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

QUESTIONS

Action 118780

QUESTIONS

Operator: ADVANCE ENERGY PARTNERS HAT MESA, LLC 11490 Westheimer Rd., Ste 950 Houston, TX 77077	OGRID: 372417
	Action Number: 118780
	Action Type: [NOTIFY] Notification Of Release (NOR)

QUESTIONS

Location of Release Source *Please answer all of the questions in this group.*	
Site Name	20220511-1216-hydrovac
Date Release Discovered	05/05/2022
Surface Owner	Private

Incident Details *Please answer all of the questions in this group.*	
Incident Type	Release Other
Did this release result in a fire or is the result of a fire	No
Has this release reached or does it have a reasonable probability of reaching a watercourse	No
Has this release endangered or does it have a reasonable probability of endangering public health	No
Has this release substantially damaged or will it substantially damage property or the environment	No
Is this release of a volume that is or may with reasonable probability be detrimental to fresh water	No

Nature and Volume of Release *Material(s) released, please answer all that apply below. Any calculations or specific justifications for the volumes provided should be attached to the follow-up C-141 submission.*	
Crude Oil Released (bbls) Details	*Not answered.*
Produced Water Released (bbls) Details	*Not answered.*
Is the concentration of dissolved chloride in the produced water >10,000 mg/l	*Not answered.*
Condensate Released (bbls) Details	*Not answered.*
Natural Gas Vented (Mcf) Details	*Not answered.*
Natural Gas Flared (Mcf) Details	*Not answered.*
Other Released Details	Cause: Human Error | Transport | Other (Specify) | Released: 48,000 LBS | Recovered: 0 LBS | Lost: 48,000 LBS]
Are there additional details for the questions above (i.e. any answer containing Other, Specify, Unknown, and/or Fire, or any negative lost amounts)	Hydrovac disposal of approximately 24 cubic yards of slurry

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

QUESTIONS (continued)

Operator: ADVANCE ENERGY PARTNERS HAT MESA, LLC 11490 Westheimer Rd., Ste 950 Houston, TX 77077	OGRID: 372417
	Action Number: 118780
	Action Type: [NOTIFY] Notification Of Release (NOR)

QUESTIONS

Nature and Volume of Release (continued)	
Is this a gas only submission (i.e. only significant Mcf values reported)	**More volume information must be supplied to determine if this will be treated as a "gas only" report.**
Was this a major release as defined by 19.15.29.7(A) NMAC	**No, not enough information provided to determine release severity.**
Reasons why this would be considered a submission for a notification of a major release	
If YES, was immediate notice given to the OCD, by whom	*Not answered.*
If YES, was immediate notice given to the OCD, to whom	*Not answered.*
If YES, was immediate notice given to the OCD, when	*Not answered.*
If YES, was immediate notice given to the OCD, by what means (phone, email, etc.)	*Not answered.*
With the implementation of the 19.15.27 NMAC (05/25/2021), venting and/or flaring of natural gas (i.e. gas only) are to be submitted on the C-129 form.	

Initial Response *The responsible party must undertake the following actions immediately unless they could create a safety hazard that would result in injury.*	
The source of the release has been stopped	True
The impacted area has been secured to protect human health and the environment	True
Released materials have been contained via the use of berms or dikes, absorbent pads, or other containment devices	True
All free liquids and recoverable materials have been removed and managed appropriately	True
If all the actions described above have not been undertaken, explain why	*Not answered.*
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 prepare and attach a narrative of actions to date in the follow-up C-141 submission. 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 prepare and attach all information needed for closure evaluation in the follow-up C-141 submission.	

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

ACKNOWLEDGMENTS

Operator: ADVANCE ENERGY PARTNERS HAT MESA, LLC 11490 Westheimer Rd., Ste 950 Houston, TX 77077	OGRID: 372417
	Action Number: 118780
	Action Type: [NOTIFY] Notification Of Release (NOR)

ACKNOWLEDGMENTS

☑	I acknowledge that I am authorized to submit notification of a releases on behalf of my operator.
☑	I acknowledge that upon submitting this application, I will be creating a new incident file (assigned to my operator) to track the notification(s) and corrective action(s) for a release, pursuant to NMAC 19.15.29.
☑	I acknowledge that creating a new incident file will require my operator to file subsequent submission(s) of form "C-141, Application for administrative approval of a release notification and corrective action", pursuant to NMAC 19.15.29.
☑	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.
☑	I acknowledge the fact that 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.
☑	I acknowledge the fact that, 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.

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 118780

CONDITIONS

Operator: ADVANCE ENERGY PARTNERS HAT MESA, LLC 11490 Westheimer Rd., Ste 950 Houston, TX 77077	OGRID: 372417
	Action Number: 118780
	Action Type: [NOTIFY] Notification Of Release (NOR)

CONDITIONS

Created By	Condition	Condition Date
aparker	When submitting future reports regarding this release, please submit the calculations used or specific justification for the volumes reported on the initial C-141.	6/20/2022

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	nAPP2217150365
District RP	
Facility ID	
Application ID	

Release Notification

Responsible Party

Responsible Party: Advance Energy Partners Hat Mesa LLC	OGRID: 372417
Contact Name: Andrew Parker	Contact Telephone: 832-672-4700 (office)
Contact email: aparker@advanceenergypartners.com	Incident # *(assigned by OCD)* nAPP2217150365
Contact mailing address: 11490 Westheimer Rd. Suite 950. Houston, TX 77077	

Location of Release Source

Latitude 32.4423143 Longitude -103.5397590
(NAD 83 in decimal degrees to 5 decimal places)

Site Name 20220511-1216-hydrovac	Site Type Production Pad
Date Release Discovered 05/05/2022	API# *(if applicable)*

Unit Letter	Section	Township	Range	County
B	35	21S	33E	Lea

Surface Owner: ☐ State ☐ Federal ☐ Tribal ☒ Private (*Name:* Merchant Livestock)

Nature and Volume of Release

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

☐ Crude Oil	Volume Released (bbls)	Volume Recovered (bbls)
☐ Produced Water	Volume Released (bbls)	Volume Recovered (bbls)
	Is the concentration of dissolved chloride in the produced water >10,000 mg/l?	☐ Yes ☐ No
☐ Condensate	Volume Released (bbls)	Volume Recovered (bbls)
☐ Natural Gas	Volume Released (Mcf)	Volume Recovered (Mcf)
☒ Other (describe)	Volume/Weight Released (provide units) Hydrovac slurry 23 cubic yards	Volume/Weight Recovered (provide units)

Cause of Release: Hydrovac disposal on production pad. Impacted area is approximately 614 sq. ft mapped by GPS with +/- 1-foot resolution.

Volume calculation: 614 sq. ft. x 1 ft depth = 614 cubic feet/27 = 23 cubic yards

Form C-141
Page 2

State of New Mexico
Oil Conservation Division

Incident ID	nAPP2217150365
District RP	
Facility ID	
Application ID	

Was this a major release as defined by 19.15.29.7(A) NMAC? ☐ Yes ☒ 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

☒ The source of the release has been stopped.
☒ The impacted area has been secured to protect human health and the environment.
☒ Released materials have been contained via the use of berms or dikes, absorbent pads, or other containment devices.
☒ All free liquids and recoverable materials have been removed and managed appropriately.

If all the actions described above have not 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: Andrew Parker Title: Env. Scientist

Signature: Andrew Parker Date: 06/20/2022

email: aparker@advanceenergypartners.com Telephone: 970-570-9535

OCD Only

Received by: Jocelyn Harimon Date: 07/25/2022

Incident ID	nAPP2217150365
District RP	
Facility ID	
Application ID	

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? **Plates 2 & 3**	>100 (ft bgs)
Did this release impact groundwater or surface water?	☐ Yes ☒ No
Are the lateral extents of the release within 300 feet of a continuously flowing watercourse or any other significant watercourse? **Plate 4**	☐ Yes ☒ 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)? **Plate 4**	☐ Yes ☒ No
Are the lateral extents of the release within 300 feet of an occupied permanent residence, school, hospital, institution, or church? **Plate 5**	☐ Yes ☒ 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? **Plate 4**	☐ Yes ☒ No
Are the lateral extents of the release within 1000 feet of any other fresh water well or spring? **Plate 4**	☐ Yes ☒ No
Are the lateral extents of the release within incorporated municipal boundaries or within a defined municipal fresh water well field? **Plate 4**	☐ Yes ☒ No
Are the lateral extents of the release within 300 feet of a wetland? **Plate 6**	☐ Yes ☒ No
Are the lateral extents of the release overlying a subsurface mine? **Plate 7**	☐ Yes ☒ No
Are the lateral extents of the release overlying an unstable area such as karst geology? **Plate 8**	☐ Yes ☒ No
Are the lateral extents of the release within a 100-year floodplain? **Plate 9**	☐ Yes ☒ No
Did the release impact areas **not** on an exploration, development, production, or storage site?	☐ Yes ☒ 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.

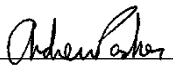
State of New Mexico
Oil Conservation Division

Incident ID	nAPP2217150365
District RP	
Facility ID	
Application ID	

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: July 25, 2022

email: aparker@advanceenergypartners.com

Telephone: 970-570-9535

OCD Only

Received by: Jocelyn Harimon

Date: 07/25/2022

State of New Mexico
Oil Conservation Division

Incident ID	nAPP2217150365
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: Andrew Parker Date: July 25, 2022

email: aparker@advanceenergypartners.com Telephone: 970-570-9535

OCD Only

Received by: Jocelyn Harimon Date: 07/25/2022

☐ Approved ☐ Approved with Attached Conditions of Approval ☐ Denied ☐ Deferral Approved

Signature: Date:

State of New Mexico
Oil Conservation Division

Incident ID	nAPP2217150365
District RP	
Facility ID	
Application ID	

Closure

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

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

☒ 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: Andrew Parker Date: July 25, 2022

email: aparker@advanceenergypartners.com Telephone: 970-570-9535

OCD Only

Received by: Jocelyn Harimon Date: 07/25/2022

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: Jennifer Nobui Date: 07/27/2022

Printed Name: Jennifer Nobui Title: Environmental Specialist A

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

July 25, 2022

New Mexico Environmental Department
1220 South St. Francis Dr.
Santa Fe, NM 87505

RE: Closure Report
Incident ID: nAPP2217150365
AEP #: 20220511-1216-hydrovac
Location: Merchant State Unit 504 "B" Pad

NMOCD:

Advance Energy Partners Hat Mesa LLC submits this closure report for the above referenced incident. We ask closure for the regulatory file.

The unauthorized release was discovered on May 5, 2022, on the NW corner of Merchant State Unit 504 "B" Pad. Surface is owned by Merchant Livestock. Field investigations suggest that a hydrovac released excavated soil (Figure 1) after performing surface trenching for construction purposes for the installation of flowlines and electrical associated with oil and gas operations. The release extent covered approximately 614 sq feet and had a maximum thickness of approximately 1 ft.

Figure 1: Photo of release viewing south-southwest from the north-northeastern extent of the release. GPS: 32.4424608 N, 103.5396967 W. Date/Time: 2022-05-05 10:08:53

Characterization

Horizontal extent of the release was determined by visual observations. The release extent mapping utilized GPS technology with sub-meter accuracy. Plate 1 shows the discharge extent relative to the Merchant State Unit 504 "B" Pad and production facilities. The discharge was located at 32.4423113, -103.5397540 (Lat, Long; NAD83).

On May 5, 2022, a sample was obtained from the source material (hydrovac slurry). Analysis of source material showed that all constituents were below the most stringent closure criteria listed in Table 1 of 19.15.29 NMAC for upper 4 feet (Table B).

Depth-to-Water

The nearest depth-to-water boring relative to the discharge extent is mapped on Plate 2. The Office of State Engineer well log is attached in Appendix A.

1. CP-1887 POD1 is 0.15 miles south southeast of the discharge area with a depth to water of >103, dated 10/07/2021.

Significant Water Courses/Sources

The nearest water source is mapped as an intermittent stream located 0.94 miles northeast of the release area.

Lithology

The hydrovac discharge occurred on an active production pad capped with caliche. The USDA Natural Resources Conservation Service (NRCS) soil survey[1] describes the upper 60-inches (5-feet), from natural ground surface, as

- 0 to 8 inches: fine sand
- 8 to 60 inches: fine sand,

with 5 to 12 % slopes.

The lithology as descibed by the NRCS is consitent with observed remediation and construction activities through the area of interest.

Remediation

On May 19, 2022; approximately 23 cubic yards of source material was removed and hauled offsite for proper disposal.

As the source material characterization samples were below the most stringent closure criteria listed in Table 1 of 19.15.29 NMAC, the remediation area was divided into three representative sections not to exceed 200 sq. ft. for the collection of confirmation samples on May 20,2022.

1 https://websoilsurvey.sc.egov.usda.gov/App/WebSoilSurvey.aspx

Incident ID: nAPP2217150365
AEP #: 20220511-1216-hydrovac

Plate 10 shows grids and square footage and Plate 11 shows the location of confirmation samples. Table A shows sample coordinates. Each confirmation sample represents a 3-point composite of the surface sample grid.

Table B shows laboratory analytical of samples. Appendix B contains the laboratory Certificates of Analysis. Confirmation samples S-02 and S-03 met the most stringent Closure Criteria listed in Table 1 of 19.15.29 NMAC. Sample S-01 met the Closure Criteria for areas in-use for oil and gas operations where depth-to-water is greater than 100-feet, as listed in Table 1 of 19.15.29 NMAC.

The surface was restored per 19.15.29.13.A-C NMAC to prior existing condition as an active production pad.

Figure 2: Restored surface viewing south-southwest from north-northeastern extent of the release. GPS: 32.4425147 N, 103.5397081 W. Date/Time: 2022-05-19 11:43:27

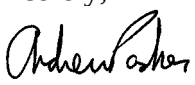
Released to Imaging: 7/27/2022 9:01:56 AM

Incident ID: nAPP2217150365
AEP #: 20220511-1216-hydrovac

When the production site is no longer in-use for oil & gas operations the S-01 area will be remediated, restored, and reclaimed per 19.15.29.13.D.

Please contact me with any questions.

Sincerely,

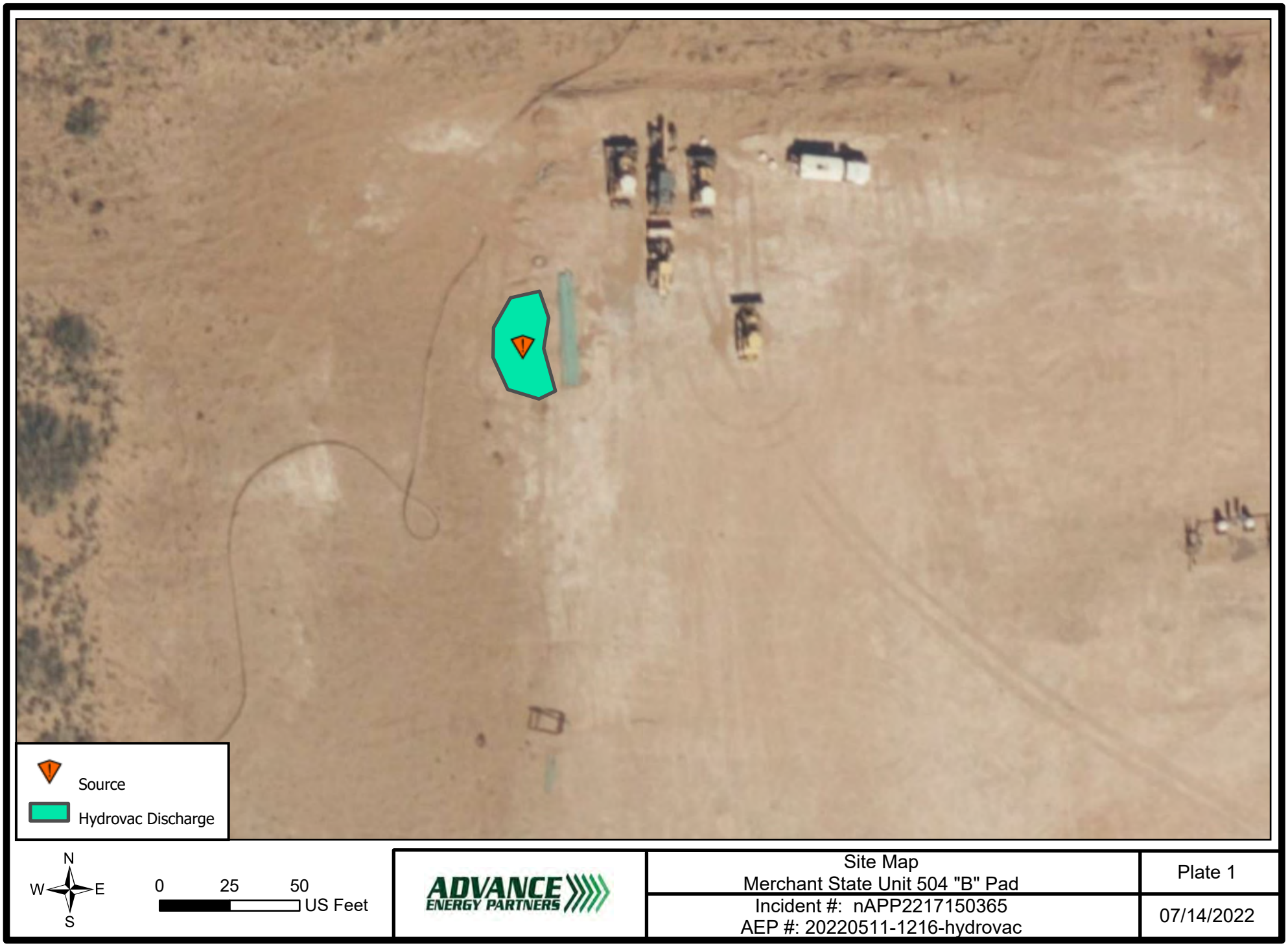


Andrew Parker
Advance Energy Partners, LLC
Environmental Scientist

Cc: Bradley Blevins, Merchant Livestock

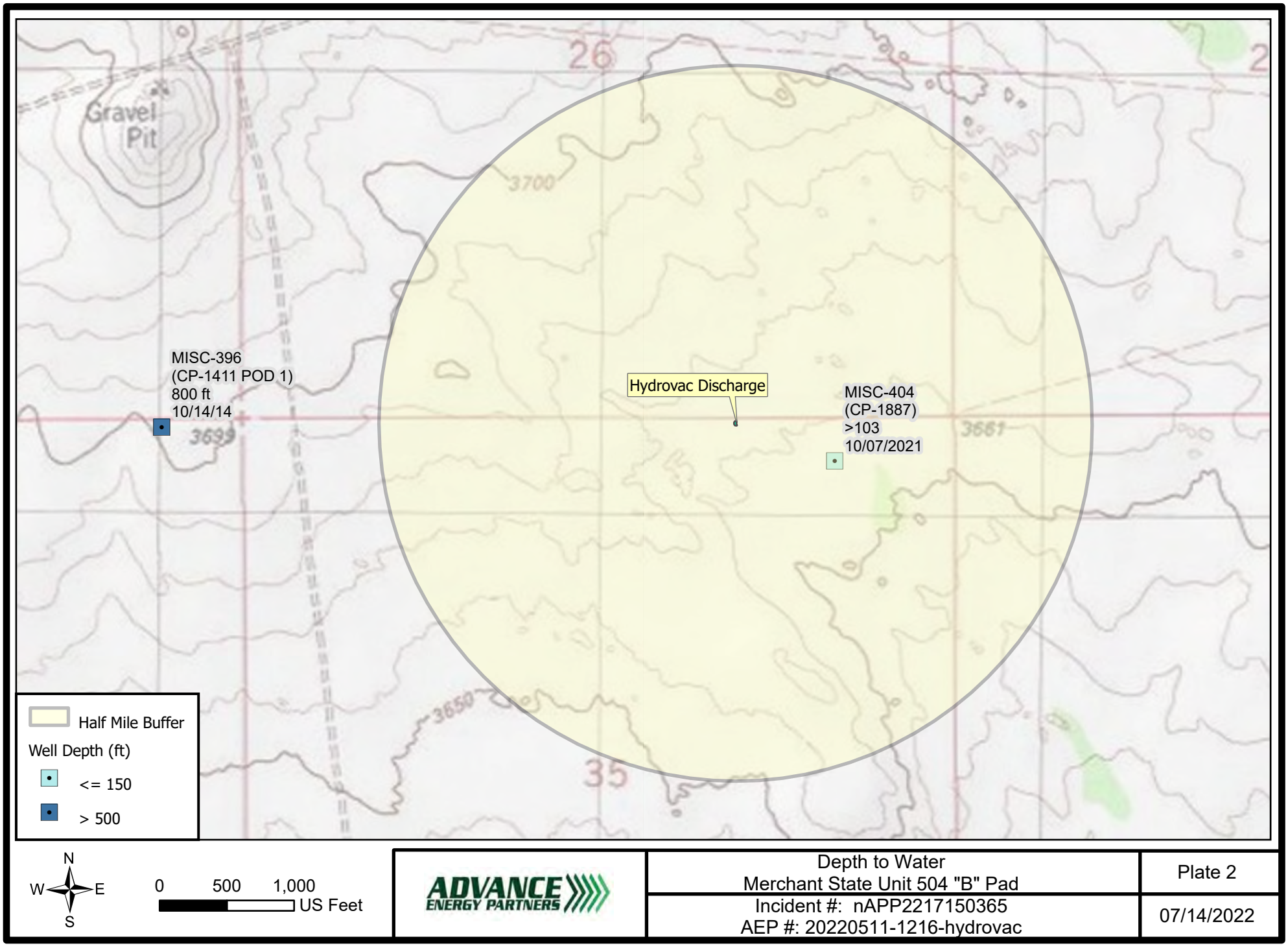
07/25/2022

Plates



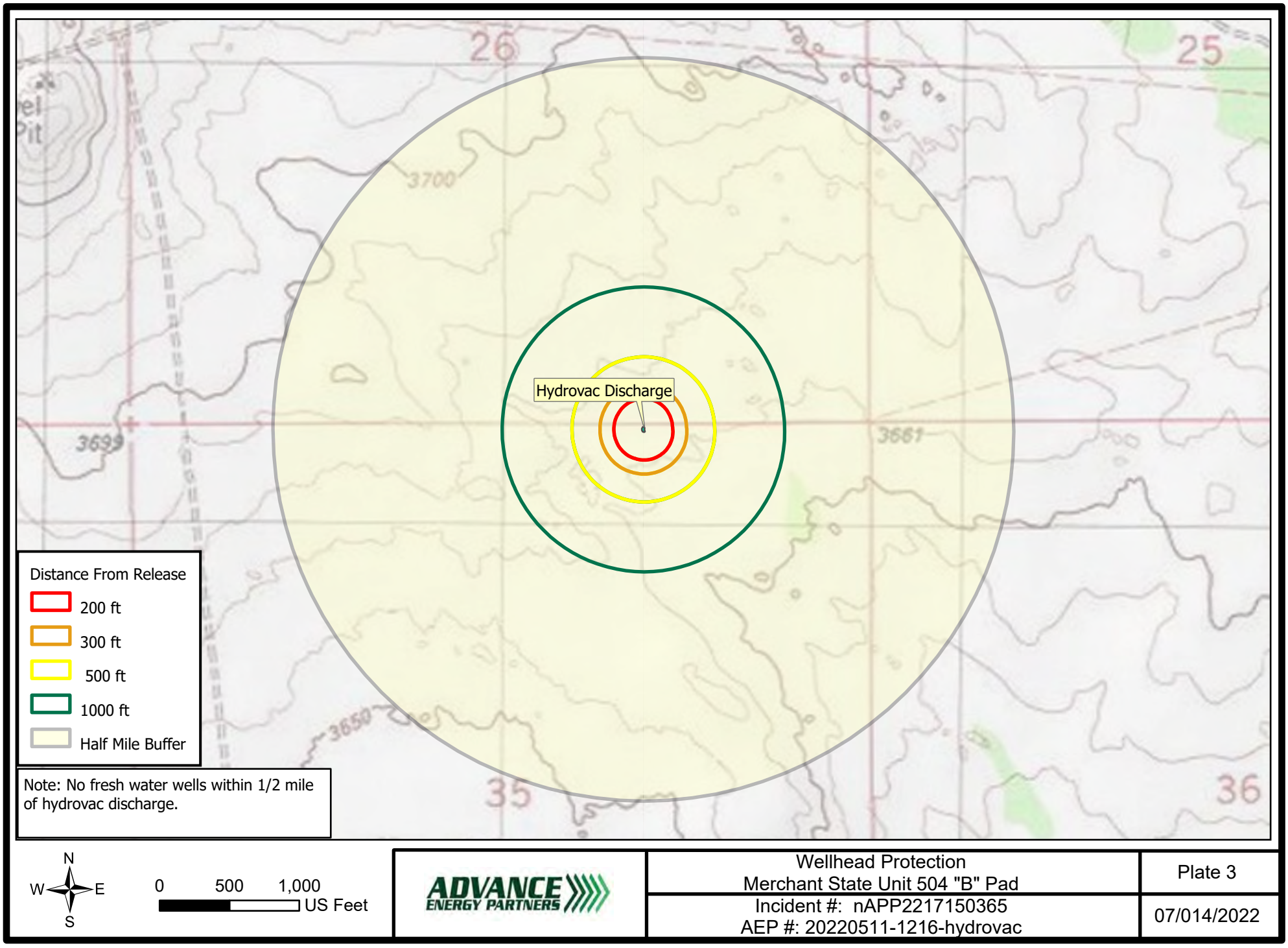
ADVANCE ENERGY PARTNERS

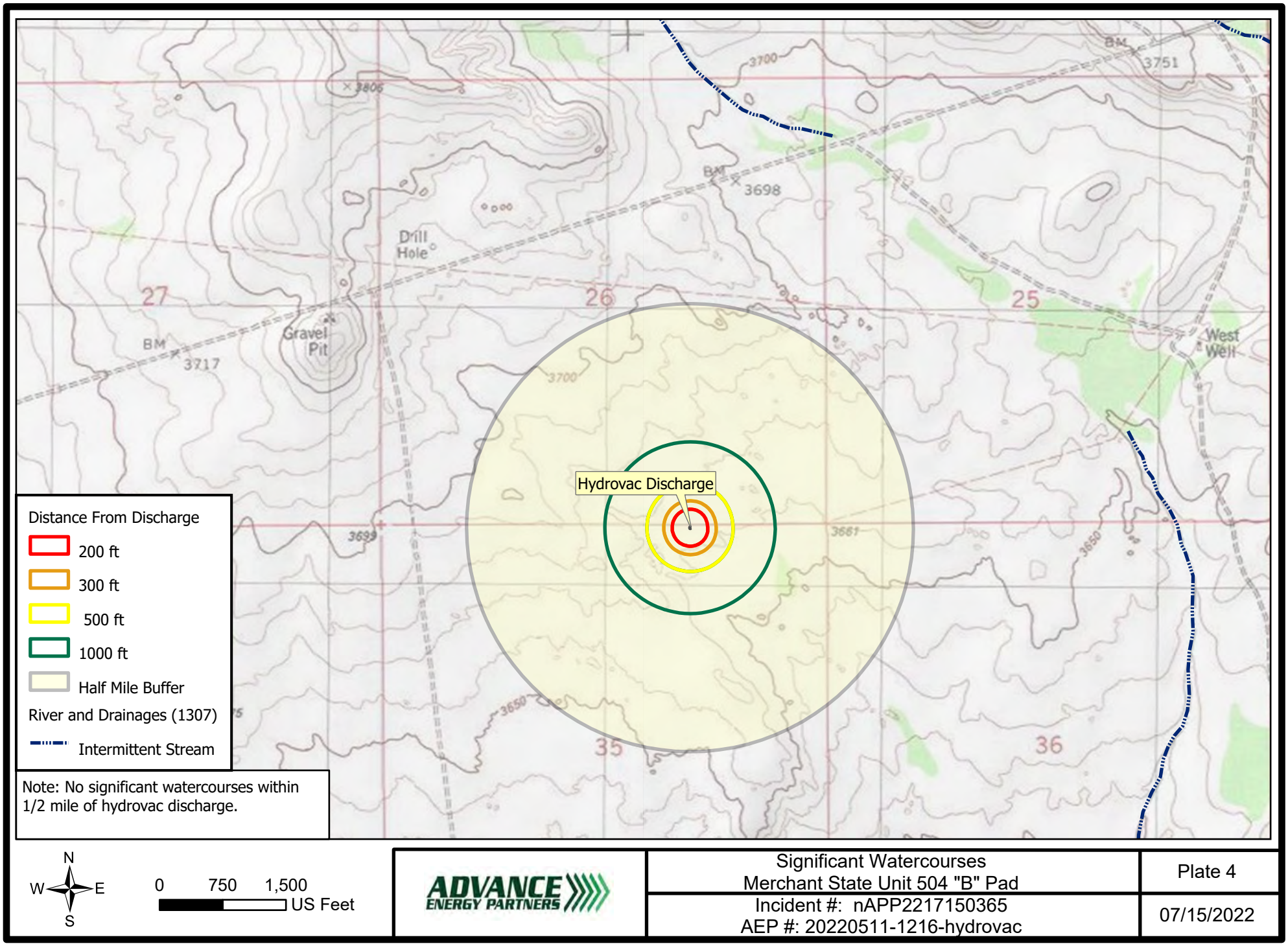
Site Map Merchant State Unit 504 "B" Pad	Plate 1
Incident #: nAPP2217150365 AEP #: 20220511-1216-hydrovac	07/14/2022

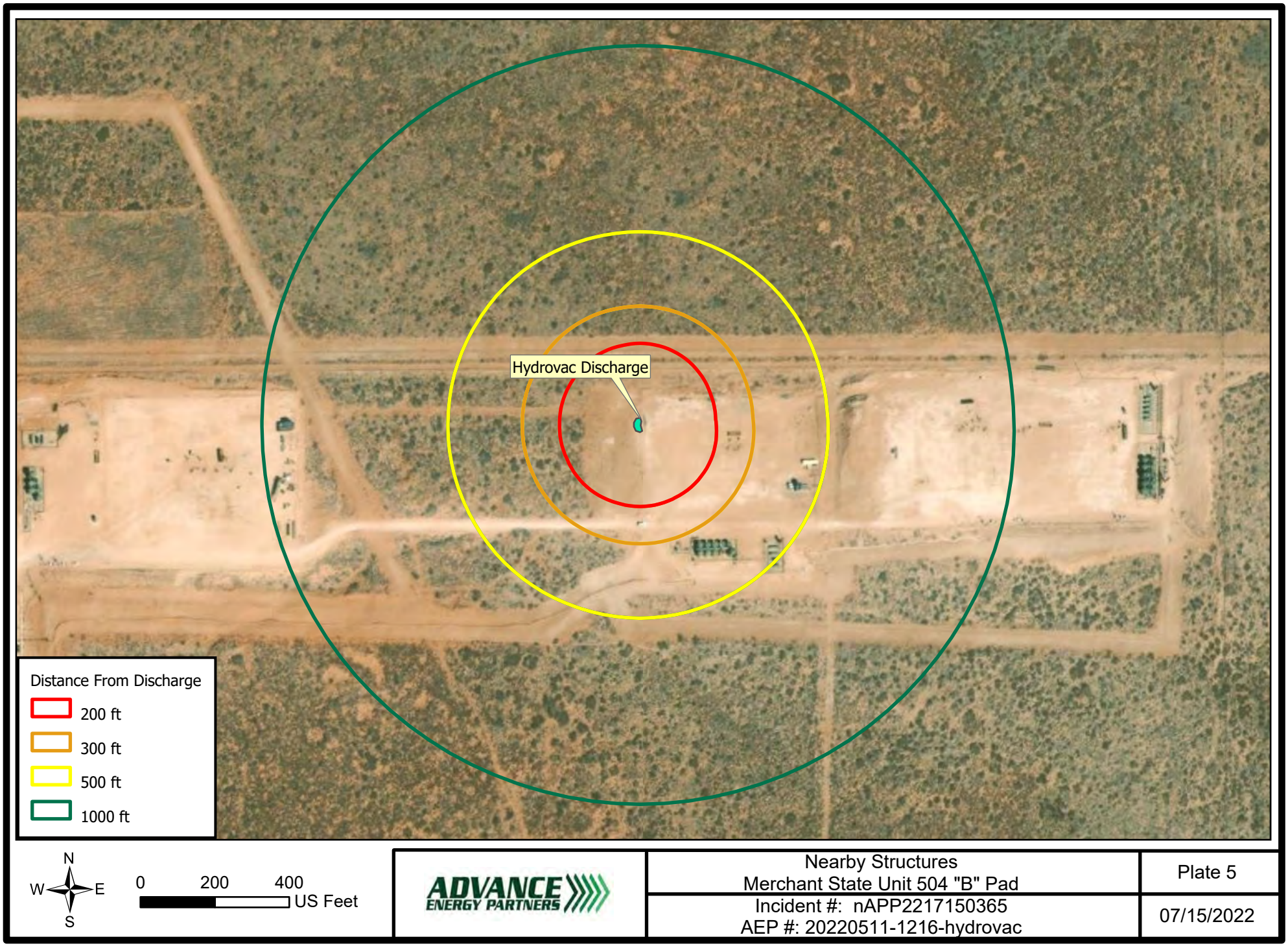


ADVANCE ENERGY PARTNERS

Depth to Water Merchant State Unit 504 "B" Pad	Plate 2
Incident #: nAPP2217150365 AEP #: 20220511-1216-hydrovac	07/14/2022

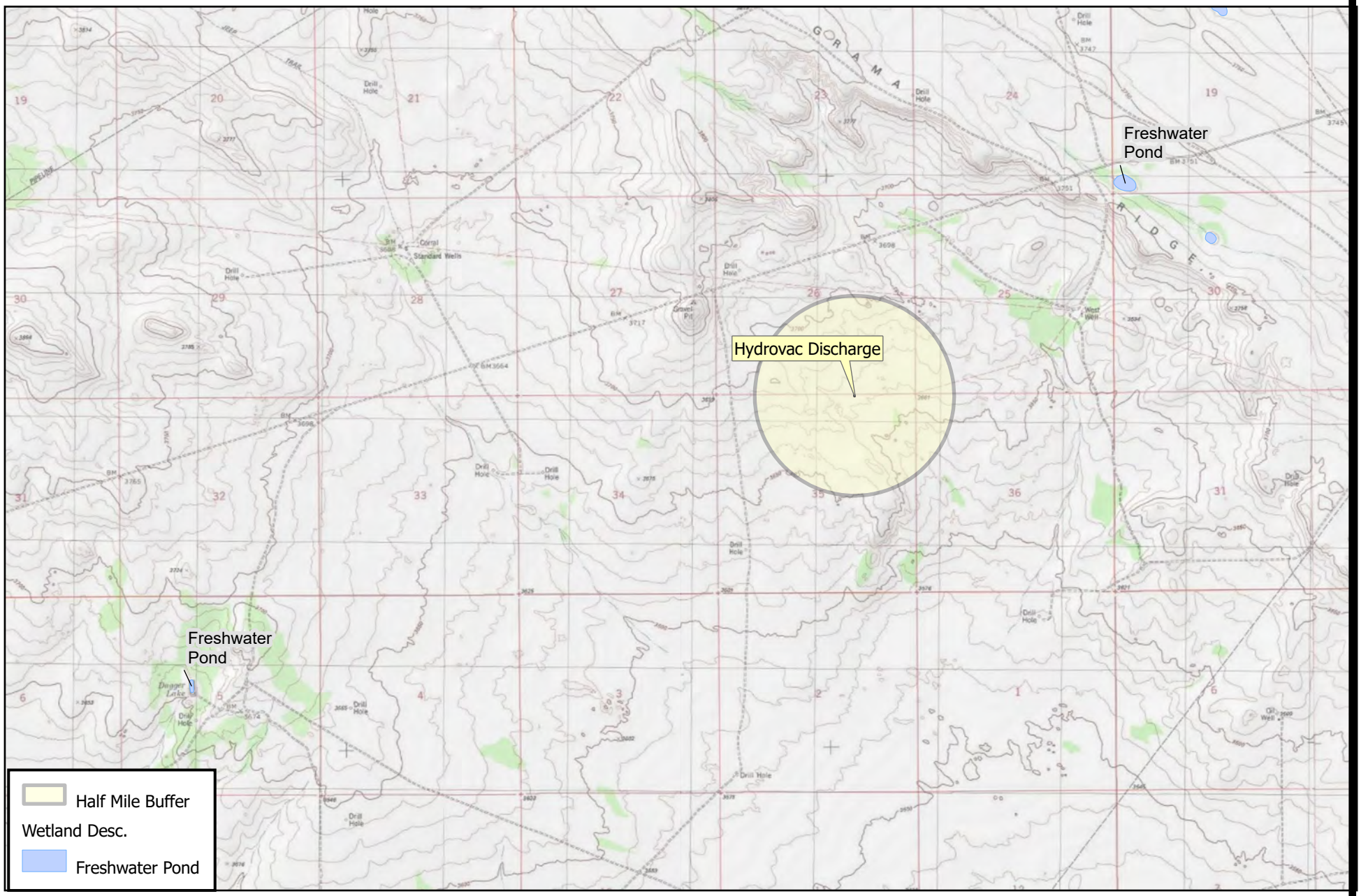

26
25
3700
3699
3661
3650
35
36
Hydrovac Discharge
Distance From Release
200 ft
300 ft
500 ft
1000 ft
Half Mile Buffer
Note: No fresh water wells within 1/2 mile of hydrovac discharge.
N
W
E
S
0
500
1,000
US Feet
ADVANCE ENERGY PARTNERS
Wellhead Protection
Merchant State Unit 504 "B" Pad
Incident #: nAPP2217150365
AEP #: 20220511-1216-hydrovac
Plate 3
07/014/2022


Hydrovac Discharge
Distance From Discharge
200 ft
300 ft
500 ft
1000 ft
Half Mile Buffer
River and Drainages (1307)
Intermittent Stream
Note: No significant watercourses within 1/2 mile of hydrovac discharge.
Drill Hole
Gravel Pit
West Well
BM 3717
BM 3698
BM 3751
3700
3699
3650
3661
27
26
25
35
36
N
W
E
S
0
750
1,500
US Feet
ADVANCE ENERGY PARTNERS
Significant Watercourses
Merchant State Unit 504 "B" Pad
Plate 4
Incident #: nAPP2217150365
AEP #: 20220511-1216-hydrovac
07/15/2022



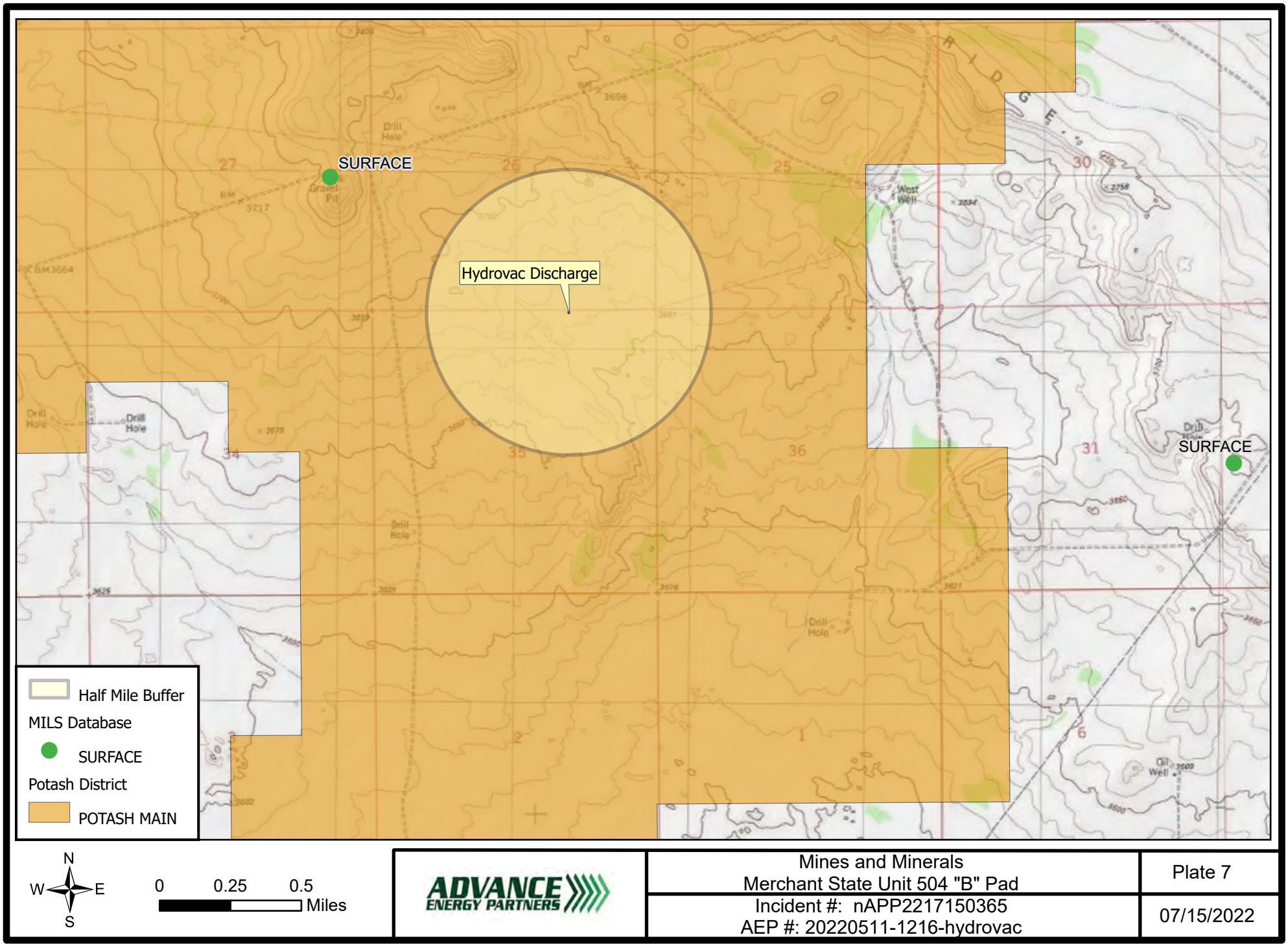
ADVANCE ENERGY PARTNERS

Nearby Structures Merchant State Unit 504 "B" Pad	Plate 5
Incident #: nAPP2217150365 AEP #: 20220511-1216-hydrovac	07/15/2022



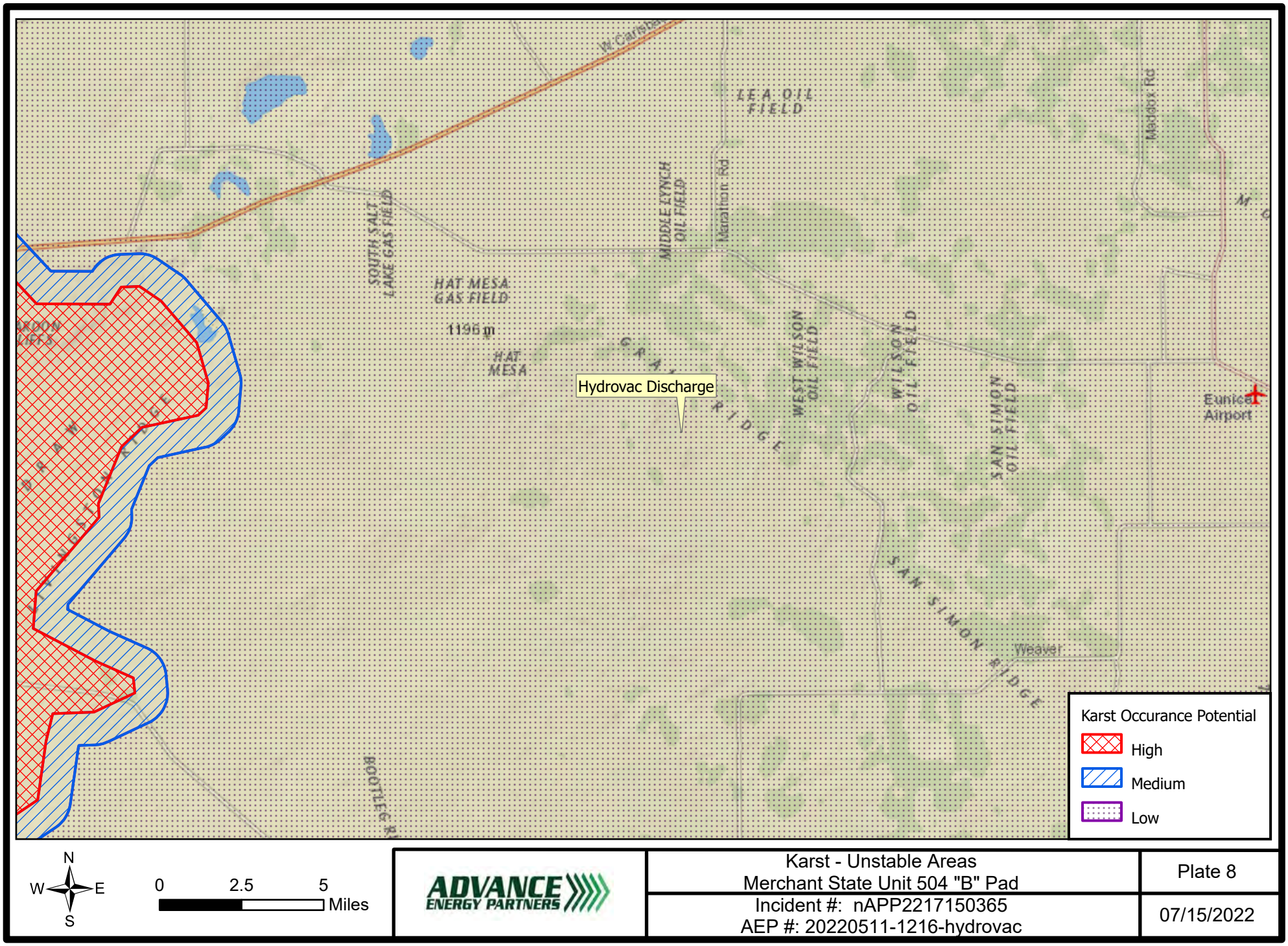
ADVANCE ENERGY PARTNERS

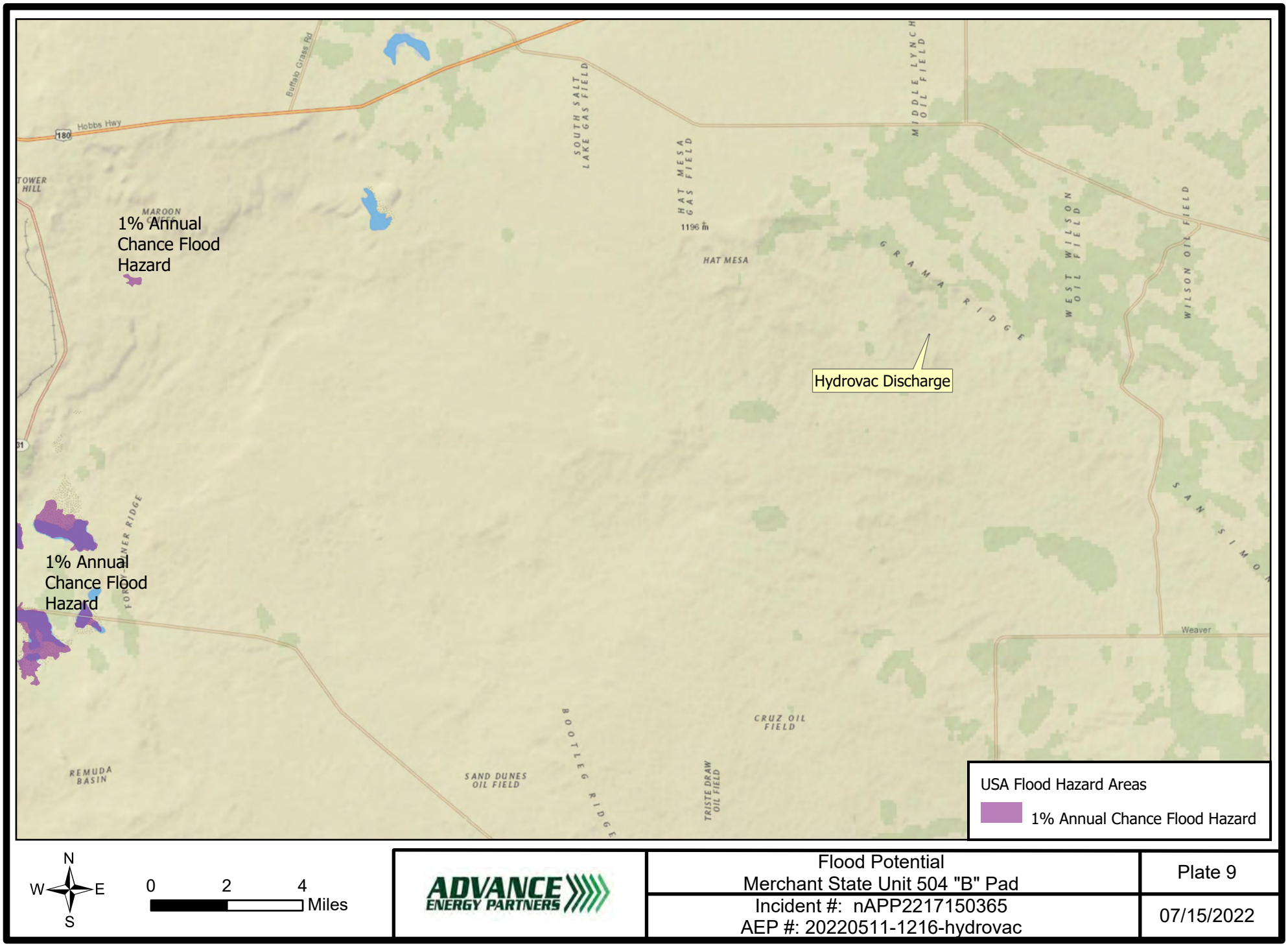
Wetlands Merchant State Unit 504 "B" Pad	Plate 6
Incident #: nAPP2217150365 AEP #: 20220511-1216-hydrovac	07/15/2022



ADVANCE ENERGY PARTNERS

Mines and Minerals Merchant State Unit 504 "B" Pad	Plate 7
Incident #: nAPP2217150365 AEP #: 20220511-1216-hydrovac	07/15/2022


LEA OIL FIELD
MIDDLE LYNCH OIL FIELD
SOUTH SALT LAKE GAS FIELD
HAT MESA GAS FIELD
1196 m
HAT MESA
Hydrovac Discharge
WEST WILSON OIL FIELD
WILSON OIL FIELD
SAN SIMON OIL FIELD
SAN SIMON RIDGE
Eunice Airport
Weaver
Maddox Rd
Karst Occurance Potential
High
Medium
Low
N
W
E
S
0
2.5
5
Miles
ADVANCE ENERGY PARTNERS
Karst - Unstable Areas
Merchant State Unit 504 "B" Pad
Incident #: nAPP2217150365
AEP #: 20220511-1216-hydrovac
Plate 8
07/15/2022

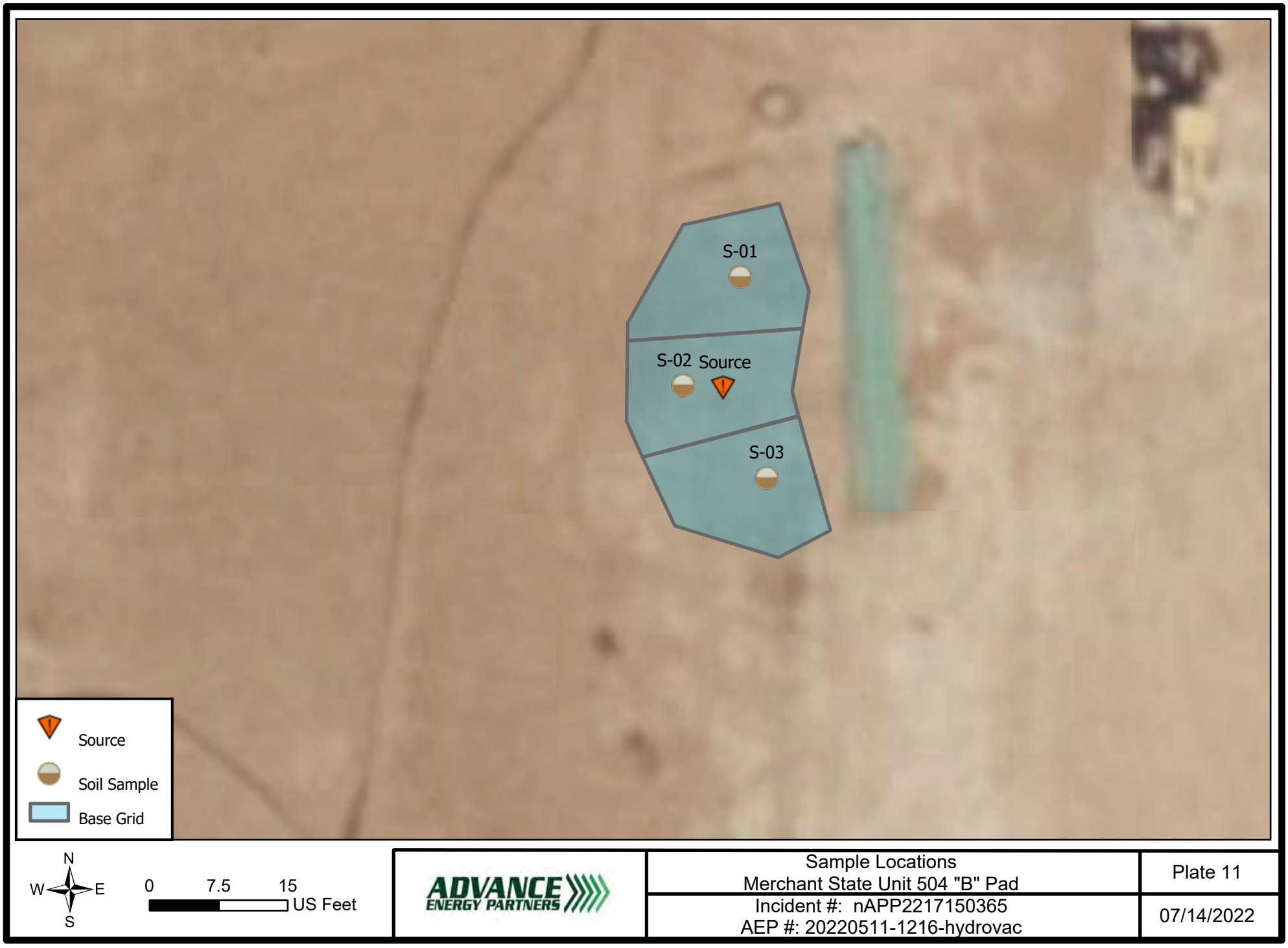


ADVANCE ENERGY PARTNERS

Flood Potential Merchant State Unit 504 "B" Pad	Plate 9
Incident #: nAPP2217150365 AEP #: 20220511-1216-hydrovac	07/15/2022

ADVANCE ENERGY PARTNERS

Base Grid Merchant State Unit 504 "B" Pad	Plate 10
Incident #: nAPP2217150365 AEP #: 20220511-1216-hydrovac	07/14/2022



ADVANCE ENERGY PARTNERS

Sample Locations Merchant State Unit 504 "B" Pad	Plate 11
Incident #: nAPP2217150365 AEP #: 20220511-1216-hydrovac	07/14/2022

Tables

Table A
Coordinates of Sample Points

Incident ID #: nAPP2217150365
Merchant State Unit 504 "B" Pad
20220511-1216-hydrovac

Sample ID	Type	Latitude	Longitude
Merchant B Pad (Source)	Source	32.4423094	-103.5397524
S-01	Surface	32.4423417	-103.5397462
S-02	Surface	32.4423091	-103.5397673
S-03	Surface	32.4422807	-103.5397388

July 20, 2022

Table B
Summary of Analytical

Incident ID: nAPP2217150365
Merchant State Unit 504 "B" Pad
20220511-1216-hydrovac

Sample ID	Date	Discrete Depth (Feet)	Top Depth (Feet)	Bottom Depth (Feet)	In Use (Yes/No)	Chloride (mg/kg)	GRO+DRO (mg/kg)	TPH Ext. (mg/kg)	Benzene (mg/kg)	BTEX (mg/kg)	Comments
NMOCD Closure Criteria											
0 - 4 feet & "not in-use"						600	--	100	10	50	
> 4 ft or "in-use"						20,000	1,000	2,500	10	50	
Merchant B	5/5/2022	Source			Yes	224	<20	<30	<0.05	<0.30	Characterization
S-01	5/20/2022	0			Yes	144	<91.6	<101.6	<0.05	<0.30	Confirmation
S-02	5/20/2022	0			Yes	112	<20	<30	<0.05	<0.30	Confirmation
S-03	5/20/2022	0			Yes	80	<20	<30	<0.05	<0.30	Confirmation

Appendix A

Well Logs

Atkins ENGINEERING ASSOCIATES INC.
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 2nd 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.

Sincerely,

Lucas Middleton

Enclosures: as noted above

RECEIVED OCD NOV - 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.)	WELL TAG ID NO.	OSE FILE NO(S).
POD1 (TW-1)	n/a	CP-1887

WELL OWNER NAME(S)	PHONE (OPTIONAL)
Advanced Energy Partners	832.672.4700

WELL OWNER MAILING ADDRESS	CITY	STATE	ZIP
11490 Westheimer Rd. Stuit 950	Houston	TX	77077

WELL LOCATION (FROM GPS)		DEGREES	MINUTES	SECONDS	
	LATITUDE	32	26	29.53	N
	LONGITUDE	103	32	14.57	W

* ACCURACY REQUIRED: ONE TENTH OF A SECOND
* DATUM REQUIRED: WGS 84

DESCRIPTION RELATING WELL LOCATION TO STREET ADDRESS AND COMMON LANDMARKS – PLSS (SECTION, TOWNSHJIP, RANGE) WHERE AVAILABLE

NE NE NE Sec. 35 T21S R33E

2. DRILLING & CASING INFORMATION

LICENSE NO.	NAME OF LICENSED DRILLER	NAME OF WELL DRILLING COMPANY
1249	Jackie D. Atkins	Atkins Engineering Associates, Inc.

DRILLING STARTED	DRILLING ENDED	DEPTH OF COMPLETED WELL (FT)	BORE HOLE DEPTH (FT)	DEPTH WATER FIRST ENCOUNTERED (FT)
10/07/2021	10/07/2021	temporary well material	103	n/a

COMPLETED WELL IS: ☐ ARTESIAN ☑ DRY HOLE ☐ SHALLOW (UNCONFINED) — STATIC WATER LEVEL IN COMPLETED WELL (FT): n/a

DRILLING FLUID: ☐ AIR ☐ MUD ADDITIVES – SPECIFY:

DRILLING METHOD: ☐ ROTARY ☐ HAMMER ☐ CABLE TOOL ☑ OTHER – SPECIFY: Hollow Stem Auger

DEPTH (feet bgl) FROM	DEPTH (feet bgl) TO	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)
0	103	±6.5	Boring- HSA	--	--	--	--

3. ANNULAR MATERIAL

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

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

4. HYDROGEOLOGIC LOG OF WELL

DEPTH (feet bgl) FROM	DEPTH (feet bgl) TO	THICKNESS (feet)	COLOR AND TYPE OF MATERIAL ENCOUNTERED - INCLUDE WATER-BEARING CAVITIES OR FRACTURE ZONES (attach supplemental sheets to fully describe all units)	WATER BEARING? (YES / NO)	ESTIMATED YIELD FOR WATER-BEARING ZONES (gpm)
0	19	19	Sand, Fine-grained, poorly graded, with Caliche ,, Tannish White	Y ✓ N	
19	29	10	Sand, Fine-grained, poorly graded, Brown	Y ✓ N	
29	103	74	Sand, Fine-grained, Poorly graded, with clay, Reddish Brown	Y ✓ N	
				Y N	
				Y N	
				Y N	
				Y N	
				Y N	
				Y N	
				Y N	
				Y N	
				Y N	
				Y N	
				Y N	
				Y N	
				Y N	
				Y N	
				Y N	
				Y N	
				Y N	
				Y N	

METHOD USED TO ESTIMATE YIELD OF WATER-BEARING STRATA:

☐ PUMP ☐ AIR LIFT ☐ BAILER ☐ OTHER – SPECIFY:

TOTAL ESTIMATED WELL YIELD (gpm): 0.00

5. TEST; RIG SUPERVISION

WELL TEST: TEST RESULTS - ATTACH A COPY OF DATA COLLECTED DURING WELL TESTING, INCLUDING DISCHARGE METHOD, START TIME, END TIME, AND A TABLE SHOWING DISCHARGE AND DRAWDOWN OVER THE TESTING PERIOD.

MISCELLANEOUS INFORMATION: Temporary well materials removed and the soil boring backfilled using drill cuttings from total depth to ten feet below ground surface, then hydrated bentonite chips from ten feet below ground surface to surface.

PRINT NAME(S) OF DRILL RIG SUPERVISOR(S) THAT PROVIDED ONSITE SUPERVISION OF WELL CONSTRUCTION OTHER THAN LICENSEE:

Shane Eldridge, Carmelo Trevino, Cameron Pruitt

6. SIGNATURE

THE UNDERSIGNED HEREBY CERTIFIES THAT, TO THE BEST OF HIS OR HER KNOWLEDGE AND BELIEF, THE FOREGOING IS A TRUE AND CORRECT RECORD OF THE ABOVE DESCRIBED HOLE AND THAT HE OR SHE WILL FILE THIS WELL RECORD WITH THE STATE ENGINEER AND THE PERMIT HOLDER WITHIN 30 DAYS AFTER COMPLETION OF WELL DRILLING:

Jack Atkins — Jackie D. Atkins — 10/27/2021

SIGNATURE OF DRILLER / PRINT SIGNEE NAME — DATE

FOR OSE INTERNAL USE — WR-20 WELL RECORD & LOG (Version 06/30/2017)

FILE NO.	POD NO.	TRN NO.	
LOCATION		WELL TAG ID NO.	PAGE 2 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

Document created by Lucas Middleton (lucas@atkinseng.com)
2021-10-29 - 3:56:13 PM GMT- IP address: 69.21.248.123

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

Adobe Sign

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):

RECEIVED OCD NOV 1 2021 PM 4:3

Version: September 8, 2009
Page 1 of 2

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:

Depth (ft bgl)	Plugging Material Used (include any additives used)	Volume of Material Placed (gallons)	Theoretical Volume of Borehole/ Casing (gallons)	Placement Method (tremie pipe, other)	Comments ("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	

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.

Jack Atkins

Signature of Well Driller

10/27/2021

Date

Version: September 8, 2009
Page 2 of 2

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

Document created by Lucas Middleton (lucas@atkinseng.com)
2021-10-29 - 3:56:37 PM GMT- IP address: 69.21.248.123

Document emailed to Jack Atkins (jack@atkinseng.com) for signature
2021-10-29 - 3:57:47 PM GMT

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

CASE DIT NOV 1 2021 PM4:43

Adobe Sign

Appendix B

Certificate of Analysis

CARDINAL Laboratories

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

May 11, 2022

ANDREW PARKER

ADVANCE ENERGY PARTNERS

11490 WESTHEIMER ROAD, STE. 950

HOUSTON, TX 77077

RE: MSU 505H

Enclosed are the results of analyses for samples received by the laboratory on 05/05/22 15:19.

Cardinal Laboratories is accredited through Texas NELAP under certificate number T104704398-21-14. 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.

Cardinal Laboratories is accreditated 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,

Celey D. Keene

Celey D. Keene

Lab Director/Quality Manager

CARDINAL Laboratories

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:	05/05/2022	Sampling Date:	05/05/2022
Reported:	05/11/2022	Sampling Type:	Soil
Project Name:	MSU 505H	Sampling Condition:	Cool & Intact
Project Number:	HYDROVAC	Sample Received By:	Shalyn Rodriguez
Project Location:	NONE GIVEN		

Sample ID: MERCHANT B (H221903-01)

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	05/09/2022	ND	1.94	97.0	2.00	4.72	
Toluene*	<0.050	0.050	05/09/2022	ND	1.92	96.1	2.00	4.69	
Ethylbenzene*	<0.050	0.050	05/09/2022	ND	1.82	91.2	2.00	4.06	
Total Xylenes*	<0.150	0.150	05/09/2022	ND	5.67	94.4	6.00	4.24	
Total BTEX	<0.300	0.300	05/09/2022	ND					

Surrogate: 4-Bromofluorobenzene (PID *101 %* *69.9-140*

Chloride, SM4500Cl-B mg/kg Analyzed By: GM

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**224**	16.0	05/09/2022	ND	416	104	400	3.77	

TPH 8015M mg/kg Analyzed By: MS S-04

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	05/11/2022	ND	213	107	200	10.3	
DRO >C10-C28*	<10.0	10.0	05/11/2022	ND	196	98.1	200	14.5	
EXT DRO >C28-C36	<10.0	10.0	05/11/2022	ND					

Surrogate: 1-Chlorooctane *137 %* *66.9-136*

Surrogate: 1-Chlorooctadecane *155 %* *59.5-142*

Cardinal Laboratories *=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

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

Notes and Definitions

S-04	The surrogate recovery for this sample is outside of established control limits due to a sample matrix effect.
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

Cardinal Laboratories *=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

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

Company Name:	Advance Energy Partners	**BILL TO**	
Project Manager:	Andrew Parker	P.O. #:	
Address:	On-File	Company:	AEP
City:	State: Zip:	Attn:	Send to
Phone #:	Fax #:	Address:	aparker@
Project #:	Project Owner:	City:	ameredev.com
Project Name:		State:	Zip:
Project Location:	MSH 505 H Hydrovac	Phone #:	
Sampler Name:	Jacob Saenz	Fax #:	

FOR LAB USE ONLY				MATRIX						PRESERV.			SAMPLING		ANALYSIS REQUEST											
Lab I.D.	Sample I.D.	(G)RAB OR (C)OMP.	# CONTAINERS	GROUNDWATER	WASTEWATER	SOIL	OIL	SLUDGE	OTHER :	ACID/BASE:	ICE / COOL	OTHER :	DATE	TIME	CHLORIDE	TPH (GRO+DRO+MRO)	BENZENE, BTEX									
H221903 1	Merchant B	C	1			X					X		5/5/22	1:15pm	X	X	X									

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising whether based in contract or tort, shall be limited to the amount paid by the client for the analyses. All claims including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within 30 days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise.

Relinquished By:	Date: 5.5.22	Received By:	Phone Result:	☐ Yes ☐ No	Add'l Phone #:
Relinquished By:	Time: 1519	Received By:	Fax Result:	☐ Yes ☐ No	Add'l Fax #:
	Date:		REMARKS:		
	Time:				
Delivered By: (Circle One) Sampler - UPS - Bus - Other:	5.3°C JC-0.5° 4.8°C #113	Sample Condition Cool: ☐ Yes ☐ No Intact: ☐ Yes ☐ No	CHECKED BY: (Initials)		

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

Received by OCD: 7/25/2022 11:07:56 AM

Released to Imaging: 7/27/2022 9:01:56 AM

CARDINAL Laboratories

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

May 27, 2022

ANDREW PARKER

ADVANCE ENERGY PARTNERS

11490 WESTHEIMER ROAD, STE. 950

HOUSTON, TX 77077

RE: MSU PAD B

Enclosed are the results of analyses for samples received by the laboratory on 05/24/22 9:20.

Cardinal Laboratories is accredited through Texas NELAP under certificate number T104704398-21-14. 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.

Cardinal Laboratories is accreditated 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,

Celey D. Keene

Celey D. Keene

Lab Director/Quality Manager

CARDINAL Laboratories

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:	05/24/2022	Sampling Date:	05/20/2022
Reported:	05/27/2022	Sampling Type:	Soil
Project Name:	MSU PAD B	Sampling Condition:	Cool & Intact
Project Number:	20220504-0657- CONSTRUCTION	Sample Received By:	Tamara Oldaker
Project Location:	NONE GIVEN		

Sample ID: S - 01 0' (H222195-01)

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	05/27/2022	ND	2.12	106	2.00	0.184	
Toluene*	<0.050	0.050	05/27/2022	ND	2.09	104	2.00	0.600	
Ethylbenzene*	<0.050	0.050	05/27/2022	ND	2.05	102	2.00	0.608	
Total Xylenes*	<0.150	0.150	05/27/2022	ND	6.36	106	6.00	1.12	
Total BTEX	<0.300	0.300	05/27/2022	ND					

Surrogate: 4-Bromofluorobenzene (PID *102 %* *69.9-140*

Chloride, SM4500Cl-B mg/kg Analyzed By: AC

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**144**	16.0	05/26/2022	ND	448	112	400	3.64	

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	05/26/2022	ND	187	93.7	200	0.104	
DRO >C10-C28*	**81.6**	10.0	05/26/2022	ND	187	93.6	200	0.966	
EXT DRO >C28-C36	<10.0	10.0	05/26/2022	ND					

Surrogate: 1-Chlorooctane *110 %* *66.9-136*

Surrogate: 1-Chlorooctadecane *134 %* *59.5-142*

Cardinal Laboratories *=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

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:	05/24/2022	Sampling Date:	05/20/2022
Reported:	05/27/2022	Sampling Type:	Soil
Project Name:	MSU PAD B	Sampling Condition:	Cool & Intact
Project Number:	20220504-0657- CONSTRUCTION	Sample Received By:	Tamara Oldaker
Project Location:	NONE GIVEN		

Sample ID: S - 02 0' (H222195-02)

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	05/27/2022	ND	2.12	106	2.00	0.184	
Toluene*	<0.050	0.050	05/27/2022	ND	2.09	104	2.00	0.600	
Ethylbenzene*	<0.050	0.050	05/27/2022	ND	2.05	102	2.00	0.608	
Total Xylenes*	<0.150	0.150	05/27/2022	ND	6.36	106	6.00	1.12	
Total BTEX	<0.300	0.300	05/27/2022	ND					

Surrogate: 4-Bromofluorobenzene (PID *102 %* *69.9-140*

Chloride, SM4500Cl-B mg/kg Analyzed By: AC

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**112**	16.0	05/26/2022	ND	448	112	400	3.64	

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	05/26/2022	ND	187	93.7	200	0.104	
DRO >C10-C28*	<10.0	10.0	05/26/2022	ND	187	93.6	200	0.966	
EXT DRO >C28-C36	<10.0	10.0	05/26/2022	ND					

Surrogate: 1-Chlorooctane *110 %* *66.9-136*

Surrogate: 1-Chlorooctadecane *122 %* *59.5-142*

Cardinal Laboratories *=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

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:	05/24/2022	Sampling Date:	05/20/2022
Reported:	05/27/2022	Sampling Type:	Soil
Project Name:	MSU PAD B	Sampling Condition:	Cool & Intact
Project Number:	20220504-0657- CONSTRUCTION	Sample Received By:	Tamara Oldaker
Project Location:	NONE GIVEN		

Sample ID: S - 03 0' (H222195-03)

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	05/27/2022	ND	2.12	106	2.00	0.184	
Toluene*	<0.050	0.050	05/27/2022	ND	2.09	104	2.00	0.600	
Ethylbenzene*	<0.050	0.050	05/27/2022	ND	2.05	102	2.00	0.608	
Total Xylenes*	<0.150	0.150	05/27/2022	ND	6.36	106	6.00	1.12	
Total BTEX	<0.300	0.300	05/27/2022	ND					

Surrogate: 4-Bromofluorobenzene (PID *102 %* *69.9-140*

Chloride, SM4500Cl-B mg/kg Analyzed By: AC

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**80.0**	16.0	05/26/2022	ND	448	112	400	3.64	

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	05/26/2022	ND	187	93.7	200	0.104	
DRO >C10-C28*	<10.0	10.0	05/26/2022	ND	187	93.6	200	0.966	
EXT DRO >C28-C36	<10.0	10.0	05/26/2022	ND					

Surrogate: 1-Chlorooctane *101 %* *66.9-136*

Surrogate: 1-Chlorooctadecane *112 %* *59.5-142*

Cardinal Laboratories *=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

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

Notes and Definitions

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

Cardinal Laboratories *=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

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

Company Name:	Advance Energy Partners
Project Manager:	Andrew Parker
Address:	On-File
City:	State: Zip:
Phone #:	Fax #:
Project #:	Project Owner:
Project Name:	20220504-0657 - ~~conta~~ Construction
Project Location:	MS4 Pad B
Sampler Name:	Jacob Saenz

BILL TO

P.O. #:	20220504-0657-Construct
Company:	AEP
Attn:	Send to
Address:	aparker@ameredev.com
City:	
State:	Zip:
Phone #:	
Fax #:	

ANALYSIS REQUEST

FOR LAB USE ONLY Lab I.D.	Sample I.D.	(G)RAB OR (C)OMP.	# CONTAINERS	MATRIX: GROUNDWATER	WASTEWATER	SOIL	OIL	SLUDGE	OTHER :	PRESERV.: ACID/BASE:	ICE / COOL	OTHER :	SAMPLING: DATE	TIME	CHLORIDE	TPH (GRO+DRO+MRO)	BENZENE, BTEX
H222195	T.O. 5/24/22																
1	S-01	OFT	C	1			X				X		5/20/22	9:50am	X	X	X
2	S-02	OFT	C	1			X				X		5/20/22	10am	X	X	X
3	S-03	OFT	C	1			X				X		5/20/22	10:20am	X	X	X

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising whether based in contract or tort, shall be limited to the amount paid by the client for the analyses. All claims including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within 30 days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise.

Relinquished By:	Date: 5.24.22	Received By:	
Relinquished By:	Time: 0920	Received By:	
	Date:		
	Time:		

Delivered By: (Circle One) 2.5c C-0.5c
Sampler - UPS - Bus - Other: 2.0c #113

Sample Condition: Cool: Yes / No; Intact: Yes / No

CHECKED BY: (Initials) AD

Phone Result: ☐ Yes ☐ No Add'l Phone #:
Fax Result: ☐ Yes ☐ No Add'l Fax #:
REMARKS:

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

Received by OCD: 7/25/2022 11:07:56 AM

Released to Imaging: 7/27/2022 9:01:56 AM

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 128378

CONDITIONS

Operator: ADVANCE ENERGY PARTNERS HAT MESA, LLC 11490 Westheimer Rd., Ste 950 Houston, TX 77077	OGRID: 372417
	Action Number: 128378
	Action Type: [C-141] Release Corrective Action (C-141)

CONDITIONS

Created By	Condition	Condition Date
jnobui	Closure Approved.	7/27/2022