

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 Oil & Gas Co.	Contact Lisa Hunter
Address 3401 East 30th St, Farmington, NM	Telephone No. (505) 258-1607
Facility Name Jicarilla 153 #25	Facility Type: Gas well
Surface Owner: Jicarilla	Mineral Owner: Jicarilla (Contract 153)
API 3003922421	

LOCATION OF RELEASE

Unit Letter	Section	Township	Range	Feet from the	North/South Line	Feet from the	East/West Line	County
A	36	26N	5W	950'	North	1100	East	Rio Arriba

Latitude **36.44796** Longitude **-107.30425**

NATURE OF RELEASE

Type of Release Hydrocarbon	Volume of Release Unknown	Volume Recovered 1031 yards
Source of Release Below Grade Tank	Date and Hour of Occurrence Unknown	Date and Hour of Discovery March 22, 2016
Was Immediate Notice Given? <input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Not Required	If YES, To Whom?	
By Whom?	Date and Hour	
Was a Watercourse Reached? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	If YES, Volume Impacting the Watercourse. N/A	
If a Watercourse was Impacted, Describe Fully.* N/A	N/A	

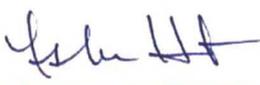
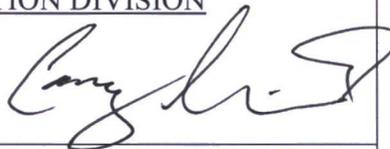
OIL CONS. DIV DIST. 3
JAN 13 2017

OIL CONS. DIV DIST. 3
JAN 13 2017

Describe Cause of Problem and Remedial Action Taken.*
Historic contamination was encountered after a soil sample was taken on March 22, 2016 during a BGT resampling project in 2016.

Describe Area Affected and Cleanup Action Taken.
Historical hydrocarbon impacted soil was found during the resampling of a BGT closure for the subject well. The excavation was 42'x 39' x 17' and 1031 yds of soil was transported to TNT landfarm and 1031 yds. of clean soil was transported from an approved Jicarilla field source and placed in the excavation site. Analytical results were below the regulatory standards – no further action required. The soil sampling report is attached for review.

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: Lisa Hunter	Approved by Environmental Specialist: 	
Title: Field Environmental Specialist	Approval Date: 2/8/17	Expiration Date:
E-mail Address: Lisa.Hunter@cop.com	Conditions of Approval: —	258 Attached <input type="checkbox"/>
Date: January 9, 2017	Phone: (505) 258-1607	

* Attach Additional Sheets If Necessary **#NOV 1621641559**

46



January 3, 2017

Robert Spearman
ConocoPhillips
San Juan Business Unit
(505) 320-3045

Via electronic mail to:
SJBUE-Team@ConocoPhillips.com

**RE: Below Grade Tank Closure, Release Assessment, and Final Excavation Report
Jicarilla 153 25
Rio Arriba County, New Mexico**

Dear Mr. Spearman:

On March 22, May 17, July 7, and December 27, 2016, Animas Environmental Services, LLC (AES) completed below grade tank (BGT) closure sampling, a release assessment, and environmental clearance of the final excavation limits at the ConocoPhillips (COPC) Jicarilla 153 25, located in Rio Arriba County, New Mexico. At the request of the New Mexico Oil Conservation Division (NMOCD), resampling of the location below the former BGT was required to meet strictest closure criteria listed in New Mexico Administrative Code (NMAC) 19.15.17.13E. After obtaining the results of the March 2016 sampling event, a release assessment was completed by AES on May 17 and July 7, 2016. The final excavation was completed by COPC contractors prior to AES' arrival at the location on December 27, 2016.

1.0 Site Information

1.1 Location

Location – NE¼ NE¼, Section 36, T26N, R5W, Rio Arriba County, New Mexico

Latitude/Longitude – N36.44796 and W107.30425, respectively

Surface Owner – Jicarilla Apache Nation

Figure 1. Topographic Site Location Map

Figure 2. Aerial Site Map with BGT Closure Sample Location

604 W. Piñon St.
Farmington, NM 87401
505-564-2281

1911 Main, Ste 206
Durango, CO 81301
970-403-3084

1.2 JANOGA and NMOCD Action Levels

The Jicarilla 153 25 release is located on Jicarilla Apache Nation lands, and soil remediation action levels are determined by the Jicarilla Apache Nation Oil and Gas Administration (JANOGA). JANOGA action levels for soils currently follow the New Mexico Oil Conservation Division (NMOCD) *Guidelines for Remediation of Leaks, Spills, and Releases* (August 1993). Per JANOGA, all locations within Jicarilla Apache Nation lands typically receive a ranking score of 20; however, at the request of NMOCD, the strictest closure criteria from NMAC 19.15.17.13E Table 1 were applied at the site. Action levels are:

- 10 mg/kg benzene and 50 mg/kg total benzene, toluene, ethylbenzene, and xylene (BTEX);
- 100 mg/kg total petroleum hydrocarbons (TPH); and
- 600 mg/kg chloride.

1.3 Assessment

AES was initially contacted by Robert Spearman of COPC on March 1, 2016. At the request of the NMOCD, resampling of the location below the former BGT was required to meet all required closure criteria listed in NMAC 19.15.17.13E. On March 22, 2016, Sam Glasses and John Sandoval of AES traveled to the location. Soil sampling consisted of collection of one discrete soil sample (S-1) from below the former BGT. The sample location is presented on Figure 2.

On May 17 and July 7, 2016, Corwin Lameman, Sam Glasses, and Emilee Skyles of AES completed release assessment field work. The assessment included collection and sampling of 22 soil samples from 8 borings in and around the release area. Soil borings were terminated between 8.5 and 20 feet. Based on field sampling results, AES recommended further excavation of the release area. Sample locations are shown on Figure 3.

On December 27, 2016, AES returned to the location to collect confirmation soil samples of the excavation. The field sampling activities included collection of five confirmation soil samples (SC-1 through SC-5) from the walls and base of the excavation. The area of the final excavation measured approximately 42 feet by 39 feet by 17 feet in depth. Sample locations and final excavation extents are presented on Figure 4.

2.0 Soil Sampling

2.1 Field Screening

2.1.1 Volatile Organic Compounds

Field screening for VOC vapors was conducted with a photo-ionization detector (PID) organic vapor meter (OVM). Before beginning field screening, the PID-OVM was first calibrated with 100 ppm isobutylene gas.

2.1.2 Total Petroleum Hydrocarbons

Soil samples were also analyzed in the field for TPH per U.S. Environmental Protection Agency (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*.

2.2 Laboratory Analyses

The samples 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. The samples were maintained on ice until delivery to the analytical laboratory, Hall Environmental Analysis Laboratory (Hall), in Albuquerque, New Mexico.

S-1 was laboratory analyzed for:

- BTEX per USEPA Method 8021B;
- TPH per USEPA Method 418.1;
- TPH as gasoline range organics (GRO) and diesel range organics (DRO) per USEPA Method 8015D; and
- Chlorides per USEPA Method 300.0.

SC-1 through SC-5 were laboratory analyzed for:

- BTEX per USEPA Method 8021B;
- TPH per USEPA Method 418.1; and
- TPH as GRO, DRO, and Motor Oil Range Organics (MRO) and per USEPA Method 8015.

2.3 Field Screening and Laboratory Analytical Results

Field sampling results are summarized in Table 1 and presented on Figures 3 and 4. Laboratory analytical results are summarized in Table 2 and presented on Figures 2 and 4. The AES Field Sampling Reports and the laboratory analytical reports are attached.

Table 1. Soil Field Screening VOC and TPH Results
Jicarilla 153 25 Release Assessments and Final Excavation
May to December 2016

Sample ID	Date Sampled	Depth below BGT (ft bgs)	VOCs OVM Reading (ppm)	TPH 418.1 (mg/kg)
<i>JANOGA and NMOCD Action Levels (NMAC 19.15.17.13E Table 1)*</i>			100	100
SB-1	5/17/16	7.75	647	15,600
		8.5	4,142	6,190
	7/7/16	12	4,255	2,870
		14	818	NA
		16	17.7	20.3
SB-2	5/17/16	8	0.9	59.1
		12	7.1	51.0
SB-3	5/17/16	9	2,834	637
		12	4,534	5,540
	7/7/16	14	1,651	NA
		16	12.9	<20.0
		20	7.1	<20.0
SB-4	5/17/16	8	0.4	60.7
		12	1,266	256
SB-5	5/17/16	8	168	NA
		12	1,273	306
SB-6	5/17/16	12	0.5	21.7
SB-7	5/17/16	12	0.0	<20.0
SB-8	7/7/16	8	0.4	<20.0
		12	0.3	NA
		14	0.1	NA
		16	0.0	<20.0

Sample ID	Date Sampled	Depth below BGT (ft bgs)	VOCs OVM Reading (ppm)	TPH 418.1 (mg/kg)
<i>JANOGA and NMOCD Action Levels (NMAC 19.15.17.13E Table 1)*</i>			100	100
SC-1	12/27/16	0 to 17	0.2	<20.0
SC-2	12/27/16	0 to 17	25.2	33.2
SC-3	12/27/16	0 to 17	0.1	<20.0
SC-4	12/27/16	0 to 17	0.0	<20.0
SC-5	12/27/16	17	0.8	<20.0

NA – Not Analyzed

*Action level determined by JANOGA and NMAC 19.15.17.13E Table 1.

Table 2. Soil Laboratory Analytical Results – Benzene, Total BTEX, TPH, and Chloride
 Jicarilla 153 25 BGT Closure and Final Excavation Clearance
 March and December 2016

Sample ID	Date Sampled	Depth (ft)	Benzene (8021) (mg/kg)	Total BTEX (8021) (mg/kg)	TPH – GRO (8015) (mg/kg)	TPH – DRO (8015) (mg/kg)	TPH – MRO (8015) (mg/kg)	TPH (418.1) (mg/kg)	Chlorides (300.0) (mg/kg)
<i>JANOGA/NMOCD Action Levels (NMAC 19.15.17.13E Table 1)*</i>			10	50		100		100	600
S-1	3/22/16	8	<0.24	28.7	280	8,600	NA	30,000	<30
SC-1	12/27/16	0 to 17	<0.023	<0.207	<4.6	<9.4	<47	<19	NA
SC-2	12/27/16	0 to 17	<0.025	<0.222	<4.9	<9.9	<50	<18	NA
SC-3	12/27/16	0 to 17	<0.024	<0.216	<4.8	<9.6	<48	<20	NA
SC-4	12/27/16	0 to 17	<0.023	<0.208	<4.6	<9.5	<47	<19	NA
SC-5	12/27/16	17	<0.024	<0.216	<4.8	<9.4	<47	<18	NA

NA – Not Analyzed

* Action level determined by JANOGA and NMAC 19.15.17.13E Table 1.

3.0 Conclusions and Recommendations

3.1 BGT Closure

On March 22, 2016, AES conducted a BGT closure and assessment of petroleum contaminated soils associated at the Jicarilla 153 25 location. NMOCD action levels for BGT closures are specified in NMAC 19.15.17.13E Table 1. BGT closure sampling results for TPH in March 2016 were above the NMOCD action levels, with S-1 at 30,000 mg/kg TPH (via USEPA Method 418.1). Laboratory results for chloride in S-1 were reported below the NMOCD action level of 600 mg/kg, with a concentration below the laboratory detection limit of 30 mg/kg. Based on laboratory results for TPH, a release was confirmed at the Jicarilla 153 25 location.

3.2 Release Assessment and Excavation

On May 17 and July 7, 2016, AES completed release assessments at the Jicarilla 153 25 release location. Action levels for releases are determined by JANOGA but at the request of NMOCD, the strictest closure requirements in NMAC 19.15.17.13E Table 1 were utilized. Initial release assessment field sampling results above the NMOCD action level of 100 mg/kg TPH were reported in SB-1 and SB-3 through SB-5, with the highest TPH concentration reported in SB-1 with 15,600 mg/kg. Based on the field sampling results, excavation of contaminated soils was recommended.

On December 27, 2016, final clearance of the excavation area was completed. Field sampling results of the excavation extents showed that field TPH concentrations were below the applicable NMOCD action level of 100 mg/kg for the final walls and base of the excavation. Laboratory analytical results reported benzene, total BTEX, and TPH concentrations (via USEPA Methods 418.1 and 8015) as below the applicable NMOCD action levels.

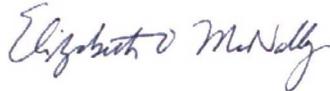
Based on final field sampling and laboratory analytical results of the excavation of petroleum contaminated soils at the Jicarilla 153 25, VOC, benzene, total BTEX, and TPH concentrations were below applicable NMOCD action levels for each of the sidewalls and base of the excavation. No further work is recommended.

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

Sincerely,



David J. Reese
Environmental Scientist



Elizabeth McNally, P.E.

Attachments:

- Figure 1. Topographic Site Location Map
- Figure 2. Aerial Site Map with BGT Closure Sample Location, March 2016
- Figure 3. Release Assessment Sample Locations and Results, May and July 2016
- Figure 4. Final Excavation Sample Locations and Results, December 2016
- AES Field Sampling Report 051716
- AES Field Sampling Report 070716
- AES Field Sampling Report 122716
- Hall Laboratory Analytical Report 1603B39
- Hall Laboratory Analytical Report 1612D34

C:\Users\emcnally\Dropbox (Animas Environmental)\2017 Client Projects\ConocoPhillips\Jicarilla 153
25\Jicarilla 153 25 Release and Final Excavation Report 010317.docx



 <p>animas environmental services Farmington, NM • Durango, CO animasenvironmental.com</p>	<p>DRAWN BY: S. Glasses</p>	<p>DATE DRAWN: May 16, 2016</p>	<p>FIGURE 1</p>
	<p>REVISIONS BY: C. Lameman</p>	<p>DATE REVISED: January 3, 2017</p>	
	<p>CHECKED BY: E. McNally</p>	<p>DATE CHECKED: January 3, 2017</p>	
	<p>APPROVED BY: E. McNally</p>	<p>DATE APPROVED: January 3, 2017</p>	

LEGEND

- ===== FORMER SECONDARY CONTAINMENT BERM
- FORMER FENCE

Laboratory Analytical Results								
Sample ID	Date	Depth (ft)	Benzene (mg/kg)	Total BTEX (mg/kg)	TPH - GRO (mg/kg)	TPH - DRO (mg/kg)	TPH 418.1 (mg/kg)	Chlorides (mg/kg)
JANOGA ACTION LEVEL			10	50	100		100	600
S-1	3/22/16	8	<0.24	28.7	280	8,600	30,000	<30

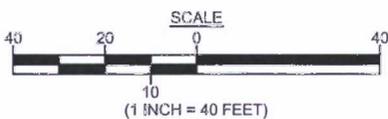
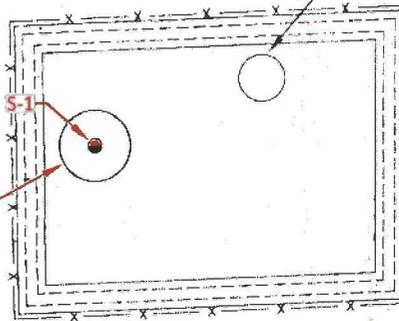
ALL SAMPLES WERE ANALYZED PER USEPA METHOD 8021B, 8015D, 418.1 AND 300.0.

JICARILLA 153 25 WELL MONUMENT

FORMER SEPARATOR

FORMER PRODUCTION TANK

FORMER BELOW GRADE TANK
S-1 SAMPLE LOCATION
N36.44777, W107.30414



AERIAL SOURCE: © 2016 GOOGLE EARTH PRO, AERIAL DATE: MARCH 16, 2015.



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animasenvironmental.com

DRAWN BY: S. Glasses	DATE DRAWN: May 16, 2016
REVISIONS BY: S. Glasses	DATE REVISED: January 6, 2017
CHECKED BY: E. McNally	DATE CHECKED: January 6, 2017
APPROVED BY: E. McNally	DATE APPROVED: January 6, 2017

FIGURE 2

**AERIAL SITE MAP
MARCH 2016**
ConocoPhillips
JICARILLA 153 25
NE¼ NE¼, SECTION 36, T26N, R5W
RIO ARriba COUNTY, NEW MEXICO
N36.44796, W107.30425

FIGURE 3

RELEASE ASSESSMENT SAMPLE
LOCATIONS AND RESULTS
MAY TO JULY 2016
ConocoPhillips
JICARILLA 153 25
NE¼ NE¼, SECTION 36, T26N, R5W
RIO ARRIBA COUNTY, NEW MEXICO
N36.44796, W107.30425



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animasenvironmental.com

DRAWN BY:
C. Lameman

DATE DRAWN:
May 18, 2016

REVISIONS BY:
S. Glasses

DATE REVISED:
January 6, 2017

CHECKED BY:
E. McNally

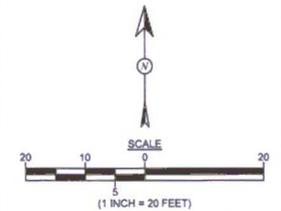
DATE CHECKED:
January 6, 2017

APPROVED BY:
E. McNally

DATE APPROVED:
January 6, 2017

LEGEND

- SOIL BORING LOCATIONS
- ===== FORMER SECONDARY CONTAINMENT BERM
- x— FORMER FENCE



Field Sampling Results				
Sample ID	Date	Depth (ft)	OVM-PID (ppm)	TPH (mg/kg)
JANOGA ACTION LEVEL			100	100
SB-1	5/17/16	7.75	647	15,600
		8.5	4,142	6,190
	7/7/16	12	4,255	2,870
		14	818	NA
SB-2	5/17/16	16	17.7	20.3
		8	0.9	59.1
	7/7/16	12	7.1	51.0
		9	2,834	637
SB-3	5/17/16	12	4,534	5,540
		14	1,651	NA
	7/7/2016	16	12.9	<20.0
		20	7.1	<20.0
SB-4	5/17/16	8	0.4	60.7
		12	1,266	256
SB-5	5/17/16	8	168	NA
		12	1,273	306
SB-6	5/17/16	12	0.5	21.7
SB-7	5/17/16	12	0.0	<20.0
		8	0.4	<20.0
	7/7/16	12	0.3	NA
		14	0.1	NA
SB-8	7/7/16	16	0.0	<20.0

NA - NOT ANALYZED

JICARILLA 153 25 WELL MONUMENT

FORMER PRODUCTION TANK

FORMER SEPARATOR

FORMER BELOW GRADE TANK
RELEASE LOCATION
N36.44777, W107.30414

FIGURE 4

FINAL EXCAVATION SAMPLE LOCATIONS AND RESULTS DECEMBER 2016
 ConocoPhillips
 JICARILLA 153 25
 NE¼ NE¼, SECTION 36, T26N, R5W
 RIO ARRIBA COUNTY, NEW MEXICO
 N36.44796, W107.30425



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 animasenvironmental.com

DRAWN BY:
C. Lameman

DATE DRAWN:
January 3, 2017

REVISIONS BY:
C. Lameman

DATE REVISED:
January 3, 2017

CHECKED BY:
E. McNally

DATE CHECKED:
January 3, 2017

APPROVED BY:
E. McNally

DATE APPROVED:
January 3, 2017

LEGEND

- SAMPLE LOCATIONS
- ▬▬▬▬▬▬ FORMER SECONDARY CONTAINMENT BERM
- x— FORMER FENCE

JICARILLA 153 25 WELL MONUMENT

FINAL EXCAVATION AREA
42 FT x 39 FT x 17 FT DEEP

FORMER PRODUCTION TANK

FORMER SEPARATOR

FORMER BELOW GRADE TANK
RELEASE LOCATION:
N36.44777, W107.30414

Field Sampling Results

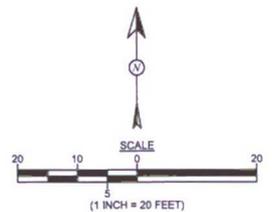
Sample ID	Date	Depth (ft)	OVM-PID (ppm)	TPH (mg/kg)
JANOGA ACTION LEVEL				100
SC-1	12/27/16	0 to 17	0.2	<20.0
SC-2	12/27/16	0 to 17	25.2	33.2
SC-3	12/27/16	0 to 17	0.1	<20.0
SC-4	12/27/16	0 to 17	0.0	<20.0
SC-5	12/27/16	17	0.8	<20.0

ALL SAMPLES WERE COMPOSITE SAMPLES.

Laboratory Analytical Results

Sample ID	Date	Depth (ft)	Benzene (mg/kg)	Total BTEX (mg/kg)	TPH - GRO (mg/kg)	TPH - DRO (mg/kg)	TPH - MRO (mg/kg)	TPH 418.1 (mg/kg)
JANOGA ACTION LEVEL			10	50	100	100	100	100
SC-1	12/27/16	0 to 17	<0.023	<0.207	<4.6	<9.4	<47	<19
SC-2	12/27/16	0 to 17	<0.025	<0.222	<4.9	<9.9	<50	<18
SC-3	12/27/16	0 to 17	<0.024	<0.216	<4.8	<9.6	<48	<20
SC-4	12/27/16	0 to 17	<0.023	<0.208	<4.6	<9.5	<47	<19
SC-5	12/27/16	17	<0.024	<0.216	<4.8	<9.4	<47	<18

ALL SAMPLES WERE ANALYZED PER USEPA METHOD 8021B, 8015D AND 418.1.



Field Screening Release Assessment Field Report

Date: 5-17-16

Client: CoPC AES Personnel: C. Laneman
 Well or Lease Name: Jicarilla 135 25 S. Glasses
 CoP Onsite Supervisor: C. Laneman Beginning mileage: 48083
 Site Arrival Time: 1000 Ending Mileage: 48312
 Site Departure Time: 330 Release Source: Historic BBT
 Land Jurisdiction: Jicarilla Well Head (GPS): 36.44796, -107.30425
 County/State: RA / NM Release Location (GPS): 36.44777, -107.30414
 Site Rank: JANDGA

Billing Info: _____
 WO #: _____
 Supervisor: _____
 USER: _____
 Area: _____
 Activity Code: _____
 Ordered by: _____

Equipment in place: Wellhead Monument

Photos taken: Yes

Buck Machine #			
Concentration	50 mg/kg	100 mg/kg	500 mg/kg
Calibration ABS Values			

Project Details: BBT to release on regulatory final Release Assessment.

Initial Recommendations: Come out with a push rig or geoprobe.

Limitations: Rain & Lightning. Auger extension limitation

Site Sketch (DOES NOT REPLACE SITE MAP) and Current Excavation Dimensions:

Horizontal (Cross-Section View):

See Attachment

Vertical (Plan View):

Date: 5-17-16

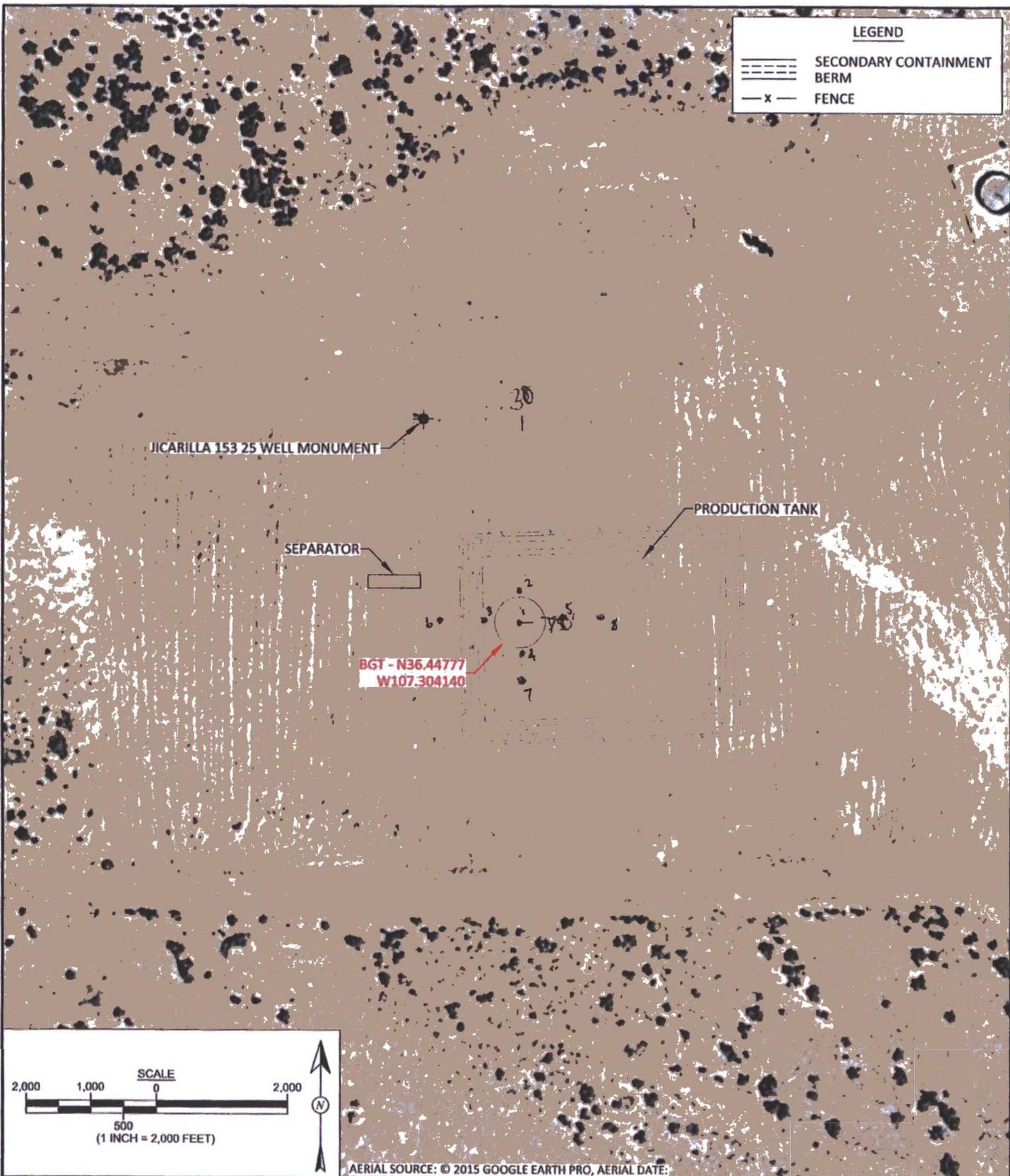
AES personnel: C. Lamenan, S. Glasses

Sample ID	Collection Date	Time of Sample Collection	Sample Location	OVM (ppm)	OVM Time	Field TPH (mg/kg)	Field TPH Analysis Time	ABS	NOTES
SB-1 @ 8.75'	5-17-16	1032	Center	647	1050	15600	1053	0.958 x 10	P6S, Md-CG, Brown, Strong odor, Gray, v. Moist
0 8.5'		1039		9142	1051	6,190	1057	0.395 x 10	P6S, Cb, Gray, v. St. odor, v. Moist Liner. Stopped
SB-2 @ 8'		1055	N of SB-1	0.9	1117	59.1	1120	0.031	P6S, Md, Red-Brown, N. odor, No staining, Moist
0 12'		1113		7.1	1126	57.0	1129	0.026	Cl w/ Sd, Dk. Brown, No odor, No staining, Moist
SB-3 @ 9'		1134	W of SB-1	2834	1150	637	1155	0.386	Sandy w/ Cl, Dk. Brown, odor, Gray staining, Moist
0 12'		1143		4534	1203	5,540	1208	0.335 x 10	Cl w/ Sd, Dk. Brown, St. odor, Gray staining, Moist #26 Spot
SB-4 @ 8'		1227	S of SB-1	0.4	1233	60.7	1237	0.032	P6S, Fin-Md, Red-Brown, No odor, No staining, Moist
0 12'		1242		1266	1304	256	1309	0.152	Cl w/ Sd, Dk. Brown, odor, Some staining, Moist
SB-5 @ 9'		1313	E of SB-1	168	1337	-	-	-	Cl w/ Sd, Dk. Brown, St. odor, Blk staining, Moist
0 12'		1329		1273	1349	306	1352	0.183	
SB-6 @ 12'		1409	W of SB-3	0.5	1426	21.65	1428	0.008	
SB-7 @ 12'		1442	E of	0.0	1503	<20.0	1505	0.006	

*Include Benzene readings in the notes section initially and transfer to Limitations if Benzene is a problem on the location.

Well or Lease Name:
 Animas Environmental Services, LLC
 Date:
 604 W Pinon St. Farmington, NM 87401 office # 505-564-2281
 1911 N Main, Ste 280, Durango, CO 81301

LEGEND	
	SECONDARY CONTAINMENT BERM
	FENCE



AERIAL SOURCE: © 2015 GOOGLE EARTH PRO, AERIAL DATE:



animas environmental services
 Farmington, NM • Durango, CO
 animasenvironmental.com

DRAWN BY: S. Glasses	DATE DRAWN: May 16, 2016
REVISIONS BY: S. Glasses	DATE REVISED: May 16, 2016
CHECKED BY: E. Skyles	DATE CHECKED: May 16, 2016
APPROVED BY: E. McNally	DATE APPROVED: May 16, 2016

FIGURE 2

AERIAL SITE MAP
MAY 2016
 ConocoPhillips
 JICARILLA 153 25
 NE¼ NE¼, SECTION 36, T26N, R5W
 RIO ARriba COUNTY, NEW MEXICO
 N36.44796, W107.30425

Field Screening Release Assessment Field Report

Date: 7-7-16

Client: COPC

AES Personnel: E-Skyles

Billing Info: _____

Well or Lease Name: JICARILLA 153 25

S. Glasses

WO #: _____

CoP Onsite Supervisor: E. Skyles

Beginning mileage: _____

Supervisor: _____

Site Arrival Time: 9:35 am

Ending Mileage: _____

USER: _____

Site Departure Time: _____

Release Source: BGT-Historic

Area: _____

Well Head (GPS): _____

Activity Code: _____

Land Jurisdiction: JICARILLA

Release Location (GPS): _____

Ordered by: _____

County/State: Pio ARRIBA / NM

Site Rank: 20

Equipment in place: PEA SITE / Well Monument Only

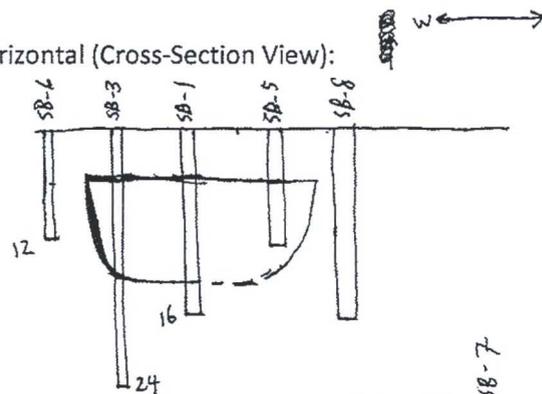
Buck Machine #			
Concentration	50 mg/kg	100 mg/kg	500 mg/kg
Calibration ABS Values			

Project Details:

Site Sketch (DOES NOT REPLACE SITE MAP) and Current Excavation Dimensions:

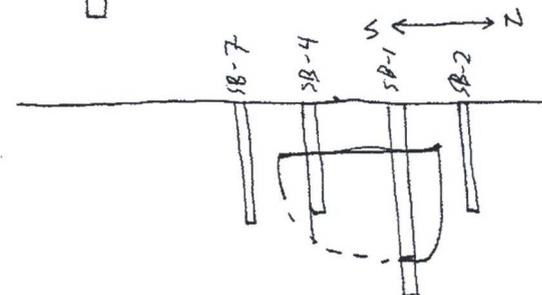
Initial Recommendations:

Horizontal (Cross-Section View):



Limitations:

Vertical (Plan View):



Well or Lease Name: Jicarilla 153 25

Date: 7/7/16

AES personnel: E. Skyles /s. glasses

Sample ID	Collection Date	Time of Sample Collection	Sample Location	OVM (ppm)	OVM Time	Field TPH (mg/kg)	Field TPH Analysis Time	ABS	NOTES
SB-3@16'	7/7/16	10:10		12.9	10:20	>20.0	1026	0.017	Slight odor sandy w/clay
SB-3@20'	7/7/16	10:15		7.1	10:22	>20.0	1032	0.018	no odor
SB-3@14'	7/7/16	10:12		16.51	10:21	NA	NA	NA	Slight odor - clay
SB-1@12'	7/7/16	10:54		4,255	11:05	2,871	11:22		x10
SB-1@14'	7/7/16	10:55		818	11:05	NA	NA	NA	
SB-1@16'	7/7/16	10:56		17.7	11:06	20.3			
SB-8@8'	7/7/16	11:22		0.4	11:37				sand,
SB-8@12'	7/7/16	11:31		0.3	11:37				clay
SB-8@14'	7/7/16	11:32		0.1	11:37				clay
SB-8@16'	7/7/16	11:33		0.0	11:37				clay

*Include Benzene readings in the notes section initially and transfer to Limitations if Benzene is a problem on the location.

Field Screening Release Assessment Field Report

Date: 12-27-16

Client: Jonaco Phillips AES Personnel: C. Lameman
 Well or Lease Name: Jicarilla 153 25
 CoP Onsite Supervisor: Eric Smith Beginning mileage: 53216
 Site Arrival Time: to 740 Ending Mileage: 53444
 Site Departure Time: 1030 Release Source: Historic BGT
 Land Jurisdiction: Jicarilla Well Head (GPS): 36.44796, -107.30425
 County/State: Rio Arriba / New Mexico Release Location (GPS): 36.44777, -107.30414
 Site Rank: SANOGA-100

Billing Info:
 WO #: 21340535
 Supervisor: Terry Nelson
 USER: MCINNS/R
 Area: 9
 Activity Code: _____
 Ordered by: Bobay Spearman
 -contact Lisa Hunter

Equipment in place: Stripped - P&AD location
 Photos taken: Yes

Buck Machine #	1		
Concentration	50 mg/kg	100 mg/kg	500 mg/kg
Calibration ABS Values	0.075	0.131	0.059

Project Details: Excavation Clearance.

Site Sketch (DOES NOT REPLACE SITE MAP) and Current Excavation Dimensions:

Horizontal (Cross-Section View):

42' x 39' x 17' Deep

Vertical (Plan View):

Initial Recommendations: N/A

Limitations: None.



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

April 06, 2016

Emilee Skyles

Animas Environmental
604 Pinon Street

Farmington, NM 87401

TEL: (505) 564-2281

FAX

RE: COPC JICARILLA 153 25

OrderNo.: 1603B39

Dear Emilee Skyles:

Hall Environmental Analysis Laboratory received 1 sample(s) on 3/23/2016 for the analyses presented in the following report.

This report is a revised report and it replaces the original report issued March 31, 2016.

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,

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

Andy Freeman

Laboratory Manager

4901 Hawkins NE

Albuquerque, NM 87109

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: 1603B39
 06-Apr-16

Client: Animas Environmental
Project: COPC JICARILLA 153 25

Sample ID MB-24484	SampType: MBLK	TestCode: EPA Method 300.0: Anions								
Client ID: PBS	Batch ID: 24484	RunNo: 33158								
Prep Date: 3/29/2016	Analysis Date: 3/29/2016	SeqNo: 1018203	Units: mg/Kg							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	ND	1.5								

Sample ID LCS-24484	SampType: LCS	TestCode: EPA Method 300.0: Anions								
Client ID: LCSS	Batch ID: 24484	RunNo: 33158								
Prep Date: 3/29/2016	Analysis Date: 3/29/2016	SeqNo: 1018204	Units: mg/Kg							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	14	1.5	15.00	0	93.2	90	110			

Qualifiers:

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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1603B39
06-Apr-16

Client: Animas Environmental
Project: COPC JICARILLA 153 25

Sample ID MB-24419	SampType: MBLK	TestCode: EPA Method 418.1: TPH								
Client ID: PBS	Batch ID: 24419	RunNo: 33169								
Prep Date: 3/24/2016	Analysis Date: 3/30/2016	SeqNo: 1018640	Units: mg/Kg							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Petroleum Hydrocarbons, TR	ND	20								

Sample ID LCS-24419	SampType: LCS	TestCode: EPA Method 418.1: TPH								
Client ID: LCSS	Batch ID: 24419	RunNo: 33169								
Prep Date: 3/24/2016	Analysis Date: 3/30/2016	SeqNo: 1018641	Units: mg/Kg							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Petroleum Hydrocarbons, TR	110	20	100.0	0	109	83.4	127			

Sample ID LCSD-24419	SampType: LCSD	TestCode: EPA Method 418.1: TPH								
Client ID: LCSS02	Batch ID: 24419	RunNo: 33169								
Prep Date: 3/24/2016	Analysis Date: 3/30/2016	SeqNo: 1018642	Units: mg/Kg							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Petroleum Hydrocarbons, TR	100	20	100.0	0	102	83.4	127	6.58	20	

Qualifiers:

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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1603B39

06-Apr-16

Client: Animas Environmental
Project: COPC JICARILLA 153 25

Sample ID MB-24573	SampType: MBLK	TestCode: EPA Method 8015M/D: Diesel Range Organics								
Client ID: PBS	Batch ID: 24573	RunNo: 33293								
Prep Date: 4/1/2016	Analysis Date: 4/5/2016	SeqNo: 1022944	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	9.6		10.00		95.9	70	130			

Sample ID LCS-24573	SampType: LCS	TestCode: EPA Method 8015M/D: Diesel Range Organics								
Client ID: LCSS	Batch ID: 24573	RunNo: 33293								
Prep Date: 4/1/2016	Analysis Date: 4/6/2016	SeqNo: 1024363	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	65.8	136			
Surr: DNOP	4.8		5.000		96.7	70	130			

Qualifiers:

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

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: 1603B39
 06-Apr-16

Client: Animas Environmental
Project: COPC JICARILLA 153 25

Sample ID MB-24391	SampType: MBLK		TestCode: EPA Method 8015D: Gasoline Range							
Client ID: PBS	Batch ID: 24391		RunNo: 33039							
Prep Date: 3/23/2016	Analysis Date: 3/24/2016		SeqNo: 1014105		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	66.2	112			

Sample ID LCS-24391	SampType: LCS		TestCode: EPA Method 8015D: Gasoline Range							
Client ID: LCSS	Batch ID: 24391		RunNo: 33039							
Prep Date: 3/23/2016	Analysis Date: 3/24/2016		SeqNo: 1014106		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	98.5	80	120			
Surr: BFB	1100		1000		111	66.2	112			

Qualifiers:

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

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: 1603B39
 06-Apr-16

Client: Animas Environmental
Project: COPC JICARILLA 153 25

Sample ID MB-24391	SampType: MBLK	TestCode: EPA Method 8021B: Volatiles								
Client ID: PBS	Batch ID: 24391	RunNo: 33039								
Prep Date: 3/23/2016	Analysis Date: 3/24/2016	SeqNo: 1014146	Units: mg/Kg							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	0.025								
Toluene	ND	0.050								
Ethylbenzene	ND	0.050								
Xylenes, Total	ND	0.10								
Surr: 4-Bromofluorobenzene	1.1		1.000		107	80	120			

Sample ID LCS-24391	SampType: LCS	TestCode: EPA Method 8021B: Volatiles								
Client ID: LCSS	Batch ID: 24391	RunNo: 33039								
Prep Date: 3/23/2016	Analysis Date: 3/24/2016	SeqNo: 1014147	Units: mg/Kg							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	1.0	0.025	1.000	0	101	75.3	123			
Toluene	0.99	0.050	1.000	0	99.3	80	124			
Ethylbenzene	1.0	0.050	1.000	0	99.9	82.8	121			
Xylenes, Total	3.0	0.10	3.000	0	99.4	83.9	122			
Surr: 4-Bromofluorobenzene	1.1		1.000		113	80	120			

Qualifiers:

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



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: 1603B39 RcptNo: 1

Received by/date: *[Signature]* *03/23/16*

Logged By: Lindsay Mangin 3/23/2016 7:15:00 AM *[Signature]*

Completed By: Lindsay Mangin 3/23/2016 9:38:00 AM *[Signature]*

Reviewed By: *IO* *03/23/16*

Chain of Custody

- 1. Custody seals intact on sample bottles? Yes No Not Present
- 2. Is Chain of Custody complete? Yes No Not Present
- 3. How was the sample delivered? Courier

Log In

- 4. Was an attempt made to cool the samples? Yes No NA
- 5. Were all samples received at a temperature of >0° C to 6.0°C Yes No NA
- 6. Sample(s) in proper container(s)? Yes No
- 7. Sufficient sample volume for indicated test(s)? Yes No
- 8. Are samples (except VOA and ONG) properly preserved? Yes No
- 9. Was preservative added to bottles? Yes No NA
- 10. VOA vials have zero headspace? Yes No No VOA Vials
- 11. Were any sample containers received broken? Yes No
- 12. Does paperwork match bottle labels?
(Note discrepancies on chain of custody) Yes No
- 13. Are matrices correctly identified on Chain of Custody? Yes No
- 14. Is it clear what analyses were requested? Yes No
- 15. Were all holding times able to be met?
(If no, notify customer for authorization.) Yes No

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

Special Handling (if applicable)

- 16. Was client notified of all discrepancies with this order? Yes No NA

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

17. Additional remarks:

18. Cooler Information

Cooler No	Temp °C	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	1.6	Good	Yes			



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

December 30, 2016

Corwin Lameman
Animas Environmental
604 Pinon Street
Farmington, NM 87401
TEL: (505) 564-2281
FAX

RE: CoPC Jicarilla 153 25

OrderNo.: 1612D34

Dear Corwin Lameman:

Hall Environmental Analysis Laboratory received 5 sample(s) on 12/28/2016 for the analyses presented in the following report.

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

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

ADHS Cert #AZ0682 -- NMED-DWB Cert #NM9425 -- NMED-Micro Cert #NM0190

Sincerely,

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

Andy Freeman
Laboratory Manager
4901 Hawkins NE
Albuquerque, NM 87109

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Animas Environmental

Client Sample ID: SC-1

Project: CoPC Jicarilla 153 25

Collection Date: 12/27/2016 8:35:00 AM

Lab ID: 1612D34-001

Matrix: SOIL

Received Date: 12/28/2016 8:00:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 418.1: TPH							Analyst: MAB
Petroleum Hydrocarbons, TR	ND	19		mg/Kg	1	12/29/2016 12:00:00 PM	29437
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: TOM
Diesel Range Organics (DRO)	ND	9.4		mg/Kg	1	12/29/2016 11:59:13 AM	29438
Motor Oil Range Organics (MRO)	ND	47		mg/Kg	1	12/29/2016 11:59:13 AM	29438
Surr: DNOP	99.9	70-130		%Rec	1	12/29/2016 11:59:13 AM	29438
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	ND	4.6		mg/Kg	1	12/29/2016 2:40:11 PM	29431
Surr: BFB	84.3	68.3-144		%Rec	1	12/29/2016 2:40:11 PM	29431
EPA METHOD 8021B: VOLATILES							Analyst: NSB
Benzene	ND	0.023		mg/Kg	1	12/29/2016 2:40:11 PM	29431
Toluene	ND	0.046		mg/Kg	1	12/29/2016 2:40:11 PM	29431
Ethylbenzene	ND	0.046		mg/Kg	1	12/29/2016 2:40:11 PM	29431
Xylenes, Total	ND	0.092		mg/Kg	1	12/29/2016 2:40:11 PM	29431
Surr: 4-Bromofluorobenzene	93.4	80-120		%Rec	1	12/29/2016 2:40:11 PM	29431

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

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

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Animas Environmental **Client Sample ID:** SC-2
Project: CoPC Jicarilla 153 25 **Collection Date:** 12/27/2016 9:15:00 AM
Lab ID: 1612D34-002 **Matrix:** SOIL **Received Date:** 12/28/2016 8:00:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 418.1: TPH Analyst: MAB							
Petroleum Hydrocarbons, TR	ND	18		mg/Kg	1	12/29/2016 12:00:00 PM	29437
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS Analyst: TOM							
Diesel Range Organics (DRO)	ND	9.9		mg/Kg	1	12/29/2016 12:20:46 PM	29438
Motor Oil Range Organics (MRO)	ND	50		mg/Kg	1	12/29/2016 12:20:46 PM	29438
Surr: DNOP	99.0	70-130		%Rec	1	12/29/2016 12:20:46 PM	29438
EPA METHOD 8015D: GASOLINE RANGE Analyst: NSB							
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	12/29/2016 3:50:50 PM	29431
Surr: BFB	87.8	68.3-144		%Rec	1	12/29/2016 3:50:50 PM	29431
EPA METHOD 8021B: VOLATILES Analyst: NSB							
Benzene	ND	0.025		mg/Kg	1	12/29/2016 3:50:50 PM	29431
Toluene	ND	0.049		mg/Kg	1	12/29/2016 3:50:50 PM	29431
Ethylbenzene	ND	0.049		mg/Kg	1	12/29/2016 3:50:50 PM	29431
Xylenes, Total	ND	0.099		mg/Kg	1	12/29/2016 3:50:50 PM	29431
Surr: 4-Bromofluorobenzene	93.6	80-120		%Rec	1	12/29/2016 3:50:50 PM	29431

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

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

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Animas Environmental

Client Sample ID: SC-3

Project: CoPC Jicarilla 153 25

Collection Date: 12/27/2016 8:40:00 AM

Lab ID: 1612D34-003

Matrix: SOIL

Received Date: 12/28/2016 8:00:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 418.1: TPH							Analyst: MAB
Petroleum Hydrocarbons, TR	ND	20		mg/Kg	1	12/29/2016 12:00:00 PM	29437
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: TOM
Diesel Range Organics (DRO)	ND	9.6		mg/Kg	1	12/29/2016 12:42:23 PM	29438
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	12/29/2016 12:42:23 PM	29438
Surr: DNOP	99.5	70-130		%Rec	1	12/29/2016 12:42:23 PM	29438
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	12/29/2016 4:14:27 PM	29431
Surr: BFB	83.3	68.3-144		%Rec	1	12/29/2016 4:14:27 PM	29431
EPA METHOD 8021B: VOLATILES							Analyst: NSB
Benzene	ND	0.024		mg/Kg	1	12/29/2016 4:14:27 PM	29431
Toluene	ND	0.048		mg/Kg	1	12/29/2016 4:14:27 PM	29431
Ethylbenzene	ND	0.048		mg/Kg	1	12/29/2016 4:14:27 PM	29431
Xylenes, Total	ND	0.096		mg/Kg	1	12/29/2016 4:14:27 PM	29431
Surr: 4-Bromofluorobenzene	91.9	80-120		%Rec	1	12/29/2016 4:14:27 PM	29431

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

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

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Animas Environmental **Client Sample ID:** SC-4
Project: CoPC Jicarilla 153 25 **Collection Date:** 12/27/2016 8:45:00 AM
Lab ID: 1612D34-004 **Matrix:** SOIL **Received Date:** 12/28/2016 8:00:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 418.1: TPH							Analyst: MAB
Petroleum Hydrocarbons, TR	ND	19		mg/Kg	1	12/29/2016 12:00:00 PM	29437
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: TOM
Diesel Range Organics (DRO)	ND	9.5		mg/Kg	1	12/29/2016 1:03:47 PM	29438
Motor Oil Range Organics (MRO)	ND	47		mg/Kg	1	12/29/2016 1:03:47 PM	29438
Surr: DNOP	100	70-130		%Rec	1	12/29/2016 1:03:47 PM	29438
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	ND	4.6		mg/Kg	1	12/29/2016 4:37:58 PM	29431
Surr: BFB	82.8	68.3-144		%Rec	1	12/29/2016 4:37:58 PM	29431
EPA METHOD 8021B: VOLATILES							Analyst: NSB
Benzene	ND	0.023		mg/Kg	1	12/29/2016 4:37:58 PM	29431
Toluene	ND	0.046		mg/Kg	1	12/29/2016 4:37:58 PM	29431
Ethylbenzene	ND	0.046		mg/Kg	1	12/29/2016 4:37:58 PM	29431
Xylenes, Total	ND	0.093		mg/Kg	1	12/29/2016 4:37:58 PM	29431
Surr: 4-Bromofluorobenzene	89.9	80-120		%Rec	1	12/29/2016 4:37:58 PM	29431

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

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

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Animas Environmental **Client Sample ID:** SC-5
Project: CoPC Jicarilla 153 25 **Collection Date:** 12/27/2016 8:54:00 AM
Lab ID: 1612D34-005 **Matrix:** SOIL **Received Date:** 12/28/2016 8:00:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 418.1: TPH							Analyst: MAB
Petroleum Hydrocarbons, TR	ND	18		mg/Kg	1	12/29/2016 12:00:00 PM	29437
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: TOM
Diesel Range Organics (DRO)	ND	9.4		mg/Kg	1	12/29/2016 1:25:06 PM	29438
Motor Oil Range Organics (MRO)	ND	47		mg/Kg	1	12/29/2016 1:25:06 PM	29438
Surr: DNOP	99.9	70-130		%Rec	1	12/29/2016 1:25:06 PM	29438
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	12/29/2016 5:01:26 PM	29431
Surr: BFB	82.9	68.3-144		%Rec	1	12/29/2016 5:01:26 PM	29431
EPA METHOD 8021B: VOLATILES							Analyst: NSB
Benzene	ND	0.024		mg/Kg	1	12/29/2016 5:01:26 PM	29431
Toluene	ND	0.048		mg/Kg	1	12/29/2016 5:01:26 PM	29431
Ethylbenzene	ND	0.048		mg/Kg	1	12/29/2016 5:01:26 PM	29431
Xylenes, Total	ND	0.096		mg/Kg	1	12/29/2016 5:01:26 PM	29431
Surr: 4-Bromofluorobenzene	90.0	80-120		%Rec	1	12/29/2016 5:01:26 PM	29431

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

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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1612D34

30-Dec-16

Client: Animas Environmental

Project: CoPC Jicarilla 153 25

Sample ID	MB-29437	SampType:	MBLK	TestCode:	EPA Method 418.1: TPH					
Client ID:	PBS	Batch ID:	29437	RunNo:	39725					
Prep Date:	12/28/2016	Analysis Date:	12/29/2016	SeqNo:	1244707	Units:	mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Petroleum Hydrocarbons, TR	ND	20								

Sample ID	LCS-29437	SampType:	LCS	TestCode:	EPA Method 418.1: TPH					
Client ID:	LCSS	Batch ID:	29437	RunNo:	39725					
Prep Date:	12/28/2016	Analysis Date:	12/29/2016	SeqNo:	1244708	Units:	mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Petroleum Hydrocarbons, TR	87	20	100.0	0	86.8	80.7	121			

Sample ID	LCSD-29437	SampType:	LCSD	TestCode:	EPA Method 418.1: TPH					
Client ID:	LCSS02	Batch ID:	29437	RunNo:	39725					
Prep Date:	12/28/2016	Analysis Date:	12/29/2016	SeqNo:	1244709	Units:	mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Petroleum Hydrocarbons, TR	93	20	100.0	0	93.3	80.7	121	7.12	20	

Qualifiers:

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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1612D34

30-Dec-16

Client: Animas Environmental
Project: CoPC Jicarilla 153 25

Sample ID	LCS-29423		SampType:	LCS		TestCode:	EPA Method 8015M/D: Diesel Range Organics				
Client ID:	LCSS		Batch ID:	29423		RunNo:	39712				
Prep Date:	12/28/2016		Analysis Date:	12/29/2016		SeqNo:	1244401		Units: %Rec		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual	
Surr: DNOP	4.6		5.000		92.7	70	130				

Sample ID	MB-29423		SampType:	MBLK		TestCode:	EPA Method 8015M/D: Diesel Range Organics				
Client ID:	PBS		Batch ID:	29423		RunNo:	39712				
Prep Date:	12/28/2016		Analysis Date:	12/29/2016		SeqNo:	1244402		Units: %Rec		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual	
Surr: DNOP	9.5		10.00		95.1	70	130				

Sample ID	LCS-29438		SampType:	LCS		TestCode:	EPA Method 8015M/D: Diesel Range Organics				
Client ID:	LCSS		Batch ID:	29438		RunNo:	39713				
Prep Date:	12/28/2016		Analysis Date:	12/29/2016		SeqNo:	1244632		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	100	63.8	116				
Surr: DNOP	5.1		5.000		102	70	130				

Sample ID	MB-29438		SampType:	MBLK		TestCode:	EPA Method 8015M/D: Diesel Range Organics				
Client ID:	PBS		Batch ID:	29438		RunNo:	39713				
Prep Date:	12/28/2016		Analysis Date:	12/29/2016		SeqNo:	1244633		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	10		10.00		102	70	130				

Qualifiers:

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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1612D34

30-Dec-16

Client: Animas Environmental
Project: CoPC Jicarilla 153 25

Sample ID	MB-29431	SampType:	MBLK	TestCode:	EPA Method 8015D: Gasoline Range					
Client ID:	PBS	Batch ID:	29431	RunNo:	39723					
Prep Date:	12/28/2016	Analysis Date:	12/29/2016	SeqNo:	1245219	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	810		1000		81.3	68.3	144			

Sample ID	LCS-29431	SampType:	LCS	TestCode:	EPA Method 8015D: Gasoline Range					
Client ID:	LCSS	Batch ID:	29431	RunNo:	39723					
Prep Date:	12/28/2016	Analysis Date:	12/29/2016	SeqNo:	1245220	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	103	74.6	123			
Surr: BFB	910		1000		90.6	68.3	144			

Sample ID	1612D34-001AMS	SampType:	MS	TestCode:	EPA Method 8015D: Gasoline Range					
Client ID:	SC-1	Batch ID:	29431	RunNo:	39723					
Prep Date:	12/28/2016	Analysis Date:	12/29/2016	SeqNo:	1245225	Units:	mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	28	4.7	23.52	0	118	61.3	150			
Surr: BFB	860		940.7		91.6	68.3	144			

Sample ID	1612D34-001AMSD	SampType:	MSD	TestCode:	EPA Method 8015D: Gasoline Range					
Client ID:	SC-1	Batch ID:	29431	RunNo:	39723					
Prep Date:	12/28/2016	Analysis Date:	12/29/2016	SeqNo:	1245226	Units:	mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	27	4.8	24.08	0	111	61.3	150	3.18	20	
Surr: BFB	900		963.4		93.7	68.3	144	0	0	

Qualifiers:

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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1612D34

30-Dec-16

Client: Animas Environmental

Project: CoPC Jicarilla 153 25

Sample ID	MB-29431	SampType:	MBLK	TestCode:	EPA Method 8021B: Volatiles					
Client ID:	PBS	Batch ID:	29431	RunNo:	39723					
Prep Date:	12/28/2016	Analysis Date:	12/29/2016	SeqNo:	1245244	Units:	mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	0.025								
Toluene	ND	0.050								
Ethylbenzene	ND	0.050								
Xylenes, Total	ND	0.10								
Surr: 4-Bromofluorobenzene	0.90		1.000		89.6	80	120			

Sample ID	LCS-29431	SampType:	LCS	TestCode:	EPA Method 8021B: Volatiles					
Client ID:	LCSS	Batch ID:	29431	RunNo:	39723					
Prep Date:	12/28/2016	Analysis Date:	12/29/2016	SeqNo:	1245245	Units:	mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	1.0	0.025	1.000	0	105	75.2	115			
Toluene	1.0	0.050	1.000	0	100	80.7	112			
Ethylbenzene	0.97	0.050	1.000	0	97.4	78.9	117			
Xylenes, Total	2.9	0.10	3.000	0	98.1	79.2	115			
Surr: 4-Bromofluorobenzene	0.95		1.000		95.4	80	120			

Qualifiers:

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



Hall Environmental Analysis Laboratory
 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: 1612D34

RcptNo: 1

Received by/date: AJ 12/28/16

Logged By: Anne Thorne 12/28/2016 8:00:00 AM *Anne Thorne*

Completed By: Anne Thorne 12/28/2016 9:21:06 AM *Anne Thorne*

Reviewed By: ATS 12/28/16

Chain of Custody

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

Log In

4. Was an attempt made to cool the samples? Yes No NA
5. Were all samples received at a temperature of >0° C to 6.0°C Yes No NA
6. Sample(s) in proper container(s)? Yes No
7. Sufficient sample volume for indicated test(s)? Yes No
8. Are samples (except VOA and ONG) properly preserved? Yes No
9. Was preservative added to bottles? Yes No NA
10. VOA vials have zero headspace? Yes No No VOA Vials
11. Were any sample containers received broken? Yes No
12. Does paperwork match bottle labels?
(Note discrepancies on chain of custody) Yes No
13. Are matrices correctly identified on Chain of Custody? Yes No
14. Is it clear what analyses were requested? Yes No
15. Were all holding times able to be met?
(If no, notify customer for authorization.) Yes No

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

Adjusted? _____

Checked by: _____

Special Handling (if applicable)

16. Was client notified of all discrepancies with this order? Yes No NA

Person Notified: _____ Date: _____

By Whom: _____ Via: eMail Phone Fax In Person

Regarding: _____

Client Instructions: _____

17. Additional remarks:

18. Cooler Information

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

