.15	6.31	7.25	208.8	3.0	V. Turbid Brown Sed. / No Odor
11:13	—	—	—	—	—	—	Samples Collected

Analytical Parameters (include analysis method and number and type of sample containers)

~~Full VOCs~~ BTEX per EPA Method ~~8260B~~ 8021 (3 - 40 mL Vials w/ HgCl2 preserve) TPH (GRO, DRO, MRO) per 8015 (1-250mL Amber Glass)

~~EDB per EPA Method 504.1 (2 - 40 mL Vial w/ Na2S2O3 preserve)~~

TDS per EPA Method SM2540c and Chlorides per EPA Method 300.0 - 1- 500mL plastic Cool

Disposal of Purged Water: On Ground - No drainage to storm drains
Collected Samples Stored on Ice in Cooler: Yes
Chain of Custody Record Complete: Yes
Analytical Laboratory: Hall Environmental Analysis Laboratory, Albuquerque, NM
Equipment Used During Sampling: Keck Water Level or Keck Interface Level, YSI Water Quality Meter and New Disposable Bailer

Notes/Comments: Calculated Purge Volume ≈ 3 Gallons

MONITORING WELL SAMPLING RECORD	Animas Environmental Services
Monitor Well No: **Interstitial Well**	624 E. Comanche St., Farmington NM 87401 Tel. (505) 564-2281 Fax (505) 324-2022

Site: Evaporation Pond — Project No.: AES
Location: BMG — Date: 3-26-20
Project: Groundwater Monitoring and Sampling — Arrival Time: 9:30
Sampling Technician: CL/GB — Air Temp: 46°F Cloudy
Purge / No Purge: Purge — T.O.C. Elev. (ft):
Well Diameter (in): 6 — Total Well Depth (ft): 11.54
Initial D.T.W. (ft): 11.12 Time: 9:32 *(taken at initial gauging of all wells)*
Confirm D.T.W. (ft): 11.12 Time: 11:20 *(taken prior to purging well)*
Final D.T.W. (ft): Time: *(taken after sample collection)*
If NAPL Present: D.T.P.: ~ D.T.W.: — Thickness: — Time: —

Water Quality Parameters - Recorded During Well Purging

Time	Temp (deg C)	Conductivity (µS) (mS)	DO (mg/L)	pH	ORP (mV)	PURGED VOLUME (see reverse for calc.)	Notes/Observations
	NO WATER QUALITY						
	READINGS						

Analytical Parameters (include analysis method and number and type of sample containers)

Full VOCs per EPA Method 8260B (3 - 40 mL Vials w/ HgCl2 preserve)
EDB per EPA Method 504.1 (2 - 40 mL Vial w/ Na2S2O3 preserve)

Disposal of Purged Water: N/A
Collected Samples Stored on Ice in Cooler: N/A
Chain of Custody Record Complete: N/A
Analytical Laboratory: Hall Environmental Analysis Laboratory, Albuquerque, NM
Equipment Used During Sampling: Keck Water Level or Keck Interface Level, YSI Water Quality Meter and New Disposable Bailer

Notes/Comments: No water has returned from the previous sample event.

No water retained while on location. No Sampling.

DEPTH TO GROUNDWATER MEASUREMENT FORM

Animas Environmental Services
624 E. Comanche St, Farmington NM 87401
Tel. (505) 564-2281 animasenvironmental.com

Project: Groundwater Monitoring and Sampling
Site: Evaporation Pond
Location: BMG
Tech: Greg Broome / Corwin Lameman

Project No.:
Date: 6-24-20
Time: 1012 - 1215
Form:

Well ID	Depth to NAPL (ft)	Depth to Water (ft)	NAPL Thickness (ft)	Notes / Observations
MW-1	—	39.61	—	
MW-2	—	40.15	—	
MW-3	—	39.45	—	
MW-4	—	39.96	—	
Interstitial Well	—	10.58	—	

Wells measured with KECK water level or KECK interface tape, decontaminated between each well measurement.

MONITORING WELL SAMPLING RECORD

Monitor Well No: MW-1

Animas Environmental Services
624 E. Comanche St., Farmington NM 87401
Tel. (505) 564-2281 Fax (505) 324-2022

Site: Evaporation Pond
Location: BMG
Project: Groundwater Monitoring and Sampling
Sampling Technician: CL/GB
Purge / No Purge: Purge
Well Diameter (in): 2
Initial D.T.W. (ft): 39.11 **Time:** 11:47 *(taken at initial gauging of all wells)*
Confirm D.T.W. (ft): 39.11 **Time:** 11:49 *(taken prior to purging well)*
Final D.T.W. (ft): 44.51 **Time:** 12:02 *(taken after sample collection)*
If NAPL Present: D.T.P.: — D.T.W.: — Thickness: — Time: —

Project No.: AES
Date: 6-24-20
Arrival Time: 11:40
Air Temp: 80°F Sunny
T.O.C. Elev. (ft):
Total Well Depth (ft): 45.61

Water Quality Parameters - Recorded During Well Purging #1 6-24-20 GB

Time	Temp (deg C)	Conductivity (µS) ~~(mS)~~	DO (mg/L)	pH	ORP (mV)	PURGED VOLUME (see reverse for calc.)	Notes/Observations
11:51	14.0	1.06	3.64	7.38	184.9	Initial	Clear / No odor
11:53	12.8	1.02	4.03	7.29	180.8	1.0	Tan Sed / No odor
11:55	13.2	1.02	4.33	7.29	172.0	2.0	Tan Sed / No odor
11:57	13.0	1.01	4.52	7.30	173.6	3.0	Tan Sed / No Odor
12:00	—	—	—	—	—	—	Samples Collected

Analytical Parameters (include analysis method and number and type of sample containers)

BTEX and GRO, DRO, MRO ~~Full VOCs~~ per EPA Method ~~8260B~~ 8021+8015 (3 - 40 mL Vials w/ HgCl2 preserve) + 1-250 mL Amber glass non

~~EDB per EPA Method 504.1 (2 - 40 mL Vial w/ Na2S2O3 preserve)~~

Chlorides + TDS per EPA Methods SM2540C and 300.0 (1-500mL non)

Disposal of Purged Water: On Ground - No drainage to SW drains
Collected Samples Stored on Ice in Cooler: Yes
Chain of Custody Record Complete: Yes
Analytical Laboratory: Hall Environmental Analysis Laboratory, Albuquerque, NM
Equipment Used During Sampling: Keck Water Level or Keck Interface Level, YSI Water Quality Meter and New Disposable Bailer

Notes/Comments: Calculated Purge Volume ≈ 3 Gallons

Replaced PVC Well Cap.

MONITORING WELL SAMPLING RECORD

Monitor Well No: MW-2

Animas Environmental Services
624 E. Comanche St., Farmington NM 87401
Tel. (505) 564-2281 Fax (505) 324-2022

Site: Evaporation Pond
Location: BMG
Project: Groundwater Monitoring and Sampling
Sampling Technician: CL/GB
Purge / No Purge: Purge
Well Diameter (in): 2
Initial D.T.W. (ft): 40.15 **Time:** 11:22 *(taken at initial gauging of all wells)*
Confirm D.T.W. (ft): 40.15 **Time:** 11:24 *(taken prior to purging well)*
Final D.T.W. (ft): 44.49 **Time:** 11:36 *(taken after sample collection)*
If NAPL Present: D.T.P.: — D.T.W.: — Thickness: — Time: —

Project No.: AES
Date: 6-24-20
Arrival Time: 11:13
Air Temp: 80°F Sunny, Breezy
T.O.C. Elev. (ft):
Total Well Depth (ft): 45.56

Water Quality Parameters - Recorded During Well Purging

Time	Temp (deg C)	Conductivity (µS) ~~(mS)~~	DO (mg/L)	pH	ORP (mV)	PURGED VOLUME (see reverse for calc.)	Notes/Observations
11:26	13.4	1.93	5.75	7.36	168.4	Initial	Sl. cloudy / No Odor
11:28	12.5	1.81	6.49	7.32	170.1	1.0	Tan Sed / No Odor
11:30	14.0	1.79	6.35	7.32	174.7	2.0	Tan Sed / No Odor
11:35	—	—	—	—	—	2.5	Samples Collected

Analytical Parameters (include analysis method and number and type of sample containers)

BTEX and GRO/DRO/MRO ~~Full VOCs~~ per EPA Method ~~8260B~~ 8021 + 8015 (3 - 40 mL Vials w/ HgCl2 preserve) + 1-250mL amber glass non
~~EDB per EPA Method 504.1 (2 - 40 mL Vial w/ Na2S2O3 preserve)~~ or

Chlorides + TDS per EPA Methods SM2540C and 300.0 (1-500 mL plastic non)

Disposal of Purged Water: On Ground - No drainage to SW drains
Collected Samples Stored on Ice in Cooler: Yes
Chain of Custody Record Complete: Yes
Analytical Laboratory: Hall Environmental Analysis Laboratory, Albuquerque, NM
Equipment Used During Sampling: Keck Water Level or Keck Interface Level, YSI Water Quality Meter and New Disposable Bailer

Notes/Comments: Calculated Purge Volume 22.5 Gallons

Replace PVC Well Cap.

MONITORING WELL SAMPLING RECORD

Monitor Well No: MW-3

Animas Environmental Services
624 E. Comanche St., Farmington NM 87401
Tel. (505) 564-2281 Fax (505) 324-2022

Site: Evaporation Pond
Location: BMG
Project: Groundwater Monitoring and Sampling
Sampling Technician: CL / CB
Purge / No Purge: Purge
Well Diameter (in): 2
Initial D.T.W. (ft): 39.45 **Time:** 10:55 *(taken at initial gauging of all wells)*
Confirm D.T.W. (ft): 39.45 **Time:** 10:57 *(taken prior to purging well)*
Final D.T.W. (ft): 44.82 **Time:** 11:09 *(taken after sample collection)*
If NAPL Present: D.T.P.: — D.T.W.: — Thickness: — Time: —

Project No.: AES
Date: 6-24-20
Arrival Time: 10:48
Air Temp: 80°F Sunny
T.O.C. Elev. (ft):
Total Well Depth (ft): 45.61

Water Quality Parameters - Recorded During Well Purging 6-24-20 CB

Time	Temp (deg C)	Conductivity (µS) (mS)	DO (mg/L)	pH	ORP (mV)	PURGED VOLUME (see reverse for calc.)	Notes/Observations
11:00	13.9	1.48	2.97	7.35	183.8	Initial	Clear / No Odor / CAW hair
11:02	13.7	1.47	2.83	7.23	182.7	1.0	Tan Sed / No Odor
11:04	12.9	1.51	3.76	7.21	180.9	2.0	Tan Sed / No Odor
11:08	—	—	—	—	—	2.5	Samples Collected
							low Yield / Recharge

Analytical Parameters (include analysis method and number and type of sample containers)

BTEX + 6Rs / DRO / MRO ~~Full VOCs~~ per EPA Method ~~8260B~~ 8021 + 8015 (3 - 40 mL Vials w/ HgCl2 preserve) + 1-250mL Amberglass non or ~~EDB per EPA Method 504.1 (2 - 40 mL Vial w/ Na2S2O3 preserve)~~ or

Chlorides + TDS per EPA Method SM2540C and 300.0 (1-500mL plastic non)

Disposal of Purged Water: On ground — No drainage to SW drains
Collected Samples Stored on Ice in Cooler: Yes
Chain of Custody Record Complete: Yes
Analytical Laboratory: Hall Environmental Analysis Laboratory, Albuquerque, NM
Equipment Used During Sampling: Keck Water Level or Keck Interface Level, YSI Water Quality Meter and New Disposable Bailer

Notes/Comments: Calculated Purge Volume ≈ 3 Gallons
No PVC well cap on arrival - Replaced.

MONITORING WELL SAMPLING RECORD

Monitor Well No: MW-4

Animas Environmental Services
624 E. Comanche St., Farmington NM 87401
Tel. (505) 564-2281 Fax (505) 324-2022

Site: Evaporation Pond
Location: BMG
Project: Groundwater Monitoring and Sampling
Sampling Technician: CL/GB
Purge / No Purge: Purge
Well Diameter (in): 2
Initial D.T.W. (ft): 39.96 **Time:** 10:28 *(taken at initial gauging of all wells)*
Confirm D.T.W. (ft): 39.96 **Time:** 10:30 *(taken prior to purging well)*
Final D.T.W. (ft): 40.79 **Time:** 10:43 *(taken after sample collection)*
If NAPL Present: D.T.P.: — D.T.W.: — Thickness: — Time: —

Project No.: AES
Date: 6-24-20
Arrival Time: 10:24
Air Temp: 78°F Sunny
T.O.C. Elev. (ft):
Total Well Depth (ft): 45.64

Water Quality Parameters - Recorded During Well Purging #1 6-24-20 GB

Time	Temp (deg C)	Conductivity (µS) (mS)	DO (mg/L)	pH	ORP (mV)	PURGED VOLUME (see reverse for calc.)	Notes/Observations
10:33	14.2	1.06	5.10	7.52	202.6	Initial	Clear/No Odor Bail sides had condair
10:35	12.9	1.06	4.26	7.09	202.2	1.0	Tan Sed / No Odor
10:37	12.2	1.05	5.03	7.08	200.3	2.0	Tan Sed / No odor
10:39	12.3	1.05	5.20	7.11	198.1	2.75	Tan Sed / No Odor
10:42	—	—	—	—	—	—	Samples Collected

Analytical Parameters (include analysis method and number and type of sample containers)

BTEX + GRO/DRO/MRO ~~Full VOCs~~ per EPA Method ~~8260B~~ 8021 + 8015 (3 - 40 mL Vials w/ HgCl2 preserve) + 1-250mL Amber glass non
EDB per EPA Method 504.1 (2 - 40 mL Vial w/ Na2S2O3 preserve)
Chlorides + TDS per EPA Method SM2540C and 300.0 (1-500mL plastic non)

Disposal of Purged Water: On Ground - No drainage to SW drains
Collected Samples Stored on Ice in Cooler: Yes
Chain of Custody Record Complete: Yes
Analytical Laboratory: Hall Environmental Analysis Laboratory, Albuquerque, NM
Equipment Used During Sampling: Keck Water Level or Keck Interface Level, YSI Water Quality Meter and New Disposable Bailer

Notes/Comments: Calculated Purge Volume ≈ 2.75 Gallons.

MONITORING WELL SAMPLING RECORD

Monitor Well No: Interstitial Well

Animas Environmental Services
624 E. Comanche St., Farmington NM 87401
Tel. (505) 564-2281 Fax (505) 324-2022

Site: Evaporation Pond
Location: BMG
Project: Groundwater Monitoring and Sampling
Sampling Technician: CL/GB
Purge / No Purge: Purge
Well Diameter (in): 6
Initial D.T.W. (ft): 10:58 **Time:** 10:15 *(taken at initial gauging of all wells)*
Confirm D.T.W. (ft): 10:58 **Time:** 10:17 *(taken prior to purging well)*
Final D.T.W. (ft): 10:57 **Time:** 12:05 *(taken after sample collection)*
If NAPL Present: **D.T.P.:** — **D.T.W.:** — **Thickness:** — **Time:** —

Project No.: AES
Date: 6-24-20
Arrival Time: 10:12
Air Temp: 76°F Sunny
T.O.C. Elev. (ft):
Total Well Depth (ft): 12.09

Water Quality Parameters - Recorded During Well Purging

Time	Temp (deg C)	Conductivity (µS) (mS)	DO (mg/L)	pH	ORP (mV)	PURGED VOLUME (see reverse for calc.)	Notes/Observations
			SEE NOTES BELOW				

Analytical Parameters (include analysis method and number and type of sample containers)

~~Full VOCs per EPA Method 8260B (3 - 40 mL Vials w/ HgCl2 preserve)~~ ~~a~~
~~EDB per EPA Method 504.1 (2 - 40 mL Vial w/ Na2S2O3 preserve)~~ ~~a~~

Disposal of Purged Water: N/A
Collected Samples Stored on Ice in Cooler: N/A
Chain of Custody Record Complete: N/A
Analytical Laboratory: Hall Environmental Analysis Laboratory, Albuquerque, NM
Equipment Used During Sampling: Keck Water Level or Keck Interface Level, YSI Water Quality Meter and New Disposable Bailer

Notes/Comments: Water did not pull in. No Samples Collected.

DEPTH TO GROUNDWATER MEASUREMENT FORM

Animas Environmental Services
624 E. Comanche St, Farmington NM 87401
Tel. (505) 564-2281 animasenvironmental.com

Project: Groundwater Monitoring and Sampling
Site: Evaporation Pond
Location: BMG
Tech: B. Broome

Project No.:
Date: 9.29.20
Time: 9:45
Form:

Well ID	Depth to NAPL (ft)	Depth to Water (ft)	NAPL Thickness (ft)	Notes / Observations
MW-1	—	39.26	-0-	
MW-2	—	40.31	-0-	
MW-3	—	39.59	-0-	
MW-4	—	40.11	-0-	
Interstitial Well	-0-	10.61	-0-	

Wells measured with KECK water level or KECK interface tape, decontaminated between each well measurement.

MONITORING WELL SAMPLING RECORD

Monitor Well No: Interstitial Well

Animas Environmental Services
624 E. Comanche St., Farmington NM 87401
Tel. (505) 564-2281 Fax (505) 324-2022

Site: Evaporation Pond
Location: BMG
Project: Groundwater Monitoring and Sampling
Sampling Technician:
Purge / No Purge: Purge
Well Diameter (in): 6
Initial D.T.W. (ft): **Time:** *(taken at initial gauging of all wells)*
Confirm D.T.W. (ft): **Time:** *(taken prior to purging well)*
Final D.T.W. (ft): **Time:** *(taken after sample collection)*
If NAPL Present: **D.T.P.:** **D.T.W.:** **Thickness:** **Time:**

Project No.: AES
Date: 9.29.20
Arrival Time: 945
Air Temp: 47°F
T.O.C. Elev. (ft):
Total Well Depth (ft):

Water Quality Parameters - Recorded During Well Purging
YSI __ - Calibrated:

Time	Temp (deg C)	Conductivity (µS) (mS)	DO (mg/L)	pH	ORP (mV)	PURGED VOLUME (see reverse for calc.)	Notes/Observations
	Low Yield						
	NO SAMPLES						
	Collected						

Analytical Parameters (include analysis method and number and type of sample containers)

Full VOCs per EPA Method 8021 (3 - 40 mL Vials w/ HgCl2 preserve)
TPH (GRO/DRO/MRO) per EPA Method 8015 (1 - 250 mL amber glass w/ no preserve)
TDS per EPA Method SM2540C and Chlorides per EPA Method 300.0 (1-500mL Plastic w/ no preserve)

Disposal of Purged Water:
Collected Samples Stored on Ice in Cooler:
Chain of Custody Record Complete:
Analytical Laboratory: Hall Environmental Analysis Laboratory, Albuquerque, NM
Equipment Used During Sampling: Keck Water Level or Keck Interface Level, YSI Water Quality Meter and New Disposable Bailer

Notes/Comments:

MONITORING WELL SAMPLING RECORD

Monitor Well No: MW-1

Animas Environmental Services
624 E. Comanche St., Farmington NM 87401
Tel. (505) 564-2281 Fax (505) 324-2022

Site: Evaporation Pond
Location: BMG
Project: Groundwater Monitoring and Sampling
Sampling Technician: G Broome
Purge / No Purge: Purge
Well Diameter (in): 2
Initial D.T.W. (ft): 39.26 **Time:** 1230 *(taken at initial gauging of all wells)*
Confirm D.T.W. (ft): 39.26 **Time:** 1232 *(taken prior to purging well)*
Final D.T.W. (ft): 45.03 **Time:** 1305 *(taken after sample collection)*
If NAPL Present: D.T.P.: — D.T.W.: — Thickness: — Time: —

Project No.: AES
Date: 9.29.20
Arrival Time: 1228
Air Temp: 67°F
T.O.C. Elev. (ft):
Total Well Depth (ft): 45.61

Water Quality Parameters - Recorded During Well Purging
YSI __ - Calibrated:

Time	Temp (deg C)	Conductivity (µS) (mS)	DO (mg/L)	pH	ORP (mV)	PURGED VOLUME (see reverse for calc.)	Notes/Observations
1237	13.6	809	3.90	7.22	112.5	1 gal	Clear
1241	12.7	778	4.07	7.24	163.1	1 gal	Cloudy
1247	15.7	864	5.14	7.40	168.2	2 gal	Tan
1253		Samples	Collected				

Analytical Parameters (include analysis method and number and type of sample containers)

Full VOCs per EPA Method 8021 (3 - 40 mL Vials w/ HgCl2 preserve)
TPH (GRO/DRO/MRO) per EPA Method 8015 (1 - 250 mL amber glass w/ no preserve)
TDS per EPA Method SM2540C and Chlorides per EPA Method 300.0 (1-500mL Plastic w/ no preserve)

Disposal of Purged Water: on ground
Collected Samples Stored on Ice in Cooler: yes
Chain of Custody Record Complete: yes
Analytical Laboratory: Hall Environmental Analysis Laboratory, Albuquerque, NM
Equipment Used During Sampling: Keck Water Level or Keck Interface Level, YSI Water Quality Meter and New Disposable Bailer

Notes/Comments:

MONITORING WELL SAMPLING RECORD

Monitor Well No: MW-2

Animas Environmental Services
624 E. Comanche St., Farmington NM 87401
Tel. (505) 564-2281 Fax (505) 324-2022

Site: Evaporation Pond
Location: BMG
Project: Groundwater Monitoring and Sampling
Sampling Technician: C. Bradley
Purge / No Purge: Purge
Well Diameter (in): 2
Initial D.T.W. (ft): 40.31 **Time:** 1200 *(taken at initial gauging of all wells)*
Confirm D.T.W. (ft): 40.31 **Time:** 1202 *(taken prior to purging well)*
Final D.T.W. (ft): 43.09 **Time:** 1225 *(taken after sample collection)*
If NAPL Present: **D.T.P.:** — **D.T.W.:** — **Thickness:** — **Time:** —

Project No.: AES
Date: 9.29.20
Arrival Time: 1154
Air Temp: 60°F
T.O.C. Elev. (ft):
Total Well Depth (ft): 45.56

Water Quality Parameters - Recorded During Well Purging
YSI __ - Calibrated:

Time	Temp (deg C)	Conductivity (µS) (mS)	DO (mg/L)	pH	ORP (mV)	PURGED VOLUME (see reverse for calc.)	Notes/Observations
1207	13.3	1365	5.35	7.26	165.2	1 gal	Clear
1213	12.1	1168	6.11	7.36	162.8	1 gal	Tan
						2 gal	Tan
1218		Sampled	Collected				

Analytical Parameters (include analysis method and number and type of sample containers)

Full VOCs per EPA Method 8021 (3 - 40 mL Vials w/ HgCl2 preserve)
TPH (GRO/DRO/MRO) per EPA Method 8015 (1 - 250 mL amber glass w/ no preserve)
TDS per EPA Method SM2540C and Chlorides per EPA Method 300.0 (1-500mL Plastic w/ no preserve)

Disposal of Purged Water: on ground
Collected Samples Stored on Ice in Cooler: Yes
Chain of Custody Record Complete: Yes
Analytical Laboratory: Hall Environmental Analysis Laboratory, Albuquerque, NM
Equipment Used During Sampling: Keck Water Level or Keck Interface Level, YSI Water Quality Meter and New Disposable Bailer

Notes/Comments:

MONITORING WELL SAMPLING RECORD

Monitor Well No: MW-3

Animas Environmental Services
624 E. Comanche St., Farmington NM 87401
Tel. (505) 564-2281 Fax (505) 324-2022

Site: Evaporation Pond
Location: BMG
Project: Groundwater Monitoring and Sampling
Sampling Technician: G. Broome
Purge / No Purge: Purge
Well Diameter (in): 2
Project No.: AES
Date: 9.29.20
Arrival Time: 1050
Air Temp: 55° F
T.O.C. Elev. (ft):
Total Well Depth (ft): 45.61

Initial D.T.W. (ft): 39.59 **Time:** 1052 *(taken at initial gauging of all wells)*
Confirm D.T.W. (ft): 39.59 **Time:** 1054 *(taken prior to purging well)*
Final D.T.W. (ft): 44.89 **Time:** 1126 *(taken after sample collection)*
If NAPL Present: D.T.P.: — **D.T.W.:** — **Thickness:** — **Time:**

Water Quality Parameters - Recorded During Well Purging
YSI __ - Calibrated:

Time	Temp (deg C)	Conductivity (µS) (mS)	DO (mg/L)	pH	ORP (mV)	PURGED VOLUME (see reverse for calc.)	Notes/Observations
1104	13.0	1270	7.22	7.21	168.1	Intial	Clear
1110	12.7	1275	7.16	7.16	169.71	1 gal	Tan
1115	13.0	1295	5.56	7.27	165.0	2 gal	Tan
1121		Samples Collected					Tan

Analytical Parameters (include analysis method and number and type of sample containers)

Full VOCs per EPA Method 8021 (3 - 40 mL Vials w/ HgCl2 preserve)
TPH (GRO/DRO/MRO) per EPA Method 8015 (1 - 250 mL amber glass w/ no preserve)
TDS per EPA Method SM2540C and Chlorides per EPA Method 300.0 (1-500mL Plastic w/ no preserve)

Disposal of Purged Water: on ground
Collected Samples Stored on Ice in Cooler: yes
Chain of Custody Record Complete: yes
Analytical Laboratory: Hall Environmental Analysis Laboratory, Albuquerque, NM
Equipment Used During Sampling: Keck Water Level or Keck Interface Level, YSI Water Quality Meter and New Disposable Bailer

Notes/Comments:

MONITORING WELL SAMPLING RECORD

Monitor Well No: MW-4

Animas Environmental Services
624 E. Comanche St., Farmington NM 87401
Tel. (505) 564-2281 Fax (505) 324-2022

Site: Evaporation Pond
Location: BMG
Project: Groundwater Monitoring and Sampling
Sampling Technician: G Broome
Purge / No Purge: Purge
Well Diameter (in): 2
Project No.: AES
Date: 9.29.20
Arrival Time: 1005
Air Temp: 47°F
T.O.C. Elev. (ft):
Total Well Depth (ft): 45.64

Initial D.T.W. (ft): 40.11 **Time:** 1007 *(taken at initial gauging of all wells)*
Confirm D.T.W. (ft): 40.11 **Time:** 1008 *(taken prior to purging well)*
Final D.T.W. (ft): 40.55 **Time:** 1042 *(taken after sample collection)*
If NAPL Present: D.T.P.: -0- **D.T.W.:** -0- **Thickness:** -0- **Time:** ______

Water Quality Parameters - Recorded During Well Purging
YSI __ - Calibrated:

Time	Temp (deg C)	Conductivity (µS) (mS)	DO (mg/L)	pH	ORP (mV)	PURGED VOLUME (see reverse for calc.)	Notes/Observations
1022	13.0	837	4.08	7.04	159.2	Initial	Clear/No odor
1027	12.0	812	4.03	7.01	163.1	1 gal	Tan/no odor
1033	11.9	812	4.64	7.03	164.4	2 gal	Brn/No odor
1039		Samples	Collected				

Analytical Parameters (include analysis method and number and type of sample containers)

Full VOCs per EPA Method 8021 (3 - 40 mL Vials w/ $HgCl_2$ preserve)
TPH (GRO/DRO/MRO) per EPA Method 8015 (1 - 250 mL amber glass w/ no preserve)
TDS per EPA Method SM2540C and Chlorides per EPA Method 300.0 (1-500mL Plastic w/ no preserve)

Disposal of Purged Water: on Ground
Collected Samples Stored on Ice in Cooler: yes
Chain of Custody Record Complete: yes
Analytical Laboratory: Hall Environmental Analysis Laboratory, Albuquerque, NM
Equipment Used During Sampling: Keck Water Level or Keck Interface Level, YSI Water Quality Meter and New Disposable Bailer

Notes/Comments:

MONITORING WELL SAMPLING RECORD

Monitor Well No: MW-1

Animas Environmental Services
624 E. Comanche St., Farmington NM 87401
Tel. (505) 564-2281 Fax (505) 324-2022

Site: Evaporation Pond
Location: BMG
Project: Groundwater Monitoring and Sampling
Sampling Technician: G. Broome
Purge / No Purge: Purge
Well Diameter (in): 2

Project No.: AES
Date: 12-8-20
Arrival Time: 11:28
Air Temp: 34° F
T.O.C. Elev. (ft):
Total Well Depth (ft): 45.61

Initial D.T.W. (ft): 39.37 **Time:** 11:30 *(taken at initial gauging of all wells)*
Confirm D.T.W. (ft): 39.37 **Time:** 11:31 *(taken prior to purging well)*
Final D.T.W. (ft): 45.31 **Time:** 12:03 *(taken after sample collection)*
If NAPL Present: D.T.P.: — **D.T.W.:** — **Thickness:** — **Time:** —

Water Quality Parameters - Recorded During Well Purging
YSI __ - Calibrated:

Time	Temp (deg C)	Conductivity (µS) (mS)	DO (mg/L)	pH	ORP (mV)	PURGED VOLUME (see reverse for calc.)	Notes/Observations
11:35	11.8	757	4.07	7.46	161.4	Initial	Clear / No Odor
11:40	12.5	763	3.84	7.31	160.4	1 gal	Brn / No Odor
11:46	13.0	748	5.33	7.39	159.7	2 gal	Brn / No Odor
		Low	Yield				
11:52		Samples	Collected				

Analytical Parameters (include analysis method and number and type of sample containers)

Full VOCs per EPA Method 8021 (3 - 40 mL Vials w/ HgCl2 preserve)
TPH (GRO/DRO/MRO) per EPA Method 8015 (1 - 250 mL amber glass w/ no preserve)
TDS per EPA Method SM2540C and Chlorides per EPA Method 300.0 (1-500mL Plastic w/ no preserve)

Disposal of Purged Water:
Collected Samples Stored on Ice in Cooler:
Chain of Custody Record Complete:
Analytical Laboratory: Hall Environmental Analysis Laboratory, Albuquerque, NM
Equipment Used During Sampling: Keck Water Level or Keck Interface Level, YSI Water Quality Meter and New Disposable Bailer

Notes/Comments:
Purge vol calc @ 3 gal

MONITORING WELL SAMPLING RECORD

Monitor Well No: MW-2

Animas Environmental Services
624 E. Comanche St., Farmington NM 87401
Tel. (505) 564-2281 Fax (505) 324-2022

Site: Evaporation Pond
Location: BMG
Project: Groundwater Monitoring and Sampling
Sampling Technician: G. Broome
Purge / No Purge: Purge
Well Diameter (in): 2
Initial D.T.W. (ft): 40.40 **Time:** 1056 *(taken at initial gauging of all wells)*
Confirm D.T.W. (ft): 40.40 **Time:** 1058 *(taken prior to purging well)*
Final D.T.W. (ft): 44.71 **Time:** 11:25 *(taken after sample collection)*
If NAPL Present: D.T.P.: — D.T.W.: — Thickness: — Time: —

Project No.: AES
Date: 12.8.20
Arrival Time: 1053
Air Temp: 31° F
T.O.C. Elev. (ft):
Total Well Depth (ft): 45.56

Water Quality Parameters - Recorded During Well Purging
YSI __ - Calibrated:

Time	Temp (deg C)	Conductivity (µS) (mS)	DO (mg/L)	pH	ORP (mV)	PURGED VOLUME (see reverse for calc.)	Notes/Observations
1103	11.2	1211	5.70	7.43	162.0	Initial	Clear / No Odor
1108	11.6	1170	6.54	7.39	162.2	1 gal	Brn / No Odor
1113	11.8	1114	6.70	7.40	162.0	2 gal	Brn / No Odor
1118		Samples Collected					

Analytical Parameters (include analysis method and number and type of sample containers)

Full VOCs per EPA Method 8021 (3 - 40 mL Vials w/ HgCl2 preserve)
TPH (GRO/DRO/MRO) per EPA Method 8015 (1 - 250 mL amber glass w/ no preserve)
TDS per EPA Method SM2540C and Chlorides per EPA Method 300.0 (1-500mL Plastic w/ no preserve)

Disposal of Purged Water: on ground
Collected Samples Stored on Ice in Cooler: yes
Chain of Custody Record Complete: yes
Analytical Laboratory: Hall Environmental Analysis Laboratory, Albuquerque, NM
Equipment Used During Sampling: Keck Water Level or Keck Interface Level, YSI Water Quality Meter and New Disposable Bailer

Notes/Comments:
Purge Vol calc @ 2.52 gal

MONITORING WELL SAMPLING RECORD

Monitor Well No: MW-3

Animas Environmental Services
624 E. Comanche St., Farmington NM 87401
Tel. (505) 564-2281 Fax (505) 324-2022

Site: Evaporation Pond
Location: BMG
Project: Groundwater Monitoring and Sampling
Sampling Technician: C. Bloomer
Purge / No Purge: Purge
Well Diameter (in): 2
Initial D.T.W. (ft): 39.69 **Time:** 10:24 *(taken at initial gauging of all wells)*
Confirm D.T.W. (ft): 39.69 **Time:** 10:25 *(taken prior to purging well)*
Final D.T.W. (ft): 45.05 **Time:** 1048 *(taken after sample collection)*
If NAPL Present: D.T.P.: — D.T.W.: — Thickness: — Time: —

Project No.: AES
Date: 12.8.20
Arrival Time: 1023
Air Temp: 29° F
T.O.C. Elev. (ft):
Total Well Depth (ft): 45.61

Water Quality Parameters - Recorded During Well Purging
YSI __ - Calibrated:

Time	Temp (deg C)	Conductivity (µS) (mS)	DO (mg/L)	pH	ORP (mV)	PURGED VOLUME (see reverse for calc.)	Notes/Observations
1030	11.8	1278	4.29	7.38	160.2	Initial	Clear / No Smell
1034	11.6	1265	5.17	7.38	156.4	1 gal	Brn / No Smell
1039	12.0	1273	6.09	7.35	155.7	2 gal	Brn / No Smell
1043		Low Yield Samples Collected					

Analytical Parameters (include analysis method and number and type of sample containers)

Full VOCs per EPA Method 8021 (3 - 40 mL Vials w/ HgCl2 preserve)
TPH (GRO/DRO/MRO) per EPA Method 8015 (1 - 250 mL amber glass w/ no preserve)
TDS per EPA Method SM2540C and Chlorides per EPA Method 300.0 (1-500mL Plastic w/ no preserve)

Disposal of Purged Water: on ground
Collected Samples Stored on Ice in Cooler: yes
Chain of Custody Record Complete: yes
Analytical Laboratory: Hall Environmental Analysis Laboratory, Albuquerque, NM
Equipment Used During Sampling: Keck Water Level or Keck Interface Level, YSI Water Quality Meter and New Disposable Bailer

Notes/Comments:
Purge vol calc @ 2.89 gal

MONITORING WELL SAMPLING RECORD

Monitor Well No: MW-4

Animas Environmental Services
624 E. Comanche St., Farmington NM 87401
Tel. (505) 564-2281 Fax (505) 324-2022

Site: Evaporation Pond
Location: BMG
Project: Groundwater Monitoring and Sampling
Sampling Technician: G. Broome
Purge / No Purge: Purge
Well Diameter (in): 2

Project No.: AES
Date: 12-8-20
Arrival Time: 9:45
Air Temp: 28°F
T.O.C. Elev. (ft):
Total Well Depth (ft): 45.64

Initial D.T.W. (ft): 40.22 **Time:** 9:46 *(taken at initial gauging of all wells)*
Confirm D.T.W. (ft): 40.22 **Time:** 9:47 *(taken prior to purging well)*
Final D.T.W. (ft): 42.36 **Time:** 10:18 *(taken after sample collection)*
If NAPL Present: **D.T.P.:** — **D.T.W.:** — **Thickness:** — **Time:** —

Water Quality Parameters - Recorded During Well Purging
YSI __ - Calibrated:

Time	Temp (deg C)	Conductivity (µS) (mS)	DO (mg/L)	pH	ORP (mV)	PURGED VOLUME (see reverse for calc.)	Notes/Observations
9:56	11.8	799	4.40	7.69	175.7	Initial	Clear/No Odor
1001	11.4	800	3.86	7.41	175.3	1 gal	Brown/No Odor
1006	11.7	811	4.25	7.32	174.0	2 gal	Brown/No Odor
1012	Samples	Collected					

Analytical Parameters (include analysis method and number and type of sample containers)

Full VOCs per EPA Method 8021 (3 - 40 mL Vials w/ HgCl2 preserve)
TPH (GRO/DRO/MRO) per EPA Method 8015 (1 - 250 mL amber glass w/ no preserve)
TDS per EPA Method SM2540C and Chlorides per EPA Method 300.0 (1-500mL Plastic w/ no preserve)

Disposal of Purged Water: on Ground
Collected Samples Stored on Ice in Cooler: Yes
Chain of Custody Record Complete: Yes
Analytical Laboratory: Hall Environmental Analysis Laboratory, Albuquerque, NM
Equipment Used During Sampling: Keck Water Level or Keck Interface Level, YSI Water Quality Meter and New Disposable Bailer

Notes/Comments:
Purge Vol calc. @ 2.65 gal

MONITORING WELL SAMPLING RECORD

Monitor Well No: Interstitial Well

Animas Environmental Services
624 E. Comanche St., Farmington NM 87401
Tel. (505) 564-2281 Fax (505) 324-2022

Site: Evaporation Pond
Location: BMG
Project: Groundwater Monitoring and Sampling
Sampling Technician: G. Broome
Purge / No Purge: Purge
Well Diameter (in): 6
Initial D.T.W. (ft): 10.49 **Time:** 9:38 *(taken at initial gauging of all wells)*
Confirm D.T.W. (ft): 10.49 **Time:** 9:40 *(taken prior to purging well)*
Final D.T.W. (ft): — **Time:** — *(taken after sample collection)*
If NAPL Present: D.T.P.: _____ **D.T.W.:** _____ **Thickness:** _____ **Time:** _____

Project No.: AES
Date: 12-8-20
Arrival Time: 9:35
Air Temp: 28°F
T.O.C. Elev. (ft): _____
Total Well Depth (ft): _____

Water Quality Parameters - Recorded During Well Purging
YSI __ - Calibrated:

Time	Temp (deg C)	Conductivity (µS) (mS)	DO (mg/L)	pH	ORP (mV)	PURGED VOLUME (see reverse for calc.)	Notes/Observations
		No Purge					
		No	Samples				
		Low	Yield				

Analytical Parameters (include analysis method and number and type of sample containers)

Full VOCs per EPA Method 8021 (3 - 40 mL Vials w/ HgCl2 preserve)
TPH (GRO/DRO/MRO) per EPA Method 8015 (1 - 250 mL amber glass w/ no preserve)
TDS per EPA Method SM2540C and Chlorides per EPA Method 300.0 (1-500mL Plastic w/ no preserve)

Disposal of Purged Water: _____
Collected Samples Stored on Ice in Cooler: _____
Chain of Custody Record Complete: _____
Analytical Laboratory: Hall Environmental Analysis Laboratory, Albuquerque, NM
Equipment Used During Sampling: Keck Water Level or Keck Interface Level, YSI Water Quality Meter and New Disposable Bailer

Notes/Comments:

DEPTH TO GROUNDWATER MEASUREMENT FORM

Animas Environmental Services
624 E. Comanche St, Farmington NM 87401
Tel. (505) 564-2281 animasenvironmental.com

Project: Groundwater Monitoring and Sampling
Site: Evaporation Pond
Location: BMG
Tech: E. Boone

Project No.:
Date: 12.8.20
Time: 11:35
Form:

Well ID	Depth to NAPL (ft)	Depth to Water (ft)	NAPL Thickness (ft)	Notes / Observations
MW-1	-0-	39.37	-0-	
MW-2	-0-	40.40	-0-	
MW-3	-0-	39.69	-0-	
MW-4	-0-	40.22	-0-	
Interstitial Well	-0-			

Wells measured with KECK water level or KECK interface tape, decontaminated between each well measurement.

BMG Landfarm Sampling - Treatment Zone (TZ)

Date: 4-2-20

Cell #	1		Composite @ 9:47 Cell 1 (CS-1)	
Sample ID:	TZ-1A	~~TZ-2A~~ TZ-1B	~~TZ-2~~ TZ-1C	TZ-1D
GPS:	36.38874	36.38889	36.38935	36.38960
(4 locations)	-106.86529	-106.86597	-106.86703	-106.86741
Time of sample:	9:37	9:40	9:43	9:45
Sample depth:	0.5	0.5	0.5	0.5
Soil characteristics:	Brown, Sand and Clay	Brown, Sand	Brown Sand, Dry	Brown, Sand, Dry
(odor, color, texture)	no odor, No Stain	No Odor, NStaining	No Odor, No Staining	No Odor, No Staining

Cell #	2		Composite @ 10:04	Cell 2 (CS-2)
Sample ID:	TZ-2A	TZ-2B	TZ-2C	TZ-2D
GPS:	36.39011	36.38999	36.38960	36.39012
(4 locations)	-106.86710	-106.86645	-106.86597	-106.86649
Time of sample:	9:55	9:57	10:00	10:02
Sample depth:	0.5	0.5	0.5	0.5
Soil characteristics:	Clay, Brown Moist	Clay & Sand Brown Moist	Brown Sand Dry	Brown, Clay & Sand Moist
(odor, color, texture)	N.O., N.S.	No Odor, No Staining	No Odor, No Staining	No Odor, No Staining

Cell #	3		Composite @ 10:23	Cell 3 (CS-3)
Sample ID:	TZ-3A	TZ-3B	TZ-3C	TZ-3D
GPS:	36.38929	36.38951	36.38922	36.38887
(4 locations)	-106.86514	-106.86398	-106.86439	-106.86447
Time of sample:	10:13	10:16	10:19	10:21
Sample depth:	0.5	0.5	0.5	0.5
Soil characteristics:	Brown, Sand, Dry	Brown, Sand Dry	Clay & Sand Moist	Sand Clay, Moist
(odor, color, texture)	No Odor, No Stain	No Odor, No Stain	No Odor, No Staining	No Odor, No Staining

Cell #	4		Composite @ 10:37	Cell 4 (CS-4)
Sample ID:	TZ-4A	TZ-4B	TZ-4C	TZ-4D
GPS:	36.38987	36.38923	36.38944	36.38891
(4 locations)	-106.86348	-106.86320	-106.86279	-106.86220
Time of sample:	10:27	10:29	10:31	10:33
Sample depth:	0.5	0.5	0.5	0.5
Soil characteristics:	Brown, Moist Sand	Brown, Moist, Sand	Brown, Moist, Sand	Brown, Moist, Sand
(odor, color, texture)	No Odor, No Staining	No Odor, No Staining	No Odor, No Staining	No Odor, No Staining

BMG Landfarm Sampling - Vadose Zone (VZ)

Date: 4-2-20

Cell #	1			
Sample ID: (S-1 through S-4)	Cell #1 VZ S-1	Cell #1 VZ S-2	Cell #1 VZ S-3	Cell #1 VZ S-4
GPS:	See TZ Notes	→	→	→
Time of sample:	10:52	11:01	11:09	11:16
Shovel depth:	2.0	2.0	2.0	2.25
Auger depth (2.5' total depth):	2.5	2.5	2.5	2.5
Soil characteristics: (odor, color, texture)	Brown Sand and clay. V. Moist No odor, No Stain	Brown, Sand and clay. Dry No odor, No Stain	Brown, Clay, Moist No odor No Staining	Tan, Sand and clay MOIST No Odor, No Staining

Cell #	2			
Sample ID: (S-1 through S-4)	Cell #2 VZ S-1	Cell #2 VZ S-2	Cell #2 VZ S-3	Cell #2 VZ S-4
GPS:	See TZ Notes	→	→	→
Time of sample:	11:24	11:31	11:38	11:47
Shovel depth:	2.25	2.25	2.0	2.0
Auger depth (2.5' total depth):	2.5	2.5	2.5	2.5
Soil characteristics: (odor, color, texture)	Tan Sand, Moist No Odor, No Staining	Tan, Sand, Moist No Odor No Staining	Brown, Sand, Moist No Odor, No Staining	Tan, Sand, Moist No Odor No Staining

Cell #	3			
Sample ID: (S-1 through S-4)	Cell #3 VZ S-1	Cell #3 VZ S-2	Cell #3 V-Z S-3	Cell #3 VZ S-4
GPS:	See TZ Notes	→	→	→
Time of sample:	11:57	12:04	12:11	12:21
Shovel depth:	2.0	2.0	2.25	2.0
Auger depth (2.5' total depth):	2.5	2.5	2.5	2.5
Soil characteristics: (odor, color, texture)	tan-Brown Sand Moist No Odor No Staining	Tan-Brown, Sand Moist No Odor No Staining	Tan-Brown Sand & Clay Moist No Odor No Staining	Brown, Sand & Clay Moist No odor, No Staining

Cell #	4			
Sample ID: (S-1 through S-4)	Cell #4 VZ S-1	Cell #4 VZ S-2	Cell #4 VZ S-3	Cell #4 VZ S-4
GPS:	See TZ Notes	→	→	→
Time of sample:	12:33	#4 12:43	12:51	13:00
Shovel depth:	2.0	2.0	2.0	2.25
Auger depth (2.5' total depth):	2.5	2.5	2.5	2.5
Soil characteristics: (odor, color, texture)	Brown, Clay, Moist No Odor No Staining	Brown, Clay, Moist No Odor No Staining	Brown clay, Moist No Odor No Staining	Brown, Sand, Moist No Odor No Staining

Treatment and Vadose Sample Locations

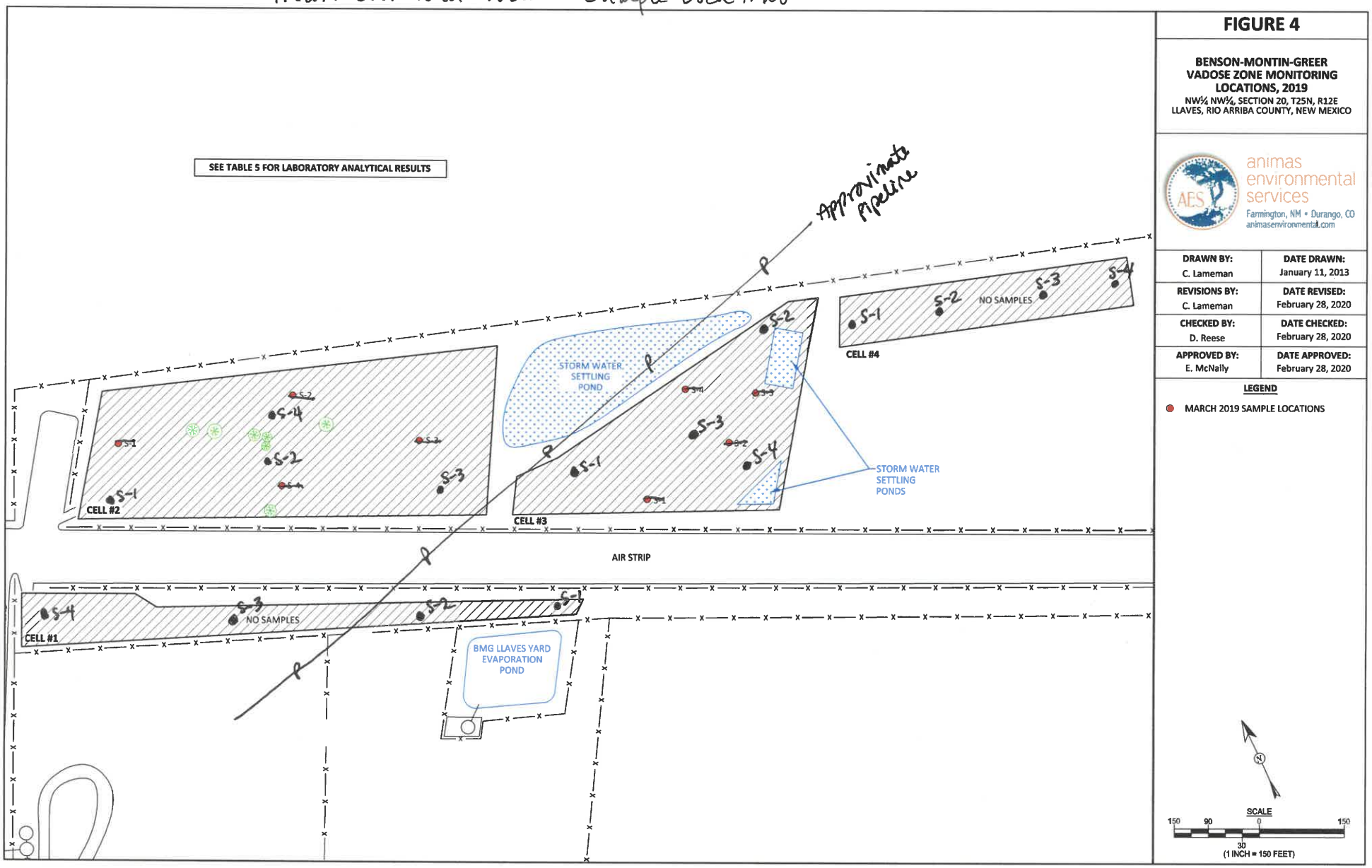


FIGURE 4

BENSON-MONTIN-GREER VADOSE ZONE MONITORING LOCATIONS, 2019

NW¼ NW¼, SECTION 20, T25N, R12E
LLAVES, RIO ARRIBA COUNTY, NEW MEXICO

animas environmental services
Farmington, NM • Durango, CO
animasenvironmental.com

DRAWN BY:	DATE DRAWN:
C. Lameman	January 11, 2013
REVISIONS BY:	**DATE REVISED:**
C. Lameman	February 28, 2020
CHECKED BY:	**DATE CHECKED:**
D. Reese	February 28, 2020
APPROVED BY:	**DATE APPROVED:**
E. McNally	February 28, 2020

LEGEND

- MARCH 2019 SAMPLE LOCATIONS

N

SCALE
150 90 0 150
30
(1 INCH = 150 FEET)

HALL ENVIRONMENTAL ANALYSIS LABORATORY

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

April 07, 2020

Elizabeth McNally

Animas Environmental
604 Pinon Street
Farmington, NM 87401
TEL:
FAX

RE: BMG Landfarm OrderNo.: 2003C34

Dear Elizabeth McNally:

Hall Environmental Analysis Laboratory received 5 sample(s) on 3/27/2020 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,

Andy Freeman
Laboratory Manager
4901 Hawkins NE
Albuquerque, NM 87109

Analytical Report
Lab Order **2003C34**
Date Reported: **4/7/2020**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Animas Environmental
Client Sample ID: MW-1
Project: BMG Landfarm
Collection Date: 3/26/2020 9:54:00 AM
Lab ID: 2003C34-001 **Matrix:** AQUEOUS **Received Date:** 3/27/2020 8:10:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE						Analyst: **JME**
Diesel Range Organics (DRO)	ND	1.0		mg/L	1	4/1/2020 9:53:34 AM
Motor Oil Range Organics (MRO)	ND	5.0		mg/L	1	4/1/2020 9:53:34 AM
Surr: DNOP	106	70-130		%Rec	1	4/1/2020 9:53:34 AM
EPA METHOD 300.0: ANIONS						Analyst: **MRA**
Chloride	23	5.0		mg/L	10	3/30/2020 5:22:24 PM
EPA METHOD 8260: VOLATILES SHORT LIST						Analyst: **DJF**
Benzene	ND	1.0		µg/L	1	4/4/2020 1:35:27 PM
Toluene	ND	1.0		µg/L	1	4/4/2020 1:35:27 PM
Ethylbenzene	ND	1.0		µg/L	1	4/4/2020 1:35:27 PM
Xylenes, Total	ND	1.5		µg/L	1	4/4/2020 1:35:27 PM
Surr: 1,2-Dichloroethane-d4	101	70-130		%Rec	1	4/4/2020 1:35:27 PM
Surr: 4-Bromofluorobenzene	96.2	70-130		%Rec	1	4/4/2020 1:35:27 PM
Surr: Dibromofluoromethane	106	70-130		%Rec	1	4/4/2020 1:35:27 PM
Surr: Toluene-d8	101	70-130		%Rec	1	4/4/2020 1:35:27 PM
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **DJF**
Gasoline Range Organics (GRO)	ND	0.050		mg/L	1	4/4/2020 1:35:27 PM
Surr: BFB	102	70-130		%Rec	1	4/4/2020 1:35:27 PM
SM2540C MOD: TOTAL DISSOLVED SOLIDS						Analyst: **KS**
Total Dissolved Solids	642	40.0	*D	mg/L	1	4/6/2020 12:28:00 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	Value above quantitation range
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 Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix		

Analytical Report
Lab Order **2003C34**
Date Reported: **4/7/2020**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Animas Environmental
Client Sample ID: MW-2
Project: BMG Landfarm
Collection Date: 3/26/2020 10:34:00 AM
Lab ID: 2003C34-002 **Matrix:** AQUEOUS **Received Date:** 3/27/2020 8:10:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE						Analyst: **JME**
Diesel Range Organics (DRO)	ND	1.0		mg/L	1	4/1/2020 11:05:20 AM
Motor Oil Range Organics (MRO)	ND	5.0		mg/L	1	4/1/2020 11:05:20 AM
Surr: DNOP	103	70-130		%Rec	1	4/1/2020 11:05:20 AM
EPA METHOD 300.0: ANIONS						Analyst: **MRA**
Chloride	250	50		mg/L	100	3/30/2020 6:01:01 PM
EPA METHOD 8260: VOLATILES SHORT LIST						Analyst: **DJF**
Benzene	ND	1.0		µg/L	1	4/4/2020 2:04:10 PM
Toluene	ND	1.0		µg/L	1	4/4/2020 2:04:10 PM
Ethylbenzene	ND	1.0		µg/L	1	4/4/2020 2:04:10 PM
Xylenes, Total	ND	1.5		µg/L	1	4/4/2020 2:04:10 PM
Surr: 1,2-Dichloroethane-d4	101	70-130		%Rec	1	4/4/2020 2:04:10 PM
Surr: 4-Bromofluorobenzene	99.1	70-130		%Rec	1	4/4/2020 2:04:10 PM
Surr: Dibromofluoromethane	108	70-130		%Rec	1	4/4/2020 2:04:10 PM
Surr: Toluene-d8	97.6	70-130		%Rec	1	4/4/2020 2:04:10 PM
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **DJF**
Gasoline Range Organics (GRO)	ND	0.050		mg/L	1	4/4/2020 2:04:10 PM
Surr: BFB	102	70-130		%Rec	1	4/4/2020 2:04:10 PM
SM2540C MOD: TOTAL DISSOLVED SOLIDS						Analyst: **KS**
Total Dissolved Solids	898	40.0	*D	mg/L	1	4/6/2020 12:28:00 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	Value above quantitation range
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 Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix		

Analytical Report
Lab Order **2003C34**
Date Reported: **4/7/2020**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Animas Environmental
Client Sample ID: MW-3
Project: BMG Landfarm
Collection Date: 3/26/2020 10:52:00 AM
Lab ID: 2003C34-003 **Matrix:** AQUEOUS **Received Date:** 3/27/2020 8:10:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE						Analyst: **JME**
Diesel Range Organics (DRO)	ND	1.0		mg/L	1	4/1/2020 11:29:20 AM
Motor Oil Range Organics (MRO)	ND	5.0		mg/L	1	4/1/2020 11:29:20 AM
Surr: DNOP	99.0	70-130		%Rec	1	4/1/2020 11:29:20 AM
EPA METHOD 300.0: ANIONS						Analyst: **MRA**
Chloride	170	5.0		mg/L	10	3/30/2020 6:13:54 PM
EPA METHOD 8260: VOLATILES SHORT LIST						Analyst: **DJF**
Benzene	ND	1.0		µg/L	1	4/4/2020 2:32:41 PM
Toluene	ND	1.0		µg/L	1	4/4/2020 2:32:41 PM
Ethylbenzene	ND	1.0		µg/L	1	4/4/2020 2:32:41 PM
Xylenes, Total	ND	1.5		µg/L	1	4/4/2020 2:32:41 PM
Surr: 1,2-Dichloroethane-d4	101	70-130		%Rec	1	4/4/2020 2:32:41 PM
Surr: 4-Bromofluorobenzene	95.5	70-130		%Rec	1	4/4/2020 2:32:41 PM
Surr: Dibromofluoromethane	103	70-130		%Rec	1	4/4/2020 2:32:41 PM
Surr: Toluene-d8	96.7	70-130		%Rec	1	4/4/2020 2:32:41 PM
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **DJF**
Gasoline Range Organics (GRO)	ND	0.050		mg/L	1	4/4/2020 2:32:41 PM
Surr: BFB	97.7	70-130		%Rec	1	4/4/2020 2:32:41 PM
SM2540C MOD: TOTAL DISSOLVED SOLIDS						Analyst: **KS**
Total Dissolved Solids	772	40.0	*D	mg/L	1	4/6/2020 12:28:00 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	Value above quantitation range
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 Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix		

Analytical Report
Lab Order **2003C34**
Date Reported: **4/7/2020**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Animas Environmental
Client Sample ID: MW-4
Project: BMG Landfarm
Collection Date: 3/26/2020 11:13:00 AM
Lab ID: 2003C34-004 **Matrix:** AQUEOUS **Received Date:** 3/27/2020 8:10:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE						Analyst: **JME**
Diesel Range Organics (DRO)	ND	1.0		mg/L	1	4/1/2020 11:53:24 AM
Motor Oil Range Organics (MRO)	ND	5.0		mg/L	1	4/1/2020 11:53:24 AM
Surr: DNOP	102	70-130		%Rec	1	4/1/2020 11:53:24 AM
EPA METHOD 300.0: ANIONS						Analyst: **MRA**
Chloride	100	5.0		mg/L	10	3/30/2020 6:39:37 PM
EPA METHOD 8260: VOLATILES SHORT LIST						Analyst: **DJF**
Benzene	ND	1.0		µg/L	1	4/4/2020 3:01:07 PM
Toluene	ND	1.0		µg/L	1	4/4/2020 3:01:07 PM
Ethylbenzene	ND	1.0		µg/L	1	4/4/2020 3:01:07 PM
Xylenes, Total	ND	1.5		µg/L	1	4/4/2020 3:01:07 PM
Surr: 1,2-Dichloroethane-d4	101	70-130		%Rec	1	4/4/2020 3:01:07 PM
Surr: 4-Bromofluorobenzene	99.9	70-130		%Rec	1	4/4/2020 3:01:07 PM
Surr: Dibromofluoromethane	103	70-130		%Rec	1	4/4/2020 3:01:07 PM
Surr: Toluene-d8	98.0	70-130		%Rec	1	4/4/2020 3:01:07 PM
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **DJF**
Gasoline Range Organics (GRO)	ND	0.050		mg/L	1	4/4/2020 3:01:07 PM
Surr: BFB	104	70-130		%Rec	1	4/4/2020 3:01:07 PM
SM2540C MOD: TOTAL DISSOLVED SOLIDS						Analyst: **KS**
Total Dissolved Solids	930	200	*D	mg/L	1	4/6/2020 12:28:00 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	Value above quantitation range
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 Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix		

Analytical Report
Lab Order **2003C34**
Date Reported: **4/7/2020**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Animas Environmental **Client Sample ID:** Trip Blank
Project: BMG Landfarm **Collection Date:**
Lab ID: 2003C34-005 **Matrix:** TRIP BLANK **Received Date:** 3/27/2020 8:10:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8260: VOLATILES SHORT LIST						Analyst: **DJF**
Benzene	ND	1.0		µg/L	1	4/4/2020 3:29:49 PM
Toluene	ND	1.0		µg/L	1	4/4/2020 3:29:49 PM
Ethylbenzene	ND	1.0		µg/L	1	4/4/2020 3:29:49 PM
Xylenes, Total	ND	1.5		µg/L	1	4/4/2020 3:29:49 PM
Surr: 1,2-Dichloroethane-d4	102	70-130		%Rec	1	4/4/2020 3:29:49 PM
Surr: 4-Bromofluorobenzene	99.0	70-130		%Rec	1	4/4/2020 3:29:49 PM
Surr: Dibromofluoromethane	106	70-130		%Rec	1	4/4/2020 3:29:49 PM
Surr: Toluene-d8	99.1	70-130		%Rec	1	4/4/2020 3:29:49 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	Value above quantitation range
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 Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix		

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **2003C34**
07-Apr-20

Client: Animas Environmental
Project: BMG Landfarm

Sample ID: **MB**	SampType: **mblk**	TestCode: **EPA Method 300.0: Anions**							
Client ID: **PBW**	Batch ID: **R67712**	RunNo: **67712**							
Prep Date:	Analysis Date: **3/30/2020**	SeqNo: **2337524**	Units: **mg/L**						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	ND	0.50								

Sample ID: **LCS**	SampType: **lcs**	TestCode: **EPA Method 300.0: Anions**							
Client ID: **LCSW**	Batch ID: **R67712**	RunNo: **67712**							
Prep Date:	Analysis Date: **3/30/2020**	SeqNo: **2337525**	Units: **mg/L**						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	4.7	0.50	5.000	0	94.9	90	110			

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 Quanitative Limit
S	% Recovery outside of range due to dilution or matrix
B	Analyte detected in the associated Method Blank
E	Value above quantitation range
J	Analyte detected below quantitation limits
P	Sample pH Not In Range
RL	Reporting Limit

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **2003C34**
07-Apr-20

Client: Animas Environmental
Project: BMG Landfarm

Sample ID: **MB-51445**	SampType: **MBLK**	TestCode: **EPA Method 8015M/D: Diesel Range**
Client ID: **PBW**	Batch ID: **51445**	RunNo: **67765**
Prep Date: **3/31/2020**	Analysis Date: **4/1/2020**	SeqNo: **2340231** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	ND	1.0								
Motor Oil Range Organics (MRO)	ND	5.0								
Surr: DNOP	0.96		1.000		96.5	70	130			

Sample ID: **MB-51446**	SampType: **MBLK**	TestCode: **EPA Method 8015M/D: Diesel Range**
Client ID: **PBW**	Batch ID: **51446**	RunNo: **67765**
Prep Date: **3/31/2020**	Analysis Date: **4/1/2020**	SeqNo: **2340232** Units: **%Rec**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP	1.1		1.000		110	70	130			

Sample ID: **LCS-51445**	SampType: **LCS**	TestCode: **EPA Method 8015M/D: Diesel Range**
Client ID: **LCSW**	Batch ID: **51445**	RunNo: **67765**
Prep Date: **3/31/2020**	Analysis Date: **4/1/2020**	SeqNo: **2340233** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	5.1	1.0	5.000	0	103	70	130			
Surr: DNOP	0.50		0.5000		99.2	70	130			

Sample ID: **LCS-51446**	SampType: **LCS**	TestCode: **EPA Method 8015M/D: Diesel Range**
Client ID: **LCSW**	Batch ID: **51446**	RunNo: **67765**
Prep Date: **3/31/2020**	Analysis Date: **4/1/2020**	SeqNo: **2340234** Units: **%Rec**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP	0.55		0.5000		110	70	130			

Sample ID: **2003C34-001BMS**	SampType: **MS**	TestCode: **EPA Method 8015M/D: Diesel Range**
Client ID: **MW-1**	Batch ID: **51445**	RunNo: **67765**
Prep Date: **3/31/2020**	Analysis Date: **4/1/2020**	SeqNo: **2340237** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	4.9	1.0	5.000	0	98.1	70	130			
Surr: DNOP	0.48		0.5000		96.8	70	130			

Sample ID: **2003C34-001BMSD**	SampType: **MSD**	TestCode: **EPA Method 8015M/D: Diesel Range**
Client ID: **MW-1**	Batch ID: **51445**	RunNo: **67765**
Prep Date: **3/31/2020**	Analysis Date: **4/1/2020**	SeqNo: **2340239** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	4.8	1.0	5.000	0	95.4	70	130	2.80	20	

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 Quanitative Limit
S	% Recovery outside of range due to dilution or matrix
B	Analyte detected in the associated Method Blank
E	Value above quantitation range
J	Analyte detected below quantitation limits
P	Sample pH Not In Range
RL	Reporting Limit

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **2003C34**
07-Apr-20

Client: Animas Environmental
Project: BMG Landfarm

Sample ID: **2003C34-001BMSD** SampType: **MSD** TestCode: **EPA Method 8015M/D: Diesel Range**
Client ID: **MW-1** Batch ID: **51445** RunNo: **67765**
Prep Date: **3/31/2020** Analysis Date: **4/1/2020** SeqNo: **2340239** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP	0.46		0.5000		91.7	70	130	0	0	

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 Quanitative Limit
S	% Recovery outside of range due to dilution or matrix
B	Analyte detected in the associated Method Blank
E	Value above quantitation range
J	Analyte detected below quantitation limits
P	Sample pH Not In Range
RL	Reporting Limit

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **2003C34**
07-Apr-20

Client: Animas Environmental
Project: BMG Landfarm

Sample ID: **mb1**	SampType: **MBLK**	TestCode: **EPA Method 8260: Volatiles Short List**
Client ID: **PBW**	Batch ID: **A67855**	RunNo: **67855**
Prep Date:	Analysis Date: **4/4/2020**	SeqNo: **2343945** 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								
Xylenes, Total	ND	1.5								
Surr: 1,2-Dichloroethane-d4	10		10.00		101	70	130			
Surr: 4-Bromofluorobenzene	9.3		10.00		93.1	70	130			
Surr: Dibromofluoromethane	11		10.00		108	70	130			
Surr: Toluene-d8	9.8		10.00		97.5	70	130			

Sample ID: **100ng btex lcs**	SampType: **LCS4**	TestCode: **EPA Method 8260: Volatiles Short List**
Client ID: **BatchQC**	Batch ID: **A67855**	RunNo: **67855**
Prep Date:	Analysis Date: **4/4/2020**	SeqNo: **2343946** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	20	1.0	20.00	0	98.5	80	120			
Toluene	21	1.0	20.00	0	105	80	120			
Ethylbenzene	21	1.0	20.00	0	105	80	120			
Xylenes, Total	65	1.5	60.00	0	109	80	120			
Surr: 4-Bromofluorobenzene	9.7		10.00		97.3	70	130			
Surr: Toluene-d8	10		10.00		99.9	70	130			

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 Quanitative Limit
S	% Recovery outside of range due to dilution or matrix
B	Analyte detected in the associated Method Blank
E	Value above quantitation range
J	Analyte detected below quantitation limits
P	Sample pH Not In Range
RL	Reporting Limit

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **2003C34**
07-Apr-20

Client: Animas Environmental
Project: BMG Landfarm

Sample ID: **mb1**	SampType: **MBLK**	TestCode: **EPA Method 8015D: Gasoline Range**
Client ID: **PBW**	Batch ID: **C67855**	RunNo: **67855**
Prep Date:	Analysis Date: **4/4/2020**	SeqNo: **2343984** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	ND	0.050								
Surr: BFB	9.9		10.00		98.9	70	130			

Sample ID: **2.5ug gro lcs**	SampType: **LCS**	TestCode: **EPA Method 8015D: Gasoline Range**
Client ID: **LCSW**	Batch ID: **C67855**	RunNo: **67855**
Prep Date:	Analysis Date: **4/4/2020**	SeqNo: **2343985** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	0.42	0.050	0.5000	0	84.8	70	130			
Surr: BFB	10		10.00		101	70	130			

Sample ID: **2003c34-001a ms**	SampType: **MS**	TestCode: **EPA Method 8015D: Gasoline Range**
Client ID: **MW-1**	Batch ID: **C67855**	RunNo: **67855**
Prep Date:	Analysis Date: **4/4/2020**	SeqNo: **2343987** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	0.43	0.050	0.5000	0.01460	83.4	70	130			
Surr: BFB	10		10.00		99.5	70	130			

Sample ID: **2003c34-001a msd**	SampType: **MSD**	TestCode: **EPA Method 8015D: Gasoline Range**
Client ID: **MW-1**	Batch ID: **C67855**	RunNo: **67855**
Prep Date:	Analysis Date: **4/4/2020**	SeqNo: **2343988** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	0.41	0.050	0.5000	0.01460	79.9	70	130	4.07	20	
Surr: BFB	9.9		10.00		99.4	70	130	0	0	

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 Quanitative Limit
S	% Recovery outside of range due to dilution or matrix
B	Analyte detected in the associated Method Blank
E	Value above quantitation range
J	Analyte detected below quantitation limits
P	Sample pH Not In Range
RL	Reporting Limit

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **2003C34**
07-Apr-20

Client: Animas Environmental
Project: BMG Landfarm

Sample ID: **MB-51511**	SampType: **MBLK**	TestCode: **SM2540C MOD: Total Dissolved Solids**
Client ID: **PBW**	Batch ID: **51511**	RunNo: **67882**
Prep Date: **4/2/2020**	Analysis Date: **4/6/2020**	SeqNo: **2345269** 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-51511**	SampType: **LCS**	TestCode: **SM2540C MOD: Total Dissolved Solids**
Client ID: **LCSW**	Batch ID: **51511**	RunNo: **67882**
Prep Date: **4/2/2020**	Analysis Date: **4/6/2020**	SeqNo: **2345270** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Total Dissolved Solids	1010	20.0	1000	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	Value above quantitation range
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 Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix		

HALL ENVIRONMENTAL ANALYSIS LABORATORY

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

Sample Log-In Check List

Client Name: **Animas Environmental** Work Order Number: **2003C34** RcptNo: **1**

Received By: **Juan Rojas** **3/27/2020 8:10:00 AM** Juan Rojas

Completed By: **Leah Baca** **3/27/2020 2:13:19 PM** Leah Baca

Reviewed By: LB 3/30/20 1016

Chain of Custody

1. Is Chain of Custody sufficiently 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° C to 6.0°C Yes ☑ No ☐ NA ☐
5. Sample(s) in proper container(s)? 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: (<2 or >12 unless noted)
Adjusted?
Checked by: DAD 3/30/20

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 °C	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	-0.6	Good				

Chain-of-Custody Record

Client: Animas Environmental Services

Mailing Address: P.O. Box 8
Farmington, NM 87499-00008

Phone #: 505-564-2281

email or Fax#: dreese@animasenvironmental.com

QA/QC Package:
X Standard □ Level 4 (Full Validation)

Accreditation:
□ NELAP □ Other

□ EDD (Type)

Turn-Around Time:
X Standard □ Rush

Project Name: BMG Landfarm

Project #: AES 040605

Project Manager: Elizabeth McNally, David Reese

Sampler: CL/GB

On Ice: X Yes □ No 0.1-0.0.1

Sample Temperature: -0.6-0.-0.6

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

Analysis Request

Date	Time	Matrix	Sample Request ID	Container Type and #	Preservative Type	HEAL No. 2003C32	BTEX 8021	TPH (GRO/DRO/MRO) 8015	TDS SM2540C	Chlorides 300.0							Air Bubbles (Y or N)
3-26-20	9:54	H2O	MW-1	(3) 40 mL glass (1) 250 mL amber glass (1) 500 mL plastic	3-HgCl2 cool 2-Non	-001	X	X	X	X							
3-26-20	10:34	H2O	MW-2	(3) 40 mL glass (1) 250 mL amber glass (1) 500 mL plastic	3-HgCl2 cool 2-Non	-002	X	X	X	X							
3-26-20	10:52	H2O	MW-3	(3) 40 mL glass (1) 250 mL amber glass (1) 500 mL plastic	3-HgCl2 cool 2-Non	-003	X	X	X	X							
3-26-20	11:13	H2O	MW-4	(3) 40 mL glass (1) 250 mL amber glass (1) 500 mL plastic	3-HgCl2 cool 2-Non	-004	X	X	X	X							
		H2O	Interstitial Well CL	(3) 40 mL glass (1) 250 mL amber glass (1) 500 mL plastic	3-HgCl2 cool 2-Non		X	X	X	X							
		H2O	Trip Blank		Cold	-005	X										

Date	Time	Relinquished by:	Received by:	Date	Time
3/26/20	1715			3/26/20	1715
3/26/20	1813		courier	3/27/20	8:10

Remarks: Not Frozen JR 3/27/20

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.

HALL ENVIRONMENTAL ANALYSIS LABORATORY

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

July 08, 2020

Elizabeth McNally

Animas Environmental
604 Pinon Street
Farmington, NM 87401
TEL:
FAX

RE: BMG Landfarm OrderNo.: 2006D79

Dear Elizabeth McNally:

Hall Environmental Analysis Laboratory received 4 sample(s) on 6/26/2020 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,

Andy Freeman
Laboratory Manager
4901 Hawkins NE
Albuquerque, NM 87109

Analytical Report
Lab Order **2006D79**
Date Reported: **7/8/2020**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Animas Environmental
Client Sample ID: MW-1
Project: BMG Landfarm
Collection Date: 6/24/2020 12:00:00 PM
Lab ID: 2006D79-001 **Matrix:** AQUEOUS **Received Date:** 6/26/2020 8:10:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE						Analyst: **BRM**
Diesel Range Organics (DRO)	ND	1.0		mg/L	1	6/28/2020 10:51:15 AM
Motor Oil Range Organics (MRO)	ND	5.0		mg/L	1	6/28/2020 10:51:15 AM
Surr: DNOP	125	70-130		%Rec	1	6/28/2020 10:51:15 AM
EPA METHOD 300.0: ANIONS						Analyst: **CAS**
Chloride	18	5.0		mg/L	10	6/28/2020 1:43:06 PM
EPA METHOD 8260: VOLATILES SHORT LIST						Analyst: **DJF**
Benzene	ND	1.0		µg/L	1	6/28/2020 5:36:24 PM
Toluene	ND	1.0		µg/L	1	6/28/2020 5:36:24 PM
Ethylbenzene	ND	1.0		µg/L	1	6/28/2020 5:36:24 PM
Xylenes, Total	ND	1.5		µg/L	1	6/28/2020 5:36:24 PM
Surr: 1,2-Dichloroethane-d4	104	70-130		%Rec	1	6/28/2020 5:36:24 PM
Surr: 4-Bromofluorobenzene	95.2	70-130		%Rec	1	6/28/2020 5:36:24 PM
Surr: Dibromofluoromethane	102	70-130		%Rec	1	6/28/2020 5:36:24 PM
Surr: Toluene-d8	107	70-130		%Rec	1	6/28/2020 5:36:24 PM
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **DJF**
Gasoline Range Organics (GRO)	ND	0.050		mg/L	1	6/28/2020 5:36:24 PM
Surr: BFB	106	70-130		%Rec	1	6/28/2020 5:36:24 PM
SM2540C MOD: TOTAL DISSOLVED SOLIDS						Analyst: **KS**
Total Dissolved Solids	648	40.0	*D	mg/L	1	7/2/2020 7:20:00 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	Value above quantitation range
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 Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix		

Analytical Report
Lab Order **2006D79**
Date Reported: **7/8/2020**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Animas Environmental
Client Sample ID: MW-2
Project: BMG Landfarm
Collection Date: 6/24/2020 11:35:00 AM
Lab ID: 2006D79-002 **Matrix:** AQUEOUS **Received Date:** 6/26/2020 8:10:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE						Analyst: **BRM**
Diesel Range Organics (DRO)	ND	1.0		mg/L	1	6/28/2020 11:01:22 AM
Motor Oil Range Organics (MRO)	ND	5.0		mg/L	1	6/28/2020 11:01:22 AM
Surr: DNOP	135	70-130	S	%Rec	1	6/28/2020 11:01:22 AM
EPA METHOD 300.0: ANIONS						Analyst: **CAS**
Chloride	310	50	*	mg/L	100	6/28/2020 2:47:28 PM
EPA METHOD 8260: VOLATILES SHORT LIST						Analyst: **DJF**
Benzene	ND	1.0		µg/L	1	6/28/2020 6:06:54 PM
Toluene	ND	1.0		µg/L	1	6/28/2020 6:06:54 PM
Ethylbenzene	ND	1.0		µg/L	1	6/28/2020 6:06:54 PM
Xylenes, Total	ND	1.5		µg/L	1	6/28/2020 6:06:54 PM
Surr: 1,2-Dichloroethane-d4	104	70-130		%Rec	1	6/28/2020 6:06:54 PM
Surr: 4-Bromofluorobenzene	94.4	70-130		%Rec	1	6/28/2020 6:06:54 PM
Surr: Dibromofluoromethane	101	70-130		%Rec	1	6/28/2020 6:06:54 PM
Surr: Toluene-d8	105	70-130		%Rec	1	6/28/2020 6:06:54 PM
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **DJF**
Gasoline Range Organics (GRO)	ND	0.050		mg/L	1	6/28/2020 6:06:54 PM
Surr: BFB	106	70-130		%Rec	1	6/28/2020 6:06:54 PM
SM2540C MOD: TOTAL DISSOLVED SOLIDS						Analyst: **KS**
Total Dissolved Solids	1030	200	*D	mg/L	1	7/2/2020 7:20:00 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 Quanitative Limit
S	% Recovery outside of range due to dilution or matrix
B	Analyte detected in the associated Method Blank
E	Value above quantitation range
J	Analyte detected below quantitation limits
P	Sample pH Not In Range
RL	Reporting Limit

Analytical Report
Lab Order **2006D79**
Date Reported: **7/8/2020**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Animas Environmental
Client Sample ID: MW-3
Project: BMG Landfarm
Collection Date: 6/24/2020 11:08:00 AM
Lab ID: 2006D79-003 **Matrix:** AQUEOUS **Received Date:** 6/26/2020 8:10:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE						Analyst: **BRM**
Diesel Range Organics (DRO)	ND	1.0		mg/L	1	6/28/2020 11:11:30 AM
Motor Oil Range Organics (MRO)	ND	5.0		mg/L	1	6/28/2020 11:11:30 AM
Surr: DNOP	127	70-130		%Rec	1	6/28/2020 11:11:30 AM
EPA METHOD 300.0: ANIONS						Analyst: **CAS**
Chloride	200	50		mg/L	100	6/28/2020 3:13:12 PM
EPA METHOD 8260: VOLATILES SHORT LIST						Analyst: **DJF**
Benzene	ND	1.0		µg/L	1	6/28/2020 6:37:36 PM
Toluene	ND	1.0		µg/L	1	6/28/2020 6:37:36 PM
Ethylbenzene	ND	1.0		µg/L	1	6/28/2020 6:37:36 PM
Xylenes, Total	ND	1.5		µg/L	1	6/28/2020 6:37:36 PM
Surr: 1,2-Dichloroethane-d4	105	70-130		%Rec	1	6/28/2020 6:37:36 PM
Surr: 4-Bromofluorobenzene	94.8	70-130		%Rec	1	6/28/2020 6:37:36 PM
Surr: Dibromofluoromethane	105	70-130		%Rec	1	6/28/2020 6:37:36 PM
Surr: Toluene-d8	106	70-130		%Rec	1	6/28/2020 6:37:36 PM
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **DJF**
Gasoline Range Organics (GRO)	ND	0.050		mg/L	1	6/28/2020 6:37:36 PM
Surr: BFB	103	70-130		%Rec	1	6/28/2020 6:37:36 PM
SM2540C MOD: TOTAL DISSOLVED SOLIDS						Analyst: **KS**
Total Dissolved Solids	850	200	*D	mg/L	1	7/2/2020 7:20:00 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	Value above quantitation range
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 Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix		

Analytical Report
Lab Order **2006D79**
Date Reported: **7/8/2020**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Animas Environmental
Client Sample ID: MW-4
Project: BMG Landfarm
Collection Date: 6/24/2020 10:42:00 AM
Lab ID: 2006D79-004 **Matrix:** AQUEOUS **Received Date:** 6/26/2020 8:10:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE						Analyst: **BRM**
Diesel Range Organics (DRO)	ND	1.0		mg/L	1	6/28/2020 11:21:51 AM
Motor Oil Range Organics (MRO)	ND	5.0		mg/L	1	6/28/2020 11:21:51 AM
Surr: DNOP	93.0	70-130		%Rec	1	6/28/2020 11:21:51 AM
EPA METHOD 300.0: ANIONS						Analyst: **CAS**
Chloride	63	5.0		mg/L	10	6/28/2020 3:26:04 PM
EPA METHOD 8260: VOLATILES SHORT LIST						Analyst: **DJF**
Benzene	ND	1.0		µg/L	1	6/28/2020 7:08:00 PM
Toluene	ND	1.0		µg/L	1	6/28/2020 7:08:00 PM
Ethylbenzene	ND	1.0		µg/L	1	6/28/2020 7:08:00 PM
Xylenes, Total	ND	1.5		µg/L	1	6/28/2020 7:08:00 PM
Surr: 1,2-Dichloroethane-d4	101	70-130		%Rec	1	6/28/2020 7:08:00 PM
Surr: 4-Bromofluorobenzene	94.5	70-130		%Rec	1	6/28/2020 7:08:00 PM
Surr: Dibromofluoromethane	99.9	70-130		%Rec	1	6/28/2020 7:08:00 PM
Surr: Toluene-d8	107	70-130		%Rec	1	6/28/2020 7:08:00 PM
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **DJF**
Gasoline Range Organics (GRO)	ND	0.050		mg/L	1	6/28/2020 7:08:00 PM
Surr: BFB	105	70-130		%Rec	1	6/28/2020 7:08:00 PM
SM2540C MOD: TOTAL DISSOLVED SOLIDS						Analyst: **KS**
Total Dissolved Solids	840	200	*D	mg/L	1	7/2/2020 7:20:00 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	Value above quantitation range
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 Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix		

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **2006D79**
08-Jul-20

Client: Animas Environmental
Project: BMG Landfarm

Sample ID: **MB**	SampType: **mblk**	TestCode: **EPA Method 300.0: Anions**							
Client ID: **PBW**	Batch ID: **R69982**	RunNo: **69982**							
Prep Date:	Analysis Date: **6/28/2020**	SeqNo: **2430991**	Units: **mg/L**						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	ND	0.50								

Sample ID: **LCS**	SampType: **lcs**	TestCode: **EPA Method 300.0: Anions**							
Client ID: **LCSW**	Batch ID: **R69982**	RunNo: **69982**							
Prep Date:	Analysis Date: **6/28/2020**	SeqNo: **2430992**	Units: **mg/L**						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	4.7	0.50	5.000	0	93.9	90	110			

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 Quanitative Limit
S	% Recovery outside of range due to dilution or matrix
B	Analyte detected in the associated Method Blank
E	Value above quantitation range
J	Analyte detected below quantitation limits
P	Sample pH Not In Range
RL	Reporting Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **2006D79**

08-Jul-20

Client: Animas Environmental

Project: BMG Landfarm

Sample ID: **LCS-53358**	SampType: **LCS**	TestCode: **EPA Method 8015M/D: Diesel Range**
Client ID: **LCSW**	Batch ID: **53358**	RunNo: **69959**
Prep Date: **6/27/2020**	Analysis Date: **6/28/2020**	SeqNo: **2429996** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	5.4	1.0	5.000	0	107	70	130			
Surr: DNOP	0.52		0.5000		103	70	130			

Sample ID: **MB-53358**	SampType: **MBLK**	TestCode: **EPA Method 8015M/D: Diesel Range**
Client ID: **PBW**	Batch ID: **53358**	RunNo: **69959**
Prep Date: **6/27/2020**	Analysis Date: **6/28/2020**	SeqNo: **2429997** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	ND	1.0								
Motor Oil Range Organics (MRO)	ND	5.0								
Surr: DNOP	1.4		1.000		144	70	130			S

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 Quanitative Limit
S	% Recovery outside of range due to dilution or matrix
B	Analyte detected in the associated Method Blank
E	Value above quantitation range
J	Analyte detected below quantitation limits
P	Sample pH Not In Range
RL	Reporting Limit

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **2006D79**
08-Jul-20

Client: Animas Environmental
Project: BMG Landfarm

Sample ID: **mb1**	SampType: **MBLK**	TestCode: **EPA Method 8260: Volatiles Short List**
Client ID: **PBW**	Batch ID: **A69970**	RunNo: **69970**
Prep Date:	Analysis Date: **6/28/2020**	SeqNo: **2430532** 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								
Xylenes, Total	ND	1.5								
Surr: 1,2-Dichloroethane-d4	10		10.00		99.6	70	130			
Surr: 4-Bromofluorobenzene	9.2		10.00		92.2	70	130			
Surr: Dibromofluoromethane	9.7		10.00		97.3	70	130			
Surr: Toluene-d8	10		10.00		104	70	130			

Sample ID: **100ng lcs**	SampType: **LCS**	TestCode: **EPA Method 8260: Volatiles Short List**
Client ID: **LCSW**	Batch ID: **A69970**	RunNo: **69970**
Prep Date:	Analysis Date: **6/28/2020**	SeqNo: **2430533** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	21	1.0	20.00	0	103	70	130			
Toluene	20	1.0	20.00	0	101	70	130			
Surr: 1,2-Dichloroethane-d4	9.8		10.00		97.7	70	130			
Surr: 4-Bromofluorobenzene	9.5		10.00		95.0	70	130			
Surr: Dibromofluoromethane	9.9		10.00		99.2	70	130			
Surr: Toluene-d8	9.5		10.00		94.6	70	130			

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 Quanitative Limit
S	% Recovery outside of range due to dilution or matrix
B	Analyte detected in the associated Method Blank
E	Value above quantitation range
J	Analyte detected below quantitation limits
P	Sample pH Not In Range
RL	Reporting Limit

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **2006D79**
08-Jul-20

Client: Animas Environmental
Project: BMG Landfarm

Sample ID: **mb1**	SampType: **MBLK**	TestCode: **EPA Method 8015D: Gasoline Range**
Client ID: **PBW**	Batch ID: **G69970**	RunNo: **69970**
Prep Date:	Analysis Date: **6/28/2020**	SeqNo: **2430569** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	ND	0.050								
Surr: BFB	10		10.00		103	70	130			

Sample ID: **2.5ug gro lcs**	SampType: **LCS**	TestCode: **EPA Method 8015D: Gasoline Range**
Client ID: **LCSW**	Batch ID: **G69970**	RunNo: **69970**
Prep Date:	Analysis Date: **6/28/2020**	SeqNo: **2430570** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	0.50	0.050	0.5000	0	99.2	70	130			
Surr: BFB	10		10.00		103	70	130			

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 Quanitative Limit
S	% Recovery outside of range due to dilution or matrix
B	Analyte detected in the associated Method Blank
E	Value above quantitation range
J	Analyte detected below quantitation limits
P	Sample pH Not In Range
RL	Reporting Limit

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **2006D79**
08-Jul-20

Client: Animas Environmental
Project: BMG Landfarm

Sample ID: **MB-53443**	SampType: **MBLK**	TestCode: **SM2540C MOD: Total Dissolved Solids**
Client ID: **PBW**	Batch ID: **53443**	RunNo: **70111**
Prep Date: **7/1/2020**	Analysis Date: **7/2/2020**	SeqNo: **2436424** 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-53443**	SampType: **LCS**	TestCode: **SM2540C MOD: Total Dissolved Solids**
Client ID: **LCSW**	Batch ID: **53443**	RunNo: **70111**
Prep Date: **7/1/2020**	Analysis Date: **7/2/2020**	SeqNo: **2436425** 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: **2006D79-001CDUP**	SampType: **DUP**	TestCode: **SM2540C MOD: Total Dissolved Solids**
Client ID: **MW-1**	Batch ID: **53443**	RunNo: **70111**
Prep Date: **7/1/2020**	Analysis Date: **7/2/2020**	SeqNo: **2436431** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Total Dissolved Solids	652	40.0						0.615	10	*D

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 Quanitative Limit
S	% Recovery outside of range due to dilution or matrix
B	Analyte detected in the associated Method Blank
E	Value above quantitation range
J	Analyte detected below quantitation limits
P	Sample pH Not In Range
RL	Reporting Limit

HALL ENVIRONMENTAL ANALYSIS LABORATORY

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

Sample Log-In Check List

Client Name: **Animas Environmental Services** Work Order Number: **2006D79** RcptNo: 1

Received By: **Scott Anderson** **6/26/2020 8:10:00 AM**

Completed By: **Emily Mocho** **6/26/2020 8:38:25 AM**

Reviewed By: JR 6/26/20

Chain of Custody

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

Log In

3. Was an attempt made to cool the samples?	Yes ☑	No ☐	NA ☐
4. Were all samples received at a temperature of >0° C to 6.0°C	Yes ☑	No ☐	NA ☐
5. Sample(s) in proper container(s)?	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: (<2 or >12 unless noted)

Adjusted?

Checked by: SPA 6.26.20

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 °C	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	2.9	Good	Not Present			
2	3.1	Good	Not Present			

Chain-of-Custody Record

Client:	Animas Environmental Services
Mailing Address:	P.O. Box 8 Farmington, NM 87499-00008
Phone #:	505-564-2281
email or Fax#:	dreese@animasenvironmental.com
QA/QC Package:	X Standard □ Level 4 (Full Validation)
Accreditation:	□ NELAP □ Other_____
□ EDD (Type)	_____

Turn-Around Time: X Standard □ Rush_____

Project Name: BMG Landfarm

Project #: AES 040605

Project Manager: Elizabeth McNally, David Reese

Sampler: 2 coolers

On Ice: X Yes □ No

Sample Temperature: 2.4 -0 = 2.4; 3.4 -0 = 3.4

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

Analysis Request

Date	Time	Matrix	Sample Request ID	Container Type and #	Preservative Type	HEAL No. 2006D79	BTEX 8021	TPH (GRO/DRO/MRO) 8015	TDS SM2540C	Chlorides 300.0							Air Bubbles (Y or N)
6-24-20	12:00	H2O	MW-1	(3) 40 mL glass (1) 250 mL amber glass (1) ~~500~~ 1L mL plastic	3-HgCl2 ~~cool~~ 2-Non	-001	X	X	X	X							
6-24-20	11:35	H2O	MW-2	(3) 40 mL glass (1) 250 mL amber glass (1) ~~500~~ 1L mL plastic	3-HgCl2 ~~cool~~ 2-Non	-002	X	X	X	X							
6-24-20	11:08	H2O	MW-3	(3) 40 mL glass (1) 250 mL amber glass (1) ~~500~~ 1L mL plastic	3-HgCl2 ~~cool~~ 2-Non	-003	X	X	X	X							
6-24-20	10:42	H2O	MW-4	(3) 40 mL glass (1) 250 mL amber glass (1) ~~500~~ 1L mL plastic	3-HgCl2 ~~cool~~ 2-Non	-004	X	X	X	X							
~~—~~		~~H2O~~	~~Interstitial Well~~	(3) 40 mL glass (1) 250 mL amber glass (1) ~~500~~ 1L mL plastic	3-HgCl2 cool 2-Non		~~X~~	~~X~~	~~X~~	~~X~~							
		H2O	Trip Blank		~~Cold~~	~~-005~~ Not Recieved SPA 6.26.20	X										

Date:	Time:	Relinquished by:	Received by:	Date	Time
6/25/2020	1628			6/25/2020	1628
6/25/2020	1840		SPA Courier	6.26.20	8:10

Remarks: Low yield wells. 1L Bottles not completely filled but more than 500mL.

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.

HALL ENVIRONMENTAL ANALYSIS LABORATORY

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

October 07, 2020

Elizabeth McNally

Animas Environmental
624 E. Comanche
Farmington, NM 87401
TEL:
FAX

RE: BMG Landfarm OrderNo.: 2009H71

Dear Elizabeth McNally:

Hall Environmental Analysis Laboratory received 5 sample(s) on 9/30/2020 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,

Andy Freeman
Laboratory Manager
4901 Hawkins NE
Albuquerque, NM 87109

Analytical Report
Lab Order **2009H71**
Date Reported: **10/7/2020**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Animas Environmental
Client Sample ID: MW-1
Project: BMG Landfarm
Collection Date: 9/29/2020 12:53:00 PM
Lab ID: 2009H71-001 **Matrix:** AQUEOUS **Received Date:** 9/30/2020 7:35:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE						Analyst: **BRM**
Diesel Range Organics (DRO)	5.4	1.0		mg/L	1	10/2/2020 1:54:34 PM
Motor Oil Range Organics (MRO)	ND	5.0		mg/L	1	10/2/2020 1:54:34 PM
Surr: DNOP	104	70-130		%Rec	1	10/2/2020 1:54:34 PM
EPA METHOD 300.0: ANIONS						Analyst: **JMT**
Chloride	21	5.0		mg/L	10	9/30/2020 5:24:53 PM
EPA METHOD 8260: VOLATILES SHORT LIST						Analyst: **JMR**
Benzene	ND	1.0		µg/L	1	10/6/2020 4:20:21 PM
Toluene	ND	1.0		µg/L	1	10/6/2020 4:20:21 PM
Ethylbenzene	ND	1.0		µg/L	1	10/6/2020 4:20:21 PM
Xylenes, Total	ND	1.5		µg/L	1	10/6/2020 4:20:21 PM
Surr: 1,2-Dichloroethane-d4	99.6	70-130		%Rec	1	10/6/2020 4:20:21 PM
Surr: Dibromofluoromethane	100	70-130		%Rec	1	10/6/2020 4:20:21 PM
Surr: Toluene-d8	98.4	70-130		%Rec	1	10/6/2020 4:20:21 PM
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **JMR**
Gasoline Range Organics (GRO)	ND	0.050		mg/L	1	10/6/2020 4:20:21 PM
Surr: BFB	97.6	70-130		%Rec	1	10/6/2020 4:20:21 PM
SM2540C MOD: TOTAL DISSOLVED SOLIDS						Analyst: **KS**
Total Dissolved Solids	614	40.0	*D	mg/L	1	10/1/2020 2:01:00 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	Value above quantitation range
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 Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix		

Analytical Report
Lab Order **2009H71**
Date Reported: **10/7/2020**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Animas Environmental
Client Sample ID: MW-2
Project: BMG Landfarm
Collection Date: 9/29/2020 12:18:00 PM
Lab ID: 2009H71-002 **Matrix:** AQUEOUS **Received Date:** 9/30/2020 7:35:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE						Analyst: **BRM**
Diesel Range Organics (DRO)	ND	1.0		mg/L	1	10/2/2020 2:04:19 PM
Motor Oil Range Organics (MRO)	ND	5.0		mg/L	1	10/2/2020 2:04:19 PM
Surr: DNOP	110	70-130		%Rec	1	10/2/2020 2:04:19 PM
EPA METHOD 300.0: ANIONS						Analyst: **JMT**
Chloride	270	50	*	mg/L	100	9/30/2020 6:03:31 PM
EPA METHOD 8260: VOLATILES SHORT LIST						Analyst: **JMR**
Benzene	ND	1.0		µg/L	1	10/6/2020 5:49:26 PM
Toluene	ND	1.0		µg/L	1	10/6/2020 5:49:26 PM
Ethylbenzene	ND	1.0		µg/L	1	10/6/2020 5:49:26 PM
Xylenes, Total	ND	1.5		µg/L	1	10/6/2020 5:49:26 PM
Surr: 1,2-Dichloroethane-d4	103	70-130		%Rec	1	10/6/2020 5:49:26 PM
Surr: Dibromofluoromethane	104	70-130		%Rec	1	10/6/2020 5:49:26 PM
Surr: Toluene-d8	99.0	70-130		%Rec	1	10/6/2020 5:49:26 PM
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **JMR**
Gasoline Range Organics (GRO)	ND	0.050		mg/L	1	10/6/2020 5:49:26 PM
Surr: BFB	96.6	70-130		%Rec	1	10/6/2020 5:49:26 PM
SM2540C MOD: TOTAL DISSOLVED SOLIDS						Analyst: **KS**
Total Dissolved Solids	1140	100	*D	mg/L	1	10/1/2020 2:01:00 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 Quanitative Limit
S	% Recovery outside of range due to dilution or matrix
B	Analyte detected in the associated Method Blank
E	Value above quantitation range
J	Analyte detected below quantitation limits
P	Sample pH Not In Range
RL	Reporting Limit

Analytical Report
Lab Order **2009H71**
Date Reported: **10/7/2020**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Animas Environmental
Client Sample ID: MW-3
Project: BMG Landfarm
Collection Date: 9/29/2020 11:21:00 AM
Lab ID: 2009H71-003 **Matrix:** AQUEOUS **Received Date:** 9/30/2020 7:35:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE						Analyst: **BRM**
Diesel Range Organics (DRO)	ND	1.0		mg/L	1	10/2/2020 2:14:02 PM
Motor Oil Range Organics (MRO)	ND	5.0		mg/L	1	10/2/2020 2:14:02 PM
Surr: DNOP	112	70-130		%Rec	1	10/2/2020 2:14:02 PM
EPA METHOD 300.0: ANIONS						Analyst: **JMT**
Chloride	240	50		mg/L	100	9/30/2020 6:29:16 PM
EPA METHOD 8260: VOLATILES SHORT LIST						Analyst: **JMR**
Benzene	ND	1.0		µg/L	1	10/6/2020 7:18:18 PM
Toluene	ND	1.0		µg/L	1	10/6/2020 7:18:18 PM
Ethylbenzene	ND	1.0		µg/L	1	10/6/2020 7:18:18 PM
Xylenes, Total	ND	1.5		µg/L	1	10/6/2020 7:18:18 PM
Surr: 1,2-Dichloroethane-d4	104	70-130		%Rec	1	10/6/2020 7:18:18 PM
Surr: Dibromofluoromethane	106	70-130		%Rec	1	10/6/2020 7:18:18 PM
Surr: Toluene-d8	97.8	70-130		%Rec	1	10/6/2020 7:18:18 PM
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **JMR**
Gasoline Range Organics (GRO)	ND	0.050		mg/L	1	10/6/2020 7:18:18 PM
Surr: BFB	100	70-130		%Rec	1	10/6/2020 7:18:18 PM
SM2540C MOD: TOTAL DISSOLVED SOLIDS						Analyst: **KS**
Total Dissolved Solids	1100	100	*D	mg/L	1	10/1/2020 2:01:00 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 Quanitative Limit
S	% Recovery outside of range due to dilution or matrix
B	Analyte detected in the associated Method Blank
E	Value above quantitation range
J	Analyte detected below quantitation limits
P	Sample pH Not In Range
RL	Reporting Limit

Analytical Report
Lab Order **2009H71**
Date Reported: **10/7/2020**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Animas Environmental
Client Sample ID: MW-4
Project: BMG Landfarm
Collection Date: 9/29/2020 10:39:00 AM
Lab ID: 2009H71-004 **Matrix:** AQUEOUS **Received Date:** 9/30/2020 7:35:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE						Analyst: **BRM**
Diesel Range Organics (DRO)	ND	1.0		mg/L	1	10/2/2020 2:23:43 PM
Motor Oil Range Organics (MRO)	ND	5.0		mg/L	1	10/2/2020 2:23:43 PM
Surr: DNOP	114	70-130		%Rec	1	10/2/2020 2:23:43 PM
EPA METHOD 300.0: ANIONS						Analyst: **JMT**
Chloride	53	5.0		mg/L	10	9/30/2020 6:42:07 PM
EPA METHOD 8260: VOLATILES SHORT LIST						Analyst: **JMR**
Benzene	ND	1.0		µg/L	1	10/6/2020 7:48:14 PM
Toluene	ND	1.0		µg/L	1	10/6/2020 7:48:14 PM
Ethylbenzene	ND	1.0		µg/L	1	10/6/2020 7:48:14 PM
Xylenes, Total	ND	1.5		µg/L	1	10/6/2020 7:48:14 PM
Surr: 1,2-Dichloroethane-d4	105	70-130		%Rec	1	10/6/2020 7:48:14 PM
Surr: Dibromofluoromethane	105	70-130		%Rec	1	10/6/2020 7:48:14 PM
Surr: Toluene-d8	96.9	70-130		%Rec	1	10/6/2020 7:48:14 PM
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **JMR**
Gasoline Range Organics (GRO)	ND	0.050		mg/L	1	10/6/2020 7:48:14 PM
Surr: BFB	97.0	70-130		%Rec	1	10/6/2020 7:48:14 PM
SM2540C MOD: TOTAL DISSOLVED SOLIDS						Analyst: **KS**
Total Dissolved Solids	690	100	*D	mg/L	1	10/1/2020 2:01:00 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 Quanitative Limit
S	% Recovery outside of range due to dilution or matrix
B	Analyte detected in the associated Method Blank
E	Value above quantitation range
J	Analyte detected below quantitation limits
P	Sample pH Not In Range
RL	Reporting Limit

Analytical Report
Lab Order **2009H71**
Date Reported: **10/7/2020**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Animas Environmental **Client Sample ID:** Trip Blank
Project: BMG Landfarm **Collection Date:**
Lab ID: 2009H71-005 **Matrix:** TRIP BLANK **Received Date:** 9/30/2020 7:35:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8260: VOLATILES SHORT LIST						Analyst: **JMR**
Benzene	ND	1.0		µg/L	1	10/6/2020 8:18:05 PM
Toluene	ND	1.0		µg/L	1	10/6/2020 8:18:05 PM
Ethylbenzene	ND	1.0		µg/L	1	10/6/2020 8:18:05 PM
Xylenes, Total	ND	1.5		µg/L	1	10/6/2020 8:18:05 PM
Surr: 1,2-Dichloroethane-d4	103	70-130		%Rec	1	10/6/2020 8:18:05 PM
Surr: 4-Bromofluorobenzene	107	70-130		%Rec	1	10/6/2020 8:18:05 PM
Surr: Dibromofluoromethane	104	70-130		%Rec	1	10/6/2020 8:18:05 PM
Surr: Toluene-d8	99.0	70-130		%Rec	1	10/6/2020 8:18:05 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 Quanitative Limit
S	% Recovery outside of range due to dilution or matrix
B	Analyte detected in the associated Method Blank
E	Value above quantitation range
J	Analyte detected below quantitation limits
P	Sample pH Not In Range
RL	Reporting Limit

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **2009H71**
07-Oct-20

Client: Animas Environmental
Project: BMG Landfarm

Sample ID: **MB**	SampType: **mblk**	TestCode: **EPA Method 300.0: Anions**							
Client ID: **PBW**	Batch ID: **R72313**	RunNo: **72313**							
Prep Date:	Analysis Date: **9/30/2020**	SeqNo: **2536157**	Units: **mg/L**						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	ND	0.50								

Sample ID: **LCS**	SampType: **lcs**	TestCode: **EPA Method 300.0: Anions**							
Client ID: **LCSW**	Batch ID: **R72313**	RunNo: **72313**							
Prep Date:	Analysis Date: **9/30/2020**	SeqNo: **2536158**	Units: **mg/L**						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	4.6	0.50	5.000	0	92.6	90	110			

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 Quanitative Limit
S	% Recovery outside of range due to dilution or matrix
B	Analyte detected in the associated Method Blank
E	Value above quantitation range
J	Analyte detected below quantitation limits
P	Sample pH Not In Range
RL	Reporting Limit

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **2009H71**
07-Oct-20

Client: Animas Environmental
Project: BMG Landfarm

Sample ID: **MB-55602**	SampType: **MBLK**	TestCode: **EPA Method 8015M/D: Diesel Range**
Client ID: **PBW**	Batch ID: **55602**	RunNo: **72349**
Prep Date: **10/1/2020**	Analysis Date: **10/2/2020**	SeqNo: **2538618** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	ND	1.0								
Motor Oil Range Organics (MRO)	ND	5.0								
Surr: DNOP	1.1		1.000		107	70	130			

Sample ID: **LCS-55602**	SampType: **LCS**	TestCode: **EPA Method 8015M/D: Diesel Range**
Client ID: **LCSW**	Batch ID: **55602**	RunNo: **72349**
Prep Date: **10/1/2020**	Analysis Date: **10/2/2020**	SeqNo: **2538619** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	5.1	1.0	5.000	0	102	70	130			
Surr: DNOP	0.53		0.5000		105	70	130			

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 Quanitative Limit
S	% Recovery outside of range due to dilution or matrix
B	Analyte detected in the associated Method Blank
E	Value above quantitation range
J	Analyte detected below quantitation limits
P	Sample pH Not In Range
RL	Reporting Limit

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **2009H71**
07-Oct-20

Client: Animas Environmental
Project: BMG Landfarm

Sample ID: **100ng lcs** SampType: **LCS** TestCode: **EPA Method 8260: Volatiles Short List**
Client ID: **LCSW** Batch ID: **R72450** RunNo: **72450**
Prep Date: Analysis Date: **10/6/2020** SeqNo: **2542682** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	20	1.0	20.00	0	97.7	70	130			
Toluene	21	1.0	20.00	0	106	70	130			
Surr: 1,2-Dichloroethane-d4	9.7		10.00		96.8	70	130			
Surr: 4-Bromofluorobenzene	11		10.00		107	70	130			
Surr: Dibromofluoromethane	9.9		10.00		99.1	70	130			
Surr: Toluene-d8	10		10.00		99.6	70	130			

Sample ID: **mb1** SampType: **MBLK** TestCode: **EPA Method 8260: Volatiles Short List**
Client ID: **PBW** Batch ID: **R72450** RunNo: **72450**
Prep Date: Analysis Date: **10/6/2020** SeqNo: **2542683** 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								
Xylenes, Total	ND	1.5								
Surr: 1,2-Dichloroethane-d4	9.6		10.00		95.9	70	130			
Surr: 4-Bromofluorobenzene	11		10.00		106	70	130			
Surr: Dibromofluoromethane	9.6		10.00		96.1	70	130			
Surr: Toluene-d8	9.8		10.00		98.0	70	130			

Sample ID: **2009h71-001ams** SampType: **MS** TestCode: **EPA Method 8260: Volatiles Short List**
Client ID: **MW-1** Batch ID: **R72450** RunNo: **72450**
Prep Date: Analysis Date: **10/6/2020** SeqNo: **2542685** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	20	1.0	20.00	0	97.7	70	130			
Toluene	20	1.0	20.00	0	100	70	130			
Surr: 1,2-Dichloroethane-d4	10		10.00		100	70	130			
Surr: 4-Bromofluorobenzene	11		10.00		108	70	130			
Surr: Dibromofluoromethane	9.8		10.00		98.2	70	130			
Surr: Toluene-d8	9.8		10.00		97.6	70	130			

Sample ID: **2009h71-001amsd** SampType: **MSD** TestCode: **EPA Method 8260: Volatiles Short List**
Client ID: **MW-1** Batch ID: **R72450** RunNo: **72450**
Prep Date: Analysis Date: **10/6/2020** SeqNo: **2542686** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	19	1.0	20.00	0	96.2	70	130	1.59	20	
Toluene	19	1.0	20.00	0	95.6	70	130	4.54	20	

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 Quanitative Limit
S	% Recovery outside of range due to dilution or matrix
B	Analyte detected in the associated Method Blank
E	Value above quantitation range
J	Analyte detected below quantitation limits
P	Sample pH Not In Range
RL	Reporting Limit

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **2009H71**
07-Oct-20

Client: Animas Environmental
Project: BMG Landfarm

Sample ID: **2009h71-001amsd** SampType: **MSD** TestCode: **EPA Method 8260: Volatiles Short List**
Client ID: **MW-1** Batch ID: **R72450** RunNo: **72450**
Prep Date: Analysis Date: **10/6/2020** SeqNo: **2542686** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: 1,2-Dichloroethane-d4	10		10.00		102	70	130	0	0	
Surr: 4-Bromofluorobenzene	11		10.00		106	70	130	0	0	
Surr: Dibromofluoromethane	10		10.00		103	70	130	0	0	
Surr: Toluene-d8	9.9		10.00		99.3	70	130	0	0	

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 Quanitative Limit
S	% Recovery outside of range due to dilution or matrix
B	Analyte detected in the associated Method Blank
E	Value above quantitation range
J	Analyte detected below quantitation limits
P	Sample pH Not In Range
RL	Reporting Limit

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **2009H71**
07-Oct-20

Client: Animas Environmental
Project: BMG Landfarm

Sample ID: **2.5ug gro lcs**	SampType: **LCS**	TestCode: **EPA Method 8015D: Gasoline Range**
Client ID: **LCSW**	Batch ID: **G72450**	RunNo: **72450**
Prep Date:	Analysis Date: **10/6/2020**	SeqNo: **2542705** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	0.46	0.050	0.5000	0	92.3	70	130			
Surr: BFB	9.8		10.00		98.2	70	130			

Sample ID: **mb1**	SampType: **MBLK**	TestCode: **EPA Method 8015D: Gasoline Range**
Client ID: **PBW**	Batch ID: **G72450**	RunNo: **72450**
Prep Date:	Analysis Date: **10/6/2020**	SeqNo: **2542706** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	ND	0.050								
Surr: BFB	9.4		10.00		94.4	70	130			

Sample ID: **2009h71-002ams**	SampType: **MS**	TestCode: **EPA Method 8015D: Gasoline Range**
Client ID: **MW-2**	Batch ID: **G72450**	RunNo: **72450**
Prep Date:	Analysis Date: **10/6/2020**	SeqNo: **2542709** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	0.44	0.050	0.5000	0	88.4	70	130			
Surr: BFB	9.5		10.00		95.5	70	130			

Sample ID: **2009h71-002amsd**	SampType: **MSD**	TestCode: **EPA Method 8015D: Gasoline Range**
Client ID: **MW-2**	Batch ID: **G72450**	RunNo: **72450**
Prep Date:	Analysis Date: **10/6/2020**	SeqNo: **2542710** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	0.40	0.050	0.5000	0	80.2	70	130	9.78	20	
Surr: BFB	9.3		10.00		93.2	70	130	0	0	

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 Quanitative Limit
S	% Recovery outside of range due to dilution or matrix
B	Analyte detected in the associated Method Blank
E	Value above quantitation range
J	Analyte detected below quantitation limits
P	Sample pH Not In Range
RL	Reporting Limit

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **2009H71**
07-Oct-20

Client: Animas Environmental
Project: BMG Landfarm

Sample ID: **MB-55575**	SampType: **MBLK**	TestCode: **SM2540C MOD: Total Dissolved Solids**							
Client ID: **PBW**	Batch ID: **55575**	RunNo: **72318**							
Prep Date: **9/30/2020**	Analysis Date: **10/1/2020**	SeqNo: **2536400**	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-55575**	SampType: **LCS**	TestCode: **SM2540C MOD: Total Dissolved Solids**							
Client ID: **LCSW**	Batch ID: **55575**	RunNo: **72318**							
Prep Date: **9/30/2020**	Analysis Date: **10/1/2020**	SeqNo: **2536401**	Units: **mg/L**						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Total Dissolved Solids	997	20.0	1000	0	99.7	80	120			

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
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 Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix		

HALL ENVIRONMENTAL ANALYSIS LABORATORY

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

Sample Log-In Check List

Client Name: **Animas Environmental Se** Work Order Number: **2009H71** RcptNo: 1

Received By: **Juan Rojas** **9/30/2020 7:35:00 AM**

Completed By: **Isaiah Ortiz** **9/30/2020 8:24:04 AM**

Reviewed By: JR 9/30/20

Chain of Custody

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

Log In

3. Was an attempt made to cool the samples?	Yes ☑	No ☐	NA ☐
4. Were all samples received at a temperature of >0° C to 6.0°C	Yes ☑	No ☐	NA ☐
5. Sample(s) in proper container(s)?	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 ☐	# of preserved bottles checked for pH: (<2 or >12 unless noted)
12. Are matrices correctly identified on Chain of Custody?	Yes ☑	No ☐	Adjusted?
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 ☐	Checked by: IVC 9/30/20

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 °C	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	0.5	Good	Yes			
2	0.4	Good	Yes			
3	0.2	Good	Yes			

Chain-of-Custody Record

HALL ENVIRONMENTAL ANALYSIS LABORATORY

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

Client: Animas Environmental Services

Mailing Address: P.O. Box 8
Farmington, NM 87499-00008

Phone #: 505-564-2281

email or Fax#: dreese@animasenvironmental.com

QA/QC Package:
X Standard ☐ Level 4 (Full Validation)

Accreditation:
☐ NELAP ☐ Other ____

☐ EDD (Type) ____

Turn-Around Time:
X Standard ☐ Rush ____

Project Name: BMG Landfarm

Project #: AES 040605

Project Manager: Elizabeth McNally, David Reese

Sampler:

On Ice: (X) Yes ☐ No

Sample Temperature: See Remarks

Analysis Request

Date	Time	Matrix	Sample Request ID	Container Type and #	Preservative Type	HEAL No. 2009H71	BTEX 8021	TPH (GRO/DRO/MRO) 8015	TDS SM2540C	Chlorides 300.0							Air Bubbles (Y or N)
9.29.20	1253	H2O	MW-1	(3) 40 mL glass (1) 250 mL amber glass (1) 500 mL plastic	3-HgCl2 cool 2-Non	001	X	X	X	X							
9.29.20	1218	H2O	MW-2	(3) 40 mL glass (1) 250 mL amber glass (1) 500 mL plastic	3-HgCl2 cool 2-Non	002	X	X	X	X							
9.29.20	1121	H2O	MW-3	(3) 40 mL glass (1) 250 mL amber glass (1) 500 mL plastic	3-HgCl2 cool 2-Non	003	X	X	X	X							
9.29.20	1039	H2O	MW-4	(3) 40 mL glass (1) 250 mL amber glass (1) 500 mL plastic	3-HgCl2 cool 2-Non	004	X	X	X	X							
	N/A	H2O	~~Interstitial Well~~ DB	~~(3) 40 mL glass (1) 250 mL amber glass (1) 500 mL plastic~~	~~3-HgCl2 cool 2-Non~~		~~X~~	~~X~~	~~X~~	~~X~~							
		H2O	Trip Blank		Cold	005	X										

Date:	Time:	Relinquished by:	Received by:	Date	Time
9/29/2020	1735	[signature]	[signature]	9/29/2020	1735
9/29/2020	1840	[signature]	[signature] courier	9/30/20	7:35

Remarks: 0.5-0=0.5
0.4-0=0.4
0.2-0=0.2

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.

HALL ENVIRONMENTAL ANALYSIS LABORATORY

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

April 21, 2020

Elizabeth McNally

Animas Environmental
604 Pinon Street
Farmington, NM 87401
TEL:
FAX:

RE: BMG Landfarm OrderNo.: 2004127

Dear Elizabeth McNally:

Hall Environmental Analysis Laboratory received 16 sample(s) on 4/3/2020 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,

Andy Freeman
Laboratory Manager
4901 Hawkins NE
Albuquerque, NM 87109

Analytical Report
Lab Order **2004127**
Date Reported: **4/21/2020**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Animas Environmental
Client Sample ID: Cell #1 VZ S-1
Project: BMG Landfarm
Collection Date: 4/2/2020 10:52:00 AM
Lab ID: 2004127-001 **Matrix:** SOIL
Received Date: 4/3/2020 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 300.0: ANIONS						Analyst: **MRA**
Fluoride	ND	1.5		mg/Kg	5	4/9/2020 7:56:25 AM
Chloride	220	7.5		mg/Kg	5	4/9/2020 7:56:25 AM
Nitrogen, Nitrite (As N)	ND	1.5		mg/Kg	5	4/8/2020 5:54:14 PM
Bromide	2.2	1.5		mg/Kg	5	4/8/2020 5:54:14 PM
Nitrogen, Nitrate (As N)	4.1	1.5		mg/Kg	5	4/8/2020 5:54:14 PM
Phosphorus, Orthophosphate (As P)	ND	7.5		mg/Kg	5	4/8/2020 5:54:14 PM
Sulfate	14	7.5		mg/Kg	5	4/8/2020 5:54:14 PM
EPA METHOD 7471: MERCURY						Analyst: **pmf**
Mercury	ND	0.033		mg/Kg	1	4/9/2020 3:33:32 PM
EPA METHOD 6010B: SOIL METALS						Analyst: **ELS**
Arsenic	ND	5.0		mg/Kg	2	4/20/2020 9:40:29 AM
Barium	75	0.20		mg/Kg	2	4/20/2020 9:40:29 AM
Cadmium	ND	0.20		mg/Kg	2	4/20/2020 9:40:29 AM
Calcium	5600	50		mg/Kg	2	4/20/2020 9:40:29 AM
Chromium	10	0.60		mg/Kg	2	4/20/2020 9:40:29 AM
Lead	3.0	0.60		mg/Kg	2	4/20/2020 9:40:29 AM
Molybdenum	ND	1.0		mg/Kg	2	4/20/2020 9:40:29 AM
Potassium	1600	100		mg/Kg	2	4/20/2020 9:40:29 AM
Selenium	ND	5.0		mg/Kg	2	4/20/2020 9:40:29 AM
Silver	ND	0.50		mg/Kg	2	4/20/2020 9:40:29 AM
Sodium	270	50		mg/Kg	2	4/20/2020 9:40:29 AM
EPA METHOD 8260B: VOLATILES SHORT LIST						Analyst: **JMR**
Benzene	ND	0.025		mg/Kg	1	4/8/2020 1:03:51 AM
Toluene	ND	0.049		mg/Kg	1	4/8/2020 1:03:51 AM
Ethylbenzene	ND	0.049		mg/Kg	1	4/8/2020 1:03:51 AM
Xylenes, Total	ND	0.099		mg/Kg	1	4/8/2020 1:03:51 AM
Surr: 1,2-Dichloroethane-d4	98.0	70-130		%Rec	1	4/8/2020 1:03:51 AM
Surr: 4-Bromofluorobenzene	95.5	70-130		%Rec	1	4/8/2020 1:03:51 AM
Surr: Dibromofluoromethane	106	70-130		%Rec	1	4/8/2020 1:03:51 AM
Surr: Toluene-d8	99.1	70-130		%Rec	1	4/8/2020 1:03:51 AM
EPA METHOD 418.1: TPH						Analyst: **CFC**
Petroleum Hydrocarbons, TR	ND	17		mg/Kg	1	4/9/2020

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	Value above quantitation range
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 Quanitative Limit
RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix

Analytical Report
Lab Order **2004127**
Date Reported: **4/21/2020**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Animas Environmental
Client Sample ID: Cell #1 VZ S-2
Project: BMG Landfarm
Collection Date: 4/2/2020 11:01:00 AM
Lab ID: 2004127-002 **Matrix:** SOIL **Received Date:** 4/3/2020 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 300.0: ANIONS						Analyst: **MRA**
Chloride	240	60		mg/Kg	20	4/9/2020 8:33:38 AM
EPA METHOD 8260B: VOLATILES SHORT LIST						Analyst: **JMR**
Benzene	ND	0.024		mg/Kg	1	4/8/2020 1:32:36 AM
Toluene	ND	0.049		mg/Kg	1	4/8/2020 1:32:36 AM
Ethylbenzene	ND	0.049		mg/Kg	1	4/8/2020 1:32:36 AM
Xylenes, Total	ND	0.097		mg/Kg	1	4/8/2020 1:32:36 AM
Surr: 1,2-Dichloroethane-d4	95.7	70-130		%Rec	1	4/8/2020 1:32:36 AM
Surr: 4-Bromofluorobenzene	90.7	70-130		%Rec	1	4/8/2020 1:32:36 AM
Surr: Dibromofluoromethane	104	70-130		%Rec	1	4/8/2020 1:32:36 AM
Surr: Toluene-d8	97.2	70-130		%Rec	1	4/8/2020 1:32:36 AM
EPA METHOD 418.1: TPH						Analyst: **CFC**
Petroleum Hydrocarbons, TR	ND	18		mg/Kg	1	4/9/2020

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 Quanitative Limit
S	% Recovery outside of range due to dilution or matrix
B	Analyte detected in the associated Method Blank
E	Value above quantitation range
J	Analyte detected below quantitation limits
P	Sample pH Not In Range
RL	Reporting Limit

Analytical Report
Lab Order **2004127**
Date Reported: **4/21/2020**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Animas Environmental
Client Sample ID: Cell #1 VZ S-3
Project: BMG Landfarm
Collection Date: 4/2/2020 11:09:00 AM
Lab ID: 2004127-003 **Matrix:** SOIL **Received Date:** 4/3/2020 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 300.0: ANIONS						Analyst: **MRA**
Chloride	ND	60		mg/Kg	20	4/9/2020 8:46:03 AM
EPA METHOD 8260B: VOLATILES SHORT LIST						Analyst: **JMR**
Benzene	ND	0.024		mg/Kg	1	4/8/2020 2:01:20 AM
Toluene	ND	0.049		mg/Kg	1	4/8/2020 2:01:20 AM
Ethylbenzene	ND	0.049		mg/Kg	1	4/8/2020 2:01:20 AM
Xylenes, Total	ND	0.098		mg/Kg	1	4/8/2020 2:01:20 AM
Surr: 1,2-Dichloroethane-d4	98.0	70-130		%Rec	1	4/8/2020 2:01:20 AM
Surr: 4-Bromofluorobenzene	94.7	70-130		%Rec	1	4/8/2020 2:01:20 AM
Surr: Dibromofluoromethane	105	70-130		%Rec	1	4/8/2020 2:01:20 AM
Surr: Toluene-d8	96.7	70-130		%Rec	1	4/8/2020 2:01:20 AM
EPA METHOD 418.1: TPH						Analyst: **CFC**
Petroleum Hydrocarbons, TR	ND	19		mg/Kg	1	4/9/2020

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 Quanitative Limit
S	% Recovery outside of range due to dilution or matrix
B	Analyte detected in the associated Method Blank
E	Value above quantitation range
J	Analyte detected below quantitation limits
P	Sample pH Not In Range
RL	Reporting Limit

Analytical Report
Lab Order **2004127**
Date Reported: **4/21/2020**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Animas Environmental
Client Sample ID: Cell #1 VZ S-4
Project: BMG Landfarm
Collection Date: 4/2/2020 11:16:00 AM
Lab ID: 2004127-004 **Matrix:** SOIL **Received Date:** 4/3/2020 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 300.0: ANIONS						Analyst: **MRA**
Chloride	ND	60		mg/Kg	20	4/9/2020 8:58:28 AM
EPA METHOD 8260B: VOLATILES SHORT LIST						Analyst: **JMR**
Benzene	ND	0.025		mg/Kg	1	4/8/2020 2:30:03 AM
Toluene	ND	0.049		mg/Kg	1	4/8/2020 2:30:03 AM
Ethylbenzene	ND	0.049		mg/Kg	1	4/8/2020 2:30:03 AM
Xylenes, Total	ND	0.099		mg/Kg	1	4/8/2020 2:30:03 AM
Surr: 1,2-Dichloroethane-d4	96.9	70-130		%Rec	1	4/8/2020 2:30:03 AM
Surr: 4-Bromofluorobenzene	91.4	70-130		%Rec	1	4/8/2020 2:30:03 AM
Surr: Dibromofluoromethane	102	70-130		%Rec	1	4/8/2020 2:30:03 AM
Surr: Toluene-d8	101	70-130		%Rec	1	4/8/2020 2:30:03 AM
EPA METHOD 418.1: TPH						Analyst: **CFC**
Petroleum Hydrocarbons, TR	ND	19		mg/Kg	1	4/9/2020

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 Quanitative Limit
S	% Recovery outside of range due to dilution or matrix
B	Analyte detected in the associated Method Blank
E	Value above quantitation range
J	Analyte detected below quantitation limits
P	Sample pH Not In Range
RL	Reporting Limit

Analytical Report
Lab Order **2004127**
Date Reported: **4/21/2020**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Animas Environmental
Client Sample ID: Cell #2 VZ S-1
Project: BMG Landfarm
Collection Date: 4/2/2020 11:24:00 AM
Lab ID: 2004127-005 **Matrix:** SOIL **Received Date:** 4/3/2020 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 300.0: ANIONS						Analyst: **MRA**
Fluoride	ND	1.5		mg/Kg	5	4/9/2020 9:10:53 AM
Chloride	12	7.5		mg/Kg	5	4/9/2020 9:10:53 AM
Nitrogen, Nitrite (As N)	ND	1.5		mg/Kg	5	4/8/2020 7:45:22 PM
Bromide	ND	1.5		mg/Kg	5	4/8/2020 7:45:22 PM
Nitrogen, Nitrate (As N)	5.8	1.5		mg/Kg	5	4/8/2020 7:45:22 PM
Phosphorus, Orthophosphate (As P)	ND	7.5		mg/Kg	5	4/8/2020 7:45:22 PM
Sulfate	22	7.5		mg/Kg	5	4/8/2020 7:45:22 PM
EPA METHOD 7471: MERCURY						Analyst: **pmf**
Mercury	ND	0.033		mg/Kg	1	4/9/2020 3:35:34 PM
EPA METHOD 6010B: SOIL METALS						Analyst: **ELS**
Arsenic	6.5	5.0		mg/Kg	2	4/20/2020 9:42:17 AM
Barium	110	0.20		mg/Kg	2	4/20/2020 9:42:17 AM
Cadmium	ND	0.20		mg/Kg	2	4/20/2020 9:42:17 AM
Calcium	4000	130		mg/Kg	5	4/20/2020 11:54:43 AM
Chromium	7.9	0.60		mg/Kg	2	4/20/2020 9:42:17 AM
Lead	3.1	0.60		mg/Kg	2	4/20/2020 9:42:17 AM
Molybdenum	ND	1.0		mg/Kg	2	4/20/2020 9:42:17 AM
Potassium	1500	250		mg/Kg	5	4/20/2020 11:54:43 AM
Selenium	ND	5.0		mg/Kg	2	4/20/2020 9:42:17 AM
Silver	ND	0.50		mg/Kg	2	4/20/2020 9:42:17 AM
Sodium	160	130		mg/Kg	5	4/20/2020 11:54:43 AM
EPA METHOD 8260B: VOLATILES SHORT LIST						Analyst: **JMR**
Benzene	ND	0.025		mg/Kg	1	4/8/2020 2:58:51 AM
Toluene	ND	0.049		mg/Kg	1	4/8/2020 2:58:51 AM
Ethylbenzene	ND	0.049		mg/Kg	1	4/8/2020 2:58:51 AM
Xylenes, Total	ND	0.099		mg/Kg	1	4/8/2020 2:58:51 AM
Surr: 1,2-Dichloroethane-d4	97.7	70-130		%Rec	1	4/8/2020 2:58:51 AM
Surr: 4-Bromofluorobenzene	95.1	70-130		%Rec	1	4/8/2020 2:58:51 AM
Surr: Dibromofluoromethane	102	70-130		%Rec	1	4/8/2020 2:58:51 AM
Surr: Toluene-d8	96.5	70-130		%Rec	1	4/8/2020 2:58:51 AM
EPA METHOD 418.1: TPH						Analyst: **CFC**
Petroleum Hydrocarbons, TR	ND	19		mg/Kg	1	4/9/2020

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 Quanitative Limit
S	% Recovery outside of range due to dilution or matrix
B	Analyte detected in the associated Method Blank
E	Value above quantitation range
J	Analyte detected below quantitation limits
P	Sample pH Not In Range
RL	Reporting Limit

Analytical Report
Lab Order **2004127**
Date Reported: **4/21/2020**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Animas Environmental
Client Sample ID: Cell #2 VZ S-2
Project: BMG Landfarm
Collection Date: 4/2/2020 11:31:00 AM
Lab ID: 2004127-006 **Matrix:** SOIL
Received Date: 4/3/2020 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 300.0: ANIONS						Analyst: **MRA**
Chloride	ND	60		mg/Kg	20	4/9/2020 9:23:17 AM
EPA METHOD 8260B: VOLATILES SHORT LIST						Analyst: **JMR**
Benzene	ND	0.024		mg/Kg	1	4/8/2020 3:27:34 AM
Toluene	ND	0.048		mg/Kg	1	4/8/2020 3:27:34 AM
Ethylbenzene	ND	0.048		mg/Kg	1	4/8/2020 3:27:34 AM
Xylenes, Total	ND	0.097		mg/Kg	1	4/8/2020 3:27:34 AM
Surr: 1,2-Dichloroethane-d4	97.8	70-130		%Rec	1	4/8/2020 3:27:34 AM
Surr: 4-Bromofluorobenzene	93.7	70-130		%Rec	1	4/8/2020 3:27:34 AM
Surr: Dibromofluoromethane	101	70-130		%Rec	1	4/8/2020 3:27:34 AM
Surr: Toluene-d8	98.0	70-130		%Rec	1	4/8/2020 3:27:34 AM
EPA METHOD 418.1: TPH						Analyst: **CFC**
Petroleum Hydrocarbons, TR	ND	20		mg/Kg	1	4/9/2020

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 Quanitative Limit
S	% Recovery outside of range due to dilution or matrix
B	Analyte detected in the associated Method Blank
E	Value above quantitation range
J	Analyte detected below quantitation limits
P	Sample pH Not In Range
RL	Reporting Limit

Analytical Report
Lab Order **2004127**
Date Reported: **4/21/2020**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Animas Environmental
Client Sample ID: Cell #2 VZ S-3
Project: BMG Landfarm
Collection Date: 4/2/2020 11:38:00 AM
Lab ID: 2004127-007 **Matrix:** SOIL **Received Date:** 4/3/2020 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 300.0: ANIONS						Analyst: **MRA**
Chloride	ND	60		mg/Kg	20	4/9/2020 10:00:31 AM
EPA METHOD 8260B: VOLATILES SHORT LIST						Analyst: **JMR**
Benzene	ND	0.025		mg/Kg	1	4/8/2020 3:56:17 AM
Toluene	ND	0.050		mg/Kg	1	4/8/2020 3:56:17 AM
Ethylbenzene	ND	0.050		mg/Kg	1	4/8/2020 3:56:17 AM
Xylenes, Total	ND	0.10		mg/Kg	1	4/8/2020 3:56:17 AM
Surr: 1,2-Dichloroethane-d4	98.5	70-130		%Rec	1	4/8/2020 3:56:17 AM
Surr: 4-Bromofluorobenzene	93.8	70-130		%Rec	1	4/8/2020 3:56:17 AM
Surr: Dibromofluoromethane	101	70-130		%Rec	1	4/8/2020 3:56:17 AM
Surr: Toluene-d8	99.2	70-130		%Rec	1	4/8/2020 3:56:17 AM
EPA METHOD 418.1: TPH						Analyst: **CFC**
Petroleum Hydrocarbons, TR	ND	19		mg/Kg	1	4/9/2020

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	Value above quantitation range
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 Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix		

Analytical Report
Lab Order **2004127**
Date Reported: **4/21/2020**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Animas Environmental
Client Sample ID: Cell #2 VZ S-4
Project: BMG Landfarm
Collection Date: 4/2/2020 11:47:00 AM
Lab ID: 2004127-008 **Matrix:** SOIL **Received Date:** 4/3/2020 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 300.0: ANIONS						Analyst: **MRA**
Chloride	ND	60		mg/Kg	20	4/9/2020 10:12:55 AM
EPA METHOD 8260B: VOLATILES SHORT LIST						Analyst: **JMR**
Benzene	ND	0.025		mg/Kg	1	4/8/2020 4:25:00 AM
Toluene	ND	0.049		mg/Kg	1	4/8/2020 4:25:00 AM
Ethylbenzene	ND	0.049		mg/Kg	1	4/8/2020 4:25:00 AM
Xylenes, Total	ND	0.099		mg/Kg	1	4/8/2020 4:25:00 AM
Surr: 1,2-Dichloroethane-d4	99.8	70-130		%Rec	1	4/8/2020 4:25:00 AM
Surr: 4-Bromofluorobenzene	94.4	70-130		%Rec	1	4/8/2020 4:25:00 AM
Surr: Dibromofluoromethane	104	70-130		%Rec	1	4/8/2020 4:25:00 AM
Surr: Toluene-d8	98.2	70-130		%Rec	1	4/8/2020 4:25:00 AM
EPA METHOD 418.1: TPH						Analyst: **CFC**
Petroleum Hydrocarbons, TR	ND	19		mg/Kg	1	4/9/2020

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	Value above quantitation range
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 Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix		

Analytical Report
Lab Order **2004127**
Date Reported: **4/21/2020**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Animas Environmental
Client Sample ID: Cell #3 VZ S-1
Project: BMG Landfarm
Collection Date: 4/2/2020 11:57:00 AM
Lab ID: 2004127-009 **Matrix:** SOIL **Received Date:** 4/3/2020 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 300.0: ANIONS						Analyst: **MRA**
Fluoride	ND	1.5		mg/Kg	5	4/9/2020 10:25:20 AM
Chloride	11	7.5		mg/Kg	5	4/9/2020 10:25:20 AM
Nitrogen, Nitrite (As N)	ND	1.5		mg/Kg	5	4/8/2020 8:47:06 PM
Bromide	ND	1.5		mg/Kg	5	4/8/2020 8:47:06 PM
Nitrogen, Nitrate (As N)	2.4	1.5		mg/Kg	5	4/8/2020 8:47:06 PM
Phosphorus, Orthophosphate (As P)	ND	7.5		mg/Kg	5	4/8/2020 8:47:06 PM
Sulfate	12	7.5		mg/Kg	5	4/8/2020 8:47:06 PM
EPA METHOD 7471: MERCURY						Analyst: **pmf**
Mercury	ND	0.033		mg/Kg	1	4/9/2020 5:24:52 AM
EPA METHOD 6010B: SOIL METALS						Analyst: **ELS**
Arsenic	ND	5.0		mg/Kg	2	4/20/2020 9:44:12 AM
Barium	74	0.20		mg/Kg	2	4/20/2020 9:44:12 AM
Cadmium	ND	0.20		mg/Kg	2	4/20/2020 9:44:12 AM
Calcium	1100	50		mg/Kg	2	4/20/2020 9:44:12 AM
Chromium	3.8	0.60		mg/Kg	2	4/20/2020 9:44:12 AM
Lead	2.4	0.60		mg/Kg	2	4/20/2020 9:44:12 AM
Molybdenum	ND	0.99		mg/Kg	2	4/20/2020 9:44:12 AM
Potassium	730	99		mg/Kg	2	4/20/2020 9:44:12 AM
Selenium	ND	5.0		mg/Kg	2	4/20/2020 9:44:12 AM
Silver	ND	0.50		mg/Kg	2	4/20/2020 9:44:12 AM
Sodium	110	50		mg/Kg	2	4/20/2020 9:44:12 AM
EPA METHOD 8260B: VOLATILES SHORT LIST						Analyst: **JMR**
Benzene	ND	0.025		mg/Kg	1	4/8/2020 4:53:19 AM
Toluene	ND	0.050		mg/Kg	1	4/8/2020 4:53:19 AM
Ethylbenzene	ND	0.050		mg/Kg	1	4/8/2020 4:53:19 AM
Xylenes, Total	ND	0.10		mg/Kg	1	4/8/2020 4:53:19 AM
Surr: 1,2-Dichloroethane-d4	101	70-130		%Rec	1	4/8/2020 4:53:19 AM
Surr: 4-Bromofluorobenzene	97.5	70-130		%Rec	1	4/8/2020 4:53:19 AM
Surr: Dibromofluoromethane	101	70-130		%Rec	1	4/8/2020 4:53:19 AM
Surr: Toluene-d8	94.2	70-130		%Rec	1	4/8/2020 4:53:19 AM
EPA METHOD 418.1: TPH						Analyst: **CFC**
Petroleum Hydrocarbons, TR	59	20		mg/Kg	1	4/15/2020

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 Quanitative Limit
S	% Recovery outside of range due to dilution or matrix
B	Analyte detected in the associated Method Blank
E	Value above quantitation range
J	Analyte detected below quantitation limits
P	Sample pH Not In Range
RL	Reporting Limit

Analytical Report
Lab Order **2004127**
Date Reported: **4/21/2020**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Animas Environmental
Client Sample ID: Cell #3 VZ S-2
Project: BMG Landfarm
Collection Date: 4/2/2020 12:04:00 PM
Lab ID: 2004127-010 **Matrix:** SOIL **Received Date:** 4/3/2020 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 300.0: ANIONS						Analyst: **MRA**
Chloride	ND	60		mg/Kg	20	4/9/2020 10:37:44 AM
EPA METHOD 8260B: VOLATILES SHORT LIST						Analyst: **JMR**
Benzene	ND	0.025		mg/Kg	1	4/8/2020 5:21:53 AM
Toluene	ND	0.050		mg/Kg	1	4/8/2020 5:21:53 AM
Ethylbenzene	ND	0.050		mg/Kg	1	4/8/2020 5:21:53 AM
Xylenes, Total	ND	0.099		mg/Kg	1	4/8/2020 5:21:53 AM
Surr: 1,2-Dichloroethane-d4	101	70-130		%Rec	1	4/8/2020 5:21:53 AM
Surr: 4-Bromofluorobenzene	95.9	70-130		%Rec	1	4/8/2020 5:21:53 AM
Surr: Dibromofluoromethane	103	70-130		%Rec	1	4/8/2020 5:21:53 AM
Surr: Toluene-d8	95.6	70-130		%Rec	1	4/8/2020 5:21:53 AM
EPA METHOD 418.1: TPH						Analyst: **CFC**
Petroleum Hydrocarbons, TR	20	19		mg/Kg	1	4/15/2020

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	Value above quantitation range
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 Quanitative Limit
RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix

Analytical Report
Lab Order **2004127**
Date Reported: **4/21/2020**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Animas Environmental
Client Sample ID: Cell #3 VZ S-3
Project: BMG Landfarm
Collection Date: 4/2/2020 12:11:00 PM
Lab ID: 2004127-011 **Matrix:** SOIL
Received Date: 4/3/2020 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 300.0: ANIONS						Analyst: **MRA**
Chloride	ND	60		mg/Kg	20	4/9/2020 10:50:08 AM
EPA METHOD 8260B: VOLATILES SHORT LIST						Analyst: **JMR**
Benzene	ND	0.025		mg/Kg	1	4/8/2020 5:50:25 AM
Toluene	ND	0.049		mg/Kg	1	4/8/2020 5:50:25 AM
Ethylbenzene	ND	0.049		mg/Kg	1	4/8/2020 5:50:25 AM
Xylenes, Total	ND	0.098		mg/Kg	1	4/8/2020 5:50:25 AM
Surr: 1,2-Dichloroethane-d4	99.3	70-130		%Rec	1	4/8/2020 5:50:25 AM
Surr: 4-Bromofluorobenzene	92.7	70-130		%Rec	1	4/8/2020 5:50:25 AM
Surr: Dibromofluoromethane	105	70-130		%Rec	1	4/8/2020 5:50:25 AM
Surr: Toluene-d8	96.5	70-130		%Rec	1	4/8/2020 5:50:25 AM
EPA METHOD 418.1: TPH						Analyst: **CFC**
Petroleum Hydrocarbons, TR	50	20		mg/Kg	1	4/15/2020

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	Value above quantitation range
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 Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix		

Analytical Report
Lab Order **2004127**
Date Reported: **4/21/2020**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Animas Environmental
Client Sample ID: Cell #3 VZ S-4
Project: BMG Landfarm
Collection Date: 4/2/2020 12:21:00 PM
Lab ID: 2004127-012 **Matrix:** SOIL **Received Date:** 4/3/2020 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 300.0: ANIONS						Analyst: **MRA**
Chloride	ND	60		mg/Kg	20	4/9/2020 11:02:33 AM
EPA METHOD 8260B: VOLATILES SHORT LIST						Analyst: **JMR**
Benzene	ND	0.024		mg/Kg	1	4/8/2020 6:18:57 AM
Toluene	ND	0.049		mg/Kg	1	4/8/2020 6:18:57 AM
Ethylbenzene	ND	0.049		mg/Kg	1	4/8/2020 6:18:57 AM
Xylenes, Total	ND	0.097		mg/Kg	1	4/8/2020 6:18:57 AM
Surr: 1,2-Dichloroethane-d4	100	70-130		%Rec	1	4/8/2020 6:18:57 AM
Surr: 4-Bromofluorobenzene	96.4	70-130		%Rec	1	4/8/2020 6:18:57 AM
Surr: Dibromofluoromethane	104	70-130		%Rec	1	4/8/2020 6:18:57 AM
Surr: Toluene-d8	96.6	70-130		%Rec	1	4/8/2020 6:18:57 AM
EPA METHOD 418.1: TPH						Analyst: **CFC**
Petroleum Hydrocarbons, TR	ND	18		mg/Kg	1	4/9/2020

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	Value above quantitation range
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 Quanitative Limit
RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix

Analytical Report
Lab Order **2004127**
Date Reported: **4/21/2020**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Animas Environmental
Client Sample ID: Cell #4 VZ S-1
Project: BMG Landfarm
Collection Date: 4/2/2020 12:33:00 PM
Lab ID: 2004127-013 **Matrix:** SOIL **Received Date:** 4/3/2020 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 300.0: ANIONS						Analyst: **MRA**
Fluoride	2.4	1.5		mg/Kg	5	4/9/2020 11:14:58 AM
Chloride	ND	7.5		mg/Kg	5	4/9/2020 11:14:58 AM
Nitrogen, Nitrite (As N)	ND	1.5		mg/Kg	5	4/8/2020 10:13:33 PM
Bromide	ND	1.5		mg/Kg	5	4/8/2020 10:13:33 PM
Nitrogen, Nitrate (As N)	18	1.5		mg/Kg	5	4/8/2020 10:13:33 PM
Phosphorus, Orthophosphate (As P)	ND	7.5		mg/Kg	5	4/8/2020 10:13:33 PM
Sulfate	15	7.5		mg/Kg	5	4/8/2020 10:13:33 PM
EPA METHOD 7471: MERCURY						Analyst: **pmf**
Mercury	ND	0.033		mg/Kg	1	4/9/2020 3:37:36 PM
EPA METHOD 6010B: SOIL METALS						Analyst: **ELS**
Arsenic	ND	12		mg/Kg	5	4/20/2020 11:56:31 AM
Barium	110	0.49		mg/Kg	5	4/20/2020 11:56:31 AM
Cadmium	ND	0.49		mg/Kg	5	4/20/2020 11:56:31 AM
Calcium	5400	120		mg/Kg	5	4/20/2020 11:56:31 AM
Chromium	17	1.5		mg/Kg	5	4/20/2020 11:56:31 AM
Lead	5.7	1.5		mg/Kg	5	4/20/2020 12:55:09 PM
Molybdenum	ND	2.5		mg/Kg	5	4/20/2020 11:56:31 AM
Potassium	2600	250		mg/Kg	5	4/20/2020 11:56:31 AM
Selenium	ND	12		mg/Kg	5	4/20/2020 11:56:31 AM
Silver	ND	1.2		mg/Kg	5	4/20/2020 11:56:31 AM
Sodium	190	120		mg/Kg	5	4/20/2020 11:56:31 AM
EPA METHOD 8260B: VOLATILES SHORT LIST						Analyst: **JMR**
Benzene	ND	0.025		mg/Kg	1	4/8/2020 6:47:30 AM
Toluene	ND	0.050		mg/Kg	1	4/8/2020 6:47:30 AM
Ethylbenzene	ND	0.050		mg/Kg	1	4/8/2020 6:47:30 AM
Xylenes, Total	ND	0.099		mg/Kg	1	4/8/2020 6:47:30 AM
Surr: 1,2-Dichloroethane-d4	98.4	70-130		%Rec	1	4/8/2020 6:47:30 AM
Surr: 4-Bromofluorobenzene	95.1	70-130		%Rec	1	4/8/2020 6:47:30 AM
Surr: Dibromofluoromethane	101	70-130		%Rec	1	4/8/2020 6:47:30 AM
Surr: Toluene-d8	94.0	70-130		%Rec	1	4/8/2020 6:47:30 AM
EPA METHOD 418.1: TPH						Analyst: **CFC**
Petroleum Hydrocarbons, TR	ND	19		mg/Kg	1	4/9/2020

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 Quanitative Limit
S	% Recovery outside of range due to dilution or matrix
B	Analyte detected in the associated Method Blank
E	Value above quantitation range
J	Analyte detected below quantitation limits
P	Sample pH Not In Range
RL	Reporting Limit

Analytical Report
Lab Order **2004127**
Date Reported: **4/21/2020**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Animas Environmental
Client Sample ID: Cell #4 VZ S-2
Project: BMG Landfarm
Collection Date: 4/2/2020 12:43:00 PM
Lab ID: 2004127-014 **Matrix:** SOIL **Received Date:** 4/3/2020 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 300.0: ANIONS						Analyst: **MRA**
Chloride	ND	60		mg/Kg	20	4/9/2020 11:27:22 AM
EPA METHOD 8260B: VOLATILES SHORT LIST						Analyst: **JMR**
Benzene	ND	0.025		mg/Kg	1	4/8/2020 7:16:01 AM
Toluene	ND	0.050		mg/Kg	1	4/8/2020 7:16:01 AM
Ethylbenzene	ND	0.050		mg/Kg	1	4/8/2020 7:16:01 AM
Xylenes, Total	ND	0.10		mg/Kg	1	4/8/2020 7:16:01 AM
Surr: 1,2-Dichloroethane-d4	96.6	70-130		%Rec	1	4/8/2020 7:16:01 AM
Surr: 4-Bromofluorobenzene	96.4	70-130		%Rec	1	4/8/2020 7:16:01 AM
Surr: Dibromofluoromethane	99.5	70-130		%Rec	1	4/8/2020 7:16:01 AM
Surr: Toluene-d8	98.0	70-130		%Rec	1	4/8/2020 7:16:01 AM
EPA METHOD 418.1: TPH						Analyst: **CFC**
Petroleum Hydrocarbons, TR	ND	19		mg/Kg	1	4/9/2020

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	Value above quantitation range
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 Quanitative Limit
RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix

Analytical Report
Lab Order **2004127**
Date Reported: **4/21/2020**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Animas Environmental
Client Sample ID: Cell #4 VZ S-3
Project: BMG Landfarm
Collection Date: 4/2/2020 12:51:00 PM
Lab ID: 2004127-015 **Matrix:** SOIL **Received Date:** 4/3/2020 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 300.0: ANIONS						Analyst: **MRA**
Chloride	ND	60		mg/Kg	20	4/9/2020 11:39:46 AM
EPA METHOD 8260B: VOLATILES SHORT LIST						Analyst: **JMR**
Benzene	ND	0.025		mg/Kg	1	4/8/2020 12:50:42 PM
Toluene	ND	0.049		mg/Kg	1	4/8/2020 12:50:42 PM
Ethylbenzene	ND	0.049		mg/Kg	1	4/8/2020 12:50:42 PM
Xylenes, Total	ND	0.099		mg/Kg	1	4/8/2020 12:50:42 PM
Surr: 1,2-Dichloroethane-d4	101	70-130		%Rec	1	4/8/2020 12:50:42 PM
Surr: 4-Bromofluorobenzene	97.8	70-130		%Rec	1	4/8/2020 12:50:42 PM
Surr: Dibromofluoromethane	99.5	70-130		%Rec	1	4/8/2020 12:50:42 PM
Surr: Toluene-d8	92.7	70-130		%Rec	1	4/8/2020 12:50:42 PM
EPA METHOD 418.1: TPH						Analyst: **CFC**
Petroleum Hydrocarbons, TR	ND	18		mg/Kg	1	4/9/2020

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	Value above quantitation range
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 Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix		

Analytical Report
Lab Order **2004127**
Date Reported: **4/21/2020**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Animas Environmental
Client Sample ID: Cell #4 VZ S-4
Project: BMG Landfarm
Collection Date: 4/2/2020 1:00:00 PM
Lab ID: 2004127-016 **Matrix:** SOIL **Received Date:** 4/3/2020 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 300.0: ANIONS						Analyst: **MRA**
Chloride	ND	60		mg/Kg	20	4/9/2020 11:52:11 AM
EPA METHOD 8260B: VOLATILES SHORT LIST						Analyst: **JMR**
Benzene	ND	0.025		mg/Kg	1	4/8/2020 1:19:13 PM
Toluene	ND	0.049		mg/Kg	1	4/8/2020 1:19:13 PM
Ethylbenzene	ND	0.049		mg/Kg	1	4/8/2020 1:19:13 PM
Xylenes, Total	ND	0.099		mg/Kg	1	4/8/2020 1:19:13 PM
Surr: 1,2-Dichloroethane-d4	99.2	70-130		%Rec	1	4/8/2020 1:19:13 PM
Surr: 4-Bromofluorobenzene	96.4	70-130		%Rec	1	4/8/2020 1:19:13 PM
Surr: Dibromofluoromethane	103	70-130		%Rec	1	4/8/2020 1:19:13 PM
Surr: Toluene-d8	96.2	70-130		%Rec	1	4/8/2020 1:19:13 PM
EPA METHOD 418.1: TPH						Analyst: **CFC**
Petroleum Hydrocarbons, TR	ND	18		mg/Kg	1	4/9/2020

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 Quanitative Limit
S	% Recovery outside of range due to dilution or matrix
B	Analyte detected in the associated Method Blank
E	Value above quantitation range
J	Analyte detected below quantitation limits
P	Sample pH Not In Range
RL	Reporting Limit

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **2004127**
21-Apr-20

Client: Animas Environmental
Project: BMG Landfarm

Sample ID: **MB-51658** SampType: **mblk** TestCode: **EPA Method 300.0: Anions**
Client ID: **PBS** Batch ID: **51658** RunNo: **67935**
Prep Date: **4/8/2020** Analysis Date: **4/8/2020** SeqNo: **2348848** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Nitrogen, Nitrite (As N)	ND	0.30								
Bromide	ND	0.30								
Nitrogen, Nitrate (As N)	ND	0.30								
Sulfate	ND	1.5								

Sample ID: **LCS-51658** SampType: **lcs** TestCode: **EPA Method 300.0: Anions**
Client ID: **LCSS** Batch ID: **51658** RunNo: **67935**
Prep Date: **4/8/2020** Analysis Date: **4/8/2020** SeqNo: **2348849** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Nitrogen, Nitrite (As N)	2.8	0.30	3.000	0	92.4	90	110			
Bromide	7.0	0.30	7.500	0	94.0	90	110			
Nitrogen, Nitrate (As N)	7.0	0.30	7.500	0	93.8	90	110			
Sulfate	28	1.5	30.00	0	92.8	90	110			

Sample ID: **2004127-001AMS** SampType: **ms** TestCode: **EPA Method 300.0: Anions**
Client ID: **Cell #1 VZ S-1** Batch ID: **51658** RunNo: **67935**
Prep Date: **4/8/2020** Analysis Date: **4/8/2020** SeqNo: **2348851** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Nitrogen, Nitrite (As N)	2.6	1.5	3.000	0	87.1	80.6	104			
Bromide	9.0	1.5	7.500	2.200	90.1	88.2	107			
Nitrogen, Nitrate (As N)	11	1.5	7.500	4.067	86.7	76	118			
Sulfate	40	7.5	30.00	13.54	89.7	53.8	147			

Sample ID: **2004127-001AMSD** SampType: **msd** TestCode: **EPA Method 300.0: Anions**
Client ID: **Cell #1 VZ S-1** Batch ID: **51658** RunNo: **67935**
Prep Date: **4/8/2020** Analysis Date: **4/8/2020** SeqNo: **2348852** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Nitrogen, Nitrite (As N)	2.6	1.5	3.000	0	86.4	80.6	104	0.692	20	
Bromide	9.3	1.5	7.500	2.200	94.1	88.2	107	3.29	20	
Nitrogen, Nitrate (As N)	11	1.5	7.500	4.067	93.3	76	118	4.52	20	
Sulfate	41	7.5	30.00	13.54	90.3	53.8	147	0.469	20	

Sample ID: **MB-51658** SampType: **mblk** TestCode: **EPA Method 300.0: Anions**
Client ID: **PBS** Batch ID: **51658** RunNo: **68005**
Prep Date: **4/8/2020** Analysis Date: **4/9/2020** SeqNo: **2350129** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual

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 Quanitative Limit
S	% Recovery outside of range due to dilution or matrix
B	Analyte detected in the associated Method Blank
E	Value above quantitation range
J	Analyte detected below quantitation limits
P	Sample pH Not In Range
RL	Reporting Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **2004127**

21-Apr-20

Client: Animas Environmental

Project: BMG Landfarm

Sample ID: **MB-51658** SampType: **mblk** TestCode: **EPA Method 300.0: Anions**

Client ID: **PBS** Batch ID: **51658** RunNo: **68005**

Prep Date: **4/8/2020** Analysis Date: **4/9/2020** SeqNo: **2350129** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Fluoride	ND	0.30								
Chloride	ND	1.5								
Nitrogen, Nitrite (As N)	ND	0.30								
Bromide	ND	0.30								
Nitrogen, Nitrate (As N)	ND	0.30								
Phosphorus, Orthophosphate (As P	ND	1.5								
Sulfate	ND	1.5								

Sample ID: **LCS-51658** SampType: **lcs** TestCode: **EPA Method 300.0: Anions**

Client ID: **LCSS** Batch ID: **51658** RunNo: **68005**

Prep Date: **4/8/2020** Analysis Date: **4/9/2020** SeqNo: **2350130** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Fluoride	1.5	0.30	1.500	0	101	90	110			
Chloride	14	1.5	15.00	0	94.4	90	110			
Nitrogen, Nitrite (As N)	2.8	0.30	3.000	0	94.4	90	110			
Bromide	7.3	0.30	7.500	0	96.8	90	110			
Nitrogen, Nitrate (As N)	7.2	0.30	7.500	0	96.3	90	110			
Phosphorus, Orthophosphate (As P	14	1.5	15.00	0	95.9	90	110			
Sulfate	28	1.5	30.00	0	94.8	90	110			

Sample ID: **2004127-001AMS** SampType: **ms** TestCode: **EPA Method 300.0: Anions**

Client ID: **Cell #1 VZ S-1** Batch ID: **51658** RunNo: **68005**

Prep Date: **4/8/2020** Analysis Date: **4/9/2020** SeqNo: **2350132** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Nitrogen, Nitrite (As N)	2.8	1.5	3.000	0	94.9	80.6	104			
Bromide	9.4	1.5	7.500	2.200	95.5	88.2	107			
Nitrogen, Nitrate (As N)	11	1.5	7.500	4.067	92.5	76	118			
Phosphorus, Orthophosphate (As P	ND	7.5	15.00	0	0	15	134			S
Sulfate	42	7.5	30.00	13.54	93.4	53.8	147			

Sample ID: **2004127-001AMSD** SampType: **msd** TestCode: **EPA Method 300.0: Anions**

Client ID: **Cell #1 VZ S-1** Batch ID: **51658** RunNo: **68005**

Prep Date: **4/8/2020** Analysis Date: **4/9/2020** SeqNo: **2350133** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Nitrogen, Nitrite (As N)	2.8	1.5	3.000	0	92.1	80.6	104	5.58	20	
Bromide	9.4	1.5	7.500	2.200	95.7	88.2	107	4.56	20	
Nitrogen, Nitrate (As N)	11	1.5	7.500	4.067	94.6	76	118	5.45	20	

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 Quanitative Limit
S	% Recovery outside of range due to dilution or matrix
B	Analyte detected in the associated Method Blank
E	Value above quantitation range
J	Analyte detected below quantitation limits
P	Sample pH Not In Range
RL	Reporting Limit

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **2004127**
21-Apr-20

Client: Animas Environmental
Project: BMG Landfarm

Sample ID: **2004127-001AMSD** SampType: **msd** TestCode: **EPA Method 300.0: Anions**
Client ID: **Cell #1 VZ S-1** Batch ID: **51658** RunNo: **68005**
Prep Date: **4/8/2020** Analysis Date: **4/9/2020** SeqNo: **2350133** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Phosphorus, Orthophosphate (As P	ND	7.5	15.00	0	0	15	134	0	20	S
Sulfate	43	7.5	30.00	13.54	97.3	53.8	147	5.50	20	

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
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 Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix		

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **2004127**

21-Apr-20

Client: Animas Environmental

Project: BMG Landfarm

Sample ID: **MB-51609**	SampType: **MBLK**	TestCode: **EPA Method 418.1: TPH**							
Client ID: **PBS**	Batch ID: **51609**	RunNo: **67984**							
Prep Date: **4/7/2020**	Analysis Date: **4/9/2020**	SeqNo: **2349681**	Units: **mg/Kg**						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Petroleum Hydrocarbons, TR	ND	20								

Sample ID: **LCS-51609**	SampType: **LCS**	TestCode: **EPA Method 418.1: TPH**							
Client ID: **LCSS**	Batch ID: **51609**	RunNo: **67984**							
Prep Date: **4/7/2020**	Analysis Date: **4/9/2020**	SeqNo: **2349682**	Units: **mg/Kg**						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Petroleum Hydrocarbons, TR	140	20	100.0	0	136	62.5	123			S

Sample ID: **LCSD-51609**	SampType: **LCSD**	TestCode: **EPA Method 418.1: TPH**							
Client ID: **LCSS02**	Batch ID: **51609**	RunNo: **67984**							
Prep Date: **4/7/2020**	Analysis Date: **4/9/2020**	SeqNo: **2349683**	Units: **mg/Kg**						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Petroleum Hydrocarbons, TR	140	20	100.0	0	139	62.5	123	2.03	20	S

Sample ID: **MB-51800**	SampType: **MBLK**	TestCode: **EPA Method 418.1: TPH**							
Client ID: **PBS**	Batch ID: **51800**	RunNo: **68123**							
Prep Date: **4/14/2020**	Analysis Date: **4/15/2020**	SeqNo: **2355144**	Units: **mg/Kg**						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Petroleum Hydrocarbons, TR	ND	20								

Sample ID: **LCS-51800**	SampType: **LCS**	TestCode: **EPA Method 418.1: TPH**							
Client ID: **LCSS**	Batch ID: **51800**	RunNo: **68123**							
Prep Date: **4/14/2020**	Analysis Date: **4/15/2020**	SeqNo: **2355145**	Units: **mg/Kg**						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Petroleum Hydrocarbons, TR	120	20	100.0	0	122	62.5	123			

Sample ID: **LCSD-51800**	SampType: **LCSD**	TestCode: **EPA Method 418.1: TPH**							
Client ID: **LCSS02**	Batch ID: **51800**	RunNo: **68123**							
Prep Date: **4/14/2020**	Analysis Date: **4/15/2020**	SeqNo: **2355146**	Units: **mg/Kg**						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Petroleum Hydrocarbons, TR	120	20	100.0	0	122	62.5	123	0	20	

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 Quanitative Limit
S	% Recovery outside of range due to dilution or matrix
B	Analyte detected in the associated Method Blank
E	Value above quantitation range
J	Analyte detected below quantitation limits
P	Sample pH Not In Range
RL	Reporting Limit

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **2004127**
21-Apr-20

Client: Animas Environmental
Project: BMG Landfarm

Sample ID: **lcs-51562**	SampType: **LCS**	TestCode: **EPA Method 8260B: Volatiles Short List**
Client ID: **LCSS**	Batch ID: **51562**	RunNo: **67929**
Prep Date: **4/4/2020**	Analysis Date: **4/7/2020**	SeqNo: **2347492** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.97	0.025	1.000	0	96.8	70	130			
Toluene	1.0	0.050	1.000	0	104	70	130			
Surr: 1,2-Dichloroethane-d4	0.47		0.5000		94.2	70	130			
Surr: 4-Bromofluorobenzene	0.48		0.5000		95.0	70	130			
Surr: Dibromofluoromethane	0.49		0.5000		98.8	70	130			
Surr: Toluene-d8	0.49		0.5000		97.0	70	130			

Sample ID: **mb-51562**	SampType: **MBLK**	TestCode: **EPA Method 8260B: Volatiles Short List**
Client ID: **PBS**	Batch ID: **51562**	RunNo: **67929**
Prep Date: **4/4/2020**	Analysis Date: **4/7/2020**	SeqNo: **2347493** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	0.025								
Toluene	ND	0.050								
Ethylbenzene	ND	0.050								
Xylenes, Total	ND	0.10								
Surr: 1,2-Dichloroethane-d4	0.51		0.5000		103	70	130			
Surr: 4-Bromofluorobenzene	0.46		0.5000		92.7	70	130			
Surr: Dibromofluoromethane	0.52		0.5000		104	70	130			
Surr: Toluene-d8	0.50		0.5000		99.3	70	130			

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 Quanitative Limit
S	% Recovery outside of range due to dilution or matrix
B	Analyte detected in the associated Method Blank
E	Value above quantitation range
J	Analyte detected below quantitation limits
P	Sample pH Not In Range
RL	Reporting Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **2004127**

21-Apr-20

Client: Animas Environmental

Project: BMG Landfarm

Sample ID: **MB-51676**	SampType: **MBLK**	TestCode: **EPA Method 7471: Mercury**							
Client ID: **PBS**	Batch ID: **51676**	RunNo: **67998**							
Prep Date: **4/8/2020**	Analysis Date: **4/9/2020**	SeqNo: **2349831**	Units: **mg/Kg**						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Mercury	ND	0.033								

Sample ID: **LCSLL-51676**	SampType: **LCSLL**	TestCode: **EPA Method 7471: Mercury**							
Client ID: **BatchQC**	Batch ID: **51676**	RunNo: **67998**							
Prep Date: **4/8/2020**	Analysis Date: **4/9/2020**	SeqNo: **2349832**	Units: **mg/Kg**						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Mercury	ND	0.033	0.006660	0	100	70	130			

Sample ID: **LCS-51676**	SampType: **LCS**	TestCode: **EPA Method 7471: Mercury**							
Client ID: **LCSS**	Batch ID: **51676**	RunNo: **67998**							
Prep Date: **4/8/2020**	Analysis Date: **4/9/2020**	SeqNo: **2349833**	Units: **mg/Kg**						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Mercury	0.16	0.033	0.1667	0	96.3	80	120			

Sample ID: **MB-51676**	SampType: **MBLK**	TestCode: **EPA Method 7471: Mercury**							
Client ID: **PBS**	Batch ID: **51676**	RunNo: **67999**							
Prep Date: **4/8/2020**	Analysis Date: **4/9/2020**	SeqNo: **2349858**	Units: **mg/Kg**						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Mercury	ND	0.033								

Sample ID: **LCSLL-51676**	SampType: **LCSLL**	TestCode: **EPA Method 7471: Mercury**							
Client ID: **BatchQC**	Batch ID: **51676**	RunNo: **67999**							
Prep Date: **4/8/2020**	Analysis Date: **4/9/2020**	SeqNo: **2349859**	Units: **mg/Kg**						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Mercury	ND	0.033	0.006660	0	113	70	130			

Sample ID: **LCS-51676**	SampType: **LCS**	TestCode: **EPA Method 7471: Mercury**							
Client ID: **LCSS**	Batch ID: **51676**	RunNo: **67999**							
Prep Date: **4/8/2020**	Analysis Date: **4/9/2020**	SeqNo: **2349860**	Units: **mg/Kg**						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Mercury	0.17	0.033	0.1667	0	99.5	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 Quanitative Limit
S	% Recovery outside of range due to dilution or matrix
B	Analyte detected in the associated Method Blank
E	Value above quantitation range
J	Analyte detected below quantitation limits
P	Sample pH Not In Range
RL	Reporting Limit

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **2004127**
21-Apr-20

Client: Animas Environmental
Project: BMG Landfarm

Sample ID: **MB-51710** SampType: **MBLK** TestCode: **EPA Method 6010B: Soil Metals**
Client ID: **PBS** Batch ID: **51710** RunNo: **68257**
Prep Date: **4/10/2020** Analysis Date: **4/20/2020** SeqNo: **2360966** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Arsenic	ND	2.5								
Barium	ND	0.10								
Cadmium	ND	0.10								
Calcium	ND	25								
Chromium	ND	0.30								
Lead	ND	0.30								
Molybdenum	ND	0.50								
Potassium	ND	50								
Selenium	ND	2.5								
Silver	ND	0.25								
Sodium	ND	25								

Sample ID: **LCS-51710** SampType: **LCS** TestCode: **EPA Method 6010B: Soil Metals**
Client ID: **LCSS** Batch ID: **51710** RunNo: **68257**
Prep Date: **4/10/2020** Analysis Date: **4/20/2020** SeqNo: **2360967** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Arsenic	26	2.5	25.00	0	104	80	120			
Barium	26	0.10	25.00	0	102	80	120			
Cadmium	26	0.10	25.00	0	103	80	120			
Calcium	2500	25	2500	0	102	80	120			
Chromium	25	0.30	25.00	0	102	80	120			
Lead	25	0.30	25.00	0	99.3	80	120			
Molybdenum	26	0.50	25.00	0	104	80	120			
Potassium	2500	50	2500	0	101	80	120			
Selenium	26	2.5	25.00	0	105	80	120			
Silver	5.2	0.25	5.000	0	103	80	120			
Sodium	2500	25	2500	0	100	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 Quanitative Limit
S	% Recovery outside of range due to dilution or matrix
B	Analyte detected in the associated Method Blank
E	Value above quantitation range
J	Analyte detected below quantitation limits
P	Sample pH Not In Range
RL	Reporting Limit

HALL ENVIRONMENTAL ANALYSIS LABORATORY

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

Sample Log-In Check List

Client Name: **Animas Environmental** Work Order Number: **2004127** RcptNo: 1

Received By: **Juan Rojas** **4/3/2020 8:00:00 AM** Juan Rojas

Completed By: **Isaiah Ortiz** **4/3/2020 8:38:36 AM** I. Ortiz

Reviewed By: IO 4/3/20

Chain of Custody

1. Is Chain of Custody sufficiently complete? Yes ☑ No ☐ Not Present ☐
2. How was the sample delivered? Courier

Log In

3. Was an attempt made to cool the samples? Yes ☑ No ☐ NA ☐
4. Were all samples received at a temperature of >0° C to 6.0°C Yes ☑ No ☐ NA ☐
5. Sample(s) in proper container(s)? 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: _____ (<2 or >12 unless noted)
Adjusted? _____
Checked by: DAD 4/3/20

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 °C	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	4.3	Good	Yes			
2	4.1	Good	Yes			

Chain-of-Custody Record

Client: Animas Environmental Services

Mailing Address: PO Box 8
Farmington, NM 87499

Phone #: 505-564-2281

email or Fax#: dreese@animasenvironmental.com

QA/QC Package:
X Standard □ Level 4 (Full Validation)

Accreditation:
□ NELAP □ Other_____

□ EDD (Type) _____

Turn-Around Time:
X Standard □ Rush_____

Project Name: **BMG Landfarm**

Project #: **AES 040605**

Project Manager: Elizabeth McNally/David Reese

Sampler: CL/GB

On Ice: (X) Yes □ No

Sample Temperature: 4.4-0.1=4.3 / 4.2-0.1=4.1

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

Analysis Request

Date	Time	Matrix	Sample Request ID	Container Type and #	Preservative Type	HEAL No. 2004127	BTEX 8021	TPH 418.1	Chlorides 300.0	RCRA 8 Metals	Major Cations/Anions						Air Bubbles (Y or N)
4-7-20																	
~~3/31/2020~~	10:52	Soil	Cell #1 VZ S-1	2 - 4 oz jars 1 - 1 gal. ziplock bag	3 - Cool	-001	X	X	X	X	X						
~~3/31/2020~~	11:01	Soil	Cell #1 VZ S-2	1 - 4 oz jars	Cool	-002	X	X	X								
~~3/31/2020~~	11:09	Soil	Cell #1 VZ S-3	1 - 4 oz jars	Cool	-003	X	X	X								
~~3/31/2020~~	11:16	Soil	Cell #1 VZ S-4	1 - 4 oz jars	Cool	-004	X	X	X								
~~3/31/2020~~	11:24	Soil	Cell #2 VZ S-1	2 - 4 oz jars 1 - 1 gal. ziplock bag	3 - Cool	-005	X	X	X	X	X						
~~3/31/2020~~	11:31	Soil	Cell #2 VZ S-2	1 - 4 oz jars	Cool	-006	X	X	X								
~~3/31/2020~~	11:38	Soil	Cell #2 VZ S-3	1 - 4 oz jars	Cool	-007	X	X	X								
~~3/31/2020~~	11:47	Soil	Cell #2 VZ S-4	1 - 4 oz jars	Cool	-008	X	X	X								
~~3/31/2020~~	11:57	Soil	Cell #3 VZ S-1	2 - 4 oz jars 1 - 1 gal. ziplock bag	3 - Cool	-009	X	X	X	X	X						
~~3/31/2020~~	12:04	Soil	Cell #3 VZ S-2	1 - 4 oz jars	Cool	-010	X	X	X								
~~3/31/2020~~	12:11	Soil	Cell #3 VZ S-3	1 - 4 oz jars	Cool	-011	X	X	X								
~~3/31/2020~~	12:21	Soil	Cell #3 VZ S-4	1 - 4 oz jars	Cool	-012	X	X	X								
~~3/31/2020~~	12:33	Soil	Cell #4 VZ S-1	2 - 4 oz jars 1 - 1 gal. ziplock bag	3 - Cool	-013	X	X	X	X	X						
~~3/31/2020~~	12:43	Soil	Cell #4 VZ S-2	1 - 4 oz jars	Cool	-014	X	X	X								

courier 4/3/20 8:00

Chain-of-Custody Record

Client: Animas Environmental Services

Mailing Address: PO Box 8
Farmington, NM 87499

Phone #: 505-564-2281

email or Fax#: dreese@animasenvironmental.com

QA/QC Package:
X Standard □ Level 4 (Full Validation)

Accreditation:
□ NELAP □ Other_____

□ EDD (Type) _____

Turn-Around Time:
X Standard □ Rush_____

Project Name: **BMG Landfarm**

Project #: **AES 040605**

Project Manager:
Elizabeth McNally/David Reese

Sampler: CL/GB

On Ice: (X) Yes □ No

Sample Temperature: 4.4-0.1=4.3

4.2-0.1=4.1

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

Analysis Request

Date	Time	Matrix	Sample Request ID	Container Type and #	Preservative Type	HEAL No. 2004127	BTEX 8021	TPH 418.1	Chlorides 300.0	RCRA 8 Metals	Major Cations/Anions						Air Bubbles (Y or N)
~~4-2-20~~ 3/31/2020 a	12:51 ~~12:57a~~	Soil	Cell #4 VZ S-3	1 - 4 oz jars	Cool	-015	X	X	X								
~~3/31/2020~~ a	13:00	Soil	Cell #4 VZ S-4	1 - 4 oz jars	Cool	-016	X	X	X								

Date:	Time:	Relinquished by:	Received by:	Date	Time
4/2/20	1712		Christine Walker	4/2/20	1712
4/2/20	1827	Christine Walker		Date	Time
			courier	4/3/20	8:00

Remarks: Call if questions. RCRA 8 metals - As, Ba, Cd, Cr, Pb, Hg, Se, Ag

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.

SR 4/3/20

HALL ENVIRONMENTAL ANALYSIS LABORATORY

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

May 12, 2020

Elizabeth McNally

Animas Environmental
604 Pinon Street
Farmington, NM 87401
TEL:
FAX:

RE: BMG Landfarm OrderNo.: 2004162

Dear Elizabeth McNally:

Hall Environmental Analysis Laboratory received 4 sample(s) on 4/3/2020 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,

Andy Freeman
Laboratory Manager
4901 Hawkins NE
Albuquerque, NM 87109

Analytical Report
Lab Order **2004162**
Date Reported: **5/12/2020**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Animas Environmental
Client Sample ID: Cell 1 (CS-1)
Project: BMG Landfarm
Collection Date: 4/2/2020 9:47:00 AM
Lab ID: 2004162-001 **Matrix:** SOIL **Received Date:** 4/3/2020 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8011/504.1 MODIFIED: EDB						Analyst: **JME**
1,2-Dibromoethane	ND	0.096		µg/Kg	1	4/9/2020 3:01:44 PM
EPA METHOD 8082A: PCB'S						Analyst: **TOM**
Aroclor 1016	ND	0.024		mg/Kg	1	4/11/2020 11:17:56 PM
Aroclor 1221	ND	0.024		mg/Kg	1	4/11/2020 11:17:56 PM
Aroclor 1232	ND	0.024		mg/Kg	1	4/11/2020 11:17:56 PM
Aroclor 1242	ND	0.024		mg/Kg	1	4/11/2020 11:17:56 PM
Aroclor 1248	ND	0.024		mg/Kg	1	4/11/2020 11:17:56 PM
Aroclor 1254	ND	0.024		mg/Kg	1	4/11/2020 11:17:56 PM
Aroclor 1260	ND	0.024		mg/Kg	1	4/11/2020 11:17:56 PM
Surr: Decachlorobiphenyl	65.2	15-129		%Rec	1	4/11/2020 11:17:56 PM
Surr: Tetrachloro-m-xylene	64.0	16.1-131		%Rec	1	4/11/2020 11:17:56 PM
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **JME**
Diesel Range Organics (DRO)	18	9.2		mg/Kg	1	4/7/2020 3:19:10 PM
Motor Oil Range Organics (MRO)	65	46		mg/Kg	1	4/7/2020 3:19:10 PM
Surr: DNOP	95.1	55.1-146		%Rec	1	4/7/2020 3:19:10 PM
EPA METHOD 8310: PAHS						Analyst: **TOM**
Naphthalene	ND	1.1		mg/Kg	1	4/12/2020 3:27:54 PM
1-Methylnaphthalene	ND	1.1		mg/Kg	1	4/12/2020 3:27:54 PM
2-Methylnaphthalene	ND	1.1		mg/Kg	1	4/12/2020 3:27:54 PM
Benzo(a)pyrene	ND	0.045		mg/Kg	1	4/12/2020 3:27:54 PM
Surr: Benzo(e)pyrene	49.8	29-98.8		%Rec	1	4/12/2020 3:27:54 PM
EPA METHOD 300.0: ANIONS						Analyst: **JMT**
Fluoride	1.9	1.5		mg/Kg	5	4/20/2020 6:16:09 PM
Chloride	18	7.5		mg/Kg	5	4/20/2020 6:16:09 PM
Nitrogen, Nitrite (As N)	ND	1.5		mg/Kg	5	4/20/2020 6:16:09 PM
Nitrogen, Nitrate (As N)	5.9	1.5		mg/Kg	5	4/20/2020 6:16:09 PM
Sulfate	9.9	7.5		mg/Kg	5	4/20/2020 6:16:09 PM
EPA METHOD 7471: MERCURY						Analyst: **pmf**
Mercury	ND	0.035		mg/Kg	1	4/14/2020 11:24:01 PM
EPA METHOD 6010B: SOIL METALS						Analyst: **ELS**
Antimony	ND	5.1		mg/Kg	2	4/20/2020 10:14:40 AM
Arsenic	ND	5.1		mg/Kg	2	4/20/2020 10:14:40 AM
Barium	73	0.20		mg/Kg	2	4/20/2020 10:14:40 AM
Beryllium	0.54	0.31		mg/Kg	2	4/20/2020 10:14:40 AM
Cadmium	ND	0.20		mg/Kg	2	4/20/2020 10:14:40 AM
Chromium	6.4	0.61		mg/Kg	2	4/20/2020 10:14:40 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	Value above quantitation range
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 Quanitative Limit
RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix

Analytical Report
Lab Order **2004162**
Date Reported: **5/12/2020**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Animas Environmental
Client Sample ID: Cell 1 (CS-1)
Project: BMG Landfarm
Collection Date: 4/2/2020 9:47:00 AM
Lab ID: 2004162-001 **Matrix:** SOIL **Received Date:** 4/3/2020 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 6010B: SOIL METALS						Analyst: **ELS**
Copper	5.3	0.82		mg/Kg	2	4/20/2020 10:14:40 AM
Iron	11000	260		mg/Kg	100	4/20/2020 9:18:11 AM
Lead	2.4	0.61		mg/Kg	2	4/20/2020 12:58:54 PM
Manganese	240	0.41		mg/Kg	2	4/20/2020 10:14:40 AM
Selenium	ND	5.1		mg/Kg	2	4/20/2020 12:58:54 PM
Silver	ND	0.51		mg/Kg	2	4/20/2020 10:14:40 AM
Thallium	ND	5.1		mg/Kg	2	4/20/2020 10:14:40 AM
Uranium	ND	10		mg/Kg	2	4/20/2020 10:14:40 AM
Zinc	23	5.1		mg/Kg	2	4/20/2020 10:14:40 AM
EPA METHOD 8260B: VOLATILES						Analyst: **JMR**
Benzene	ND	0.025		mg/Kg	1	4/8/2020 1:47:57 PM
Toluene	ND	0.049		mg/Kg	1	4/8/2020 1:47:57 PM
Ethylbenzene	ND	0.049		mg/Kg	1	4/8/2020 1:47:57 PM
Methyl tert-butyl ether (MTBE)	ND	0.049		mg/Kg	1	4/8/2020 1:47:57 PM
1,2,4-Trimethylbenzene	ND	0.049		mg/Kg	1	4/8/2020 1:47:57 PM
1,3,5-Trimethylbenzene	ND	0.049		mg/Kg	1	4/8/2020 1:47:57 PM
1,2-Dichloroethane (EDC)	ND	0.049		mg/Kg	1	4/8/2020 1:47:57 PM
1,2-Dibromoethane (EDB)	ND	0.049		mg/Kg	1	4/8/2020 1:47:57 PM
Naphthalene	ND	0.099		mg/Kg	1	4/8/2020 1:47:57 PM
1-Methylnaphthalene	ND	0.20		mg/Kg	1	4/8/2020 1:47:57 PM
2-Methylnaphthalene	ND	0.20		mg/Kg	1	4/8/2020 1:47:57 PM
Acetone	ND	0.74		mg/Kg	1	4/8/2020 1:47:57 PM
Bromobenzene	ND	0.049		mg/Kg	1	4/8/2020 1:47:57 PM
Bromodichloromethane	ND	0.049		mg/Kg	1	4/8/2020 1:47:57 PM
Bromoform	ND	0.049		mg/Kg	1	4/8/2020 1:47:57 PM
Bromomethane	ND	0.15		mg/Kg	1	4/8/2020 1:47:57 PM
2-Butanone	ND	0.49		mg/Kg	1	4/8/2020 1:47:57 PM
Carbon disulfide	ND	0.49		mg/Kg	1	4/8/2020 1:47:57 PM
Carbon tetrachloride	ND	0.049		mg/Kg	1	4/8/2020 1:47:57 PM
Chlorobenzene	ND	0.049		mg/Kg	1	4/8/2020 1:47:57 PM
Chloroethane	ND	0.099		mg/Kg	1	4/8/2020 1:47:57 PM
Chloroform	ND	0.049		mg/Kg	1	4/8/2020 1:47:57 PM
Chloromethane	ND	0.15		mg/Kg	1	4/8/2020 1:47:57 PM
2-Chlorotoluene	ND	0.049		mg/Kg	1	4/8/2020 1:47:57 PM
4-Chlorotoluene	ND	0.049		mg/Kg	1	4/8/2020 1:47:57 PM
cis-1,2-DCE	ND	0.049		mg/Kg	1	4/8/2020 1:47:57 PM
cis-1,3-Dichloropropene	ND	0.049		mg/Kg	1	4/8/2020 1:47:57 PM
1,2-Dibromo-3-chloropropane	ND	0.099		mg/Kg	1	4/8/2020 1:47:57 PM
Dibromochloromethane	ND	0.049		mg/Kg	1	4/8/2020 1:47:57 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	Value above quantitation range
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 Quanitative Limit
RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix

Analytical Report
Lab Order **2004162**
Date Reported: **5/12/2020**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Animas Environmental
Client Sample ID: Cell 1 (CS-1)
Project: BMG Landfarm
Collection Date: 4/2/2020 9:47:00 AM
Lab ID: 2004162-001 **Matrix:** SOIL **Received Date:** 4/3/2020 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8260B: VOLATILES						Analyst: **JMR**
Dibromomethane	ND	0.049		mg/Kg	1	4/8/2020 1:47:57 PM
1,2-Dichlorobenzene	ND	0.049		mg/Kg	1	4/8/2020 1:47:57 PM
1,3-Dichlorobenzene	ND	0.049		mg/Kg	1	4/8/2020 1:47:57 PM
1,4-Dichlorobenzene	ND	0.049		mg/Kg	1	4/8/2020 1:47:57 PM
Dichlorodifluoromethane	ND	0.049		mg/Kg	1	4/8/2020 1:47:57 PM
1,1-Dichloroethane	ND	0.049		mg/Kg	1	4/8/2020 1:47:57 PM
1,1-Dichloroethene	ND	0.049		mg/Kg	1	4/8/2020 1:47:57 PM
1,2-Dichloropropane	ND	0.049		mg/Kg	1	4/8/2020 1:47:57 PM
1,3-Dichloropropane	ND	0.049		mg/Kg	1	4/8/2020 1:47:57 PM
2,2-Dichloropropane	ND	0.099		mg/Kg	1	4/8/2020 1:47:57 PM
1,1-Dichloropropene	ND	0.099		mg/Kg	1	4/8/2020 1:47:57 PM
Hexachlorobutadiene	ND	0.099		mg/Kg	1	4/8/2020 1:47:57 PM
2-Hexanone	ND	0.49		mg/Kg	1	4/8/2020 1:47:57 PM
Isopropylbenzene	ND	0.049		mg/Kg	1	4/8/2020 1:47:57 PM
4-Isopropyltoluene	ND	0.049		mg/Kg	1	4/8/2020 1:47:57 PM
4-Methyl-2-pentanone	ND	0.49		mg/Kg	1	4/8/2020 1:47:57 PM
Methylene chloride	ND	0.15		mg/Kg	1	4/8/2020 1:47:57 PM
n-Butylbenzene	ND	0.15		mg/Kg	1	4/8/2020 1:47:57 PM
n-Propylbenzene	ND	0.049		mg/Kg	1	4/8/2020 1:47:57 PM
sec-Butylbenzene	ND	0.049		mg/Kg	1	4/8/2020 1:47:57 PM
Styrene	ND	0.049		mg/Kg	1	4/8/2020 1:47:57 PM
tert-Butylbenzene	ND	0.049		mg/Kg	1	4/8/2020 1:47:57 PM
1,1,1,2-Tetrachloroethane	ND	0.049		mg/Kg	1	4/8/2020 1:47:57 PM
1,1,2,2-Tetrachloroethane	ND	0.049		mg/Kg	1	4/8/2020 1:47:57 PM
Tetrachloroethene (PCE)	ND	0.049		mg/Kg	1	4/8/2020 1:47:57 PM
trans-1,2-DCE	ND	0.049		mg/Kg	1	4/8/2020 1:47:57 PM
trans-1,3-Dichloropropene	ND	0.049		mg/Kg	1	4/8/2020 1:47:57 PM
1,2,3-Trichlorobenzene	ND	0.099		mg/Kg	1	4/8/2020 1:47:57 PM
1,2,4-Trichlorobenzene	ND	0.049		mg/Kg	1	4/8/2020 1:47:57 PM
1,1,1-Trichloroethane	ND	0.049		mg/Kg	1	4/8/2020 1:47:57 PM
1,1,2-Trichloroethane	ND	0.049		mg/Kg	1	4/8/2020 1:47:57 PM
Trichloroethene (TCE)	ND	0.049		mg/Kg	1	4/8/2020 1:47:57 PM
Trichlorofluoromethane	ND	0.049		mg/Kg	1	4/8/2020 1:47:57 PM
1,2,3-Trichloropropane	ND	0.099		mg/Kg	1	4/8/2020 1:47:57 PM
Vinyl chloride	ND	0.049		mg/Kg	1	4/8/2020 1:47:57 PM
Xylenes, Total	ND	0.099		mg/Kg	1	4/8/2020 1:47:57 PM
Surr: Dibromofluoromethane	104	70-130		%Rec	1	4/8/2020 1:47:57 PM
Surr: 1,2-Dichloroethane-d4	101	70-130		%Rec	1	4/8/2020 1:47:57 PM
Surr: Toluene-d8	95.6	70-130		%Rec	1	4/8/2020 1:47:57 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	Value above quantitation range
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 Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix		

Analytical Report
Lab Order **2004162**
Date Reported: **5/12/2020**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Animas Environmental
Client Sample ID: Cell 1 (CS-1)
Project: BMG Landfarm
Collection Date: 4/2/2020 9:47:00 AM
Lab ID: 2004162-001 **Matrix:** SOIL **Received Date:** 4/3/2020 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8260B: VOLATILES						Analyst: **JMR**
Surr: 4-Bromofluorobenzene	99.9	70-130		%Rec	1	4/8/2020 1:47:57 PM
EPA METHOD 8015D MOD: GASOLINE RANGE						Analyst: **JMR**
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	4/8/2020 1:47:57 PM
Surr: BFB	102	70-130		%Rec	1	4/8/2020 1:47:57 PM
SM4500H+B/EPA 9040C						Analyst: **JRR**
pH	8.52			pH Units	1	4/9/2020 10:39:00 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 Quanitative Limit
S	% Recovery outside of range due to dilution or matrix
B	Analyte detected in the associated Method Blank
E	Value above quantitation range
J	Analyte detected below quantitation limits
P	Sample pH Not In Range
RL	Reporting Limit

Analytical Report
Lab Order **2004162**
Date Reported: **5/12/2020**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Animas Environmental
Client Sample ID: Cell 2 (CS-2)
Project: BMG Landfarm
Collection Date: 4/2/2020 10:04:00 AM
Lab ID: 2004162-002 **Matrix:** SOIL
Received Date: 4/3/2020 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **JME**
Diesel Range Organics (DRO)	630	180		mg/Kg	20	4/7/2020 2:06:36 PM
Motor Oil Range Organics (MRO)	1000	880		mg/Kg	20	4/7/2020 2:06:36 PM
Surr: DNOP	0	55.1-146	S	%Rec	20	4/7/2020 2:06:36 PM
EPA METHOD 300.0: ANIONS						Analyst: **JMT**
Chloride	ND	60		mg/Kg	20	4/20/2020 7:05:48 PM
EPA METHOD 8015D MOD: GASOLINE RANGE						Analyst: **JMR**
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	4/8/2020 4:10:39 PM
Surr: BFB	99.5	70-130		%Rec	1	4/8/2020 4:10:39 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	Value above quantitation range
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 Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix		

Analytical Report
Lab Order **2004162**
Date Reported: **5/12/2020**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Animas Environmental
Client Sample ID: Cell 3 (CS-3)
Project: BMG Landfarm
Collection Date: 4/2/2020 10:23:00 AM
Lab ID: 2004162-003 **Matrix:** SOIL
Received Date: 4/3/2020 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **JME**
Diesel Range Organics (DRO)	870	200		mg/Kg	20	4/7/2020 2:31:09 PM
Motor Oil Range Organics (MRO)	1600	990		mg/Kg	20	4/7/2020 2:31:09 PM
Surr: DNOP	0	55.1-146	S	%Rec	20	4/7/2020 2:31:09 PM
EPA METHOD 300.0: ANIONS						Analyst: **JMT**
Chloride	ND	60		mg/Kg	20	4/20/2020 7:43:01 PM
EPA METHOD 8015D MOD: GASOLINE RANGE						Analyst: **JMR**
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	4/8/2020 5:36:00 PM
Surr: BFB	102	70-130		%Rec	1	4/8/2020 5:36:00 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 Quanitative Limit
S	% Recovery outside of range due to dilution or matrix
B	Analyte detected in the associated Method Blank
E	Value above quantitation range
J	Analyte detected below quantitation limits
P	Sample pH Not In Range
RL	Reporting Limit

Analytical Report
Lab Order **2004162**
Date Reported: **5/12/2020**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Animas Environmental
Client Sample ID: Cell 4 (CS-4)
Project: BMG Landfarm
Collection Date: 4/2/2020 10:35:00 AM
Lab ID: 2004162-004 **Matrix:** SOIL
Received Date: 4/3/2020 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8011/504.1 MODIFIED: EDB						Analyst: **JME**
1,2-Dibromoethane	ND	0.048		µg/Kg	1	4/9/2020 3:47:07 PM
EPA METHOD 8082A: PCB'S						Analyst: **TOM**
Aroclor 1016	ND	0.023		mg/Kg	1	4/11/2020 11:53:57 PM
Aroclor 1221	ND	0.023		mg/Kg	1	4/11/2020 11:53:57 PM
Aroclor 1232	ND	0.023		mg/Kg	1	4/11/2020 11:53:57 PM
Aroclor 1242	ND	0.023		mg/Kg	1	4/11/2020 11:53:57 PM
Aroclor 1248	ND	0.023		mg/Kg	1	4/11/2020 11:53:57 PM
Aroclor 1254	ND	0.023		mg/Kg	1	4/11/2020 11:53:57 PM
Aroclor 1260	ND	0.023		mg/Kg	1	4/11/2020 11:53:57 PM
Surr: Decachlorobiphenyl	66.8	15-129		%Rec	1	4/11/2020 11:53:57 PM
Surr: Tetrachloro-m-xylene	66.4	16.1-131		%Rec	1	4/11/2020 11:53:57 PM
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **JME**
Diesel Range Organics (DRO)	ND	9.2		mg/Kg	1	4/8/2020 7:12:41 AM
Motor Oil Range Organics (MRO)	ND	46		mg/Kg	1	4/8/2020 7:12:41 AM
Surr: DNOP	89.8	55.1-146		%Rec	1	4/8/2020 7:12:41 AM
EPA METHOD 8310: PAHS						Analyst: **TOM**
Naphthalene	ND	0.25		mg/Kg	1	4/12/2020 5:09:54 PM
1-Methylnaphthalene	ND	0.25		mg/Kg	1	4/12/2020 5:09:54 PM
2-Methylnaphthalene	ND	0.25		mg/Kg	1	4/12/2020 5:09:54 PM
Benzo(a)pyrene	ND	0.010		mg/Kg	1	4/12/2020 5:09:54 PM
Surr: Benzo(e)pyrene	49.6	29-98.8		%Rec	1	4/12/2020 5:09:54 PM
EPA METHOD 300.0: ANIONS						Analyst: **JMT**
Fluoride	1.6	1.5		mg/Kg	5	4/20/2020 7:55:25 PM
Chloride	ND	7.5		mg/Kg	5	4/20/2020 7:55:25 PM
Nitrogen, Nitrite (As N)	ND	1.5		mg/Kg	5	4/20/2020 7:55:25 PM
Nitrogen, Nitrate (As N)	6.2	1.5		mg/Kg	5	4/20/2020 7:55:25 PM
Sulfate	12	7.5		mg/Kg	5	4/20/2020 7:55:25 PM
EPA METHOD 7471: MERCURY						Analyst: **pmf**
Mercury	ND	0.035		mg/Kg	1	4/14/2020 11:36:40 PM
EPA METHOD 6010B: SOIL METALS						Analyst: **ELS**
Antimony	ND	4.9		mg/Kg	2	4/20/2020 10:31:40 AM
Arsenic	ND	4.9		mg/Kg	2	4/20/2020 10:31:40 AM
Barium	110	0.20		mg/Kg	2	4/20/2020 10:31:40 AM
Beryllium	0.76	0.29		mg/Kg	2	4/20/2020 10:31:40 AM
Cadmium	ND	0.20		mg/Kg	2	4/20/2020 10:31:40 AM
Chromium	10	0.59		mg/Kg	2	4/20/2020 10:31:40 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	Value above quantitation range
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 Quanitative Limit
RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix

Analytical Report
Lab Order **2004162**
Date Reported: **5/12/2020**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Animas Environmental
Client Sample ID: Cell 4 (CS-4)
Project: BMG Landfarm
Collection Date: 4/2/2020 10:35:00 AM
Lab ID: 2004162-004 **Matrix:** SOIL **Received Date:** 4/3/2020 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 6010B: SOIL METALS						Analyst: **ELS**
Copper	8.8	0.79		mg/Kg	2	4/20/2020 10:31:40 AM
Iron	16000	250		mg/Kg	100	4/20/2020 9:19:58 AM
Lead	3.7	0.59		mg/Kg	2	4/20/2020 1:03:54 PM
Manganese	270	0.39		mg/Kg	2	4/20/2020 10:31:40 AM
Selenium	ND	4.9		mg/Kg	2	4/20/2020 1:03:54 PM
Silver	ND	0.49		mg/Kg	2	4/20/2020 10:31:40 AM
Thallium	ND	4.9		mg/Kg	2	4/20/2020 10:31:40 AM
Uranium	ND	9.8		mg/Kg	2	4/20/2020 10:31:40 AM
Zinc	32	4.9		mg/Kg	2	4/20/2020 10:31:40 AM
EPA METHOD 8260B: VOLATILES						Analyst: **JMR**
Benzene	ND	0.024		mg/Kg	1	4/8/2020 6:04:28 PM
Toluene	ND	0.049		mg/Kg	1	4/8/2020 6:04:28 PM
Ethylbenzene	ND	0.049		mg/Kg	1	4/8/2020 6:04:28 PM
Methyl tert-butyl ether (MTBE)	ND	0.049		mg/Kg	1	4/8/2020 6:04:28 PM
1,2,4-Trimethylbenzene	ND	0.049		mg/Kg	1	4/8/2020 6:04:28 PM
1,3,5-Trimethylbenzene	ND	0.049		mg/Kg	1	4/8/2020 6:04:28 PM
1,2-Dichloroethane (EDC)	ND	0.049		mg/Kg	1	4/8/2020 6:04:28 PM
1,2-Dibromoethane (EDB)	ND	0.049		mg/Kg	1	4/8/2020 6:04:28 PM
Naphthalene	ND	0.098		mg/Kg	1	4/8/2020 6:04:28 PM
1-Methylnaphthalene	ND	0.20		mg/Kg	1	4/8/2020 6:04:28 PM
2-Methylnaphthalene	ND	0.20		mg/Kg	1	4/8/2020 6:04:28 PM
Acetone	ND	0.73		mg/Kg	1	4/8/2020 6:04:28 PM
Bromobenzene	ND	0.049		mg/Kg	1	4/8/2020 6:04:28 PM
Bromodichloromethane	ND	0.049		mg/Kg	1	4/8/2020 6:04:28 PM
Bromoform	ND	0.049		mg/Kg	1	4/8/2020 6:04:28 PM
Bromomethane	ND	0.15		mg/Kg	1	4/8/2020 6:04:28 PM
2-Butanone	ND	0.49		mg/Kg	1	4/8/2020 6:04:28 PM
Carbon disulfide	ND	0.49		mg/Kg	1	4/8/2020 6:04:28 PM
Carbon tetrachloride	ND	0.049		mg/Kg	1	4/8/2020 6:04:28 PM
Chlorobenzene	ND	0.049		mg/Kg	1	4/8/2020 6:04:28 PM
Chloroethane	ND	0.098		mg/Kg	1	4/8/2020 6:04:28 PM
Chloroform	ND	0.049		mg/Kg	1	4/8/2020 6:04:28 PM
Chloromethane	ND	0.15		mg/Kg	1	4/8/2020 6:04:28 PM
2-Chlorotoluene	ND	0.049		mg/Kg	1	4/8/2020 6:04:28 PM
4-Chlorotoluene	ND	0.049		mg/Kg	1	4/8/2020 6:04:28 PM
cis-1,2-DCE	ND	0.049		mg/Kg	1	4/8/2020 6:04:28 PM
cis-1,3-Dichloropropene	ND	0.049		mg/Kg	1	4/8/2020 6:04:28 PM
1,2-Dibromo-3-chloropropane	ND	0.098		mg/Kg	1	4/8/2020 6:04:28 PM
Dibromochloromethane	ND	0.049		mg/Kg	1	4/8/2020 6:04:28 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	Value above quantitation range
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 Quanitative Limit
RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix

Analytical Report
Lab Order **2004162**
Date Reported: **5/12/2020**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Animas Environmental
Client Sample ID: Cell 4 (CS-4)
Project: BMG Landfarm
Collection Date: 4/2/2020 10:35:00 AM
Lab ID: 2004162-004 **Matrix:** SOIL **Received Date:** 4/3/2020 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8260B: VOLATILES						Analyst: **JMR**
Dibromomethane	ND	0.049		mg/Kg	1	4/8/2020 6:04:28 PM
1,2-Dichlorobenzene	ND	0.049		mg/Kg	1	4/8/2020 6:04:28 PM
1,3-Dichlorobenzene	ND	0.049		mg/Kg	1	4/8/2020 6:04:28 PM
1,4-Dichlorobenzene	ND	0.049		mg/Kg	1	4/8/2020 6:04:28 PM
Dichlorodifluoromethane	ND	0.049		mg/Kg	1	4/8/2020 6:04:28 PM
1,1-Dichloroethane	ND	0.049		mg/Kg	1	4/8/2020 6:04:28 PM
1,1-Dichloroethene	ND	0.049		mg/Kg	1	4/8/2020 6:04:28 PM
1,2-Dichloropropane	ND	0.049		mg/Kg	1	4/8/2020 6:04:28 PM
1,3-Dichloropropane	ND	0.049		mg/Kg	1	4/8/2020 6:04:28 PM
2,2-Dichloropropane	ND	0.098		mg/Kg	1	4/8/2020 6:04:28 PM
1,1-Dichloropropene	ND	0.098		mg/Kg	1	4/8/2020 6:04:28 PM
Hexachlorobutadiene	ND	0.098		mg/Kg	1	4/8/2020 6:04:28 PM
2-Hexanone	ND	0.49		mg/Kg	1	4/8/2020 6:04:28 PM
Isopropylbenzene	ND	0.049		mg/Kg	1	4/8/2020 6:04:28 PM
4-Isopropyltoluene	ND	0.049		mg/Kg	1	4/8/2020 6:04:28 PM
4-Methyl-2-pentanone	ND	0.49		mg/Kg	1	4/8/2020 6:04:28 PM
Methylene chloride	ND	0.15		mg/Kg	1	4/8/2020 6:04:28 PM
n-Butylbenzene	ND	0.15		mg/Kg	1	4/8/2020 6:04:28 PM
n-Propylbenzene	ND	0.049		mg/Kg	1	4/8/2020 6:04:28 PM
sec-Butylbenzene	ND	0.049		mg/Kg	1	4/8/2020 6:04:28 PM
Styrene	ND	0.049		mg/Kg	1	4/8/2020 6:04:28 PM
tert-Butylbenzene	ND	0.049		mg/Kg	1	4/8/2020 6:04:28 PM
1,1,1,2-Tetrachloroethane	ND	0.049		mg/Kg	1	4/8/2020 6:04:28 PM
1,1,2,2-Tetrachloroethane	ND	0.049		mg/Kg	1	4/8/2020 6:04:28 PM
Tetrachloroethene (PCE)	ND	0.049		mg/Kg	1	4/8/2020 6:04:28 PM
trans-1,2-DCE	ND	0.049		mg/Kg	1	4/8/2020 6:04:28 PM
trans-1,3-Dichloropropene	ND	0.049		mg/Kg	1	4/8/2020 6:04:28 PM
1,2,3-Trichlorobenzene	ND	0.098		mg/Kg	1	4/8/2020 6:04:28 PM
1,2,4-Trichlorobenzene	ND	0.049		mg/Kg	1	4/8/2020 6:04:28 PM
1,1,1-Trichloroethane	ND	0.049		mg/Kg	1	4/8/2020 6:04:28 PM
1,1,2-Trichloroethane	ND	0.049		mg/Kg	1	4/8/2020 6:04:28 PM
Trichloroethene (TCE)	ND	0.049		mg/Kg	1	4/8/2020 6:04:28 PM
Trichlorofluoromethane	ND	0.049		mg/Kg	1	4/8/2020 6:04:28 PM
1,2,3-Trichloropropane	ND	0.098		mg/Kg	1	4/8/2020 6:04:28 PM
Vinyl chloride	ND	0.049		mg/Kg	1	4/8/2020 6:04:28 PM
Xylenes, Total	ND	0.098		mg/Kg	1	4/8/2020 6:04:28 PM
Surr: Dibromofluoromethane	103	70-130		%Rec	1	4/8/2020 6:04:28 PM
Surr: 1,2-Dichloroethane-d4	96.9	70-130		%Rec	1	4/8/2020 6:04:28 PM
Surr: Toluene-d8	93.6	70-130		%Rec	1	4/8/2020 6:04:28 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	Value above quantitation range
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 Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix		

Analytical Report
Lab Order **2004162**
Date Reported: **5/12/2020**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Animas Environmental
Client Sample ID: Cell 4 (CS-4)
Project: BMG Landfarm
Collection Date: 4/2/2020 10:35:00 AM
Lab ID: 2004162-004 **Matrix:** SOIL **Received Date:** 4/3/2020 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8260B: VOLATILES						Analyst: **JMR**
Surr: 4-Bromofluorobenzene	94.5	70-130		%Rec	1	4/8/2020 6:04:28 PM
EPA METHOD 8015D MOD: GASOLINE RANGE						Analyst: **JMR**
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	4/8/2020 6:04:28 PM
Surr: BFB	100	70-130		%Rec	1	4/8/2020 6:04:28 PM
SM4500H+B/EPA 9040C						Analyst: **JRR**
pH	8.29			pH Units	1	4/9/2020 10:39:00 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 Quanitative Limit
S	% Recovery outside of range due to dilution or matrix
B	Analyte detected in the associated Method Blank
E	Value above quantitation range
J	Analyte detected below quantitation limits
P	Sample pH Not In Range
RL	Reporting Limit

Pace Analytical®
National Center for Testing & Innovation

ANALYTICAL REPORT

April 13, 2020

Hall Environmental Analysis Laboratory

Sample Delivery Group: L1206258

Samples Received: 04/07/2020

Project Number:

Description:

Report To:

4901 Hawkins NE

Albuquerque, NM 87109

Entire Report Reviewed By: Daphne R Richards

Daphne Richards
Project Manager

TABLE OF CONTENTS

CELL 1 (CS-1) 2004162-001B L1206258-01 Solid

			Collected by	Collected date/time	Received date/time
				04/02/20 09:47	04/07/20 08:30

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Wet Chemistry by Method 9012B	WG1457525	1	04/09/20 09:00	04/10/20 13:08	SDL	Mt. Juliet, TN
Wet Chemistry by Method 9066	WG1457951	1	04/09/20 08:55	04/09/20 14:15	SDL	Mt. Juliet, TN
Semi Volatile Organic Compounds (GC/MS) by Method 8270C	WG1458188	1	04/09/20 19:52	04/10/20 04:34	ADF	Mt. Juliet, TN

CELL 4 (CS-4) 2004162-004B L1206258-02 Solid

			Collected by	Collected date/time	Received date/time
				04/02/20 10:35	04/07/20 08:30

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Wet Chemistry by Method 9012B	WG1457525	1	04/09/20 09:00	04/10/20 13:11	SDL	Mt. Juliet, TN
Wet Chemistry by Method 9066	WG1457951	1	04/09/20 08:55	04/09/20 14:19	SDL	Mt. Juliet, TN
Semi Volatile Organic Compounds (GC/MS) by Method 8270C	WG1458188	1	04/09/20 19:52	04/10/20 04:53	ADF	Mt. Juliet, TN

All sample aliquots were received at the correct temperature, in the proper containers, with the appropriate preservatives, and within method specified holding times, unless qualified or notated within the report. Where applicable, all MDL (LOD) and RDL (LOQ) values reported for environmental samples have been corrected for the dilution factor used in the analysis. All Method and Batch Quality Control are within established criteria except where addressed in this case narrative, a non-conformance form or properly qualified within the sample results. By my digital signature below, I affirm to the best of my knowledge, all problems/anomalies observed by the laboratory as having the potential to affect the quality of the data have been identified by the laboratory, and no information or data have been knowingly withheld that would affect the quality of the data.

Daphne R Richards

Daphne Richards
Project Manager

Wet Chemistry by Method 9012B

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
Cyanide	ND		0.250	1	04/10/2020 13:08	WG1457525

Wet Chemistry by Method 9066

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
Total Phenol by 4AAP	ND	J6	0.670	1	04/09/2020 14:15	WG1457951

Semi Volatile Organic Compounds (GC/MS) by Method 8270C

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
Atrazine	ND		0.333	1	04/10/2020 04:34	WG1458188
Pentachlorophenol	ND		0.333	1	04/10/2020 04:34	WG1458188
Phenol	ND		0.333	1	04/10/2020 04:34	WG1458188
(S) 2-Fluorophenol	*64.0*		*12.0-120*		*04/10/2020 04:34*	WG1458188
(S) Phenol-d5	*60.2*		*10.0-120*		*04/10/2020 04:34*	WG1458188
(S) Nitrobenzene-d5	*52.7*		*10.0-122*		*04/10/2020 04:34*	WG1458188
(S) 2-Fluorobiphenyl	*60.6*		*15.0-120*		*04/10/2020 04:34*	WG1458188
(S) 2,4,6-Tribromophenol	*84.9*		*10.0-127*		*04/10/2020 04:34*	WG1458188
(S) p-Terphenyl-d14	*67.6*		*10.0-120*		*04/10/2020 04:34*	WG1458188

Wet Chemistry by Method 9012B

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
Cyanide	ND		0.250	1	04/10/2020 13:11	WG1457525

Wet Chemistry by Method 9066

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
Total Phenol by 4AAP	ND		0.670	1	04/09/2020 14:19	WG1457951

Semi Volatile Organic Compounds (GC/MS) by Method 8270C

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
Atrazine	ND		0.333	1	04/10/2020 04:53	WG1458188
Pentachlorophenol	ND		0.333	1	04/10/2020 04:53	WG1458188
Phenol	ND		0.333	1	04/10/2020 04:53	WG1458188
(S) 2-Fluorophenol	*65.3*		*12.0-120*		*04/10/2020 04:53*	WG1458188
(S) Phenol-d5	*62.9*		*10.0-120*		*04/10/2020 04:53*	WG1458188
(S) Nitrobenzene-d5	*55.5*		*10.0-122*		*04/10/2020 04:53*	WG1458188
(S) 2-Fluorobiphenyl	*62.3*		*15.0-120*		*04/10/2020 04:53*	WG1458188
(S) 2,4,6-Tribromophenol	*92.1*		*10.0-127*		*04/10/2020 04:53*	WG1458188
(S) p-Terphenyl-d14	*72.0*		*10.0-120*		*04/10/2020 04:53*	WG1458188

Method Blank (MB)

(MB) R3517472-1 04/10/20 13:03

Analyte	MB Result mg/kg	MB Qualifier	MB MDL mg/kg	MB RDL mg/kg
Cyanide	U		0.0733	0.250

L1206258-02 Original Sample (OS) • Duplicate (DUP)

(OS) L1206258-02 04/10/20 13:11 • (DUP) R3517472-5 04/10/20 13:12

Analyte	Original Result mg/kg	DUP Result mg/kg	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Cyanide	ND	0.000	1	0.000		20

L1206664-06 Original Sample (OS) • Duplicate (DUP)

(OS) L1206664-06 04/10/20 13:32 • (DUP) R3517472-8 04/10/20 13:33

Analyte	Original Result mg/kg	DUP Result mg/kg	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Cyanide	U	0.000	1	0.000		20

Laboratory Control Sample (LCS)

(LCS) R3517472-2 04/10/20 13:04

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
Cyanide	2.50	2.72	109	85.0-115	

L1206258-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1206258-01 04/10/20 13:08 • (MS) R3517472-3 04/10/20 13:09 • (MSD) R3517472-4 04/10/20 13:10

Analyte	Spike Amount mg/kg	Original Result mg/kg	MS Result mg/kg	MSD Result mg/kg	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Cyanide	1.67	ND	1.42	1.42	85.2	85.3	1	75.0-125			0.152	20

L1206664-05 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1206664-05 04/10/20 13:29 • (MS) R3517472-6 04/10/20 13:30 • (MSD) R3517472-7 04/10/20 13:31

Analyte	Spike Amount mg/kg	Original Result mg/kg	MS Result mg/kg	MSD Result mg/kg	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Cyanide	1.67	U	ND	0.452	0.000	27.2	1	75.0-125	J6	J3 J6	200	20

Method Blank (MB)

(MB) R3517148-1 04/09/20 14:10

Analyte	MB Result mg/kg	MB Qualifier	MB MDL mg/kg	MB RDL mg/kg
Total Phenol by 4AAP	U		0.220	0.670

L1206258-02 Original Sample (OS) • Duplicate (DUP)

(OS) L1206258-02 04/09/20 14:19 • (DUP) R3517148-5 04/09/20 14:20

Analyte	Original Result mg/kg	DUP Result mg/kg	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Total Phenol by 4AAP	ND	0.532	1	0.000		20

Laboratory Control Sample (LCS)

(LCS) R3517148-2 04/09/20 14:10

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
Total Phenol by 4AAP	8.33	7.90	94.8	90.0-110	

L1206258-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1206258-01 04/09/20 14:15 • (MS) R3517148-3 04/09/20 14:16 • (MSD) R3517148-4 04/09/20 14:17

Analyte	Spike Amount mg/kg	Original Result mg/kg	MS Result mg/kg	MSD Result mg/kg	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Total Phenol by 4AAP	16.7	ND	13.5	14.1	80.7	84.4	1	90.0-110	J6	J6	4.52	20

Method Blank (MB)

(MB) R3517469-2 04/10/20 02:19

Analyte	MB Result mg/kg	MB Qualifier	MB MDL mg/kg	MB RDL mg/kg
Atrazine	U		0.0938	0.333
Pentachlorophenol	U		0.0480	0.333
Phenol	U		0.00695	0.333
(S) Nitrobenzene-d5	*66.4*			*10.0-122*
(S) 2-Fluorobiphenyl	*70.9*			*15.0-120*
(S) p-Terphenyl-d14	*79.6*			*10.0-120*
(S) Phenol-d5	*69.5*			*10.0-120*
(S) 2-Fluorophenol	*75.5*			*12.0-120*
(S) 2,4,6-Tribromophenol	*74.8*			*10.0-127*

Laboratory Control Sample (LCS)

(LCS) R3517469-1 04/10/20 02:00

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
Atrazine	0.666	0.539	80.9	43.0-120	
Pentachlorophenol	0.666	0.520	78.1	29.0-120	
Phenol	0.666	0.470	70.6	28.0-120	
(S) Nitrobenzene-d5			*67.3*	*10.0-122*	
(S) 2-Fluorobiphenyl			*72.4*	*15.0-120*	
(S) p-Terphenyl-d14			*77.8*	*10.0-120*	
(S) Phenol-d5			*76.1*	*10.0-120*	
(S) 2-Fluorophenol			*80.9*	*12.0-120*	
(S) 2,4,6-Tribromophenol			*89.2*	*10.0-127*	

L1205871-02 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1205871-02 04/10/20 05:51 • (MS) R3517469-3 04/10/20 06:10 • (MSD) R3517469-4 04/10/20 06:29

Analyte	Spike Amount mg/kg	Original Result mg/kg	MS Result mg/kg	MSD Result mg/kg	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Pentachlorophenol	0.666	U	0.490	0.495	73.6	74.3	2	10.0-160			1.02	31
Phenol	0.666	U	0.396	0.424	59.5	63.7	2	12.0-120			6.83	38
(S) Nitrobenzene-d5					*47.1*	*45.9*		*10.0-122*				
(S) 2-Fluorobiphenyl					*63.7*	*65.2*		*15.0-120*				
(S) p-Terphenyl-d14					*74.8*	*85.3*		*10.0-120*				
(S) Phenol-d5					*64.8*	*67.5*		*10.0-120*				
(S) 2-Fluorophenol					*56.1*	*55.0*		*12.0-120*				
(S) 2,4,6-Tribromophenol					*60.4*	*62.2*		*10.0-127*				

Guide to Reading and Understanding Your Laboratory Report

The information below is designed to better explain the various terms used in your report of analytical results from the Laboratory. This is not intended as a comprehensive explanation, and if you have additional questions please contact your project representative.

Results Disclaimer - Information that may be provided by the customer, and contained within this report, include Permit Limits, Project Name, Sample ID, Sample Matrix, Sample Preservation, Field Blanks, Field Spikes, Field Duplicates, On-Site Data, Sampling Collection Dates/Times, and Sampling Location. Results relate to the accuracy of this information provided, and as the samples are received.

Abbreviations and Definitions

MDL	Method Detection Limit.
ND	Not detected at the Reporting Limit (or MDL where applicable).
RDL	Reported Detection Limit.
Rec.	Recovery.
RPD	Relative Percent Difference.
SDG	Sample Delivery Group.
(S)	Surrogate (Surrogate Standard) - Analytes added to every blank, sample, Laboratory Control Sample/Duplicate and Matrix Spike/Duplicate; used to evaluate analytical efficiency by measuring recovery. Surrogates are not expected to be detected in all environmental media.
U	Not detected at the Reporting Limit (or MDL where applicable).
Analyte	The name of the particular compound or analysis performed. Some Analyses and Methods will have multiple analytes reported.
Dilution	If the sample matrix contains an interfering material, the sample preparation volume or weight values differ from the standard, or if concentrations of analytes in the sample are higher than the highest limit of concentration that the laboratory can accurately report, the sample may be diluted for analysis. If a value different than 1 is used in this field, the result reported has already been corrected for this factor.
Limits	These are the target % recovery ranges or % difference value that the laboratory has historically determined as normal for the method and analyte being reported. Successful QC Sample analysis will target all analytes recovered or duplicated within these ranges.
Original Sample	The non-spiked sample in the prep batch used to determine the Relative Percent Difference (RPD) from a quality control sample. The Original Sample may not be included within the reported SDG.
Qualifier	This column provides a letter and/or number designation that corresponds to additional information concerning the result reported. If a Qualifier is present, a definition per Qualifier is provided within the Glossary and Definitions page and potentially a discussion of possible implications of the Qualifier in the Case Narrative if applicable.
Result	The actual analytical final result (corrected for any sample specific characteristics) reported for your sample. If there was no measurable result returned for a specific analyte, the result in this column may state “ND” (Not Detected) or “BDL” (Below Detectable Levels). The information in the results column should always be accompanied by either an MDL (Method Detection Limit) or RDL (Reporting Detection Limit) that defines the lowest value that the laboratory could detect or report for this analyte.
Uncertainty (Radiochemistry)	Confidence level of 2 sigma.
Case Narrative (Cn)	A brief discussion about the included sample results, including a discussion of any non-conformances to protocol observed either at sample receipt by the laboratory from the field or during the analytical process. If present, there will be a section in the Case Narrative to discuss the meaning of any data qualifiers used in the report.
Quality Control Summary (Qc)	This section of the report includes the results of the laboratory quality control analyses required by procedure or analytical methods to assist in evaluating the validity of the results reported for your samples. These analyses are not being performed on your samples typically, but on laboratory generated material.
Sample Chain of Custody (Sc)	This is the document created in the field when your samples were initially collected. This is used to verify the time and date of collection, the person collecting the samples, and the analyses that the laboratory is requested to perform. This chain of custody also documents all persons (excluding commercial shippers) that have had control or possession of the samples from the time of collection until delivery to the laboratory for analysis.
Sample Results (Sr)	This section of your report will provide the results of all testing performed on your samples. These results are provided by sample ID and are separated by the analyses performed on each sample. The header line of each analysis section for each sample will provide the name and method number for the analysis reported.
Sample Summary (Ss)	This section of the Analytical Report defines the specific analyses performed for each sample ID, including the dates and times of preparation and/or analysis.

Qualifier	Description
J3	The associated batch QC was outside the established quality control range for precision.
J6	The sample matrix interfered with the ability to make any accurate determination; spike value is low.

Pace National is the only environmental laboratory accredited/certified to support your work nationwide from one location. One phone call, one point of contact, one laboratory. No other lab is as accessible or prepared to handle your needs throughout the country. Our capacity and capability from our single location laboratory is comparable to the collective totals of the network laboratories in our industry. The most significant benefit to our one location design is the design of our laboratory campus. The model is conducive to accelerated productivity, decreasing turn-around time, and preventing cross contamination, thus protecting sample integrity. Our focus on premium quality and prompt service allows us to be YOUR LAB OF CHOICE.
* Not all certifications held by the laboratory are applicable to the results reported in the attached report.
* Accreditation is only applicable to the test methods specified on each scope of accreditation held by Pace National.

State Accreditations

Alabama	40660	Nebraska	NE-OS-15-05
Alaska	17-026	Nevada	TN-03-2002-34
Arizona	AZ0612	New Hampshire	2975
Arkansas	88-0469	New Jersey–NELAP	TN002
California	2932	New Mexico [1]	n/a
Colorado	TN00003	New York	11742
Connecticut	PH-0197	North Carolina	Env375
Florida	E87487	North Carolina [1]	DW21704
Georgia	NELAP	North Carolina [3]	41
Georgia [1]	923	North Dakota	R-140
Idaho	TN00003	Ohio–VAP	CL0069
Illinois	200008	Oklahoma	9915
Indiana	C-TN-01	Oregon	TN200002
Iowa	364	Pennsylvania	68-02979
Kansas	E-10277	Rhode Island	LAO00356
Kentucky [1 6]	90010	South Carolina	84004
Kentucky [2]	16	South Dakota	n/a
Louisiana	AI30792	Tennessee [1 4]	2006
Louisiana [1]	LA180010	Texas	T104704245-18-15
Maine	TN0002	Texas [5]	LAB0152
Maryland	324	Utah	TN00003
Massachusetts	M-TN003	Vermont	VT2006
Michigan	9958	Virginia	460132
Minnesota	047-999-395	Washington	C847
Mississippi	TN00003	West Virginia	233
Missouri	340	Wisconsin	9980939910
Montana	CERT0086	Wyoming	A2LA

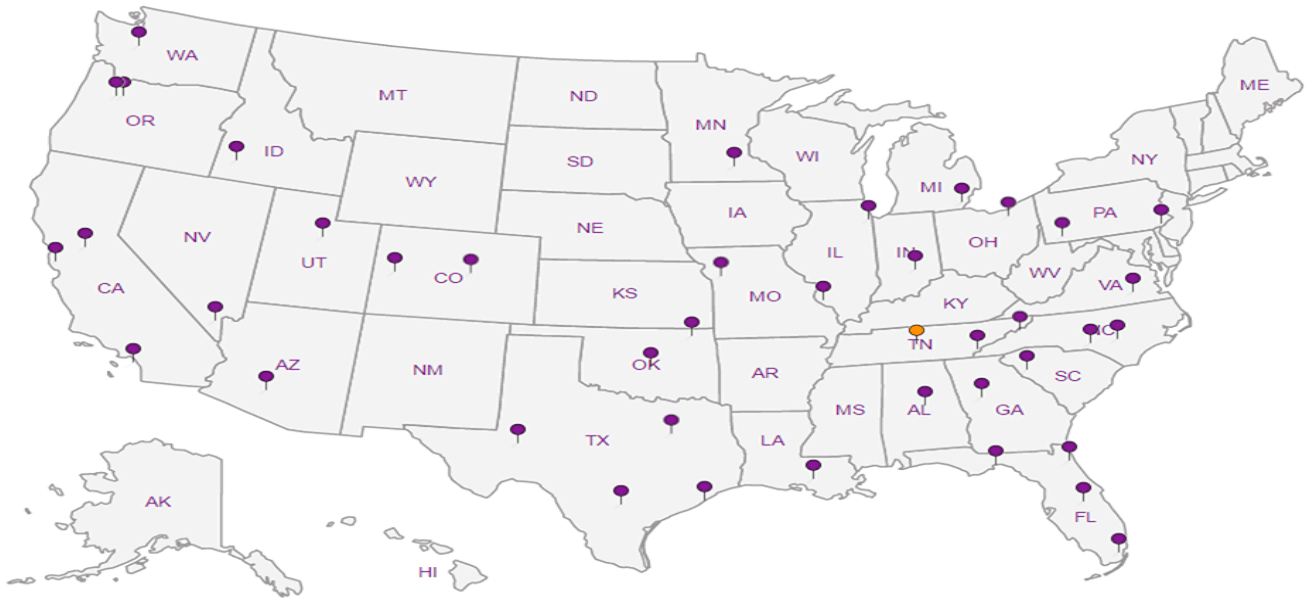
Third Party Federal Accreditations

A2LA – ISO 17025	1461.01	AIHA-LAP,LLC EMLAP	100789
A2LA – ISO 17025 [5]	1461.02	DOD	1461.01
Canada	1461.01	USDA	P330-15-00234
EPA–Crypto	TN00003		

[1] Drinking Water [2] Underground Storage Tanks [3] Aquatic Toxicity [4] Chemical/Microbiological [5] Mold [6] Wastewater n/a Accreditation not applicable

Our Locations

Pace National has sixty-four client support centers that provide sample pickup and/or the delivery of sampling supplies. If you would like assistance from one of our support offices, please contact our main office. Pace National performs all testing at our central laboratory.



HALL ENVIRONMENTAL ANALYSIS LABORATORY

CHAIN OF CUSTODY RECORD

PAGE: 1 OF: 1

B013

L206258

Hall Environmental Analysis L...
4901 H...
Albuquerque, N...
TEL: 505-345-3975
FAX: 505-345-4107
Website: www.hallenvironmental.com

SUB CONTRATOR:	PACE TN	COMPANY: PACE TN	PHONE: (800) 767-5859	FAX: (615) 758-5859	
ADDRESS:	12065 Lebanon Rd		ACCOUNT #:	EMAIL:	
CITY, STATE, ZIP:	Mt. Juliet, TN 37122				

ITEM	SAMPLE	CLIENT SAMPLE ID	BOTTLE TYPE	MATRIX	COLLECTION DATE	# CONTAINERS	ANALYTICAL COMMENTS
1	2004162-001B	Cell 1 (CS-1)	8OZGU	Soil	4/2/2020 9:47:00 AM	1	Atrazine and Pentachlorophenol, Total Phenols and Total CN
2	2004162-004B	Cell 4 (CS-4)	8OZGU	Soil	4/2/2020 10:35:00 AM	1	Atrazine and Pentachlorophenol, Total Phenols and Total CN

SPECIAL INSTRUCTIONS / COMMENTS:

Please include the LAB ID and the CLIENT SAMPLE ID on all final reports. Please e-mail results to lab@hallenvironmental.com. Please return all coolers and blue ice. Thank you.

Fed 4510 1668 8355

Relinquished By:	Date:	Time:	Received By:	Date:	Time:
LS	4/3/2020	4:33 PM			
Relinquished By:	Date:	Time:	Received By:	Date:	Time:
Relinquished By:	Date:	Time:	Received By:	Date: 4/7/20	Time: 8:30

TAT: Standard ☐ RUSH Next BD ☐ 2nd BD ☐ 3rd BD ☐

REPORT TRANSMITTAL DESIRED:
☐ HARDCOPY (extra cost) ☐ FAX ☐ EMAIL ☐ ONLINE

FOR LAB USE ONLY
Temp of samples 1.2+.1=1.3°C uy Attempt to Cool ?
Comments: RAD SCREEN: <0.5 mR/hr

Cont=2

Pace Analytical National Center for Testing & Innovation
Cooler Receipt Form

Client: HALLENVANM	L1206258	
Cooler Received/Opened On: 4 / 7 / 20 Temperature:	1.3°C	
Received by: Monica Rifenberrick		
Signature:		

Receipt Check List	NP	Yes	No
COC Seal Present / Intact?	✓		
COC Signed / Accurate?		✓	
Bottles arrive intact?		✓	
Correct bottles used?		✓	
Sufficient volume sent?		✓	
If Applicable			
VOA Zero headspace?			
Preservation Correct / Checked?			

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

May 11, 2020

Andy Freeman
Hall Environmental
4901 Hawkins NE
Albuquerque, NM 87109

RE: Project: 2004162
Pace Project No.: 30358865

Dear Andy Freeman:

Enclosed are the analytical results for sample(s) received by the laboratory on April 14, 2020. The results relate only to the samples included in this report. Results reported herein conform to the applicable TNI/NELAC Standards and the laboratory's Quality Manual, where applicable, unless otherwise noted in the body of the report.

The test results provided in this final report were generated by each of the following laboratories within the Pace Network:
- Pace Analytical Services - Greensburg

If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Jacquelyn Collins
jacquelyn.collins@pacelabs.com
(724)850-5612
Project Manager

Enclosures

cc: Ms. Jackie Ball, Hall Environmental
Michelle Garcia, Hall Environmental

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

CERTIFICATIONS

Project: 2004162
Pace Project No.: 30358865

Pace Analytical Services Pennsylvania
1638 Roseytown Rd Suites 2,3&4, Greensburg, PA 15601
ANAB DOD-ELAP Rad Accreditation #: L2417
Alabama Certification #: 41590
Arizona Certification #: AZ0734
Arkansas Certification
California Certification #: 04222CA
Colorado Certification #: PA01547
Connecticut Certification #: PH-0694
Delaware Certification
EPA Region 4 DW Rad
Florida/TNI Certification #: E87683
Georgia Certification #: C040
Florida: Cert E871149 SEKS WET
Guam Certification
Hawaii Certification
Idaho Certification
Illinois Certification
Indiana Certification
Iowa Certification #: 391
Kansas/TNI Certification #: E-10358
Kentucky Certification #: KY90133
KY WW Permit #: KY0098221
KY WW Permit #: KY0000221
Louisiana DHH/TNI Certification #: LA180012
Louisiana DEQ/TNI Certification #: 4086
Maine Certification #: 2017020
Maryland Certification #: 308
Massachusetts Certification #: M-PA1457
Michigan/PADEP Certification #: 9991
Missouri Certification #: 235
Montana Certification #: Cert0082
Nebraska Certification #: NE-OS-29-14
Nevada Certification #: PA014572018-1
New Hampshire/TNI Certification #: 297617
New Jersey/TNI Certification #: PA051
New Mexico Certification #: PA01457
New York/TNI Certification #: 10888
North Carolina Certification #: 42706
North Dakota Certification #: R-190
Ohio EPA Rad Approval: #41249
Oregon/TNI Certification #: PA200002-010
Pennsylvania/TNI Certification #: 65-00282
Puerto Rico Certification #: PA01457
Rhode Island Certification #: 65-00282
South Dakota Certification
Tennessee Certification #: 02867
Texas/TNI Certification #: T104704188-17-3
Utah/TNI Certification #: PA014572017-9
USDA Soil Permit #: P330-17-00091
Vermont Dept. of Health: ID# VT-0282
Virgin Island/PADEP Certification
Virginia/VELAP Certification #: 9526
Washington Certification #: C868
West Virginia DEP Certification #: 143
West Virginia DHHR Certification #: 9964C
Wisconsin Approve List for Rad
Wyoming Certification #: 8TMS-L

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

SAMPLE SUMMARY

Project: 2004162
Pace Project No.: 30358865

Lab ID	Sample ID	Matrix	Date Collected	Date Received
30358865001	**2004162-001C Cell 1 (CS-1)**	Solid	04/02/20 09:47	04/14/20 09:30
30358865002	**2004162-004C Cell 4 (CS-4)**	Solid	04/02/20 10:35	04/14/20 09:30

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

SAMPLE ANALYTE COUNT

Project: 2004162
Pace Project No.: 30358865

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
30358865001	**2004162-001C Cell 1 (CS-1)**	EPA 901.1	MAH	2	PASI-PA
30358865002	**2004162-004C Cell 4 (CS-4)**	EPA 901.1	MAH	2	PASI-PA

PASI-PA = Pace Analytical Services - Greensburg

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

PROJECT NARRATIVE

Project: 2004162
Pace Project No.: 30358865

Method: **EPA 901.1**
Description: 901.1 Gamma Spec INGROWTH
Client: Hall Environmental
Date: May 11, 2020

General Information:
2 samples were analyzed for EPA 901.1 by Pace Analytical Services Greensburg. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Additional Comments:

This data package has been reviewed for quality and completeness and is approved for release.

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: 2004162
Pace Project No.: 30358865

Sample: 2004162-001C Cell 1 (CS-1) **Lab ID: 30358865001** Collected: 04/02/20 09:47 Received: 04/14/20 09:30 Matrix: Solid
PWS: Site ID: Sample Type:

Results reported on a "dry-weight" basis

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
		Pace Analytical Services - Greensburg				
Radium-226	EPA 901.1	**1.063 ± 0.317 (0.236) C:NA T:NA**	pCi/g	05/08/20 14:54	13982-63-3	Ra
Radium-228	EPA 901.1	**0.607 ± 0.502 (0.556) C:NA T:NA**	pCi/g	05/08/20 14:54	15262-20-1	

Sample: 2004162-004C Cell 4 (CS-4) **Lab ID: 30358865002** Collected: 04/02/20 10:35 Received: 04/14/20 09:30 Matrix: Solid
PWS: Site ID: Sample Type:

Results reported on a "dry-weight" basis

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
		Pace Analytical Services - Greensburg				
Radium-226	EPA 901.1	**1.063 ± 0.409 (0.305) C:NA T:NA**	pCi/g	05/08/20 15:12	13982-63-3	Ra
Radium-228	EPA 901.1	**1.461 ± 0.454 (0.252) C:NA T:NA**	pCi/g	05/08/20 15:12	15262-20-1	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

QUALITY CONTROL - RADIOCHEMISTRY

Project: 2004162
Pace Project No.: 30358865

QC Batch: 394244
QC Batch Method: EPA 901.1
Analysis Method: EPA 901.1
Analysis Description: 901.1 Gamma Spec Ingrowth
Laboratory: Pace Analytical Services - Greensburg
Associated Lab Samples: 30358865001, 30358865002

METHOD BLANK: 1909588
Matrix: Solid
Associated Lab Samples: 30358865001, 30358865002

Parameter	Act ± Unc (MDC) Carr Trac	Units	Analyzed	Qualifiers
Radium-226	0.029 ± 0.036 (0.184) C:NA T:NA	pCi/g	05/07/20 13:15	Ra
Radium-228	0.063 ± 0.092 (0.142) C:NA T:NA	pCi/g	05/07/20 13:15	

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

QUALIFIERS

Project: 2004162
Pace Project No.: 30358865

DEFINITIONS

DF - Dilution Factor, if reported, represents the factor applied to the reported data due to dilution of the sample aliquot.

ND - Not Detected at or above adjusted reporting limit.

TNTC - Too Numerous To Count

J - Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.

MDL - Adjusted Method Detection Limit.

PQL - Practical Quantitation Limit.

RL - Reporting Limit - The lowest concentration value that meets project requirements for quantitative data with known precision and bias for a specific analyte in a specific matrix.

S - Surrogate

1,2-Diphenylhydrazine decomposes to and cannot be separated from Azobenzene using Method 8270. The result for each analyte is a combined concentration.

Consistent with EPA guidelines, unrounded data are displayed and have been used to calculate % recovery and RPD values.

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

U - Indicates the compound was analyzed for, but not detected.

N-Nitrosodiphenylamine decomposes and cannot be separated from Diphenylamine using Method 8270. The result reported for each analyte is a combined concentration.

Act - Activity

Unc - Uncertainty: For Safe Drinking Water Act (SDWA) analyses, the reported Unc. Is the calculated Count Uncertainty (95% confidence interval) using a coverage factor of 1.96. For all other matrices (non-SDWA), the reported Unc. is the calculated Expanded Uncertainty (aka Combined Standard Uncertainty, CSU), reported at the 95% confidence interval using a coverage factor of 1.96.

Gamma Spec: The Unc. reported for all gamma-spectroscopy analyses (EPA 901.1), is the calculated Expanded Uncertainty (CSU) at the 95.4% confidence interval, using a coverage factor of 2.0.

(MDC) - Minimum Detectable Concentration

Trac - Tracer Recovery (%)

Carr - Carrier Recovery (%)

Pace Analytical is TNI accredited. Contact your Pace PM for the current list of accredited analytes.

TNI - The NELAC Institute.

ANALYTE QUALIFIERS

Ra	The reported Ra-226 results were determined by hermetically sealing the dried, processed sample in an appropriate-sized can. Each sample was stored for a minimum of 21 days to ensure that equilibrium between Ra-226 and daughters Bi-214 and Pb-214 was achieved. Reported Ra-226 results were inferred from gamma peaks attributable to Bi-214 and Pb-214.

HALL ENVIRONMENTAL ANALYSIS LABORATORY

CHAIN OF CUSTODY RECORD

PAGE: 1 OF: 1

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

SUB CONTRATOR:	Pace Analytical-PA	COMPANY:	Pace Analytical Services, Inc.	PHONE: (724) 850-5600	FAX: (724) 850-5601
ADDRESS:	1638 Roseytown Rd Ste 2,3,4			ACCOUNT #:	EMAIL:
CITY, STATE, ZIP:	Greensburg, PA 15601				

ITEM	SAMPLE	CLIENT SAMPLE ID	BOTTLE TYPE	MATRIX	COLLECTION DATE	# CONTAINERS	ANALYTICAL COMMENTS	
1	2004162-001C	Cell 1 (CS-1)	8OZGU	Soil	4/2/2020 9:47:00 AM	1	Ra226/228	001
2	2004162-004C	Cell 4 (CS-4)	8OZGU	Soil	4/2/2020 10:35:00 AM	1	Ra226/228	002

WO# : 30358865

30358865

SPECIAL INSTRUCTIONS / COMMENTS:

Please include the LAB ID and the CLIENT SAMPLE ID on all final reports. Please e-mail results to lab@hallenvironmental.com. Please return all coolers and blue ice. Thank you.

Relinquished By: LB	Date: 4/3/2020	Time: 1:04 PM	Received By: Vivian Pace	Date: 4/14/20	Time: 930
Relinquished By:	Date:	Time:	Received By:	Date:	Time:
Relinquished By:	Date:	Time:	Received By:	Date:	Time:

TAT: Standard ☐ RUSH Next BD ☐ 2nd BD ☐ 3rd BD ☐

REPORT TRANSMITTAL DESIRED:
☐ HARDCOPY (extra cost) ☐ FAX ☐ EMAIL ☐ ONLINE

FOR LAB USE ONLY
Temp of samples _____ °C Attempt to Cool ? _____
Comments: _____

Pittsburgh Lab Sample Condition Upon Receipt

Pace Analytical

Client Name: Hall Environmental Project #: 30358865

Courier: ☐ Fed Ex ☐ UPS ☐ USPS ☐ Client ☐ Commercial ☐ Pace Other _____

Label: MG

LIMS Login: MG

Tracking #: 7702 2776 3056

Custody Seal on Cooler/Box Present: ☑ yes ☐ no Seals intact: ☑ yes ☐ no

Thermometer Used: 10 Type of Ice: Wet Blue None

Cooler Temperature Observed Temp: 8.2 °C Correction Factor: -0.3°C Final Temp: 7.9 °C

Temp should be above freezing to 6°C

Comments:	Yes	No	N/A	pH paper Lot# SL / Date and Initials of person examining contents: MG 4/15/2020
Chain of Custody Present:	✓			1.
Chain of Custody Filled Out:	✓			2.
Chain of Custody Relinquished:	✓			3.
Sampler Name & Signature on COC:		✓		4.
Sample Labels match COC: -Includes date/time/ID Matrix: SL	✓			5.
Samples Arrived within Hold Time:	✓			6.
Short Hold Time Analysis (<72hr remaining):		✓		7.
Rush Turn Around Time Requested:		✓		8.
Sufficient Volume:	✓			9.
Correct Containers Used:	✓			10.
-Pace Containers Used:		✓		
Containers Intact:	✓			11.
Orthophosphate field filtered			✓	12.
Hex Cr Aqueous sample field filtered			✓	13.
Organic Samples checked for dechlorination:			✓	14.
Filtered volume received for Dissolved tests			✓	15.
All containers have been checked for preservation. exceptions: VOA, coliform, TOC, O&G, Phenolics, Radon, Non-aqueous matrix	✓	✓		16. MG 4/15/2020
All containers meet method preservation requirements.	✓			Initial when completed: MG Date/time of preservation: Lot # of added preservative:
Headspace in VOA Vials (>6mm):		✓		17.
Trip Blank Present:		✓		18.
Trip Blank Custody Seals Present			✓	
Rad Samples Screened < 0.5 mrem/hr	✓			Initial when completed: MG Date: 4/15/2020

Client Notification/ Resolution:

Person Contacted: _____ Date/Time: _____ Contacted By: _____

Comments/ Resolution: _____

☐ **A check in this box indicates that additional information has been stored in ereports.**

Note: Whenever there is a discrepancy affecting North Carolina compliance samples, a copy of this form will be sent to the North Carolina DEHNR Certification Office (i.e. out of hold, incorrect preservative, out of temp, incorrect containers)

*PM review is documented electronically in LIMS. When the Project Manager closes the SRF Review schedule in LIMS. The review is in the Status section of the Workorder Edit Screen.

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **2004162**
12-May-20

Client: Animas Environmental
Project: BMG Landfarm

Sample ID: **MB-51968**	SampType: **mblk**	TestCode: **EPA Method 300.0: Anions**							
Client ID: **PBS**	Batch ID: **51968**	RunNo: **68287**							
Prep Date: **4/20/2020**	Analysis Date: **4/20/2020**	SeqNo: **2362456**	Units: **mg/Kg**						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Fluoride	ND	0.30								
Chloride	ND	1.5								
Nitrogen, Nitrite (As N)	ND	0.30								
Nitrogen, Nitrate (As N)	ND	0.30								
Sulfate	ND	1.5								

Sample ID: **LCS-51968**	SampType: **lcs**	TestCode: **EPA Method 300.0: Anions**							
Client ID: **LCSS**	Batch ID: **51968**	RunNo: **68287**							
Prep Date: **4/20/2020**	Analysis Date: **4/20/2020**	SeqNo: **2362457**	Units: **mg/Kg**						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Fluoride	1.6	0.30	1.500	0	109	90	110			
Chloride	14	1.5	15.00	0	94.3	90	110			
Nitrogen, Nitrite (As N)	2.8	0.30	3.000	0	94.3	90	110			
Nitrogen, Nitrate (As N)	7.3	0.30	7.500	0	97.5	90	110			
Sulfate	29	1.5	30.00	0	95.2	90	110			

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 Quanitative Limit
S	% Recovery outside of range due to dilution or matrix
B	Analyte detected in the associated Method Blank
E	Value above quantitation range
J	Analyte detected below quantitation limits
P	Sample pH Not In Range
RL	Reporting Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **2004162**

12-May-20

Client: Animas Environmental

Project: BMG Landfarm

Sample ID: **MB-51671**	SampType: **MBLK**	TestCode: **EPA Method 8011/504.1 Modified: EDB**
Client ID: **PBS**	Batch ID: **51671**	RunNo: **67972**
Prep Date: **4/9/2020**	Analysis Date: **4/9/2020**	SeqNo: **2349631** Units: **µg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
1,2-Dibromoethane	ND	0.10								

Sample ID: **LCS-51671**	SampType: **LCS**	TestCode: **EPA Method 8011/504.1 Modified: EDB**
Client ID: **LCSS**	Batch ID: **51671**	RunNo: **67972**
Prep Date: **4/9/2020**	Analysis Date: **4/9/2020**	SeqNo: **2349632** Units: **µg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
1,2-Dibromoethane	1.2	0.10	1.000	0	124	70	130			

Sample ID: **MB-51671**	SampType: **MBLK**	TestCode: **EPA Method 8011/504.1 Modified: EDB**
Client ID: **PBS**	Batch ID: **51671**	RunNo: **67972**
Prep Date: **4/9/2020**	Analysis Date: **4/9/2020**	SeqNo: **2349634** Units: **µg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
1,2-Dibromoethane	ND	0.10								

Sample ID: **2004162-001AMS**	SampType: **MS**	TestCode: **EPA Method 8011/504.1 Modified: EDB**
Client ID: **Cell 1 (CS-1)**	Batch ID: **51671**	RunNo: **67972**
Prep Date: **4/9/2020**	Analysis Date: **4/9/2020**	SeqNo: **2349640** Units: **µg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
1,2-Dibromoethane	0.75	0.058	0.5843	0	128	65	135			

Sample ID: **2004162-001AMSD**	SampType: **MSD**	TestCode: **EPA Method 8011/504.1 Modified: EDB**
Client ID: **Cell 1 (CS-1)**	Batch ID: **51671**	RunNo: **67972**
Prep Date: **4/9/2020**	Analysis Date: **4/9/2020**	SeqNo: **2349641** Units: **µg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
1,2-Dibromoethane	0.73	0.066	0.6641	0	110	65	135	2.53	20	

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 Quanitative Limit
S	% Recovery outside of range due to dilution or matrix
B	Analyte detected in the associated Method Blank
E	Value above quantitation range
J	Analyte detected below quantitation limits
P	Sample pH Not In Range
RL	Reporting Limit

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **2004162**
12-May-20

Client: Animas Environmental
Project: BMG Landfarm

Sample ID: **MB-51569**	SampType: **MBLK**	TestCode: **EPA Method 8015M/D: Diesel Range Organics**
Client ID: **PBS**	Batch ID: **51569**	RunNo: **67895**
Prep Date: **4/5/2020**	Analysis Date: **4/7/2020**	SeqNo: **2347143** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	ND	10								
Motor Oil Range Organics (MRO)	ND	50								
Surr: DNOP	9.4		10.00		94.3	55.1	146			

Sample ID: **LCS-51569**	SampType: **LCS**	TestCode: **EPA Method 8015M/D: Diesel Range Organics**
Client ID: **LCSS**	Batch ID: **51569**	RunNo: **67895**
Prep Date: **4/5/2020**	Analysis Date: **4/8/2020**	SeqNo: **2347144** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	47	10	50.00	0	94.3	70	130			
Surr: DNOP	4.5		5.000		90.0	55.1	146			

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 Quanitative Limit
S	% Recovery outside of range due to dilution or matrix
B	Analyte detected in the associated Method Blank
E	Value above quantitation range
J	Analyte detected below quantitation limits
P	Sample pH Not In Range
RL	Reporting Limit

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **2004162**
12-May-20

Client: Animas Environmental
Project: BMG Landfarm

Sample ID: **MB-51653** SampType: **MBLK** TestCode: **EPA Method 8082A: PCB's**
Client ID: **PBS** Batch ID: **51653** RunNo: **68036**
Prep Date: **4/8/2020** Analysis Date: **4/11/2020** SeqNo: **2351814** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Aroclor 1016	ND	0.025								
Aroclor 1221	ND	0.025								
Aroclor 1232	ND	0.025								
Aroclor 1242	ND	0.025								
Aroclor 1248	ND	0.025								
Aroclor 1254	ND	0.025								
Aroclor 1260	ND	0.025								
Surr: Decachlorobiphenyl	0.026		0.06250		42.0	15	129			
Surr: Tetrachloro-m-xylene	0.028		0.06250		44.0	16.1	131			

Sample ID: **LCS-51653** SampType: **LCS** TestCode: **EPA Method 8082A: PCB's**
Client ID: **LCSS** Batch ID: **51653** RunNo: **68036**
Prep Date: **4/8/2020** Analysis Date: **4/11/2020** SeqNo: **2351815** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Aroclor 1016	0.090	0.025	0.1250	0	72.0	25.1	122			
Aroclor 1260	0.091	0.025	0.1250	0	72.6	32.4	92.8			
Surr: Decachlorobiphenyl	0.046		0.06250		74.4	15	129			
Surr: Tetrachloro-m-xylene	0.045		0.06250		72.0	16.1	131			

Sample ID: **MB-51653** SampType: **MBLK** TestCode: **EPA Method 8082A: PCB's**
Client ID: **PBS** Batch ID: **51653** RunNo: **68036**
Prep Date: **4/8/2020** Analysis Date: **4/11/2020** SeqNo: **2351826** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Aroclor 1016	ND	0.025								
Aroclor 1221	ND	0.025								
Aroclor 1232	ND	0.025								
Aroclor 1242	ND	0.025								
Aroclor 1248	ND	0.025								
Aroclor 1254	ND	0.025								
Aroclor 1260	ND	0.025								
Surr: Decachlorobiphenyl	0.026		0.06250		41.6	15	129			
Surr: Tetrachloro-m-xylene	0.026		0.06250		42.4	16.1	131			

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 Quanitative Limit
S	% Recovery outside of range due to dilution or matrix
B	Analyte detected in the associated Method Blank
E	Value above quantitation range
J	Analyte detected below quantitation limits
P	Sample pH Not In Range
RL	Reporting Limit

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **2004162**
12-May-20

Client: Animas Environmental
Project: BMG Landfarm

Sample ID: **lcs-51562**	SampType: **LCS**	TestCode: **EPA Method 8260B: Volatiles**
Client ID: **LCSS**	Batch ID: **51562**	RunNo: **67929**
Prep Date: **4/4/2020**	Analysis Date: **4/7/2020**	SeqNo: **2347544** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.97	0.025	1.000	0	96.8	70	130			
Toluene	1.0	0.050	1.000	0	104	70	130			
Chlorobenzene	1.1	0.050	1.000	0	107	70	130			
1,1-Dichloroethene	1.1	0.050	1.000	0	105	70	130			
Trichloroethene (TCE)	0.91	0.050	1.000	0	91.4	70	130			
Surr: Dibromofluoromethane	0.49		0.5000		98.8	70	130			
Surr: 1,2-Dichloroethane-d4	0.47		0.5000		94.2	70	130			
Surr: Toluene-d8	0.49		0.5000		97.0	70	130			
Surr: 4-Bromofluorobenzene	0.48		0.5000		95.0	70	130			

Sample ID: **mb-51562**	SampType: **MBLK**	TestCode: **EPA Method 8260B: Volatiles**
Client ID: **PBS**	Batch ID: **51562**	RunNo: **67929**
Prep Date: **4/4/2020**	Analysis Date: **4/7/2020**	SeqNo: **2347545** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	0.025								
Toluene	ND	0.050								
Ethylbenzene	ND	0.050								
Methyl tert-butyl ether (MTBE)	ND	0.050								
1,2,4-Trimethylbenzene	ND	0.050								
1,3,5-Trimethylbenzene	ND	0.050								
1,2-Dichloroethane (EDC)	ND	0.050								
1,2-Dibromoethane (EDB)	ND	0.050								
Naphthalene	ND	0.10								
1-Methylnaphthalene	ND	0.20								
2-Methylnaphthalene	ND	0.20								
Acetone	ND	0.75								
Bromobenzene	ND	0.050								
Bromodichloromethane	ND	0.050								
Bromoform	ND	0.050								
Bromomethane	ND	0.15								
2-Butanone	ND	0.50								
Carbon disulfide	ND	0.50								
Carbon tetrachloride	ND	0.050								
Chlorobenzene	ND	0.050								
Chloroethane	ND	0.10								
Chloroform	ND	0.050								
Chloromethane	ND	0.15								
2-Chlorotoluene	ND	0.050								

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 Quanitative Limit
S	% Recovery outside of range due to dilution or matrix
B	Analyte detected in the associated Method Blank
E	Value above quantitation range
J	Analyte detected below quantitation limits
P	Sample pH Not In Range
RL	Reporting Limit

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **2004162**
12-May-20

Client: Animas Environmental
Project: BMG Landfarm

Sample ID: **mb-51562**	SampType: **MBLK**	TestCode: **EPA Method 8260B: Volatiles**
Client ID: **PBS**	Batch ID: **51562**	RunNo: **67929**
Prep Date: **4/4/2020**	Analysis Date: **4/7/2020**	SeqNo: **2347545** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
4-Chlorotoluene	ND	0.050								
cis-1,2-DCE	ND	0.050								
cis-1,3-Dichloropropene	ND	0.050								
1,2-Dibromo-3-chloropropane	ND	0.10								
Dibromochloromethane	ND	0.050								
Dibromomethane	ND	0.050								
1,2-Dichlorobenzene	ND	0.050								
1,3-Dichlorobenzene	ND	0.050								
1,4-Dichlorobenzene	ND	0.050								
Dichlorodifluoromethane	ND	0.050								
1,1-Dichloroethane	ND	0.050								
1,1-Dichloroethene	ND	0.050								
1,2-Dichloropropane	ND	0.050								
1,3-Dichloropropane	ND	0.050								
2,2-Dichloropropane	ND	0.10								
1,1-Dichloropropene	ND	0.10								
Hexachlorobutadiene	ND	0.10								
2-Hexanone	ND	0.50								
Isopropylbenzene	ND	0.050								
4-Isopropyltoluene	ND	0.050								
4-Methyl-2-pentanone	ND	0.50								
Methylene chloride	ND	0.15								
n-Butylbenzene	ND	0.15								
n-Propylbenzene	ND	0.050								
sec-Butylbenzene	ND	0.050								
Styrene	ND	0.050								
tert-Butylbenzene	ND	0.050								
1,1,1,2-Tetrachloroethane	ND	0.050								
1,1,2,2-Tetrachloroethane	ND	0.050								
Tetrachloroethene (PCE)	ND	0.050								
trans-1,2-DCE	ND	0.050								
trans-1,3-Dichloropropene	ND	0.050								
1,2,3-Trichlorobenzene	ND	0.10								
1,2,4-Trichlorobenzene	ND	0.050								
1,1,1-Trichloroethane	ND	0.050								
1,1,2-Trichloroethane	ND	0.050								
Trichloroethene (TCE)	ND	0.050								
Trichlorofluoromethane	ND	0.050								
1,2,3-Trichloropropane	ND	0.10								

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
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 Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix		

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **2004162**
12-May-20

Client: Animas Environmental
Project: BMG Landfarm

Sample ID: **mb-51562**	SampType: **MBLK**	TestCode: **EPA Method 8260B: Volatiles**
Client ID: **PBS**	Batch ID: **51562**	RunNo: **67929**
Prep Date: **4/4/2020**	Analysis Date: **4/7/2020**	SeqNo: **2347545** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Vinyl chloride	ND	0.050								
Xylenes, Total	ND	0.10								
Surr: Dibromofluoromethane	0.52		0.5000		104	70	130			
Surr: 1,2-Dichloroethane-d4	0.51		0.5000		103	70	130			
Surr: Toluene-d8	0.50		0.5000		99.3	70	130			
Surr: 4-Bromofluorobenzene	0.46		0.5000		92.7	70	130			

Sample ID: **2004162-002ams**	SampType: **MS**	TestCode: **EPA Method 8260B: Volatiles**
Client ID: **Cell 2 (CS-2)**	Batch ID: **51562**	RunNo: **67951**
Prep Date: **4/4/2020**	Analysis Date: **4/8/2020**	SeqNo: **2348714** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.92	0.025	0.9990	0	92.2	70	130			
Toluene	0.97	0.050	0.9990	0	97.2	70	130			
Chlorobenzene	0.97	0.050	0.9990	0	96.9	70	130			
1,1-Dichloroethene	0.99	0.050	0.9990	0	99.5	70	130			
Trichloroethene (TCE)	0.90	0.050	0.9990	0	90.1	70	130			
Surr: Dibromofluoromethane	0.49		0.4995		97.8	70	130			
Surr: 1,2-Dichloroethane-d4	0.49		0.4995		98.1	70	130			
Surr: Toluene-d8	0.45		0.4995		91.0	70	130			
Surr: 4-Bromofluorobenzene	0.46		0.4995		91.4	70	130			

Sample ID: **2004162-002amsd**	SampType: **MSD**	TestCode: **EPA Method 8260B: Volatiles**
Client ID: **Cell 2 (CS-2)**	Batch ID: **51562**	RunNo: **67951**
Prep Date: **4/4/2020**	Analysis Date: **4/8/2020**	SeqNo: **2348715** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.94	0.025	0.9980	0	94.4	70	130	2.29	20	
Toluene	1.0	0.050	0.9980	0	100	70	130	2.71	20	
Chlorobenzene	1.0	0.050	0.9980	0	99.8	70	130	2.84	20	
1,1-Dichloroethene	1.0	0.050	0.9980	0	100	70	130	0.418	20	
Trichloroethene (TCE)	0.90	0.050	0.9980	0	89.9	70	130	0.249	20	
Surr: Dibromofluoromethane	0.49		0.4990		98.8	70	130	0	0	
Surr: 1,2-Dichloroethane-d4	0.47		0.4990		95.0	70	130	0	0	
Surr: Toluene-d8	0.47		0.4990		93.2	70	130	0	0	
Surr: 4-Bromofluorobenzene	0.47		0.4990		94.7	70	130	0	0	

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 Quanitative Limit
S	% Recovery outside of range due to dilution or matrix
B	Analyte detected in the associated Method Blank
E	Value above quantitation range
J	Analyte detected below quantitation limits
P	Sample pH Not In Range
RL	Reporting Limit

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **2004162**
12-May-20

Client: Animas Environmental
Project: BMG Landfarm

Sample ID: **MB-51730** SampType: **MBLK** TestCode: **EPA Method 8310: PAHs**
Client ID: **PBS** Batch ID: **51730** RunNo: **68048**
Prep Date: **4/11/2020** Analysis Date: **4/12/2020** SeqNo: **2352250** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Naphthalene	ND	0.25								
1-Methylnaphthalene	ND	0.25								
2-Methylnaphthalene	ND	0.25								
Benzo(a)pyrene	ND	0.010								
Surr: Benzo(e)pyrene	0.36		0.5000		72.3	29	98.8			

Sample ID: **LCS-51730** SampType: **LCS** TestCode: **EPA Method 8310: PAHs**
Client ID: **LCSS** Batch ID: **51730** RunNo: **68048**
Prep Date: **4/11/2020** Analysis Date: **4/12/2020** SeqNo: **2352251** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Naphthalene	0.85	0.25	2.000	0	42.5	33	89.2			
1-Methylnaphthalene	0.88	0.25	2.000	0	43.8	35.1	91.5			
2-Methylnaphthalene	0.87	0.25	2.000	0	43.4	34.2	92.1			
Benzo(a)pyrene	ND	0.010	0.01250	0	30.0	15	98.1			
Surr: Benzo(e)pyrene	0.28		0.5000		55.8	29	98.8			

Sample ID: **2004162-001AMS** SampType: **MS** TestCode: **EPA Method 8310: PAHs**
Client ID: **Cell 1 (CS-1)** Batch ID: **51730** RunNo: **68048**
Prep Date: **4/11/2020** Analysis Date: **4/12/2020** SeqNo: **2352254** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Naphthalene	ND	1.2	1.930	0	52.8	19	86.7			
1-Methylnaphthalene	ND	1.2	1.930	0	52.9	15	96.5			
2-Methylnaphthalene	ND	1.2	1.930	0	52.4	15.8	97.2			
Benzo(a)pyrene	ND	0.048	0.01206	0	60.0	15	112			
Surr: Benzo(e)pyrene	0.27		0.4824		56.8	29	98.8			

Sample ID: **2004162-001AMSD** SampType: **MSD** TestCode: **EPA Method 8310: PAHs**
Client ID: **Cell 1 (CS-1)** Batch ID: **51730** RunNo: **68048**
Prep Date: **4/11/2020** Analysis Date: **4/12/2020** SeqNo: **2352255** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Naphthalene	ND	1.2	1.984	0	49.6	19	86.7	0	61.3	
1-Methylnaphthalene	ND	1.2	1.984	0	47.6	15	96.5	0	56.7	
2-Methylnaphthalene	ND	1.2	1.984	0	47.5	15.8	97.2	0	66.9	
Benzo(a)pyrene	ND	0.050	0.01240	0	50.0	15	112	0	53.2	
Surr: Benzo(e)pyrene	0.24		0.4960		49.0	29	98.8	0	20	

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 Quanitative Limit
S	% Recovery outside of range due to dilution or matrix
B	Analyte detected in the associated Method Blank
E	Value above quantitation range
J	Analyte detected below quantitation limits
P	Sample pH Not In Range
RL	Reporting Limit

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **2004162**
12-May-20

Client: Animas Environmental
Project: BMG Landfarm

Sample ID: **MB-51730** SampType: **MBLK** TestCode: **EPA Method 8310: PAHs**
Client ID: **PBS** Batch ID: **51730** RunNo: **68048**
Prep Date: **4/11/2020** Analysis Date: **4/12/2020** SeqNo: **2352268** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Naphthalene	ND	0.25								
1-Methylnaphthalene	ND	0.25								
2-Methylnaphthalene	ND	0.25								
Benzo(a)pyrene	ND	0.010								
Surr: Benzo(e)pyrene	0.36		0.5000		71.2	29	98.8			

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 Quanitative Limit
S	% Recovery outside of range due to dilution or matrix
B	Analyte detected in the associated Method Blank
E	Value above quantitation range
J	Analyte detected below quantitation limits
P	Sample pH Not In Range
RL	Reporting Limit

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **2004162**
12-May-20

Client: Animas Environmental
Project: BMG Landfarm

Sample ID: **MB-51805** SampType: **MBLK** TestCode: **EPA Method 7471: Mercury**
Client ID: **PBS** Batch ID: **51805** RunNo: **68115**
Prep Date: **4/14/2020** Analysis Date: **4/14/2020** SeqNo: **2354518** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Mercury	ND	0.033								

Sample ID: **LLLCS-51805** SampType: **LCSLL** TestCode: **EPA Method 7471: Mercury**
Client ID: **BatchQC** Batch ID: **51805** RunNo: **68115**
Prep Date: **4/14/2020** Analysis Date: **4/14/2020** SeqNo: **2354519** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Mercury	ND	0.033	0.006660	0	97.6	70	130			

Sample ID: **LCS-51805** SampType: **LCS** TestCode: **EPA Method 7471: Mercury**
Client ID: **LCSS** Batch ID: **51805** RunNo: **68115**
Prep Date: **4/14/2020** Analysis Date: **4/14/2020** SeqNo: **2354520** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Mercury	0.16	0.033	0.1667	0	97.9	80	120			

Sample ID: **2004162-001AMS** SampType: **MS** TestCode: **EPA Method 7471: Mercury**
Client ID: **Cell 1 (CS-1)** Batch ID: **51805** RunNo: **68115**
Prep Date: **4/14/2020** Analysis Date: **4/14/2020** SeqNo: **2354526** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Mercury	0.18	0.034	0.1728	0.01011	98.3	80	120			

Sample ID: **2004162-001AMSD** SampType: **MSD** TestCode: **EPA Method 7471: Mercury**
Client ID: **Cell 1 (CS-1)** Batch ID: **51805** RunNo: **68115**
Prep Date: **4/14/2020** Analysis Date: **4/14/2020** SeqNo: **2354527** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Mercury	0.17	0.034	0.1742	0.01011	93.7	80	120	3.69	20	

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 Quanitative Limit
S	% Recovery outside of range due to dilution or matrix
B	Analyte detected in the associated Method Blank
E	Value above quantitation range
J	Analyte detected below quantitation limits
P	Sample pH Not In Range
RL	Reporting Limit

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **2004162**
12-May-20

Client: Animas Environmental
Project: BMG Landfarm

Sample ID: **MB-51785** SampType: **MBLK** TestCode: **EPA Method 6010B: Soil Metals**
Client ID: **PBS** Batch ID: **51785** RunNo: **68257**
Prep Date: **4/14/2020** Analysis Date: **4/20/2020** SeqNo: **2360972** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Antimony	ND	2.5								
Arsenic	ND	2.5								
Barium	ND	0.10								
Beryllium	ND	0.15								
Cadmium	ND	0.10								
Chromium	ND	0.30								
Copper	ND	0.40								
Iron	ND	2.5								
Lead	ND	0.30								
Manganese	ND	0.20								
Selenium	ND	2.5								
Silver	ND	0.25								
Thallium	ND	2.5								
Uranium	ND	5.0								
Zinc	ND	2.5								

Sample ID: **LCS-51785** SampType: **LCS** TestCode: **EPA Method 6010B: Soil Metals**
Client ID: **LCSS** Batch ID: **51785** RunNo: **68257**
Prep Date: **4/14/2020** Analysis Date: **4/20/2020** SeqNo: **2360973** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Antimony	25	2.5	25.00	0	100	80	120			
Arsenic	24	2.5	25.00	0	97.3	80	120			
Barium	25	0.10	25.00	0	99.7	80	120			
Beryllium	26	0.15	25.00	0	105	80	120			
Cadmium	25	0.10	25.00	0	99.9	80	120			
Chromium	25	0.30	25.00	0	99.1	80	120			
Copper	26	0.40	25.00	0	104	80	120			
Iron	26	2.5	25.00	0	102	80	120			
Lead	24	0.30	25.00	0	95.7	80	120			
Manganese	25	0.20	25.00	0	99.5	80	120			
Selenium	25	2.5	25.00	0	100	80	120			
Silver	5.0	0.25	5.000	0	100	80	120			
Thallium	23	2.5	25.00	0	92.1	80	120			
Uranium	24	5.0	25.00	0	97.9	80	120			
Zinc	24	2.5	25.00	0	94.2	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 Quanitative Limit
S	% Recovery outside of range due to dilution or matrix
B	Analyte detected in the associated Method Blank
E	Value above quantitation range
J	Analyte detected below quantitation limits
P	Sample pH Not In Range
RL	Reporting Limit

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **2004162**
12-May-20

Client: Animas Environmental
Project: BMG Landfarm

Sample ID: **2004162-001AMS** SampType: **MS** TestCode: **EPA Method 6010B: Soil Metals**
Client ID: **Cell 1 (CS-1)** Batch ID: **51785** RunNo: **68257**
Prep Date: **4/14/2020** Analysis Date: **4/20/2020** SeqNo: **2361064** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Antimony	6.6	4.9	24.55	0	26.9	75	125			S
Arsenic	26	4.9	24.55	3.631	91.0	75	125			
Barium	130	0.20	24.55	73.09	228	75	125			S
Beryllium	24	0.29	24.55	0.5367	95.2	75	125			
Cadmium	22	0.20	24.55	0	89.3	75	125			
Chromium	31	0.59	24.55	6.376	100	75	125			
Copper	29	0.79	24.55	5.346	94.9	75	125			
Manganese	240	0.39	24.55	239.6	10.3	75	125			S
Silver	3.4	0.49	4.909	0	68.8	75	125			S
Thallium	18	4.9	24.55	0	74.5	75	125			S
Uranium	21	9.8	24.55	1.540	80.3	75	125			
Zinc	45	4.9	24.55	22.69	89.9	75	125			

Sample ID: **2004162-001AMSD** SampType: **MSD** TestCode: **EPA Method 6010B: Soil Metals**
Client ID: **Cell 1 (CS-1)** Batch ID: **51785** RunNo: **68257**
Prep Date: **4/14/2020** Analysis Date: **4/20/2020** SeqNo: **2361068** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Antimony	6.6	4.9	24.66	0	26.6	75	125	0.373	20	S
Arsenic	24	4.9	24.66	3.631	82.7	75	125	7.82	20	
Barium	110	0.20	24.66	73.09	152	75	125	15.4	20	S
Beryllium	24	0.30	24.66	0.5367	93.4	75	125	1.35	20	
Cadmium	21	0.20	24.66	0	86.9	75	125	2.23	20	
Chromium	30	0.59	24.66	6.376	94.3	75	125	4.52	20	
Copper	28	0.79	24.66	5.346	90.9	75	125	3.06	20	
Manganese	220	0.39	24.66	239.6	-62.0	75	125	7.64	20	S
Silver	3.5	0.49	4.932	0	70.2	75	125	2.37	20	S
Thallium	19	4.9	24.66	0	77.4	75	125	4.27	20	
Uranium	23	9.9	24.66	1.540	86.0	75	125	6.82	20	
Zinc	42	4.9	24.66	22.69	78.8	75	125	6.02	20	

Sample ID: **2004162-001AMS** SampType: **MS** TestCode: **EPA Method 6010B: Soil Metals**
Client ID: **Cell 1 (CS-1)** Batch ID: **51785** RunNo: **68257**
Prep Date: **4/14/2020** Analysis Date: **4/20/2020** SeqNo: **2361664** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Lead	24	0.59	24.55	2.442	87.1	75	125			
Selenium	23	4.9	24.55	0	92.6	75	125			

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 Quanitative Limit
S	% Recovery outside of range due to dilution or matrix
B	Analyte detected in the associated Method Blank
E	Value above quantitation range
J	Analyte detected below quantitation limits
P	Sample pH Not In Range
RL	Reporting Limit

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **2004162**
12-May-20

Client: Animas Environmental
Project: BMG Landfarm

Sample ID: **2004162-001AMSD** SampType: **MSD** TestCode: **EPA Method 6010B: Soil Metals**
Client ID: **Cell 1 (CS-1)** Batch ID: **51785** RunNo: **68257**
Prep Date: **4/14/2020** Analysis Date: **4/20/2020** SeqNo: **2361665** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Lead	24	0.59	24.66	2.442	86.1	75	125	0.580	20	
Selenium	23	4.9	24.66	0	91.4	75	125	0.803	20	

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 Quanitative Limit
S	% Recovery outside of range due to dilution or matrix
B	Analyte detected in the associated Method Blank
E	Value above quantitation range
J	Analyte detected below quantitation limits
P	Sample pH Not In Range
RL	Reporting Limit

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **2004162**
12-May-20

Client: Animas Environmental
Project: BMG Landfarm

Sample ID: **lcs-51562**	SampType: **LCS**	TestCode: **EPA Method 8015D Mod: Gasoline Range**
Client ID: **LCSS**	Batch ID: **51562**	RunNo: **67929**
Prep Date: **4/4/2020**	Analysis Date: **4/7/2020**	SeqNo: **2347504** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	21	5.0	25.00	0	83.5	70	130			
Surr: BFB	510		500.0		102	70	130			

Sample ID: **mb-51562**	SampType: **MBLK**	TestCode: **EPA Method 8015D Mod: Gasoline Range**
Client ID: **PBS**	Batch ID: **51562**	RunNo: **67929**
Prep Date: **4/4/2020**	Analysis Date: **4/7/2020**	SeqNo: **2347506** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	ND	5.0								
Surr: BFB	490		500.0		98.9	70	130			

Sample ID: **2004162-001ams**	SampType: **MS**	TestCode: **EPA Method 8015D Mod: Gasoline Range**
Client ID: **Cell 1 (CS-1)**	Batch ID: **51562**	RunNo: **67951**
Prep Date: **4/4/2020**	Analysis Date: **4/8/2020**	SeqNo: **2348743** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	19	4.9	24.70	0	75.4	70	130			
Surr: BFB	520		494.1		105	70	130			

Sample ID: **2004162-001amsd**	SampType: **MSD**	TestCode: **EPA Method 8015D Mod: Gasoline Range**
Client ID: **Cell 1 (CS-1)**	Batch ID: **51562**	RunNo: **67951**
Prep Date: **4/4/2020**	Analysis Date: **4/8/2020**	SeqNo: **2348744** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	18	5.0	25.00	0	73.0	70	130	2.04	20	
Surr: BFB	520		500.0		103	70	130	0	0	

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 Quanitative Limit
S	% Recovery outside of range due to dilution or matrix
B	Analyte detected in the associated Method Blank
E	Value above quantitation range
J	Analyte detected below quantitation limits
P	Sample pH Not In Range
RL	Reporting Limit

HALL ENVIRONMENTAL ANALYSIS LABORATORY

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

Sample Log-In Check List

Client Name: **Animas Environmental** Work Order Number: **2004162** RcptNo: 1

Received By: **Juan Rojas** **4/3/2020 8:00:00 AM** Juan Rojas

Completed By: **Leah Baca** **4/3/2020 12:30:07 PM** Leah Baca

Reviewed By: IO 4/3/20

Chain of Custody

1. Is Chain of Custody sufficiently 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° C to 6.0°C Yes ☑ No ☐ NA ☐
5. Sample(s) in proper container(s)? 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: _____ (<2 or >12 unless noted)
Adjusted? _____
Checked by: JR 4/3/20

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 °C	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	4.3	Good				
2	4.1	Good				

Chain-of-Custody Record

Client: Animas Environmental Services

Mailing Address: PO Box 8
Farmington, NM 87499

Phone #: 505-564-2281

email or Fax#: dreese@animasenvironmental.com

QA/QC Package:
X Standard □ Level 4 (Full Validation)

Accreditation:
□ NELAP □ Other_____

□ EDD (Type) _____

Turn-Around Time:
X Standard □ Rush_____

Project Name: **BMG Landfarm**

Project #: AES 040605

Project Manager: Elizabeth McNally/David Reese

Sampler: CL/GB

On Ice: (X) Yes □ No

Sample Temperature: 4.4-0.1=4.3 / 4.2-0.1=4.1

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

Date	Time	Matrix	Sample Request ID	Container Type and #	Preservative Type	HEAL No.	Chlorides 300.0	TPH - GRO, DRO, MRO (8015)	BTEX (8021)	List A and B NMAC 20.6.2.3103	Air Bubbles (Y or N)
4-2-20						2004162					
~~3/31/2020~~	9:47	Soil	Cell 1 (CS-1)	2 - 8 oz jars 1 - 1 Gal. Ziplock	3 -Cool	-001	X	X	X	X	
~~3/31/2020~~	10:04	Soil	Cell 2 (~~CS-1~~)(CS-2)	1 - 4 oz jars	Cool	-002	X	X			
~~3/31/2020~~	10:23	Soil	Cell 3 (~~CS-1~~)(CS-3)	1 - 4 oz jars	Cool	-003	X	X			
~~3/31/2020~~	10:35	Soil	Cell 4 (~~CS-1~~)(CS-4)	2 - 8 oz jars 1 - 1 Gal. Ziplock	3 -Cool	-004	X	X	X	X	

Date:	Time:	Relinquished by:	Received by:	Date	Time
4/2/20	1712			4/2/20	1712
4/2/20				4/3/20	8:00

Remarks: Pls run full list of Parts A and B NMAC 20.6.2.3103 for Cells 1 and 4. See attached list.

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.

 WQCC Limits 12/20/2018

20.6.2.3103 STANDARDS FOR GROUND WATER OF 10,000 mg/l TDS CONCENTRATION OR LESS: The following standards are the allowable pH range and the maximum allowable concentration in ground water for the contaminants specified unless the existing condition exceeds the standard or unless otherwise provided in Subsection E of Section 20.6.2.3109 NMAC. Regardless of whether there is one contaminant or more than one contaminant present in ground water, when an existing pH or concentration of any water contaminant exceeds the standard specified in Subsection A, B, or C of this section, the existing pH or concentration shall be the allowable limit, provided that the discharge at such concentrations will not result in concentrations at any place of withdrawal for present or reasonably foreseeable future use in excess of the standards of this section. These standards shall apply to the dissolved portion of the contaminants specified with a definition of dissolved being that given in the publication "*methods for chemical analysis of water and waste of the U.S. environmental protection agency*," with the exception that standards for mercury, organic compounds and non-aqueous phase liquids shall apply to the total nonfiltered concentrations of the contaminants. If the secretary determines that there is a reasonable probability of facilitated contaminant transport by colloids or organic macromolecules, or that proper filtration procedures are not being followed, the discharger may be required to test for both filtered and nonfiltered portions of inorganic contaminants to develop appropriate protocol for monitoring contaminants that have the potential to migrate through the aquifer.

A. Human Health Standards

(1) Numerical Standards

			Old limits
	(a)	Antimony (Sb) (CAS 7440-36-0).....0.006 mg/l	new
	(b)	Arsenic (As) (CAS 7440-38-2).....0.01 mg/l	0.1
	(c)	Barium (Ba) (CAS 7440-39-3).....2 mg/l	1.0
	(d)	Beryllium (be) (CAS 7440-41-7).....0.004 mg/l	new
	(e)	Cadmium (Cd) (CAS 7440-43-9).....0.005 mg/l	0.01
	(f)	Chromium (Cr) (CAS 7440-47-3).....0.05 mg/l	
	(g)	Cyanide (CN) (CAS 57-12-5).....0.2 mg/l	
	(h)	Fluoride (F) (CAS 16984-48-8).....1.6 mg/l	
	(i)	Lead (Pb) (CAS 7439-92-1).....0.015 mg/l	0.05
	(j)	Total Mercury (Hg) (CAS 7439-97-6).....0.002 mg/l	
	(k)	Nitrate (NO_3 as N) (CAS 14797-55-8).....10.0 mg/l	
	(l)	Nitrite (NO_2 as N) (CAS 10102-44-0).....1.0 mg/l	
	(m)	Selenium (Se) (CAS 7782-49-2).....0.05 mg/l	
	(n)	Silver (Ag) (CAS 7440-224).....0.05 mg/l	
	(o)	Thallium (Tl) (CAS 7440-28-0).....0.002 mg/l	new
	(p)	Uranium (U) (CAS 7440-61-1).....0.03 mg/l	5.0
	(q)	Radioactivity: Combined Radium-226 (CAS 13982-63-3) and Radium-228 (CAS 15262-20-1).....5 pCi/l	30
	(r)	Benzene (CAS 71-43-2).....0.005 mg/l	0.01
	(s)	Polychlorinated biphenyls (PCB's) (CAS 1336-36-3).0.0005 mg/l	0.01
	(t)	Toluene (CAS 108-88-3).....1 mg/l	0.75
	(u)	Carbon Tetrachloride (CAS 56-23-5).....0.005 mg/l	0.01
	(v)	1,2-dichloroethane (EDC) (CAS 107-06-2).....0.005 mg/l	0.01
	(w)	1,1-dichloroethylene (1,1-DCE) (CAS 75-35-4).....0.007 mg/l	0.005
	(x)	tetrachloroethylene (PCE) (CAS 127-18-4).....0.005 mg/l	0.02
	(y)	trichloroethylene (TCE) (CAS 79-01-6).....0.005 mg/l	0.1
	(z)	ethylbenzene (CAS 100-41-4).....0.7 mg/l	0.75
	(aa)	total xylenes (CAS 1330-20-7).....0.62 mg/l	
	(bb)	methylene chloride (CAS 75-09-2).....0.005 mg/l	0.1
	(cc)	chloroform (CAS 67-66-3).....0.1 mg/l	
	(dd)	1,1-dichloroethane (CAS 75-34-3).....0.025 mg/l	
	(ee)	ethylene dibromide (EDB) (CAS 106-93-4).....0.00005 mg/l	0.0001
	(ff)	1,1,1-trichloroethane (CAS 71-55-6).....0.2 mg/l	0.06
	(gg)	1,1,2-trichloroethane (CAS 79-00-5).....0.005 mg/l	0.01
	(hh)	1,1,2,2-tetrachloroethane (CAS 79-34-5).....0.01 mg/l	
	(ii)	vinyl chloride (CAS 75-01-4).....0.002 mg/l	0.001
	(jj)	PAHs: total naphthalene (CAS 91-20-3) plus monomethylnaphthalenes ...0.03 mg/l	
	(kk)	benzo-a-pyrene (CAS 50-32-8).....0.0002 mg/l	0.0007

(ll) cis-1,2-dichloroethene (CAS 156-59-2).....0.07 mg/l new
(mm) trans-1,2-dichloroethene (CAS 156-60-5).....0.1 mg/l new
(nn) 1,2-dichloropropane (PDC) (CAS 78-87-5).....0.005 mg/l new
(oo) styrene (CAS 100-42-5).....0.1 mg/l new
(pp) 1,2-dichlorobenzene (CAS 95-50-1).....0.6 mg/l new
(qq) 1,4-dichlorobenzene (CAS 106-46-7).....0.075 mg/l new
(rr) 1,2,4-trichlorobenzene (CAS 120-82-1).....0.07 mg/l new
(ss) pentachlorophenol (CAS 87-86-5).....0.001 mg/l new
(tt) atrazine (CAS 1912-24-9).....0.003 mg/l new

(2) **Standards for Toxic Pollutants.** A toxic pollutant shall not be present at a concentration shown by credible scientific data and other evidence appropriate under the Water Quality Act, currently available to the public, to have potential for causing one or more of the following effects upon exposure, ingestion, or assimilation either directly from the environment or indirectly by ingestion through food chains: (1) unreasonably threatens to injure human health, or the health of animals or plants which are commonly hatched, bred, cultivated or protected for use by man for food or economic benefit; as used in this definition injuries to health include death, histopathologic change, clinical symptoms of disease, behavioral abnormalities, genetic mutation, physiological malfunctions or physical deformations in such organisms or their offspring; or (2) creates a lifetime risk of more than one cancer per 100,000 exposed persons.

(3) **Standards for Non-Aqueous Phase Liquids.** Non-aqueous phase liquid shall not be present floating atop of or immersed within ground water, as can be reasonably measured.

B. Other Standards for Domestic Water Supply

(1) Chloride (Cl) (CAS 16887-00-6).....250.0 mg/l
(2) Copper (Cu) (CAS 7440-50-8).....1.0 mg/l
(3) Iron (Fe) (CAS 7439-89-6).....1.0 mg/l
(4) Manganese (Mn) (CAS 7439-96-5).....0.2 mg/l
(5) Phenols .....0.005 mg/l
(6) Sulfate (SO_4) (CAS 14808-79-8).....600.0 mg/l
(7) Total Dissolved Solids (TDS) TDS.....1000.0 mg/l
(8) Zinc (Zn) (CAS 7440-66-6).....10.0 mg/l
(9) pH.....between 6 and 9
(10) Methyl tertiary-butyl ether (MTBE) (CAS 1634-04-4).....0.1 mg/l new

C. Standards for Irrigation Use - Ground water shall meet the standards of Subsection A, B, and C of this section unless otherwise provided.

(1) Aluminum (Al) (CAS 7429-90-5).....5.0 mg/l
(2) Boron (B) (CAS 7440-42-8).....0.75 mg/l
(3) Cobalt (Co) (CAS 7440-48-4).....0.05 mg/l
(4) Molybdenum (Mo) (CAS 7439-98-7).....1.0 mg/l
(5) Nickel (Ni) (CAS 7440-02-0).....0.2 mg/l

D. For purposes of application of the amended numeric standards for arsenic, cadmium, lead,

HALL ENVIRONMENTAL ANALYSIS LABORATORY

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

December 22, 2020

Elizabeth McNally

Animas Environmental
624 E. Comanche
Farmington, NM 87401
TEL:
FAX

RE: BMG Landfarm OrderNo.: 2012434

Dear Elizabeth McNally:

Hall Environmental Analysis Laboratory received 5 sample(s) on 12/9/2020 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,

Andy Freeman
Laboratory Manager
4901 Hawkins NE
Albuquerque, NM 87109

Analytical Report
Lab Order **2012434**
Date Reported: **12/22/2020**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Animas Environmental
Client Sample ID: MW-1
Project: BMG Landfarm
Collection Date: 12/8/2020 11:52:00 AM
Lab ID: 2012434-001 **Matrix:** AQUEOUS **Received Date:** 12/9/2020 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE						Analyst: **BRM**
Diesel Range Organics (DRO)	ND	1.0		mg/L	1	12/11/2020 11:08:01 AM
Motor Oil Range Organics (MRO)	ND	5.0		mg/L	1	12/11/2020 11:08:01 AM
Surr: DNOP	113	70-130		%Rec	1	12/11/2020 11:08:01 AM
EPA METHOD 300.0: ANIONS						Analyst: **CAS**
Chloride	22	2.5		mg/L	5	12/9/2020 3:51:30 PM
EPA METHOD 8260: VOLATILES SHORT LIST						Analyst: **DJF**
Benzene	ND	1.0		µg/L	1	12/18/2020 1:59:47 AM
Toluene	ND	1.0		µg/L	1	12/18/2020 1:59:47 AM
Ethylbenzene	ND	1.0		µg/L	1	12/18/2020 1:59:47 AM
Xylenes, Total	ND	1.5		µg/L	1	12/18/2020 1:59:47 AM
Surr: 1,2-Dichloroethane-d4	92.2	70-130		%Rec	1	12/18/2020 1:59:47 AM
Surr: Dibromofluoromethane	107	70-130		%Rec	1	12/18/2020 1:59:47 AM
Surr: Toluene-d8	95.2	70-130		%Rec	1	12/18/2020 1:59:47 AM
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **DJF**
Gasoline Range Organics (GRO)	ND	0.050		mg/L	1	12/18/2020 1:59:47 AM
Surr: BFB	94.8	70-130		%Rec	1	12/18/2020 1:59:47 AM
SM2540C MOD: TOTAL DISSOLVED SOLIDS						Analyst: **MH**
Total Dissolved Solids	634	40.0	*D	mg/L	1	12/11/2020 3:18:00 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	Value above quantitation range
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 Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix		

Analytical Report
Lab Order **2012434**
Date Reported: **12/22/2020**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Animas Environmental **Client Sample ID:** MW-2
Project: BMG Landfarm **Collection Date:** 12/8/2020 11:18:00 AM
Lab ID: 2012434-002 **Matrix:** AQUEOUS **Received Date:** 12/9/2020 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE						Analyst: **BRM**
Diesel Range Organics (DRO)	ND	1.0		mg/L	1	12/11/2020 11:36:45 AM
Motor Oil Range Organics (MRO)	ND	5.0		mg/L	1	12/11/2020 11:36:45 AM
Surr: DNOP	146	70-130	S	%Rec	1	12/11/2020 11:36:45 AM
EPA METHOD 300.0: ANIONS						Analyst: **CAS**
Chloride	300	10	*	mg/L	20	12/9/2020 4:28:45 PM
EPA METHOD 8260: VOLATILES SHORT LIST						Analyst: **DJF**
Benzene	ND	1.0		µg/L	1	12/18/2020 3:21:24 AM
Toluene	ND	1.0		µg/L	1	12/18/2020 3:21:24 AM
Ethylbenzene	ND	1.0		µg/L	1	12/18/2020 3:21:24 AM
Xylenes, Total	ND	1.5		µg/L	1	12/18/2020 3:21:24 AM
Surr: 1,2-Dichloroethane-d4	87.7	70-130		%Rec	1	12/18/2020 3:21:24 AM
Surr: Dibromofluoromethane	103	70-130		%Rec	1	12/18/2020 3:21:24 AM
Surr: Toluene-d8	92.9	70-130		%Rec	1	12/18/2020 3:21:24 AM
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **DJF**
Gasoline Range Organics (GRO)	ND	0.050		mg/L	1	12/18/2020 3:21:24 AM
Surr: BFB	95.8	70-130		%Rec	1	12/18/2020 3:21:24 AM
SM2540C MOD: TOTAL DISSOLVED SOLIDS						Analyst: **MH**
Total Dissolved Solids	902	40.0	*D	mg/L	1	12/11/2020 3:18:00 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	Value above quantitation range
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 Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix		

Analytical Report
Lab Order **2012434**
Date Reported: **12/22/2020**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Animas Environmental
Client Sample ID: MW-3
Project: BMG Landfarm
Collection Date: 12/8/2020 10:43:00 AM
Lab ID: 2012434-003 **Matrix:** AQUEOUS **Received Date:** 12/9/2020 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE						Analyst: **BRM**
Diesel Range Organics (DRO)	ND	1.0		mg/L	1	12/11/2020 11:46:19 AM
Motor Oil Range Organics (MRO)	ND	5.0		mg/L	1	12/11/2020 11:46:19 AM
Surr: DNOP	114	70-130		%Rec	1	12/11/2020 11:46:19 AM
EPA METHOD 300.0: ANIONS						Analyst: **CAS**
Chloride	290	10	*	mg/L	20	12/9/2020 4:53:34 PM
EPA METHOD 8260: VOLATILES SHORT LIST						Analyst: **DJF**
Benzene	ND	1.0		µg/L	1	12/18/2020 3:48:38 AM
Toluene	ND	1.0		µg/L	1	12/18/2020 3:48:38 AM
Ethylbenzene	ND	1.0		µg/L	1	12/18/2020 3:48:38 AM
Xylenes, Total	ND	1.5		µg/L	1	12/18/2020 3:48:38 AM
Surr: 1,2-Dichloroethane-d4	88.3	70-130		%Rec	1	12/18/2020 3:48:38 AM
Surr: Dibromofluoromethane	104	70-130		%Rec	1	12/18/2020 3:48:38 AM
Surr: Toluene-d8	96.1	70-130		%Rec	1	12/18/2020 3:48:38 AM
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **DJF**
Gasoline Range Organics (GRO)	ND	0.050		mg/L	1	12/18/2020 3:48:38 AM
Surr: BFB	96.2	70-130		%Rec	1	12/18/2020 3:48:38 AM
SM2540C MOD: TOTAL DISSOLVED SOLIDS						Analyst: **MH**
Total Dissolved Solids	960	40.0	*D	mg/L	1	12/11/2020 3:18:00 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	Value above quantitation range
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 Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix		

Analytical Report
Lab Order **2012434**
Date Reported: **12/22/2020**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Animas Environmental **Client Sample ID:** MW-4
Project: BMG Landfarm **Collection Date:** 12/8/2020 10:12:00 AM
Lab ID: 2012434-004 **Matrix:** AQUEOUS **Received Date:** 12/9/2020 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE						Analyst: **BRM**
Diesel Range Organics (DRO)	ND	1.0		mg/L	1	12/11/2020 11:55:52 AM
Motor Oil Range Organics (MRO)	ND	5.0		mg/L	1	12/11/2020 11:55:52 AM
Surr: DNOP	159	70-130	S	%Rec	1	12/11/2020 11:55:52 AM
EPA METHOD 300.0: ANIONS						Analyst: **CAS**
Chloride	59	2.5		mg/L	5	12/9/2020 5:05:59 PM
EPA METHOD 8260: VOLATILES SHORT LIST						Analyst: **DJF**
Benzene	ND	1.0		µg/L	1	12/18/2020 4:15:47 AM
Toluene	ND	1.0		µg/L	1	12/18/2020 4:15:47 AM
Ethylbenzene	ND	1.0		µg/L	1	12/18/2020 4:15:47 AM
Xylenes, Total	ND	1.5		µg/L	1	12/18/2020 4:15:47 AM
Surr: 1,2-Dichloroethane-d4	87.5	70-130		%Rec	1	12/18/2020 4:15:47 AM
Surr: Dibromofluoromethane	101	70-130		%Rec	1	12/18/2020 4:15:47 AM
Surr: Toluene-d8	97.1	70-130		%Rec	1	12/18/2020 4:15:47 AM
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **DJF**
Gasoline Range Organics (GRO)	ND	0.050		mg/L	1	12/18/2020 4:15:47 AM
Surr: BFB	98.6	70-130		%Rec	1	12/18/2020 4:15:47 AM
SM2540C MOD: TOTAL DISSOLVED SOLIDS						Analyst: **MH**
Total Dissolved Solids	676	40.0	*	mg/L	1	12/11/2020 3:18:00 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	Value above quantitation range
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 Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix		

Analytical Report
Lab Order **2012434**
Date Reported: **12/22/2020**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Animas Environmental **Client Sample ID:** Trip Blank
Project: BMG Landfarm **Collection Date:**
Lab ID: 2012434-005 **Matrix:** TRIP BLANK **Received Date:** 12/9/2020 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8260: VOLATILES SHORT LIST						Analyst: **DJF**
Benzene	ND	1.0		µg/L	1	12/18/2020 4:43:03 AM
Toluene	ND	1.0		µg/L	1	12/18/2020 4:43:03 AM
Ethylbenzene	ND	1.0		µg/L	1	12/18/2020 4:43:03 AM
Xylenes, Total	ND	1.5		µg/L	1	12/18/2020 4:43:03 AM
Surr: 1,2-Dichloroethane-d4	87.8	70-130		%Rec	1	12/18/2020 4:43:03 AM
Surr: Dibromofluoromethane	102	70-130		%Rec	1	12/18/2020 4:43:03 AM
Surr: Toluene-d8	96.2	70-130		%Rec	1	12/18/2020 4:43:03 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	Value above quantitation range
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 Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix		

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **2012434**
22-Dec-20

Client: Animas Environmental
Project: BMG Landfarm

Sample ID: **MB**	SampType: **mblk**	TestCode: **EPA Method 300.0: Anions**							
Client ID: **PBW**	Batch ID: **R73911**	RunNo: **73911**							
Prep Date:	Analysis Date: **12/9/2020**	SeqNo: **2606359**	Units: **mg/L**						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	ND	0.50								

Sample ID: **LCS**	SampType: **lcs**	TestCode: **EPA Method 300.0: Anions**							
Client ID: **LCSW**	Batch ID: **R73911**	RunNo: **73911**							
Prep Date:	Analysis Date: **12/9/2020**	SeqNo: **2606360**	Units: **mg/L**						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	4.7	0.50	5.000	0	94.1	90	110			

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 Quanitative Limit
S	% Recovery outside of range due to dilution or matrix
B	Analyte detected in the associated Method Blank
E	Value above quantitation range
J	Analyte detected below quantitation limits
P	Sample pH Not In Range
RL	Reporting Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **2012434**

22-Dec-20

Client: Animas Environmental

Project: BMG Landfarm

Sample ID: **2012434-001BMS** SampType: **MS** TestCode: **EPA Method 8015M/D: Diesel Range**

Client ID: **MW-1** Batch ID: **56916** RunNo: **73941**

Prep Date: **12/10/2020** Analysis Date: **12/11/2020** SeqNo: **2608566** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	5.7	1.0	5.000	0	115	70	130			
Surr: DNOP	0.61		0.5000		121	70	130			

Sample ID: **2012434-001BMSD** SampType: **MSD** TestCode: **EPA Method 8015M/D: Diesel Range**

Client ID: **MW-1** Batch ID: **56916** RunNo: **73941**

Prep Date: **12/10/2020** Analysis Date: **12/11/2020** SeqNo: **2608567** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	6.6	1.0	5.000	0	132	70	130	13.9	20	S
Surr: DNOP	0.76		0.5000		152	70	130	0	0	S

Sample ID: **LCS-56916** SampType: **LCS** TestCode: **EPA Method 8015M/D: Diesel Range**

Client ID: **LCSW** Batch ID: **56916** RunNo: **73941**

Prep Date: **12/10/2020** Analysis Date: **12/11/2020** SeqNo: **2608571** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	5.5	1.0	5.000	0	110	70	130			
Surr: DNOP	0.61		0.5000		122	70	130			

Sample ID: **MB-56916** SampType: **MBLK** TestCode: **EPA Method 8015M/D: Diesel Range**

Client ID: **PBW** Batch ID: **56916** RunNo: **73941**

Prep Date: **12/10/2020** Analysis Date: **12/11/2020** SeqNo: **2608572** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	ND	1.0								
Motor Oil Range Organics (MRO)	ND	5.0								
Surr: DNOP	1.1		1.000		108	70	130			

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 Quanitative Limit
S	% Recovery outside of range due to dilution or matrix
B	Analyte detected in the associated Method Blank
E	Value above quantitation range
J	Analyte detected below quantitation limits
P	Sample pH Not In Range
RL	Reporting Limit

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **2012434**
22-Dec-20

Client: Animas Environmental
Project: BMG Landfarm

Sample ID: **mb1** SampType: **MBLK** TestCode: **EPA Method 8260: Volatiles Short List**
Client ID: **PBW** Batch ID: **SL74101** RunNo: **74101**
Prep Date: Analysis Date: **12/17/2020** SeqNo: **2614568** 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								
Xylenes, Total	ND	1.5								
Surr: 1,2-Dichloroethane-d4	9.1		10.00		91.4	70	130			
Surr: 4-Bromofluorobenzene	9.9		10.00		99.4	70	130			
Surr: Dibromofluoromethane	10		10.00		102	70	130			
Surr: Toluene-d8	9.5		10.00		94.5	70	130			

Sample ID: **100ng lcs** SampType: **LCS** TestCode: **EPA Method 8260: Volatiles Short List**
Client ID: **LCSW** Batch ID: **SL74101** RunNo: **74101**
Prep Date: Analysis Date: **12/17/2020** SeqNo: **2614569** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	20	1.0	20.00	0	101	70	130			
Toluene	20	1.0	20.00	0	97.5	70	130			
Surr: 1,2-Dichloroethane-d4	9.2		10.00		91.9	70	130			
Surr: 4-Bromofluorobenzene	10		10.00		101	70	130			
Surr: Dibromofluoromethane	11		10.00		106	70	130			
Surr: Toluene-d8	9.3		10.00		92.7	70	130			

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 Quanitative Limit
S	% Recovery outside of range due to dilution or matrix
B	Analyte detected in the associated Method Blank
E	Value above quantitation range
J	Analyte detected below quantitation limits
P	Sample pH Not In Range
RL	Reporting Limit

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **2012434**
22-Dec-20

Client: Animas Environmental
Project: BMG Landfarm

Sample ID: **mb2**	SampType: **MBLK**	TestCode: **EPA Method 8015D: Gasoline Range**							
Client ID: **PBW**	Batch ID: **G74101**	RunNo: **74101**							
Prep Date:	Analysis Date: **12/18/2020**	SeqNo: **2614699**	Units: **mg/L**						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	ND	0.050								
Surr: BFB	9.7		10.00		96.6	70	130			

Sample ID: **2.5ug gro lcs**	SampType: **LCS**	TestCode: **EPA Method 8015D: Gasoline Range**							
Client ID: **LCSW**	Batch ID: **G74101**	RunNo: **74101**							
Prep Date:	Analysis Date: **12/17/2020**	SeqNo: **2614700**	Units: **mg/L**						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	0.41	0.050	0.5000	0	81.5	70	130			
Surr: BFB	9.8		10.00		97.6	70	130			

Sample ID: **2012434-001a ms**	SampType: **MS**	TestCode: **EPA Method 8015D: Gasoline Range**							
Client ID: **MW-1**	Batch ID: **G74101**	RunNo: **74101**							
Prep Date:	Analysis Date: **12/18/2020**	SeqNo: **2614702**	Units: **mg/L**						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	0.38	0.050	0.5000	0	76.5	70	130			
Surr: BFB	9.5		10.00		94.6	70	130			

Sample ID: **2012434-001a msd**	SampType: **MSD**	TestCode: **EPA Method 8015D: Gasoline Range**							
Client ID: **MW-1**	Batch ID: **G74101**	RunNo: **74101**							
Prep Date:	Analysis Date: **12/18/2020**	SeqNo: **2614703**	Units: **mg/L**						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	0.37	0.050	0.5000	0	73.7	70	130	3.73	20	
Surr: BFB	9.7		10.00		97.1	70	130	0	0	

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 Quanitative Limit
S	% Recovery outside of range due to dilution or matrix
B	Analyte detected in the associated Method Blank
E	Value above quantitation range
J	Analyte detected below quantitation limits
P	Sample pH Not In Range
RL	Reporting Limit

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **2012434**
22-Dec-20

Client: Animas Environmental
Project: BMG Landfarm

Sample ID: **MB-56923**	SampType: **MBLK**	TestCode: **SM2540C MOD: Total Dissolved Solids**							
Client ID: **PBW**	Batch ID: **56923**	RunNo: **73964**							
Prep Date: **12/10/2020**	Analysis Date: **12/11/2020**	SeqNo: **2608464**	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-56923**	SampType: **LCS**	TestCode: **SM2540C MOD: Total Dissolved Solids**							
Client ID: **LCSW**	Batch ID: **56923**	RunNo: **73964**							
Prep Date: **12/10/2020**	Analysis Date: **12/11/2020**	SeqNo: **2608465**	Units: **mg/L**						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Total Dissolved Solids	1010	20.0	1000	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 Quanitative Limit
S	% Recovery outside of range due to dilution or matrix
B	Analyte detected in the associated Method Blank
E	Value above quantitation range
J	Analyte detected below quantitation limits
P	Sample pH Not In Range
RL	Reporting Limit

HALL ENVIRONMENTAL ANALYSIS LABORATORY

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

Sample Log-In Check List

Client Name: **Animas Environmental Se** Work Order Number: **2012434** RcptNo: 1

Received By: **Isaiah Ortiz** **12/9/2020 8:00:00 AM** I_OL

Completed By: **Isaiah Ortiz** **12/9/2020 8:15:58 AM** I_OL

Reviewed By: SGL 12/9/20

Chain of Custody

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

Log In

3. Was an attempt made to cool the samples? Yes ☑ No ☐ NA ☐
4. Were all samples received at a temperature of >0° C to 6.0°C Yes ☑ No ☐ NA ☐
5. Sample(s) in proper container(s)? 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: (<2 or >12 unless noted)
Adjusted?
Checked by: YR 12/9/20

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 °C	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	4.2	Good	Not Present			

Chain-of-Custody Record

Client: Animas Environmental Services

Mailing Address: P.O. Box 8
Farmington, NM 87499-00008

Phone #: 505-564-2281

email or Fax#: dreese@animasenvironmental.com

QA/QC Package: X Standard ☐ Level 4 (Full Validation)

Accreditation: ☐ NELAP ☐ Other ____

☐ EDD (Type) ____

Turn-Around Time: X Standard ☐ Rush ____

Project Name: BMG Landfarm

Project #: AES 040605

Project Manager: Elizabeth McNally, David Reese

Sampler:

On Ice: X Yes ☐ No

Sample Temperature: 4.1+0.1 (cf) 4.2°C

HALL ENVIRONMENTAL ANALYSIS LABORATORY

www.hallenvironmental.com

4901 Hawkins NE - Albuquerque, NM 8710[illegible]

Tel. 505-345-3975 Fax 505-345-4107

Analysis Request

Date	Time	Matrix	Sample Request ID	Container Type and #	Preservative Type	HEAL No. 2012434	BTEX 8021	TPH (GRO/DRO/MRO) 8015	TDS SM2540C	Chlorides 300.0								Air Bubbles (Y or N)
12.8.20	1152	H2O	MW-1	(3) 40 mL glass (1) 250 mL amber glass (1) 500 mL plastic	3-HgCl2 cool 2-Non	001	X	X	X	X								
12.8.20	1118	H2O	MW-2	(3) 40 mL glass (1) 250 mL amber glass (1) 500 mL plastic	3-HgCl2 cool 2-Non	002	X	X	X	X								
12.8.20	1043	H2O	MW-3	(3) 40 mL glass (1) 250 mL amber glass (1) 500 mL plastic	3-HgCl2 cool 2-Non	003	X	X	X	X								
12.8.20	1012	H2O	MW-4	(3) 40 mL glass (1) 250 mL amber glass (1) 500 mL plastic	3-HgCl2 cool 2-Non	004	X	X	X	X								
No Sample		~~H2O~~	~~Interstitial Well~~	~~(3) 40 mL glass (1) 250 mL amber glass (1) 500 mL plastic~~	~~3-HgCl2 cool 2-Non~~		X	X	X	X								
		H2O	Trip Blank		Cold	005	X											

Date:	Time:	Relinquished by:	Received by:	Date	Time
12/8/2020	1610	Doug [illegible]	Mustin Walt	12/8/2020	1610
12/8/2020	1824	Mustin Walt	[illegible]	12/9/20	0800

Remarks: Direct bill to BMG. Call with Questions.

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.

Jones, Brad A., EMNRD

From: Jones, Brad A., EMNRD
Sent: Wednesday, April 27, 2022 10:25 AM
To: bmg@bmgdrilling.com; zstradling@bmgdrilling.com
Cc: Elizabeth McNally
Subject: NM2-004 BMG 2020 Landfarm Monitoring and Sampling Report OCD Review
Attachments: 2022 0427 NM2-004 BMG Corp 2020 Monitoring Report OCD Review.pdf

Matt, Zach, and Elizabeth,

Please see the attached. OCD has completed the review of the 2020 Landfarm Monitoring and Sampling Report . If you have any questions regarding this matter, please do not hesitate to contact me.

Sincerely,

Brad Jones

Brad A. Jones ● Environmental Scientist Specialist - Advanced
Environmental Bureau
EMNRD - Oil Conservation Division
1220 S. Saint Francis Drive | Santa Fe, New Mexico 87505
(505) 469-7486 | brad.a.jones@state.nm.us
www.emnrd.nm.gov

State of New Mexico
Energy, Minerals and Natural Resources Department

April 27, 2022

Mr. Matt Dimond
Benson-Montin-Greer Drilling Corp.
4900 College Boulevard
Farmington, New Mexico 87402
bmg@bmgdrilling.com

RE: 2020 Landfarm Monitoring and Sampling Report
Benson-Montin-Greer Drilling Corp. (OGRID 2096)
Permit Number: NM2-004
Location: NW/4, NW/4 of Section 20, Township 25 North, Range 1 East, NMPM
Rio Arriba County, New Mexico

Mr. Dimond:

The Oil Conservation Division (OCD) has completed its review of Benson-Montin-Greer Drilling Corp's (BMG) 2020 Landfarm Monitoring and Sampling Report**,** dated November 26, 2021, for the BMG Landfarm under permit NM2-004. OCD's review of the annual report has resulted in the discovery of non-compliance to the requirements of 19.15.36 NMAC when a release has been detected from the required routine quarterly vadose zone monitoring. There seems to be some confusion of how to apply the transitional provisions of 19.15.36.20.A NMAC to the existing permit conditions which has resulted in performing the some of the landfarm monitoring incorrectly. Also, BMG has not complied with the Closure conditions of existing permit NM2-004 and the closure and post-closure requirements of 19.15.36.18 NMAC to pursue closure and post-closure of the landfarm.

Closure:
In accordance with Condition 2, under the heading of Closure of existing permit NM2-004, "*A closure plan for the facility will be provided* including the following OCD closure procedures: a) When the facility is to be closed no new material will be accepted; b) Any water not evaporated will be hauled to a commercial disposal facility; c) All liners will be removed; d) Tanks at the location will be emptied and any waste will be hauled to. a commercial disposal facility. The empty tanks will be removed; e) Existing landfarm soils will be remediated until they meet the OCD standards in effect at the time of closure; f) The soils beneath the landfarm will be characterized as to total petroleum hydrocarbons (TPH) and volatile aromatic organics (BTEX) content to determine potential migration of contamination; g) The soils beneath the evaporation pond and produced water receiving and treatment area will be characterized as to total petroleum hydrocarbons (TPH) and volatile aromatic organics (BTEX) content to determine potential migration of contamination; h) Contaminated soils exceeding OCD closure standards for the site will be removed or remediated; i) The area will be contoured, seeded with native grasses, and allowed to return to its natural state. If the landowner desires to keep existing structures,

berms, and fences for future alternative uses the structures may be left in place; and j) Closure will be pursuant to all OCD requirements in effect at the time of closure, and any other applicable local, state and/or federal regulations."

Pursuant to 19.15.36.18.A(5) NMAC, "Closure shall proceed in accordance *with the approved closure and post closure plan and schedule* and modifications or additional requirements the division imposes." OCD has no record of BMG submitting a closure and post-closure care plan and/or schedule for review. Without an *OCD approved closure and post closure plan and schedule*, BMG is currently considered to be in an operational status with the landfarm. To be approved to pursue closure and post-closure, BMG must comply with the existing closure permit conditions of permit NM2-004 and the closure and post-closure requirements of 19.15.36.18 NMAC by providing notice and submitting a closure and post closure plan and a proposed schedule for closure for OCD's review and consideration of approval. This will ensure that the correct constituents required of 19.15.36.15.F(5) NMAC are analyzed and assessed for closure. Submit the required closure and post closure plan and proposed schedule as a stand-alone separate request through OCD Permitting as a "Non-Fee SWMF Submittal."

Vadose Zone Monitoring:
In accordance with 19.15.36.15.E(2) NMAC, "The operator shall compare each result to the higher of the PQL or the background soil concentrations to determine whether a release has occurred." OCD wishes the clarify the that the *background soil concentrations* are based upon background samples with detected concentrations and the *PQL* is based upon background samples with only non-detects, which are demonstrated on Table 1 of the report. For a proper and acceptable vadose zone monitoring demonstration the vadose samples must be analyzed with a reporting limit at or below the OCD approved background concentration and/or PQL for each constituent to determine if a release has occurred. OCD brings this topic up because several constituents were assessed by a reporting limit that was more than 2 to 5 times greater than the background value approved by OCD. The laboratory results demonstrate that Arsenic was assessed with a reporting limit of 5 mg/kg and as high as 12 mg/kg for Cell 4, when the OCD approved background is 2.5 mg/kg; Chloride was assessed with a reporting limit of 60 mg/kg, when the OCD approved background is 25 mg/kg; Cadmium was assessed with a reporting limit of 0.2 mg/kg, when the OCD approved background is 0.1 mg/kg; Selenium was assessed with a reporting limit of 12 mg/kg, when the OCD approved background is 2.5 mg/kg; Silver was assessed with a reporting limit of 1.2 mg/kg, when the OCD approved background is 0.25 mg/kg; Nitrate was assessed with a reporting limit of 1.5 mg/kg, when the OCD approved background is 0.3 mg/kg. OCD is unable to accept any non-detect vadose zone monitoring results that utilized a reporting limit greater than the 2016 OCD approved soils background concentrations and PQLs, due to it being an incomplete assessment for an unauthorized release.

Pursuant to 19.15.36.15.E(5) NMAC, "If vadose zone sampling results show that the concentrations of TPH, BTEX or chlorides exceed the higher of the PQL or the background soil concentrations, then the operator shall notify the division's environmental bureau of the exceedance and shall immediately collect and analyze a minimum of four randomly selected, independent samples for TPH, BTEX, chlorides and the constituents listed in Subsections A and B of 20.6.2.3103 NMAC. The operator shall submit the results of the re-sampling event and a response action plan for the division's approval within 45 days of the initial notification. The response action plan shall address changes in the landfarm's operation to prevent further contamination and, if necessary, a plan for remediating existing contamination." On Table 5, BMG documented exceedances of Chloride for Cell 1 and exceedances of TPH for Cell 3. Instead of providing OCD the required notice, performing the required additional vadose zone monitoring, comparing the additional sampling results to the 2016 OCD approved background, and submitting a response action plan as required of 19.15.36.15.E(5) NMAC, BMG compared the routine quarterly

vadose zone results with the New Mexico Environment Department (NMED) Soil Screening Levels (SSLs) for Soil Leaching (SL) to Groundwater with a dilution attenuation factor (DAF) of 20. BMG is required to comply and implement the requirements of 19.15.36.15.E(5) NMAC. OCD is unable to accept the Proposed Response Action for Vadose Zone (Cell 2), provided in Section 4.2.3 of the 2020 Landfarm Monitoring and Sampling Report since it is not based upon actions (additional sampling) and laboratory analytical results required of 19.15.36.15.E(5) NMAC.

OCD wishes to clarify that 19.15.36.15.E(5) NMAC requires 4 samples to be taken around the sample location of each detected vadose zone release and demonstrated exceedance to investigate and determine if additional constituents are associated with the detected release locations of TPH, BTEX and/or chloride from the routine quarterly vadose zone monitoring. In the future, immediately provide the notice to OCD of the detected releases of TPH, BTEX, and chlorides from the routine quarterly vadose zone monitoring and complete the additional sampling and analysis required of 19.15.36.15.E(5) NMAC. If compliance with the additional sampling required of 19.15.36.15.E(5) NMAC coincides with a routine vadose zone sampling event, please perform each sampling event separately. The next routine vadose zone sampling event should not be performed in the same vicinity in which releases were detected from the previous routine sampling event and the additional investigation of 19.15.36.15.E(5) NMAC is required.

OCD also recommends reviewing the OCD April 21, 2021 policy on *How to address a release to the vadose zone at a Part 36 landfarm pursuant to Part 29* at the following hyperlink: https://www.emnrd.nm.gov/ocd/wp-content/uploads/sites/6/2021-0421-How-to-address-a-release-to-the-vadose-zone-at-a-Part-36-landfarm-pursuant-to-Part-29.pdf. This document is to advise parties on how to address the following scenario: When a landfarm operator completes the release response sampling required of 19.15.36.15.E(5) NMAC and submits a response action plan proposing to remediate the “unauthorized” releases discovered in the vadose zone pursuant to 19.15.29 NMAC and OCD approves the response action plan.

OCD wishes to notify BMG that the last 5-year vadose zone sampling event required of 19.15.36.15.E(3) NMAC occurred between May 6th and 8th of 2014 and is approximately 3 years past due. Based upon this notice, OCD expects BMG to perform the 5-year vadose sampling event required of 19.15.36.15.E(3) NMAC within the calendar year of 2022.

Treatment Zone Monitoring:
As clarified above regarding the evaluation of potential landfarm closure, BMG must comply with the closure conditions of the existing permit and demonstrate compliance to 19.15.36.18 NMAC by providing notice and submitting a closure/post-closure plan and schedule to OCD for review and approval prior to implementing any closure and/or post-closure activities.

In the closure and post-closure plan, BMG will need to resolve the issue regarding the proper assessment of the correct constituents required of 19.15.36.15.F(5) NMAC. Pursuant to 19.15.36.15.F(5) NMAC, “the concentration of constituents listed in Subsections A and B of 20.6.2.3103 NMAC *shall be determined by EPA SW-846 methods 6010B or 6020* or other methods approved by the division.” Based upon the 2016 OCD approved background, this would include the following: arsenic, barium, cadmium, chromium, copper, iron, lead, manganese, selenium, silver, and zinc all by EPA Method 6010B, along with mercury by EPA Method 7471(which can also be determined by EPA methods 6010B or 6020). BMG should limit the discussion of the compliance of 19.15.36.15.F(5) NMAC to the constituents listed in Subsections A and B of 20.6.2.3103 NMAC determined by EPA SW-846 methods 6010B or 6020 or other methods approved by the division, as identified above.

Regarding BMG's proposed risk assessment discussion in Section 3.2.3 and the application of a dilution attenuation factor (DAF) of 20, Section 4.4 of the 2019 New Mexico Environment Department Risk Assessment Guidance for Site Investigations and Remediation, Volume I states *"NMED believes that a DAF of 20 for a 0.5 acre source area is protective of groundwater in New Mexico. If the default DAF is not representative of conditions at a specific site, then it is appropriate to calculate a site-specific DAF based upon available site data."*

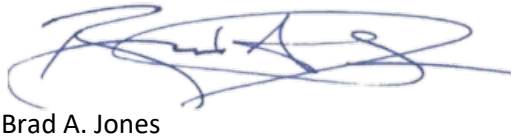
Section 4.7 further clarifies "*Larger source sizes result in lower DAFs. The default DAF used to develop SL-SSLs for a 0.5 acre source may not be protective of groundwater at sites larger than 0.5 acre."* Due to the landfarm cells exceeding the 0.5-acre size consideration, OCD is open to the consideration of the use one of the two approaches, if applicable, recognized in Section 4.7 of the risk assessment guidance or provide a written justification for the use of a *DAF of 20 for a 0.5 acre source area*. BMG can propose the new DAF assessment or justification for the use of a DAF of 20 in the closure and post-closure plan. Ensure the closure and post-closure plan demonstrates that BMG is considering and proposing the lowest concentration based upon all the exposure routes considered in the 2019 New Mexico Environment Department Risk Assessment Guidance for Site Investigations and Remediation.

Table 4B does not consider any other exposure pathway other than groundwater. The NMED SSL exposure limit for total chromium for Construction Worker Soil (Noncancer) of 1.34E+02 or 134 mg/kg is much lower than the proposed groundwater (DAF 20) of 2.05E+05 or 205,000 mg/kg. Ensure that the lowest applicable NMED SSL exposure limit is compared to the exceedance. OCD wishes to inform BMG that Table 4B demonstrates the detected concentrations for Iron of 11,000 mg/kg and 16,000 mg/kg for Cells 1 and 4 from the April 2, 2020 sampling event exceed the 2016 OCD approved background value of 6,500 mg/kg and the NMED SSL Target Soil Leachate Concentration of 6.96E+03 mg/kg (or 6,960 mg/kg) for groundwater with a DAF of 20. OCD brings this issue up due to BMG's conclusion provided in Section 5.1 of the report which states "all were shown to be below NMED SSLs for soil leaching to groundwater (DAF 20). Therefore, treatment zone concentrations are believed to be protective of human health and the environment, and closure of Treatment Cells 1 and 4 are anticipated." Keep in mind that 19.15.36.15.F(5) NMAC requires BMG to "propose closure standards based upon individual site conditions that protect *fresh water, public health and the environment*."

OCD also noticed that BMG did not determine the TPH results by EPA method 418.1 as required of 19.15.36.15.F(3) NMAC. BMG used the sum of GRO, DRO, and MRO determined by EPA Methods 8015 and 8015D. BMG must request the use of the sum of GRO, DRO, and MRO determined by EPA Methods 8015 and 8015D to be used in lieu of EPA method 418.1 in the closure and post-closure plan to obtain OCD approval for use of another EPA method.

If there are any questions regarding this matter, please do not hesitate to contact me at (505) 469-7486 or brad.a.jones@state.nm.us.

Respectfully,



Brad A. Jones
Environmental Specialist

Cc: Elizabeth McNally, Animas Environmental Services, LLC, emcnally@animasenvironmental.com

District I
1625 N. French Dr., Hobbs, NM 88240
Phone:(575) 393-6161 Fax:(575) 393-0720
District II
811 S. First St., Artesia, NM 88210
Phone:(575) 748-1283 Fax:(575) 748-9720
District III
1000 Rio Brazos Rd., Aztec, NM 87410
Phone:(505) 334-6178 Fax:(505) 334-6170
District IV
1220 S. St Francis Dr., Santa Fe, NM 87505
Phone:(505) 476-3470 Fax:(505) 476-3462

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

CONDITIONS

Action 73138

CONDITIONS

Operator: BENSON-MONTIN-GREER DRILLING CORP 4900 College Blvd. Farmington, NM 87402	OGRID: 2096
	Action Number: 73138
	Action Type: [C-137] Non-Fee SWMF Submittal (SWMF NON-FEE SUBMITTAL)

CONDITIONS

Created By	Condition	Condition Date
bjones	OCD emailed the review to Matt Dimond and Zach Stradling (BMG) and Elizabeth McNally (Animas) on April 27, 2022. Please see the OCD Response attached to the end of the report. If you have questions regarding this matter, please do not hesitate to contact me.	4/27/2022