

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	nAPP2109056450
District RP	
Facility ID	
Application ID	

## Release Notification

### Responsible Party

Responsible Party: Advance Energy Partners Hat Mesa LLC	OGRID: 372417
Contact Name: Randy Black	Contact Telephone: 832-672-4700
Contact email: rblack@advanceenergypartners.com	Incident # (assigned by OCD)
Contact mailing address: 11490 Westheimer Rd. Suite 950. Houston, TX 77077	

### Location of Release Source

Latitude 32.4536953 \_\_\_\_\_ Longitude -103.6199314 \_\_\_\_\_  
(NAD 83 in decimal degrees to 5 decimal places)

Site Name 20210109-0245-112934	Site Type Lease Road (NMNM 112934)
Date Release Discovered 01/09/2021	API# (if applicable)

Unit Letter	Section	Township	Range	County
A, H	25	21S	32E	Lea

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 dissolved chloride 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 type="checkbox"/> Natural Gas	Volume Released (Mcf)	Volume Recovered (Mcf)
<input checked="" type="checkbox"/> Other (describe)	Volume/Weight Released (provide units)	Volume/Weight Recovered (provide units)

Cause of Release See attached report

State of New Mexico  
Oil Conservation Division

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

### 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 checked="" 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:
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>Andrew Parker</u> Title: <u>Env. Scientist</u> Signature: <u></u> Date: <u>03/31/2021</u> email: <u>aparker@advanceenergypartners.com</u> Telephone: <u>970-570-9535</u>
<b><u>OCD Only</u></b> Received by: <u>Ramona Marcus</u> Date: <u>5/9/2021</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? <b>Plate 4 &amp; 5</b>	<u>141</u> (ft bgs)
Did this release impact groundwater or surface water?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release within 300 feet of a continuously flowing watercourse or any other significant watercourse?	<input type="checkbox"/> Yes <input checked="" 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 type="checkbox"/> Yes <input checked="" 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 1/2-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

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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: Andrew Parker

Title: Env. Scientist

Signature: 

Date: April 22, 2021

email: aparker@advanceenergypartners.com

Telephone: 970-570-9535

**OCD Only**

Received by: Ramona Marcus

Date: 5/9/2021

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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.

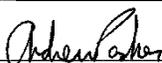
**Closure Report Attachment Checklist:** *Each of the following items must be included in the closure report.*

- 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: Andrew Parker

Title: Env. Scientist

Signature: 

Date: April 22, 2021

email: aparker@advanceenergypartners.com

Telephone: 970-570-9535

**OCD Only**

Received by: Ramona Marcus

Date: 5/9/2021

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: 07/29/2021

Printed Name: Chad Hensley

Title: Environmental Specialist - Advanced

**From:** [OCDOnline@state.nm.us](mailto:OCDOnline@state.nm.us)  
**To:** [Andrew Parker](#)  
**Subject:** The Oil Conservation Division (OCD) has accepted the application, Application ID: 22484  
**Date:** Wednesday, March 31, 2021 3:41:04 PM

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To whom it may concern (c/o Andrew Parker for ADVANCE ENERGY PARTNERS HAT MESA, LLC),

The OCD has accepted the submitted *Notification of a release* (NOR), for incident ID (n#) nAPP2109056450, with the following conditions:

- **When submitting future reports regarding this release, please submit the calculations used or specific justification for the volumes reported on the initial C-141.**

Please reference nAPP2109056450, on all subsequent C-141 submissions and communications regarding the remediation of this release.

**NOTE:** As of December 2019, NMOCD has discontinued the use of the “RP” number.

If you have any questions regarding this application, or don't know why you have received this email, please contact us.

[ocd.enviro@state.nm.us](mailto:ocd.enviro@state.nm.us)

**New Mexico Energy, Minerals and Natural Resources Department**  
1220 South St. Francis Drive  
Santa Fe, NM 87505

**From:** [Andrew Parker](#)  
**To:** [Enviro, OCD, EMNRD](#)  
**Cc:** [Bratcher, Mike, EMNRD](#)  
**Subject:** 48 hour sampling notification Incident # nAPP2109056450  
**Date:** Tuesday, April 6, 2021 5:03:00 PM  
**Attachments:** [C-141 Initial nAPP2109056450.pdf](#)

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NMOCD,

Advance Energy submits this 48-hour soil sampling notice for Incident No. nAPP2109056450.

Andrew Parker  
Environmental Scientist  
970-570-9535



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**From:** Andrew Parker  
**Sent:** Wednesday, March 31, 2021 4:07 PM  
**To:** Enviro, OCD, EMNRD <OCD.Enviro@state.nm.us>  
**Cc:** Amos, James <jamos@blm.gov>; Randy Black <RBlack@advanceenergypartners.com>; Debbie Moughon <dmoughon@advanceenergypartners.com>; Baron Chandler <BChandler@advanceenergypartners.com>; Jacob Saenz <JSaenz@advanceenergypartners.com>  
**Subject:** C-141 Initial Incident # nAPP2109056450

NMOCD:

The attached C-141 initial notification was submitted electronically via the online portal on March 31, 2021. Please note the supplemental report attached to the C-141.

C-141 Incident # nAPP2109056450  
AEP #: 20210109-0245-112934

Andrew Parker  
Environmental Scientist  
970-570-9535





11490 Westheimer Road, Suite 950, Houston, Texas 77077 • Phone 832-672-4700 • Fax 832-672-4609

April 22, 2021

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

RE: Closure Report  
Incident ID: nAPP2109056450  
AEP #: 20210109-0245-112934  
Location: BLM Lease Road # 112934

NMOCD:

Advance Energy Partners Hat Mesa LLC (AEP) submits this closure report for the above referenced incident. The initial C-141 release notification was submitted in response to the Bureau Chief's letter dated March 9, 2021 (Appendix A). Based upon soil characterization sampling results, we respectfully ask closure of the regulatory file.

AEP's environmental team identified suspect unauthorized discharges upon arriving to the AEP lease the morning of January 9<sup>th</sup> (Figure 1). The environmental team proceeded to track the suspect unauthorized discharges using GPS technology and the ArcGIS Collector mapping application. Plate 1 shows the observed suspect unauthorized discharge that occurred along a segment of the lease road on AEP's Federal lease NMNM 112934. The length of the release along AEP's lease road is 0.5 miles and is located in Unit Letter A & H, T21S R32E Sec 25; with a coordinate midpoint at 32.4534958°, -103.6199454. The release area was located on the right-of-way as shown on Figure 1.



Figure 1: Suspect unauthorized discharge along the north/south lease road; viewing north. Time/Date: 2021-01-09 08:41:09. GPS: 32.4751778 N, 103.6201083 W.

Incident ID: nAPP2109056450  
AEP #: 20210109-0245-112934

## Characterization

On April 9, 2021 three soil samples from the surface to 1-foot below ground surface was collected along the release extent as shown on Plate 1. Soil samples were submitted for laboratory testing for the analysis of the constituents listed in Table 1 of 19.15.29 NMAC. As presented in Table A, the soil samples were below the most stringent closure criteria listed in Table 1 of 19.15.29 NMAC. Laboratory Certificate of Analysis is located in Appendix B.

Sample ID	Date	Top Depth (Feet)	Bottom Depth (Feet)	In Use	Chloride (PPM)	GRO+DRO (PPM)	TPH Ext. (PPM)	Benzene (PPM)	BTEX (PPM)
NMOCD Closure Criteria									
0 - 4 feet & "not in-use"					600	--	2,500	10	50
> 4 ft or "in-use"					20,000	1,000	2,500	10	50
Road N.	4/9/2021	0.0	1.0	Road	32	<20	<30	<0.05	<0.3
Road C.	4/9/2021	0.0	1.0	Road	160	<20	<30	<0.05	<0.3
Road S.	4/9/2021	0.0	1.0	Road	160	<20	<30	<0.05	<0.3

Table A: Summary of Analytical

### Depth-to-Water

The nearest water well is a USGS gauged well (Site No 322852103370001) located 1.7-miles north of the release extent. The USGS gauged the well on 04/18/1991 and recorded a depth to water reading of 141.19 ft.

### Significant Water Courses/Sources

The nearest surface water source is mapped as an intermittent stream located 1.15-miles north-northwest of the release area.

### Lithology

The release extent was within a lease road right-of-way. The upper 0.5-feet consisted of imported caliche as road base material. From 0.5 to 1 foot below ground surface, a reddish-brown silty sand was encountered.

Incident ID: nAPP2109056450  
AEP #: 20210109-0245-112934

## Restoration & Closure

After collection of hand auger samples, the surface was restored per 19.15.29.13 NMAC as a lease access road right-of-way for oil and gas operations.

Characterization sample results exhibited concentrations below the most stringent closure criteria listed in Table 1 of 19.15.29 NMAC. No remediation is necessary and we respectfully ask NMOCD for closure of the regulatory file.

Please contact me with any questions.

Sincerely,



Andrew Parker  
Advance Energy Partners, LLC  
Environmental Scientist

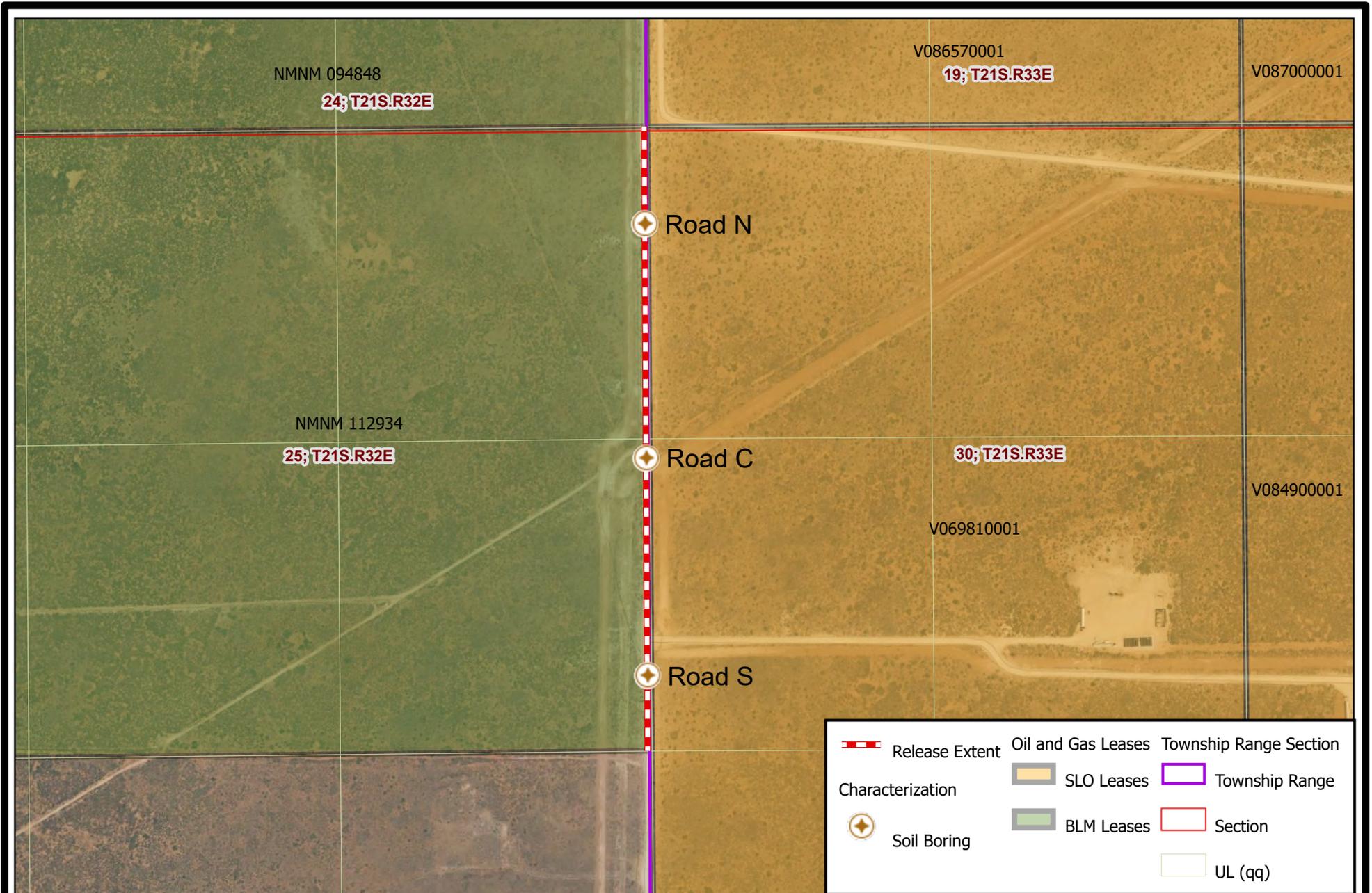
Cc: Jim Amos, BLM Carlsbad Field Office

04/22/2021

Released to Imaging: 7/29/2021 11:53:06 AM

# Plates





0 300 600 Feet



Release Extent and Sample Locations  
BLM Lease # 112934

Incident ID: nAPP2109056450  
AEP #: 20210109-0245-112934

Plate 1

Release Date  
Jan. 9, 2021

# Appendix A

## Bureau Chief Letter



State of New Mexico  
Energy, Minerals and Natural Resources Department

Michelle Lujan Grisham  
Governor

Sarah Cottrell Propst  
Cabinet Secretary

Todd E. Leahy, JD, PhD  
Deputy Secretary

Adrienne Sandoval, Director  
Oil Conservation Division



**BY ELECTRONIC AND CERTIFIED MAIL**

March 9, 2021

Debbie Moughon  
Engineering Technician  
Advance Energy Partners Hat Mesa, LLC  
11490 Westheimer Rd., Ste. 950  
Houston, Texas 77077  
[dmoughon@advanceenergypartners.com](mailto:dmoughon@advanceenergypartners.com)

**Re: Reported Releases of Produced Water**

Dear Ms. Moughon:

The Oil Conservation Division (“OCD”) received Advance Energy Partners Hat Mesa LLC’s (“AEP”) January 12, 2021 and January 18, 2021 executive summaries documenting suspected releases of produced water. The information provided does not identify the origin of the produced water or the transporter(s) responsible for the discharges.

Certain of the suspected releases occurred on the AEP leases 112934, 0202296, and V084260001. OCD identified AEP as the responsible party for these locations, pursuant to 19.15.29.7 (C) NMAC. As the responsible party, AEP is required to remediate releases and comply with all parts of 19.15.29 NMAC. AEP must provide site characterization reports, or submit a final closure reports, within 90 days of the date of this letter.

If you have any questions regarding this letter, please email me at [emily.hernandez@state.nm.us](mailto:emily.hernandez@state.nm.us).

Regards,

Emily A. Hernandez  
Environmental Bureau Chief

cc: Jesse Tremaine, EMNRD OGC

1220 South St. Francis Drive • Santa Fe, New Mexico 87505  
Phone (505) 476-3440 • Fax (505) 476-3462 • [www.emnrd.state.nm.us/ocd](http://www.emnrd.state.nm.us/ocd)



11490 Westheimer Road, Suite 950, Houston, Texas 77077 • Phone 832-672-4700 • Fax 832-672-4609

January 12, 2021

AEP #:	20210107-2100-unknown 20210109-0245-unknown
Location:	Lease Roads & Abe #001
RE:	Suspect unauthorized discharges by unknown operator

### **Executive Summary**

During the time period between January 7<sup>th</sup> and 9<sup>th</sup>, 2021; Advance Energy Partners Hat Mesa LLC (AEP) personnel identified five (5) instances of suspect unauthorized discharges per 19.15.34.20 NMAC. As defined in Part A (highlighted below), discharges of produced water on the “surface of the ground” includes oil field lease roads. Plates 1 & 3 identifies the locations of observed discharges. The suspect unauthorized discharges occurred on State, Federal, and private surface.

**19.15.34.20 DISPOSITION OF PRODUCED WATER AND OTHER OIL FIELD WASTE:** Except as authorized by 19.15.17 NMAC, 19.15.26.8 NMAC, 19.15.30 NMAC, 19.15.34 NMAC or 19.15.36 NMAC, persons, including transporters, shall not dispose of produced water or other oil field waste:

- A. on or below the surface of the ground, in a pit or in a pond, lake, depression or watercourse;
  - B. in another place or in a manner that may constitute a hazard to fresh water, public health, or the environment; or
  - C. in a permitted pit or registered or permitted surface waste management facility without permission of the owner or operator of the pit or facility.
- [19.15.34.20 NMAC - Rp, 19.15.34.11 NMAC, 3/31/2015]

AEP personnel observed produced water transporting activities later in the afternoon of January 9<sup>th</sup> (Exhibit 1) from the Marathon Battle 34 Federal #4 lease.

Internal investigations conclude that AEP was not transporting produced water within the time period and locations referenced here within. Data suggests that suspected unauthorized discharges originated from Marathon Oil Permian LLC and BC Operating Inc leases.

*Exhibit 1: Produced water transport activities on the Marathon Battle 34 Federal #4 lease.  
Date/Time: 2021-01-09 15:28:39.  
GPS: 32.4434250 N, 103.5660167 W*



12 January 2021

AEP #: 20210109-0245-unknown  
Suspect unauthorized discharges

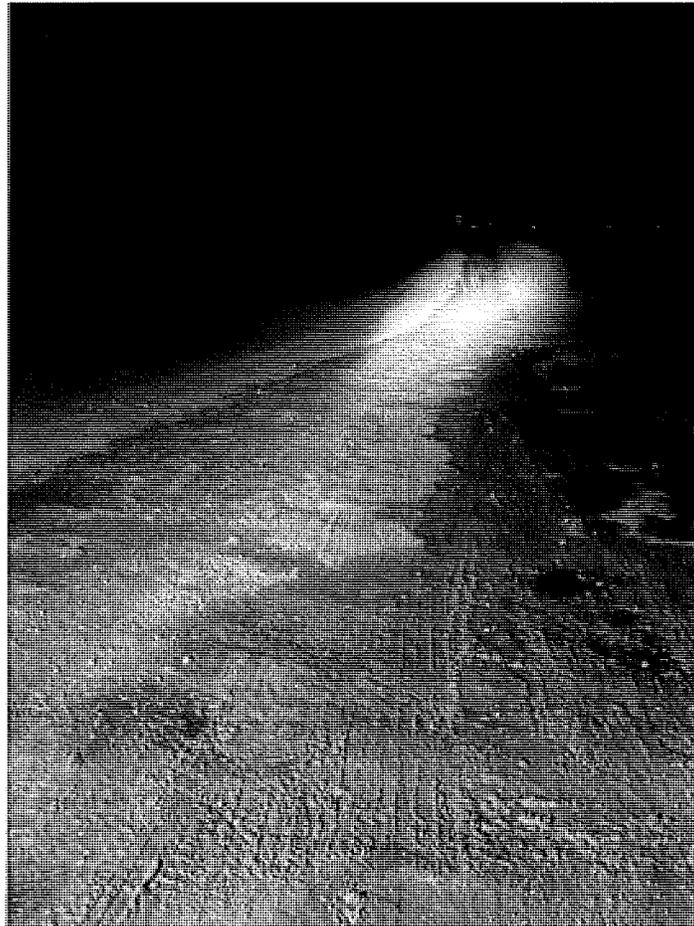
### **Suspect Discharges January 7, 2021**

(AEP #: 20210107-2100-unknown)

Starting at 9:45pm (21:45 hrs) on January 7<sup>th</sup> the night crew at AEP identified three areas of suspect unauthorized discharges as shown on Plate 1.

1. Along the north/south lease road identified as “North at cattle guard west of Tomahawk SWD”. Sec. 30; T21S.R33E.
2. Along the north/south lease road identified as “West of cattle guard to Dagger State offices”. Sec. 31; T21S.R33E.
3. Identified as “Lease access to Marathon Battle 1H”. Sec. 34; T21S.R33E

Figure 1, below, shows the suspect discharge “West of cattle guard to Dagger State offices” captured by the night crew.



*Figure 1: Suspect unauthorized discharge at “West of cattle guard to Dagger State offices”. Photo is viewing south along the north/south lease road in Sec. 31; T21S.R33E. Date/Time: 2021-01-07 21:47:18. GPS: 32.4511111 N, 103.6200000 W (approximate)*

12 January 2021

AEP #: 20210109-0245-unknown  
Suspect unauthorized discharges

### ***Suspect Discharges January 9, 2021***

(AEP #: 20210109-0245-unknown)

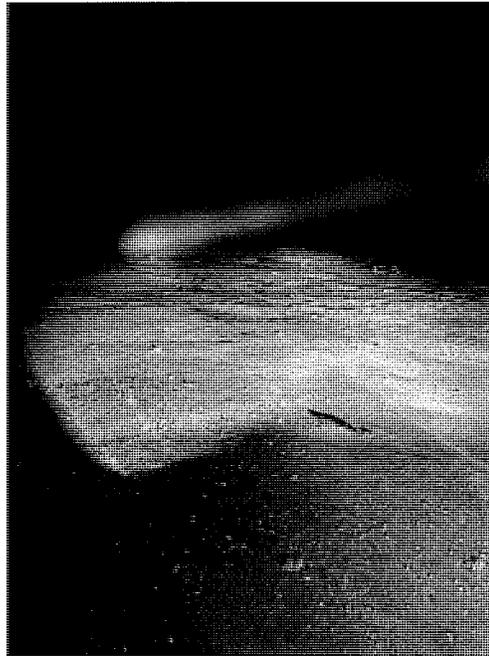
At 2:45am (02:45 hrs) on January 9<sup>th</sup> the night crew at AEP identified an unauthorized discharge on the AEP lease Abe #1 (API: 30-025-33061); State surface. The AEP environmental team mapped the discharge extent (Plate 2). Figures 2 through 5, below, are photos of the suspect discharge.



*Figure 2: Suspect unauthorized discharge on the AEP lease Abe #1. Photo is viewing north at the discharge point. Date/Time: 2021-01-09 02:50:32. GPS: 32.4446722 N, 103.5756833 W.*

12 January 2021

AEP #: 20210109-0245-unknown  
Suspect unauthorized discharges



*Figure 3: Suspect unauthorized discharge at the AEP lease Abe #1. Photo is viewing northwest. The spotlight is focused on the northwestern extent of the release extent. Date/Time: 2021-01-09 03:01:53. GPS: 32.4446972 N, 103.5755000 W.*



*Figure 4: Suspect unauthorized discharge at the AEP lease Abe #1. Photo is viewing north from the discharge point (foreground). Wet soil defines the release extent. Date/Time: 2021-01-09 11:20:41. GPS: 32.4447250 N, 103.5756750 W.*

12 January 2021

AEP #: 20210109-0245-unknown  
Suspect unauthorized discharges

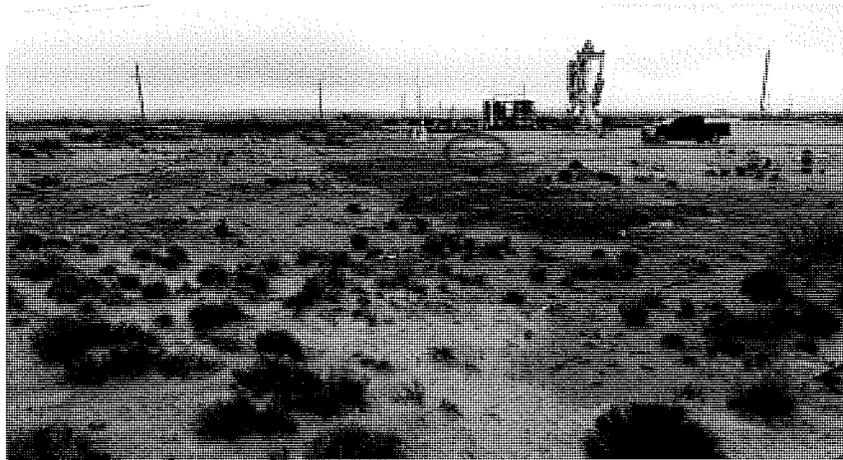


Figure 5: Suspect unauthorized discharge at the AEP lease Abe #1. Photo is viewing east-southeast from the northwestern extent. The red circle identifies the discharge point. Wet soil defines the release extent. Date/Time: 2021-01-09 11:22:29. GPS: 32.4446528 N, 103.5762333 W

AEP's environmental team identified suspect unauthorized discharges upon arriving to the AEP lease the morning of January 9<sup>th</sup> (Figure 6). The environmental team proceeded to track the suspect unauthorized discharges using GPS technology and the ArcGIS Collector mapping application. Plate 3 shows the observed suspect unauthorized discharges. Locations of Figures 4 through 13 are plotted on Plate 3.

Observations during the lease road tracking of suspect unauthorized discharge include:

1. The track along the north/south lease (Figure 6) that turned east at the Tomahawk SWD.



Figure 6: Suspect unauthorized discharge along the north/south lease road; viewing north. Location of photo is plotted on Plate 3. Time/Date: 2021-01-09 08:41:09. GPS: 32.4751778 N, 103.6201083 W.

12 January 2021

AEP #: 20210109-0245-unknown  
Suspect unauthorized discharges

Figure 7: Suspect unauthorized discharge in an area commonly known as the “Abe lease area”. The discharge was tracked south toward the east/west lease road, continued west to the Tomahawk SWD, then turned north on the north/south lease road as shown on Plate 3. Date/Time: 2021-01-09 09:24:41. GPS: 32.4485278 N, 103.5752500 W.

2. A 0.5-mile section within the “Abe lease area” tracking northwest to southeast. Figures 8 and 9 shows discharges along the route. The northwest node of the segment is located at the entrance to the shared location of the BC Operating Abe State #2 tank battery (API: 30-025-42066; Figure 10) and the Marathon Abe Unit #2 wellhead (API: 30-025-34146).



Figure 8: Suspect unauthorized discharge at the southern node of the 0.5-mile tracked route within the “Abe lease area”. Photo is viewing south at the node terminus. Date/Time: 2021-01-09 09:43:18. GPS: 32.4502861 N, 103.5768667 W.

12 January 2021

AEP #: 20210109-0245-unknown  
Suspect unauthorized discharges



Figure 9: Suspect unauthorized discharge along the 0.5-mile tracked route within the "Abe lease area". Discharge flowed off the lease road. Date/Time: 2021-01-09 09:54:37. GPS: 32.4514611 N, 103.5797722 W.

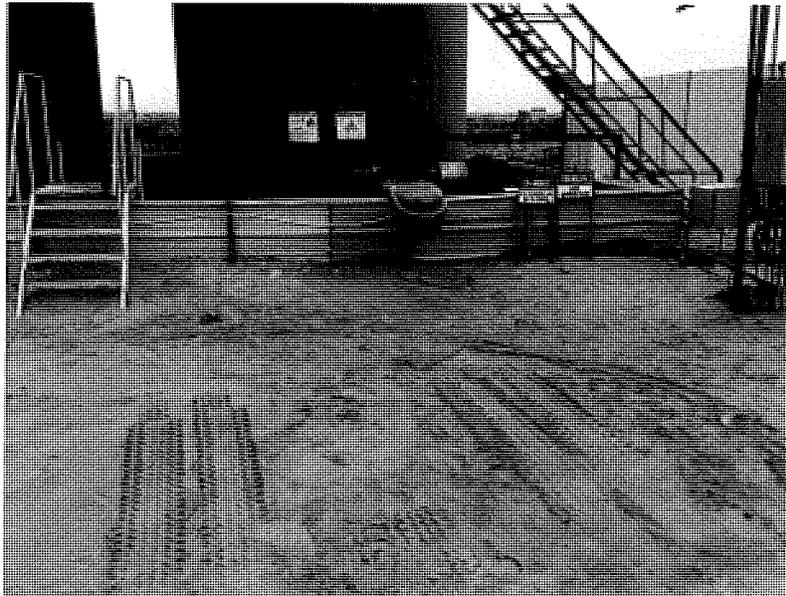


Figure 10: Loading area at BC Operating Abe State #2 tank battery (API: 30-025-42066). Date/Time: 2021-01-09 12:40:27. GPS: 32.4522361 N, 103.5884861 W.

3. Suspect unauthorized discharge along a north/south 0.2-mile segment near the Battle 34 lease area. The suspect unauthorized discharge was tracked to the Marathon Battle 34 Federal 4H lease (API: 30-025-42636). Figures 11 – 13 show photos of discharge along the north/south lease road as mapped on Plate 3.

12 January 2021

AEP #: 20210109-0245-unknown  
Suspect unauthorized discharges



Figure 11: Suspect unauthorized discharge along a 0.2-mile segment of a north/south lease road near the area commonly call the "Battle 34 lease area". Photo is viewing south toward the east/west lease road. The Battle 34 Federal 4H tank battery is visible in photo background. Date/Time: 2021-01-09 10:29:53. GPS: 32.4468278 N, 103.5666889 W.

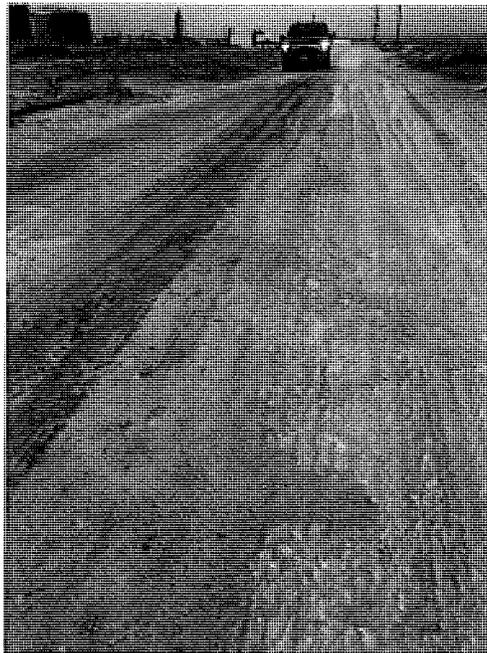
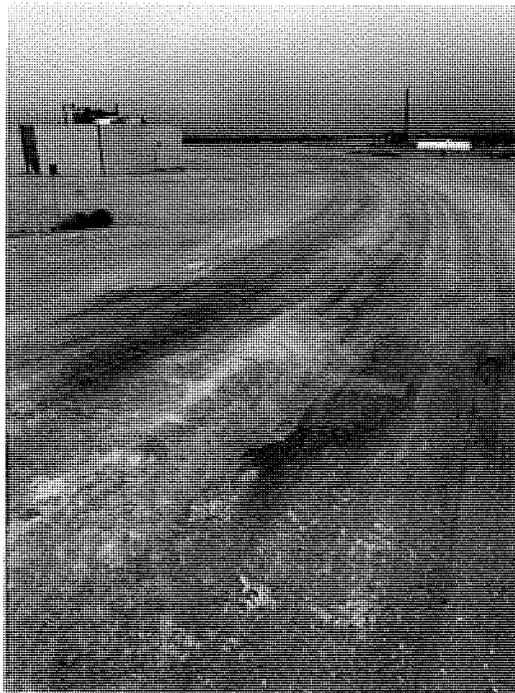


Figure 12: Suspect unauthorized discharge along the north/south lease road to the Marathon Battle 34 Federal 4H lease (API: 30-025-42636); viewing south. The Battle 34 Federal 4H is visible in the photo background. Date/Time: 2021-01-09 10:27:12. GPS: 32.4448611 N, 103.5664000 W.

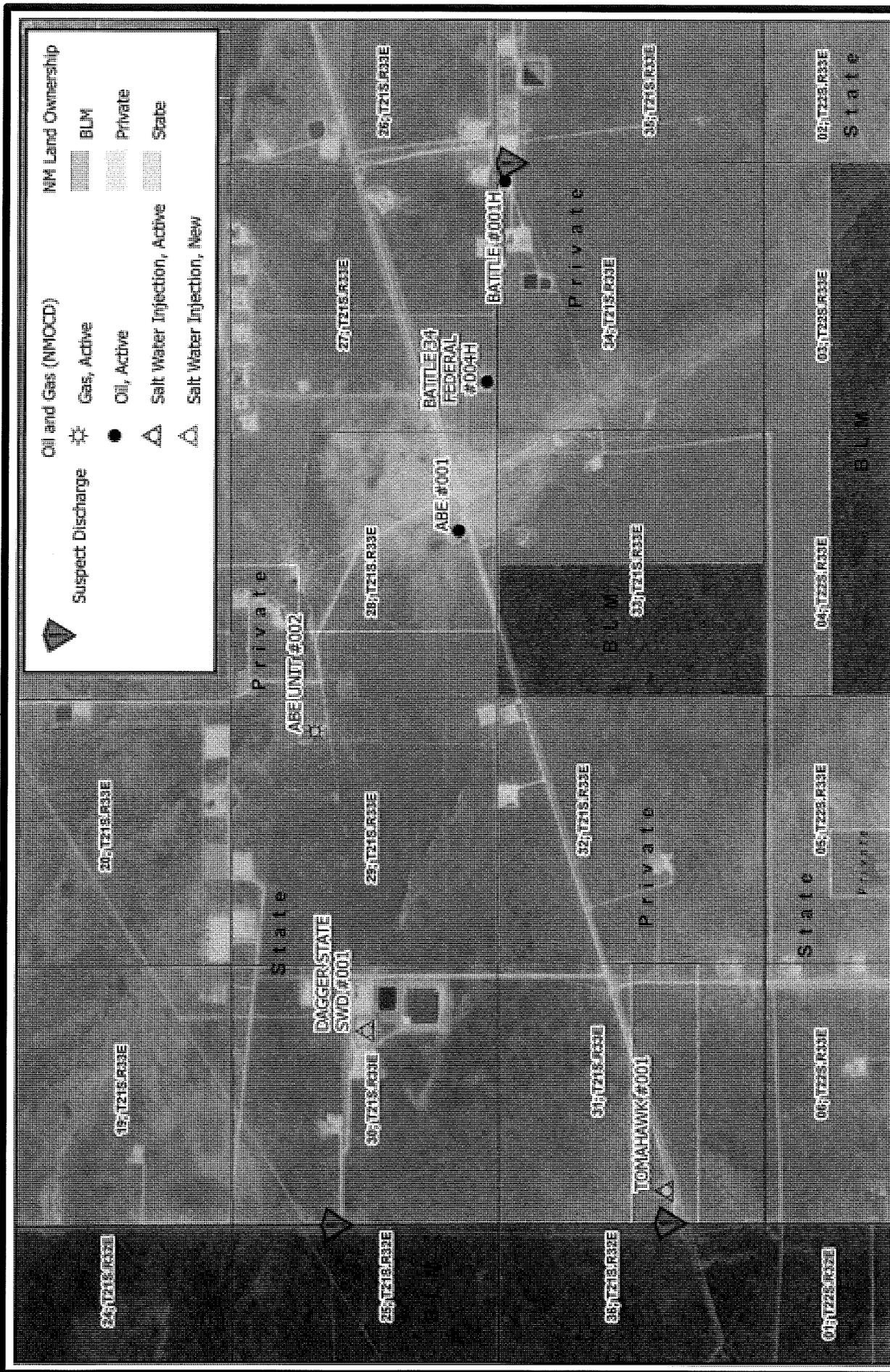
12 January 2021

AEP #: 20210109-0245-unknown  
Suspect unauthorized discharges



*Figure 13: Suspect unauthorized discharge along a 0.2-mile segment of a north/south lease road. Photo is viewing south at the entrance to the Marathon Battle 34 Federal 4H lease. Date/Time: 2021-01-09 10:25:47. GPS: 32.4438833 N, 103.5663833 W.*

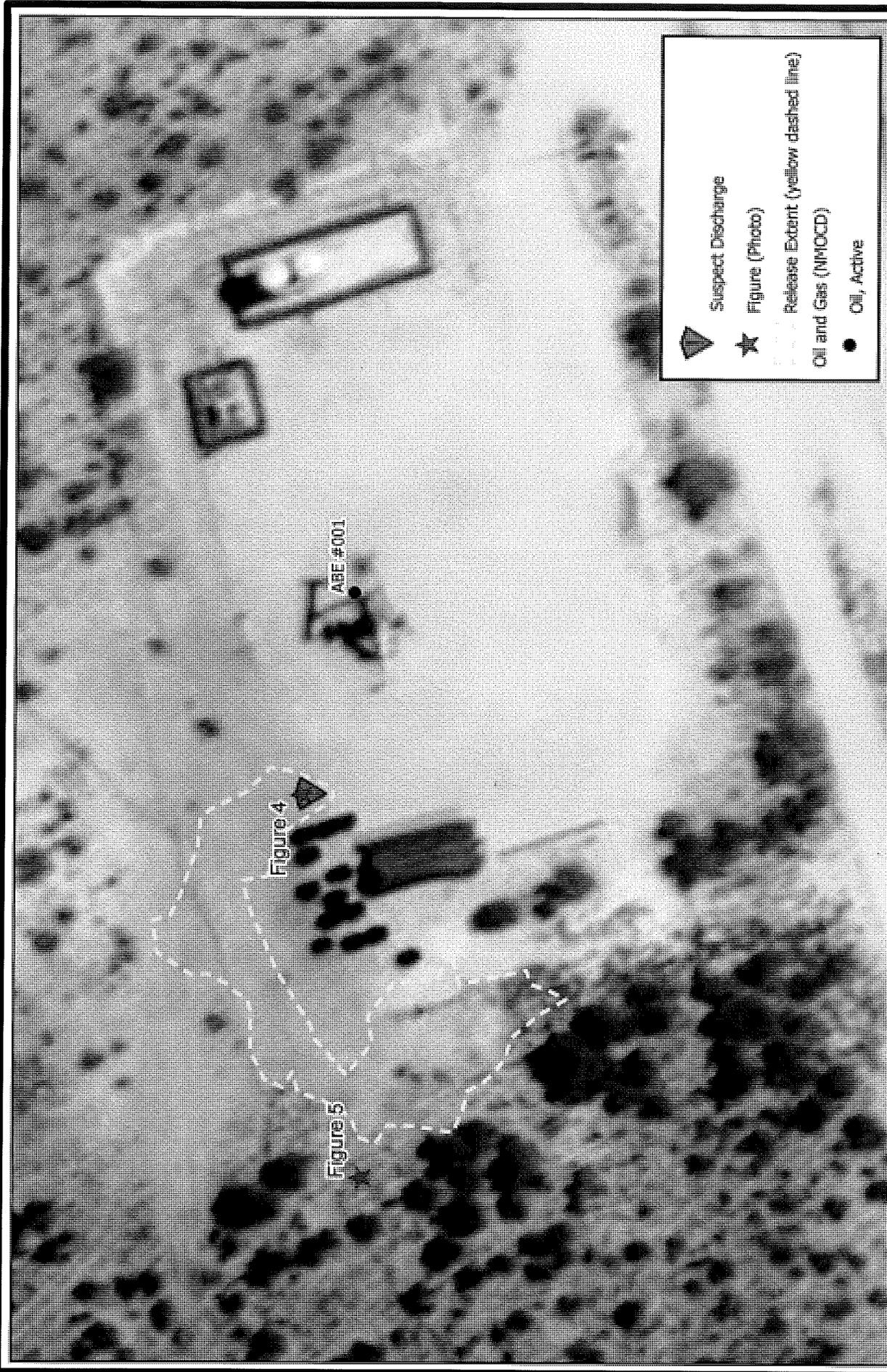
M:\20210109-0245-unknown\arcGIS\_20210109-0245\arcGIS\_20210109-0245.aprx



	Tracked Unauthorized Discharges by Unknown Operator January 7th, 2021		Plate 1
	Suspect Unauthorized Discharges (Jan. 7-9, 2021) AEP #: 20210109-0245-2021		1/10/2021



M:\20210109-0245-unknown\arcGIS\_20210109-0245.aprx



Unauthorized Discharge by Unknown Operator  
 Abe #1 (API: 30-025-33061)  
 Suspect Unauthorized Discharges (Jan. 7-9, 2021)  
 AEP #: 20210109-0245-2021

Plate 2  
 1/10/2021



# Appendix B

## Laboratory Certificate of Analysis





PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

---

April 14, 2021

ANDREW PARKER

ADVANCE ENERGY PARTNERS

11490 WESTHEIMER ROAD, STE. 950

HOUSTON, TX 77077

RE: ADVANCE ENERGY

Enclosed are the results of analyses for samples received by the laboratory on 04/09/21 14:10.

Cardinal Laboratories is accredited through Texas NELAP under certificate number T104704398-20-13. Accreditation applies to drinking water, non-potable water and solid and chemical materials. All accredited analytes are denoted by an asterisk (\*). For a complete list of accredited analytes and matrices visit the TCEQ website at [www.tceq.texas.gov/field/qa/lab\\_accred\\_certif.html](http://www.tceq.texas.gov/field/qa/lab_accred_certif.html).

Cardinal Laboratories is accredited through the State of Colorado Department of Public Health and Environment for:

Method EPA 552.2	Haloacetic Acids (HAA-5)
Method EPA 524.2	Total Trihalomethanes (TTHM)
Method EPA 524.4	Regulated VOCs (V1, V2, V3)

Accreditation applies to public drinking water matrices.

This report meets NELAP requirements and is made up of a cover page, analytical results, and a copy of the original chain-of-custody. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

A handwritten signature in black ink that reads "Celey D. Keene".

Celey D. Keene

Lab Director/Quality Manager



PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

**Analytical Results For:**

ADVANCE ENERGY PARTNERS  
 ANDREW PARKER  
 11490 WESTHEIMER ROAD, STE. 950  
 HOUSTON TX, 77077  
 Fax To: (832) 672-4609

Received:	04/09/2021	Sampling Date:	04/09/2021
Reported:	04/14/2021	Sampling Type:	Soil
Project Name:	ADVANCE ENERGY	Sampling Condition:	Cool & Intact
Project Number:	20210109 - 0245 - 112934	Sample Received By:	Tamara Oldaker
Project Location:	NOT GIVEN		

**Sample ID: ROAD N. (H210904-01)**

BTEX 8021B		mg/kg		Analyzed By: ms					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	04/12/2021	ND	2.12	106	2.00	2.98	
Toluene*	<0.050	0.050	04/12/2021	ND	2.20	110	2.00	2.83	
Ethylbenzene*	<0.050	0.050	04/12/2021	ND	2.13	106	2.00	3.06	
Total Xylenes*	<0.150	0.150	04/12/2021	ND	6.45	107	6.00	3.19	
Total BTEX	<0.300	0.300	04/12/2021	ND					

Surrogate: 4-Bromofluorobenzene (PID) 108 % 73.3-129

Chloride, SM4500Cl-B		mg/kg		Analyzed By: GM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	32.0	16.0	04/12/2021	ND	432	108	400	3.77	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	04/12/2021	ND	210	105	200	3.47	
DRO >C10-C28*	<10.0	10.0	04/12/2021	ND	218	109	200	0.669	
EXT DRO >C28-C36	<10.0	10.0	04/12/2021	ND					

Surrogate: 1-Chlorooctane 89.1 % 44.3-144

Surrogate: 1-Chlorooctadecane 89.9 % 42.2-156

Cardinal Laboratories

\*=Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager



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**Analytical Results For:**

ADVANCE ENERGY PARTNERS  
 ANDREW PARKER  
 11490 WESTHEIMER ROAD, STE. 950  
 HOUSTON TX, 77077  
 Fax To: (832) 672-4609

Received:	04/09/2021	Sampling Date:	04/09/2021
Reported:	04/14/2021	Sampling Type:	Soil
Project Name:	ADVANCE ENERGY	Sampling Condition:	Cool & Intact
Project Number:	20210109 - 0245 - 112934	Sample Received By:	Tamara Oldaker
Project Location:	NOT GIVEN		

**Sample ID: ROAD C. (H210904-02)**

BTEX 8021B		mg/kg		Analyzed By: ms					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	04/12/2021	ND	2.12	106	2.00	2.98	
Toluene*	<0.050	0.050	04/12/2021	ND	2.20	110	2.00	2.83	
Ethylbenzene*	<0.050	0.050	04/12/2021	ND	2.13	106	2.00	3.06	
Total Xylenes*	<0.150	0.150	04/12/2021	ND	6.45	107	6.00	3.19	
Total BTEX	<0.300	0.300	04/12/2021	ND					

Surrogate: 4-Bromofluorobenzene (PID) 109 % 73.3-129

Chloride, SM4500CI-B		mg/kg		Analyzed By: GM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	160	16.0	04/12/2021	ND	432	108	400	3.77	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	04/12/2021	ND	210	105	200	3.47	
DRO >C10-C28*	<10.0	10.0	04/12/2021	ND	218	109	200	0.669	
EXT DRO >C28-C36	<10.0	10.0	04/12/2021	ND					

Surrogate: 1-Chlorooctane 87.0 % 44.3-144

Surrogate: 1-Chlorooctadecane 88.7 % 42.2-156

Cardinal Laboratories

\*=Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager



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**Analytical Results For:**

ADVANCE ENERGY PARTNERS  
 ANDREW PARKER  
 11490 WESTHEIMER ROAD, STE. 950  
 HOUSTON TX, 77077  
 Fax To: (832) 672-4609

Received:	04/09/2021	Sampling Date:	04/09/2021
Reported:	04/14/2021	Sampling Type:	Soil
Project Name:	ADVANCE ENERGY	Sampling Condition:	Cool & Intact
Project Number:	20210109 - 0245 - 112934	Sample Received By:	Tamara Oldaker
Project Location:	NOT GIVEN		

**Sample ID: ROAD S. (H210904-03)**

BTEX 8021B		mg/kg		Analyzed By: ms					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	04/12/2021	ND	2.12	106	2.00	2.98	
Toluene*	<0.050	0.050	04/12/2021	ND	2.20	110	2.00	2.83	
Ethylbenzene*	<0.050	0.050	04/12/2021	ND	2.13	106	2.00	3.06	
Total Xylenes*	<0.150	0.150	04/12/2021	ND	6.45	107	6.00	3.19	
Total BTEX	<0.300	0.300	04/12/2021	ND					

Surrogate: 4-Bromofluorobenzene (PID) 108 % 73.3-129

Chloride, SM4500CI-B		mg/kg		Analyzed By: GM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	160	16.0	04/12/2021	ND	432	108	400	3.77	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	04/12/2021	ND	210	105	200	3.47	
DRO >C10-C28*	<10.0	10.0	04/12/2021	ND	218	109	200	0.669	
EXT DRO >C28-C36	<10.0	10.0	04/12/2021	ND					

Surrogate: 1-Chlorooctane 86.8 % 44.3-144

Surrogate: 1-Chlorooctadecane 88.7 % 42.2-156

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\*=Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager



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Notes and Definitions

- S-06 The recovery of this surrogate is outside control limits due to sample dilution required from high analyte concentration and/or matrix interference's.
- QR-03 The RPD value for the sample duplicate or MS/MSD was outside of QC acceptance limits due to matrix interference. QC batch accepted based on LCS and/or LCSD recovery and/or RPD values.
- QM-07 The spike recovery was outside acceptance limits for the MS and/or MSD. The batch was accepted based on acceptable LCS recovery.
- ND Analyte NOT DETECTED at or above the reporting limit
- RPD Relative Percent Difference
- \*\* Samples not received at proper temperature of 6°C or below.
- \*\*\* Insufficient time to reach temperature.
- Chloride by SM4500Cl-B does not require samples be received at or below 6°C  
Samples reported on an as received basis (wet) unless otherwise noted on report

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*Celey D. Keene*

Celey D. Keene, Lab Director/Quality Manager



**CHAIN-OF-CUSTODY AND ANALYSIS REQUEST**

101 East Marland, Hobbs, NM 88240  
 (575) 393-2326 FAX (575) 393-2476

**BILL TO**

**ANALYSIS REQUEST**

Company Name: Advance Energy Partners		P.O. #:	
Project Manager: Andrew Parker		Company: AEP	
Address: On-File		Attn: Send to	
City:		Address: Aparker@advance	
State:		City: energypartners.com	
Zip:		State:	
Phone #:		Zip:	
Project #:		Phone #:	
Project Name: 20210109-0245-112934		Fax #:	
Project Location:		SAMPLING	
Sampler Name: Jacob Saenz		DATE	
FOR LAB USE ONLY		TIME	
Lab I.D.	Sample I.D.	(G)RAB OR (C)OMP.	# CONTAINERS
Handout		GROUNDWATER	
1 Road N.		WASTEWATER	
2 Road C.		SOIL	
3 Road S.		OIL	
		SLUDGE	
		OTHER:	
		ACID/BASE:	
		ICE / COOL	
		OTHER:	
		DATE	
		TIME	
		CHLORIDE	
		TPH (GRO+DRO+MRO)	
		BENZENE, BTEX	

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Relinquished By: SAOB SHV 2 Date: 4-9-21 Time: 1410 Received By: Juanara Velazquez

Delivered By: (Circle One) UPS - Bus - Other: -8.3c #13 Sample Condition:  Cool  Intact  Yes  No  Yes  No CHECKED BY: YS (Initials)

† Cardinal cannot accept verbal changes. Please fax written changes to (575) 393-2326

**District I**  
 1625 N. French Dr., Hobbs, NM 88240  
 Phone:(575) 393-6161 Fax:(575) 393-0720

**District II**  
 811 S. First St., Artesia, NM 88210  
 Phone:(575) 748-1283 Fax:(575) 748-9720

**District III**  
 1000 Rio Brazos Rd., Aztec, NM 87410  
 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 25407

**CONDITIONS**

Operator: ADVANCE ENERGY PARTNERS HAT MESA, LLC 11490 Westheimer Rd., Ste 950 Houston, TX 77077	OGRID: 372417
	Action Number: 25407
	Action Type: [C-141] Release Corrective Action (C-141)

**CONDITIONS**

Created By	Condition	Condition Date
chensley	None	7/29/2021