

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

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

Form C-141  
Revised August 24, 2018  
Submit to appropriate OCD District office

Incident ID	NRM2027435497
District RP	
Facility ID	
Application ID	

## Release Notification

### Responsible Party

Responsible Party Harvest Midstream Company	OGRID 373888
Contact Name Kijun Hong	Contact Telephone 505-632-4475
Contact email khong@harvestmidstream.com	Incident # (assigned by OCD)
Contact mailing address 1755 Arroyo Dr., Bloomfield, NM 87413	

### Location of Release Source

Latitude 36.66250 Longitude -107.85583  
(NAD 83 in decimal degrees to 5 decimal places)

Site Name Lateral J2 Pipeline	Site Type Natural Gas Pipeline
Date Release Discovered 8/28/20	API# (if applicable)

Unit Letter	Section	Township	Range	County
E	13	28N	10W	San Juan

Surface Owner: ☐ State ☒ Federal ☐ Tribal ☐ Private (Name: \_\_\_\_\_)

### Nature and Volume of Release

Material(s) Released (Select all that apply and attach calculations or specific justification for the volumes provided below)

<input type="checkbox"/> Crude Oil	Volume Released (bbls)	Volume Recovered (bbls)
<input type="checkbox"/> Produced Water	Volume Released (bbls)	Volume Recovered (bbls)
	Is the concentration of total dissolved solids (TDS) in the produced water >10,000 mg/l?	<input type="checkbox"/> Yes <input type="checkbox"/> No
<input type="checkbox"/> Condensate	Volume Released (bbls)	Volume Recovered (bbls)
<input checked="" type="checkbox"/> Natural Gas	Volume Released (Mcf) TBD	Volume Recovered (Mcf) no liquids
<input type="checkbox"/> Other (describe)	Volume/Weight Released (provide units)	Volume/Weight Recovered (provide units)

#### Cause of Release


Natural gas pipeline leak, no liquids. Site is 20 ft from a wash that is a tributary to Armenta Canyon wash. Leak was exposed and a clamp was put on the line. Leak has been repaired.

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Was this a major release as defined by 19.15.29.7(A) NMAC?  <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	If YES, for what reason(s) does the responsible party consider this a major release?  19.15.29.7(A)(2b): may with reasonable probability reach a watercourse
If YES, was immediate notice given to the OCD? By whom? To whom? When and by what means (phone, email, etc)?  No immediate notice	

Initial Response

The responsible party must undertake the following actions immediately unless they could create a safety hazard that would result in injury

<input checked="" type="checkbox"/> The source of the release has been stopped. <input checked="" type="checkbox"/> The impacted area has been secured to protect human health and the environment. <input checked="" type="checkbox"/> Released materials have been contained via the use of berms or dikes, absorbent pads, or other containment devices. <input type="checkbox"/> All free liquids and recoverable materials have been removed and managed appropriately.	
If all the actions described above have <u>not</u> been undertaken, explain why:  No recoverable materials and no free liquids to remove. Release delineation occurred Sept. 24, 2020. Ten soil samples collected from eight borings and submitted for laboratory analysis. Lab results are pending.	
Per 19.15.29.8 B. (4) NMAC the responsible party may commence remediation immediately after discovery of a release. If remediation has begun, please attach a narrative of actions to date. If remedial efforts have been successfully completed or if the release occurred within a lined containment area (see 19.15.29.11(A)(5)(a) NMAC), please attach all information needed for closure evaluation.	
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.	
Printed Name: <u>Kijun Hong</u> Signature: <u></u> email: <u>khong@harvestmidstream.com</u>	Title: <u>Environmental Specialist</u> Date: <u>9/28/2020</u> Telephone: <u>505-632-4475</u>
<b><u>OCD Only</u></b> Received by: <u>Ramona Marcus</u> Date: <u>10/01/2020</u>	

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## Site Assessment/Characterization

*This information must be provided to the appropriate district office no later than 90 days after the release discovery date.*

What is the shallowest depth to groundwater beneath the area affected by the release?	<u>&gt;12</u> (ft bgs)
Did this release impact groundwater or surface water?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Are the lateral extents of the release within 300 feet of a continuously flowing watercourse or any other significant watercourse?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Are the lateral extents of the release within 200 feet of any lakebed, sinkhole, or playa lake (measured from the ordinary high-water mark)?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release within 300 feet of an occupied permanent residence, school, hospital, institution, or church?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release within 500 horizontal feet of a spring or a private domestic fresh water well used by less than five households for domestic or stock watering purposes?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release within 1000 feet of any other fresh water well or spring?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release within incorporated municipal boundaries or within a defined municipal fresh water well field?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release within 300 feet of a wetland?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Are the lateral extents of the release overlying a subsurface mine?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release overlying an unstable area such as karst geology?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release within a 100-year floodplain?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Did the release impact areas <b>not</b> on an exploration, development, production, or storage site?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No

Attach a comprehensive report (electronic submittals in .pdf format are preferred) demonstrating the lateral and vertical extents of soil contamination associated with the release have been determined. Refer to 19.15.29.11 NMAC for specifics.

### **Characterization Report Checklist:** *Each of the following items must be included in the report.*


- ☒ Scaled site map showing impacted area, surface features, subsurface features, delineation points, and monitoring wells.
- ☒ Field data
- ☒ Data table of soil contaminant concentration data
- ☒ Depth to water determination
- ☒ Determination of water sources and significant watercourses within ½-mile of the lateral extents of the release
- ☒ Boring or excavation logs
- ☒ Photographs including date and GIS information
- ☒ Topographic/Aerial maps
- ☒ Laboratory data including chain of custody

If the site characterization report does not include completed efforts at remediation of the release, the report must include a proposed remediation plan. That plan must include the estimated volume of material to be remediated, the proposed remediation technique, proposed sampling plan and methods, anticipated timelines for beginning and completing the remediation. The closure criteria for a release are contained in Table 1 of 19.15.29.12 NMAC, however, use of the table is modified by site- and release-specific parameters.

State of New Mexico  
Oil Conservation Division

Incident ID	NRM2027435497
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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.

Printed Name: Kijun Hong Title: Environmental Specialist  
 Signature:  Date: 10/19/2020  
 email: khong@harvestmidstream.com Telephone: 505-632-4475

**OCD Only**

Received by: \_\_\_\_\_ Date: \_\_\_\_\_



Incident ID	NRM2027435497
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Facility ID	
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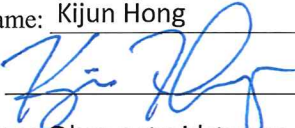
## Closure

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.*

- ☒ A scaled site and sampling diagram as described in 19.15.29.11 NMAC
- ☒ 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)
- ☒ Laboratory analyses of final sampling (Note: appropriate ODC District office must be notified 2 days prior to final sampling)
- ☒ 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: 10/19/2020  
email: khong@harvestmidstream.com Telephone: 505-632-4475

**OCD Only**

Received by: \_\_\_\_\_ Date: \_\_\_\_\_

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: Nelson Velez Date: 06/13/2022  
Printed Name: Nelson Velez Title: Environmental Specialist – Adv



October 13, 2020

Cory Smith  
Oil Conservation Division  
Energy, Minerals, & Natural Resources  
1000 Rio Brazos  
Aztec, New Mexico 87410  
Email: [Cory.Smith@state.nm.us](mailto:Cory.Smith@state.nm.us)

**RE: CLOSURE REPORT**  
**Lateral J2 Pipeline Release Assessment**  
**NMOCD Incident No. NRM2027435497**  
**Harvest Release Report No. RRS200828A**  
**SW¼ NW¼, Section 13, T28N, R10W**  
**San Juan County, New Mexico**

Dear Mr. Smith:

Harvest Midstream Company (Harvest) completed a release assessment at the Lateral J2 Pipeline release location in September 2020. The release, consisting of an undetermined quantity of natural gas (no liquids), was confirmed at this location on August 28, 2020. It is classified as a major release because of its proximity to a tributary of Armenta Wash. AES personnel completed a site delineation of the release on September 24, 2020.

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## 1.0 Site Information

### 1.1 Location

Site Name – Lateral J2 Pipeline  
Legal Description – SW¼ NW¼, Section 13, T28N, R10W, San Juan County, New Mexico  
Release Latitude/Longitude – N36.66250, W107.85583, respectively  
Land Jurisdiction – Bureau of Land Management  
Figure 1. Topographic Site Location Map  
Figure 2. Aerial Site Location Map

624 E Comanche St.  
Farmington, NM 87401  
505-564-2281  
[animasenvironmental.com](http://animasenvironmental.com)

## Lateral J2 Pipeline Release Assessment Report

October 13, 2020

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## 1.2 Release Information

On August 28, 2020, Harvest received a call from Intermountain Gas Company about an exposed leak on the Lateral J2 pipeline. Upon verifying the leak, a clamp was placed on the line and repairs completed later. Note that shallow groundwater accumulated in the excavation during repairs. The initial release was of an undetermined volume, and no liquids were observed.

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## 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:** Saturated soils and groundwater were encountered during repair activities.
- **Sensitive Receptor Determination:** The release site is located 20 ft from a small wash that is a tributary of Armenta Canyon wash. It is designated as a wetland by the National Wetlands Inventory.

**NMOCD 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) as gasoline range organics (GRO), diesel range organics (DRO), and motor oil range organics (MRO);
- 600 mg/kg chloride.

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## 3.0 Site Delineation

Release assessment soil samples were collected by AES on September 24, 2020. Notification of release assessment soil sampling was made to NMOCD and BLM on September 21, 2020. The project notification is attached.

### 3.1 Field Screening

Soil sampling activities included collection of 36 soil samples from 6 hand-augered borings surrounding the release location. All borings were augered to a depth of 12 ft below ground surface (bgs). Moist soils and strong odors were encountered in some of the borings. All samples were analyzed by photoionization detector organic vapor meter (PID-OVM); the highest reading was in SB-4 at 10 ft bgs, with 287.2 ppm. A

## Lateral J2 Pipeline Release Assessment Report

October 13, 2020

Page 3 of 4

total of 10 samples from 6 borings were submitted for laboratory analysis. These samples were collected from 4 to 12 ft bgs. Sample locations are presented on Figure 3. Field data and boring logs are attached.

### 3.3 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.

### 3.4 Laboratory Analytical Results

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

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## 4.0 Conclusions

AES completed a release assessment of natural gas contamination at the Harvest Lateral J2 Pipeline in September 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

Lateral J2 Pipeline Release Assessment Report

October 13, 2020

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Elizabeth McNally, P.E.

**Attachments:**

Figure 1. Topographic Site Location Map

Figure 2. Aerial Site Location Map

Figure 3. Site Delineation Sample Locations and Laboratory Analytical Results

Photograph Log

Field Data and Boring Logs (September 24, 2020)

Hall Analytical Report 2009F26

NMOCD Site Assessment/Characterization Ranking

Sampling Notification—September 21, 2020

**Cc:**

Kijun Hong

Harvest Midstream Company

1755 Arroyo Dr.

Bloomfield, New Mexico 87413

Email: [khong@harvestmidstream.com](mailto:khong@harvestmidstream.com)

Tamara Faust and Sherrie Landon

Bureau of Land Management

Farmington Field Office

6251 College Blvd., Suite A

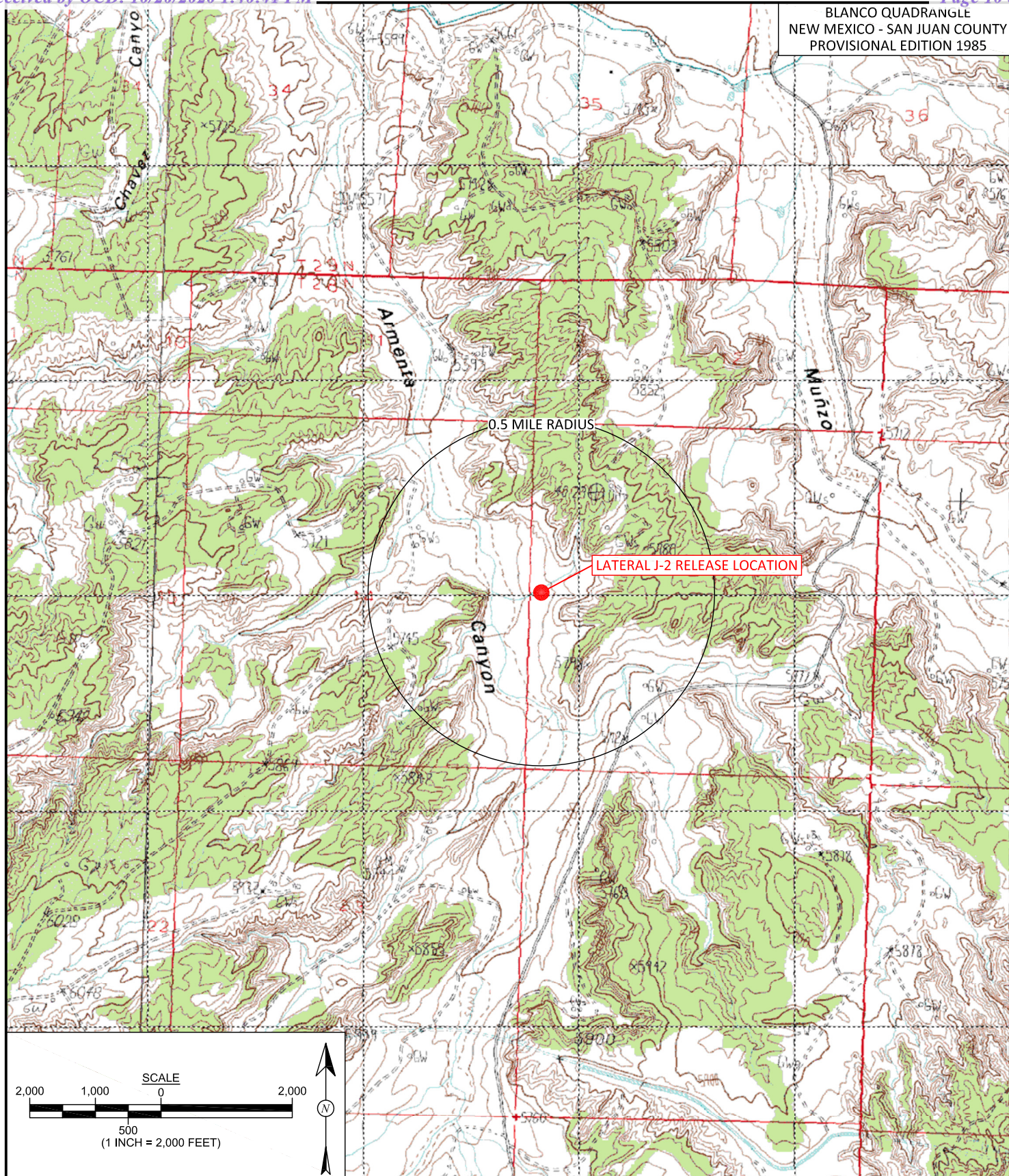
Farmington, New Mexico 87402

Email: [tfaust@blm.gov](mailto:tfaust@blm.gov) and [slandon@blm.gov](mailto:slandon@blm.gov)

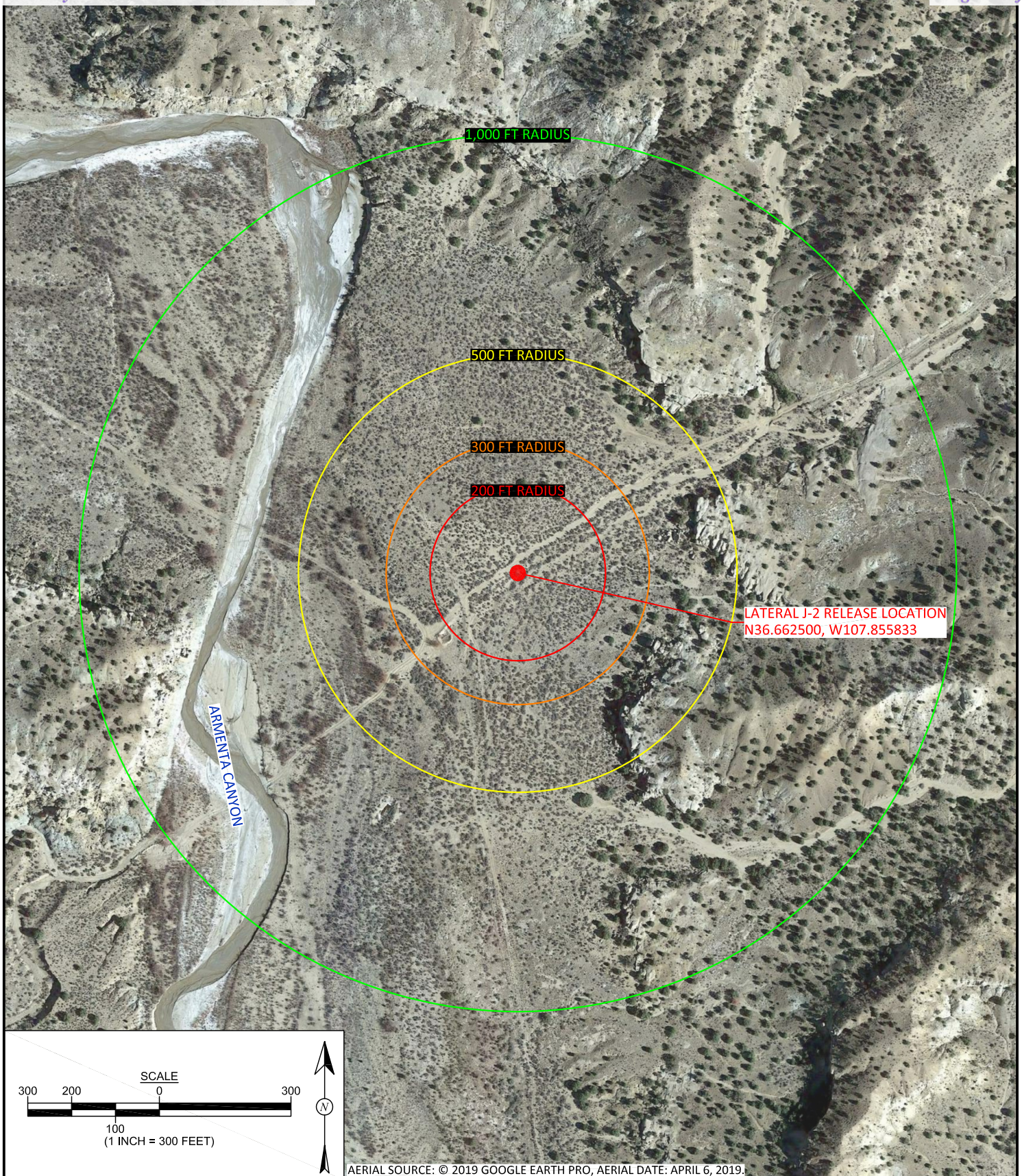
HarvestMidstream/Shared Documents/Lateral J2/Reports/Lateral J2 Pipeline Release Assmnt Report  
101320.docx



BLANCO QUADRANGLE  
NEW MEXICO - SAN JUAN COUNTY  
PROVISIONAL EDITION 1985







animas  
environmental  
services

Farmington, NM • Durango, CO  
animasenvironmental.com

<b>DRAWN BY:</b> C. Lameman	<b>DATE DRAWN:</b> September 14, 2020
<b>REVISIONS BY:</b> C. Lameman	<b>DATE REVISED:</b> September 14, 2020
<b>CHECKED BY:</b> E. McNally	<b>DATE CHECKED:</b> September 14, 2020
<b>APPROVED BY:</b> E. McNally	<b>DATE APPROVED:</b> September 14, 2020

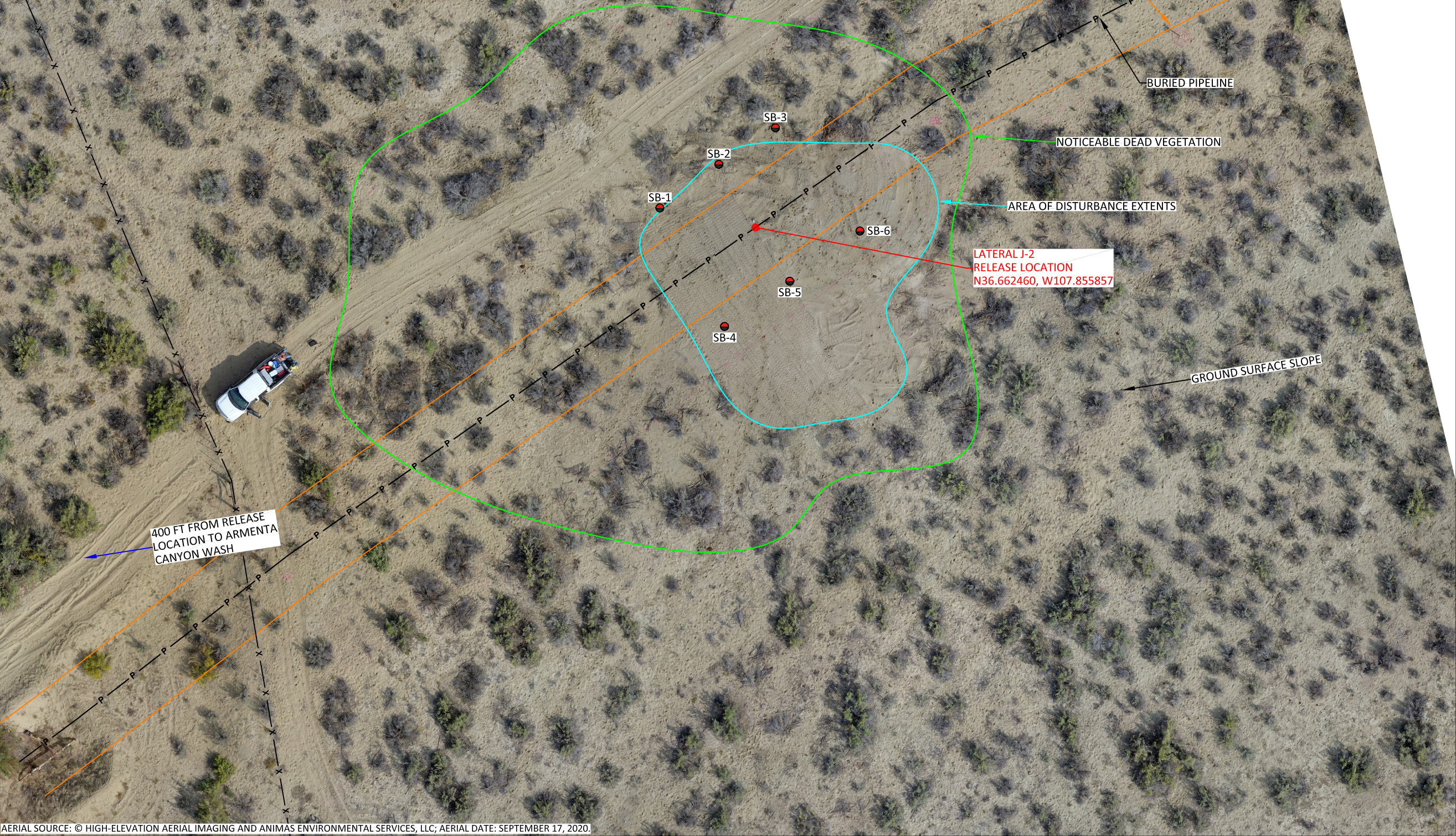
## FIGURE 2

**AERIAL SITE MAP**  
HARVEST FOUR CORNERS  
LATERAL J-2  
RELEASE ID: RRS200828A  
SW¼ NW¼, SECTION 13, T28N, R10W  
SAN JUAN COUNTY, NEW MEXICO  
N36.662500, W107.855833



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)	Chlorides (mg/kg)
NMOCD ACTION LEVEL			10	50	100			600
SB-1 @ 4ft	9/24/20	4	<0.024	<0.212	<4.7	<9.0	<45	<60
SB-1 @ 12ft	9/24/20	12	<0.023	0.099	<4.6	<9.9	<49	<60
SB-2 @ 8ft	9/24/20	8	<0.023	<0.208	<4.6	<9.7	<48	280
SB-2 @ 12ft	9/24/20	12	<0.024	<0.220	<4.9	<9.7	<48	<60
SB-3 @ 12ft	9/24/20	12	<0.024	0.12	<4.7	<9.6	<48	<60
SB-4 @ 10ft	9/24/20	10	<0.024	0.15	<4.8	20	<49	160
SB-4 @ 12ft	9/24/20	12	<0.025	<0.225	<5.0	<9.5	<48	<60
SB-5 @ 10ft	9/24/20	10	<0.024	<0.216	<4.8	<9.8	<49	150
SB-5 @ 12ft	9/24/20	12	<0.023	0.18	<4.7	<9.7	<48	100
SB-6 @ 12ft	9/24/20	12	<0.025	<0.221	<4.9	<9.4	<47	190

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



AERIAL SOURCE: © HIGH-ELEVATION AERIAL IMAGING AND ANIMAS ENVIRONMENTAL SERVICES, LLC; AERIAL DATE: SEPTEMBER 17, 2020.

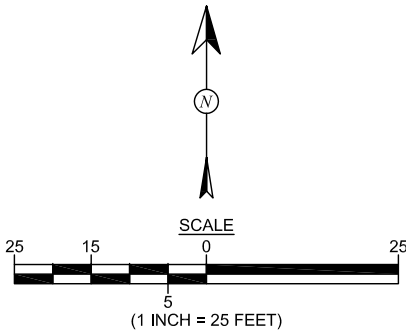
FIGURE 3

SEPTEMBER 2020 SITE DELINEATION  
SAMPLE LOCATIONS AND  
LABORATORY ANALYTICAL RESULTS  
HARVEST FOUR CORNERS  
LATERAL J-2  
RELEASE ID: RRS200828A  
SE¼ NE¼, SECTION 14, T28N, R10W  
SAN JUAN COUNTY, NEW MEXICO  
N36.662500, W107.855833



<b>DRAWN BY:</b> C. Lameman	<b>DATE DRAWN:</b> October 5, 2020
<b>REVISIONS BY:</b> C. Lameman	<b>DATE REVISED:</b> October 5, 2020
<b>CHECKED BY:</b> E. McNally	<b>DATE CHECKED:</b> October 5, 2020
<b>APPROVED BY:</b> E. McNally	<b>DATE APPROVED:</b> October 5, 2020

- LEGEND**
- HAND AUGER BORING SAMPLE LOCATION





**Lateral J2**  
**NMOCD Incident No. NRM2027435497**  
**Pipeline Release Assessment**



Photo 1: SB-1 through SB-3 locations. View is to the northeast.

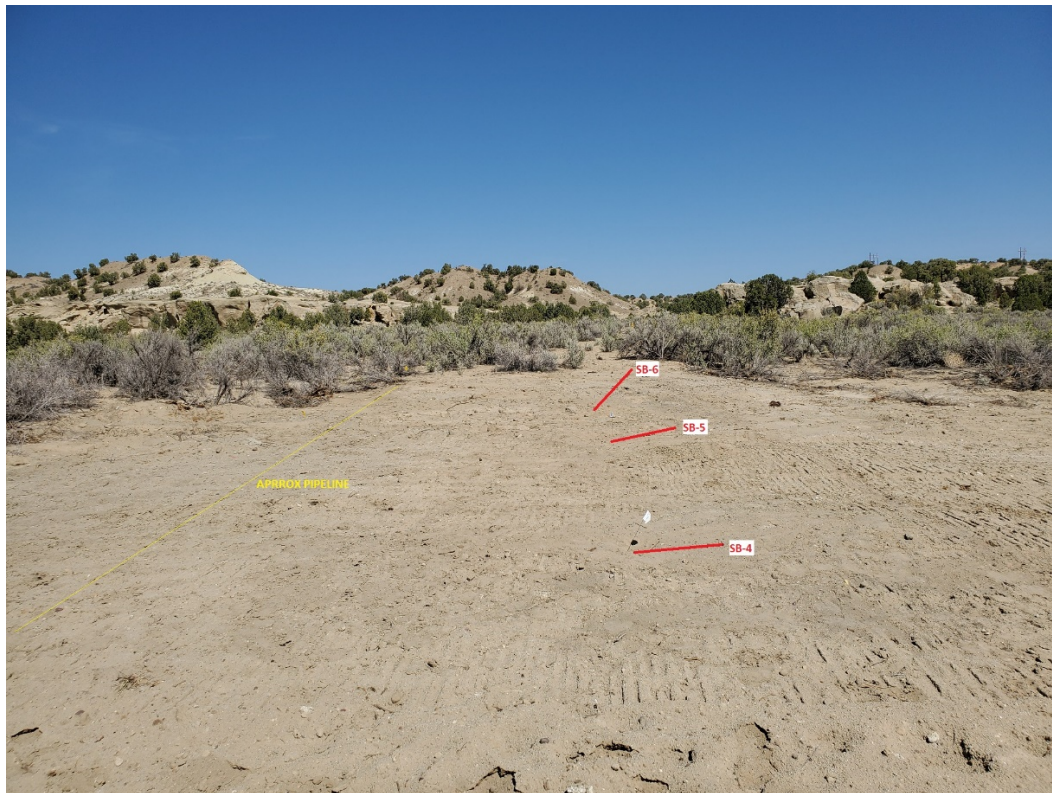


Photo 2: SB-4 through SB-6 locations. View is to the northeast.

Facility or Pipeline Name: Lateral J-Z Pipeline Release

Date: 9-24-20

AES personnel: C. Lameiman, G. Broome

Sample ID	Collection Date	Time of Sample Collection	Sample Location	Sample Depth (ft)	Composite	PID-OVM (ppm)	Time of PID-OVM	Chlorides (mg/l CL-)	Time of Chlorides	NOTES (i.e. Soil Type, Color, Odor, Staining)
SB-1	9-24-20	8:12		2	N	21.5	8:14	80	9:21	S.S.O = Strong Sewer Odor N.S. = No Staining Sand, CG, Tan, Strong Sewer Odor, Moist, No Stain
		8:15		4		186.8	8:17	80	9:24	Sand, CG, Tan, Strong Sewer Odor, Moist, St. Stain
		8:22		6		157.7	8:25	60	9:26	Sand, CG, Tan, Strong Sewer Odor, Moist, No Stain
		8:27		8		178.1	8:30	60	9:28	@ 7' Fr Sand. Sand, FB, Tan, Strong Odor, Dry, No Stain
		8:34		10		92.1	8:38	60	9:30	Sand, FB, Tan, Sewer Odor, No Stain, Dry
		8:45		12		90.2	8:52	60	9:32	Sand, FB, Tan-Green, Clayey, St. Sewer Odor, Moist, No Stain
SB-2		9:06		2		26.4	9:11	NA	-	Sand, CG, Staining @ 1', Strong Sewer Odor, Moist
		9:09		4		87.3	9:14	80	10:42	Sand, MG, Tan, Strong Sewer Odor, Dry, N.S.
		9:18		6		82.8	9:22	NA	-	Sand, MG, Tan, No Odor, Dry, N.S.
		9:42		8		208.7	9:47	140	15:49	Sand, MG-FG, Tan, St. Odor, N.S., Dry
		9:49		10		93.0	9:57	NA	-	Sand, FG, Tan, Sewer Odor, Moist, N.S.
		9:55		12		63.8	10:00	80	15:50	Sand and Clay, FB, Tan-Green, St. Odor, Dry, N.S.
SB-3		10:10		2		33.1	10:14	NA	-	Sand, CG, Tan, Staining @ 225', S.S.O, N.S., Moist
		10:12		4		13.9	10:18	80	15:52	Sand, CG, Tan, S.S.O, Moist, N.S.
		10:17		6		45.7	10:24	NA	-	Sand, CG-MG, Tan, Sewer Odor, Dry, N.S.
		10:31		8		88.7	10:36	60	15:54	Sand, MG-FG, Tan, Sewer Odor, Dry, N.S.
		10:39		10		43.3	10:44	NA	-	Sand, MG-FG, Tan, Sewer Odor, Moist, N.S.
		10:46		12		37.9	10:51	40	15:56	Sand and Clay, FB, Tan-Green, Moist, Sewer Odor, N.S.

Type of Sample collection?:



Facility or Pipeline Name: Lateral J-2 Pipeline Release

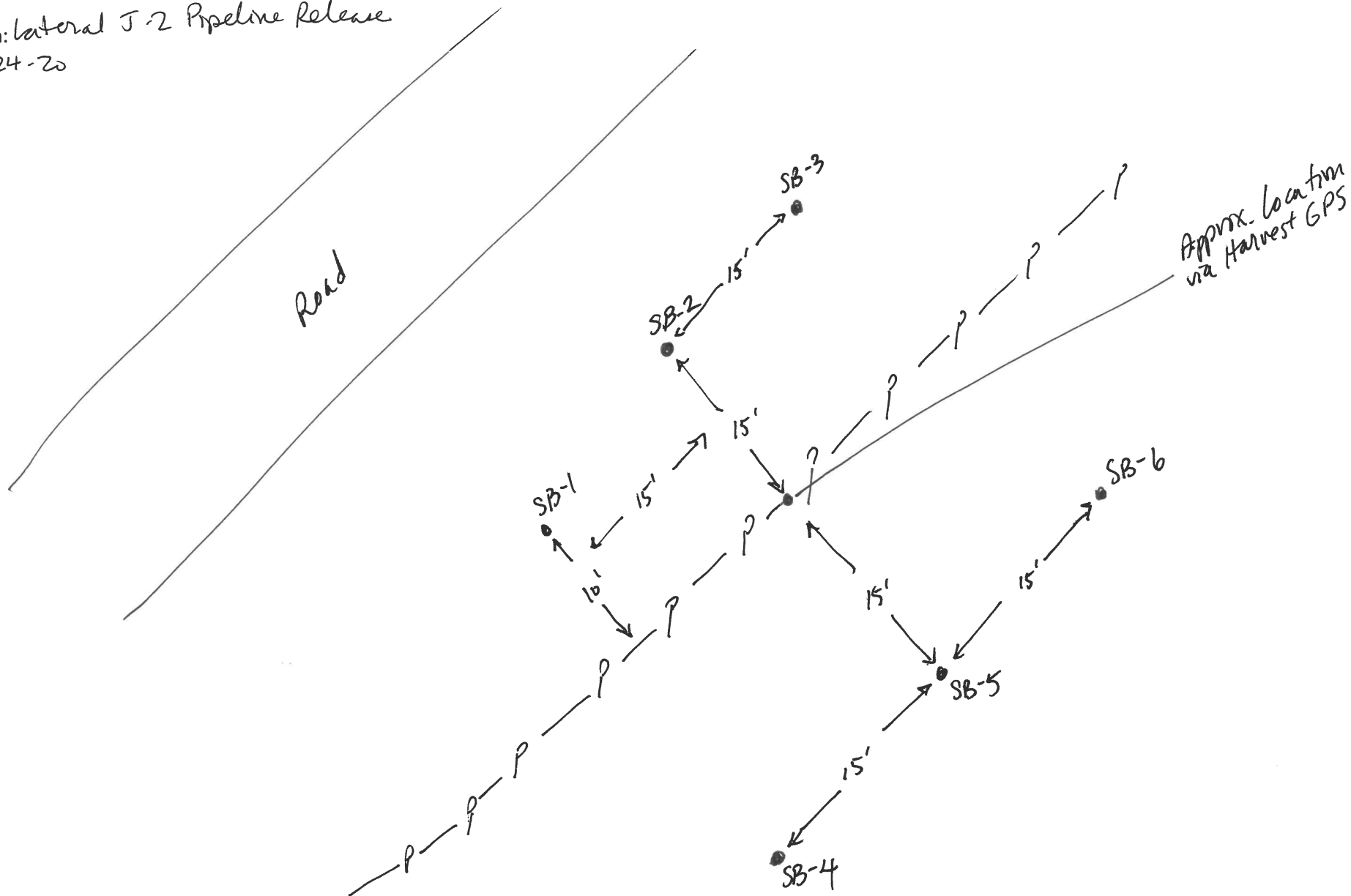
Date: 9-24-20

AES personnel: C. Lamenman, G. Broome

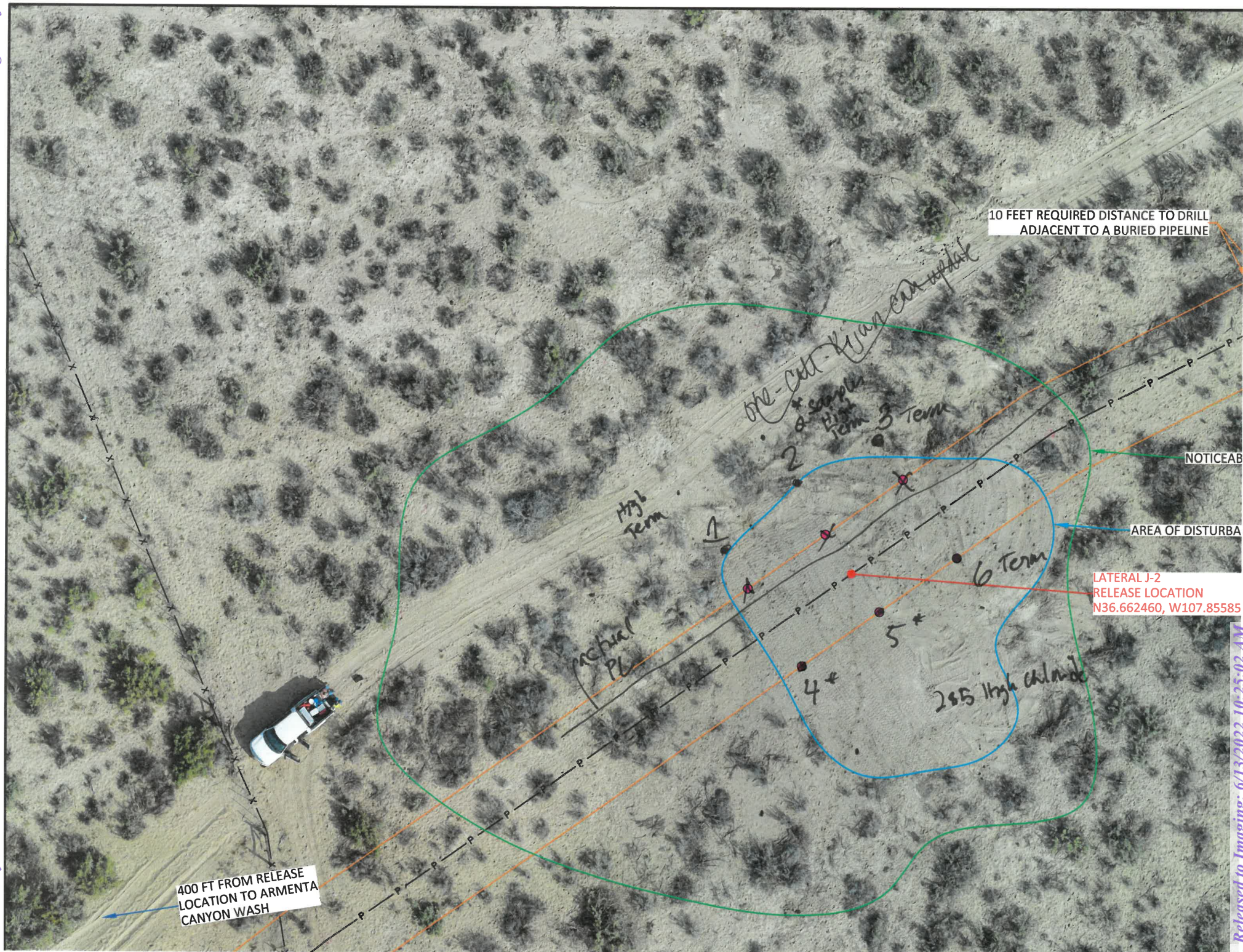
Sample ID	Collection Date	Time of Sample Collection	Sample Location	Sample Depth (ft)	Composite	PID-OVM (ppm)	Time of PID-OVM	Chlorides (mg/l CL-)	Time of Chlorides	String Sewer Odor = S.S.O No Staining = N.S. NOTES (i.e. Soil Type, Color, Odor, Staining)
SB-4	9-24-20	11:01		2	N	1.1	11:05	NA	-	Sand, LG, Tan, Sl. Sewer Odor, Moist, N.S.
		11:03		4		59.5	11:08	40	15:58	Sand, LG, Tan, Sl. Gray Staining, Moist, Sewer Odor
		11:06		6		72.4	11:11	NA	-	Sand, LG, Gray Staining, Moist, Sewer Odor
		11:10		8		41.4	11:15	60	16:01	Sand, LG-MG, Gray Staining, Moist, S.S.O.
		11:41		10		287.2	11:48	NA	-	Sand, MG, Gray Staining, Moist, S.S.O. like Penafin
		11:47		12		74.2	11:52	80	16:04	Sand, MG, Strong Odor, Moist, N.S., Tan
SB-5		11:55		2		7.2	12:00	NA	-	Sand, LG, Tan, Sl. Odor, Moist, N.S.
		11:59		4		33.7	12:05	40	16:06	Sand, LG, Tan, Some Staining, Strong Odor, Moist
		12:04		6		69.2	12:09	NA	-	Sand, MG, Tan, Strong Odor, Dry, N.S.
		12:19		8		49.9	12:29	60	16:08	Sand, MG, Tan, Strong Odor, Dry, N.S.
		12:30		10		105.8	12:37	NA	-	Sand, MG-FG, Tan, N.S., Moist, S.S.O.
		12:36		12		48.3	12:41	60	16:10	Sand and Clay, MG-FG, Tan-Green, Sl. Odor, N.S. Moist
SB-6		12:53		2		2.2	13:00	NA	-	Sand, LG, Tan, Sl. Odor, Moist, N.S.
		12:57		4		21.7	13:05	40	16:12	Sand, LG, Tan, Some Staining, Moist, S.S.O. 6mg
		13:10		6		48.5	13:16 13:28	NA	-	Sand, FG, Tan, S.S.O, Dry, N.S.
		13:21		8		51.5	13:28	80	16:14	V. loose sand & silt: Sand, FG, loose, Sl. Odor, Dry, N.S.
		13:26		10		42.8	13:31	NA	-	Sand, FG, Tan, Sl. Odor, Dry, N.S.
		13:41		12		103.0	13:45	60	16:16	Sand and Clay, FG, Green, Moist, Sl. Odor, N.S.

Type of Sample collection?:

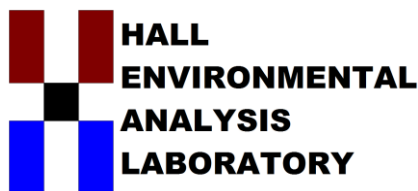
Site sketch: Lateral J-2 Pipeline Release  
Date: 9-24-20











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

October 02, 2020

Elizabeth McNally  
Animas Environmental Services  
624 E. Comanche  
Farmington, NM 87401  
TEL: (505) 564-2281  
FAX: (505) 324-2022

RE: Harvest Lateral J-2

OrderNo.: 2009F26

Dear Elizabeth McNally:

Hall Environmental Analysis Laboratory received 10 sample(s) on 9/25/2020 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](http://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,

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

Andy Freeman  
Laboratory Manager  
4901 Hawkins NE  
Albuquerque, NM 87109

## Analytical Report

Lab Order 2009F26

Date Reported: 10/2/2020

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Animas Environmental Services

Client Sample ID: SB-1 @ 4ft

Project: Harvest Lateral J-2

Collection Date: 9/24/2020 8:15:00 AM

Lab ID: 2009F26-001

Matrix: SOIL

Received Date: 9/25/2020 7:50:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: CAS
Chloride	ND	60		mg/Kg	20	9/29/2020 9:34:14 PM	55541
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>							Analyst: mb
Diesel Range Organics (DRO)	ND	9.0		mg/Kg	1	9/28/2020 1:16:43 PM	55464
Motor Oil Range Organics (MRO)	ND	45		mg/Kg	1	9/28/2020 1:16:43 PM	55464
Surr: DNOP	70.0	30.4-154		%Rec	1	9/28/2020 1:16:43 PM	55464
<b>EPA METHOD 8015D: GASOLINE RANGE</b>							Analyst: NSB
Gasoline Range Organics (GRO)	ND	4.7		mg/Kg	1	9/28/2020 2:00:44 PM	55460
Surr: BFB	90.9	75.3-105		%Rec	1	9/28/2020 2:00:44 PM	55460
<b>EPA METHOD 8021B: VOLATILES</b>							Analyst: NSB
Benzene	ND	0.024		mg/Kg	1	9/28/2020 2:00:44 PM	55460
Toluene	ND	0.047		mg/Kg	1	9/28/2020 2:00:44 PM	55460
Ethylbenzene	ND	0.047		mg/Kg	1	9/28/2020 2:00:44 PM	55460
Xylenes, Total	ND	0.094		mg/Kg	1	9/28/2020 2:00:44 PM	55460
Surr: 4-Bromofluorobenzene	103	80-120		%Rec	1	9/28/2020 2:00:44 PM	55460

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 Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

## Analytical Report

Lab Order 2009F26

Date Reported: 10/2/2020

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Animas Environmental Services

Client Sample ID: SB-1 @ 12ft

Project: Harvest Lateral J-2

Collection Date: 9/24/2020 8:45:00 AM

Lab ID: 2009F26-002

Matrix: SOIL

Received Date: 9/25/2020 7:50:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: <b>CAS</b>
Chloride	ND	60		mg/Kg	20	9/29/2020 9:46:39 PM	55541
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>							Analyst: <b>mb</b>
Diesel Range Organics (DRO)	ND	9.9		mg/Kg	1	9/28/2020 1:46:04 PM	55464
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	9/28/2020 1:46:04 PM	55464
Surr: DNOP	86.4	30.4-154		%Rec	1	9/28/2020 1:46:04 PM	55464
<b>EPA METHOD 8015D: GASOLINE RANGE</b>							Analyst: <b>NSB</b>
Gasoline Range Organics (GRO)	ND	4.6		mg/Kg	1	9/28/2020 3:11:18 PM	55460
Surr: BFB	90.6	75.3-105		%Rec	1	9/28/2020 3:11:18 PM	55460
<b>EPA METHOD 8021B: VOLATILES</b>							Analyst: <b>NSB</b>
Benzene	ND	0.023		mg/Kg	1	9/28/2020 3:11:18 PM	55460
Toluene	ND	0.046		mg/Kg	1	9/28/2020 3:11:18 PM	55460
Ethylbenzene	ND	0.046		mg/Kg	1	9/28/2020 3:11:18 PM	55460
Xylenes, Total	0.099	0.092		mg/Kg	1	9/28/2020 3:11:18 PM	55460
Surr: 4-Bromofluorobenzene	106	80-120		%Rec	1	9/28/2020 3:11:18 PM	55460

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

<b>Qualifiers:</b>	*	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 Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

## Analytical Report

Lab Order 2009F26

Date Reported: 10/2/2020

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Animas Environmental Services

Client Sample ID: SB-2 @ 8ft

Project: Harvest Lateral J-2

Collection Date: 9/24/2020 9:42:00 AM

Lab ID: 2009F26-003

Matrix: SOIL

Received Date: 9/25/2020 7:50:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: <b>CAS</b>
Chloride	280	60		mg/Kg	20	9/29/2020 9:59:03 PM	55541
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>							Analyst: <b>mb</b>
Diesel Range Organics (DRO)	ND	9.7		mg/Kg	1	9/28/2020 1:55:49 PM	55464
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	9/28/2020 1:55:49 PM	55464
Surr: DNOP	79.1	30.4-154		%Rec	1	9/28/2020 1:55:49 PM	55464
<b>EPA METHOD 8015D: GASOLINE RANGE</b>							Analyst: <b>NSB</b>
Gasoline Range Organics (GRO)	ND	4.6		mg/Kg	1	9/28/2020 4:22:20 PM	55460
Surr: BFB	89.0	75.3-105		%Rec	1	9/28/2020 4:22:20 PM	55460
<b>EPA METHOD 8021B: VOLATILES</b>							Analyst: <b>NSB</b>
Benzene	ND	0.023		mg/Kg	1	9/28/2020 4:22:20 PM	55460
Toluene	ND	0.046		mg/Kg	1	9/28/2020 4:22:20 PM	55460
Ethylbenzene	ND	0.046		mg/Kg	1	9/28/2020 4:22:20 PM	55460
Xylenes, Total	ND	0.093		mg/Kg	1	9/28/2020 4:22:20 PM	55460
Surr: 4-Bromofluorobenzene	101	80-120		%Rec	1	9/28/2020 4:22:20 PM	55460

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

**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 Quantitative 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

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## Analytical Report

Lab Order 2009F26

Date Reported: 10/2/2020

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Animas Environmental Services

Client Sample ID: SB-2 @ 12ft

Project: Harvest Lateral J-2

Collection Date: 9/24/2020 9:55:00 AM

Lab ID: 2009F26-004

Matrix: SOIL

Received Date: 9/25/2020 7:50:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: CAS
Chloride	ND	60		mg/Kg	20	9/29/2020 10:11:28 PM	55541
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>							Analyst: mb
Diesel Range Organics (DRO)	ND	9.7		mg/Kg	1	9/28/2020 2:05:34 PM	55464
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	9/28/2020 2:05:34 PM	55464
Surr: DNOP	74.4	30.4-154		%Rec	1	9/28/2020 2:05:34 PM	55464
<b>EPA METHOD 8015D: GASOLINE RANGE</b>							Analyst: NSB
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	9/28/2020 4:45:54 PM	55460
Surr: BFB	86.0	75.3-105		%Rec	1	9/28/2020 4:45:54 PM	55460
<b>EPA METHOD 8021B: VOLATILES</b>							Analyst: NSB
Benzene	ND	0.024		mg/Kg	1	9/28/2020 4:45:54 PM	55460
Toluene	ND	0.049		mg/Kg	1	9/28/2020 4:45:54 PM	55460
Ethylbenzene	ND	0.049		mg/Kg	1	9/28/2020 4:45:54 PM	55460
Xylenes, Total	ND	0.098		mg/Kg	1	9/28/2020 4:45:54 PM	55460
Surr: 4-Bromofluorobenzene	100	80-120		%Rec	1	9/28/2020 4:45:54 PM	55460

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

<b>Qualifiers:</b>	*	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 Quantitative 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

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## Analytical Report

Lab Order 2009F26

Date Reported: 10/2/2020

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Animas Environmental Services

Client Sample ID: SB-3 @ 12ft

Project: Harvest Lateral J-2

Collection Date: 9/24/2020 10:46:00 AM

Lab ID: 2009F26-005

Matrix: SOIL

Received Date: 9/25/2020 7:50:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: <b>CAS</b>
Chloride	ND	60		mg/Kg	20	9/29/2020 10:23:53 PM	55541
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>							Analyst: <b>mb</b>
Diesel Range Organics (DRO)	ND	9.6		mg/Kg	1	9/28/2020 2:15:18 PM	55464
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	9/28/2020 2:15:18 PM	55464
Surr: DNOP	77.9	30.4-154		%Rec	1	9/28/2020 2:15:18 PM	55464
<b>EPA METHOD 8015D: GASOLINE RANGE</b>							Analyst: <b>NSB</b>
Gasoline Range Organics (GRO)	ND	4.7		mg/Kg	1	9/28/2020 5:09:15 PM	55460
Surr: BFB	89.5	75.3-105		%Rec	1	9/28/2020 5:09:15 PM	55460
<b>EPA METHOD 8021B: VOLATILES</b>							Analyst: <b>NSB</b>
Benzene	ND	0.024		mg/Kg	1	9/28/2020 5:09:15 PM	55460
Toluene	ND	0.047		mg/Kg	1	9/28/2020 5:09:15 PM	55460
Ethylbenzene	ND	0.047		mg/Kg	1	9/28/2020 5:09:15 PM	55460
Xylenes, Total	0.12	0.094		mg/Kg	1	9/28/2020 5:09:15 PM	55460
Surr: 4-Bromofluorobenzene	100	80-120		%Rec	1	9/28/2020 5:09:15 PM	55460

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

<b>Qualifiers:</b>	*	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 Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

## Analytical Report

Lab Order 2009F26

Date Reported: 10/2/2020

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Animas Environmental Services

Client Sample ID: SB-4 @ 10ft

Project: Harvest Lateral J-2

Collection Date: 9/24/2020 11:41:00 AM

Lab ID: 2009F26-006

Matrix: SOIL

Received Date: 9/25/2020 7:50:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: <b>CAS</b>
Chloride	160	60		mg/Kg	20	9/29/2020 10:36:17 PM	55541
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>							Analyst: <b>mb</b>
Diesel Range Organics (DRO)	20	9.7		mg/Kg	1	9/28/2020 2:25:02 PM	55464
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	9/28/2020 2:25:02 PM	55464
Surr: DNOP	99.3	30.4-154		%Rec	1	9/28/2020 2:25:02 PM	55464
<b>EPA METHOD 8015D: GASOLINE RANGE</b>							Analyst: <b>NSB</b>
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	9/28/2020 5:32:39 PM	55460
Surr: BFB	93.4	75.3-105		%Rec	1	9/28/2020 5:32:39 PM	55460
<b>EPA METHOD 8021B: VOLATILES</b>							Analyst: <b>NSB</b>
Benzene	ND	0.024		mg/Kg	1	9/28/2020 5:32:39 PM	55460
Toluene	ND	0.048		mg/Kg	1	9/28/2020 5:32:39 PM	55460
Ethylbenzene	ND	0.048		mg/Kg	1	9/28/2020 5:32:39 PM	55460
Xylenes, Total	0.15	0.097		mg/Kg	1	9/28/2020 5:32:39 PM	55460
Surr: 4-Bromofluorobenzene	102	80-120		%Rec	1	9/28/2020 5:32:39 PM	55460

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

<b>Qualifiers:</b>	*	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 Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

## Analytical Report

Lab Order 2009F26

Date Reported: 10/2/2020

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Animas Environmental Services

Client Sample ID: SB-4 @ 12ft

Project: Harvest Lateral J-2

Collection Date: 9/24/2020 11:47:00 AM

Lab ID: 2009F26-007

Matrix: SOIL

Received Date: 9/25/2020 7:50:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: CAS
Chloride	ND	60		mg/Kg	20	9/29/2020 10:48:42 PM	55541
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>							Analyst: mb
Diesel Range Organics (DRO)	ND	9.5		mg/Kg	1	9/28/2020 2:34:44 PM	55464
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	9/28/2020 2:34:44 PM	55464
Surr: DNOP	77.7	30.4-154		%Rec	1	9/28/2020 2:34:44 PM	55464
<b>EPA METHOD 8015D: GASOLINE RANGE</b>							Analyst: NSB
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	9/28/2020 5:56:20 PM	55460
Surr: BFB	87.1	75.3-105		%Rec	1	9/28/2020 5:56:20 PM	55460
<b>EPA METHOD 8021B: VOLATILES</b>							Analyst: NSB
Benzene	ND	0.025		mg/Kg	1	9/28/2020 5:56:20 PM	55460
Toluene	ND	0.050		mg/Kg	1	9/28/2020 5:56:20 PM	55460
Ethylbenzene	ND	0.050		mg/Kg	1	9/28/2020 5:56:20 PM	55460
Xylenes, Total	ND	0.10		mg/Kg	1	9/28/2020 5:56:20 PM	55460
Surr: 4-Bromofluorobenzene	97.8	80-120		%Rec	1	9/28/2020 5:56:20 PM	55460

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

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 Quantitative 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

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## Analytical Report

Lab Order 2009F26

Date Reported: 10/2/2020

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Animas Environmental Services

Client Sample ID: SB-5 @ 10ft

Project: Harvest Lateral J-2

Collection Date: 9/24/2020 12:30:00 PM

Lab ID: 2009F26-008

Matrix: SOIL

Received Date: 9/25/2020 7:50:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: JRR
Chloride	150	60		mg/Kg	20	9/30/2020 1:55:20 PM	55559
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>							Analyst: mb
Diesel Range Organics (DRO)	ND	9.8		mg/Kg	1	9/28/2020 2:44:25 PM	55464
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	9/28/2020 2:44:25 PM	55464
Surr: DNOP	89.0	30.4-154		%Rec	1	9/28/2020 2:44:25 PM	55464
<b>EPA METHOD 8015D: GASOLINE RANGE</b>							Analyst: NSB
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	9/28/2020 7:06:31 PM	55460
Surr: BFB	90.3	75.3-105		%Rec	1	9/28/2020 7:06:31 PM	55460
<b>EPA METHOD 8021B: VOLATILES</b>							Analyst: NSB
Benzene	ND	0.024		mg/Kg	1	9/28/2020 7:06:31 PM	55460
Toluene	ND	0.048		mg/Kg	1	9/28/2020 7:06:31 PM	55460
Ethylbenzene	ND	0.048		mg/Kg	1	9/28/2020 7:06:31 PM	55460
Xylenes, Total	ND	0.096		mg/Kg	1	9/28/2020 7:06:31 PM	55460
Surr: 4-Bromofluorobenzene	102	80-120		%Rec	1	9/28/2020 7:06:31 PM	55460

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 Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

## Analytical Report

Lab Order 2009F26

Date Reported: 10/2/2020

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Animas Environmental Services

Client Sample ID: SB-5 @ 12ft

Project: Harvest Lateral J-2

Collection Date: 9/24/2020 12:36:00 PM

Lab ID: 2009F26-009

Matrix: SOIL

Received Date: 9/25/2020 7:50:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: JRR
Chloride	100	60		mg/Kg	20	9/30/2020 2:32:33 PM	55559
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>							Analyst: mb
Diesel Range Organics (DRO)	ND	9.7		mg/Kg	1	9/28/2020 2:54:06 PM	55464
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	9/28/2020 2:54:06 PM	55464
Surr: DNOP	77.7	30.4-154		%Rec	1	9/28/2020 2:54:06 PM	55464
<b>EPA METHOD 8015D: GASOLINE RANGE</b>							Analyst: NSB
Gasoline Range Organics (GRO)	ND	4.7		mg/Kg	1	9/28/2020 7:29:50 PM	55460
Surr: BFB	93.9	75.3-105		%Rec	1	9/28/2020 7:29:50 PM	55460
<b>EPA METHOD 8021B: VOLATILES</b>							Analyst: NSB
Benzene	ND	0.023		mg/Kg	1	9/28/2020 7:29:50 PM	55460
Toluene	ND	0.047		mg/Kg	1	9/28/2020 7:29:50 PM	55460
Ethylbenzene	ND	0.047		mg/Kg	1	9/28/2020 7:29:50 PM	55460
Xylenes, Total	0.18	0.093		mg/Kg	1	9/28/2020 7:29:50 PM	55460
Surr: 4-Bromofluorobenzene	104	80-120		%Rec	1	9/28/2020 7:29:50 PM	55460

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

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 Quantitative 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

## Analytical Report

Lab Order 2009F26

Date Reported: 10/2/2020

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Animas Environmental Services

Client Sample ID: SB-6 @ 12ft

Project: Harvest Lateral J-2

Collection Date: 9/24/2020 1:41:00 PM

Lab ID: 2009F26-010

Matrix: SOIL

Received Date: 9/25/2020 7:50:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: JRR
Chloride	190	60		mg/Kg	20	9/30/2020 2:44:57 PM	55559
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>							Analyst: mb
Diesel Range Organics (DRO)	ND	9.4		mg/Kg	1	9/28/2020 3:03:45 PM	55464
Motor Oil Range Organics (MRO)	ND	47		mg/Kg	1	9/28/2020 3:03:45 PM	55464
Surr: DNOP	83.1	30.4-154		%Rec	1	9/28/2020 3:03:45 PM	55464
<b>EPA METHOD 8015D: GASOLINE RANGE</b>							Analyst: NSB
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	9/28/2020 7:53:09 PM	55460
Surr: BFB	90.9	75.3-105		%Rec	1	9/28/2020 7:53:09 PM	55460
<b>EPA METHOD 8021B: VOLATILES</b>							Analyst: NSB
Benzene	ND	0.025		mg/Kg	1	9/28/2020 7:53:09 PM	55460
Toluene	ND	0.049		mg/Kg	1	9/28/2020 7:53:09 PM	55460
Ethylbenzene	ND	0.049		mg/Kg	1	9/28/2020 7:53:09 PM	55460
Xylenes, Total	ND	0.098		mg/Kg	1	9/28/2020 7:53:09 PM	55460
Surr: 4-Bromofluorobenzene	105	80-120		%Rec	1	9/28/2020 7:53:09 PM	55460

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

<b>Qualifiers:</b>	*	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 Quantitative 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

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**QC SUMMARY REPORT****Hall Environmental Analysis Laboratory, Inc.**

WO#: 2009F26

02-Oct-20

**Client:** Animas Environmental Services**Project:** Harvest Lateral J-2

Sample ID: <b>MB-55541</b>	SampType: <b>mblk</b>	TestCode: <b>EPA Method 300.0: Anions</b>								
Client ID: <b>PBS</b>	Batch ID: <b>55541</b>	RunNo: <b>72232</b>								
Prep Date: <b>9/29/2020</b>	Analysis Date: <b>9/29/2020</b>	SeqNo: <b>2534669</b>	Units: <b>mg/Kg</b>							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	ND	1.5								

Sample ID: <b>LCS-55541</b>	SampType: <b>lcs</b>	TestCode: <b>EPA Method 300.0: Anions</b>								
Client ID: <b>LCSS</b>	Batch ID: <b>55541</b>	RunNo: <b>72232</b>								
Prep Date: <b>9/29/2020</b>	Analysis Date: <b>9/29/2020</b>	SeqNo: <b>2534670</b>	Units: <b>mg/Kg</b>							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	14	1.5	15.00	0	94.7	90	110			

Sample ID: <b>MB-55559</b>	SampType: <b>mblk</b>	TestCode: <b>EPA Method 300.0: Anions</b>								
Client ID: <b>PBS</b>	Batch ID: <b>55559</b>	RunNo: <b>72273</b>								
Prep Date: <b>9/30/2020</b>	Analysis Date: <b>9/30/2020</b>	SeqNo: <b>2536057</b>	Units: <b>mg/Kg</b>							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	ND	1.5								

Sample ID: <b>LCS-55559</b>	SampType: <b>lcs</b>	TestCode: <b>EPA Method 300.0: Anions</b>								
Client ID: <b>LCSS</b>	Batch ID: <b>55559</b>	RunNo: <b>72273</b>								
Prep Date: <b>9/30/2020</b>	Analysis Date: <b>9/30/2020</b>	SeqNo: <b>2536058</b>	Units: <b>mg/Kg</b>							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	14	1.5	15.00	0	92.0	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 Quantitative 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#: 2009F26

02-Oct-20

**Client:** Animas Environmental Services**Project:** Harvest Lateral J-2

Sample ID: <b>LCS-55461</b>	SampType: <b>LCS</b>	TestCode: <b>EPA Method 8015M/D: Diesel Range Organics</b>								
Client ID: <b>LCSS</b>	Batch ID: <b>55461</b>	RunNo: <b>72183</b>								
Prep Date: <b>9/26/2020</b>	Analysis Date: <b>9/28/2020</b>	SeqNo: <b>2530703</b> Units: <b>%Rec</b>								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP	4.2		5.000		84.7	30.4	154			

Sample ID: <b>MB-55461</b>	SampType: <b>MBLK</b>	TestCode: <b>EPA Method 8015M/D: Diesel Range Organics</b>								
Client ID: <b>PBS</b>	Batch ID: <b>55461</b>	RunNo: <b>72183</b>								
Prep Date: <b>9/26/2020</b>	Analysis Date: <b>9/28/2020</b>	SeqNo: <b>2530704</b> Units: <b>%Rec</b>								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP	8.8		10.00		88.1	30.4	154			

Sample ID: <b>MB-55464</b>	SampType: <b>MBLK</b>	TestCode: <b>EPA Method 8015M/D: Diesel Range Organics</b>								
Client ID: <b>PBS</b>	Batch ID: <b>55464</b>	RunNo: <b>72183</b>								
Prep Date: <b>9/26/2020</b>	Analysis Date: <b>9/28/2020</b>	SeqNo: <b>2531147</b> Units: <b>mg/Kg</b>								
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	6.7		10.00		67.3	30.4	154			

Sample ID: <b>2009F26-001AMS</b>	SampType: <b>MS</b>	TestCode: <b>EPA Method 8015M/D: Diesel Range Organics</b>								
Client ID: <b>SB-1 @ 4ft</b>	Batch ID: <b>55464</b>	RunNo: <b>72183</b>								
Prep Date: <b>9/26/2020</b>	Analysis Date: <b>9/28/2020</b>	SeqNo: <b>2531221</b> Units: <b>mg/Kg</b>								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	41	9.1	45.75	0	89.3	15	184			
Surr: DNOP	3.1		4.575		67.8	30.4	154			

Sample ID: <b>2009F26-001AMSD</b>	SampType: <b>MSD</b>	TestCode: <b>EPA Method 8015M/D: Diesel Range Organics</b>								
Client ID: <b>SB-1 @ 4ft</b>	Batch ID: <b>55464</b>	RunNo: <b>72183</b>								
Prep Date: <b>9/26/2020</b>	Analysis Date: <b>9/28/2020</b>	SeqNo: <b>2531222</b> Units: <b>mg/Kg</b>								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	43	9.5	47.26	0	90.7	15	184	4.83	23.9	
Surr: DNOP	3.1		4.726		66.4	30.4	154	0	0	

Sample ID: <b>LCS-55464</b>	SampType: <b>LCS</b>	TestCode: <b>EPA Method 8015M/D: Diesel Range Organics</b>								
Client ID: <b>LCSS</b>	Batch ID: <b>55464</b>	RunNo: <b>72183</b>								
Prep Date: <b>9/26/2020</b>	Analysis Date: <b>9/28/2020</b>	SeqNo: <b>2531226</b> Units: <b>mg/Kg</b>								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	43	10	50.00	0	86.9	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 Quantitative 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

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QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 2009F26  
02-Oct-20

Client: Animas Environmental Services  
Project: Harvest Lateral J-2

Sample ID: LCS-55464	SampType: LCS	TestCode: EPA Method 8015M/D: Diesel Range Organics								
Client ID: LCSS	Batch ID: 55464	RunNo: 72183								
Prep Date: 9/26/2020	Analysis Date: 9/28/2020	SeqNo: 2531226		Units: mg/Kg						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP	2.8		5.000		55.4	30.4	154			

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 Quantitative Limit	RL Reporting Limit
S % Recovery outside of range due to dilution or matrix	

**QC SUMMARY REPORT****Hall Environmental Analysis Laboratory, Inc.**

WO#: 2009F26

02-Oct-20

**Client:** Animas Environmental Services**Project:** Harvest Lateral J-2

Sample ID: <b>mb-55460</b>	SampType: <b>MBLK</b>	TestCode: <b>EPA Method 8015D: Gasoline Range</b>								
Client ID: <b>PBS</b>	Batch ID: <b>55460</b>	RunNo: <b>72205</b>								
Prep Date: <b>9/26/2020</b>	Analysis Date: <b>9/28/2020</b>	SeqNo: <b>2531593</b> Units: <b>mg/Kg</b>								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	ND	5.0								
Surr: BFB	930		1000		93.2	75.3	105			

Sample ID: <b>lcs-55460</b>	SampType: <b>LCS</b>	TestCode: <b>EPA Method 8015D: Gasoline Range</b>								
Client ID: <b>LCSS</b>	Batch ID: <b>55460</b>	RunNo: <b>72205</b>								
Prep Date: <b>9/26/2020</b>	Analysis Date: <b>9/28/2020</b>	SeqNo: <b>2531594</b> Units: <b>mg/Kg</b>								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	22	5.0	25.00	0	89.8	72.5	106			
Surr: BFB	1000		1000		101	75.3	105			

Sample ID: <b>2009f26-001ams</b>	SampType: <b>MS</b>	TestCode: <b>EPA Method 8015D: Gasoline Range</b>								
Client ID: <b>SB-1 @ 4ft</b>	Batch ID: <b>55460</b>	RunNo: <b>72205</b>								
Prep Date: <b>9/26/2020</b>	Analysis Date: <b>9/28/2020</b>	SeqNo: <b>2531596</b> Units: <b>mg/Kg</b>								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	21	4.8	23.95	0	86.6	61.3	114			
Surr: BFB	920		957.9		95.6	75.3	105			

Sample ID: <b>2009f26-001amsd</b>	SampType: <b>MSD</b>	TestCode: <b>EPA Method 8015D: Gasoline Range</b>								
Client ID: <b>SB-1 @ 4ft</b>	Batch ID: <b>55460</b>	RunNo: <b>72205</b>								
Prep Date: <b>9/26/2020</b>	Analysis Date: <b>9/28/2020</b>	SeqNo: <b>2531597</b> Units: <b>mg/Kg</b>								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	21	4.8	23.99	0	87.2	61.3	114	0.928	20	
Surr: BFB	940		959.7		97.4	75.3	105	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 Quantitative 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#: 2009F26

02-Oct-20

**Client:** Animas Environmental Services**Project:** Harvest Lateral J-2

Sample ID: <b>mb-55460</b>	SampType: <b>MBLK</b>	TestCode: <b>EPA Method 8021B: Volatiles</b>								
Client ID: <b>PBS</b>	Batch ID: <b>55460</b>	RunNo: <b>72205</b>								
Prep Date: <b>9/26/2020</b>	Analysis Date: <b>9/28/2020</b>	SeqNo: <b>2531620</b> Units: <b>mg/Kg</b>								
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	1.0		1.000		103	80	120			

Sample ID: <b>LCS-55460</b>	SampType: <b>LCS</b>	TestCode: <b>EPA Method 8021B: Volatiles</b>								
Client ID: <b>LCSS</b>	Batch ID: <b>55460</b>	RunNo: <b>72205</b>								
Prep Date: <b>9/26/2020</b>	Analysis Date: <b>9/28/2020</b>	SeqNo: <b>2531621</b> Units: <b>mg/Kg</b>								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.96	0.025	1.000	0	96.1	80	120			
Toluene	1.0	0.050	1.000	0	100	80	120			
Ethylbenzene	1.0	0.050	1.000	0	102	80	120			
Xylenes, Total	3.1	0.10	3.000	0	102	80	120			
Surr: 4-Bromofluorobenzene	1.1		1.000		107	80	120			

Sample ID: <b>2009f26-002ams</b>	SampType: <b>MS</b>	TestCode: <b>EPA Method 8021B: Volatiles</b>								
Client ID: <b>SB-1 @ 12ft</b>	Batch ID: <b>55460</b>	RunNo: <b>72205</b>								
Prep Date: <b>9/26/2020</b>	Analysis Date: <b>9/28/2020</b>	SeqNo: <b>2531624</b> Units: <b>mg/Kg</b>								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.88	0.024	0.9597	0.01369	90.2	76.3	120			
Toluene	0.96	0.048	0.9597	0.02077	97.5	78.5	120			
Ethylbenzene	0.98	0.048	0.9597	0.01489	100	78.1	124			
Xylenes, Total	3.0	0.096	2.879	0.09908	101	79.3	125			
Surr: 4-Bromofluorobenzene	1.0		0.9597		104	80	120			

Sample ID: <b>2009f26-002amsd</b>	SampType: <b>MSD</b>	TestCode: <b>EPA Method 8021B: Volatiles</b>								
Client ID: <b>SB-1 @ 12ft</b>	Batch ID: <b>55460</b>	RunNo: <b>72205</b>								
Prep Date: <b>9/26/2020</b>	Analysis Date: <b>9/28/2020</b>	SeqNo: <b>2531625</b> Units: <b>mg/Kg</b>								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.92	0.024	0.9653	0.01369	94.0	76.3	120	4.55	20	
Toluene	1.0	0.048	0.9653	0.02077	101	78.5	120	4.42	20	
Ethylbenzene	1.0	0.048	0.9653	0.01489	104	78.1	124	4.19	20	
Xylenes, Total	3.1	0.097	2.896	0.09908	105	79.3	125	3.69	20	
Surr: 4-Bromofluorobenzene	1.0		0.9653		106	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 Quantitative 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

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

## Sample Log-In Check List

Client Name: **Animas Environmental Services**

Work Order Number: **2009F26**

RcptNo: 1

Received By: **Cheyenne Cason** 9/25/2020 7:50:00 AM

Completed By: **Juan Rojas** 9/25/2020 8:14:06 AM

Reviewed By: *se 9/15/20*

*Juan Rojas*

### 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. 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? Yes ☒ No ☐  
(Note discrepancies on chain of custody)
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? Yes ☒ No ☐  
(If no, notify customer for authorization.)

# of preserved  
bottles checked  
for pH:

(≤2 or >12 unless noted)

Adjusted? \_\_\_\_\_

Checked by: *cm 9/25/20*

### 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	5.5	Good				






**NMOCD Site Assessment/Characterization, Remediation & Closure**

Site Name:	<b>Lateral J2 Pipeline</b>
API #:	not applicable
Lat/Long:	36.662500, -107.855833
TRS:	SE/NE-14-28N-10W
Land Jurisdiction:	Federal - BLM
County:	San Juan
Determination made by:	David Reese, CHMM/Environmental Scientist
Date:	9/14/2020

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)				
20' from a tributary wash of Armenta Canyon Wash, which flows to San Juan River				

Depth to Groundwater Determination (NMAC 19.15.29.11A.2)	
Cathodic Report/Site Specific Hydrogeology	groundwater encountered during repair activities
Elevation Differential	release location is next to wash
Water Wells	no registered wells within 1/2 mile
Cathodic Report Nearby Wells	none available for nearby wells

Sensitive Receptor Determination		
<i>*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):</i>		
<300' of any continuously flowing watercourse or any other significant watercourse	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>
<200' of any lakebed, sinkhole or playa lake (measured from the Ordinary High Water Mark)	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<300' of an occupied permanent residence, school, hospital, institution or church	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<500' of a spring or private/domestic water well used by <5 households for domestic or stock watering purposes	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<1000' of any water well or spring	<input type="checkbox"/>	<input checked="" type="checkbox"/>
within incorporated municipal boundaries or within a defined municipal fresh water well field	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<300' of a wetland	<input checked="" type="checkbox"/>	<input type="checkbox"/>
within the area overlying a subsurface mine	<input type="checkbox"/>	<input checked="" type="checkbox"/>
within an unstable area	<input type="checkbox"/>	<input checked="" type="checkbox"/>
within a 100-year floodplain	<input type="checkbox"/>	<input checked="" type="checkbox"/>

**Explain any 'Yes' Marks:**  
 Release location is 20' from a wash that is a tributary of Armenta Canyon Wash and that is designated as a wetland by Nat. Wetlands Inventory. Also, not within a nearby 100-year floodplain.

Actual Depth to Groundwater is:	≤50 <input checked="" type="checkbox"/>	50-100 <input type="checkbox"/>	>100 <input type="checkbox"/>
*Treat Depth to Groundwater as if it's ≤ 50 ft?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
	≤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

# Active & Inactive Points of Diversion

(with Ownership Information)

No PODs found.

### UTMNAD83 Radius Search (in meters):

**Easting (X):** 244750

**Northing (Y):** 4061234

**Radius:** 805

The data is furnished by the NMOSE/ISC and is accepted by the recipient with the expressed understanding that the OSE/ISC make no warranties, expressed or implied, concerning the accuracy, completeness, reliability, usability, or suitability for any particular purpose of the data.



## BASEMAPS &gt;

## MAP LAYERS &gt;

☒ Wetlands 1 ?☒ Riparian 1 ?☐ Riparian Mapping Areas 1 ?☒ Data Source 1 ?☐ Source Type☐ Image Scale☐ Image Year☐ Areas of Interest ?☐ FWS Managed Lands 1 ?☐ Historic Wetland Data 1 ?

Measure



R4SBA

## LEGEND

## Wetlands

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

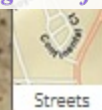
## Riparian

- Forested/Shrub
- Herbaceous

1:4,514

36.663 | -107.854



T  
I

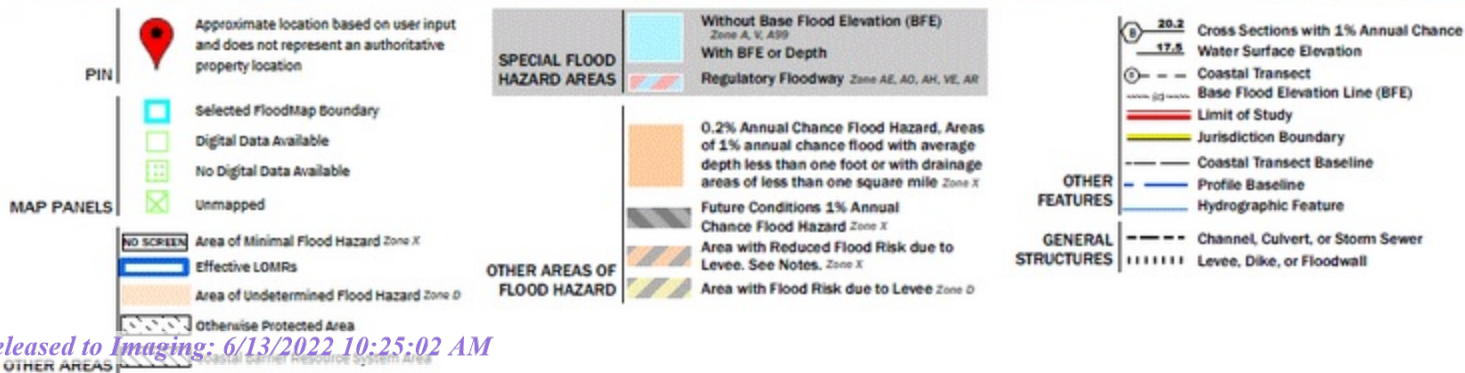
San Juan County  
350064

Zone A

AREA OF MINIMAL FLOOD HAZARD  
Zone X

35045C1100F  
eff. 8/5/2010

POWERED BY  
Esri, USDA Farm Service Agency **esri**



**From:** [Smith, Cory, EMNRD](#)  
**To:** [Karen Lupton](#)  
**Cc:** [Kijun Hong](#); [Lbell@harvestmidstream.com](mailto:Lbell@harvestmidstream.com); [Elizabeth McNally](#); [Corwin Lameman](#); [Greg Broome](#)  
**Subject:** RE: Project Notification for Harvest Midstream Lateral J-2 site Delineation  
**Date:** Tuesday, September 22, 2020 7:39:27 AM

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Kijun,

Thank you for the notice, in addition if ground water is encountered please sample for general water chemistry(TDS, pH), Cation/Anion and full list 8260.

Thank you,

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](mailto:cory.smith@state.nm.us)

---

**From:** Karen Lupton <[klupton@animasenvironmental.com](mailto:klupton@animasenvironmental.com)>  
**Sent:** Monday, September 21, 2020 4:30 PM  
**To:** Smith, Cory, EMNRD <[Cory.Smith@state.nm.us](mailto:Cory.Smith@state.nm.us)>  
**Cc:** Kijun Hong <[khong@harvestmidstream.com](mailto:khong@harvestmidstream.com)>; [Lbell@harvestmidstream.com](mailto:Lbell@harvestmidstream.com); McNally, Elizabeth <[emcnally@animasenvironmental.com](mailto:emcnally@animasenvironmental.com)>; Corwin Lameman <[clameman@animasenvironmental.com](mailto:clameman@animasenvironmental.com)>; Greg Broome <[gbroome@animasenvironmental.com](mailto:gbroome@animasenvironmental.com)>  
**Subject:** [EXT] Project Notification for Harvest Midstream Lateral J-2 site Delineation

Hi Cory:

Animas Environmental Services would like to schedule delineation at the Harvest Midstream Lateral J2 site on Thursday, September 24<sup>th</sup> at 8:0AM. Corwin Lameman and Greg Broome from AES will be on location Thursday, September 24<sup>th</sup>. This is for site assessment purposes only to determine the extent of the release. If there are any questions, please don't hesitate to call or email me.

- Soil samples will be collected using a hand auger.
- In the event that groundwater is reached, groundwater samples will be collected using a hydropunch.
- Delineation samples will include field screening for OVMs and collecting samples for lab analysis from at least two intervals from each boring, one from the interval with the highest OVM readings and one from the terminal depth of the boring.
- Lab samples will be run for BTEX, TPH (GRO, DRO, and MRO), and chlorides.



Corwin Lameman 505.486.2281

Greg Broome 970.560.2117

Thank you!

Karen Lupton

Director of Operations

[klupton@animasenvironmental.com](mailto:klupton@animasenvironmental.com)

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Phone:(505) 334-6178 Fax:(505) 334-6170  
**District IV**  
1220 S. St Francis Dr., Santa Fe, NM 87505  
Phone:(505) 476-3470 Fax:(505) 476-3462

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

CONDITIONS  
  
Action 10761

CONDITIONS

Operator: Harvest Four Corners, LLC 1111 Travis Street Houston, TX 77002	OGRID: 373888
	Action Number: 10761
	Action Type: [C-141] Release Corrective Action (C-141)

CONDITIONS

Created By	Condition	Condition Date
nvelez	None	6/13/2022