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September 23, 2014

Jim Griswold
New Mexico Oil Conservation Division
1220 S. St. Francis Drive
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Re: Periodic Progress Report
4th Quarter 2013 and 1st and 2nd Quarter 2014
Benson-Montin-Greer
Highway 537 Truck Receiving Station 2009 Release
Rio Arriba County, New Mexico

Dear Mr. Griswold:

On behalf of Benson-Montin-Greer Drilling Corporation (BMG), Animas Environmental Services, LLC (AES) has prepared this Periodic Progress Report, which provides details of site work for the 4th Quarter 2013 and the 1st and 2nd quarters 2014 at the BMG Highway 537 Truck Receiving Station 2009 release location. Sampling was conducted in January 2014 (4th Quarter 2013) and April 2014 (1st Quarter 2014), 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 consists 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 Survey (USGS) 7.5-minute Schmitz Ranch, Rio Arriba County, New Mexico topographic quadrangle (USGS 1963), is included as Figure 1. An aerial map with a site plan, including existing monitor wells, is presented as Figure 2.

1.2 Release History

On January 29, 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. Also on January 29, 2009, BMG contracted with TNT Excavating (TNT) to remove the buried 6-inch line in order to determine where the leak originated.

On January 30, 2009, TNT used a trackhoe to excavate an area (10 feet by 20 feet by 15 feet in depth) around the buried 6-inch line. AES collected soil samples from the base of the excavation for field screening with a photo-ionization detector (PID) organic vapor meter (OVM). Field screening results at 12 feet below ground surface (bgs) were 5,861 parts per million (ppm) volatile organic compounds (VOCs), and at 15 feet bgs VOCs were measured at 6,640 ppm. Additionally, AES collected one soil sample at 15 feet bgs for laboratory analysis of benzene, toluene, ethylbenzene, and xylene (BTEX) and total petroleum hydrocarbons (TPH). The analytical results of the soil sample collected on January 30, 2009, had total BTEX concentrations of 1,657 mg/kg and total TPH concentrations of 20,300 mg/kg.

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.

2.0 Groundwater Monitoring and Sampling – January 2014

The fourth quarterly groundwater and sampling event of 2013 was conducted by AES personnel on January 2014. Groundwater samples from MW-1, MW-3, and MW-9 were laboratory analyzed for BTEX per USEPA Method 8021 and TPH per USEPA Method 8015 at Hall in Albuquerque, New Mexico, as well as field analyzed for temperature, conductivity, dissolved oxygen (DO), and ORP.

2.1 Groundwater Measurements and Water Quality Data

During the January 2014 sampling event, groundwater measurements were recorded for MW-1 through MW-11. Average groundwater elevations decreased across the site by approximately 0.5 feet since the September 2013 sampling event. Groundwater gradient was calculated between MW-9 and MW-10, with a magnitude of 0.007 ft/ft to the west-southwest. Depth to groundwater ranged from 15.17 feet below top of casing (TOC) in MW-6 to 30.39 feet below TOC in MW-11. Depth to groundwater measurements are presented in Table 1. Groundwater elevation contours are presented in Figure 3.

Groundwater quality measurements were recorded for MW-1, MW-3, and MW-9. Recorded temperatures ranged from 12.23°C in MW-3 to 12.78°C in MW-1. Groundwater DO concentrations were between 1.11 mg/L in MW-9 and 1.75 mg/L in MW-1. ORP measurements were between -59.9 mV in MW-3 and -54.8 mV in MW-9, and conductivity readings were between 4.764 mS/cm and 5.160 mS/cm. Water quality data are presented in Table 1. Water Sample Collection Forms are included in the Appendix.

2.2 Groundwater Analytical Results

Dissolved phase benzene concentrations slightly exceeded the WQCC standard in MW-1 with 14 µg/L. Dissolved phase toluene, ethylbenzene, and xylene concentrations were below applicable New Mexico (WQCC) standards in each of the wells sampled. TPH concentrations as GRO above laboratory detection limits were reported in MW-1 (0.21 mg/L) and MW-3 (0.12 mg/L), and TPH concentrations (as DRO and MRO) were reported below the laboratory detection limits in all wells sampled. Tabulated laboratory analytical results are included in Table 2. Contaminant concentrations are included in Figure 4, and Graphs 1 through 3 present groundwater elevations and dissolved phase benzene concentrations for MW-1, MW-3, and MW-9, respectively. Dissolved benzene contours are shown in Figure 5. Laboratory analytical reports for January 2014 are included in the Appendix.

3.0 Groundwater Monitoring and Sampling – April 2014

The 1st quarterly groundwater and sampling event of 2014 was conducted by AES personnel on April 4, 2014. Groundwater samples from MW-3, MW-4, MW-8, and MW-9 were laboratory analyzed for BTEX per USEPA Method 8021 and TPH per USEPA Method 8015 at Hall in Albuquerque, New Mexico, as well as field analyzed for temperature, conductivity, DO, and ORP.

3.1 Groundwater Measurements and Water Quality Data

During the April 2014 sampling event, groundwater measurements were recorded for MW-1 through MW-11. *Note that free product (or non-aqueous phase liquids "NAPL") was observed in MW-1, with a measured thickness of 1.18 ft.* Average groundwater elevations decreased across the site by approximately 0.1 feet since the January 2014 sampling event. Groundwater gradient was calculated between MW-9 and MW-10, with a magnitude of 0.007 ft/ft to the west-southwest. Depth to groundwater ranged from 15.20 feet below TOC in MW-6 to 31.02 feet below TOC in MW-1. Depth to groundwater measurements are presented in Table 1. Groundwater elevation data and contours are presented in Figure 6.

Groundwater quality measurements were recorded for MW-3, MW-4, MW-8, and MW-9. Recorded temperatures ranged from 12.10°C in MW-3 to 13.14°C in MW-8. Groundwater DO concentrations were between 1.70 mg/L in MW-8 and 2.86 mg/L in MW-4. ORP measurements were between -48.2 mV in MW-9 and 89.4 mV in MW-4, and conductivity readings were between 0.362 mS/cm in MW-3 and 0.435 mS/cm in MW-4. Water quality data are presented in Table 1. Water Sample Collection Forms are included in the Appendix.

3.2 Groundwater Analytical Results

Dissolved phase benzene, toluene, ethyl benzene, and xylene concentrations were below applicable New Mexico WQCC standards in each of the wells sampled. Note that MW-1 was not sampled because of the presence of free product. TPH concentrations as GRO above laboratory detection limits were reported in MW-3 (0.20 mg/L), MW-8 (0.072 mg/L), and MW-9 (0.075 mg/L). Additionally, TPH concentrations (as DRO and MRO) were reported below the laboratory detection limits in all wells sampled. Tabulated laboratory analytical results are included in Table 2. Contaminant concentrations are included in Figure 7. Laboratory analytical reports for April 2014 are included in the Appendix.

4.0 Site Assessment for Lease Closeout – May and June 2014

In May and June 2014, AES conducted a site assessment on behalf of BMG as part of termination of the property lease. The work included a release assessment and excavation of two discrete areas, along with associated field sampling and laboratory analyses. The site assessment and excavation activities are fully detailed in a separate report prepared by AES.

5.0 Remediation System Re-Installation – August 2014

On August 4, 2014, AES re-installed a Remediation Service International (RSI) mobile extraction and treatment system at the site to treat residual contaminants. The system is a trailer-mounted, single engine (Model V3), multi-phase high vacuum extraction system that utilizes a propane or natural gas-fired internal combustion engine for vacuum generation, and a compressive thermal oxidizer for vapor destruction of up to 35 lbs/hr at 50 standard cubic feet per minute (SCFM). The internal combustion engine system produces a vacuum up to 28 in-Hg and vapor/air extraction flow rates of up to 50 SCFM. Additionally, the remediation system is equipped with an RSI S.A.V.E. controller and data collection. RSI remediation system layout is shown in Figure 8.

The system was set up with the vacuum in MW-1 based on the presence of free product during the April 2014 sampling event. Note that on September 8, 2014, Biotech personnel reported no NAPL in MW-1 and a depth to water of 30.13 feet. The RSI unit was in operation until September 15, 2014. Hydrocarbons extracted during that time frame will be reported in the next periodic progress report (3rd Quarter 2014).

6.0 Conclusions and Recommendations

AES conducted groundwater monitoring and sampling at the BMG Highway 537 Truck Receiving Station on January 14, 2014, and April 4, 2014. During the April 2014 event, the presence of free product was observed for the first time in MW-1, with a measurable thickness of 1.18 ft. Groundwater elevations were found to have decreased in all wells by approximately 0.54 feet between January 2014 and September 2013 (3rd quarter) and decreased an additional 0.09 feet by April 2014. Groundwater gradient for January and April 2014 was calculated to be approximately 0.007 ft/ft in a west-southwestern direction, which is consistent with historic site data.

In January 2014, groundwater samples were collected from monitor wells MW-1, MW-3, and MW-9. Monitor wells MW-2, MW-4 through MW-8, MW-10, and MW-11 have remained

below the WQCC standards for BTEX and TPH for eight or more consecutive sampling events and therefore were not sampled in January 2014. For the April 2014, groundwater samples were collected from MW-3, MW-4, MW-8, and MW-9. MW-1 was not sampled due to the presence of NAPL.

Dissolved phase benzene concentrations above the WQCC standard of 10 µg/L were reported in MW-1 (14 µg/L) in January 2014. In April 2014, dissolved phase benzene, toluene, ethyl benzene, and xylenes remained below the applicable WQCC standards in each of the wells tested. GRO concentrations above the laboratory detection limit were reported in MW-1 and MW-3 in January 2014 and MW-3, MW-8, and MW-9 in April 2014. DRO and MRO concentrations were reported below the laboratory detection limits in all sampled wells during the January 2014 and April 2014 sampling events.

Based on laboratory analytical results and actively running remediation systems, AES recommends continuing groundwater monitoring and sampling of monitor wells MW-1, MW-3, and MW-9 on a semi-annual basis during active remediation.

AES recommends running the RSI unit on bi-weekly basis until December 2014 and then shutting down until March 2015 for the winter season. The RSI unit remediation will resume May 2015, contingent upon field and laboratory analytical results from 1st quarter 2015 sampling.

7.0 Scheduled Site Activities

The following site activities have been tentatively scheduled:

- 3rd quarter sampling and monitoring September 2014;
- RSI unit operational on bi-weekly schedule through early December 2014;
- Monthly monitoring well gauging;
- Suspend RSI operations from December 2014 through March 2015;
- 1st quarter sampling March 2015; and
- Resume RSI operations if needed in spring 2015 based on 1st quarter sampling.

If you have any questions regarding this report or site conditions, please do not hesitate to contact Brent Everett or Ross Kennemer at (505) 564-2281.

Sincerely,

David J. Reese
Environmental Scientist

Brent Everett
Sr. Hydrogeologist/Project Manager

Elizabeth McNally, P.E.

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 2. Aerial Map with General Site Plan
Figure 3. Groundwater Elevation Contours, January 2014
Figure 4. Groundwater Contaminant Concentrations, January 2014
Figure 5. Dissolved Benzene Concentration Contours, January 2014
Figure 6. Groundwater Elevation Contours, April 2014
Figure 7. Groundwater Contaminant Concentrations, April 2014
Figure 8. RSI Remediation System Layout

Graphs

Graph 1. MW-1 Groundwater Elevations and Benzene Concentrations, January 2014
Graph 2. MW-3 Groundwater Elevations and Benzene Concentrations, April 2014
Graph 3. MW-9 Groundwater Elevations and Benzene Concentrations, April 2014

Appendix

Water Sample Collection Forms 011414
Water Sample Collection Forms 040414
Hall Analytical Report 1401707
Hall Analytical Report 1404312
Hall Analytical Report 1404313

Cc:

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Attachments

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)	pH	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	NM	NM	NM	NM	NM
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
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

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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)	pH	ORP (mV)
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-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
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	04-Apr-14	29.39	7064.01	7034.62	12.10	0.362	1.74	6.90	-45.1

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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)	pH	ORP (mV)
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
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-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

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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)	pH	ORP (mV)
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
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-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
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

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)	pH	ORP (mV)
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
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

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)	pH	ORP (mV)
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-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

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)	pH	ORP (mV)
MW-9	04-Apr-14	29.69	7062.60	7032.91	12.89	0.407	2.81	6.89	-48.2
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-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

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)	pH	ORP (mV)
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
Downgradient MW-7*	09-Mar-09	13.09	7051.30	7038.21	8.14	3.441	4.52	6.49	12.8

NOTE: NM = NOT MEASURED
NA = NOT AVAILABLE
* = Monitoring Well from HWY 537 '06-'07 spill

Average GW Elev.:
7033.88

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

Well ID	Date Sampled	Benzene	Toluene	Ethyl-benzene	Total 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***
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-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	<2.0	<0.050	<1.0	<5.0
MW-2	12-Aug-11	<1.0	<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
MW-3	05-Mar-09	**400**	**1,100**	110	**1,300**	8.2	3.4	<5.0
MW-3	11-Sep-09	**380**	27	26	61	4.2	9.6	6.0
MW-3	15-Jan-10	**750**	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
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

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

Well ID	Date Sampled	Benzene	Toluene	Ethyl-benzene	Total 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***
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-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
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

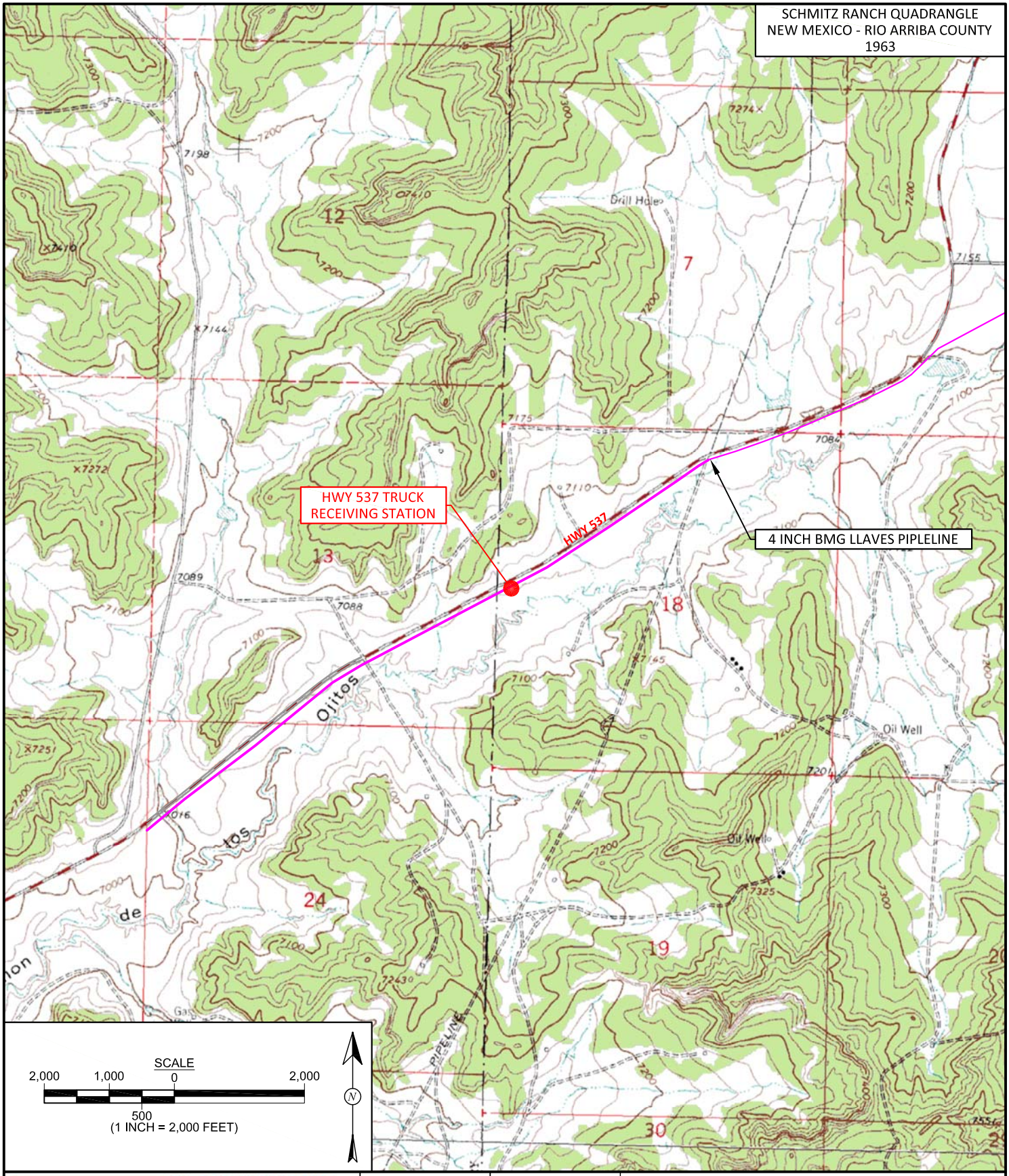
TABLE 2
SUMMARY OF GROUNDWATER ANALYTICAL RESULTS
BMG HWY 537 TRUCK RECEIVING STATION 2009 RELEASE
Rio Arriba County, New Mexico

Well ID	Date Sampled	Benzene	Toluene	Ethyl-benzene	Total 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***
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
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

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

Well ID	Date Sampled	Benzene	Toluene	Ethyl-benzene	Total 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***
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	<1.0	<1.0	<1.0	<2.0	<0.050	<1.0	<5.0
MW-10	10-Sep-09	<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	<2.0	<0.050	<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	<1.0	<1.0	<1.0	<2.0	<0.050	<1.0	<5.0
MW-11	16-Nov-11	<1.0	<1.0	<1.0	<2.0	<0.050	<1.0	<5.0
Downgradient MW-7*	09-Mar-09	<1.0	<1.0	<1.0	<2.0	<0.050	<1.0	<5.0

NOTE: NS = Not Sampled
GRO = Gasoline Range Organics
DRO = Diesel Range Organics
MRO = Motor Oil Range Organics
* = Monitoring Well from HWY 537 '06-'07 spill



DRAWN BY: C. Lameman	**DATE DRAWN:** January 10, 2013	**FIGURE 1**	
REVISIONS BY: C. Lameman	**DATE REVISED:** February 19, 2014	**TOPOGRAPHIC SITE LOCATION MAP** BENSON-MONTIN-GREER LLAVES PIPELINE HWY. 537 TRUCK RECEIVING STATION 2009 RELEASE SW ¼ NW ¼ SECTION 18, T25N, R3W RIO ARRIBA COUNTY, NEW MEXICO N36.39866, W107.19328	
CHECKED BY: D. Watson	**DATE CHECKED:** February 19, 2014		
APPROVED BY: E. McNally	**DATE APPROVED:** February 19, 2014		

AES
Animas Environmental Services, LLC

FIGURE 2

GENERAL SITE PLAN
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

Animas Environmental Services, LLC

DRAWN BY:	DATE DRAWN:
C. Lameman	January 10, 2013
REVISIONS BY:	**DATE REVISED:**
C. Lameman	February 19, 2014
CHECKED BY:	**DATE CHECKED:**
D. Watson	February 19, 2014
APPROVED BY:	**DATE APPROVED:**
E. McNally	February 19, 2014

LEGEND

MONITORING WELL INSTALLED FEBRUARY 2009

AERIAL SOURCE: © 2012 MICROSOFT CORPORATION - AVAILABLE EXCLUSIVELY BY DIGITALGLOBE

STATE HWY. 537
CATTLE GUARD
PIPELINE INLET
9
10
4" DIA. BURIED PIPE
GATE
SOIL BERM
6" DIA. ABOVE GRADE PIPE
4" BURIED PIPE
LLAVES PIPELINE
SOIL BERM
MW-5
8
7
6
4
5
3
2
1
METER SKID/PUMPS
MW-2
CATTLE GUARD
MW-11
MW-1
LOCATION OF ⅛" CORROSION HOLE, DISCOVERED ON 01/30/09
PUMPS
GATE
4" DIA. BURIED PIPE
MW-4
MW-10
TRUCK LOADING STATION
FENCE
MW-3
MW-8
MW-7
MW-9
POND
MW-6

N

SCALE
40 20 0 40
10
(1 INCH = 40 FEET)

FIGURE 3

GROUNDWATER ELEVATION CONTOURS, JANUARY 2014
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

Animas Environmental Services, LLC

DRAWN BY:	DATE DRAWN:
C. Lameman	January 10, 2013
REVISIONS BY:	**DATE REVISED:**
C. Lameman	February 19, 2014
CHECKED BY:	**DATE CHECKED:**
D. Watson	February 19, 2014
APPROVED BY:	**DATE APPROVED:**
E. McNally	February 19, 2014

LEGEND

- MONITORING WELL INSTALLED FEBRUARY 2009
- FENCE
- PONDS, WET LANDS, & FLOOD PLANES
- 7034.83 GROUNDWATER ELEVATION IN FEET (A.M.S.L.)
- —7034.0— GROUNDWATER ELEVATION CONTOUR IN FEET (A.M.S.L.)

NOTE: GROUNDWATER ELEVATION MEASUREMENTS WERE MADE ON JANUARY 14, 2014.

SCALE
40 20 0 40
10
(1 INCH = 40 FEET)

STATE HWY. 537
CATTLE GUARD
GATE
SOIL BERM
9
10
SOIL BERM
1
2
3
4
5
6
7
8
METER SKID/PUMPS
MW-5 7034.48
MW-2 7034.84
GROUNDWATER GRADIENT BETWEEN MW-9 AND MW-10 IS 0.007 FT/FT
MW-11 7033.71
MW-1 7034.56
PUMPS
CATTLE GUARD
GATE
FENCE
MW-4 7034.18
MW-10 7034.83
MW-3 7034.63
MW-8 7033.62
7033.5
7034.0
7034.5
MW-7 7034.19
MW-9 7032.92
7033.0
POND
MW-6 7034.37

FIGURE 4

GROUNDWATER CONTAMINANT CONCENTRATIONS, JANUARY 2014
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

Animas Environmental Services, LLC

DRAWN BY: C. Lameman	**DATE DRAWN:** January 10, 2013
REVISIONS BY: C. Lameman	**DATE REVISED:** February 19, 2014
CHECKED BY: D. Watson	**DATE CHECKED:** February 19, 2014
APPROVED BY: E. McNally	**DATE APPROVED:** February 19, 2014

LEGEND

- MONITORING WELL INSTALLED FEBRUARY 2009
- FENCE
- PONDS, WET LANDS, & FLOOD PLANES
- B — BENZENE
- T — TOLUENE
- E — ETHYLBENZENE
- X — XYLENES
- GRO — GASOLINE RANGED ORGANICS
- DRO — DIESEL RANGED ORGANICS
- MRO — MOTOR OIL RANGED ORGANICS
- µg/L — MICROGRAMS PER LITER (PPB)
- < — ANALYTE NOT DETECTED ABOVE LISTED METHOD LIMIT

NOTE: ALL SAMPLES COLLECTED ON JANUARY 14, 2014, AND ANALYZED PER EPA METHOD 8021B AND 8015D.

SCALE
40 20 0 40
10
(1 INCH = 40 FEET)

STATE HWY. 537
CATTLE GUARD
GATE
FENCE
SOIL BERM
BERM
METER SKID/PUMPS
PUMPS
POND
1 2 3 4 5 6 7 8 9 10

MW-1
B = 14 µg/L
T = <2.0 µg/L
E = 15 µg/L
X = <4.0 µg/L
GRO = 0.21 mg/L
DRO = <1.0 mg/L
MRO = <5.0 mg/L

MW-2 NOT SAMPLED
MW-3
B = <1.0 µg/L
T = <1.0 µg/L
E = <1.0 µg/L
X = <2.0 µg/L
GRO = 0.12 mg/L
DRO = <1.0 mg/L
MRO = <5.0 mg/L

MW-4 NOT SAMPLED
MW-5 NOT SAMPLED
MW-6 NOT SAMPLED
MW-7 NOT SAMPLED
MW-8 NOT SAMPLED
MW-9
B = <1.0 µg/L
T = <1.0 µg/L
E = <1.0 µg/L
X = <2.0 µg/L
GRO = <0.050 mg/L
DRO = <1.0 mg/L
MRO = <5.0 mg/L
MW-10 NOT SAMPLED
MW-11 NOT SAMPLED

FIGURE 5

DISSOLVED BENZENE CONCENTRATION CONTOURS
JANUARY 2014
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

Animas Environmental Services, LLC

DRAWN BY: C. Lameman	**DATE DRAWN:** January 10, 2013
REVISIONS BY: C. Lameman	**DATE REVISED:** February 19, 2014
CHECKED BY: D. Watson	**DATE CHECKED:** February 19, 2014
APPROVED BY: E. McNally	**DATE APPROVED:** February 19, 2014

LEGEND

- MONITORING WELL INSTALLED FEBRUARY 2009
- FENCE
- PONDS, WET LANDS, & FLOOD PLANES
- 14 — DISSOLVED BENZENE CONCENTRATION
- 10 — DISSOLVED BENZENE CONCENTRATION CONTOURS
- NS — NOT SAMPLED

NOTE: ALL SAMPLES COLLECTED ON JANUARY 14, 2014, AND ANALYZED PER EPA METHOD 8021B AND 8015D. ALL ANALYTICAL RESULTS REPORTED AS µg/L (PPB).

SCALE
40 20 0 40
10
(1 INCH = 40 FEET)

STATE HWY. 537
CATTLE GUARD
GATE
SOIL BERM
9
10
8
7
6
5
4
3
2
1
MW-5 NS
METER SKID/PUMPS
MW-2 NS
MW-1 NS
14
10
PUMPS
MW-11 NS
CATTLE GUARD
GATE
FENCE
MW-4 NS
MW-10 NS
MW-3 <1.0
MW-8 NS
MW-7 NS
MW-9 <1.0
POND
MW-6 NS

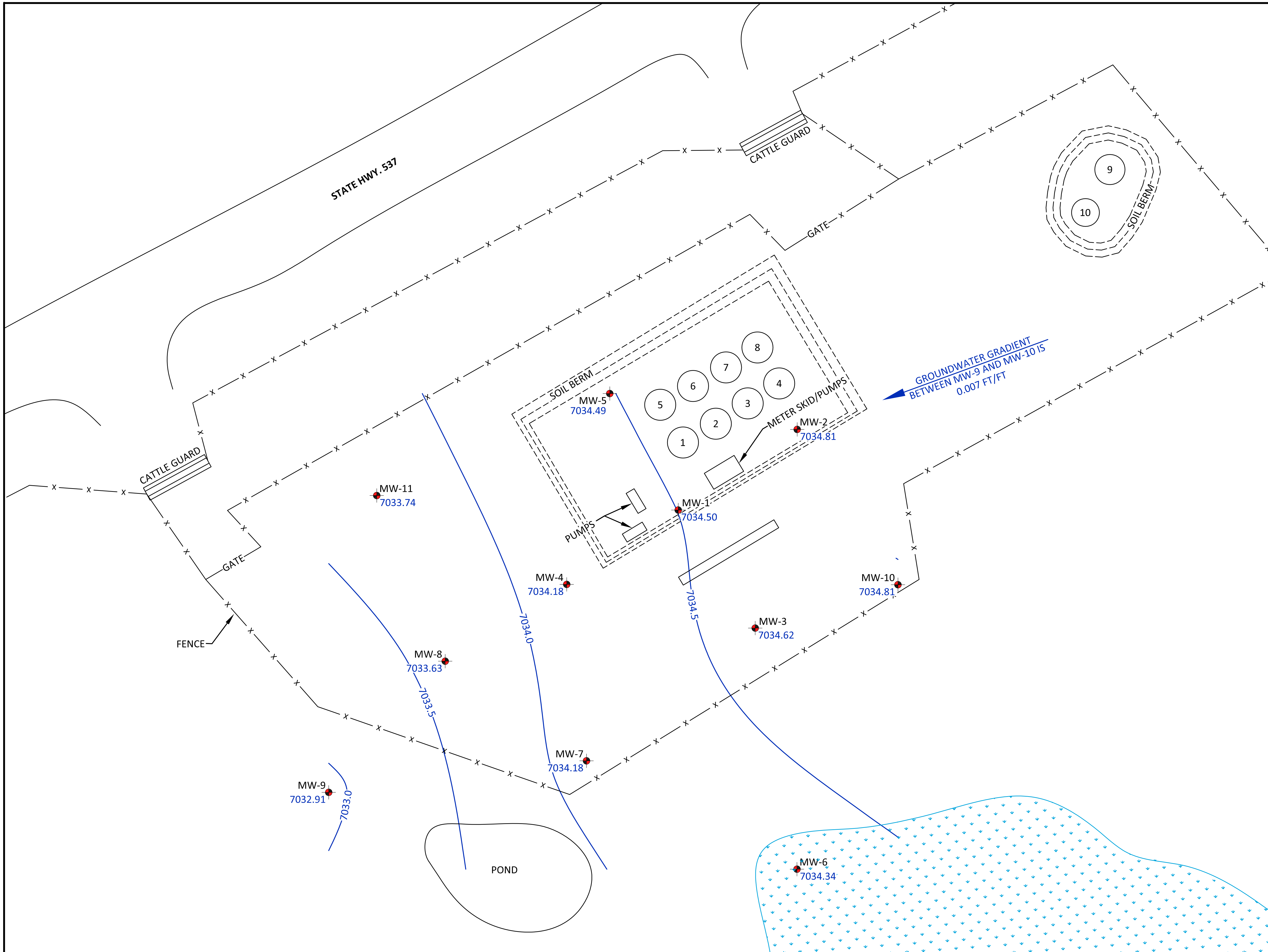


FIGURE 6

GROUNDWATER ELEVATION CONTOURS, APRIL 2014
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

AES
Animas Environmental Services, LLC

DRAWN BY:	**DATE DRAWN:**
C. Lameman	January 10, 2013
REVISIONS BY:	**DATE REVISED:**
C. Lameman	September 16, 2014
CHECKED BY:	**DATE CHECKED:**
B. Everett	September 16, 2014
APPROVED BY:	**DATE APPROVED:**
E. McNally	September 16, 2014

LEGEND

- MONITORING WELL INSTALLED FEBRUARY 2009
- x — FENCE
- PONDS, WET LANDS, & FLOOD PLANES
- 7034.81 — GROUNDWATER ELEVATION IN FEET (A.M.S.L.)
- —7034.0— — GROUNDWATER ELEVATION CONTOUR IN FEET (A.M.S.L.)

NOTE: GROUNDWATER ELEVATION MEASUREMENTS WERE MADE ON APRIL 14, 2014.

N

SCALE
40 20 0 40
10
(1 INCH = 40 FEET)

FIGURE 7

GROUNDWATER CONTAMINANT CONCENTRATIONS, APRIL 2014
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

Animas Environmental Services, LLC

DRAWN BY: C. Lameman	**DATE DRAWN:** January 10, 2013
REVISIONS BY: C. Lameman	**DATE REVISED:** September 16, 2014
CHECKED BY: B. Everett	**DATE CHECKED:** September 16, 2014
APPROVED BY: E. McNally	**DATE APPROVED:** September 16, 2014

LEGEND

- MONITORING WELL INSTALLED FEBRUARY 2009
- FENCE
- PONDS, WET LANDS, & FLOOD PLANES
- B = BENZENE
- T = TOLUENE
- E = ETHYLBENZENE
- X = XYLENES
- GRO = GASOLINE RANGED ORGANICS
- DRO = DIESEL RANGED ORGANICS
- MRO = MOTOR OIL RANGED ORGANICS
- µg/L = MICROGRAMS PER LITER (PPB)
- < = ANALYTE NOT DETECTED ABOVE LISTED METHOD LIMIT

NOTE: ALL SAMPLES COLLECTED ON APRIL 14, 2014, AND ANALYZED PER EPA METHOD 8021B AND 8015D.

N

SCALE
40 20 0 40
10
(1 INCH = 40 FEET)

STATE HWY. 537
CATTLE GUARD
GATE
FENCE
BERM
METER SKID/PUMPS
PUMPS
SOIL BERM
POND
1
2
3
4
5
6
7
8
9
10

MW-1: NOT SAMPLED, 1.18 FT OF NAPL

MW-2: NOT SAMPLED

MW-3: B = <1.0 µg/L, T = <1.0 µg/L, E = <1.0 µg/L, X = <2.0 µg/L, GRO = 0.20 mg/L, DRO = <1.0 mg/L, MRO = <5.0 mg/L

MW-4: B = <1.0 µg/L, T = <1.0 µg/L, E = <1.0 µg/L, X = <2.0 µg/L, GRO = <2.0 mg/L, DRO = <0.050 mg/L, MRO = <5.0 mg/L

MW-5: NOT SAMPLED

MW-6: NOT SAMPLED

MW-7: NOT SAMPLED

MW-8: B = <1.0 µg/L, T = <1.0 µg/L, E = <1.0 µg/L, X = <2.0 µg/L, GRO = 0.072 mg/L, DRO = <1.0 mg/L, MRO = <5.0 mg/L

MW-9: B = <1.0 µg/L, T = <1.0 µg/L, E = <1.0 µg/L, X = <2.0 µg/L, GRO = 0.075 mg/L, DRO = <1.0 mg/L, MRO = <5.0 mg/L

MW-10: NOT SAMPLED

MW-11: NOT SAMPLED

FIGURE 8

RSI REMEDIATION LAYOUT
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

Animas Environmental Services, LLC

DRAWN BY: C. Lameman	**DATE DRAWN:** September 18, 2014
REVISIONS BY: C. Lameman	**DATE REVISED:** September 18, 2014
CHECKED BY: B. Everett	**DATE CHECKED:** September 18, 2014
APPROVED BY: E. McNally	**DATE APPROVED:** September 18, 2014

LEGEND

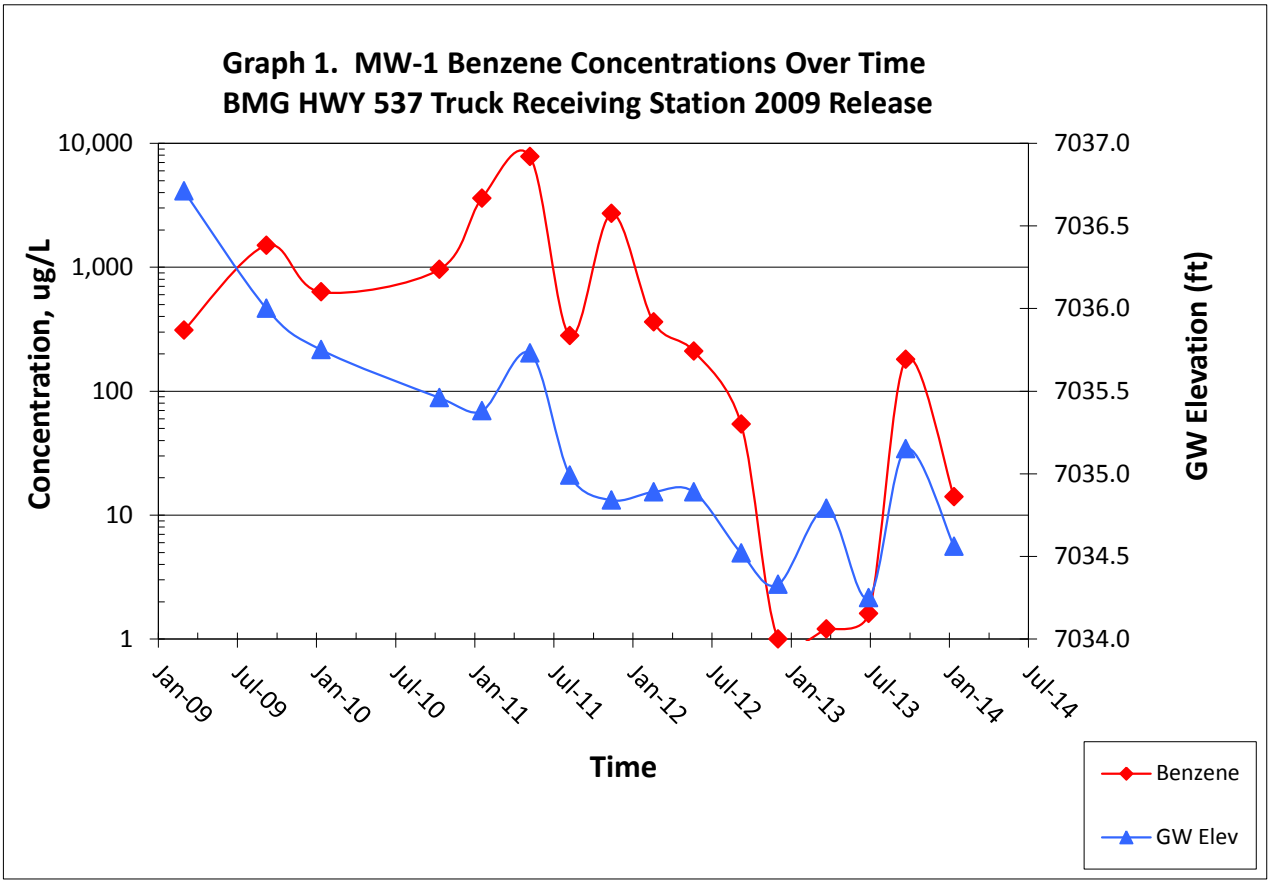
- MONITORING WELL INSTALLED FEBRUARY 2009
- FENCE
- PONDS, WET LANDS, & FLOOD PLANES
- <1.0 DISSOLVED BENZENE CONCENTRATION

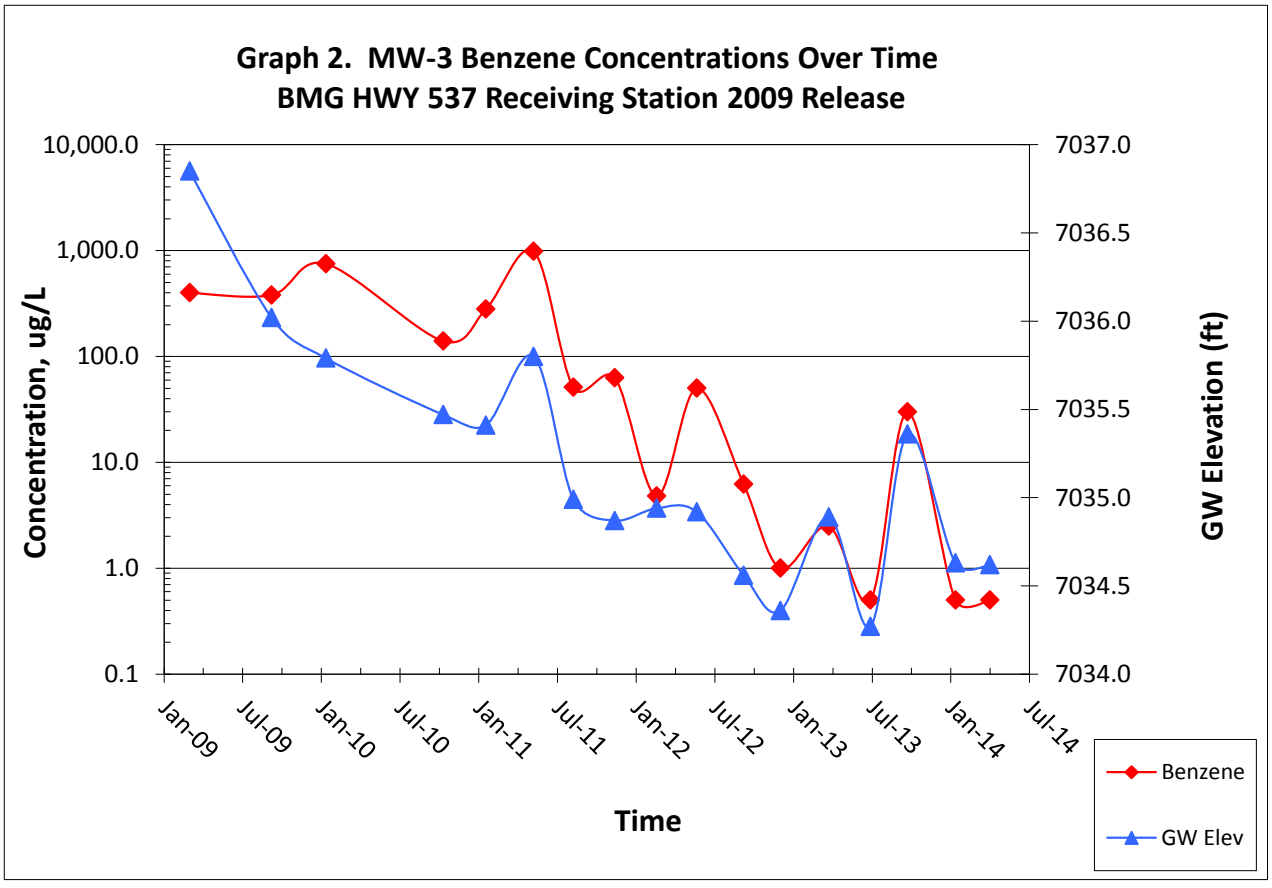
NOTE: ALL SAMPLES COLLECTED ON APRIL 4, 2014, AND ANALYZED PER EPA METHOD 8021B AND 8015D. ALL ANALYTICAL RESULTS REPORTED AS µg/L (PPB).

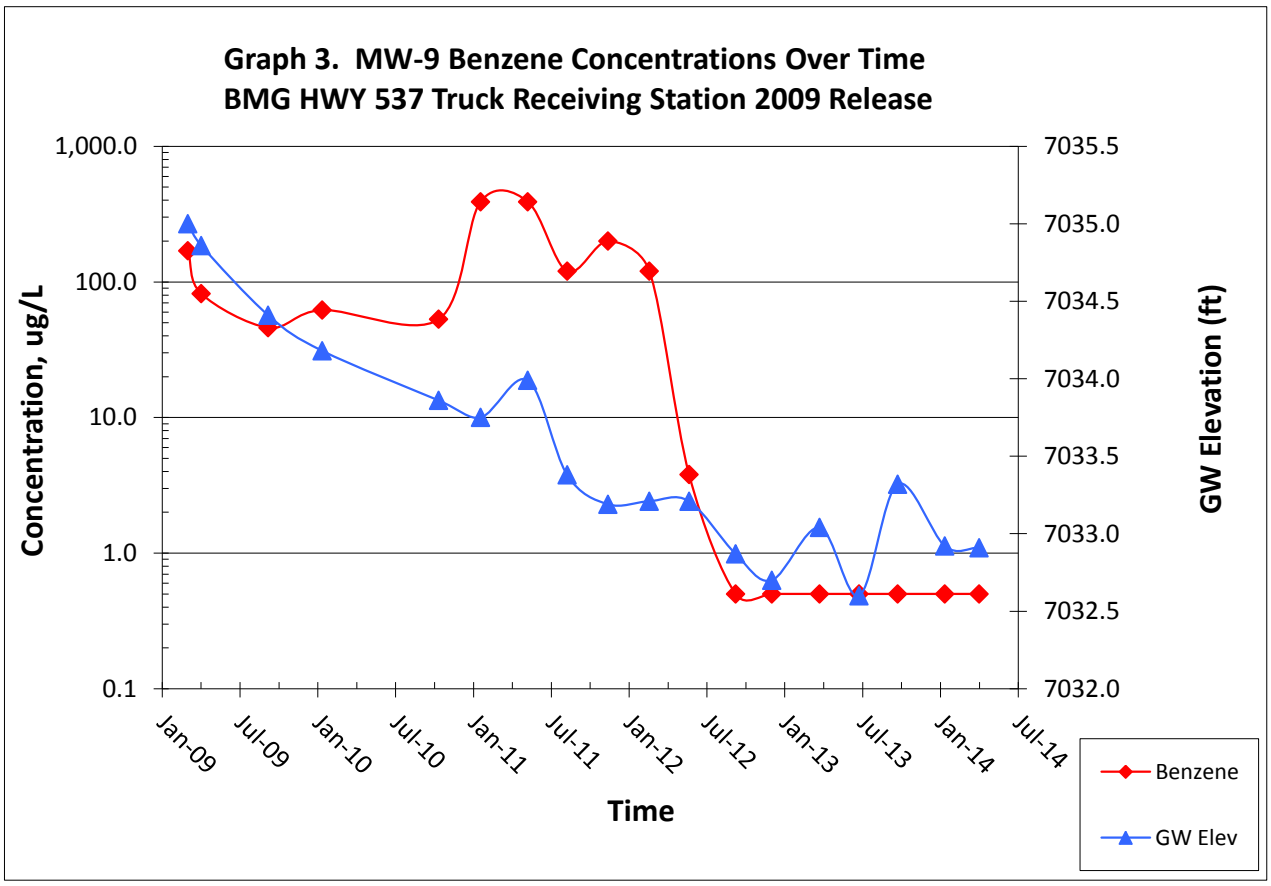
STATE HWY. 537
CATTLE GUARD
GATE
CATTLE GUARD
GATE
FENCE
9
10
SOIL BERM
MW-5
NS
EXTRACTED GROUNDWATER STORAGE TANK
PROPANE TANK
MW-2
NS
VACUUM HOSE
MW-11
NS
RSI UNIT
MW-1
1.18 FT OF NAPL
MW-4
<1.0
MW-10
NS
MW-3
<1.0
MW-8
<1.0
MW-7
NS
MW-9
<1.0
POND
MW-6
NS

N

SCALE
40 20 0 40
10
(1 INCH = 40 FEET)


Graph 1. MW-1 Benzene Concentrations Over Time
BMG HWY 537 Truck Receiving Station 2009 Release
Concentration, ug/L
10,000
1,000
100
10
1
GW Elevation (ft)
7037.0
7036.5
7036.0
7035.5
7035.0
7034.5
7034.0
Jan-09
Jul-09
Jan-10
Jul-10
Jan-11
Jul-11
Jan-12
Jul-12
Jan-13
Jul-13
Jan-14
Jul-14
Time
Benzene
GW Elev


Graph 2. MW-3 Benzene Concentrations Over Time
BMG HWY 537 Receiving Station 2009 Release
Concentration, ug/L
10,000.0
1,000.0
100.0
10.0
1.0
0.1
GW Elevation (ft)
7037.0
7036.5
7036.0
7035.5
7035.0
7034.5
7034.0
Jan-09
Jul-09
Jan-10
Jul-10
Jan-11
Jul-11
Jan-12
Jul-12
Jan-13
Jul-13
Jan-14
Jul-14
Time
Benzene
GW Elev


Graph 3. MW-9 Benzene Concentrations Over Time
BMG HWY 537 Truck Receiving Station 2009 Release
Concentration, ug/L
1,000.0
100.0
10.0
1.0
0.1
GW Elevation (ft)
7035.5
7035.0
7034.5
7034.0
7033.5
7033.0
7032.5
7032.0
Jan-09
Jul-09
Jan-10
Jul-10
Jan-11
Jul-11
Jan-12
Jul-12
Jan-13
Jul-13
Jan-14
Jul-14
Time
Benzene
GW Elev

DEPTH TO GROUNDWATER MEASUREMENT FORM

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

Project: Groundwater Monitoring
Site: Hwy 537 Truck Station Spill 2009
Location: Rio Arriba County, New Mexico
Tech: L. LaMunE

Project No.: AES 090201
Date: 1/14/2014
Time: 0934
Form: 1 of 1

Well I.D.	Time	Depth to NAPL (ft.)	Depth to Water (ft.)	NAPL Thickness (ft.)	TDW	Notes / Observations
MW-1	0936		30.10		39.51	3' Above ground well casing
MW-2	0940		29.81		39.96	4' Above ground well casing
MW-3	0944		29.38		43.38	
MW-4	0947		29.54		43.76	40" Above ground well casing
MW-5	0952		30.31		44.05	40" Above grond well casing
MW-6	1022		15.17		23.54	42" Above ground well casing
MW-7	0956		28.61		41.00	39" Above grond well casing
MW-8	0959		29.65		44.10	41" Above ground well casing
MW-9	1027		29.68		38.76	41" Above grond well casing.
MW-10	1008		28.44		38.45	32" Above grond well casing
MW-11	1003		30.39		43.58	37" Above grond well casing

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

DEPTH TO GROUNDWATER MEASUREMENT FORM

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

Project: Groundwater Monitoring
Site: Hwy 537 Truck Station Spill 2009
Location: Rio Arriba County, New Mexico
Tech:

Project No.: AES 090201
Date: 1/14/2014
Time: 1030
Form: 1 of 1

Well I.D.	Time	Depth to NAPL (ft.)	Depth to Water (ft.)	NAPL Thickness (ft.)	Notes / Observations
MW-1					TDW
MW-3					
~~MW-8~~	No sample per		D. Watson	ph	call 1038 1/14/2014
MW-9	1032		29.68		38.76

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

MONITORING WELL SAMPLING RECORD

Monitor Well No: MW-1

Animas Environmental Services

624 E. Comanche, Farmington NM 87401

Tel. (505) 564-2281 Fax (505) 324-2022

Site: Highway 537 ~~2008 Spill~~ 2009 Spill

Location: Rio Arriba County, New Mexico

Project: Groundwater Monitoring and Sampling

Sampling Technician: Lamone, L.

Purge / No Purge: ~~Non~~ Purge

Well Diameter (in): ~~0.75~~ 2"

Initial D.T.W. (ft): 30.10 **Time:** 0936 *(taken at initial gauging of all wells)*

Confirm D.T.W. (ft): 30.10 **Time:** 1209 *(taken prior to purging well)*

Final D.T.W. (ft): 30.30 **Time:** 1230 *(taken after sample collection)*

If NAPL Present: D.T.P.:_____ D.T.W.:_____ **Thickness:**_____ **Time:**_____

Project No.: ~~AES-080101~~

Date: 1-14-2014

Arrival Time: 1205 (1232 Sample)

Air Temp: 34° F

T.O.C. Elev. (ft): ~~7082.57~~

Total Well Depth (ft): ~~39.87~~ 39.51

Water Quality Parameters - Recorded During Well Purging

Time	Temp (deg C)	Conductivity (µS) (mS)	DO (mg/L)	pH	ORP (mV)	PURGED VOLUME (see reverse for calc.)	Notes/Observations
1218	11.43	4.277	2.30	~~24.37~~	-77.1	1st Bailer	Clear H2O
1221	12.30	4.829	1.17	~~24.35~~	-60.0	1.0 gal.	Tan H2O
1223	12.89	5.050	1.07	~~24.42~~	-49.9	2.0 gal	Tan H2O
1226	12.80	5.149	1.21	~~24.51~~	-38.3	3.0 gal.	Tan H2O
1228	12.70	5.152	1.37	~~24.52~~	-35.0	4.0 gal	Tan H2O
1232	12.78	4.905	1.75	~~24.35~~	-59.5	4.75 gal.	Tan H2O

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

BTEX per EPA Method 8021 (3 40mL Vials w/ HCl preserve)

TPH C6-C36 per EPA Method 8015B (2 40mL Vials w/ HCl preserve)

TPH C6-C36 per EPA Method 8015B (40mL Vial w/ no preservative)

Disposal of Purged Water: Into 55 gal. drum on site

Collected Samples Stored on Ice in Cooler: Yes

Chain of Custody Record Complete: Yes

Analytical Laboratory: Hall Environmental Analysis Laboratory, Albuquerque, NM

Equipment Used During Sampling: Keck Water Level or Keck Interface Level, YSI Water Quality Meter and New Disposable Bailer

Notes/Comments:

9.41 H2O column

1.54 H2O volume

4.75 gal. purged

MONITORING WELL SAMPLING RECORD	Animas Environmental Services
Monitor Well No: MW-3	624 E. Comanche, Farmington NM 87401 Tel. (505) 564-2281 Fax (505) 324-2022

Site: Highway 537 ~~2008~~ 09 Spill
Location: Rio Arriba County, New Mexico
Project: Groundwater Monitoring and Sampling
Sampling Technician: Lamone
Purge / No Purge: ~~No Purge~~ Purge
Well Diameter (in): ~~0.75~~ 2"
Initial D.T.W. (ft): 29.38 **Time:** 0944 (taken at initial gauging of all wells)
Confirm D.T.W. (ft): 29.37 **Time:** 1129 (taken prior to purging well)
Final D.T.W. (ft): 30.50 **Time:** 1151 (taken after sample collection)
If NAPL Present: D.T.P.: ______ **D.T.W.:** ______ **Thickness:** ______ **Time:** ______

Project No.: AE~~S 080101~~
Date: 1.14.2014
Arrival Time: 1125 (1154 Sample)
Air Temp: 32° F
T.O.C. Elev. (ft): ~~7081.1~~
Total Well Depth (ft): ~~35.1~~ 43.38

Water Quality Parameters - Recorded During Well Purging

Time	Temp (deg C)	Conductivity (µS) (mS)	DO (mg/L)	pH	ORP (mV)	PURGED VOLUME (see reverse for calc.)	Notes/Observations
1134	11.65	4.648	2.13	~~24.89~~	-48.9	1st Bailer	Clear H2O
1139	12.34	4.789	3.51	~~24.62~~	-74.1	1.0 gal.	tan H2O some sheen
1144	12.43	4.791	1.57	~~24.59~~	-69.8	3.0 gal.	gray H2O
1149	12.35	4.780	1.78	~~24.60~~	-59.3	5.0 gal	gray H2O
1154	12.23	4.764	1.74	~~24.59~~	-59.9	7.0 gal	

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

BTEX per EPA Method 8021 (3 40mL Vials w/ HCl preserve)

TPH C6-C36 per EPA Method 8015B (2 40mL Vials w/ HCl preserve)

TPH C6-C36 per EPA Method 8015B (40mL Vial w/ no preservative)

Disposal of Purged Water: ~~Onto~~ into 55 gal. drum on site
Collected Samples Stored on Ice in Cooler: yes
Chain of Custody Record Complete: yes
Analytical Laboratory: Hall Environmental Analysis Laboratory, Albuquerque, NM
Equipment Used During Sampling: Keck Water Level or Keck Interface Level, YSI Water Quality Meter and New Disposable Bailer

Notes/Comments: Recharge is good on well

revised: 01/06/10

MONITORING WELL SAMPLING RECORD

Monitor Well No: MW-9

Animas Environmental Services

624 E. Comanche, Farmington NM 87401

Tel. (505) 564-2281 Fax (505) 324-2022

Site: Highway 537 ~~2008~~ Spill 2009

Location: Rio Arriba County, New Mexico

Project: Groundwater Monitoring and Sampling

Sampling Technician: ~~Heather Woods~~ Lamone, Lo

Purge / No Purge: No Purge

Well Diameter (in): ~~2~~ 2"

Project No.: ~~AES-080101~~

Date: 1/14/2014

Arrival Time: 1030 (1109 Sample)

Air Temp: 44° F

T.O.C. Elev. (ft): ~~7883.64~~

Total Well Depth (ft): 38.76

Initial D.T.W. (ft): 29.68 **Time:** 1032 *(taken at initial gauging of all wells)*

Confirm D.T.W. (ft): ↓ **Time:** ↓ *(taken prior to purging well)*

Final D.T.W. (ft): 29.91 **Time:** 1106 *(taken after sample collection)*

If NAPL Present: D.T.P.:_____ D.T.W.:_____ **Thickness:**_____ **Time:**_____

Water Quality Parameters - Recorded During Well Purging

Time	Temp (deg C)	Conductivity (µS) (mS)	DO (mg/L)	pH	ORP (mV)	PURGED VOLUME (see reverse for calc.)	Notes/Observations
1052	11.28	5.070	2.44	~~24.74~~	-5.7	1st Bailer	Clear H2o
1056	12.56	4.949	1.47	~~24.52~~	-42.4	1.0 gal	clear H2o
1059	12.58	5.105	1.56	~~24.52~~	-47.8	2.0 gal	
1103	12.68	5.114	1.24	~~24.48~~	-51.2	3.0 gal.	Clear H2o
1109	12.61	5.160	1.11	~~24.48~~	-54.8	4.5 gal	clear H2o

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

BTEX per EPA Method 8021 (3 40mL Vials w/ HCl preserve)

TPH C6-C36 per EPA Method 8015B (2 40mL Vials w/ HCl preserve)

TPH C6-C36 per EPA Method 8015B (40mL Vial w/ no preservative)

Disposal of Purged Water: unto pavement

Collected Samples Stored on Ice in Cooler: yes

Chain of Custody Record Complete: yes

Analytical Laboratory: Hall Environmental Analysis Laboratory, Albuquerque, NM

Equipment Used During Sampling: Keck Water Level or Keck Interface Level, YSI Water Quality Meter and New Disposable Bailer

Notes/Comments:

9.08 H2o column

1.48 H2o volume

4.50 gal. purged

DEPTH TO GROUNDWATER MEASUREMENT FORM

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

Project: Groundwater Monitoring
Site: Hwy 537 Truck Station Spill 2009
Location: Rio Arriba County, New Mexico
Tech:

Project No.: AES 090201
Date: 4.4.2014
Time: 0930
Form: 1 of 1

Well I.D.	Time	Depth to NAPL (ft.)	Depth to Water (ft.)	NAPL Thickness (ft.)	Notes / Observations
MW-1	0937	29.84	31.02	~ 1.18	4' well casing above ground
MW-2	0938		29.84		4' well casing above ground
MW-3	0923		29.39		3' well casing
MW-4	0933		29.54		3' Above grounnd well casing
MW-5	0937		30.30		3' well casing
MW-6	0945		15.20	~	9' well casing
MW-7	0927	~	28.62		25' well casing
MW-8	0931		29.64		7.5 well casing
MW-9	0943		29.69		3' well casing
MW-10	0925		28.46		3' well casing
MW-11	0935		30.36	~	3' well casing

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

MONITORING WELL SAMPLING RECORD

Monitor Well No: MW-1

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

Site: Highway 537 Truck Station Spill 2009
Location: Rio Arriba County, New Mexico
Project: Groundwater Monitoring and Sampling
Sampling Technician: LL / JS
Purge / No Purge: Purge
Well Diameter (in): 2
Initial D.T.W. (ft): _____ **Time:** _____ *(taken at initial gauging of all wells)*
Confirm D.T.W. (ft): _____ **Time:** _____ *(taken prior to purging well)*
Final D.T.W. (ft): _____ **Time:** _____ *(taken after sample collection)*

Project No.: AES 090201
Date: 4.4.2014
Arrival Time: 1027
Air Temp: 37° F
T.O.C. Elev. (ft): 7064.66
Total Well Depth (ft): 43.65

If NAPL Present: D.T.P.: 29.84 D.T.W.: 31.02 **Thickness:** 1.18 **Time:** ~~0930~~ 0937

Water Quality Parameters - Recorded During Well Purging

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

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

~~BTEX per EPA Method 8021 (3 40mL Vials w/ HCl preserve)~~
TPH C6-C36 per EPA Method 8015B (2 40mL Vials w/ HCl preserve)
~~TPH C6-C36 per EPA Method 8015B (40mL Vial w/ no preservative)~~

Disposal of Purged Water: _____
Collected Samples Stored on Ice in Cooler: NO Sample
Chain of Custody Record Complete: _____
Analytical Laboratory: Hall Environmental Analysis Laboratory, Albuquerque, NM
Equipment Used During Sampling: Keck Water Level or Keck Interface Level, YSI Water Quality Meter and New Disposable Bailer

Notes/Comments:

MONITORING WELL SAMPLING RECORD

Monitor Well No: MW-3

Animas Environmental Services

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

Site: Highway 537 Truck Station Spill 2009
Location: Rio Arriba County, New Mexico
Project: Groundwater Monitoring and Sampling
Sampling Technician: LL & JS
Purge / No Purge: Purge
Well Diameter (in): 2
Initial D.T.W. (ft): 29.39 **Time:** 0923
Confirm D.T.W. (ft): 29.39 **Time:** 0951
Final D.T.W. (ft): 30.04 **Time:** 1018
If NAPL Present: D.T.P.:_____ D.T.W.:_____ Thickness:_____ Time:_____

Project No.: AES 090201
Date: 4-4-2014
Arrival Time: 0949 (1020 Sample)
Air Temp: 34° F
T.O.C. Elev. (ft): 7064.01
Total Well Depth (ft): 41.1
(taken at initial gauging of all wells)
(taken prior to purging well)
(taken after sample collection)

Water Quality Parameters - Recorded During Well Purging

Time	Temp (deg C)	Conductivity (µS) (mS)	DO (mg/L)	pH	ORP (mV)	PURGED VOLUME (see reverse for calc.)	Notes/Observations
0958	13.11	0.318	[redacted]	6.82	-60.4	.5 gal.	clear H2O
1000	12.37	0.338	2.02	6.82	-78.5	1.0 gal.	
1004	12.28	0.346	1.25	6.87	-59.9	2.0 gal	gray H2O slight odor
1010	12.14	0.359	1.25	6.90	-47.7	3.0 gal	
1014	12.19	0.362	1.38	6.88	-44.3	4.0 gal	"
1015	12.13	0.364	1.53	6.89	-41.5	5.0 gal	gray H2O
1020	12.10	0.362	1.74	6.96	-45.1	5.75 gal.	gray H2O

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

BTEX per EPA Method 8021 (3 40mL Vials w/ HCl preserve)
TPH C6-C36 per EPA Method 8015B (2 40mL Vials w/ HCl preserve)
TPH C6-C36 per EPA Method 8015B (40mL Vial w/ no preservative)

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

Notes/Comments:

11.71 H2O column
1.91 H2O volume
5.75 gal. to be purged

revised: 08/10/09

MONITORING WELL SAMPLING RECORD

Monitor Well No: MW-4

Animas Environmental Services

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

Site: Highway 537 Truck Station Spill 2009
Location: Rio Arriba County, New Mexico
Project: Groundwater Monitoring and Sampling
Sampling Technician: JS/LL
Purge / No Purge: Purge
Well Diameter (in): 2

Project No.: AES 090201
Date: 4.4.2014
Arrival Time: 1116 (1153 sample)
Air Temp: 39°
T.O.C. Elev. (ft):
Total Well Depth (ft): 43.90

Initial D.T.W. (ft): 29.54 **Time:** 0933 *(taken at initial gauging of all wells)*
Confirm D.T.W. (ft): 29.54 **Time:** 1120 *(taken prior to purging well)*
Final D.T.W. (ft): 29.85 **Time:** 1151 *(taken after sample collection)*
If NAPL Present: D.T.P.: **D.T.W.:** **Thickness:** **Time:**

Water Quality Parameters - Recorded During Well Purging

Time	Temp (deg C)	Conductivity (µS) (mS)	DO (mg/L)	pH	ORP (mV)	PURGED VOLUME (see reverse for calc.)	Notes/Observations
1126	12.44	0.421	2.87	7.22	47.3	1st Bailer	Clear H2O
1131	12.53	0.432	1.52	7.01	60.3	1.0	clear-lt. tan H2O
1137	12.27	0.433	1.82	6.91	69.7	3.0 gal	Lt Tan H2O
1144	12.39	0.435	1.68	6.87	79.2	5.0 gal	" "
1153	12.16	0.435	2.86	6.90	89.4	7.0 gal	Lt Tan H2O

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

BTEX per EPA Method 8021 (3 40mL Vials w/ HCl preserve)
TPH C6-C36 per EPA Method 8015B (2 40mL Vials w/ HCl preserve)
TPH C6-C36 per EPA Method 8015B (40mL Vial w/ no preservative)

Disposal of Purged Water: Into 55 gal. drum on site
Collected Samples Stored on Ice in Cooler: yes
Chain of Custody Record Complete: yes
Analytical Laboratory: Hall Environmental Analysis Laboratory, Albuquerque, NM
Equipment Used During Sampling: Keck Water Level or Keck Interface Level, YSI Water Quality Meter and New Disposable Bailer

Notes/Comments:
14-36 Column
2.34 Volumn
7.0 gal.

MONITORING WELL SAMPLING RECORD

Monitor Well No: MW-8

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

Site: Highway 537 Truck Station Spill 2009
Location: Rio Arriba County, New Mexico
Project: Groundwater Monitoring and Sampling
Sampling Technician: JJ/LL
Purge / No Purge: Purge
Well Diameter (in): 2

Project No.: AES 090201
Date: 4-4-2014
Arrival Time: 1210 (1239 Sample)
Air Temp: 39°F
T.O.C. Elev. (ft): 7063.27
Total Well Depth (ft): 44.1

Initial D.T.W. (ft): 0931 **Time:** 29.64 *(taken at initial gauging of all wells)*
Confirm D.T.W. (ft): 2965 **Time:** 1212 *(taken prior to purging well)*
Final D.T.W. (ft): 30.20 **Time:** 1237 *(taken after sample collection)*
If NAPL Present: **D.T.P.:** _____ **D.T.W.:** _____ **Thickness:** _____ **Time:** _____

Water Quality Parameters - Recorded During Well Purging

Time	Temp (deg C)	Conductivity (µS) (mS)	DO (mg/L)	pH	ORP (mV)	PURGED VOLUME (see reverse for calc.)	Notes/Observations
1218	12.80	0.406	2.21	6.95	-21.4	1st Bailer	Clear H2O
1224	13.41	0.413	1.31	6.78	-62.0	1.0 gal	H2O has slight
1230	13.22	0.414	1.50	6.78	-30.8	3.0 gal	Sheen.
1236	13.14	0.423	1.40	6.80	-19.8	5.0 gal	slight sheen
1239	13.14	0.424	1.70	6.80	-14.9	7.0 gal	@ Tan H2O
							slight sheen

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

BTEX per EPA Method 8021 (3 40mL Vials w/ HCl preserve)
TPH C6-C36 per EPA Method 8015B (2 40mL Vials w/ HCl preserve)
TPH C6-C36 per EPA Method 8015B (40mL Vial w/ no preservative)

Disposal of Purged Water: ~~Pit~~ to 55 gal drum on site
Collected Samples Stored on Ice in Cooler: yes
Chain of Custody Record Complete: yes
Analytical Laboratory: Hall Environmental Analysis Laboratory, Albuquerque, NM
Equipment Used During Sampling: Keck Water Level or Keck Interface Level, YSI Water Quality Meter and New Disposable Bailer

Notes/Comments:

14.45 Column
2.36 volume
7.0 gal. to be purged

H2O has slight sheen
Recharge good on well

MONITORING WELL SAMPLING RECORD

Monitor Well No: MW-9

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

Site: Highway 537 Truck Station Spill 2009
Location: Rio Arriba County, New Mexico
Project: Groundwater Monitoring and Sampling
Sampling Technician: JS/LC
Purge / No Purge: Purge
Well Diameter (in): 2
Initial D.T.W. (ft): 29.69 **Time:** 0943 *(taken at initial gauging of all wells)*
Confirm D.T.W. (ft): 29.69 **Time:** 1051 *(taken prior to purging well)*
Final D.T.W. (ft): 31.0 **Time:** 1109 *(taken after sample collection)*
If NAPL Present: D.T.P.:_____ D.T.W.:_____ Thickness:_____ Time:_____

Project No.: AES 090201
Date: 4-4-2014
Arrival Time: 1048 (1110 Sample)
Air Temp: 38°F
T.O.C. Elev. (ft): 7062.6
Total Well Depth (ft): 39.15

Water Quality Parameters - Recorded During Well Purging

Time	Temp (deg C)	Conductivity (µS) (mS)	DO (mg/L)	pH	ORP (mV)	PURGED VOLUME (see reverse for calc.)	Notes/Observations
10.52	13.02	0.366	1.77	7.03	-54.1	.5 gal.	Tan H2O
1058	13.06	0.381	2.52	6.87	-32.1	1.0 gal.	Tan H2O
1102	12.93	0.387	2.33	6.85	-27.8	2.0 gal	Tan H2O
1104	12.96	0.405	1.54	6.90	-45.1	3.0 gal	
1106	12.77	0.418	1.36	6.90	-53.2	4.0 gal	Tan H2O
1110	12.89	0.407	2.81	6.89	-48.2	4.75 gal.	Tan H2O

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

BTEX per EPA Method 8021 (3 40mL Vials w/ HCl preserve)
TPH C6-C36 per EPA Method 8015B (2 40mL Vials w/ HCl preserve)
TPH C6-C36 per EPA Method 8015B (40mL Vial w/ no preservative)

Disposal of Purged Water: Into 55 gal drum on site
Collected Samples Stored on Ice in Cooler: yes
Chain of Custody Record Complete: yes
Analytical Laboratory: Hall Environmental Analysis Laboratory, Albuquerque, NM
Equipment Used During Sampling: Keck Water Level or Keck Interface Level, YSI Water Quality Meter and New Disposable Bailer

Notes/Comments:
9.46 Htw column
1.54 Htw volume
4.63 gal. to be purged

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

January 23, 2014

Debbie Watson

Animas Environmental Services
624 East Comanche
Farmington, NM 87401
TEL: (505) 486-4071
FAX

RE: BMG Hwy 537 2009 Release OrderNo.: 1401707

Dear Debbie Watson:

Hall Environmental Analysis Laboratory received 4 sample(s) on 1/16/2014 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 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

4901 Hawkins NE
Albuquerque, NM 87109

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Animas Environmental Services
Client Sample ID: MW-1
Project: BMG Hwy 537 2009 Release
Collection Date: 1/14/2014 12:32:00 PM
Lab ID: 1401707-001
Matrix: AQUEOUS
Received Date: 1/16/2014 10:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8015D: DIESEL RANGE						Analyst: **BCN**	
Diesel Range Organics (DRO)	ND	1.0		mg/L	1	1/17/2014 5:42:24 PM	11276
Motor Oil Range Organics (MRO)	ND	5.0		mg/L	1	1/17/2014 5:42:24 PM	11276
Surr: DNOP	103	62.7-145		%REC	1	1/17/2014 5:42:24 PM	11276
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **JMP**	
Gasoline Range Organics (GRO)	0.21	0.10		mg/L	2	1/17/2014 10:03:44 PM	R16162
Surr: BFB	97.6	80.4-118		%REC	2	1/17/2014 10:03:44 PM	R16162
EPA METHOD 8021B: VOLATILES						Analyst: **JMP**	
Benzene	14	2.0		µg/L	2	1/17/2014 10:03:44 PM	R16162
Toluene	ND	2.0		µg/L	2	1/17/2014 10:03:44 PM	R16162
Ethylbenzene	15	2.0		µg/L	2	1/17/2014 10:03:44 PM	R16162
Xylenes, Total	ND	4.0		µg/L	2	1/17/2014 10:03:44 PM	R16162
Surr: 4-Bromofluorobenzene	103	85-136		%REC	2	1/17/2014 10:03:44 PM	R16162

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
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
O	RSD is greater than RSDlimit	P	Sample pH greater than 2 for VOA and TOC only.
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Animas Environmental Services
Client Sample ID: MW-3
Project: BMG Hwy 537 2009 Release
Collection Date: 1/14/2014 11:54:00 AM
Lab ID: 1401707-002
Matrix: AQUEOUS
Received Date: 1/16/2014 10:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8015D: DIESEL RANGE						Analyst: **BCN**	
Diesel Range Organics (DRO)	ND	1.0		mg/L	1	1/17/2014 6:13:20 PM	11276
Motor Oil Range Organics (MRO)	ND	5.0		mg/L	1	1/17/2014 6:13:20 PM	11276
Surr: DNOP	102	62.7-145		%REC	1	1/17/2014 6:13:20 PM	11276
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **JMP**	
Gasoline Range Organics (GRO)	0.12	0.050		mg/L	1	1/17/2014 11:29:25 PM	R16162
Surr: BFB	101	80.4-118		%REC	1	1/17/2014 11:29:25 PM	R16162
EPA METHOD 8021B: VOLATILES						Analyst: **JMP**	
Benzene	ND	1.0		µg/L	1	1/17/2014 11:29:25 PM	R16162
Toluene	ND	1.0		µg/L	1	1/17/2014 11:29:25 PM	R16162
Ethylbenzene	ND	1.0		µg/L	1	1/17/2014 11:29:25 PM	R16162
Xylenes, Total	ND	2.0		µg/L	1	1/17/2014 11:29:25 PM	R16162
Surr: 4-Bromofluorobenzene	101	85-136		%REC	1	1/17/2014 11:29:25 PM	R16162

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
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
O	RSD is greater than RSDlimit	P	Sample pH greater than 2 for VOA and TOC only.
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Animas Environmental Services
Client Sample ID: MW-9
Project: BMG Hwy 537 2009 Release
Collection Date: 1/14/2014 11:09:00 AM
Lab ID: 1401707-003
Matrix: AQUEOUS
Received Date: 1/16/2014 10:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8015D: DIESEL RANGE						Analyst: **BCN**	
Diesel Range Organics (DRO)	ND	1.0		mg/L	1	1/17/2014 6:44:04 PM	11276
Motor Oil Range Organics (MRO)	ND	5.0		mg/L	1	1/17/2014 6:44:04 PM	11276
Surr: DNOP	105	62.7-145		%REC	1	1/17/2014 6:44:04 PM	11276
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **JMP**	
Gasoline Range Organics (GRO)	ND	0.050		mg/L	1	1/18/2014 12:55:01 AM	R16162
Surr: BFB	89.3	80.4-118		%REC	1	1/18/2014 12:55:01 AM	R16162
EPA METHOD 8021B: VOLATILES						Analyst: **JMP**	
Benzene	ND	1.0		µg/L	1	1/18/2014 12:55:01 AM	R16162
Toluene	ND	1.0		µg/L	1	1/18/2014 12:55:01 AM	R16162
Ethylbenzene	ND	1.0		µg/L	1	1/18/2014 12:55:01 AM	R16162
Xylenes, Total	ND	2.0		µg/L	1	1/18/2014 12:55:01 AM	R16162
Surr: 4-Bromofluorobenzene	100	85-136		%REC	1	1/18/2014 12:55:01 AM	R16162

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
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
O	RSD is greater than RSDlimit	P	Sample pH greater than 2 for VOA and TOC only.
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Animas Environmental Services
Client Sample ID: Trip Blank
Project: BMG Hwy 537 2009 Release
Collection Date:
Lab ID: 1401707-004
Matrix: TRIP BLANK
Received Date: 1/16/2014 10:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8021B: VOLATILES						Analyst: **JMP**	
Benzene	ND	1.0		µg/L	1	1/18/2014 1:23:24 AM	R16162
Toluene	ND	1.0		µg/L	1	1/18/2014 1:23:24 AM	R16162
Ethylbenzene	ND	1.0		µg/L	1	1/18/2014 1:23:24 AM	R16162
Xylenes, Total	ND	2.0		µg/L	1	1/18/2014 1:23:24 AM	R16162
Surr: 4-Bromofluorobenzene	98.1	85-136		%REC	1	1/18/2014 1:23:24 AM	R16162

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
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
O	RSD is greater than RSDlimit	P	Sample pH greater than 2 for VOA and TOC only.
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits		

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1401707**

23-Jan-14

Client: Animas Environmental Services

Project: BMG Hwy 537 2009 Release

Sample ID	**MB-11276**	SampType:	**MBLK**		TestCode:	**EPA Method 8015D: Diesel Range**				
Client ID:	**PBW**	Batch ID:	**11276**		RunNo:	**16138**				
Prep Date:	**1/17/2014**	Analysis Date:	**1/17/2014**		SeqNo:	**465316**	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		102	62.7	145			

Sample ID	**LCSD-11276**	SampType:	**LCSD**		TestCode:	**EPA Method 8015D: Diesel Range**				
Client ID:	**LCSS02**	Batch ID:	**11276**		RunNo:	**16138**				
Prep Date:	**1/17/2014**	Analysis Date:	**1/17/2014**		SeqNo:	**465400**	Units:	**mg/L**		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	5.1	1.0	5.000	0	102	73.3	145	1.40	20	
Surr: DNOP	0.49		0.5000		97.7	62.7	145	0	0	

Sample ID	**LCS-11276**	SampType:	**LCS**		TestCode:	**EPA Method 8015D: Diesel Range**				
Client ID:	**LCSW**	Batch ID:	**11276**		RunNo:	**16138**				
Prep Date:	**1/17/2014**	Analysis Date:	**1/17/2014**		SeqNo:	**465873**	Units:	**mg/L**		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	5.2	1.0	5.000	0	103	73.3	145			
Surr: DNOP	0.52		0.5000		104	62.7	145			

Qualifiers:

- * Value exceeds Maximum Contaminant Level.
- E Value above quantitation range
- J Analyte detected below quantitation limits
- O RSD is greater than RSDlimit
- R RPD outside accepted recovery limits
- S Spike Recovery outside accepted recovery limits
- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- P Sample pH greater than 2 for VOA and TOC only.
- RL Reporting Detection Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1401707**

23-Jan-14

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:	**R16162**	RunNo:	**16162**					
Prep Date:		Analysis Date:	**1/17/2014**	SeqNo:	**465718**	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		88.0	80.4	118			

Sample ID	**2.5UG GRO LCS**	SampType:	**LCS**	TestCode:	**EPA Method 8015D: Gasoline Range**					
Client ID:	**LCSW**	Batch ID:	**R16162**	RunNo:	**16162**					
Prep Date:		Analysis Date:	**1/17/2014**	SeqNo:	**465719**	Units:	**mg/L**			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	0.57	0.050	0.5000	0	113	80	120			
Surr: BFB	19		20.00		97.1	80.4	118			

Sample ID	**1401707-001AMS**	SampType:	**MS**	TestCode:	**EPA Method 8015D: Gasoline Range**					
Client ID:	**MW-1**	Batch ID:	**R16162**	RunNo:	**16162**					
Prep Date:		Analysis Date:	**1/17/2014**	SeqNo:	**465727**	Units:	**mg/L**			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	1.2	0.10	1.000	0.2068	104	67.7	128			
Surr: BFB	42		40.00		105	80.4	118			

Sample ID	**1401707-001AMSD**	SampType:	**MSD**	TestCode:	**EPA Method 8015D: Gasoline Range**					
Client ID:	**MW-1**	Batch ID:	**R16162**	RunNo:	**16162**					
Prep Date:		Analysis Date:	**1/17/2014**	SeqNo:	**465728**	Units:	**mg/L**			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	1.2	0.10	1.000	0.2068	99.4	67.7	128	3.76	20	
Surr: BFB	42		40.00		104	80.4	118	0	0	

Qualifiers:

- * Value exceeds Maximum Contaminant Level.
- E Value above quantitation range
- J Analyte detected below quantitation limits
- O RSD is greater than RSDlimit
- R RPD outside accepted recovery limits
- S Spike Recovery outside accepted recovery limits
- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- P Sample pH greater than 2 for VOA and TOC only.
- RL Reporting Detection Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1401707**

23-Jan-14

Client: Animas Environmental Services

Project: BMG Hwy 537 2009 Release

Sample ID	**5ML RB**	SampType:	**MBLK**	TestCode:	**EPA Method 8021B: Volatiles**					
Client ID:	**PBW**	Batch ID:	**R16162**	RunNo:	**16162**					
Prep Date:		Analysis Date:	**1/17/2014**	SeqNo:	**465750**	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	20		20.00		98.1	85	136			

Sample ID	**100NG BTEX LCS**	SampType:	**LCS**	TestCode:	**EPA Method 8021B: Volatiles**					
Client ID:	**LCSW**	Batch ID:	**R16162**	RunNo:	**16162**					
Prep Date:		Analysis Date:	**1/17/2014**	SeqNo:	**465751**	Units:	**µg/L**			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	21	1.0	20.00	0	106	80	120			
Toluene	21	1.0	20.00	0	107	80	120			
Ethylbenzene	21	1.0	20.00	0	106	80	120			
Xylenes, Total	63	2.0	60.00	0	106	80	120			
Surr: 4-Bromofluorobenzene	21		20.00		104	85	136			

Sample ID	**1401707-002AMS**	SampType:	**MS**	TestCode:	**EPA Method 8021B: Volatiles**					
Client ID:	**MW-3**	Batch ID:	**R16162**	RunNo:	**16162**					
Prep Date:		Analysis Date:	**1/17/2014**	SeqNo:	**465754**	Units:	**µg/L**			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	21	1.0	20.00	0.3788	105	73.4	119			
Toluene	21	1.0	20.00	0.1814	105	80	120			
Ethylbenzene	21	1.0	20.00	0.3586	105	80	120			
Xylenes, Total	63	2.0	60.00	1.342	103	80	120			
Surr: 4-Bromofluorobenzene	21		20.00		106	85	136			

Sample ID	**1401707-002AMSD**	SampType:	**MSD**	TestCode:	**EPA Method 8021B: Volatiles**					
Client ID:	**MW-3**	Batch ID:	**R16162**	RunNo:	**16162**					
Prep Date:		Analysis Date:	**1/18/2014**	SeqNo:	**465755**	Units:	**µg/L**			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	21	1.0	20.00	0.3788	102	73.4	119	2.99	20	
Toluene	20	1.0	20.00	0.1814	101	80	120	3.97	20	
Ethylbenzene	21	1.0	20.00	0.3586	102	80	120	2.97	20	
Xylenes, Total	62	2.0	60.00	1.342	101	80	120	2.34	20	
Surr: 4-Bromofluorobenzene	21		20.00		106	85	136	0	0	

Qualifiers:

- * Value exceeds Maximum Contaminant Level.
- E Value above quantitation range
- J Analyte detected below quantitation limits
- O RSD is greater than RSDlimit
- R RPD outside accepted recovery limits
- S Spike Recovery outside accepted recovery limits
- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- P Sample pH greater than 2 for VOA and TOC only.
- RL Reporting Detection Limit

HALL ENVIRONMENTAL ANALYSIS LABORATORY

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

Sample Log-In Check List

Client Name: Animas Environmental Work Order Number: 1401707 RcptNo: 1

Received by/date: MG 01/16/14

Logged By: **Lindsay Mangin** 1/16/2014 10:00:00 AM

Completed By: **Lindsay Mangin** 1/17/2014 7:37:45 AM

Reviewed By: 01/17/14

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?	Courier		

Log In

4. Was an attempt made to cool the samples?	Yes ☑	No ☐	NA ☐
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 ☐
10. VOA vials have zero headspace?	Yes ☑	No ☐	No VOA Vials ☐
11. Were any sample containers received broken?	Yes ☐	No ☑	
12. Does paperwork match bottle labels? (Note discrepancies on chain of custody)	Yes ☑	No ☐	
13. Are matrices correctly identified on Chain of Custody?	Yes ☑	No ☐	
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 ☐	

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

Adjusted? _____

Checked by: _____

Special Handling (if applicable)

16. 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: _____

17. Additional remarks:

18. **Cooler Information**

Cooler No	Temp °C	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	1.0	Good	Yes			

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	X Standard ☐ Rush
	Project Name: BMG Hwy 537 2009 Release
Mailing Address 624 E Comanche	
Farmington NM 87401	Project #: AES 090201
Phone #: 505-564-2281	
email or Fax#: 505-324-2022	Project Manager: Deborah Watson
QA/QC Package: X Standard ☐ Level 4 (Full Validation)	
Accreditation: ☐ NELAP ☐ Other	Sampler:
☐ EDD (Type)	On Ice: ☑ Yes ☐ No
	Sample Temperature: 1.0

Date	Time	Matrix	Sample Request ID	Container Type and #	Preservative Type	HEAL No. 1401707	BTEX 8021	TPH 8015 (C6 - C36) (GRO, DRO, MRO)	Air Bubbles (Y or N)
1/14/2014	1232	H_2O	MW-1	Glass 6 - 40 mL	5 - HCl 1 - Non	-001	X	X	
1/14/2014	1154	H_2O	MW-3	Glass 6 - 40 mL	5 - HCl 1 - Non	-002	X	X	
1/14/2014	1109	H_2O	MW-9	Glass 6 - 40 mL	5 - HCl 1 - Non	-003	X	X	
1/14/2014		H_2O	Trip Blank	Glass 2 - 40 mL	HCl	-004	X		

Date:	Time:	Relinquished by:	Received by:	Date	Time
1/15/14	1838		Christine Walters	1/15/14	1838
1/15/14	1752	Christine Walters	Michelle Garcia	01/16/14	1000

Remarks:

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 14, 2014

Debbie Watson

Animas Environmental Services
624 East Comanche
Farmington, NM 87401
TEL: (505) 486-4071
FAX

RE: BMG Hwy 537 2009 Release OrderNo.: 1404312

Dear Debbie Watson:

Hall Environmental Analysis Laboratory received 3 sample(s) on 4/8/2014 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 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

4901 Hawkins NE
Albuquerque, NM 87109

Analytical Report
Lab Order **1404312**
Date Reported: **4/14/2014**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Animas Environmental Services
Client Sample ID: MW-3
Project: BMG Hwy 537 2009 Release
Collection Date: 4/4/2014 10:20:00 AM
Lab ID: 1404312-001 **Matrix:** AQUEOUS **Received Date:** 4/8/2014 10:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8015D: DIESEL RANGE						Analyst: **JME**	
Diesel Range Organics (DRO)	ND	1.0		mg/L	1	4/8/2014 11:38:51 PM	12582
Motor Oil Range Organics (MRO)	ND	5.0		mg/L	1	4/8/2014 11:38:51 PM	12582
Surr: DNOP	88.7	62.7-145		%REC	1	4/8/2014 11:38:51 PM	12582
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	0.20	0.050		mg/L	1	4/9/2014 7:44:19 PM	R17895
Surr: BFB	123	80.4-118	S	%REC	1	4/9/2014 7:44:19 PM	R17895
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Benzene	ND	1.0		µg/L	1	4/9/2014 7:44:19 PM	R17895
Toluene	ND	1.0		µg/L	1	4/9/2014 7:44:19 PM	R17895
Ethylbenzene	ND	1.0		µg/L	1	4/9/2014 7:44:19 PM	R17895
Xylenes, Total	ND	2.0		µg/L	1	4/9/2014 7:44:19 PM	R17895
Surr: 4-Bromofluorobenzene	106	82.9-139		%REC	1	4/9/2014 7:44:19 PM	R17895

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
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
O	RSD is greater than RSDlimit	P	Sample pH greater than 2.
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Animas Environmental Services
Client Sample ID: MW-9
Project: BMG Hwy 537 2009 Release
Collection Date: 4/4/2014 11:10:00 AM
Lab ID: 1404312-002 **Matrix:** AQUEOUS **Received Date:** 4/8/2014 10:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8015D: DIESEL RANGE						Analyst: **JME**	
Diesel Range Organics (DRO)	ND	1.0		mg/L	1	4/9/2014 12:00:44 AM	12582
Motor Oil Range Organics (MRO)	ND	5.0		mg/L	1	4/9/2014 12:00:44 AM	12582
Surr: DNOP	102	62.7-145		%REC	1	4/9/2014 12:00:44 AM	12582
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	0.075	0.050		mg/L	1	4/9/2014 3:12:46 PM	R17895
Surr: BFB	114	80.4-118		%REC	1	4/9/2014 3:12:46 PM	R17895
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Benzene	ND	1.0		µg/L	1	4/9/2014 3:12:46 PM	R17895
Toluene	ND	1.0		µg/L	1	4/9/2014 3:12:46 PM	R17895
Ethylbenzene	ND	1.0		µg/L	1	4/9/2014 3:12:46 PM	R17895
Xylenes, Total	ND	2.0		µg/L	1	4/9/2014 3:12:46 PM	R17895
Surr: 4-Bromofluorobenzene	103	82.9-139		%REC	1	4/9/2014 3:12:46 PM	R17895

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
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
O	RSD is greater than RSDlimit	P	Sample pH greater than 2.
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Animas Environmental Services
Client Sample ID: Trip Blank
Project: BMG Hwy 537 2009 Release
Collection Date:
Lab ID: 1404312-003
Matrix: TRIP BLANK
Received Date: 4/8/2014 10:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Benzene	ND	1.0		µg/L	1	4/9/2014 3:42:59 PM	R17895
Toluene	ND	1.0		µg/L	1	4/9/2014 3:42:59 PM	R17895
Ethylbenzene	ND	1.0		µg/L	1	4/9/2014 3:42:59 PM	R17895
Xylenes, Total	ND	2.0		µg/L	1	4/9/2014 3:42:59 PM	R17895
Surr: 4-Bromofluorobenzene	102	82.9-139		%REC	1	4/9/2014 3:42:59 PM	R17895

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
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
O	RSD is greater than RSDlimit	P	Sample pH greater than 2.
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits		

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1404312**

14-Apr-14

Client: Animas Environmental Services

Project: BMG Hwy 537 2009 Release

Sample ID	**MB-12582**	SampType:	**MBLK**		TestCode:	**EPA Method 8015D: Diesel Range**				
Client ID:	**PBW**	Batch ID:	**12582**		RunNo:	**17845**				
Prep Date:	**4/8/2014**	Analysis Date:	**4/8/2014**		SeqNo:	**514999**	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	0.94		1.000		93.6	62.7	145			

Sample ID	**LCS-12582**	SampType:	**LCS**		TestCode:	**EPA Method 8015D: Diesel Range**				
Client ID:	**LCSW**	Batch ID:	**12582**		RunNo:	**17845**				
Prep Date:	**4/8/2014**	Analysis Date:	**4/8/2014**		SeqNo:	**515000**	Units:	**mg/L**		

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	5.5	1.0	5.000	0	110	78.6	146			
Surr: DNOP	0.48		0.5000		95.6	62.7	145			

Sample ID	**LCSD-12582**	SampType:	**LCSD**		TestCode:	**EPA Method 8015D: Diesel Range**				
Client ID:	**LCSS02**	Batch ID:	**12582**		RunNo:	**17845**				
Prep Date:	**4/8/2014**	Analysis Date:	**4/8/2014**		SeqNo:	**515143**	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	113	78.6	146	3.00	26.5	
Surr: DNOP	0.48		0.5000		96.0	62.7	145	0	0	

Qualifiers:

- * Value exceeds Maximum Contaminant Level.
- E Value above quantitation range
- J Analyte detected below quantitation limits
- O RSD is greater than RSDlimit
- R RPD outside accepted recovery limits
- S Spike Recovery outside accepted recovery limits
- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- P Sample pH greater than 2.
- RL Reporting Detection Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1404312**

14-Apr-14

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:	**R17895**	RunNo:	**17895**					
Prep Date:		Analysis Date:	**4/9/2014**	SeqNo:	**516157**	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	20		20.00		99.7	80.4	118			

Sample ID	**2.5UG GRO LCS**	SampType:	**LCS**	TestCode:	**EPA Method 8015D: Gasoline Range**					
Client ID:	**LCSW**	Batch ID:	**R17895**	RunNo:	**17895**					
Prep Date:		Analysis Date:	**4/9/2014**	SeqNo:	**516158**	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	80	120			
Surr: BFB	21		20.00		105	80.4	118			

Qualifiers:

- * Value exceeds Maximum Contaminant Level.
- E Value above quantitation range
- J Analyte detected below quantitation limits
- O RSD is greater than RSDlimit
- R RPD outside accepted recovery limits
- S Spike Recovery outside accepted recovery limits
- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- P Sample pH greater than 2.
- RL Reporting Detection Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1404312**

14-Apr-14

Client: Animas Environmental Services

Project: BMG Hwy 537 2009 Release

Sample ID	**5ML RB**	SampType:	**MBLK**	TestCode:	**EPA Method 8021B: Volatiles**					
Client ID:	**PBW**	Batch ID:	**R17895**	RunNo:	**17895**					
Prep Date:		Analysis Date:	**4/9/2014**	SeqNo:	**516194**	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	20		20.00		101	82.9	139			

Sample ID	**100NG BTEX LCS**	SampType:	**LCS**	TestCode:	**EPA Method 8021B: Volatiles**					
Client ID:	**LCSW**	Batch ID:	**R17895**	RunNo:	**17895**					
Prep Date:		Analysis Date:	**4/9/2014**	SeqNo:	**516195**	Units:	**µg/L**			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	19	1.0	20.00	0	97.1	80	120			
Toluene	19	1.0	20.00	0	94.6	80	120			
Ethylbenzene	18	1.0	20.00	0	92.0	80	120			
Xylenes, Total	57	2.0	60.00	0	95.1	80	120			
Surr: 4-Bromofluorobenzene	21		20.00		103	82.9	139			

Sample ID	**1404312-001AMS**	SampType:	**MS**	TestCode:	**EPA Method 8021B: Volatiles**					
Client ID:	**MW-3**	Batch ID:	**R17895**	RunNo:	**17895**					
Prep Date:		Analysis Date:	**4/9/2014**	SeqNo:	**516203**	Units:	**µg/L**			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	20	1.0	20.00	0.7500	98.1	71	129			
Toluene	20	1.0	20.00	0.1620	98.6	68.4	135			
Ethylbenzene	19	1.0	20.00	0.1560	96.5	69.4	135			
Xylenes, Total	60	2.0	60.00	0.9380	99.2	72.4	135			
Surr: 4-Bromofluorobenzene	22		20.00		108	82.9	139			

Sample ID	**1404312-001AMSD**	SampType:	**MSD**	TestCode:	**EPA Method 8021B: Volatiles**					
Client ID:	**MW-3**	Batch ID:	**R17895**	RunNo:	**17895**					
Prep Date:		Analysis Date:	**4/9/2014**	SeqNo:	**516204**	Units:	**µg/L**			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	20	1.0	20.00	0.7500	96.3	71	129	1.84	20	
Toluene	20	1.0	20.00	0.1620	97.7	68.4	135	0.889	20	
Ethylbenzene	19	1.0	20.00	0.1560	95.5	69.4	135	1.00	20	
Xylenes, Total	60	2.0	60.00	0.9380	98.0	72.4	135	1.20	20	
Surr: 4-Bromofluorobenzene	22		20.00		110	82.9	139	0	0	

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
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
O	RSD is greater than RSDlimit	P	Sample pH greater than 2.
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits		

HALL ENVIRONMENTAL ANALYSIS LABORATORY

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

Sample Log-In Check List

Client Name: Animas Environmental Work Order Number: 1404312 RcptNo: 1

Received by/date: 04/08/14

Logged By: **Lindsay Mangin** 4/8/2014 10:00:00 AM

Completed By: **Lindsay Mangin** 4/8/2014 10:18:11 AM

Reviewed By: 04/08/14

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?	Courier		

Log In

4. Was an attempt made to cool the samples?	Yes ☑	No ☐	NA ☐
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 ☐
10. VOA vials have zero headspace?	Yes ☑	No ☐	No VOA Vials ☐
11. Were any sample containers received broken?	Yes ☐	No ☑	
12. Does paperwork match bottle labels? (Note discrepancies on chain of custody)	Yes ☑	No ☐	# of preserved bottles checked for pH: ____ (<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 ☑

Person Notified: ____ Date: ____

By Whom: ____ Via: ☐ eMail ☐ Phone ☐ Fax ☐ In Person

Regarding: ____

Client Instructions: ____

17. Additional remarks:

18. **Cooler Information**

Cooler No	Temp °C	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	2.9	Good	Yes			

Chain-of-Custody Record

Client: Animas Environmental Services

Mailing Address: 624 E Comanche
Farmington NM 87401

Phone #: 505-564-2281

email or Fax#: 505-324-2022

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

Accreditation:
☐ NELAP ☐ Other

☐ EDD (Type)

Turn-Around Time:
X Standard ☐ Rush

Project Name:
BMG Hwy 537 2009 Release

Project #:
AES 090201

Project Manager:
Deborah Watson

Sampler: J. Sprague

On Ice: ☒ Yes ☐ No

Sample Temperature: 2.6

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

Analysis Request

Date	Time	Matrix	Sample Request ID	Container Type and #	Preservative Type	HEAL No. 1404312	BTEX 8021	TPH 8015 (C6 - C36) (GRO, DRO, MRO)	Air Bubbles (Y or N)
4-4-2014	1020	H_2O	MW-3	Glass 6 - 40 mL	5 - HCl 1 - Non	-001	X	X	
4-4-2014	1110	H_2O	MW-9	Glass 6 - 40 mL	5 - HCl 1 - Non	-002	X	X	
		H_2O	Trip Blank	Glass 2 - 40 mL	HCl	-003	X		

Date	Time	Relinquished by:	Received by:	Date	Time
4/7/14	1741			4/7/14	1741
4/7/14	1758			04/08/14	1000

Remarks:

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

HALL ENVIRONMENTAL ANALYSIS LABORATORY

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

April 22, 2014

Debbie Watson

Animas Environmental Services
624 East Comanche
Farmington, NM 87401
TEL: (505) 486-4071
FAX

RE: BMG Hwy 537 2009 Release OrderNo.: 1404313

Dear Debbie Watson:

Hall Environmental Analysis Laboratory received 3 sample(s) on 4/8/2014 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 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
4901 Hawkins NE
Albuquerque, NM 87109

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Animas Environmental Services
Client Sample ID: MW-4
Project: BMG Hwy 537 2009 Release
Collection Date: 4/4/2014 11:53:00 AM
Lab ID: 1404313-001 **Matrix:** AQUEOUS **Received Date:** 4/8/2014 10:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8015D: DIESEL RANGE						Analyst: **JME**	
Diesel Range Organics (DRO)	ND	1.0		mg/L	1	4/9/2014 12:22:45 AM	12582
Motor Oil Range Organics (MRO)	ND	5.0		mg/L	1	4/9/2014 12:22:45 AM	12582
Surr: DNOP	106	62.7-145		%REC	1	4/9/2014 12:22:45 AM	12582
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	ND	0.050		mg/L	1	4/9/2014 4:13:10 PM	R17895
Surr: BFB	106	80.4-118		%REC	1	4/9/2014 4:13:10 PM	R17895
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Benzene	ND	1.0		µg/L	1	4/9/2014 4:13:10 PM	R17895
Toluene	ND	1.0		µg/L	1	4/9/2014 4:13:10 PM	R17895
Ethylbenzene	ND	1.0		µg/L	1	4/9/2014 4:13:10 PM	R17895
Xylenes, Total	ND	2.0		µg/L	1	4/9/2014 4:13:10 PM	R17895
Surr: 4-Bromofluorobenzene	101	82.9-139		%REC	1	4/9/2014 4:13:10 PM	R17895

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
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
O	RSD is greater than RSDlimit	P	Sample pH greater than 2.
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Animas Environmental Services
Client Sample ID: MW-8
Project: BMG Hwy 537 2009 Release
Collection Date: 4/4/2014 12:39:00 PM
Lab ID: 1404313-002
Matrix: AQUEOUS
Received Date: 4/8/2014 10:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8015D: DIESEL RANGE						Analyst: **JME**	
Diesel Range Organics (DRO)	ND	1.0		mg/L	1	4/9/2014 12:44:38 AM	12582
Motor Oil Range Organics (MRO)	ND	5.0		mg/L	1	4/9/2014 12:44:38 AM	12582
Surr: DNOP	96.9	62.7-145		%REC	1	4/9/2014 12:44:38 AM	12582
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	0.072	0.050		mg/L	1	4/9/2014 4:43:20 PM	R17895
Surr: BFB	112	80.4-118		%REC	1	4/9/2014 4:43:20 PM	R17895
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Benzene	ND	1.0		µg/L	1	4/9/2014 4:43:20 PM	R17895
Toluene	ND	1.0		µg/L	1	4/9/2014 4:43:20 PM	R17895
Ethylbenzene	ND	1.0		µg/L	1	4/9/2014 4:43:20 PM	R17895
Xylenes, Total	ND	2.0		µg/L	1	4/9/2014 4:43:20 PM	R17895
Surr: 4-Bromofluorobenzene	102	82.9-139		%REC	1	4/9/2014 4:43:20 PM	R17895

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
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
O	RSD is greater than RSDlimit	P	Sample pH greater than 2.
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Animas Environmental Services
Client Sample ID: Trip Blank
Project: BMG Hwy 537 2009 Release
Collection Date:
Lab ID: 1404313-003
Matrix: TRIP BLANK
Received Date: 4/8/2014 10:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8021B: VOLATILES						Analyst: **RAA**	
Benzene	ND	1.0		µg/L	1	4/17/2014 7:47:02 PM	R18059
Toluene	ND	1.0		µg/L	1	4/17/2014 7:47:02 PM	R18059
Ethylbenzene	ND	1.0		µg/L	1	4/17/2014 7:47:02 PM	R18059
Xylenes, Total	ND	2.0		µg/L	1	4/17/2014 7:47:02 PM	R18059
Surr: 4-Bromofluorobenzene	92.5	82.9-139		%REC	1	4/17/2014 7:47:02 PM	R18059

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
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
O	RSD is greater than RSDlimit	P	Sample pH greater than 2.
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits		

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1404313**

22-Apr-14

Client: Animas Environmental Services

Project: BMG Hwy 537 2009 Release

Sample ID **MB-12582**	SampType: **MBLK**	TestCode: **EPA Method 8015D: Diesel Range**
Client ID: **PBW**	Batch ID: **12582**	RunNo: **17845**
Prep Date: **4/8/2014**	Analysis Date: **4/8/2014**	SeqNo: **514999** 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	0.94		1.000		93.6	62.7	145			

Sample ID **LCS-12582**	SampType: **LCS**	TestCode: **EPA Method 8015D: Diesel Range**
Client ID: **LCSW**	Batch ID: **12582**	RunNo: **17845**
Prep Date: **4/8/2014**	Analysis Date: **4/8/2014**	SeqNo: **515000** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	5.5	1.0	5.000	0	110	78.6	146			
Surr: DNOP	0.48		0.5000		95.6	62.7	145			

Sample ID **LCSD-12582**	SampType: **LCSD**	TestCode: **EPA Method 8015D: Diesel Range**
Client ID: **LCSS02**	Batch ID: **12582**	RunNo: **17845**
Prep Date: **4/8/2014**	Analysis Date: **4/8/2014**	SeqNo: **515143** 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	113	78.6	146	3.00	26.5	
Surr: DNOP	0.48		0.5000		96.0	62.7	145	0	0	

Qualifiers:

- * Value exceeds Maximum Contaminant Level.
- E Value above quantitation range
- J Analyte detected below quantitation limits
- O RSD is greater than RSDlimit
- R RPD outside accepted recovery limits
- S Spike Recovery outside accepted recovery limits
- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- P Sample pH greater than 2.
- RL Reporting Detection Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1404313**

22-Apr-14

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: **R17895**	RunNo: **17895**
Prep Date:	Analysis Date: **4/9/2014**	SeqNo: **516157** 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	20		20.00		99.7	80.4	118			

Sample ID **2.5UG GRO LCS**	SampType: **LCS**	TestCode: **EPA Method 8015D: Gasoline Range**
Client ID: **LCSW**	Batch ID: **R17895**	RunNo: **17895**
Prep Date:	Analysis Date: **4/9/2014**	SeqNo: **516158** 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	80	120			
Surr: BFB	21		20.00		105	80.4	118			

Sample ID **5ML-RB**	SampType: **MBLK**	TestCode: **EPA Method 8015D: Gasoline Range**
Client ID: **PBW**	Batch ID: **R18059**	RunNo: **18059**
Prep Date:	Analysis Date: **4/17/2014**	SeqNo: **521745** Units: **%REC**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: BFB	16		20.00		80.1	80.4	118			S

Sample ID **2.5UG GRO LCS**	SampType: **LCS**	TestCode: **EPA Method 8015D: Gasoline Range**
Client ID: **LCSW**	Batch ID: **R18059**	RunNo: **18059**
Prep Date:	Analysis Date: **4/17/2014**	SeqNo: **521746** Units: **%REC**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: BFB	18		20.00		87.7	80.4	118			

Qualifiers:

- * Value exceeds Maximum Contaminant Level.
- E Value above quantitation range
- J Analyte detected below quantitation limits
- O RSD is greater than RSDlimit
- R RPD outside accepted recovery limits
- S Spike Recovery outside accepted recovery limits
- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- P Sample pH greater than 2.
- RL Reporting Detection Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1404313**

22-Apr-14

Client: Animas Environmental Services

Project: BMG Hwy 537 2009 Release

Sample ID	**5ML RB**	SampType:	**MBLK**	TestCode:	**EPA Method 8021B: Volatiles**					
Client ID:	**PBW**	Batch ID:	**R17895**	RunNo:	**17895**					
Prep Date:		Analysis Date:	**4/9/2014**	SeqNo:	**516194**	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	20		20.00		101	82.9	139			

Sample ID	**100NG BTEX LCS**	SampType:	**LCS**	TestCode:	**EPA Method 8021B: Volatiles**					
Client ID:	**LCSW**	Batch ID:	**R17895**	RunNo:	**17895**					
Prep Date:		Analysis Date:	**4/9/2014**	SeqNo:	**516195**	Units:	**µg/L**			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	19	1.0	20.00	0	97.1	80	120			
Toluene	19	1.0	20.00	0	94.6	80	120			
Ethylbenzene	18	1.0	20.00	0	92.0	80	120			
Xylenes, Total	57	2.0	60.00	0	95.1	80	120			
Surr: 4-Bromofluorobenzene	21		20.00		103	82.9	139			

Sample ID	**5ML-RB2**	SampType:	**MBLK**	TestCode:	**EPA Method 8021B: Volatiles**					
Client ID:	**PBW**	Batch ID:	**R18059**	RunNo:	**18059**					
Prep Date:		Analysis Date:	**4/17/2014**	SeqNo:	**521759**	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	18		20.00		91.1	82.9	139			

Sample ID	**100NG BTEX LCS**	SampType:	**LCS**	TestCode:	**EPA Method 8021B: Volatiles**					
Client ID:	**LCSW**	Batch ID:	**R18059**	RunNo:	**18059**					
Prep Date:		Analysis Date:	**4/17/2014**	SeqNo:	**521760**	Units:	**µg/L**			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	20	1.0	20.00	0	102	80	120			
Toluene	20	1.0	20.00	0	102	80	120			
Ethylbenzene	20	1.0	20.00	0	102	80	120			
Xylenes, Total	63	2.0	60.00	0	104	80	120			
Surr: 4-Bromofluorobenzene	18		20.00		91.0	82.9	139			

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
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
O	RSD is greater than RSDlimit	P	Sample pH greater than 2.
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits		

HALL ENVIRONMENTAL ANALYSIS LABORATORY

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

Sample Log-In Check List

Client Name: Animas Environmental Work Order Number: 1404313 RcptNo: 1

Received by/date: 04/08/14

Logged By: **Lindsay Mangin** 4/8/2014 10:00:00 AM

Completed By: **Lindsay Mangin** 4/8/2014 10:21:59 AM

Reviewed By: 04/08/14

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?	Courier		

Log In

4. Was an attempt made to cool the samples?	Yes ☑	No ☐	NA ☐
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 ☐
10. VOA vials have zero headspace?	Yes ☑	No ☐	No VOA Vials ☐
11. Were any sample containers received broken?	Yes ☐	No ☑	
12. Does paperwork match bottle labels? (Note discrepancies on chain of custody)	Yes ☑	No ☐	
13. Are matrices correctly identified on Chain of Custody?	Yes ☑	No ☐	
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 ☐	

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

Adjusted? _____

Checked by: _____

Special Handling (if applicable)

16. 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: _____

17. Additional remarks:

18. **Cooler Information**

Cooler No	Temp °C	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	2.9	Good	Yes			

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	X Standard ☐ Rush
Mailing Address: 624 E Comanche, Farmington NM 87401	Project Name: BMG Hwy 537 2009 Release
Phone #: 505-564-2281	Project #: AES 090201
email or Fax#: 505-324-2022	Project Manager: Deborah Watson
QA/QC Package: X Standard ☐ Level 4 (Full Validation)	Sampler: J. Sprague
Accreditation: ☐ NELAP ☐ Other ☐ EDD (Type)	On Ice: ☑ Yes ☐ No
	Sample Temperature: 2.4

Date	Time	Matrix	Sample Request ID	Container Type and #	Preservative Type	HEAL No. 1204231	BTEX 8021	TPH 8015 (C6 - C36) (GRO, DRO, MRO)	Air Bubbles (Y or N)
4-4-2014	1153	H_2O	MW-4	Glass 6 - 40 mL	5 - HCl 1 - Non	-001	X	X	
4-4-2014	1239	H_2O	MW-8	Glass 6 - 40 mL	5 - HCl 1 - Non	-002	X	X	
		H_2O	Trip Blank	Glass 2 - 40 mL	HCl	-003	X		

Analysis Request

Date:	Time:	Relinquished by:	Received by:	Date	Time
4/7/14	1741	Jess C Sprague	Christine Walker	4/7/14	1741
Date:	Time:	Relinquished by:	Received by:	Date	Time
4/7/14	1758	Christine Walker		04/08/14	1000

Remarks:

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.