# Animas Environmental Services, LLC



February 14, 2017

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

Re: 2016 Annual Report

**Benson-Montin-Greer** 

**Highway 537 Truck Receiving Station 2009 Release** 

Rio Arriba County, New Mexico NMOCD ORDER #3RP-448-0

Dear Mr. Griswold:

On behalf of Benson-Montin-Greer Drilling Corporation (BMG), Animas Environmental Services, LLC (AES) has prepared this Annual Progress Report, which provides details of groundwater monitoring and sampling and remediation activities conducted during 2016 and early 2017 at the BMG Highway 537 Truck Receiving Station 2009 release location. Semi-annual monitoring and sampling was conducted on June 2, 2016, and January 26, 2017 in accordance with recommendations presented in the Site Investigation Report prepared by AES and submitted on April 10, 2009.

### 1.0 Site Information

The BMG Highway 537 Truck Receiving Station previously consisted of eight 500 barrel (bbl) oil storage tanks, one 600 bbl oil storage tank, one 80 bbl open top waste tank, and various pumps and meters associated with crude oil transport truck loading, unloading, and pipeline transport. Surface ownership in the area where the release occurred includes private land owned by the Schmitz Ranch.

### 1.1 Site Location

The truck receiving station is located along the south side of NM State Highway 537 and is adjacent to the Los Ojitos Arroyo, which eventually drains to Largo Canyon. The facility is described legally as being located within the SW¼ NW¼ Section 18, T25N, R3W in Rio Arriba County, New Mexico. Latitude and longitude were recorded as being N36.39866 and W107.19328, respectively. A topographic site location map, based on an excerpt from the U.S. Geological

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Survey (USGS) 7.5-minute Schmitz Ranch, Rio Arriba County, New Mexico topographic quadrangle (USGS 1963), is included as Figure 1. Site plans, including existing monitor wells, are presented as Figures 2A and 2B.

### 1.2 Release History

In January 2009, a Western Refining truck driver discovered crude condensate within the bermed area around the storage tanks, on the south side of Tank #1. BMG personnel arrived on-site and confirmed a leak at a buried 6-inch line between the storage tanks and the truck loading pump. BMG isolated the line and emptied it of residual oil. BMG then contacted Brandon Powell of New Mexico Oil Conservation Division (NMOCD) to provide notification and intended response to the release.

The release was the result of a corrosion hole along the bottom of the pipe near the truck loading pumps. Because it was determined that the leak had impacted soils to at least 15 feet bgs, and due to the presence of tanks, buried pipe, buried conduit, and fixed pumps and meters within the release area, BMG and AES, in consultation with NMOCD, concluded that an assessment of the release area by installing soil borings and monitor wells would be the most appropriate assessment method.

On February 2, 2009, the 6-inch line was repaired, and the excavation was backfilled with clean fill material. Approximately 100 cubic yards of contaminated soil were transported to the TNT Landfarm for disposal. From February 16 through 20, 2009, site investigation activities were conducted by AES in order to delineate the full extent of petroleum hydrocarbon impact on surface and subsurface soils and groundwater resulting from the release. The investigation procedures included the installation of 11 monitor wells (MW-1 through MW-11) and collection of soil and groundwater samples. Work was completed in accordance with the *Sampling and Analysis Plan* prepared by AES and dated February 3, 2009, and also in accordance with U.S. Environmental Protection Agency (USEPA) Environmental Response Team's Standard Operating Procedures (SOPs), and applicable American Society of Testing and Materials (ASTM) standards. Details of the site investigation are included in the AES *Site Investigation Report* submitted to NMOCD in April 2009.

### 1.3 Excavation Assessment, May-June 2014

On May 12 and June 4, 2014, AES conducted a site assessment on behalf of BMG as part of termination of the site lease. The work included soil sampling during the excavation of hydrocarbon contaminated soils that were discovered when the storage tanks and truck loading station were removed from the site, and a subsequent assessment of subsurface soils, utilizing a Geoprobe. Approximately 600 cubic yards of petroleum impacted soil were removed from the excavated areas and transported to the BMG Landfarm by TPC, LLC.

Results of the excavation assessment confirmed that residual contaminants are present under the former loading area. However, with the exception of one discrete location there are minimal residual contaminants below the former tank area. Results of the excavation assessment were reported under a separate cover dated November 12, 2014.

# 2.0 Groundwater Monitoring and Sampling, 2009 through 2015

AES has conducted quarterly to semi-annually groundwater measurement and sampling since March of 2009. Tabulated groundwater elevations and quality are included in Table 1, laboratory analytical results are included in Table 2, and contaminant concentrations are included in Figure 3.

From 2009 to 2015, there has been significant contaminant reduction. Nine of the eleven monitor wells (MW-2 and MW-4 through MW-11) have had eight or more consecutive sampling events with readings below New Mexico Water Quality Control Commission (WQCC) standards. Note that MW-1 consistently shows a small amount of non-aqueous phase liquid (NAPL) above the water table. Remediation efforts for MW-1 have included hand bailing of free product, a solar sipper, and periodic operation of an RSI multi-phase extraction MPE unit, which most recently operated between April 23 and May 28, 2015.

# 3.0 Groundwater Monitoring and Sampling, 2016

Groundwater gauging of all site wells was conducted on June 2, 2016, October 20, 2016, and January 26, 2017. Groundwater samples from MW-3 were collected in June 2016 and January 2017 (for December 2016) and laboratory analyzed for benzene, toluene, ethylbenzene and xylenes (BTEX) per USEPA Method 8021 and total petroleum hydrocarbons (TPH) as gasoline range, diesel range, and motor oil range organics (GRO, DRO, and MRO) per USEPA Method 8015 at Hall Laboratories in Albuquerque, New Mexico.

### 3.1 Groundwater Measurements

On June 2 and October 20, 2016, and January 26, 2017, groundwater measurements were recorded for MW-1 through MW-11. Average groundwater elevations decreased 0.38 feet between June and October 2016, yet increased 0.47 feet between October 2016 and January 2017. Depth to groundwater ranged from 14.92 feet below top of casing (TOC) in MW-6 to 31.21 feet below TOC in MW-1. Depth to groundwater measurements are presented in Table 1, and groundwater elevation contours are included in Figure 2B. Groundwater gradient was calculated at 0.007 ft/ft to the west-southwest, which is consistent with historical data. Water quality data are presented in Table 1, and groundwater elevation contour maps are included as Figures 2A, 2B, and 2C. Water sample collection forms are included in the appendix.

### 3.2 Groundwater Analytical Results

MW-3 was sampled on June 2, 2016, and January 26, 2017. Dissolved phase BTEX concentrations were below laboratory detection limits and applicable New Mexico WQCC standards in MW-3 for both events. GRO, DRO and MRO concentrations were also reported below laboratory detection limits for both sampling events. Tabulated laboratory analytical results are included in Table 2, and contaminant concentrations are included in Figure 3. Laboratory analytical reports for June 2016 and January 2017 are included in the Appendix.

## 4.0 NAPL Recovery, 2016

During 2016, NAPL was hand-bailed from MW-1 during gauging and sampling events and disposed of into an on-site waste storage tank. A total of 6 gallons of NAPL was recovered as part of hand-bailing.

### 5.0 Conclusions and Recommendations

AES conducted groundwater monitoring and sampling at the former BMG Highway 537 Truck Receiving Station on June 2 and October 20, 2016, and January 26, 2017. On all three events, free product continued to be observed in MW-1, decreasing from a measurable thickness of 1.65 ft (June 2016) to 0.61 ft (January 2017). Average groundwater elevations decreased 0.38 feet between June and October 2016, yet increased an average 0.47 feet between October 2016 and January 2017. Groundwater gradient for both events was calculated to be approximately 0.006 ft/ft to 0.007 ft/ft in a west-southwestern direction, which is consistent with historic site data.

On June 2, 2016, and January 26, 2017, groundwater samples were collected from monitor well MW-3. MW-1 was not sampled due to the presence of NAPL. Monitor wells MW-2 and MW-4 through MW-11 have remained below the WQCC standards for BTEX for eight or more consecutive sampling events and therefore were not sampled. In MW-3, dissolved phase BTEX concentrations remained below the applicable WQCC standards and laboratory detection limits for both the June 2016 and January 2017 sampling events. Dissolved phase GRO, DRO and MRO concentrations were also reported below laboratory detection limits.

Based on laboratory analytical results and ongoing remedial efforts, AES recommends continuing groundwater monitoring and sampling of monitor wells MW-1 and MW-3 on a semi-annual basis, including continued hand-bailing of MW-1. Because several wells have maintained at least eight consecutive quarters with concentrations below WQCC standards, AES recommends the plugging and abandonment of the following monitor wells:

- MW-5 through MW-11.
- MW-2 and MW-4 will remain open in order to be gauged for groundwater elevations and gradient calculations.

### 6.0 Scheduled Site Activities

The following site activities have been tentatively scheduled in 2017:

- Plug and abandon seven monitor wells (MW-5 through MW-11) in May or June 2017;
- Semi-annual monitoring and sampling events scheduled for June 2017 and
   December 2017, to include gauging MW-1 through MW-4 and sampling of MW-3;
- Possible installation of skimmer pump or passive skimmer in MW-1 for collection of free product during summer months;

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

Respectfully Submitted,

David W. Johnson

Geologist

Elizabeth McNally, P.E.

Elizabeth V MiNdly

### **Tables**

Table 1. Summary of Groundwater Measurement and Water Quality Data

Table 2. Summary of Groundwater Analytical Results

### **Figures**

Figure 1. Topographic Site Location Map

Figure 2A. Site Plan with Groundwater Elevation Contours, June 2016

Figure 2B. Site Plan with Groundwater Elevation Contours, October 2016

Figure 2C. Site Plan with Groundwater Elevation Contours, January 2017

Figure 3A. Groundwater Contaminant Concentrations, June 2016

Figure 3B. Groundwater Contaminant Concentrations, January 2017

### Graphs

Graph 1. MW-3 Groundwater Elevations and Benzene Concentrations Over Time

### Appendix

Water Sample Collection Forms— June 2016 and January 2017 Hall Analytical Report 1606173 (June 2016) Hall Analytical Report 1701B31 (January 2017)

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TABLE 1
SUMMARY OF GROUNDWATER MEASUREMENT AND WATER QUALITY DATA
BMG HWY 537 TRUCK RECEIVING STATION 2009 RELEASE

Well ID	Date Sampled	Depth to Water (ft)	Surveyed TOC (ft)	GW Elev. (ft)	Temperature (C)	Conductivity (mS)	DO (mg/L)	pН	ORP (mV)
MW-1	05-Mar-09	27.95	7064.66	7036.71	12.29	5.231	1.27	6.64	-36.1
MW-1	11-Sep-09	28.66	7064.66	7036.00	13.15	7.016	0.65	8.60	-118.5
MW-1	15-Jan-10	28.91	7064.66	7035.75	13.30	3.714	2.74	6.79	-167.8
MW-1	15-Oct-10	29.20	7064.66	7035.46	13.77	4.642	1.51	7.14	-17.9
MW-1	21-Jan-11	29.28	7064.66	7035.38	12.42	4.246	1.63	6.92	-85.8
MW-1	12-May-11	28.93	7064.66	7035.73	13.08	3.830	2.95	7.00	-96.1
MW-1	12-Aug-11	29.67	7064.66	7034.99	14.03	4.637	3.83	6.94	-107.9
MW-1	16-Nov-11	29.82	7064.66	7034.84	11.57	4.385	2.89	5.35	-69.7
MW-1	21-Feb-12	29.77	7064.66	7034.89	12.01	4.063	1.09	6.78	-123.9
MW-1	24-May-12	29.77	7064.66	7034.89	12.94	4.563	1.04	6.95	-46.5
MW-1	10-Sep-12	30.14	7064.66	7034.52	14.63	4.705	1.16	7.12	-15.7
MW-1	04-Dec-12	30.33	7064.66	7034.33	12.55	4.430	1.30	7.11	-7.1
MW-1	26-Mar-13	29.87	7064.66	7034.79	12.20	4.556	1.66	6.72	-5.9
MW-1	01-Jul-13	30.41	7064.66	7034.25	13.52	4.372	3.61	7.18	9.2
MW-1	25-Sep-13	29.51	7064.66	7035.15	12.62	8.264	1.64	7.21	-48.6
MW-1	14-Jan-14	30.10	7064.66	7034.56	12.78	4.905	1.75	NM	-59.5
MW-1	04-Apr-14	31.02	7064.66	7033.64	Not Me	asured - Free Prod	uct Present (	1.18 ft thic	kness)
MW-1	26-Sep-14	30.90	7064.66	7033.76	Not Me	asured - Free Prod	uct Present (	0.65 ft thic	kness)
MW-1	03-Dec-14	31.47	7064.66	7033.19	Not Me	asured - Free Prod	uct Present (	1.16 ft thic	kness)
MW-1	27-Mar-15	29.63	7064.66	7035.03	Not Me	asured - Free Prod	uct Present (	0.28 ft thic	kness)
MW-1	08-Dec-15	31.48	7064.66	7033.18	Not Me	asured - Free Prod	uct Present (	1.64 ft thic	kness)
MW-1	02-Jun-16	31.21	7064.66	7033.45	Not Me	asured - Free Prod	uct Present (	1.65 ft thic	kness)
MW-1	20-Oct-16	30.94	7064.66	7033.72	Not Me	asured - Free Prod	uct Present (	0.74 ft thic	kness)
MW-1	26-Jan-17	30.38	7064.66	7034.28	Not Me	asured - Free Prod	uct Present (	0.61 ft thic	kness)
MW-2	05-Mar-09	27.69	7064.65	7036.96	12.00	4.567	2.59	6.82	-29.8
MW-2	10-Sep-09	28.38	7064.65	7036.27	12.93	6.480	1.09	7.58	62.2
MW-2	15-Jan-10	28.62	7064.65	7036.03	12.49	3.604	2.10	7.57	-70.3

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Well ID	Date Sampled	Depth to Water (ft)	Surveyed TOC (ft)	GW Elev. (ft)	Temperature (C)	Conductivity (mS)	DO (mg/L)	рН	ORP (mV)
MW-2	14-Oct-10	28.91	7064.65	7035.74	12.49	3.968	1.71	7.40	98.9
MW-2	21-Jan-11	28.99	7064.65	7035.66	11.44	4.045	1.62	8.56	-6.2
MW-2	12-May-11	28.63	7064.65	7036.02	13.14	4.087	1.43	7.67	-66.7
MW-2	12-Aug-11	29.37	7064.65	7035.28	14.08	4.102	4.36	7.09	160.2
MW-2	16-Nov-11	29.52	7064.65	7035.13	11.60	4.021	2.48	7.51	176.2
MW-2	21-Feb-12	29.46	7064.65	7035.19	NM	NM	NM	NM	NM
MW-2	24-May-12	29.47	7064.65	7035.18	NM	NM	NM	NM	NM
MW-2	10-Sep-12	29.84	7064.65	7034.81	NM	NM	NM	NM	NM
MW-2	04-Dec-12	30.03	7064.65	7034.62	NM	NM	NM	NM	NM
MW-2	26-Mar-13	29.60	7064.65	7035.05	NM	NM	NM	NM	NM
MW-2	27-Jun-13	30.11	7064.65	7034.54	NM	NM	NM	NM	NM
MW-2	25-Sep-13	29.28	7064.65	7035.37	NM	NM	NM	NM	NM
MW-2	14-Jan-14	29.81	7064.65	7034.84	NM	NM	NM	NM	NM
MW-2	04-Apr-14	29.84	7064.65	7034.81	NM	NM	NM	NM	NM
MW-2	10-Sep-14	29.88	7064.65	7034.77	NM	NM	NM	NM	NM
MW-2	03-Dec-14	30.24	7064.65	7034.41	NM	NM	NM	NM	NM
MW-2	27-Mar-15	29.16	7064.65	7035.49	NM	NM	NM	NM	NM
MW-2	08-Dec-15	29.90	7064.65	7034.75	NM	NM	NM	NM	NM
MW-2	02-Jun-16	29.57	7064.65	7035.08	NM	NM	NM	NM	NM
MW-2	20-Oct-16	30.02	7064.65	7034.63	NM	NM	NM	NM	NM
MW-2	26-Jan-17	29.61	7064.65	7035.04	NM	NM	NM	NM	NM
MW-3	05-Mar-09	27.16	7064.01	7036.85	12.29	4.310	2.17	6.66	-28.2
MW-3	11-Sep-09	27.99	7064.01	7036.02	13.50	6.080	0.53	9.43	-163.6
MW-3	15-Jan-10	28.22	7064.01	7035.79	11.99	3.607	1.85	7.27	-222.5
MW-3	14-Oct-10	28.54	7064.01	7035.47	12.41	4.180	1.46	7.24	-53.1
MW-3	21-Jan-11	28.60	7064.01	7035.41	11.92	4.224	1.60	7.20	-122.5
MW-3	12-May-11	28.21	7064.01	7035.80	12.56	4.172	2.25	7.28	-145.8

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MW-3	12-Aug-11	29.02	7064.01	7034.99	13.32	4.372	2.35	7.17	-158.5
MW-3	16-Nov-11	29.14	7064.01	7034.87	10.87	4.326	2.17	6.53	-105.7
MW-3	21-Feb-12	29.07	7064.01	7034.94	11.36	4.481	1.01	7.09	-118.0
MW-3	24-May-12	29.09	7064.01	7034.92	13.30	4.325	0.81	7.07	-70.3
MW-3	10-Sep-12	29.45	7064.01	7034.56	13.26	4.377	2.49	7.23	-42.7
MW-3	04-Dec-12	29.65	7064.01	7034.36	12.08	4.294	0.69	7.26	-46.8
MW-3	26-Mar-13	29.12	7064.01	7034.89	11.93	2.337	5.85	7.46	59.3
MW-3	01-Jul-13	29.74	7064.01	7034.27	14.64	4.119	11.22	7.69	-36.8
MW-3	25-Sep-13	28.65	7064.01	7035.36	12.50	7.764	2.08	7.22	-79.5
MW-3	14-Jan-14	29.38	7064.01	7034.63	12.23	4.764	1.74	NM	-59.9
MW-3	10-Sep-14	29.39	7064.01	7034.62	NM	NM	NM	NM	NM
MW-3	26-Sep-14	13.68	7064.01	7050.33	12.88	2.718	2.69	7.11	27.2
MW-3	03-Dec-14	29.83	7064.01	7034.18	NM	NM	NM	NM	NM
MW-3	27-Mar-15	28.60	7064.01	7035.41	NM	NM	NM	NM	NM
MW-3	08-Dec-15	29.45	7064.01	7034.56	NM	NM	NM	NM	NM
MW-3	02-Jun-16	29.15	7064.01	7034.86	12.71	4.064	1.58	7.08	-3.2
MW-3	20-Oct-16	29.60	7064.01	7034.41	NM	NM	NM	NM	NM
MW-3	26-Jan-17	29.09	7064.01	7034.92	11.19	4.024	1.90	7.18	11.5
MW-4	05-Mar-09	27.39	7063.72	7036.33	12.36	4.760	1.72	6.58	-29.2
MW-4	06-Apr-09	27.58	7063.72	7036.14	11.87	4.599	2.06	6.75	18.0
MW-4	10-Sep-09	28.12	7063.72	7035.60	13.09	6.337	0.81	6.98	54.6
MW-4	15-Jan-10	28.34	7063.72	7035.38	11.65	3.812	2.78	7.20	-125.1
MW-4	15-Oct-10	28.64	7063.72	7035.08	12.52	4.491	1.42	7.13	42.8
MW-4	21-Jan-11	28.72	7063.72	7035.00	11.90	4.748	1.14	7.19	5.4
MW-4	12-May-11	28.39	7063.72	7035.33	13.11	4.576	2.58	7.29	-25.8
MW-4	12-Aug-11	29.10	7063.72	7034.62	13.89	4.759	3.98	6.85	74.9
MW-4	16-Nov-11	29.26	7063.72	7034.46	11.66	4.725	2.15	7.11	153.0

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MW-4	21-Feb-12	29.22	7063.72	7034.50	10.27	4.927	1.02	7.02	-11.3
MW-4	24-May-12	29.23	7063.72	7034.49	13.75	4.687	1.04	6.98	39.3
MW-4	10-Sep-12	29.58	7063.72	7034.14	NM	NM	NM	NM	NM
MW-4	04-Dec-12	29.77	7063.72	7033.95	NM	NM	NM	NM	NM
MW-4	26-Mar-13	29.33	7063.72	7034.39	NM	NM	NM	NM	NM
MW-4	27-Jun-13	29.85	7063.72	7033.87	NM	NM	NM	NM	NM
MW-4	25-Sep-13	28.96	7063.72	7034.76	NM	NM	NM	NM	NM
MW-4	14-Jan-14	29.54	7063.72	7034.18	NM	NM	NM	NM	NM
MW-4	04-Apr-14	29.54	7063.72	7034.18	12.16	0.435	2.86	6.90	89.4
MW-4	10-Sep-14	29.60	7063.72	7034.12	NM	NM	NM	NM	NM
MW-4	03-Dec-14	29.97	7063.72	7033.75	NM	NM	NM	NM	NM
MW-4	27-Mar-15	28.89	7063.72	7034.83	NM	NM	NM	NM	NM
MW-4	08-Dec-15	29.58	7063.72	7034.14	NM	NM	NM	NM	NM
MW-4	02-Jun-16	29.28	7063.72	7034.44	NM	NM	NM	NM	NM
MW-4	20-Oct-16	29.71	7063.72	7034.01	NM	NM	NM	NM	NM
MW-4	26-Jan-17	29.28	7063.72	7034.44	NM	NM	NM	NM	NM
MW-5	05-Mar-09	28.24	7064.79	7036.55	11.80	6.088	3.89	6.61	-17.3
MW-5	10-Sep-09	28.87	7064.79	7035.92	12.78	7.785	1.22	7.09	60.5
MW-5	15-Jan-10	29.10	7064.79	7035.69	11.19	4.288	1.93	7.27	-85.8
MW-5	14-Oct-10	29.38	7064.79	7035.41	12.34	4.725	1.24	7.23	98.1
MW-5	21-Jan-11	29.47	7064.79	7035.32	11.93	5.038	2.71	7.31	103.9
MW-5	12-May-11	29.17	7064.79	7035.62	12.40	4.957	2.44	7.42	-44.4
MW-5	12-Aug-11	29.84	7064.79	7034.95	13.73	4.968	3.87	6.83	189.8
MW-5	16-Nov-11	30.00	7064.79	7034.79	11.16	4.814	4.47	7.18	290.4
MW-5	21-Feb-12	29.96	7064.79	7034.83	NM	NM	NM	NM	NM
MW-5	25-May-12	29.96	7064.79	7034.83	NM	NM	NM	NM	NM
MW-5	10-Sep-12	30.31	7064.79	7034.48	NM	NM	NM	NM	NM

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MW-5	04-Dec-12	30.52	7064.79	7034.27	NM	NM	NM	NM	NM
MW-5	26-Mar-13	30.14	7064.79	7034.65	NM	NM	NM	NM	NM
MW-5	27-Jun-13	30.60	7064.79	7034.19	NM	NM	NM	NM	NM
MW-5	25-Sep-13	29.87	7064.79	7034.92	NM	NM	NM	NM	NM
MW-5	14-Jan-14	30.31	7064.79	7034.48	NM	NM	NM	NM	NM
MW-5	04-Apr-14	30.30	7064.79	7034.49	NM	NM	NM	NM	NM
MW-5	10-Sep-14	30.37	7064.79	7034.42	NM	NM	NM	NM	NM
MW-5	03-Dec-14	30.70	7064.79	7034.09	NM	NM	NM	NM	NM
MW-5	27-Mar-15	29.72	7064.79	7035.07	NM	NM	NM	NM	NM
MW-5	08-Dec-15	30.36	7064.79	7034.43	NM	NM	NM	NM	NM
MW-5	02-Jun-16	30.03	7064.79	7034.76	NM	NM	NM	NM	NM
MW-5	20-Oct-16	30.47	7064.79	7034.32	NM	NM	NM	NM	NM
MW-5	26-Jan-17	30.10	7064.79	7034.69	NM	NM	NM	NM	NM
MW-6	05-Mar-09	12.67	7049.54	7036.87	9.21	4.967	4.30	6.53	4.6
MW-6	10-Sep-09	13.90	7049.54	7035.64	11.85	6.287	1.15	7.12	75.9
MW-6	15-Jan-10	14.02	7049.54	7035.52	10.81	3.789	2.46	7.35	-66.7
MW-6	15-Oct-10	14.39	7049.54	7035.15	12.45	4.353	1.40	7.24	20.7
MW-6	21-Jan-11	14.42	7049.54	7035.12	11.59	4.516	3.10	7.32	-37.3
MW-6	12-May-11	14.00	7049.54	7035.54	10.69	4.349	1.89	7.47	-24.9
MW-6	12-Aug-11	14.93	7049.54	7034.61	11.99	4.492	4.24	7.56	0.2
MW-6	16-Nov-11	14.99	7049.54	7034.55	12.01	4.398	2.74	6.46	182.1
MW-6	21-Feb-12	14.90	7049.54	7034.64	NM	NM	NM	NM	NM
MW-6	25-May-12	14.92	7049.54	7034.62	NM	NM	NM	NM	NM
MW-6	10-Sep-12	NM	7049.54	NM	NM - Well is Dry				
MW-6	04-Dec-12	15.48	7049.54	7034.06	NM	NM	NM	NM	NM
MW-6	26-Mar-13	14.79	7049.54	7034.75	NM	NM	NM	NM	NM
MW-6	27-Jun-13	15.60	7049.54	7033.94	NM	NM	NM	NM	NM

TABLE 1
SUMMARY OF GROUNDWATER MEASUREMENT AND WATER QUALITY DATA
BMG HWY 537 TRUCK RECEIVING STATION 2009 RELEASE

Well ID	Date Sampled	Depth to Water (ft)	Surveyed TOC (ft)	GW Elev. (ft)	Temperature (C)	Conductivity (mS)	DO (mg/L)	рН	ORP (mV)
MW-6	25-Sep-13	14.92	7049.54	7034.62	NM	NM	NM	NM	NM
MW-6	14-Jan-14	15.17	7049.54	7034.37	NM	NM	NM	NM	NM
MW-6	04-Apr-14	15.20	7049.54	7034.34	NM	NM	NM	NM	NM
MW-6	10-Sep-14	15.06	7049.54	7034.48	NM	NM	NM	NM	NM
MW-6	03-Dec-14	15.66	7049.54	7033.88	NM	NM	NM	NM	NM
MW-6	27-Mar-15	14.09	7049.54	7035.45	NM	NM	NM	NM	NM
MW-6	08-Dec-15	15.21	7049.54	7034.33	NM	NM	NM	NM	NM
MW-6	02-Jun-16	14.92	7049.54	7034.62	NM	NM	NM	NM	NM
MW-6	20-Oct-16	15.41	7049.54	7034.13	NM	NM	NM	NM	NM
MW-6	26-Jan-17	14.69	7049.54	7034.85	NM	NM	NM	NM	NM
MW-7	06-Mar-09	26.34	7062.80	7036.46	11.40	4.951	2.17	6.50	-3.3
MW-7	10-Sep-09	27.23	7062.80	7035.57	12.61	6.288	1.03	7.05	51.0
MW-7	15-Jan-10	27.44	7062.80	7035.36	11.02	3.820	2.92	7.27	-66.3
MW-7	14-Oct-10	27.76	7062.80	7035.04	12.79	4.047	1.24	7.19	68.6
MW-7	21-Jan-11	27.82	7062.80	7034.98	10.79	4.205	2.22	7.37	42.0
MW-7	12-May-11	27.46	7062.80	7035.34	12.80	4.118	1.73	7.38	-70.4
MW-7	12-Aug-11	28.24	7062.80	7034.56	13.88	4.119	2.90	7.30	112.8
MW-7	16-Nov-11	28.38	7062.80	7034.42	11.24	4.077	2.75	6.32	168.0
MW-7	21-Feb-12	28.31	7062.80	7034.49	NM	NM	NM	NM	NM
MW-7	24-May-12	28.34	7062.80	7034.46	NM	NM	NM	NM	NM
MW-7	10-Sep-12	28.69	7062.80	7034.11	NM	NM	NM	NM	NM
MW-7	04-Dec-12	28.86	7062.80	7033.94	NM	NM	NM	NM	NM
MW-7	26-Mar-13	28.33	7062.80	7034.47	NM	NM	NM	NM	NM
MW-7	27-Jun-13	28.97	7062.80	7033.83	NM	NM	NM	NM	NM
MW-7	25-Sep-13	27.78	7062.80	7035.02	NM	NM	NM	NM	NM
MW-7	14-Jan-14	28.61	7062.80	7034.19	NM	NM	NM	NM	NM
MW-7	04-Apr-14	28.62	7062.80	7034.18	NM	NM	NM	NM	NM

TABLE 1
SUMMARY OF GROUNDWATER MEASUREMENT AND WATER QUALITY DATA
BMG HWY 537 TRUCK RECEIVING STATION 2009 RELEASE

Well ID	Date Sampled	Depth to Water (ft)	Surveyed TOC (ft)	GW Elev. (ft)	Temperature (C)	Conductivity (mS)	DO (mg/L)	рН	ORP (mV)
MW-7	10-Sep-14	28.58	7062.80	7034.22	NM	NM	NM	NM	NM
MW-7	03-Dec-14	29.02	7062.80	7033.78	NM	NM	NM	NM	NM
MW-7	27-Mar-15	27.76	7062.80	7035.04	NM	NM	NM	NM	NM
MW-7	08-Dec-15	28.62	7062.80	7034.18	NM	NM	NM	NM	NM
MW-7	02-Jun-16	28.34	7062.80	7034.46	NM	NM	NM	NM	NM
MW-7	20-Oct-16	28.79	7062.80	7034.01	NM	NM	NM	NM	NM
MW-7	26-Jan-17	28.24	7062.80	7034.56	NM	NM	NM	NM	NM
MW-8	06-Mar-09	27.49	7063.27	7035.78	11.91	4.731	2.14	6.40	-4.4
MW-8	10-Sep-09	28.14	7063.27	7035.13	13.53	5.987	1.12	8.51	-93.2
MW-8	15-Jan-10	28.39	7063.27	7034.88	11.43	2.891	1.86	6.68	-162.2
MW-8	15-Oct-10	28.70	7063.27	7034.57	12.80	4.017	1.21	7.04	-39.1
MW-8	21-Jan-11	28.80	7063.27	7034.47	12.30	4.002	1.55	7.08	-91.2
MW-8	12-May-11	28.52	7063.27	7034.75	13.16	3.966	1.60	7.16	-121.2
MW-8	12-Aug-11	29.19	7063.27	7034.08	13.85	4.194	3.45	6.97	-148.3
MW-8	16-Nov-11	29.35	7063.27	7033.92	11.49	4.218	2.57	6.49	-115.4
MW-8	21-Feb-12	29.31	7063.27	7033.96	12.21	4.500	0.88	6.96	-116.0
MW-8	24-May-12	29.34	7063.27	7033.93	13.43	4.402	0.65	6.93	-41.2
MW-8	10-Sep-12	29.68	7063.27	7033.59	12.98	4.499	1.34	7.12	-27.3
MW-8	04-Dec-12	29.87	7063.27	7033.40	12.53	3.045	3.78	7.13	-3.1
MW-8	26-Mar-13	29.47	7063.27	7033.80	12.65	4.449	4.10	6.95	22.0
MW-8	27-Jun-13	29.97	7063.27	7033.30	14.39	6.908	8.14	7.01	-43.6
MW-8	25-Sep-13	29.14	7063.27	7034.13	NM	NM	NM	NM	NM
MW-8	14-Jan-14	29.65	7063.27	7033.62	NM	NM	NM	NM	NM
MW-8	04-Apr-14	29.64	7063.27	7033.63	13.14	0.424	1.70	6.80	-14.9
MW-8	04-Apr-14	29.68	7063.27	7033.59	NM	NM	NM	NM	NM
MW-8	03-Dec-14	30.00	7063.27	7033.27	NM	NM	NM	NM	NM
MW-8	27-Mar-15	29.02	7063.27	7034.25	NM	NM	NM	NM	NM

TABLE 1
SUMMARY OF GROUNDWATER MEASUREMENT AND WATER QUALITY DATA
BMG HWY 537 TRUCK RECEIVING STATION 2009 RELEASE

Well ID	Date Sampled	Depth to Water (ft)	Surveyed TOC (ft)	GW Elev. (ft)	Temperature (C)	Conductivity (mS)	DO (mg/L)	pН	ORP (mV)
MW-8	08-Dec-15	29.59	7063.27	7033.68	NM	NM	NM	NM	NM
MW-8	02-Jun-16	29.31	7063.27	7033.96	NM	NM	NM	NM	NM
MW-8	20-Oct-16	29.72	7063.27	7033.55	NM	NM	NM	NM	NM
MW-8	26-Jan-17	29.33	7063.27	7033.94	NM	NM	NM	NM	NM
MW-9	06-Mar-09	27.60	7062.60	7035.00	9.47	5.418	5.12	6.39	-1.8
MW-9	06-Apr-09	27.74	7062.60	7034.86	11.86	5.174	2.24	6.72	25.2
MW-9	10-Sep-09	28.19	7062.60	7034.41	13.10	7.257	0.86	7.03	-129.8
MW-9	15-Jan-10	28.42	7062.60	7034.18	10.89	3.960	2.29	7.13	-187.4
MW-9	15-Oct-10	28.74	7062.60	7033.86	12.85	4.561	1.89	7.17	-74.4
MW-9	21-Jan-11	28.85	7062.60	7033.75	12.67	4.452	1.34	7.16	-90.8
MW-9	12-May-11	28.61	7062.60	7033.99	13.12	4.120	2.31	7.28	-94.1
MW-9	12-Aug-11	29.22	7062.60	7033.38	12.92	4.492	5.42	7.33	-132.7
MW-9	16-Nov-11	29.41	7062.60	7033.19	11.80	4.402	2.67	5.56	-75.1
MW-9	21-Feb-12	29.39	7062.60	7033.21	11.89	4.241	1.37	6.95	-127.0
MW-9	24-May-12	29.39	7062.60	7033.21	13.68	4.470	0.80	7.08	-56.4
MW-9	10-Sep-12	29.73	7062.60	7032.87	13.41	4.439	1.41	7.13	-52.2
MW-9	04-Dec-12	29.90	7062.60	7032.70	12.87	4.374	1.34	7.19	-60.5
MW-9	26-Mar-13	29.56	7062.60	7033.04	12.57	4.396	1.24	6.72	-15.8
MW-9	27-Jun-13	30.00	7062.60	7032.60	20.04	6.761	2.38	7.10	-48.5
MW-9	25-Sep-13	29.28	7062.60	7033.32	13.08	8.437	2.44	7.19	-84.6
MW-9	14-Jan-14	29.68	7062.60	7032.92	12.61	5.160	1.11	NM	-54.8
MW-9	04-Apr-14	29.69	7062.60	7032.91	12.89	0.407	2.81	6.89	-48.2
MW-9	10-Sep-14	29.72	7062.60	7032.88	NM	NM	NM	NM	NM
MW-9	03-Dec-14	30.00	7062.60	7032.60	NM	NM	NM	NM	NM
MW-9	27-Mar-15	29.12	7062.60	7033.48	NM	NM	NM	NM	NM
MW-9	08-Dec-15	29.55	7062.60	7033.05	NM	NM	NM	NM	NM
MW-9	02-Jun-16	29.29	7062.60	7033.31	NM	NM	NM	NM	NM

TABLE 1
SUMMARY OF GROUNDWATER MEASUREMENT AND WATER QUALITY DATA
BMG HWY 537 TRUCK RECEIVING STATION 2009 RELEASE

Well ID	Date Sampled	Depth to Water (ft)	Surveyed TOC (ft)	GW Elev. (ft)	Temperature (C)	Conductivity (mS)	DO (mg/L)	рН	ORP (mV)
MW-9	20-Oct-16	29.69	7062.60	7032.91	NM	NM	NM	NM	NM
MW-9	26-Jan-17	29.32	7062.60	7033.28	NM	NM	NM	NM	NM
MW-10	09-Mar-09	26.25	7063.27	7037.02	10.51	4.572	3.44	6.62	15.6
MW-10	10-Sep-09	27.10	7063.27	7036.17	12.62	5.133	1.83	6.97	80.7
MW-10	15-Jan-10	27.29	7063.27	7035.98	10.82	3.210	2.47	7.10	-99.3
MW-10	14-Oct-10	27.61	7063.27	7035.66	11.98	3.811	1.80	7.22	119.2
MW-10	21-Jan-11	27.66	7063.27	7035.61	10.73	3.946	1.78	7.45	90.1
MW-10	12-May-11	27.28	7063.27	7035.99	12.26	3.839	1.34	7.26	84.9
MW-10	12-Aug-11	28.08	7063.27	7035.19	12.84	3.948	4.99	6.62	175.8
MW-10	16-Nov-11	28.20	7063.27	7035.07	10.81	3.912	2.81	6.17	190.7
MW-10	21-Feb-12	28.13	7063.27	7035.14	NM	NM	NM	NM	NM
MW-10	24-May-12	28.15	7063.27	7035.12	NM	NM	NM	NM	NM
MW-10	10-Sep-12	28.54	7063.27	7034.73	NM	NM	NM	NM	NM
MW-10	04-Dec-12	28.72	7063.27	7034.55	NM	NM	NM	NM	NM
MW-10	26-Mar-13	28.20	7063.27	7035.07	NM	NM	NM	NM	NM
MW-10	27-Jun-13	28.79	7063.27	7034.48	NM	NM	NM	NM	NM
MW-10	25-Sep-13	27.80	7063.27	7035.47	NM	NM	NM	NM	NM
MW-10	14-Jan-14	28.44	7063.27	7034.83	NM	NM	NM	NM	NM
MW-10	04-Apr-14	28.46	7063.27	7034.81	NM	NM	NM	NM	NM
MW-10	10-Sep-14	28.48	7063.27	7034.79	NM	NM	NM	NM	NM
MW-10	03-Dec-14	28.92	7063.27	7034.35	NM	NM	NM	NM	NM
MW-10	27-Mar-15	27.70	7063.27	7035.57	NM	NM	NM	NM	NM
MW-10	08-Dec-15	28.56	7063.27	7034.71	NM	NM	NM	NM	NM
MW-10	02-Jun-16	28.22	7063.27	7035.05	NM	NM	NM	NM	NM
MW-10	20-Oct-16	28.70	7063.27	7034.57	NM	NM	NM	NM	NM
MW-10	26-Jan-17	28.19	7063.27	7035.08	NM	NM	NM	NM	NM

TABLE 1
SUMMARY OF GROUNDWATER MEASUREMENT AND WATER QUALITY DATA
BMG HWY 537 TRUCK RECEIVING STATION 2009 RELEASE
Rio Arriba County, New Mexico

Well ID	Date Sampled	Depth to Water (ft)	Surveyed TOC (ft)	GW Elev. (ft)	Temperature (C)	Conductivity (mS)	DO (mg/L)	рН	ORP (mV)
MW-11	09-Mar-09	28.33	7064.10	7035.77	11.47	5.730	3.52	6.63	17.1
MW-11	10-Sep-09	28.88	7064.10	7035.22	13.32	7.785	0.67	7.02	61.2
MW-11	15-Jan-10	29.13	7064.10	7034.97	10.20	3.995	1.86	7.16	-59.2
MW-11	14-Oct-10	29.44	7064.10	7034.66	13.00	4.901	1.93	7.20	94.5
MW-11	21-Jan-11	29.53	7064.10	7034.57	11.55	4.937	1.75	7.37	216.0
MW-11	12-May-11	29.25	7064.10	7034.85	12.97	4.701	2.71	7.41	-16.0
MW-11	12-Aug-11	29.89	7064.10	7034.21	12.89	4.872	3.24	7.39	122.2
MW-11	16-Nov-11	30.07	7064.10	7034.03	11.49	4.762	3.61	7.00	307.9
MW-11	21-Feb-12	30.04	7064.10	7034.06	NM	NM	NM	NM	NM
MW-11	24-May-12	30.06	7064.10	7034.04	NM	NM	NM	NM	NM
MW-11	10-Sep-12	30.38	7064.10	7033.72	NM	NM	NM	NM	NM
MW-11	04-Dec-12	30.58	7064.10	7033.52	NM	NM	NM	NM	NM
MW-11	26-Mar-13	30.23	7064.10	7033.87	NM	NM	NM	NM	NM
MW-11	27-Jun-13	30.66	7064.10	7033.44	NM	NM	NM	NM	NM
MW-11	25-Sep-13	30.00	7064.10	7034.10	NM	NM	NM	NM	NM
MW-11	14-Jan-14	30.39	7064.10	7033.71	NM	NM	NM	NM	NM
MW-11	04-Apr-14	30.36	7064.10	7033.74	NM	NM	NM	NM	NM
MW-11	10-Sep-14	30.42	7064.10	7033.68	NM	NM	NM	NM	NM
MW-11	03-Dec-14	30.73	7064.10	7033.37	NM	NM	NM	NM	NM
MW-11	27-Mar-15	29.83	7064.10	7034.27	NM	NM	NM	NM	NM
MW-11	08-Dec-15	30.34	7064.10	7033.76	NM	NM	NM	NM	NM
MW-11	02-Jun-16	30.04	7064.10	7034.06	NM	NM	NM	NM	NM
MW-11	20-Oct-16	30.45	7064.10	7033.65	NM	NM	NM	NM	NM
MW-11	26-Jan-17	30.10	7064.10	7034.00	NM	NM	NM	NM	NM

NOTE: NM = NOT MEASURED NA = NOT AVAILABLE

TABLE 2
SUMMARY OF GROUNDWATER ANALYTICAL RESULTS
BMG HWY 537 TRUCK RECEIVING STATION 2009 RELEASE

	Date		,	Ethyl-	Total			
Well ID	Sampled	Benzene	Toluene	benzene	Xylenes	GRO	DRO	MRO
Well 15	Sampled	(μg/L)	(μg/L)	(μg/L)	/γιείιες (μg/L)	(mg/L)	(mg/L)	(mg/L)
Analytical	Method	8021B	8021B	8021B	8021B	8015B	8015B	8015B
New Mexic		10	750	750	620	NE	NE	NE
		-						
MW-1	05-Mar-09	310	91	5.1	200	2.1	<1.0	<5.0
MW-1	11-Sep-09	1,500	1.1	48	170	4.8	<1.0	<5.0
MW-1	15-Jan-10	630	<5.0	19	47	2.1	<1.0	<5.0
MW-1	15-Oct-10	960	53	37	94	4.1	<1.0	<5.0
MW-1	21-Jan-11	3,600	<10	140	160	10	<1.0	<5.0
MW-1	12-May-11	7,800	42	270	33	19	<1.0	<5.0
MW-1	12-Aug-11	280	<1.0	18	<2.0	1.2	<1.0	<5.0
MW-1	16-Nov-11	2,700	<5.0	76	<10	3.9	<1.0	<5.0
MW-1	21-Feb-12	360	<1.0	54	<2.0	1.2	<1.0	<5.0
MW-1	24-May-12	210	2.1	31	5.1	0.59	<1.0	<5.0
MW-1	10-Sep-12	54	<2.0	36	<4.0	0.45	<1.0	<5.0
MW-1	04-Dec-12	<2.0	<2.0	17	<4.0	0.19	<1.0	<5.0
MW-1	26-Mar-13	1.2	<1.0	1.8	<2.0	<0.050	<1.0	<5.0
MW-1	01-Jul-13	1.6	<1.0	6.5	<2.0	0.090	<1.0	<5.0
MW-1	25-Sep-13	180	2.9	36	8.8	0.53	<1.0	<5.0
MW-1	14-Jan-14	14	<2.0	15	<4.0	0.21	<1.0	<5.0
MW-1	04-Apr-14			e Product Pres				
MW-1	26-Sep-14			e Product Pres	•			
MW-1	03-Dec-14			e Product Pres	•			
MW-1	27-Mar-15			e Product Pres	•			
MW-1	08-Dec-15			e Product Pres				
MW-1	02-Jun-16			e Product Pres				
MW-1	20-Oct-16			e Product Pres	·			
MW-1	26-Jan-17		NS - Fre	e Product Pres	ent (0.61 ft	thickness)		
	05.14 00	.4.0	.4.0	.4.0	.2.2	.0.050	.4.0	.5.0
MW-2	05-Mar-09	<1.0	<1.0	<1.0	<2.0	<0.050	<1.0	<5.0
MW-2	10-Sep-09	<1.0	<1.0	<1.0	<2.0	<0.050	<1.0	<5.0
MW-2	15-Jan-10	<1.0	<1.0	<1.0	<2.0	<0.050	<1.0	<5.0
MW-2	14-Oct-10	<1.0	<1.0	<1.0	<2.0	<0.050	<1.0	<5.0
MW-2	21-Jan-11	<1.0	<1.0	<1.0	<2.0	<0.050	<1.0	<5.0
MW-2	12-May-11	<1.0 <1.0	<1.0	<1.0	<2.0	<0.050	<1.0	<5.0
MW-2	12-Aug-11		<1.0	<1.0	<2.0	<0.050	<1.0	<5.0
MW-2	16-Nov-11	<1.0	<1.0	<1.0	<2.0	<0.050	<1.0	<5.0
DAVA/ 2	0E Mar 00	400	1 100	110	1 200	0.7	2.4	∠E ∩
MW-3	05-Mar-09	380	<b>1,100</b> 27	110 26	<b>1,300</b> 61	8.2	3.4	<5.0
MW-3	11-Sep-09					4.2	9.6	6.0
MW-3	15-Jan-10	750 140	11	34	<20	3.4	7.0	6.1
MW-3	14-Oct-10	140	<1.0	6.8	2.8	0.76	1.9	<5.0

TABLE 2
SUMMARY OF GROUNDWATER ANALYTICAL RESULTS
BMG HWY 537 TRUCK RECEIVING STATION 2009 RELEASE

	Date			Ethyl-	Total			
Well ID	Sampled	Benzene	Toluene	benzene	Xylenes	GRO	DRO	MRO
		(μg/L)	(μg/L)	(μg/L)	(μg/L)	(mg/L)	(mg/L)	(mg/L)
Analytical I	Method	8021B	8021B	8021B	8021B	8015B	8015B	8015B
New Mexico	o WQCC	10	<i>750</i>	<i>750</i>	620	NE	NE	NE
MW-3	21-Jan-11	280	<1.0	24	9.1	1.7	3.5	<5.0
MW-3	12-May-11	980	<1.0	42	<2.0	3.0	4.8	<5.0
MW-3	12-Aug-11	51	<1.0	4.2	<2.0	0.38	<1.0	<5.0
MW-3	16-Nov-11	63	<1.0	6.0	<2.0	0.46	3.3	<5.0
MW-3	21-Feb-12	4.8	<1.0	<1.0	<2.0	0.18	<1.0	<5.0
MW-3	24-May-12	50	<1.0	3.0	<2.0	0.33	<1.0	<5.0
MW-3	10-Sep-12	6.2	<2.0	<2.0	<4.0	0.29	<1.0	<5.0
MW-3	04-Dec-12	<2.0	<2.0	<2.0	<4.0	0.26	<1.0	<5.0
MW-3	26-Mar-13	2.5	<1.0	<1.0	<2.0	0.23	<1.0	<5.0
MW-3	01-Jul-13	<1.0	<1.0	<1.0	<2.0	0.11	<1.0	<5.0
MW-3	25-Sep-13	30	<1.0	1.5	3.2	0.23	<1.0	<5.0
MW-3	14-Jan-14	<1.0	<1.0	<1.0	<2.0	0.12	<1.0	<5.0
MW-3	04-Apr-14	<1.0	<1.0	<1.0	<2.0	0.20	<1.0	<5.0
MW-3	26-Sep-14	<1.0	<1.0	<1.0	<2.0	0.095	<1.0	<5.0
MW-3	27-Mar-15	<1.0	<1.0	<1.0	<2.0	0.056	1.1	<5.0
MW-3	15-Sep-15	<1.0	<1.0	<1.0	<1.5	0.130	<1.0	<5.0
MW-3	02-Jun-16	<1.0	<1.0	<1.0	<2.0	<0.050	<1.0	<5.0
MW-3	26-Jan-17	<1.0	<1.0	<1.0	<2.0	<0.050	<1.0	<5.0
MW-4	05-Mar-09	2.7	1.4	<1.0	<2.0	<0.050	<1.0	<5.0
MW-4	06-Apr-09	<1.0	<1.0	<1.0	<2.0	<0.050	<1.0	<5.0
MW-4	10-Sep-09	13	<1.0	<1.0	<2.0	0.051	<1.0	<5.0
MW-4	15-Jan-10	8.6	<1.0	<1.0	<2.0	<0.050	<1.0	<5.0
MW-4	15-Oct-10	6.3	<1.0	<1.0	<2.0	<0.050	<1.0	<5.0
MW-4	21-Jan-11	3.6	<1.0	<1.0	<2.0	<0.050	<1.0	<5.0
MW-4	12-May-11	<1.0	<1.0	<1.0	<2.0	<0.050	<1.0	<5.0
MW-4	12-Aug-11	<1.0	<1.0	<1.0	<2.0	<0.050	<1.0	<5.0
MW-4	16-Nov-11	<1.0	<1.0	<1.0	<2.0	<0.050	<1.0	<5.0
MW-4	21-Feb-12	<1.0	<1.0	<1.0	<2.0	<0.050	<1.0	<5.0
MW-4	24-May-12	<1.0	<1.0	<1.0	<2.0	<0.050	<1.0	<5.0
MW-4	04-Apr-14	<1.0	<1.0	<1.0	<2.0	<0.050	<1.0	<5.0
MW-5	05-Mar-09	<1.0	<1.0	<1.0	<2.0	<0.050	<1.0	<5.0
MW-5	10-Sep-09	<1.0	<1.0	<1.0	<2.0	<0.050	<1.0	<5.0
MW-5	15-Jan-10	<1.0	<1.0	<1.0	<2.0	<0.050	<1.0	<5.0
MW-5	14-Oct-10	<1.0	<1.0	<1.0	<2.0	<0.050	<1.0	<5.0
MW-5	21-Jan-11	<1.0	<1.0	<1.0	<2.0	<0.050	<1.0	<5.0
MW-5	12-May-11	<1.0	<1.0	<1.0	<2.0	<0.050	<1.0	<5.0
MW-5	12-Aug-11	<1.0	<1.0	<1.0	<2.0	<0.050	<1.0	<5.0

TABLE 2
SUMMARY OF GROUNDWATER ANALYTICAL RESULTS
BMG HWY 537 TRUCK RECEIVING STATION 2009 RELEASE
Rio Arriba County, New Mexico

Date				Ethyl-	Total			
Well ID	Sampled	Benzene	Toluene	benzene	Xylenes	GRO	DRO	MRO
		(μg/L)	(μg/L)	(μg/L)	(μg/L)	(mg/L)	(mg/L)	(mg/L)
Analytical		8021B	8021B	8021B	8021B	8015B	8015B	8015B
New Mexic	,	10	750	750	620	NE	NE	NE
MW-5	16-Nov-11	<1.0	<1.0	<1.0	<2.0	<0.050	<1.0	<5.0
MW-6	06-Mar-09	<1.0	<1.0	<1.0	<2.0	<0.050	<1.0	<5.0
MW-6	10-Sep-09	<1.0	<1.0	<1.0	<2.0	<0.050	<1.0	<5.0
MW-6	15-Jan-10	<1.0	<1.0	<1.0	<2.0	<0.050	<1.0	<5.0
MW-6	15-Oct-10	<1.0	<1.0	<1.0	<2.0	<0.050	<1.0	<5.0
MW-6	21-Jan-11	<1.0	<1.0	<1.0	<2.0	<0.050	<1.0	<5.0
MW-6	12-May-11	<1.0	<1.0	<1.0	<2.0	<0.050	<1.0	<5.0
MW-6	12-Aug-11	<1.0	<1.0	<1.0	<2.0	<0.050	<1.0	<5.0
MW-6	16-Nov-11	<1.0	<1.0	<1.0	<2.0	<0.050	<1.0	<5.0
MW-7	06-Mar-09	<1.0	<1.0	<1.0	<2.0	<0.050	<1.0	<5.0
MW-7	10-Sep-09	<1.0	<1.0	<1.0	<2.0	<0.050	<1.0	<5.0
MW-7	15-Jan-10	<1.0	<1.0	<1.0	<2.0	<0.050	<1.0	<5.0
MW-7	14-Oct-10	<1.0	<1.0	<1.0	<2.0	<0.050	<1.0	<5.0
MW-7	21-Jan-11	<1.0	<1.0	<1.0	<2.0	<0.050	<1.0	<5.0
MW-7	12-May-11	<1.0	<1.0	<1.0	<2.0	<0.050	<1.0	<5.0
MW-7	12-Aug-11	<1.0	<1.0	<1.0	<2.0	<0.050	<1.0	<5.0
MW-7	16-Nov-11	<1.0	<1.0	<1.0	<2.0	<0.050	<1.0	<5.0
MW-8	06-Mar-09	160	170	12	350	2.1	1.5	<5.0
MW-8	11-Sep-09	1,200	<20	36	75	4.1	1.1	<5.0
MW-8	15-Jan-10	56	<1.0	2.3	2.2	0.24	<1.0	<5.0
MW-8	15-Oct-10	50	<1.0	1.7	<2.0	0.21	<1.0	<5.0
MW-8	21-Jan-11	370	<1.0	4.6	<2.0	0.58	<1.0	<5.0
MW-8	12-May-11	430	<1.0	25	<2.0	1.4	<1.0	<5.0
MW-8	12-Aug-11	2.3	<1.0	<1.0	<2.0	0.070	<1.0	<5.0
MW-8	16-Nov-11	1.5	<1.0	<1.0	<2.0	0.17	<1.0	<5.0
MW-8	21-Feb-12	<1.0	<1.0	<1.0	<2.0	<0.050	<1.0	<5.0
MW-8	24-May-12	<1.0	<1.0	<1.0	<2.0	0.12	<1.0	<5.0
MW-8	10-Sep-12	<1.0	<1.0	<1.0	<2.0	0.16	<1.0	<5.0
MW-8	04-Dec-12	<1.0	<1.0	<1.0	<2.0	<0.050	<1.0	<5.0
MW-8	26-Mar-13	<1.0	<1.0	<1.0	<2.0	<0.050	<1.0	<5.0
MW-8	27-Jun-13	<1.0	<1.0	<1.0	<2.0	0.052	<1.0	<5.0
MW-8	04-Apr-14	<1.0	<1.0	<1.0	<2.0	0.072	<1.0	<5.0
MW-9	06-Mar-09	170	350	49	530	2.5	<1.0	<5.0
MW-9	06-Apr-09	82	62	16	210	1.6	<1.0	<5.0
MW-9	10-Sep-09	46	<1.0	3.8	19	0.86	<1.0	<5.0

TABLE 2
SUMMARY OF GROUNDWATER ANALYTICAL RESULTS
BMG HWY 537 TRUCK RECEIVING STATION 2009 RELEASE

	Date			Ethyl-	Total				
Well ID	Sampled	Benzene	Toluene	benzene	Xylenes	GRO	DRO	MRO	
		(μg/L)	(μg/L)	(μg/L)	(μg/L)	(mg/L)	(mg/L)	(mg/L)	
Analytical I	Method	8021B	8021B	8021B	8021B	8015B	8015B	8015B	
New Mexico	o WQCC	10	<i>750</i>	<i>750</i>	620	NE	NE	NE	
MW-9	15-Jan-10	62	<1.0	4.2	12	0.49	<1.0	<5.0	
MW-9	15-Oct-10	53	<1.0	2.3	<2.0	0.22	<1.0	<5.0	
MW-9	21-Jan-11	390	<1.0	5.1	<2.0	0.41	<1.0	<5.0	
MW-9	12-May-11	390	<1.0	11	<2.0	0.92	<1.0	<5.0	
MW-9	12-Aug-11	120	<1.0	5.6	<2.0	0.35	<1.0	<5.0	
MW-9	16-Nov-11	200	<5.0	9.6	<10	0.57	<1.0	<5.0	
MW-9	21-Feb-12	120	<1.0	4.2	<2.0	0.30	<1.0	<5.0	
MW-9	24-May-12	3.8	<1.0	1.4	<2.0	0.076	<1.0	<5.0	
MW-9	10-Sep-12	<1.0	<1.0	<1.0	<2.0	0.072	<1.0	<5.0	
MW-9	04-Dec-12	<1.0	<1.0	<1.0	<2.0	<0.050	<1.0	<5.0	
MW-9	26-Mar-13	<1.0	<1.0	<1.0	<2.0	<0.050	<1.0	<5.0	
MW-9	27-Jun-13	<1.0	<1.0	<1.0	<2.0	<0.050	<1.0	<5.0	
MW-9	25-Sep-13	<1.0	<1.0	<1.0	<2.0	<0.050	<1.0	<5.0	
MW-9	14-Jan-14	<1.0	<1.0	<1.0	<2.0	<0.050	<1.0	<5.0	
MW-9	04-Apr-14	<1.0	<1.0	<1.0	<2.0	0.075	<1.0	<5.0	
MW-10	09-Mar-09 10-Sep-09	09-Mar-09	<1.0	_	<1.0	<2.0	<0.050	<1.0	<5.0
MW-10		<1.0	<1.0	<1.0	<2.0	<0.050	<1.0	<5.0	
MW-10	15-Jan-10	<1.0	<1.0	<1.0 <2.0		<0.050	<1.0	<5.0	
MW-10	14-Oct-10	<1.0	<1.0	<1.0	<1.0 <2.0		<1.0	<5.0	
MW-10	21-Jan-11	<1.0	<1.0	<1.0	<2.0	<0.050	<1.0	<5.0	
MW-10	12-May-11	<1.0	<1.0	<1.0	<2.0	<0.050	<1.0	<5.0	
MW-10	12-Aug-11	<1.0	<1.0	<1.0	<2.0	<0.050	<1.0	<5.0	
MW-10	16-Nov-11	<1.0	<1.0	<1.0	<2.0	<0.050	<1.0	<5.0	
MW-11	09-Mar-09	<1.0	<1.0	<1.0	<2.0	<0.050	<1.0	<5.0	
MW-11	10-Sep-09	<1.0	<1.0	<1.0	<2.0	<0.050	<1.0	<5.0	
MW-11	15-Jan-10	<1.0	<1.0	<1.0	<2.0	<0.050	<1.0	<5.0	
MW-11	14-Oct-10	<1.0	<1.0	<1.0	<2.0	<0.050	<1.0	<5.0	
MW-11	21-Jan-11	<1.0	<1.0	<1.0	<2.0	<0.050	<1.0	<5.0	
MW-11	12-May-11	<1.0	<1.0	<1.0	<2.0	<0.050	<1.0	<5.0	
MW-11	12-Aug-11 16-Nov-11	<1.0	<1.0 <1.0	<1.0	<2.0 <2.0	<0.050 <0.050	<1.0 <1.0	<5.0 <5.0	
MW-11	10-1404-11	<1.0	\1.U	<1.0	<b>\</b> 2.0	\U.U3U	\1.0	\3.0	
Downgradient									
MW-7*	09-Mar-09	<1.0	<1.0	<1.0	<2.0	<0.050	<1.0	<5.0	
IAIAA-1	US IVIAI-US	`1.0	`1.0	`1.0	`~	10.030	`1.0	٠٥.٥	
L	NC - Not Com								

**NOTE:** NS = Not Sampled

GRO = Gasoline Range Organics

### TABLE 2

# SUMMARY OF GROUNDWATER ANALYTICAL RESULTS BMG HWY 537 TRUCK RECEIVING STATION 2009 RELEASE

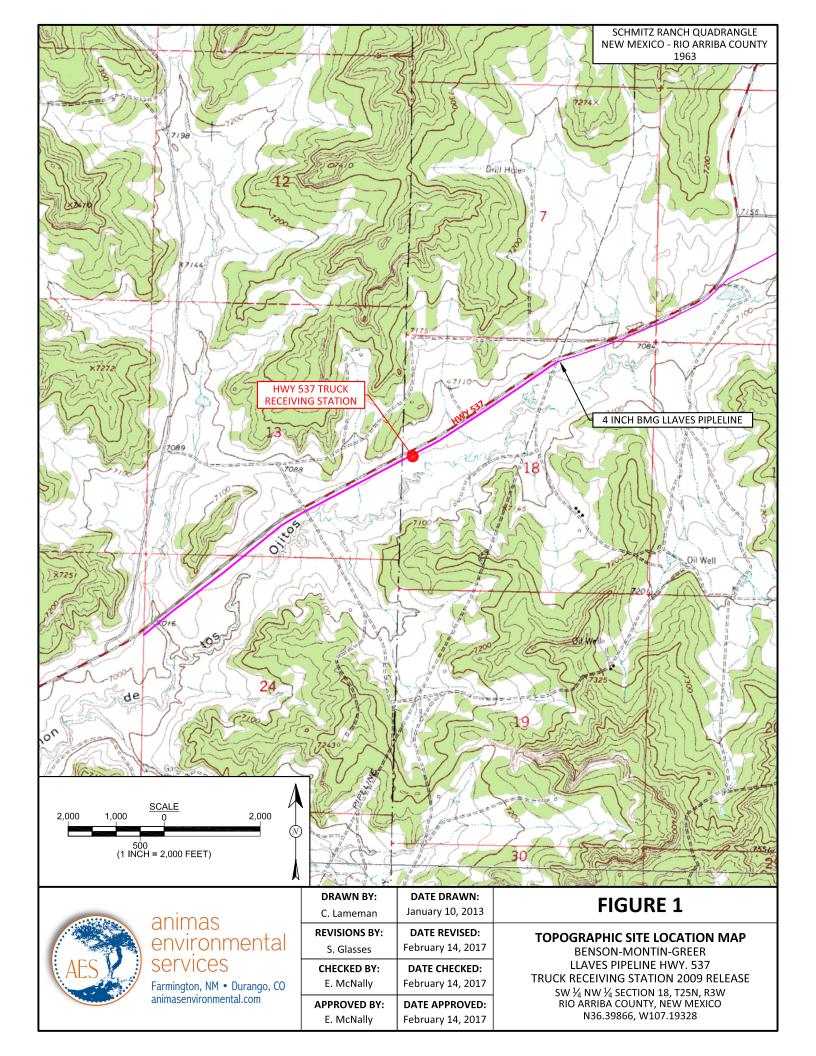
## Rio Arriba County, New Mexico

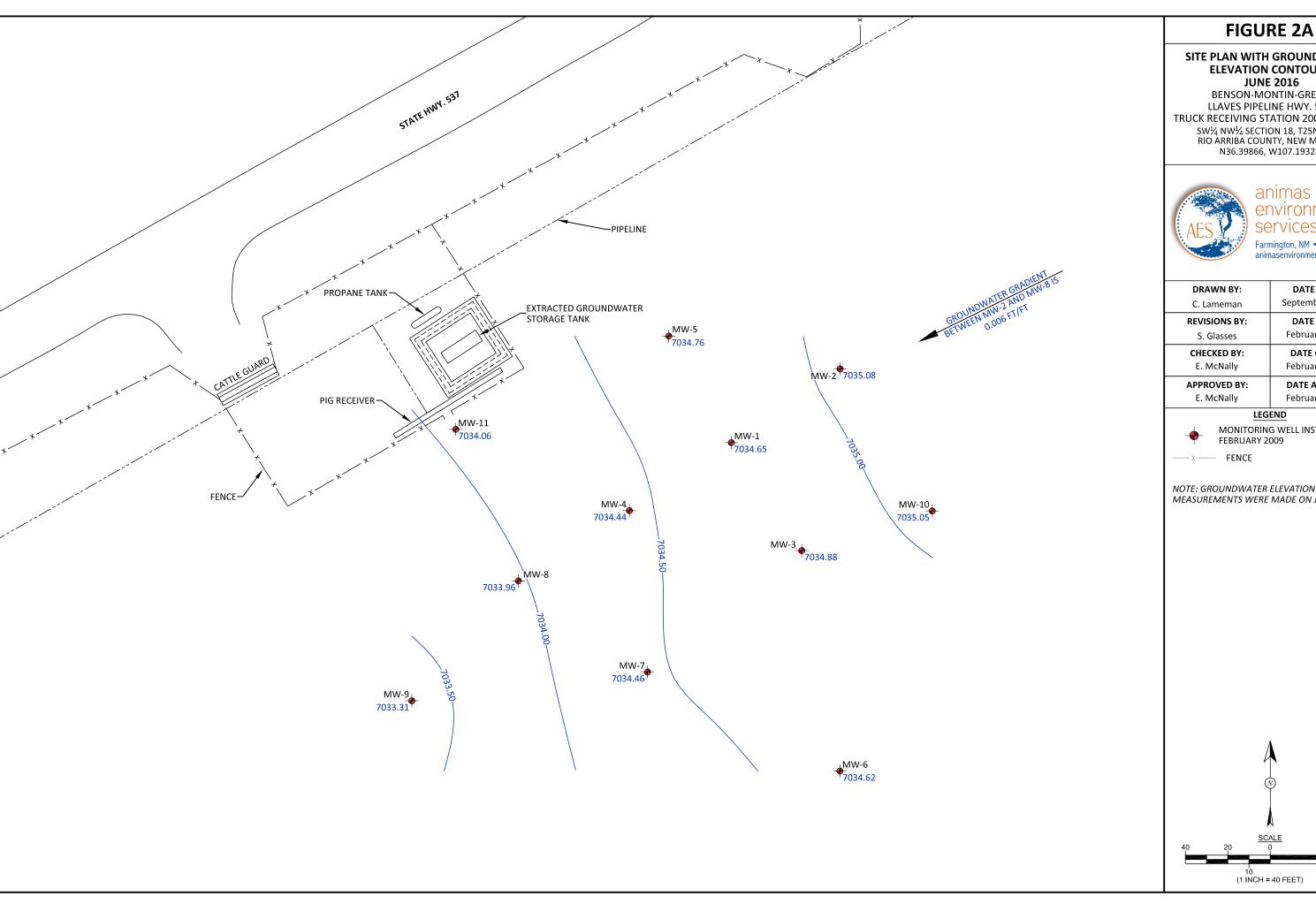
	Date			Ethyl-	Total			
Well ID	Sampled	Benzene	Toluene	benzene	Xylenes	GRO	DRO	MRO
(μg/L)		(μg/L)	(μg/L)	(μg/L)	(mg/L)	(mg/L)	(mg/L)	
Analytical Method		8021B	8021B	8021B	8021B	8015B	8015B	8015B
New Mexico WQCC		10	750	750	620	NE	NE	NE

DRO = Diesel Range Organics

MRO = Motor Oil Range Organics

<sup>\* =</sup> Monitoring Well from HWY 537 '06-'07 spill





### SITE PLAN WITH GROUNDWATER **ELEVATION CONTOURS JUNE 2016**

BENSON-MONTIN-GREER LLAVES PIPELINE HWY. 537 TRUCK RECEIVING STATION 2009 RELEASE SW¼ NW¼ SECTION 18, T25N, R3W RIO ARRIBA COUNTY, NEW MEXICO N36.39866, W107.19328

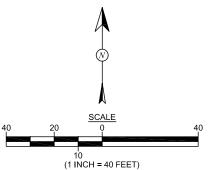


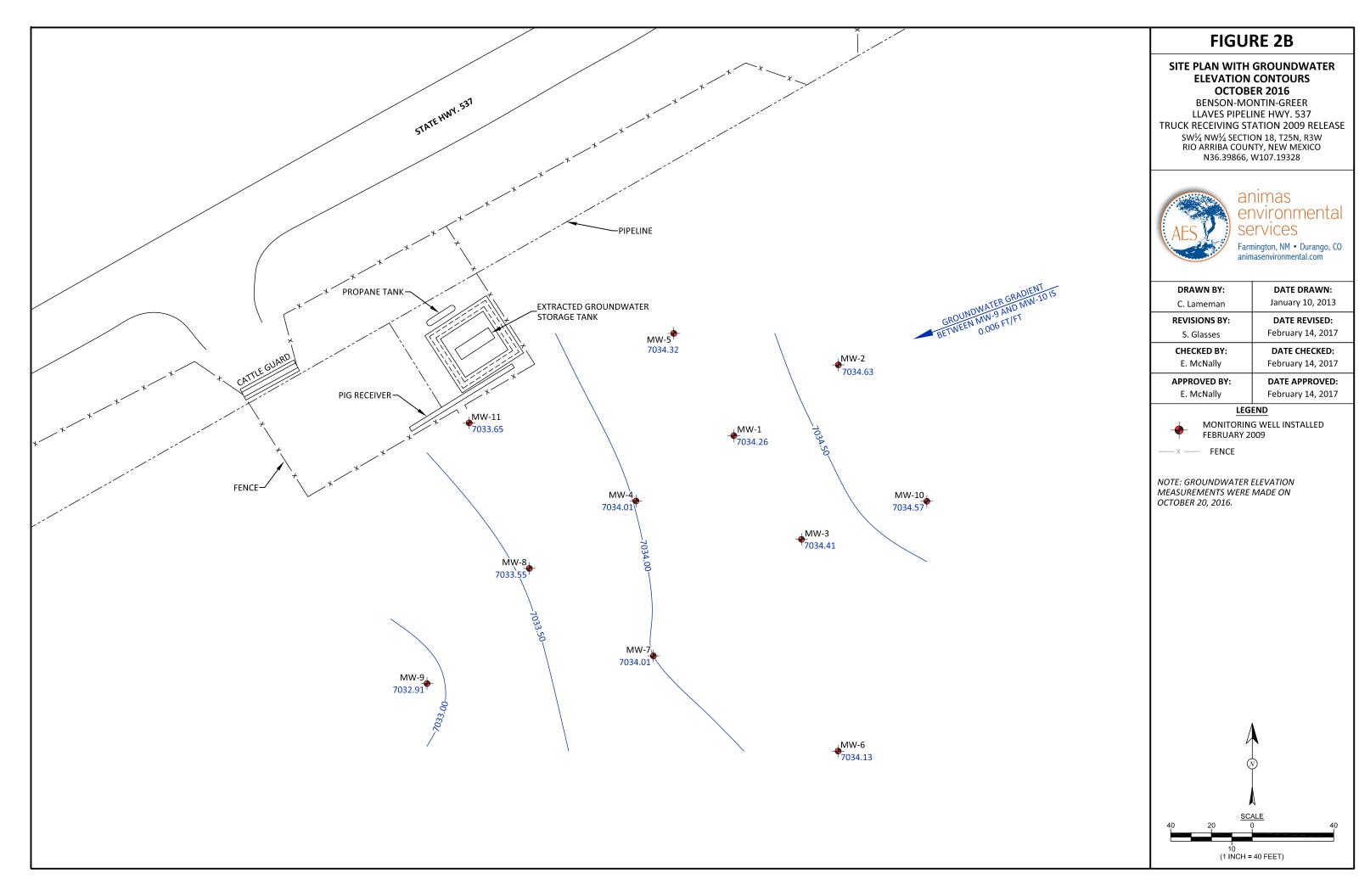
envijorinental	
services	
Farmington, NM • Durango, CO animasenvironmental.com	

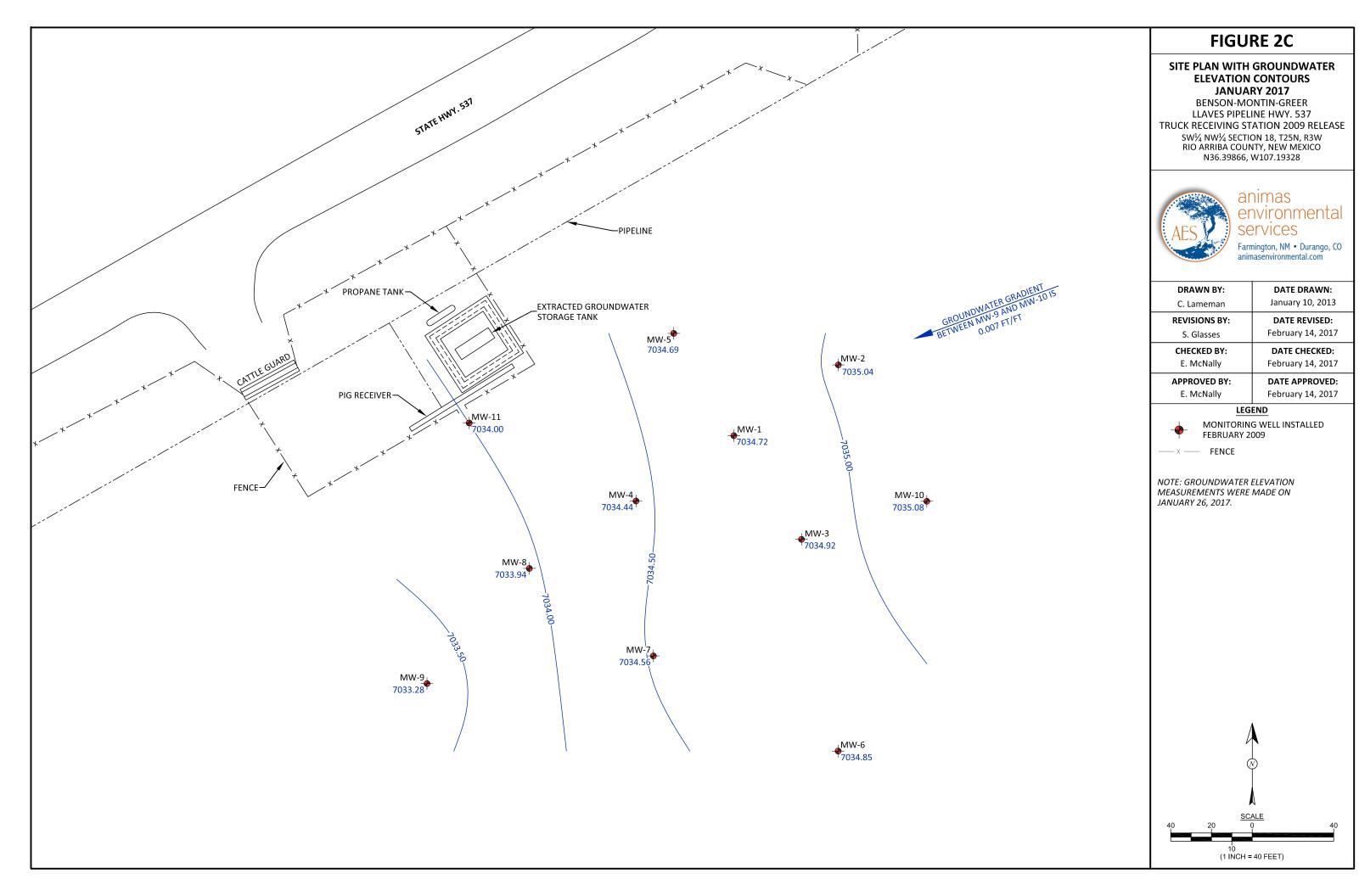
<b>DRAWN BY:</b> C. Lameman	DATE DRAWN: September 18, 2014			
REVISIONS BY: S. Glasses	<b>DATE REVISED:</b> February 14, 2017			
CHECKED BY: E. McNally	<b>DATE CHECKED:</b> February 14, 2017			
APPROVED BY: E. McNally	<b>DATE APPROVED:</b> February 14, 2017			

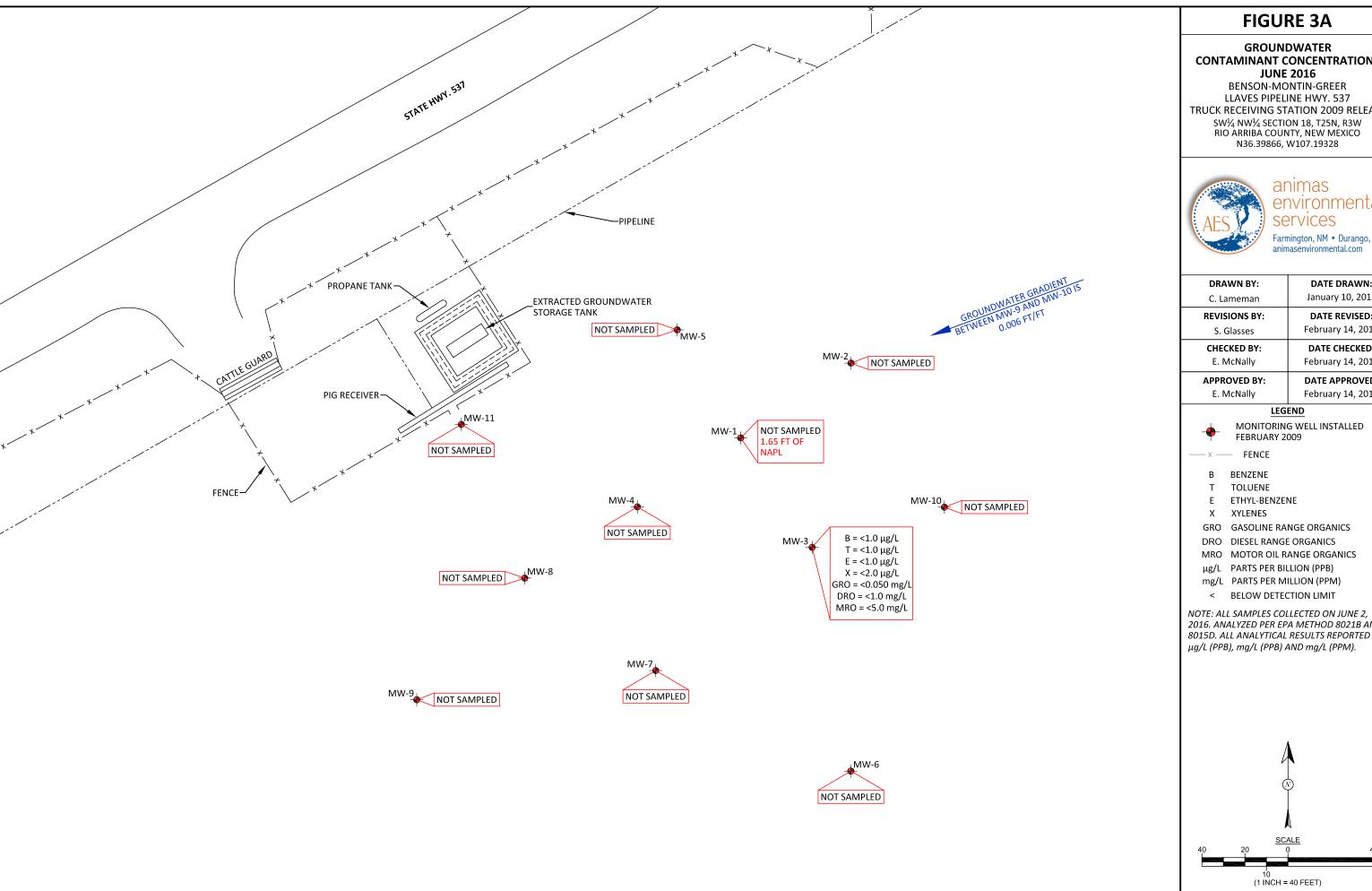
MONITORING WELL INSTALLED

NOTE: GROUNDWATER ELEVATION MEASUREMENTS WERE MADE ON JUNE 2, 2016.









# FIGURE 3A

### **GROUNDWATER CONTAMINANT CONCENTRATIONS JUNE 2016**

LLAVES PIPELINE HWY. 537 TRUCK RECEIVING STATION 2009 RELEASE SW1/4 NW1/4 SECTION 18, T25N, R3W RIO ARRIBA COUNTY, NEW MÉXICO N36.39866, W107.19328

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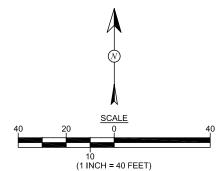
DRAWN BY:	DATE DRAWN:			
C. Lameman	January 10, 2013			
REVISIONS BY:	DATE REVISED:			
S. Glasses	February 14, 2017			
CHECKED BY:	DATE CHECKED:			
E. McNally	February 14, 2017			
APPROVED BY:	DATE APPROVED:			
E. McNally	February 14, 2017			

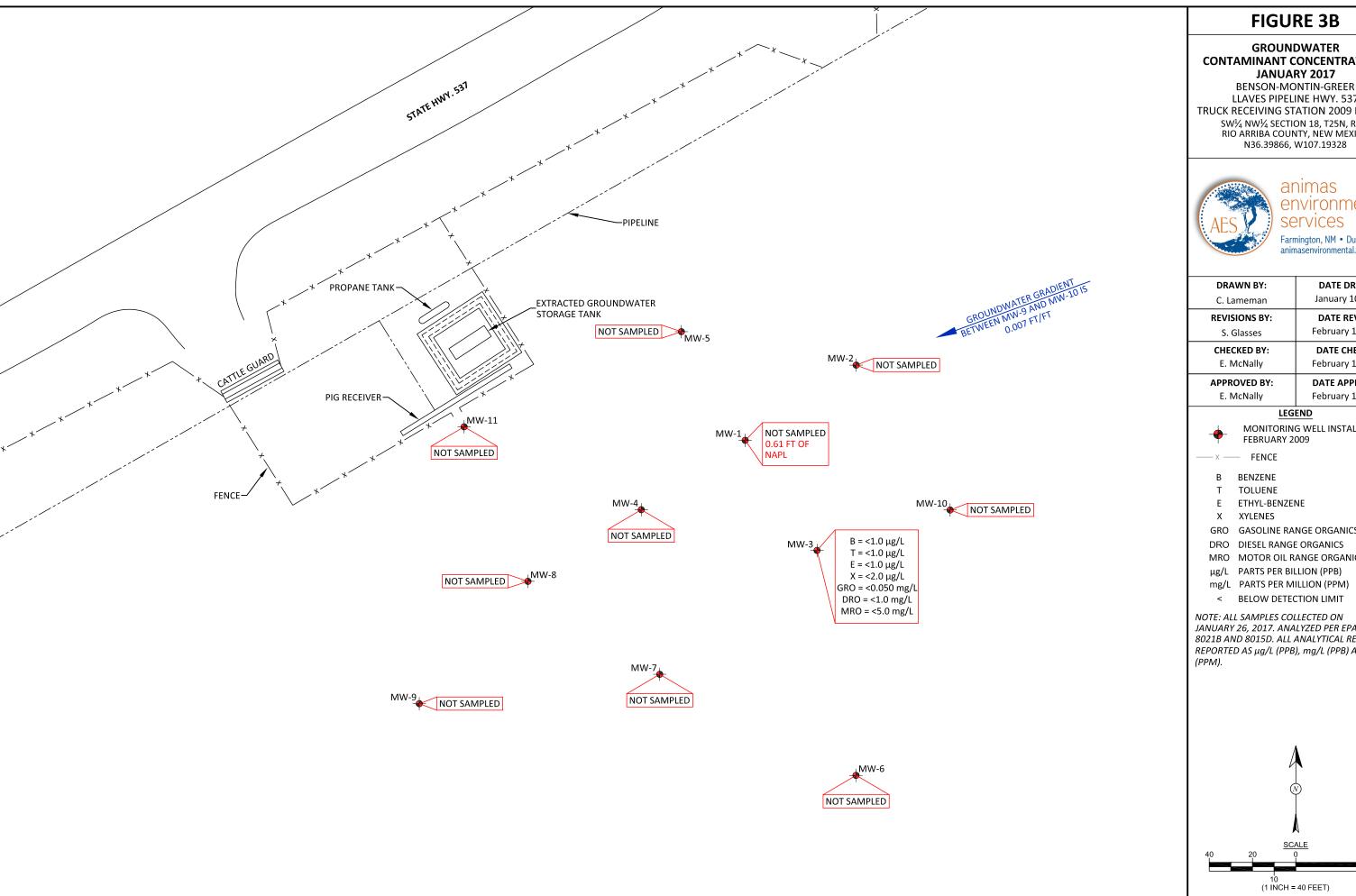
### LEGEND

MONITORING WELL INSTALLED FEBRUARY 2009

GRO GASOLINE RANGE ORGANICS

2016. ANALYZED PER EPA METHOD 8021B AND 8015D. ALL ANALYTICAL RESULTS REPORTED AS μg/L (PPB), mg/L (PPB) AND mg/L (PPM).





# FIGURE 3B

### **GROUNDWATER CONTAMINANT CONCENTRATIONS JANUARY 2017**

LLAVES PIPELINE HWY. 537 TRUCK RECEIVING STATION 2009 RELEASE SW1/4 NW1/4 SECTION 18, T25N, R3W RIO ARRIBA COUNTY, NEW MÉXICO N36.39866, W107.19328

# anımas environmental services

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DRAWN BY:	DATE DRAWN:			
C. Lameman	January 10, 2013			
REVISIONS BY:	DATE REVISED:			
S. Glasses	February 14, 2017			
CHECKED BY:	DATE CHECKED:			
E. McNally	February 14, 2017			
APPROVED BY:	DATE APPROVED:			
E. McNally	February 14, 2017			

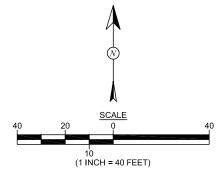
### LEGEND

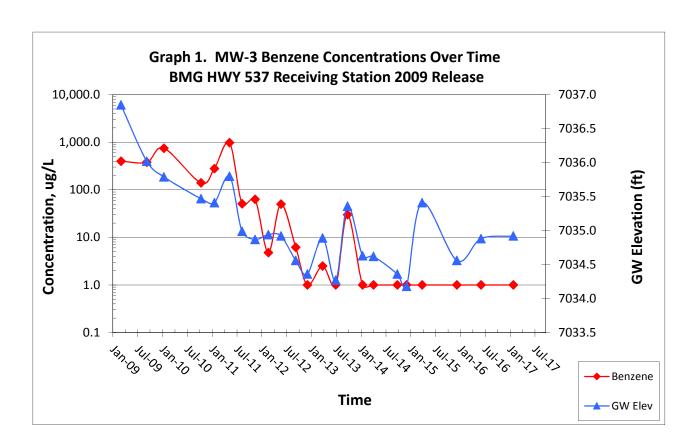
MONITORING WELL INSTALLED

GRO GASOLINE RANGE ORGANICS

MRO MOTOR OIL RANGE ORGANICS

NOTE: ALL SAMPLES COLLECTED ON JANUARY 26, 2017. ANALYZED PER EPA METHOD 8021B AND 8015D. ALL ANALYTICAL RESULTS REPORTED AS μg/L (PPB), mg/L (PPB) AND mg/L





MONITORING WELL SAMPLING RECORD					Animas Environmental Services					
Monitor Well No: MW-3						604 W. Pinon St, Farmington NM 87401				
						Tel. (505) 564-2281 Fax (505) 324-2022				
	BMG				Project No.:					
	2009 Release					Date: 06/02/16				
Sampling	Groundwater Technician:	Monitoring and	Sampling		- '	Arrival Time: <u>0954</u>	·			
	e / No Purge:		<u> </u>		- то	Air Temp:	<u> </u>			
Well	Diameter (in):	2				ell Depth (ft): 나용이				
Initi	al D.T.W. (ft):	29.15	Time:	0912		(taken at initial gauging				
Confir	m D.T.W. (ft):	29.13	Time:	095 lu		_(taken prior to purging	•			
I FIN	aι υ. ι .w. (π): APL Present:	29°44 DTP:	Time:	<u>ー1の多</u> む L::	S Th	(taken after sample col				
,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,							ime:			
		1	Paramete	rs - Rec	orded D	During Well Purging				
	Temp	Conductivity	DO		ORP	PURGED VOLUME				
Time	(deg C)	(µS) (mS)	(mg/L)	pН	(mV)	(see reverse for calc.)	Notes/Observations			
1010	13.bis	4.039	1.50	7.05	-5.2		Clarity Brawn			
1017	13.03	4.075	1.41	7.04	-40.3	2.0 gel	Stoody / Gray wor			
1023	12.86	4.060	1.25	7.07	-8.6	4.0 gal	Cloudy Gray Stight ogganic odor			
1028	12:75	4.054	1.21	7.07	-8.3	(e.d (e)	Bright 4 no oder			
1034	12.71	4.064	1.58	7.03	-3.2	6-75 Gal	Cloudy Brain			
1035	***************************************				The same of the sa		Sample Collected			
							The state of the s			
Analyti	cal Paramet	ters (include a	nalysis n	nethod a	ınd nun	nber and type of san	nple containers)			
						/ials w HCl preserve)				
		un voos per L	i A Metriou	0021 (3 -	· 40 IIIL \	riais w noi preserve)				
	וח	isposal of Purg	ad Water:	Tail						
Collec		_								
Conce		stody Record (		755						
	Chain of Cu	-		Hall Esti		-1 A	A.11			
Fauinma	ant Head Dur		-			al Analysis Laboratory, <i>A</i>				
Ечирин	Equipment Used During Sampling: Keck Water Level or Keck Interface Level, YSI Water Quality Meter									
lotes/Com	and New Disposable Bailer  otes/Comments:									
	ves/comments.									
							, , , , , , , , , , , , , , , , , , , ,			
		M								
revised. 00	10/09	······································								

If it is necessary to calculate the volume of the monitoring well to determine what volume of groundwater will need to be purged from the well prior to collecting the samples, use the following equation:

Well Volume = (h)(cf)

where:

h = height of water column (feet) cf = gallons/foot based on well diameter shown below

The gallons/foot for common size monitoring wells are as follows:

Well Diameter (inches)	2"\	3"	4"	6"
Volume (gallons/foot)	0.1632	0.3672	0.6528	1.4688

The well volume is typically tripled to determine the volume to be purged.

Show purge volume calculation below:

h = Total Well Depth - Depth To Water = 
$$\frac{43-12}{29.13} = \frac{13.99}{3}$$
  
Well Volume = (h)(cf) = ( $\frac{13.99}{13.99}$ )(0.1632) = ( $\frac{2.283168}{3}$ ) 3

Total Purge Volume = 3(Well Volume) =  $\frac{6.849504}{3}$ 

MONIT	ORING WE	LL SAMPLI	NG RECC	RD	Animas Environmental Services				
Monitor Well No: MW-3						604 W. Pinon St, Farmington NM 87401			
						Tel. (505) 564-2281 Fax (505) 324-2022			
Site:					Project No.:				
Location:	2009 Release				۸	Date: <u>/- 26-1</u> arrival Time: 10/0	7		
		Monitoring and S S - డ్ర (ఒక్కరిక్ర	sampling		<i>A</i>	Air Temp: <u>32° F</u>			
Samping	i echnician: e / No Purge: Diameter (in):	Purge	·····		T.O.	C. Elev. (ft): 7064	.66		
				ד	otal We	ll Depth (ft): ム3。) 5	,		
Initia	al D.T.W. (ft):	29.09	Time:	1026		(taken at initial gauging	of all wells)		
Confir	n D.T.W. (ft):	29.09	Time: Time: '	1028		(taken prior to purging v (taken after sample coll	vell) lection)		
Fina If N	al D.T.W. (ft):	D.T.P.:	D.T.W	1109	Thi	ckness:Ti	me:		
	V	ater Quality I	<sup>2</sup> arametei	rs - Kec	oraea D	Puring Well Purging			
	Temp	Conductivity	DO		ORP	PURGED VOLUME			
Time	(deg C)	(µS) (mS)	(mg/L)	рН	(mV)	(see reverse for calc.)	Notes/Observations		
1037	11.49	4.115	2.48	7-23	-4.3	initial	Cloudy Had INO odor		
10-10	12.08	4.032	1.96	7.19	-19.8	/	Cloudy Tan Hzo, of Shight organic odor		
1043	11.88	4.002	1.44	7.21	-157	2-	Cloudy Ton H2D Slight organic odor		
10746	11.68	4.4.13	134	747	- 7.8	3	Slight organic odor Closely Brown Ital Slight organic will Closely Tuh 1822 NO odor Closely Tuh 1820 No odor Closely Tony Hill No odor		
1052	11.54	4.003	1.83	7.18	1.3	4.1	Closely Trady 1820		
	<u> </u>	4.00	1.91	7.1%	68	<u> </u>	Cloudy Tony Hru		
1100	11.62	3.98	1.89	7.17	7.1	6			
1100	11.57		1.90	7.1%	11.5	6.75	Slight Myssic Ddw		
11 0 3	11.19	4.024	1 - 132	6.0%	17.5	(1/3			
h NF			and the state of t	and the same of th		The state of the s	Sample Collected		
1105	And the state of t	The state of the s					Sanges arising		
					ļ				
Analy	tical Parame	eters (include	analysis I	method	and nu	mber and type of sa	mple containers)		
		Full VOCs per i	EPA Metho	d 8021 (3	- 40 mL	Vials w HCl preserve)			
		Disposal of Pur	ged Water	: Ov	Carsual	surface			
Col		es Stored on Ice			913111				
001	r	Sustody Record							
	Gliain of C	•	=		vironmer	ntal Analysis Laboratory,	Albuquerque NM		
							A distribute a balancia and processing of processing a second of the sec		
Equip	ment Used Di		Wew Disp	or a common management of the last		nterface Level YSI Wat	is Quality Meter		
	<u></u>	an	A MAM DISD	Joanie De	anoj.				
Notes/Co	mments:								

revised: 06/10/09



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

June 13, 2016

Elizabeth McNally Animas Environmental Services 604 Pinon Street Farmington, NM 87401

TEL: (505) 564-2281 FAX (505) 324-2022

RE: BMG HWY 537 2009 Release OrderNo.: 1606173

### Dear Elizabeth McNally:

Hall Environmental Analysis Laboratory received 2 sample(s) on 6/3/2016 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 <a href="www.hallenvironmental.com">www.hallenvironmental.com</a> 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 qualifers 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 #NM0190

Sincerely,

Andy Freeman

Laboratory Manager

andyl

4901 Hawkins NE

Albuquerque, NM 87109

# **Analytical Report**Lab Order **1606173**

# Hall Environmental Analysis Laboratory, Inc.

Date Reported: 6/13/2016

CLIENT: Animas Environmental Services Client Sample ID: MW-3

 Project:
 BMG HWY 537 2009 Release
 Collection Date: 6/2/2016 10:35:00 AM

 Lab ID:
 1606173-001
 Matrix: AQUEOUS
 Received Date: 6/3/2016 7:45:00 AM

Analyses	Result	PQL Qu	al Units	DF	Date Analyzed	Batch
EPA METHOD 8015M/D: DIESEL RAN	GE				Analysi	: JME
Diesel Range Organics (DRO)	ND	1.0	mg/L	1	6/7/2016 7:10:01 PM	25672
Motor Oil Range Organics (MRO)	ND	5.0	mg/L	1	6/7/2016 7:10:01 PM	25672
Surr: DNOP	104	70-141	%Rec	1	6/7/2016 7:10:01 PM	25672
EPA METHOD 8015D: GASOLINE RAM	NGE				Analyst	t: NSB
Gasoline Range Organics (GRO)	ND	0.050	mg/L	1	6/8/2016 10:09:20 AM	A34784
Surr: BFB	106	66.4-120	%Rec	1	6/8/2016 10:09:20 AM	A34784
EPA METHOD 8021B: VOLATILES					Analyst	t: NSB
Benzene	ND	1.0	μg/L	1	6/8/2016 10:09:20 AM	B34784
Toluene	ND	1.0	μg/L	1	6/8/2016 10:09:20 AM	B34784
Ethylbenzene	ND	1.0	μg/L	1	6/8/2016 10:09:20 AM	B34784
Xylenes, Total	ND	2.0	μg/L	1	6/8/2016 10:09:20 AM	B34784
Surr: 4-Bromofluorobenzene	101	87.9-146	%Rec	1	6/8/2016 10:09:20 AM	B34784

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

#### **Qualifiers:** Value exceeds Maximum Contaminant Level. Analyte detected in the associated Method Blank D Sample Diluted Due to Matrix Е Value above quantitation range Analyte detected below quantitation limits Page 1 of 5 Н Holding times for preparation or analysis exceeded J ND Not Detected at the Reporting Limit P Sample pH Not In Range R RPD outside accepted recovery limits RL Reporting Detection Limit % Recovery outside of range due to dilution or matrix Sample container temperature is out of limit as specified

# **Analytical Report**Lab Order **1606173**

# Date Reported: 6/13/2016

# Hall Environmental Analysis Laboratory, Inc.

CLIENT: Animas Environmental Services Client Sample ID: TRIP BLANK

**Project:** BMG HWY 537 2009 Release **Collection Date:** 

**Lab ID:** 1606173-002 **Matrix:** TRIP BLANK **Received Date:** 6/3/2016 7:45:00 AM

Analyses	Result	PQL Qu	al Units	DF	Date Analyzed	Batch
EPA METHOD 8015D: GASOLINE RAI	NGE				Analysi	: NSB
Gasoline Range Organics (GRO)	ND	0.050	mg/L	1	6/8/2016 10:32:49 AM	A34784
Surr: BFB	104	66.4-120	%Rec	1	6/8/2016 10:32:49 AM	A34784
EPA METHOD 8021B: VOLATILES					Analyst	:: NSB
Benzene	ND	1.0	μg/L	1	6/8/2016 10:32:49 AM	B34784
Toluene	ND	1.0	μg/L	1	6/8/2016 10:32:49 AM	B34784
Ethylbenzene	ND	1.0	μg/L	1	6/8/2016 10:32:49 AM	B34784
Xylenes, Total	ND	2.0	μg/L	1	6/8/2016 10:32:49 AM	B34784
Surr: 4-Bromofluorobenzene	102	87.9-146	%Rec	1	6/8/2016 10:32:49 AM	B34784

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

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	В	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	Е	Value above quantitation range
	Н	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits Page 2 of 5
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
	S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified

# Hall Environmental Analysis Laboratory, Inc.

WO#: 1606173

13-Jun-16

**Client: Animas Environmental Services Project:** BMG HWY 537 2009 Release

Sample ID LCS-25672 SampType: LCS TestCode: EPA Method 8015M/D: Diesel Range

LCSW Client ID: Batch ID: 25672 RunNo: 34716

Prep Date: 6/6/2016 Analysis Date: 6/6/2016 SeqNo: 1071063 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 0 108 71.3 139 Surr: DNOP 0.51 0.5000 103 70 141

TestCode: EPA Method 8015M/D: Diesel Range Sample ID MB-25672 SampType: MBLK

Client ID: PBW Batch ID: 25672 RunNo: 34716

Prep Date: 6/6/2016 Analysis Date: 6/6/2016 SeqNo: 1071064 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 0.98 1.000 97.9 70 141

### Qualifiers:

- Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- Η Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- R RPD outside accepted recovery limits
- S % Recovery outside of range due to dilution or matrix
- В Analyte detected in the associated Method Blank
- Е Value above quantitation range
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Detection Limit
- Sample container temperature is out of limit as specified

Page 3 of 5

# Hall Environmental Analysis Laboratory, Inc.

WO#: **1606173** 

13-Jun-16

Client: Animas Environmental Services
Project: BMG HWY 537 2009 Release

Sample ID 5ML RB SampType: MBLK TestCode: EPA Method 8015D: Gasoline Range

Client ID: PBW Batch ID: A34784 RunNo: 34784

Prep Date: Analysis Date: 6/8/2016 SeqNo: 1073391 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 21 20.00 103 66.4 120

Sample ID 2.5UG GRO LCS SampType: LCS TestCode: EPA Method 8015D: Gasoline Range

Client ID: LCSW Batch ID: A34784 RunNo: 34784

Prep Date: Analysis Date: 6/8/2016 SeqNo: 1073392 Units: mg/L

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

 Gasoline Range Organics (GRO)
 0.46
 0.050
 0.5000
 0
 92.9
 80
 120

 Surr: BFB
 23
 20.00
 113
 66.4
 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
- R RPD outside accepted recovery limits
- 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 Detection Limit
- W Sample container temperature is out of limit as specified

Page 4 of 5

# Hall Environmental Analysis Laboratory, Inc.

WO#: 1606173

13-Jun-16

**Client: Animas Environmental Services Project:** BMG HWY 537 2009 Release

Sample ID 5ML RB SampType: MBLK TestCode: EPA Method 8021B: Volatiles PBW Client ID: Batch ID: **B34784** RunNo: 34784 Prep Date: Analysis Date: 6/8/2016 SeqNo: 1073411 Units: µg/L Analyte Result **PQL** SPK value SPK Ref Val %REC LowLimit HighLimit %RPD **RPDLimit** Qual Methyl tert-butyl ether (MTBE) ND 2.5 ND Benzene 1.0 Toluene ND 1.0 Ethylbenzene ND 1.0 Xylenes, Total ND 2.0 1,2,4-Trimethylbenzene ND 1.0 1,3,5-Trimethylbenzene ND 1.0 Surr: 4-Bromofluorobenzene 20.00 102 87.9 146 20

Sample ID 100NG BTEX LCS	SampT	ype: <b>LC</b>	s	Tes	tCode: El	PA Method	8021B: Volat	iles		
Client ID: LCSW	Batch	1D: <b>B3</b>	4784	F	RunNo: 3	4784				
Prep Date:	Analysis D	ate: <b>6/</b>	8/2016	8	SeqNo: 1	073412	Units: µg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Methyl tert-butyl ether (MTBE)	17	2.5	20.00	0	83.6	78.4	127			
Benzene	17	1.0	20.00	0	86.0	80	120			
Toluene	18	1.0	20.00	0	89.7	80	120			
Ethylbenzene	18	1.0	20.00	0	90.9	80	120			
Xylenes, Total	55	2.0	60.00	0	91.6	80	120			
1,2,4-Trimethylbenzene	18	1.0	20.00	0	89.6	79.9	137			
1,3,5-Trimethylbenzene	18	1.0	20.00	0	88.2	81.6	128			
Surr: 4-Bromofluorobenzene	22		20.00		111	87.9	146			

### Qualifiers:

Value exceeds Maximum Contaminant Level.

D Sample Diluted Due to Matrix

Η Holding times for preparation or analysis exceeded

ND Not Detected at the Reporting Limit

RPD outside accepted recovery limits R

S % Recovery outside of range due to dilution or matrix В Analyte detected in the associated Method Blank

Е Value above quantitation range

J Analyte detected below quantitation limits

Page 5 of 5

P Sample pH Not In Range

RL Reporting Detection Limit

Sample container temperature is out of limit as specified



4901 Hawkins NE Albuquerque, NM 87109

# Sample Log-In Check List

TEL: 505-345-3975 FAX: 505-345-4107 Website: www.hallenvironmental.com

Client Name: Animas Environmental Work Order Number	er: 1606173	•••	RcptNo:	 1
Received by/date: 00003 (1)	2			
Logged By: Ashley Gallegos 6/3/2016 7:45:00 AM	ļ	A		
Completed By: Ashley Gallegos 6/3/2016 2:24:06 PM	1	A		
Reviewed By:		V		
Chain of Custody				
1. Custody seals intact on sample bottles?	Yes	No 🗌	Not Present 🗹	
2. Is Chain of Custody complete?	Yes 🗸	No 🗌	Not Present	
3. How was the sample delivered?	<u>Courier</u>			
<u>Log In</u>				
4. Was an attempt made to cool the samples?	Yes 🗹	No 🗆	NA $\square$	
5. Were all samples received at a temperature of >0° C to 6.0°C	Yes 🗹	No 🗌	na 🗆	
6. Sample(s) in proper container(s)?	Yes 🗹	No 🗌		
7. Sufficient sample volume for indicated test(s)?	Yes 🗸	No 🗌		
8. Are samples (except VOA and ONG) properly preserved?	Yes 🗸	No 🗌		
9. Was preservative added to bottles?	Yes	No 🗹	NA $\square$	
10.VOA vials have zero headspace?	Yes	No 🗌	No VOA Vials 🗹	
11, Were any sample containers received broken?	Yes	No 🔽	# of preserved	
12. Does paperwork match bottle labels?	Yes 🗹	No 🗆	bottles checked for pH:	
(Note discrepancies on chain of custody)	700 📖		(<2 or	>12 unless noted)
13. Are matrices correctly identified on Chain of Custody?	Yes 🗹	No 🗆	Adjusted?	
14. Is it clear what analyses were requested?	Yes 🗹	No 📙		
15. Were all holding times able to be met? (If no, notify customer for authorization.)	Yes 🗹	No 📙	Checked by:	
Special Handling (if applicable)				
16. Was client notified of all discrepancies with this order?	Yes 🗌	No 🗌	NA 🗹	1
Person Notified: Date				
By Whom: Via:	eMail _	Phone Fax	☐ In Person	
Regarding:		and administration and source as a section and source as a section and section		
Client Instructions:				
17. Additional remarks:				
18. Cooler Information			•	
Cooler No Temp °C Condition Seal Intact Seal No 1 1.2 Good Yes	Seal Date	Signed By		
Land the sound to the state of				

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Client: Ani	mas Envi	ronmenta	Olient: Animas Environmental Services, LLC	X Standard	□ Rush		」		<b>=</b>	ZAL.	YSIS	ANALYSIS LABORATORY	30R	ATO.	אַ <u>'</u>	
				Project Name: E	SMG HWY &	Project Name: BMG HWY 537 2009 Release			i	www.h	 Illenviro	www.hallenvironmental.com	l.com			
Mailing Address:	dress:		•					4901	Hawki	ns NE	- Albuc	4901 Hawkins NE - Albuquerque, NM 87109	NM 87	109		
304 W Pin	on St, Fa	rmington,	304 W Pinon St, Farmington, NM 87401	Project#:				<u>.</u>	505-34	505-345-3975	Fax	505-3	505-345-4107			
Phone #: 505 - 564 - 2281	05 - 564	- 2281								Ar	alysis	Analysis Request	ř			
Email or Fax#: 505 - 324 - 2022	ах#: 505	- 324 - 20	22	Project Manager: E. McNally	r: E. McNall	λ <sub>l</sub>										
JA/QC Package:	kage:							MRC								
X Standard	Ъ	ļ	☐ Level 4 (Full Validation)					I/OH								
Accreditation:	on:	Ċ		S)	Glasses			3O\D							-n	
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ר) ממש ר	ype)			sample i emperature:	ature: 🦟	1										JO
Date	Time	Matrix	Sample Request ID	Container Type and #	Preservative Type	HEAL NO.	TEX - 8021B	PH - EPA 8015 006 - 300	000 - 000						**	ir Bubbles (Y
6/2/16	1035	H20	MW-3	3-40 mL VOAs 1 L Amber	HCL	/00-	×			-						<b>√</b> 1
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12/11	1020		Metulbotan	) (Imax	3	1745										



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

February 01, 2017

Elizabeth McNally Animas Environmental Services 604 Pinon Street Farmington, NM 87401

TEL: (505) 564-2281 FAX (505) 324-2022

RE: BMG HWY 537 2009 Release OrderNo.: 1701B31

### Dear Elizabeth McNally:

Hall Environmental Analysis Laboratory received 2 sample(s) on 1/27/2017 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 <a href="www.hallenvironmental.com">www.hallenvironmental.com</a> 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 qualifers 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 #NM0190

Sincerely,

Andy Freeman

Laboratory Manager

andyl

4901 Hawkins NE

Albuquerque, NM 87109

# Analytical Report Lab Order 1701B31

Date Reported: 2/1/2017

# Hall Environmental Analysis Laboratory, Inc.

**CLIENT:** Animas Environmental Services **Client Sample ID:** MW-3

 Project:
 BMG HWY 537 2009 Release
 Collection Date: 1/26/2017 11:05:00 AM

 Lab ID:
 1701B31-001
 Matrix: AQUEOUS
 Received Date: 1/27/2017 8:40:00 AM

Analyses	Result	PQL Qu	al Units	DF	Date Analyzed	Batch
EPA METHOD 8015M/D: DIESEL RANG	GE				Analyst	: TOM
Diesel Range Organics (DRO)	ND	1.0	mg/L	1	1/31/2017 6:05:07 PM	29939
Motor Oil Range Organics (MRO)	ND	5.0	mg/L	1	1/31/2017 6:05:07 PM	29939
Surr: DNOP	124	98.8-141	%Rec	1	1/31/2017 6:05:07 PM	29939
EPA METHOD 8015D: GASOLINE RAN	IGE				Analyst	: NSB
Gasoline Range Organics (GRO)	ND	0.050	mg/L	1	1/30/2017 2:03:00 PM	G40379
Surr: BFB	93.5	52.3-138	%Rec	1	1/30/2017 2:03:00 PM	G40379
EPA METHOD 8021B: VOLATILES					Analyst	: NSB
Methyl tert-butyl ether (MTBE)	ND	2.5	μg/L	1	1/30/2017 2:03:00 PM	B40379
Benzene	ND	1.0	μg/L	1	1/30/2017 2:03:00 PM	B40379
Toluene	ND	1.0	μg/L	1	1/30/2017 2:03:00 PM	B40379
Ethylbenzene	ND	1.0	μg/L	1	1/30/2017 2:03:00 PM	B40379
Xylenes, Total	ND	2.0	μg/L	1	1/30/2017 2:03:00 PM	B40379
1,2,4-Trimethylbenzene	ND	1.0	μg/L	1	1/30/2017 2:03:00 PM	B40379
1,3,5-Trimethylbenzene	ND	1.0	μg/L	1	1/30/2017 2:03:00 PM	B40379
Surr: 4-Bromofluorobenzene	92.5	80-120	%Rec	1	1/30/2017 2:03:00 PM	B40379

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

### Qualifiers:

- \* Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- R RPD outside accepted recovery limits
- 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 Page 1 of 5
- P Sample pH Not In Range
- RL Reporting Detection Limit
- W Sample container temperature is out of limit as specified

# Analytical Report Lab Order 1701B31

Date Reported: 2/1/2017

# Hall Environmental Analysis Laboratory, Inc.

CLIENT: Animas Environmental Services Client Sample ID: TRIP BLANK

**Project:** BMG HWY 537 2009 Release **Collection Date:** 

**Lab ID:** 1701B31-002 **Matrix:** TRIP BLANK **Received Date:** 1/27/2017 8:40:00 AM

Analyses	Result	PQL Qu	al Units	DF	Date Analyzed	Batch
EPA METHOD 8015D: GASOLINE RAI	NGE				Analyst	: NSB
Gasoline Range Organics (GRO)	ND	0.050	mg/L	1	1/30/2017 3:37:31 PM	G40379
Surr: BFB	87.0	52.3-138	%Rec	1	1/30/2017 3:37:31 PM	G40379
EPA METHOD 8021B: VOLATILES					Analyst	: NSB
Methyl tert-butyl ether (MTBE)	ND	2.5	μg/L	1	1/30/2017 3:37:31 PM	B40379
Benzene	ND	1.0	μg/L	1	1/30/2017 3:37:31 PM	B40379
Toluene	ND	1.0	μg/L	1	1/30/2017 3:37:31 PM	B40379
Ethylbenzene	ND	1.0	μg/L	1	1/30/2017 3:37:31 PM	B40379
Xylenes, Total	ND	2.0	μg/L	1	1/30/2017 3:37:31 PM	B40379
1,2,4-Trimethylbenzene	ND	1.0	μg/L	1	1/30/2017 3:37:31 PM	B40379
1,3,5-Trimethylbenzene	ND	1.0	μg/L	1	1/30/2017 3:37:31 PM	B40379
Surr: 4-Bromofluorobenzene	88.6	80-120	%Rec	1	1/30/2017 3:37:31 PM	B40379

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

#### **Qualifiers:** Value exceeds Maximum Contaminant Level. Analyte detected in the associated Method Blank D Sample Diluted Due to Matrix Е Value above quantitation range Analyte detected below quantitation limits Page 2 of 5 Н Holding times for preparation or analysis exceeded J ND Not Detected at the Reporting Limit P Sample pH Not In Range R RPD outside accepted recovery limits RL Reporting Detection Limit % Recovery outside of range due to dilution or matrix Sample container temperature is out of limit as specified

# Hall Environmental Analysis Laboratory, Inc.

WO#: **1701B31** 

01-Feb-17

Client: Animas Environmental Services
Project: BMG HWY 537 2009 Release

Sample ID LCS-29939 SampType: LCS TestCode: EPA Method 8015M/D: Diesel Range

Client ID: LCSW Batch ID: 29939 RunNo: 40391

Prep Date: 1/30/2017 Analysis Date: 1/31/2017 SeqNo: 1266528 Units: mg/L

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

 Diesel Range Organics (DRO)
 6.0
 1.0
 5.000
 0
 121
 63.2
 155

 Surr: DNOP
 0.64
 0.5000
 129
 98.8
 141

Sample ID MB-29939 SampType: MBLK TestCode: EPA Method 8015M/D: Diesel Range

Client ID: PBW Batch ID: 29939 RunNo: 40391

Prep Date: 1/30/2017 Analysis Date: 1/31/2017 SeqNo: 1266529 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 1.3 1.000 133 98.8 141

### 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
- R RPD outside accepted recovery limits
- 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 Detection Limit
- W Sample container temperature is out of limit as specified

Page 3 of 5

# Hall Environmental Analysis Laboratory, Inc.

WO#: **1701B31** 

01-Feb-17

Client: Animas Environmental Services
Project: BMG HWY 537 2009 Release

Sample ID RB SampType: MBLK TestCode: EPA Method 8015D: Gasoline Range

Client ID: PBW Batch ID: G40379 RunNo: 40379

Prep Date: Analysis Date: 1/30/2017 SeqNo: 1265743 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 90.0 52.3 138

Sample ID 2.5UG GRO LCS SampType: LCS TestCode: EPA Method 8015D: Gasoline Range

Client ID: LCSW Batch ID: G40379 RunNo: 40379

Prep Date: Analysis Date: 1/30/2017 SeqNo: 1265744 Units: mg/L

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

 Gasoline Range Organics (GRO)
 0.53
 0.050
 0.5000
 0
 106
 79.1
 123

 Surr: BFB
 19
 20.00
 96.6
 52.3
 138

Sample ID 1701B31-001AMS SampType: MS TestCode: EPA Method 8015D: Gasoline Range

Client ID: MW-3 Batch ID: G40379 RunNo: 40379

Prep Date: Analysis Date: 1/30/2017 SeqNo: 1265755 Units: mg/L

SPK Ref Val SPK value %REC %RPD **RPDLimit** Analyte Result PQL LowLimit HighLimit Qual 0.55 0.050 0.5000 0.03200 103 64.8 129

 Gasoline Range Organics (GRO)
 0.55
 0.050
 0.5000
 0.03200
 103
 64.8
 129

 Surr: BFB
 20
 20.00
 100
 52.3
 138

Sample ID 1701B31-001AMSD SampType: MSD TestCode: EPA Method 8015D: Gasoline Range

Client ID: MW-3 Batch ID: G40379 RunNo: 40379

Prep Date: Analysis Date: 1/30/2017 SeqNo: 1265756 Units: mg/L

%REC Analyte Result **PQL** SPK value SPK Ref Val LowLimit HighLimit %RPD **RPDLimit** Qual Gasoline Range Organics (GRO) 0.54 0.050 0.5000 0.03200 102 64.8 129 1.54 20 Surr: BFB 20 20.00 97.9 52.3 138 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

R RPD outside accepted recovery limits

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 Detection Limit

W Sample container temperature is out of limit as specified

Page 4 of 5

# Hall Environmental Analysis Laboratory, Inc.

WO#: 1701B31

01-Feb-17

**Client: Animas Environmental Services** BMG HWY 537 2009 Release **Project:** 

Sample ID RB SampType: MBLK TestCode: EPA Method 8021B: Volatiles PBW Client ID: Batch ID: **B40379** RunNo: 40379 Analysis Date: 1/30/2017 Prep Date: SeqNo: 1265766 Units: µg/L Analyte Result **PQL** SPK value SPK Ref Val %REC LowLimit HighLimit %RPD **RPDLimit** Qual Methyl tert-butyl ether (MTBE) ND 2.5 ND Benzene 1.0 Toluene ND 1.0 Ethylbenzene ND 1.0 Xylenes, Total ND 2.0 1,2,4-Trimethylbenzene ND 1.0 1,3,5-Trimethylbenzene ND 1.0 Surr: 4-Bromofluorobenzene 20.00 89.4 120 18 80

Sample ID 100NG BTEX LCS	SampT	ype: LC	s	Tes	tCode: El	PA Method	8021B: Volat	iles		
Client ID: LCSW	Batch	ID: <b>B4</b>	0379	F	RunNo: 4	0379				
Prep Date:	Analysis D	ate: 1/	30/2017	S	SeqNo: 1	265767	Units: µg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Methyl tert-butyl ether (MTBE)	21	2.5	20.00	0	105	80	120			
Benzene	20	1.0	20.00	0	102	80	120			
Toluene	18	1.0	20.00	0	89.1	80	120			
Ethylbenzene	17	1.0	20.00	0	85.1	80	120			
Xylenes, Total	51	2.0	60.00	0	85.2	80	120			
1,2,4-Trimethylbenzene	17	1.0	20.00	0	83.7	80	120			
1,3,5-Trimethylbenzene	17	1.0	20.00	0	85.2	80	120			
Surr: 4-Bromofluorobenzene	19		20.00		94.1	80	120			

### Qualifiers:

Value exceeds Maximum Contaminant Level.

D Sample Diluted Due to Matrix

Η Holding times for preparation or analysis exceeded

ND Not Detected at the Reporting Limit

RPD outside accepted recovery limits R

S % Recovery outside of range due to dilution or matrix В Analyte detected in the associated Method Blank

Е Value above quantitation range

J Analyte detected below quantitation limits

P Reporting Detection Limit

Sample pH Not In Range

RL

Sample container temperature is out of limit as specified

Page 5 of 5



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: A	nimas Environmental	Work Order Number	: 1701B31		RcptNo:	1
Received by/date:	RE	0//27/1-	7			
Logged By:	Ashley Gallegos	1/27/2017 8:40:00 AM	1	AZ		
Completed By:	Ashley Gallegos	1/27/2017 9;27:26 AM	1	A		j
Reviewed By:	$a\pi$	127/17		V		
Chain of Custo	dv					:
	intact on sample bottles?		Yes	No 🗀	Not Present	
2. Is Chain of Cus			Yes 🗹	No 🗀	Not Present	
3. How was the sa	ample delivered?		Courier			
<u>Log In</u>						
4. Was an attemp	ot made to cool the sampl	es?	Yes 🗹	No 🗔	NA 🗀	
5. Were all samp	les received at a temperat	ture of >0° C to 6.0°C	Yes 🗹	No 🗌	NA 🗆	
6. Sample(s) in p	roper container(s)?		Yes 🗹	No 🗀		
7. Sufficient sam	ole volume for indicated te	est(s)?	Yes 🗹	No 🗀		
8. Are samples (e	except VOA and ONG) pro	perly preserved?	Yes 🗹	No 🗌		
9. Was preservat	ive added to bottles?		Yes	No 🗸	NA 🗍	
10.VOA vials have	e zero headspace?		Yes 🗹	No 🗆	No VOA Vials	
11, Were any sam	ple containers received b	roken?	Yes	No 🗸	# of preserved	
			17.773	[""]	bottles checked	
	rk match bottle labels? ncies on chain of custody)	1	Yes 🗸	No L	for pH: (<2 c	or >12 unless noted
	orrectly identified on Chair		Yes 🗸	No 🗌	Adjusted?	
	analyses were requested		Yes 🗸	No 🗀		
15. Were all holdin	ng times able to be met?		Yes 🗹	No 🗔	Checked by:	
• • •						
<del></del>	ng (if applicable)			r≔i	اله ا	
16. Was client not	ified of all discrepancies w	ith this order?	Yes	No L	NA 🗸	1
Person N	Notified:	Date	AND THE PERSON NAMED AND THE PERSON ASSESSED.			
By Whor	n:	Via:	eMail	│Phone [_] Fax	In Person	
Regardir	ig:					
Client In	structions:					
17. Additional ren	narks:					
18. <u>Cooler Inform</u>		l caribbant locate	.O ( D - 4 -	l otimest Dis	1	
Cooler No	Temp °C Condition  1.8 Good	Seal Intact   Seal No   Yes	Seal Date	Signed By		

HALL ENVIRONMENTAL	ANALYSIS LABORATORY	www.hallenvironmental.com	4901 Hawkins NE - Albuquerque, NM 87109	Tel. 505-345-3975 Fax 505-345-4107	Analysis Request					· · · · · · · · · · · · · · · · · · ·	Y) səlddu8 TiA										If $ U\rangle$   $V$
			490	Tel		(0	AM/	OBC	RO/E	B (C	 TPH - EPA 80	×	×					Remarks:			possibility.
	ıh.	Project Name: BMG HWY 537 2009 Release				ΛIII				CF-0.1=68	HEALNO. 1701831 EX-80215	× // // // ×	× 200-						_6	Daté Time U27ルフ ハロザハ	ries. This serves as notice of this p
ë.	□ Rus	MG HWY				r. E. McNa			Glasses	ature 1.9	Preservative Type	HCL non	<del>7</del>						1 20 h	. 1	edited laborate
Turn-Around Time:	X Standard	Project Name: B		Project #:		Project Manager: E. McNally			Sampler: S. Gla			3-40 mL VOAs 1 L Amber	2- your var					Received by:	Mustin heep	Received by:	2 poontracted to other accr
Chain-of-Custody Record	Client: Animas Environmental Services, LLC			NM 87401		22		☐ Level 4 (Full Validation)			Sample Request ID	MW-3	Trip Blanks	•				d by:	Hones China	nduished by:	ted to Hall Environmental may be suk
-Cust	onmental			nington,	2281	324 - 202			Ç	֓֞֞֞֞֟֓֓֓֓֓֟֟֓֓֓֟֟֓֟֟֟֓֟֟֟֓֟֟֟֓֟֟֟֓֟֟֟֓	Matrix	H20	HZD					 Relinquished by:	A STATE OF THE STA	Relinquished by	mples submi
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Ch	Client: Anin		Mailing Address:	604 W Pinon St. Farmington, NM 87401	Phone #: 505 - 564 - 2281	Email or Fax#: 505 - 324 - 2022	QA/QC Package:	X Standard	Accreditation:	☐ EDD (Type)	Date	1/26/17			1			Date:	1/24/17	,	