

3R-1012

**Release Report/ General
Correspondence**

Enterprise RA

Date: 2013

District I
1625 N. French Dr., Hobbs, NM 88240
District II
811 S. First St., Artesia, NM 88210
District III
1000 Rio Brazos Road, Aztec, NM 87410
District IV
1220 S. St. Francis Dr., Santa Fe, NM 87505

State of New Mexico
Energy Minerals and Natural Resources

Form C-141
Revised August 8, 2011

Oil Conservation Division
1220 South St. Francis Dr.
Santa Fe, NM 87505

Submit 1 Copy to appropriate District Office in
accordance with 19.15.29 NMAC.

Release Notification and Corrective Action

OPERATOR

☐ Initial Report ☒ Final Report

Name of Company	Enterprise Field Services, LLC	Contact	Aaron Dailey
Address	614 Reilly Avenue, Farmington 87401	Telephone No.	(505) 599-2286
Facility Name	Salazar #9 Pipeline	Facility Type	Natural Gas Gathering Pipeline
Surface Owner	BLM	Mineral Owner	BLM
		API No.	

LOCATION OF RELEASE

Unit Letter	Section	Township	Range	Feet from the	North/South Line	Feet from the	East/West Line	County
H	22	25N	6W					Rio Arriba

Latitude_N36.38572_ Longitude_W107.4458_

NATURE OF RELEASE

Type of Release	Oil/Condensate/Natural gas. Soil impact has been confirmed.	Volume of Release	Unknown	Volume Recovered	Remedial excavation conducted 10/10/2012
Source of Release	4" Pipeline	Date and Hour of Occurrence	Unknown	Date and Hour of Discovery	8/6/2012
Was Immediate Notice Given?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Not Required	If YES, To Whom? Not known to be reportable until completion of release assessment and receipt of laboratory analytical results on 10/3/2012 as the impacts were all below grade.			
By Whom?		Date and Hour			
Was a Watercourse Reached?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	If YES, Volume Impacting the Watercourse.			


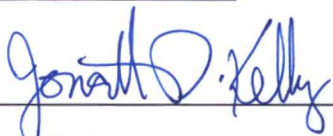
RCVD JAN 22 '13
OIL CONS. DIV.
DIST. 3

If a Watercourse was Impacted, Describe Fully.*

Describe Cause of Problem and Remedial Action Taken.* Initial response activities included repair of the 4" pipeline the week of 8/13/2012. A release assessment was completed by a third party contractor on 9/24/2012. Based on the third party assessment and laboratory analysis received on 10/3/2012, the release was determined to be reportable.

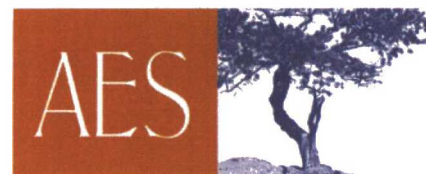
Describe Area Affected and Cleanup Action Taken.* Please refer to the third party environmental corrective action report attached to this c-141 "final" report form. Area has been cleaned up to levels below OCD regulatory standards.

I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to NMOCD rules and regulations all operators are required to report and/or file certain release notifications and perform corrective actions for releases which may endanger public health or the environment. The acceptance of a C-141 report by the NMOCD marked as "Final Report" does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to ground water, surface water, human health or the environment. In addition, NMOCD acceptance of a C-141 report does not relieve the operator of responsibility for compliance with any other federal, state, or local laws and/or regulations.

Signature: 		OIL CONSERVATION DIVISION	
Printed Name: Matt Marra		Approved by Environmental Specialist: 	
Title: Sr. Director, Environmental		Approval Date: 3/26/2013	Expiration Date:
E-mail Address: memarra@eprod.com		Conditions of Approval:	
Date: 1-15-2013	Phone: (713) 381-6684	Attached <input type="checkbox"/>	

* Attach Additional Sheets If Necessary

njk 1308546889



Animas Environmental Services, LLC

www.animasenvironmental.com

624 E. Comanche
Farmington, NM 87401
505-564-2281

Durango, Colorado
970-403-3274

December 28, 2012

Aaron Dailey
Enterprise Field Services, LLC
614 Reilly Avenue
Farmington, New Mexico 87401

**RE: Initial Release Assessment and Mitigation Report
Salazar #9 August 2012 Pipeline Release
SE¼ NE¼, Section 22, T25N, R6W
Rio Arriba County, New Mexico**

RCVD MAR 18 '13
OIL CONS. DIV.
DIST. 3

Dear Mr. Dailey:

On September 24 and October 10, 2012, Animas Environmental Services, LLC (AES) completed an initial release assessment and confirmation sampling of the final excavation at the Enterprise Field Services, LLC (Enterprise) pipeline associated with the Salazar #9 well location. The August 2012 natural gas condensate release was located approximately 37 miles southeast of Bloomfield, New Mexico.

1.0 Site Information

1.1 Location

Location - SE¼ NE¼, Section 22, T25N, R6W, Rio Arriba County, New Mexico

Latitude/Longitude - N36.38572 and W107.44582, respectively

Surface Owner – Federal (Bureau of Land Management)

Figure 1. Topographic Site Location Map

Figure 2. Aerial Site Map

1.2 NMOCD Ranking

In accordance with the New Mexico Oil Conservation Division (NMOCD) *Guidelines for Remediation of Leaks, Spills, and Releases* (August 1993), the release location was assigned a ranking score to establish release action levels. The ranking score was obtained in part by reviewing available records of nearby oil/gas wells using the NMOCD online database. A pit assessment form dated July 1994 for the Salazar #9 well, located approximately 1,200 feet northwest of the release area, reported the depth to groundwater as less than 50 feet below ground surface (bgs). The New Mexico Office of the State Engineer (NMOSE) database was reviewed for nearby water wells, and no registered water wells were reported to be located within 1,000 feet of the location. Google Earth and the New Mexico Tech Petroleum Recovery Research Center online

mapping tool (<http://ford.nmt.edu/react/project.html>) were accessed to aid in the identification of downgradient surface water. The Gonzales Canyon wash is located approximately 300 feet to the north of the release location. Based on this information, the release location was assessed a ranking score of 40.

2.0 Release Assessment and Mitigation

2.1 Initial Assessment

The pipeline release occurred in August 2012 and was promptly repaired by Enterprise contractors. At the time of the pipeline repair it was undetermined if the release was a reportable quantity. AES completed the initial assessment of the release September 24, 2012, and based on field screening results, it was determined that the release was reportable. Enterprise submitted a release notification to NMOCD on October 3, 2012.

During the release assessment a total of 11 soil borings were installed along the pipeline corridor to depths ranging from 6 to 8 feet bgs. Soil samples were collected for field screening of volatile organic compounds (VOCs) and total petroleum hydrocarbons (TPH), as well as laboratory analysis.

Based on the field screening results, AES recommended source removal of petroleum hydrocarbon impacted soils above NMOCD action levels. Soil sample locations and the recommended excavation area are included on Figure 3, and a photograph log is attached.

2.2 Mitigation and Confirmation Sampling

On October 10, 2012, Enterprise contractors utilized a hydro-vac truck to expose the pipeline prior to initiating excavation of petroleum contaminated soil (PCS). A total of 190 cubic yards and 3 barrels (bbls) of PCS were removed and transported to the TNT Landfarm for disposal. The final excavation measured approximately 31 feet by 16 feet by 10 feet in depth. AES collected soil samples for field screening of VOCs in order to guide the excavation extents and collected 5-point composite samples for confirmation laboratory analysis from the final four walls and base of the excavation. Soil sample locations are illustrated on Figure 4, and PCS disposal documents are attached.

3.0 Soil Sampling

3.1 Initial Assessment

As part of initial assessment on September 24, 2012, AES personnel installed 11 soil borings (SB-1 through SB-11) to depths ranging from 3.5 feet to 8 feet bgs. Discrete

samples were collected for field screening from various intervals within each boring. A total of 43 samples were field screened for VOCs, 16 of which were also field screened for TPH. Additionally, four samples (SB-1, SB-3, SB-10, and SB-11) were submitted for laboratory analysis for quality assurance/quality control (QA/QC) of the field screening results.

3.2 Confirmation Sampling

During PCS removal on October 10, 2012, AES personnel collected five 5-point composite soil samples (SC-1 through SC-5) from the sidewalls of the excavation at depths ranging from 1 to 10 feet bgs and from the base of the excavation at 10 feet bgs. The composite samples were field screened and submitted for confirmation laboratory analysis.

3.3 Field Screening

3.3.1 Volatile Organic Compounds

A portion of each sample was utilized for field screening of VOC vapors with a photo-ionization detector (PID) organic vapor meter (OVM). Before beginning field screening, the PID-OVM was first calibrated with 100 parts per million (ppm) isobutylene gas.

3.3.2 Total Petroleum Hydrocarbons

During the initial assessment, samples were also analyzed in the field for TPH per USEPA Method 418.1 using a Buck Scientific Model HC-404 Total Hydrocarbon Analyzer Infrared Spectrometer (Buck). A 3-point calibration was completed prior to conducting soil analyses. Field analytical protocol followed AES's *Standard Operating Procedure: Field Analysis Total Petroleum Hydrocarbons per EPA Method 418.1*.

3.4 Laboratory Analyses

The four QA/QC samples from the initial release assessment and SC-1 through SC-5 from the final excavation were collected for laboratory analysis and were placed into new, clean, laboratory-supplied containers, which were then labeled, placed on ice, and logged onto a sample chain of custody record. Samples were maintained on ice until delivery to the analytical laboratory, Hall Environmental Analysis Laboratory (Hall), in Albuquerque, New Mexico. Soil samples were laboratory analyzed for:

- Benzene, toluene, ethylbenzene, and xylene (BTEX) per U.S. Environmental Protection Agency (USEPA) Method 8021B;
- TPH for gasoline range organics (GRO) and diesel range organics (DRO) per USEPA Method 8015B.

4.0 Field Screening and Laboratory Analytical Results

4.1 Initial Assessment

Soil field screening readings for VOCs from the initial assessment ranged from 77.7 ppm in SB-11 up to 4,668 ppm in SB-3. Field TPH results ranged from 59.7 mg/kg in SB-8 to greater than 2,500 mg/kg each in SB-3, SB-5, and SB-6.

Laboratory analytical results from the initial assessment reported benzene concentrations below laboratory detection limits in each sample. Total BTEX concentrations were below laboratory detection limits, except for SB-1 at 7 feet bgs (28 mg/kg) and SB-3 at 6 feet bgs (179 mg/kg). TPH concentrations were reported above laboratory detection limits in SB-1 at 7 feet bgs (640 mg/kg GRO and 960 mg/kg DRO), SB-3 at 6 feet bgs (2,900 mg/kg GRO and 2,000 mg/kg DRO), and SB-11 at 2 feet bgs (33 mg/kg DRO). An AES field screening report is attached, and laboratory analytical results are included in Table 1 and on Figure 3.

4.2 Confirmation Sampling

Soil field screening results from the October 2012 confirmation sampling showed that VOC concentrations ranged from 19.8 ppm in SC-2 up to 1,440 ppm in SC-4. Soil analytical results from SC-1 through SC-5 showed that benzene and total BTEX concentrations were below laboratory detection limits. TPH concentrations (as GRO/DRO) were below laboratory detection limits in all samples, except for SC-3 with 17 mg/kg GRO. Laboratory analytical results are included in Table 1 and on Figure 4. Laboratory analytical reports are attached.

5.0 Conclusions and Recommendations

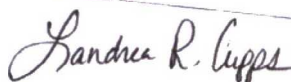
NMOCD action levels for releases are specified in NMOCD's *Guidelines for Leaks, Spills, and Releases* (August 1993), and the release was assigned a ranking score of 40. During the initial assessment at the Salazar #9 pipeline release location on September 24, 2012, field screening for VOCs via OVM exceeded the action level of 100 ppm in SB-1 through SB-10. Additionally, field TPH results exceeded the action level of 100 mg/kg in SB-1, SB-3 through SB-6, and SB-9. Laboratory analytical results for total BTEX exceeded the action level of 50 mg/kg in SB-3 with 179 mg/kg, and TPH exceeded the action level of 100 mg/kg in SB-1 (640 mg/kg GRO and 960 mg/kg DRO) and SB-3 (2,900 mg/kg GRO and 2,000 mg/kg DRO). Based on the field screening and laboratory analytical results, AES recommended source removal of petroleum hydrocarbon impacted soils above NMOCD action levels.

On October 10, 2012, Enterprise contractors completed source removal of petroleum hydrocarbon impacted soils, and AES collected confirmation samples from the walls and base of the excavation. The field screening action level of 100 ppm for VOCs was exceeded in SC-3, SC-4, and SC-5; however, laboratory analytical results for benzene, total BTEX, and TPH were below NMOCD action levels within the excavated release area.

Based on the removal of petroleum hydrocarbon impacted soils, field observations, field screening values, and laboratory analytical results for benzene, total BTEX, and TPH, soils are not impacted above NMOCD action levels within the release area, and no further work is recommended at the Salazar #9 August 2012 pipeline release area.

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

Sincerely,



Landrea Cupps
Environmental Scientist



Elizabeth McNally, P.E.

Attachments:

- Table 1. Summary of Field Screening and Laboratory Analytical Results
- Figure 1. Topographic Site Location Map
- Figure 2. Aerial Site Map
- Figure 3. Initial Assessment Sample Locations and Results, September 2012
- Figure 4. Final Excavation Sample Locations and Results, October 2012
- Photograph Log
- AES Field Screening Report 092412
- TNT Landfarm C-138, October 10, 2012
- Laboratory Analytical Reports (Hall 1209B93 and 1210690)

TABLE 1. SUMMARY OF FIELD SCREENING AND LABORATORY ANALYTICAL RESULTS

Salazar #9 August 2012 Pipeline Release

Initial Release Assessment and Mitigation Report

SE¼ NE¼, Section 22, T25N, R6W, Rio Arriba County, New Mexico

Sample ID	Date Sampled	Depth (feet)	OVM Reading	Field TPH	Benzene	Total BTEX	GRO (C6-C10)	DRO (C10-C22)
					(USEPA 8021B)	(USEPA 8015B)	(USEPA 8015B)	(USEPA 8015B)
			(ppm)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)
NMOCD Action Level			100	100	10	50	100	
SB-1	24-Sep-12	0.5	3,570	NA	NA	NA	NA	NA
		3	1,541	NA	NA	NA	NA	NA
		4.5	2,591	NA	NA	NA	NA	NA
		6	3,612	1,590	NA	NA	NA	NA
		7	2,452	914	<0.99	28	640	960
SB-2	24-Sep-12	0.5	326	99.1	NA	NA	NA	NA
		2	273	NA	NA	NA	NA	NA
		4	153	NA	NA	NA	NA	NA
		6	138	83.6	NA	NA	NA	NA
SB-3	24-Sep-12	0.5	1,347	NA	NA	NA	NA	NA
		2	4,668	>2,500	NA	NA	NA	NA
		4	2,799	NA	NA	NA	NA	NA
		6	3,390	NA	<2.4	179	2,900	2,000
SB-4	24-Sep-12	1	977	NA	NA	NA	NA	NA
		2	3,258	919	NA	NA	NA	NA
		4	2,493	NA	NA	NA	NA	NA
		6	1,390	203	NA	NA	NA	NA

TABLE 1. SUMMARY OF FIELD SCREENING AND LABORATORY ANALYTICAL RESULTS

Salazar #9 August 2012 Pipeline Release

Initial Release Assessment and Mitigation Report

SE¼ NE¼, Section 22, T25N, R6W, Rio Arriba County, New Mexico

Sample ID	Date Sampled	Depth (feet)	OVM Reading	Field TPH	Benzene	Total BTEX	GRO (C6-C10)	DRO (C10-C22)
					(USEPA 8021B)		(USEPA 8015B)	
			(ppm)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)
NMOCD Action Level			100	100	10	50	100	
SB-5	24-Sep-12	0.5	1,120	NA	NA	NA	NA	NA
		2	1,247	NA	NA	NA	NA	NA
		4	3,292	>2,500	NA	NA	NA	NA
		6	1,394	NA	NA	NA	NA	NA
SB-6	24-Sep-12	1	1,002	NA	NA	NA	NA	NA
		2	3,334	>2,500	NA	NA	NA	NA
		3.5	1,772	NA	NA	NA	NA	NA
SB-7	24-Sep-12	1	299	NA	NA	NA	NA	NA
		3	300	NA	NA	NA	NA	NA
		5	226	NA	NA	NA	NA	NA
		7	327	NA	NA	NA	NA	NA
		8	324	68.0	NA	NA	NA	NA
SB-8	24-Sep-12	0.5	489	59.7	NA	NA	NA	NA
		2	159	NA	NA	NA	NA	NA
		4	205	88.4	NA	NA	NA	NA
		6	365	NA	NA	NA	NA	NA
SB-9	24-Sep-12	1	942	360	NA	NA	NA	NA
		3	323	NA	NA	NA	NA	NA
		5	271	NA	NA	NA	NA	NA
		7	80.6	74.0	NA	NA	NA	NA

TABLE 1. SUMMARY OF FIELD SCREENING AND LABORATORY ANALYTICAL RESULTS

Salazar #9 August 2012 Pipeline Release

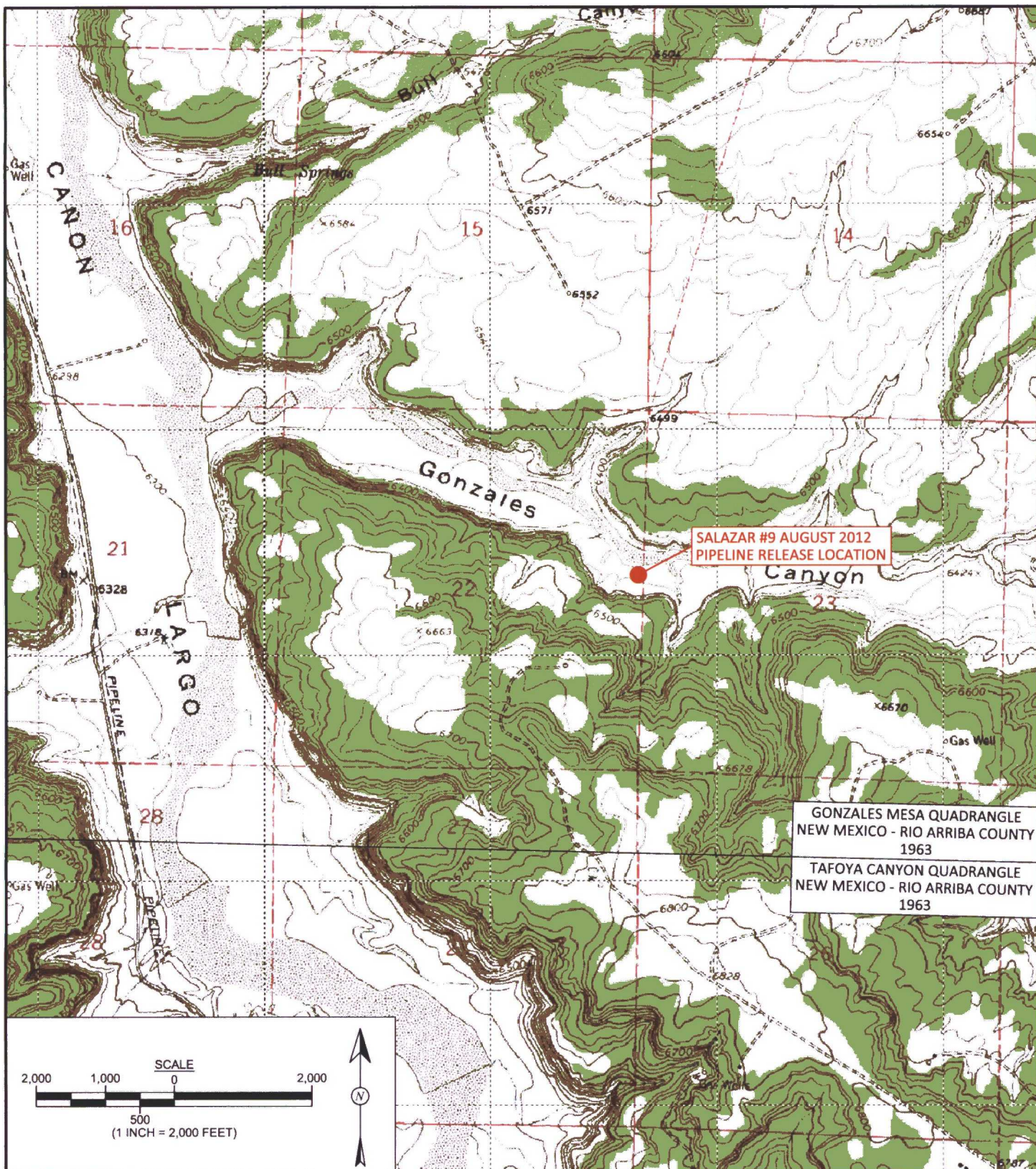
Initial Release Assessment and Mitigation Report

SE¼ NE¼, Section 22, T25N, R6W, Rio Arriba County, New Mexico

Sample ID	Date Sampled	Depth (feet)	OVM Reading	Field TPH	Benzene	Total BTEX	GRO (C6-C10)	DRO (C10-C22)
					(USEPA 8021B)		(USEPA 8015B)	
			(ppm)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)
NMOCD Action Level			100	100	10	50	100	
SB-10	24-Sep-12	0.5	125	NA	NA	NA	NA	NA
		3	79.9	NA	NA	NA	NA	NA
		5	133	76.4	<0.048	<0.239	<4.8	<9.7
		7	110	NA	NA	NA	NA	NA
SB-11	24-Sep-12	2	92.7	NA	<0.049	<0.245	<4.9	33
		4	77.7	NA	NA	NA	NA	NA
SC-1	10-Oct-12	1 to 10	81.2	NA	<0.049	<0.245	<4.9	<9.6
SC-2	10-Oct-12	1 to 10	19.8	NA	<0.049	<0.245	<4.9	<9.8
SC-3	10-Oct-12	1 to 10	346	NA	<0.048	<0.240	17	<9.8
SC-4	10-Oct-12	1 to 10	1,440	NA	<0.049	<0.245	<4.9	<9.8
SC-5	10-Oct-12	10	114	NA	<0.049	<0.246	<4.9	<9.9

NOTES

NA - Not Analyzed

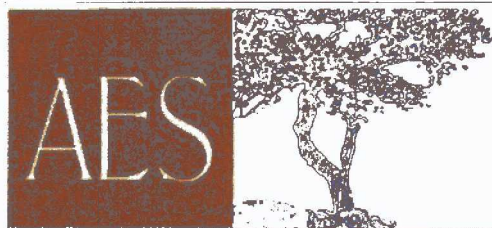
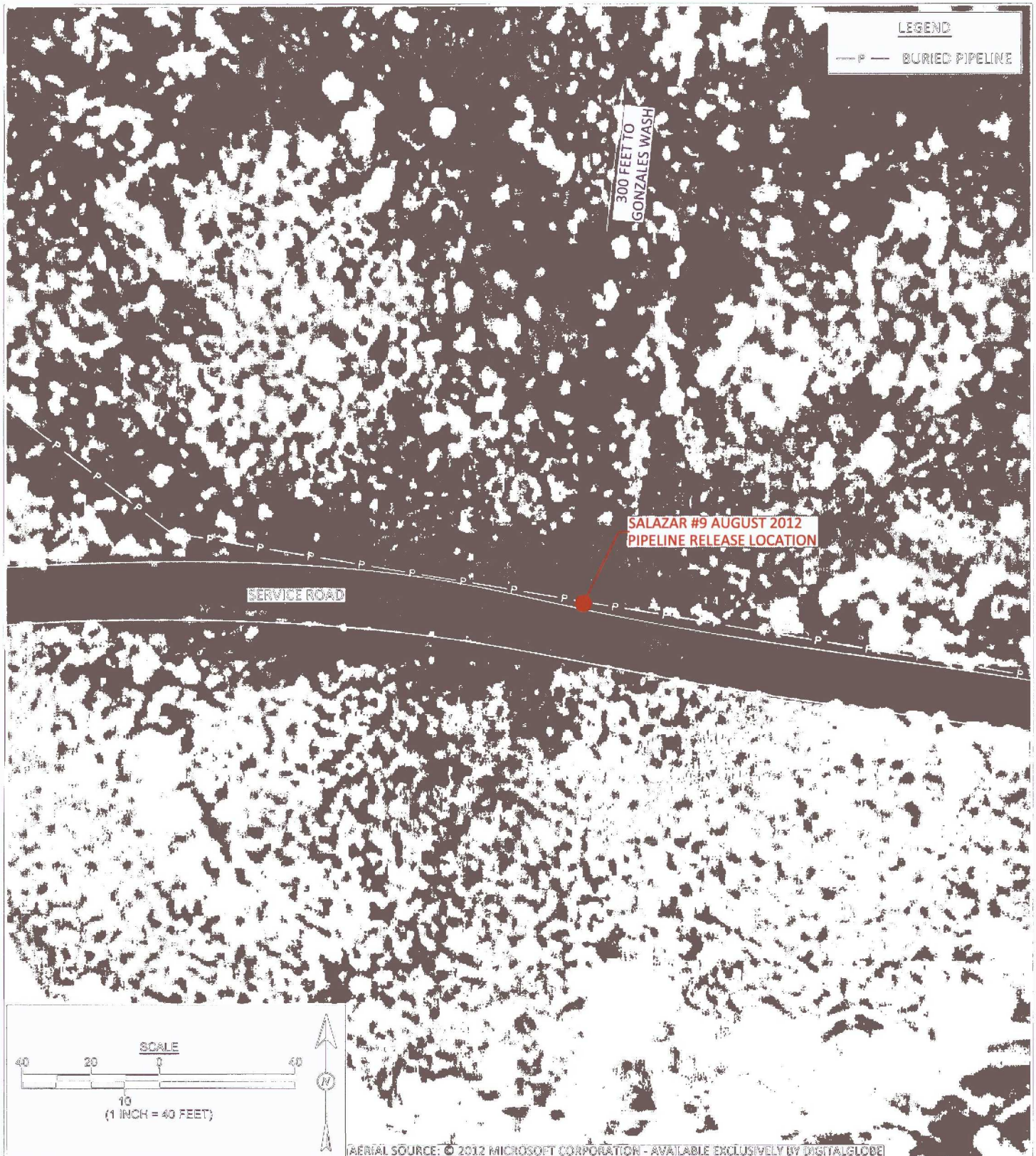


Animas Environmental Services, LLC

DRAWN BY: C. Lameman	DATE DRAWN: September 26, 2012
REVISIONS BY: C. Lameman	DATE REVISED: December 17, 2012
CHECKED BY: T. Ross	DATE CHECKED: December 17, 2012
APPROVED BY: E. McNally	DATE APPROVED: December 17, 2012

FIGURE 1

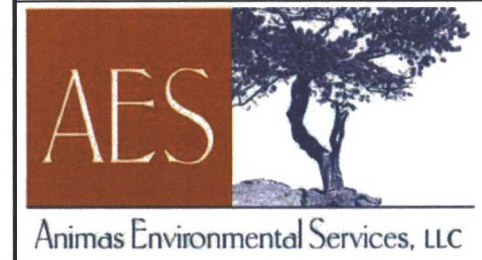
TOPOGRAPHIC SITE LOCATION MAP
ENTERPRISE FIELD SERVICES, LLC
SALAZAR #9 AUGUST 2012
PIPELINE RELEASE LOCATION
RIO ARriba COUNTY, NEW MEXICO
SE¼ NE¼, SECTION 22, T25N, R6W
N36.38572, W107.44582



Animas Environmental Services, LLC

DRAWN BY: C. Lameman	DATE DRAWN: September 26, 2012	FIGURE 2 AERIAL SITE MAP ENTERPRISE FIELD SERVICES, LLC SALAZAR #9 AUGUST 2012 PIPELINE RELEASE LOCATION RIO ARriba COUNTY, NEW MEXICO SE¼ NE¼, SECTION 22, T25N, R6W N36.38572, W107.44582
REVISIONS BY: C. Lameman	DATE REVISED: December 17, 2012	
CHECKED BY: T. Ross	DATE CHECKED: December 17, 2012	
APPROVED BY: E. McNally	DATE APPROVED: December 17, 2012	

FINAL EXCAVATION SAMPLE
LOCATIONS AND RESULTS
OCTOBER 2012
ENTERPRISE FIELD SERVICES, LLC
SALAZAR #9 AUGUST 2012
PIPELINE RELEASE LOCATION
RIO ARriba COUNTY, NEW MEXICO
SE¼ NE¼, SECTION 22, T25N, R6W
N36.38572, W107.44582

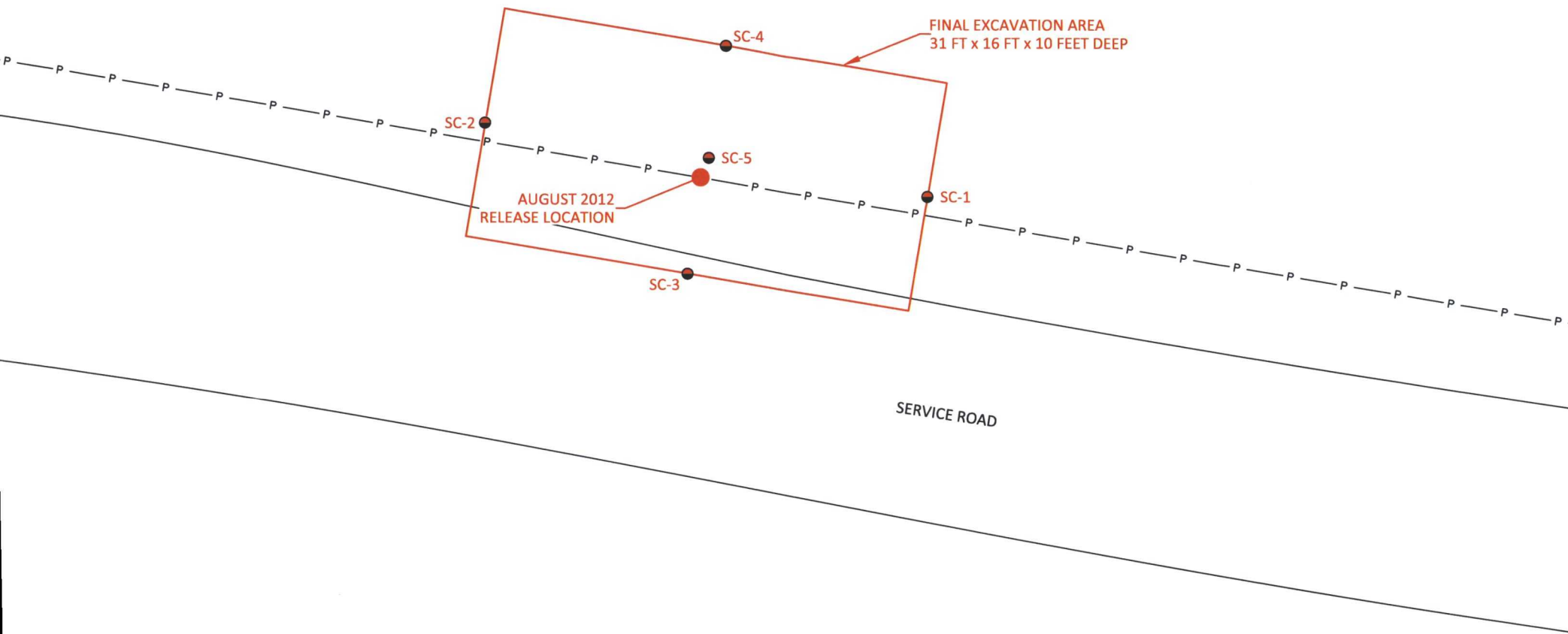


DRAWN BY: C. Lameman	DATE DRAWN: October 17, 2012
REVISIONS BY: C. Lameman	DATE REVISED: December 17, 2012
CHECKED BY: T. Ross	DATE CHECKED: December 17, 2012
APPROVED BY: E. McNally	DATE APPROVED: December 17, 2012

LEGEND

● SAMPLE LOCATION

— P — BURIED PIPELINE



Field Screening and Laboratory Analytical Results							
Sample ID	Date	Depth (ft)	OVM-PID (ppm)	Benzene (mg/kg)	TOTAL BTEX (mg/kg)	TPH - GRO (mg/kg)	TPH - DRO (mg/kg)
NMOCD ACTION LEVEL			100	10	50	100	
SC-1	10/10/12	1 to 10	81.2	<0.049	<0.245	<4.9	<9.6
SC-2	10/10/12	1 to 10	19.8	<0.049	<0.245	<4.9	<9.8
SC-3	10/10/12	1 to 10	346	<0.048	<0.240	17	<9.8
SC-4	10/10/12	1 to 10	1,440	<0.049	<0.245	<4.9	<9.8
SC-5	10/10/12	10	114	<0.049	<0.246	<4.9	<9.9
ALL SAMPLES WERE ANALYZED PER EPA METHOD 8021B AND 8015B.							





Photo #1	
Client: Enterprise Field Services, LLC	
Project: Salazar #9 Release Assessment and Mitigation	
Taken by: Lavina Lamone	
September 24, 2012	
AES Project No: 120809	Description: View of the release area during the initial assessment, which was after the pipeline repair. The orange pin flags designate soil boring locations.

Photo #2	
Client: Enterprise Field Services, LLC	
Project: Salazar #9 Release Assessment and Mitigation	
Taken by: Tami Ross	
October 10, 2012	
AES Project No: 120809	Description: View of the final excavation.

AES Field Screening Report



Animas Environmental Services, LLC

www.animasenvironmental.com

Client: Enterprise Field Services, LLC

Project Location: Salazar #9

Date: 9/24/2012

Matrix: Soil

624 E. Comanche
Farmington, NM 87401
505-564-2281

Durango, Colorado
970-403-3274

Sample ID	Collection Date	Time of Sample Collection	Sample Location	OVM (ppm)	Field Chloride (mg/kg)	Field TPH Analysis Time	Field TPH* (mg/kg)	TPH PQL (mg/kg)	DF	TPH Analysts Initials
SB-1	9/24/2012	12:10	0.5	3,570	NA	Not Analyzed for TPH				
SB-1	9/24/2012	12:13	3	1,541	NA	Not Analyzed for TPH				
SB-1	9/24/2012	12:20	4.5	2,591	NA	Not Analyzed for TPH				
SB-1	9/24/2012	12:36	6	3,612	NA	13:10	1,590	20.0	1	HMW
SB-1	9/24/2012	12:57	7	2,452	NA	13:49	914	20.0	1	HMW
SB-2	9/24/2012	12:40	0.5	326	NA	13:52	99.1	20.0	1	HMW
SB-2	9/24/2012	12:43	2	273	NA	Not Analyzed for TPH				
SB-2	9/24/2012	12:45	4	153	NA	Not Analyzed for TPH				
SB-2	9/24/2012	12:50	6	138	NA	13:59	83.6	20.0	1	HMW
SB-3	9/24/2012	13:05	0.5	1,347	NA	Not Analyzed for TPH				
SB-3	9/24/2012	13:07	2	4,668	NA	15:20	>2,500	20.0	1	HMW
SB-3	9/24/2012	13:10	4	2,799	NA	Not Analyzed for TPH				
SB-3	9/24/2012	13:14	6	3,390	NA	11:31	68.1	20.0	1	HMW

Sample ID	Collection Date	Time of Sample Collection	Sample Location	OVM (ppm)	Field Chloride (mg/kg)	Field TPH Analysis Time	Field TPH* (mg/kg)	TPH PQL (mg/kg)	DF	TPH Analysts Initials
SB-4	9/24/2012	13:16	1	977	NA	Not Analyzed for TPH				
SB-4	9/24/2012	13:18	2	3,258	NA	15:24	919	20.0	1	HMW
SB-4	9/24/2012	13:22	4	2,493	NA	Not Analyzed for TPH				
SB-4	9/24/2012	13:28	6	1,390	NA	15:25	203	20.0	1	HMW
SB-5	9/24/2012	13:32	0.5	1,120	NA	Not Analyzed for TPH				
SB-5	9/24/2012	13:35	2	1,247	NA	Not Analyzed for TPH				
SB-5	9/24/2012	13:38	4	3,292	NA	15:32	>2,500	20.0	1	HMW
SB-5	9/24/2012	13:41	6	1,394	NA	Not Analyzed for TPH				
SB-6	9/24/2012	14:33	1	1,002	NA	Not Analyzed for TPH				
SB-6	9/24/2012	14:36	2	3,334	NA	16:33	>2,500	20.0	1	HMW
SB-6	9/24/2012	14:55	3.5	1,772	NA	Not Analyzed for TPH				
SB-7	9/24/2012	15:42	1	299	NA	Not Analyzed for TPH				
SB-7	9/24/2012	15:45	3	300	NA	Not Analyzed for TPH				
SB-7	9/24/2012	15:48	5	226	NA	Not Analyzed for TPH				
SB-7	9/24/2012	15:51	7	327	NA	Not Analyzed for TPH				
SB-7	9/24/2012	15:54	8	324	NA	16:37	68.0	20.0	1	HMW
SB-8	9/24/2012	15:58	0.5	489	NA	16:44	59.7	20.0	1	HMW
SB-8	9/24/2012	16:00	2	159	NA	Not Analyzed for TPH				
SB-8	9/24/2012	16:04	4	205	NA	16:41	88.4	20.0	1	HMW
SB-8	9/24/2012	16:40	6	365	NA	Not Analyzed for TPH				
SB-9	9/24/2012	16:20	1	942	NA	17:17	360	20.0	1	HMW
SB-9	9/24/2012	16:26	3	323	NA	Not Analyzed for TPH				
SB-9	9/24/2012	16:32	5	271	NA	Not Analyzed for TPH				
SB-9	9/24/2012	16:37	7	80.6	NA	17:20	74.0	20.0	1	HMW

Sample ID	Collection Date	Time of Sample Collection	Sample Location	OVM (ppm)	Field Chloride (mg/kg)	Field TPH Analysis Time	Field TPH* (mg/kg)	TPH PQL (mg/kg)	DF	TPH Analysts Initials
SB-10	9/24/2012	16:44	0.5	125	NA	Not Analyzed for TPH				
SB-10	9/24/2012	16:47	3	79.9	NA	Not Analyzed for TPH				
SB-10	9/24/2012	16:50	5	133	NA	17:23	76.4	20.0	1	HMW
SB-10	9/24/2012	16:58	7	110	NA	Not Analyzed for TPH				
SB-11	9/24/2012	17:06	2	92.7	NA	Not Analyzed for TPH				
SB-11	9/24/2012	17:10	4	77.7	NA	Not Analyzed for TPH				

PQL Practical Quantitation Limit

ND Not Detected at the Reporting Limit

NA Not Analyzed

DF Dilution Factor

*Field TPH concentrations recorded may be below PQL.

Field Chloride - Quantab Chloride Titrators or Drop Count Titration with Silver Nitrate

Total Petroleum Hydrocarbons - USEPA 418.1

Analyst: *Heather M. Woods*

District I
1625 N. French Dr., Hobbs, NM 88240
District II
1301 W. Grand Avenue, Artesia, NM 88210
District III
1000 Rio Brazos Road, Aztec, NM 87410
District IV
1220 S. St. Francis Dr., Santa Fe, NM 87505

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

Form C-138
Revised 08/21/11

*Surface Waste Management Facility Operator
and Generator shall maintain and make this
documentation available for Division inspection.

REQUEST FOR APPROVAL TO ACCEPT SOLID WASTE

1. Generator Name and Address:
Enterprise Products Operating, L.P.

2. Originating Site:
Salazar #9 Pipeline

3. Location of Material (Street Address, City, State or ULSTR):
Unit 11 Section 22 T25N R6W, Lat 36.38572, Long. -107.44582

4. Source and Description of Waste:
Excavation of exempt petroleum hydrocarbon contaminated soil from pipeline release

Estimated Volume 200 yd³ bbls Known Volume (to be entered by the operator at the end of the haul) 190 yd³ bbls

5. GENERATOR CERTIFICATION STATEMENT OF WASTE STATUS

I, _____, representative or authorized agent for Enterprise Products Operating _____ do hereby
certify that according to the Resource Conservation and Recovery Act (RCRA) and the US Environmental Protection Agency's July 1988
regulatory determination, the above described waste is (Check the appropriate classification)

☒ RCRA Exempt: Oil field wastes generated from oil and gas exploration and production operations and are not mixed with non-
exempt waste. Operator Use Only: Waste Acceptance Frequency ☐ Monthly ☐ Weekly ☐ Per Load

☐ RCRA Non-Exempt: Oil field waste which is non-hazardous that does not exceed the minimum standards for waste hazardous by
characteristics established in RCRA regulations, 40 CFR 261.21-261.24, or listed hazardous waste as defined in 40 CFR, part 261,
subpart D, as amended. The following documentation is attached to demonstrate the above-described waste is non-hazardous. (Check
the appropriate items)

☐ MSDS Information ☐ RCRA Hazardous Waste Analysis ☒ Process Knowledge ☐ Other (Provide description in Box 4)

GENERATOR 19.15.36.15 WASTE TESTING CERTIFICATION STATEMENT FOR LANDFARMS

I, _____, representative for Enterprise Products Operating _____ authorize T-n-T environmental to complete
the required testing/sign the Generator Waste Testing Certification.

I, _____, representative for _____ do hereby certify that

Representative/Agent Signature
representative samples of the oil field waste have been subjected to the paint filter test and tested for chloride content and that the samples
have been found to conform to the specific requirements applicable to landfarms pursuant to Section 15 of 19.15.36 NMAC. The results
of the representative samples are attached to demonstrate the above-described waste conform to the requirements of Section 15 of
19.15.36 NMAC.

5. Transporter: EMS Contractors, Switzer, 8898 Val, EnviroTech
OCD Permitted Surface Waste Management Facility

Name and Facility Permit #: T-n-T Environmental Inc. NM-01-0008
Address of Facility: #70 CR 405, Lindrieth, NM 87029

Method of Treatment and/or Disposal:

☐ Evaporation ☐ Injection ☐ Treating Plant ☒ Landfarm ☐ Landfill ☐ Other

Waste Acceptance Status:

☒ APPROVED

☐ DENIED (Must Be Maintained As Permanent Record)

PRINT NAME: Lois Schmitz

TITLE: Office Admin

DATE: 10-10-12

SIGNATURE: [Signature]
Surface Waste Management Facility Authorized Agent

TELEPHONE NO.: 575-774-6504



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

October 02, 2012

Tami Ross
Animas Environmental Services
624 East Comanche
Farmington, NM 87401
TEL: (505) 793-2072
FAX

RE: Salazar #9

OrderNo.: 1209B93

Dear Tami Ross:

Hall Environmental Analysis Laboratory received 4 sample(s) on 9/26/2012 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. 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. 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.

Sincerely,

Andy Freeman
Laboratory Manager
4901 Hawkins NE
Albuquerque, NM 87109

Analytical Report

Lab Order 1209B93

Date Reported: 10/2/2012

Hall Environmental Analysis Laboratory, Inc.**CLIENT:** Animas Environmental Services**Client Sample ID:** SB-1@7'**Project:** Salazar #9**Collection Date:** 9/24/2012 12:57:00 PM**Lab ID:** 1209B93-001**Matrix:** SOIL**Received Date:** 9/26/2012 10:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015B: DIESEL RANGE ORGANICS						Analyst: JMP
Diesel Range Organics (DRO)	960	10		mg/Kg	1	9/28/2012 12:51:57 PM
Surr: DNOP	122	77.6-140		%REC	1	9/28/2012 12:51:57 PM
EPA METHOD 8015B: GASOLINE RANGE						Analyst: NSB
Gasoline Range Organics (GRO)	640	99		mg/Kg	20	9/30/2012 1:40:47 AM
Surr: BFB	252	84-116	S	%REC	20	9/30/2012 1:40:47 AM
EPA METHOD 8021B: VOLATILES						Analyst: NSB
Benzene	ND	0.99		mg/Kg	20	9/30/2012 1:40:47 AM
Toluene	2.4	0.99		mg/Kg	20	9/30/2012 1:40:47 AM
Ethylbenzene	2.1	0.99		mg/Kg	20	9/30/2012 1:40:47 AM
Xylenes, Total	23	2.0		mg/Kg	20	9/30/2012 1:40:47 AM
Surr: 4-Bromofluorobenzene	108	80-120		%REC	20	9/30/2012 1:40:47 AM

Qualifiers:

- * Value exceeds Maximum Contaminant Level.
- E Value above quantitation range
- J Analyte detected below quantitation limits
- P Sample pH greater than 2
- RL Reporting Detection Limit

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- R RPD outside accepted recovery limits
- S Spike Recovery outside accepted recovery limits

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1209B93

Date Reported: 10/2/2012

CLIENT: Animas Environmental Services

Client Sample ID: SB-3@6'

Project: Salazar #9

Collection Date: 9/24/2012 1:14:00 PM

Lab ID: 1209B93-002

Matrix: SOIL

Received Date: 9/26/2012 10:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015B: DIESEL RANGE ORGANICS						Analyst: JPM
Diesel Range Organics (DRO)	2000	96		mg/Kg	10	10/1/2012 10:35:47 AM
Surr: DNOP	0	77.6-140	S	%REC	10	10/1/2012 10:35:47 AM
EPA METHOD 8015B: GASOLINE RANGE						Analyst: NSB
Gasoline Range Organics (GRO)	2900	240		mg/Kg	50	9/30/2012 2:09:31 AM
Surr: BFB	314	84-116	S	%REC	50	9/30/2012 2:09:31 AM
EPA METHOD 8021B: VOLATILES						Analyst: NSB
Benzene	ND	2.4		mg/Kg	50	9/30/2012 2:09:31 AM
Toluene	21	2.4		mg/Kg	50	9/30/2012 2:09:31 AM
Ethylbenzene	7.8	2.4		mg/Kg	50	9/30/2012 2:09:31 AM
Xylenes, Total	150	4.9		mg/Kg	50	9/30/2012 2:09:31 AM
Surr: 4-Bromofluorobenzene	113	80-120		%REC	50	9/30/2012 2:09:31 AM

Qualifiers:

- * Value exceeds Maximum Contaminant Level.
- E Value above quantitation range
- J Analyte detected below quantitation limits
- P Sample pH greater than 2
- RL Reporting Detection Limit

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- R RPD outside accepted recovery limits
- S Spike Recovery outside accepted recovery limits

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Animas Environmental Services

Client Sample ID: SB-10@5'

Project: Salazar #9

Collection Date: 9/24/2012 4:50:00 PM

Lab ID: 1209B93-003

Matrix: SOIL

Received Date: 9/26/2012 10:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015B: DIESEL RANGE ORGANICS						Analyst: JMP
Diesel Range Organics (DRO)	ND	9.7		mg/Kg	1	9/28/2012 2:19:32 PM
Surr: DNOP	107	77.6-140		%REC	1	9/28/2012 2:19:32 PM
EPA METHOD 8015B: GASOLINE RANGE						Analyst: NSB
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	9/30/2012 2:30:53 PM
Surr: BFB	104	84-116		%REC	1	9/30/2012 2:30:53 PM
EPA METHOD 8021B: VOLATILES						Analyst: NSB
Benzene	ND	0.048		mg/Kg	1	9/30/2012 2:30:53 PM
Toluene	ND	0.048		mg/Kg	1	9/30/2012 2:30:53 PM
Ethylbenzene	ND	0.048		mg/Kg	1	9/30/2012 2:30:53 PM
Xylenes, Total	ND	0.095		mg/Kg	1	9/30/2012 2:30:53 PM
Surr: 4-Bromofluorobenzene	94.5	80-120		%REC	1	9/30/2012 2:30:53 PM

Qualifiers:

- * Value exceeds Maximum Contaminant Level.
- E Value above quantitation range
- J Analyte detected below quantitation limits
- P Sample pH greater than 2
- RL Reporting Detection Limit

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- R RPD outside accepted recovery limits
- S Spike Recovery outside accepted recovery limits

Analytical Report

Lab Order 1209B93

Date Reported: 10/2/2012

Hall Environmental Analysis Laboratory, Inc.**CLIENT:** Animas Environmental Services**Client Sample ID:** SB-11@2'**Project:** Salazar #9**Collection Date:** 9/24/2012 5:06:00 PM**Lab ID:** 1209B93-004**Matrix:** SOIL**Received Date:** 9/26/2012 10:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015B: DIESEL RANGE ORGANICS						Analyst: JMP
Diesel Range Organics (DRO)	33	9.7		mg/Kg	1	10/1/2012 8:36:22 AM
Surr: DNOP	111	77.6-140		%REC	1	10/1/2012 8:36:22 AM
EPA METHOD 8015B: GASOLINE RANGE						Analyst: NSB
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	9/30/2012 3:28:28 PM
Surr: BFB	96.9	84-116		%REC	1	9/30/2012 3:28:28 PM
EPA METHOD 8021B: VOLATILES						Analyst: NSB
Benzene	ND	0.049		mg/Kg	1	9/30/2012 3:28:28 PM
Toluene	ND	0.049		mg/Kg	1	9/30/2012 3:28:28 PM
Ethylbenzene	ND	0.049		mg/Kg	1	9/30/2012 3:28:28 PM
Xylenes, Total	ND	0.098		mg/Kg	1	9/30/2012 3:28:28 PM
Surr: 4-Bromofluorobenzene	93.1	80-120		%REC	1	9/30/2012 3:28:28 PM

Qualifiers:

- * Value exceeds Maximum Contaminant Level.
- E Value above quantitation range
- J Analyte detected below quantitation limits
- P Sample pH greater than 2
- RL Reporting Detection Limit

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- R RPD outside accepted recovery limits
- S Spike Recovery outside accepted recovery limits

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1209B93

02-Oct-12

Client: Animas Environmental Services

Project: Salazar #9

Sample ID	MB-3974	SampType:	MBLK	TestCode:	EPA Method 8015B: Diesel Range Organics					
Client ID:	PBS	Batch ID:	3974	RunNo:	5816					
Prep Date:	9/27/2012	Analysis Date:	9/28/2012	SeqNo:	167266	Units:	mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	ND	10								
Surr: DNOP	10		10.00		101	77.6	140			

Sample ID	LCS-3974	SampType:	LCS	TestCode:	EPA Method 8015B: Diesel Range Organics					
Client ID:	LCSS	Batch ID:	3974	RunNo:	5816					
Prep Date:	9/27/2012	Analysis Date:	9/28/2012	SeqNo:	167486	Units:	mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	42	10	50.00	0	83.3	52.6	130			
Surr: DNOP	4.9		5.000		97.1	77.6	140			

Sample ID	1209B93-001AMS	SampType:	MS	TestCode:	EPA Method 8015B: Diesel Range Organics					
Client ID:	SB-1@7'	Batch ID:	3974	RunNo:	5816					
Prep Date:	9/27/2012	Analysis Date:	9/28/2012	SeqNo:	167922	Units:	mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	940	9.8	49.16	958.7	-40.2	57.2	146			S
Surr: DNOP	4.8		4.916		98.6	77.6	140			

Sample ID	1209B93-001AMSD	SampType:	MSD	TestCode:	EPA Method 8015B: Diesel Range Organics					
Client ID:	SB-1@7'	Batch ID:	3974	RunNo:	5816					
Prep Date:	9/27/2012	Analysis Date:	9/28/2012	SeqNo:	168423	Units:	mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	950	9.6	48.22	958.7	-22.3	57.2	146	0.958	24.5	S
Surr: DNOP	4.9		4.822		101	77.6	140	0	0	

Qualifiers:

- * Value exceeds Maximum Contaminant Level.
- E Value above quantitation range
- J Analyte detected below quantitation limits
- P Sample pH greater than 2

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- R RPD outside accepted recovery limits

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1209B93

02-Oct-12

Client: Animas Environmental Services

Project: Salazar #9

Sample ID	MB-3969	SampType:	MBLK	TestCode:	EPA Method 8015B: Gasoline Range					
Client ID:	PBS	Batch ID:	3969	RunNo:	5856					
Prep Date:	9/27/2012	Analysis Date:	9/29/2012	SeqNo:	168356	Units:	mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	ND	5.0								
Surr: BFB	980		1000		98.4	84	116			

Sample ID	LCS-3969	SampType:	LCS	TestCode:	EPA Method 8015B: Gasoline Range					
Client ID:	LCSS	Batch ID:	3969	RunNo:	5856					
Prep Date:	9/27/2012	Analysis Date:	9/29/2012	SeqNo:	168357	Units:	mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	26	5.0	25.00	0	102	74	117			
Surr: BFB	1000		1000		103	84	116			

Sample ID	MB-4004	SampType:	MBLK	TestCode:	EPA Method 8015B: Gasoline Range					
Client ID:	PBS	Batch ID:	4004	RunNo:	5859					
Prep Date:	9/29/2012	Analysis Date:	9/30/2012	SeqNo:	168574	Units:	%REC			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: BFB	970		1000		97.0	84	116			

Sample ID	LCS-4004	SampType:	LCS	TestCode:	EPA Method 8015B: Gasoline Range					
Client ID:	LCSS	Batch ID:	4004	RunNo:	5859					
Prep Date:	9/29/2012	Analysis Date:	9/30/2012	SeqNo:	168575	Units:	%REC			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: BFB	1000		1000		99.8	84	116			

Qualifiers:

- * Value exceeds Maximum Contaminant Level.
- E Value above quantitation range
- J Analyte detected below quantitation limits
- P Sample pH greater than 2

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- R RPD outside accepted recovery limits

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1209B93

02-Oct-12

Client: Animas Environmental Services

Project: Salazar #9

Sample ID	MB-3969		SampType:	MBLK		TestCode:	EPA Method 8021B: Volatiles			
Client ID:	PBS		Batch ID:	3969		RunNo:	5856			
Prep Date:	9/27/2012		Analysis Date:	9/29/2012		SeqNo:	168386		Units: mg/Kg	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	0.050								
Toluene	ND	0.050								
Ethylbenzene	ND	0.050								
Xylenes, Total	ND	0.10								
Surr: 4-Bromofluorobenzene	0.99		1.000		98.6	80	120			

Sample ID	LCS-3969		SampType:	LCS		TestCode:	EPA Method 8021B: Volatiles			
Client ID:	LCSS		Batch ID:	3969		RunNo:	5856			
Prep Date:	9/27/2012		Analysis Date:	9/29/2012		SeqNo:	168387		Units: mg/Kg	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.94	0.050	1.000	0	94.1	76.3	117			
Toluene	0.96	0.050	1.000	0	95.9	80	120			
Ethylbenzene	0.99	0.050	1.000	0	98.7	77	116			
Xylenes, Total	3.0	0.10	3.000	0	99.5	76.7	117			
Surr: 4-Bromofluorobenzene	1.1		1.000		106	80	120			

Sample ID	MB-4004		SampType:	MBLK		TestCode:	EPA Method 8021B: Volatiles			
Client ID:	PBS		Batch ID:	4004		RunNo:	5859			
Prep Date:	9/29/2012		Analysis Date:	9/30/2012		SeqNo:	168614		Units: %REC	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: 4-Bromofluorobenzene	0.97		1.000		97.4	80	120			

Sample ID	LCS-4004		SampType:	LCS		TestCode:	EPA Method 8021B: Volatiles			
Client ID:	LCSS		Batch ID:	4004		RunNo:	5859			
Prep Date:	9/29/2012		Analysis Date:	9/30/2012		SeqNo:	168615		Units: %REC	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: 4-Bromofluorobenzene	1.0		1.000		104	80	120			

Qualifiers:

- * Value exceeds Maximum Contaminant Level.
- E Value above quantitation range
- J Analyte detected below quantitation limits
- P Sample pH greater than 2

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- R RPD outside accepted recovery limits

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1209B93

02-Oct-12

Client: Animas Environmental Services

Project: Salazar #9

Sample ID	mb-3969		SampType:	MBLK		TestCode:	EPA Method 8260B: VOLATILES			
Client ID:	PBS		Batch ID:	3969		RunNo:	5909			
Prep Date:	9/27/2012		Analysis Date:	10/1/2012		SeqNo:	170213		Units: %REC	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: 1,2-Dichloroethane-d4	0.42		0.5000		84.7	70	130			
Surr: 4-Bromofluorobenzene	0.40		0.5000		79.5	70	130			
Surr: Dibromofluoromethane	0.50		0.5000		100	70	130			
Surr: Toluene-d8	0.35		0.5000		71.0	70	130			

Sample ID	lcs-3969		SampType:	LCS		TestCode:	EPA Method 8260B: VOLATILES			
Client ID:	LCSS		Batch ID:	3969		RunNo:	5909			
Prep Date:	9/27/2012		Analysis Date:	10/1/2012		SeqNo:	170214		Units: %REC	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: 1,2-Dichloroethane-d4	0.44		0.5000		88.3	70	130			
Surr: 4-Bromofluorobenzene	0.39		0.5000		78.8	70	130			
Surr: Dibromofluoromethane	0.40		0.5000		79.2	70	130			
Surr: Toluene-d8	0.36		0.5000		72.3	70	130			

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 |
| P Sample pH greater than 2 | R RPD outside accepted recovery limits |



Hall Environmental Analysis Laboratory
4901 Hawkins NE
Albuquerque, NM 87105
TEL: 505-345-3975 FAX: 505-345-4107
Website: www.hallenvironmental.com

Sample Log-In Check List

Client Name: Animas Environmental

Work Order Number: 1209B93

Received by/date: *LM* 09/26/12

Logged By: Ashley Gallegos

9/26/2012 10:00:00 AM

Completed By: Ashley Gallegos

9/26/2012 5:44:21 PM

Reviewed By: *JD* 09/27/12

Chain of Custody

1. Were seals intact? Yes ☐ No ☐ Not Present ☒
2. Is Chain of Custody complete? Yes ☒ No ☐ Not Present ☐
3. How was the sample delivered? Courier

Log In

4. Coolers are present? (see 19. for cooler specific information) Yes ☒ No ☐ NA ☐
5. Was an attempt made to cool the samples? Yes ☒ No ☐ NA ☐
6. Were all samples received at a temperature of $>0^{\circ}\text{C}$ to 6.0°C ? Yes ☒ No ☐ NA ☐
7. Sample(s) in proper container(s)? Yes ☒ No ☐
8. Sufficient sample volume for indicated test(s)? Yes ☒ No ☐
9. Are samples (except VOA and ONG) properly preserved? Yes ☒ No ☐
10. Was preservative added to bottles? Yes ☐ No ☒ NA ☐
11. VOA vials have zero headspace? Yes ☐ No ☐ No VOA Vials ☒
12. Were any sample containers received broken? Yes ☐ No ☒
13. Does paperwork match bottle labels?
(Note discrepancies on chain of custody) Yes ☒ No ☐ # of preserved bottles checked for pH: ☐
14. Are matrices correctly identified on Chain of Custody? Yes ☒ No ☐ (<2 or >12 unless noted)
15. Is it clear what analyses were requested? Yes ☒ No ☐ Adjusted? ☐
16. Were all holding times able to be met?
(If no, notify customer for authorization.) Yes ☒ No ☐ Checked by: ☐

Special Handling (if applicable)

17. 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: _____

18. Additional remarks: _____

19. Cooler Information

Cooler No	Temp $^{\circ}\text{C}$	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	1.0	Good	Not Present			

Client: Animas Environmental Services

Mailing Address: 624 E. Comanche

Farmington, NM 87401

Phone #: 505 - 564 - 2291

email or Fax#:

QA/QC Package:

☒ Standard ☐ Level 4 (Full Validation)

Accreditation

☐ NELAP☐ Other☐ EDD (Type)

Turn-Around Time:

☒ **Standard** ☐ **Rush**

Project Name:

Salazar #9

Project #:

Project Manager:

Tami Ross

Sampler: H. Woods

☐ No ☒ Yes

Sample Temperature 1 / 6

Date:	Time:	Relinquished by:	Received by:	Date	Time
1/25/12	1638	Heather M. Woods	Christa Walter	1/25/12	1638
Date:	Time:	Relinquished by:	Received by:	Date	Time
1/25/12	1757	Christa Walter	[Signature]	09/26/12	1000

HALL ENVIRONMENTAL ANALYSIS LABORATORY

www.hallenvironmental.com

4901 Hawkins NE - Albuquerque, NM 87109

Tel. 505-345-3975 Fax 505-345-4107

Analysis Request

	X	X	X	BTEX + MTBE + TPH (Gas only)
				(607820)
	X	X	X	TPH Method 8015B (Gas/Diesel)
				TPH (Method 418.1)
				EDB (Method 504.1)
				8310 (PNA or PAH)
				RCRA 8 Metals
				Anions (F, Cl, NO ₃ , NO ₂ , PO ₄ , SO ₄)
				8081 Pesticides / 8082 PCB's
				8260B (VOA)
				8270 (Semi-VOA)

Remarks: Bill to Enterprise Products Company

If necessary, samples submitted to Hall Environmental may be subcontracted to other accredited laboratories. This service is not available for all tests.



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

October 23, 2012

Tami Ross

Animas Environmental Services

624 East Comanche

Farmington, NM 87401

TEL: (505) 793-2072

FAX

RE: Salazar #9

OrderNo.: 1210690

Dear Tami Ross:

Hall Environmental Analysis Laboratory received 5 sample(s) on 10/12/2012 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. 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. 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.

Sincerely,

Andy Freeman

Laboratory Manager

4901 Hawkins NE

Albuquerque, NM 87109

Analytical Report

Lab Order 1210690

Date Reported: 10/23/2012

Hall Environmental Analysis Laboratory, Inc.**CLIENT:** Animas Environmental Services**Client Sample ID:** SC-1**Project:** Salazar #9**Collection Date:** 10/10/2012 11:55:00 AM**Lab ID:** 1210690-001**Matrix:** SOIL**Received Date:** 10/12/2012 9:50:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015B: DIESEL RANGE ORGANICS						Analyst: JMP
Diesel Range Organics (DRO)	ND	9.6		mg/Kg	1	10/17/2012 7:49:21 AM
Surr: DNOP	93.2	77.6-140		%REC	1	10/17/2012 7:49:21 AM
EPA METHOD 8015B: GASOLINE RANGE						Analyst: NSB
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	10/20/2012 12:22:59 AM
Surr: BFB	96.0	84-116		%REC	1	10/20/2012 12:22:59 AM
EPA METHOD 8021B: VOLATILES						Analyst: NSB
Benzene	ND	0.049		mg/Kg	1	10/20/2012 12:22:59 AM
Toluene	ND	0.049		mg/Kg	1	10/20/2012 12:22:59 AM
Ethylbenzene	ND	0.049		mg/Kg	1	10/20/2012 12:22:59 AM
Xylenes, Total	ND	0.098		mg/Kg	1	10/20/2012 12:22:59 AM
Surr: 4-Bromofluorobenzene	97.5	80-120		%REC	1	10/20/2012 12:22:59 AM

Qualifiers:

- * Value exceeds Maximum Contaminant Level.
- E Value above quantitation range
- J Analyte detected below quantitation limits
- P Sample pH greater than 2
- RL Reporting Detection Limit

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- R RPD outside accepted recovery limits
- S Spike Recovery outside accepted recovery limits

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1210690

Date Reported: 10/23/2012

CLIENT: Animas Environmental Services

Client Sample ID: SC-2

Project: Salazar #9

Collection Date: 10/10/2012 1:25:00 PM

Lab ID: 1210690-002

Matrix: SOIL

Received Date: 10/12/2012 9:50:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015B: DIESEL RANGE ORGANICS						Analyst: JMP
Diesel Range Organics (DRO)	ND	9.8		mg/Kg	1	10/17/2012 8:54:10 AM
Surr: DNOP	91.3	77.6-140		%REC	1	10/17/2012 8:54:10 AM
EPA METHOD 8015B: GASOLINE RANGE						Analyst: NSB
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	10/20/2012 12:51:40 AM
Surr: BFB	90.3	84-116		%REC	1	10/20/2012 12:51:40 AM
EPA METHOD 8021B: VOLATILES						Analyst: NSB
Benzene	ND	0.049		mg/Kg	1	10/20/2012 12:51:40 AM
Toluene	ND	0.049		mg/Kg	1	10/20/2012 12:51:40 AM
Ethylbenzene	ND	0.049		mg/Kg	1	10/20/2012 12:51:40 AM
Xylenes, Total	ND	0.098		mg/Kg	1	10/20/2012 12:51:40 AM
Surr: 4-Bromofluorobenzene	97.5	80-120		%REC	1	10/20/2012 12:51:40 AM

Qualifiers:

- * Value exceeds Maximum Contaminant Level.
- E Value above quantitation range
- J Analyte detected below quantitation limits
- P Sample pH greater than 2
- RL Reporting Detection Limit

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- R RPD outside accepted recovery limits
- S Spike Recovery outside accepted recovery limits

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Animas Environmental Services

Client Sample ID: SC-3

Project: Salazar #9

Collection Date: 10/10/2012 2:22:00 PM

Lab ID: 1210690-003

Matrix: SOIL

Received Date: 10/12/2012 9:50:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015B: DIESEL RANGE ORGANICS						Analyst: JMP
Diesel Range Organics (DRO)	ND	9.8		mg/Kg	1	10/17/2012 9:15:47 AM
Surr: DNOP	94.7	77.6-140		%REC	1	10/17/2012 9:15:47 AM
EPA METHOD 8015B: GASOLINE RANGE						Analyst: NSB
Gasoline Range Organics (GRO)	17	4.8		mg/Kg	1	10/20/2012 1:20:19 AM
Surr: BFB	150	84-116	S	%REC	1	10/20/2012 1:20:19 AM
EPA METHOD 8021B: VOLATILES						Analyst: NSB
Benzene	ND	0.048		mg/Kg	1	10/20/2012 1:20:19 AM
Toluene	ND	0.048		mg/Kg	1	10/20/2012 1:20:19 AM
Ethylbenzene	ND	0.048		mg/Kg	1	10/20/2012 1:20:19 AM
Xylenes, Total	ND	0.096		mg/Kg	1	10/20/2012 1:20:19 AM
Surr: 4-Bromofluorobenzene	101	80-120		%REC	1	10/20/2012 1:20:19 AM

Qualifiers:

- * Value exceeds Maximum Contaminant Level.
- E Value above quantitation range
- J Analyte detected below quantitation limits
- P Sample pH greater than 2
- RL Reporting Detection Limit

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- R RPD outside accepted recovery limits
- S Spike Recovery outside accepted recovery limits

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1210690

Date Reported: 10/23/2012

CLIENT: Animas Environmental Services

Client Sample ID: SC-4

Project: Salazar #9

Collection Date: 10/10/2012 2:30:00 PM

Lab ID: 1210690-004

Matrix: SOIL

Received Date: 10/12/2012 9:50:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015B: DIESEL RANGE ORGANICS						Analyst: JMP
Diesel Range Organics (DRO)	ND	9.8		mg/Kg	1	10/17/2012 9:37:19 AM
Surr: DNOP	95.1	77.6-140		%REC	1	10/17/2012 9:37:19 AM
EPA METHOD 8015B: GASOLINE RANGE						Analyst: NSB
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	10/20/2012 1:49:03 AM
Surr: BFB	96.5	84-116		%REC	1	10/20/2012 1:49:03 AM
EPA METHOD 8021B: VOLATILES						Analyst: NSB
Benzene	ND	0.049		mg/Kg	1	10/20/2012 1:49:03 AM
Toluene	ND	0.049		mg/Kg	1	10/20/2012 1:49:03 AM
Ethylbenzene	ND	0.049		mg/Kg	1	10/20/2012 1:49:03 AM
Xylenes, Total	ND	0.098		mg/Kg	1	10/20/2012 1:49:03 AM
Surr: 4-Bromofluorobenzene	96.2	80-120		%REC	1	10/20/2012 1:49:03 AM

Qualifiers:

- * Value exceeds Maximum Contaminant Level.
- E Value above quantitation range
- J Analyte detected below quantitation limits
- P Sample pH greater than 2
- RL Reporting Detection Limit

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- R RPD outside accepted recovery limits
- S Spike Recovery outside accepted recovery limits

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1210690

Date Reported: 10/23/2012

CLIENT: Animas Environmental Services

Client Sample ID: SC-5

Project: Salazar #9

Collection Date: 10/10/2012 3:25:00 PM

Lab ID: 1210690-005

Matrix: SOIL

Received Date: 10/12/2012 9:50:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015B: DIESEL RANGE ORGANICS						Analyst: JMP
Diesel Range Organics (DRO)	ND	9.9		mg/Kg	1	10/17/2012 10:20:35 AM
Surr: DNOP	93.0	77.6-140		%REC	1	10/17/2012 10:20:35 AM
EPA METHOD 8015B: GASOLINE RANGE						Analyst: NSB
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	10/20/2012 2:17:49 AM
Surr: BFB	93.4	84-116		%REC	1	10/20/2012 2:17:49 AM
EPA METHOD 8021B: VOLATILES						Analyst: NSB
Benzene	ND	0.049		mg/Kg	1	10/20/2012 2:17:49 AM
Toluene	ND	0.049		mg/Kg	1	10/20/2012 2:17:49 AM
Ethylbenzene	ND	0.049		mg/Kg	1	10/20/2012 2:17:49 AM
Xylenes, Total	ND	0.099		mg/Kg	1	10/20/2012 2:17:49 AM
Surr: 4-Bromofluorobenzene	96.2	80-120		%REC	1	10/20/2012 2:17:49 AM

Qualifiers:

- * Value exceeds Maximum Contaminant Level.
- E Value above quantitation range
- J Analyte detected below quantitation limits
- P Sample pH greater than 2
- RL Reporting Detection Limit

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- R RPD outside accepted recovery limits
- S Spike Recovery outside accepted recovery limits

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1210690

23-Oct-12

Client: Animas Environmental Services

Project: Salazar #9

Sample ID	MB-4344	SampType:	MBLK	TestCode:	EPA Method 8015B: Diesel Range Organics					
Client ID:	PBS	Batch ID:	4344	RunNo:	6288					
Prep Date:	10/16/2012	Analysis Date:	10/17/2012	SeqNo:	181249	Units:	mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	ND	10								
Surr: DNOP	8.6		10.00		85.7	77.6	140			

Sample ID	LCS-4344	SampType:	LCS	TestCode:	EPA Method 8015B: Diesel Range Organics					
Client ID:	LCSS	Batch ID:	4344	RunNo:	6288					
Prep Date:	10/16/2012	Analysis Date:	10/17/2012	SeqNo:	181251	Units:	mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	50	10	50.00	0	99.7	52.6	130			
Surr: DNOP	3.9		5.000		78.5	77.6	140			

Qualifiers:

- * Value exceeds Maximum Contaminant Level.
- E Value above quantitation range
- J Analyte detected below quantitation limits
- P Sample pH greater than 2

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- R RPD outside accepted recovery limits

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1210690

23-Oct-12

Client: Animas Environmental Services

Project: Salazar #9

Sample ID	LCS-4331		SampType: LCS		TestCode: EPA Method 8015B: Gasoline Range					
Client ID:	LCSS		Batch ID: 4331		RunNo: 6371					
Prep Date:	10/16/2012		Analysis Date: 10/20/2012		SeqNo: 183174		Units: mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	22	5.0	25.00	0	89.1	74	117			
Surr: BFB	940		1000		94.1	84	116			

Qualifiers:

- * Value exceeds Maximum Contaminant Level.
- E Value above quantitation range
- J Analyte detected below quantitation limits
- P Sample pH greater than 2

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- R RPD outside accepted recovery limits

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1210690

23-Oct-12

Client: Animas Environmental Services

Project: Salazar #9

Sample ID	MB-4331		SampType:	MBLK		TestCode:	EPA Method 8021B: Volatiles			
Client ID:	PBS		Batch ID:	4331		RunNo:	6371			
Prep Date:	10/16/2012		Analysis Date:	10/20/2012		SeqNo:	183194		Units: mg/Kg	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	0.050								
Toluene	ND	0.050								
Ethylbenzene	ND	0.050								
Xylenes, Total	ND	0.10								
Surr: 4-Bromofluorobenzene	1.0		1.000		101	80	120			

Sample ID	LCS-4331		SampType:	LCS		TestCode:	EPA Method 8021B: Volatiles			
Client ID:	LCSS		Batch ID:	4331		RunNo:	6371			
Prep Date:	10/16/2012		Analysis Date:	10/20/2012		SeqNo:	183195		Units: mg/Kg	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	1.0	0.050	1.000	0	104	76.3	117			
Toluene	1.0	0.050	1.000	0	104	80	120			
Ethylbenzene	1.0	0.050	1.000	0	105	77	116			
Xylenes, Total	3.2	0.10	3.000	0	106	76.7	117			
Surr: 4-Bromofluorobenzene	1.1		1.000		107	80	120			

Qualifiers:

- * Value exceeds Maximum Contaminant Level.
- E Value above quantitation range
- J Analyte detected below quantitation limits
- P Sample pH greater than 2

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- R RPD outside accepted recovery limits

Sample Log-In Check List

Client Name: Animas Environmental Work Order Number: 1210690
Received by/date: MG 10/12/12
Logged By: Lindsay Mangin 10/12/2012 9:50:00 AM *[Signature]*
Completed By: Lindsay Mangin 10/12/2012 3:47:53 PM *[Signature]*
Reviewed By: IO 10/16/12

Chain of Custody

1. Were seals intact? Yes ☐ No ☐ Not Present ☒
2. Is Chain of Custody complete? Yes ☒ No ☐ Not Present ☐
3. How was the sample delivered? Courier

Log In

4. Coolers are present? (see 19. for cooler specific information) Yes ☒ No ☐ NA ☐
5. Was an attempt made to cool the samples? Yes ☒ No ☐ NA ☐
6. Were all samples received at a temperature of $>0^{\circ}\text{C}$ to 6.0°C ? Yes ☒ No ☐ NA ☐
7. Sample(s) in proper container(s)? Yes ☒ No ☐
8. Sufficient sample volume for indicated test(s)? Yes ☒ No ☐
9. Are samples (except VOA and ONG) properly preserved? Yes ☒ No ☐
10. Was preservative added to bottles? Yes ☐ No ☒ NA ☐
11. VOA vials have zero headspace? Yes ☐ No ☐ No VOA Vials ☒
12. Were any sample containers received broken? Yes ☐ No ☒
13. Does paperwork match bottle labels?
(Note discrepancies on chain of custody) Yes ☒ No ☐
14. Are matrices correctly identified on Chain of Custody? Yes ☒ No ☐
15. Is it clear what analyses were requested? Yes ☒ No ☐
16. 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)

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

Person Notified:	_____	Date:	_____
By Whom:	_____	Via:	<input type="checkbox"/> eMail <input type="checkbox"/> Phone <input type="checkbox"/> Fax <input type="checkbox"/> In Person
Regarding:	_____		
Client Instructions:	_____		

18. Additional remarks:

19. Cooler Information

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

☐ EDD (Type)

Sample 1

Tel. 505-345-3975 Fax 505-345-4107

Analysis Request

[illegible]

Received by: _____ Date _____ Time _____
Michelle Ann 10/12/12 0950

Remarks: BILL TO ENTERPRISE PRODUCTS
COMPANY

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.

District I
1625 N. French Dr., Hobbs, NM 88240
District II
811 S. First St., Artesia, NM 88210
District III
1000 Rio Brazos Road, Aztec, NM 87410
District IV
1220 S. St. Francis Dr., Santa Fe, NM 87505

State of New Mexico
Energy Minerals and Natural Resources

Oil Conservation Division
1220 South St. Francis Dr.
Santa Fe, NM 87505

Form C-141
Revised August 8, 2011

Submit 1 Copy to appropriate District Office in
accordance with 19.15.29 NMAC.

Release Notification and Corrective Action

OPERATOR

☐ Initial Report ☒ Final Report

Name of Company Enterprise Field Services	Contact Aaron Dailey
Address 614 Reilly Avenue, Farmington, NM 87418	Telephone No. (505) 599-2286
Facility Name Lateral 2C-45 pipeline	Facility Type Natural Gas Gathering Pipeline

Surface Owner BLM	Mineral Owner BLM	API No.
-------------------	-------------------	---------

LOCATION OF RELEASE

Unit Letter J	Section 24	Township 25N	Range 6W	Feet from the	North/South Line	Feet from the	East/West Line	County Rio Arriba
---------------	------------	--------------	----------	---------------	------------------	---------------	----------------	-------------------

Latitude N36.38347 Longitude W107.41676 (Decimal Degrees)

NATURE OF RELEASE

Type of Release Natural gas condensate	Volume of Release Unknown	Volume Recovered 3,128 cubic yards contaminated soil and 12 barrels of contaminated water
Source of Release	Date and Hour of Occurrence	Date and Hour of Discovery 3/31/2012 @ 0900 hrs
Was Immediate Notice Given? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Not Required	If YES, To Whom? Brandon Powell, Glenn von Gonten of NM OCD	
By Whom? Aaron Dailey, Enterprise Field Services	Date and Hour 3/31/2012 @ 10:20 hours	
Was a Watercourse Reached? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	If YES, Volume Impacting the Watercourse. Unknown Volume in Lapis Canyon wash	

If a Watercourse was Impacted, Describe Fully.*

Please refer to the attached third party environmental corrective action report for details.

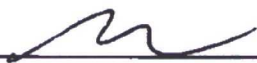
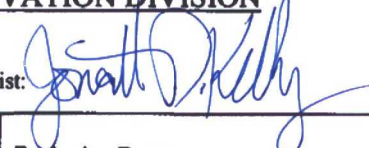
Describe Cause of Problem and Remedial Action Taken.*

A corrosion leak and historical contamination was discovered on this pipeline in the wash. The gathering line was rendered out of service and replaced with new pipe throughout the entire section of the Lapis Wash area.

Describe Area Affected and Cleanup Action Taken.*

The following week, a cleanup response occurred, where 3,128 cubic yards of condensate contaminated soil was removed and disposed of at an OCD permitted land farm facility. During the initial response, it was discovered that groundwater had been impacted in the area where the condensate impacted soil was removed. Subsequent groundwater sampling demonstrates that groundwater sampled was found well below applicable WQCC standards. Third party environmental oversight was utilized for the duration of the project. Please refer to the attached third party environmental corrective action report for specific details.

I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to NMOCD rules and regulations all operators are required to report and/or file certain release notifications and perform corrective actions for releases which may endanger public health or the environment. The acceptance of a C-141 report by the NMOCD marked as "Final Report" does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to ground water, surface water, human health or the environment. In addition, NMOCD acceptance of a C-141 report does not relieve the operator of responsibility for compliance with any other federal, state, or local laws and/or regulations.

Signature: 	OIL CONSERVATION DIVISION	
Printed Name: Matt Marra	Approved by Environmental Specialist: 	
Title: Sr. Director, Environmental	Approval Date: 4/6/2013	Expiration Date:
E-mail Address: memarra@eprod.com	Conditions of Approval:	Attached <input type="checkbox"/>
Date: 1-15-2013 Phone: (713) 381-6684		

* Attach Additional Sheets If Necessary

nJK 13 0934774



Animas Environmental Services, LLC

www.animasenvironmental.com

624 E. Comanche
Farmington, NM 87401
505-564-2281

Durango, Colorado
970-403-3084

December 18, 2012

Aaron Dailey
Enterprise Field Services, LLC
614 Reilly Avenue
Farmington, New Mexico 87401

**RE: Continued Site Assessment Report
Lateral 2C-45 March 2012 Pipeline Release
NW ¼ SE ¼, Sec. 24, T29N, R6W
Rio Arriba County, New Mexico**

RCVD MAR 18 '13
OIL CONS. DIV.
DIST. 3

Dear Mr. Dailey:

Animas Environmental Services, LLC (AES) has prepared this Continued Release Assessment Report, on behalf of Enterprise Field Services, LLC, (Enterprise), which details the continued assessment of a natural gas and condensate release from the Lateral 2C-45 pipeline. The release was discovered on March 31, 2012, and is located within Lapis Canyon wash in Rio Arriba County, New Mexico. The release was a result of pipeline corrosion. Initial assessment and mitigation activities were detailed in the *Initial Release Assessment and Mitigation Report* prepared by AES and dated September 21, 2012.

1.0 Site Information

1.1 Location

Location - NW¼ SE¼, Section 24, T25N, R6W, Rio Arriba County, New Mexico

Latitude/Longitude - N36.38347 and W108.41676, respectively

Surface Owner – Federal (Bureau of Land Management)

Figure 1. Topographic Site Location Map

Figure 2. Aerial Site Location Map

1.2 NMOCD Ranking

Prior to the initial release assessment in March 2012, and in accordance with the New Mexico Oil Conservation Division (NMOCD) *Guidelines for Remediation of Leaks, Spills, and Releases* (August 1993), the release location was assigned a ranking score to establish release action levels. The ranking score was obtained in part by reviewing available records of nearby oil/gas wells using the NMOCD online database. No records for nearby well locations with similar surface elevations were found to assist in determining NMOCD ranking. Additionally, the New Mexico Office of the State Engineer

(NMOSE) database was reviewed for nearby private domestic water wells, and no registered water wells were reported to be located within 1,000 feet of the location.

Google Earth and the New Mexico Tech Petroleum Recovery Research Center online mapping tool (<http://ford.nmt.edu/react/project.html>) were accessed to aid in the identification of downgradient surface water. Additionally, AES personnel assessed the NMOCD ranking criteria using topographical interpretation and visual reconnaissance on-site. The release location is within Lapis Wash, and groundwater was estimated to be less than 50 feet below ground surface (bgs). Depth to groundwater was confirmed at 12 feet bgs during the initial release assessment and mitigation. Based on this information, the location was assessed a ranking score of 40.

1.3 Initial Release and Mitigation Report Summary

On March 31, 2012, a condensate release was discovered from the 4-inch diameter Lateral 2C-45 pipeline. Upon repair of the pipeline, Enterprise contractors excavated an area measuring 35 feet by 30 feet by 13 feet deep around the March 2012 release location. On April 1, 2012, Enterprise completed an inspection of the Lateral 2C-45 pipeline and determined that there were two historical release points south of the March 2012 release point. As a result, 140 feet of pipeline, including the March 2012 release point, were abandoned in place at 12 feet bgs, and a new pipeline segment was installed at 8 feet bgs. The new pipeline trench, which extended from the March 2012 release excavation, measured 120 feet by 4 feet by 8 feet deep.

On April 9 through April 24, 2012, Enterprise contractors expanded the excavation to continue the removal of petroleum contaminated soil (PCS). The final excavation area measured approximately 8,800 square feet ranging from 10 to 19 feet deep and was backfilled with stockpiled overburden and clean imported material. AES monitored the progress of the excavation via field screening for volatile organic compounds (VOCs) and confirmation laboratory analysis of soil samples.

Groundwater was encountered at approximately 12 feet bgs within the excavation on the western side of the pipeline. Three groundwater samples (GW-1 through GW-3) were collected from the excavation for laboratory analysis.

Based on soil laboratory analytical results, PCS was removed to below NMOCD action levels for benzene, total benzene, toluene, ethyl-benzene, and xylenes (BTEX), and total petroleum hydrocarbons (TPH) within the accessible areas of the excavation. Groundwater laboratory analytical results confirmed that groundwater was impacted by dissolved phase benzene with concentrations exceeding the applicable New Mexico Water Quality Commission (WQCC) standard in GW-2 (60 µg/L) and GW-3 (34 µg/L). Dissolved phase toluene, ethylbenzene, and total xylenes were below applicable WQCC standards.

AES recommended the installation of a temporary soil boring using a Geoprobe in order to investigate PCS that may exist in the southwestern portion of the excavation where access was restricted due to cave-ins along with the installation of Hydropunch points to delineate the dissolved phase contaminant plume.

2.0 Continued Site Assessment – November 2012

On November 7, 2012, AES completed a continued site assessment along the Lateral 2C-45 pipeline. Using a GeoProbe DT 6620 track-mounted direct push rig operated by Earth Worx, Los Lunas, New Mexico, one soil boring (SB-1) was installed within the southwestern portion of the former excavation where access was restricted during the initial release assessment. Soil samples were collected from SB-1 for field screening and laboratory analysis.

A temporary monitor well (GW-2) was installed within SB-1. Additionally, four Hydropunch points (GW-1 and GW-3 through GW-5) were installed using the Geoprobe. GW-1 was installed in the area that groundwater contamination was previously confirmed, and GW-3 was installed downgradient of that location. GW-4 was installed downgradient within Lapis Wash, and GW-5 was installed upgradient of the release area, along the east side of the access road. Groundwater samples were collected from each well for laboratory analysis. The soil boring and temporary well locations are included on Figure 3.

2.1 Notifications

AES notified Enterprise by telephone 48 hours prior to field activities. AES also utilized the New Mexico One-Call system to identify and mark all underground utilities at the site before initiating the continued assessment.

3.0 Soil Sampling

AES installed one soil boring (SB-1) to define the lateral and vertical extent of near surface and subsurface soil contamination in the southwestern portion of the former excavation, in an area that was inaccessible during the initial release assessment in April 2012. The soil boring was advanced to a total depth of 28 feet bgs. The location of SB-1 is presented on Figure 3.

3.1 Soil Lithology

Soils encountered in SB-1 consisted of probable fill material from the mitigation excavation to a depth of approximately 12 feet bgs, combined with slough material derived from the excavation and backfill process. Soils in this zone consisted of medium brown, moist to very moist sandy lean clay with no odor. Soils below this zone to a depth of approximately 22 feet bgs consisted of native, very dark grey to black, wet sandy lean clay, and exhibited a hydrocarbon odor. Below 22 feet bgs, the soils consisted of interbedded greyish-brown, wet clayey sand and sandy lean clay with no odor noted.

3.2 Soil Sample Collection

Soil samples from SB-1 were collected from continuously driven core-barrel samplers during advancement of the soil borings. At 4-ft intervals, a soil sample was collected from the core barrel sampler and transferred to appropriately labeled sample containers.

3.2.1 Field Screening

The sample was split for field screening of VOCs with a photo-ionization detector (PID) organic vapor meter (OVM), which was calibrated to 100 parts per million (ppm) with isobutylene gas. The soil sample collected for laboratory analysis was collected from the interval with the highest VOC reading.

3.2.2 Laboratory Analyses - Soil

The soil sample collected from SB-1 for laboratory analysis was submitted to Hall Environmental Analysis Laboratory (Hall), Albuquerque, New Mexico, for laboratory analysis of the following parameters:

- BTEX – USEPA Method 8021;
- TPH Gasoline Range Organics (GRO) and Diesel Range Organics (DRO)– EPA Method 8015 Modified.

Once collected, the sample was preserved in laboratory-supplied containers and stored in an insulated cooler containing ice. The sample was shipped by Hall personnel in insulated coolers containing ice at less than 6°C via bus to the laboratory.

3.3 Soil Field Screening and Laboratory Analytical Results

Field screening VOC vapor readings in SB-1 ranged from 8.1 ppm at near surface up to 44.0 ppm at 16 to 20 feet bgs. Soil analytical results showed that benzene, total BTEX, and TPH concentrations in SB-1 at 16 to 20 feet bgs were below laboratory detection

limits. The field screening and laboratory analytical results have been tabulated and are presented in Table 1 and on Figure 3. Soil analytical laboratory reports are attached.

Table 1. Soil Field Screening and Laboratory Analytical Results
Lateral 2C-45 March 2012 Release
November 2012 Continued Site Assessment

Sample ID	Sample Date	Depth (ft)	VOCs OVM (ppm)	Benzene (mg/kg)	Total BTEX (mg/kg)	TPH- GRO (mg/kg)	TPH- DRO (mg/kg)
NMOCD Action Level			100	10	50	100*	
SB-1	11/7/12	0 to 4	8.1	NA	NA	NA	NA
		4 to 8	16.2	NA	NA	NA	NA
		8 to 12	20.0	NA	NA	NA	NA
		12 to 16	37.9	NA	NA	NA	NA
		16 to 20	44.0	<0.048	<0.24	<4.8	<10
		24 to 28	14.7	NA	NA	NA	NA

*Action level determined by the NMOCD ranking score per *NMOCD Guidelines for Leaks, Spills, and Releases* (August 1993).

4.0 Groundwater Sampling

On November 7, 2012, AES installed and collected samples from a total of five temporary Hydropunch points (GW-1 through GW-5). Groundwater was encountered at depths ranging from 12 to 28 feet bgs.

4.1 Laboratory Analyses

Groundwater samples were collected using new disposable bailers, preserved in laboratory-supplied containers, and stored in an insulated cooler containing ice. Samples were shipped in insulated coolers containing ice at less than 6°C to the analytical laboratory (Hall). Groundwater samples were laboratory analyzed for:

- BTEX per USEPA Method 8021B.

4.2 Laboratory Analytical Results

Dissolved phase analytical results show reported concentrations for benzene, toluene, ethylbenzene, and xylenes were below laboratory detection limits in each sample (GW-1 through GW-5). The analytical results for groundwater samples have been tabulated and are presented in Table 2 and on Figure 3. Groundwater analytical laboratory reports are attached.

Table 2. Groundwater Laboratory Analytical Results
Lateral 2C-45 March 2012 Release
November 2012 Continued Release Assessment

<i>Sample ID</i>	<i>Sample Date</i>	<i>Benzene (µg/L)</i>	<i>Toluene (µg/L)</i>	<i>Ethyl-benzene (µg/L)</i>	<i>Total Xylenes (µg/L)</i>
WQCC Standard		10	750	750	620
GW-1	11/7/12	<2.0	<2.0	<2.0	<4.0
GW-2	11/7/12	<2.0	<2.0	<2.0	<4.0
GW-3	11/7/12	<2.0	<2.0	<2.0	<4.0
GW-4	11/7/12	<2.0	<2.0	<2.0	<4.0
GW-5	11/7/12	<2.0	<2.0	<2.0	<4.0

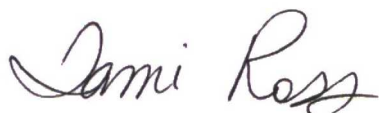
5.0 Conclusions and Recommendations

On November 7, 2012, AES personnel completed a continued site assessment at the Lateral 2C-45 March 2012 release location. As part of the continued site assessment, one soil boring (SB-1) was installed to approximately 28 feet bgs. Groundwater samples were collected from SB-1 and from four additional temporary wells. Soil analytical results from SB-1 were below laboratory detection limits for benzene, total BTEX and TPH and confirmed that petroleum contaminated soils have been removed to below NMOCD action levels within the southwestern portion of the excavation that was previously inaccessible for sampling during the release assessment in March and April 2012.


Groundwater analytical results for GW-1 through GW-5 were also below laboratory detection limits for BTEX and confirm that natural attenuation of residual dissolved phase contaminants has occurred at the release location since source removal of soils in March and April 2012.

Based on field observations, field screening, and soil and groundwater laboratory analytical results, soil concentrations are below NMOCD action levels, and groundwater concentrations are well below applicable WQCC standards. AES recommends no further action. If you have any questions about this report or site conditions, please do not hesitate to contact me or Ross Kennemer at (505) 564-2281.

Sincerely,



Tami C. Ross, CHMM
Project Manager

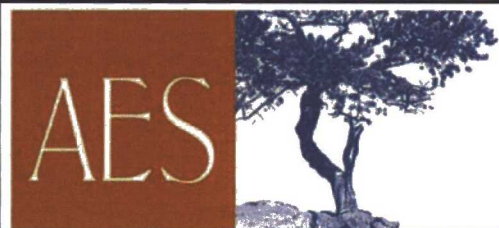
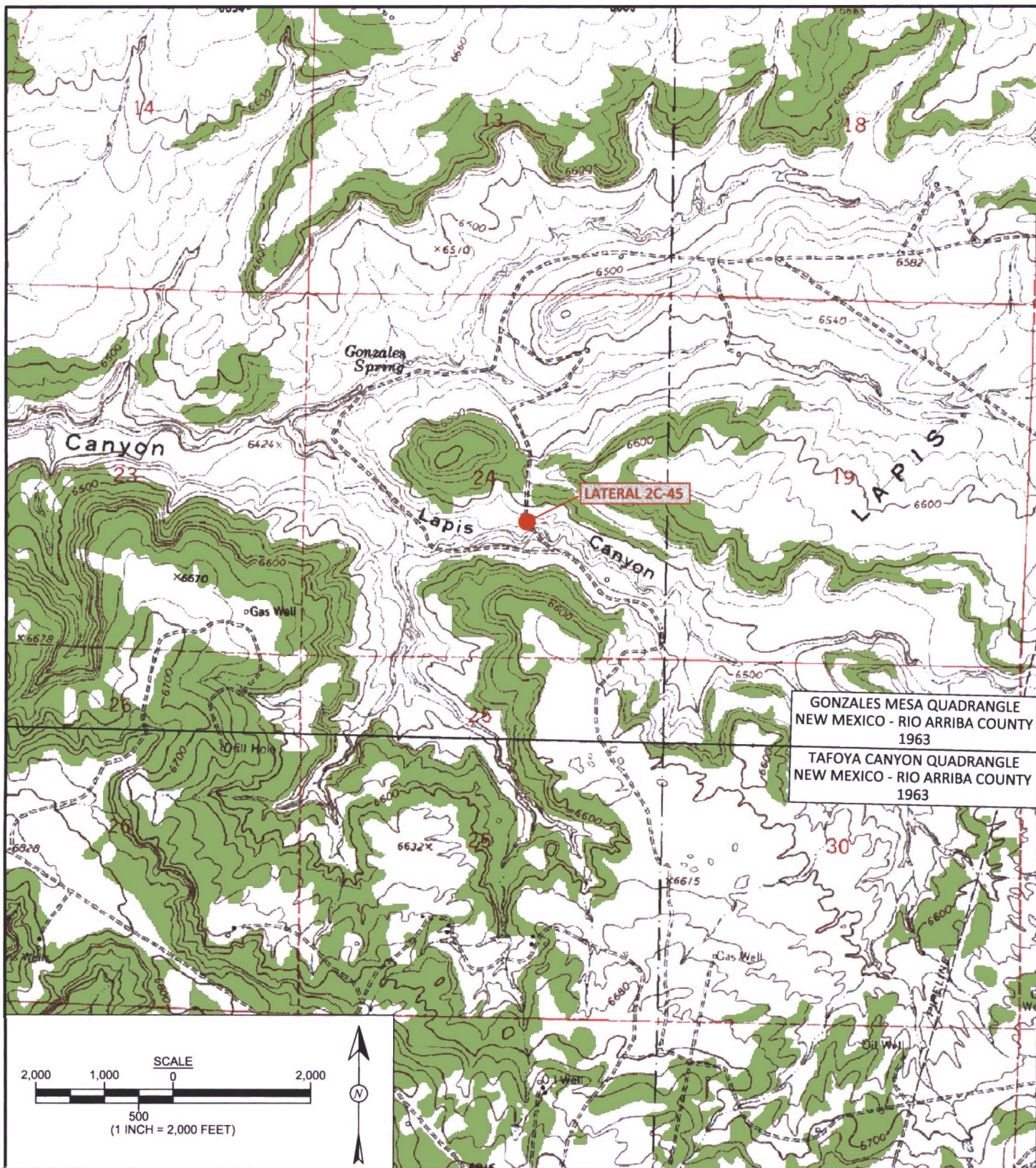


Elizabeth McNally, P.E.

Attachments:

- Figure 1. Topographic Site Location Map
- Figure 2. Aerial Site Map
- Figure 3. Hydropunch and Soil Boring Locations and Results, November 2012
- Soil Boring Log SB-1
- Laboratory Analytical Reports (Hall 1211354)

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Release Assessment Report 121812.docx



Animas Environmental Services, LLC

DRAWN BY:
C. Lameman

REVISIONS BY:
C. Lameman

CHECKED BY:
T. Ross

APPROVED BY:
E. McNally

DATE DRAWN:
November 8, 2012

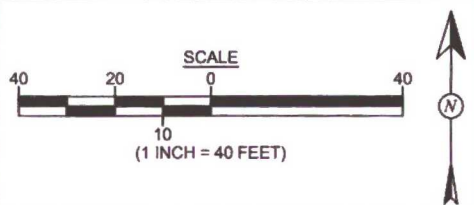
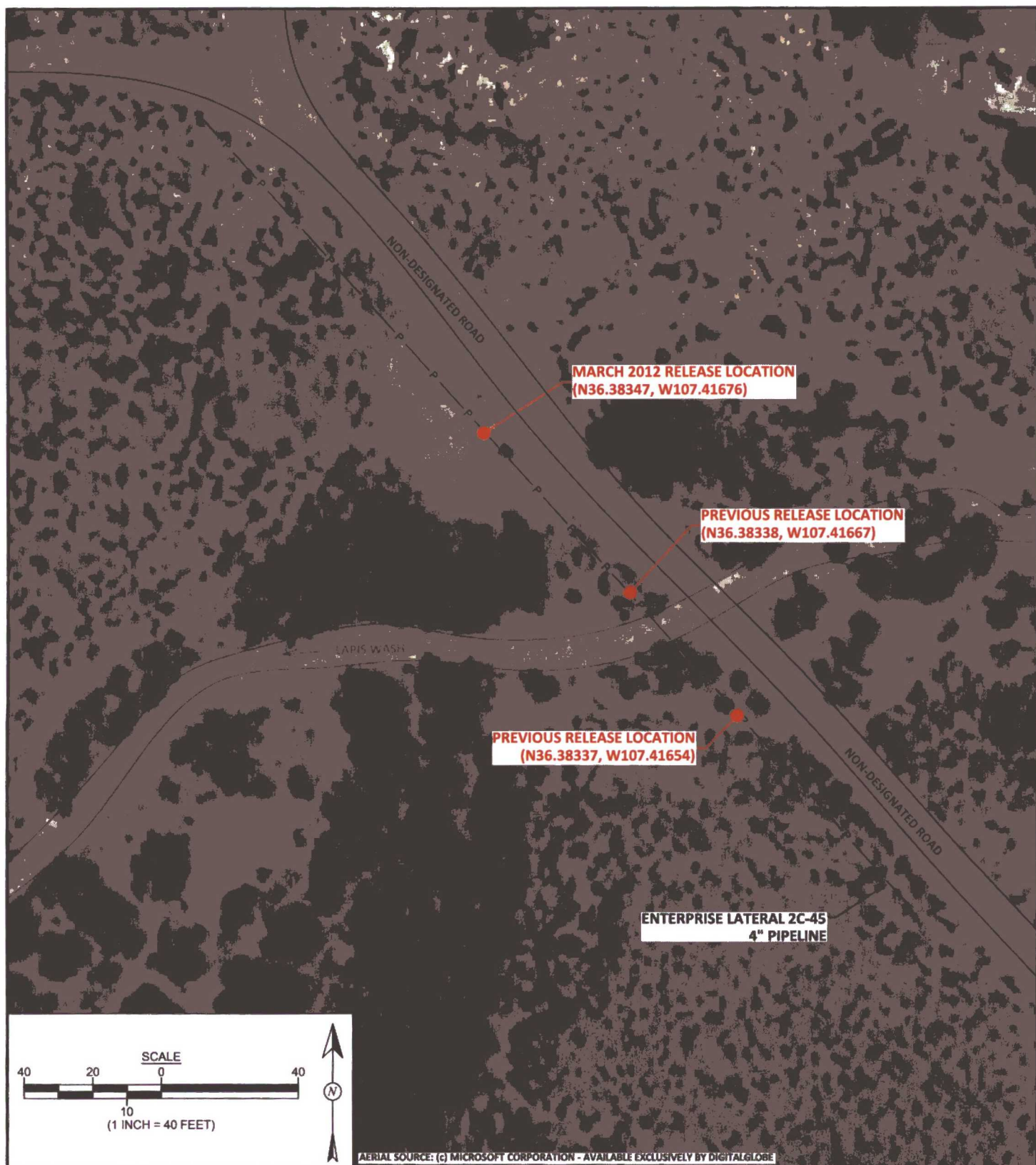
DATE REVISED:
December 14, 2012

DATE CHECKED:
December 14, 2012

DATE APPROVED:
December 17, 2012

FIGURE 1

TOPOGRAPHIC SITE LOCATION MAP
 ENTERPRISE FIELD SERVICES, LLC
 LATERAL 2C-45 CONTINUED SITE ASSESSMENT
 RIO ARRIBA COUNTY, NEW MEXICO
 NW¼ SE¼, SECTION 24, T25N, R6W
 N36.38347, W107.41676



AERIAL SOURCE: (c) MICROSOFT CORPORATION - AVAILABLE EXCLUSIVELY BY DIGITALGLOBE



Animas Environmental Services, LLC

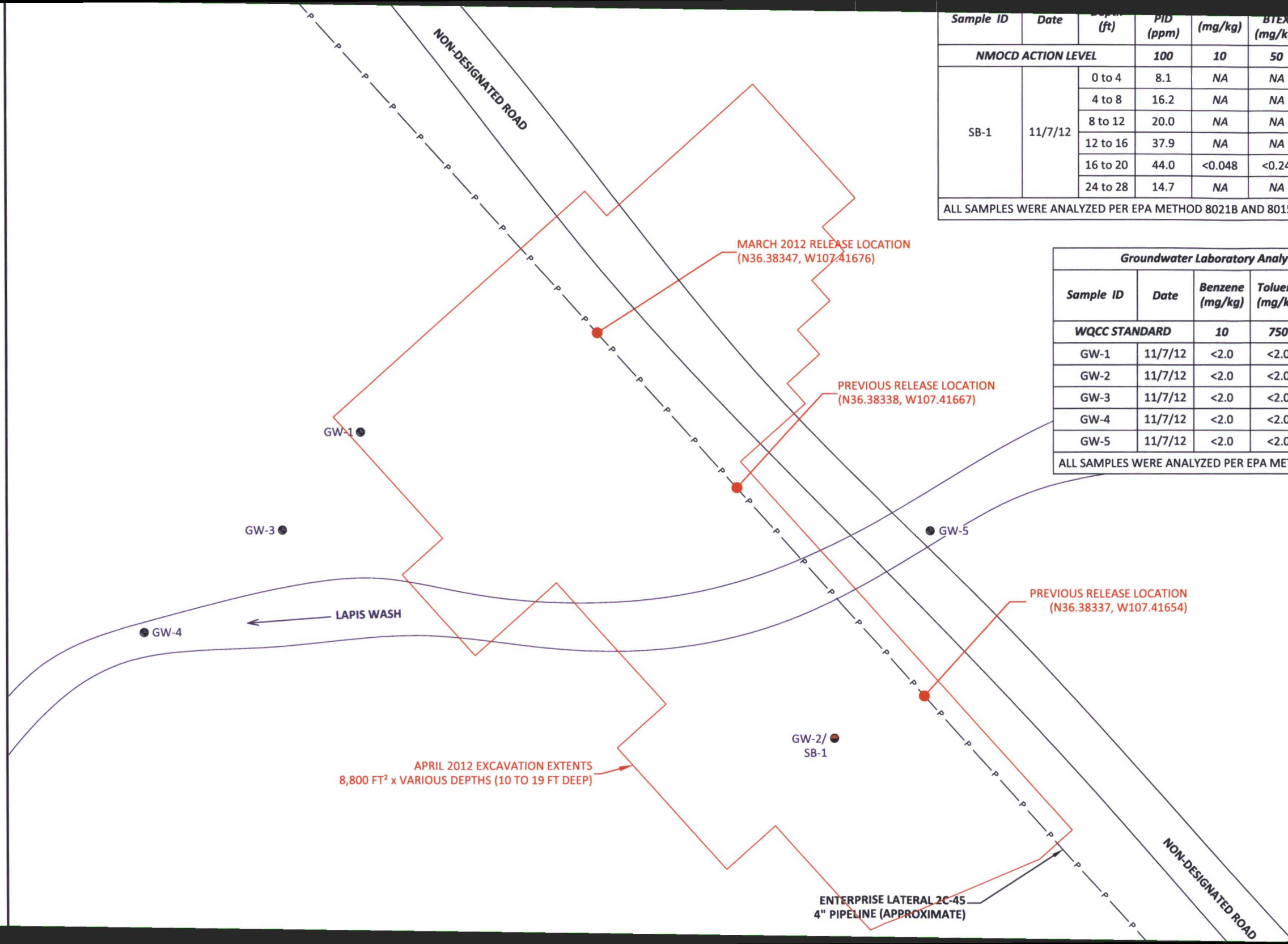
DRAWN BY: C. Lameman	DATE DRAWN: November 8, 2012
REVISIONS BY: C. Lameman	DATE REVISED: December 14, 2012
CHECKED BY: T. Ross	DATE CHECKED: December 14, 2012
APPROVED BY: E. McNally	DATE APPROVED: December 17, 2012

FIGURE 2

AERIAL SITE MAP
 ENTERPRISE FIELD SERVICES, LLC
 LATERAL 2C-45 CONTINUED SITE ASSESSMENT
 RIO ARRIBA COUNTY, NEW MEXICO
 NW¼ SE¼, SECTION 24, T25N, R6W
 N36.38347, W107.41676

Sample ID	Date	Depth (ft)	PID (ppm)	(mg/kg)	BTEX (mg/kg)	GRD (mg/kg)	DRO (mg/kg)
NMOCD ACTION LEVEL			100	10	50	100	
SB-1	11/7/12	0 to 4	8.1	NA	NA	NA	NA
		4 to 8	16.2	NA	NA	NA	NA
		8 to 12	20.0	NA	NA	NA	NA
		12 to 16	37.9	NA	NA	NA	NA
		16 to 20	44.0	<0.048	<0.24	<4.8	<10
		24 to 28	14.7	NA	NA	NA	NA
ALL SAMPLES WERE ANALYZED PER EPA METHOD 8021B AND 8015B.							

Groundwater Laboratory Analytical Results					
Sample ID	Date	Benzene (mg/kg)	Toluene (mg/kg)	Ehtyl-benzene (mg/kg)	Xylenes (mg/kg)
WQCC STANDARD		10	750	750	620
GW-1	11/7/12	<2.0	<2.0	<2.0	<4.0
GW-2	11/7/12	<2.0	<2.0	<2.0	<4.0
GW-3	11/7/12	<2.0	<2.0	<2.0	<4.0
GW-4	11/7/12	<2.0	<2.0	<2.0	<4.0
GW-5	11/7/12	<2.0	<2.0	<2.0	<4.0
ALL SAMPLES WERE ANALYZED PER EPA METHOD 8021B.					










Amnas
Environmental
Services LLC
624 East Comanche St.
Farmington, NM 87401

SB-1

ENTERPRISE PRODUCTS COMPANY
FEDERAL 2C-45
RIO ARriba COUNTY, NEW MEXICO
NW1/4, SE1/4, SECTION 24, T25N, R6W

Date Started : 11/7/12
Date Completed : 11/7/12
Hole Diameter : 2.25"
Drilling Method : GeoProbe
Sampling Method : Core Barrel

Latitude : N36.38347
Longitude : W107.41676
Survey By : GPS
Logged By : A. Rilling

Depth in Feet	Surf. Elev. 6451	USCS	GRAPHIC	DESCRIPTION	Water Level	OVM (ppm)	
0	6451	CL		Sandy LEAN CLAY; medium brown, moist, no odor		16.2	
2	6449						
4	6447						
6	6445						
8	6443			Very moist, no odor.			21.0
10	6441						37.9
12	6439			Very dark grey to black, organic staining, slight odor, roots.			
14	6437						
16	6435			Petroleum odor.			44.0
18	6433			Organic odor.			
20	6431			No odor.			
22	6429	SC		Clayey SAND; fine- to medium-grained, greyish-brown, wet, no odor.		14.7	
24	6427	CL		Sandy LEAN CLAY; fine- to medium-grained, greyish-brown, wet, no odor.			
26	6425			Interbedded Sandy LEAN CLAY and Clayey SAND.			
28	6423						
30							

12-18-2012 C:\Users\Anna\Dropbox\2012 December 2012 (Former Trial File)\Enterprise\Lateral 2C-45\Soil and GW Borings\SB-1 bor



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

November 21, 2012

Tami Ross
Animas Environmental Services
624 East Comanche
Farmington, NM 87401
TEL: (505) 793-2072
FAX

RE: Enterprise Lateral 2C-45 Contd. Release Assessment

OrderNo.: 1211354

Dear Tami Ross:

Hall Environmental Analysis Laboratory received 6 sample(s) on 11/8/2012 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. 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. 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.

Sincerely,

Andy Freeman
Laboratory Manager
4901 Hawkins NE
Albuquerque, NM 87109

Analytical Report

Lab Order 1211354

Date Reported: 11/21/2012

Hall Environmental Analysis Laboratory, Inc.**CLIENT:** Animas Environmental Services**Client Sample ID:** GW-1**Project:** Enterprise Lateral 2C-45 Contd. Release**Collection Date:** 11/7/2012 11:15:00 AM**Lab ID:** 1211354-001**Matrix:** AQUEOUS**Received Date:** 11/8/2012 10:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8021B: VOLATILES						Analyst: NSB
Benzene	ND	2.0	p	µg/L	2	11/13/2012 6:44:10 PM
Toluene	ND	2.0	p	µg/L	2	11/13/2012 6:44:10 PM
Ethylbenzene	ND	2.0	p	µg/L	2	11/13/2012 6:44:10 PM
Xylenes, Total	ND	4.0	p	µg/L	2	11/13/2012 6:44:10 PM
Surr: 4-Bromofluorobenzene	99.9	69.7-152	p	%REC	2	11/13/2012 6:44:10 PM

Qualifiers:

- * Value exceeds Maximum Contaminant Level.
- E Value above quantitation range
- J Analyte detected below quantitation limits
- P Sample pH greater than 2
- RL Reporting Detection Limit

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- R RPD outside accepted recovery limits
- S Spike Recovery outside accepted recovery limits

Analytical Report

Lab Order 1211354

Date Reported: 11/21/2012

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Animas Environmental Services

Client Sample ID: GW-2

Project: Enterprise Lateral 2C-45 Contd. Release

Collection Date: 11/7/2012 12:16:00 PM

Lab ID: 1211354-002

Matrix: AQUEOUS

Received Date: 11/8/2012 10:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8021B: VOLATILES						Analyst: NSB
Benzene	ND	2.0		µg/L	2	11/13/2012 7:14:22 PM
Toluene	ND	2.0		µg/L	2	11/13/2012 7:14:22 PM
Ethylbenzene	ND	2.0		µg/L	2	11/13/2012 7:14:22 PM
Xylenes, Total	ND	4.0		µg/L	2	11/13/2012 7:14:22 PM
Surr: 4-Bromofluorobenzene	97.8	69.7-152		%REC	2	11/13/2012 7:14:22 PM

Qualifiers: * Value exceeds Maximum Contaminant Level.
E Value above quantitation range
J Analyte detected below quantitation limits
P Sample pH greater than 2
RL Reporting Detection Limit

B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
R RPD outside accepted recovery limits
S Spike Recovery outside accepted recovery limits

Analytical Report

Lab Order 1211354

Date Reported: 11/21/2012

Hall Environmental Analysis Laboratory, Inc.**CLIENT:** Animas Environmental Services**Client Sample ID:** GW-3**Project:** Enterprise Lateral 2C-45 Contd. Release**Collection Date:** 11/7/2012 12:56:00 PM**Lab ID:** 1211354-003**Matrix:** AQUEOUS**Received Date:** 11/8/2012 10:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8021B: VOLATILES						Analyst: NSB
Benzene	ND	2.0	p	µg/L	2	11/10/2012 3:27:01 AM
Toluene	ND	2.0	p	µg/L	2	11/10/2012 3:27:01 AM
Ethylbenzene	ND	2.0	p	µg/L	2	11/10/2012 3:27:01 AM
Xylenes, Total	ND	4.0	p	µg/L	2	11/10/2012 3:27:01 AM
Surr: 4-Bromofluorobenzene	100	69.7-152	p	%REC	2	11/10/2012 3:27:01 AM

Qualifiers:

- * Value exceeds Maximum Contaminant Level.
- E Value above quantitation range
- J Analyte detected below quantitation limits
- P Sample pH greater than 2
- RL Reporting Detection Limit

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- R RPD outside accepted recovery limits
- S Spike Recovery outside accepted recovery limits

Analytical Report

Lab Order 1211354

Date Reported: 11/21/2012

Hall Environmental Analysis Laboratory, Inc.**CLIENT:** Animas Environmental Services**Client Sample ID:** GW-4**Project:** Enterprise Lateral 2C-45 Contd. Release**Collection Date:** 11/7/2012 1:25:00 PM**Lab ID:** 1211354-004**Matrix:** AQUEOUS**Received Date:** 11/8/2012 10:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8021B: VOLATILES						Analyst: NSB
Benzene	ND	2.0	p	µg/L	2	11/10/2012 3:57:20 AM
Toluene	ND	2.0	p	µg/L	2	11/10/2012 3:57:20 AM
Ethylbenzene	ND	2.0	p	µg/L	2	11/10/2012 3:57:20 AM
Xylenes, Total	ND	4.0	p	µg/L	2	11/10/2012 3:57:20 AM
Surr: 4-Bromofluorobenzene	98.9	69.7-152	p	%REC	2	11/10/2012 3:57:20 AM

Qualifiers:

- * Value exceeds Maximum Contaminant Level.
- E Value above quantitation range
- J Analyte detected below quantitation limits
- P Sample pH greater than 2
- RL Reporting Detection Limit

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- R RPD outside accepted recovery limits
- S Spike Recovery outside accepted recovery limits

Analytical Report

Lab Order 1211354

Date Reported: 11/21/2012

Hall Environmental Analysis Laboratory, Inc.**CLIENT:** Animas Environmental Services**Client Sample ID:** GW-5**Project:** Enterprise Lateral 2C-45 Contd. Release**Collection Date:** 11/7/2012 1:42:00 PM**Lab ID:** 1211354-005**Matrix:** AQUEOUS**Received Date:** 11/8/2012 10:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8021B: VOLATILES						Analyst: NSB
Benzene	ND	2.0		µg/L	2	11/12/2012 4:53:40 PM
Toluene	ND	2.0		µg/L	2	11/12/2012 4:53:40 PM
Ethylbenzene	ND	2.0		µg/L	2	11/12/2012 4:53:40 PM
Xylenes, Total	ND	4.0		µg/L	2	11/12/2012 4:53:40 PM
Surr: 4-Bromofluorobenzene	106	69.7-152		%REC	2	11/12/2012 4:53:40 PM

Qualifiers:

- * Value exceeds Maximum Contaminant Level.
- E Value above quantitation range
- J Analyte detected below quantitation limits
- P Sample pH greater than 2
- RL Reporting Detection Limit

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- R RPD outside accepted recovery limits
- S Spike Recovery outside accepted recovery limits

Analytical Report

Lab Order 1211354

Date Reported: 11/21/2012

Hall Environmental Analysis Laboratory, Inc.**CLIENT:** Animas Environmental Services**Client Sample ID:** SB-1**Project:** Enterprise Lateral 2C-45 Contd. Release**Collection Date:** 11/7/2012 11:54:00 AM**Lab ID:** 1211354-006**Matrix:** SOIL**Received Date:** 11/8/2012 10:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015B: DIESEL RANGE ORGANICS						Analyst: JMP
Diesel Range Organics (DRO)	ND	10		mg/Kg	1	11/12/2012 9:56:00 PM
Surr: DNOP	98.9	77.6-140		%REC	1	11/12/2012 9:56:00 PM
EPA METHOD 8015B: GASOLINE RANGE						Analyst: NSB
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	11/13/2012 1:35:14 AM
Surr: BFB	96.0	84-116		%REC	1	11/13/2012 1:35:14 AM
EPA METHOD 8021B: VOLATILES						Analyst: NSB
Benzene	ND	0.048		mg/Kg	1	11/13/2012 1:35:14 AM
Toluene	ND	0.048		mg/Kg	1	11/13/2012 1:35:14 AM
Ethylbenzene	ND	0.048		mg/Kg	1	11/13/2012 1:35:14 AM
Xylenes, Total	ND	0.096		mg/Kg	1	11/13/2012 1:35:14 AM
Surr: 4-Bromofluorobenzene	98.8	80-120		%REC	1	11/13/2012 1:35:14 AM

Qualifiers:

- * Value exceeds Maximum Contaminant Level.
- E Value above quantitation range
- J Analyte detected below quantitation limits
- P Sample pH greater than 2
- RL Reporting Detection Limit

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- R RPD outside accepted recovery limits
- S Spike Recovery outside accepted recovery limits

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1211354

21-Nov-12

Client: Animas Environmental Services

Project: Enterprise Lateral 2C-45 Contd. Release Assesm

Sample ID	MB-4760	SampType:	MBLK	TestCode:	EPA Method 8015B: Diesel Range Organics					
Client ID:	PBS	Batch ID:	4760	RunNo:	6820					
Prep Date:	11/9/2012	Analysis Date:	11/12/2012	SeqNo:	197266	Units:	mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	ND	10								
Surr: DNOP	8.3		10.00		83.2	77.6	140			

Sample ID	LCS-4760	SampType:	LCS	TestCode:	EPA Method 8015B: Diesel Range Organics					
Client ID:	LCSS	Batch ID:	4760	RunNo:	6820					
Prep Date:	11/9/2012	Analysis Date:	11/12/2012	SeqNo:	197915	Units:	mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	47	10	50.00	0	93.6	52.6	130			
Surr: DNOP	3.9		5.000		78.2	77.6	140			

Qualifiers:

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- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- R RPD outside accepted recovery limits

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1211354

21-Nov-12

Client: Animas Environmental Services

Project: Enterprise Lateral 2C-45 Contd. Release Assesm

Sample ID	MB-4753	SampType:	MBLK	TestCode:	EPA Method 8015B: Gasoline Range					
Client ID:	PBS	Batch ID:	4753	RunNo:	6807					
Prep Date:	11/8/2012	Analysis Date:	11/9/2012	SeqNo:	197818	Units:	mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	ND	5.0								
Surr: BFB	980		1000		97.6	84	116			

Sample ID	LCS-4753	SampType:	LCS	TestCode:	EPA Method 8015B: Gasoline Range					
Client ID:	LCSS	Batch ID:	4753	RunNo:	6807					
Prep Date:	11/8/2012	Analysis Date:	11/9/2012	SeqNo:	197819	Units:	mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	26	5.0	25.00	0	104	74	117			
Surr: BFB	1000		1000		102	84	116			

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QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1211354

21-Nov-12

Client: Animas Environmental Services

Project: Enterprise Lateral 2C-45 Contd. Release Assesm

Sample ID	MB-4753		SampType: MBLK		TestCode: EPA Method 8021B: Volatiles					
Client ID:	PBS		Batch ID: 4753		RunNo: 6807					
Prep Date:	11/8/2012		Analysis Date: 11/9/2012		SeqNo: 197845		Units: mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	0.050								
Toluene	ND	0.050								
Ethylbenzene	ND	0.050								
Xylenes, Total	ND	0.10								
Surr: 4-Bromofluorobenzene	1.0		1.000		103	80	120			

Sample ID	LCS-4753		SampType: LCS		TestCode: EPA Method 8021B: Volatiles					
Client ID:	LCSS		Batch ID: 4753		RunNo: 6807					
Prep Date:	11/8/2012		Analysis Date: 11/9/2012		SeqNo: 197846		Units: mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	1.0	0.050	1.000	0	100	76.3	117			
Toluene	1.0	0.050	1.000	0	101	80	120			
Ethylbenzene	1.0	0.050	1.000	0	102	77	116			
Xylenes, Total	3.1	0.10	3.000	0	102	76.7	117			
Surr: 4-Bromofluorobenzene	1.1		1.000		107	80	120			

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QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1211354

21-Nov-12

Client: Animas Environmental Services

Project: Enterprise Lateral 2C-45 Contd. Release Assesm

Sample ID	5ML RB	SampType:	MBLK	TestCode:	EPA Method 8021B: Volatiles					
Client ID:	PBW	Batch ID:	R6828	RunNo:	6828					
Prep Date:		Analysis Date:	11/9/2012	SeqNo:	197771	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		99.2	69.7	152			

Sample ID	100NG BTEX LCS	SampType:	LCS	TestCode:	EPA Method 8021B: Volatiles					
Client ID:	LCSW	Batch ID:	R6828	RunNo:	6828					
Prep Date:		Analysis Date:	11/9/2012	SeqNo:	197772	Units:	µg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	19	1.0	20.00	0	96.9	80	120			
Toluene	19	1.0	20.00	0	97.5	80	120			
Ethylbenzene	20	1.0	20.00	0	99.8	80	120			
Xylenes, Total	62	2.0	60.00	0	103	80	120			
Surr: 4-Bromofluorobenzene	21		20.00		105	69.7	152			

Sample ID	5ML RB	SampType:	MBLK	TestCode:	EPA Method 8021B: Volatiles					
Client ID:	PBW	Batch ID:	R6845	RunNo:	6845					
Prep Date:		Analysis Date:	11/12/2012	SeqNo:	198278	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	69.7	152			

Sample ID	100NG BTEX LCS	SampType:	LCS	TestCode:	EPA Method 8021B: Volatiles					
Client ID:	LCSW	Batch ID:	R6845	RunNo:	6845					
Prep Date:		Analysis Date:	11/12/2012	SeqNo:	198279	Units:	µg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	21	1.0	20.00	0	103	80	120			
Toluene	21	1.0	20.00	0	104	80	120			
Ethylbenzene	21	1.0	20.00	0	107	80	120			
Xylenes, Total	65	2.0	60.00	0	108	80	120			
Surr: 4-Bromofluorobenzene	22		20.00		110	69.7	152			

Qualifiers:

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QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1211354

21-Nov-12

Client: Animas Environmental Services

Project: Enterprise Lateral 2C-45 Contd. Release Assesm

Sample ID	5ML RB	SampType:	MBLK	TestCode:	EPA Method 8021B: Volatiles					
Client ID:	PBW	Batch ID:	R6882	RunNo:	6882					
Prep Date:		Analysis Date:	11/13/2012	SeqNo:	199164	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	21		20.00		103	69.7	152			

Sample ID	100NG BTEX LCS	SampType:	LCS	TestCode:	EPA Method 8021B: Volatiles					
Client ID:	LCSW	Batch ID:	R6882	RunNo:	6882					
Prep Date:		Analysis Date:	11/13/2012	SeqNo:	199165	Units:	µg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	23	1.0	20.00	0	114	80	120			
Toluene	23	1.0	20.00	0	116	80	120			
Ethylbenzene	23	1.0	20.00	0	117	80	120			
Xylenes, Total	71	2.0	60.00	0	119	80	120			
Surr: 4-Bromofluorobenzene	22		20.00		110	69.7	152			

Qualifiers:

* Value exceeds Maximum Contaminant Level.
E Value above quantitation range
J Analyte detected below quantitation limits
P Sample pH greater than 2

B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
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Sample Log-In Check List

Client Name: Animas Environmental

Work Order Number: 1211354

Received by/date:

AT

11/08/12

Logged By: Lindsay Mangin

11/8/2012 10:00:00 AM

[Signature]

Completed By: Lindsay Mangin

11/8/2012 12:45:02 PM

[Signature]

Reviewed By:

[Signature]

11/08/12

Chain of Custody

1. Were seals intact? Yes ☐ No ☐ Not Present ☒
2. Is Chain of Custody complete? Yes ☒ No ☐ Not Present ☐
3. How was the sample delivered? Courier

Log In

4. Coolers are present? (see 19. for cooler specific information) Yes ☒ No ☐ NA ☐
5. Was an attempt made to cool the samples? Yes ☒ No ☐ NA ☐
6. Were all samples received at a temperature of $>0^{\circ}\text{C}$ to 6.0°C ? Yes ☒ No ☐ NA ☐
7. Sample(s) in proper container(s)? Yes ☒ No ☐
8. Sufficient sample volume for indicated test(s)? Yes ☒ No ☐
9. Are samples (except VOA and ONG) properly preserved? Yes ☒ No ☐
10. Was preservative added to bottles? Yes ☐ No ☒ NA ☐
11. VOA vials have zero headspace? Yes ☒ No ☒ No VOA Vials ☐
12. Were any sample containers received broken? Yes ☐ No ☒
13. Does paperwork match bottle labels?
(Note discrepancies on chain of custody) Yes ☒ No ☐ # of preserved bottles checked for pH:
14. Are matrices correctly identified on Chain of Custody? Yes ☒ No ☐ (<2 or >12 unless noted)
15. Is it clear what analyses were requested? Yes ☒ No ☐ Adjusted? ☐
16. Were all holding times able to be met?
(If no, notify customer for authorization.) Yes ☒ No ☐ Checked by:

Special Handling (if applicable)

17. 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:

18. Additional remarks:

19. Cooler Information

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