

Incident ID	nAPP2036561497
District RP	
Facility ID	
Application ID	

## Remediation Plan

**Remediation Plan Checklist:** Each of the following items must be included in the plan.

- Detailed description of proposed remediation technique
- Scaled sitemap with GPS coordinates showing delineation points
- Estimated volume of material to be remediated
- Closure criteria is to Table 1 specifications subject to 19.15.29.12(C)(4) NMAC
- Proposed schedule for remediation (note if remediation plan timeline is more than 90 days OCD approval is required)

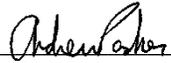
**Deferral Requests Only:** Each of the following items must be confirmed as part of any request for deferral of remediation.

- Contamination must be in areas immediately under or around production equipment where remediation could cause a major facility deconstruction.
- Extents of contamination must be fully delineated.
- Contamination does not cause an imminent risk to human health, the environment, or groundwater.

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: November 4, 2021

email: aparker@advanceenergypartners.com

Telephone: 970-570-9535

**OCD Only**

Received by: Robert Hamlet Date: 3/7/2022

- Approved       Approved with Attached Conditions of Approval       Denied       Deferral Approved

Signature: 

Date: 3/7/2022



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

November 4, 2021

NM Oil Conservation Division  
Environmental Bureau  
1220 South St. Francis Dr.  
Santa Fe, NM 87505

RE:

Revised Remediation Plan  
Incident #: nAPP2036561497  
AEP #: 12242020-0130-dc  
Location: Merchant State Unit #554H (MSU "A" Pad)

NMOCD:

Advance Energy Partners Hat Mesa LLC (AEP) submits this revised remediation plan based on the denial dated August 23, 2021. This revised remediation plan addresses the following issues:

- Depth-to-water determination
- Remediation, restoration, and reclamation for the portion of the release that is not on an active production site used for oil & gas operations.

### **Depth to Water Determination**

In September/October 2021, Advance Energy initiated a depth-to-water boring program to determine whether depth-to-water is present in the upper 100-feet of the surface soil profile. Nine (9) boreholes were advanced between 103 to 105-feet below ground surface, rested for at least 72-hours, and gauged for the presence of groundwater. The nearest boring is located 0.09-miles southwest of the release. The boring is identified as MISC-404 (CP-1887). No groundwater was detected within the upper 100-feet. Plate 2 (revised) is an updated depth-to-water map.

The driller log is located in Appendix A (revised).

Incident #: nAPP2036561497

AEP #: 12242020-0130-dc

## 1. Revised Remediation Plan

Please refer to the April 2021 remediation plan for a discussion on characterization sampling results. Table 2, Plate 11, and Plate 12 is reproduced from the April 2021 remediation plan.

Additional soil samples will be collected for laboratory confirmation for constituents listed in Table 1 of 19.15.29 NMAC. Each soil sample shall not be representative of more than 400 square feet. Plate 11 shows the proposed sample grid with associated square footage. Plate 12 shows the proposed confirmation soil sample locations relative to the sample grid.

Each soil sample will vertically delineate to the following closure criteria, where depth to water is greater than 100-feet, as defined in Table 1 of 19.15.29 NMAC.

- Off-site in the pipeline ROW
  - Upper 4-feet
    - Chloride < 600 mg/kg
    - TPH (GRO + DRO + MRO) < 100 mg/kg
    - BTEX < 50 mg/kg
    - Benzene < 10 mg/kg
  - Below 4-feet
    - Chloride < 20,000 mg/kg
    - TPH (GRO + DRO + MRO) < 2,500 mg/kg
    - TPH (GRO + DRO) < 1,000 mg/kg
    - BTEX < 50 mg/kg
    - Benzene < 10 mg/kg
- On the active production site
  - Chloride < 20,000 mg/kg
  - TPH (GRO + DRO + MRO) < 2,500 mg/kg
  - TPH (GRO + DRO) < 1,000 mg/kg
  - BTEX < 50 mg/kg
  - Benzene < 10 mg/kg

The proposed sample depths at each sample location is defined as:

- 0 – 1 ft composite
- 1 – 2 ft composite, and
- a soil sample from 2 to 4 feet and at 4.5-feet below ground surface if field screening levels suggest an exceedance of the above listed closure criteria or if the two samples in the upper 2-feet exhibit an increase in field screening levels.

It is anticipated that confirmation sampling on the active production site will meet closure criteria as on-site use for oil and gas operations per 19.15.29.12.C.(2) NMAC. Therefore, no remediation is expected; and volume of excavated material is anticipated to be zero. After confirmation sampling demonstrates that the above closure criteria is met, the surface will be

11/04/2021

Incident #: nAPP2036561497  
AEP #: 12242020-0130-dc

restored to an active production site per 19.15.29.13.A-C (NMAC). If confirmation sample results exhibit concentrations exceeding the above closure criteria, we will submit a revised remediation plan. When the production site is no longer in use for oil and gas operations, the surface shall be remediated, restored, and reclaimed per 19.15.29.13.D.

If soil samples off-site and along the pipeline ROW exceed the above closure criteria for off-site locations; AEP will,

1. Remediate, restore, and reclaim the impacted area according to 19.15.29.13.A-D NMAC;  
or
2. Ask NMOCD for a variance for alternative remediation methodologies.

Confirmation sampling will begin within 30-days of remediation plan approval. If AEP elects to remediate the release within the pipeline ROW via dig-haul-dispose, remediation activities will begin within 45-days of laboratory confirmation sample results. We will notify NMOCD with the selected remedial action within 10-days of laboratory confirmation sample results followed by formal notification via a C-141 submission.

Please contact me with any questions at 970-570-9535.

Sincerely,  
Advance Energy Partners Hat Mesa, LLC



Andrew Parker  
Env. Scientist

Copy: Randy Black; Advance Energy Partners Hat Mesa, LLC  
Braden Harris; Advance Energy Partners Hat Mesa, LLC  
Merchant Livestock  
State Land Office

11/04/2021

Incident ID	nAPP2036561497
District RP	
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## Remediation Plan

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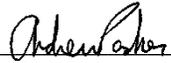
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Printed Name: Andrew Parker

Title: Env. Scientist

Signature: 

Date: November 4, 2021

email: aparker@advanceenergypartners.com

Telephone: 970-570-9535

**OCD Only**

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

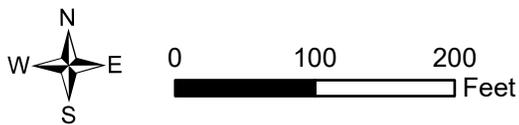
- Approved       Approved with Attached Conditions of Approval       Denied       Deferral Approved

Signature: \_\_\_\_\_

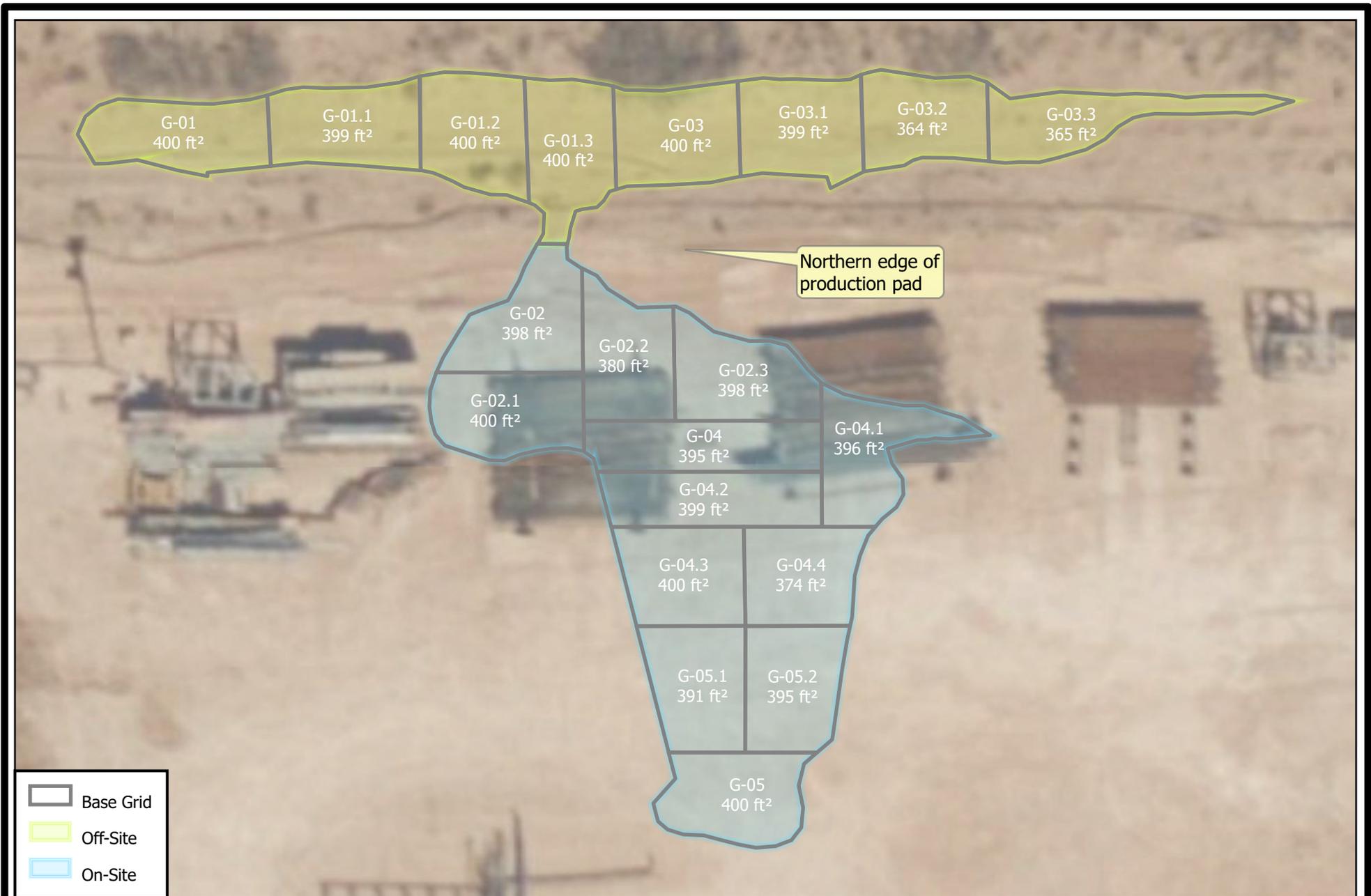
Date: \_\_\_\_\_

# Plates





Depth to Water MSU #554H (MSU "A" Pad)	Plate 02
Incident #: nAPP2036561497 AEP #: 12242020-0130-dc	10/22/2021



Base Grid  
 Off-Site  
 On-Site

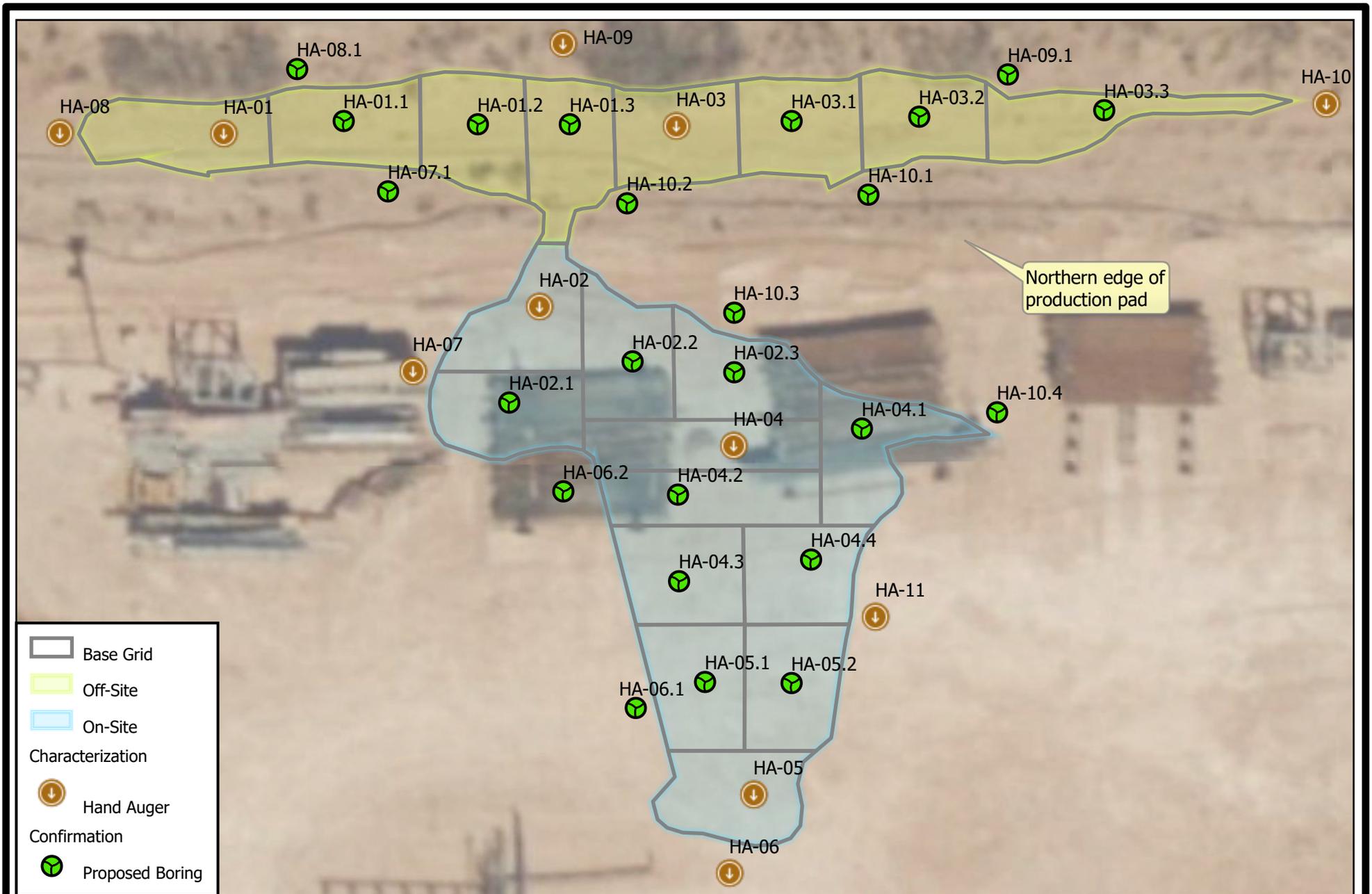
N  
 W —+— E  
 S

0      15      30  
 US Feet



Base Grid Size (On-site vs. Off-Site)
AEP #: 12242020-0130-dc MSU #554H (MSU "A" Pad)

Plate 11
04/13/2021



Proposed Confirmation Sampling Locations (On-site vs. Off-Site)	Plate 12
AEP #: 12242020-0130-dc MSU #554H (MSU "A" Pad)	04/13/2021

# Tables



Table 2  
Summary of Analytical

Incident #: nAPP2036561497  
AEP #: 12242020-0130-dc

Sample ID	Date	Discrete Depth (Feet)	Top Depth (Feet)	Bottom Depth (Feet)	In-Site (Yes/No)	EC (field) dS/m	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"							10,000	1,000	2,500	10	50
HA-01	3/23/2021		0.00	1.00	No	1.20	992	<20	<30	<0.05	<0.3
HA-01	3/23/2021		1.00	2.00	No	3.48	2960	<20	<30	<0.05	<0.3
HA-01	3/23/2021		2.00	3.00	No	5.86	7360	<20	<30	<0.05	<0.3
HA-01	3/23/2021		3.00	4.00	No	1.87	2480	<20	<30	<0.05	<0.3
HA-01	3/23/2021	4.5			No	0.45	272	<20	<30	<0.05	<0.3
HA-02	3/23/2021		0.00	0.75	Yes		1150	<254	<265.7	<0.05	<0.3
HA-02	3/23/2021		0.75	1.50	Yes	0.32	192	<20	<30	<0.05	<0.3
HA-02	3/23/2021		1.50	2.50	Yes	0.20	288	<21.2	<31.2	<0.05	<0.3
HA-03	3/23/2021		0.00	1.00	No	1.08	832	<20	<30	<0.05	<0.3
HA-03	3/23/2021		1.00	2.00	No	2.73	1630	<20	<30	<0.05	<0.3
HA-03	3/23/2021		2.00	3.00	No	6.95	7730	<20	<30	<0.05	<0.3
HA-03	3/23/2021		3.00	4.00	No	5.68	8400	<20	<30	<0.05	<0.3
HA-03	3/23/2021	4.5			No	4.57	5760	<20	<30	<0.05	<0.3
HA-04	3/24/2021		0.00	0.75	Yes		2280	<20	<30	<0.05	<0.3
HA-04	3/24/2021		0.75	1.50	Yes	0.23	128	<20	<30	<0.05	<0.3
HA-04	3/24/2021		1.50	2.50	Yes	0.10	16	<20	<30	<0.05	<0.3
HA-05	3/24/2021		0.00	0.75	Yes		2520	<55.2	<65.2	<0.05	<0.3
HA-05	3/24/2021		0.75	1.50	Yes	0.27	96	<20	<30	<0.05	<0.3
HA-05	3/24/2021		1.50	2.50	Yes	0.10	16	<20	<30	<0.05	<0.3
HA-06	3/24/2021		0.00	0.75	Yes		608	<20	<30	<0.05	<0.3
HA-06	3/24/2021		0.75	1.50	Yes	0.34	176	<20	<30	<0.05	<0.3
HA-06	3/24/2021		1.50	2.50	Yes	0.20	48	<20	<30	<0.05	<0.3
HA-07	3/24/2021		0.00	0.75	Yes		944	<20	<30	<0.05	<0.3
HA-07	3/24/2021		0.75	1.50	Yes	0.32	256	<20	<30	<0.05	<0.3
HA-07	3/24/2021		1.50	2.50	Yes	0.20	96	<20	<30	<0.05	<0.3
HA-08	3/24/2021		0.00	1.00	No	0.07	48	<20	<30	<0.05	<0.3
HA-09	3/24/2021		0.00	1.00	No	0.05	16	<20	<30	<0.05	<0.3
HA-10	3/24/2021		0.00	1.00	No	0.20	96	<20	<30	<0.05	<0.3
HA-11	3/24/2021		0.00	0.75	Yes		624	<20	<30	<0.05	<0.3
HA-11	3/24/2021		0.75	1.50	Yes	0.27	32	<20	<30	<0.05	<0.3

# Appendix A

## Water Well Logs





2904 W 2nd St.  
Roswell, NM 88201  
voice: 575.624.2420  
fax: 575.624.2421  
www.atkinseng.com

08/29/2021

DII-NMOSE  
1900 W 2<sup>nd</sup> Street  
Roswell, NM 88201

*Hand Delivered to the DII Office of the State Engineer*

Re: Well Record CP-1887 Pod1

To whom it may concern:

Attached please find a well log & record and a plugging record, in duplicate, for a one (1) soil borings, CP-1887 Pod1.

If you have any questions, please contact me at 575.499.9244 or [lucas@atkinseng.com](mailto:lucas@atkinseng.com).

Sincerely,

A handwritten signature in black ink that reads "Lucas Middleton". The signature is written in a cursive style.

Lucas Middleton

Enclosures: as noted above

USE DIT NOV 1 2021 PM 2:43



# WELL RECORD & LOG

OFFICE OF THE STATE ENGINEER

www.ose.state.nm.us

1. GENERAL AND WELL LOCATION	OSE POD NO. (WELL NO.) POD1 (TW-1)		WELL TAG ID NO. n/a		OSE FILE NO(S). CP-1887		
	WELL OWNER NAME(S) Advanced Energy Partners				PHONE (OPTIONAL) 832.672.4700		
	WELL OWNER MAILING ADDRESS 11490 Westheimer Rd. Stuit 950				CITY Houston	STATE TX	ZIP 77077
	WELL LOCATION (FROM GPS)	DEGREES LATITUDE	MINUTES 32	SECONDS 26	29.53	N	* ACCURACY REQUIRED: ONE TENTH OF A SECOND * DATUM REQUIRED: WGS 84
LONGITUDE							
103 32 14.57 W							
DESCRIPTION RELATING WELL LOCATION TO STREET ADDRESS AND COMMON LANDMARKS - PLSS (SECTION, TOWNSHIP, RANGE) WHERE AVAILABLE NE NE NE Sec. 35 T21S R33E							

2. DRILLING & CASING INFORMATION	LICENSE NO. 1249	NAME OF LICENSED DRILLER Jackie D. Atkins			NAME OF WELL DRILLING COMPANY Atkins Engineering Associates, Inc.			
	DRILLING STARTED 10/07/2021	DRILLING ENDED 10/07/2021	DEPTH OF COMPLETED WELL (FT) temporary well material	BORE HOLE DEPTH (FT) 103	DEPTH WATER FIRST ENCOUNTERED (FT) n/a			
	COMPLETED WELL IS: <input type="checkbox"/> ARTESIAN <input checked="" type="checkbox"/> DRY HOLE <input type="checkbox"/> SHALLOW (UNCONFINED)				STATIC WATER LEVEL IN COMPLETED WELL (FT) n/a			
	DRILLING FLUID: <input type="checkbox"/> AIR <input type="checkbox"/> MUD ADDITIVES - SPECIFY:							
	DRILLING METHOD: <input type="checkbox"/> ROTARY <input type="checkbox"/> HAMMER <input type="checkbox"/> CABLE TOOL <input checked="" type="checkbox"/> OTHER - SPECIFY: Hollow Stem Auger							
	DEPTH (feet bgl)		BORE HOLE DIAM (inches)	CASING MATERIAL AND/OR GRADE (include each casing string, and note sections of screen)	CASING CONNECTION TYPE (add coupling diameter)	CASING INSIDE DIAM. (inches)	CASING WALL THICKNESS (inches)	SLOT SIZE (inches)
	FROM	TO						
	0	103	±6.5	Boring- HSA	--	--	--	--

3. ANNULAR MATERIAL	DEPTH (feet bgl)		BORE HOLE DIAM. (inches)	LIST ANNULAR SEAL MATERIAL AND GRAVEL PACK SIZE-RANGE BY INTERVAL	AMOUNT (cubic feet)	METHOD OF PLACEMENT
	FROM	TO				

USE J11 N30 2021 pnc12.3

FOR OSE INTERNAL USE		WR-20 WELL RECORD & LOG (Version 06/30/17)			
FILE NO.	POD NO.	TRN NO.			
LOCATION	WELL TAG ID NO.	PAGE 1 OF 2			



# 2021-10-27\_CP-1887\_OSE\_Well Record and Log-for sign

Final Audit Report

2021-10-29

Created:	2021-10-29
By:	Lucas Middleton (lucas@atkinseng.com)
Status:	Signed
Transaction ID:	CBJCHBCAABAAJbvrfK4AaOE3rMPE3Q4ETnuBZ8bY6U0w

## "2021-10-27\_CP-1887\_OSE\_Well Record and Log-for sign" History

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-  Document emailed to Jack Atkins (jack@atkinseng.com) for signature  
2021-10-29 - 3:57:38 PM GMT
-  Email viewed by Jack Atkins (jack@atkinseng.com)  
2021-10-29 - 4:15:46 PM GMT- IP address: 64.90.153.232
-  Document e-signed by Jack Atkins (jack@atkinseng.com)  
Signature Date: 2021-10-29 - 4:16:29 PM GMT - Time Source: server- IP address: 64.90.153.232
-  Agreement completed.  
2021-10-29 - 4:16:29 PM GMT

OSE SIGNATURE 2021-10-29





# PLUGGING RECORD



**NOTE: A Well Plugging Plan of Operations shall be approved by the State Engineer prior to plugging - 19.27.4 NMAC**

### I. GENERAL / WELL OWNERSHIP:

State Engineer Well Number: CP-1887-POD1

Well owner: Advanced Energy Partners Phone No.: 832.672.4700

Mailing address: 11490 Westheimer Rd. Stuit 950

City: Houston State: Texas Zip code: 77077

### II. WELL PLUGGING INFORMATION:

- 1) Name of well drilling company that plugged well: Jackie D. Atkins ( Atkins Engineering Associates Inc.)
- 2) New Mexico Well Driller License No.: 1249 Expiration Date: 04/30/23
- 3) Well plugging activities were supervised by the following well driller(s)/rig supervisor(s): Shane Eldridge, Carmelo Trevino, Cameron Pruitt
- 4) Date well plugging began: 10-14-2021 Date well plugging concluded: 10-14-2021
- 5) GPS Well Location: Latitude: 32 deg, 26 min, 29.53 sec  
Longitude: 103 deg, 32 min, 14.57 sec, WGS 84
- 6) Depth of well confirmed at initiation of plugging as: 103 ft below ground level (bgl),  
by the following manner: weighted tape
- 7) Static water level measured at initiation of plugging: n/a ft bgl
- 8) Date well plugging plan of operations was approved by the State Engineer: 07/12/2021
- 9) Were all plugging activities consistent with an approved plugging plan? Yes If not, please describe differences between the approved plugging plan and the well as it was plugged (attach additional pages as needed):

GSE 07 NOV 1 2021 PM 4:23

10) Log of Plugging Activities - Label vertical scale with depths, and indicate separate plugging intervals with horizontal lines as necessary to illustrate material or methodology changes. Attach additional pages if necessary.

For each interval plugged, describe within the following columns:

<u>Depth</u> (ft bgl)	<u>Plugging Material Used</u> (include any additives used)	<u>Volume of Material Placed</u> (gallons)	<u>Theoretical Volume of Borehole/ Casing</u> (gallons)	<u>Placement Method</u> (tremie pipe, other)	<u>Comments</u> ("casing perforated first", "open annular space also plugged", etc.)
0-10'	Hydrated Bentonite	15.6 gallons	15 gallons	Augers	
10'-103'	Drill Cuttings	Approx. 147 gallons	147gallons	Boring	

ESE OCT NOV 1 2021 PM 2:43

MULTIPLY	BY	AND OBTAIN
cubic feet x	7.4805	= gallons
cubic yards x	201.97	= gallons

**III. SIGNATURE:**

I, Jackie D. Atkins, say that I am familiar with the rules of the Office of the State Engineer pertaining to the plugging of wells and that each and all of the statements in this Plugging Record and attachments are true to the best of my knowledge and belief.

*Jackie Atkins*

10/27/2021

Signature of Well Driller

Date

# 2021-10-27\_CP-1887\_WD-11 Plugging Record-forsign

Final Audit Report

2021-10-29

Created:	2021-10-29
By:	Lucas Middleton (lucas@atkinseng.com)
Status:	Signed
Transaction ID:	CBJCHBCAABAAdCweMFDf8Y1erfSiXmrU36TYmU-GuTyP

## "2021-10-27\_CP-1887\_WD-11 Plugging Record-forsign" History

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-  Email viewed by Jack Atkins (jack@atkinseng.com)  
2021-10-29 - 4:15:04 PM GMT- IP address: 64.90.153.232
-  Document e-signed by Jack Atkins (jack@atkinseng.com)  
Signature Date: 2021-10-29 - 4:15:31 PM GMT - Time Source: server- IP address: 64.90.153.232
-  Agreement completed.  
2021-10-29 - 4:15:31 PM GMT

CSE DT NOV 1 2021 PM 4:43



**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 60286

**CONDITIONS**

Operator: ADVANCE ENERGY PARTNERS HAT MESA, LLC 11490 Westheimer Rd., Ste 950 Houston, TX 77077	OGRID: 372417
	Action Number: 60286
	Action Type: [C-141] Release Corrective Action (C-141)

**CONDITIONS**

Created By	Condition	Condition Date
rhamlet	The Remediation Plan is Conditionally Approved. All off pad areas must contain a minimum of 4 feet non-waste containing uncontaminated, earthen material with chloride concentrations less than 600 mg/kg and less than 100 mg/kg for TPH. In the pasture area, 4 feet below the ground surface, soil contamination limits revert back to Table 1 "Closure Criteria for Soils Impacted by a Release" included in the spill rule. Soil contamination levels need to meet closure criteria standards for proven depth to water determination. Please make sure all groundwater data is included in closure report summary. Sidewall samples should be delineated/excavated to 600 mg/kg for chlorides and 100 mg/kg for TPH to define the edge of the release. The variance for floor confirmation samples of 400 ft2 is approved. Sidewall samples should represent no more than 200 ft2. The work will need to occur in 90 days after the work plan has been approved.	3/7/2022