Form C-141
Page 6

State of New Mexico
Oil Conservation Division

Incident ID	NCS 1929556371
District RP	
Facility ID	
Application ID	

Closure

The responsible party must attach information demonstrating they have complied with all applicable closure requirements and any conditions or directives of the OCD. This demonstration should be in the form of a comprehensive report (electronic submittals in .pdf format are preferred) including a scaled site map, sampling diagrams, relevant field notes, photographs of any excavation prior to backfilling, laboratory data including chain of custody documents of final sampling, and a narrative of the remedial activities. Refer to 19.15.29.12 NMAC.

Closure Report Attachment Checklist: ***Each of the following items must be included in the closure report.***

[X] A scaled site and sampling diagram as described in 19.15.29.11 NMAC

[X] Photographs of the remediated site prior to backfill or photos of the liner integrity if applicable (Note: appropriate OCD District office must be notified 2 days prior to liner inspection)

[X] Laboratory analyses of final sampling (Note: appropriate ODC District office must be notified 2 days prior to final sampling)

[X] Description of remediation activities

I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to OCD 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 OCD does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to groundwater, surface water, human health or the environment. In addition, OCD 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. The responsible party acknowledges they must substantially restore, reclaim, and re-vegetate the impacted surface area to the conditions that existed prior to the release or their final land use in accordance with 19.15.29.13 NMAC including notification to the OCD when reclamation and re-vegetation are complete.

Printed Name: Kijun Hong Title: Environmental Specialist

Signature: Date: 2/13/2020

email: khong@harvestmidstream.com Telephone: 505-632-4475

OCD Only

Received by: OCD Date: 6/30/2020

Closure approval by the OCD does not relieve the responsible party of liability should their operations have failed to adequately investigate and remediate contamination that poses a threat to groundwater, surface water, human health, or the environment nor does not relieve the responsible party of compliance with any other federal, state, or local laws and/or regulations.

Closure Approved by: Date: 12/7/2020

Printed Name: Cory Smith Title: Environmental Specialist

June 25, 2020

Cory Smith
Oil Conservation Division
Energy, Minerals, & Natural Resources
1000 Rio Brazos
Aztec, New Mexico 87410

RE: CLOSURE REPORT
Rosa 089 MV Pipeline Excavation Clearance
Incident No. NCS 1929556371
NE¼ NE¼, Section 34, T32N, R6W
Rio Arriba County, New Mexico

Dear Mr. Smith:

Harvest Midstream Company (Harvest) completed confirmation sampling of the excavated areas at the Harvest Rosa 089 MV Pipeline release location in October 2019. The release, consisting of 23.214 Mcf of natural gas (no liquids), was confirmed at this location on September 27, 2019. The presence of a fire constitutes it as a major release under New Mexico Oil Conservation Division (NMOCD) regulations. In order to repair the line, it was necessary to excavate soils around the line. Harvest collected soil samples to confirm there was no impact from the natural gas release.

1.0 Site Information

1.1 Location

Site Name – Rosa 089 MV Pipeline
Legal Description – NE¼ NE¼, Section 34, T32N, R6W, Rio Arriba County, New Mexico
Release Latitude/Longitude – N36.94273, W107.43864, respectively
Land Jurisdiction – Bureau of Land Management
Figure 1. Topographic Site Location Map
Figure 2. Aerial Site Location Map

1.2 Release Information 2019

On September 27, 2019, Logos personnel went to light the burner on the site separator when a fire started. The presence of a fire qualifies this as a major release. The employee shut the gas off and mobilized to his truck

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

to grab a fire extinguisher and text his coworkers for assistance. When they attempted to extinguish the fire, they noticed the ground would keep burning. They then shut in the dog leg to the location and blew the line down from the separators and then the fire went out. Minor damage occurred to the separator paint. Harvest personnel then arrived, pressured up the line, and used their gas monitors to check around flanges, piping, valves and ground where fire was and found high LEL in about four different spots. There is a 15 ft dead leg to the east of combo units that runs to a valve setting (locked out), where the bulk of the leaks appeared to be, before going off the side of the hill to the 32-5 15 well line. There were three separate holes: two were 5/32-inch and one was 3/32-inch. The initial release was estimated to be 23.214 Mcf of natural gas; however, no liquids were observed. Cory Smith and Jim Griswold of NMOCD were informed of the release on September 28, 2019, via email.

On October 3, 2019, Harvest replaced 37 feet (ft) of 4-inch pipe, two 4-inch tee's, two 4-inch 90's, and taped and rock shielded the line, after which the line was returned to service, and the well operator informed. On the same day, Jesse Graham of Harvest collected two composite soil samples for laboratory analysis, one from the excavation base at about 4 to 5 ft below ground surface (bgs) and another from the sidewalls. There was no odor or discoloring, so Harvest then backfilled line.

2.0 Site Ranking

In accordance with NMAC 19.15.29.12 Table I (August 2018), release closure criteria are based on the minimum depth to groundwater within the horizontal extent of the release area:

- **Depth to Groundwater:** Cathodic reports could not be located for oil and gas wells within one-half mile. Depth to water records could not located for any wells within one-half mile. The site is located 585 ft higher than Navajo Lake located 1,650 ft to the north. Depth to groundwater is greater than 100 ft bgs.
- **Sensitive Receptor Determination:** The release site is not located within the sensitive receptor areas listed at NMAC 19.15.29.12C.4.

NMOCD Action levels are:

- 10 mg/kg benzene and 50 mg/kg total benzene, toluene, ethylbenzene, and xylene (BTEX);
- 1,000 mg/kg total petroleum hydrocarbons (TPH) as gasoline range organics (GRO) and diesel range organics (DRO) and 2,500 mg/kg as GRO/DRO and motor oil range organics (MRO);
- 20,000 mg/kg chloride.

3.0 Soil Sampling

Initial soil samples were collected by Harvest on October 3, 2019. However, because of the presence of a fire, which qualified the release as "major", soil confirmation samples were collected under oversight of NMOCD and Harvest on February 6, 2020. Notification of soil confirmation sampling was made to NMOCD on February 3, 2020. Soil confirmation sampling activities included collection of two confirmation soil samples from the walls and base of the repair trench. Sample locations are presented on Figure 3, and project notification is attached.

3.1 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 sample chain of custody records. The samples were maintained on ice until delivery to the analytical laboratory, Hall Environmental Analysis Laboratory (Hall) in Albuquerque, New Mexico. All samples were laboratory analyzed for:

- BTEX per U.S. Environmental Protection Agency (USEPA) Method 8021B;
- TPH as GRO, DRO, MRO per USEPA Method 8015M/D; and
- Chlorides per USEPA Method 300.0.

3.2 Laboratory Analytical Results

All laboratory analytical results for the confirmation soil samples were below laboratory detection limits and applicable action levels for benzene, total BTEX, TPH (as GRO, DRO, and MRO), and chlorides. The laboratory analytical report is attached.

4.0 Conclusions

Harvest completed excavation of natural gas contamination at the Rosa 089 MV Pipeline in October 2019. Final clearance of the release area was completed during a confirmation sampling event in February 2020. Laboratory analytical results reported benzene, total BTEX, TPH (as GRO/DRO/MRO), and chloride concentrations in all samples as *below* applicable NMOCD action levels. No further action is recommended at this time.

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

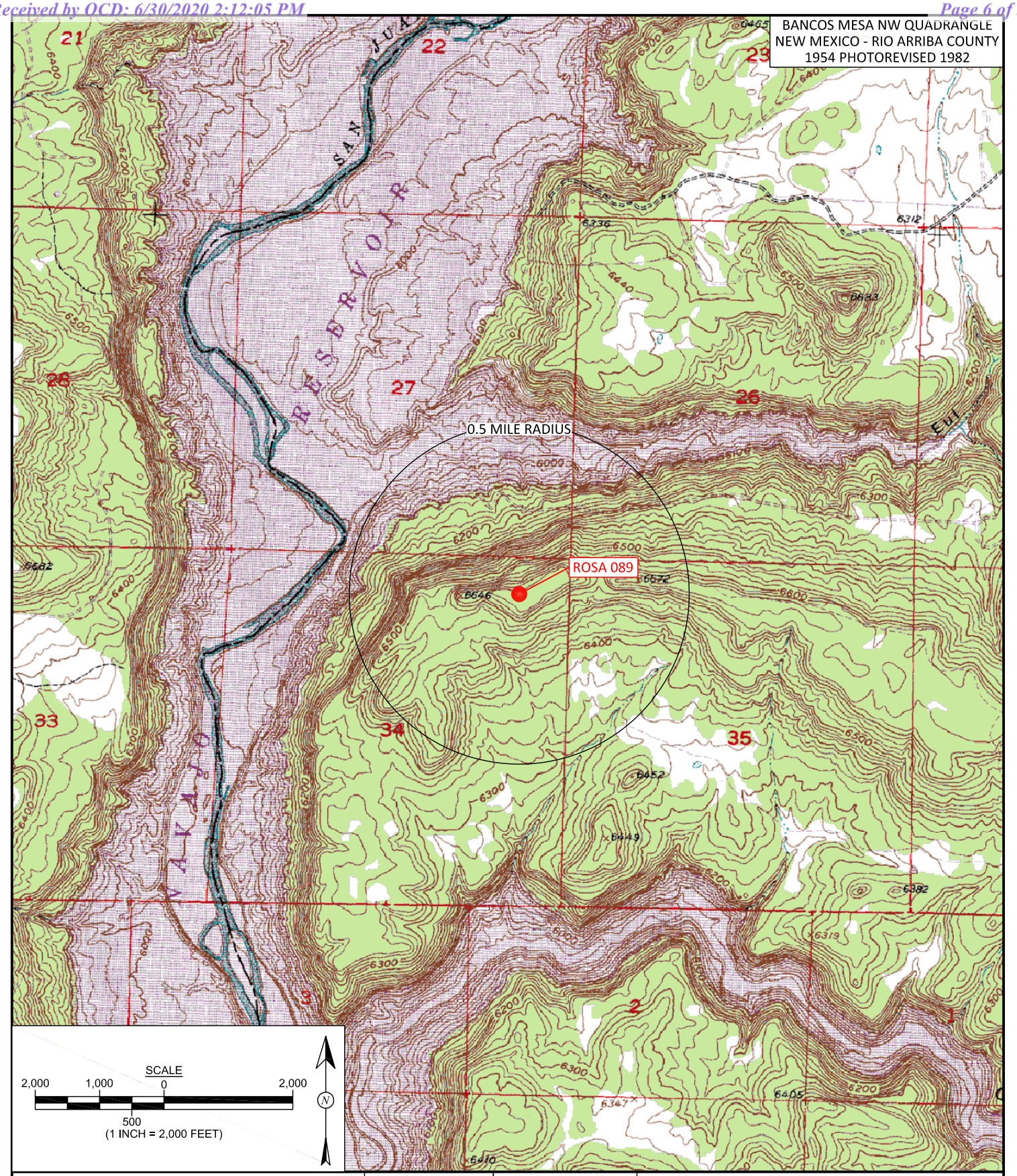
Elizabeth McNally, P.E.

Attachments:

Figure 1. Topographic Site Location Map
Figure 2. Aerial Site Location Map
Figure 3. Excavation Area and Soil Sample Locations
Photograph Log
Hall Analytical Reports 1910364 and 2002280
NMOCD Site Assessment/Characterization Determination
Sampling Notification

Cc:
Kijun Hong
Harvest Midstream Company
1755 Arroyo Dr.
Bloomfield, New Mexico 87413
Email: khong@harvestmidstream.com

https://animasenvironmental.sharepoint.com/sites/HarvestMidstream/Shared Documents/Rosa 089/Reports/Rosa 089 MV Pipeline Exc Clearance Report 062520.docx



DRAWN BY: C. Lameman	**DATE DRAWN:** October 2, 2019	**FIGURE 1**
REVISIONS BY: C. Lameman	**DATE REVISED:** October 2, 2019	**TOPOGRAPHIC SITE LOCATION MAP**
CHECKED BY: E. McNally	**DATE CHECKED:** October 2, 2019	HARVEST MIDSTREAM ROSA 089 NE¼ NE¼, SECTION 34, T32N, R6W RIO ARRIBA COUNTY, NEW MEXICO N36.9427, W107.4384
APPROVED BY: E. McNally	**DATE APPROVED:** October 2, 2019	

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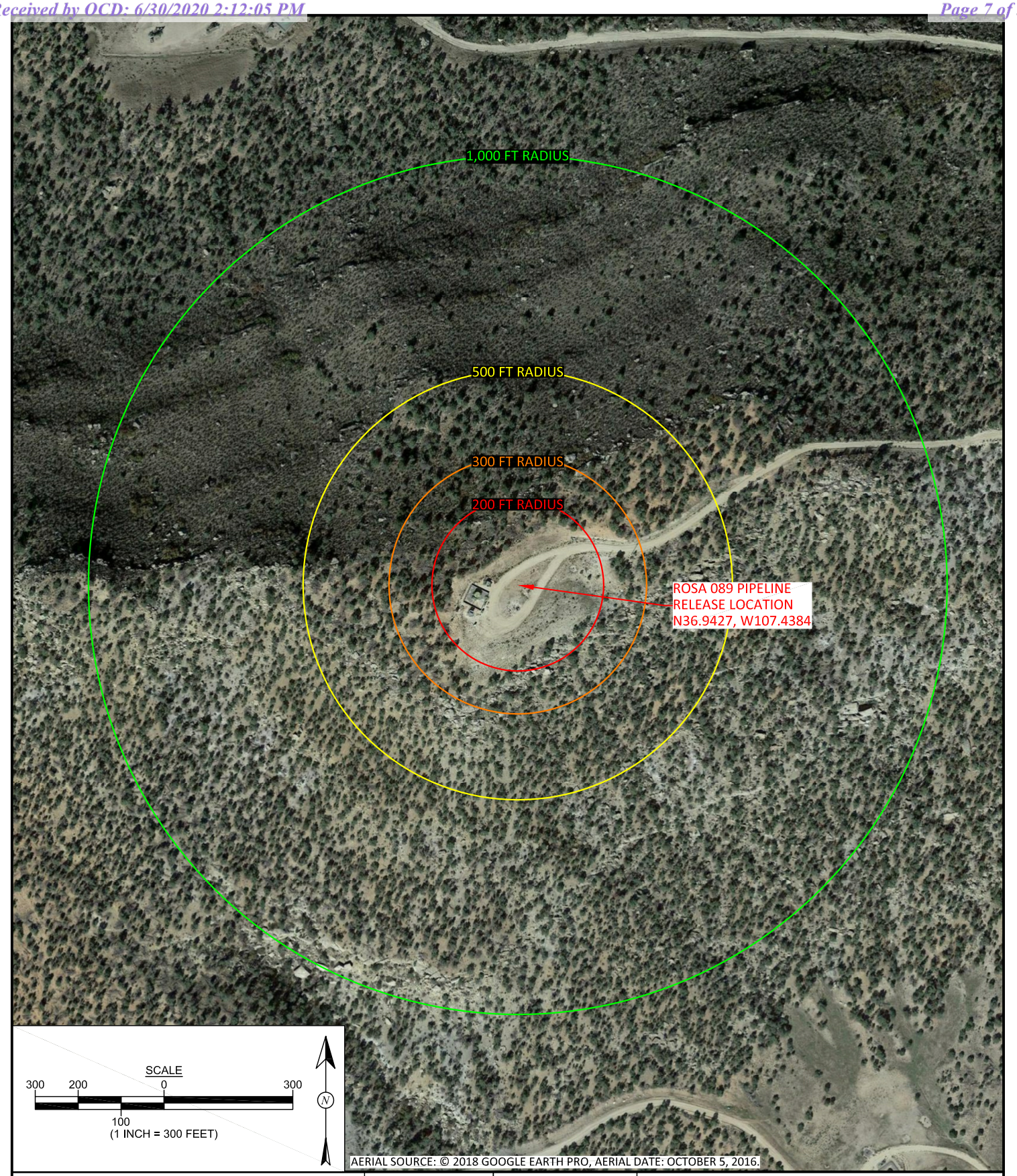

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REVISIONS BY: C. Lameman	**DATE REVISED:** October 2, 2019
CHECKED BY: E. McNally	**DATE CHECKED:** October 2, 2019
APPROVED BY: E. McNally	**DATE APPROVED:** October 2, 2019

FIGURE 2

AERIAL SITE LOCATION MAP
HARVEST MIDSTREAM
ROSA 089
NE¼ NE¼, SECTION 34, T32N, R6W
RIO ARRIBA COUNTY, NEW MEXICO
N36.9427, W107.4384

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DRAWN BY: C. Lameman	**DATE DRAWN:** February 11, 2020
REVISIONS BY: C. Lameman	**DATE REVISED:** February 11, 2020
CHECKED BY: E. McNally	**DATE CHECKED:** February 11, 2020
APPROVED BY: E. McNally	**DATE APPROVED:** February 11, 2020

FIGURE 3

EXCAVATION AREA MAP AND SOIL SAMPLE LOCATIONS
HARVEST MIDSTREAM
ROSA 089
NE¼ NE¼, SECTION 34, T32N, R6W
RIO ARRIBA COUNTY, NEW MEXICO
N36.9427, W107.4384

Rosa 89
NMOCD Order No. 3RP-13666, Incident No. NCS 1929556371
Pipeline Excavation Clearance

Photo 1: Excavation Area (21' x 11' x 5' to 6' deep).

Photo 2: Composite Sample SC-1. North Wall. Sample points 1 through 3.

Rosa 89
NMOCD Order No. 3RP-13666, Incident No. NCS 1929556371
Pipeline Excavation Clearance

Photo 3: Composite Sample SC-1. North and West Wall. Sample points 4 through 6.

Photo 4: Composite Sample SC-2. South Wall. Sample points 1 through 4.

Rosa 89
NMOCD Order No. 3RP-13666, Incident No. NCS 1929556371
Pipeline Excavation Clearance

Photo 5: Composite Sample SC-2. East and South Wall. Sample points 3 through 6.

Photo 6: Composite Sample SC-3. Base. Sample points 1, 2, and 6.

Rosa 89
NMOCD Order No. 3RP-13666, Incident No. NCS 1929556371
Pipeline Excavation Clearance

Photo 7: Composite Sample SC-3. Base. Sample points 3 through 5.

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

October 11, 2019

Jesse Graham

Harvest
1755 Arroyo Dr.
Bloomfield, NM 87413
TEL: (505) 632-4475
FAX:

RE: Rosa 89 OrderNo.: 1910364

Dear Jesse Graham:

Hall Environmental Analysis Laboratory received 2 sample(s) on 10/5/2019 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 #NM0901

Sincerely,

Andy Freeman

Laboratory Manager

4901 Hawkins NE
Albuquerque, NM 87109

Analytical Report
Lab Order **1910364**
Date Reported: **10/11/2019**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Harvest
Client Sample ID: Bottom
Project: Rosa 89
Collection Date: 10/3/2019 3:08:00 PM
Lab ID: 1910364-001 **Matrix:** SOIL **Received Date:** 10/5/2019 9:05:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **CJS**	
Chloride	ND	60		mg/Kg	20	10/9/2019 2:26:39 PM	48035
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **BRM**	
Diesel Range Organics (DRO)	ND	8.8		mg/Kg	1	10/8/2019 11:28:59 PM	47973
Motor Oil Range Organics (MRO)	ND	44		mg/Kg	1	10/8/2019 11:28:59 PM	47973
Surr: DNOP	128	70-130		%Rec	1	10/8/2019 11:28:59 PM	47973
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	10/8/2019 12:31:47 PM	47976
Surr: BFB	94.8	77.4-118		%Rec	1	10/8/2019 12:31:47 PM	47976
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Benzene	ND	0.025		mg/Kg	1	10/8/2019 12:31:47 PM	47976
Toluene	ND	0.049		mg/Kg	1	10/8/2019 12:31:47 PM	47976
Ethylbenzene	ND	0.049		mg/Kg	1	10/8/2019 12:31:47 PM	47976
Xylenes, Total	ND	0.099		mg/Kg	1	10/8/2019 12:31:47 PM	47976
Surr: 4-Bromofluorobenzene	91.5	80-120		%Rec	1	10/8/2019 12:31:47 PM	47976

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
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix		

Analytical Report
Lab Order **1910364**
Date Reported: **10/11/2019**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Harvest
Client Sample ID: Sides
Project: Rosa 89
Collection Date: 10/3/2019 3:08:00 PM
Lab ID: 1910364-002 **Matrix:** SOIL **Received Date:** 10/5/2019 9:05:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **CJS**	
Chloride	ND	60		mg/Kg	20	10/9/2019 2:39:03 PM	48035
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **BRM**	
Diesel Range Organics (DRO)	ND	9.0		mg/Kg	1	10/8/2019 11:51:01 PM	47973
Motor Oil Range Organics (MRO)	ND	45		mg/Kg	1	10/8/2019 11:51:01 PM	47973
Surr: DNOP	226	70-130	S	%Rec	1	10/8/2019 11:51:01 PM	47973
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	10/8/2019 1:40:33 PM	47976
Surr: BFB	97.2	77.4-118		%Rec	1	10/8/2019 1:40:33 PM	47976
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Benzene	ND	0.025		mg/Kg	1	10/8/2019 1:40:33 PM	47976
Toluene	ND	0.050		mg/Kg	1	10/8/2019 1:40:33 PM	47976
Ethylbenzene	ND	0.050		mg/Kg	1	10/8/2019 1:40:33 PM	47976
Xylenes, Total	ND	0.10		mg/Kg	1	10/8/2019 1:40:33 PM	47976
Surr: 4-Bromofluorobenzene	95.4	80-120		%Rec	1	10/8/2019 1:40:33 PM	47976

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
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix		

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1910364**

11-Oct-19

Client: Harvest

Project: Rosa 89

Sample ID: **MB-48035**	SampType: **mblk**	TestCode: **EPA Method 300.0: Anions**
Client ID: **PBS**	Batch ID: **48035**	RunNo: **63533**
Prep Date: **10/9/2019**	Analysis Date: **10/9/2019**	SeqNo: **2171599** Units: **mg/Kg**

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

Sample ID: **LCS-48035**	SampType: **lcs**	TestCode: **EPA Method 300.0: Anions**
Client ID: **LCSS**	Batch ID: **48035**	RunNo: **63533**
Prep Date: **10/9/2019**	Analysis Date: **10/9/2019**	SeqNo: **2171600** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	15	1.5	15.00	0	98.9	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
PQL	Practical Quanitative Limit
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 Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1910364**

11-Oct-19

Client: Harvest

Project: Rosa 89

Sample ID: **LCS-47973**	SampType: **LCS**	TestCode: **EPA Method 8015M/D: Diesel Range Organics**
Client ID: **LCSS**	Batch ID: **47973**	RunNo: **63485**
Prep Date: **10/7/2019**	Analysis Date: **10/8/2019**	SeqNo: **2170017** 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	90.8	63.9	124			
Surr: DNOP	4.9		5.000		98.6	70	130			

Sample ID: **MB-47973**	SampType: **MBLK**	TestCode: **EPA Method 8015M/D: Diesel Range Organics**
Client ID: **PBS**	Batch ID: **47973**	RunNo: **63485**
Prep Date: **10/7/2019**	Analysis Date: **10/8/2019**	SeqNo: **2170018** 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		105	70	130			

Sample ID: **LCS-48012**	SampType: **LCS**	TestCode: **EPA Method 8015M/D: Diesel Range Organics**
Client ID: **LCSS**	Batch ID: **48012**	RunNo: **63525**
Prep Date: **10/8/2019**	Analysis Date: **10/9/2019**	SeqNo: **2170483** Units: **%Rec**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP	4.6		5.000		92.1	70	130			

Sample ID: **MB-48012**	SampType: **MBLK**	TestCode: **EPA Method 8015M/D: Diesel Range Organics**
Client ID: **PBS**	Batch ID: **48012**	RunNo: **63525**
Prep Date: **10/8/2019**	Analysis Date: **10/9/2019**	SeqNo: **2170486** Units: **%Rec**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP	9.0		10.00		90.2	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
PQL	Practical Quanitative Limit
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 Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1910364**

11-Oct-19

Client: Harvest

Project: Rosa 89

Sample ID: **MB-47976** SampType: **MBLK** TestCode: **EPA Method 8015D: Gasoline Range**

Client ID: **PBS** Batch ID: **47976** RunNo: **63496**

Prep Date: **10/7/2019** Analysis Date: **10/8/2019** SeqNo: **2169919** 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		102	77.4	118			

Sample ID: **LCS-47976** SampType: **LCS** TestCode: **EPA Method 8015D: Gasoline Range**

Client ID: **LCSS** Batch ID: **47976** RunNo: **63496**

Prep Date: **10/7/2019** Analysis Date: **10/8/2019** SeqNo: **2169920** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	26	5.0	25.00	0	102	80	120			
Surr: BFB	1100		1000		114	77.4	118			

Sample ID: **1910364-001AMS** SampType: **MS** TestCode: **EPA Method 8015D: Gasoline Range**

Client ID: **Bottom** Batch ID: **47976** RunNo: **63496**

Prep Date: **10/7/2019** Analysis Date: **10/8/2019** SeqNo: **2169922** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	26	5.0	24.95	0	102	69.1	142			
Surr: BFB	1100		998.0		113	77.4	118			

Sample ID: **1910364-001AMSD** SampType: **MSD** TestCode: **EPA Method 8015D: Gasoline Range**

Client ID: **Bottom** Batch ID: **47976** RunNo: **63496**

Prep Date: **10/7/2019** Analysis Date: **10/8/2019** SeqNo: **2169923** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	27	5.0	24.98	0	107	69.1	142	4.72	20	
Surr: BFB	1100		999.0		113	77.4	118	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
PQL	Practical Quanitative Limit
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 Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1910364**

11-Oct-19

Client: Harvest

Project: Rosa 89

Sample ID: **MB-47976**	SampType: **MBLK**	TestCode: **EPA Method 8021B: Volatiles**
Client ID: **PBS**	Batch ID: **47976**	RunNo: **63496**
Prep Date: **10/7/2019**	Analysis Date: **10/8/2019**	SeqNo: **2169939** 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	0.98		1.000		98.4	80	120			

Sample ID: **LCS-47976**	SampType: **LCS**	TestCode: **EPA Method 8021B: Volatiles**
Client ID: **LCSS**	Batch ID: **47976**	RunNo: **63496**
Prep Date: **10/7/2019**	Analysis Date: **10/8/2019**	SeqNo: **2169940** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.95	0.025	1.000	0	95.0	80	120			
Toluene	0.99	0.050	1.000	0	99.4	80	120			
Ethylbenzene	0.99	0.050	1.000	0	98.9	80	120			
Xylenes, Total	2.9	0.10	3.000	0	96.8	80	120			
Surr: 4-Bromofluorobenzene	1.0		1.000		102	80	120			

Sample ID: **1910364-002AMS**	SampType: **MS**	TestCode: **EPA Method 8021B: Volatiles**
Client ID: **Sides**	Batch ID: **47976**	RunNo: **63496**
Prep Date: **10/7/2019**	Analysis Date: **10/8/2019**	SeqNo: **2169943** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.96	0.024	0.9794	0.01069	96.8	76	123			
Toluene	1.0	0.049	0.9794	0.01010	102	80.3	127			
Ethylbenzene	1.0	0.049	0.9794	0.01107	105	80.2	131			
Xylenes, Total	3.0	0.098	2.938	0.03009	102	78	133			
Surr: 4-Bromofluorobenzene	0.93		0.9794		95.4	80	120			

Sample ID: **1910364-002AMSD**	SampType: **MSD**	TestCode: **EPA Method 8021B: Volatiles**
Client ID: **Sides**	Batch ID: **47976**	RunNo: **63496**
Prep Date: **10/7/2019**	Analysis Date: **10/8/2019**	SeqNo: **2169944** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.89	0.024	0.9690	0.01069	90.9	76	123	7.25	20	
Toluene	0.97	0.048	0.9690	0.01010	99.0	80.3	127	4.37	20	
Ethylbenzene	0.98	0.048	0.9690	0.01107	100	80.2	131	5.67	20	
Xylenes, Total	2.9	0.097	2.907	0.03009	98.2	78	133	5.15	20	
Surr: 4-Bromofluorobenzene	0.96		0.9690		99.0	80	120	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
PQL	Practical Quanitative Limit
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 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: **Harvest** Work Order Number: **1910364** RcptNo: **1**

Received By: **Erin Melendrez** **10/5/2019 9:05:00 AM**

Completed By: **Erin Melendrez** **10/5/2019 10:51:43 AM**

Reviewed By: ENM 10/6/19

Chain of Custody

1. Is Chain of Custody complete? Yes ☑ No ☐ Not Present ☐
2. How was the sample delivered? Courier

Log In

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

Special Handling (if applicable)

15. 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:

16. Additional remarks:

17. Cooler Information

Cooler No	Temp °C	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	0.6	Good	Yes			

Chain-of-Custody Record

Client: Harvest Midstream

Mailing Address: 1755 Arroyo dr
Bloomfield NM

Phone #:

email or Fax#: Monica, Kisan, Jesse, Stan, Hoss

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

Accreditation: ☐ Az Compliance
☐ NELAC ☐ Other

☐ EDD (Type)

Turn-Around Time:
☒ Standard ☐ Rush

Project Name: Rosa 89

Project #: AFE 1963648

Project Manager: Jesse Graham

Sampler: Jesse Graham

On Ice: ☒ Yes ☐ No

# of Coolers: 1

Cooler Temp (including CF): 1.1-0.5(CF)=0.6°C

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 Name	Container Type and #	Preservative Type	HEAL No. 1910364	BTEX / MTBE / TMBs (8021)	TPH:8015D(GRO / DRO / MRO)	8081 Pesticides/8082 PCB's	EDB (Method 504.1)	PAHs by 8310 or 8270SIMS	RCRA 8 Metals	Cl, F, Br, NO_3, NO_2, PO_4, SO_4	8260 (VOA)	8270 (Semi-VOA)	Total Coliform (Present/Absent)
10-3-19	3:08	Soil	Bottom	4 OZ	Cool	-001	X	X					X			
10-3-19	3:08	Soil	Sides	4 OZ	Cool	-002	X	X					X			

Analysis Request

Date:	Time:	Relinquished by:	Received by:	Via:	Date	Time
10/3/19	1815	Jesse Graham	Mustang Wells		10/3/19	1815
10/4/19	1817	Mustang Wells		Courier	10/5/19	0905

Remarks:

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

HALL ENVIRONMENTAL ANALYSIS LABORATORY

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

February 10, 2020

Elizabeth McNally

Animas Environmental Services
604 Pinon Street
Farmington, NM 87401
TEL: (505) 564-2281
FAX (505) 324-2022

RE: Harvest Midstream Rosa 89 OrderNo.: 2002280

Dear Elizabeth McNally:

Hall Environmental Analysis Laboratory received 3 sample(s) on 2/7/2020 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 #NM0901

Sincerely,

Andy Freeman
Laboratory Manager
4901 Hawkins NE
Albuquerque, NM 87109

Analytical Report
Lab Order **2002280**
Date Reported: **2/10/2020**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Animas Environmental Services
Client Sample ID: SC-1
Project: Harvest Midstream Rosa 89
Collection Date: 2/6/2020 10:40:00 AM
Lab ID: 2002280-001 **Matrix:** SOIL **Received Date:** 2/7/2020 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **CAS**	
Chloride	65	60		mg/Kg	20	2/7/2020 1:31:10 PM	50328
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **CLP**	
Diesel Range Organics (DRO)	ND	10		mg/Kg	1	2/7/2020 12:53:13 PM	50322
Motor Oil Range Organics (MRO)	ND	50		mg/Kg	1	2/7/2020 12:53:13 PM	50322
Surr: DNOP	97.5	55.1-146		%Rec	1	2/7/2020 12:53:13 PM	50322
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **RAA**	
Gasoline Range Organics (GRO)	ND	4.2		mg/Kg	1	2/7/2020 11:49:12 AM	50313
Surr: BFB	80.7	66.6-105		%Rec	1	2/7/2020 11:49:12 AM	50313
EPA METHOD 8021B: VOLATILES						Analyst: **RAA**	
Benzene	ND	0.021		mg/Kg	1	2/7/2020 11:49:12 AM	50313
Toluene	ND	0.042		mg/Kg	1	2/7/2020 11:49:12 AM	50313
Ethylbenzene	ND	0.042		mg/Kg	1	2/7/2020 11:49:12 AM	50313
Xylenes, Total	ND	0.085		mg/Kg	1	2/7/2020 11:49:12 AM	50313
Surr: 4-Bromofluorobenzene	89.3	80-120		%Rec	1	2/7/2020 11:49:12 AM	50313

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
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix		

Analytical Report
Lab Order **2002280**
Date Reported: **2/10/2020**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Animas Environmental Services
Client Sample ID: SC-2
Project: Harvest Midstream Rosa 89
Collection Date: 2/6/2020 10:45:00 AM
Lab ID: 2002280-002 **Matrix:** SOIL **Received Date:** 2/7/2020 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **CAS**	
Chloride	ND	60		mg/Kg	20	2/7/2020 1:43:30 PM	50328
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **CLP**	
Diesel Range Organics (DRO)	ND	9.6		mg/Kg	1	2/7/2020 1:02:27 PM	50322
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	2/7/2020 1:02:27 PM	50322
Surr: DNOP	95.7	55.1-146		%Rec	1	2/7/2020 1:02:27 PM	50322
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **RAA**	
Gasoline Range Organics (GRO)	ND	4.7		mg/Kg	1	2/7/2020 12:12:40 PM	50313
Surr: BFB	85.0	66.6-105		%Rec	1	2/7/2020 12:12:40 PM	50313
EPA METHOD 8021B: VOLATILES						Analyst: **RAA**	
Benzene	ND	0.023		mg/Kg	1	2/7/2020 12:12:40 PM	50313
Toluene	ND	0.047		mg/Kg	1	2/7/2020 12:12:40 PM	50313
Ethylbenzene	ND	0.047		mg/Kg	1	2/7/2020 12:12:40 PM	50313
Xylenes, Total	ND	0.093		mg/Kg	1	2/7/2020 12:12:40 PM	50313
Surr: 4-Bromofluorobenzene	95.2	80-120		%Rec	1	2/7/2020 12:12:40 PM	50313

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
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix		

Analytical Report
Lab Order **2002280**
Date Reported: **2/10/2020**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Animas Environmental Services
Client Sample ID: SC-3
Project: Harvest Midstream Rosa 89
Collection Date: 2/6/2020 10:51:00 AM
Lab ID: 2002280-003 **Matrix:** SOIL **Received Date:** 2/7/2020 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **CAS**	
Chloride	110	60		mg/Kg	20	2/7/2020 1:55:51 PM	50328
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **CLP**	
Diesel Range Organics (DRO)	11	9.9		mg/Kg	1	2/7/2020 1:11:41 PM	50322
Motor Oil Range Organics (MRO)	ND	50		mg/Kg	1	2/7/2020 1:11:41 PM	50322
Surr: DNOP	103	55.1-146		%Rec	1	2/7/2020 1:11:41 PM	50322
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **RAA**	
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	2/7/2020 12:36:14 PM	50313
Surr: BFB	81.8	66.6-105		%Rec	1	2/7/2020 12:36:14 PM	50313
EPA METHOD 8021B: VOLATILES						Analyst: **RAA**	
Benzene	ND	0.025		mg/Kg	1	2/7/2020 12:36:14 PM	50313
Toluene	ND	0.049		mg/Kg	1	2/7/2020 12:36:14 PM	50313
Ethylbenzene	ND	0.049		mg/Kg	1	2/7/2020 12:36:14 PM	50313
Xylenes, Total	ND	0.099		mg/Kg	1	2/7/2020 12:36:14 PM	50313
Surr: 4-Bromofluorobenzene	91.2	80-120		%Rec	1	2/7/2020 12:36:14 PM	50313

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
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix		

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **2002280**
10-Feb-20

Client: Animas Environmental Services
Project: Harvest Midstream Rosa 89

Sample ID: **MB-50328**	SampType: **mblk**	TestCode: **EPA Method 300.0: Anions**							
Client ID: **PBS**	Batch ID: **50328**	RunNo: **66427**							
Prep Date: **2/7/2020**	Analysis Date: **2/7/2020**	SeqNo: **2282379**	Units: **mg/Kg**						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	ND	1.5								

Sample ID: **LCS-50328**	SampType: **lcs**	TestCode: **EPA Method 300.0: Anions**							
Client ID: **LCSS**	Batch ID: **50328**	RunNo: **66427**							
Prep Date: **2/7/2020**	Analysis Date: **2/7/2020**	SeqNo: **2282380**	Units: **mg/Kg**						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	14	1.5	15.00	0	92.3	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
PQL	Practical Quanitative Limit
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 Limit

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **2002280**
10-Feb-20

Client: Animas Environmental Services
Project: Harvest Midstream Rosa 89

Sample ID: **MB-50322**	SampType: **MBLK**	TestCode: **EPA Method 8015M/D: Diesel Range Organics**
Client ID: **PBS**	Batch ID: **50322**	RunNo: **66379**
Prep Date: **2/7/2020**	Analysis Date: **2/7/2020**	SeqNo: **2281223** 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	9.7		10.00		97.0	55.1	146			

Sample ID: **LCS-50322**	SampType: **LCS**	TestCode: **EPA Method 8015M/D: Diesel Range Organics**
Client ID: **LCSS**	Batch ID: **50322**	RunNo: **66379**
Prep Date: **2/7/2020**	Analysis Date: **2/7/2020**	SeqNo: **2281224** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	49	10	50.00	0	97.2	70	130			
Surr: DNOP	4.4		5.000		87.4	55.1	146			

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
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix		

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **2002280**

10-Feb-20

Client: Animas Environmental Services

Project: Harvest Midstream Rosa 89

Sample ID: **lcs-50313** SampType: **LCS** TestCode: **EPA Method 8015D: Gasoline Range**

Client ID: **LCSS** Batch ID: **50313** RunNo: **66388**

Prep Date: **2/6/2020** Analysis Date: **2/7/2020** SeqNo: **2282531** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	22	5.0	25.00	0	86.2	80	120			
Surr: BFB	920		1000		92.1	66.6	105			

Sample ID: **mb-50313** SampType: **MBLK** TestCode: **EPA Method 8015D: Gasoline Range**

Client ID: **PBS** Batch ID: **50313** RunNo: **66388**

Prep Date: **2/6/2020** Analysis Date: **2/7/2020** SeqNo: **2282532** 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	840		1000		84.4	66.6	105			

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
PQL	Practical Quanitative Limit
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 Limit

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **2002280**
10-Feb-20

Client: Animas Environmental Services
Project: Harvest Midstream Rosa 89

Sample ID: **LCS-50313** SampType: **LCS** TestCode: **EPA Method 8021B: Volatiles**
Client ID: **LCSS** Batch ID: **50313** RunNo: **66388**
Prep Date: **2/6/2020** Analysis Date: **2/7/2020** SeqNo: **2282556** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.93	0.025	1.000	0	93.0	80	120			
Toluene	0.94	0.050	1.000	0	94.5	80	120			
Ethylbenzene	0.95	0.050	1.000	0	95.2	80	120			
Xylenes, Total	2.9	0.10	3.000	0	96.2	80	120			
Surr: 4-Bromofluorobenzene	0.96		1.000		95.6	80	120			

Sample ID: **mb-50313** SampType: **MBLK** TestCode: **EPA Method 8021B: Volatiles**
Client ID: **PBS** Batch ID: **50313** RunNo: **66388**
Prep Date: **2/6/2020** Analysis Date: **2/7/2020** SeqNo: **2282557** 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	0.96		1.000		95.6	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
PQL	Practical Quanitative Limit
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 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: **2002280** RcptNo: 1

Received By: **Desiree Dominguez** **2/7/2020 8:00:00 AM** DD

Completed By: **Leah Baca** **2/7/2020 8:20:16 AM** Leah SBaca

Reviewed By: DAD 2-7-20

Chain of Custody

1. Is Chain of Custody sufficiently complete?	Yes ☑	No ☐	Not Present ☐
2. How was the sample delivered?	Client		

Log In

3. Was an attempt made to cool the samples?	Yes ☑	No ☐	NA ☐
4. Were all samples received at a temperature of >0° C to 6.0°C	Yes ☑	No ☐	NA ☐
5. Sample(s) in proper container(s)?	Yes ☑	No ☐	
6. Sufficient sample volume for indicated test(s)?	Yes ☑	No ☐	
7. Are samples (except VOA and ONG) properly preserved?	Yes ☑	No ☐	
8. Was preservative added to bottles?	Yes ☐	No ☑	NA ☐
9. Received at least 1 vial with headspace <1/4" for AQ VOA?	Yes ☑	No ☐	NA ☐
10. Were any sample containers received broken?	Yes ☐	No ☑	
11. Does paperwork match bottle labels? (Note discrepancies on chain of custody)	Yes ☑	No ☐	
12. Are matrices correctly identified on Chain of Custody?	Yes ☑	No ☐	
13. Is it clear what analyses were requested?	Yes ☑	No ☐	
14. 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: SR 2/7/20

Special Handling (if applicable)

15. 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: _____

16. Additional remarks:

17. **Cooler Information**

Cooler No	Temp °C	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	0.3	Good				

Chain-of-Custody Record

Client: Animas Environmental Services

Mailing Address: 624 E. Comanche St.
Farmington NM 87401

Phone #: 505.564.2281

email or Fax#: emcnally@animasenvironmental.com

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

Accreditation: ☐ Az Compliance
☐ NELAC ☐ Other

☐ EDD (Type)

Turn-Around Time:
☐ Standard ~~☒~~ Rush ~~3~~ 2-Day TAT

Project Name: Harvest Midstream Rosa 89

Project #:

Project Manager: Elizabeth McNally / Karen Lupton

Sampler: CL & BB

On Ice: ☒ Yes ☐ No

# of Coolers: 1

Cooler Temp(including CF): 0.3+0.0 = 0.3°C

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 Name	Container Type and #	Preservative Type	HEAL No. 2002280	BTEX / ~~MTBE / TMB~~'s (8021)	TPH:8015D(GRO / DRO / MRO)	8081 Pesticides/8082 PCB's	EDB (Method 504.1)	PAHs by 8310 or 8270SIMS	RCRA 8 Metals	Cl, F, Br, NO_3, NO_2, PO_4, SO_4	8260 (VOA)	8270 (Semi-VOA)	Total Coliform (Present/Absent)	Chlorides (300.0)					
2-6-20	10:40	Soil	SC-1	2-4oz jars	2-Cool	-001	X	X									X					
2-6-20	10:45	Soil	SC-2	1	2	-002	X	X									X					
2-6-20	10:51	Soil	SC-3			-003	X	X									X					

Date:	Time:	Relinquished by:	Received by:	Via:	Date	Time
2/6/20	1629				2/6/20	1629
2/6/20	1807			courier	2/7/20	8:00

Remarks:

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

NMOCD Site Assessment/Characterization, Remediation & Closure

Site Name:	**Rosa 089 MV Pipeline**
API #:	not applicable
Lat/Long:	N36.94273 W107.43864
TRS:	NE/NE-34-32N-6W
Land Jurisdiction:	Federal - BLM
County:	Rio Arriba
Determination made by:	David Reese, CHMM/Environmental Scientist
Date:	1/21/2020

Wellhead Protection Area Assessment:

Determine the horizontal distance from all known water sources within 1/2 mile of the release including private and domestic water sources. Water sources are wells, springs or other sources of fresh water extraction. Private and domestic water sources are those water sources used by less than five households for domestic or stock purposes. (NMAC 19.15.29.11A.3)

Water Source Type (well/spring/stock pond)	ID (if available)	Latitude	Longitude	Distance
none within 1/2 mile				

Distance to Nearest Significant Watercourse (NMAC 19.15.29.11A.4)

Navajo Lake is 1650 ft to the north

Depth to Groundwater Determination (NMAC 19.15.29.11A.2)

Cathodic Report/Site Specific Hydrogeology	none available
Elevation Differential	approximately 585' higher than Navajo Lake
Water Wells	no registered wells within 1/2 mile
Cathodic Report Nearby Wells	none available for nearby wells

Sensitive Receptor Determination **If a release occurs within the following areas, the RP must treat the release as if it occurred less than 50 ft to Groundwater (NMAC 19.15.29.12C.4):*	**Yes**	**No**
<300' of any continuously flowing watercourse or any other significant watercourse	☐	☑
<200' of any lakebed, sinkhole or playa lake (measured from the Ordinary High Water Mark)	☐	☑
<300' of an occupied permanent residence, school, hospital, institution or church	☐	☑
<500' of a spring or private/domestic water well used by <5 households for domestic or stock watering purposes	☐	☑
<1000' of any water well or spring	☐	☑
within incorporated municipal boundaries or within a defined municipal fresh water well field	☐	☑
<300' of a wetland	☐	☑
within the area overlying a subsurface mine	☐	☑
within an unstable area	☐	☑
within a 100-year floodplain	☐	☑

Explain any 'Yes' Marks:

Actual Depth to Groundwater is: ≤50 ☐ 50-100 ☐ >100 ☑

***Treat Depth to Groundwater as if it's ≤ 50 ft?** Yes ☐ No ☑

	≤50	50-100	>100
Release Action Levels are... Benzene	**10**	**10**	**10**
BTEX (mg/kg)	**50**	**50**	**50**
8015 TPH (GRO/DRO) (mg/kg)	**Not Applicable**	**1,000**	**1,000**
8015 TPH (GRO/DRO/MRO) (mg/kg)	**100**	**2,500**	**2,500**
Chlorides (mg/kg)	**600**	**10,000**	**20,000**

NMAC 19.15.29.12 Table I. Release Action Levels are determined by the depth below bottom of pit to groundwater.

New Mexico Office of the State Engineer

Water Column/Average Depth to Water

(quarters are 1=NW 2=NE 3=SW 4=SE)
(quarters are smallest to largest) (NAD83 UTM in meters)

No records found.

PLSS Search:

Section(s): 34 **Township:** 32N **Range:** 06W

2/11/20 3:18 PM

WATER COLUMN/ AVERAGE DEPTH TO WATER

U.S. Fish and Wildlife Service
National Wetlands Inventory

Rosa 089 Wetlands

February 11, 2020

Wetlands

- Estuarine and Marine Deepwater
- Estuarine and Marine Wetland
- Freshwater Emergent Wetland
- Freshwater Forested/Shrub Wetland
- Freshwater Pond
- Lake
- Other
- Riverine

This map is for general reference only. The US Fish and Wildlife Service is not responsible for the accuracy or currentness of the base data shown on this map. All wetlands related data should be used in accordance with the layer metadata found on the Wetlands Mapper web site.

From: Elizabeth McNally
To: Cory Smith (cory.smith@state.nm.us)
Cc: Karen Lupton; khong@harvestmidstream.com; jgraham@harvestmidstream.com; David Reese; Corwin Lameman
Subject: Confirmation Soil Sampling at Harvest Rosa 089
Date: Monday, February 10, 2020 4:53:20 PM
Attachments: Rpt_2002280_Harvest_Midstream_Rosa_89_Final_v1.pdf

Hi Cory,
I hope all is well. We just got the labs back for the Harvest Rosa 089 Release Soil Sampling for the gas release (Incident # NCS 1929556371). All lab results were either below laboratory detection limits or well below NMOCD action levels. The results are attached for your review.

If this is ok, Harvest would like to backfill the excavated area.

Please don't hesitate to give me a call with any questions. We will prepare the revised C-141 to include site map, photos, and lab results.

Thanks, and have a good evening,
Beth

Elizabeth McNally, PE
Principal
Animas Environmental Services, LLC
emcnally@animasenvironmental.com
We've moved! 624 E Comanche St, Farmington NM
(Tel) 505.564.2281

From: Karen Lupton <klupton@animasenvironmental.com>
Sent: Monday, February 03, 2020 5:06 PM
To: Cory Smith (cory.smith@state.nm.us) <cory.smith@state.nm.us>
Cc: Elizabeth McNally <emcnally@animasenvironmental.com>
Subject: FW: Confirmation Soil Sampling at Harvest Rose 089

Hi Cory:

The incident number is NCS 1929556371.

Please let me know if you need any additional information.

Thank you!

Karen

From: Smith, Cory, EMNRD <Cory.Smith@state.nm.us>
Sent: Monday, February 03, 2020 4:00 PM
To: Elizabeth McNally <emcnally@animasenvironmental.com>
Cc: khong@harvestmidstream.com; jgraham@harvestmidstream.com; Corwin Lameman <clameman@animasenvironmental.com>; Greg Broome <gbroome@animasenvironmental.com>; David Reese <dreese@animasenvironmental.com>
Subject: RE: Confirmation Soil Sampling at Harvest Rose 089

Hello,

What is the incident# associated with the release?

Cory Smith
Environmental Specialist
Oil Conservation Division
Energy, Minerals, & Natural Resources
1000 Rio Brazos, Aztec, NM 87410
(505)334-6178 ext 115
cory.smith@state.nm.us

From: Elizabeth McNally <emcnally@animasenvironmental.com>
Sent: Monday, February 3, 2020 3:08 PM
To: Smith, Cory, EMNRD <Cory.Smith@state.nm.us>
Cc: khong@harvestmidstream.com; jgraham@harvestmidstream.com; Corwin Lameman <clameman@animasenvironmental.com>; Greg Broome <gbroome@animasenvironmental.com>; David Reese <dreese@animasenvironmental.com>
Subject: [EXT] Confirmation Soil Sampling at Harvest Rose 089

Hello Cory,
We have scheduled soil confirmation sampling at the Harvest Rosa 089 release location for Thursday, February 6 beginning at about 10:30 a.m.

Corwin Lameman and Greg Broome from AES will be onsite for the sampling. Corwin's contact number is 505.486.4062.

They anticipate beginning about 10:30 a.m. but will not begin until you are either on location or have given them instructions to start.

Please call with any questions.
Thanks, and have a good week ahead,
Beth

Elizabeth McNally, PE
Principal
Animas Environmental Services, LLC
emcnally@animasenvironmental.com
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