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-141
Revised August 8, 2011

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

Release Notification and Corrective Action

OPERATOR

☐ Initial Report ☒ Final Report

Name of Company **Burlington Resources, a Wholly Owned Subsidiary of ConocoPhillips Company**	Contact **Ashley Maxwell**
Address 3401 East 30th St, Farmington, NM	Telephone No.(505) 324-5169
Facility Name: **San Juan 27-5 Unit 102M**	Facility Type: **Gas Well**

Surface Owner **Federal**	Mineral Owner **Federal**	API No. **3003923896** **SF 079491**

LOCATION OF RELEASE

Unit Letter	Section	Township	Range	Feet from the	North/South Line	Feet from the	East/West Line	County
P	**12**	**27N**	**5W**	**840'**	**South**	**790'**	**East**	**Rio Arriba**

Latitude 36.58242 Longitude -107.30276

NATURE OF RELEASE

Type of Release **Produced Fluids**	Volume of Release **264 yds³**	Volume Recovered **264 yds³**
Source of Release **Unknown Production Equipment**	Date and Hour of Occurrence **7/16/2012**	Date and Hour of Discovery
Was Immediate Notice Given? ☐ Yes ☐ No ☒ Not Required	If YES, To Whom?	
By Whom?	Date and Hour	
Was a Watercourse Reached? ☐ Yes ☒ No	If YES, Volume Impacting the Watercourse.	

RCVD DEC 28 '12
OIL CONS. DIV.
DIST. 3

If a Watercourse was Impacted, Describe Fully.*
N/A

Describe Cause of Problem and Remedial Action Taken.*
Discovery of historical hydrocarbon impacted soil.

Describe Area Affected and Cleanup Action Taken.*
Excavation was required based on NMOCD Guidelines for Remediation of Leaks, Spills and Releases. The excavation was 20'X25'X15' and 264 yds³ of soil was transported to a third party land farm. Excavation and confirmation sampling occurred. Analytical results were below the regulatory standards set forth in the NMOCD Guidelines for Remediation of Leaks, Spills and Releases; therefore no further action is needed.

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 Approved by Environmental Specialist:	
Printed Name: **Ashley Maxwell**		
Title: Field Environmental Specialist	Approval Date: 1/23/2013	Expiration Date:
E-mail Address: ashley.p.wethington@conocophillips.com	Conditions of Approval:	Attached ☐
Date: December 27, 2012 Phone: 505-324-5169		

* Attach Additional Sheets If Necessary

nJK1302330775

Animas Environmental Services, LLC
www.animasenvironmental.com
624 E. Comanche
Farmington, NM 87401
505-564-2281
Durango, Colorado
970-403-3084

December 21, 2012

Ashley Maxwell
ConocoPhillips
San Juan Business Unit
Office 216-2
5525 Hwy 64
Farmington, New Mexico 87401

RE: Surface Depression Assessment and Final Excavation Report
San Juan 27-5 #102M
Rio Arriba County, New Mexico

Dear Ms. Maxwell:

On May 24 and July 18, 2012, Animas Environmental Services, LLC (AES) completed an initial release assessment and environmental clearance of the final excavation limits at the ConocoPhillips (CoP) San Juan 27-5 #102M, located in Rio Arriba County, New Mexico. A historical release was encountered within the extents of a surface depression at the location. The initial release assessment was completed by AES on May 24, 2012. The final excavation was completed by CoP contractors while AES was on location on July 18, 2012.

1.0 Site Information

1.1 Location

Site Name – San Juan 27-5 #102M
Legal Description – SE¼ SE¼, Section 12, T27N, R5W, Rio Arriba County, New Mexico
Well Latitude/Longitude – N36.58249 and W107.30324, respectively
Surface Depression Latitude/Longitude – N36.58247 and W107.30354, respectively
Land Jurisdiction - Private
Figure 1. Topographic Site Location Map
Figure 2. Aerial Site Map, May 2012

1.2 NMOCD Ranking

Prior to site work, the New Mexico Oil Conservation Division (NMOCD) database was reviewed, and a Cathodic Protection Report from March 1996 for the San Juan 27-5 #102M reported the depth to groundwater beneath the location as 160 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. Additionally, 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.

Once on site, AES personnel further assessed the ranking using topographical interpretation, Global Positioning System (GPS) elevation readings, and visual reconnaissance. AES personnel concluded that depth to groundwater at the site was greater than 100 feet bgs. A livestock pond is located approximately 160 feet northeast of the location and drains south-southeast to Carrizo Canyon . The site location has been assigned a ranking score of 20 per the NMOCD *Guidelines for Leaks, Spills, and Releases* (1993).

1.3 Assessments

AES was initially contacted by Ashley Maxwell, CoP representative, on May 23, 2012 to complete an assessment of a surface depression at the location. On May 24, 2012, Deborah Watson and Zachary Trujillo of AES mobilized to the location. While on location, based on visual observations and field screening results, AES determined that petroleum impacted soils were located within the area of the surface depression. Therefore, AES proceeded with release assessment field work on the same day. The assessment included collection and field screening of 20 soil samples from five test holes (TH-1 through TH-5) collected within the surface depression. Test holes were terminated on sandstone, with the exception of TH-3. Based on the field screening results and laboratory analytical results, AES recommended excavation of the release area. Sample locations are shown on Figure 3.

On July 18, 2012, AES returned to the location to collect confirmation soil samples of the excavation. The field screening activities included collection of five confirmation soil samples (SC-1 through SC-5) of the walls and base of the excavation. Sample SC-6 was a composite of SC-1 through SC-5. The final excavation was approximately 21 feet by 22 feet by 16 feet deep. Sample locations and final excavation extents are presented on Figure 4.

2.0 Soil Sampling

A total of 20 soil samples and 6 composite samples were collected during the assessments. All soil samples were field screened for volatile organic compounds

(VOCs), and selected samples were also analyzed for total petroleum hydrocarbons (TPH). Five of the soil samples collected during the initial assessment (TH-1 through TH-5) and six composite soil samples (SC-1 through SC-6) were submitted for laboratory analysis.

2.1 Field Screening

2.1.1 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.

2.1.2 Total Petroleum Hydrocarbons

Field TPH samples were analyzed 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.*

2.1.3 Chlorides

Soil sample SC-6 was field screened for chlorides using Chloride Drop Count Titration with silver nitrate. Sampling and analysis methods followed procedures provided by Hach Company.

2.2 Laboratory Analyses

The 11 soil samples (TH-1 through TH-5 and SC-1 through SC-6) collected for laboratory analysis 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 TH-1 through TH-5 and SC-5 were laboratory analyzed for:

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

Note that soil samples SC-1 through SC-5 were analyzed for TPH as GRO/DRO per USEPA Method 8015B, and SC-6 was analyzed for BTEX per USEPA Method 8021B and for chloride per USEPA Method 300.0.

2.3 Field and Laboratory Analytical Results

On May 24, 2012, initial assessment field screening results for VOCs via OVM reported concentrations ranging from 7.6 ppm in TH-5 up to 4,912 ppm in TH-1. On July 18, 2012, final excavation field screening results for VOCs via OVM ranged from 7.8 ppm in SC-4 up to 59.0 ppm in SC-2. Field TPH concentrations ranged from 132 mg/kg in SC-1 up to 238 mg/kg in SC-2. Field screening results are summarized in Table 1 and presented on Figures 3 and 4. The AES field screening reports are attached.

Table 1. Field Screening VOCs, TPH, and Chloride Results
San Juan 27-5 #102M Surface Depression Assessment and Final Excavation
May and July 2012

Sample ID	*Date Sampled*	*Sample Location*	*Sample Depth (ft bgs)*	*VOCs OVM Reading (ppm)*	*Field TPH (mg/kg)*	*Field Chlorides (mg/kg)*
		NMOCD Action Level*		***100***	***100***	***250***
TH-1	5/24/12	Center	0.5	11.1	NA	NA
			1	**2,360**	NA	NA
			2	**3,603**	NA	NA
			3	**4,342**	NA	NA
			5	**4,912**	NA	NA
			6	**3,828**	NA	NA
TH-2	5/24/12	Southeast	0.5	56.7	NA	NA
			2	31.0	NA	NA
			4	31.0	NA	NA
TH-3	5/24/12	Northeast	0.5	23.7	NA	NA
			2	19.1	NA	NA
			4	13.8	NA	NA
			7	16.4	NA	NA
TH-4	5/24/12	Southwest	0.5	11.8	NA	NA
			2	9.2	NA	NA
			4	10.5	NA	NA
TH-5	5/24/12	Northwest	0.5	8.7	NA	NA
			2	7.6	NA	NA

Sample ID	***Date Sampled***	***Sample Location***	***Sample Depth (ft bgs)***	***VOCs OVM Reading (ppm)***	***Field TPH (mg/kg)***	***Field Chlorides (mg/kg)***
		NMOCD Action Level*		***100***	***100***	***250***
			4	8.3	NA	NA
			6	63.8	NA	NA
SC-1	7/18/12	Northwest Wall	1 to 16	10.1	**132**	NA
SC-2	7/18/12	Southeast Wall	1 to 16	59.0	**238**	NA
SC-3	7/18/12	Northeast Wall	1 to 16	8.8	**140**	NA
SC-4	7/18/12	Southwest Wall	1 to 16	7.8	**145**	NA
SC-5	7/18/12	Base	16	10.0	**140**	NA
SC-6	7/18/12	Surface Depression Composite	1 to 16	46.1	NA	220

NA – Not Analyzed
*Action level determined by the NMOCD ranking score per *NMOCD Guidelines for Leaks, Spills, and Releases* (August 1993)

During the May 2012 assessment, laboratory analytical results for TH-1 through TH-5 reported benzene concentrations below laboratory detection limits. Total BTEX concentrations ranged from less than 0.25 mg/kg up to 80.4 mg/kg in TH-1. TPH concentrations as GRO/DRO were reported below laboratory detection limits for all samples, except TH-1 with reported concentrations of 710 mg/kg GRO and 520 mg/kg DRO.

In July 2012, laboratory analytical results from SC-1 through SC-5 were used to confirm field screening results during excavation activities. Benzene and total BTEX concentrations were reported below laboratory detection limits in SC-5 and SC-6. TPH concentrations as GRO/DRO were reported below laboratory detection limits in all samples, except SC-2 with 32 mg/kg GRO. The chloride concentration in SC-6 was reported below the laboratory detection limit of 30 mg/kg. Results are presented in Table 2 and on Figures 3 and 4. Laboratory analytical reports are attached.

Table 2. Laboratory Analytical Results – Benzene, Total BTEX, TPH, and Chloride
San Juan 27-5 #102M Surface Depression Assessment and Final Excavation
May and July 2012

Sample ID	*Date Sampled*	*Sample Depth (ft bgs)*	*Benzene (mg/kg)*	*Total BTEX (mg/kg)*	*TPH-GRO (mg/kg)*	*TPH-DRO (mg/kg)*	*Chloride (mg/kg)*
	*NMOCD Action Level**		*0.2/10*	*50*	*100*		*250*
TH-1	5/24/12	6	<2.5	**80.4**	**710**	**520**	NA
TH-2	5/24/12	4	<0.050	<0.25	<5.0	<10	NA
TH-3	5/24/12	7	<0.050	<0.25	<5.0	<9.8	NA
TH-4	5/24/12	4	<0.050	<0.25	<5.0	<10	NA
TH-5	5/24/12	6	<0.050	<0.25	<5.0	<9.7	NA
SC-1	7/18/12	1 to 16	NA	NA	<5.0	<10	NA
SC-2	7/18/12	1 to 16	NA	NA	32	<10	NA
SC-3	7/18/12	1 to 16	NA	NA	<5.0	<9.9	NA
SC-4	7/18/12	1 to 16	NA	NA	<5.0	<9.8	NA
SC-5	7/18/12	16	<0.050	<0.25	<5.0	<9.9	NA
SC-6	7/18/12	1 to 16	<0.12	<1.12	NA	NA	<30

NA – Not Analyzed
*Action level determined by the NMOCD ranking score per *NMOCD Guidelines for Leaks, Spills, and Releases* (August 1993)

3.0 Conclusions and Recommendations

On May 24, 2012, AES conducted an initial release assessment of petroleum contaminated soils following determination of a historical release located within the extents of a surface depression identified at the San Juan 27-5 #102M. Action levels for releases are determined by the NMOCD ranking score per *NMOCD Guidelines for Leaks, Spills, and Releases* (August 1993), and the site was assigned a ranking score of 20. Field screening results above the NMOCD action level of 100 ppm VOCs were reported in TH-1, with the highest concentration (4,912 mg/kg) being reported at 5 feet bgs. Laboratory analytical results showed that benzene concentrations were below laboratory detection limits, but that total BTEX concentrations were reported above the NMOCD action level of 50 mg/kg in TH-1 with 80.4 mg/kg. TPH concentrations (as

GRO/DRO) were also above the NMOCD action level within TH-1 (1,230 mg/kg). Based on field screening and laboratory analytical results, excavation of the release area was recommended.

On July 18, 2012, confirmation sampling of the final excavation area was completed. Field screening results of the excavation extents showed that VOC concentrations were below the NMOCD action level of 100 ppm in all samples. Field TPH concentrations exceeded the NMOCD action level of 100 mg/kg in all samples, with the highest concentration of 238 mg/kg reported in SC-2. However, laboratory analytical results showed reported TPH concentrations (as GRO/DRO) below the NMOCD action level of 100 mg/kg in all samples.

NMOCD action levels for pit closures are specified in New Mexico Administrative Code (NMAC) 19.15.17.13C. Analytical results for SC-5 and SC-6, surface depression composite samples, showed that reported benzene and total BTEX concentrations were below applicable NMOCD action levels. Sample SC-5 had a reported TPH concentration below the applicable NMOCD action level, and the chloride concentration in SC-6 was reported below the NMOCD action level of 250 mg/kg.

Based on final field screening and laboratory analytical results of the final excavation of petroleum contaminated soils at the San Juan 27-5 #102M, benzene, total BTEX, VOCs, TPH, and chloride concentrations were below applicable NMOCD action levels. No further work is recommended.

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

Sincerely,

Heather M. Woods

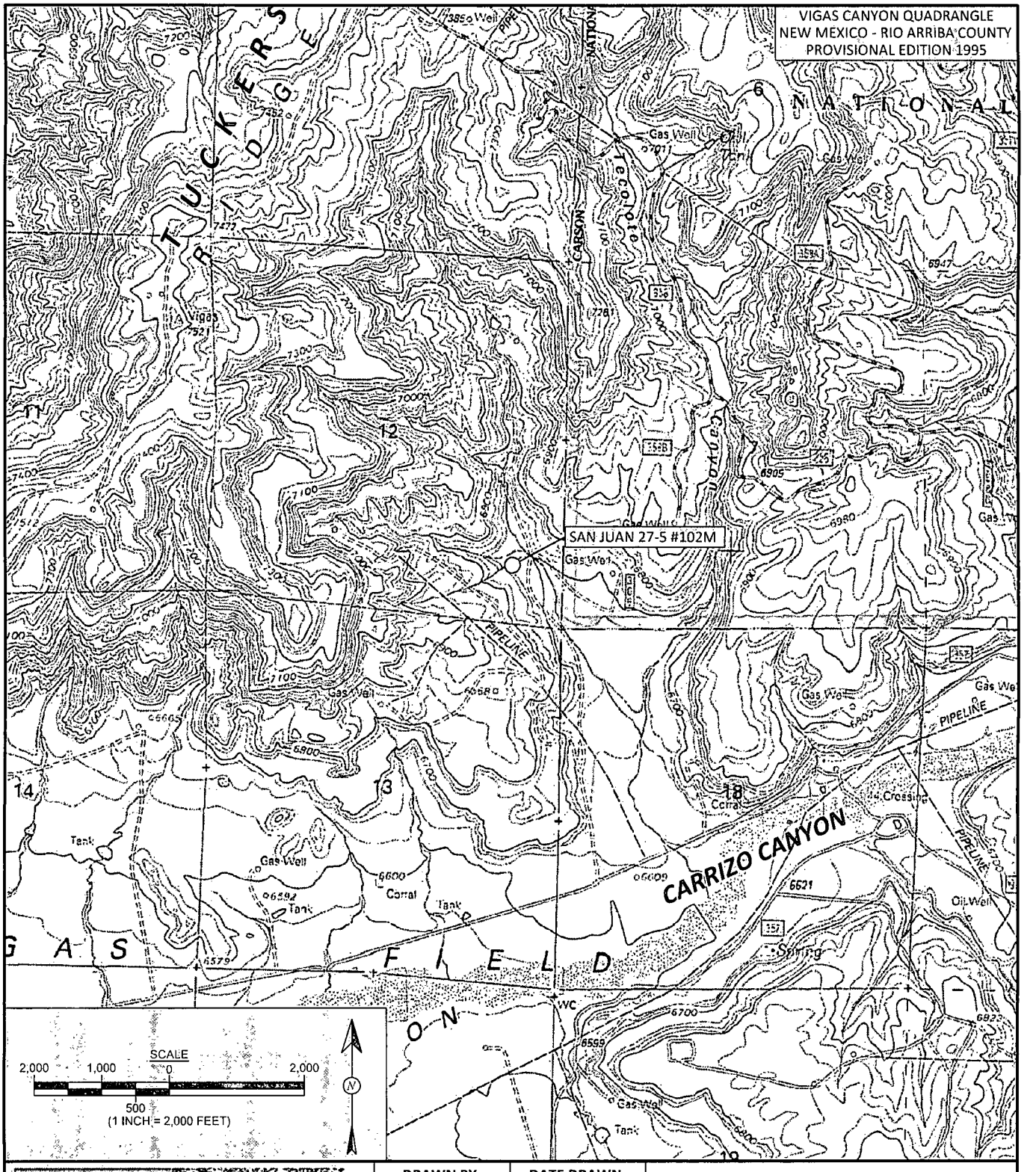
Heather M. Woods
Staff Geologist

Elizabeth McNally, P.E.

Attachments:

Figure 1. Topographic Site Location Map
Figure 2. Aerial Site Map, May 2012
Figure 3. Initial Assessment Soil Sample Locations and Results, May 2012
Figure 4. Final Excavation Soil Sample Locations and Results, July 2012
AES Field Screening Report 052412
AES Field Screening Report 071812
Hall Analytical Report 1205A96
Hall Analytical Report 1207802

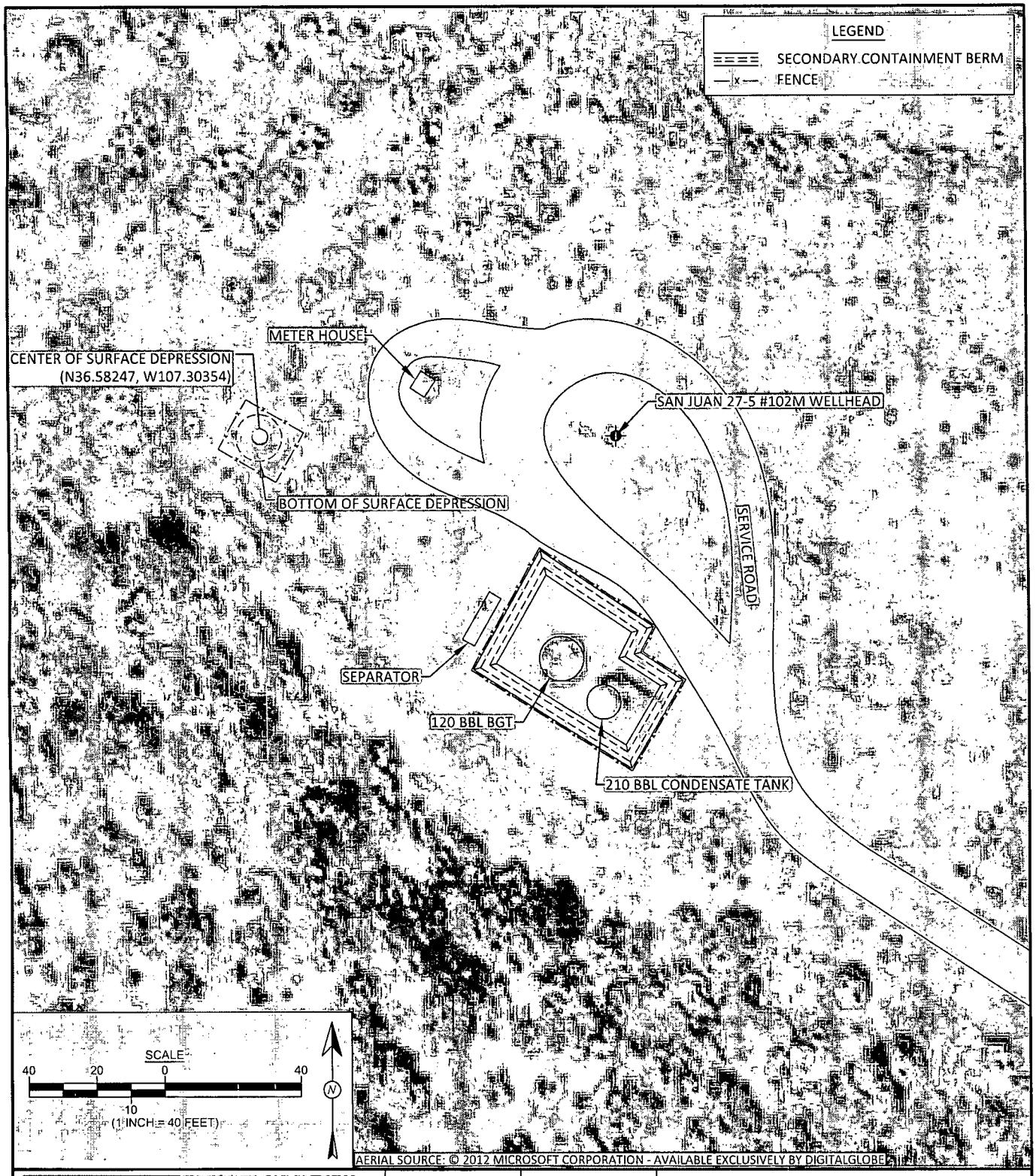
R:\Animas 2000\Dropbox\2012 December 2012\ConocoPhillips\SJ 27-5 #102 M\San Juan 27-5 #102M Surface Depression Assessment and Final Excavation Report 122112.docx



Animas Environmental Services, LLC	
DRAWN BY: N. Willis	**DATE DRAWN:** May 25, 2012
REVISIONS BY: C. Lameman	**DATE REVISED:** November 26, 2012
CHECKED BY: D. Watson	**DATE CHECKED:** November 26, 2012
APPROVED BY: E. McNally	**DATE APPROVED:** November 26, 2012

FIGURE 1

TOPOGRAPHIC SITE LOCATION MAP
ConocoPhillips
SAN JUAN 27-5 #102M
RIO ARRIBA COUNTY, NEW MEXICO
SE¼ SE¼, SECTION 12, T27N, R5W
N36.58249, W107.30324



Animas Environmental Services, LLC

DRAWN BY: N. Willis	**DATE DRAWN:** May 25, 2012
REVISIONS BY: C. Lameman	**DATE REVISED:** November 26, 2012
CHECKED BY: D. Watson	**DATE CHECKED:** November 26, 2012
APPROVED BY: E. McNally	**DATE APPROVED:** November 26, 2012

FIGURE 2

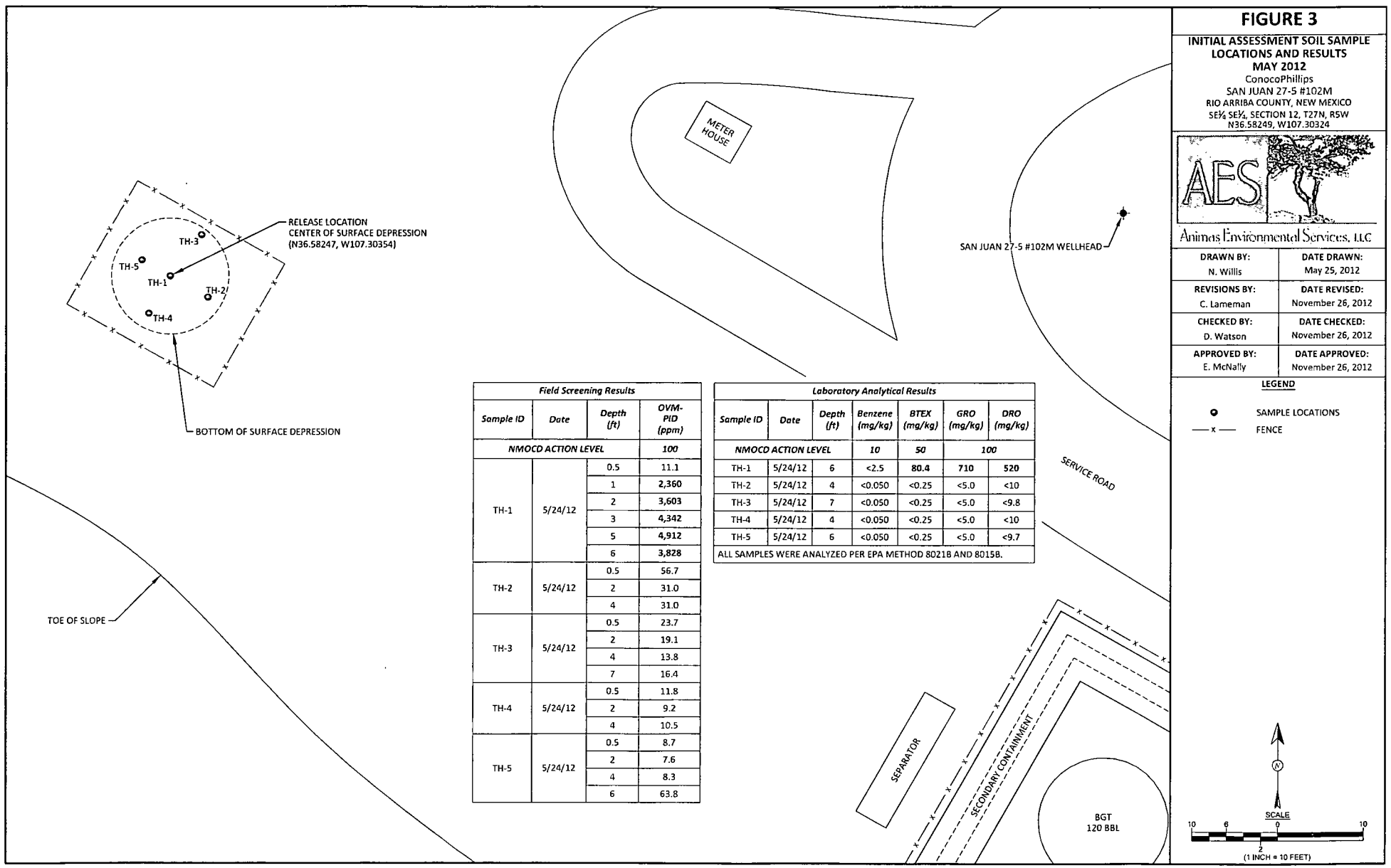
AERIAL SITE MAP
MAY 2012
ConocoPhillips
SAN JUAN 27-5 #102 M
RIO ARRIBA COUNTY, NEW MEXICO
SE¼ SE¼, SECTION 12, T27N, R5W
N36.58249, W107.30324

FIGURE 3

INITIAL ASSESSMENT SOIL SAMPLE LOCATIONS AND RESULTS
MAY 2012
ConocoPhillips
SAN JUAN 27-5 #102M
RIO ARRIBA COUNTY, NEW MEXICO
SE¼ SE¼, SECTION 12, T27N, R5W
N36.58249, W107.30324

Animas Environmental Services, LLC

DRAWN BY:	DATE DRAWN:
N. Willis	May 25, 2012
REVISIONS BY:	**DATE REVISED:**
C. Lameman	November 26, 2012
CHECKED BY:	**DATE CHECKED:**
D. Watson	November 26, 2012
APPROVED BY:	**DATE APPROVED:**
E. McNally	November 26, 2012



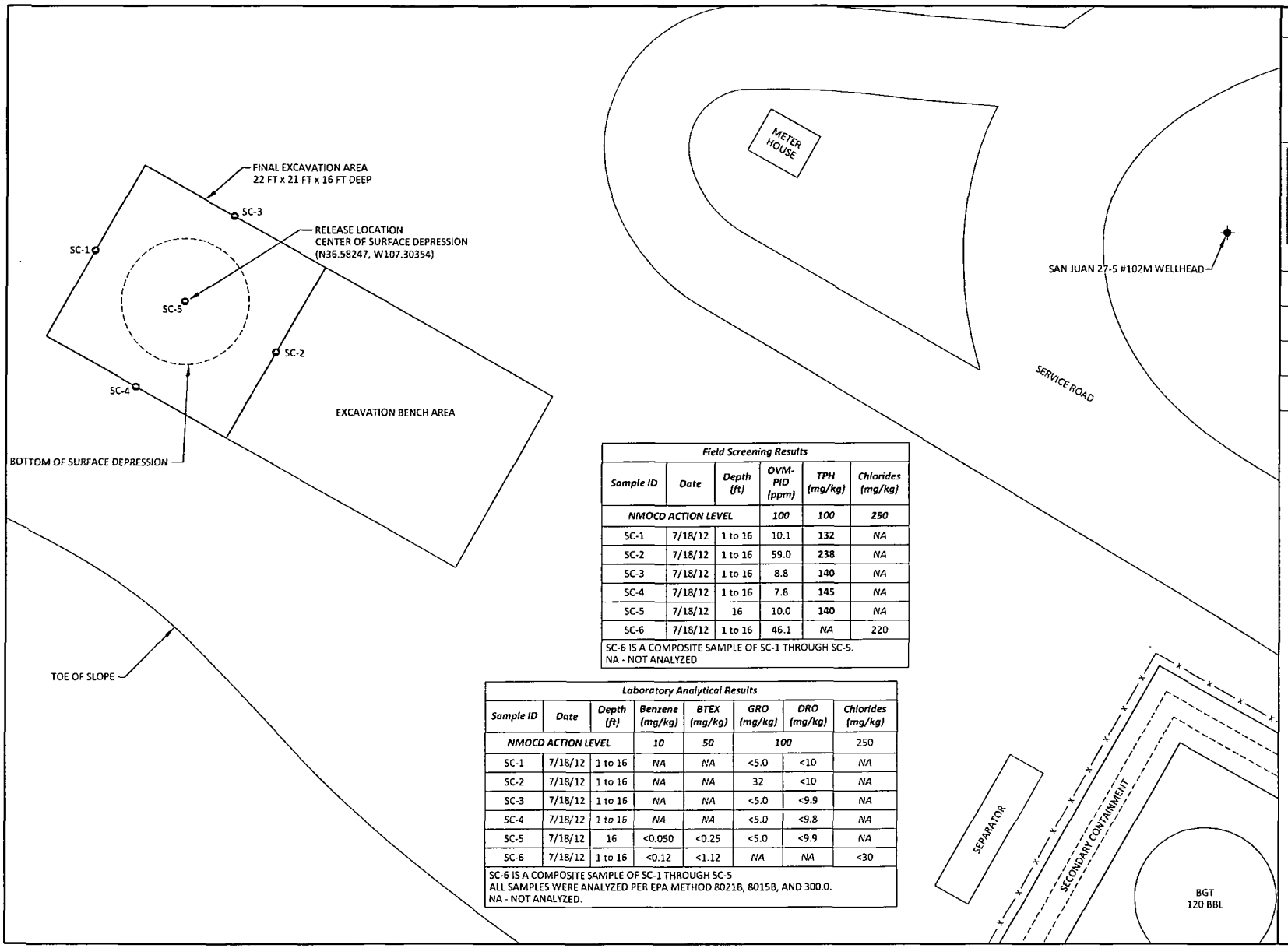
LEGEND

- SAMPLE LOCATIONS
- FENCE

SCALE
10 6 0 10
2
(1 INCH = 10 FEET)

Field Screening Results			
Sample ID	Date	Depth (ft)	OVM-PID (ppm)
NMOCD ACTION LEVEL			100
TH-1	5/24/12	0.5	11.1
		1	2,360
		2	3,603
		3	4,342
		5	4,912
		6	3,828
TH-2	5/24/12	0.5	56.7
		2	31.0
		4	31.0
TH-3	5/24/12	0.5	23.7
		2	19.1
		4	13.8
		7	16.4
TH-4	5/24/12	0.5	11.8
		2	9.2
		4	10.5
TH-5	5/24/12	0.5	8.7
		2	7.6
		4	8.3
		6	63.8

Laboratory Analytical Results						
Sample ID	Date	Depth (ft)	Benzene (mg/kg)	BTEX (mg/kg)	GRO (mg/kg)	DRO (mg/kg)
NMOCD ACTION LEVEL			10	50	100	
TH-1	5/24/12	6	<2.5	80.4	710	520
TH-2	5/24/12	4	<0.050	<0.25	<5.0	<10
TH-3	5/24/12	7	<0.050	<0.25	<5.0	<9.8
TH-4	5/24/12	4	<0.050	<0.25	<5.0	<10
TH-5	5/24/12	6	<0.050	<0.25	<5.0	<9.7
ALL SAMPLES WERE ANALYZED PER EPA METHOD 8021B AND 8015B.						



Field Screening Results					
Sample ID	Date	Depth (ft)	OVM-PID (ppm)	TPH (mg/kg)	Chlorides (mg/kg)
NMOCD ACTION LEVEL			100	100	250
SC-1	7/18/12	1 to 16	10.1	132	NA
SC-2	7/18/12	1 to 16	59.0	238	NA
SC-3	7/18/12	1 to 16	8.8	140	NA
SC-4	7/18/12	1 to 16	7.8	145	NA
SC-5	7/18/12	16	10.0	140	NA
SC-6	7/18/12	1 to 16	46.1	NA	220

SC-6 IS A COMPOSITE SAMPLE OF SC-1 THROUGH SC-5.
NA - NOT ANALYZED

Laboratory Analytical Results							
Sample ID	Date	Depth (ft)	Benzene (mg/kg)	BTEX (mg/kg)	GRO (mg/kg)	DRO (mg/kg)	Chlorides (mg/kg)
NMOCD ACTION LEVEL			10	50	100		250
SC-1	7/18/12	1 to 16	NA	NA	<5.0	<10	NA
SC-2	7/18/12	1 to 16	NA	NA	32	<10	NA
SC-3	7/18/12	1 to 16	NA	NA	<5.0	<9.9	NA
SC-4	7/18/12	1 to 16	NA	NA	<5.0	<9.8	NA
SC-5	7/18/12	16	<0.050	<0.25	<5.0	<9.9	NA
SC-6	7/18/12	1 to 16	<0.12	<1.12	NA	NA	<30

SC-6 IS A COMPOSITE SAMPLE OF SC-1 THROUGH SC-5
ALL SAMPLES WERE ANALYZED PER EPA METHOD 8021B, 8015B, AND 300.0.
NA - NOT ANALYZED.

FIGURE 4

FINAL EXCAVATION SOIL SAMPLE LOCATIONS AND RESULTS
JULY 2012
ConocoPhillips
SAN JUAN 27-5 #102M
RIO ARRIBA COUNTY, NEW MEXICO
SE¼ SE¼, SECTION 12, T27N, R5W
N36.58249, W107.30324

Animas Environmental Services, LLC

DRAWN BY:	DATE DRAWN:
N. Willis	May 25, 2012
REVISIONS BY:	DATE REVISED:
C. Lameman	November 26, 2012
CHECKED BY:	DATE CHECKED:
D. Watson	November 26, 2012
APPROVED BY:	DATE APPROVED:
E. McNally	November 26, 2012

LEGEND

SAMPLE LOCATIONS
FENCE

SCALE
10 6 0 10
2
(1 INCH = 10 FEET)

AES Field Screening Report

Animas Environmental Services, LLC
www.animasenvironmental.com
624 E. Comanche
Farmington, NM 87401
505-564-2281
Durango, Colorado
970-403-3274

Client: ConocoPhillips

Project Location: San Juan 27-5 #102M

Date: 5/24/2012

Matrix: Soil

Sample ID	Collection Date	Collection Time	OVM (ppm)	Time of Sample Analysis	Field TPH* (mg/kg)	TPH PQL (mg/kg)	DF	TPH Analysts Initials
TH-1 @ 0.5'	5/24/2012	14:37	11.1	14:59	*Not analyzed for TPH.*			
TH-1 @1'	5/24/2012	14:41	2,360	14:59	*Not analyzed for TPH.*			
TH-1 @ 2'	5/24/2012	14:46	3,603	15:02	*Not analyzed for TPH.*			
TH-1 @ 3'	5/24/2012	14:51	4,342	15:04	*Not analyzed for TPH.*			
TH-1 @ 5'	5/24/2012	15:03	4,912	15:16	*Not analyzed for TPH.*			
TH-1 @ 6'	5/24/2012	15:13	3,828	15:37	*Not analyzed for TPH.*			
TH-2 @ 0.5'	5/24/2012	15:21	56.7	15:37	*Not analyzed for TPH.*			
TH-2 @ 2'	5/24/2012	15:23	31.0	15:38	*Not analyzed for TPH.*			
TH-2 @ 4'	5/24/2012	15:30	31.0	15:42	*Not analyzed for TPH.*			
TH-3 @ 0.5'	5/24/2012	15:41	23.7	15:54	*Not analyzed for TPH.*			
TH-3 @ 2'	5/24/2012	15:45	19.1	16:08	*Not analyzed for TPH.*			
TH-3 @ 4'	5/24/2012	15:48	13.8	16:09	*Not analyzed for TPH.*			

Sample ID	Collection Date	Collection Time	OVM (ppm)	Time of Sample Analysis	Field TPH* (mg/kg)	TPH PQL (mg/kg)	DF	TPH Analysts Initials
TH-3 @ 7'	5/24/2012	16:03	16.4	16:15	*Not analyzed for TPH.*			
TH-4 @ 0.5'	5/24/2012	16:11	11.8	16:22	*Not analyzed for TPH.*			
TH-4 @ 2'	5/24/2012	16:14	9.2	16:30	*Not analyzed for TPH.*			
TH-4 @ 4'	5/24/2012	16:18	10.5	16:31	*Not analyzed for TPH.*			
TH-5 @ 0.5'	5/24/2012	16:26	8.7	16:42	*Not analyzed for TPH.*			
TH-5 @ 2'	5/24/2012	16:30	7.6	16:43	*Not analyzed for TPH.*			
TH-5 @ 4'	5/24/2012	16:34	8.3	16:46	*Not analyzed for TPH.*			
TH-5 @ 6'	5/24/2012	16:41	63.8	16:51	*Not analyzed for TPH.*			

Total Petroleum Hydrocarbons - USEPA 418.1

PQL	Practical Quantitation Limit
ND	Not Detected at the Reporting Limit
DF	Dilution Factor
NA	Not Analyzed

**Field TPH concentrations recorded may be below PQL.*

Analyst: Deborah Watson

AES Field Screening Report

Animas Environmental Services, LLC
www.animasenvironmental.com
624 E. Comanche
Farmington, NM 87401
505-564-2281
Durango, Colorado
970-403-3274

Client: ConocoPhillips

Project Location: San Juan 27-5 #102M

Date: 7/18/2012

Matrix: Soil

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
SC-1	7/18/2012	10:10	Northwest Wall	10.1	NA	10:56	132	20.0	1	HMW
SC-2	7/18/2012	9:54	Southeast Wall	59.0	NA	11:00	238	20.0	1	HMW
SC-3	7/18/2012	9:50	Northeast Wall	8.8	NA	11:04	140	20.0	1	HMW
SC-4	7/18/2012	10:00	Southwest Wall	7.8	NA	11:08	145	20.0	1	HMW
SC-5	7/18/2012	9:45	Base	10.0	NA	11:13	140	20.0	1	HMW
SC-6	7/18/2012	10:13	Composite	46.1	220	*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

Report Finalized: 07/18/12

HALL ENVIRONMENTAL ANALYSIS LABORATORY

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

May 30, 2012

Ross Kennemer

Animas Environmental Services
624 East Comanche
Farmington, NM 87401
TEL: (505) 486-1776
FAX (505) 324-2022

RE: COP SJ 27-5 #102M OrderNo.: 1205A96

Dear Ross Kennemer:

Hall Environmental Analysis Laboratory received 5 sample(s) on 5/26/2012 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.

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 **1205A96**
Date Reported: **5/30/2012**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Animas Environmental Services
Project: COP SJ 27-5 #102M
Lab ID: 1205A96-001

Client Sample ID: TH-1@6'
Collection Date: 5/24/2012 3:13:00 PM
Matrix: MEOH (SOIL) **Received Date:** 5/26/2012

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015B: DIESEL RANGE ORGANICS						Analyst: **JMP**
Diesel Range Organics (DRO)	520	9.7		mg/Kg	1	5/29/2012 11:02:23 AM
Surr: DNOP	109	82.1-121		%REC	1	5/29/2012 11:02:23 AM
EPA METHOD 8015B: GASOLINE RANGE						Analyst: **NSB**
Gasoline Range Organics (GRO)	710	500		mg/Kg	100	5/29/2012 2:42:56 PM
Surr: BFB	94.8	69.7-121		%REC	100	5/29/2012 2:42:56 PM
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**
Benzene	ND	2.5		mg/Kg	100	5/29/2012 2:42:56 PM
Toluene	3.8	2.5		mg/Kg	100	5/29/2012 2:42:56 PM
Ethylbenzene	2.6	2.5		mg/Kg	100	5/29/2012 2:42:56 PM
Xylenes, Total	74	10		mg/Kg	100	5/29/2012 2:42:56 PM
Surr: 4-Bromofluorobenzene	87.7	80-120		%REC	100	5/29/2012 2:42:56 PM

Qualifiers:

*/X	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
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Animas Environmental Services
Client Sample ID: TH-2 @4'
Project: COP SJ 27-5 #102M
Collection Date: 5/24/2012 3:30:00 PM
Lab ID: 1205A96-002
Matrix: MEOH (SOIL)
Received Date: 5/26/2012

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	5/29/2012 11:24:09 AM
Surr: DNOP	105	82.1-121		%REC	1	5/29/2012 11:24:09 AM
EPA METHOD 8015B: GASOLINE RANGE						Analyst: **NSB**
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	5/29/2012 12:39:45 PM
Surr: BFB	101	69.7-121		%REC	1	5/29/2012 12:39:45 PM
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**
Benzene	ND	0.050		mg/Kg	1	5/29/2012 12:39:45 PM
Toluene	ND	0.050		mg/Kg	1	5/29/2012 12:39:45 PM
Ethylbenzene	ND	0.050		mg/Kg	1	5/29/2012 12:39:45 PM
Xylenes, Total	ND	0.10		mg/Kg	1	5/29/2012 12:39:45 PM
Surr: 4-Bromofluorobenzene	111	80-120		%REC	1	5/29/2012 12:39:45 PM

Qualifiers:

*/X	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
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Animas Environmental Services
Client Sample ID: TH-3 @7'
Project: COP SJ 27-5 #102M
Collection Date: 5/24/2012 4:03:00 PM
Lab ID: 1205A96-003
Matrix: MEOH (SOIL)
Received Date: 5/26/2012

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	5/29/2012 11:45:46 AM
Surr: DNOP	107	82.1-121		%REC	1	5/29/2012 11:45:46 AM
EPA METHOD 8015B: GASOLINE RANGE						Analyst: **NSB**
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	5/29/2012 1:10:32 PM
Surr: BFB	90.3	69.7-121		%REC	1	5/29/2012 1:10:32 PM
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**
Benzene	ND	0.050		mg/Kg	1	5/29/2012 1:10:32 PM
Toluene	ND	0.050		mg/Kg	1	5/29/2012 1:10:32 PM
Ethylbenzene	ND	0.050		mg/Kg	1	5/29/2012 1:10:32 PM
Xylenes, Total	ND	0.10		mg/Kg	1	5/29/2012 1:10:32 PM
Surr: 4-Bromofluorobenzene	94.3	80-120		%REC	1	5/29/2012 1:10:32 PM

Qualifiers:

*/X	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
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Animas Environmental Services
Client Sample ID: TH-4@4'
Project: COP SJ 27-5 #102M
Collection Date: 5/24/2012 4:18:00 PM
Lab ID: 1205A96-004
Matrix: MEOH (SOIL)
Received Date: 5/26/2012

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	5/29/2012 12:17:40 PM
Surr: DNOP	107	82.1-121		%REC	1	5/29/2012 12:17:40 PM
EPA METHOD 8015B: GASOLINE RANGE						Analyst: **NSB**
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	5/29/2012 1:41:18 PM
Surr: BFB	73.6	69.7-121		%REC	1	5/29/2012 1:41:18 PM
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**
Benzene	ND	0.050		mg/Kg	1	5/29/2012 1:41:18 PM
Toluene	ND	0.050		mg/Kg	1	5/29/2012 1:41:18 PM
Ethylbenzene	ND	0.050		mg/Kg	1	5/29/2012 1:41:18 PM
Xylenes, Total	ND	0.10		mg/Kg	1	5/29/2012 1:41:18 PM
Surr: 4-Bromofluorobenzene	77.6	80-120	S	%REC	1	5/29/2012 1:41:18 PM

Qualifiers:

*/X	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
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Animas Environmental Services
Client Sample ID: TH-5 @6'
Project: COP SJ 27-5 #102M
Collection Date: 5/24/2012 4:41:00 PM
Lab ID: 1205A96-005
Matrix: MEOH (SOIL)
Received Date: 5/26/2012

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	5/29/2012 12:39:25 PM
Surr: DNOP	108	82.1-121		%REC	1	5/29/2012 12:39:25 PM
EPA METHOD 8015B: GASOLINE RANGE						Analyst: **NSB**
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	5/29/2012 2:12:00 PM
Surr: BFB	104	69.7-121		%REC	1	5/29/2012 2:12:00 PM
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**
Benzene	ND	0.050		mg/Kg	1	5/29/2012 2:12:00 PM
Toluene	ND	0.050		mg/Kg	1	5/29/2012 2:12:00 PM
Ethylbenzene	ND	0.050		mg/Kg	1	5/29/2012 2:12:00 PM
Xylenes, Total	ND	0.10		mg/Kg	1	5/29/2012 2:12:00 PM
Surr: 4-Bromofluorobenzene	105	80-120		%REC	1	5/29/2012 2:12:00 PM

Qualifiers:

*/X	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
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits		

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1205A96**

30-May-12

Client: Animas Environmental Services

Project: COP SJ 27-5 #102M

Sample ID	**MB-2116**	SampType: **MBLK**			TestCode: **EPA Method 8015B: Diesel Range Organics**					
Client ID:	**PBS**	Batch ID: **2116**			RunNo: **3051**					
Prep Date:	**5/25/2012**	Analysis Date: **5/29/2012**			SeqNo: **84484**		Units: **%REC**			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP	11		10.00		111	82.1	121			

Sample ID	**LCS-2116**	SampType: **LCS**			TestCode: **EPA Method 8015B: Diesel Range Organics**					
Client ID:	**LCSS**	Batch ID: **2116**			RunNo: **3051**					
Prep Date:	**5/25/2012**	Analysis Date: **5/29/2012**			SeqNo: **84500**		Units: **%REC**			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP	4.7		5.000		94.3	82.1	121			

Sample ID	**MB-2112**	SampType: **MBLK**			TestCode: **EPA Method 8015B: Diesel Range Organics**					
Client ID:	**PBS**	Batch ID: **2112**			RunNo: **3051**					
Prep Date:	**5/25/2012**	Analysis Date: **5/29/2012**			SeqNo: **84501**		Units: **%REC**			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP	11		10.00		109	82.1	121			

Sample ID	**LCS-2112**	SampType: **LCS**			TestCode: **EPA Method 8015B: Diesel Range Organics**					
Client ID:	**LCSS**	Batch ID: **2112**			RunNo: **3051**					
Prep Date:	**5/25/2012**	Analysis Date: **5/29/2012**			SeqNo: **84655**		Units: **%REC**			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP	4.8		5.000		96.4	82.1	121			

Sample ID	**1205A10-001AMS**	SampType: **MS**			TestCode: **EPA Method 8015B: Diesel Range Organics**					
Client ID:	**BatchQC**	Batch ID: **2112**			RunNo: **3051**					
Prep Date:	**5/25/2012**	Analysis Date: **5/29/2012**			SeqNo: **84661**		Units: **%REC**			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP	4.6		4.878		94.2	82.1	121			

Sample ID	**1205A10-001AMSD**	SampType: **MSD**			TestCode: **EPA Method 8015B: Diesel Range Organics**					
Client ID:	**BatchQC**	Batch ID: **2112**			RunNo: **3051**					
Prep Date:	**5/25/2012**	Analysis Date: **5/29/2012**			SeqNo: **84744**		Units: **%REC**			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP	4.8		4.854		98.5	82.1	121	0	0	

Sample ID	**MB-2129**	SampType: **MBLK**			TestCode: **EPA Method 8015B: Diesel Range Organics**					
Client ID:	**PBS**	Batch ID: **2129**			RunNo: **3051**					
Prep Date:	**5/29/2012**	Analysis Date: **5/29/2012**			SeqNo: **84746**		Units: **mg/Kg**			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	ND	10								

Qualifiers:

- */X Value exceeds Maximum Contaminant Level.
- E Value above quantitation range
- J Analyte detected below quantitation limits
- R RPD outside accepted recovery limits
- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- RL Reporting Detection Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1205A96**

30-May-12

Client: Animas Environmental Services

Project: COP SJ 27-5 #102M

Sample ID **MB-2129**	SampType: **MBLK**	TestCode: **EPA Method 8015B: Diesel Range Organics**
Client ID: **PBS**	Batch ID: **2129**	RunNo: **3051**
Prep Date: **5/29/2012**	Analysis Date: **5/29/2012**	SeqNo: **84746** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP	11		10.00		105	82.1	121			

Sample ID **LCS-2129**	SampType: **LCS**	TestCode: **EPA Method 8015B: Diesel Range Organics**
Client ID: **LCSS**	Batch ID: **2129**	RunNo: **3051**
Prep Date: **5/29/2012**	Analysis Date: **5/29/2012**	SeqNo: **84867** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	38	10	50.00	0	76.4	52.6	130			
Surr: DNOP	4.6		5.000		91.2	82.1	121			

Sample ID **1205A59-001AMS**	SampType: **MS**	TestCode: **EPA Method 8015B: Diesel Range Organics**
Client ID: **BatchQC**	Batch ID: **2116**	RunNo: **3064**
Prep Date: **5/25/2012**	Analysis Date: **5/29/2012**	SeqNo: **85124** Units: **%REC**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP	4.5		5.005		90.2	82.1	121			

Sample ID **1205A59-001AMSD**	SampType: **MSD**	TestCode: **EPA Method 8015B: Diesel Range Organics**
Client ID: **BatchQC**	Batch ID: **2116**	RunNo: **3064**
Prep Date: **5/25/2012**	Analysis Date: **5/29/2012**	SeqNo: **85125** Units: **%REC**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP	5.3		5.025		105	82.1	121	0	0	

Sample ID **MB-2136**	SampType: **MBLK**	TestCode: **EPA Method 8015B: Diesel Range Organics**
Client ID: **PBS**	Batch ID: **2136**	RunNo: **3082**
Prep Date: **5/29/2012**	Analysis Date: **5/30/2012**	SeqNo: **85154** Units: **%REC**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP	11		10.00		106	82.1	121			

Sample ID **LCS-2136**	SampType: **LCS**	TestCode: **EPA Method 8015B: Diesel Range Organics**
Client ID: **LCSS**	Batch ID: **2136**	RunNo: **3082**
Prep Date: **5/29/2012**	Analysis Date: **5/30/2012**	SeqNo: **85155** Units: **%REC**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP	4.6		5.000		91.9	82.1	121			

Sample ID **1205A68-001AMS**	SampType: **MS**	TestCode: **EPA Method 8015B: Diesel Range Organics**
Client ID: **BatchQC**	Batch ID: **2136**	RunNo: **3082**
Prep Date: **5/29/2012**	Analysis Date: **5/30/2012**	SeqNo: **85232** Units: **%REC**

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

Qualifiers:

- */X Value exceeds Maximum Contaminant Level.
- E Value above quantitation range
- J Analyte detected below quantitation limits
- R RPD outside accepted recovery limits
- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- RL Reporting Detection Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1205A96**

30-May-12

Client: Animas Environmental Services

Project: COP SJ 27-5 #102M

Sample ID **1205A68-001AMS**	SampType: **MS**	TestCode: **EPA Method 8015B: Diesel Range Organics**
Client ID: **BatchQC**	Batch ID: **2136**	RunNo: **3082**
Prep Date: **5/29/2012**	Analysis Date: **5/30/2012**	SeqNo: **85232** Units: **%REC**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP	4.7		4.912		96.7	82.1	121			

Sample ID **1205A68-001AMSD**	SampType: **MSD**	TestCode: **EPA Method 8015B: Diesel Range Organics**
Client ID: **BatchQC**	Batch ID: **2136**	RunNo: **3082**
Prep Date: **5/29/2012**	Analysis Date: **5/30/2012**	SeqNo: **85347** Units: **%REC**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP	4.8		4.907		97.6	82.1	121	0	0	

Qualifiers:

- */X Value exceeds Maximum Contaminant Level.
- E Value above quantitation range
- J Analyte detected below quantitation limits
- R RPD outside accepted recovery limits
- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- RL Reporting Detection Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1205A96**

30-May-12

Client: Animas Environmental Services

Project: COP SJ 27-5 #102M

Sample ID **5ML RB**	SampType: **MBLK**	TestCode: **EPA Method 8015B: Gasoline Range**
Client ID: **PBS**	Batch ID: **R3077**	RunNo: **3077**
Prep Date:	Analysis Date: **5/29/2012**	SeqNo: **85210** 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	1,000		1,000		101	69.7	121			

Sample ID **2.5UG GRO LCS**	SampType: **LCS**	TestCode: **EPA Method 8015B: Gasoline Range**
Client ID: **LCSS**	Batch ID: **R3077**	RunNo: **3077**
Prep Date:	Analysis Date: **5/29/2012**	SeqNo: **85213** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	28	5.0	25.00	0	112	98.5	133			
Surr: BFB	820		1,000		82.4	69.7	121			

Sample ID **1205A96-002AMS**	SampType: **MS**	TestCode: **EPA Method 8015B: Gasoline Range**
Client ID: **TH-2 @4'**	Batch ID: **R3077**	RunNo: **3077**
Prep Date:	Analysis Date: **5/29/2012**	SeqNo: **85223** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	21	5.0	18.61	0	113	85.4	147			
Surr: BFB	640		744.3		86.1	69.7	121			

Sample ID **1205A96-002AMSD**	SampType: **MSD**	TestCode: **EPA Method 8015B: Gasoline Range**
Client ID: **TH-2 @4'**	Batch ID: **R3077**	RunNo: **3077**
Prep Date:	Analysis Date: **5/29/2012**	SeqNo: **85224** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	21	5.0	18.61	0	112	85.4	147	0.284	19.2	
Surr: BFB	770		744.3		103	69.7	121	0	0	

Sample ID **MB-2115**	SampType: **MBLK**	TestCode: **EPA Method 8015B: Gasoline Range**
Client ID: **PBS**	Batch ID: **2115**	RunNo: **3077**
Prep Date: **5/25/2012**	Analysis Date: **5/29/2012**	SeqNo: **85231** Units: **%REC**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: BFB	1,000		1,000		99.6	69.7	121			

Sample ID **LCS-2115**	SampType: **LCS**	TestCode: **EPA Method 8015B: Gasoline Range**
Client ID: **LCSS**	Batch ID: **2115**	RunNo: **3077**
Prep Date: **5/25/2012**	Analysis Date: **5/29/2012**	SeqNo: **85234** Units: **%REC**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: BFB	890		1,000		89.3	69.7	121			

Qualifiers:

- */X Value exceeds Maximum Contaminant Level.
- E Value above quantitation range
- J Analyte detected below quantitation limits
- R RPD outside accepted recovery limits
- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- RL Reporting Detection Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1205A96**

30-May-12

Client: Animas Environmental Services

Project: COP SJ 27-5 #102M

Sample ID **MB-2115** SampType: **MBLK** TestCode: **EPA Method 8021B: Volatiles**

Client ID: **PBS** Batch ID: **2115** RunNo: **3077**

Prep Date: **5/25/2012** Analysis Date: **5/29/2012** SeqNo: **85330** 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	1.1		1.000		109	80	120			

Sample ID **LCS-2115** SampType: **LCS** TestCode: **EPA Method 8021B: Volatiles**

Client ID: **LCSS** Batch ID: **2115** RunNo: **3077**

Prep Date: **5/25/2012** Analysis Date: **5/29/2012** SeqNo: **85331** 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	102	83.3	107			
Toluene	0.97	0.050	1.000	0	96.9	74.3	115			
Ethylbenzene	1.0	0.050	1.000	0	102	80.9	122			
Xylenes, Total	3.1	0.10	3.000	0	105	85.2	123			
Surr: 4-Bromofluorobenzene	0.90		1.000		90.3	80	120			

Sample ID **1205A67-001AMS** SampType: **MS** TestCode: **EPA Method 8021B: Volatiles**

Client ID: **BatchQC** Batch ID: **2115** RunNo: **3077**

Prep Date: **5/25/2012** Analysis Date: **5/29/2012** SeqNo: **85341** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.94	0.048	0.9643	0	97.7	67.2	113			
Toluene	0.88	0.048	0.9643	0	91.6	62.1	116			
Ethylbenzene	0.93	0.048	0.9643	0	96.3	67.9	127			
Xylenes, Total	2.9	0.096	2.893	0	99.0	60.6	134			
Surr: 4-Bromofluorobenzene	0.86		0.9643		89.6	80	120			

Sample ID **1205A67-001AMSD** SampType: **MSD** TestCode: **EPA Method 8021B: Volatiles**

Client ID: **BatchQC** Batch ID: **2115** RunNo: **3077**

Prep Date: **5/25/2012** Analysis Date: **5/29/2012** SeqNo: **85342** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.94	0.047	0.9390	0	99.9	67.2	113	0.417	14.3	
Toluene	0.87	0.047	0.9390	0	93.1	62.1	116	1.11	15.9	
Ethylbenzene	0.94	0.047	0.9390	0	99.6	67.9	127	0.716	14.4	
Xylenes, Total	2.9	0.094	2.817	0	101	60.6	134	0.210	12.6	
Surr: 4-Bromofluorobenzene	1.1		0.9390		115	80	120	0	0	

Qualifiers:

- */X Value exceeds Maximum Contaminant Level.
- E Value above quantitation range
- J Analyte detected below quantitation limits
- R RPD outside accepted recovery limits
- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- RL Reporting Detection Limit

HALL ENVIRONMENTAL ANALYSIS LABORATORY

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

Sample Log-In Check List

Client Name: Animas Environmental — Work Order Number: 1205A96

Received by/date: AT 05/26/12

Logged By: **Andy Freeman** 5/26/2012

Completed By: **Anne Thorne** 5/29/2012

Reviewed By: AT/MS 05/29/12

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° 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: ☐ 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			

Chain-of-Custody Record

Client: Animas Environmental Services LLC

Mailing Address: 624 E Comanche Farmington NM 87401

Phone #: 505 564 2281

email or Fax#:

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

Accreditation
☐ NELAP ☐ Other

☐ EDD (Type)

Turn-Around Time:
☐ Standard ☒ Rush Sameday

Project Name: CoP SJ 27-5 #102M

Project #:

Project Manager: R. Kennemer

Sampler: D Watson

On Ice: ☒ Yes ☐ No

Sample Temperature:

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

Date	Time	Matrix	Sample Request ID	Container Type and #	Preservative Type	HEAL No.	BTEX + ~~MTBE~~ (8021)	BTEX + MTBE + TPH (Gas only)	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)	Air Bubbles (Y or N)
5-24-12	1513	soil	TH-1@6'	1-4oz 1-MeOH Kit	non MeOH	1205A96-1	X		X									
	1530		TH-2@4'			-2	X		X									
	1603		TH-3@7'			-3	X		X									
	1618		TH-4@4'			-4	X		X									
	1641		TH-5@6'			-5	X		X									

Date:	Time:	Relinquished by:	Received by:	Date	Time
5/25/12	1147	Debra Watson	Christine Walsh	5/25/12	1147
5/25/12	1237	Christine Walsh		5/26/12	11:30

Remarks: Bill to ConocoPhillips
WO: 9032261
Area: 25
Supervisor: Billy Schaaphok
User: MKSPENC
Ordered by: Ashley M.

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

HALL ENVIRONMENTAL ANALYSIS LABORATORY

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

July 23, 2012

Debbie Watson

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

RE: COP SJ 27-5 #102M OrderNo.: 1207802

Dear Debbie Watson:

Hall Environmental Analysis Laboratory received 6 sample(s) on 7/19/2012 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 **1207802**
Date Reported: **7/23/2012**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Animas Environmental Services
Project: COP SJ 27-5 #102M
Lab ID: 1207802-001 **Matrix:** SOIL

Client Sample ID: SC-1
Collection Date: 7/18/2012 10:10:00 AM
Received Date: 7/19/2012 10:15:00 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	7/19/2012 11:40:31 AM
Surr: DNOP	108	77.6-140		%REC	1	7/19/2012 11:40:31 AM
EPA METHOD 8015B: GASOLINE RANGE						Analyst: **NSB**
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	7/19/2012 12:39:15 PM
Surr: BFB	100	69.7-121		%REC	1	7/19/2012 12:39:15 PM

Qualifiers:				
	*/X	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
	R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
	S	Spike Recovery outside accepted recovery limits	U	Samples with CalcVal < MDL

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Animas Environmental Services
Client Sample ID: SC-2
Project: COP SJ 27-5 #102M
Collection Date: 7/18/2012 9:54:00 AM
Lab ID: 1207802-002 **Matrix:** SOIL **Received Date:** 7/19/2012 10:15:00 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	7/19/2012 12:06:05 PM
Surr: DNOP	110	77.6-140		%REC	1	7/19/2012 12:06:05 PM
EPA METHOD 8015B: GASOLINE RANGE						Analyst: **NSB**
Gasoline Range Organics (GRO)	32	5.0		mg/Kg	1	7/19/2012 1:08:00 PM
Surr: BFB	227	69.7-121	S	%REC	1	7/19/2012 1:08:00 PM

Qualifiers:

*/X	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
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits	U	Samples with CalcVal < MDL

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Animas Environmental Services
Client Sample ID: SC-3
Project: COP SJ 27-5 #102M
Collection Date: 7/18/2012 9:50:00 AM
Lab ID: 1207802-003 **Matrix:** SOIL **Received Date:** 7/19/2012 10:15:00 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	7/19/2012 12:03:26 PM
Surr: DNOP	106	77.6-140		%REC	1	7/19/2012 12:03:26 PM
EPA METHOD 8015B: GASOLINE RANGE						Analyst: **NSB**
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	7/19/2012 1:36:43 PM
Surr: BFB	115	69.7-121		%REC	1	7/19/2012 1:36:43 PM

Qualifiers:

*/X	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
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits	U	Samples with CalcVal < MDL

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Animas Environmental Services
Client Sample ID: SC-4
Project: COP SJ 27-5 #102M
Collection Date: 7/18/2012 10:00:00 AM
Lab ID: 1207802-004 **Matrix:** SOIL **Received Date:** 7/19/2012 10:15:00 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	7/19/2012 11:41:26 AM
Surr: DNOP	106	77.6-140		%REC	1	7/19/2012 11:41:26 AM
EPA METHOD 8015B: GASOLINE RANGE						Analyst: **NSB**
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	7/19/2012 2:05:35 PM
Surr: BFB	108	69.7-121		%REC	1	7/19/2012 2:05:35 PM

Qualifiers:				
	*/X	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
	R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
	S	Spike Recovery outside accepted recovery limits	U	Samples with CalcVal < MDL

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Animas Environmental Services
Project: COP SJ 27-5 #102M
Lab ID: 1207802-005 **Matrix:** SOIL

Client Sample ID: SC-5
Collection Date: 7/18/2012 9:45:00 AM
Received Date: 7/19/2012 10:15:00 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	7/19/2012 12:25:18 PM
Surr: DNOP	109	77.6-140		%REC	1	7/19/2012 12:25:18 PM
EPA METHOD 8015B: GASOLINE RANGE						Analyst: **NSB**
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	7/19/2012 2:34:24 PM
Surr: BFB	113	69.7-121		%REC	1	7/19/2012 2:34:24 PM
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**
Benzene	ND	0.050		mg/Kg	1	7/19/2012 2:34:24 PM
Toluene	ND	0.050		mg/Kg	1	7/19/2012 2:34:24 PM
Ethylbenzene	ND	0.050		mg/Kg	1	7/19/2012 2:34:24 PM
Xylenes, Total	ND	0.10		mg/Kg	1	7/19/2012 2:34:24 PM
Surr: 4-Bromofluorobenzene	111	80-120		%REC	1	7/19/2012 2:34:24 PM

Qualifiers:

*/X	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
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits	U	Samples with CalcVal < MDL

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Animas Environmental Services
Project: COP SJ 27-5 #102M
Lab ID: 1207802-006 **Matrix:** SOIL

Client Sample ID: SC-6
Collection Date: 7/18/2012 10:13:00 AM
Received Date: 7/19/2012 10:15:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**
Benzene	ND	0.12		mg/Kg	5	7/19/2012 3:03:16 PM
Toluene	ND	0.25		mg/Kg	5	7/19/2012 3:03:16 PM
Ethylbenzene	ND	0.25		mg/Kg	5	7/19/2012 3:03:16 PM
Xylenes, Total	ND	0.50		mg/Kg	5	7/19/2012 3:03:16 PM
Surr: 4-Bromofluorobenzene	111	80-120		%REC	5	7/19/2012 3:03:16 PM
EPA METHOD 300.0: ANIONS						Analyst: **BRM**
Chloride	ND	30		mg/Kg	20	7/19/2012 12:28:24 PM

Qualifiers:

*/X	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
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits	U	Samples with CalcVal < MDL

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1207802**

23-Jul-12

Client: Animas Environmental Services

Project: COP SJ 27-5 #102M

Sample ID **MB-2907**	SampType: **MBLK**	TestCode: **EPA Method 300.0: Anions**
Client ID: **PBS**	Batch ID: **2907**	RunNo: **4157**
Prep Date: **7/19/2012**	Analysis Date: **7/19/2012**	SeqNo: **118814** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	ND	1.5								

Sample ID **LCS-2907**	SampType: **LCS**	TestCode: **EPA Method 300.0: Anions**
Client ID: **LCSS**	Batch ID: **2907**	RunNo: **4157**
Prep Date: **7/19/2012**	Analysis Date: **7/19/2012**	SeqNo: **118815** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	15	1.5	15.00	0	98.3	90	110			

Sample ID **1207599-001AMS**	SampType: **MS**	TestCode: **EPA Method 300.0: Anions**
Client ID: **BatchQC**	Batch ID: **2907**	RunNo: **4157**
Prep Date: **7/19/2012**	Analysis Date: **7/19/2012**	SeqNo: **118819** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	15	7.5	15.00	2.511	81.1	64.4	117			

Sample ID **1207599-001AMSD**	SampType: **MSD**	TestCode: **EPA Method 300.0: Anions**
Client ID: **BatchQC**	Batch ID: **2907**	RunNo: **4157**
Prep Date: **7/19/2012**	Analysis Date: **7/19/2012**	SeqNo: **118820** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	15	7.5	15.00	2.511	84.6	64.4	117	3.56	20	

Qualifiers:

*/X	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
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1207802**

23-Jul-12

Client: Animas Environmental Services

Project: COP SJ 27-5 #102M

Sample ID **MB-2911**	SampType: **MBLK**	TestCode: **EPA Method 8015B: Diesel Range Organics**
Client ID: **PBS**	Batch ID: **2911**	RunNo: **4133**
Prep Date: **7/19/2012**	Analysis Date: **7/19/2012**	SeqNo: **118627** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	ND	10								
Motor Oil Range Organics (MRO)	ND	50								
Surr: DNOP	11		10.00		114	77.6	140			

Sample ID **LCS-2911**	SampType: **LCS**	TestCode: **EPA Method 8015B: Diesel Range Organics**
Client ID: **LCSS**	Batch ID: **2911**	RunNo: **4133**
Prep Date: **7/19/2012**	Analysis Date: **7/19/2012**	SeqNo: **118783** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	45	10	50.00	0	90.1	52.6	130			
Surr: DNOP	4.6		5.000		91.0	77.6	140			

Sample ID **1207748-001CMS**	SampType: **MS**	TestCode: **EPA Method 8015B: Diesel Range Organics**
Client ID: **BatchQC**	Batch ID: **2911**	RunNo: **4172**
Prep Date: **7/19/2012**	Analysis Date: **7/20/2012**	SeqNo: **120061** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	69	9.8	49.21	33.03	73.8	57.2	146			
Surr: DNOP	4.7		4.921		95.0	77.6	140			

Sample ID **1207748-001CMSD**	SampType: **MSD**	TestCode: **EPA Method 8015B: Diesel Range Organics**
Client ID: **BatchQC**	Batch ID: **2911**	RunNo: **4172**
Prep Date: **7/19/2012**	Analysis Date: **7/20/2012**	SeqNo: **120062** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	75	10	50.15	33.03	83.6	57.2	146	7.81	24.5	
Surr: DNOP	4.7		5.015		94.2	77.6	140	0	0	

Qualifiers:

- */X Value exceeds Maximum Contaminant Level.
- E Value above quantitation range
- J Analyte detected below quantitation limits
- R RPD outside accepted recovery limits
- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- RL Reporting Detection Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1207802**

23-Jul-12

Client: Animas Environmental Services

Project: COP SJ 27-5 #102M

Sample ID **MB-2878**	SampType: **MBLK**	TestCode: **EPA Method 8015B: Gasoline Range**
Client ID: **PBS**	Batch ID: **2878**	RunNo: **4160**
Prep Date: **7/18/2012**	Analysis Date: **7/19/2012**	SeqNo: **119360** 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	1000		1000		103	69.7	121			

Sample ID **LCS-2878**	SampType: **LCS**	TestCode: **EPA Method 8015B: Gasoline Range**
Client ID: **LCSS**	Batch ID: **2878**	RunNo: **4160**
Prep Date: **7/18/2012**	Analysis Date: **7/19/2012**	SeqNo: **119361** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	25	5.0	25.00	0	101	85	115			
Surr: BFB	1100		1000		109	69.7	121			

Sample ID **1207548-001AMS**	SampType: **MS**	TestCode: **EPA Method 8015B: Gasoline Range**
Client ID: **BatchQC**	Batch ID: **2878**	RunNo: **4160**
Prep Date: **7/18/2012**	Analysis Date: **7/19/2012**	SeqNo: **119368** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	23	4.7	23.39	0	98.5	85.4	147			
Surr: BFB	990		935.5		106	69.7	121			

Sample ID **1207548-001AMSD**	SampType: **MSD**	TestCode: **EPA Method 8015B: Gasoline Range**
Client ID: **BatchQC**	Batch ID: **2878**	RunNo: **4160**
Prep Date: **7/18/2012**	Analysis Date: **7/19/2012**	SeqNo: **119369** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	23	4.8	23.85	0	95.0	85.4	147	1.61	19.2	
Surr: BFB	1000		954.2		109	69.7	121	0	0	

Qualifiers:

- */X Value exceeds Maximum Contaminant Level.
- E Value above quantitation range
- J Analyte detected below quantitation limits
- R RPD outside accepted recovery limits
- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- RL Reporting Detection Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1207802**

23-Jul-12

Client: Animas Environmental Services

Project: COP SJ 27-5 #102M

Sample ID **MB-2878**	SampType: **MBLK**	TestCode: **EPA Method 8021B: Volatiles**
Client ID: **PBS**	Batch ID: **2878**	RunNo: **4160**
Prep Date: **7/18/2012**	Analysis Date: **7/19/2012**	SeqNo: **119432** Units: **%REC**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: 4-Bromofluorobenzene	1.1		1.000		113	80	120			

Sample ID **LCS-2878**	SampType: **LCS**	TestCode: **EPA Method 8021B: Volatiles**
Client ID: **LCSS**	Batch ID: **2878**	RunNo: **4160**
Prep Date: **7/18/2012**	Analysis Date: **7/19/2012**	SeqNo: **119433** Units: **%REC**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: 4-Bromofluorobenzene	1.2		1.000		119	80	120			

Sample ID **1207624-001AMS**	SampType: **MS**	TestCode: **EPA Method 8021B: Volatiles**
Client ID: **BatchQC**	Batch ID: **2878**	RunNo: **4160**
Prep Date: **7/18/2012**	Analysis Date: **7/19/2012**	SeqNo: **119488** Units: **%REC**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: 4-Bromofluorobenzene	1.1		0.9398		116	80	120			

Sample ID **1207624-001AMSD**	SampType: **MSD**	TestCode: **EPA Method 8021B: Volatiles**
Client ID: **BatchQC**	Batch ID: **2878**	RunNo: **4160**
Prep Date: **7/18/2012**	Analysis Date: **7/20/2012**	SeqNo: **119499** Units: **%REC**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: 4-Bromofluorobenzene	1.1		0.9132		116	80	120	0	0	

Qualifiers:

- */X Value exceeds Maximum Contaminant Level.
- E Value above quantitation range
- J Analyte detected below quantitation limits
- R RPD outside accepted recovery limits
- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- RL Reporting Detection Limit

HALL ENVIRONMENTAL ANALYSIS LABORATORY

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

Sample Log-In Check List

Client Name: Animas Environmental Work Order Number: 1207802

Received by/date: AT 07/19/12

Logged By: **Anne Thorne** 7/19/2012 10:15:00 AM

Completed By: **Anne Thorne** 7/19/2012

Reviewed By: JO 07/19/12

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° 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: ☐ 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			

Chain-of-Custody Record

Client: Animas Environmental Services, LLC

Mailing Address: 624 E. Comanche
Farmington, NM 87401

Phone #: 505-564-2281

email or Fax#: 505-324-2022

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

Accreditation
☐ NELAP ☐ Other _____

☐ EDD (Type) _____

Turn-Around Time: ASAP - Anions
☐ Standard ☒ Rush Same Day

Project Name:
CoP SJ 27-5 #102M

Project #:

Project Manager:
D. Watson

Sampler: Heather Woods

On Ice: ☒ Yes ☐ No

Sample Temperature: 1.6

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

Analysis Request

Date	Time	Matrix	Sample Request ID	Container Type and #	Preservative Type	HEAL No. 1201882	BTEX + MTBE + TMB's (8021)	BTEX + MTBE + TPH (Gas only)	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)	Air Bubbles (Y or N)
7/18/12	1010	Soil	SC-1	MeOH Kit; 1 4oz Jar	MeOH	-001			X									
7/18/12	954	Soil	SC-2	MeOH Kit; 1 4oz Jar	MeOH	-002			X									
7/18/12	950	Soil	SC-3	MeOH Kit; 2 4oz Jar	MeOH	-003			X									
7/18/12	1000	Soil	SC-4	MeOH Kit; 2 4oz Jar	MeOH	-004			X									
7/18/12	945	Soil	SC-5	MeOH Kit; 2 4oz Jar	MeOH	-005	X		X									
7/18/12	1013	Soil	SC-6	MeOH Kit; 2 4oz Jar	MeOH	-006	X							X				

Date:	Time:	Relinquished by:	Received by:	Date	Time
7/18/12	1622	Heather M. Woods	Christine Walker	7/18/12	1622
Date:	Time:	Relinquished by:	Received by:	Date	Time
7/18/12	1702	Christine Walker		07/19/12	1015

Remarks: Bill to Conoco Phillips
WO: 9052517
Area: 25
Super: kendal bassing
userid: KAITLW
acct code: D150
ordered by: Eric Smith