



March 2, 2020

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

**RE: 2019 Landfarm Monitoring and Sampling Report
Permit # NM-02-0004
BMG's Centralized Surface Waste Management Facility
Rio Arriba County, New Mexico**

Dear Mr. Griswold:

Between March 2019 and January 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 March 2019, AES conducted landfarm treatment zone and vadose zone sampling. A meeting was held with BMG and NMOCD on May 24, 2019, to discuss finalization of background concentration thresholds and the process to begin working towards landfarm closure, since the landfarm no longer receives any petroleum contaminated soils for treatment.

1.0 Monitoring and Sampling, 2014 to 2018

AES personnel conducted quarterly groundwater and landfarm sampling at the BMG Surface Waste Management Facility between March 2014 and December 2018.

1.1 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. Verbal

Jim Griswold
Landfarm Monitoring and Sampling Report
March 2, 2020; Page 2 of 7

approval of background threshold concentrations was given by Jim Griswold of NMOCD in June 2018.

1.2 Evaporation Pond Groundwater Monitoring and Sampling

Groundwater analytical results from monitor wells MW-1 through MW-4 (located around the Evaporation Pond) remained below laboratory detection limits for BTEX and TPH for all sampling events between 2014 and 2018.

1.3 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 2018.

1.4 Landfarm Vadose Zone Sampling

Vadose zone analytical results reported concentrations exceeding the NMOCD verbally approved background threshold concentrations in all cells for various parameters, including TPH, chloride, fluoride, nitrate, sulfate, arsenic, barium, chromium, copper, iron, lead, manganese, and zinc.

Landfarm sampling results from 2014 to 2018 are detailed in the comprehensive *Landfarm Monitoring and Sampling Report* dated April 19, 2019.

2.0 Evaporation Pond Groundwater Monitoring and Sampling

2.1 2008 Site Investigation

In April 2008, AES personnel confirmed the presence of liquid within the Interstitial Well at the Landfarm evaporation pond. 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.

Jim Griswold
Landfarm Monitoring and Sampling Report
March 2, 2020; Page 3 of 7

2.2 Evaporation Pond Monitoring and Sampling

- No samples were collected directly from the evaporation pond for laboratory analysis during 2019.

2.3 Groundwater Monitoring and Sampling, Q1 through Q4 2019

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 Evaporation Pond) was conducted on:

- Q1 - March 28, 2019
- Q2 - July 3, 2019
- Q3 - September 30, 2019; and
- Q4 - January 30, 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 8021B;
- 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.

2.3.1 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 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.

2.4 Laboratory Analytical Results

All laboratory analytical results for MW-1 through MW-4 were below laboratory detection limits for BTEX and TPH (GRO, DRO, and MRO). 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.

Jim Griswold
Landfarm Monitoring and Sampling Report
March 2, 2020; Page 4 of 7

3.0 Landfarm Treatment Zone

3.1 Treatment Zone Sample Collection, March 2019

In accordance with NMAC 19.15.36.15.D and after consultation with NMOCD in 2014, AES personnel collected composite soil samples created from four randomly selected discrete samples in active cells, Cell 2 and Cell 3, on a semi-annual basis. Note that the second semi-annual samples were not collected, pending further consultation with NMOCD about addressing exceedances and beginning evaluation of potential landfarm closure. Samples were collected from 0.5- to 1-foot below the treatment zone (TZ) surface. Sampling dates, periods, cells, IDs, and analysis parameters are included as follows:

Treatment Zone Sampling Information

Cells Sampled	Sampling Date	Sampling Period	No. of Samples	Sample ID	Parameter(s) and USEPA Method(s)
2-3	March 28, 2019	Q1 2019	2	TZ-Cell #2-#3	GRO/DRO/MRO 8015; Chloride 300.0

3.2 Treatment Zone Analytical Results

For the March 2019 sampling event at Cells 2 and 3, TPH and chloride laboratory analytical results were below NMOCD Closure Action Levels in all samples collected. Treatment zone concentrations in all cells, Cells 1 through 4 now meet closure criteria for TPH and chloride. Closure Action Levels for treatment cells are as follows:

- Benzene – 0.2 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

BMG will continue to coordinate with NMOCD to plan for sampling of additional parameters for the treatment zone in accordance with the permit and NMAC 19.15.36.15.F(1-5). These parameters will include BTEX per EPA Method 8260 and the parameters included in NMAC 20.6.2.3103. Treatment zone sample locations from 2019 along with TPH and chloride analytical results are presented on Table 4 and on Figure 3. Laboratory reports are presented in the Appendix.

Jim Griswold
Landfarm Monitoring and Sampling Report
March 2, 2020; Page 5 of 7

4.0 Landfarm Vadose Zone

4.1 Vadose Zone Sample Collection, March 2019

In accordance with NMAC 19.15.36.20.A (Transitional Provisions), NMAC 19.15.36.15.E, and the existing permit, discrete soil samples were collected on March 28, 2019, from each of the four cells (Cells #1 through #4) at depths of 1.5 to 2.5 feet below the top of native ground surface (below the treatment zones). Each sample collection location was filled in with bentonite following sampling. The sampling date, period, cells, IDs, and analysis parameters are included as follows:

Vadose Zone Sampling Information

Sampling Period	Sampling Date	Sample ID	Parameter(s) and USEPA Method(s)
Q1 2019	March 28, 2019	Cell # 1 S-1, Cell # 1 S-2, Cell # 1 S-3, Cell # 1 S-4; Cell # 2 S-1, Cell # 2 S-2, Cell # 2 S-3, Cell # 2 S-4; Cell # 3 S-1, Cell # 3 S-2, Cell # 3 S-3, Cell # 3 S-4; Cell # 4 S-1, Cell # 4 S-2, Cell # 4 S-3, Cell # 4 S-4	418.1 TPH; 8021 BTEX; 300.0 CI

Vadose zone laboratory analytical results from 2019 are summarized in Table 5. Sample locations are presented on Figure 4. Laboratory reports are presented in the Appendix.

4.2 Comparison to Background Thresholds

Vadose zone chloride concentrations in Cell 1 were above the NMOCD (verbally) approved background threshold for chloride in 2019. Parameters with concentrations above background levels are summarized below:

Vadose Zone Concentrations Above Background Threshold Levels

Cell	Sample Date	Parameter	Concentration (mg/kg)	Background Threshold (mg/kg)
#1 S-1	3/28/2019	Chloride	210	25
#1 S-2	3/28/2019	Chloride	66	25

Note that a Response Action Plan is being developed to address concentrations that exceed background thresholds, but that several parameters may be associated with naturally occurring characteristics of near surface soils. Also note that NMOCD elected to utilize the lowest of the background sample concentrations as threshold concentrations, even though in many instances there was wide variability in reported results.

Jim Griswold
Landfarm Monitoring and Sampling Report
March 2, 2020; Page 6 of 7

5.0 Conclusions and Recommendations

5.1 Conclusions

AES personnel conducted quarterly groundwater and landfarm sampling at the BMG Surface Waste Management Facility in 2019.

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 quarterly sampling events in 2019.

Landfarm treatment zone samples had TPH and chloride concentrations below NMOCD Closure Action Levels for both events in Cells 2 and 3. All four cells (Cells 1 through 4) now meet treatment zone closure criteria.

Vadose zone analytical results reported concentrations exceeding the NMOCD verbally approved background threshold concentrations in Cell 1 for chloride.

5.2 Recommendations and Scheduled Activities

- **Groundwater** – Quarterly groundwater monitoring and sampling will continue according to the Sampling and Analysis Plan;
- **Treatment Zone** - for Cells 1, 3, and 4, AES recommends completing additional required sampling in consultation with NMOCD for treatment zone closure under NMAC 19.15.36.15.F(1-5);
- **Vadose Zone** - as required in NMAC 19.15.36.15.E(3), 5-year monitoring and sampling in the vadose zone 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. Results will be compared to the higher of the PQL or the background soil concentrations to determine whether a release has occurred. AES will coordinate with NMOCD for development and submittal of a response action plan, as required in NMAC 19.15.36.15.E(5).

The next quarterly sampling event at the BMG Landfarm is scheduled for late March 2020.

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

Jim Griswold
Landfarm Monitoring and Sampling Report
March 2, 2020; Page 7 of 7

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 5. Vadose Zone Soil Analytical Results

Figures

- Figure 1. Background Soil Samples, December 2014
- Figure 2. Evaporation Pond and Monitor Well Locations and Concentrations, 2019
- Figure 3. Treatment Zone Monitoring Locations and Results, 2019
- Figure 4. Vadose Zone Monitoring Locations, 2019

Appendix

Water and Soil Sample Collection Forms and Laboratory Analytical Reports, 2019

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

TABLE 1
BACKGROUND SOIL SAMPLING ANALYTICAL RESULTS
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)	Background Value (mg/kg)
Date Sampled			12/2/2014	12/2/2014	12/2/2014	
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	0.05
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	0.1
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

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	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-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
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

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	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-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
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

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	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-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

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-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
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
Interstitial Well	29-Mar-13	NS	9.77	-9.77	8.84	261.3	0.84	6.56	9.7
Interstitial Well	01-Jul-13	NS	9.70	-9.70	18.31	86.76	3.79	7.14	9.6

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

<i>Well ID</i>	<i>Date Measured</i>	<i>Top of Casing Elevation (ft amsl)</i>	<i>Depth to Water (ft)</i>	<i>Water Level Elevation (ft amsl)</i>	<i>Temp. (°C)</i>	<i>Specific Conduct. (mS)</i>	<i>Dissolved Oxygen (mg/L)</i>	<i>pH</i>	<i>ORP (mV)</i>
Interstitial Well	09-Oct-13	NS	9.82	-9.82	16.84	148.2	3.60	6.57	34.5
Interstitial Well	31-Mar-14	NS	9.92	-9.92	7.65	139.2	2.01	6.68	93.9
Interstitial Well	01-Oct-14	NS	9.50	-9.50	NM	NM	NM	NM	NM
Interstitial Well	26-Mar-15	NS	9.83	-9.83	NM	NM	NM	NM	NM
Interstitial Well	23-Jun-15	NS	10.66	-10.66	18.36	139.0	0.00	6.82	97.6
Interstitial Well	24-Sep-15	NS	11.33	-11.33	20.42	139.3	2.87	7.06	73.4
Interstitial Well	23-Sep-16	NS	NM	NM	NM	NM	NM	NM	NM
Interstitial Well	19-Dec-16	NS	NM	NM	NM	NM	NM	NM	NM
Interstitial Well	13-Apr-17	NS	10.16	-10.16	NM	NM	NM	NM	NM
Interstitial Well	20-Jun-17	NS	NM	NM	NM	NM	NM	NM	NM
Interstitial Well	14-Sep-17	NS	NM	NM	NM	NM	NM	NM	NM
Interstitial Well	14-Dec-17	NS	NM	NM	NM	NM	NM	NM	NM
Interstitial Well	14-Mar-18	NS	11.12	NM	NM	NM	NM	NM	NM
Interstitial Well	12-Jun-18	NS	10.35	NM	NM	NM	NM	NM	NM
Interstitial Well	17-Sep-18	NS	10.74	NM	NM	NM	NM	NM	NM
Interstitial Well	19-Dec-18	NS	10.18	NM	NM	NM	NM	NM	NM
Interstitial Well	28-Mar-19	NS	10.71	-10.71	NM - Minimal Water Recharge				
Interstitial Well	30-Sep-19	NS	9.91	-9.91	NM - Minimal Water Recharge				
Interstitial Well	30-Jan-20	NS	11.15	-11.15	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 (μ g/L)	Toluene (μ g/L)	Ethyl- Benzene (μ g/L)	Total Xylenes (μ g/L)	GRO (mg/L)	DRO (mg/L)	MRO (mg/L)	Chloride (mg/L)	TDS (mg/L)	Barium (mg/L)	Cadmium (mg/L)
Method		8021B	8021B	8021B	8021B	8015D	8015D	8015D	300.0	SM2540C	200.7	200.7
NM WQCC STANDARD		5	1,000	700	620	0.0101*	0.0167*	NE	NE	NE	2	0.005
MW-1	18-Sep-12	<2.0	<2.0	<2.0	<4.0	<0.10	<1.0	NA	11	654	0	<0.0020
MW-1	6-Dec-12	<1.0	<1.0	<1.0	<2.0	<0.050	<1.0	<5.0	10	610	NM	NM
MW-1	29-Mar-13	<2.0	<2.0	<2.0	<4.0	<0.10	<1.0	<5.0	9.6	810	NM	NM
MW-1	1-Jul-13	<2.0	<2.0	<2.0	<4.0	<0.10	<1.0	<5.0	9.2	640	NM	NM
MW-1	9-Oct-13	<1.0	<1.0	<1.0	<2.0	<0.050	<1.0	<5.0	9.7	690	0.45	<0.0020
MW-1	31-Mar-14	<1.0	<1.0	<1.0	<2.0	<0.050	<1.0	<5.0	9.2	612	NM	NM
MW-1	30-Sep-14	<1.0	<1.0	<1.0	<2.0	<0.050	<1.0	<5.0	10	614	NM	NM
MW-1	2-Dec-14	<1.0	<1.0	<1.0	<2.0	<0.050	<1.0	<5.0	14	660	NM	NM
MW-1	26-Mar-15	<1.0	<1.0	<1.0	<2.0	<0.050	<1.0	<5.0	14	580	NM	NM
MW-1	23-Jun-15	<2.0	<2.0	<2.0	<4.0	<0.10	<1.0	<5.0	61	720	NM	NM
MW-1	24-Sep-15	<1.0	<1.0	<1.0	<2.0	<0.050	<1.0	<5.0	38	710	NM	NM
MW-1	10-Dec-15	<1.0	<1.0	<1.0	<2.0	<0.050	<1.0	<5.0	43	627	NM	NM
MW-1	04-Mar-16	<1.0	<1.0	<1.0	<2.0	<0.050	<1.0	<5.0	68	666	NM	NM
MW-1	17-Jun-16	<1.0	<1.0	<1.0	<1.5	<0.050	<1.0	<5.0	96	769	NM	NM
MW-1	23-Sep-16	<1.0	<1.0	<1.0	<2.0	<0.050	<1.0	<5.0	60	687	NM	NM
MW-1	19-Dec-16	<1.0	<1.0	<1.0	<1.5	<0.050	<1.0	<5.0	48	658	NM	NM
MW-1	13-Apr-17	<1.0	<1.0	<1.0	<1.5	<0.050	<1.0	<5.0	26	690	NM	NM
MW-1	20-Jun-17	<1.0	<1.0	<1.0	<1.5	<0.050	<1.0	<5.0	25	662	NM	NM
MW-1	14-Sep-17	<1.0	<1.0	<1.0	<2.0	<0.050	<1.0	<5.0	23	615	NM	NM
MW-1	14-Dec-17	<1.0	<1.0	<1.0	<1.5	<0.050	<1.0	<5.0	22	620	NM	NM
MW-1	14-Mar-18	<1.0	<1.0	<1.0	<2.0	<0.050	<1.0	<5.0	26	642	NM	NM
MW-1	12-Jun-18	<1.0	<1.0	<1.0	<1.5	<0.050	1.5	<5.0	19	620	NM	NM

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

Well ID	Date	Benzene (μ g/L)	Toluene (μ g/L)	Ethyl- Benzene (μ g/L)	Total Xylenes (μ g/L)	GRO (mg/L)	DRO (mg/L)	MRO (mg/L)	Chloride (mg/L)	TDS (mg/L)	Barium (mg/L)	Cadmium (mg/L)
Method		8021B	8021B	8021B	8021B	8015D	8015D	8015D	300.0	SM2540C	200.7	200.7
NM WQCC STANDARD		5	1,000	700	620	0.0101*	0.0167*	NE	NE	NE	2	0.005
MW-1	17-Sep-18	<1.0	<1.0	<1.0	<2.0	<0.050	<1.0	<5.0	16	570	NM	NM
MW-1	19-Dec-18	<1.0	<1.0	<1.0	<2.0	<0.050	<1.0	<5.0	16	595	NM	NM
MW-1	28-Mar-19	<1.0	<1.0	<1.0	<1.5	<0.050	<1.0	<5.0	120	714	NM	NM
MW-1	03-Jul-19	<1.0	<1.0	<1.0	<2.0	<0.050	<1.0	<5.0	31	715	NM	NM
MW-1	30-Sep-19	<1.0	<1.0	<1.0	<2.0	<0.050	<1.0	<5.0	45	716	NM	NM
MW-1	30-Jan-20	<1.0	<1.0	<1.0	<2.0	<0.050	<1.0	<5.0	28	730	NM	NM
MW-2	18-Sep-12	<2.0	<2.0	<2.0	<4.0	<0.10	<1.0	NA	30	615	1.1	<0.0040
MW-2	6-Dec-12	<2.0	<2.0	<2.0	<4.0	<0.10	<1.0	<5.0	32	500	NM	NM
MW-2	29-Mar-13	<2.0	<2.0	<2.0	<4.0	<0.10	<1.0	<5.0	28	590	NM	NM
MW-2	1-Jul-13	<1.0	<1.0	<1.0	<2.0	<0.050	<1.0	<5.0	26	580	NM	NM
MW-2	9-Oct-13	<1.0	<1.0	<1.0	<2.0	<0.050	<1.0	<5.0	26	790	0.47	<0.0020
MW-2	31-Mar-14	<1.0	<1.0	<1.0	<2.0	<0.050	<1.0	<5.0	30	630	NM	NM
MW-2	1-Oct-14	<1.0	<1.0	<1.0	<2.0	<0.050	<1.0	<5.0	31	632	NM	NM
MW-2	2-Dec-14	<1.0	<1.0	<1.0	<2.0	<0.050	<1.0	<5.0	34	780	NM	NM
MW-2	26-Mar-15	<1.0	<1.0	<1.0	<2.0	<0.050	<1.0	<5.0	33	600	NM	NM
MW-2	23-Jun-15	<2.0	<2.0	<2.0	<4.0	<0.10	<1.0	<5.0	33	720	NM	NM
MW-2	24-Sep-15	<1.0	<1.0	<1.0	<2.0	<0.050	<1.0	<5.0	48	740	NM	NM
MW-2	10-Dec-15	<1.0	<1.0	<1.0	<2.0	<0.050	<1.0	<5.0	170	902	NM	NM
MW-2	04-Mar-16	<1.0	<1.0	<1.0	<2.0	<0.050	<1.0	<5.0	280	1,040	NM	NM
MW-2	17-Jun-16	<1.0	<1.0	<1.0	<1.5	<0.050	<1.0	<5.0	460	1,400	NM	NM
MW-2	23-Sep-16	<1.0	<1.0	<1.0	<2.0	<0.050	<1.0	<5.0	380	1,230	NM	NM

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

Well ID	Date	Benzene (μ g/L)	Toluene (μ g/L)	Ethyl- Benzene (μ g/L)	Total Xylenes (μ g/L)	GRO (mg/L)	DRO (mg/L)	MRO (mg/L)	Chloride (mg/L)	TDS (mg/L)	Barium (mg/L)	Cadmium (mg/L)
Method		8021B	8021B	8021B	8021B	8015D	8015D	8015D	300.0	SM2540C	200.7	200.7
NM WQCC STANDARD		5	1,000	700	620	0.0101*	0.0167*	NE	NE	NE	2	0.005
MW-2	19-Dec-16	<1.0	<1.0	<1.0	<2.0	<0.050	<1.0	<5.0	470	1,370	NM	NM
MW-2	13-Apr-17	<1.0	<1.0	<1.0	<1.5	<0.050	<1.0	<5.0	520	1,770	NM	NM
MW-2	20-Jun-17	<1.0	<1.0	<1.0	<1.5	<0.050	<1.0	<5.0	770	2,160	NM	NM
MW-2	14-Sep-17	<1.0	<1.0	<1.0	<2.0	<0.050	<1.0	<5.0	700	2,030	NM	NM
MW-2	14-Dec-17	<1.0	<1.0	<1.0	<1.5	<0.050	<1.0	<5.0	770	2,400	NM	NM
MW-2	14-Mar-18	<1.0	<1.0	<1.0	<2.0	<0.050	<1.0	<5.0	790	1,980	NM	NM
MW-2	12-Jun-18	<1.0	<1.0	<1.0	<1.5	<0.050	1.3	<5.0	620	1,890	NM	NM
MW-2	17-Sep-18	<1.0	<1.0	<1.0	<2.0	<0.050	<1.0	<5.0	580	1,750	NM	NM
MW-2	19-Dec-18	<1.0	<1.0	<1.0	<2.0	<0.050	<1.0	<5.0	600	1,420	NM	NM
MW-2	28-Mar-19	<1.0	<1.0	<1.0	<1.5	<0.050	<1.0	<5.0	840	2,020	NM	NM
MW-2	03-Jul-19	<1.0	<1.0	<1.0	<2.0	<0.050	<1.0	<5.0	310	1,060	NM	NM
MW-2	30-Sep-19	<1.0	<1.0	<1.0	<2.0	<0.050	<1.0	<5.0	240	1,040	NM	NM
MW-2	30-Jan-20	<1.0	<1.0	<1.0	<2.0	<0.050	<1.0	<5.0	240	950	NM	NM
MW-3	18-Sep-12	<1.0	<1.0	<1.0	<2.0	<0.050	<1.0	NA	23	690	0.69	<0.0040
MW-3	6-Dec-12	<2.0	<2.0	<2.0	<4.0	<0.10	<1.0	<5.0	22	600	NM	NM
MW-3	29-Mar-13	<2.0	<2.0	<2.0	<4.0	<0.10	<1.0	<5.0	20	680	NM	NM
MW-3	1-Jul-13	<2.0	<2.0	<2.0	<4.0	<0.10	<1.0	<5.0	20	630	NM	NM
MW-3	9-Oct-13	<1.0	<1.0	<1.0	<2.0	<0.050	<1.0	<5.0	21	620	0.59	<0.0020
MW-3	31-Mar-14	<1.0	<1.0	<1.0	<2.0	<0.050	<1.0	<5.0	18	544	NM	NM
MW-3	30-Sep-14	<1.0	<1.0	<1.0	<2.0	<0.050	<1.0	<5.0	19	574	NM	NM
MW-3	2-Dec-14	<1.0	<1.0	<1.0	<2.0	<0.050	<1.0	<5.0	21	580	NM	NM

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)	Barium (mg/L)	Cadmium (mg/L)
Method		8021B	8021B	8021B	8021B	8015D	8015D	8015D	300.0	SM2540C	200.7	200.7
NM WQCC STANDARD		5	1,000	700	620	0.0101*	0.0167*	NE	NE	NE	2	0.005
MW-3	26-Mar-15	<1.0	<1.0	<1.0	<2.0	<0.050	<1.0	<5.0	23	601	NM	NM
MW-3	23-Jun-15	<2.0	<2.0	<2.0	<4.0	<0.10	<1.0	<5.0	24	680	NM	NM
MW-3	24-Sep-15	<1.0	<1.0	<1.0	<2.0	<0.050	<1.0	<5.0	23	570	NM	NM
MW-3	10-Dec-15	<1.0	<1.0	<1.0	<2.0	<0.050	<1.0	<5.0	22	540	NM	NM
MW-3	04-Mar-16	<1.0	<1.0	<1.0	<2.0	<0.050	<1.0	<5.0	21	620	NM	NM
MW-3	17-Jun-16	<1.0	<1.0	<1.0	<1.5	<0.050	<1.0	<5.0	22	600	NM	NM
MW-3	23-Sep-16	<1.0	<1.0	<1.0	<2.0	<0.050	<1.0	<5.0	23	561	NM	NM
MW-3	19-Dec-16	<1.0	<1.0	<1.0	<2.0	<0.050	<1.0	<5.0	24	534	NM	NM
MW-3	13-Apr-17	<1.0	<1.0	<1.0	<1.5	<0.050	<1.0	<5.0	25	655	NM	NM
MW-3	20-Jun-17	<1.0	<1.0	<1.0	<1.5	<0.050	<1.0	<5.0	28	590	NM	NM
MW-3	14-Sep-17	<1.0	<1.0	<1.0	<2.0	<0.050	<1.0	<5.0	30	595	NM	NM
MW-3	14-Dec-17	<1.0	<1.0	<1.0	<1.5	<0.050	<1.0	<5.0	32	598	NM	NM
MW-3	14-Mar-18	<1.0	<1.0	<1.0	<2.0	<0.050	<1.0	<5.0	33	612	NM	NM
MW-3	12-Jun-18	<1.0	<1.0	<1.0	<1.5	<0.050	<1.0	<5.0	37	626	NM	NM
MW-3	17-Sep-18	<1.0	<1.0	<1.0	<2.0	<0.050	<1.0	<5.0	62	640	NM	NM
MW-3	19-Dec-18	<1.0	<1.0	<1.0	<2.0	<0.050	<1.0	<5.0	76	688	NM	NM
MW-3	28-Mar-19	<1.0	<1.0	<1.0	<1.5	<0.050	<1.0	<5.0	85	734	NM	NM
MW-3	03-Jul-19	<1.0	<1.0	<1.0	<2.0	<0.050	<1.0	<5.0	120	780	NM	NM
MW-3	30-Sep-19	<1.0	<1.0	<1.0	<2.0	<0.050	<1.0	<5.0	150	855	NM	NM
MW-3	30-Jan-20	<1.0	<1.0	<1.0	<2.0	<0.050	<1.0	<5.0	160	920	NM	NM
MW-4	18-Sep-12	<1.0	<1.0	<1.0	<2.0	<0.050	<1.0	NA	16	660	0.084	<0.0020

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

Well ID	Date	Benzene (μ g/L)	Toluene (μ g/L)	Ethyl- Benzene (μ g/L)	Total Xylenes (μ g/L)	GRO (mg/L)	DRO (mg/L)	MRO (mg/L)	Chloride (mg/L)	TDS (mg/L)	Barium (mg/L)	Cadmium (mg/L)
Method		8021B	8021B	8021B	8021B	8015D	8015D	8015D	300.0	SM2540C	200.7	200.7
NM WQCC STANDARD		5	1,000	700	620	0.0101*	0.0167*	NE	NE	NE	2	0.005
MW-4	6-Dec-12	<1.0	<1.0	<1.0	<2.0	<0.050	<1.0	<5.0	14	760	NM	NM
MW-4	29-Mar-13	<2.0	<2.0	<2.0	<4.0	<0.10	<1.0	<5.0	12	750	NM	NM
MW-4	1-Jul-13	<1.0	<1.0	<1.0	<2.0	<0.050	<1.0	<5.0	10	608	NM	NM
MW-4	9-Oct-13	<1.0	<1.0	<1.0	<2.0	<0.050	<1.0	<5.0	11	690	0.17	<0.0020
MW-4	31-Mar-14	<1.0	<1.0	<1.0	<2.0	<0.050	<1.0	<5.0	12	600	NM	NM
MW-4	30-Sep-14	<1.0	<1.0	<1.0	<2.0	<0.050	<1.0	<5.0	15	618	NM	NM
MW-4	2-Dec-14	<2.0	<2.0	<2.0	<4.0	<0.10	<1.0	<5.0	21	770	NM	NM
MW-4	26-Mar-15	<1.0	<1.0	<1.0	<2.0	<0.050	<1.0	<5.0	34	615	NM	NM
MW-4	23-Jun-15	<2.0	<2.0	<2.0	<4.0	<0.10	<1.0	<5.0	73	1090	NM	NM
MW-4	24-Sep-15	<1.0	<1.0	<1.0	<2.0	<0.050	<1.0	<5.0	97	635	NM	NM
MW-4	10-Dec-15	<1.0	<1.0	<1.0	<2.0	<0.050	<1.0	<5.0	250	782	NM	NM
MW-4	04-Mar-16	<1.0	<1.0	<1.0	<2.0	<0.050	<1.0	<5.0	170	721	NM	NM
MW-4	17-Jun-16	<1.0	<1.0	<1.0	<1.5	<0.050	<1.0	<5.0	290	938	NM	NM
MW-4	23-Sep-16	<1.0	<1.0	<1.0	<2.0	<0.050	<1.0	<5.0	250	879	NM	NM
MW-4	19-Dec-16	<1.0	<1.0	<1.0	<2.0	<0.050	<1.0	<5.0	250	800	NM	NM
MW-4	13-Apr-17	<1.0	<1.0	<1.0	<1.5	<0.050	<1.0	<5.0	180	790	NM	NM
MW-4	20-Jun-17	<1.0	<1.0	<1.0	<1.5	<0.050	<1.0	<5.0	180	744	NM	NM
MW-4	14-Sep-17	<1.0	<1.0	<1.0	<2.0	<0.050	<1.0	<5.0	170	775	NM	NM
MW-4	14-Dec-17	<1.0	<1.0	<1.0	<1.5	<0.050	<1.0	<5.0	170	754	NM	NM
MW-4	14-Mar-18	<1.0	<1.0	<1.0	<2.0	<0.050	<1.0	<5.0	160	694	NM	NM
MW-4	12-Jun-18	<1.0	<1.0	<1.0	<1.5	<0.050	<1.0	<5.0	150	751	NM	NM
MW-4	17-Sep-18	<1.0	<1.0	<1.0	<2.0	<0.050	<1.0	<5.0	110	930	NM	NM

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)	Barium (mg/L)	Cadmium (mg/L)
Method		8021B	8021B	8021B	8021B	8015D	8015D	8015D	300.0	SM2540C	200.7	200.7
NM WQCC STANDARD		5	1,000	700	620	0.0101*	0.0167*	NE	NE	NE	2	0.005
MW-4	19-Dec-18	<1.0	<1.0	<1.0	<2.0	<0.050	<1.0	<5.0	94	644	NM	NM
MW-4	28-Mar-19	<1.0	<1.0	<1.0	<1.5	<0.050	<1.0	<5.0	19	594	NM	NM
MW-4	03-Jul-19	<1.0	<1.0	<1.0	<2.0	<0.050	<1.0	<5.0	84	620	NM	NM
MW-4	30-Sep-19	<1.0	<1.0	<1.0	<2.0	<0.050	<1.0	<5.0	99	750	NM	NM
MW-4	30-Jan-20	<1.0	<1.0	<1.0	<2.0	<0.050	<1.0	<5.0	110	790	NM	NM
Interstitial Well	18-Sep-12	<5.0	<5.0	<5.0	<10	<0.25	<3.0	NA	120,000	170,000	50	<0.10
Interstitial Well	6-Dec-12	<10	<10	<10	<20	<0.50	6.9	<5.0	110,000	159,000	NM	NM
Interstitial Well	29-Mar-13	<10	<10	<10	<20	<0.50	3.8	<5.0	98,000	154,000	NM	NM
Interstitial Well	1-Jul-13	<10	<10	<10	<20	<0.50	4.6	<5.0	80,000	145,000	NM	NM
Interstitial Well	9-Oct-13	<10	<10	<10	<20	<0.50	36	9.5	90,000	144,000	24	0.53
Interstitial Well	31-Mar-14	<1.0	<1.0	<1.0	<2.0	<0.050	3.1	<5.0	69,000	146,000	NM	NM
Interstitial Well	3-Dec-14	<1.0	<1.0	<1.0	<2.0	0.087	6	<5.0	98,000	133,000	NM	NM
Interstitial Well	24-Sep-15	<1.0	<1.0	<1.0	<2.0	0.074	2.8	<5.0	100,000	141,000	50	0.054
Interstitial Well	23-Sep-16	<10	<10	<10	<20	<0.50	3.8	<5.0	88,000	138,000	NM	NM
Interstitial Well	19-Dec-16	<5.0	<5.0	<5.0	<7.5	<0.25	2.9	<5.0	130,000	147,000	NM	NM

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

Well ID	Date	Benzene (μ g/L)	Toluene (μ g/L)	Ethyl- Benzene (μ g/L)	Total Xylenes (μ g/L)	GRO (mg/L)	DRO (mg/L)	MRO (mg/L)	Chloride (mg/L)	TDS (mg/L)	Barium (mg/L)	Cadmium (mg/L)
Method		8021B	8021B	8021B	8021B	8015D	8015D	8015D	300.0	SM2540C	200.7	200.7
NM WQCC STANDARD		5	1,000	700	620	0.0101*	0.0167*	NE	NE	NE	2	0.005
Interstitial Well	14-Sep-17	<1.0	<1.0	<1.0	<2.0	<0.050	4.5	<5.0	97,000	118,000	NM	NM
Interstitial Well	14-Dec-17	<1.0	<1.0	<1.0	<1.5	0.062	3.8	<5.0	67,000	126,000	NM	NM
Interstitial Well	14-Mar-18	<5.0	<5.0	<5.0	<10	<0.25	4.2	<5.0	75,000	122,000	NM	NM
Interstitial Well	12-Jun-18	<1.0	<1.0	<1.0	<1.5	0.11	3.7	<5.0	75,000	180,000	NM	NM
Interstitial Well	17-Sep-18	<1.0	<1.0	<1.0	<2.0	0.13	3.5	<5.0	80,000	135,000	NM	NM
Interstitial Well	19-Dec-18	<1.0	<1.0	<1.0	<2.0	0.052	2.8	<5.0	70,000	133,000	NM	NM
Evaporation Pond	3-Dec-14	190	240	14	88	1.2	9.2	<5.0	74,000	105,000	NM	NM
Evaporation Pond	24-Sep-15	13	13	1.0	5.6	0.11	2.9	<5.0	87,000	136,000	210	<0.020
Evaporation Pond	19-Dec-16	4.3	23	<5.0	<7.5	0.87	6.1	<5.0	110,000	169,000	NM	NM
Evaporation Pond	14-Dec-17	44	43	3.9	22	0.53	9.6	<5.0	86,000	164,000	NM	NM
Evaporation Pond	17-Sep-18	<5.0	<5.0	<5.0	<10	<0.25	9.7	<5.0	180,000	295,000	NM	NM

Notes: *NMED Groundwater Screening Level source: Risk Assessment Guidance for Site Investigations & Remediation Vol. I, Table 6-4 (February 2019)
 < Analyte not detected above listed method limit
 NA Not Analyzed

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

Well ID	Date	Benzene (μ g/L)	Toluene (μ g/L)	Ethyl- Benzene (μ g/L)	Total Xylenes (μ g/L)	GRO (mg/L)	DRO (mg/L)	MRO (mg/L)	Chloride (mg/L)	TDS (mg/L)	Barium (mg/L)	Cadmium (mg/L)
Method		8021B	8021B	8021B	8021B	8015D	8015D	8015D	300.0	SM2540C	200.7	200.7
NM WQCC STANDARD		5	1,000	700	620	0.0101*	0.0167*	NE	NE	NE	2	0.005

NE Not Established
 TPH Total Petroleum Hydrocarbons
 GRO Gasoline Range Organics
 DRO Diesel Range Organics
 MRO Motor Oil Range Organics

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

Well ID	Calcium (mg/L)	Chromium (mg/L)	Magnesium (mg/L)	Potassium (mg/L)	Silver (mg/L)	Sodium (mg/L)	Arsenic (mg/L)	Lead (mg/L)	Selenium (mg/L)	Mercury (mg/L)
	200.7	200.7	200.7	200.7	200.7	200.7	200.8	200.8	200.8	245.1
	NE	0.05	NE	NE	50	NE	0.01	0.015	0.05	0.002
MW-1	120	0	57	6	<0.0050	21	0.0037	0.0045	0.0095	<0.00020
MW-1	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
MW-1	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
MW-1	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
MW-1	110	0.018	58	7.1	<0.0050	20	0.0067	0.02	0.0072	<0.00020
MW-1	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
MW-1	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
MW-1	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
MW-1	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
MW-1	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
MW-1	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
MW-1	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
MW-1	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
MW-1	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
MW-1	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
MW-1	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
MW-1	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
MW-1	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
MW-1	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
MW-1	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
MW-1	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
MW-1	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
MW-1	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM

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

Well ID	Calcium (mg/L)	Chromium (mg/L)	Magnesium (mg/L)	Potassium (mg/L)	Silver (mg/L)	Sodium (mg/L)	Arsenic (mg/L)	Lead (mg/L)	Selenium (mg/L)	Mercury (mg/L)
	200.7	200.7	200.7	200.7	200.7	200.7	200.8	200.8	200.8	245.1
	NE	0.05	NE	NE	50	NE	0.01	0.015	0.05	0.002
MW-1	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
MW-1	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
MW-1	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
MW-1	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
MW-1	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
MW-1	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
MW-2	150	0.041	69	10	<0.010	24	0.0053	0.028	0.0062	0.00022
MW-2	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
MW-2	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
MW-2	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
MW-2	110	0.017	55	6.6	<0.0050	21	0.0054	0.016	0.0097	<0.00020
MW-2	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
MW-2	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
MW-2	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
MW-2	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
MW-2	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
MW-2	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
MW-2	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
MW-2	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
MW-2	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
MW-2	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
MW-2	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM

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

Well ID	Calcium (mg/L)	Chromium (mg/L)	Magnesium (mg/L)	Potassium (mg/L)	Silver (mg/L)	Sodium (mg/L)	Arsenic (mg/L)	Lead (mg/L)	Selenium (mg/L)	Mercury (mg/L)
	200.7	200.7	200.7	200.7	200.7	200.7	200.8	200.8	200.8	245.1
	NE	0.05	NE	NE	50	NE	0.01	0.015	0.05	0.002
MW-2	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
MW-2	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
MW-2	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
MW-2	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
MW-2	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
MW-2	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
MW-2	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
MW-2	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
MW-2	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
MW-2	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
MW-2	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
MW-2	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
MW-3	140	0.044	67	9.9	<0.010	22	0.011	0.023	<0.0050	0.00025
MW-3	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
MW-3	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
MW-3	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
MW-3	120	0.031	58	7.6	<0.0050	20	0.0094	0.031	0.0044	<0.00020
MW-3	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
MW-3	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
MW-3	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM

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

[illegible]

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

Well ID	Calcium (mg/L)	Chromium (mg/L)	Magnesium (mg/L)	Potassium (mg/L)	Silver (mg/L)	Sodium (mg/L)	Arsenic (mg/L)	Lead (mg/L)	Selenium (mg/L)	Mercury (mg/L)
	200.7	200.7	200.7	200.7	200.7	200.7	200.8	200.8	200.8	245.1
	NE	0.05	NE	NE	50	NE	0.01	0.015	0.05	0.002
MW-4	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
MW-4	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
MW-4	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
MW-4	110	0.0079	56	5.7	<0.0050	21	0.0024	0.0076	0.0046	<0.00020
MW-4	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
MW-4	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
MW-4	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
MW-4	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
MW-4	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
MW-4	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
MW-4	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
MW-4	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
MW-4	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
MW-4	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
MW-4	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
MW-4	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
MW-4	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
MW-4	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
MW-4	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
MW-4	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
MW-4	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
MW-4	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
MW-4	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
MW-4	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
MW-4	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM

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

Well ID	Calcium (mg/L)	Chromium (mg/L)	Magnesium (mg/L)	Potassium (mg/L)	Silver (mg/L)	Sodium (mg/L)	Arsenic (mg/L)	Lead (mg/L)	Selenium (mg/L)	Mercury (mg/L)
	200.7	200.7	200.7	200.7	200.7	200.7	200.8	200.8	200.8	245.1
	NE	0.05	NE	NE	50	NE	0.01	0.015	0.05	0.002
MW-4	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
MW-4	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
MW-4	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
MW-4	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
MW-4	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
Interstitial Well	5400	<0.30	1,000	1,400	2.8	44,000	NM	NM	NM	<0.00020
Interstitial Well	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
Interstitial Well	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
Interstitial Well	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
Interstitial Well	4900	<0.030	780	1,300	<0.050	46,000	0.41	<0.050	<0.50	<0.00020
Interstitial Well	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
Interstitial Well	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
Interstitial Well	NM	<0.060	NM	NM	<0.050	NM	0.77	<0.050	<0.50	<0.00020
Interstitial Well	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
Interstitial Well	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM

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

Well ID	Calcium (mg/L)	Chromium (mg/L)	Magnesium (mg/L)	Potassium (mg/L)	Silver (mg/L)	Sodium (mg/L)	Arsenic (mg/L)	Lead (mg/L)	Selenium (mg/L)	Mercury (mg/L)
	200.7	200.7	200.7	200.7	200.7	200.7	200.8	200.8	200.8	245.1
	NE	0.05	NE	NE	50	NE	0.01	0.015	0.05	0.002
Interstitial Well	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
Interstitial Well	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
Interstitial Well	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
Interstitial Well	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
Interstitial Well	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
Interstitial Well	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
Evaporation Pond	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
Evaporation Pond	NM	<0.060	NM	NM	<0.050	NM	<0.20	<0.050	<0.50	<0.00020
Evaporation Pond	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
Evaporation Pond	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
Evaporation Pond	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM

Notes: *NMED Groundwater Screening Level source: Risk Assessment Guidance for Site Investigations & Remediation Vol. I, Table 6
 < Analyte not detected above listed method limit
 NA Not Analyzed

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

Well ID	Calcium (mg/L)	Chromium (mg/L)	Magnesium (mg/L)	Potassium (mg/L)	Silver (mg/L)	Sodium (mg/L)	Arsenic (mg/L)	Lead (mg/L)	Selenium (mg/L)	Mercury (mg/L)
	200.7	200.7	200.7	200.7	200.7	200.7	200.8	200.8	200.8	245.1
	NE	0.05	NE	NE	50	NE	0.01	0.015	0.05	0.002

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

<i>Treatment Zone Cell</i>	<i>Date</i>	<i>TPH (mg/kg)</i>	<i>GRO (mg/kg)</i>	<i>DRO (mg/kg)</i>	<i>MRO (mg/kg)</i>	<i>Benzene (mg/kg)</i>	<i>Toluene (mg/kg)</i>	<i>Ethyl-Benzene (mg/kg)</i>	<i>Total Xylenes (mg/kg)</i>	<i>Chloride (mg/kg)</i>
<i>Method</i>		418.1	8015	8015D	8015D	8021B	8021B	8021B	8021B	300.0
NMOCDClosure Action Levels (NMAC 19.15.36.15)		2,500	2,500 GRO/DRO/MRO 500 GRO/DRO			0.2 (Benzene) / 50 (BTEX)				500
Treatment Zone	18-Sep-12	NM	<50	2,800	4,200	<0.50	<0.50	<0.50	<1.0	21
Treatment Zone	06-Dec-12	NM	<5.0	960	3,000	<0.50	<0.50	<0.50	<1.0	31
Treatment Zone	29-Mar-13	NM	<5.0	180	420	<0.050	<0.050	<0.050	<0.10	22
Treatment Zone	01-Jul-13	NM	<5.0	880	1,500	<0.050	<0.050	<0.050	<0.10	8.8
Treatment Zone	09-Oct-13	NM	<5.0	2,700	3,100	<0.050	<0.050	<0.050	<0.10	29
Treatment Zone	31-Mar-14	NM	<2.7	470	1,000	<0.027	<0.027	<0.027	<0.055	<30
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
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

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	8021B	8021B	8021B	300.0
NMOCDClosure Action Levels (NMAC 19.15.36.15)		2,500	2,500 GRO/DRO/MRO 500 GRO/DRO			0.2 (Benzene) / 50 (BTEX)				500
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
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
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

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	8021B	8021B	8021B	300.0
NMOCD Closure Action Levels (NMAC 19.15.36.15)		2,500	2,500 GRO/DRO/MRO 500 GRO/DRO			0.2 (Benzene) / 50 (BTEX)				500
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
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
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

Notes:

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

TABLE 5
VADOSE ZONE SOIL ANALYTICAL RESULTS
BMG Landform, 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	Nitrate mg/kg	Vadose Zone Sample ID	Date	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	Magnesium mg/kg	Vadose Zone Sample ID	Date	Manganese mg/kg	Potassium mg/kg	Selenium mg/kg	Silver mg/kg	Sodium mg/kg	Zinc mg/kg	
Method	418.1	801SD	801SM/D	801SM/D	801B	802B	802B	801B	802B	300.0	300.0	300.0	Method	300.0	7471	6010B	6010B	6010B	6010B	6010B	6010B	6010B	6010B	6010B	6010B	Method	6010B	6010B	6010B	6010B	6010B	6010B		
NMOC Approved Background	20		20		0.05	0.05	0.05	0.01	0.1	25	0.6	0.3	NMOC Approved Background	1.5	0.03	2.5	42	0.1	NA	4.4	3.4	6500	2.1	NA	NMOC Approved Background	140	NA	2.5	0.25	NA	13			
VZ Cell #1	18-Sep-12	NM	<5.0	<10	NM	<0.050	<0.050	<0.050	<0.10	<15	<3.0	14	VZ Cell #1	18-Sep-12	15	<0.033	<12	150	<0.50	5,800	15	NM	NM	5.2	3,600	VZ Cell #1	18-Sep-12	NM	NM	2,900	<12	<1.2	<120	NM
VZ Cell #1	6-Dec-12	NM	<5.0	240	830	<0.050	<0.050	<0.050	<0.10	66	NM	NM	VZ Cell #1	6-Dec-12	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	VZ Cell #1	6-Dec-12	NM	NM	NM	NM	NM	NM	
VZ Cell #1	1-Jul-13	NM	<5.0	<10	<50	<0.050	<0.050	<0.050	<0.10	<7.5	NM	NM	VZ Cell #1	1-Jul-13	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	VZ Cell #1	1-Jul-13	NM	NM	NM	NM	NM	NM	
VZ Cell #1	9-Oct-13	NM	<5.0	<9.9	<49	<0.050	<0.050	<0.050	<0.10	19	2.0	8.2	VZ Cell #1	9-Oct-13	9.1	NM	<12	120	<0.50	5,600	17	NM	NM	5.5	3,300	VZ Cell #1	9-Oct-13	NM	NM	2,400	<12	<1.2	<120	NM
VZ Cell #1	31-Mar-14	21	<3.6	<10	<50	<0.036	<0.036	<0.036	<0.071	<30	NM	NM	VZ Cell #1	31-Mar-14	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	VZ Cell #1	31-Mar-14	NM	NM	NM	NM	NM	NM	
VZ Cell #1A	29-Mar-13	NM	<5.0	<10	<51	<0.050	<0.050	<0.050	<0.10	<7.5	<1.5	8.0	VZ Cell #1A	29-Mar-13	110	NM	<12	86	<0.50	4,700	10	NM	NM	4.4	2,000	VZ Cell #1A	29-Mar-13	NM	NM	1,600	<12	<1.2	<120	NM
Cell #1 S-1	6-May-14	<20	NM	NM	NM	<0.046	<0.046	<0.046	<0.092	<1.5	0.77	1.5	Cell #1 S-1	6-May-14	5.5	<0.032	<5.0	73	<0.20	2,200	5.5	4.1	9,100	2.9	1,500	Cell #1 S-1	6-May-14	260	970	<5.0	<0.50	<50	22	
Cell #1 S-1	1-Oct-14	<20	NM	NM	NM	<0.048	<0.048	<0.048	<0.096	<30	NM	NM	Cell #1 S-1	1-Oct-14	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	Cell #1 S-1	1-Oct-14	NM	NM	NM	NM	NM	NM	
Cell #1 S-1	9-Dec-14	<20	NM	NM	NM	<0.049	<0.049	<0.049	<0.098	<30	NM	NM	Cell #1 S-1	9-Dec-14	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	Cell #1 S-1	9-Dec-14	NM	NM	NM	NM	NM	NM	
Cell #1 S-1	27-Mar-15	<20	NM	NM	NM	<0.048	<0.048	<0.048	<0.095	<30	NM	NM	Cell #1 S-1	27-Mar-15	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	Cell #1 S-1	27-Mar-15	NM	NM	NM	NM	NM	NM	
Cell #1 S-1	24-Jun-15	NM	<4.8	<9.8	<49	<0.048	<0.048	<0.048	<0.097	NM	NM	NM	Cell #1 S-1	24-Jun-15	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	Cell #1 S-1	24-Jun-15	NM	NM	NM	NM	NM	NM	
Cell #1 S-1	24-Sep-15	NM	<4.8	<9.9	<49	<0.048	<0.048	<0.048	<0.097	<1.5	0.51	2.3	Cell #1 S-1	24-Sep-15	4.9	<0.034	<12	56	<0.50	2,000	4.7	NM	NM	3.4	1,300	Cell #1 S-1	24-Sep-15	NM	830	<12	<1.2	<120	NM	
Cell #1 S-1	09-Dec-15	NM	<4.7	<9.7	<48	<0.047	<0.047	<0.047	<0.095	NM	NM	NM	Cell #1 S-1	09-Dec-15	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	Cell #1 S-1	09-Dec-15	NM	NM	NM	NM	NM	NM	
Cell #1 S-1	07-Mar-16	<20	NM	NM	NM	<0.048	<0.048	<0.048	<0.096	180	NM	NM	Cell #1 S-1	07-Mar-16	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	Cell #1 S-1	07-Mar-16	NM	NM	NM	NM	NM	NM	
Cell #1 S-1	16-Jun-16	<20	NM	NM	NM	<0.025	<0.049	<0.049	<0.099	150	NM	NM	Cell #1 S-1	16-Jun-16	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	Cell #1 S-1	16-Jun-16	NM	NM	NM	NM	NM	NM	
Cell #1 S-1	22-Sep-16	NM	<4.6	<9.7	<48	<0.023	<0.046	<0.046	<0.092	140	2.3	3.5	Cell #1 S-1	22-Sep-16	22	<0.033	<4.9	110	<0.20	4,000	13	NM	NM	4.8	2,600	Cell #1 S-1	22-Sep-16	NM	2,100	<4.9	<0.49	88	NM	
Cell #1 S-1	15-Dec-16	NM	<4.8	<10	<50	<0.024	<0.048	<0.048	<0.097	NM	NM	NM	Cell #1 S-1	15-Dec-16	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	Cell #1 S-1	15-Dec-16	NM	NM	NM	NM	NM	NM	
Cell #1 S-1	13-Apr-17	<19	NM	NM	NM	<0.023	<0.046	<0.046	<0.092	100	NM	NM	Cell #1 S-1	13-Apr-17	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	Cell #1 S-1	13-Apr-17	NM	NM	NM	NM	NM	NM	
Cell #1 S-1	22-Jun-17	NM	<4.9	<9.8	<49	NM	NM	NM	NM	NM	NM	NM	Cell #1 S-1	22-Jun-17	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	Cell #1 S-1	22-Jun-17	NM	NM	NM	NM	NM	NM	
Cell #1 S-1	20-Sep-17	NM	<4.6	<9.9	<50	NM	NM	NM	NM	NM	NM	NM	Cell #1 S-1	20-Sep-17	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	Cell #1 S-1	20-Sep-17	NM	NM	NM	NM	NM	NM	
Cell #1 S-1	06-Dec-17	NM	<4.7	<9.2	<46	NM	NM	NM	NM	140	1.8	2.9	Cell #1 S-1	06-Dec-17	37	<0.033	<12	190	<0.50	5,700	18	NM	NM	4.2	3,800	Cell #1 S-1	06-Dec-17	NM	3,500	<12	<1.2	190	NM	
Cell #1 S-1	13-Mar-18	<19	NM	NM	NM	<0.025	<0.050	<0.050	<0.10	630	NM	NM	Cell #1 S-1	13-Mar-18	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	Cell #1 S-1	13-Mar-18	NM	NM	NM	NM	NM	NM	
Cell #1 S-1	24-Jul-18	NM	<4.7	<9.8	<49	<0.023	<0.047	<0.047	<0.093	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	24-Jul-18	NM	NM	NM	NM	NM	NM	
Cell #1 S-1	17-Sep-18	<19	NM	NM	NM	<0.025	<0.050	<0.050	<0.099	370	1.6	5.8	Cell #1 S-1	17-Sep-18	9.6	<0.033	<12	130	<0.20	5,600	14	NM	NM	3.3	3,300	Cell #1 S-1	17-Sep-18	NM	2,600	<12	<1.2	460	NM	
Cell #1 S-1	19-Dec-18	NM	<4.9	<9.8	68	<0.024	<0.049	<0.049	<0.097	NM	NM	NM	Cell #1 S-1	19-Dec-18	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	Cell #1 S-1	19-Dec-18	NM	NM	NM	NM	NM	NM	
Cell #1 S-1	28-Mar-19	<20	NM	NM	NM	<0.024	<0.047	<0.047	<0.095	210	NM	NM	Cell #1 S-1	28-Mar-19	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	Cell #1 S-1	28-Mar-19	NM	NM	NM	NM	NM	NM	
VZ Cell #1B	29-Mar-13	NM	<5.0	12	51	<0.050	<0.050	<0.050	<0.10	<7.5	2.8	<1.5	VZ Cell #1B	29-Mar-13	11	NM	<12	62	<0.50	5,600	13	NM	NM	4.4	2,000	VZ Cell #1B	29-Mar-13	NM	1,800	<12	<1.2	<120	NM	
Cell #1 S-2	6-May-14	<20	NM	NM	NM	<0.047	<0.047	<0.047	<0.094	98	0.96	0.45	Cell #1 S-2	6-May-14	17	<0.033	<12	130	<0.48	6,800	11	10	18,000	5.4	3,000	Cell #1 S-2	6-May-14	430	2,200	<12	<1.2	<120	48	
Cell #1 S-2	1-Oct-14	<20	NM	NM	NM	<0.047	<0.047	<0.047	<0.093	230	NM	NM	Cell #1 S-2	1-Oct-14	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	Cell #1 S-2	1-Oct-14	NM	NM	NM	NM	NM	NM	
Cell #1 S-2	9-Dec-14	<20	NM	NM	NM	<0.049	<0.049	<0.049	<0.098	<30	NM	NM	Cell #1 S-2	9-Dec-14	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	Cell #1 S-2	9-Dec-14	NM	NM	NM	NM	NM	NM	
Cell #1 S-2	27-Mar-15	<20	NM	NM	NM	<0.047	<0.047	<0.047	<0.094	<30	NM	NM	Cell #1 S-2	27-Mar-15	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	Cell #1 S-2	27-Mar-15	NM	NM	NM	NM	NM	NM	
Cell #1 S-2	24-Jun-15	NM	<4.9	<9.7	<49	<0.049	<0.049	<0.049	<0.098	NM	NM	NM	Cell #1 S-2	24-Jun-15	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	Cell #1 S-2	24-Jun-15	NM	NM	NM	NM	NM	NM	
Cell #1 S-2	24-Sep-15	NM	<4.8	<10	<50	<0.048	<0.048	<0.048	<0.097	2.1	1.2	<0.30	Cell #1 S-2	24-Sep-15	17	<0.033	<12	140	<0.50	7,700	9.4	NM	NM	5.7	2,800	Cell #1 S-2	24-Sep-15	NM	1,700	<12	<1.2	<120	NM	
Cell #1 S-2	09-Dec-15	NM	<4.7	<10	<51	<0.047	<0.047	<0.047	<0.095	NM	NM	NM	Cell #1 S-2	09-Dec-15	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	Cell #1 S-2	09-Dec-15	NM	NM	NM	NM	NM	NM	
Cell #1 S-2	07-Mar-16	<19	NM	NM	NM	<0.048	<0.048	<0.048	<0.096	<30	NM	NM	Cell #1 S-2	07-Mar-16	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	Cell #1 S-2	07-Mar-16	NM	NM	NM	NM	NM	NM	
Cell #1 S-2	16-Jun-16	<19	NM	NM	NM	<0.023	<0.047	<0.047	<0.093	<30	NM	NM	Cell #1 S-2	16-Jun-16	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	Cell #1 S-2	16-Jun-16	NM	NM	NM	NM	NM	NM	
Cell #1 S-2	22-Sep-16	NM	<5.0	<9.8	<49	<0.025	<0.050	<0.050	<0.10	99	1.7	4.5	Cell #1 S-2	22-Sep-16	33	<0.033	<5.0	120	<0.20	6,000	13	NM	NM	4.5	2,600	Cell #1 S-2	22-Sep-16	NM	1,800	<5.0	<0.50	56	NM	
Cell #1 S-2	15-Dec-16	NM	<4.7	<10	<50	<0.024	<0.047	<0.047	<0.094	NM	NM	NM	Cell #1 S-2	15-Dec-16	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	Cell #1 S-2	15-Dec-16	NM	NM	NM	NM	NM	NM	
Cell #1 S-2	13-Apr-17	<19	NM	NM	NM	<0.023	<0.046	<0.046	<0.093	<30	NM	NM	Cell #1 S-2	13-Apr-17	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	Cell #1 S-2	13-Apr-17	NM	NM	NM	NM	NM	NM	
Cell #1 S-2	22-Jun-17	NM	<4.7	<9.9	<50	NM	NM	NM	NM	NM	NM	NM	Cell #1 S-2	22-Jun-17	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	Cell #1 S-2	22-Jun-17	NM	NM	NM	NM	NM		

TABLE 5

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	Nitrate mg/kg	Vadose Zone Sample ID	Date	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	Magnesium mg/kg	Vadose Zone Sample ID	Date	Manganese mg/kg	Potassium mg/kg	Selenium mg/kg	Silver mg/kg	Sodium mg/kg	Zinc mg/kg	
Method	418.1	801SD	801SM/D	801SM/D	8021B	8021B	8021B	8021B	8021B	300.0	300.0	300.0	Method	300.0	7471	6010B	6010B	6010B	6010B	6010B	6010B	6010B	6500	6010B	6010B	Method	6010B	6010B	6010B	6010B	6010B	6010B		
NMOCDA Approved Background		20	20		0.05	0.05	0.05	0.1	25	0.6	0.3	NMOCDA Approved Background		1.5	0.03	2.5	42	0.1	NA	4.4	3.4	3.4	6500	2.1	NA	NMOCDA Approved Background		140	NA	2.5	0.25	NA	13	
Cell #1 S-3	24-Jul-18	NM	<4.9	<9.8	<4.9	<0.025	<0.049	<0.049	<0.099	NM	NM	NM	Cell #1 S-3	24-Jul-18	NM	<0.033	<12	120	<0.20	4,400	12	NM	NM	NM	NM	Cell #1 S-3	24-Jul-18	NM	NM	NM	NM	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	10	Cell #1 S-3	17-Sep-18	13	<0.033	<12	120	<0.20	4,400	12	NM	NM	NM	3.9	3,000	Cell #1 S-3	17-Sep-18	NM	NM	2,400	<12	<0.50	130
Cell #1 S-3	19-Dec-18	NM	<4.8	<9.9	<4.9	<0.024	<0.048	<0.048	<0.096	NM	NM	NM	Cell #1 S-3	19-Dec-18	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	Cell #1 S-3	19-Dec-18	NM	NM	NM	NM	NM	NM	
Cell #1 S-3	28-Mar-19	<20	NM	NM	NM	<0.025	<0.049	<0.049	<0.099	<60	NM	NM	Cell #1 S-3	28-Mar-19	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	Cell #1 S-3	28-Mar-19	NM	NM	NM	NM	NM	NM	
VZ Cell #1D	29-Mar-13	NM	<5.0	19	56	<0.050	<0.050	<0.050	<0.10	34	2.1	<1.5	VZ Cell #1D	29-Mar-13	<7.5	NM	<12	56	<0.50	2,300	8.6	NM	NM	4.1	1,300	VZ Cell #1D	29-Mar-13	NM	NM	1,300	<12	<1.2	<120	
Cell #1 S-4	6-May-14	<20	NM	NM	NM	<0.047	<0.047	<0.047	<0.093	280	0.98	3.0	Cell #1 S-4	6-May-14	21	<0.032	<13	110	<0.51	7,900	15	14	19,000	5.1	3,400	Cell #1 S-4	6-May-14	350	2,400	<13	<1.3	220	46	
Cell #1 S-4	1-Oct-14	<20	NM	NM	NM	<0.047	<0.047	<0.047	<0.094	<30	NM	NM	Cell #1 S-4	1-Oct-14	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	Cell #1 S-4	1-Oct-14	NM	NM	NM	NM	NM	NM	
Cell #1 S-4	9-Dec-14	<20	NM	NM	NM	<0.050	<0.050	<0.050	<0.099	110	NM	NM	Cell #1 S-4	9-Dec-14	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	Cell #1 S-4	9-Dec-14	NM	NM	NM	NM	NM	NM	
Cell #1 S-4	27-Mar-15	<20	NM	NM	NM	<0.047	<0.047	<0.047	<0.094	730	NM	NM	Cell #1 S-4	27-Mar-15	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	Cell #1 S-4	27-Mar-15	NM	NM	NM	NM	NM	NM	
Cell #1 S-4	24-Jun-15	NM	<4.8	<9.9	<4.9	<0.048	<0.048	<0.048	<0.097	NM	NM	NM	Cell #1 S-4	24-Jun-15	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	Cell #1 S-4	24-Jun-15	NM	NM	NM	NM	NM	NM	
Cell #1 S-4	24-Sep-15	NM	<4.8	<10	<50	<0.048	<0.048	<0.048	<0.097	120	2.6	5.3	Cell #1 S-4	24-Sep-15	31	<0.032	<12	87	<0.50	6,900	10	NM	NM	4.7	2,100	Cell #1 S-4	24-Sep-15	NM	1,400	<12	<1.2	410	NM	
Cell #1 S-4	09-Dec-15	NM	<4.8	<9.9	<4.9	<0.048	<0.048	<0.048	<0.096	NM	NM	NM	Cell #1 S-4	09-Dec-15	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	Cell #1 S-4	09-Dec-15	NM	NM	NM	NM	NM	NM	
Cell #1 S-4	07-Mar-16	<20	NM	NM	NM	<0.049	<0.049	<0.049	<0.098	<30	NM	NM	Cell #1 S-4	07-Mar-16	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	Cell #1 S-4	07-Mar-16	NM	NM	NM	NM	NM	NM	
Cell #1 S-4	16-Jun-16	<20	NM	NM	NM	<0.023	<0.046	<0.046	<0.092	<30	NM	NM	Cell #1 S-4	16-Jun-16	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	Cell #1 S-4	16-Jun-16	NM	NM	NM	NM	NM	NM	
Cell #1 S-4	22-Sep-16	NM	<4.6	<10	<51	<0.023	<0.046	<0.046	<0.091	<1.5	0.55	1.9	Cell #1 S-4	22-Sep-16	3.3	<0.033	3.1	49	<0.10	5,400	4.0	NM	NM	2.6	1,000	Cell #1 S-4	22-Sep-16	NM	630	<2.5	<0.25	<25	NM	
Cell #1 S-4	15-Dec-16	NM	<4.9	<9.6	<48	<0.024	<0.049	<0.049	<0.097	NM	NM	NM	Cell #1 S-4	15-Dec-16	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	Cell #1 S-4	15-Dec-16	NM	NM	NM	NM	NM	NM	
Cell #1 S-4	13-Apr-17	<19	NM	NM	NM	<0.025	<0.049	<0.049	<0.099	<30	NM	NM	Cell #1 S-4	13-Apr-17	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	Cell #1 S-4	13-Apr-17	NM	NM	NM	NM	NM	NM	
Cell #1 S-4	22-Jun-17	NM	<4.7	<9.8	<49	NM	NM	NM	NM	NM	NM	NM	Cell #1 S-4	22-Jun-17	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	Cell #1 S-4	22-Jun-17	NM	NM	NM	NM	NM	NM	
Cell #1 S-4	20-Sep-17	NM	<4.8	<10	<50	NM	NM	NM	NM	NM	NM	NM	Cell #1 S-4	20-Sep-17	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	Cell #1 S-4	20-Sep-17	NM	NM	NM	NM	NM	NM	
Cell #1 S-4	06-Dec-17	NM	<4.8	<9.6	<48	NM	NM	NM	NM	6.10	0.42	20	Cell #1 S-4	06-Dec-17	8.5	<0.032	5.8	81	<0.098	2,000	5.4	NM	NM	2.6	1,500	Cell #1 S-4	06-Dec-17	NM	1,100	<2.5	<0.25	32	NM	
Cell #1 S-4	13-Mar-18	<19	NM	NM	NM	<0.024	<0.049	<0.049	<0.097	<30	NM	NM	Cell #1 S-4	13-Mar-18	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	Cell #1 S-4	13-Mar-18	NM	NM	NM	NM	NM	NM	
Cell #1 S-4	24-Jul-18	NM	<5.0	<9.8	<49	<0.025	<0.050	<0.050	<0.099	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	24-Jul-18	NM	NM	NM	NM	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	24	Cell #1 S-4	17-Sep-18	28	<0.032	<4.9	78	<0.097	2,500	6.9	NM	NM	2.2	1,900	Cell #1 S-4	17-Sep-18	NM	1,400	<4.9	<0.24	87	NM	
Cell #1 S-4	19-Dec-18	NM	<4.7	<9.6	<48	<0.024	<0.047	<0.047	<0.094	NM	NM	NM	Cell #1 S-4	19-Dec-18	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	Cell #1 S-4	19-Dec-18	NM	NM	NM	NM	NM	NM	
Cell #1 S-4	28-Mar-19	<20	NM	NM	NM	<0.025	<0.049	<0.049	<0.099	<60	NM	NM	Cell #1 S-4	28-Mar-19	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	Cell #1 S-4	28-Mar-19	NM	NM	NM	NM	NM	NM	
VZ Cell #2	18-Sep-12	NM	<5.0	<9.9	NM	<0.050	<0.050	<0.050	<0.10	15	<3.0	<3.0	VZ Cell #2	18-Sep-12	<15	<0.033	<12	90	<0.50	7,000	5.2	NM	NM	2.8	1,200	VZ Cell #2	18-Sep-12	NM	550	<12	<1.2	<120	NM	
VZ Cell #2	6-Dec-12	NM	<5.0	<10	<50	<0.050	<0.050	<0.050	<0.10	<7.5	NM	NM	VZ Cell #2	6-Dec-12	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	VZ Cell #2	6-Dec-12	NM	NM	NM	NM	NM	NM	
VZ Cell #2	29-Mar-13	NM	<5.0	<10	<50	<0.050	<0.050	<0.050	<0.10	<7.5	<1.5	3.3	VZ Cell #2	29-Mar-13	28	0.071	<13	160	<0.50	7,400	10	NM	NM	5.9	2,300	VZ Cell #2	29-Mar-13	NM	1000	<13	<1.2	<120	NM	
VZ Cell #2	1-Jul-13	NM	<5.0	<10	<50	<0.050	<0.050	<0.050	<0.10	<7.5	NM	NM	VZ Cell #2	1-Jul-13	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	VZ Cell #2	1-Jul-13	NM	NM	NM	NM	NM	NM	
VZ Cell #2	9-Oct-13	NM	<5.0	<10	<50	<0.050	<0.050	<0.050	<0.10	1.6	0.85	3.8	VZ Cell #2	9-Oct-13	110	NM	<12	170	<0.50	7,400	10	NM	NM	5.7	2,300	VZ Cell #2	9-Oct-13	NM	1,100	<12	<1.2	<120	NM	
VZ Cell #2	31-Mar-14	<20	<2.8	<9.9	<50	<0.028	<0.028	<0.028	<0.056	<30	NM	NM	VZ Cell #2	31-Mar-14	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	VZ Cell #2	31-Mar-14	NM	NM	NM	NM	NM	NM	
Cell #2 S-1	08-May-14	<20	NM	NM	NM	<0.047	<0.047	<0.047	<0.093	6.2	0.69	5.2	Cell #2 S-1	08-May-14	120	<0.034	<5.1	87	<0.20	2,300	5.2	4.3	11,000	3.0	1,200	Cell #2 S-1	08-May-14	250	970	<5.1	<0.51	<51	22	
Cell #2 S-1	01-Oct-14	<20	NM	NM	NM	<0.047	<0.047	<0.047	<0.095	<30	NM	NM	Cell #2 S-1	01-Oct-14	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	Cell #2 S-1	01-Oct-14	NM	NM	NM	NM	NM	NM	
Cell #2 S-1	09-Dec-14	<20	NM	NM	NM	<0.047	<0.047	<0.047	<0.094	<30	NM	NM	Cell #2 S-1	09-Dec-14	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	Cell #2 S-1	09-Dec-14	NM	NM	NM	NM	NM	NM	
Cell #2 S-1	27-Mar-15	<20	NM	NM	NM	<0.049	<0.049	<0.049	<0.099	<30	NM	NM	Cell #2 S-1	27-Mar-15	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	Cell #2 S-1	27-Mar-15	NM	NM	NM	NM	NM	NM	
Cell #2 S-1	24-Jun-15	NM	<4.9	<10	<50	<0.049	<0.049	<0.049	<0.098	NM	NM	NM	Cell #2 S-1	24-Jun-15	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	Cell #2 S-1	24-Jun-15	NM	NM	NM	NM	NM	NM	
Cell #2 S-1	24-Sep-15	NM	<4.8	<9.9	<49	<0.048	<0.048	<0.048	<0.097	87	0.46	1.2	Cell #2 S-1	24-Sep-15	74	<0.032	<12	120	<0.49	6,100	5.9	NM	NM	4.6	1,600	Cell #2 S-1	24-Sep-15	NM	770	<12	<1.2	140	NM	
Cell #2 S-1	09-Dec-15	NM	<5.0	<10	<50	<0.050	<0.050	<0.050	<0.099	NM	NM	NM	Cell #2 S-1	09-Dec-15	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	Cell #2 S-1	09-Dec-15	NM	NM	NM	NM	NM	NM	
Cell #2 S-1	07-Mar-16	<19	NM	NM	NM	<0.049	<0.049	<0.049	<0.099	<30	NM	NM	Cell #2 S-1	07-Mar-16	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	Cell #2 S-1	07-Mar-16	NM	NM	NM	NM	NM	NM	
Cell #2 S-1	16-Jun-16	<20	NM	NM	NM	<0.025	<0.050	<0.050	<0.099	52	NM	NM	Cell #2 S-1	16-Jun-16	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	Cell #2 S-1	16-Jun-16	NM	NM	NM	NM	NM	NM	
Cell #2 S-1	22-Sep-16	NM	<4.8	<9.8	<49	<0.024	<0.048	<0.048	<0.097	17	1.0	1.1	Cell #2 S-1	22-Sep-16	16	<0.032	2.6	58	<0.099															

TABLE 5
VADOSE ZONE SOIL ANALYTICAL RESULTS
BMG Landform, 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	Nitrate mg/kg	Vadose Zone Sample ID	Date	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	Magnesium mg/kg	Vadose Zone Sample ID	Date	Manganese mg/kg	Potassium mg/kg	Selenium mg/kg	Silver mg/kg	Sodium mg/kg	Zinc mg/kg
Method	418.1	801SD	801SM/D	801SM/D	8021B	8021B	8021B	8021B	8021B	300.0	300.0	300.0	Method	300.0	7471	6010B	6010B	6010B	6010B	6010B	6010B	6010B	6010B	6010B	6010B	Method	6010B	6010B	6010B	6010B	6010B	6010B	
NMOC Approved Background	20		20		0.05	0.05	0.05	0.1	25	0.6	0.3		NMOC Approved Background	1.5	0.03	2.5	42	0.1	NA	4.4	3.4	6500	2.1	NA		NMOC Approved Background	140	NA	2.5	0.25	NA	13	
Cell #2 S-2	22-Jun-17	NM	<4.8	<9.5	<48	NM	NM	NM	NM	NM	NM	NM	Cell #2 S-2	22-Jun-17	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	Cell #2 S-2	22-Jun-17	NM	NM	NM	NM	NM	NM
Cell #2 S-2	20-Sep-17	NM	<4.7	<9.2	<46	NM	NM	NM	NM	NM	NM	NM	Cell #2 S-2	20-Sep-17	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	Cell #2 S-2	20-Sep-17	NM	NM	NM	NM	NM	NM
Cell #2 S-2	06-Dec-17	NM	<4.7	<9.5	<47	NM	NM	NM	NM	32	0.76	1.7	Cell #2 S-2	06-Dec-17	120	<0.032	2.7	100	<0.097	1,700	4.7	NM	2.6	1,200	Cell #2 S-2	06-Dec-17	NM	620	<2.4	<0.24	68	NM	
Cell #2 S-2	13-Mar-18	<19	NM	NM	NM	<0.024	<0.049	<0.049	<0.098	<30	NM	NM	Cell #2 S-2	13-Mar-18	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	Cell #2 S-2	13-Mar-18	NM	NM	NM	NM	NM	NM
Cell #2 S-2	24-Jul-18	NM	<4.6	<9.6	<48	<0.023	<0.046	<0.046	<0.092	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	24-Jul-18	NM	NM	NM	NM	NM	NM
Cell #2 S-2	17-Sep-18	<19	NM	NM	NM	<0.024	<0.049	<0.049	<0.098	12	<1.5	8.2	Cell #2 S-2	17-Sep-18	90	<0.033	<5.0	95	<0.10	1,800	5.0	NM	2.9	1,200	Cell #2 S-2	17-Sep-18	NM	750	<2.5	<0.25	90	NM	
Cell #2 S-2	19-Dec-18	NM	<4.9	<9.6	<48	<0.024	<0.049	<0.049	<0.098	NM	NM	NM	Cell #2 S-2	19-Dec-18	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	Cell #2 S-2	19-Dec-18	NM	NM	NM	NM	NM	NM
Cell #2 S-2	28-Mar-19	<20	NM	NM	NM	<0.024	<0.048	<0.048	<0.096	<59	NM	NM	Cell #2 S-2	28-Mar-19	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	Cell #2 S-2	28-Mar-19	NM	NM	NM	NM	NM	NM
Cell #2 S-3	8-May-14	870	NM	NM	NM	<0.048	<0.048	<0.048	<0.096	15	1.6	<1.5	Cell #2 S-3	8-May-14	160	<0.034	<5.1	59	<0.20	3,200	5.7	5.7	9,800	3.4	1,200	Cell #2 S-3	8-May-14	140	840	<5.0	<0.50	110	21
Cell #2 S-3	1-Oct-14	46	NM	NM	NM	<0.048	<0.048	<0.048	<0.095	<30	NM	NM	Cell #2 S-3	1-Oct-14	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	Cell #2 S-3	1-Oct-14	NM	NM	NM	NM	NM	NM
Cell #2 S-3	9-Dec-14	<20	NM	NM	NM	<0.048	<0.048	<0.048	<0.095	<30	NM	NM	Cell #2 S-3	9-Dec-14	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	Cell #2 S-3	9-Dec-14	NM	NM	NM	NM	NM	NM
Cell #2 S-3	27-Mar-15	<20	NM	NM	NM	<0.047	<0.047	<0.047	<0.093	<30	NM	NM	Cell #2 S-3	27-Mar-15	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	Cell #2 S-3	27-Mar-15	NM	NM	NM	NM	NM	NM
Cell #2 S-3	24-Jun-15	NM	<4.7	<9.7	<48	<0.047	<0.047	<0.047	<0.095	NM	NM	NM	Cell #2 S-3	24-Jun-15	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	Cell #2 S-3	24-Jun-15	NM	NM	NM	NM	NM	NM
Cell #2 S-3	24-Sep-15	NM	<4.8	450	920	<0.048	<0.048	<0.048	<0.097	13	0.99	6.1	Cell #2 S-3	24-Sep-15	130	<0.033	<12	60	<0.49	5,200	5.6	NM	2.9	1,200	Cell #2 S-3	24-Sep-15	NM	820	<12	<1.2	<120	NM	
Cell #2 S-3	09-Dec-15	NM	<4.9	<9.8	<49	<0.049	<0.049	<0.049	<0.099	NM	NM	NM	Cell #2 S-3	09-Dec-15	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	Cell #2 S-3	09-Dec-15	NM	NM	NM	NM	NM	NM
Cell #2 S-3	07-Mar-16	<20	NM	NM	NM	<0.048	<0.048	<0.048	<0.097	<30	NM	NM	Cell #2 S-3	07-Mar-16	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	Cell #2 S-3	07-Mar-16	NM	NM	NM	NM	NM	NM
Cell #2 S-3	16-Jun-16	<20	NM	NM	NM	<0.024	<0.047	<0.047	<0.095	<30	NM	NM	Cell #2 S-3	16-Jun-16	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	Cell #2 S-3	16-Jun-16	NM	NM	NM	NM	NM	NM
Cell #2 S-3	22-Sep-16	NM	<4.7	<9.9	<50	<0.024	<0.047	<0.047	<0.094	13	0.64	5.1	Cell #2 S-3	22-Sep-16	130	<0.032	2.6	86	<0.099	2,500	4.7	NM	2.6	1,200	Cell #2 S-3	22-Sep-16	NM	640	<2.5	<0.25	65	NM	
Cell #2 S-3	15-Dec-16	NM	<5.0	<9.9	<50	<0.025	<0.050	<0.050	<0.099	NM	NM	NM	Cell #2 S-3	15-Dec-16	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	Cell #2 S-3	15-Dec-16	NM	NM	NM	NM	NM	NM
Cell #2 S-3	13-Apr-17	34	NM	NM	NM	<0.023	<0.046	<0.046	<0.092	<30	NM	NM	Cell #2 S-3	13-Apr-17	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	Cell #2 S-3	13-Apr-17	NM	NM	NM	NM	NM	NM
Cell #2 S-3	22-Jun-17	NM	<4.8	<10	<50	NM	NM	NM	NM	NM	NM	NM	Cell #2 S-3	22-Jun-17	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	Cell #2 S-3	22-Jun-17	NM	NM	NM	NM	NM	NM
Cell #2 S-3	20-Sep-17	NM	<4.8	<10	<50	NM	NM	NM	NM	NM	NM	NM	Cell #2 S-3	20-Sep-17	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	Cell #2 S-3	20-Sep-17	NM	NM	NM	NM	NM	NM
Cell #2 S-3	06-Dec-17	NM	<4.8	17	<47	NM	NM	NM	NM	14.0	<0.30	<0.30	Cell #2 S-3	06-Dec-17	34	<0.033	<12	130	<0.50	2,900	9.4	NM	3.1	2,200	Cell #2 S-3	06-Dec-17	NM	1,900	<12	<1.2	<120	NM	
Cell #2 S-3	13-Mar-18	<19	NM	NM	NM	<0.024	<0.049	<0.049	<0.097	<30	NM	NM	Cell #2 S-3	13-Mar-18	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	Cell #2 S-3	13-Mar-18	NM	NM	NM	NM	NM	NM
Cell #2 S-3	24-Jul-18	NM	4.7	<9.4	<47	<0.024	<0.047	<0.047	<0.094	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	24-Jul-18	NM	NM	NM	NM	NM	NM
Cell #2 S-3	17-Sep-18	<20	NM	NM	NM	<0.025	<0.050	<0.050	<0.099	10	<1.5	9.1	Cell #2 S-3	17-Sep-18	8.7	<0.033	<2.5	71	<0.10	1,300	4.4	NM	1.9	990	Cell #2 S-3	17-Sep-18	NM	860	<2.5	<0.25	63	NM	
Cell #2 S-3	19-Dec-18	NM	<4.8	<9.5	<48	<0.024	<0.048	<0.048	<0.096	NM	NM	NM	Cell #2 S-3	19-Dec-18	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	Cell #2 S-3	19-Dec-18	NM	NM	NM	NM	NM	NM
Cell #2 S-3	28-Mar-19	<20	NM	NM	NM	<0.024	<0.048	<0.048	<0.097	<60	NM	NM	Cell #2 S-3	28-Mar-19	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	Cell #2 S-3	28-Mar-19	NM	NM	NM	NM	NM	NM
Cell #2 S-4	8-May-14	<20	NM	NM	NM	<0.047	<0.047	<0.047	<0.094	<7.5	<1.5	18	Cell #2 S-4	8-May-14	9.9	<0.034	<4.9	95	<0.20	2,400	7.6	5.4	15,000	3.5	1,700	Cell #2 S-4	8-May-14	290	1,100	<4.9	<0.49	<49	28
Cell #2 S-4	1-Oct-14	<20	NM	NM	NM	<0.048	<0.048	<0.048	<0.096	<30	NM	NM	Cell #2 S-4	1-Oct-14	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	Cell #2 S-4	1-Oct-14	NM	NM	NM	NM	NM	NM
Cell #2 S-4	9-Dec-14	<20	NM	NM	NM	<0.048	<0.048	<0.048	<0.097	<30	NM	NM	Cell #2 S-4	9-Dec-14	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	Cell #2 S-4	9-Dec-14	NM	NM	NM	NM	NM	NM
Cell #2 S-4	27-Mar-15	<20	NM	NM	NM	<0.048	<0.048	<0.048	<0.096	<30	NM	NM	Cell #2 S-4	27-Mar-15	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	Cell #2 S-4	27-Mar-15	NM	NM	NM	NM	NM	NM
Cell #2 S-4	24-Jun-15	NM	<5.0	<9.8	<49	<0.050	<0.050	<0.050	<0.099	NM	NM	NM	Cell #2 S-4	24-Jun-15	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	Cell #2 S-4	24-Jun-15	NM	NM	NM	NM	NM	NM
Cell #2 S-4	24-Sep-15	NM	<4.8	<9.9	<49	<0.048	<0.048	<0.048	<0.097	14	<1.5	4.0	Cell #2 S-4	24-Sep-15	62	<0.033	<12	120	<0.50	2,900	8.2	NM	4.8	2,100	Cell #2 S-4	24-Sep-15	NM	1,600	<12	<1.2	<120	NM	
Cell #2 S-4	09-Dec-15	NM	<4.9	<9.7	<49	<0.049	<0.049	<0.049	<0.097	NM	NM	NM	Cell #2 S-4	09-Dec-15	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	Cell #2 S-4	09-Dec-15	NM	NM	NM	NM	NM	NM
Cell #2 S-4	07-Mar-16	<20	NM	NM	NM	<0.049	<0.049	<0.049	<0.098	<30	NM	NM	Cell #2 S-4	07-Mar-16	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	Cell #2 S-4	07-Mar-16	NM	NM	NM	NM	NM	NM
Cell #2 S-4	16-Jun-16	<20	NM	NM	NM	<0.023	<0.046	<0.046	<0.092	<30	NM	NM	Cell #2 S-4	16-Jun-16	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	Cell #2 S-4	16-Jun-16	NM	NM	NM	NM	NM	NM
Cell #2 S-4	22-Sep-16	NM	<4.8	<9.2	<46	<0.024	<0.048	<0.048	<0.096	8.2	0.48	21	Cell #2 S-4	22-Sep-16	17	<0.033	2.6	69	<0.099	1,600	6.0	NM	2.7	1,300	Cell #2 S-4	22-Sep-16	NM	1,200	<2.5	<0.25	<25	NM	
Cell #2 S-4	15-Dec-16	NM	<4.7	<9.4	<47	<0.023	<0.047	<0.047	<0.093	NM	NM	NM	Cell #2 S-4	15-Dec-16	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	Cell #2 S-4	15-Dec-16	NM	NM	NM	NM	NM	NM
Cell #2 S-4	13-Apr-17	710	NM	NM	NM	<0.024	<0.048	<0.048	<0.095	<30	NM	NM	Cell #2 S-4	13-Apr-17	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	Cell #2 S-4	13-Apr-17	NM	NM	NM	NM	NM	NM
Cell #2 S-4	22-Jun-17	NM	<4.9	<9.4	<47	NM	NM	NM	NM	NM	NM	NM	Cell #2 S-4	22-Jun-17	NM	NM	NM	NM															

TABLE 5
VAADOSE 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	Nitrate mg/kg	Vadose Zone Sample ID	Date	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	Magnesium mg/kg	Vadose Zone Sample ID	Date	Manganese mg/kg	Potassium mg/kg	Selenium mg/kg	Silver mg/kg	Sodium mg/kg	Zinc mg/kg
Method	418.1												Method	300.0	7471	60108	60108	60108	60108	60108	60108	60108	60108	60108	60108	Method	60108	60108	60108	60108	60108	60108	
NMOC Approved Background	20					0.05	0.05	0.05	0.01	25	0.6	0.3	NMOC Approved Background	1.5	0.03	2.5	42	0.1	NA	4.4	3.4	6500	2.1	NA	NMOC Approved Background	140	NA	NA	2.5	0.25	NA	13	
Cell #3 S-1	22-Sep-16	NM	<4.8	<9.8	<4.9	<0.024	<0.048	<0.048	<0.095	<1.5	0.83	3.3	Cell #3 S-1	22-Sep-16	18	<0.033	4.7	73	<0.098	1,100	4.0	NM	NM	2.5	800	Cell #3 S-1	22-Sep-16	NM	560	<2.5	<0.25	47	NM
Cell #3 S-1	15-Dec-16	NM	<5.0	<9.9	<5.0	<0.025	<0.050	<0.050	<0.10	NM	NM	NM	Cell #3 S-1	15-Dec-16	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	Cell #3 S-1	15-Dec-16	NM	NM	NM	NM	NM	NM
Cell #3 S-1	13-Apr-17	<19	NM	NM	NM	<0.023	<0.046	<0.046	<0.092	<30	13	17	Cell #3 S-1	13-Apr-17	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	Cell #3 S-1	13-Apr-17	NM	NM	NM	NM	NM	NM
Cell #3 S-1	22-Jun-17	NM	<4.9	<9.7	<4.8	NM	NM	NM	NM	NM	NM	NM	Cell #3 S-1	22-Jun-17	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	Cell #3 S-1	22-Jun-17	NM	NM	NM	NM	NM	NM
Cell #3 S-1	20-Sep-17	NM	<4.7	<9.6	<4.8	NM	NM	NM	NM	NM	NM	NM	Cell #3 S-1	20-Sep-17	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	Cell #3 S-1	20-Sep-17	NM	NM	NM	NM	NM	NM
Cell #3 S-1	06-Dec-17	NM	<4.9	<10	<51	NM	NM	NM	NM	3.9	0.51	1.5	Cell #3 S-1	06-Dec-17	10	<0.033	3.2	90	<0.096	1,100	3.3	NM	NM	2.0	820	Cell #3 S-1	06-Dec-17	NM	570	<2.4	<2.4	41	NM
Cell #3 S-1	13-Mar-18	<19	NM	NM	NM	<0.024	<0.048	<0.048	<0.097	<30	NM	NM	Cell #3 S-1	13-Mar-18	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	Cell #3 S-1	13-Mar-18	NM	NM	NM	NM	NM	NM
Cell #3 S-1	24-Jul-18	NM	<4.7	<9.3	<4.6	<0.024	<0.047	<0.047	<0.094	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	24-Jul-18	NM	NM	NM	NM	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	4.6	Cell #3 S-1	17-Sep-18	8.5	<0.033	<2.4	55	<0.097	920	3.4	NM	NM	1.8	820	Cell #3 S-1	17-Sep-18	NM	730	<2.4	<0.24	82	NM
Cell #3 S-1	19-Dec-18	NM	<4.8	<10	<50	<0.024	<0.048	<0.048	<0.097	NM	NM	NM	Cell #3 S-1	19-Dec-18	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	Cell #3 S-1	19-Dec-18	NM	NM	NM	NM	NM	NM
Cell #3 S-1	28-Mar-19	<19	NM	NM	NM	<0.024	<0.048	<0.048	<0.096	<60	NM	NM	Cell #3 S-1	28-Mar-19	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	Cell #3 S-1	28-Mar-19	NM	NM	NM	NM	NM	NM
VZ Cell #3B	29-Mar-13	NM	<5.0	41	60	<0.050	<0.050	<0.050	<0.10	<7.5	3.9	1.6	VZ Cell #3B	29-Mar-13	39	<0.033	<25	160	<1.0	8,100	20	NM	NM	8.0	5,000	VZ Cell #3B	29-Mar-13	NM	3,200	<25	<2.5	<250	NM
Cell #3 S-2	8-May-14	<20	NM	NM	NM	<0.047	<0.047	<0.047	<0.094	20	1.3	10	Cell #3 S-2	8-May-14	32	<0.032	<5.0	65	<0.20	2,100	8.9	7.2	12,000	3.3	1,600	Cell #3 S-2	8-May-14	200	1,400	<5.0	<0.50	<50	26
Cell #3 S-2	1-Oct-14	36	NM	NM	NM	<0.049	<0.049	<0.049	<0.097	<30	NM	NM	Cell #3 S-2	1-Oct-14	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	Cell #3 S-2	1-Oct-14	NM	NM	NM	NM	NM	NM
Cell #3 S-2	3-Dec-14	<20	NM	NM	NM	<0.047	<0.047	<0.047	<0.095	1.7	NM	NM	Cell #3 S-2	3-Dec-14	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	Cell #3 S-2	3-Dec-14	NM	NM	NM	NM	NM	NM
Cell #3 S-2	27-Mar-15	<20	NM	NM	NM	<0.048	<0.048	<0.048	<0.096	<30	NM	NM	Cell #3 S-2	27-Mar-15	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	Cell #3 S-2	27-Mar-15	NM	NM	NM	NM	NM	NM
Cell #3 S-2	24-Jun-15	NM	<5.0	<9.8	<4.9	<0.050	<0.050	<0.050	<0.10	NM	NM	NM	Cell #3 S-2	24-Jun-15	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	Cell #3 S-2	24-Jun-15	NM	NM	NM	NM	NM	NM
Cell #3 S-2	24-Sep-15	NM	<4.8	<9.9	<4.9	<0.048	<0.048	<0.048	<0.096	3.7	2.0	2.8	Cell #3 S-2	24-Sep-15	83	<0.033	<12	80	<0.49	1,900	8.0	NM	3.9	1,700	Cell #3 S-2	24-Sep-15	NM	1,300	<12	<1.2	<120	NM	
Cell #3 S-2	09-Dec-15	NM	<4.8	<9.5	<47	<0.048	<0.048	<0.048	<0.096	NM	NM	NM	Cell #3 S-2	09-Dec-15	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	Cell #3 S-2	09-Dec-15	NM	NM	NM	NM	NM	NM
Cell #3 S-2	07-Mar-16	<20	NM	NM	NM	<0.049	<0.049	<0.049	<0.098	<30	NM	NM	Cell #3 S-2	07-Mar-16	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	Cell #3 S-2	07-Mar-16	NM	NM	NM	NM	NM	NM
Cell #3 S-2	16-Jun-16	<20	NM	NM	NM	<0.024	<0.047	<0.047	<0.095	<30	NM	NM	Cell #3 S-2	16-Jun-16	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	Cell #3 S-2	16-Jun-16	NM	NM	NM	NM	NM	NM
Cell #3 S-2	22-Sep-16	NM	<4.8	<10	<50	<0.024	<0.048	<0.048	<0.096	9.6	<1.5	<1.5	Cell #3 S-2	22-Sep-16	69	<0.032	<2.5	48	<0.099	1,500	7.2	NM	2.9	1,400	Cell #3 S-2	22-Sep-16	NM	1,000	<2.5	<0.25	<25	NM	
Cell #3 S-2	15-Dec-16	NM	<4.8	<9.5	<47	<0.024	<0.048	<0.048	<0.096	NM	NM	NM	Cell #3 S-2	15-Dec-16	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	Cell #3 S-2	15-Dec-16	NM	NM	NM	NM	NM	NM
Cell #3 S-2	13-Apr-17	<18	NM	NM	NM	<0.023	<0.047	<0.047	<0.094	<30	NM	NM	Cell #3 S-2	13-Apr-17	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	Cell #3 S-2	13-Apr-17	NM	NM	NM	NM	NM	NM
Cell #3 S-2	22-Jun-17	NM	<4.8	<10	<50	NM	NM	NM	NM	NM	NM	NM	Cell #3 S-2	22-Jun-17	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	Cell #3 S-2	22-Jun-17	NM	NM	NM	NM	NM	NM
Cell #3 S-2	20-Sep-17	NM	<4.7	<9.8	<49	NM	NM	NM	NM	NM	NM	NM	Cell #3 S-2	20-Sep-17	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	Cell #3 S-2	20-Sep-17	NM	NM	NM	NM	NM	NM
Cell #3 S-2	06-Dec-17	NM	<4.9	<9.7	<48	NM	NM	NM	NM	<7.5	<1.5	<1.5	Cell #3 S-2	06-Dec-17	14	<0.031	<12	90	<0.48	2,400	8.7	NM	3.6	1,900	Cell #3 S-2	06-Dec-17	NM	1,700	<12	<1.2	<120	NM	
Cell #3 S-2	13-Mar-18	<19	NM	NM	NM	<0.024	<0.049	<0.049	<0.097	<30	NM	NM	Cell #3 S-2	13-Mar-18	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	Cell #3 S-2	13-Mar-18	NM	NM	NM	NM	NM	NM
Cell #3 S-2	24-Jul-18	NM	<4.7	<9.2	<46	<0.023	<0.047	<0.047	<0.094	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	24-Jul-18	NM	NM	NM	NM	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	1.9	Cell #3 S-2	17-Sep-18	64	<0.031	<5.0	67	<0.099	2,000	9.8	NM	2.6	1,900	Cell #3 S-2	17-Sep-18	NM	1,700	<5.0	<0.25	100	NM	
Cell #3 S-2	19-Dec-18	NM	<4.7	<9.7	<48	<0.023	<0.047	<0.047	<0.094	NM	NM	NM	Cell #3 S-2	19-Dec-18	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	Cell #3 S-2	19-Dec-18	NM	NM	NM	NM	NM	NM
Cell #3 S-2	28-Mar-19	<19	NM	NM	NM	<0.024	<0.048	<0.048	<0.095	<60	NM	NM	Cell #3 S-2	28-Mar-19	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	Cell #3 S-2	28-Mar-19	NM	NM	NM	NM	NM	NM
VZ Cell #3C	29-Mar-13	NM	<5.0	<10	<50	<0.050	<0.050	<0.050	<0.10	<7.5	3.4	6.5	VZ Cell #3C	29-Mar-13	29	<0.033	<25	140	<1.0	9,400	16	NM	7.9	4,000	VZ Cell #3C	29-Mar-13	NM	2,300	<25	<2.5	<250	NM	
Cell #3 S-3	8-May-14	<20	NM	NM	NM	<0.048	<0.048	<0.048	<0.096	7.6	1.5	9.3	Cell #3 S-3	8-May-14	130	<0.033	<12	160	<0.49	5,200	18	13	23,000	6.2	3,100	Cell #3 S-3	8-May-14	310	2,500	<12	<1.2	<120	53
Cell #3 S-3	1-Oct-14	170	NM	NM	NM	<0.048	<0.048	<0.048	<0.096	<30	NM	NM	Cell #3 S-3	1-Oct-14	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	Cell #3 S-3	1-Oct-14	NM	NM	NM	NM	NM	NM
Cell #3 S-3	3-Dec-14	<20	NM	NM	NM	<0.047	<0.047	<0.047	<0.093	6.1	NM	NM	Cell #3 S-3	3-Dec-14	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	Cell #3 S-3	3-Dec-14	NM	NM	NM	NM	NM	NM
Cell #3 S-3	27-Mar-15	63	NM	NM	NM	<0.050	<0.050	<0.050	<0.10	<30	NM	NM	Cell #3 S-3	27-Mar-15	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	Cell #3 S-3	27-Mar-15	NM	NM	NM	NM	NM	NM
Cell #3 S-3	24-Jun-15	NM	<4.8	<10	<50	<0.048	<0.048	<0.048	<0.096	NM	NM	NM	Cell #3 S-3	24-Jun-15	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	Cell #3 S-3	24-Jun-15	NM	NM	NM	NM	NM	NM
Cell #3 S-3	24-Sep-15	NM	<4.8	<10	<50	<0.048	<0.048	<0.048	<0.097	7.7	0.56	7.0	Cell #3 S-3	24-Sep-15	200	<0.033	<12	150	<0.49	4,000	15	NM	6.6	3,100	Cell #3 S-3	24-Sep-15	NM	2,500	<12	<1.2	<120	NM	
Cell #3 S-3	09-Dec-15	NM	<4.7	<9.9	<49	<0.047	<0.047	<0.047	<0.094	NM	NM	NM	Cell #3 S-3	09-Dec-15	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	Cell #3 S-3	09-Dec-15	NM	NM	NM	NM	NM	NM
Cell #3 S-3	07-Mar-16	5,300	NM	NM	NM	<0.047	<0.047	<0.047	<0.																								

Page 5 of 6

Animas Environmental Services, LLC
 BMG Landfarm Tables 013020

Page 5 of 6

Monitoring and Sampling Report
 March 2, 2020

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	Nitrate mg/kg	Vadose Zone Sample ID	Date	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	Magnesium mg/kg	Vadose Zone Sample ID	Date	Manganese mg/kg	Potassium mg/kg	Selenium mg/kg	Silver mg/kg	Sodium mg/kg	Zinc mg/kg
Method		418.1	8015D	8015M/D	8015M/D	8021B	8021B	8021B	8021B	300.0	300.0	300.0	Method		300.0	7471	6010B	6010B	6010B	6010B	6010B	6010B	6010B	6010B	6010B	Method		6010B	6010B	6010B	6010B	6010B	6010B
NMOCD Approved Background		20			20	0.05	0.05	0.05	0.1	25	0.6	0.3	NMOCD Approved Background		1.5	0.03	2.5		0.1	NA	4.4	3.4	6500	2.1	NA	NMOCD Approved Background		140	NA	2.5	0.25	NA	13
Cell #4 S-3	07-Mar-16	<20	NM	NM	NM	<0.048	<0.048	<0.048	<0.096	<30	NM	NM	Cell #4 S-3	07-Mar-16	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	Cell #4 S-3	07-Mar-16	NM	NM	NM	NM	NM	NM
Cell #4 S-3	16-Jun-16	<19	NM	NM	NM	<0.024	<0.048	<0.048	<0.096	<30	NM	NM	Cell #4 S-3	16-Jun-16	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	Cell #4 S-3	16-Jun-16	NM	NM	NM	NM	NM	NM
Cell #4 S-3	22-Sep-16	NM	<5.0	<9.5	<48	<0.025	<0.050	<0.050	<0.10	<7.5	3.5	4.1	Cell #4 S-3	22-Sep-16	<7.5	<0.033	<5.0	78	<0.20	2,700	12	NM	NM	5.1	1,600	Cell #4 S-3	22-Sep-16	NM	1,400	<5.0	<0.50	<50	NM
Cell #4 S-3	15-Dec-16	NM	<5.0	<9.5	<48	<0.025	<0.050	<0.050	<0.099	NM	NM	NM	Cell #4 S-3	15-Dec-16	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	Cell #4 S-3	15-Dec-16	NM	NM	NM	NM	NM	NM
Cell #4 S-3	13-Apr-17	<19	NM	NM	NM	<0.024	<0.049	<0.049	<0.097	<30	NM	NM	Cell #4 S-3	13-Apr-17	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	Cell #4 S-3	13-Apr-17	NM	NM	NM	NM	NM	NM
Cell #4 S-3	22-Jun-17	NM	<5.0	<9.8	<49	NM	NM	NM	NM	NM	NM	NM	Cell #4 S-3	22-Jun-17	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	Cell #4 S-3	22-Jun-17	NM	NM	NM	NM	NM	NM
Cell #4 S-3	20-Sep-17	NM	<4.7	<9.3	<47	NM	NM	NM	NM	NM	NM	NM	Cell #4 S-3	20-Sep-17	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	Cell #4 S-3	20-Sep-17	NM	NM	NM	NM	NM	NM
Cell #4 S-3	06-Dec-17	NM	<4.6	<9.6	<48	NM	NM	NM	NM	<7.5	<1.5	15	Cell #4 S-3	06-Dec-17	<7.5	<0.031	<12	110	<0.49	2,500	17	NM	NM	5.4	2,300	Cell #4 S-3	06-Dec-17	NM	2,200	<12	<1.2	<120	NM
Cell #4 S-3	13-Mar-18	<20	NM	NM	NM	<0.023	<0.047	<0.047	<0.093	<30	NM	NM	Cell #4 S-3	13-Mar-18	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	Cell #4 S-3	13-Mar-18	NM	NM	NM	NM	NM	NM
Cell #4 S-3	24-Jul-18	NM	<4.8	<9.2	<46	<0.024	<0.048	<0.048	<0.097	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	24-Jul-18	NM	NM	NM	NM	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	7.4	Cell #4 S-3	17-Sep-18	11	<0.032	<12	95	<0.19	5,500	15	NM	NM	5.1	2,200	Cell #4 S-3	17-Sep-18	NM	1,800	<4.8	<0.48	130	NM
Cell #4 S-3	19-Dec-18	NM	<4.7	<9.7	<49	<0.024	<0.047	<0.047	<0.094	NM	NM	NM	Cell #4 S-3	19-Dec-18	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	Cell #4 S-3	19-Dec-18	NM	NM	NM	NM	NM	NM
Cell #4 S-3	28-Mar-19	<19	NM	NM	NM	<0.024	<0.048	<0.048	<0.097	<60	NM	NM	Cell #4 S-3	28-Mar-19	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	Cell #4 S-3	28-Mar-19	NM	NM	NM	NM	NM	NM
Cell #4 S-4	6-May-14	<20	NM	NM	NM	<0.048	<0.048	<0.048	<0.096	<7.5	<1.5	<1.5	Cell #4 S-4	6-May-14	7.9	<0.034	<5.0	77	<0.20	1,700	10	8.0	16,000	4.0	1,400	Cell #4 S-4	6-May-14	190	1,400	<5.0	<0.50	<50	27
Cell #4 S-4	1-Oct-14	<20	NM	NM	NM	<0.048	<0.048	<0.048	<0.097	<30	NM	NM	Cell #4 S-4	1-Oct-14	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	Cell #4 S-4	1-Oct-14	NM	NM	NM	NM	NM	NM
Cell #4 S-4	3-Dec-14	<20	NM	NM	NM	<0.049	<0.049	<0.049	<0.098	4.1	NM	NM	Cell #4 S-4	3-Dec-14	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	Cell #4 S-4	3-Dec-14	NM	NM	NM	NM	NM	NM
Cell #4 S-4	27-Mar-15	<20	NM	NM	NM	<0.048	<0.048	<0.048	<0.096	<30	NM	NM	Cell #4 S-4	27-Mar-15	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	Cell #4 S-4	27-Mar-15	NM	NM	NM	NM	NM	NM
Cell #4 S-4	24-Jun-15	NM	<4.8	<9.6	<48	<0.048	<0.048	<0.048	<0.096	NM	NM	NM	Cell #4 S-4	24-Jun-15	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	Cell #4 S-4	24-Jun-15	NM	NM	NM	NM	NM	NM
Cell #4 S-4	24-Sep-15	NM	<4.8	<9.8	<49	<0.048	<0.048	<0.048	<0.097	2.7	0.84	1.6	Cell #4 S-4	24-Sep-15	4.5	<0.033	<12	73	<0.49	1,600	9.9	NM	NM	4.3	1,400	Cell #4 S-4	24-Sep-15	NM	1,500	<12	<1.2	<120	NM
Cell #4 S-4	09-Dec-15	NM	<4.9	<10	<50	<0.049	<0.049	<0.049	<0.098	NM	NM	NM	Cell #4 S-4	09-Dec-15	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	Cell #4 S-4	09-Dec-15	NM	NM	NM	NM	NM	NM
Cell #4 S-4	07-Mar-16	<20	NM	NM	NM	<0.046	<0.046	<0.046	<0.092	<30	NM	NM	Cell #4 S-4	07-Mar-16	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	Cell #4 S-4	07-Mar-16	NM	NM	NM	NM	NM	NM
Cell #4 S-4	16-Jun-16	<19	NM	NM	NM	<0.023	<0.046	<0.046	<0.093	<30	NM	NM	Cell #4 S-4	16-Jun-16	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	Cell #4 S-4	16-Jun-16	NM	NM	NM	NM	NM	NM
Cell #4 S-4	22-Sep-16	NM	<4.6	<9.9	<49	<0.023	<0.046	<0.046	<0.092	<7.5	<1.5	<1.5	Cell #4 S-4	22-Sep-16	<7.5	<0.033	<4.9	83	<0.20	2,200	12	NM	NM	5.2	2,000	Cell #4 S-4	22-Sep-16	NM	1,400	<4.9	<0.49	<49	NM
Cell #4 S-4	15-Dec-16	NM	<4.7	<9.7	<49	<0.023	<0.047	<0.047	<0.094	NM	NM	NM	Cell #4 S-4	15-Dec-16	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	Cell #4 S-4	15-Dec-16	NM	NM	NM	NM	NM	NM
Cell #4 S-4	13-Apr-17	<19	NM	NM	NM	<0.025	<0.050	<0.050	<0.099	<30	NM	NM	Cell #4 S-4	13-Apr-17	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	Cell #4 S-4	13-Apr-17	NM	NM	NM	NM	NM	NM
Cell #4 S-4	22-Jun-17	NM	<4.7	<9.4	<47	NM	NM	NM	NM	NM	NM	NM	Cell #4 S-4	22-Jun-17	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	Cell #4 S-4	22-Jun-17	NM	NM	NM	NM	NM	NM
Cell #4 S-4	20-Sep-17	NM	<4.6	<9.8	<49	NM	NM	NM	NM	NM	NM	NM	Cell #4 S-4	20-Sep-17	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	Cell #4 S-4	20-Sep-17	NM	NM	NM	NM	NM	NM
Cell #4 S-4	06-Dec-17	NM	<4.9	<9.3	<46	NM	NM	NM	NM	NM	NM	NM	Cell #4 S-4	06-Dec-17	NM	<0.031	<12	110	<0.50	9,900	15	NM	NM	7.1	2,500	Cell #4 S-4	06-Dec-17	NM	1,900	<12	<1.2	<120	NM
Cell #4 S-4	13-Mar-18	<20	NM	NM	NM	<0.025	<0.049	<0.049	<0.098	<30	NM	NM	Cell #4 S-4	13-Mar-18	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	Cell #4 S-4	13-Mar-18	NM	NM	NM	NM	NM	NM
Cell #4 S-4	24-Jul-18	NM	<4.8	<9.6	<48	<0.024	<0.048	<0.048	<0.096	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	24-Jul-18	NM	NM	NM	NM	NM	NM
Cell #4 S-4	17-Sep-18	<19	NM	NM	NM	<0.024	<0.049	<0.049	<0.098	12	3.7	3.7	Cell #4 S-4	17-Sep-18	24	<0.032	<5.0	170	<0.20	5,300	16	NM	NM	4.5	2,300	Cell #4 S-4	17-Sep-18	NM	2,200	<5.0	<0.50	120	NM
Cell #4 S-4	19-Dec-18	NM	<4.7	<9.9	<49	<0.023	<0.047	<0.047	<0.093	NM	NM	NM	Cell #4 S-4	19-Dec-18	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	Cell #4 S-4	19-Dec-18	NM	NM	NM	NM	NM	NM
Cell #4 S-4	28-Mar-19	<20	NM	NM	NM	<0.023	<0.046	<0.046	<0.092	<60	NM	NM	Cell #4 S-4	28-Mar-19	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	Cell #4 S-4	28-Mar-19	NM	NM	NM	NM	NM	NM

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

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

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



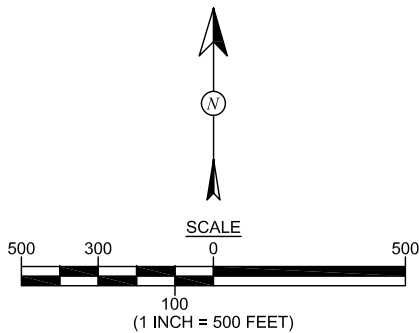
FIGURE 1

**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

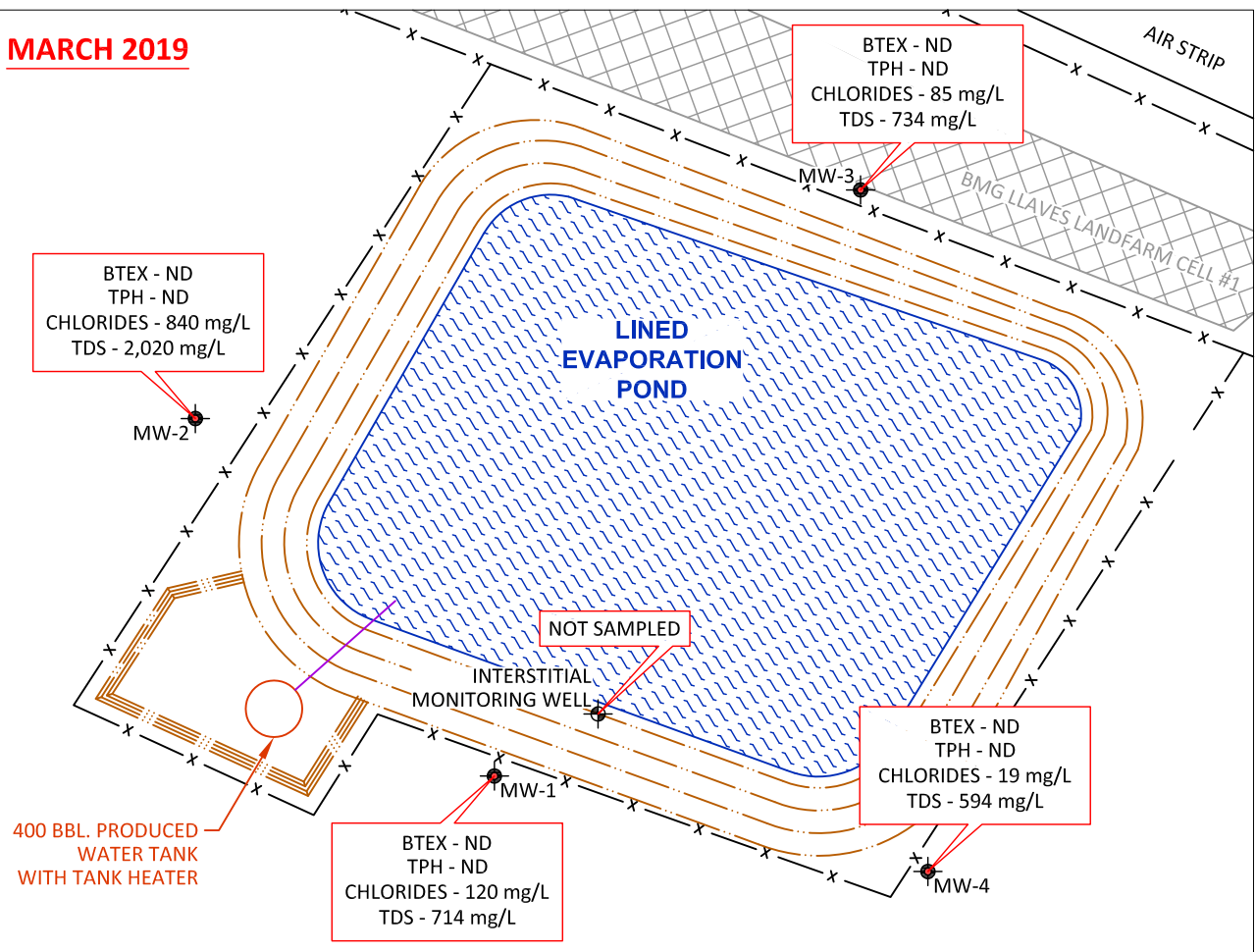


DRAWN BY: C. Lameman	DATE DRAWN: November 15, 2018
REVISIONS BY: C. Lameman	DATE REVISED: February 28, 2020
CHECKED BY: D. Reese	DATE CHECKED: February 28, 2020
APPROVED BY: E. McNally	DATE APPROVED: February 28, 2020

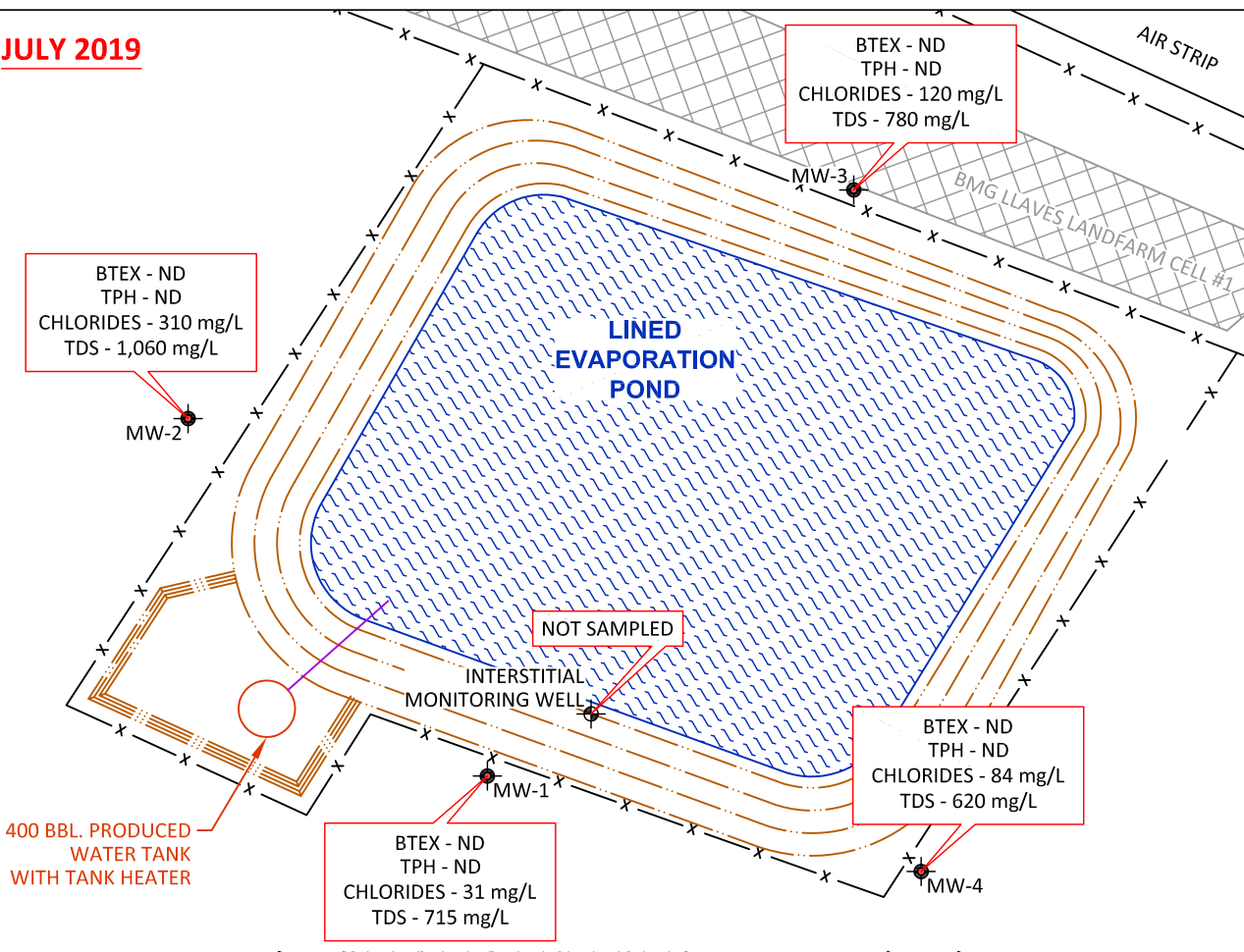
LEGEND
● DECEMBER 2014 SAMPLE LOCATIONS



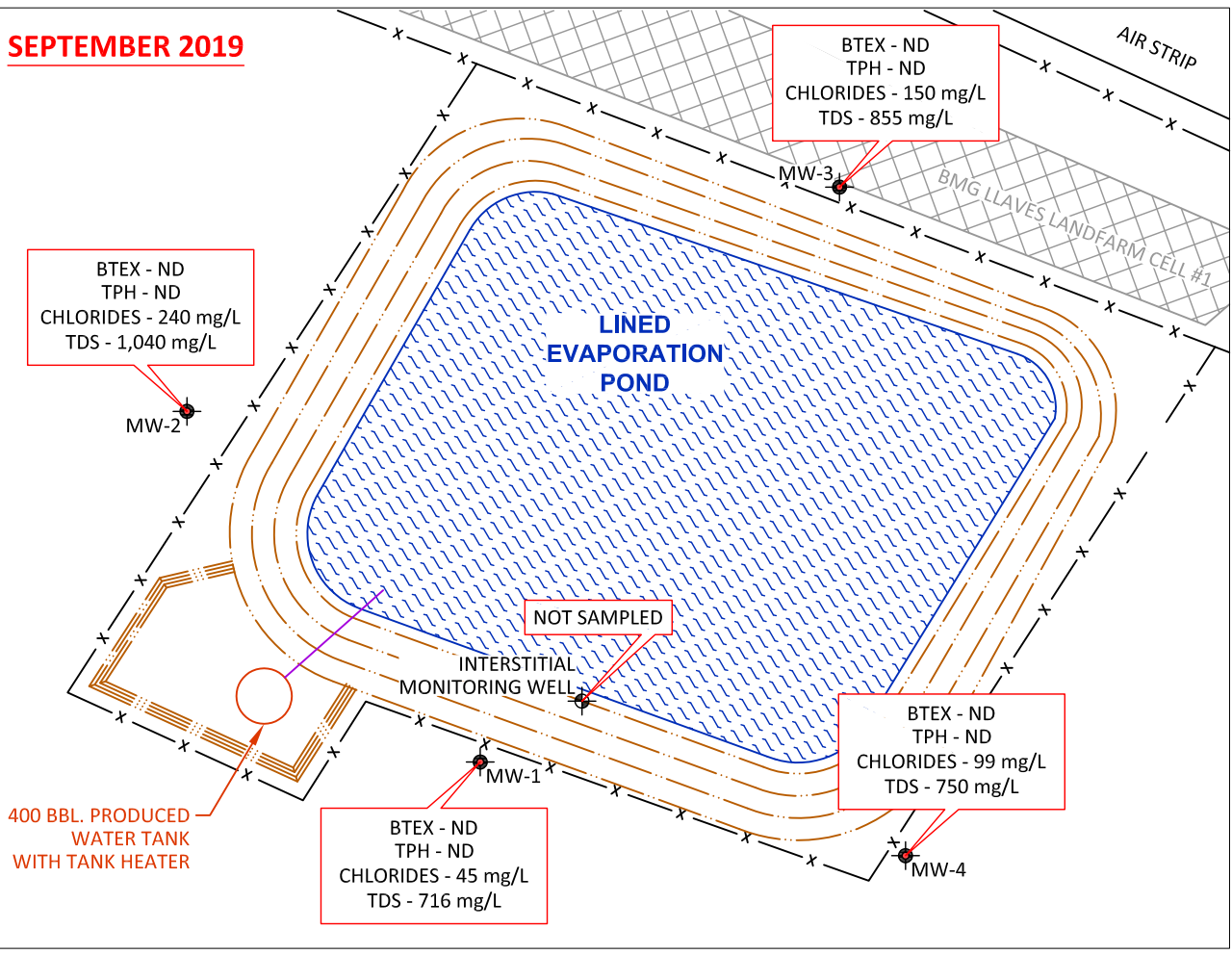
MARCH 2019



JULY 2019



SEPTEMBER 2019



JANUARY 2020

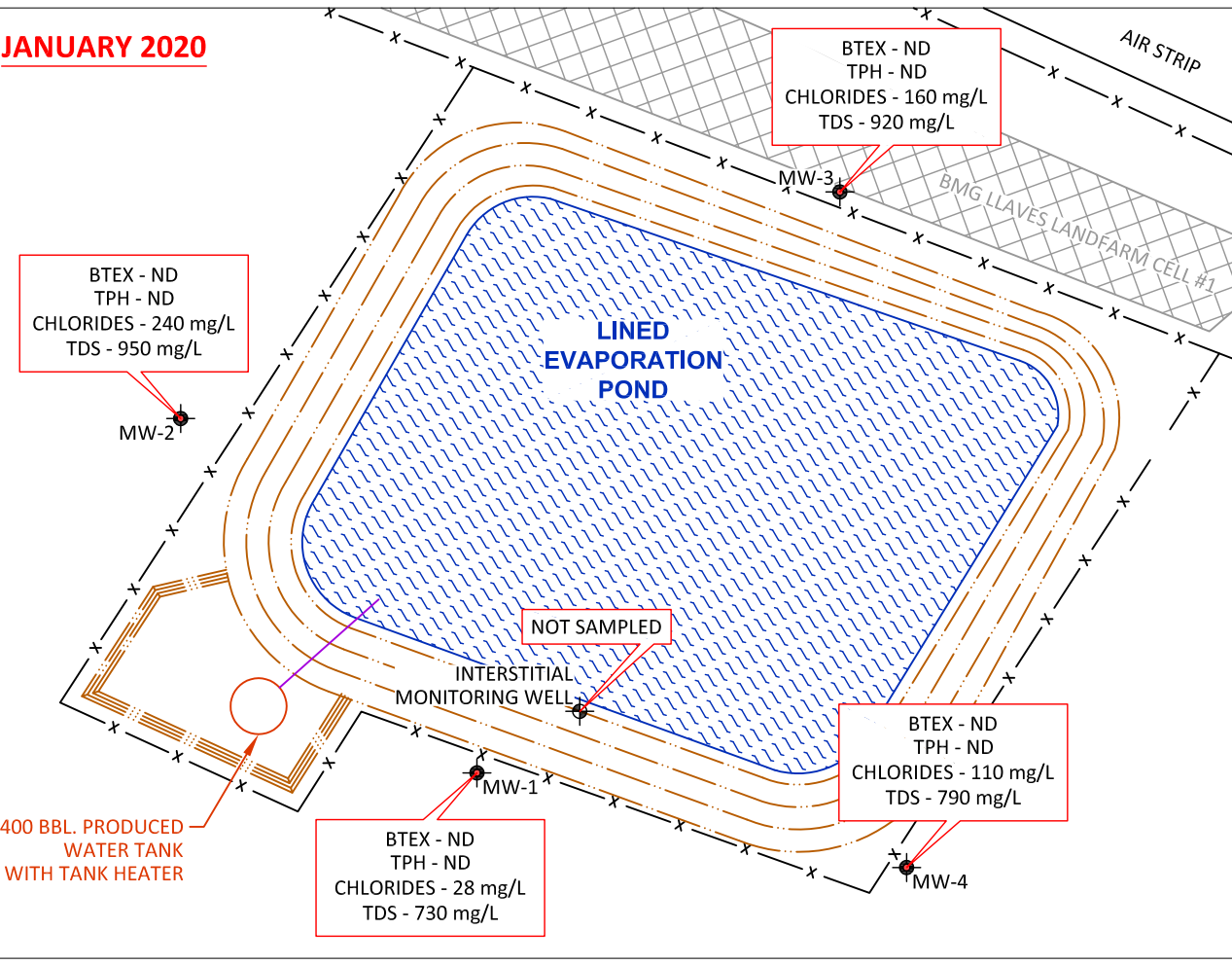


FIGURE 2

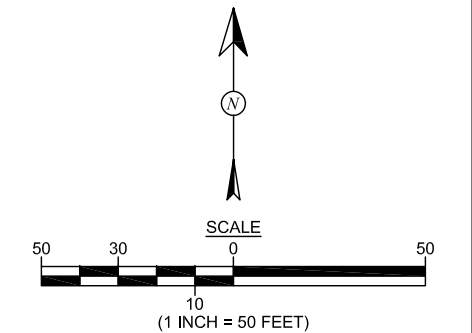
BENSON-MONTIN-GREER
CENTRALIZED SURFACE WASTE
MANAGEMENT FACILITY EVAPORATION POND
AND MONITOR WELL LOCATIONS
2019 CONCENTRATIONS
NW¼ NW¼, SECTION 20, T25N, R1E
LLAVES, RIO ARriba COUNTY, NEW MEXICO



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	
— 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 28,
JULY 3, SEPTEMBER 30, 2019 AND JANUARY 30,
2020. ALL SAMPLES ANALYZED PER EPA METHOD
8015B, 8021B, SM 2540C, AND 300.0.



TREATMENT ZONE MONITORING LOCATIONS, MARCH 2019							
SAMPLE ID	SAMPLE LOCATION	SAMPLE DATE	SAMPLE DEPTH (ft)	GRO (mg/kg)	DRO (mg/kg)	MRO (mg/kg)	CHLORIDE (mg/kg)
TZ-Cell #1	CELL #1	NO SAMPLES					
TZ-Cell #2	CELL #2	28-Mar-19	0.5	<4.6	190	370	<60
TZ-Cell #3	CELL #3	28-Mar-19	0.5	<4.7	48	98	<60
TZ-Cell #4	CELL #4	NO SAMPLES					
ALL SAMPLES WERE COMPOSITE SAMPLES.							

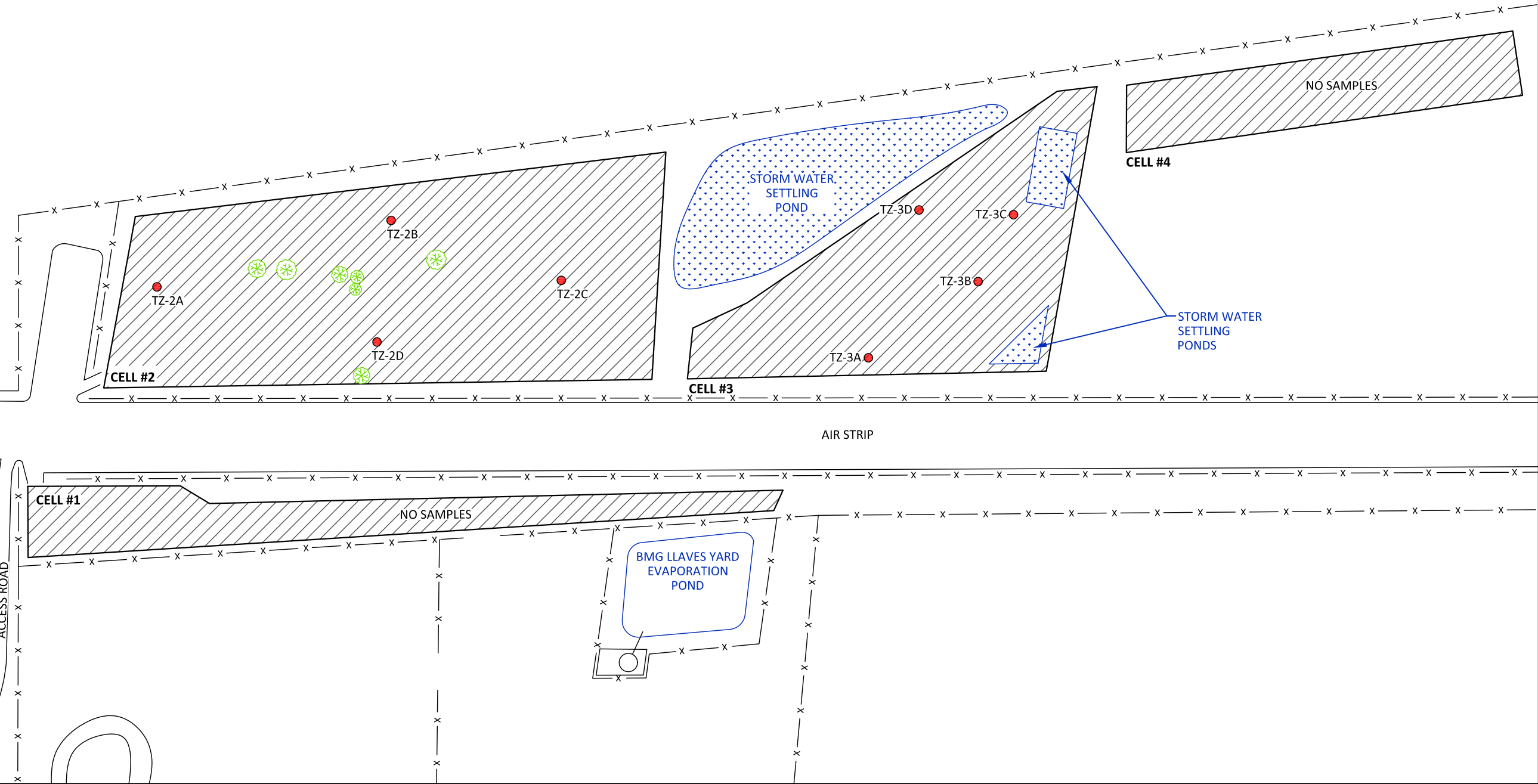


FIGURE 3

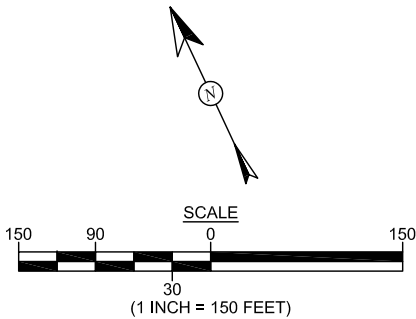
**BENSON-MONTIN-GREER
TREATMENT ZONE MONITORING
LOCATIONS AND RESULTS
2019**
NW¼ NW¼, SECTION 20, T25N, R12E
LLAVES, RIO ARriba COUNTY, NEW MEXICO

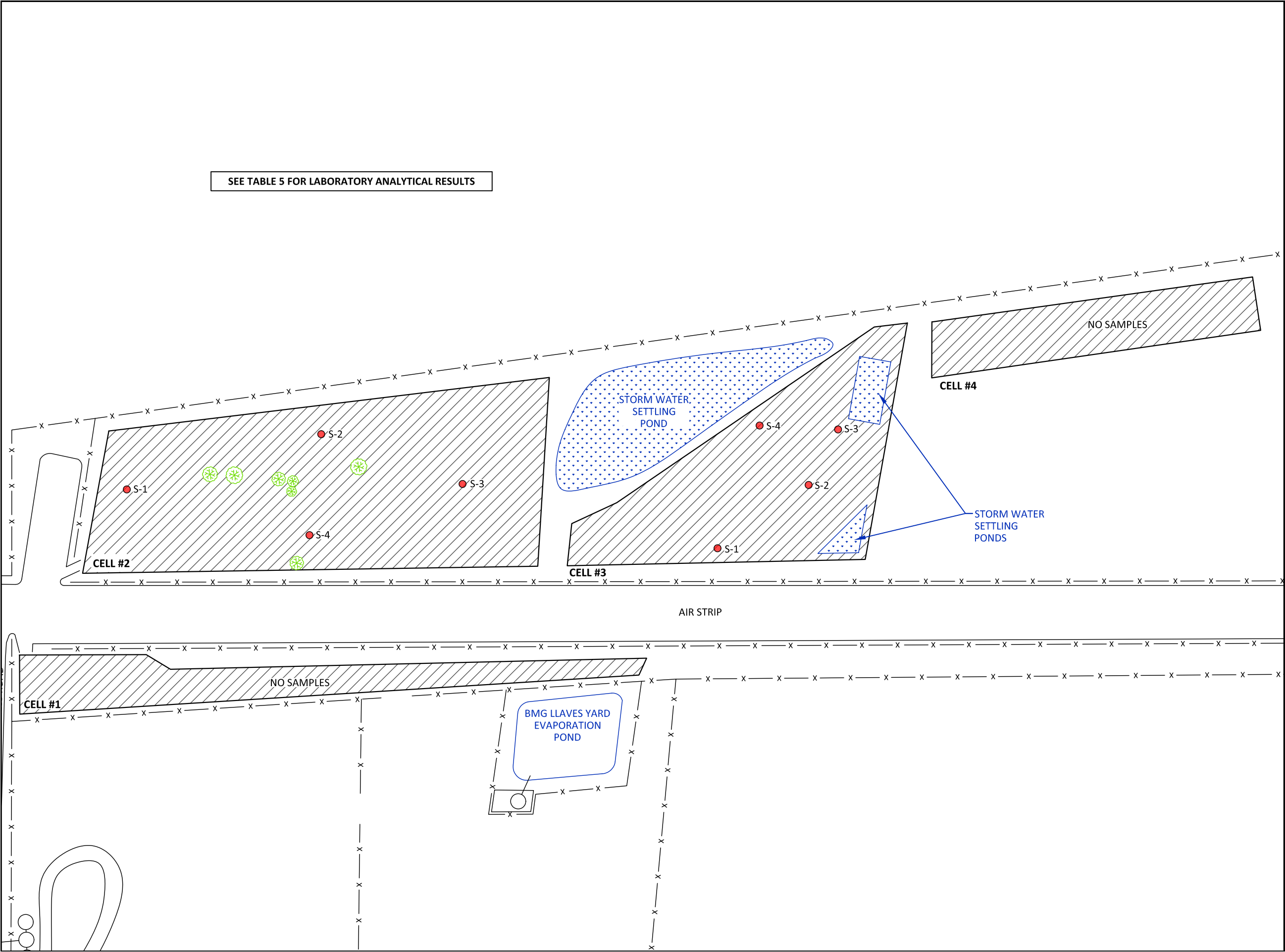


DRAWN BY: C. Lameman	DATE DRAWN: January 11, 2013
REVISIONS BY: C. Lameman	DATE REVISED: February 28, 2020
CHECKED BY: D. Reese	DATE CHECKED: February 28, 2020
APPROVED BY: E. McNally	DATE APPROVED: February 28, 2020

LEGEND

- MARCH 2019 SAMPLE LOCATIONS





SEE TABLE 5 FOR LABORATORY ANALYTICAL RESULTS

FIGURE 4

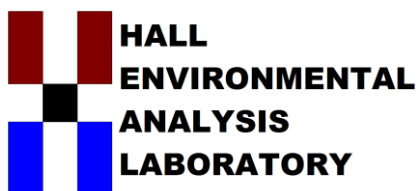
**BENSON-MONTIN-GREER
VADOSE ZONE MONITORING
LOCATIONS, 2019**
NW¼ NW¼, SECTION 20, T25N, R12E
LLAVES, RIO ARriba COUNTY, NEW MEXICO



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

● MARCH 2019 SAMPLE LOCATIONS



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

February 11, 2020

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

RE: BMG Landfarm

OrderNo.: 2001C36

Dear Elizabeth McNally:

Hall Environmental Analysis Laboratory received 5 sample(s) on 1/31/2020 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,

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

Andy Freeman
Laboratory Manager
4901 Hawkins NE
Albuquerque, NM 87109

Analytical Report

Lab Order 2001C36

Date Reported: 2/11/2020

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Animas Environmental

Client Sample ID: MW-1

Project: BMG Landfarm

Collection Date: 1/30/2020 1:18:00 PM

Lab ID: 2001C36-001

Matrix: AQUEOUS

Received Date: 1/31/2020 7:48:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: MRA
Chloride	28	5.0		mg/L	10	2/3/2020 8:51:53 PM	A66263
SM2540C MOD: TOTAL DISSOLVED SOLIDS							Analyst: KS
Total Dissolved Solids	730	100	*D	mg/L	1	2/7/2020 12:27:00 PM	50264
EPA METHOD 8015M/D: DIESEL RANGE							Analyst: CLP
Diesel Range Organics (DRO)	ND	1.0		mg/L	1	2/3/2020 2:54:59 PM	50201
Motor Oil Range Organics (MRO)	ND	5.0		mg/L	1	2/3/2020 2:54:59 PM	50201
Surr: DNOP	121	70-130		%Rec	1	2/3/2020 2:54:59 PM	50201
EPA METHOD 8015D: GASOLINE RANGE							Analyst: RAA
Gasoline Range Organics (GRO)	ND	0.050		mg/L	1	2/6/2020 1:47:20 PM	G66356
Surr: BFB	79.8	67.5-110		%Rec	1	2/6/2020 1:47:20 PM	G66356
EPA METHOD 8021B: VOLATILES							Analyst: RAA
Benzene	ND	1.0		µg/L	1	2/6/2020 1:47:20 PM	B66356
Toluene	ND	1.0		µg/L	1	2/6/2020 1:47:20 PM	B66356
Ethylbenzene	ND	1.0		µg/L	1	2/6/2020 1:47:20 PM	B66356
Xylenes, Total	ND	2.0		µg/L	1	2/6/2020 1:47:20 PM	B66356
Surr: 4-Bromofluorobenzene	86.7	80-120		%Rec	1	2/6/2020 1:47:20 PM	B66356

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 Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

Page 1 of 10

Analytical Report

Lab Order 2001C36

Date Reported: 2/11/2020

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Animas Environmental

Client Sample ID: MW-2

Project: BMG Landfarm

Collection Date: 1/30/2020 12:29:00 PM

Lab ID: 2001C36-002

Matrix: AQUEOUS

Received Date: 1/31/2020 7:48:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: MRA
Chloride	240	50		mg/L	100	2/3/2020 9:56:16 PM	A66263
SM2540C MOD: TOTAL DISSOLVED SOLIDS							Analyst: KS
Total Dissolved Solids	950	100	*D	mg/L	1	2/7/2020 12:27:00 PM	50264
EPA METHOD 8015M/D: DIESEL RANGE							Analyst: CLP
Diesel Range Organics (DRO)	ND	1.0		mg/L	1	2/3/2020 3:04:21 PM	50201
Motor Oil Range Organics (MRO)	ND	5.0		mg/L	1	2/3/2020 3:04:21 PM	50201
Surr: DNOP	106	70-130		%Rec	1	2/3/2020 3:04:21 PM	50201
EPA METHOD 8015D: GASOLINE RANGE							Analyst: RAA
Gasoline Range Organics (GRO)	ND	0.050		mg/L	1	2/6/2020 2:10:55 PM	G66356
Surr: BFB	80.3	67.5-110		%Rec	1	2/6/2020 2:10:55 PM	G66356
EPA METHOD 8021B: VOLATILES							Analyst: RAA
Benzene	ND	1.0		µg/L	1	2/6/2020 2:10:55 PM	B66356
Toluene	ND	1.0		µg/L	1	2/6/2020 2:10:55 PM	B66356
Ethylbenzene	ND	1.0		µg/L	1	2/6/2020 2:10:55 PM	B66356
Xylenes, Total	ND	2.0		µg/L	1	2/6/2020 2:10:55 PM	B66356
Surr: 4-Bromofluorobenzene	88.1	80-120		%Rec	1	2/6/2020 2:10:55 PM	B66356

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 Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

Page 2 of 10

Analytical Report

Lab Order 2001C36

Date Reported: 2/11/2020

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Animas Environmental

Client Sample ID: MW-3

Project: BMG Landfarm

Collection Date: 1/30/2020 11:45:00 AM

Lab ID: 2001C36-003

Matrix: AQUEOUS

Received Date: 1/31/2020 7:48:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: MRA
Chloride	160	5.0		mg/L	10	2/3/2020 10:09:08 PM	A66263
SM2540C MOD: TOTAL DISSOLVED SOLIDS							Analyst: KS
Total Dissolved Solids	920	100	*D	mg/L	1	2/7/2020 12:27:00 PM	50264
EPA METHOD 8015M/D: DIESEL RANGE							Analyst: CLP
Diesel Range Organics (DRO)	ND	1.0		mg/L	1	2/3/2020 3:13:43 PM	50201
Motor Oil Range Organics (MRO)	ND	5.0		mg/L	1	2/3/2020 3:13:43 PM	50201
Surr: DNOP	127	70-130		%Rec	1	2/3/2020 3:13:43 PM	50201
EPA METHOD 8015D: GASOLINE RANGE							Analyst: RAA
Gasoline Range Organics (GRO)	ND	0.050		mg/L	1	2/6/2020 2:34:32 PM	G66356
Surr: BFB	82.8	67.5-110		%Rec	1	2/6/2020 2:34:32 PM	G66356
EPA METHOD 8021B: VOLATILES							Analyst: RAA
Benzene	ND	1.0		µg/L	1	2/6/2020 2:34:32 PM	B66356
Toluene	ND	1.0		µg/L	1	2/6/2020 2:34:32 PM	B66356
Ethylbenzene	ND	1.0		µg/L	1	2/6/2020 2:34:32 PM	B66356
Xylenes, Total	ND	2.0		µg/L	1	2/6/2020 2:34:32 PM	B66356
Surr: 4-Bromofluorobenzene	91.5	80-120		%Rec	1	2/6/2020 2:34:32 PM	B66356

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 Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

Page 3 of 10

Analytical Report

Lab Order 2001C36

Date Reported: 2/11/2020

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Animas Environmental

Client Sample ID: MW-4

Project: BMG Landfarm

Collection Date: 1/30/2020 10:55:00 AM

Lab ID: 2001C36-004

Matrix: AQUEOUS

Received Date: 1/31/2020 7:48:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: MRA
Chloride	110	5.0		mg/L	10	2/3/2020 10:34:51 PM	A66263
SM2540C MOD: TOTAL DISSOLVED SOLIDS							Analyst: KS
Total Dissolved Solids	790	200	*D	mg/L	1	2/7/2020 12:27:00 PM	50264
EPA METHOD 8015M/D: DIESEL RANGE							Analyst: CLP
Diesel Range Organics (DRO)	ND	1.0		mg/L	1	2/3/2020 3:23:06 PM	50201
Motor Oil Range Organics (MRO)	ND	5.0		mg/L	1	2/3/2020 3:23:06 PM	50201
Surr: DNOP	104	70-130		%Rec	1	2/3/2020 3:23:06 PM	50201
EPA METHOD 8015D: GASOLINE RANGE							Analyst: RAA
Gasoline Range Organics (GRO)	ND	0.050		mg/L	1	2/6/2020 2:58:03 PM	G66356
Surr: BFB	86.7	67.5-110		%Rec	1	2/6/2020 2:58:03 PM	G66356
EPA METHOD 8021B: VOLATILES							Analyst: RAA
Benzene	ND	1.0		µg/L	1	2/6/2020 2:58:03 PM	B66356
Toluene	ND	1.0		µg/L	1	2/6/2020 2:58:03 PM	B66356
Ethylbenzene	ND	1.0		µg/L	1	2/6/2020 2:58:03 PM	B66356
Xylenes, Total	ND	2.0		µg/L	1	2/6/2020 2:58:03 PM	B66356
Surr: 4-Bromofluorobenzene	95.7	80-120		%Rec	1	2/6/2020 2:58:03 PM	B66356

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 Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

Page 4 of 10

Analytical Report

Lab Order 2001C36

Date Reported: 2/11/2020

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Animas Environmental

Client Sample ID: Trip Blank

Project: BMG Landfarm

Collection Date:

Lab ID: 2001C36-005

Matrix: AQUEOUS

Received Date: 1/31/2020 7:48:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8015D: GASOLINE RANGE							Analyst: RAA
Gasoline Range Organics (GRO)	ND	0.050		mg/L	1	2/6/2020 4:08:45 PM	G66356
Surr: BFB	83.4	67.5-110		%Rec	1	2/6/2020 4:08:45 PM	G66356
EPA METHOD 8021B: VOLATILES							Analyst: RAA
Benzene	ND	1.0		µg/L	1	2/6/2020 4:08:45 PM	B66356
Toluene	ND	1.0		µg/L	1	2/6/2020 4:08:45 PM	B66356
Ethylbenzene	ND	1.0		µg/L	1	2/6/2020 4:08:45 PM	B66356
Xylenes, Total	ND	2.0		µg/L	1	2/6/2020 4:08:45 PM	B66356
Surr: 4-Bromofluorobenzene	92.4	80-120		%Rec	1	2/6/2020 4:08:45 PM	B66356

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 Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

Page 5 of 10

QC SUMMARY REPORT**Hall Environmental Analysis Laboratory, Inc.**

WO#: 2001C36

11-Feb-20

Client: Animas Environmental**Project:** BMG Landfarm

Sample ID: MB	SampType: mblk	TestCode: EPA Method 300.0: Anions								
Client ID: PBW	Batch ID: A66263	RunNo: 66263								
Prep Date:	Analysis Date: 2/3/2020	SeqNo: 2276254 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: A66263	RunNo: 66263								
Prep Date:	Analysis Date: 2/3/2020	SeqNo: 2276255 Units: mg/L								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	4.9	0.50	5.000	0	98.8	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 Quantitative 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

Page 6 of 10

QC SUMMARY REPORT**Hall Environmental Analysis Laboratory, Inc.**

WO#: 2001C36

11-Feb-20

Client: Animas Environmental**Project:** BMG Landfarm

Sample ID: MB-50201	SampType: MBLK	TestCode: EPA Method 8015M/D: Diesel Range								
Client ID: PBW	Batch ID: 50201	RunNo: 66246								
Prep Date: 2/3/2020	Analysis Date: 2/3/2020	SeqNo: 2276109			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	1.0		1.000		100	70	130			

Sample ID: LCS-50201	SampType: LCS	TestCode: EPA Method 8015M/D: Diesel Range								
Client ID: LCSW	Batch ID: 50201	RunNo: 66246								
Prep Date: 2/3/2020	Analysis Date: 2/3/2020	SeqNo: 2276110			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	111	71.8	135			
Surr: DNOP	0.48		0.5000		96.6	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 Quantitative 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#: 2001C36

11-Feb-20

Client: Animas Environmental**Project:** BMG Landfarm

Sample ID: mb	SampType: MBLK		TestCode: EPA Method 8015D: Gasoline Range							
Client ID: PBW	Batch ID: G66356		RunNo: 66356							
Prep Date:	Analysis Date: 2/6/2020		SeqNo: 2280529		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	17		20.00		85.8	67.5	110			

Sample ID: 2.5ug gro lcs	SampType: LCS		TestCode: EPA Method 8015D: Gasoline Range							
Client ID: LCSW	Batch ID: G66356		RunNo: 66356							
Prep Date:	Analysis Date: 2/6/2020		SeqNo: 2280530		Units: mg/L					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	0.47	0.050	0.5000	0	93.6	70.8	121			
Surr: BFB	18		20.00		89.6	67.5	110			

Sample ID: 2001c36-001ams	SampType: MS		TestCode: EPA Method 8015D: Gasoline Range							
Client ID: MW-1	Batch ID: G66356		RunNo: 66356							
Prep Date:	Analysis Date: 2/6/2020		SeqNo: 2280532		Units: mg/L					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	0.45	0.050	0.5000	0	90.6	51.1	131			
Surr: BFB	19		20.00		94.2	67.5	110			

Sample ID: 2001c36-001amsd	SampType: MSD		TestCode: EPA Method 8015D: Gasoline Range							
Client ID: MW-1	Batch ID: G66356		RunNo: 66356							
Prep Date:	Analysis Date: 2/6/2020		SeqNo: 2280533		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	88.2	51.1	131	2.77	20	
Surr: BFB	19		20.00		95.2	67.5	110	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 Quantitative 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#: 2001C36

11-Feb-20

Client: Animas Environmental**Project:** BMG Landfarm

Sample ID: mb	SampType: MBLK	TestCode: EPA Method 8021B: Volatiles								
Client ID: PBW	Batch ID: B66356	RunNo: 66356								
Prep Date:	Analysis Date: 2/6/2020	SeqNo: 2280556	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	2.0								
Surr: 4-Bromofluorobenzene	19		20.00		95.6	80	120			

Sample ID: 100ng btex lcs	SampType: LCS	TestCode: EPA Method 8021B: Volatiles								
Client ID: LCSW	Batch ID: B66356	RunNo: 66356								
Prep Date:	Analysis Date: 2/6/2020	SeqNo: 2280557	Units: µg/L							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	19	1.0	20.00	0	95.6	80	120			
Toluene	19	1.0	20.00	0	96.9	80	120			
Ethylbenzene	19	1.0	20.00	0	97.1	80	120			
Xylenes, Total	59	2.0	60.00	0	98.3	80	119			
Surr: 4-Bromofluorobenzene	19		20.00		93.9	80	120			

Qualifiers:

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

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#: 2001C36

11-Feb-20

Client: Animas Environmental**Project:** BMG Landfarm

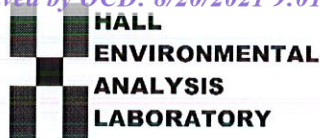
Sample ID: MB-50264	SampType: MBLK	TestCode: SM2540C MOD: Total Dissolved Solids								
Client ID: PBW	Batch ID: 50264	RunNo: 66398								
Prep Date: 2/4/2020	Analysis Date: 2/7/2020	SeqNo: 2281469	Units: mg/L							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Total Dissolved Solids	ND	20.0								

Sample ID: LCS-50264	SampType: LCS	TestCode: SM2540C MOD: Total Dissolved Solids								
Client ID: LCSW	Batch ID: 50264	RunNo: 66398								
Prep Date: 2/4/2020	Analysis Date: 2/7/2020	SeqNo: 2281470	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 Quantitative 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
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: 2001C36

RcptNo: 1

Received By: Anne Thorne

1/31/2020 7:48:00 AM

Completed By: Anne Thorne

1/31/2020 12:03:54 PM

Reviewed By: LB

1/31/2020

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 $>0^{\circ}\text{C}$ 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: _____

Special Handling (if applicable)

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

Person Notified: _____

Date: _____

By Whom: _____

Via: ☐ eMail ☐ Phone ☐ Fax ☐ In Person

Regarding: _____

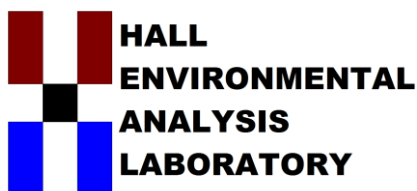
Client Instructions: _____

16. Additional remarks:

17. Cooler Information

Cooler No	Temp $^{\circ}\text{C}$	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	1.1	Good	Yes			
2	1.2	Good	Yes			

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

April 08, 2019

Elizabeth McNally
Animas Environmental Services
604 Pinon Street
Farmington, NM 87401
TEL: (505) 564-2281
FAX

RE: BMG Landfarm

OrderNo.: 1904015

Dear Elizabeth McNally:

Hall Environmental Analysis Laboratory received 2 sample(s) on 3/30/2019 for the analyses presented in the following report.

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

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

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

Sincerely,

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

Andy Freeman
Laboratory Manager
4901 Hawkins NE
Albuquerque, NM 87109

Analytical Report

Lab Order 1904015

Date Reported: 4/8/2019

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Animas Environmental Services

Client Sample ID: Cell #2 TZ CS-1

Project: BMG Landfarm

Collection Date: 3/28/2019 10:59:00 AM

Lab ID: 1904015-001

Matrix: SOIL

Received Date: 3/30/2019 9:20:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: Irm
Diesel Range Organics (DRO)	190	9.9		mg/Kg	1	4/3/2019 4:52:28 PM
Motor Oil Range Organics (MRO)	370	49		mg/Kg	1	4/3/2019 4:52:28 PM
Surr: DNOP	99.9	70-130		%Rec	1	4/3/2019 4:52:28 PM
EPA METHOD 8015D: GASOLINE RANGE						Analyst: RAA
Gasoline Range Organics (GRO)	ND	4.6		mg/Kg	1	4/2/2019 5:56:11 PM
Surr: BFB	89.3	73.8-119		%Rec	1	4/2/2019 5:56:11 PM
EPA METHOD 300.0: ANIONS						Analyst: MRA
Chloride	ND	60		mg/Kg	20	4/3/2019 10:40:01 PM

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

Qualifiers:	H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
	PQL	Practical Quantitative Limit	RL	Reporting Detection Limit
	S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified at testcode

Analytical Report

Lab Order 1904015

Date Reported: 4/8/2019

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Animas Environmental Services

Client Sample ID: Cell #3 TZ CS-1

Project: BMG Landfarm

Collection Date: 3/28/2019 11:47:00 AM

Lab ID: 1904015-002

Matrix: SOIL

Received Date: 3/30/2019 9:20:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: CLP
Diesel Range Organics (DRO)	48	9.7		mg/Kg	1	4/5/2019 10:31:47 AM
Motor Oil Range Organics (MRO)	98	48		mg/Kg	1	4/5/2019 10:31:47 AM
Surr: DNOP	99.7	70-130		%Rec	1	4/5/2019 10:31:47 AM
EPA METHOD 8015D: GASOLINE RANGE						Analyst: RAA
Gasoline Range Organics (GRO)	ND	4.7		mg/Kg	1	4/2/2019 7:06:15 PM
Surr: BFB	90.0	73.8-119		%Rec	1	4/2/2019 7:06:15 PM
EPA METHOD 300.0: ANIONS						Analyst: MRA
Chloride	ND	60		mg/Kg	20	4/3/2019 10:52:25 PM

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

Qualifiers:	H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
	PQL	Practical Quantitative Limit	RL	Reporting Detection Limit
	S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified at testcode

QC SUMMARY REPORT**Hall Environmental Analysis Laboratory, Inc.**

WO#: 1904015

08-Apr-19

Client: Animas Environmental Services**Project:** BMG Landfarm

Sample ID: MB-44074	SampType: MBLK	TestCode: EPA Method 300.0: Anions								
Client ID: PBS	Batch ID: 44074	RunNo: 58854								
Prep Date: 4/3/2019	Analysis Date: 4/3/2019	SeqNo: 1979174	Units: mg/Kg							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	ND	1.5								

Sample ID: LCS-44074	SampType: LCS	TestCode: EPA Method 300.0: Anions								
Client ID: LCSS	Batch ID: 44074	RunNo: 58854								
Prep Date: 4/3/2019	Analysis Date: 4/3/2019	SeqNo: 1979175	Units: mg/Kg							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	14	1.5	15.00	0	95.7	90	110			

Qualifiers:

H Holding times for preparation or analysis exceeded
PQL Practical Quantitative Limit
S % Recovery outside of range due to dilution or matrix

ND Not Detected at the Reporting Limit
RL Reporting Detection Limit
W Sample container temperature is out of limit as specified at testcode

QC SUMMARY REPORT**Hall Environmental Analysis Laboratory, Inc.**

WO#: 1904015

08-Apr-19

Client: Animas Environmental Services**Project:** BMG Landfarm

Sample ID: MB-44043	SampType: MBLK	TestCode: EPA Method 8015M/D: Diesel Range Organics								
Client ID: PBS	Batch ID: 44043	RunNo: 58838								
Prep Date: 4/2/2019	Analysis Date: 4/3/2019	SeqNo: 1979112 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	9.3		10.00		93.4	70	130			

Sample ID: LCS-44043	SampType: LCS	TestCode: EPA Method 8015M/D: Diesel Range Organics								
Client ID: LCSS	Batch ID: 44043	RunNo: 58838								
Prep Date: 4/2/2019	Analysis Date: 4/3/2019	SeqNo: 1979113 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	93.4	63.9	124			
Surr: DNOP	4.7		5.000		94.2	70	130			

Sample ID: 1904015-001AMS	SampType: MS	TestCode: EPA Method 8015M/D: Diesel Range Organics								
Client ID: Cell #2 TZ CS-1	Batch ID: 44043	RunNo: 58859								
Prep Date: 4/2/2019	Analysis Date: 4/3/2019	SeqNo: 1979885 Units: mg/Kg								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	250	9.5	47.62	194.3	121	53.5	126			
Surr: DNOP	5.0		4.762		105	70	130			

Sample ID: 1904015-001AMSD	SampType: MSD	TestCode: EPA Method 8015M/D: Diesel Range Organics								
Client ID: Cell #2 TZ CS-1	Batch ID: 44043	RunNo: 58859								
Prep Date: 4/2/2019	Analysis Date: 4/3/2019	SeqNo: 1979886 Units: mg/Kg								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	360	9.7	48.69	194.3	346	53.5	126	36.2	21.7	RS
Surr: DNOP	5.3		4.869		108	70	130	0	0	

Qualifiers:

H Holding times for preparation or analysis exceeded
PQL Practical Quantitative Limit
S % Recovery outside of range due to dilution or matrix

ND Not Detected at the Reporting Limit
RL Reporting Detection Limit
W Sample container temperature is out of limit as specified at testcode

QC SUMMARY REPORT**Hall Environmental Analysis Laboratory, Inc.**

WO#: 1904015

08-Apr-19

Client: Animas Environmental Services**Project:** BMG Landfarm

Sample ID: 1904015-001AMS	SampType: MS	TestCode: EPA Method 8015D: Gasoline Range								
Client ID: Cell #2 TZ CS-1	Batch ID: 44008	RunNo: 58817								
Prep Date: 4/1/2019	Analysis Date: 4/2/2019	SeqNo: 1978212 Units: mg/Kg								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	24	4.8	24.15	0	97.9	69.1	142			
Surr: BFB	980		966.2		102	73.8	119			

Sample ID: 1904015-001AMSD	SampType: MSD	TestCode: EPA Method 8015D: Gasoline Range								
Client ID: Cell #2 TZ CS-1	Batch ID: 44008	RunNo: 58817								
Prep Date: 4/1/2019	Analysis Date: 4/2/2019	SeqNo: 1978213 Units: mg/Kg								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	24	4.9	24.58	0	96.2	69.1	142	0.0239	20	
Surr: BFB	1000		983.3		102	73.8	119	0	0	

Sample ID: LCS-44008	SampType: LCS	TestCode: EPA Method 8015D: Gasoline Range								
Client ID: LCSS	Batch ID: 44008	RunNo: 58817								
Prep Date: 4/1/2019	Analysis Date: 4/2/2019	SeqNo: 1978215 Units: mg/Kg								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	23	5.0	25.00	0	91.8	80.1	123			
Surr: BFB	1000		1000		103	73.8	119			

Sample ID: MB-44008	SampType: MBLK	TestCode: EPA Method 8015D: Gasoline Range								
Client ID: PBS	Batch ID: 44008	RunNo: 58817								
Prep Date: 4/1/2019	Analysis Date: 4/2/2019	SeqNo: 1978216 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	910		1000		91.1	73.8	119			

Qualifiers:

H Holding times for preparation or analysis exceeded
PQL Practical Quantitative Limit
S % Recovery outside of range due to dilution or matrix

ND Not Detected at the Reporting Limit
RL Reporting Detection Limit
W Sample container temperature is out of limit as specified at testcode



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: **1904015**

RcptNo: 1

Received By: **Anne Thorne** 3/30/2019 9:20:00 AMCompleted By: **Yazmine Garduno** 4/1/2019 10:09:59 AMReviewed By: **ENM** 4/1/19LB: **JO** 4/01/19

Anne Thorne
Yazmine Garduno

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 $>0^{\circ}\text{C}$ 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. VOA vials have zero headspace? Yes ☐ No ☐ No VOA Vials ☒
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: JO
4/01/19
(<2 or >12 unless noted)
Adjusted? _____
Checked by: _____

Special Handling (if applicable)

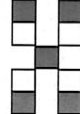
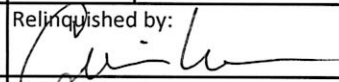
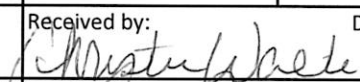
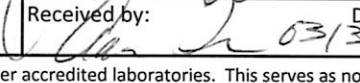
15. Was client notified of all discrepancies with this order? Yes ☐ No ☐ NA ☒

Person Notified: _____ Date: _____
By Whom: _____ Via: ☐ eMail ☐ Phone ☐ Fax ☐ In Person
Regarding: _____
Client Instructions: _____

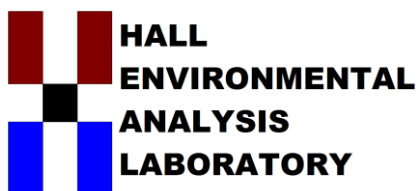
16. Additional remarks:

17. Cooler Information

Cooler No	Temp $^{\circ}\text{C}$	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	1.0	Good	Yes			
2	1.0	Good	Yes			
3	1.0	Good	Yes			

Chain-of-Custody Record				Turn-Around Time:			 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				☒ Standard ☐ Rush			<table border="1"> <tr> <th colspan="12">Analysis Request</th> </tr> <tr> <td rowspan="5">Chlorides 300.0</td> <td rowspan="5">TPH - GRO, DRO, MRO (8015)</td> <td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td> <td rowspan="5">Air Bubbles (Y or N)</td> </tr> <tr><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr> <tr><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr> <tr><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr> <tr><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr> </table>												Analysis Request												Chlorides 300.0	TPH - GRO, DRO, MRO (8015)											Air Bubbles (Y or N)																																								
Analysis Request																																																																																			
Chlorides 300.0	TPH - GRO, DRO, MRO (8015)																							Air Bubbles (Y or N)																																																											
Mailing Address: 604 W. Pinon Street				Project Name: BMG Landfarm																																																																															
Farmington, NM 87401				Project #: AES 040605																																																																															
Phone #: 505-564-2281				Project Manager: Elizabeth McNally/David Reese																																																																															
email or Fax#: <u>dreese@animasenvironmental.com</u>				QA/QC Package: ☒ Standard ☐ Level 4 (Full Validation)																																																																															
Accreditation: ☐ NELAP ☐ Other				Sampler: CL/GB																																																																															
☐ EDD (Type)				On Ice: ☒ Yes ☐ No																																																																															
				Sample Temperature: <u>3 coders 1.0° ea</u>																																																																															
Date	Time	Matrix	Sample Request ID	Container Type and #	Preservative Type	HEAL No.																																																																													
3/28/2019	10:59	Soil	Cell #2 TZ CS-1	1 - 4 oz jars	Cool	1904015 -001	X	X																																																																											
3/28/2019	11:47	Soil	Cell #3 TZ CS-1	1 - 4 oz jars	Cool	-002	X	X																																																																											
Date:	Time:	Relinquished by:		Received by:		Date	Time	Remarks: Call if questions.																																																																											
3/29/19	1530					3/29/19	1530																																																																												
Date:	Time:	Relinquished by:		Received by:		Date	Time																																																																												
3/29/19	1840					03/30/19	0920																																																																												

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

April 05, 2019

Elizabeth McNally
Animas Environmental Services
604 Pinon Street
Farmington, NM 87401
TEL: (505) 564-2281
FAX:

RE: BMG Landfarm

OrderNo.: 1904023

Dear Elizabeth McNally:

Hall Environmental Analysis Laboratory received 16 sample(s) on 3/30/2019 for the analyses presented in the following report.

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

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

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

Sincerely,

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

Andy Freeman
Laboratory Manager
4901 Hawkins NE
Albuquerque, NM 87109

Analytical Report

Lab Order 1904023

Date Reported: 4/5/2019

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Animas Environmental Services

Client Sample ID: Cell #1 VZ S-1

Project: BMG Landfarm

Collection Date: 3/28/2019 9:52:00 AM

Lab ID: 1904023-001

Matrix: SOIL

Received Date: 3/30/2019 9:20:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 418.1: TPH							Analyst: CLP
Petroleum Hydrocarbons, TR	ND	20		mg/Kg	1	4/3/2019	44049
EPA METHOD 300.0: ANIONS							Analyst: MRA
Chloride	210	59		mg/Kg	20	4/3/2019 11:04:50 PM	44074
EPA METHOD 8021B: VOLATILES							Analyst: RAA
Benzene	ND	0.024		mg/Kg	1	4/2/2019 7:29:38 PM	44008
Toluene	ND	0.047		mg/Kg	1	4/2/2019 7:29:38 PM	44008
Ethylbenzene	ND	0.047		mg/Kg	1	4/2/2019 7:29:38 PM	44008
Xylenes, Total	ND	0.095		mg/Kg	1	4/2/2019 7:29:38 PM	44008
Surr: 4-Bromofluorobenzene	92.5	80-120		%Rec	1	4/2/2019 7:29:38 PM	44008

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

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	H	Holding times for preparation or analysis exceeded
	ND	Not Detected at the Reporting Limit	PQL	Practical Quantitative Limit
	RL	Reporting Detection Limit	W	Sample container temperature is out of limit as specified at testcode

Page 1 of 19

Analytical Report

Lab Order 1904023

Date Reported: 4/5/2019

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Animas Environmental Services

Client Sample ID: Cell #1 VZ S-2

Project: BMG Landfarm

Collection Date: 3/28/2019 10:06:00 AM

Lab ID: 1904023-002

Matrix: SOIL

Received Date: 3/30/2019 9:20:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 418.1: TPH							Analyst: CLP
Petroleum Hydrocarbons, TR	ND	19		mg/Kg	1	4/3/2019	44049
EPA METHOD 300.0: ANIONS							Analyst: MRA
Chloride	66	61		mg/Kg	20	4/3/2019 11:17:14 PM	44074
EPA METHOD 8021B: VOLATILES							Analyst: RAA
Benzene	ND	0.025		mg/Kg	1	4/2/2019 8:40:06 PM	44008
Toluene	ND	0.050		mg/Kg	1	4/2/2019 8:40:06 PM	44008
Ethylbenzene	ND	0.050		mg/Kg	1	4/2/2019 8:40:06 PM	44008
Xylenes, Total	ND	0.10		mg/Kg	1	4/2/2019 8:40:06 PM	44008
Surr: 4-Bromofluorobenzene	91.2	80-120		%Rec	1	4/2/2019 8:40:06 PM	44008

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

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	H	Holding times for preparation or analysis exceeded
	ND	Not Detected at the Reporting Limit	PQL	Practical Quantitative Limit
	RL	Reporting Detection Limit	W	Sample container temperature is out of limit as specified at testcode

Analytical Report

Lab Order 1904023

Date Reported: 4/5/2019

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Animas Environmental Services

Client Sample ID: Cell #1 VZ S-3

Project: BMG Landfarm

Collection Date: 3/28/2019 10:16:00 AM

Lab ID: 1904023-003

Matrix: SOIL

Received Date: 3/30/2019 9:20:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 418.1: TPH							Analyst: CLP
Petroleum Hydrocarbons, TR	ND	20		mg/Kg	1	4/3/2019	44049
EPA METHOD 300.0: ANIONS							Analyst: MRA
Chloride	ND	60		mg/Kg	20	4/3/2019 11:29:38 PM	44074
EPA METHOD 8021B: VOLATILES							Analyst: RAA
Benzene	ND	0.025		mg/Kg	1	4/2/2019 9:03:38 PM	44008
Toluene	ND	0.049		mg/Kg	1	4/2/2019 9:03:38 PM	44008
Ethylbenzene	ND	0.049		mg/Kg	1	4/2/2019 9:03:38 PM	44008
Xylenes, Total	ND	0.099		mg/Kg	1	4/2/2019 9:03:38 PM	44008
Surr: 4-Bromofluorobenzene	95.1	80-120		%Rec	1	4/2/2019 9:03:38 PM	44008

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

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	H	Holding times for preparation or analysis exceeded
	ND	Not Detected at the Reporting Limit	PQL	Practical Quantitative Limit
	RL	Reporting Detection Limit	W	Sample container temperature is out of limit as specified at testcode

Page 3 of 19

Analytical Report

Lab Order 1904023

Date Reported: 4/5/2019

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Animas Environmental Services

Client Sample ID: Cell #1 VZ S-4

Project: BMG Landfarm

Collection Date: 3/28/2019 10:25:00 AM

Lab ID: 1904023-004

Matrix: SOIL

Received Date: 3/30/2019 9:20:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 418.1: TPH							Analyst: CLP
Petroleum Hydrocarbons, TR	ND	20		mg/Kg	1	4/3/2019	44049
EPA METHOD 300.0: ANIONS							Analyst: MRA
Chloride	ND	60		mg/Kg	20	4/3/2019 11:42:03 PM	44074
EPA METHOD 8021B: VOLATILES							Analyst: RAA
Benzene	ND	0.025		mg/Kg	1	4/2/2019 9:27:07 PM	44008
Toluene	ND	0.049		mg/Kg	1	4/2/2019 9:27:07 PM	44008
Ethylbenzene	ND	0.049		mg/Kg	1	4/2/2019 9:27:07 PM	44008
Xylenes, Total	ND	0.099		mg/Kg	1	4/2/2019 9:27:07 PM	44008
Surr: 4-Bromofluorobenzene	95.8	80-120		%Rec	1	4/2/2019 9:27:07 PM	44008

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

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	H	Holding times for preparation or analysis exceeded
	ND	Not Detected at the Reporting Limit	PQL	Practical Quantitative Limit
	RL	Reporting Detection Limit	W	Sample container temperature is out of limit as specified at testcode

Analytical Report

Lab Order 1904023

Date Reported: 4/5/2019

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Animas Environmental Services

Client Sample ID: Cell #2 VZ S-1

Project: BMG Landfarm

Collection Date: 3/28/2019 10:36:00 AM

Lab ID: 1904023-005

Matrix: SOIL

Received Date: 3/30/2019 9:20:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 418.1: TPH							Analyst: CLP
Petroleum Hydrocarbons, TR	ND	19		mg/Kg	1	4/3/2019	44049
EPA METHOD 300.0: ANIONS							Analyst: MRA
Chloride	ND	60		mg/Kg	20	4/4/2019 12:19:18 AM	44074
EPA METHOD 8021B: VOLATILES							Analyst: RAA
Benzene	ND	0.024		mg/Kg	1	4/2/2019 9:50:41 PM	44008
Toluene	ND	0.048		mg/Kg	1	4/2/2019 9:50:41 PM	44008
Ethylbenzene	ND	0.048		mg/Kg	1	4/2/2019 9:50:41 PM	44008
Xylenes, Total	ND	0.097		mg/Kg	1	4/2/2019 9:50:41 PM	44008
Surr: 4-Bromofluorobenzene	93.8	80-120		%Rec	1	4/2/2019 9:50:41 PM	44008

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

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	H	Holding times for preparation or analysis exceeded
	ND	Not Detected at the Reporting Limit	PQL	Practical Quantitative Limit
	RL	Reporting Detection Limit	W	Sample container temperature is out of limit as specified at testcode

Page 5 of 19

Analytical Report

Lab Order 1904023

Date Reported: 4/5/2019

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Animas Environmental Services

Client Sample ID: Cell #2 VZ S-2

Project: BMG Landfarm

Collection Date: 3/28/2019 10:46:00 AM

Lab ID: 1904023-006

Matrix: SOIL

Received Date: 3/30/2019 9:20:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 418.1: TPH							Analyst: CLP
Petroleum Hydrocarbons, TR	ND	20		mg/Kg	1	4/3/2019	44049
EPA METHOD 300.0: ANIONS							Analyst: MRA
Chloride	ND	59		mg/Kg	20	4/4/2019 12:56:31 AM	44074
EPA METHOD 8021B: VOLATILES							Analyst: RAA
Benzene	ND	0.024		mg/Kg	1	4/2/2019 10:14:12 PM	44008
Toluene	ND	0.048		mg/Kg	1	4/2/2019 10:14:12 PM	44008
Ethylbenzene	ND	0.048		mg/Kg	1	4/2/2019 10:14:12 PM	44008
Xylenes, Total	ND	0.096		mg/Kg	1	4/2/2019 10:14:12 PM	44008
Surr: 4-Bromofluorobenzene	94.6	80-120		%Rec	1	4/2/2019 10:14:12 PM	44008

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

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	H	Holding times for preparation or analysis exceeded
	ND	Not Detected at the Reporting Limit	PQL	Practical Quantitative Limit
	RL	Reporting Detection Limit	W	Sample container temperature is out of limit as specified at testcode

Page 6 of 19

Analytical Report

Lab Order 1904023

Date Reported: 4/5/2019

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Animas Environmental Services

Client Sample ID: Cell #2 VZ S-3

Project: BMG Landfarm

Collection Date: 3/28/2019 10:54:00 AM

Lab ID: 1904023-007

Matrix: SOIL

Received Date: 3/30/2019 9:20:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 418.1: TPH							Analyst: CLP
Petroleum Hydrocarbons, TR	ND	20		mg/Kg	1	4/3/2019	44049
EPA METHOD 300.0: ANIONS							Analyst: MRA
Chloride	ND	60		mg/Kg	20	4/4/2019 1:08:55 AM	44074
EPA METHOD 8021B: VOLATILES							Analyst: RAA
Benzene	ND	0.024		mg/Kg	1	4/3/2019 12:11:31 AM	44008
Toluene	ND	0.048		mg/Kg	1	4/3/2019 12:11:31 AM	44008
Ethylbenzene	ND	0.048		mg/Kg	1	4/3/2019 12:11:31 AM	44008
Xylenes, Total	ND	0.097		mg/Kg	1	4/3/2019 12:11:31 AM	44008
Surr: 4-Bromofluorobenzene	97.5	80-120		%Rec	1	4/3/2019 12:11:31 AM	44008

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

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	H	Holding times for preparation or analysis exceeded
	ND	Not Detected at the Reporting Limit	PQL	Practical Quantitative Limit
	RL	Reporting Detection Limit	W	Sample container temperature is out of limit as specified at testcode

Page 7 of 19

Analytical Report

Lab Order 1904023

Date Reported: 4/5/2019

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Animas Environmental Services

Client Sample ID: Cell #2 VZ S-4

Project: BMG Landfarm

Collection Date: 3/28/2019 11:04:00 AM

Lab ID: 1904023-008

Matrix: SOIL

Received Date: 3/30/2019 9:20:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 418.1: TPH							Analyst: CLP
Petroleum Hydrocarbons, TR	ND	20		mg/Kg	1	4/3/2019	44049
EPA METHOD 300.0: ANIONS							Analyst: MRA
Chloride	ND	61		mg/Kg	20	4/4/2019 1:21:20 AM	44074
EPA METHOD 8021B: VOLATILES							Analyst: RAA
Benzene	ND	0.025		mg/Kg	1	4/3/2019 12:35:10 AM	44008
Toluene	ND	0.049		mg/Kg	1	4/3/2019 12:35:10 AM	44008
Ethylbenzene	ND	0.049		mg/Kg	1	4/3/2019 12:35:10 AM	44008
Xylenes, Total	ND	0.098		mg/Kg	1	4/3/2019 12:35:10 AM	44008
Surr: 4-Bromofluorobenzene	94.3	80-120		%Rec	1	4/3/2019 12:35:10 AM	44008

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

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	H	Holding times for preparation or analysis exceeded
	ND	Not Detected at the Reporting Limit	PQL	Practical Quantitative Limit
	RL	Reporting Detection Limit	W	Sample container temperature is out of limit as specified at testcode

Analytical Report

Lab Order 1904023

Date Reported: 4/5/2019

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Animas Environmental Services

Client Sample ID: Cell #3 VZ S-1

Project: BMG Landfarm

Collection Date: 3/28/2019 11:15:00 AM

Lab ID: 1904023-009

Matrix: SOIL

Received Date: 3/30/2019 9:20:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 418.1: TPH							Analyst: CLP
Petroleum Hydrocarbons, TR	ND	19		mg/Kg	1	4/3/2019	44049
EPA METHOD 300.0: ANIONS							Analyst: MRA
Chloride	ND	60		mg/Kg	20	4/4/2019 12:58:29 AM	44089
EPA METHOD 8021B: VOLATILES							Analyst: RAA
Benzene	ND	0.024		mg/Kg	1	4/3/2019 12:58:46 AM	44008
Toluene	ND	0.048		mg/Kg	1	4/3/2019 12:58:46 AM	44008
Ethylbenzene	ND	0.048		mg/Kg	1	4/3/2019 12:58:46 AM	44008
Xylenes, Total	ND	0.096		mg/Kg	1	4/3/2019 12:58:46 AM	44008
Surr: 4-Bromofluorobenzene	93.2	80-120		%Rec	1	4/3/2019 12:58:46 AM	44008

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

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	H	Holding times for preparation or analysis exceeded
	ND	Not Detected at the Reporting Limit	PQL	Practical Quantitative Limit
	RL	Reporting Detection Limit	W	Sample container temperature is out of limit as specified at testcode

Analytical Report

Lab Order 1904023

Date Reported: 4/5/2019

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Animas Environmental Services

Client Sample ID: Cell #3 VZ S-2

Project: BMG Landfarm

Collection Date: 3/28/2019 11:32:00 AM

Lab ID: 1904023-010

Matrix: SOIL

Received Date: 3/30/2019 9:20:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 418.1: TPH							Analyst: CLP
Petroleum Hydrocarbons, TR	ND	19		mg/Kg	1	4/3/2019	44049
EPA METHOD 300.0: ANIONS							Analyst: MRA
Chloride	ND	60		mg/Kg	20	4/4/2019 1:10:54 AM	44089
EPA METHOD 8021B: VOLATILES							Analyst: RAA
Benzene	ND	0.024		mg/Kg	1	4/3/2019 1:22:11 AM	44008
Toluene	ND	0.048		mg/Kg	1	4/3/2019 1:22:11 AM	44008
Ethylbenzene	ND	0.048		mg/Kg	1	4/3/2019 1:22:11 AM	44008
Xylenes, Total	ND	0.095		mg/Kg	1	4/3/2019 1:22:11 AM	44008
Surr: 4-Bromofluorobenzene	93.8	80-120		%Rec	1	4/3/2019 1:22:11 AM	44008

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

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	H	Holding times for preparation or analysis exceeded
	ND	Not Detected at the Reporting Limit	PQL	Practical Quantitative Limit
	RL	Reporting Detection Limit	W	Sample container temperature is out of limit as specified at testcode

Page 10 of 19

Analytical Report

Lab Order 1904023

Date Reported: 4/5/2019

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Animas Environmental Services

Client Sample ID: Cell #3 VZ S-3

Project: BMG Landfarm

Collection Date: 3/28/2019 11:43:00 AM

Lab ID: 1904023-011

Matrix: SOIL

Received Date: 3/30/2019 9:20:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 418.1: TPH							Analyst: CLP
Petroleum Hydrocarbons, TR	ND	20		mg/Kg	1	4/3/2019	44049
EPA METHOD 300.0: ANIONS							Analyst: MRA
Chloride	ND	60		mg/Kg	20	4/4/2019 1:48:07 AM	44089
EPA METHOD 8021B: VOLATILES							Analyst: RAA
Benzene	ND	0.023		mg/Kg	1	4/3/2019 1:45:48 AM	44008
Toluene	ND	0.047		mg/Kg	1	4/3/2019 1:45:48 AM	44008
Ethylbenzene	ND	0.047		mg/Kg	1	4/3/2019 1:45:48 AM	44008
Xylenes, Total	ND	0.094		mg/Kg	1	4/3/2019 1:45:48 AM	44008
Surr: 4-Bromofluorobenzene	95.8	80-120		%Rec	1	4/3/2019 1:45:48 AM	44008

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

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	H	Holding times for preparation or analysis exceeded
	ND	Not Detected at the Reporting Limit	PQL	Practical Quantitative Limit
	RL	Reporting Detection Limit	W	Sample container temperature is out of limit as specified at testcode

Page 11 of 19

Analytical Report

Lab Order 1904023

Date Reported: 4/5/2019

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Animas Environmental Services

Client Sample ID: Cell #3 VZ S-4

Project: BMG Landfarm

Collection Date: 3/28/2019 11:52:00 AM

Lab ID: 1904023-012

Matrix: SOIL

Received Date: 3/30/2019 9:20:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 418.1: TPH							Analyst: CLP
Petroleum Hydrocarbons, TR	ND	18		mg/Kg	1	4/3/2019	44049
EPA METHOD 300.0: ANIONS							Analyst: MRA
Chloride	ND	60		mg/Kg	20	4/4/2019 2:00:32 AM	44089
EPA METHOD 8021B: VOLATILES							Analyst: RAA
Benzene	ND	0.025		mg/Kg	1	4/3/2019 2:09:22 AM	44008
Toluene	ND	0.050		mg/Kg	1	4/3/2019 2:09:22 AM	44008
Ethylbenzene	ND	0.050		mg/Kg	1	4/3/2019 2:09:22 AM	44008
Xylenes, Total	ND	0.099		mg/Kg	1	4/3/2019 2:09:22 AM	44008
Surr: 4-Bromofluorobenzene	92.7	80-120		%Rec	1	4/3/2019 2:09:22 AM	44008

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

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	H	Holding times for preparation or analysis exceeded
	ND	Not Detected at the Reporting Limit	PQL	Practical Quantitative Limit
	RL	Reporting Detection Limit	W	Sample container temperature is out of limit as specified at testcode

Page 12 of 19

Analytical Report

Lab Order 1904023

Date Reported: 4/5/2019

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Animas Environmental Services

Client Sample ID: Cell #4 VZ S-1

Project: BMG Landfarm

Collection Date: 3/28/2019 12:03:00 PM

Lab ID: 1904023-013

Matrix: SOIL

Received Date: 3/30/2019 9:20:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 418.1: TPH							Analyst: CLP
Petroleum Hydrocarbons, TR	ND	19		mg/Kg	1	4/3/2019	44049
EPA METHOD 300.0: ANIONS							Analyst: MRA
Chloride	ND	60		mg/Kg	20	4/4/2019 2:12:57 AM	44089
EPA METHOD 8021B: VOLATILES							Analyst: RAA
Benzene	ND	0.023		mg/Kg	1	4/3/2019 2:32:42 AM	44008
Toluene	ND	0.047		mg/Kg	1	4/3/2019 2:32:42 AM	44008
Ethylbenzene	ND	0.047		mg/Kg	1	4/3/2019 2:32:42 AM	44008
Xylenes, Total	ND	0.093		mg/Kg	1	4/3/2019 2:32:42 AM	44008
Surr: 4-Bromofluorobenzene	95.1	80-120		%Rec	1	4/3/2019 2:32:42 AM	44008

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

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	H	Holding times for preparation or analysis exceeded
	ND	Not Detected at the Reporting Limit	PQL	Practical Quantitative Limit
	RL	Reporting Detection Limit	W	Sample container temperature is out of limit as specified at testcode

Page 13 of 19

Analytical Report

Lab Order 1904023

Date Reported: 4/5/2019

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Animas Environmental Services

Client Sample ID: Cell #4 VZ S-2

Project: BMG Landfarm

Collection Date: 3/28/2019 12:12:00 PM

Lab ID: 1904023-014

Matrix: SOIL

Received Date: 3/30/2019 9:20:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 418.1: TPH							Analyst: CLP
Petroleum Hydrocarbons, TR	ND	19		mg/Kg	1	4/3/2019	44049
EPA METHOD 300.0: ANIONS							Analyst: MRA
Chloride	ND	60		mg/Kg	20	4/4/2019 2:25:21 AM	44089
EPA METHOD 8021B: VOLATILES							Analyst: RAA
Benzene	ND	0.023		mg/Kg	1	4/3/2019 2:56:16 AM	44008
Toluene	ND	0.047		mg/Kg	1	4/3/2019 2:56:16 AM	44008
Ethylbenzene	ND	0.047		mg/Kg	1	4/3/2019 2:56:16 AM	44008
Xylenes, Total	ND	0.093		mg/Kg	1	4/3/2019 2:56:16 AM	44008
Surr: 4-Bromofluorobenzene	96.0	80-120		%Rec	1	4/3/2019 2:56:16 AM	44008

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

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	H	Holding times for preparation or analysis exceeded
	ND	Not Detected at the Reporting Limit	PQL	Practical Quantitative Limit
	RL	Reporting Detection Limit	W	Sample container temperature is out of limit as specified at testcode

Page 14 of 19

Analytical Report

Lab Order 1904023

Date Reported: 4/5/2019

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Animas Environmental Services

Client Sample ID: Cell #4 VZ S-3

Project: BMG Landfarm

Collection Date: 3/28/2019 12:20:00 PM

Lab ID: 1904023-015

Matrix: SOIL

Received Date: 3/30/2019 9:20:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 418.1: TPH							Analyst: CLP
Petroleum Hydrocarbons, TR	ND	19		mg/Kg	1	4/3/2019	44049
EPA METHOD 300.0: ANIONS							Analyst: MRA
Chloride	ND	60		mg/Kg	20	4/4/2019 2:37:45 AM	44089
EPA METHOD 8021B: VOLATILES							Analyst: RAA
Benzene	ND	0.024		mg/Kg	1	4/3/2019 3:19:41 AM	44008
Toluene	ND	0.048		mg/Kg	1	4/3/2019 3:19:41 AM	44008
Ethylbenzene	ND	0.048		mg/Kg	1	4/3/2019 3:19:41 AM	44008
Xylenes, Total	ND	0.097		mg/Kg	1	4/3/2019 3:19:41 AM	44008
Surr: 4-Bromofluorobenzene	95.5	80-120		%Rec	1	4/3/2019 3:19:41 AM	44008

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

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	H	Holding times for preparation or analysis exceeded
	ND	Not Detected at the Reporting Limit	PQL	Practical Quantitative Limit
	RL	Reporting Detection Limit	W	Sample container temperature is out of limit as specified at testcode

Page 15 of 19

Analytical Report

Lab Order 1904023

Date Reported: 4/5/2019

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Animas Environmental Services

Client Sample ID: Cell #4 VZ S-4

Project: BMG Landfarm

Collection Date: 3/28/2019 12:29:00 PM

Lab ID: 1904023-016

Matrix: SOIL

Received Date: 3/30/2019 9:20:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 418.1: TPH							Analyst: CLP
Petroleum Hydrocarbons, TR	ND	20		mg/Kg	1	4/3/2019	44049
EPA METHOD 300.0: ANIONS							Analyst: MRA
Chloride	ND	60		mg/Kg	20	4/4/2019 2:50:10 AM	44089
EPA METHOD 8021B: VOLATILES							Analyst: RAA
Benzene	ND	0.023		mg/Kg	1	4/3/2019 3:43:15 AM	44008
Toluene	ND	0.046		mg/Kg	1	4/3/2019 3:43:15 AM	44008
Ethylbenzene	ND	0.046		mg/Kg	1	4/3/2019 3:43:15 AM	44008
Xylenes, Total	ND	0.092		mg/Kg	1	4/3/2019 3:43:15 AM	44008
Surr: 4-Bromofluorobenzene	96.2	80-120		%Rec	1	4/3/2019 3:43:15 AM	44008

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

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	H	Holding times for preparation or analysis exceeded
	ND	Not Detected at the Reporting Limit	PQL	Practical Quantitative Limit
	RL	Reporting Detection Limit	W	Sample container temperature is out of limit as specified at testcode

Page 16 of 19

QC SUMMARY REPORT**Hall Environmental Analysis Laboratory, Inc.**

WO#: 1904023

05-Apr-19

Client: Animas Environmental Services**Project:** BMG Landfarm

Sample ID: MB-44074	SampType: MBLK	TestCode: EPA Method 300.0: Anions								
Client ID: PBS	Batch ID: 44074	RunNo: 58854								
Prep Date: 4/3/2019	Analysis Date: 4/3/2019	SeqNo: 1979174 Units: mg/Kg								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	ND	1.5								

Sample ID: LCS-44074	SampType: LCS	TestCode: EPA Method 300.0: Anions								
Client ID: LCSS	Batch ID: 44074	RunNo: 58854								
Prep Date: 4/3/2019	Analysis Date: 4/3/2019	SeqNo: 1979175 Units: mg/Kg								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	14	1.5	15.00	0	95.7	90	110			

Sample ID: MB-44089	SampType: mblk	TestCode: EPA Method 300.0: Anions								
Client ID: PBS	Batch ID: 44089	RunNo: 58879								
Prep Date: 4/3/2019	Analysis Date: 4/4/2019	SeqNo: 1979365 Units: mg/Kg								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	ND	1.5								

Sample ID: LCS-44089	SampType: lcs	TestCode: EPA Method 300.0: Anions								
Client ID: LCSS	Batch ID: 44089	RunNo: 58879								
Prep Date: 4/3/2019	Analysis Date: 4/4/2019	SeqNo: 1979366 Units: mg/Kg								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	14	1.5	15.00	0	94.2	90	110			

Qualifiers:

* Value exceeds Maximum Contaminant Level.
 ND Not Detected at the Reporting Limit
 RL Reporting Detection Limit

H Holding times for preparation or analysis exceeded
 PQL Practical Quantitative Limit
 W Sample container temperature is out of limit as specified at testcode

QC SUMMARY REPORT**Hall Environmental Analysis Laboratory, Inc.**

WO#: 1904023

05-Apr-19

Client: Animas Environmental Services**Project:** BMG Landfarm

Sample ID: MB-44049	SampType: MBLK	TestCode: EPA Method 418.1: TPH								
Client ID: PBS	Batch ID: 44049	RunNo: 58861								
Prep Date: 4/2/2019	Analysis Date: 4/3/2019	SeqNo: 1978527 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-44049	SampType: LCS	TestCode: EPA Method 418.1: TPH								
Client ID: LCSS	Batch ID: 44049	RunNo: 58861								
Prep Date: 4/2/2019	Analysis Date: 4/3/2019	SeqNo: 1978528 Units: mg/Kg								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Petroleum Hydrocarbons, TR	76	20	100.0	0	76.4	54.3	153			

Sample ID: LCSD-44049	SampType: LCSD	TestCode: EPA Method 418.1: TPH								
Client ID: LCSS02	Batch ID: 44049	RunNo: 58861								
Prep Date: 4/2/2019	Analysis Date: 4/3/2019	SeqNo: 1978529 Units: mg/Kg								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Petroleum Hydrocarbons, TR	82	20	100.0	0	81.9	54.3	153	6.96	20	

Qualifiers:

* Value exceeds Maximum Contaminant Level.
 ND Not Detected at the Reporting Limit
 RL Reporting Detection Limit

H Holding times for preparation or analysis exceeded
 PQL Practical Quantitative Limit
 W Sample container temperature is out of limit as specified at testcode

QC SUMMARY REPORT**Hall Environmental Analysis Laboratory, Inc.**

WO#: 1904023

05-Apr-19

Client: Animas Environmental Services**Project:** BMG Landfarm

Sample ID: 1904023-001AMS	SampType: MS	TestCode: EPA Method 8021B: Volatiles								
Client ID: Cell #1 VZ S-1	Batch ID: 44008	RunNo: 58817								
Prep Date: 4/1/2019	Analysis Date: 4/2/2019	SeqNo: 1978233 Units: mg/Kg								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.89	0.025	0.9814	0	90.5	63.9	127			
Toluene	0.96	0.049	0.9814	0.02469	95.4	69.9	131			
Ethylbenzene	0.95	0.049	0.9814	0	97.1	71	132			
Xylenes, Total	2.9	0.098	2.944	0.01466	98.1	71.8	131			
Surr: 4-Bromofluorobenzene	0.96		0.9814		97.5	80	120			

Sample ID: 1904023-001AMSD	SampType: MSD	TestCode: EPA Method 8021B: Volatiles								
Client ID: Cell #1 VZ S-1	Batch ID: 44008	RunNo: 58817								
Prep Date: 4/1/2019	Analysis Date: 4/2/2019	SeqNo: 1978234 Units: mg/Kg								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.83	0.024	0.9728	0	85.0	63.9	127	7.14	20	
Toluene	0.89	0.049	0.9728	0.02469	89.4	69.9	131	7.20	20	
Ethylbenzene	0.90	0.049	0.9728	0	92.1	71	132	6.15	20	
Xylenes, Total	2.7	0.097	2.918	0.01466	92.5	71.8	131	6.77	20	
Surr: 4-Bromofluorobenzene	0.93		0.9728		95.8	80	120	0	0	

Sample ID: LCS-44008	SampType: LCS	TestCode: EPA Method 8021B: Volatiles								
Client ID: LCSS	Batch ID: 44008	RunNo: 58817								
Prep Date: 4/1/2019	Analysis Date: 4/2/2019	SeqNo: 1978260 Units: mg/Kg								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.90	0.025	1.000	0	90.5	80	120			
Toluene	0.95	0.050	1.000	0	95.1	80	120			
Ethylbenzene	0.94	0.050	1.000	0	94.0	80	120			
Xylenes, Total	2.9	0.10	3.000	0	96.0	80	120			
Surr: 4-Bromofluorobenzene	0.94		1.000		93.5	80	120			

Sample ID: MB-44008	SampType: MBLK	TestCode: EPA Method 8021B: Volatiles								
Client ID: PBS	Batch ID: 44008	RunNo: 58817								
Prep Date: 4/1/2019	Analysis Date: 4/2/2019	SeqNo: 1978261 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: 4-Bromofluorobenzene	0.92		1.000		92.3	80	120			

Qualifiers:

* Value exceeds Maximum Contaminant Level.

ND Not Detected at the Reporting Limit

RL Reporting Detection Limit

H Holding times for preparation or analysis exceeded

PQL Practical Quantitative Limit

W Sample container temperature is out of limit as specified at testcode



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: 1904023

RcptNo: 1

Received By: Anne Thorne

3/30/2019 9:20:00 AM

Completed By: Victoria Zellar

4/1/2019 11:21:43 AM

Reviewed By: *LB**4/1/19*
Anne Thorne
Victoria Zellar
labeled by
DAD 4/1/19

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 $>0^{\circ}\text{C}$ 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. VOA vials have zero headspace? Yes ☐ No ☐ No VOA Vials ☒
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 4/1/19*

Special Handling (if applicable)

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

Person Notified: _____

Date: _____

By Whom: _____

Via: ☐ eMail ☐ Phone ☐ Fax ☐ In Person

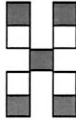
Regarding: _____

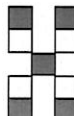
Client Instructions: _____

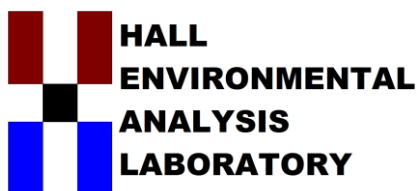
16. Additional remarks:

17. Cooler Information

Cooler No	Temp $^{\circ}\text{C}$	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	1.0	Good	Yes			
2	1.0	Good	Yes			
3	1.0	Good	Yes			

Chain-of-Custody Record				Turn-Around Time:			 HALL ENVIRONMENTAL ANALYSIS LABORATORY www.hallenvironmental.com 4901 Hawkins NE - Albuquerque, NM 87105 Tel. 505-345-3975 Fax 505-345-4107																																																																																																																																																																										
Client: Animas Environmental Services				☒ Standard ☐ Rush _____			<table border="1"> <tr> <th colspan="10">Analysis Request</th> </tr> <tr> <td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td> <td rowspan="15">Air Bubbles (Y or N)</td> </tr> <tr><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr> <tr><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr> <tr><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr> <tr><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr> <tr><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr> <tr><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr> <tr><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr> <tr><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr> <tr><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr> <tr><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr> <tr><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr> <tr><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr> <tr><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr> <tr><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr> </table>										Analysis Request																				Air Bubbles (Y or N)																																																																																																																																												
Analysis Request																																																																																																																																																																																	
																				Air Bubbles (Y or N)																																																																																																																																																													
Mailing Address: 604 W. Pinon Street				Project Name: BMG Landfarm																																																																																																																																																																													
Farmington, NM 87401				Project #: AES 040605																																																																																																																																																																													
Phone #: 505-564-2281				Project Manager: Elizabeth McNally/David Reese																																																																																																																																																																													
email or Fax#: <u>dreese@animasenvironmental.com</u>				Project Manager: Elizabeth McNally/David Reese																																																																																																																																																																													
QA/QC Package: ☒ Standard ☐ Level 4 (Full Validation)				Sampler: CL/GB																																																																																																																																																																													
Accreditation: ☐ NELAP ☐ Other _____				On Ice: ☒ Yes ☐ No																																																																																																																																																																													
☐ EDD (Type) _____				Sample Temperature: <u>3 coolers 1.0° ea</u>																																																																																																																																																																													
Date	Time	Matrix	Sample Request ID	Container Type and #	Preservative Type	HEAL No.	BTEX 8021	TPH 418.1	Chlorides 300.0																																																																																																																																																																								
3/28/2019	9:52	Soil	Cell #1 VZ S-1	1 - 4 oz jars	Cool	-001	X	X	X																																																																																																																																																																								
3/28/2019	10:06	Soil	Cell #1 VZ S-2	1 - 4 oz jars	Cool	-002	X	X	X																																																																																																																																																																								
3/28/2019	10:16	Soil	Cell #1 VZ S-3	1 - 4 oz jars	Cool	-003	X	X	X																																																																																																																																																																								
3/28/2019	10:25	Soil	Cell #1 VZ S-4	1 - 4 oz jars	Cool	-004	X	X	X																																																																																																																																																																								
3/28/2019	10:36	Soil	Cell #2 VZ S-1	1 - 4 oz jars	Cool	-005	X	X	X																																																																																																																																																																								
3/28/2019	10:46	Soil	Cell #2 VZ S-2	1 - 4 oz jars	Cool	-006	X	X	X																																																																																																																																																																								
3/28/2019	10:54	Soil	Cell #2 VZ S-3	1 - 4 oz jars	Cool	-007	X	X	X																																																																																																																																																																								
3/28/2019	11:04	Soil	Cell #2 VZ S-4	1 - 4 oz jars	Cool	-008	X	X	X																																																																																																																																																																								
3/28/2019	11:15	Soil	Cell #3 VZ S-1	1 - 4 oz jars	Cool	-009	X	X	X																																																																																																																																																																								
3/28/2019	11:32	Soil	Cell #3 VZ S-2	1 - 4 oz jars	Cool	-010	X	X	X																																																																																																																																																																								
3/28/2019	11:43	Soil	Cell #3 VZ S-3	1 - 4 oz jars	Cool	-011	X	X	X																																																																																																																																																																								
3/28/2019	11:52	Soil	Cell #3 VZ S-4	1 - 4 oz jars	Cool	-012	X	X	X																																																																																																																																																																								
3/28/2019	12:03	Soil	Cell #4 VZ S-1	1 - 4 oz jars	Cool	-013	X	X	X																																																																																																																																																																								
3/28/2019	12:12	Soil	Cell #4 VZ S-2	1 - 4 oz jars	Cool	-014	X	X	X																																																																																																																																																																								

Chain-of-Custody Record				Turn-Around Time:			 HALL ENVIRONMENTAL ANALYSIS LABORATORY www.hallenvironmental.com 4901 Hawkins NE - Albuquerque, NM 87105 Tel. 505-345-3975 Fax 505-345-4107																																																																						
Client: Animas Environmental Services				☒ Standard ☐ Rush _____			<table border="1"> <tr> <th colspan="10">Analysis Request</th> </tr> <tr> <td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td> <td rowspan="5"> BTEX 8021 TPH 418.1 Chlorides 300.0 Air Bubbles (Y or N) </td> </tr> <tr><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr> <tr><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr> <tr><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr> <tr><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr> </table>										Analysis Request																				BTEX 8021 TPH 418.1 Chlorides 300.0 Air Bubbles (Y or N)																																								
Analysis Request																																																																													
																				BTEX 8021 TPH 418.1 Chlorides 300.0 Air Bubbles (Y or N)																																																									
Project Name: BMG Landfarm				Project #: AES 040605																																																																									
Mailing Address: 604 W. Pinon Street				Project Manager: Elizabeth McNally/David Reese																																																																									
Farmington, NM 87401				Sampler: CL/GB																																																																									
Phone #: 505-564-2281				On Ice: ☒ Yes ☐ No																																																																									
email or Fax#: <u>dreese@animasenvironmental.com</u>				Sample Temperature: <u>3 coolers 10°-20°</u>																																																																									
QA/QC Package: ☒ Standard ☐ Level 4 (Full Validation)																																																																													
Accreditation: ☐ NELAP ☐ Other _____																																																																													
☐ EDD (Type) _____																																																																													
Date	Time	Matrix	Sample Request ID	Container Type and #	Preservative Type	HEAL No.																																																																							
3/28/2019	12:20	Soil	Cell #4 VZ S-3	1 - 4 oz jars	Cool	1904023 -015	X	X	X																																																																				
3/28/2019	12:29	Soil	Cell #4 VZ S-4	1 - 4 oz jars	Cool	-016	X	X	X																																																																				
Date: 3/29/19	Time: 1530	Relinquished by: <u>[Signature]</u>		Received by: <u>[Signature]</u>		Date: 3/29/19	Time: 1530	Remarks: Call if questions.																																																																					
Date: 3/29/19	Time: 1840	Relinquished by: <u>[Signature]</u>		Received by: <u>[Signature]</u>		Date: 03/30/19	Time: 0920																																																																						



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

April 09, 2019

Elizabeth McNally
Animas Environmental Services
604 Pinon Street
Farmington, NM 87401
TEL: (505) 564-2281
FAX:

RE: BMG Landfarm

OrderNo.: 1904033

Dear Elizabeth McNally:

Hall Environmental Analysis Laboratory received 5 sample(s) on 3/30/2019 for the analyses presented in the following report.

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

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

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

Sincerely,

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

Andy Freeman
Laboratory Manager
4901 Hawkins NE
Albuquerque, NM 87109

Analytical Report

Lab Order 1904033

Date Reported: 4/9/2019

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Animas Environmental Services

Client Sample ID: MW-1

Project: BMG Landfarm

Collection Date: 3/28/2019 2:24:00 PM

Lab ID: 1904033-001

Matrix: AQUEOUS

Received Date: 3/30/2019 9:20:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: MRA
Chloride	120	10		mg/L	20	4/2/2019 11:36:56 AM	R58843
SM2540C MOD: TOTAL DISSOLVED SOLIDS							Analyst: KS
Total Dissolved Solids	714	40.0	*D	mg/L	1	4/5/2019 12:59:00 PM	44069
EPA METHOD 8015D: GASOLINE RANGE							Analyst: DJF
Gasoline Range Organics (GRO)	ND	0.050		mg/L	1	4/3/2019 9:19:24 AM	G58841
Surr: BFB	101	70-130		%Rec	1	4/3/2019 9:19:24 AM	G58841
EPA METHOD 8015M/D: DIESEL RANGE							Analyst: Irm
Diesel Range Organics (DRO)	ND	1.0		mg/L	1	4/2/2019 5:00:13 PM	44016
Motor Oil Range Organics (MRO)	ND	5.0		mg/L	1	4/2/2019 5:00:13 PM	44016
Surr: DNOP	106	70-130		%Rec	1	4/2/2019 5:00:13 PM	44016
EPA METHOD 8260: VOLATILES SHORT LIST							Analyst: DJF
Benzene	ND	1.0		µg/L	1	4/3/2019 9:19:24 AM	R58841
Toluene	ND	1.0		µg/L	1	4/3/2019 9:19:24 AM	R58841
Ethylbenzene	ND	1.0		µg/L	1	4/3/2019 9:19:24 AM	R58841
Xylenes, Total	ND	1.5		µg/L	1	4/3/2019 9:19:24 AM	R58841
Surr: 1,2-Dichloroethane-d4	85.3	70-130		%Rec	1	4/3/2019 9:19:24 AM	R58841
Surr: 4-Bromofluorobenzene	105	70-130		%Rec	1	4/3/2019 9:19:24 AM	R58841
Surr: Dibromofluoromethane	83.4	70-130		%Rec	1	4/3/2019 9:19:24 AM	R58841
Surr: Toluene-d8	96.8	70-130		%Rec	1	4/3/2019 9:19:24 AM	R58841

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

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	H	Holding times for preparation or analysis exceeded
	ND	Not Detected at the Reporting Limit	PQL	Practical Quantitative Limit
	RL	Reporting Detection Limit	S	% Recovery outside of range due to dilution or matrix
	W	Sample container temperature is out of limit as specified at testcode		

Page 1 of 11

Analytical Report

Lab Order 1904033

Date Reported: 4/9/2019

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Animas Environmental Services

Client Sample ID: MW-2

Project: BMG Landfarm

Collection Date: 3/28/2019 2:01:00 PM

Lab ID: 1904033-002

Matrix: AQUEOUS

Received Date: 3/30/2019 9:20:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: smb
Chloride	840	50	*	mg/L	100	4/5/2019 2:10:47 AM	A58921
SM2540C MOD: TOTAL DISSOLVED SOLIDS							Analyst: KS
Total Dissolved Solids	2020	100	*D	mg/L	1	4/5/2019 12:59:00 PM	44069
EPA METHOD 8015D: GASOLINE RANGE							Analyst: DJF
Gasoline Range Organics (GRO)	ND	0.050		mg/L	1	4/3/2019 10:44:57 AM	G58841
Surr: BFB	101	70-130		%Rec	1	4/3/2019 10:44:57 AM	G58841
EPA METHOD 8015M/D: DIESEL RANGE							Analyst: Irm
Diesel Range Organics (DRO)	ND	1.0		mg/L	1	4/2/2019 6:06:20 PM	44016
Motor Oil Range Organics (MRO)	ND	5.0		mg/L	1	4/2/2019 6:06:20 PM	44016
Surr: DNOP	109	70-130		%Rec	1	4/2/2019 6:06:20 PM	44016
EPA METHOD 8260: VOLATILES SHORT LIST							Analyst: DJF
Benzene	ND	1.0		µg/L	1	4/3/2019 10:44:57 AM	R58841
Toluene	ND	1.0		µg/L	1	4/3/2019 10:44:57 AM	R58841
Ethylbenzene	ND	1.0		µg/L	1	4/3/2019 10:44:57 AM	R58841
Xylenes, Total	ND	1.5		µg/L	1	4/3/2019 10:44:57 AM	R58841
Surr: 1,2-Dichloroethane-d4	86.4	70-130		%Rec	1	4/3/2019 10:44:57 AM	R58841
Surr: 4-Bromofluorobenzene	104	70-130		%Rec	1	4/3/2019 10:44:57 AM	R58841
Surr: Dibromofluoromethane	84.9	70-130		%Rec	1	4/3/2019 10:44:57 AM	R58841
Surr: Toluene-d8	96.3	70-130		%Rec	1	4/3/2019 10:44:57 AM	R58841

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

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	H	Holding times for preparation or analysis exceeded
	ND	Not Detected at the Reporting Limit	PQL	Practical Quantitative Limit
	RL	Reporting Detection Limit	S	% Recovery outside of range due to dilution or matrix
	W	Sample container temperature is out of limit as specified at testcode		

Page 2 of 11

Analytical Report

Lab Order 1904033

Date Reported: 4/9/2019

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Animas Environmental Services

Client Sample ID: MW-3

Project: BMG Landfarm

Collection Date: 3/28/2019 1:29:00 PM

Lab ID: 1904033-003

Matrix: AQUEOUS

Received Date: 3/30/2019 9:20:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: MRA
Chloride	85	10		mg/L	20	4/2/2019 12:51:24 PM	R58843
SM2540C MOD: TOTAL DISSOLVED SOLIDS							Analyst: KS
Total Dissolved Solids	734	40.0	*D	mg/L	1	4/5/2019 12:59:00 PM	44069
EPA METHOD 8015D: GASOLINE RANGE							Analyst: DJF
Gasoline Range Organics (GRO)	ND	0.050		mg/L	1	4/3/2019 11:13:28 AM	G58841
Surr: BFB	104	70-130		%Rec	1	4/3/2019 11:13:28 AM	G58841
EPA METHOD 8015M/D: DIESEL RANGE							Analyst: Irm
Diesel Range Organics (DRO)	ND	1.0		mg/L	1	4/2/2019 6:28:33 PM	44016
Motor Oil Range Organics (MRO)	ND	5.0		mg/L	1	4/2/2019 6:28:33 PM	44016
Surr: DNOP	104	70-130		%Rec	1	4/2/2019 6:28:33 PM	44016
EPA METHOD 8260: VOLATILES SHORT LIST							Analyst: DJF
Benzene	ND	1.0		µg/L	1	4/3/2019 11:13:28 AM	R58841
Toluene	ND	1.0		µg/L	1	4/3/2019 11:13:28 AM	R58841
Ethylbenzene	ND	1.0		µg/L	1	4/3/2019 11:13:28 AM	R58841
Xylenes, Total	ND	1.5		µg/L	1	4/3/2019 11:13:28 AM	R58841
Surr: 1,2-Dichloroethane-d4	86.8	70-130		%Rec	1	4/3/2019 11:13:28 AM	R58841
Surr: 4-Bromofluorobenzene	105	70-130		%Rec	1	4/3/2019 11:13:28 AM	R58841
Surr: Dibromofluoromethane	85.0	70-130		%Rec	1	4/3/2019 11:13:28 AM	R58841
Surr: Toluene-d8	98.4	70-130		%Rec	1	4/3/2019 11:13:28 AM	R58841

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

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	H	Holding times for preparation or analysis exceeded
	ND	Not Detected at the Reporting Limit	PQL	Practical Quantitative Limit
	RL	Reporting Detection Limit	S	% Recovery outside of range due to dilution or matrix
	W	Sample container temperature is out of limit as specified at testcode		

Page 3 of 11

Analytical Report

Lab Order 1904033

Date Reported: 4/9/2019

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Animas Environmental Services

Client Sample ID: MW-4

Project: BMG Landfarm

Collection Date: 3/28/2019 2:49:00 PM

Lab ID: 1904033-004

Matrix: AQUEOUS

Received Date: 3/30/2019 9:20:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: MRA
Chloride	19	10		mg/L	20	4/2/2019 1:16:13 PM	R58843
SM2540C MOD: TOTAL DISSOLVED SOLIDS							Analyst: KS
Total Dissolved Solids	594	40.0	*D	mg/L	1	4/5/2019 12:59:00 PM	44069
EPA METHOD 8015D: GASOLINE RANGE							Analyst: DJF
Gasoline Range Organics (GRO)	ND	0.050		mg/L	1	4/3/2019 11:42:07 AM	G58841
Surr: BFB	98.9	70-130		%Rec	1	4/3/2019 11:42:07 AM	G58841
EPA METHOD 8015M/D: DIESEL RANGE							Analyst: Irm
Diesel Range Organics (DRO)	ND	1.0		mg/L	1	4/2/2019 6:50:43 PM	44016
Motor Oil Range Organics (MRO)	ND	5.0		mg/L	1	4/2/2019 6:50:43 PM	44016
Surr: DNOP	103	70-130		%Rec	1	4/2/2019 6:50:43 PM	44016
EPA METHOD 8260: VOLATILES SHORT LIST							Analyst: DJF
Benzene	ND	1.0		µg/L	1	4/3/2019 11:42:07 AM	R58841
Toluene	ND	1.0		µg/L	1	4/3/2019 11:42:07 AM	R58841
Ethylbenzene	ND	1.0		µg/L	1	4/3/2019 11:42:07 AM	R58841
Xylenes, Total	ND	1.5		µg/L	1	4/3/2019 11:42:07 AM	R58841
Surr: 1,2-Dichloroethane-d4	86.7	70-130		%Rec	1	4/3/2019 11:42:07 AM	R58841
Surr: 4-Bromofluorobenzene	99.7	70-130		%Rec	1	4/3/2019 11:42:07 AM	R58841
Surr: Dibromofluoromethane	85.0	70-130		%Rec	1	4/3/2019 11:42:07 AM	R58841
Surr: Toluene-d8	97.3	70-130		%Rec	1	4/3/2019 11:42:07 AM	R58841

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

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	H	Holding times for preparation or analysis exceeded
	ND	Not Detected at the Reporting Limit	PQL	Practical Quantitative Limit
	RL	Reporting Detection Limit	S	% Recovery outside of range due to dilution or matrix
	W	Sample container temperature is out of limit as specified at testcode		

Page 4 of 11

Analytical Report

Lab Order 1904033

Date Reported: 4/9/2019

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Animas Environmental Services

Client Sample ID: Trip Blank

Project: BMG Landfarm

Collection Date:

Lab ID: 1904033-005

Matrix: TRIP BLANK

Received Date: 3/30/2019 9:20:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260: VOLATILES SHORT LIST							Analyst: DJF
Benzene	ND	1.0		µg/L	1	4/3/2019 12:10:44 PM	R58841
Toluene	ND	1.0		µg/L	1	4/3/2019 12:10:44 PM	R58841
Ethylbenzene	ND	1.0		µg/L	1	4/3/2019 12:10:44 PM	R58841
Xylenes, Total	ND	1.5		µg/L	1	4/3/2019 12:10:44 PM	R58841
Surr: 1,2-Dichloroethane-d4	84.5	70-130		%Rec	1	4/3/2019 12:10:44 PM	R58841
Surr: 4-Bromofluorobenzene	102	70-130		%Rec	1	4/3/2019 12:10:44 PM	R58841
Surr: Dibromofluoromethane	83.9	70-130		%Rec	1	4/3/2019 12:10:44 PM	R58841
Surr: Toluene-d8	97.5	70-130		%Rec	1	4/3/2019 12:10:44 PM	R58841

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

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	H	Holding times for preparation or analysis exceeded
	ND	Not Detected at the Reporting Limit	PQL	Practical Quantitative Limit
	RL	Reporting Detection Limit	S	% Recovery outside of range due to dilution or matrix
	W	Sample container temperature is out of limit as specified at testcode		

QC SUMMARY REPORT**Hall Environmental Analysis Laboratory, Inc.**

WO#: 1904033

09-Apr-19

Client: Animas Environmental Services**Project:** BMG Landfarm

Sample ID: MB	SampType: mblk	TestCode: EPA Method 300.0: Anions								
Client ID: PBW	Batch ID: R58843	RunNo: 58843								
Prep Date:	Analysis Date: 4/2/2019	SeqNo: 1977716 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: R58843	RunNo: 58843								
Prep Date:	Analysis Date: 4/2/2019	SeqNo: 1977717 Units: mg/L								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	4.8	0.50	5.000	0	96.8	90	110			

Sample ID: MB	SampType: MBLK	TestCode: EPA Method 300.0: Anions								
Client ID: PBW	Batch ID: A58921	RunNo: 58921								
Prep Date:	Analysis Date: 4/4/2019	SeqNo: 1981163 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: A58921	RunNo: 58921								
Prep Date:	Analysis Date: 4/4/2019	SeqNo: 1981164 Units: mg/L								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	4.9	0.50	5.000	0	98.6	90	110			

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit	PQL	Practical Quantitative Limit
RL	Reporting Detection Limit	S	% Recovery outside of range due to dilution or matrix
W	Sample container temperature is out of limit as specified at testcode		

QC SUMMARY REPORT**Hall Environmental Analysis Laboratory, Inc.**

WO#: 1904033

09-Apr-19

Client: Animas Environmental Services**Project:** BMG Landfarm

Sample ID: LCS-44016	SampType: LCS		TestCode: EPA Method 8015M/D: Diesel Range							
Client ID: LCSW	Batch ID: 44016		RunNo: 58815							
Prep Date: 4/2/2019	Analysis Date: 4/2/2019		SeqNo: 1976628		Units: mg/L					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	5.0	1.0	5.000	0	99.4	71.8	135			
Surr: DNOP	0.43		0.5000		85.1	70	130			

Sample ID: MB-44016	SampType: MBLK		TestCode: EPA Method 8015M/D: Diesel Range							
Client ID: PBW	Batch ID: 44016		RunNo: 58815							
Prep Date: 4/2/2019	Analysis Date: 4/2/2019		SeqNo: 1976629		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	0.92		1.000		92.2	70	130			

Sample ID: 1904033-001BMS	SampType: MS		TestCode: EPA Method 8015M/D: Diesel Range							
Client ID: MW-1	Batch ID: 44016		RunNo: 58848							
Prep Date: 4/2/2019	Analysis Date: 4/2/2019		SeqNo: 1977918		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	68.1	137			
Surr: DNOP	0.50		0.5000		99.7	70	130			

Sample ID: 1904033-001BMSD	SampType: MSD		TestCode: EPA Method 8015M/D: Diesel Range							
Client ID: MW-1	Batch ID: 44016		RunNo: 58848							
Prep Date: 4/2/2019	Analysis Date: 4/2/2019		SeqNo: 1977919		Units: mg/L					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	5.3	1.0	5.000	0	105	68.1	137	2.03	20	
Surr: DNOP	0.49		0.5000		98.2	70	130	0	0	

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit	PQL	Practical Quantitative Limit
RL	Reporting Detection Limit	S	% Recovery outside of range due to dilution or matrix
W	Sample container temperature is out of limit as specified at testcode		

QC SUMMARY REPORT**Hall Environmental Analysis Laboratory, Inc.**

WO#: 1904033

09-Apr-19

Client: Animas Environmental Services**Project:** BMG Landfarm

Sample ID: 100ng lcs	SampType: LCS			TestCode: EPA Method 8260: Volatiles Short List						
Client ID: LCSW	Batch ID: R58841			RunNo: 58841						
Prep Date:	Analysis Date: 4/3/2019			SeqNo: 1980220		Units: µg/L				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	16	1.0	20.00	0	82.4	70	130			
Toluene	19	1.0	20.00	0	95.7	70	130			
Surr: 1,2-Dichloroethane-d4	8.8		10.00		88.5	70	130			
Surr: 4-Bromofluorobenzene	10		10.00		105	70	130			
Surr: Dibromofluoromethane	8.5		10.00		84.6	70	130			
Surr: Toluene-d8	9.4		10.00		93.6	70	130			

Sample ID: 1904033-001a ms	SampType: MS			TestCode: EPA Method 8260: Volatiles Short List						
Client ID: MW-1	Batch ID: R58841			RunNo: 58841						
Prep Date:	Analysis Date: 4/3/2019			SeqNo: 1980242		Units: µg/L				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	17	1.0	20.00	0	83.9	70	130			
Toluene	19	1.0	20.00	0	96.5	70	130			
Surr: 1,2-Dichloroethane-d4	8.6		10.00		85.6	70	130			
Surr: 4-Bromofluorobenzene	11		10.00		106	70	130			
Surr: Dibromofluoromethane	8.4		10.00		84.3	70	130			
Surr: Toluene-d8	9.3		10.00		93.4	70	130			

Sample ID: 1904033-001a msd	SampType: MSD			TestCode: EPA Method 8260: Volatiles Short List						
Client ID: MW-1	Batch ID: R58841			RunNo: 58841						
Prep Date:	Analysis Date: 4/3/2019			SeqNo: 1980243		Units: µg/L				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	16	1.0	20.00	0	78.5	70	130	6.60	20	
Toluene	19	1.0	20.00	0	97.4	70	130	0.931	20	
Surr: 1,2-Dichloroethane-d4	8.5		10.00		84.6	70	130	0	0	
Surr: 4-Bromofluorobenzene	10		10.00		100	70	130	0	0	
Surr: Dibromofluoromethane	8.4		10.00		83.9	70	130	0	0	
Surr: Toluene-d8	9.7		10.00		97.4	70	130	0	0	

Sample ID: rb	SampType: MBLK			TestCode: EPA Method 8260: Volatiles Short List						
Client ID: PBW	Batch ID: R58841			RunNo: 58841						
Prep Date:	Analysis Date: 4/3/2019			SeqNo: 1980248		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								

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit	PQL	Practical Quantitative Limit
RL	Reporting Detection Limit	S	% Recovery outside of range due to dilution or matrix
W	Sample container temperature is out of limit as specified at testcode		

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1904033

09-Apr-19

Client: Animas Environmental Services**Project:** BMG Landfarm

Sample ID: rb	SampType: MBLK		TestCode: EPA Method 8260: Volatiles Short List							
Client ID: PBW	Batch ID: R58841		RunNo: 58841							
Prep Date:	Analysis Date: 4/3/2019		SeqNo: 1980248		Units: µg/L					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: 1,2-Dichloroethane-d4	8.5		10.00		85.2	70	130			
Surr: 4-Bromofluorobenzene	10		10.00		101	70	130			
Surr: Dibromofluoromethane	8.4		10.00		84.0	70	130			
Surr: Toluene-d8	9.6		10.00		95.8	70	130			

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit	PQL	Practical Quantitative Limit
RL	Reporting Detection Limit	S	% Recovery outside of range due to dilution or matrix
W	Sample container temperature is out of limit as specified at testcode		

QC SUMMARY REPORT**Hall Environmental Analysis Laboratory, Inc.**

WO#: 1904033

09-Apr-19

Client: Animas Environmental Services**Project:** BMG Landfarm

Sample ID: 1904033-002a ms	SampType: MS	TestCode: EPA Method 8015D: Gasoline Range								
Client ID: MW-2	Batch ID: G58841	RunNo: 58841								
Prep Date:	Analysis Date: 4/3/2019	SeqNo: 1980259 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	83.1	70	130			
Surr: BFB	10		10.00		100	70	130			

Sample ID: 2.5ug gro lcs	SampType: LCS	TestCode: EPA Method 8015D: Gasoline Range								
Client ID: LCSW	Batch ID: G58841	RunNo: 58841								
Prep Date:	Analysis Date: 4/3/2019	SeqNo: 1980265 Units: mg/L								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	0.45	0.050	0.5000	0	90.2	70	130			
Surr: BFB	10		10.00		103	70	130			

Sample ID: rb	SampType: MBLK	TestCode: EPA Method 8015D: Gasoline Range								
Client ID: PBW	Batch ID: G58841	RunNo: 58841								
Prep Date:	Analysis Date: 4/3/2019	SeqNo: 1980266 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	9.8		10.00		98.4	70	130			

Sample ID: 1904033-002a msd	SampType: MSD	TestCode: EPA Method 8015D: Gasoline Range								
Client ID: MW-2	Batch ID: G58841	RunNo: 58841								
Prep Date:	Analysis Date: 4/3/2019	SeqNo: 1980270 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	80.0	70	130	3.78	20	
Surr: BFB	10		10.00		100	70	130	0	0	

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit	PQL	Practical Quantitative Limit
RL	Reporting Detection Limit	S	% Recovery outside of range due to dilution or matrix
W	Sample container temperature is out of limit as specified at testcode		

QC SUMMARY REPORT**Hall Environmental Analysis Laboratory, Inc.**

WO#: 1904033

09-Apr-19

Client: Animas Environmental Services**Project:** BMG Landfarm

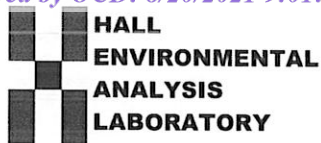
Sample ID: MB-44069	SampType: MBLK	TestCode: SM2540C MOD: Total Dissolved Solids								
Client ID: PBW	Batch ID: 44069	RunNo: 58928								
Prep Date: 4/3/2019	Analysis Date: 4/5/2019	SeqNo: 1981702	Units: mg/L							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Total Dissolved Solids	ND	20.0								

Sample ID: LCS-44069	SampType: LCS	TestCode: SM2540C MOD: Total Dissolved Solids								
Client ID: LCSW	Batch ID: 44069	RunNo: 58928								
Prep Date: 4/3/2019	Analysis Date: 4/5/2019	SeqNo: 1981703	Units: mg/L							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Total Dissolved Solids	1020	20.0	1000	0	102	80	120			

Qualifiers:

* Value exceeds Maximum Contaminant Level.
 ND Not Detected at the Reporting Limit
 RL Reporting Detection Limit
 W Sample container temperature is out of limit as specified at testcode

H Holding times for preparation or analysis exceeded
 PQL Practical Quantitative Limit
 S % Recovery outside of range due to dilution or matrix



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: 1904033

RcptNo: 1

Received By: Anne Thorne 3/30/2019 9:20:00 AM

Completed By: Yazmine Garduno 4/1/2019 12:22:17 PM

Reviewed By: ENM
LB: TO 4/01/19

Anne Thorne
Yazmine Garduno

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 $>0^{\circ}\text{C}$ 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. VOA vials have zero headspace? Yes ☐ No ☐ No VOA Vials ☒
10. Were any sample containers received broken? Yes ☐ No ☒
11. Does paperwork match bottle labels? Yes ☒ No ☐
(Note discrepancies on chain of custody)
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? Yes ☒ No ☐
(If no, notify customer for authorization.)

of preserved bottles checked for pH: TO 04/01/19
(<2 or >12 unless noted)
Adjusted? _____
Checked by: _____

Special Handling (if applicable)

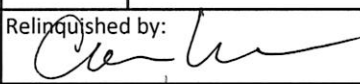
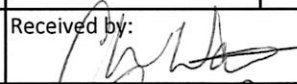
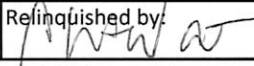
15. Was client notified of all discrepancies with this order? Yes ☐ No ☐ NA ☒

Person Notified: _____ Date: _____
By Whom: _____ Via: ☐ eMail ☐ Phone ☐ Fax ☐ In Person
Regarding: _____
Client Instructions: _____

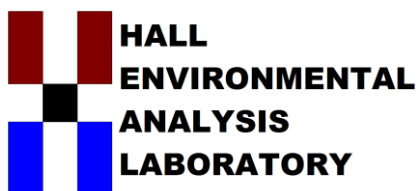
16. Additional remarks:

17. Cooler Information

Cooler No	Temp $^{\circ}\text{C}$	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	1.0	Good	Yes			
2	1.0	Good	Yes			
3	1.0	Good	Yes			

Chain-of-Custody Record				Turn-Around Time:			 HALL ENVIRONMENTAL ANALYSIS LABORATORY www.hallenvironmental.com 4901 Hawkins NE - Albuquerque, NM 87109 Tel. 505-345-3975 Fax 505-345-4107 Analysis Request																																										
Client: Animas Environmental Services				☒ Standard ☐ Rush _____			<table border="1"> <tr><td rowspan="5">BTX 8021</td><td rowspan="5">TPH (GRO/DRO/MRO) 8015</td><td rowspan="5">TDS SM2540C</td><td rowspan="5">Chlorides 300.0</td><td rowspan="5"></td><td rowspan="5"></td><td rowspan="5"></td><td rowspan="5"></td><td rowspan="5"></td><td rowspan="5"></td><td rowspan="5"></td><td rowspan="5"></td><td rowspan="5"></td><td rowspan="5"></td><td rowspan="5"></td><td rowspan="5"></td><td rowspan="5"></td><td rowspan="5"></td><td rowspan="5"></td><td rowspan="5">Air Bubbles (Y or N)</td></tr> <tr></tr> <tr></tr> <tr></tr> <tr></tr> </table>										BTX 8021	TPH (GRO/DRO/MRO) 8015	TDS SM2540C	Chlorides 300.0																Air Bubbles (Y or N)													
BTX 8021	TPH (GRO/DRO/MRO) 8015	TDS SM2540C	Chlorides 300.0																																														Air Bubbles (Y or N)
Project Name: BMG Landfarm				Project #: AES 040605																																													
Mailing Address: 604 W. Pinon Street				Project Manager: Elizabeth McNally, David Reese																																													
Farmington, NM 87401																																																	
Phone #: 505-564-2281																																																	
email or Fax#: dreese@animasenvironmental.com																																																	
QA/QC Package: ☒ Standard ☐ Level 4 (Full Validation)																																																	
Accreditation: ☐ NELAP ☐ Other _____				Sampler: CL/GB																																													
☐ EDD (Type) _____				On Ice: ☒ Yes ☐ No																																													
				Sample Temperature: 3 coolers @ 1.0° ea																																													
Date	Time	Matrix	Sample Request ID	Container Type and #	Preservative Type	HEAL No. 19041033																																											
3/28/2019	14:24	H2O	MW-1	(3) 40 mL glass (1) 250 mL amber glass (1) 500 mL plastic	3-HCl 2-Non	-001	X	X	X	X																																							
3/28/2019	14:01	H2O	MW-2	(3) 40 mL glass (1) 250 mL amber glass (1) 500 mL plastic	3-HCl 2-Non	-002	X	X	X	X																																							
3/28/2019	13:29	H2O	MW-3	(3) 40 mL glass (1) 250 mL amber glass (1) 500 mL plastic	3-HCl 2-Non	-003	X	X	X	X																																							
3/28/2019	14:49	H2O	MW-4	(3) 40 mL glass (1) 250 mL amber glass (1) 500 mL plastic	3-HCl 2-Non	-004	X	X	X	X																																							
		H2O	Trip Blank		Cold		X																																										
Date:	Time:	Relinquished by:		Received by:		Date	Time	Remarks:																																									
3/29/19	1530						1530																																										
Date:	Time:	Relinquished by:		Received by:		Date	Time																																										
3/29/19	1840					03/30/19	0920																																										

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

July 17, 2019

Elizabeth McNally
Animas Environmental Services
604 Pinon Street
Farmington, NM 87401
TEL: (505) 564-2281
FAX:

RE: BMG Landfarm

OrderNo.: 1907234

Dear Elizabeth McNally:

Hall Environmental Analysis Laboratory received 5 sample(s) on 7/4/2019 for the analyses presented in the following report.

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

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

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

Sincerely,

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

Andy Freeman
Laboratory Manager
4901 Hawkins NE
Albuquerque, NM 87109

Analytical Report

Lab Order 1907234

Date Reported: 7/17/2019

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Animas Environmental Services

Client Sample ID: MW-1

Project: BMG Landfarm

Collection Date: 7/3/2019 10:13:00 AM

Lab ID: 1907234-001

Matrix: AQUEOUS

Received Date: 7/4/2019 8:05:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: smb
Chloride	31	10		mg/L	20	7/5/2019 6:23:59 PM	R61176
SM2540C MOD: TOTAL DISSOLVED SOLIDS							Analyst: KS
Total Dissolved Solids	715	100	*D	mg/L	1	7/11/2019 4:41:00 PM	46102
EPA METHOD 8015M/D: DIESEL RANGE							Analyst: BRM
Diesel Range Organics (DRO)	ND	1.0		mg/L	1	7/9/2019 6:42:44 PM	46076
Motor Oil Range Organics (MRO)	ND	5.0		mg/L	1	7/9/2019 6:42:44 PM	46076
Surr: DNOP	95.4	70-130		%Rec	1	7/9/2019 6:42:44 PM	46076
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	ND	0.050		mg/L	1	7/8/2019 10:37:30 AM	G61222
Surr: BFB	90.9	72.8-125		%Rec	1	7/8/2019 10:37:30 AM	G61222
EPA METHOD 8021B: VOLATILES							Analyst: NSB
Benzene	ND	1.0		µg/L	1	7/8/2019 10:37:30 AM	B61222
Toluene	ND	1.0		µg/L	1	7/8/2019 10:37:30 AM	B61222
Ethylbenzene	ND	1.0		µg/L	1	7/8/2019 10:37:30 AM	B61222
Xylenes, Total	ND	2.0		µg/L	1	7/8/2019 10:37:30 AM	B61222
Surr: 4-Bromofluorobenzene	94.2	80-120		%Rec	1	7/8/2019 10:37:30 AM	B61222

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 Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

Page 1 of 10

Analytical Report

Lab Order 1907234

Date Reported: 7/17/2019

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Animas Environmental Services

Client Sample ID: MW-2

Project: BMG Landfarm

Collection Date: 7/3/2019 9:49:00 AM

Lab ID: 1907234-002

Matrix: AQUEOUS

Received Date: 7/4/2019 8:05:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: smb
Chloride	310	10	*	mg/L	20	7/5/2019 6:48:47 PM	R61176
SM2540C MOD: TOTAL DISSOLVED SOLIDS							Analyst: KS
Total Dissolved Solids	1060	100	*D	mg/L	1	7/11/2019 4:41:00 PM	46102
EPA METHOD 8015M/D: DIESEL RANGE							Analyst: BRM
Diesel Range Organics (DRO)	ND	1.0		mg/L	1	7/9/2019 7:04:52 PM	46076
Motor Oil Range Organics (MRO)	ND	5.0		mg/L	1	7/9/2019 7:04:52 PM	46076
Surr: DNOP	105	70-130		%Rec	1	7/9/2019 7:04:52 PM	46076
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	ND	0.050		mg/L	1	7/8/2019 11:00:56 AM	G61222
Surr: BFB	101	72.8-125		%Rec	1	7/8/2019 11:00:56 AM	G61222
EPA METHOD 8021B: VOLATILES							Analyst: NSB
Benzene	ND	1.0		µg/L	1	7/8/2019 11:00:56 AM	B61222
Toluene	ND	1.0		µg/L	1	7/8/2019 11:00:56 AM	B61222
Ethylbenzene	ND	1.0		µg/L	1	7/8/2019 11:00:56 AM	B61222
Xylenes, Total	ND	2.0		µg/L	1	7/8/2019 11:00:56 AM	B61222
Surr: 4-Bromofluorobenzene	105	80-120		%Rec	1	7/8/2019 11:00:56 AM	B61222

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 Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

Page 2 of 10

Analytical Report

Lab Order 1907234

Date Reported: 7/17/2019

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Animas Environmental Services

Client Sample ID: MW-3

Project: BMG Landfarm

Collection Date: 7/3/2019 9:15:00 AM

Lab ID: 1907234-003

Matrix: AQUEOUS

Received Date: 7/4/2019 8:05:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: smb
Chloride	120	10		mg/L	20	7/5/2019 7:13:37 PM	R61176
SM2540C MOD: TOTAL DISSOLVED SOLIDS							Analyst: KS
Total Dissolved Solids	780	100	*D	mg/L	1	7/11/2019 4:41:00 PM	46102
EPA METHOD 8015M/D: DIESEL RANGE							Analyst: BRM
Diesel Range Organics (DRO)	ND	1.0		mg/L	1	7/9/2019 7:27:07 PM	46076
Motor Oil Range Organics (MRO)	ND	5.0		mg/L	1	7/9/2019 7:27:07 PM	46076
Surr: DNOP	99.0	70-130		%Rec	1	7/9/2019 7:27:07 PM	46076
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	ND	0.050		mg/L	1	7/8/2019 11:24:27 AM	G61222
Surr: BFB	90.6	72.8-125		%Rec	1	7/8/2019 11:24:27 AM	G61222
EPA METHOD 8021B: VOLATILES							Analyst: NSB
Benzene	ND	1.0		µg/L	1	7/8/2019 11:24:27 AM	B61222
Toluene	ND	1.0		µg/L	1	7/8/2019 11:24:27 AM	B61222
Ethylbenzene	ND	1.0		µg/L	1	7/8/2019 11:24:27 AM	B61222
Xylenes, Total	ND	2.0		µg/L	1	7/8/2019 11:24:27 AM	B61222
Surr: 4-Bromofluorobenzene	94.8	80-120		%Rec	1	7/8/2019 11:24:27 AM	B61222

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 Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

Analytical Report

Lab Order 1907234

Date Reported: 7/17/2019

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Animas Environmental Services

Client Sample ID: MW-4

Project: BMG Landfarm

Collection Date: 7/3/2019 8:40:00 AM

Lab ID: 1907234-004

Matrix: AQUEOUS

Received Date: 7/4/2019 8:05:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: smb
Chloride	84	10		mg/L	20	7/5/2019 7:38:25 PM	R61176
SM2540C MOD: TOTAL DISSOLVED SOLIDS							Analyst: KS
Total Dissolved Solids	620	100	*D	mg/L	1	7/11/2019 4:41:00 PM	46102
EPA METHOD 8015M/D: DIESEL RANGE							Analyst: BRM
Diesel Range Organics (DRO)	ND	1.0		mg/L	1	7/9/2019 7:49:19 PM	46076
Motor Oil Range Organics (MRO)	ND	5.0		mg/L	1	7/9/2019 7:49:19 PM	46076
Surr: DNOP	109	70-130		%Rec	1	7/9/2019 7:49:19 PM	46076
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	ND	0.050		mg/L	1	7/8/2019 11:47:56 AM	G61222
Surr: BFB	94.5	72.8-125		%Rec	1	7/8/2019 11:47:56 AM	G61222
EPA METHOD 8021B: VOLATILES							Analyst: NSB
Benzene	ND	1.0		µg/L	1	7/8/2019 11:47:56 AM	B61222
Toluene	ND	1.0		µg/L	1	7/8/2019 11:47:56 AM	B61222
Ethylbenzene	ND	1.0		µg/L	1	7/8/2019 11:47:56 AM	B61222
Xylenes, Total	ND	2.0		µg/L	1	7/8/2019 11:47:56 AM	B61222
Surr: 4-Bromofluorobenzene	99.5	80-120		%Rec	1	7/8/2019 11:47:56 AM	B61222

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 Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

Analytical Report

Lab Order 1907234

Date Reported: 7/17/2019

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Animas Environmental Services

Client Sample ID: Trip Blank

Project: BMG Landfarm

Collection Date:

Lab ID: 1907234-005

Matrix: AQUEOUS

Received Date: 7/4/2019 8:05:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	ND	0.050		mg/L	1	7/8/2019 12:11:22 PM	G61222
Surr: BFB	89.8	72.8-125		%Rec	1	7/8/2019 12:11:22 PM	G61222
EPA METHOD 8021B: VOLATILES							Analyst: NSB
Benzene	ND	1.0		µg/L	1	7/8/2019 12:11:22 PM	B61222
Toluene	ND	1.0		µg/L	1	7/8/2019 12:11:22 PM	B61222
Ethylbenzene	ND	1.0		µg/L	1	7/8/2019 12:11:22 PM	B61222
Xylenes, Total	ND	2.0		µg/L	1	7/8/2019 12:11:22 PM	B61222
Surr: 4-Bromofluorobenzene	92.8	80-120		%Rec	1	7/8/2019 12:11:22 PM	B61222

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 Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

Page 5 of 10

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1907234

17-Jul-19

Client: Animas Environmental Services**Project:** BMG Landfarm

Sample ID: MB	SampType: MBLK		TestCode: EPA Method 300.0: Anions							
Client ID: PBW	Batch ID: R61176		RunNo: 61176							
Prep Date:	Analysis Date: 7/5/2019		SeqNo: 2074459		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: R61176		RunNo: 61176							
Prep Date:	Analysis Date: 7/5/2019		SeqNo: 2074460		Units: mg/L					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	4.8	0.50	5.000	0	96.0	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 Quantitative 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

Page 6 of 10

QC SUMMARY REPORT**Hall Environmental Analysis Laboratory, Inc.**

WO#: 1907234

17-Jul-19

Client: Animas Environmental Services**Project:** BMG Landfarm

Sample ID: LCS-46076	SampType: LCS			TestCode: EPA Method 8015M/D: Diesel Range						
Client ID: LCSW	Batch ID: 46076			RunNo: 61236						
Prep Date: 7/9/2019	Analysis Date: 7/9/2019			SeqNo: 2076127		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	114	71.8	135			
Surr: DNOP	0.55		0.5000		111	70	130			

Sample ID: MB-46076	SampType: MBLK			TestCode: EPA Method 8015M/D: Diesel Range						
Client ID: PBW	Batch ID: 46076			RunNo: 61236						
Prep Date: 7/9/2019	Analysis Date: 7/9/2019			SeqNo: 2076128		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	1.0		1.000		104	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 Quantitative 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#: 1907234

17-Jul-19

Client: Animas Environmental Services**Project:** BMG Landfarm

Sample ID: RB	SampType: MBLK	TestCode: EPA Method 8015D: Gasoline Range								
Client ID: PBW	Batch ID: G61222	RunNo: 61222								
Prep Date:	Analysis Date: 7/8/2019	SeqNo: 2075475 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	18		20.00		89.9	72.8	125			

Sample ID: 2.5UG GRO LCS	SampType: LCS	TestCode: EPA Method 8015D: Gasoline Range								
Client ID: LCSW	Batch ID: G61222	RunNo: 61222								
Prep Date:	Analysis Date: 7/8/2019	SeqNo: 2075476 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	84.2	77.7	130			
Surr: BFB	21		20.00		105	72.8	125			

Sample ID: 1907234-001AMS	SampType: MS	TestCode: EPA Method 8015D: Gasoline Range								
Client ID: MW-1	Batch ID: G61222	RunNo: 61222								
Prep Date:	Analysis Date: 7/8/2019	SeqNo: 2075480 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	86.8	65.4	140			
Surr: BFB	21		20.00		103	72.8	125			

Sample ID: 1907234-001AMSD	SampType: MSD	TestCode: EPA Method 8015D: Gasoline Range								
Client ID: MW-1	Batch ID: G61222	RunNo: 61222								
Prep Date:	Analysis Date: 7/8/2019	SeqNo: 2075481 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	85.3	65.4	140	1.72	20	
Surr: BFB	20		20.00		101	72.8	125	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 Quantitative 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#: 1907234

17-Jul-19

Client: Animas Environmental Services**Project:** BMG Landfarm

Sample ID: RB	SampType: MBLK	TestCode: EPA Method 8021B: Volatiles								
Client ID: PBW	Batch ID: B61222	RunNo: 61222								
Prep Date:	Analysis Date: 7/8/2019	SeqNo: 2075488 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	2.0								
Surr: 4-Bromofluorobenzene	19		20.00		93.4	80	120			

Sample ID: 100NG BTEX LCS	SampType: LCS	TestCode: EPA Method 8021B: Volatiles								
Client ID: LCSW	Batch ID: B61222	RunNo: 61222								
Prep Date:	Analysis Date: 7/8/2019	SeqNo: 2075489 Units: µg/L								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	19	1.0	20.00	0	94.1	80	120			
Toluene	20	1.0	20.00	0	98.9	80	120			
Ethylbenzene	20	1.0	20.00	0	100	80	120			
Xylenes, Total	60	2.0	60.00	0	100	80	120			
Surr: 4-Bromofluorobenzene	20		20.00		98.6	80	120			

Sample ID: 1907234-003AMS	SampType: MS	TestCode: EPA Method 8021B: Volatiles								
Client ID: MW-3	Batch ID: B61222	RunNo: 61222								
Prep Date:	Analysis Date: 7/8/2019	SeqNo: 2075496 Units: µg/L								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	20	1.0	20.00	0	98.4	80	120			
Toluene	21	1.0	20.00	0	103	80	120			
Ethylbenzene	21	1.0	20.00	0	104	80	120			
Xylenes, Total	62	2.0	60.00	0	103	80	120			
Surr: 4-Bromofluorobenzene	20		20.00		97.8	80	120			

Sample ID: 1907234-003AMSD	SampType: MSD	TestCode: EPA Method 8021B: Volatiles								
Client ID: MW-3	Batch ID: B61222	RunNo: 61222								
Prep Date:	Analysis Date: 7/8/2019	SeqNo: 2075498 Units: µg/L								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	19	1.0	20.00	0	95.5	80	120	2.92	20	
Toluene	20	1.0	20.00	0	99.5	80	120	3.04	20	
Ethylbenzene	20	1.0	20.00	0	99.9	80	120	4.21	20	
Xylenes, Total	59	2.0	60.00	0	98.8	80	120	4.45	20	
Surr: 4-Bromofluorobenzene	19		20.00		96.7	80	120	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 Quantitative 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#: 1907234

17-Jul-19

Client: Animas Environmental Services

Project: BMG Landfarm

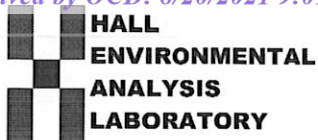
Sample ID: MB-46102	SampType: MBLK	TestCode: SM2540C MOD: Total Dissolved Solids								
Client ID: PBW	Batch ID: 46102	RunNo: 61318								
Prep Date: 7/10/2019	Analysis Date: 7/11/2019	SeqNo: 2078603			Units: mg/L					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Total Dissolved Solids	ND	20.0								

Sample ID: LCS-46102	SampType: LCS	TestCode: SM2540C MOD: Total Dissolved Solids								
Client ID: LCSW	Batch ID: 46102	RunNo: 61318								
Prep Date: 7/10/2019	Analysis Date: 7/11/2019	SeqNo: 2078604			Units: mg/L					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Total Dissolved Solids	1020	20.0	1000	0	102	80	120			

Qualifiers:

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

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
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: 1907234

RcptNo: 1

Received By: Andy Freeman

7/4/2019 8:05:00 AM

Completed By: Anne Thorne

7/5/2019 9:04:38 AM

Reviewed By: ENH

7/5/19

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 $>0^{\circ}\text{C}$ 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. VOA vials have zero headspace? Yes ☐ No ☐ No VOA Vials ☒10. Were any sample containers received broken? Yes ☐ No ☒11. Does paperwork match bottle labels? Yes ☒ No ☐

(Note discrepancies on chain of custody)

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? Yes ☒ No ☐

(If no, notify customer for authorization.)

of preserved
bottles checked
for pH:

(<2 or >12 unless noted)

Adjusted? _____

Checked by: DAD 7/5/19

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: _____

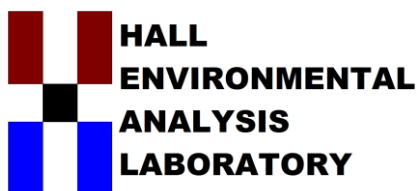
16. Additional remarks:

17. Cooler Information

Cooler No	Temp °C	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	3.3	Good	Yes			

Chain-of-Custody Record				Turn-Around Time:		Analysis Request	
Client: Animas Environmental Services		☒ Standard ☐ Rush		Project Name: BMG Landfarm		HALL ENVIRONMENTAL ANALYSIS LABORATORY	
Mailing Address: P.O. Box 8		Project #: AES 040605		www.hallenvironmental.com		4901 Hawkins NE - Albuquerque, NM 87109	
Phone #: 505-564-2281		Project Manager: Elizabeth McNally, David Reese		Tel. 505-345-3975		Fax 505-345-4107	
email or Fax#: dreese@animasenvironmental.com		Sampler: CL/GB		TPH (GRO/DRO/MRO) 8015		Chlorides 300.0	
☒ Standard ☐ Level 4 (Full Validation)		On Ice: ☒ Yes ☐ No		TDS SM2540C			
Accreditation: ☐ NELAP ☐ Other		Sample Temperature: 3.3°C		BTX 8021			
☐ EDD (Type)		Container Type and #		HEAL No.		Air Bubbles (Y or N)	
Date	Time	Matrix	Sample Request ID	Preservative Type			
7.3.19	10:13	H2O	MW-1	(3) 40 mL glass (1) 250 mL amber glass (1) 500 mL plastic	3-HCl 2-Non	X	X
7.3.19	9:49	H2O	MW-2	(3) 40 mL glass (1) 250 mL amber glass (1) 500 mL plastic	3-HCl 2-Non	X	X
7.3.19	9:15	H2O	MW-3	(3) 40 mL glass (1) 250 mL amber glass (1) 500 mL plastic	3-HCl 2-Non	X	X
7.3.19	8:40	H2O	MW-4	(3) 40 mL glass (1) 250 mL amber glass (1) 500 mL plastic	3-HCl 2-Non	X	X
		H2O	Trip Blank		Cold	X	
Relinquished by: <i>David Reese</i>		Received by: <i>Elizabeth McNally</i>		Date: 7/3/19		Time: 1532	
Date: 7.3.19	Time: 12:40			Date: 7/4/19		Time: 0805	
Date: 7/3/19	Time: 1740			Date: 7/4/19		Time: 0805	

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

October 08, 2019

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

RE: BMG Landfarm

OrderNo.: 1910005

Dear Elizabeth McNally:

Hall Environmental Analysis Laboratory received 5 sample(s) on 10/1/2019 for the analyses presented in the following report.

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

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

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

Sincerely,

A handwritten signature in black ink, appearing to read "Andy Freeman", is written over a white background.

Andy Freeman
Laboratory Manager
4901 Hawkins NE
Albuquerque, NM 87109

Analytical Report

Lab Order 1910005

Date Reported: 10/8/2019

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Animas Environmental

Client Sample ID: MW-1

Project: BMG Landfarm

Collection Date: 9/30/2019 11:40:00 AM

Lab ID: 1910005-001

Matrix: AQUEOUS

Received Date: 10/1/2019 8:25:00 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	10/2/2019 9:24:41 AM
Motor Oil Range Organics (MRO)	ND	5.0		mg/L	1	10/2/2019 9:24:41 AM
Surr: DNOP	112	70-130		%Rec	1	10/2/2019 9:24:41 AM
EPA METHOD 8015D: GASOLINE RANGE						Analyst: NSB
Gasoline Range Organics (GRO)	ND	0.050		mg/L	1	10/2/2019 9:15:36 PM
Surr: BFB	99.4	65.8-143		%Rec	1	10/2/2019 9:15:36 PM
EPA METHOD 8021B: VOLATILES						Analyst: NSB
Benzene	ND	1.0		µg/L	1	10/2/2019 9:15:36 PM
Toluene	ND	1.0		µg/L	1	10/2/2019 9:15:36 PM
Ethylbenzene	ND	1.0		µg/L	1	10/2/2019 9:15:36 PM
Xylenes, Total	ND	2.0		µg/L	1	10/2/2019 9:15:36 PM
Surr: 4-Bromofluorobenzene	99.6	80-120		%Rec	1	10/2/2019 9:15:36 PM
EPA METHOD 300.0: ANIONS						Analyst: CAS
Chloride	45	5.0		mg/L	10	10/1/2019 7:53:52 PM
SM2540C MOD: TOTAL DISSOLVED SOLIDS						Analyst: KS
Total Dissolved Solids	716	40.0	*D	mg/L	1	10/7/2019 11:13:00 AM

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

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

Analytical Report

Lab Order 1910005

Date Reported: 10/8/2019

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Animas Environmental

Client Sample ID: MW-2

Project: BMG Landfarm

Collection Date: 9/30/2019 12:07:00 PM

Lab ID: 1910005-002

Matrix: AQUEOUS

Received Date: 10/1/2019 8:25:00 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	10/2/2019 10:37:41 AM
Motor Oil Range Organics (MRO)	ND	5.0		mg/L	1	10/2/2019 10:37:41 AM
Surr: DNOP	109	70-130		%Rec	1	10/2/2019 10:37:41 AM
EPA METHOD 8015D: GASOLINE RANGE						Analyst: NSB
Gasoline Range Organics (GRO)	ND	0.050		mg/L	1	10/2/2019 9:38:19 PM
Surr: BFB	99.9	65.8-143		%Rec	1	10/2/2019 9:38:19 PM
EPA METHOD 8021B: VOLATILES						Analyst: NSB
Benzene	ND	1.0		µg/L	1	10/2/2019 9:38:19 PM
Toluene	ND	1.0		µg/L	1	10/2/2019 9:38:19 PM
Ethylbenzene	ND	1.0		µg/L	1	10/2/2019 9:38:19 PM
Xylenes, Total	ND	2.0		µg/L	1	10/2/2019 9:38:19 PM
Surr: 4-Bromofluorobenzene	99.2	80-120		%Rec	1	10/2/2019 9:38:19 PM
EPA METHOD 300.0: ANIONS						Analyst: CAS
Chloride	240	50		mg/L	100	10/1/2019 8:32:29 PM
SM2540C MOD: TOTAL DISSOLVED SOLIDS						Analyst: KS
Total Dissolved Solids	1040	100	*D	mg/L	1	10/7/2019 11:13:00 AM

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

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

Analytical Report

Lab Order 1910005

Date Reported: 10/8/2019

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Animas Environmental

Client Sample ID: MW-3

Project: BMG Landfarm

Collection Date: 9/30/2019 12:34:00 PM

Lab ID: 1910005-003

Matrix: AQUEOUS

Received Date: 10/1/2019 8:25:00 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	10/2/2019 11:02:21 AM
Motor Oil Range Organics (MRO)	ND	5.0		mg/L	1	10/2/2019 11:02:21 AM
Surr: DNOP	105	70-130		%Rec	1	10/2/2019 11:02:21 AM
EPA METHOD 8015D: GASOLINE RANGE						Analyst: NSB
Gasoline Range Organics (GRO)	ND	0.050		mg/L	1	10/2/2019 10:01:00 PM
Surr: BFB	98.7	65.8-143		%Rec	1	10/2/2019 10:01:00 PM
EPA METHOD 8021B: VOLATILES						Analyst: NSB
Benzene	ND	1.0		µg/L	1	10/2/2019 10:01:00 PM
Toluene	ND	1.0		µg/L	1	10/2/2019 10:01:00 PM
Ethylbenzene	ND	1.0		µg/L	1	10/2/2019 10:01:00 PM
Xylenes, Total	ND	2.0		µg/L	1	10/2/2019 10:01:00 PM
Surr: 4-Bromofluorobenzene	97.9	80-120		%Rec	1	10/2/2019 10:01:00 PM
EPA METHOD 300.0: ANIONS						Analyst: CAS
Chloride	150	5.0		mg/L	10	10/1/2019 9:11:44 PM
SM2540C MOD: TOTAL DISSOLVED SOLIDS						Analyst: KS
Total Dissolved Solids	855	100	*D	mg/L	1	10/7/2019 11:13:00 AM

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

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

Page 3 of 10

Analytical Report

Lab Order 1910005

Date Reported: 10/8/2019

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Animas Environmental

Client Sample ID: MW-4

Project: BMG Landfarm

Collection Date: 9/30/2019 10:44:00 AM

Lab ID: 1910005-004

Matrix: AQUEOUS

Received Date: 10/1/2019 8:25:00 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	10/2/2019 11:26:43 AM
Motor Oil Range Organics (MRO)	ND	5.0		mg/L	1	10/2/2019 11:26:43 AM
Surr: DNOP	111	70-130		%Rec	1	10/2/2019 11:26:43 AM
EPA METHOD 8015D: GASOLINE RANGE						Analyst: NSB
Gasoline Range Organics (GRO)	ND	0.050		mg/L	1	10/2/2019 10:24:07 PM
Surr: BFB	103	65.8-143		%Rec	1	10/2/2019 10:24:07 PM
EPA METHOD 8021B: VOLATILES						Analyst: NSB
Benzene	ND	1.0		µg/L	1	10/2/2019 10:24:07 PM
Toluene	ND	1.0		µg/L	1	10/2/2019 10:24:07 PM
Ethylbenzene	ND	1.0		µg/L	1	10/2/2019 10:24:07 PM
Xylenes, Total	ND	2.0		µg/L	1	10/2/2019 10:24:07 PM
Surr: 4-Bromofluorobenzene	101	80-120		%Rec	1	10/2/2019 10:24:07 PM
EPA METHOD 300.0: ANIONS						Analyst: CAS
Chloride	99	5.0		mg/L	10	10/1/2019 9:36:57 PM
SM2540C MOD: TOTAL DISSOLVED SOLIDS						Analyst: KS
Total Dissolved Solids	750	100	*D	mg/L	1	10/7/2019 11:13:00 AM

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

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

Analytical Report

Lab Order 1910005

Date Reported: 10/8/2019

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Animas Environmental

Client Sample ID: Trip Blank

Project: BMG Landfarm

Collection Date:

Lab ID: 1910005-005

Matrix: TRIP BLANK

Received Date: 10/1/2019 8:25:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8021B: VOLATILES						Analyst: NSB
Benzene	ND	1.0		µg/L	1	10/2/2019 10:47:20 PM
Toluene	ND	1.0		µg/L	1	10/2/2019 10:47:20 PM
Ethylbenzene	ND	1.0		µg/L	1	10/2/2019 10:47:20 PM
Xylenes, Total	ND	2.0		µg/L	1	10/2/2019 10:47:20 PM
Surr: 4-Bromofluorobenzene	104	80-120		%Rec	1	10/2/2019 10:47:20 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 Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

Page 5 of 10

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: 1910005
08-Oct-19

Client: Animas Environmental
Project: BMG Landfarm

Sample ID: MB	SampType: MBLK	TestCode: EPA Method 300.0: Anions								
Client ID: PBW	Batch ID: R63362	RunNo: 63362								
Prep Date:	Analysis Date: 10/1/2019	SeqNo: 2163414		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: R63362	RunNo: 63362								
Prep Date:	Analysis Date: 10/1/2019	SeqNo: 2163415		Units: mg/L						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	5.0	0.50	5.000	0	100	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 Quantitative 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#: 1910005

08-Oct-19

Client: Animas Environmental**Project:** BMG Landfarm

Sample ID: 1910005-001BMS	SampType: MS	TestCode: EPA Method 8015M/D: Diesel Range								
Client ID: MW-1	Batch ID: 47861	RunNo: 63365								
Prep Date: 10/1/2019	Analysis Date: 10/2/2019	SeqNo: 2163551 Units: mg/L								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	5.6	1.0	5.000	0	113	68.1	137			
Surr: DNOP	0.49		0.5000		98.1	70	130			

Sample ID: 1910005-001BMSD	SampType: MSD	TestCode: EPA Method 8015M/D: Diesel Range								
Client ID: MW-1	Batch ID: 47861	RunNo: 63365								
Prep Date: 10/1/2019	Analysis Date: 10/2/2019	SeqNo: 2163552 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	68.1	137	2.10	20	
Surr: DNOP	0.50		0.5000		99.7	70	130	0	0	

Sample ID: LCS-47861	SampType: LCS	TestCode: EPA Method 8015M/D: Diesel Range								
Client ID: LCSW	Batch ID: 47861	RunNo: 63365								
Prep Date: 10/1/2019	Analysis Date: 10/2/2019	SeqNo: 2163558 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	109	71.8	135			
Surr: DNOP	0.48		0.5000		96.8	70	130			

Sample ID: MB-47861	SampType: MBLK	TestCode: EPA Method 8015M/D: Diesel Range								
Client ID: PBW	Batch ID: 47861	RunNo: 63365								
Prep Date: 10/1/2019	Analysis Date: 10/2/2019	SeqNo: 2163559 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			

Qualifiers:

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

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#: 1910005

08-Oct-19

Client: Animas Environmental**Project:** BMG Landfarm

Sample ID: RB	SampType: MBLK		TestCode: EPA Method 8015D: Gasoline Range							
Client ID: PBW	Batch ID: B63368		RunNo: 63368							
Prep Date:	Analysis Date: 10/2/2019		SeqNo: 2163872		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	19		20.00		96.9	65.8	143			

Sample ID: 2.5UG GRO LCS	SampType: LCS		TestCode: EPA Method 8015D: Gasoline Range							
Client ID: LCSW	Batch ID: B63368		RunNo: 63368							
Prep Date:	Analysis Date: 10/2/2019		SeqNo: 2163873		Units: mg/L					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	0.54	0.050	0.5000	0	107	73.6	119			
Surr: BFB	24		20.00		118	65.8	143			

Qualifiers:

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

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#: 1910005

08-Oct-19

Client: Animas Environmental**Project:** BMG Landfarm

Sample ID: RB	SampType: MBLK	TestCode: EPA Method 8021B: Volatiles								
Client ID: PBW	Batch ID: D63368	RunNo: 63368								
Prep Date:	Analysis Date: 10/2/2019	SeqNo: 2163929	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	2.0								
Surr: 4-Bromofluorobenzene	19		20.00		96.6	80	120			

Sample ID: 100NG BTEX LCS	SampType: LCS	TestCode: EPA Method 8021B: Volatiles								
Client ID: LCSW	Batch ID: D63368	RunNo: 63368								
Prep Date:	Analysis Date: 10/2/2019	SeqNo: 2163930	Units: µg/L							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	19	1.0	20.00	0	95.2	80	120			
Toluene	20	1.0	20.00	0	97.7	80	120			
Ethylbenzene	19	1.0	20.00	0	96.8	80	120			
Xylenes, Total	57	2.0	60.00	0	95.7	80	120			
Surr: 4-Bromofluorobenzene	22		20.00		108	80	120			

Qualifiers:

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

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#: 1910005

08-Oct-19

Client: Animas Environmental
Project: BMG Landfarm

Sample ID: MB-47924	SampType: MBLK	TestCode: SM2540C MOD: Total Dissolved Solids								
Client ID: PBW	Batch ID: 47924	RunNo: 63455								
Prep Date: 10/3/2019	Analysis Date: 10/7/2019	SeqNo: 2167427	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-47924	SampType: LCS	TestCode: SM2540C MOD: Total Dissolved Solids								
Client ID: LCSW	Batch ID: 47924	RunNo: 63455								
Prep Date: 10/3/2019	Analysis Date: 10/7/2019	SeqNo: 2167428	Units: mg/L							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Total Dissolved Solids	1020	20.0	1000	0	102	80	120			

Qualifiers:

* Value exceeds Maximum Contaminant Level.

D Sample Diluted Due to Matrix

H Holding times for preparation or analysis exceeded

ND Not Detected at the Reporting Limit

PQL Practical Quantitative Limit

S % Recovery outside of range due to dilution or matrix

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

Page 10 of 10

Chain-of-Custody Record						Turn-Around Time:	
Client: Animas Environmental Services		☒ Standard ☐ Rush					
Mailing Address: P.O. Box 8		Project Name: BMG Landfarm					
Phone #: Farmington, NM 87499-00008		Project #: AES 040605					
Email or Fax#: 505-564-2281		Project Manager: Elizabeth McNally, David Reese					
QA/QC Package: dreese@animasenvironmental.com		Sampler: CL/GB					
☒ Standard ☐ Level 4 (Full Validation)		On Ice: X Yes ☐ No					
Accreditation: ☐ NELAP ☐ Other		Sample Temperature: 4.9-D-10FD=4.8°C					
☐ EDD (Type)		Container Type and #		Preservative Type		HEAL No.	
Date	Time	Matrix	Sample Request ID	(3) 40 mL glass (1) 250 mL amber glass (1) 500 mL plastic	3-HCl 2-Non		BTEX 8021
9-30-19	11:46	H2O	MW-1			X	TDS SM2540C
9-30-19	12:07	H2O	MW-2			X	Chlorides 300.0
9-30-19	12:34	H2O	MW-3			X	TPH (GRO/DRO/MRO) 8015
9-30-19	10:44	H2O	MW-4			X	Air Bubbles (Y or N)
		H2O	Trip Blank		Cold	X	
Date:	Time:	Relinquished by:	Received by:	Date	Time	Remarks:	
9/30/19	1703	<i>[Signature]</i>	<i>[Signature]</i>	9/30/19	1703		
9/30/19	1747	<i>[Signature]</i>	<i>[Signature]</i>	10/19	0835		

Jones, Brad A., EMNRD

From: Jones, Brad A., EMNRD
Sent: Friday, February 25, 2022 1:49 PM
To: bmg@bmgdrilling.com
Cc: Elizabeth McNally
Subject: NM2-004 BMG's 2019 Landfarm Monitoring and Sampling Report OCD Review
Attachments: 2022 0225 NM2-004 BMG Corp 2019 Annual Report OCD Review.pdf

Ms. Dimond and Elizabeth,

Please see the attached. OCD has completed the review of the 2019 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

Michelle Lujan Grisham
Governor

Sarah Cottrell Propst
Cabinet Secretary

Todd E. Leahy, JD, PhD
Deputy Secretary

Adrienne Sandoval
Director, Oil Conservation Division



February 25, 2022

Ms. Glenda Dimond
Benson-Montin-Greer Drilling Corp.
4900 College Boulevard
Farmington, New Mexico 87402

**RE: 2019 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**

Ms. Dimond:

The Oil Conservation Division (OCD) has completed its review of Benson-Montin-Greer Drilling Corp's (BMG) 2019 Landfarm Monitoring and Sampling Report, dated March 2, 2020, for the BMG Landfarm under permit NM2-004. OCD's review of the annual report has resulted in the discovery of releases detected in the vadose zone and 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 also 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.

Transitional Provisions and Monitoring Requirements:

On June 30, 2011 OCD sent a letter to each landfarm operator informing them how the transitional provisions of 19.15.36.20 NMAC should be applied to the existing permit conditions. This letter is located in the administrative record directly through the following hyperlink:
https://ocdimage.emnrd.nm.gov/Imaging/FileStore/santafeadmin/ao/209729/peem0112360331_12_ao.pdf
Please review the June 30, 2011 letter from OCD. Keep in mind that the regulatory language of 19.15.36.20 NMAC was amended on June 30, 2016 and the approach discussed in the June 2011 letter should be applied to the additional considerations identified in 19.15.36.20.A NMAC.

OCD was unable to locate any submittals or approvals for major and/or minor modification requests to the existing permit conditions. Based upon the existing permit conditions of Permit NM2-004, and the financial assurance, operational, monitoring, waste acceptance and closure and post closure requirements provided in 19.15.36 NMAC, except as otherwise specifically provided in the applicable permit or order, or other agreements that the division has granted in writing to the particular surface waste management facility, as recognized in the transitional provision of 19.15.36.20.A NMAC, BMG is required to perform the following sampling at the OCD permitted surface waste management facility NM2-004:

Benson-Montin-Greer Drilling Corp.
NM2-004
February 25, 2022
Page 2

Ground Water Monitoring: MW-1 through MW-4 sampled quarterly, for TPH as determined by EPA method 418.1 or 8015B for the sum of DRO, GRO, and MRO (only one TPH test method is required); BTEX as determined by EPA SW-846 method 8021B or 8260B; chloride concentration, as determined by EPA method 300.0; and Total Dissolved Solids (TDS) by Standard Method 2540C.

Treatment Zone - contaminated soils being remediated: Sampled semi-annually (one composite soil sample per landfarm cell, consisting of four discrete samples), for TPH as determined by EPA SW-846 method 8015M or EPA method 418.1 or other EPA method approved by the division (only one TPH test method is required); and chloride as determined by EPA method 300.0.

Vadose Zone (VZ) - native soils beneath the treatment zone soils: A minimum of one random soil sample will be taken from each individual cell. Samples taken quarterly between two (2) to three (3) feet below the native ground surface (as required by permit).

- 1st Quarter VZ: TPH as determined by EPA method 418.1; BTEX as determined by EPA SW-846 method 8021B or 8260B, and chlorides as determined by EPA method 300.0.
- 2nd Quarter VZ: TPH as determined by EPA method 418.1; and BTEX as determined by EPA SW-846 method 8021B or 8260B.
- 3rd Quarter VZ: TPH as determined by EPA method 418.1; BTEX as determined by EPA SW-846 method 8021B or 8260B, major cations/anions (which includes chlorides) and eight (8) RCRA heavy metals
- 4th Quarter VZ: TPH as determined by EPA method 418.1; and BTEX as determined by EPA SW-846 method 8021B or 8260B

- Five year VZ monitoring is required of 19.15.36.15.E(3) NMAC. The operator shall collect and analyze a minimum of four randomly selected, independent samples from the vadose zone, using the methods specified below (as determined by EPA SW-846 methods 6010B or 6020) for the constituents listed in Subsections A and B of 20.6.2.3103 NMAC at least every five years and shall compare each result to the higher of the PQL or the background soil concentrations to determine whether a release has occurred

- Compliance to the release response requirements of 19.15.36.15.E(5) NMAC. The notice to OCD, additional sampling, and the submittal of the sampling results and the release response action plan of 19.15.36.15.E(5) NMAC is required after each quarterly routine vadose zone sampling event if TPH, BTEX, and/or chloride exceed the higher of the PQL or the background soil concentrations. There is no reason or need for a consultation with OCD for BMG/Animas Environmental Services (AES) to provide OCD notice of the release, immediately complete the required additional sampling of the detected release locations and submit sampling results and a release response remediation action plan within 45 days of the initial notification.

Section 1.0: Monitoring and Sampling, 2014 to 2018:

This section provides a summary of a monitoring report that is dated April 19, 2019 and was submitted to OCD on in 2019. The summary of the vadose zone analytical results discussed in Section 1.4 recognizes exceedances of TPH and chlorides from 2014 to 2019 to the facility background but does not recognize that the requirements of 19.15.36.15.E(5) NMAC were required to be implemented and completed.

Section 3.0 Landfarm Treatment Zone:

Only one semi-annual treatment zone sampling event was performed in 2019. BMG suggests that second sampling event was not performed due to pending further consultation with NMOCD about addressing exceedances and beginning evaluation of potential landfarm closure. OCD wishes to clarify that an exceedance detected in the treatment zone and/or vadose zone should not impact future treatment zone sampling. BMG could have sampled in a different location, away from the March 28, 2019 sample locations for the second semi-annual treatment zone sampling event.

Benson-Montin-Greer Drilling Corp.
NM2-004
February 25, 2022
Page 3

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. This would have no bearing on BMG's ability to perform the second semi-annual treatment zone sampling event in 2019.

Section 4.0 Landfarm Vadose Zone:

OCD wishes to point out that the proposed vadose sampling discussed in Section 4.1 does not demonstrate compliance to 19.15.36.20.A NMAC or the June 30, 2011 letter from OCD regarding how to apply the transitional provisions of 19.15.36.20 NMAC to the conditions of an existing permitted surface waste management facility landfarm. Only one vadose zone sampling event was performed by BMG/AES in 2019. No explanation was provided to justify why the remaining quarterly vadose zone sampling was not performed.

In Section 4.2, Comparison to Background Thresholds, BMG identifies the 2 chloride exceedances discovered in Cell 1. OCD review discovered that all the other samples were analyzed for chloride with a reporting limit ranging from 59 to 61 mg/kg, which is more than double the OCD approved facility background concentration of 25 mg/kg. OCD does not consider this to be a proper assessment for a release of chlorides in the vadose zone. BMG should be analyzing all future vadose zone samples for constituent concentrations at or below facility background concentrations approved by OCD to determine if an unauthorized release to the vadose zone has occurred.

In Section 4.2, BMG/AES provides a note, stating that a Response Action Plan is being developed to address concentrations that exceed background thresholds. The issue with the statement is that OCD has been unable to locate any additional vadose zone monitoring results as required of 19.15.36.15.E(5) NMAC, which requires the operator to 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. Without the required sampling, OCD is unsure how a response action plan can be developed.

In accordance with 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. The additional 4 samples should be taken around the 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. The notice to OCD, additional sampling, and the submittal of the release response action plan of 19.15.36.15.E(5) NMAC is required after each quarterly routine vadose sampling event if TPH, BTEX, and/or chloride exceed the higher of the PQL or the background soil concentrations.

Section 5.0 Conclusions and Recommendations:

In the future, BMG/Animas should start recognizing that the ground water analytical results, Table 3, from several of the monitoring wells are beginning to illustrate trending of increases in chloride and TDS concentrations since 2012.

In Section 5.2, Recommendations and Scheduled Activities, BMG/AES recommends completing the additional required sampling, for Cells 1, 3, and 4, in consultation with NMOCD for treatment zone

Benson-Montin-Greer Drilling Corp.
NM2-004
February 25, 2022
Page 4

closure under NMAC 19.15.36.15.F(1-5). OCD wishes to clarify that a consultation is not required. 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 Section 5.2, BMG/AES proposes that the 5-year monitoring of the vadose zone, required of NMAC 19.15.36.15.E(3), 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. The last 5-year vadose sampling occurred between May 6th and 8th of 2014 and is past due. OCD wishes to inform BMD/AES that the constituent listed in Subsections A and B of 20.6.2.3103 NMAC was updated on December 21, 2018 and includes additional metals that can be analyzed and be determined by EPA SW-846 methods 6010B or 6020.

What OCD did not find in Section 5.0, is any recognition that BMG/AES will comply with the notice, additional sampling and the submittal of the re-sampling results and the response action plan, as required of 19.15.36.15.E(5) NMAC, for the chlorides releases that exceed the higher of the PQL or the background soil concentrations during the March 28, 2019 vadose zone sampling event. This has been an outstanding issue regarding the vadose zone monitoring. The requirements of 19.15.36.15.E(5) NMAC must be completed for OCD's review and approval of the response action plan prior to BMG's pursuit to remediate the unauthorized releases under the requirements of 19.15.29 NMAC.

OCD recommends reviewing the OCD's 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" release discovered in the vadose zone pursuant to 19.15.29 NMAC and OCD approves the response action plan.

If there are any questions, 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

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 41119

CONDITIONS

Operator: BENSON-MONTIN-GREER DRILLING CORP 4900 College Blvd. Farmington, NM 87402	OGRID: 2096
	Action Number: 41119
	Action Type: [C-137] Non-Fee SWMF Submittal (SWMF NON-FEE SUBMITTAL)

CONDITIONS

Created By	Condition	Condition Date
bjones	OCD emailed the review to Glenda Dimond and Elizabeth McNally on February 25, 2022. Please see the OCD's Response attached to the bottom of the report.	2/25/2022