

STATE OF NEW MEXICO
DEPARTMENT OF ENERGY, MINERALS AND NATURAL RESOURCES
OIL CONSERVATION DIVISION

APPLICATION OF ADVANCE ENERGY
PARTNERS HAT MESA, LLC TO AMEND
ORDER NOS. R-21851 AND R-21853 TO
CONSOLIDATE HORIZONTAL SPACING
UNITS, REVISE WELL LOCATIONS, AND
INCLUDE ADDITIONAL WELLS, LEA
COUNTY, NEW MEXICO.

CASE NO. 22324
ORDER NOS. R-21851, R-21853
(Re-Open)

EXHIBIT INDEX

Compulsory Pooling Checklist

Exhibit A Self-Affirmed Statement of Paul Burdick

- A-1 Application & Proposed Notice of Hearing
- A-2 C-102(s)
- A-3 Plat of Tracts, Ownership & Pooled Parties, Unit Recapitulation
- A-4 Sample Well Proposal Letter & AFE(s)
- A-5 Summary of Communications
- A-6 Hearing Notice Letter and Return Receipts
- A-7 Affidavit of Publication

Exhibit B Self-Affirmed Statement of Edward Caamano

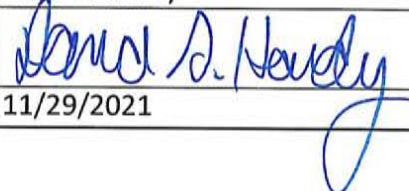
- B-1 Location Map
- B-2 Structure Map
- B-3 Cross Section

COMPULSORY POOLING APPLICATION CHECKLIST

ALL INFORMATION IN THE APPLICATION MUST BE SUPPORTED BY SIGNED AFFIDAVITS

Case No.:	22324
Hearing Date:	12/2/2021
Applicant	Advance Energy Partners Hat Mesa, LLC
Designated Operator & OGRID	OGRID # 372417
Applicant's Counsel	Hinkle Shanor LLP
Case Title	Application of Advance Energy Partners Hat Mesa, LLC to Amend Order Nos. R-21851 and R-21853 to Consolidate Horizontal Spacing Units, Revise Well Locations, and Include Additional Wells, Lea County, New Mexico
Entries of Appearance/Intervenors	
Well Family	Margarita
Formation/Pool	
Formation Name(s) or Vertical Extent	Bone Spring
Primary Product (Oil or Gas)	Oil
Pooling this vertical extent	Bone Spring
Pool Name and Pool Code	WC-025 G-08 S213304D; Bone Spring pool (Pool Code 97895)
Well Location Setback Rules	Statewide
Spacing Unit Size	720-acre
Spacing Unit	
Type (Horizontal/Vertical)	Horizontal
Size (Acres)	720-acre
Building Blocks	quarter-quarter
Orientation	Standup
Description: TRS/County	S/2NE/4 and SE/4 of Section 13, E/2 of Section 24, and NE/4 of Section 25, Township 21 South, Range 32 East in Lea County, New Mexico
Standard Horizontal Well Spacing Unit (Y/N), If No, describe	Yes
Other Situations	
Depth Severance: Y/N. If yes, description	No
Proximity Tracts: If yes, description	The completed interval for the proposed Margarita Federal Com 13 #6H well will be within 330' of the quarter-quarter line separating the W/2SE/4 from the E/2SE/4 and the SE/4NE/4 from the SW/4NE/4 of Section 13, the E/2E/2 from the W/2E/2 of Section 24, and the W/2NE/4 from the E/2NE/4 of Section 25 to allow the inclusion of this acreage in a 720-acre, more or less, standard horizontal spacing unit.
Proximity Defining Well: if yes, description	Margarita Federal Com 13 #6H
Well(s)	
Name & API (if assigned), surface and bottom hole location, footages, completion target, orientation, completion status (standard or non-standard)	Add wells as needed
Well #1	Margarita Federal Com 13 #5H (API # pending) SHL: S13-T21S-R32E 1399 FNL, 2014 FEL (Unit G) BHL: S25-T21S-R32E 2540 FNL, 2310 FEL (Unit G) Completion Target: Bone Spring TVD: Approx. 10900'

Well #2	Margarita Federal Com 13 #6H (API # pending) SHL: S13-T21S-R32E 1399 FNL, 1882 FEL (Unit G) BHL: S25-T21S-R32E 2540 FNL, 1430 FEL (Unit G) Completion Target: Bone Spring TVD: Approx. 9900'
Well #3	Margarita Federal Com 13 #7H (API # pending) SHL: S13-T21S-R32E 460 FNL, 774 FEL (Unit A) BHL: S25-T21S-R32E 2540 FNL, 1430 FEL (Unit G) Completion Target: Bone Spring TVD: Approx. 11250'
Well #4	Margarita Federal Com 13 #8H (API # pending) SHL: S13-T21S-R32E 460 FNL, 642 FEL (Unit A) BHL: S25-T21S-R32E 2540 FNL, 550 FEL (Unit H) Completion Target: Bone Spring TVD: Approx. 10900'
Well #5	Margarita Federal Com 13 #11H (API # pending) SHL: S13-T21S-R32E 1399 FNL, 1948 FEL (Unit G) BHL: S25-T21S-R32E 2540 FNL, 2310 FEL (Unit G) Completion Target: Bone Spring TVD: Approx. 10200'
Well #6	Margarita Federal Com 13 #12H (API # pending) SHL: S13-T21S-R32E 460 FNL, 708 FEL (Unit A) BHL: S25-T21S-R32E 2540 FNL, 550 FEL (Unit H) Completion Target: Bone Spring TVD: Approx. 10200'
Well #7	Margarita Federal Com 13 #15H (API # pending) SHL: S13-T21S-R32E 1399 FNL, 2047 FEL (Unit G) BHL: S25-T21S-R32E 2540 FNL, 2310 FEL (Unit G) Completion Target: Bone Spring TVD: Approx. 11450'
Well #8	Margarita Federal Com 13 #16H (API # pending) SHL: S13-T21S-R32E 460 FNL, 807 FEL (Unit A) BHL: S25-T21S-R32E 2540 FNL, 1430 FEL (Unit G) Completion Target: Bone Spring TVD: Approx. 11700'
Well #9	Margarita Federal Com 13 #19H (API # pending) SHL: S13-T21S-R32E 1399 FNL, 1915 FEL (Unit G) BHL: S25-T21S-R32E 2540 FNL, 1430 FEL (Unit G) Completion Target: Bone Spring TVD: Approx. 10520'
Well #10	Margarita Federal Com 13 #20H (API # pending) SHL: S13-T21S-R32E 460 FNL, 675 FEL (Unit A) BHL: S25-T21S-R32E 2540 FNL, 550 FEL (Unit H) Completion Target: Bone Spring TVD: Approx. 11450'
Horizontal Well First and Last Take Points	Exhibit A-2
Completion Target (Formation, TVD and MD)	Exhibit A-4
AFE Capex and Operating Costs	
Drilling Supervision/Month \$	8,000
Production Supervision/Month \$	800
Justification for Supervision Costs	Exhibit A
Requested Risk Charge	200%
Notice of Hearing	
Proposed Notice of Hearing	Exhibit A-1
Proof of Mailed Notice of Hearing (20 days before hearing)	Exhibit A-6

Proof of Published Notice of Hearing (10 days before hearing)	Exhibit A-7
Ownership Determination	
Land Ownership Schematic of Spacing Unit	Exhibit A-3
Tract List (including lease numbers & owners)	Exhibit A-3
Pooled Parties (including ownership type)	Exhibit A-3
Unlocatable Parties to be Pooled	Exhibit A-3
Ownership Depth Severance	N/A
Joinder	
Sample Copy of Proposal Letter	Exhibit A-4
List of Interest Owners (ie Exhibit A of JOA)	Exhibit A-3
Chronology of Contact with Non-Joined Working Interests	Exhibit A-5
Overhead Rates In Proposal Letter	N/A
Cost Estimate to Drill and Complete	Exhibit A-4
Cost Estimate to Equip Well	Exhibit A-4
Cost Estimate for Production Facilities	Exhibit A-4
Geology	
Summary (including special considerations)	Exhibit B
Spacing Unit Schematic	Exhibit B-1
Gunbarrel/Lateral Trajectory Schematic	N/A
Well Orientation (with rationale)	Exhibit B
Target Formation	Exhibit B
HSU Cross Section	Exhibit B-3
Depth Severance Discussion	N/A
Forms, Figures and Tables	
C-102	Exhibit A-2
Tracts	Exhibit A-3
Summary of Interests, Unit Recapitulation (Tracts)	Exhibit A-3
General Location Map (including basin)	Exhibit B-1
Well Bore Location Map	Exhibit B-1
Structure Contour Map - Subsea Depth	Exhibit B-2
Cross Section Location Map (including wells)	Exhibit B-2
Cross Section (including Landing Zone)	Exhibit B-3
Additional Information	
CERTIFICATION: I hereby certify that the information provided in this checklist is complete and accurate.	
Printed Name (Attorney or Party Representative):	Dana S. Hardy
Signed Name (Attorney or Party Representative):	
Date:	11/29/2021

STATE OF NEW MEXICO
DEPARTMENT OF ENERGY, MINERALS AND NATURAL RESOURCES
OIL CONSERVATION DIVISION

APPLICATION OF ADVANCE ENERGY
PARTNERS HAT MESA, LLC TO AMEND
ORDER NOS. R-21851 AND R-21853 TO
CONSOLIDATE HORIZONTAL SPACING
UNITS, REVISE WELL LOCATIONS, AND
INCLUDE ADDITIONAL WELLS, LEA
COUNTY, NEW MEXICO.

CASE NO. 22324
ORDER NOS. R-21851, R-21853
(Re-Open)

SELF-AFFIRMED STATEMENT
OF PAUL BURDICK

1. I am a Land Advisor at Advance Energy Partners Hat Mesa, LLC (“Advance”) and am over 18 years of age. I have personal knowledge of the matters addressed herein and am competent to provide this Self-Affirmed Statement. I have previously testified before the New Mexico Oil Conservation Division (“Division”) and my qualifications as an expert in petroleum land matters were accepted and made a matter of record.

2. I am familiar with the application in the above-referenced case and the land matters involved. Copies of the application and proposed hearing notice are attached hereto as **Exhibit A-1**.

3. None of the parties proposed to be pooled in this case indicated opposition to this matter proceeding by affidavit, therefore I do not expect any opposition at hearing.

4. Advance seeks to (1) amend the locations of the wells approved under Order Nos. R-21851 and R-21853 (“Orders”); (2) consolidate the adjacent horizontal spacing units approved under the Orders into a 720-acre, more or less, standard horizontal spacing unit (“Unit”) within the Bone Spring formation comprised of the S/2NE/4 and SE/4 of Section 13, E/2 of Section 24,



and NE/4 of Section 25, Township 21 South, Range 32 East in Lea County, New Mexico; and (3) include the Margarita Federal Com 13 #19H and #20H wells in the Unit.

5. On September 22, 2021, the Division issued Order No. R-21851 in Case No. 22105 and Order No. R-21853 in Case No. 22107.

6. Order No. R-21851 pooled all uncommitted mineral interests in the Bone Spring formation underlying a 360-acre, more or less, standard horizontal spacing unit comprised of the SE/4NE/4 and E/2SE/4 of Section 13, E/2 E/2 of Section 24, and E/2 NE/4 of Section 25, Township 21 South, Range 32 East in Lea County, New Mexico and dedicated the unit to the Margarita Federal Com #7H, #8H, #12H, and #16H wells.

7. Order No. R-21853 pooled all uncommitted mineral interests in the Bone Spring formation underlying a 360-acre, more or less, standard horizontal spacing unit comprised of the SW/4NE/4 and W/2SE/4 of Section 13, W/2E/2 of Section 24, and W/2NE/4 of Section 25, Township 21 South, Range 32 East in Lea County, New Mexico and dedicated the unit to the Margarita Federal Com #15H, #5H, #6H, and #11H wells.

8. The Orders designated Advance as the operator of the units.

9. Subsequent to the entry of the Orders, Advance revised the proposed locations of the wells approved under the Orders and intends to include the Margarita Federal Com 13 #19H and #20H wells in its development plan. Accordingly, Applicant intends to dedicate the Unit to the following wells (“Wells”):

- **Margarita Federal Com 13 #5H, #6H, #11H, #15H and #19H** wells to be horizontally drilled from a surface location in the SW/4NE/4 (Unit G) of Section 13 to a bottom hole location in the SW/4NE/4 (Unit G) of Section 25;

- **Margarita Federal Com 13 #7H and #16H** wells to be horizontally drilled from a surface location in the NE/4NE/4 (Unit A) of Section 13 to a bottom hole location in the SW/4NE/4 (Unit G) of Section 25; and
- **Margarita Federal Com 13 #8H, #12 and #20** wells to be horizontally drilled from a surface location in the NE/4NE/4 (Unit A) of Section 13 to a bottom hole location in the SE/4NE/4 (Unit H) of Section 25.

10. The completed intervals of the Wells will be orthodox.

11. The completed interval for the proposed **Margarita Federal Com 13 #6H** well will be within 330' of the quarter-quarter line separating the W/2SE/4 from the E/2SE/4 and the SE/4NE/4 from the SW/4NE/4 of Section 13, the E/2E/2 from the W/2E/2 of Section 24, and the W/2NE/4 from the E/2NE/4 of Section 25 to allow the inclusion of this acreage in a 720-acre, more or less, standard horizontal spacing unit.

12. As such, Advance seeks to consolidate the horizontal spacing units approved under the Orders into a 720-acre, more or less, standard horizontal spacing unit ("Unit") within the Bone Spring formation comprised of the S/2NE/4 and SE/4 of Section 13, E/2 of Section 24, and NE/4 of Section 25, Township 21 South, Range 32 East in Lea County, New Mexico.

13. The Wells are located in the WC-025 G-08 S213304D; Bone Spring pool (Pool Code 97895) which is subject to the statewide horizontal well rules set out in NMAC 19.15.16.15.

14. **Exhibit A-2** contains C-102s for the Wells.

15. **Exhibit A-3** contains a plat identifying ownership by tract in the Unit. This exhibit also contains any applicable lease numbers, unit recapitulation, and the interests Advance seeks to pool. This exhibit also identifies the horizontal spacing units and well dedications approved under the Orders.

16. **Exhibit A-4** contains a sample well proposal letter and AFEs sent to working interest owners for the Wells. The estimated costs reflected on the AFEs are fair and reasonable and comparable to the cost of other wells of similar depth and length drilled in the area.

17. Advance has conducted a diligent search of all county public records including phone directories and computer databases.

18. In my opinion, Advance has made a good-faith effort to reach voluntary joinder of uncommitted interests in the Wells as indicated by the chronology of contact in **Exhibit A-5**.

19. Advance requests overhead and administrative rates of \$8,000 per month while the Wells are being drilled and \$800 per month while the Wells are producing. These rates are fair and are comparable to the rates charged by Advance and by other operators in the vicinity.

20. Notice of Advance's application and the Division hearing was timely provided to the uncommitted interests by certified mail more than 20 days prior to the hearing date. A sample of the notice letters and associated green cards are attached as **Exhibit A-6**.

21. Notice of Advance's application and the Division hearing was published more than ten business days prior to the hearing date. The affidavit of publication is attached as **Exhibit A-7**.

22. The exhibits attached hereto were either prepared by me or under my supervision or were compiled from company business records.

23. In my opinion, the granting of Advance's application would serve the interests of conservation, the protection of correlative rights, and the prevention of waste.

24. I understand this Self-Affirmed Statement will be used as written testimony in this case. I affirm my testimony in paragraphs 1 through 23 above is true and correct and is made

under penalty of perjury under the laws of the State of New Mexico. My testimony is made as of the date handwritten next to my signature below.


Paul Burdick

November 16, 2021
Date

STATE OF NEW MEXICO
DEPARTMENT OF ENERGY, MINERALS AND NATURAL RESOURCES
OIL CONSERVATION DIVISION

APPLICATION OF ADVANCE ENERGY PARTNERS HAT MESA, LLC TO AMEND ORDER NOS. R-21851 AND R-21853 TO CONSOLIDATE HORIZONTAL SPACING UNITS, REVISE WELL LOCATIONS, AND INCLUDE ADDITIONAL WELLS, LEA COUNTY, NEW MEXICO.

CASE NO. 22324
ORDER NOS. R-21851, R-21853
(Re-Open)

APPLICATION

Advance Energy Partners Hat Mesa, LLC ("Applicant") files this application to: (1) amend the locations of the wells approved under Order Nos. R-21851 and R-21853 ("Orders"); (2) consolidate the adjacent horizontal spacing units approved under the Orders into a 720-acre, more or less, standard horizontal spacing unit ("Unit") within the Bone Spring formation comprised of the S/2NE/4 and SE/4 of Section 13, E/2 of Section 24, and NE/4 of Section 25, Township 21 South, Range 32 East in Lea County, New Mexico; and (3) include the Margarita Federal Com 13 #19H and #20H wells in the Unit. In support of its application, Applicant states the following:

1. On September 22, 2021, the Division issued Order No. R-21851 in Case No. 22105 and Order No. R-21853 in Case No. 22107.
2. Order No. R-21851 pooled all uncommitted mineral interests in the Bone Spring formation underlying a 360-acre, more or less, standard horizontal spacing unit comprised of the SE/4NE/4 and E/2SE/4 of Section 13, E/2 E/2 of Section 24, and E/2 NE/4 of Section 25, Township 21 South, Range 32 East in Lea County, New Mexico and dedicated the unit to the Margarita Federal Com #7H, #8H, #12H, and #16H wells.
3. Order No. R-21853 pooled all uncommitted mineral interests in the Bone Spring formation underlying a 360-acre, more or less, standard horizontal spacing unit comprised of the

ADVANCE ENERGY PARTNERS HAT MESA, LLC
Case No. 22324
Exhibit A-1

SW/4NE/4 and W/2SE/4 of Section 13, W/2E/2 of Section 24, and W/2NE/4 of Section 25, Township 21 South, Range 32 East in Lea County, New Mexico and dedicated the unit to the Margarita Federal Com #15H, #5H, #6H, and #11H wells.

4. The Orders designated Applicant as the operator of the units.

5. Subsequent to the entry of the Orders, Applicant revised the proposed locations of the wells approved under the Orders and intends to include the Margarita Federal Com 13 #19H and #20H wells in its development plan. Accordingly, Applicant intends to dedicate the Unit to the following wells ("Wells"):

- **Margarita Federal Com 13 #5H, #6H, #11H, #15H and #19H** wells to be horizontally drilled from a surface location in the SW/4NE/4 (Unit G) of Section 13 to a bottom hole location in the SW/4NE/4 (Unit G) of Section 25;
- **Margarita Federal Com 13 #7H and #16H** wells to be horizontally drilled from a surface location in the NE/4NE/4 (Unit A) of Section 13 to a bottom hole location in the SW/4NE/4 (Unit G) of Section 25; and
- **Margarita Federal Com 13 #8H, #12 and #20** wells to be horizontally drilled from a surface location in the NE/4NE/4 (Unit A) of Section 13 to a bottom hole location in the SE/4NE/4 (Unit H) of Section 25.

2. The completed intervals of the Wells will be orthodox.

3. The completed interval for the proposed **Margarita Federal Com 13 #6H** well will be within 330' of the quarter-quarter line separating the W/2SE/4 from the E/2SE/4 and the SE/4NE/4 from the SW/4NE/4 of Section 13, the E/2E/2 from the W/2E/2 of Section 24, and the W/2NE/4 from the E/2NE/4 of Section 25 to allow the inclusion of this acreage in a 720-acre, more or less, standard horizontal spacing unit.

4. Applicant has undertaken diligent, good-faith efforts to obtain voluntary agreements from all mineral interest owners to participate in the drilling of the Wells but has been unable to obtain voluntary agreements from all of the mineral interest owners.

5. The pooling of uncommitted mineral interests will avoid the drilling of unnecessary wells, prevent waste, and protect correlative rights.

6. In order to allow Applicant to obtain its just and fair share of the oil and gas underlying the subject lands, the Orders should be amended as discussed above, all uncommitted mineral interests in the Unit should be pooled, and Applicant should be designated the operator of the Wells and Unit.

WHEREFORE, Applicant requests this application be set for hearing on December 2, 2021 and that, after notice and hearing, the Division approve:

- a. the revised locations of the Wells;
- b. the addition of the Margarita Federal Com 13 #19H and #20H wells to the Unit; and
- c. the consolidation of the horizontal spacing units approved under Order Nos. R-21851 and R-21853 into a 720-acre, more or less, standard horizontal spacing unit.

Respectfully submitted,

HINKLE SHANOR LLP

/s/ Dana S. Hardy

Dana S. Hardy

Michael Rodriguez

P.O. Box 2068

Santa Fe, NM 87504-2068

Phone: (505) 982-4554

Facsimile: (505) 982-8623

dhardy@hinklelawfirm.com

mrodriguez@hinklelawfirm.com

Counsel for Advance Energy Partners Hat Mesa, LLC

Application of Advance Energy Partners Hat Mesa, LLC to Amend Order Nos. R-21851 and R-21853 to Consolidate Horizontal Spacing Units, Revise Well Locations, and Include Additional Wells, Lea County, New Mexico. Applicant files this application to: (1) amend the locations of the wells approved under Order Nos. R-21851 and R-21853 (“Orders”); (2) consolidate the adjacent horizontal spacing units approved under the Orders into a 720-acre, more or less, standard horizontal spacing unit (“Unit”) within the Bone Spring formation comprised of the S/2NE/4 and SE/4 of Section 13, E/2 of Section 24, and NE/4 of Section 25, Township 21 South, Range 32 East in Lea County, New Mexico; and (3) include the Margarita Federal Com 13 #19H and #20H wells in the Unit. Order No. R-21851 pooled all uncommitted mineral interests in the Bone Spring formation underlying a 360-acre, more or less, standard horizontal spacing unit comprised of the SE/4NE/4 and E/2SE/4 of Section 13, E/2 E/2 of Section 24, and E/2 NE/4 of Section 25, Township 21 South, Range 32 East in Lea County, New Mexico and dedicated the unit to the Margarita Federal Com #7H, #8H, #12H, and #16H wells. Order No. R-21853 pooled all uncommitted mineral interests in the Bone Spring formation underlying a 360-acre, more or less, standard horizontal spacing unit comprised of the SW/4NE/4 and W/2SE/4 of Section 13, W/2E/2 of Section 24, and W/2NE/4 of Section 25, Township 21 South, Range 32 East in Lea County, New Mexico and dedicated the unit to the Margarita Federal Com #15H, #5H, #6H, and #11H wells. The Orders designated Applicant as the operator of the units. Subsequent to the entry of the Orders, Applicant revised the proposed locations of the wells approved under the Orders and intends to include the Margarita Federal Com 13 #19H and #20H wells in its development plan. Accordingly, Applicant intends to dedicate the Unit to the following wells (“Wells”):

- **Margarita Federal Com 13 #5H, #6H, #11H, #15H and #19H** wells to be horizontally drilled from a surface location in the SW/4NE/4 (Unit G) of Section 13 to a bottom hole location in the SW/4NE/4 (Unit G) of Section 25;
- **Margarita Federal Com 13 #7H and #16H** wells to be horizontally drilled from a surface location in the NE/4NE/4 (Unit A) of Section 13 to a bottom hole location in the SW/4NE/4 (Unit G) of Section 25; and
- **Margarita Federal Com 13 #8H, #12 and #20** wells to be horizontally drilled from a surface location in the NE/4NE/4 (Unit A) of Section 13 to a bottom hole location in the SE/4NE/4 (Unit H) of Section 25.

The completed intervals of the Wells will be orthodox. The completed interval for the proposed Margarita Federal Com 13 #6H well will be within 330’ of the quarter-quarter line separating the W/2SE/4 from the E/2SE/4 and the SE/4NE/4 from the SW/4NE/4 of Section 13, the E/2E/2 from the W/2E/2 of Section 24, and the W/2NE/4 from the E/2NE/4 of Section 25 to allow inclusion of this acreage into a standard horizontal well spacing unit. The Wells are located approximately twenty-seven (27) miles west of Eunice, New Mexico.

DISTRICT I
 1625 N. French Dr., Hobbs, NM 88240
 Phone (575) 393-8161 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) 476-3460 Fax: (505) 476-3462

State of New Mexico
 Energy, Minerals and Natural Resources Department

Form C-102
 Revised August 4, 2011

Submit one copy to appropriate
 District Office

OIL CONSERVATION DIVISION
 1220 South St. Francis Dr.
 Santa Fe, New Mexico 87505

WELL LOCATION AND ACREAGE DEDICATION PLAT

AMENDED REPORT

API Number	Pool Code	Pool Name
Property Code	Property Name MARGARITA FEDERAL COM	
Well Number	5H	
OGRID No.	Operator Name ADVANCE ENERGY PARTNERS HAT MESA	Elevation 3911'

Surface Location

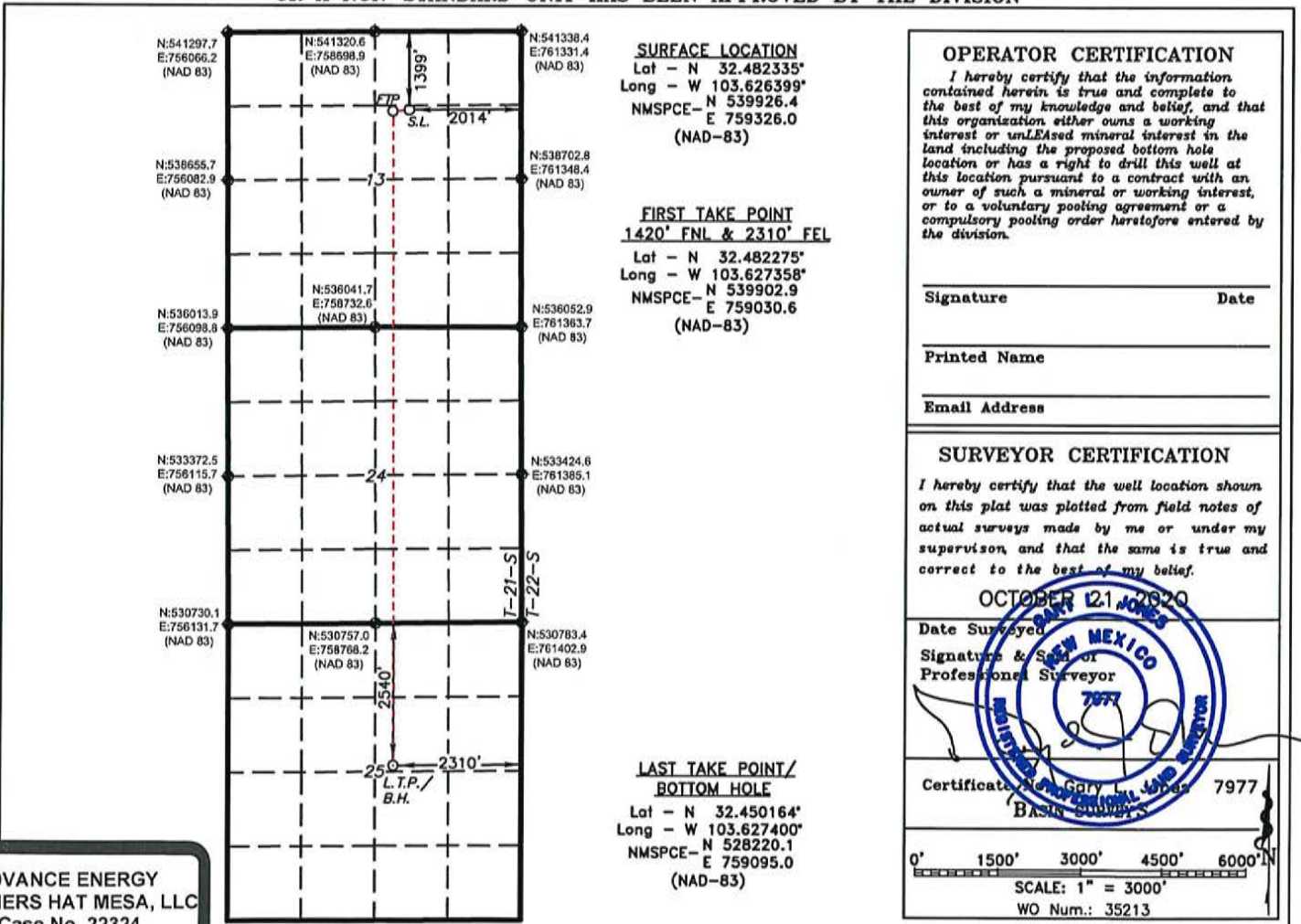
UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	SOUTH/South line	Feet from the	East/West line	County
G	13	21 S	32 E		1399	NORTH	2014	EAST	LEA

Bottom Hole Location If Different From Surface

UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	SOUTH/South line	Feet from the	East/West line	County
G	25	21 S	32 E		2540	NORTH	2310	EAST	LEA

Dedicated Acres	Joint or Infill	Consolidation Code	Order No.

NO ALLOWABLE WILL BE ASSIGNED TO THIS COMPLETION UNTIL ALL INTERESTS HAVE BEEN CONSOLIDATED OR A NON-STANDARD UNIT HAS BEEN APPROVED BY THE DIVISION



OPERATOR CERTIFICATION
 I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief, and that this organization either owns a working interest or unleased mineral interest in the land including the proposed bottom hole location or has a right to drill this well at this location pursuant to a contract with an owner of such a mineral or working interest, or to a voluntary pooling agreement or a compulsory pooling order heretofore entered by the division.

Signature _____ Date _____

Printed Name _____

Email Address _____

SURVEYOR CERTIFICATION
 I hereby certify that the well location shown on this plat was plotted from field notes of actual surveys made by me or under my supervision and that the same is true and correct to the best of my belief.

OCTOBER 21 2020
 Date Surveyed _____
 Signature & Seal of Professional Surveyor
 Gary L. Jones 7977
 Certificate No. Gary L. Jones 7977
 BASIS: 7977

0' 1500' 3000' 4500' 6000'
 SCALE: 1" = 3000'
 WO Num.: 35213

ADVANCE ENERGY
 PARTNERS HAT MESA, LLC
 Case No. 22324

Exhibit A-2

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) 746-1253 Fax: (575) 746-6170

DISTRICT III
 1000 Rio Brazos Rd., Aztec, NM 87410
 Phone (505) 334-6176 Fax: (505) 334-6170

DISTRICT IV
 1220 S. St. Francis Dr., Santa Fe, NM 87505
 Phone (505) 476-3460 Fax: (505) 476-3462

State of New Mexico
 Energy, Minerals and Natural Resources Department

Form C-102
 Revised August 4, 2011

Submit one copy to appropriate
 District Office

OIL CONSERVATION DIVISION
 1220 South St. Francis Dr.
 Santa Fe, New Mexico 87505

WELL LOCATION AND ACREAGE DEDICATION PLAT

AMENDED REPORT

API Number	Pool Code	Pool Name
Property Code	Property Name MARGARITA FEDERAL COM	
Well Number	6H	
OGRID No.	Operator Name ADVANCE ENERGY PARTNERS HAT MESA	Elevation 3910'

Surface Location

UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	SOUTH/South line	Feet from the	East/West line	County
G	13	21 S	32 E		1399	NORTH	1882	EAST	LEA

Bottom Hole Location If Different From Surface

UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	SOUTH/South line	Feet from the	East/West line	County
G	25	21 S	32 E		2540	NORTH	1430	EAST	LEA

Dedicated Acres	Joint or Infill	Consolidation Code	Order No.

NO ALLOWABLE WILL BE ASSIGNED TO THIS COMPLETION UNTIL ALL INTERESTS HAVE BEEN CONSOLIDATED OR A NON-STANDARD UNIT HAS BEEN APPROVED BY THE DIVISION

SURFACE LOCATION
 Lat - N 32.482334°
 Long - W 103.625971°
 NMSPC - N 539927.2
 E 759458.1
 (NAD-83)

FIRST TAKE POINT
 1420' FNL & 1430' FEL
 Lat - N 32.482276°
 Long - W 103.624504°
 NMSPC - N 539908.8
 E 759910.6
 (NAD-83)

**LAST TAKE POINT/
 BOTTOM HOLE**
 Lat - N 32.450171°
 Long - W 103.624547°
 NMSPC - N 528229.0
 E 759975.0
 (NAD-83)

OPERATOR CERTIFICATION

I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief, and that this organization either owns a working interest or unLEASED mineral interest in the land including the proposed bottom hole location or has a right to drill this well at this location pursuant to a contract with an owner of such a mineral or working interest, or to a voluntary pooling agreement or a compulsory pooling order heretofore entered by the division.

Signature _____ Date _____

Printed Name _____

Email Address _____

SURVEYOR CERTIFICATION

I hereby certify that the well location shown on this plat was plotted from field notes of actual surveys made by me or under my supervision, and that the same is true and correct to the best of my belief.

OCTOBER 21 2020

Date Surveyed _____

Signature & Seal of Professional Surveyor _____

Certificate No. Gary L. Jones 7977

Basin Number _____

0' 1500' 3000' 4500' 6000' IN
 SCALE: 1" = 3000'
 WO Num.: 35213

DISTRICT I
1625 N. French Dr., Hobbs, NM 88240
Phone (575) 393-8161 Fax: (575) 393-0720

DISTRICT II
811 S. First St., Artesia, NM 88210
Phone (575) 746-1263 Fax: (575) 746-0720

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) 476-3460 Fax: (505) 476-3452

State of New Mexico
Energy, Minerals and Natural Resources Department

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Revised August 4, 2011

Submit one copy to appropriate
District Office

OIL CONSERVATION DIVISION
1220 South St. Francis Dr.
Santa Fe, New Mexico 87505

WELL LOCATION AND ACREAGE DEDICATION PLAT

AMENDED REPORT

API Number	Pool Code	Pool Name
Property Code	Property Name	Well Number
OGRID No.	Operator Name	Elevation
	MARGARITA FEDERAL COM 13	7H
	ADVANCE ENERGY PARTNERS HAT MESA	3907'

Surface Location

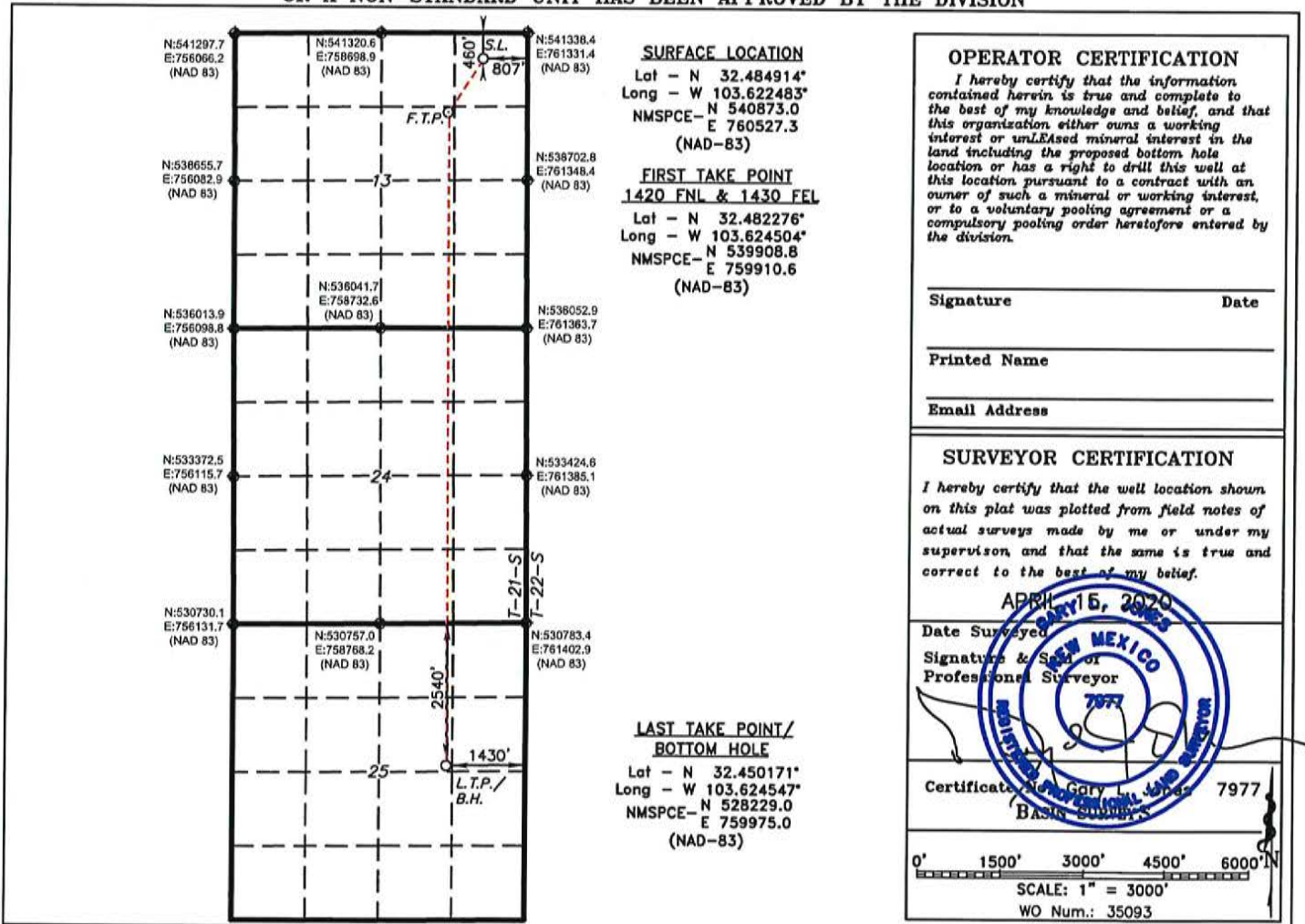
UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	SOUTH/South line	Feet from the	East/West line	County
A	13	21 S	32 E		460	NORTH	807	EAST	LEA

Bottom Hole Location If Different From Surface

UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	SOUTH/South line	Feet from the	East/West line	County
G	25	21 S	32 E		2540	NORTH	1430	EAST	LEA

Dedicated Acres	Joint or Infill	Consolidation Code	Order No.

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Santa Fe, New Mexico 87505

WELL LOCATION AND ACREAGE DEDICATION PLAT

AMENDED REPORT

API Number	Pool Code	Pool Name
Property Code	Property Name	Well Number
	MARGARITA FEDERAL COM 13	8H
OGRID No.	Operator Name	Elevation
	ADVANCE ENERGY PARTNERS HAT MESA	3906'

Surface Location

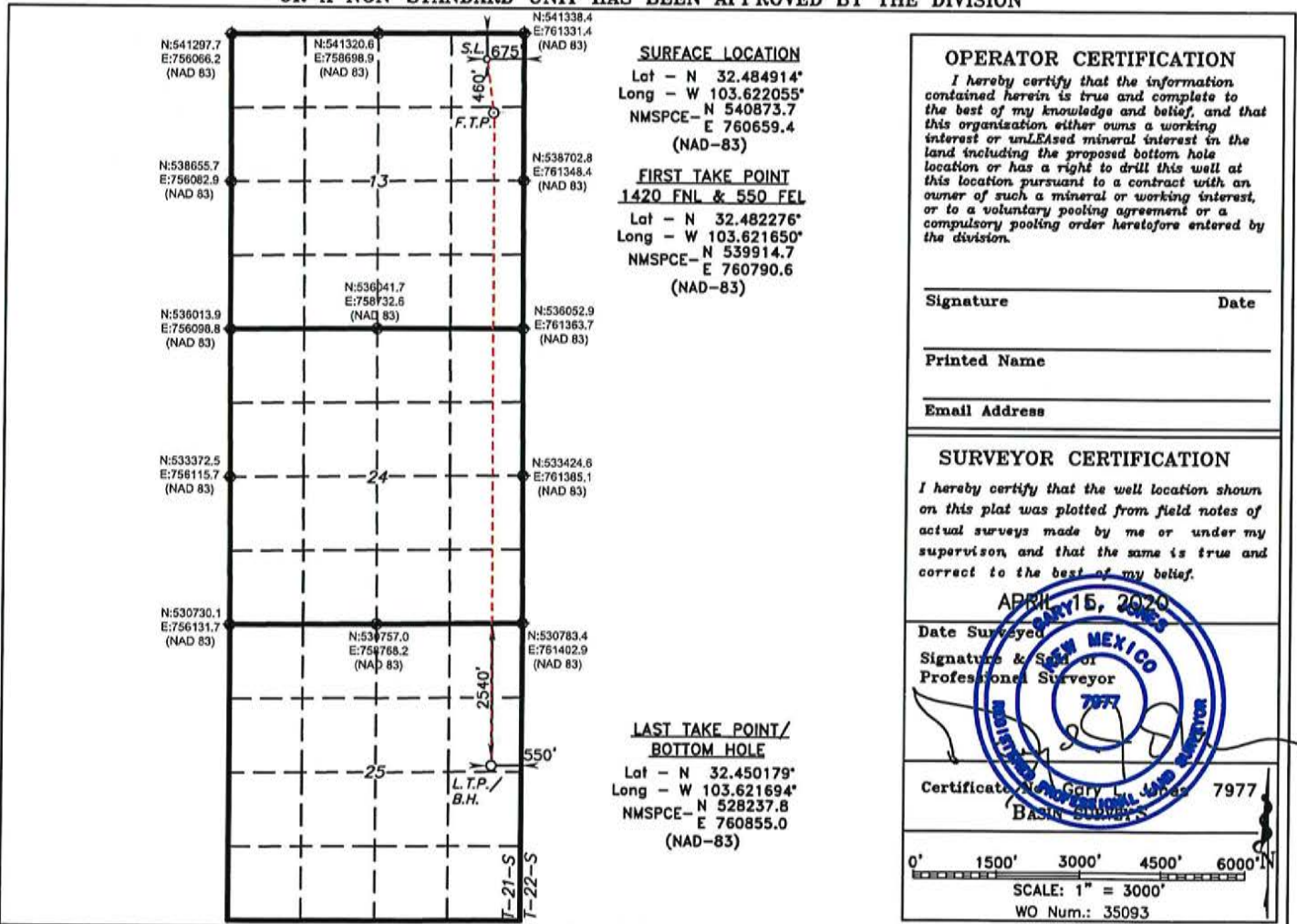
UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	SOUTH/South line	Feet from the	East/West line	County
A	13	21 S	32 E		460	NORTH	675	EAST	LEA

Bottom Hole Location If Different From Surface

UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	SOUTH/South line	Feet from the	East/West line	County
H	25	21 S	32 E		2540	NORTH	550	EAST	LEA

Dedicated Acres	Joint or Infill	Consolidation Code	Order No.

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OPERATOR CERTIFICATION

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Signature _____ Date _____

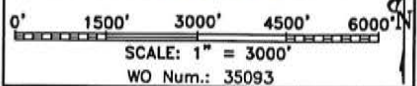
Printed Name _____

Email Address _____

SURVEYOR CERTIFICATION

I hereby certify that the well location shown on this plat was plotted from field notes of actual surveys made by me or under my supervision, and that the same is true and correct to the best of my belief.

APR 15 2020
 Date Surveyed _____
 Signature & Seal of Professional Surveyor
 Gary L. Jones
 Certificate No. 7977
 State of New Mexico
 Board of Geology



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State of New Mexico
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 Revised August 4, 2011

Submit one copy to appropriate
 District Office

OIL CONSERVATION DIVISION
 1220 South St. Francis Dr.
 Santa Fe, New Mexico 87505

WELL LOCATION AND ACREAGE DEDICATION PLAT

AMENDED REPORT

API Number	Pool Code	Pool Name
Property Code	Property Name MARGARITA FEDERAL COM	
Well Number	11H	
OGRID No.	Operator Name ADVANCE ENERGY PARTNERS HAT MESA	Elevation 3911'

Surface Location

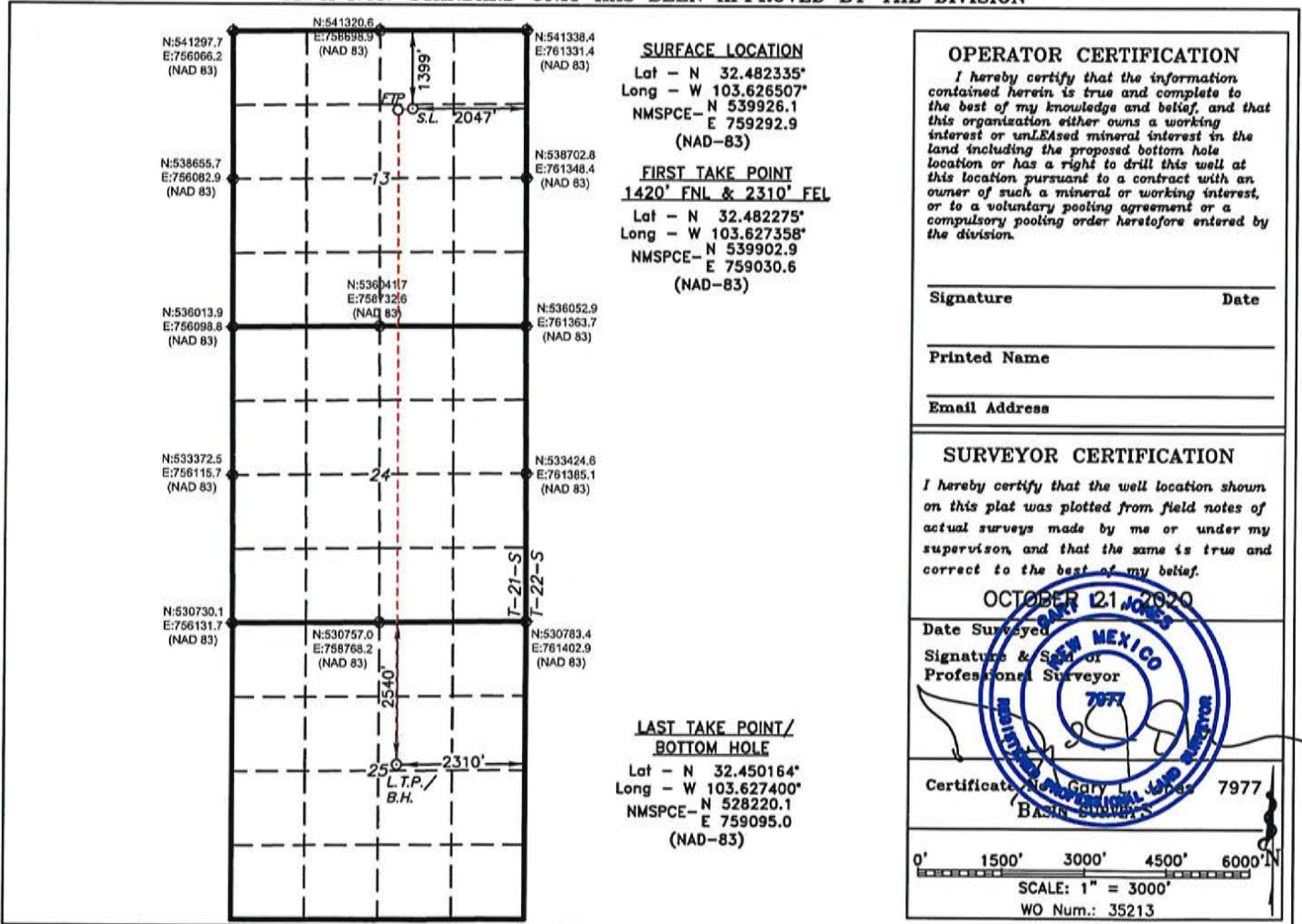
UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	SOUTH/South line	Feet from the	East/West line	County
G	13	21 S	32 E		1399	NORTH	2047	EAST	LEA

Bottom Hole Location If Different From Surface

UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	SOUTH/South line	Feet from the	East/West line	County
G	25	21 S	32 E		2540	NORTH	2310	EAST	LEA

Dedicated Acres	Joint or Infill	Consolidation Code	Order No.

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 1825 N. French Dr., Hobbs, NM 88240
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 Santa Fe, New Mexico 87505

WELL LOCATION AND ACREAGE DEDICATION PLAT

AMENDED REPORT

API Number	Pool Code	Pool Name
Property Code	Property Name MARGARITA FEDERAL COM 13	
OGRID No.	Operator Name ADVANCE ENERGY PARTNERS HAT MESA	Well Number 12H Elevation 3906'

Surface Location

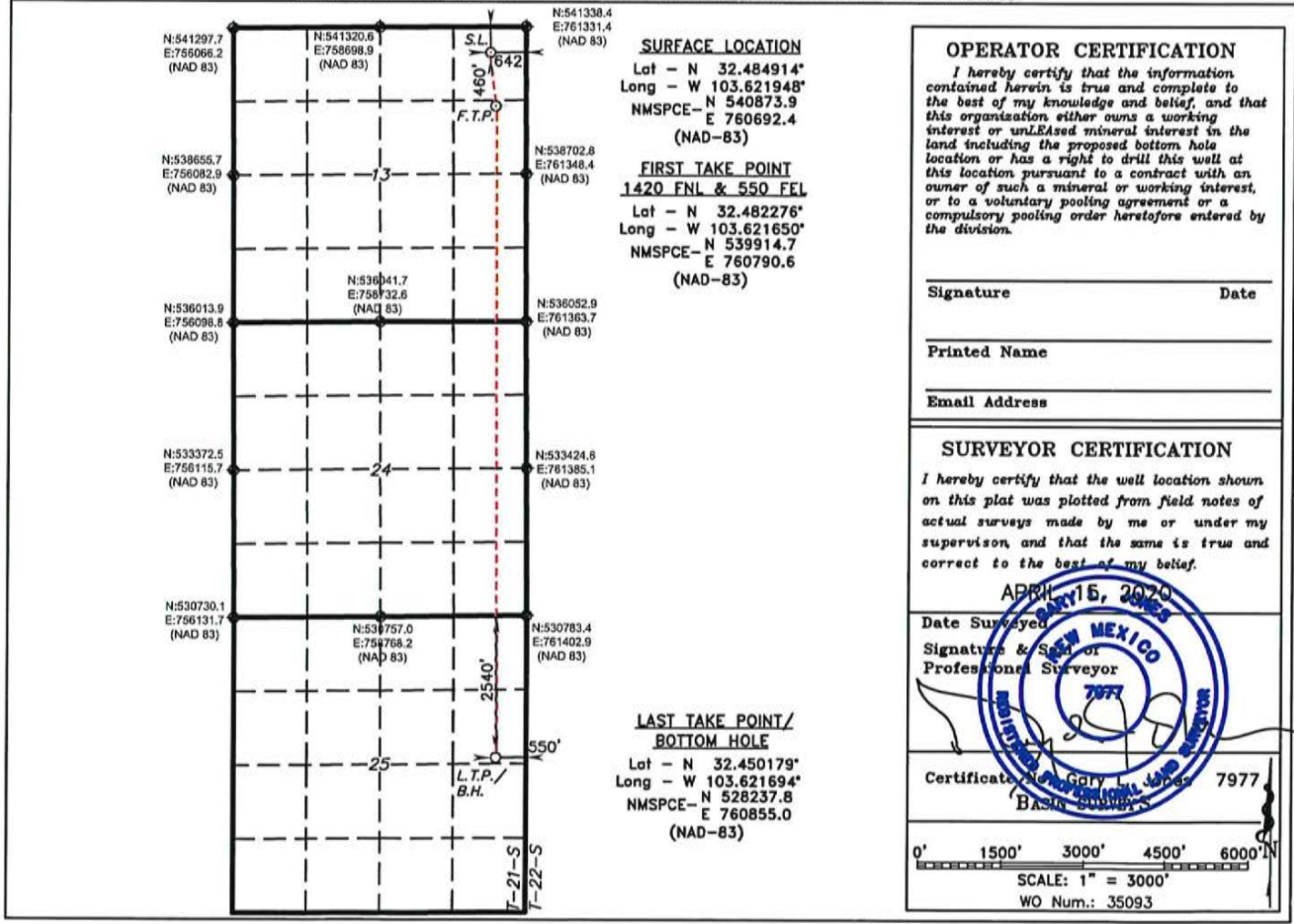
UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	SOUTH/South line	Feet from the	East/West line	County
A	13	21 S	32 E		460	NORTH	642	EAST	LEA

Bottom Hole Location If Different From Surface

UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	SOUTH/South line	Feet from the	East/West line	County
H	25	21 S	32 E		2540	NORTH	550	EAST	LEA

Dedicated Acres	Joint or Infill	Consolidation Code	Order No.
-----------------	-----------------	--------------------	-----------

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OPERATOR CERTIFICATION
 I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief, and that this organization either owns a working interest or unleased mineral interest in the land including the proposed bottom hole location or has a right to drill this well at this location pursuant to a contract with an owner of such a mineral or working interest, or to a voluntary pooling agreement or a compulsory pooling order heretofore entered by the division.

Signature _____ Date _____
 Printed Name _____
 Email Address _____

SURVEYOR CERTIFICATION
 I hereby certify that the well location shown on this plat was plotted from field notes of actual surveys made by me or under my supervision, and that the same is true and correct to the best of my belief.

APR 15 2020
 Date Surveyed
 Signature & Seal of Professional Surveyor
 GARY L. GIBSON
 7977

Certificate No. 7977
 BASIN SURVEYORS

0' 1500' 3000' 4500' 6000'
 SCALE: 1" = 3000'
 WO Num.: 35093

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 Phone (575) 393-6161 Fax: (575) 393-0720

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

WELL LOCATION AND ACREAGE DEDICATION PLAT

AMENDED REPORT

API Number	Pool Code	Pool Name
Property Code	Property Name MARGARITA FEDERAL COM	
OGRID No.	Operator Name ADVANCE ENERGY PARTNERS HAT MESA	
	Well Number 15H	Elevation 3910'

Surface Location

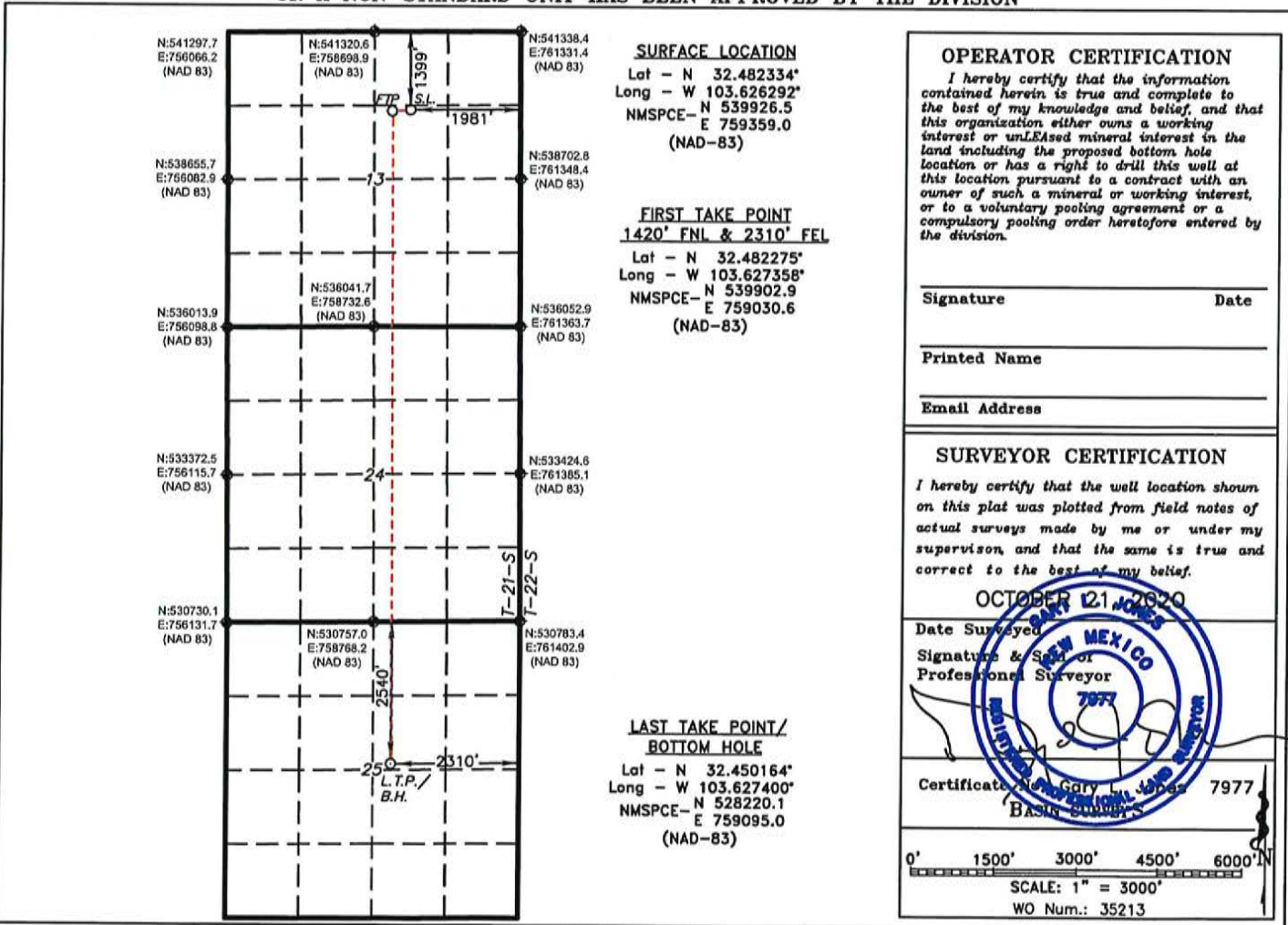
UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	SOUTH/South line	Feet from the	East/West line	County
G	13	21 S	32 E		1399	NORTH	1981	EAST	LEA

Bottom Hole Location If Different From Surface

UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	SOUTH/South line	Feet from the	East/West line	County
G	25	21 S	32 E		2540	NORTH	2310	EAST	LEA

Dedicated Acres	Joint or Infill	Consolidation Code	Order No.

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

WELL LOCATION AND ACREAGE DEDICATION PLAT

AMENDED REPORT

API Number	Pool Code	Pool Name
Property Code	Property Name MARGARITA FEDERAL COM 13	
OGRID No.	Operator Name ADVANCE ENERGY PARTNERS HAT MESA	Well Number 16H Elevation 3907'

Surface Location

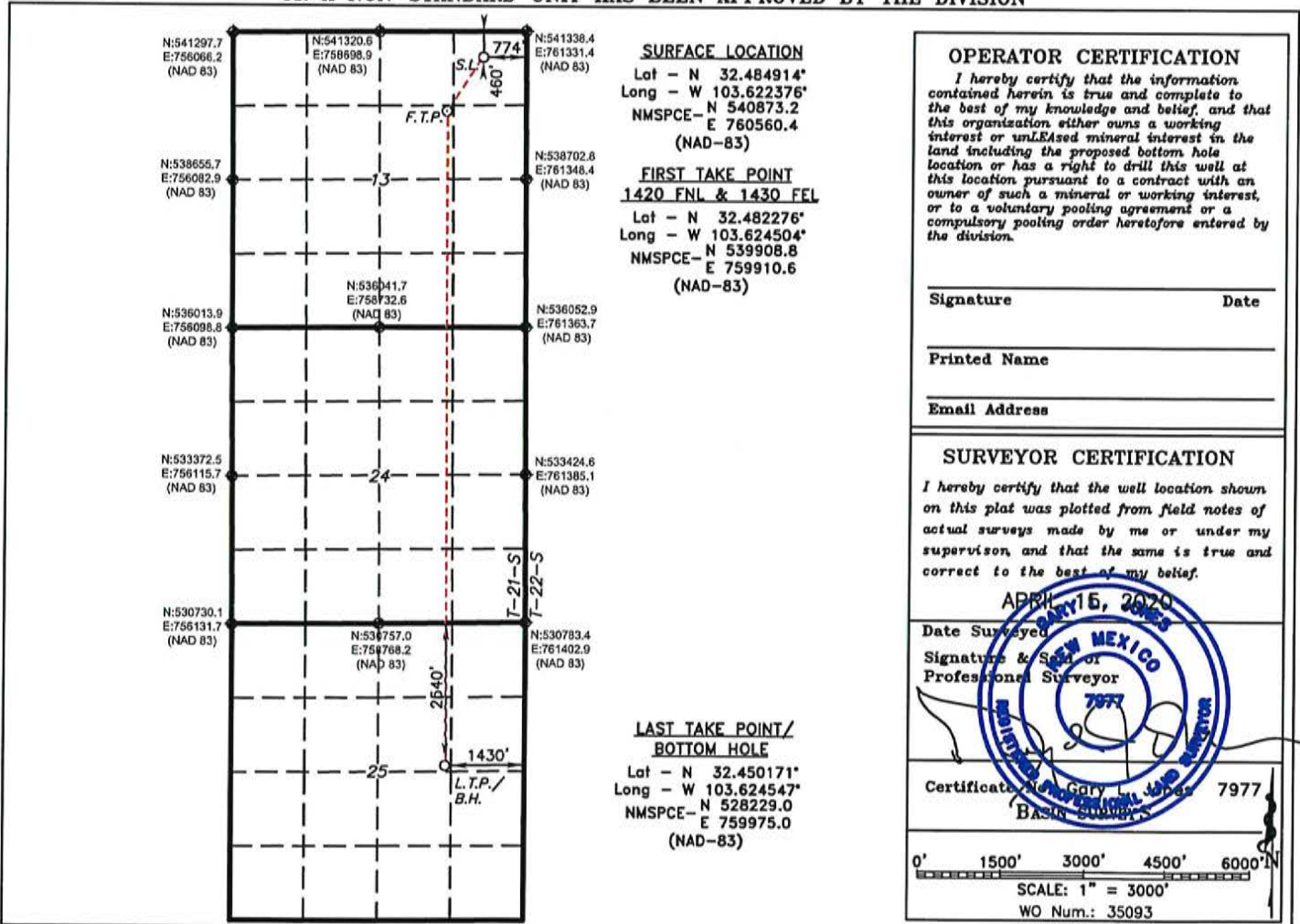
UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	SOUTH/South line	Feet from the	East/West line	County
A	13	21 S	32 E		460	NORTH	774	EAST	LEA

Bottom Hole Location If Different From Surface

UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	SOUTH/South line	Feet from the	East/West line	County
G	25	21 S	32 E		2540	NORTH	1430	EAST	LEA

Dedicated Acres	Joint or Infill	Consolidation Code	Order No.

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 Santa Fe, New Mexico 87505

WELL LOCATION AND ACREAGE DEDICATION PLAT

AMENDED REPORT

API Number	Pool Code	Pool Name
Property Code	Property Name	Well Number
	MARGARITA FEDERAL COM	19H
OGRID No.	Operator Name	Elevation
	ADVANCE ENERGY PARTNERS HAT MESA	3910'

Surface Location

UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	SOUTH/South line	Feet from the	East/West line	County
G	13	21 S	32 E		1399	NORTH	1915	EAST	LEA

Bottom Hole Location If Different From Surface

UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	SOUTH/South line	Feet from the	East/West line	County
G	25	21 S	32 E		2540	NORTH	1430	EAST	LEA

Dedicated Acres	Joint or Infill	Consolidation Code	Order No.

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SURFACE LOCATION
 Lat - N 32.482334°
 Long - W 103.626078°
 NMPSPCE - N 539927.0
 E 759425.0
 (NAD-83)

FIRST TAKE POINT
1420' FNL & 1430' FEL
 Lat - N 32.482276°
 Long - W 103.624504°
 NMPSPCE - N 539908.8
 E 759910.6
 (NAD-83)

**LAST TAKE POINT/
 BOTTOM HOLE**
 Lat - N 32.450171°
 Long - W 103.624547°
 NMPSPCE - N 528229.0
 E 759975.0
 (NAD-83)

OPERATOR CERTIFICATION

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Signature _____ Date _____

Printed Name _____

Email Address _____

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OCTOBER 21 2020

Date Surveyed _____

Signature & Seal of Professional Surveyor _____

Certificate No. Gary L. Jones 7977

BASIN _____

0' 1500' 3000' 4500' 6000'

SCALE: 1" = 3000'

WO Num.: 35213

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 Santa Fe, New Mexico 87505

WELL LOCATION AND ACREAGE DEDICATION PLAT

AMENDED REPORT

API Number	Pool Code	Pool Name
Property Code	Property Name MARGARITA FEDERAL COM 13	
OGRID No.	Operator Name ADVANCE ENERGY PARTNERS HAT MESA	Well Number 20H Elevation 3907'

Surface Location

UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	SOUTH/South line	Feet from the	East/West line	County
A	13	21 S	32 E		460	NORTH	708	EAST	LEA

Bottom Hole Location If Different From Surface

UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	SOUTH/South line	Feet from the	East/West line	County
H	25	21 S	32 E		2540	NORTH	550	EAST	LEA

Dedicated Acres	Joint or Infill	Consolidation Code	Order No.

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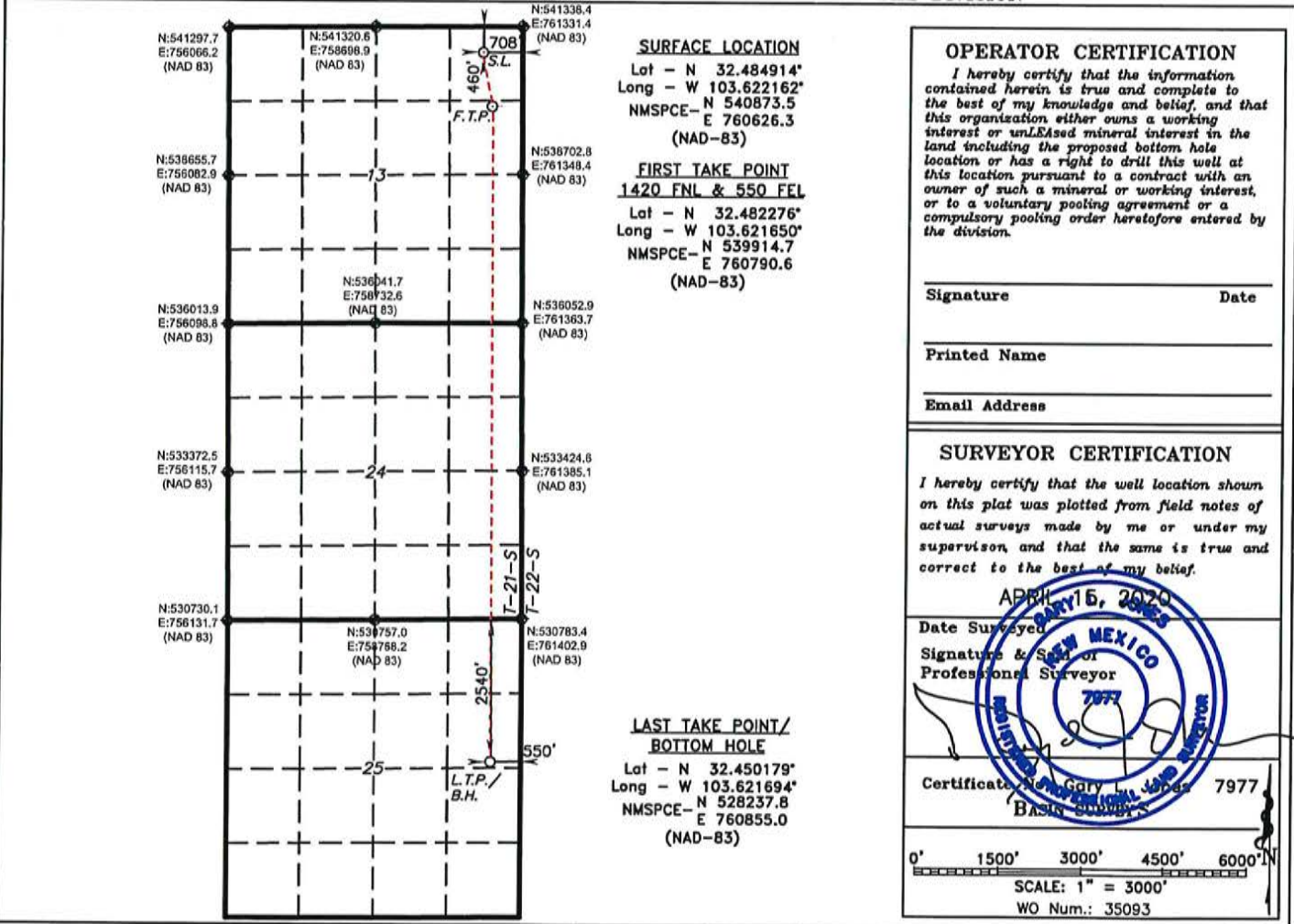
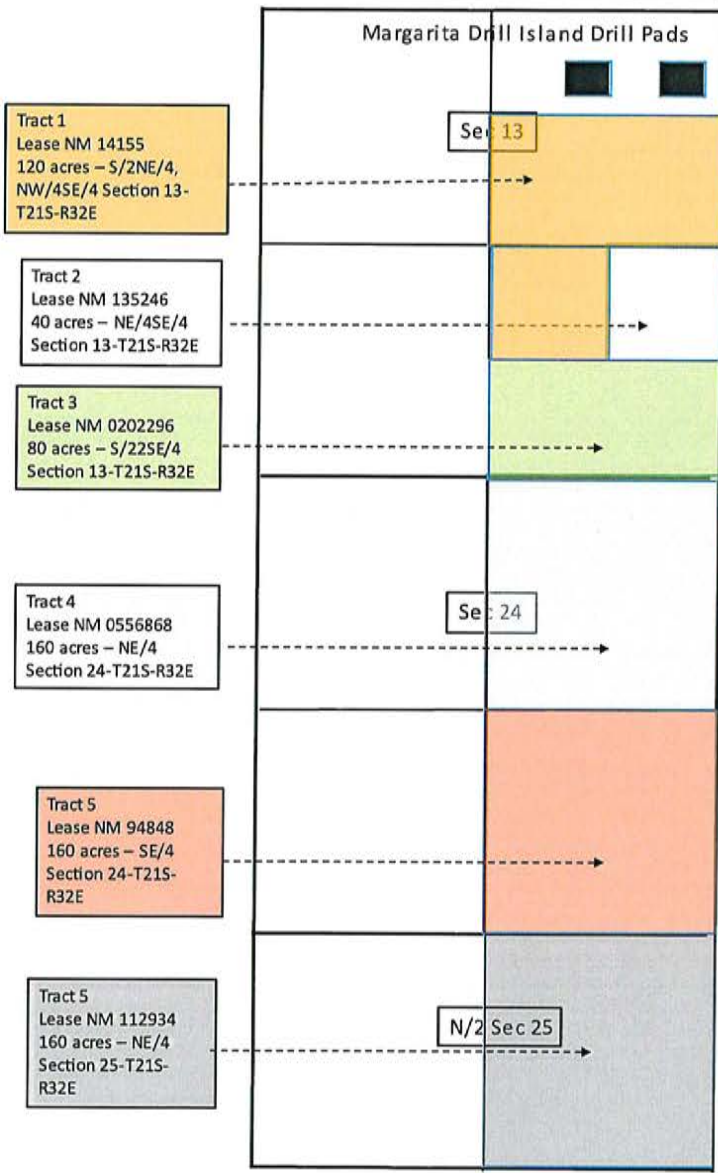


Exhibit A-3
 720 acre Bone Spring Unit
 S/2NE/4, SE/4 Section 13, E/2 Section 24, NE/4 Section 25, T21S-R32E, Lea
 County, N.M.



**ADVANCE ENERGY
 PARTNERS HAT MESA, LLC
 Case No. 22324**

Exhibit A-3

Exhibit A-3

S/2NE/4, SE/4 Section 13, E/2 Section 24, NE/4 Section 25, T21S-R32E, Lea County, N.M., containing 720 acres

Tract 1: S/2NE/4, NW/4SE/4 Section 13-21S-32E (BLM Lease NM 14155)

Advance Energy Partners Hat Mesa, LLC 100% W.I.

Tract 2: NE/4SE/4 Section 13-21S-32E (BLM Lease NM 135246)

Marathon Oil Permian, LLC 100% W.I.

Tract 3: S/2SE/4 Section 13-21S-32E (BLM Lease NM 0202296)

Advance Energy Partners Hat Mesa, LLC 100% W.I.

Tract 4: NE/4 Section 24-21S-32E (BLM Lease NM 0556868)

Advance Energy Partners Hat Mesa, LLC 51.5625% W.I.

ConocoPhillips Company 48.4375% W.I.

Tract 5: SE/4 Section 24-21S-32E (BLM Lease NM 94848)

Advance Energy Partners Hat Mesa, LLC 100% W.I.

Tract 6: NE/4 Section 25-21S-32E (BLM Lease NM 112934)

Advance Energy Partners Hat Mesa, LLC 100% W.I.

RECAPITULATION

Tract No.	Number Acres Committed	Percentage of Interest in Unit
1	120	16.667%
2	40	5.556%
3	80	11.111%
4	160	22.222%
5	160	22.222%
6	160	22.222%

Advance Energy Partners Hat Mesa, LLC. . 11490 Westheimer Road, Suite 950 Houston, Texas 77077	83.333% W.I
ConocoPhillips Company 600 W. Illinois Avenue Midland, Texas 79701	11.111% W.I.
Marathon Oil Permian, LLC 5555 San Felipe St. Houston, Texas 77056	5.556% W.I.
Total	100.000%

Leasehold Interest:

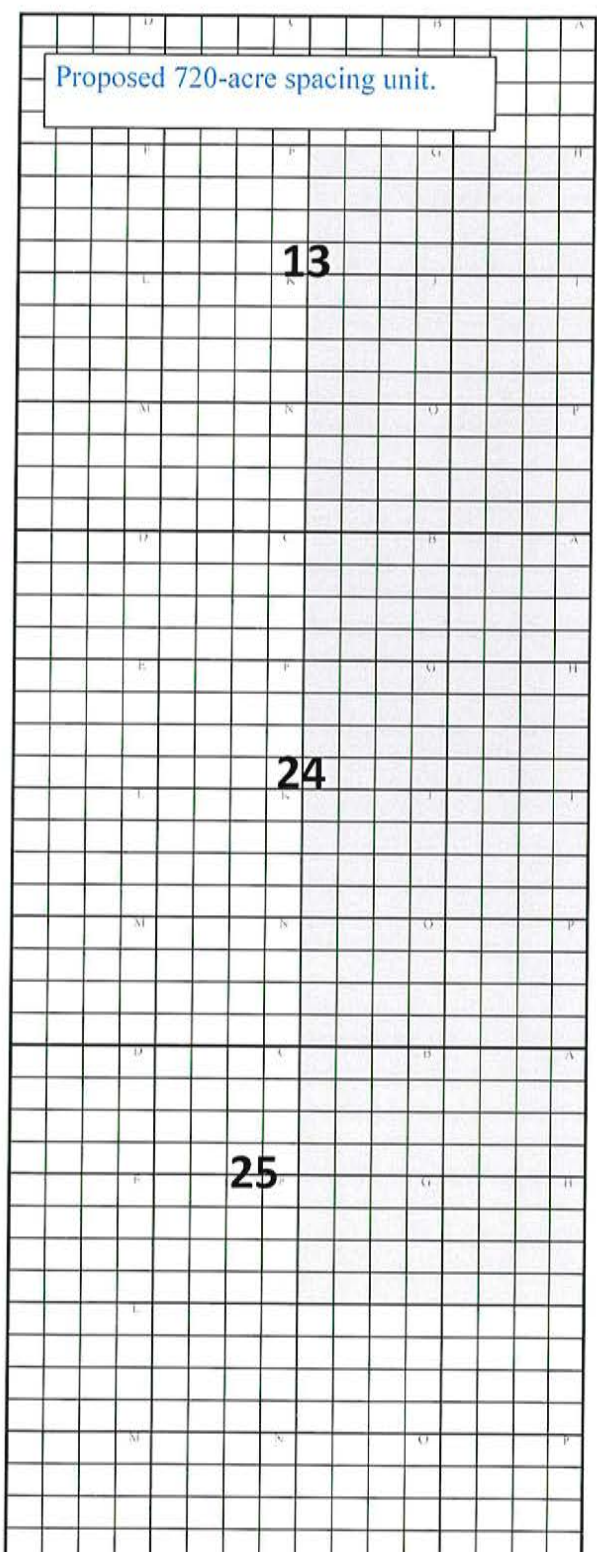
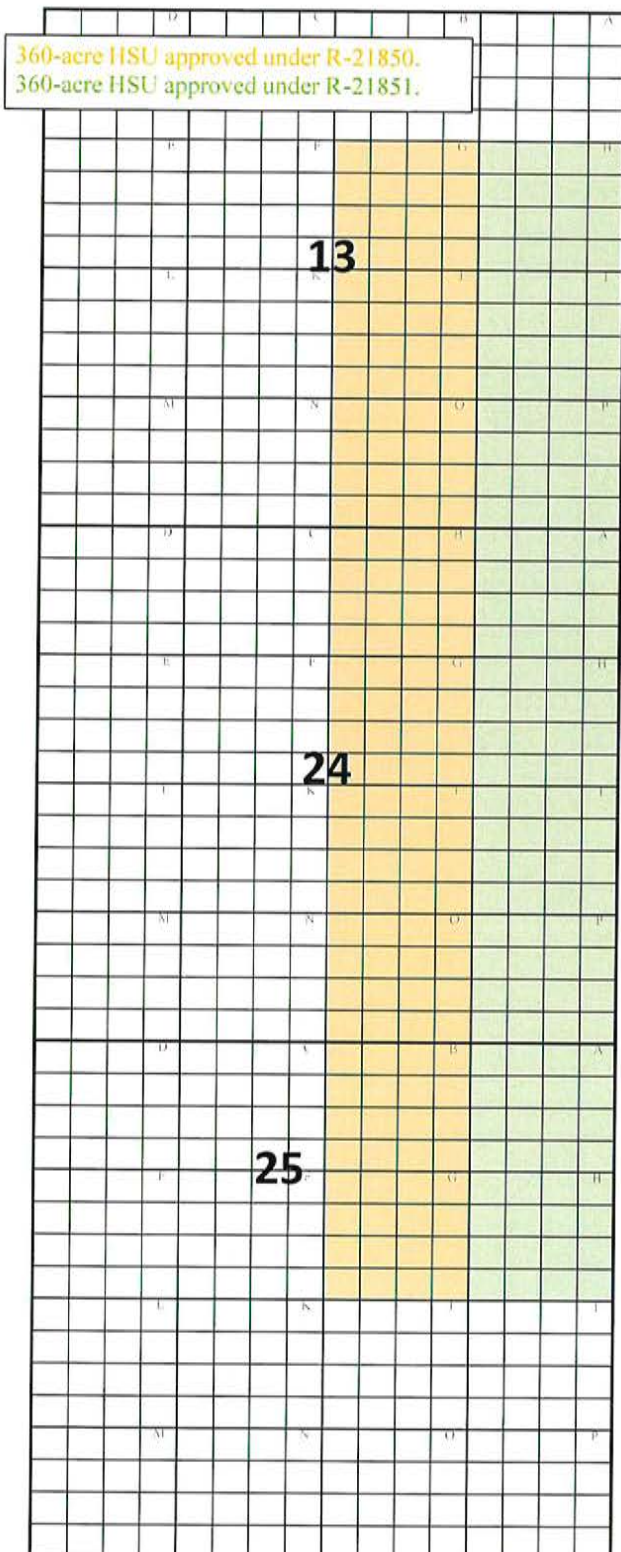
Advance Energy Partners Hat Mesa, LLC. .
11490 Westheimer Road, Suite 950
Houston, Texas 77077

ConocoPhillips Company
600 W. Illinois Avenue
Midland, Texas 79701

Marathon Oil Permian, LLC
5555 San Felipe St.
Houston, Texas 77056

Advance Energy Partners Hat Mesa, LLC

S/2NE/4, SE/4 of Section 13, E/2 of Section 24, NE/4 of Section 25, Township



11490 Westheimer Road,
Suite 950, Houston, Texas



77077 • Phone 832-672-4700 • Fax 832-672-4609

ADVANCE ENERGY
PARTNERS HAT MESA, LLC
Case No. 22324
Exhibit A-4

Date: October 7, 2021

Federal Express Tracking No.
8158 1407 8490
8158 1407 8504

ConocoPhillips Company
600 W. Illinois Avenue
Midland, Texas 79701
Attention: Jennifer Midkiff

Marathon Oil Permian, LLC
5555 San Felipe St.
Houston, Texas 77056
Attention: Farley Duvall

Re: Revised Margarita Federal Com Well Proposals (Bone Spring Targets)
East Margarita Ridge Development Area
S/2NE/4, SE/4 Sec 13, E/2 Sec 24, NE/4 Sec 25, T21S-R32E
Lea County, New Mexico

Ladies and Gentlemen:

This letter is to revise and replace certain AFEs sent July 7, 2021, proposing the wells in the referenced lands. Specifically, the AFEs targeting the Bone Spring formation zones have been revised as to the bottomhole locations and true vertical depths of the wells.

Advance Energy Partners Hat Mesa, LLC (AEPHM) proposes to drill the following wells, testing the Bone Spring formation within the referenced lands. The proposed wells shall be drilled from established and approved Drill Islands designated for the Margarita Ridge Development Area which are located within the N/2NE/4 Section 13, T22S-R32E. The bottom-hole locations shall be in the NE/4 of Section 25, T21S-R32E, Lea County, New Mexico.

Proposed Wells (revised as to the Bone Spring targets)

Well Name	Target	Surface Location in	Bottomhole Location in	Measured	True Vertical	Lateral	Completed
		Section 13-21S-32E	Section 25-21S-32E	Depth	Depth	Length	Well Cost Est.
Margarita Federal Com 13 #5H	Bone Spring	1399' FNL, 2014' FEL	2540' FNL, 2310' FEL	22,677	10,900	11,777	\$9,430,906
Margarita Federal Com 13 #6H	Bone Spring	1399' FNL, 1882' FEL	2540' FNL, 1430' FEL	22,840	9,900	12,940	\$9,440,392
Margarita Federal Com 13 #7H	Bone Spring	460' FNL, 774' FEL	2540' FNL, 1430' FEL	23,269	11,250	12,019	\$9,668,352
Margarita Federal Com 13 #8H	Bone Spring	460' FNL, 642' FEL	2540' FNL, 550' FEL	23,611	10,900	12,711	\$9,735,469
Margarita Federal Com 13 #11H	Bone Spring	1399' FNL, 1948' FEL	2540' FNL, 2310' FEL	22,320	10,200	12,120	\$9,410,062
Margarita Federal Com 13 #12H	Bone Spring	460' FNL, 708' FEL	2540' FNL, 550' FEL	22,932	10,200	12,732	\$9,648,629
Margarita Federal Com 13 #15H	Bone Spring	1399' FNL, 2047' FEL	2540' FNL, 2310' FEL	23,141	11,450	11,691	\$9,457,974
Margarita Federal Com 13 #16H	Bone Spring	460' FNL, 807' FEL	2540' FNL, 1430' FEL	23,662	11,700	11,962	\$9,645,664
Margarita Federal Com 13 #19H	Bone Spring	1399' FNL, 1915' FEL	2540' FNL, 1430' FEL	23,319	10,520	12,799	\$9,954,467
Margarita Federal Com 13 #20H	Bone Spring	460' FNL, 675' FEL	2540' FNL, 550' FEL	24,071	11,400	12,671	\$10,200,836

AEPHM proposes to drill the above wells in accordance to an AAPL 2015 form Joint Operating Agreement (JOA) covering the S/2NE/4, SE/4 of Section 13, E/2 Section 24 and NE/4 Section 25, all in T21S-R32E, Lea

East Margarita Fed Com Well Proposals – Revised Bone Spring Wells
October 7, 2021
Page 2

County, NM as to the depths lying from the surface to the base of the Wolfcamp formation. The proposed JOA form was delivered to each party via our original proposal dated July 7, 2021.

Attached are the AFEs pertaining to the above-described wells. The AFEs are only estimates and may not represent the actual costs. The actual depth and lateral length may change due to unexpected conditions encountered during drilling operations.

If you elect to participate in the drilling and completion of the proposed wells, please indicate your approval so by signing the AFEs in the space indicated and by returning 1 signed copy of each approved AFE. We also request the party(s) execute the JOA.

If you do not want to participate, as an alternative, Advance Energy Partners is open to acquire your interest under mutually acceptable terms.

Thank you for your consideration to our proposal. and request your timely evaluation and response within 30 days of receipt. If you have questions or require additional information, please contact me using telephone number or email address provided below.

Sincerely,
Advance Energy Partners Hat Mesa, LLC

Paul Burdick
Land Advisor
(832) 672-4623
Email: PBurdick@AdvanceEnergyPartners.com



Authorization For Expenditure

AFE#: NM0189 R1

Date: Oct 8, 2021

Lease: Margarita Federal	Target: Bone Springs
Well No: Margarita Federal Com 13 #5H	Projected MD/TVD: 22677/10900
County: Lea	Spud to TD: 19.9
State: NM	Lateral Length: 11100
SHL: S13-T21S-R32E 1399 FNL, 2014 FEL	Stages: 71
BHL: S25-T21S-R32E 2540 FNL, 2310 FEL	Proppant/ft: 2500

Project Description:

The proposed AFE is for the Margarita Fed Com 5H, a 2.25 section Bone Spring to be drilled in Lea County, NM. This is a 4 string casing design consisting of the following: 24" surface hole drilled on Water to +/- 1700' and 20" 94# J-55 BTC casing set and cemented in place; 17.5" first intermediate hole drilled on Brine to +/-3615' and 13" 68# HCL-80 BTC casing set and cemented in place; 12.25" second intermediate drilled on Water to +/-5600' and a split string of 9.625" 40# J-55 LTC and 9.625" 40# HCL-80 LTC set and cemented in place; 8.5" production hole drilled on OBM to TD at +/-22677' and 5.5" 20# HCP-110 GBCD production casing set and cemented in place. There will be ~11100' of treatable lateral and completion design will consist of +/-71 stages and 2500 lbs/ft of proppant. Pad Facility design consistent with Wool Head Pad A and B. Cost associated with off pad Power Lines or Pipelines is not included in this AFE.

TANGIBLE COSTS		Dry Hole	Completion	Facility	Total
Tangible Drilling - 01		\$ 979,302.00	\$ -	\$ -	\$ 979,302.00
9402	Production Casing	\$ 439,281	\$ -	\$ -	\$ 439,281
9401	Surface Casing	\$ 118,394	\$ -	\$ -	\$ 118,394
9404-1	Wellhead & Equipment	\$ 43,977	\$ -	\$ -	\$ 43,977
9412	Intermediate 1 Casing	\$ 377,650	\$ -	\$ -	\$ 377,650
Tangible Completion - 02		\$ -	\$ 46,382.00	\$ -	\$ 46,382.00
9404-2	Wellhead & Equipment	\$ -	\$ 46,382	\$ -	\$ 46,382
Tangible Facility - 03		\$ -	\$ -	\$ 500,000.00	\$ 500,000.00
9407	Tanks	\$ -	\$ -	\$ 25,000	\$ 25,000
9421	Production Battery	\$ -	\$ -	\$ 18,000	\$ 18,000
9408	Vessels	\$ -	\$ -	\$ 150,000	\$ 150,000
9420	Pumps-Surface	\$ -	\$ -	\$ 35,000	\$ 35,000
9419	Flare	\$ -	\$ -	\$ 6,000	\$ 6,000
9417	Electrical	\$ -	\$ -	\$ 75,000	\$ 75,000
9424	Vapor Recovery Unit	\$ -	\$ -	\$ 22,000	\$ 22,000
9416	Valves & Fittings	\$ -	\$ -	\$ 145,000	\$ 145,000
9423	COMM- SCADA/Radio/Telecom	\$ -	\$ -	\$ 6,000	\$ 6,000
9490	Miscellaneous	\$ -	\$ -	\$ 12,000	\$ 12,000
9418	Gas Meter	\$ -	\$ -	\$ 6,000	\$ 6,000
TOTAL TANGIBLE COSTS >>>		\$ 979,302.00	\$ 46,382.00	\$ 500,000.00	\$ 1,525,684.00

INTANGIBLE COSTS		Dry Hole	Completion	Facility	Total
Intangible Drilling - 01		\$ 2,785,921.00	\$ -	\$ -	\$ 2,785,921.00
9228	Mudlogging & Services	\$ 17,783	\$ -	\$ -	\$ 17,783
9217	Inspection & Testing	\$ 25,848	\$ -	\$ -	\$ 25,848
9203	Drilling - Rig Move	\$ 97,588	\$ -	\$ -	\$ 97,588
9237	Mancamp	\$ 46,015	\$ -	\$ -	\$ 46,015
9215	Transportation	\$ 10,550	\$ -	\$ -	\$ 10,550
9219	Bits & BHA	\$ 125,937	\$ -	\$ -	\$ 125,937
9232	Mud - Auxiliary	\$ 22,157	\$ -	\$ -	\$ 22,157
9204	Directional	\$ 376,908	\$ -	\$ -	\$ 376,908
9235	Disposal	\$ 150,245	\$ -	\$ -	\$ 150,245
9206	Contract Labor	\$ 36,695	\$ -	\$ -	\$ 36,695
9218	Casing Services	\$ 98,261	\$ -	\$ -	\$ 98,261
9208	Cementing & Services	\$ 200,183	\$ -	\$ -	\$ 200,183
9239	Company Supervision	\$ 2,862	\$ -	\$ -	\$ 2,862
9229	Geosteering Services	\$ 4,930	\$ -	\$ -	\$ 4,930
9236	Safety & Environmental	\$ 5,321	\$ -	\$ -	\$ 5,321



Authorization For Expenditure

Date: Oct 8, 2021

9212	Equipment Rental	\$	142,717	\$	-	\$	-	\$	142,717
9224	Fuel	\$	177,638	\$	-	\$	-	\$	177,638
9222	Consulting Services	\$	127,709	\$	-	\$	-	\$	127,709
9234	Solids Control / Closed Loop	\$	86,640	\$	-	\$	-	\$	86,640
9211	Location & Roads	\$	46,730	\$	-	\$	-	\$	46,730
9205	Drilling Overhead	\$	5,502	\$	-	\$	-	\$	5,502
9233	Mud - Diesel	\$	91,746	\$	-	\$	-	\$	91,746
9207	Permits, surveys, land & legal	\$	43,255	\$	-	\$	-	\$	43,255
9220	Insurance	\$	5,275	\$	-	\$	-	\$	5,275
9209	Mud - Chemicals & Engineering	\$	141,800	\$	-	\$	-	\$	141,800
9231	Mud - Brine	\$	17,073	\$	-	\$	-	\$	17,073
9290	Contingency (5%)	\$	132,292	\$	-	\$	-	\$	132,292
9202	Drilling - Daywork	\$	512,240	\$	-	\$	-	\$	512,240
9230	Mud - Drill Water	\$	32,021	\$	-	\$	-	\$	32,021
Intangible Completion - 02		\$	-	\$	4,719,301.00	\$	-	\$	4,719,301.00
9337	Sand	\$	-	\$	539,922	\$	-	\$	539,922
9314	Stimulation	\$	-	\$	749,050	\$	-	\$	749,050
9327	Flowback/Testing	\$	-	\$	99,698	\$	-	\$	99,698
9336	Contingency (10%)	\$	-	\$	237,112	\$	-	\$	237,112
9313	Rental Equipment - Downhole	\$	-	\$	21,795	\$	-	\$	21,795
9307	Water Disposal	\$	-	\$	64,656	\$	-	\$	64,656
9304	Safety & Environmental	\$	-	\$	10,545	\$	-	\$	10,545
9328	Company Supervision	\$	-	\$	6,277	\$	-	\$	6,277
9309	Fuel	\$	-	\$	676,598	\$	-	\$	676,598
9321	Roustabout Services	\$	-	\$	3,165	\$	-	\$	3,165
9325	Wireline/Perforating	\$	-	\$	468,483	\$	-	\$	468,483
9311	Location, Permit & Damages	\$	-	\$	17,353	\$	-	\$	17,353
9331	Pump Down Services	\$	-	\$	67,520	\$	-	\$	67,520
9326	Coil Tubing Unit	\$	-	\$	49,156	\$	-	\$	49,156
9315	Transportation	\$	-	\$	18,348	\$	-	\$	18,348
9332	Chemicals	\$	-	\$	337,073	\$	-	\$	337,073
9306	Contract Labor	\$	-	\$	76,858	\$	-	\$	76,858
9305	Completion Overhead	\$	-	\$	10,932	\$	-	\$	10,932
9330	Mancamp	\$	-	\$	32,077	\$	-	\$	32,077
9322	Consulting Services	\$	-	\$	120,527	\$	-	\$	120,527
9312	Rental Equipment - Surface	\$	-	\$	425,133	\$	-	\$	425,133
9335	Packers, Frac Plugs & Accessories	\$	-	\$	67,204	\$	-	\$	67,204
9343	WTR - AEP Water Recycle	\$	-	\$	24,533	\$	-	\$	24,533
9339	WTR - Brackish Water	\$	-	\$	465,367	\$	-	\$	465,367
9346	WTR - Water Transfers	\$	-	\$	123,450	\$	-	\$	123,450
9340	WTR - Fresh Water	\$	-	\$	6,469	\$	-	\$	6,469
Intangible Facility - 03		\$	-	\$	-	\$	400,000.00	\$	400,000.00
9360	Surface Rental	\$	-	\$	-	\$	13,000	\$	13,000
9351	Installation Costs - Supervision	\$	-	\$	-	\$	15,000	\$	15,000
9362	Consulting - Engineering	\$	-	\$	-	\$	12,000	\$	12,000
9352	Instal-Labor Mechanical	\$	-	\$	-	\$	140,000	\$	140,000
9357	Location,Permit,Damages,Survey	\$	-	\$	-	\$	15,000	\$	15,000
9356	Fluids,Chemicals	\$	-	\$	-	\$	10,000	\$	10,000
9354	Instal-Labor: Welding	\$	-	\$	-	\$	15,000	\$	15,000
9363	Trucking Costs	\$	-	\$	-	\$	12,000	\$	12,000
9359	Disposal	\$	-	\$	-	\$	12,000	\$	12,000
9353	Instal Labor: Inst,Elec,Autom	\$	-	\$	-	\$	144,000	\$	144,000
9370	Miscellaneous	\$	-	\$	-	\$	12,000	\$	12,000



AFE#: NM0189 R1

Authorization For Expenditure

Date: Oct 8, 2021

TOTAL INTANGIBLE COSTS >>>	\$ 2,785,921.00	\$ 4,719,301.00	\$ 400,000.00	\$ 7,905,222.00
TOTAL PROJECT COSTS >>>	\$ 3,765,223.00	\$ 4,765,683.00	\$ 900,000.00	\$ 9,430,906.00
	Dry Hole	Completion	Facility	Total

This Authority for Expenditure is based on cost estimates. Billing will reflect your proportionate share of the actual invoice costs.

Operator: ADVANCE ENERGY PARTNERS HAT MESA

Signature: 
Name: Braden Harris

Date: Oct 6, 2021
Title: V.P. of Drilling & Completions

Signature: 
Name: Kevin Hayes

Date: Oct 7, 2021
Title: C.F.O.

Signature: 
Name: Peter Lellis

Date: Oct 8, 2021
Title: President & C.E.O.

WI Owner: _____

Date: _____

Approved By: _____

Title: _____

Printed Name: _____



Authorization For Expenditure

AFE#: NM0190 R1

Date: Oct 8, 2021

Lease: Margarita Federal	Target: Bone Springs
Well No: Margarita Federal Com 13 #6H	Projected MD/TVD: 22840/9900
County: Lea	Spud to TD: 20
State: NM	Lateral Length: 11100
SHL: S13-T21S-R32E 1399 FNL, 1882 FEL	Stages: 71
BHL: S25-T21S-R32E 2540 FNL, 1430 FEL	Proppant/ft: 2500

Project Description:

The proposed AFE is for the Margarita Fed Com 6H, a 2.25 section Bone Spring to be drilled in Lea County, NM. This is a 4 string casing design consisting of the following: 24" surface hole drilled on Water to +/- 1700' and 20" 94# J-55 BTC casing set and cemented in place; 17.5" first intermediate hole drilled on Brine to +/-3615' and 13" 68# HCL-80 BTC casing set and cemented in place; 12.25" second intermediate drilled on Water to +/-5600' and a split string of 9.625" 40# J-55 LTC and 9.625" 40# HCL-80 LTC set and cemented in place; 8.5" production hole drilled on OBM to TD at +/-22840' and 5.5" 20# HCP-110 GBCD production casing set and cemented in place. There will be ~11100' of treatable lateral and completion design will consist of +/-71 stages and 2500 lbs/ft of proppant. Pad Facility design consistent with Wool Head Pad A and B. Cost associated with off pad Power Lines or Pipelines is not included in this AFE.

TANGIBLE COSTS			Dry Hole	Completion	Facility	Total
Tangible Drilling - 01			\$ 982,417.00	\$ -	\$ -	\$ 982,417.00
9412	Intermediate 1 Casing	\$ 377,650	\$ -	\$ -	\$ 377,650	
9402	Production Casing	\$ 442,396	\$ -	\$ -	\$ 442,396	
9401	Surface Casing	\$ 118,394	\$ -	\$ -	\$ 118,394	
9404-1	Wellhead & Equipment	\$ 43,977	\$ -	\$ -	\$ 43,977	
Tangible Completion - 02			\$ -	\$ 46,382.00	\$ -	\$ 46,382.00
9404-2	Wellhead & Equipment	\$ -	\$ 46,382	\$ -	\$ 46,382	
Tangible Facility - 03			\$ -	\$ -	\$ 500,000.00	\$ 500,000.00
9424	Vapor Recovery Unit	\$ -	\$ -	\$ 22,000	\$ 22,000	
9419	Flare	\$ -	\$ -	\$ 6,000	\$ 6,000	
9423	COMM- SCADA/Radio/Telecom	\$ -	\$ -	\$ 6,000	\$ 6,000	
9490	Miscellaneous	\$ -	\$ -	\$ 12,000	\$ 12,000	
9416	Valves & Fittings	\$ -	\$ -	\$ 145,000	\$ 145,000	
9418	Gas Meter	\$ -	\$ -	\$ 6,000	\$ 6,000	
9417	Electrical	\$ -	\$ -	\$ 75,000	\$ 75,000	
9407	Tanks	\$ -	\$ -	\$ 25,000	\$ 25,000	
9420	Pumps-Surface	\$ -	\$ -	\$ 35,000	\$ 35,000	
9421	Production Battery	\$ -	\$ -	\$ 18,000	\$ 18,000	
9408	Vessels	\$ -	\$ -	\$ 150,000	\$ 150,000	
TOTAL TANGIBLE COSTS >>>			\$ 982,417.00	\$ 46,382.00	\$ 500,000.00	\$ 1,528,799.00

INTANGIBLE COSTS			Dry Hole	Completion	Facility	Total
Intangible Drilling - 01			\$ 2,792,292.00	\$ -	\$ -	\$ 2,792,292.00
9220	Insurance	\$ 5,275	\$ -	\$ -	\$ 5,275	
9230	Mud - Drill Water	\$ 32,021	\$ -	\$ -	\$ 32,021	
9205	Drilling Overhead	\$ 5,526	\$ -	\$ -	\$ 5,526	
9232	Mud - Auxillary	\$ 22,180	\$ -	\$ -	\$ 22,180	
9218	Casing Services	\$ 98,261	\$ -	\$ -	\$ 98,261	
9209	Mud - Chemicals & Engineering	\$ 141,933	\$ -	\$ -	\$ 141,933	
9290	Contingency (5%)	\$ 132,594	\$ -	\$ -	\$ 132,594	
9211	Location & Roads	\$ 46,731	\$ -	\$ -	\$ 46,731	
9237	Mancamp	\$ 46,138	\$ -	\$ -	\$ 46,138	
9235	Disposal	\$ 150,245	\$ -	\$ -	\$ 150,245	
9219	Bits & BHA	\$ 126,000	\$ -	\$ -	\$ 126,000	
9234	Solids Control / Closed Loop	\$ 89,081	\$ -	\$ -	\$ 89,081	
9206	Contract Labor	\$ 36,695	\$ -	\$ -	\$ 36,695	
9202	Drilling - Daywork	\$ 514,463	\$ -	\$ -	\$ 514,463	
9204	Directional	\$ 378,016	\$ -	\$ -	\$ 378,016	



Authorization For Expenditure

Date: Oct 8, 2021

9208	Cementing & Services	\$	200,183	\$	-	\$	-	\$	200,183
9236	Safety & Environmental	\$	5,330	\$	-	\$	-	\$	5,330
9231	Mud - Brine	\$	17,073	\$	-	\$	-	\$	17,073
9203	Drilling - Rig Move	\$	97,588	\$	-	\$	-	\$	97,588
9207	Permits, surveys, land & legal	\$	43,255	\$	-	\$	-	\$	43,255
9239	Company Supervision	\$	2,868	\$	-	\$	-	\$	2,868
9233	Mud - Diesel	\$	91,746	\$	-	\$	-	\$	91,746
9224	Fuel	\$	178,366	\$	-	\$	-	\$	178,366
9212	Equipment Rental	\$	143,280	\$	-	\$	-	\$	143,280
9217	Inspection & Testing	\$	25,848	\$	-	\$	-	\$	25,848
9229	Geosteering Services	\$	4,943	\$	-	\$	-	\$	4,943
9228	Mudlogging & Services	\$	17,909	\$	-	\$	-	\$	17,909
9215	Transportation	\$	10,550	\$	-	\$	-	\$	10,550
9222	Consulting Services	\$	128,194	\$	-	\$	-	\$	128,194
Intangible Completion - 02		\$	-	\$	4,719,301.00	\$	-	\$	4,719,301.00
9309	Fuel	\$	-	\$	676,598	\$	-	\$	676,598
9305	Completion Overhead	\$	-	\$	10,932	\$	-	\$	10,932
9312	Rental Equipment - Surface	\$	-	\$	425,133	\$	-	\$	425,133
9332	Chemicals	\$	-	\$	337,073	\$	-	\$	337,073
9321	Roustabout Services	\$	-	\$	3,165	\$	-	\$	3,165
9328	Company Supervision	\$	-	\$	6,277	\$	-	\$	6,277
9306	Contract Labor	\$	-	\$	76,858	\$	-	\$	76,858
9331	Pump Down Services	\$	-	\$	67,520	\$	-	\$	67,520
9330	Mancamp	\$	-	\$	32,077	\$	-	\$	32,077
9336	Contingency (10%)	\$	-	\$	237,112	\$	-	\$	237,112
9337	Sand	\$	-	\$	539,922	\$	-	\$	539,922
9315	Transportation	\$	-	\$	18,348	\$	-	\$	18,348
9325	Wireline/Perforating	\$	-	\$	468,483	\$	-	\$	468,483
9307	Water Disposal	\$	-	\$	64,656	\$	-	\$	64,656
9322	Consulting Services	\$	-	\$	120,527	\$	-	\$	120,527
9327	Flowback/Testing	\$	-	\$	99,698	\$	-	\$	99,698
9311	Location, Permit & Damages	\$	-	\$	17,353	\$	-	\$	17,353
9313	Rental Equipment - Downhole	\$	-	\$	21,795	\$	-	\$	21,795
9335	Packers, Frac Plugs & Accessories	\$	-	\$	67,204	\$	-	\$	67,204
9314	Stimulation	\$	-	\$	749,050	\$	-	\$	749,050
9304	Safety & Environmental	\$	-	\$	10,545	\$	-	\$	10,545
9326	Coil Tubing Unit	\$	-	\$	49,156	\$	-	\$	49,156
9343	WTR - AEP Water Recycle	\$	-	\$	24,533	\$	-	\$	24,533
9340	WTR - Fresh Water	\$	-	\$	6,469	\$	-	\$	6,469
9346	WTR - Water Transfers	\$	-	\$	123,450	\$	-	\$	123,450
9339	WTR - Brackish Water	\$	-	\$	465,367	\$	-	\$	465,367
Intangible Facility - 03		\$	-	\$	-	\$	400,000.00	\$	400,000.00
9363	Trucking Costs	\$	-	\$	-	\$	12,000	\$	12,000
9353	Instal Labor: Inst,Elec,Autom	\$	-	\$	-	\$	144,000	\$	144,000
9360	Surface Rental	\$	-	\$	-	\$	13,000	\$	13,000
9354	Instal-Labor: Welding	\$	-	\$	-	\$	15,000	\$	15,000
9359	Disposal	\$	-	\$	-	\$	12,000	\$	12,000
9362	Consulting - Engineering	\$	-	\$	-	\$	12,000	\$	12,000
9370	Miscellaneous	\$	-	\$	-	\$	12,000	\$	12,000
9356	Fluids,Chemicals	\$	-	\$	-	\$	10,000	\$	10,000
9352	Instal-Labor Mechanical	\$	-	\$	-	\$	140,000	\$	140,000
9351	Installation Costs - Supervision	\$	-	\$	-	\$	15,000	\$	15,000
9357	Location,Permit,Damages,Survey	\$	-	\$	-	\$	15,000	\$	15,000



Authorization For Expenditure

AFE#: NM0190 R1

Date: Oct 8, 2021

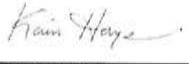
TOTAL INTANGIBLE COSTS >>>	\$ 2,792,292.00	\$ 4,719,301.00	\$ 400,000.00	\$ 7,911,593.00
TOTAL PROJECT COSTS >>>	\$ 3,774,709.00	\$ 4,765,683.00	\$ 900,000.00	\$ 9,440,392.00
	Dry Hole	Completion	Facility	Total

This Authority for Expenditure is based on cost estimates. Billing will reflect your proportionate share of the actual invoice costs.

Operator: ADVANCE ENERGY PARTNERS HAT MESA

Signature: 
Name: Braden Harris

Date: Oct 6, 2021
Title: V.P. of Drilling & Completions

Signature: 
Name: Kevin Hayes

Date: Oct 7, 2021
Title: C.F.O.

Signature: 
Name: Peter Lellis

Date: Oct 8, 2021
Title: President & C.E.O.

WI Owner: _____

Date: _____

Approved By: _____

Title: _____

Printed Name: _____



Authorization For Expenditure

AFE#: NM0183 R1

Date: Oct 8, 2021

Lease: Margarita Federal	Target: Bone Springs
Well No: Margarita Federal Com 13 #7H	Projected MD/TVD: 23269/11250
County: Lea	Spud to TD: 20.3
State: NM	Lateral Length: 11700
SHL: S13-T21S-R32E 460 FNL, 774 FEL	Stages: 75
BHL: S25-T21S-R32E 2540 FNL, 1430 FEL	Proppant/ft: 2500

Project Description:

The proposed AFE is for the Margarita Fed Com 7H, a 2.25 section Bone Spring to be drilled in Lea County, NM. This is a 4 string casing design consisting of the following: 24" surface hole drilled on Water to +/- 1700' and 20" 94# J-55 BTC casing set and cemented in place; 17.5" first intermediate hole drilled on Brine to +/-3615' and 13" 68# HCL-80 BTC casing set and cemented in place; 12.25" second intermediate drilled on Water to +/-5600' and a split string of 9.625" 40# J-55 LTC and 9.625" 40# HCL-80 LTC set and cemented in place; 8.5" production hole drilled on OBM to TD at +/-23269' and 5.5" 20# HCP-110 GBCD production casing set and cemented in place. There will be ~11700' of treatable lateral and completion design will consist of +/-75 stages and 2500 lbs/ft of proppant. Pad Facility design consistent with Wool Head Pad A and B. Cost associated with off pad Power Lines or Pipelines is not included in this AFE.

TANGIBLE COSTS		Dry Hole	Completion	Facility	Total
Tangible Drilling - 01		\$ 990,613.00	\$ -	\$ -	\$ 990,613.00
9401	Surface Casing	\$ 118,394	\$ -	\$ -	\$ 118,394
9412	Intermediate 1 Casing	\$ 377,650	\$ -	\$ -	\$ 377,650
9402	Production Casing	\$ 450,592	\$ -	\$ -	\$ 450,592
9404-1	Wellhead & Equipment	\$ 43,977	\$ -	\$ -	\$ 43,977
Tangible Completion - 02		\$ -	\$ 46,382.00	\$ -	\$ 46,382.00
9404-2	Wellhead & Equipment	\$ -	\$ 46,382	\$ -	\$ 46,382
Tangible Facility - 03		\$ -	\$ -	\$ 500,000.00	\$ 500,000.00
9420	Pumps-Surface	\$ -	\$ -	\$ 35,000	\$ 35,000
9408	Vessels	\$ -	\$ -	\$ 150,000	\$ 150,000
9416	Valves & Fittings	\$ -	\$ -	\$ 145,000	\$ 145,000
9407	Tanks	\$ -	\$ -	\$ 25,000	\$ 25,000
9418	Gas Meter	\$ -	\$ -	\$ 6,000	\$ 6,000
9421	Production Battery	\$ -	\$ -	\$ 18,000	\$ 18,000
9417	Electrical	\$ -	\$ -	\$ 75,000	\$ 75,000
9490	Miscellaneous	\$ -	\$ -	\$ 12,000	\$ 12,000
9423	COMM- SCADA/Radio/Telecom	\$ -	\$ -	\$ 6,000	\$ 6,000
9419	Flare	\$ -	\$ -	\$ 6,000	\$ 6,000
9424	Vapor Recovery Unil	\$ -	\$ -	\$ 22,000	\$ 22,000
TOTAL TANGIBLE COSTS >>>		\$ 990,613.00	\$ 46,382.00	\$ 500,000.00	\$ 1,536,995.00

INTANGIBLE COSTS		Dry Hole	Completion	Facility	Total
Intangible Drilling - 01		\$ 2,807,573.00	\$ -	\$ -	\$ 2,807,573.00
9219	Bits & BHA	\$ 126,135	\$ -	\$ -	\$ 126,135
9222	Consulting Services	\$ 129,241	\$ -	\$ -	\$ 129,241
9232	Mud - Auxillary	\$ 22,227	\$ -	\$ -	\$ 22,227
9235	Disposal	\$ 150,245	\$ -	\$ -	\$ 150,245
9231	Mud - Brine	\$ 17,073	\$ -	\$ -	\$ 17,073
9205	Drilling Overhead	\$ 5,579	\$ -	\$ -	\$ 5,579
9218	Casing Services	\$ 98,261	\$ -	\$ -	\$ 98,261
9290	Contingency (5%)	\$ 133,314	\$ -	\$ -	\$ 133,314
9217	Inspection & Testing	\$ 25,848	\$ -	\$ -	\$ 25,848
9229	Geosteering Services	\$ 5,099	\$ -	\$ -	\$ 5,099
9215	Transportation	\$ 10,550	\$ -	\$ -	\$ 10,550
9206	Contract Labor	\$ 36,695	\$ -	\$ -	\$ 36,695
9237	Mancamp	\$ 46,403	\$ -	\$ -	\$ 46,403
9239	Company Supervision	\$ 2,882	\$ -	\$ -	\$ 2,882
9236	Safety & Environmental	\$ 5,352	\$ -	\$ -	\$ 5,352



AFE#: NM0183 R1

Authorization For Expenditure

Date: Oct 8, 2021

9202	Drilling - Daywork	\$ 519,460	\$ -	\$ -	\$ 519,460
9204	Directional	\$ 382,868	\$ -	\$ -	\$ 382,868
9234	Solids Control / Closed Loop	\$ 88,881	\$ -	\$ -	\$ 88,881
9233	Mud - Diesel	\$ 91,746	\$ -	\$ -	\$ 91,746
9208	Cementing & Services	\$ 200,183	\$ -	\$ -	\$ 200,183
9203	Drilling - Rig Move	\$ 97,588	\$ -	\$ -	\$ 97,588
9209	Mud - Chemicals & Engineering	\$ 142,150	\$ -	\$ -	\$ 142,150
9211	Location & Roads	\$ 46,703	\$ -	\$ -	\$ 46,703
9228	Mudlogging & Services	\$ 18,175	\$ -	\$ -	\$ 18,175
9230	Mud - Drill Water	\$ 32,021	\$ -	\$ -	\$ 32,021
9224	Fuel	\$ 179,936	\$ -	\$ -	\$ 179,936
9212	Equipment Rental	\$ 144,428	\$ -	\$ -	\$ 144,428
9220	Insurance	\$ 5,275	\$ -	\$ -	\$ 5,275
9207	Permits, surveys, land & legal	\$ 43,255	\$ -	\$ -	\$ 43,255
Intangible Completion - 02		\$ -	\$ 4,923,784.00	\$ -	\$ 4,923,784.00
9322	Consulting Services	\$ -	\$ 124,563	\$ -	\$ 124,563
9305	Completion Overhead	\$ -	\$ 11,195	\$ -	\$ 11,195
9330	Mancamp	\$ -	\$ 32,480	\$ -	\$ 32,480
9315	Transportation	\$ -	\$ 18,348	\$ -	\$ 18,348
9331	Pump Down Services	\$ -	\$ 70,685	\$ -	\$ 70,685
9304	Safety & Environmental	\$ -	\$ 10,545	\$ -	\$ 10,545
9332	Chemicals	\$ -	\$ 356,063	\$ -	\$ 356,063
9307	Water Disposal	\$ -	\$ 64,656	\$ -	\$ 64,656
9313	Rental Equipment - Downhole	\$ -	\$ 21,795	\$ -	\$ 21,795
9309	Fuel	\$ -	\$ 714,472	\$ -	\$ 714,472
9314	Stimulation	\$ -	\$ 791,250	\$ -	\$ 791,250
9327	Flowback/Testing	\$ -	\$ 99,698	\$ -	\$ 99,698
9311	Location, Permit & Damages	\$ -	\$ 17,353	\$ -	\$ 17,353
9321	Roustabout Services	\$ -	\$ 3,165	\$ -	\$ 3,165
9328	Company Supervision	\$ -	\$ 6,317	\$ -	\$ 6,317
9312	Rental Equipment - Surface	\$ -	\$ 448,450	\$ -	\$ 448,450
9337	Sand	\$ -	\$ 570,340	\$ -	\$ 570,340
9336	Contingency (10%)	\$ -	\$ 248,579	\$ -	\$ 248,579
9326	Coil Tubing Unit	\$ -	\$ 51,926	\$ -	\$ 51,926
9335	Packers, Frac Plugs & Accessories	\$ -	\$ 70,369	\$ -	\$ 70,369
9325	Wireline/Perforating	\$ -	\$ 494,858	\$ -	\$ 494,858
9306	Contract Labor	\$ -	\$ 76,858	\$ -	\$ 76,858
9340	WTR - Fresh Water	\$ -	\$ 6,469	\$ -	\$ 6,469
9346	WTR - Water Transfers	\$ -	\$ 123,450	\$ -	\$ 123,450
9343	WTR - AEP Water Recycle	\$ -	\$ 24,533	\$ -	\$ 24,533
9339	WTR - Brackish Water	\$ -	\$ 465,367	\$ -	\$ 465,367
Intangible Facility - 03		\$ -	\$ -	\$ 400,000.00	\$ 400,000.00
9352	Instal-Labor Mechanical	\$ -	\$ -	\$ 140,000	\$ 140,000
9363	Trucking Costs	\$ -	\$ -	\$ 12,000	\$ 12,000
9360	Surface Rental	\$ -	\$ -	\$ 13,000	\$ 13,000
9353	Instal Labor: Inst,Elec,Autom	\$ -	\$ -	\$ 144,000	\$ 144,000
9370	Miscellaneous	\$ -	\$ -	\$ 12,000	\$ 12,000
9351	Installation Costs - Supervision	\$ -	\$ -	\$ 15,000	\$ 15,000
9356	Fluids,Chemicals	\$ -	\$ -	\$ 10,000	\$ 10,000
9357	Location,Permit,Damages,Survey	\$ -	\$ -	\$ 15,000	\$ 15,000
9359	Disposal	\$ -	\$ -	\$ 12,000	\$ 12,000
9362	Consulting - Engineering	\$ -	\$ -	\$ 12,000	\$ 12,000
9354	Instal-Labor: Welding	\$ -	\$ -	\$ 15,000	\$ 15,000



Authorization For Expenditure

AFE#: NM0183 R1

Date: Oct 8, 2021

TOTAL INTANGIBLE COSTS >>>	\$ 2,807,573.00	\$ 4,923,784.00	\$ 400,000.00	\$ 8,131,357.00
TOTAL PROJECT COSTS >>>	\$ 3,798,186.00	\$ 4,970,166.00	\$ 900,000.00	\$ 9,668,352.00
	Dry Hole	Completion	Facility	Total

This Authority for Expenditure is based on cost estimates. Billing will reflect your proportionate share of the actual invoice costs.

Operator: ADVANCE ENERGY PARTNERS HAT MESA

Signature: 
Name: Braden Harris

Date: Oct 6, 2021
Title: V.P. of Drilling & Completions

Signature: 
Name: Kevin Hayes

Date: Oct 7, 2021
Title: C.F.O.

Signature: 
Name: Peter Lellis

Date: Oct 8, 2021
Title: President & C.E.O.

WI Owner: _____

Date: _____

Approved By: _____

Title: _____

Printed Name: _____



Authorization For Expenditure

AFE#: NM0184 R1

Date: Oct 8, 2021

Lease: Margarita Federal	Target: Bone Springs
Well No: Margarita Federal Com 13 #8H	Projected MD/TVD: 23611/10900
County: Lea	Spud to TD: 20.5
State: NM	Lateral Length: 11900
SHL: S13-T21S-R32E 460 FNL, 642 FEL	Stages: 76
BHL: S25-T21S-R32E 2540 FNL, 550 FEL	Proppant/ft: 2500

Project Description:

The proposed AFE is for the Margarita Fed Com 8H, a 2.25 section Bone Spring to be drilled in Lea County, NM. This is a 4 string casing design consisting of the following: 24" surface hole drilled on Water to +/- 1700' and 20" 94# J-55 BTC casing set and cemented in place; 17.5" first intermediate hole drilled on Brine to +/-3615' and 13" 68# HCL-80 BTC casing set and cemented in place; 12.25" second intermediate drilled on Water to +/-5600' and a split string of 9.625" 40# J-55 LTC and 9.625" 40# HCL-80 LTC set and cemented in place; 8.5" production hole drilled on OBM to TD at +/-23611' and 5.5" 20# HCP-110 GBCD production casing set and cemented in place. There will be ~11900' of treatable lateral and completion design will consist of +/-76 stages and 2500 lbs/ft of proppant. Pad Facility design consistent with Wool Head Pad A and B. Cost associated with off pad Power Lines or Pipelines is not included in this AFE.

TANGIBLE COSTS			Dry Hole	Completion	Facility	Total
Tangible Drilling - 01			\$ 997,147.00	\$ -	\$ -	\$ 997,147.00
9401	Surface Casing	\$	118,394	\$ -	\$ -	\$ 118,394
9402	Production Casing	\$	457,126	\$ -	\$ -	\$ 457,126
9412	Intermediate 1 Casing	\$	377,650	\$ -	\$ -	\$ 377,650
9404-1	Wellhead & Equipment	\$	43,977	\$ -	\$ -	\$ 43,977
Tangible Completion - 02			\$ -	\$ 46,382.00	\$ -	\$ 46,382.00
9404-2	Wellhead & Equipment	\$	-	\$ 46,382	\$ -	\$ 46,382
Tangible Facility - 03			\$ -	\$ -	\$ 500,000.00	\$ 500,000.00
9418	Gas Meter	\$	-	\$ -	\$ 6,000	\$ 6,000
9490	Miscellaneous	\$	-	\$ -	\$ 12,000	\$ 12,000
9407	Tanks	\$	-	\$ -	\$ 25,000	\$ 25,000
9424	Vapor Recovery Unit	\$	-	\$ -	\$ 22,000	\$ 22,000
9408	Vessels	\$	-	\$ -	\$ 150,000	\$ 150,000
9421	Production Battery	\$	-	\$ -	\$ 18,000	\$ 18,000
9417	Electrical	\$	-	\$ -	\$ 75,000	\$ 75,000
9419	Flare	\$	-	\$ -	\$ 6,000	\$ 6,000
9423	COMM- SCADA/Radio/Telecom	\$	-	\$ -	\$ 6,000	\$ 6,000
9416	Valves & Fittings	\$	-	\$ -	\$ 145,000	\$ 145,000
9420	Pumps-Surface	\$	-	\$ -	\$ 35,000	\$ 35,000
TOTAL TANGIBLE COSTS >>>			\$ 997,147.00	\$ 46,382.00	\$ 500,000.00	\$ 1,543,529.00

INTANGIBLE COSTS			Dry Hole	Completion	Facility	Total
Intangible Drilling - 01			\$ 2,821,397.00	\$ -	\$ -	\$ 2,821,397.00
9211	Location & Roads	\$	46,695	\$ -	\$ -	\$ 46,695
9290	Contingency (5%)	\$	133,968	\$ -	\$ -	\$ 133,968
9205	Drilling Overhead	\$	5,626	\$ -	\$ -	\$ 5,626
9224	Fuel	\$	181,348	\$ -	\$ -	\$ 181,348
9222	Consulting Services	\$	130,183	\$ -	\$ -	\$ 130,183
9228	Mudlogging & Services	\$	18,418	\$ -	\$ -	\$ 18,418
9206	Contract Labor	\$	36,695	\$ -	\$ -	\$ 36,695
9209	Mud - Chemicals & Engineering	\$	142,385	\$ -	\$ -	\$ 142,385
9219	Bits & BHA	\$	126,257	\$ -	\$ -	\$ 126,257
9217	Inspection & Testing	\$	25,848	\$ -	\$ -	\$ 25,848
9203	Drilling - Rig Move	\$	97,588	\$ -	\$ -	\$ 97,588
9230	Mud - Drill Water	\$	32,021	\$ -	\$ -	\$ 32,021
9212	Equipment Rental	\$	145,770	\$ -	\$ -	\$ 145,770
9236	Safety & Environmental	\$	5,371	\$ -	\$ -	\$ 5,371
9220	Insurance	\$	5,275	\$ -	\$ -	\$ 5,275



Authorization For Expenditure

Date: Oct 8, 2021

9231	Mud - Brine	\$ 17,073	\$ -	\$ -	\$ 17,073
9208	Cementing & Services	\$ 200,183	\$ -	\$ -	\$ 200,183
9239	Company Supervision	\$ 2,893	\$ -	\$ -	\$ 2,893
9202	Drilling - Daywork	\$ 523,840	\$ -	\$ -	\$ 523,840
9234	Solids Control / Closed Loop	\$ 89,352	\$ -	\$ -	\$ 89,352
9232	Mud - Auxiliary	\$ 22,270	\$ -	\$ -	\$ 22,270
9218	Casing Services	\$ 98,261	\$ -	\$ -	\$ 98,261
9229	Geosteering Services	\$ 5,166	\$ -	\$ -	\$ 5,166
9235	Disposal	\$ 150,245	\$ -	\$ -	\$ 150,245
9233	Mud - Diesel	\$ 91,746	\$ -	\$ -	\$ 91,746
9204	Directional	\$ 385,840	\$ -	\$ -	\$ 385,840
9215	Transportation	\$ 10,550	\$ -	\$ -	\$ 10,550
9237	Mancamp	\$ 47,275	\$ -	\$ -	\$ 47,275
9207	Permits, surveys, land & legal	\$ 43,255	\$ -	\$ -	\$ 43,255
Intangible Completion - 02		\$ -	\$ 4,970,543.00	\$ -	\$ 4,970,543.00
9322	Consulting Services	\$ -	\$ 124,675	\$ -	\$ 124,675
9335	Packers, Frac Plugs & Accessories	\$ -	\$ 71,160	\$ -	\$ 71,160
9328	Company Supervision	\$ -	\$ 6,318	\$ -	\$ 6,318
9315	Transportation	\$ -	\$ 18,348	\$ -	\$ 18,348
9336	Contingency (10%)	\$ -	\$ 251,127	\$ -	\$ 251,127
9304	Safety & Environmental	\$ -	\$ 10,545	\$ -	\$ 10,545
9306	Contract Labor	\$ -	\$ 76,858	\$ -	\$ 76,858
9325	Wireline/Perforating	\$ -	\$ 501,452	\$ -	\$ 501,452
9307	Water Disposal	\$ -	\$ 64,656	\$ -	\$ 64,656
9311	Location, Permit & Damages	\$ -	\$ 17,353	\$ -	\$ 17,353
9330	Mancamp	\$ -	\$ 32,491	\$ -	\$ 32,491
9314	Stimulation	\$ -	\$ 801,800	\$ -	\$ 801,800
9327	Flowback/Testing	\$ -	\$ 99,698	\$ -	\$ 99,698
9309	Fuel	\$ -	\$ 722,781	\$ -	\$ 722,781
9321	Roustabout Services	\$ -	\$ 3,165	\$ -	\$ 3,165
9332	Chemicals	\$ -	\$ 360,810	\$ -	\$ 360,810
9337	Sand	\$ -	\$ 577,944	\$ -	\$ 577,944
9312	Rental Equipment - Surface	\$ -	\$ 453,242	\$ -	\$ 453,242
9313	Rental Equipment - Downhole	\$ -	\$ 21,795	\$ -	\$ 21,795
9305	Completion Overhead	\$ -	\$ 11,203	\$ -	\$ 11,203
9331	Pump Down Services	\$ -	\$ 70,685	\$ -	\$ 70,685
9326	Coil Tubing Unit	\$ -	\$ 52,618	\$ -	\$ 52,618
9343	WTR - AEP Water Recycle	\$ -	\$ 24,533	\$ -	\$ 24,533
9339	WTR - Brackish Water	\$ -	\$ 465,367	\$ -	\$ 465,367
9340	WTR - Fresh Water	\$ -	\$ 6,469	\$ -	\$ 6,469
9346	WTR - Water Transfers	\$ -	\$ 123,450	\$ -	\$ 123,450
Intangible Facility - 03		\$ -	\$ -	\$ 400,000.00	\$ 400,000.00
9362	Consulting - Engineering	\$ -	\$ -	\$ 12,000	\$ 12,000
9359	Disposal	\$ -	\$ -	\$ 12,000	\$ 12,000
9354	Instal-Labor: Welding	\$ -	\$ -	\$ 15,000	\$ 15,000
9360	Surface Rental	\$ -	\$ -	\$ 13,000	\$ 13,000
9356	Fluids,Chemicals	\$ -	\$ -	\$ 10,000	\$ 10,000
9370	Miscellaneous	\$ -	\$ -	\$ 12,000	\$ 12,000
9351	Installation Costs - Supervision	\$ -	\$ -	\$ 15,000	\$ 15,000
9353	Instal Labor: Inst,Elec,Autom	\$ -	\$ -	\$ 144,000	\$ 144,000
9363	Trucking Costs	\$ -	\$ -	\$ 12,000	\$ 12,000
9357	Location,Permit,Damages,Survey	\$ -	\$ -	\$ 15,000	\$ 15,000
9352	Instal-Labor Mechanical	\$ -	\$ -	\$ 140,000	\$ 140,000



AFE#: NM0184 R1

Authorization For Expenditure

Date: Oct 8, 2021

TOTAL INTANGIBLE COSTS >>>	\$ 2,821,397.00	\$ 4,970,543.00	\$ 400,000.00	\$ 8,191,940.00
TOTAL PROJECT COSTS >>>	\$ 3,818,544.00	\$ 5,016,925.00	\$ 900,000.00	\$ 9,735,469.00
	Dry Hole	Completion	Facility	Total

This Authority for Expenditure is based on cost estimates. Billing will reflect your proportionate share of the actual invoice costs.

Operator: ADVANCE ENERGY PARTNERS HAT MESA

Signature: Name: Braden Harris

Date: Oct 6, 2021
Title: V.P. of Drilling & Completions

Signature: Name: Kevin Hayes

Date: Oct 7, 2021
Title: C.F.O.

Signature: Name: Peter Lellis

Date: Oct 8, 2021
Title: President & C.E.O.

WI Owner: _____

Date: _____

Approved By: _____

Title: _____

Printed Name: _____



Authorization For Expenditure

AFE#: NM0191 R1

Date: Oct 8, 2021

Lease: Margarita Federal	Target: Bone Springs
Well No: Margarita Federal Com 13 #11H	Projected MD/TVD: 22320/10200
County: Lea	Spud to TD: 19.7
State: NM	Lateral Length: 11100
SHL: S13-T21S-R32E 1399 FNL, 1948 FEL	Stages: 71
BHL: S25-T21S-R32E 2540 FNL, 2310 FEL	Proppant/ft: 2500

Project Description:

The proposed AFE is for the Margarita Fed Com 11H, a 2.25 section Bone Spring to be drilled in Lea County, NM. This is a 4 string casing design consisting of the following: 24" surface hole drilled on Water to +/- 1700' and 20" 94# J-55 BTC casing set and cemented in place; 17.5" first intermediate hole drilled on Brine to +/-3615' and 13" 68# HCL-80 BTC casing set and cemented in place; 12.25" second intermediate drilled on Water to +/-5600' and a split string of 9.625" 40# J-55 LTC and 9.625" 40# HCL-80 LTC set and cemented in place; 8.5" production hole drilled on OBM to TD at +/-22320' and 5.5" 20# HCP-110 GBCD production casing set and cemented in place. There will be ~11100' of treatable lateral and completion design will consist of +/-71 stages and 2500 lbs/ft of proppant. Pad Facility design consistent with Wool Head Pad A and B. Cost associated with off pad Power Lines or Pipelines is not included in this AFE.

TANGIBLE COSTS		Dry Hole	Completion	Facility	Total
Tangible Drilling - 01		\$ 972,482.00	\$ -	\$ -	\$ 972,482.00
9412	Intermediate 1 Casing	\$ 377,650	\$ -	\$ -	\$ 377,650
9401	Surface Casing	\$ 118,394	\$ -	\$ -	\$ 118,394
9402	Production Casing	\$ 432,461	\$ -	\$ -	\$ 432,461
9404-1	Wellhead & Equipment	\$ 43,977	\$ -	\$ -	\$ 43,977
Tangible Completion - 02		\$ -	\$ 46,382.00	\$ -	\$ 46,382.00
9404-2	Wellhead & Equipment	\$ -	\$ 46,382	\$ -	\$ 46,382
Tangible Facility - 03		\$ -	\$ -	\$ 500,000.00	\$ 500,000.00
9490	Miscellaneous	\$ -	\$ -	\$ 12,000	\$ 12,000
9419	Flare	\$ -	\$ -	\$ 6,000	\$ 6,000
9423	COMM- SCADA/Radio/Telecom	\$ -	\$ -	\$ 6,000	\$ 6,000
9408	Vessels	\$ -	\$ -	\$ 150,000	\$ 150,000
9420	Pumps-Surface	\$ -	\$ -	\$ 35,000	\$ 35,000
9407	Tanks	\$ -	\$ -	\$ 25,000	\$ 25,000
9418	Gas Meter	\$ -	\$ -	\$ 6,000	\$ 6,000
9424	Vapor Recovery Unit	\$ -	\$ -	\$ 22,000	\$ 22,000
9421	Production Battery	\$ -	\$ -	\$ 18,000	\$ 18,000
9417	Electrical	\$ -	\$ -	\$ 75,000	\$ 75,000
9416	Valves & Fittings	\$ -	\$ -	\$ 145,000	\$ 145,000
TOTAL TANGIBLE COSTS >>>		\$ 972,482.00	\$ 46,382.00	\$ 500,000.00	\$ 1,518,864.00

INTANGIBLE COSTS		Dry Hole	Completion	Facility	Total
Intangible Drilling - 01		\$ 2,771,897.00	\$ -	\$ -	\$ 2,771,897.00
9204	Directional	\$ 374,564	\$ -	\$ -	\$ 374,564
9235	Disposal	\$ 150,245	\$ -	\$ -	\$ 150,245
9219	Bits & BHA	\$ 125,798	\$ -	\$ -	\$ 125,798
9232	Mud - Auxiliary	\$ 22,109	\$ -	\$ -	\$ 22,109
9220	Insurance	\$ 5,275	\$ -	\$ -	\$ 5,275
9205	Drilling Overhead	\$ 5,448	\$ -	\$ -	\$ 5,448
9230	Mud - Drill Water	\$ 32,021	\$ -	\$ -	\$ 32,021
9234	Solids Control / Closed Loop	\$ 87,616	\$ -	\$ -	\$ 87,616
9215	Transportation	\$ 10,550	\$ -	\$ -	\$ 10,550
9202	Drilling - Daywork	\$ 507,332	\$ -	\$ -	\$ 507,332
9208	Cementing & Services	\$ 200,183	\$ -	\$ -	\$ 200,183
9233	Mud - Diesel	\$ 91,746	\$ -	\$ -	\$ 91,746
9224	Fuel	\$ 176,028	\$ -	\$ -	\$ 176,028
9206	Contract Labor	\$ 36,695	\$ -	\$ -	\$ 36,695
9211	Location & Roads	\$ 46,727	\$ -	\$ -	\$ 46,727



Authorization For Expenditure

AFE#: NM0191 R1

Date: Oct 8, 2021

9207	Permits, surveys, land & legal	\$ 43,255	\$ -	\$ -	\$ 43,255
9237	Mancamp	\$ 45,743	\$ -	\$ -	\$ 45,743
9229	Geosteering Services	\$ 4,908	\$ -	\$ -	\$ 4,908
9228	Mudlogging & Services	\$ 17,504	\$ -	\$ -	\$ 17,504
9217	Inspection & Testing	\$ 25,848	\$ -	\$ -	\$ 25,848
9222	Consulting Services	\$ 126,636	\$ -	\$ -	\$ 126,636
9203	Drilling - Rig Move	\$ 97,588	\$ -	\$ -	\$ 97,588
9212	Equipment Rental	\$ 141,469	\$ -	\$ -	\$ 141,469
9209	Mud - Chemicals & Engineering	\$ 141,501	\$ -	\$ -	\$ 141,501
9231	Mud - Brine	\$ 17,073	\$ -	\$ -	\$ 17,073
9239	Company Supervision	\$ 2,849	\$ -	\$ -	\$ 2,849
9290	Contingency (5%)	\$ 131,626	\$ -	\$ -	\$ 131,626
9236	Safety & Environmental	\$ 5,299	\$ -	\$ -	\$ 5,299
9218	Casing Services	\$ 98,261	\$ -	\$ -	\$ 98,261
Intangible Completion - 02		\$ -	\$ 4,719,301.00	\$ -	\$ 4,719,301.00
9306	Contract Labor	\$ -	\$ 76,858	\$ -	\$ 76,858
9335	Packers, Frac Plugs & Accessories	\$ -	\$ 67,204	\$ -	\$ 67,204
9314	Stimulation	\$ -	\$ 749,050	\$ -	\$ 749,050
9332	Chemicals	\$ -	\$ 337,073	\$ -	\$ 337,073
9305	Completion Overhead	\$ -	\$ 10,932	\$ -	\$ 10,932
9328	Company Supervision	\$ -	\$ 6,277	\$ -	\$ 6,277
9307	Water Disposal	\$ -	\$ 64,656	\$ -	\$ 64,656
9331	Pump Down Services	\$ -	\$ 67,520	\$ -	\$ 67,520
9330	Mancamp	\$ -	\$ 32,077	\$ -	\$ 32,077
9322	Consulting Services	\$ -	\$ 120,527	\$ -	\$ 120,527
9304	Safety & Environmental	\$ -	\$ 10,545	\$ -	\$ 10,545
9312	Rental Equipment - Surface	\$ -	\$ 425,133	\$ -	\$ 425,133
9325	Wireline/Perforating	\$ -	\$ 468,483	\$ -	\$ 468,483
9336	Contingency (10%)	\$ -	\$ 237,112	\$ -	\$ 237,112
9315	Transportation	\$ -	\$ 18,348	\$ -	\$ 18,348
9327	Flowback/Testing	\$ -	\$ 99,698	\$ -	\$ 99,698
9311	Location, Permit & Damages	\$ -	\$ 17,353	\$ -	\$ 17,353
9326	Coil Tubing Unit	\$ -	\$ 49,156	\$ -	\$ 49,156
9309	Fuel	\$ -	\$ 676,598	\$ -	\$ 676,598
9337	Sand	\$ -	\$ 539,922	\$ -	\$ 539,922
9321	Roustabout Services	\$ -	\$ 3,165	\$ -	\$ 3,165
9313	Rental Equipment - Downhole	\$ -	\$ 21,795	\$ -	\$ 21,795
9339	WTR - Brackish Water	\$ -	\$ 465,367	\$ -	\$ 465,367
9346	WTR - Water Transfers	\$ -	\$ 123,450	\$ -	\$ 123,450
9343	WTR - AEP Water Recycle	\$ -	\$ 24,533	\$ -	\$ 24,533
9340	WTR - Fresh Water	\$ -	\$ 6,469	\$ -	\$ 6,469
Intangible Facility - 03		\$ -	\$ -	\$ 400,000.00	\$ 400,000.00
9353	Instal Labor: Inst,Elec,Autom	\$ -	\$ -	\$ 144,000	\$ 144,000
9359	Disposal	\$ -	\$ -	\$ 12,000	\$ 12,000
9362	Consulting - Engineering	\$ -	\$ -	\$ 12,000	\$ 12,000
9363	Trucking Costs	\$ -	\$ -	\$ 12,000	\$ 12,000
9370	Miscellaneous	\$ -	\$ -	\$ 12,000	\$ 12,000
9357	Location,Permit,Damages,Survey	\$ -	\$ -	\$ 15,000	\$ 15,000
9360	Surface Rental	\$ -	\$ -	\$ 13,000	\$ 13,000
9352	Instal-Labor Mechanical	\$ -	\$ -	\$ 140,000	\$ 140,000
9356	Fluids,Chemicals	\$ -	\$ -	\$ 10,000	\$ 10,000
9354	Instal-Labor: Welding	\$ -	\$ -	\$ 15,000	\$ 15,000
9351	Installation Costs - Supervision	\$ -	\$ -	\$ 15,000	\$ 15,000



AFE#: NM0191 R1

Authorization For Expenditure

Date: Oct 8, 2021

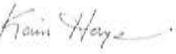
TOTAL INTANGIBLE COSTS >>>	\$ 2,771,897.00	\$ 4,719,301.00	\$ 400,000.00	\$ 7,891,198.00
TOTAL PROJECT COSTS >>>	\$ 3,744,379.00	\$ 4,765,683.00	\$ 900,000.00	\$ 9,410,062.00
	Dry Hole	Completion	Facility	Total

This Authority for Expenditure is based on cost estimates. Billing will reflect your proportionate share of the actual invoice costs.

Operator: ADVANCE ENERGY PARTNERS HAT MESA

Signature: 
 Name: Braden Harris

Date: Oct 6, 2021
 Title: V.P. of Drilling & Completions

Signature: 
 Name: Kevin Hayes

Date: Oct 7, 2021
 Title: C.F.O.

Signature: 
 Name: Peter Lellis

Date: Oct 8, 2021
 Title: President & C.E.O.

WI Owner: _____

Date: _____

Approved By: _____

Title: _____

Printed Name: _____



AFE#: NM0185 R1

Authorization For Expenditure

Date: Oct 8, 2021

Lease: Margarita Federal	Target: Bone Springs
Well No: Margarita Federal Com 13 #12H	Projected MD/TVD: 22932/10200
County: Lea	Spud to TD: 20.1
State: NM	Lateral Length: 11700
SHL: S13-T21S-R32E 460 FNL, 708 FEL	Stages: 75
BHL: S25-T21S-R32E 2540 FNL, 550 FEL	Proppant/ft: 2500

Project Description:

The proposed AFE is for the Margarita Fed Com 12H, a 2.25 section Bone Spring to be drilled in Lea County, NM. This is a 4 string casing design consisting of the following: 24" surface hole drilled on Water to +/- 1700' and 20" 94# J-55 BTC casing set and cemented in place; 17.5" first intermediate hole drilled on Brine to +/-3615' and 13" 68# HCL-80 BTC casing set and cemented in place; 12.25" second intermediate drilled on Water to +/-5600' and a split string of 9.625" 40# J-55 LTC and 9.625" 40# HCL-80 LTC set and cemented in place; 8.5" production hole drilled on OBM to TD at +/-22932' and 5.5" 20# HCP-110 GBCD production casing set and cemented in place. There will be ~11700' of treatable lateral and completion design will consist of +/-75 stages and 2500 lbs/ft of proppant. Pad Facility design consistent with Wool Head Pad A and B. Cost associated with off pad Power Lines or Pipelines is not included in this AFE.

TANGIBLE COSTS			Dry Hole	Completion	Facility	Total
Tangible Drilling - 01			\$ 984,174.00	\$ -	\$ -	\$ 984,174.00
9404-1	Wellhead & Equipment	\$ 43,977	\$ -	\$ -	\$ 43,977	
9402	Production Casing	\$ 444,153	\$ -	\$ -	\$ 444,153	
9401	Surface Casing	\$ 118,394	\$ -	\$ -	\$ 118,394	
9412	Intermediate 1 Casing	\$ 377,650	\$ -	\$ -	\$ 377,650	
Tangible Completion - 02			\$ -	\$ 46,382.00	\$ -	\$ 46,382.00
9404-2	Wellhead & Equipment	\$ -	\$ 46,382	\$ -	\$ 46,382	
Tangible Facility - 03			\$ -	\$ -	\$ 500,000.00	\$ 500,000.00
9424	Vapor Recovery Unit	\$ -	\$ -	\$ 22,000	\$ 22,000	
9417	Electrical	\$ -	\$ -	\$ 75,000	\$ 75,000	
9418	Gas Meter	\$ -	\$ -	\$ 6,000	\$ 6,000	
9419	Flare	\$ -	\$ -	\$ 6,000	\$ 6,000	
9408	Vessels	\$ -	\$ -	\$ 150,000	\$ 150,000	
9416	Valves & Fittings	\$ -	\$ -	\$ 145,000	\$ 145,000	
9421	Production Battery	\$ -	\$ -	\$ 18,000	\$ 18,000	
9423	COMM- SCADA/Radio/Telecom	\$ -	\$ -	\$ 6,000	\$ 6,000	
9407	Tanks	\$ -	\$ -	\$ 25,000	\$ 25,000	
9420	Pumps-Surface	\$ -	\$ -	\$ 35,000	\$ 35,000	
9490	Miscellaneous	\$ -	\$ -	\$ 12,000	\$ 12,000	
TOTAL TANGIBLE COSTS >>>			\$ 984,174.00	\$ 46,382.00	\$ 500,000.00	\$ 1,530,556.00

INTANGIBLE COSTS			Dry Hole	Completion	Facility	Total
Intangible Drilling - 01			\$ 2,794,289.00	\$ -	\$ -	\$ 2,794,289.00
9206	Contract Labor	\$ 36,695	\$ -	\$ -	\$ 36,695	
9233	Mud - Diesel	\$ 91,746	\$ -	\$ -	\$ 91,746	
9211	Location & Roads	\$ 46,698	\$ -	\$ -	\$ 46,698	
9218	Casing Services	\$ 98,261	\$ -	\$ -	\$ 98,261	
9220	Insurance	\$ 5,275	\$ -	\$ -	\$ 5,275	
9208	Cementing & Services	\$ 200,183	\$ -	\$ -	\$ 200,183	
9209	Mud - Chemicals & Engineering	\$ 141,864	\$ -	\$ -	\$ 141,864	
9215	Transportation	\$ 10,550	\$ -	\$ -	\$ 10,550	
9219	Bits & BHA	\$ 126,003	\$ -	\$ -	\$ 126,003	
9205	Drilling Overhead	\$ 5,528	\$ -	\$ -	\$ 5,528	
9230	Mud - Drill Water	\$ 32,021	\$ -	\$ -	\$ 32,021	
9217	Inspection & Testing	\$ 25,848	\$ -	\$ -	\$ 25,848	
9229	Geosteering Services	\$ 5,082	\$ -	\$ -	\$ 5,082	
9204	Directional	\$ 380,715	\$ -	\$ -	\$ 380,715	
9203	Drilling - Rig Move	\$ 97,588	\$ -	\$ -	\$ 97,588	



AFE#: NM0185 R1

Authorization For Expenditure

Date: Oct 8, 2021

9239	Company Supervision	\$ 2,869	\$ -	\$ -	\$ 2,869
9232	Mud - Auxillary	\$ 22,181	\$ -	\$ -	\$ 22,181
9290	Contingency (5%)	\$ 132,683	\$ -	\$ -	\$ 132,683
9234	Solids Control / Closed Loop	\$ 87,874	\$ -	\$ -	\$ 87,874
9207	Permits, surveys, land & legal	\$ 43,255	\$ -	\$ -	\$ 43,255
9235	Disposal	\$ 150,245	\$ -	\$ -	\$ 150,245
9212	Equipment Rental	\$ 143,239	\$ -	\$ -	\$ 143,239
9236	Safety & Enviornmental	\$ 5,332	\$ -	\$ -	\$ 5,332
9222	Consulting Services	\$ 128,221	\$ -	\$ -	\$ 128,221
9224	Fuel	\$ 178,406	\$ -	\$ -	\$ 178,406
9202	Drilling - Daywork	\$ 514,799	\$ -	\$ -	\$ 514,799
9228	Mudlogging & Services	\$ 17,910	\$ -	\$ -	\$ 17,910
9237	Mancamp	\$ 46,145	\$ -	\$ -	\$ 46,145
9231	Mud - Brine	\$ 17,073	\$ -	\$ -	\$ 17,073
Intangible Completion - 02		\$ -	\$ 4,923,784.00	\$ -	\$ 4,923,784.00
9315	Transportation	\$ -	\$ 18,348	\$ -	\$ 18,348
9326	Coll Tubing Unit	\$ -	\$ 51,926	\$ -	\$ 51,926
9305	Completion Overhead	\$ -	\$ 11,195	\$ -	\$ 11,195
9304	Safety & Environmental	\$ -	\$ 10,545	\$ -	\$ 10,545
9309	Fuel	\$ -	\$ 714,472	\$ -	\$ 714,472
9306	Contract Labor	\$ -	\$ 76,858	\$ -	\$ 76,858
9313	Rental Equipment - Downhole	\$ -	\$ 21,795	\$ -	\$ 21,795
9335	Packers, Frac Plugs & Accessories	\$ -	\$ 70,369	\$ -	\$ 70,369
9311	Location, Permit & Damages	\$ -	\$ 17,353	\$ -	\$ 17,353
9331	Pump Down Services	\$ -	\$ 70,685	\$ -	\$ 70,685
9328	Company Supervision	\$ -	\$ 6,317	\$ -	\$ 6,317
9332	Chemicals	\$ -	\$ 356,063	\$ -	\$ 356,063
9337	Sand	\$ -	\$ 570,340	\$ -	\$ 570,340
9330	Mancamp	\$ -	\$ 32,480	\$ -	\$ 32,480
9327	Flowback/Testing	\$ -	\$ 99,698	\$ -	\$ 99,698
9314	Stimulation	\$ -	\$ 791,250	\$ -	\$ 791,250
9322	Consulting Services	\$ -	\$ 124,563	\$ -	\$ 124,563
9307	Water Disposal	\$ -	\$ 64,656	\$ -	\$ 64,656
9336	Contingency (10%)	\$ -	\$ 248,579	\$ -	\$ 248,579
9312	Rental Equipment - Surface	\$ -	\$ 448,450	\$ -	\$ 448,450
9321	Roustabout Services	\$ -	\$ 3,165	\$ -	\$ 3,165
9325	Wireline/Perforating	\$ -	\$ 494,858	\$ -	\$ 494,858
9339	WTR - Brackish Water	\$ -	\$ 465,367	\$ -	\$ 465,367
9340	WTR - Fresh Water	\$ -	\$ 6,469	\$ -	\$ 6,469
9346	WTR - Water Transfers	\$ -	\$ 123,450	\$ -	\$ 123,450
9343	WTR - AEP Water Recycle	\$ -	\$ 24,533	\$ -	\$ 24,533
Intangible Facility - 03		\$ -	\$ -	\$ 400,000.00	\$ 400,000.00
9359	Disposal	\$ -	\$ -	\$ 12,000	\$ 12,000
9360	Surface Rental	\$ -	\$ -	\$ 13,000	\$ 13,000
9362	Consulting - Engineering	\$ -	\$ -	\$ 12,000	\$ 12,000
9363	Trucking Costs	\$ -	\$ -	\$ 12,000	\$ 12,000
9354	Instal-Labor: Welding	\$ -	\$ -	\$ 15,000	\$ 15,000
9352	Instal-Labor Mechanical	\$ -	\$ -	\$ 140,000	\$ 140,000
9370	Miscellaneous	\$ -	\$ -	\$ 12,000	\$ 12,000
9356	Fluids, Chemicals	\$ -	\$ -	\$ 10,000	\$ 10,000
9353	Instal Labor: Inst, Elec, Autom	\$ -	\$ -	\$ 144,000	\$ 144,000
9357	Location, Permit, Damages, Survey	\$ -	\$ -	\$ 15,000	\$ 15,000
9351	Installation Costs - Supervision	\$ -	\$ -	\$ 15,000	\$ 15,000



AFE#: NM0185 R1

Authorization For Expenditure

Date: Oct 8, 2021

TOTAL INTANGIBLE COSTS >>>	\$ 2,794,289.00	\$ 4,923,784.00	\$ 400,000.00	\$ 8,118,073.00
TOTAL PROJECT COSTS >>>	\$ 3,778,463.00	\$ 4,970,166.00	\$ 900,000.00	\$ 9,648,629.00
	Dry Hole	Completion	Facility	Total

This Authority for Expenditure is based on cost estimates. Billing will reflect your proportionate share of the actual invoice costs.

Operator: ADVANCE ENERGY PARTNERS HAT MESA

Signature: 
 Name: Braden Harris

Date: Oct 6, 2021
 Title: V.P. of Drilling & Completions

Signature: 
 Name: Kevin Hayes

Date: Oct 7, 2021
 Title: C.F.O.

Signature: 
 Name: Peter Lellis

Date: Oct 8, 2021
 Title: President & C.E.O.

WI Owner: _____

Date: _____

Approved By: _____

Title: _____

Printed Name: _____



Authorization For Expenditure

AFE#: NM0192 R1

Date: Oct 8, 2021

Lease: Margarita Federal	Target: Bone Springs
Well No: Margarita Federal Com 13 #15H	Projected MD/TVD: 23141/11450
County: Lea	Spud to TD: 20.2
State: NM	Lateral Length: 11100
SHL: S13-T21S-R32E 1399 FNL, 2047 FEL	Stages: 71
BHL: S25-T21S-R32E 2540 FNL, 2310 FEL	Proppant/ft: 2500

Project Description:

The proposed AFE is for the Margarita Fed Com 15H, a 2.25 section Bone Spring to be drilled in Lea County, NM. This is a 4 string casing design consisting of the following: 24" surface hole drilled on Water to +/- 1700' and 20" 94# J-55 BTC casing set and cemented in place; 17.5" first intermediate hole drilled on Brine to +/-3615' and 13" 68# HCL-80 BTC casing set and cemented in place; 12.25" second intermediate drilled on Water to +/-5600' and a split string of 9.625" 40# J-55 LTC and 9.625" 40# HCL-80 LTC set and cemented in place; 8.5" production hole drilled on OBM to TD at +/-23141' and 5.5" 20# HCP-110 GBCD production casing set and cemented in place. There will be ~11100' of treatable lateral and completion design will consist of +/-71 stages and 2500 lbs/ft of proppant. Pad Facility design consistent with Wool Head Pad A and B. Cost associated with off pad Power Lines or Pipelines is not included in this AFE.

TANGIBLE COSTS			Dry Hole	Completion	Facility	Total
Tangible Drilling - 01			\$ 988,168.00	\$ -	\$ -	\$ 988,168.00
9402	Production Casing	\$	448,147	\$ -	\$ -	\$ 448,147
9412	Intermediate 1 Casing	\$	377,650	\$ -	\$ -	\$ 377,650
9401	Surface Casing	\$	118,394	\$ -	\$ -	\$ 118,394
9404-1	Wellhead & Equipment	\$	43,977	\$ -	\$ -	\$ 43,977
Tangible Completion - 02			\$ -	\$ 46,382.00	\$ -	\$ 46,382.00
9404-2	Wellhead & Equipment	\$	-	\$ 46,382	\$ -	\$ 46,382
Tangible Facility - 03			\$ -	\$ -	\$ 500,000.00	\$ 500,000.00
9408	Vessels	\$	-	\$ -	\$ 150,000	\$ 150,000
9407	Tanks	\$	-	\$ -	\$ 25,000	\$ 25,000
9421	Production Battery	\$	-	\$ -	\$ 18,000	\$ 18,000
9418	Gas Meter	\$	-	\$ -	\$ 6,000	\$ 6,000
9420	Pumps-Surface	\$	-	\$ -	\$ 35,000	\$ 35,000
9419	Flare	\$	-	\$ -	\$ 6,000	\$ 6,000
9417	Electrical	\$	-	\$ -	\$ 75,000	\$ 75,000
9423	COMM- SCADA/Radio/Telecom	\$	-	\$ -	\$ 6,000	\$ 6,000
9424	Vapor Recovery Unil	\$	-	\$ -	\$ 22,000	\$ 22,000
9416	Valves & Fittings	\$	-	\$ -	\$ 145,000	\$ 145,000
9490	Miscellaneous	\$	-	\$ -	\$ 12,000	\$ 12,000
TOTAL TANGIBLE COSTS >>>			\$ 988,168.00	\$ 46,382.00	\$ 500,000.00	\$ 1,534,550.00

INTANGIBLE COSTS			Dry Hole	Completion	Facility	Total
Intangible Drilling - 01			\$ 2,804,123.00	\$ -	\$ -	\$ 2,804,123.00
9231	Mud - Brine	\$	17,073	\$ -	\$ -	\$ 17,073
9290	Contingency (5%)	\$	133,156	\$ -	\$ -	\$ 133,156
9220	Insurance	\$	5,275	\$ -	\$ -	\$ 5,275
9219	Bits & BHA	\$	126,117	\$ -	\$ -	\$ 126,117
9235	Disposal	\$	150,245	\$ -	\$ -	\$ 150,245
9217	Inspection & Testing	\$	25,848	\$ -	\$ -	\$ 25,848
9218	Casing Services	\$	98,261	\$ -	\$ -	\$ 98,261
9222	Consulting Services	\$	129,100	\$ -	\$ -	\$ 129,100
9224	Fuel	\$	179,724	\$ -	\$ -	\$ 179,724
9232	Mud - Auxillary	\$	22,221	\$ -	\$ -	\$ 22,221
9204	Directional	\$	379,983	\$ -	\$ -	\$ 379,983
9229	Geosteering Services	\$	4,960	\$ -	\$ -	\$ 4,960
9205	Drilling Overhead	\$	5,572	\$ -	\$ -	\$ 5,572
9208	Cementing & Services	\$	200,183	\$ -	\$ -	\$ 200,183
9234	Solids Control / Closed Loop	\$	89,951	\$ -	\$ -	\$ 89,951



Authorization For Expenditure

9230	Mud - Drill Water	\$ 32,021	\$ -	\$ -	\$ 32,021
9202	Drilling - Daywork	\$ 518,605	\$ -	\$ -	\$ 518,605
9209	Mud - Chemicals & Engineering	\$ 142,185	\$ -	\$ -	\$ 142,185
9212	Equipment Rental	\$ 144,333	\$ -	\$ -	\$ 144,333
9215	Transportation	\$ 10,550	\$ -	\$ -	\$ 10,550
9207	Permits, surveys, land & legal	\$ 43,255	\$ -	\$ -	\$ 43,255
9203	Drilling - Rig Move	\$ 97,588	\$ -	\$ -	\$ 97,588
9228	Mudlogging & Services	\$ 18,145	\$ -	\$ -	\$ 18,145
9211	Location & Roads	\$ 46,735	\$ -	\$ -	\$ 46,735
9233	Mud - Diesel	\$ 91,746	\$ -	\$ -	\$ 91,746
9206	Contract Labor	\$ 36,695	\$ -	\$ -	\$ 36,695
9237	Mancamp	\$ 46,368	\$ -	\$ -	\$ 46,368
9239	Company Supervision	\$ 2,880	\$ -	\$ -	\$ 2,880
9236	Safety & Environmental	\$ 5,348	\$ -	\$ -	\$ 5,348
Intangible Completion - 02		\$ -	\$ 4,719,301.00	\$ -	\$ 4,719,301.00
9328	Company Supervision	\$ -	\$ 6,277	\$ -	\$ 6,277
9307	Water Disposal	\$ -	\$ 64,656	\$ -	\$ 64,656
9322	Consulting Services	\$ -	\$ 120,527	\$ -	\$ 120,527
9336	Contingency (10%)	\$ -	\$ 237,112	\$ -	\$ 237,112
9332	Chemicals	\$ -	\$ 337,073	\$ -	\$ 337,073
9309	Fuel	\$ -	\$ 676,598	\$ -	\$ 676,598
9313	Rental Equipment - Downhole	\$ -	\$ 21,795	\$ -	\$ 21,795
9304	Safety & Environmental	\$ -	\$ 10,545	\$ -	\$ 10,545
9326	Coil Tubing Unit	\$ -	\$ 49,156	\$ -	\$ 49,156
9315	Transportation	\$ -	\$ 18,348	\$ -	\$ 18,348
9331	Pump Down Services	\$ -	\$ 67,520	\$ -	\$ 67,520
9314	Stimulation	\$ -	\$ 749,050	\$ -	\$ 749,050
9325	Wireline/Perforating	\$ -	\$ 468,483	\$ -	\$ 468,483
9306	Contract Labor	\$ -	\$ 76,858	\$ -	\$ 76,858
9335	Packers, Frac Plugs & Accessories	\$ -	\$ 67,204	\$ -	\$ 67,204
9337	Sand	\$ -	\$ 539,922	\$ -	\$ 539,922
9321	Roustabout Services	\$ -	\$ 3,165	\$ -	\$ 3,165
9311	Location, Permit & Damages	\$ -	\$ 17,353	\$ -	\$ 17,353
9305	Completion Overhead	\$ -	\$ 10,932	\$ -	\$ 10,932
9312	Rental Equipment - Surface	\$ -	\$ 425,133	\$ -	\$ 425,133
9330	Mancamp	\$ -	\$ 32,077	\$ -	\$ 32,077
9327	Flowback/Testing	\$ -	\$ 99,698	\$ -	\$ 99,698
9340	WTR - Fresh Water	\$ -	\$ 6,469	\$ -	\$ 6,469
9343	WTR - AEP Water Recycle	\$ -	\$ 24,533	\$ -	\$ 24,533
9339	WTR - Brackish Water	\$ -	\$ 465,367	\$ -	\$ 465,367
9346	WTR - Water Transfers	\$ -	\$ 123,450	\$ -	\$ 123,450
Intangible Facility - 03		\$ -	\$ -	\$ 400,000.00	\$ 400,000.00
9353	Instal Labor: Inst,Elec,Autom	\$ -	\$ -	\$ 144,000	\$ 144,000
9354	Instal-Labor: Welding	\$ -	\$ -	\$ 15,000	\$ 15,000
9352	Instal-Labor Mechanical	\$ -	\$ -	\$ 140,000	\$ 140,000
9356	Fluids,Chemicals	\$ -	\$ -	\$ 10,000	\$ 10,000
9351	Installation Costs - Supervision	\$ -	\$ -	\$ 15,000	\$ 15,000
9362	Consulting - Engineering	\$ -	\$ -	\$ 12,000	\$ 12,000
9370	Miscellaneous	\$ -	\$ -	\$ 12,000	\$ 12,000
9363	Trucking Costs	\$ -	\$ -	\$ 12,000	\$ 12,000
9359	Disposal	\$ -	\$ -	\$ 12,000	\$ 12,000
9357	Location,Permit,Damages,Survey	\$ -	\$ -	\$ 15,000	\$ 15,000
9360	Surface Rental	\$ -	\$ -	\$ 13,000	\$ 13,000



AFE#: NM0192 R1

Authorization For Expenditure

Date: Oct 8, 2021

TOTAL INTANGIBLE COSTS >>>	\$ 2,804,123.00	\$ 4,719,301.00	\$ 400,000.00	\$ 7,923,424.00
TOTAL PROJECT COSTS >>>	\$ 3,792,291.00	\$ 4,765,683.00	\$ 900,000.00	\$ 9,457,974.00
	Dry Hole	Completion	Facility	Total

This Authority for Expenditure is based on cost estimates. Billing will reflect your proportionate share of the actual invoice costs.

Operator: ADVANCE ENERGY PARTNERS HAT MESA

Signature: 
 Name: Braden Harris

Date: Oct 6, 2021
 Title: V.P. of Drilling & Completions

Signature: 
 Name: Kevin Hayes

Date: Oct 7, 2021
 Title: C.F.O.

Signature: 
 Name: Peter Lellis

Date: Oct 8, 2021
 Title: President & C.E.O.

WI Owner: _____

Date: _____

Approved By: _____

Title: _____

Printed Name: _____



Authorization For Expenditure

AFE#: NM0186 R1

Date: Oct 8, 2021

Lease: Margarita Federal	Target: Bone Springs
Well No: Margarita Federal Com 13 #16H	Projected MD/TVD: 23662/11700
County: Lea	Spud to TD: 20.5
State: NM	Lateral Length: 11600
SHL: S13-T21S-R32E 460 FNL, 807 FEL	Stages: 74
BHL: S25-T21S-R32E 2540 FNL, 1430 FEL	Proppant/ft: 2500

Project Description:

The proposed AFE is for the Margarita Fed Com 16H, a 2.25 section Bone Spring to be drilled in Lea County, NM. This is a 4 string casing design consisting of the following: 24" surface hole drilled on Water to +/- 1700' and 20" 94# J-55 BTC casing set and cemented in place; 17.5" first intermediate hole drilled on Brine to +/-3615' and 13" 68# HCL-80 BTC casing set and cemented in place; 12.25" second intermediate drilled on Water to +/-5600' and a split string of 9.625" 40# J-55 LTC and 9.625" 40# HCL-80 LTC set and cemented in place; 8.5" production hole drilled on OBM to TD at +/-23662' and 5.5" 20# HCP-110 GBCD production casing set and cemented in place. There will be ~11600' of treatable lateral and completion design will consist of +/-74 stages and 2500 lbs/ft of proppant. Pad Facility design consistent with Wool Head Pad A and B. Cost associated with off pad Power Lines or Pipelines is not included in this AFE.

TANGIBLE COSTS			Dry Hole	Completion	Facility	Total
Tangible Drilling - 01			\$ 998,122.00	\$ -	\$ -	\$ 998,122.00
9412	Intermediate 1 Casing	\$ 377,650	\$ -	\$ -	\$ 377,650	
9402	Production Casing	\$ 458,101	\$ -	\$ -	\$ 458,101	
9404-1	Wellhead & Equipment	\$ 43,977	\$ -	\$ -	\$ 43,977	
9401	Surface Casing	\$ 118,394	\$ -	\$ -	\$ 118,394	
Tangible Completion - 02			\$ -	\$ 46,382.00	\$ -	\$ 46,382.00
9404-2	Wellhead & Equipment	\$ -	\$ 46,382	\$ -	\$ 46,382	
Tangible Facility - 03			\$ -	\$ -	\$ 500,000.00	\$ 500,000.00
9417	Electrical	\$ -	\$ -	\$ 75,000	\$ 75,000	
9423	COMM- SCADA/Radio/Telecom	\$ -	\$ -	\$ 6,000	\$ 6,000	
9424	Vapor Recovery Unit	\$ -	\$ -	\$ 22,000	\$ 22,000	
9418	Gas Meter	\$ -	\$ -	\$ 6,000	\$ 6,000	
9416	Valves & Fittings	\$ -	\$ -	\$ 145,000	\$ 145,000	
9420	Pumps-Surface	\$ -	\$ -	\$ 35,000	\$ 35,000	
9407	Tanks	\$ -	\$ -	\$ 25,000	\$ 25,000	
9490	Miscellaneous	\$ -	\$ -	\$ 12,000	\$ 12,000	
9408	Vessels	\$ -	\$ -	\$ 150,000	\$ 150,000	
9419	Flare	\$ -	\$ -	\$ 6,000	\$ 6,000	
9421	Production Battery	\$ -	\$ -	\$ 18,000	\$ 18,000	
TOTAL TANGIBLE COSTS >>>			\$ 998,122.00	\$ 46,382.00	\$ 500,000.00	\$ 1,544,504.00

INTANGIBLE COSTS			Dry Hole	Completion	Facility	Total
Intangible Drilling - 01			\$ 2,824,137.00	\$ -	\$ -	\$ 2,824,137.00
9209	Mud - Chemicals & Engineering	\$ 142,494	\$ -	\$ -	\$ 142,494	
9235	Disposal	\$ 150,245	\$ -	\$ -	\$ 150,245	
9212	Equipment Rental	\$ 146,112	\$ -	\$ -	\$ 146,112	
9222	Consulting Services	\$ 130,450	\$ -	\$ -	\$ 130,450	
9229	Geosteering Services	\$ 5,108	\$ -	\$ -	\$ 5,108	
9230	Mud - Drill Water	\$ 32,021	\$ -	\$ -	\$ 32,021	
9224	Fuel	\$ 181,748	\$ -	\$ -	\$ 181,748	
9237	Mancamp	\$ 47,343	\$ -	\$ -	\$ 47,343	
9232	Mud - Auxillary	\$ 22,282	\$ -	\$ -	\$ 22,282	
9206	Contract Labor	\$ 36,695	\$ -	\$ -	\$ 36,695	
9236	Safety & Environmental	\$ 5,376	\$ -	\$ -	\$ 5,376	
9211	Location & Roads	\$ 46,711	\$ -	\$ -	\$ 46,711	
9228	Mudlogging & Services	\$ 18,490	\$ -	\$ -	\$ 18,490	
9219	Bits & BHA	\$ 126,291	\$ -	\$ -	\$ 126,291	
9207	Permits, surveys, land & legal	\$ 43,255	\$ -	\$ -	\$ 43,255	



Authorization For Expenditure

AFE#: NM0186 R1

Date: Oct 8, 2021

9217	Inspection & Testing	\$ 25,848	\$ -	\$ -	\$ 25,848
9233	Mud - Diesel	\$ 91,746	\$ -	\$ -	\$ 91,746
9208	Cementing & Services	\$ 200,183	\$ -	\$ -	\$ 200,183
9204	Directional	\$ 385,219	\$ -	\$ -	\$ 385,219
9218	Casing Services	\$ 98,261	\$ -	\$ -	\$ 98,261
9290	Contingency (5%)	\$ 134,102	\$ -	\$ -	\$ 134,102
9231	Mud - Brine	\$ 17,073	\$ -	\$ -	\$ 17,073
9239	Company Supervision	\$ 2,897	\$ -	\$ -	\$ 2,897
9220	Insurance	\$ 5,275	\$ -	\$ -	\$ 5,275
9205	Drilling Overhead	\$ 5,640	\$ -	\$ -	\$ 5,640
9203	Drilling - Rig Move	\$ 97,588	\$ -	\$ -	\$ 97,588
9234	Solids Control / Closed Loop	\$ 90,170	\$ -	\$ -	\$ 90,170
9202	Drilling - Daywork	\$ 524,964	\$ -	\$ -	\$ 524,964
9215	Transportation	\$ 10,550	\$ -	\$ -	\$ 10,550
Intangible Completion - 02		\$ -	\$ 4,877,023.00	\$ -	\$ 4,877,023.00
9314	Stimulation	\$ -	\$ 780,700	\$ -	\$ 780,700
9330	Mancamp	\$ -	\$ 32,469	\$ -	\$ 32,469
9305	Completion Overhead	\$ -	\$ 11,188	\$ -	\$ 11,188
9322	Consulting Services	\$ -	\$ 124,450	\$ -	\$ 124,450
9328	Company Supervision	\$ -	\$ 6,315	\$ -	\$ 6,315
9326	Coil Tubing Unit	\$ -	\$ 51,233	\$ -	\$ 51,233
9313	Rental Equipment - Downhole	\$ -	\$ 21,795	\$ -	\$ 21,795
9332	Chemicals	\$ -	\$ 351,315	\$ -	\$ 351,315
9315	Transportation	\$ -	\$ 18,348	\$ -	\$ 18,348
9321	Roustabout Services	\$ -	\$ 3,165	\$ -	\$ 3,165
9304	Safety & Environmental	\$ -	\$ 10,545	\$ -	\$ 10,545
9335	Packers, Frac Plugs & Accessories	\$ -	\$ 69,577	\$ -	\$ 69,577
9307	Water Disposal	\$ -	\$ 64,656	\$ -	\$ 64,656
9331	Pump Down Services	\$ -	\$ 70,685	\$ -	\$ 70,685
9306	Contract Labor	\$ -	\$ 76,858	\$ -	\$ 76,858
9325	Wireline/Perforating	\$ -	\$ 488,265	\$ -	\$ 488,265
9311	Location, Permit & Damages	\$ -	\$ 17,353	\$ -	\$ 17,353
9309	Fuel	\$ -	\$ 706,164	\$ -	\$ 706,164
9337	Sand	\$ -	\$ 562,735	\$ -	\$ 562,735
9336	Contingency (10%)	\$ -	\$ 246,031	\$ -	\$ 246,031
9327	Flowback/Testing	\$ -	\$ 99,698	\$ -	\$ 99,698
9312	Rental Equipment - Surface	\$ -	\$ 443,659	\$ -	\$ 443,659
9339	WTR - Brackish Water	\$ -	\$ 465,367	\$ -	\$ 465,367
9343	WTR - AEP Water Recycle	\$ -	\$ 24,533	\$ -	\$ 24,533
9340	WTR - Fresh Water	\$ -	\$ 6,469	\$ -	\$ 6,469
9346	WTR - Water Transfers	\$ -	\$ 123,450	\$ -	\$ 123,450
Intangible Facility - 03		\$ -	\$ -	\$ 400,000.00	\$ 400,000.00
9352	Instal-Labor Mechanical	\$ -	\$ -	\$ 140,000	\$ 140,000
9360	Surface Rental	\$ -	\$ -	\$ 13,000	\$ 13,000
9362	Consulting - Engineering	\$ -	\$ -	\$ 12,000	\$ 12,000
9359	Disposal	\$ -	\$ -	\$ 12,000	\$ 12,000
9356	Fluids,Chemicals	\$ -	\$ -	\$ 10,000	\$ 10,000
9351	Installation Costs - Supervision	\$ -	\$ -	\$ 15,000	\$ 15,000
9354	Instal-Labor: Welding	\$ -	\$ -	\$ 15,000	\$ 15,000
9363	Trucking Costs	\$ -	\$ -	\$ 12,000	\$ 12,000
9357	Location,Permit,Damages,Survey	\$ -	\$ -	\$ 15,000	\$ 15,000
9353	Instal Labor: Inst,Elec,Autom	\$ -	\$ -	\$ 144,000	\$ 144,000
9370	Miscellaneous	\$ -	\$ -	\$ 12,000	\$ 12,000



AFE#: NM0186 R1


Authorization For Expenditure

Date: Oct 8, 2021

TOTAL INTANGIBLE COSTS >>>	\$ 2,824,137.00	\$ 4,877,023.00	\$ 400,000.00	\$ 8,101,160.00
TOTAL PROJECT COSTS >>>	\$ 3,822,259.00	\$ 4,923,405.00	\$ 900,000.00	\$ 9,645,664.00
	Dry Hole	Completion	Facility	Total

This Authority for Expenditure is based on cost estimates. Billing will reflect your proportionate share of the actual invoice costs.

Operator: ADVANCE ENERGY PARTNERS HAT MESA

Signature: 
 Name: Braden Harris

Date: Oct 6, 2021
 Title: V.P. of Drilling & Completions

Signature: 
 Name: Kevin Hayes

Date: Oct 7, 2021
 Title: C.F.O.

Signature: 
 Name: Peter Lellis

Date: Oct 8, 2021
 Title: President & C.E.O.

WI Owner: _____

Date: _____

Approved By: _____

Title: _____

Printed Name: _____



Authorization For Expenditure

AFE#: NM0193 R1

Date: Oct 8, 2021

Lease: Margarita Federal	Target: Bone Spring
Well No: Margarita Federal Com 13 #19H	Projected MD/TVD: 23319/10520
County: Lea	Spud to TD: 22.6
State: NM	Lateral Length: 11100
SHL: S13-T21S-R32E 1399 FNL, 1915 FEL	Stages: 71
BHL: S25-T21S-R32E 2540 FNL, 1430 FEL	Proppant/ft: 2500

Project Description:

The proposed AFE is for the Margarita Fed Com 19H, a 2.25 section Wolfcamp to be drilled in Lea County, NM. This is a 4 string casing design consisting of the following: 24" surface hole drilled on Water to +/- 1700' and 20" 94# J-55 BTC casing set and cemented in place; 17.5" first intermediate hole drilled on Brine to +/-5600' and 13" 68# HCL-80 BTC casing set and cemented in place; 12.25" second intermediate drilled on Water to +/-10500' and 9.625" 40# HCP-110 LTC set and cemented in place; 8.5" production hole drilled on OBM to TD at +/-23319' and 5.5" 20# HCP-110 GBCD production casing set and cemented in place. There will be ~11100' of treatable lateral and completion design will consist of +/-71 stages and 2500 lbs/ft of proppant. Pad Facility design consistent with a Merchant syle battery. Cost associated with off pad Power Lines or Pipelines is not included in this AFE.

TANGIBLE COSTS		Dry Hole	Completion	Facility	Total
Tangible Drilling - 01		\$ 1,300,432.00	\$ -	\$ -	\$ 1,300,432.00
9412	Intermediate 1 Casing	\$ 686,521	\$ -	\$ -	\$ 686,521
9401	Surface Casing	\$ 118,387	\$ -	\$ -	\$ 118,387
9402	Production Casing	\$ 451,547	\$ -	\$ -	\$ 451,547
9404-1	Wellhead & Equipment	\$ 43,977	\$ -	\$ -	\$ 43,977
Tangible Completion - 02		\$ -	\$ 46,382.00	\$ -	\$ 46,382.00
9404-2	Wellhead & Equipment	\$ -	\$ 46,382	\$ -	\$ 46,382
Tangible Facility - 03		\$ -	\$ -	\$ 500,000.00	\$ 500,000.00
9424	Vapor Recovery Unit	\$ -	\$ -	\$ 22,000	\$ 22,000
9408	Vessels	\$ -	\$ -	\$ 150,000	\$ 150,000
9417	Electrical	\$ -	\$ -	\$ 75,000	\$ 75,000
9421	Production Battery	\$ -	\$ -	\$ 18,000	\$ 18,000
9418	Gas Meter	\$ -	\$ -	\$ 6,000	\$ 6,000
9416	Valves & Fittings	\$ -	\$ -	\$ 145,000	\$ 145,000
9490	Miscellaneous	\$ -	\$ -	\$ 12,000	\$ 12,000
9419	Flare	\$ -	\$ -	\$ 6,000	\$ 6,000
9423	COMM- SCADA/Radio/Telecom	\$ -	\$ -	\$ 6,000	\$ 6,000
9420	Pumps-Surface	\$ -	\$ -	\$ 35,000	\$ 35,000
9407	Tanks	\$ -	\$ -	\$ 25,000	\$ 25,000
TOTAL TANGIBLE COSTS >>>		\$ 1,300,432.00	\$ 46,382.00	\$ 500,000.00	\$ 1,846,814.00

INTANGIBLE COSTS		Dry Hole	Completion	Facility	Total
Intangible Drilling - 01		\$ 2,988,352.00	\$ -	\$ -	\$ 2,988,352.00
9218	Casing Services	\$ 101,426	\$ -	\$ -	\$ 101,426
9205	Drilling Overhead	\$ 6,125	\$ -	\$ -	\$ 6,125
9235	Disposal	\$ 162,766	\$ -	\$ -	\$ 162,766
9211	Location & Roads	\$ 46,818	\$ -	\$ -	\$ 46,818
9202	Drilling - Daywork	\$ 568,688	\$ -	\$ -	\$ 568,688
9239	Company Supervision	\$ 3,017	\$ -	\$ -	\$ 3,017
9212	Equipment Rental	\$ 157,726	\$ -	\$ -	\$ 157,726
9234	Solids Control / Closed Loop	\$ 99,175	\$ -	\$ -	\$ 99,175
9208	Cementing & Services	\$ 217,005	\$ -	\$ -	\$ 217,005
9215	Transportation	\$ 10,550	\$ -	\$ -	\$ 10,550
9233	Mud - Diesel	\$ 91,746	\$ -	\$ -	\$ 91,746
9229	Geosteering Services	\$ 4,966	\$ -	\$ -	\$ 4,966
9220	Insurance	\$ 5,275	\$ -	\$ -	\$ 5,275
9217	Inspection & Testing	\$ 25,848	\$ -	\$ -	\$ 25,848
9204	Directional	\$ 400,365	\$ -	\$ -	\$ 400,365



Authorization For Expenditure

9222	Consulting Services	\$ 140,064	\$ -	\$ -	\$ 140,064
9203	Drilling - Rig Move	\$ 97,588	\$ -	\$ -	\$ 97,588
9219	Bits & BHA	\$ 127,534	\$ -	\$ -	\$ 127,534
9224	Fuel	\$ 196,171	\$ -	\$ -	\$ 196,171
9237	Mancamp	\$ 53,788	\$ -	\$ -	\$ 53,788
9209	Mud - Chemicals & Engineering	\$ 156,904	\$ -	\$ -	\$ 156,904
9236	Safety & Environmental	\$ 5,537	\$ -	\$ -	\$ 5,537
9232	Mud - Auxillary	\$ 22,719	\$ -	\$ -	\$ 22,719
9290	Contingency (5%)	\$ 141,922	\$ -	\$ -	\$ 141,922
9207	Permits, surveys, land & legal	\$ 43,255	\$ -	\$ -	\$ 43,255
9228	Mudlogging & Services	\$ 15,585	\$ -	\$ -	\$ 15,585
9231	Mud - Brine	\$ 17,073	\$ -	\$ -	\$ 17,073
9206	Contract Labor	\$ 36,695	\$ -	\$ -	\$ 36,695
9230	Mud - Drill Water	\$ 32,021	\$ -	\$ -	\$ 32,021
Intangible Completion - 02		\$ -	\$ 4,719,301.00	\$ -	\$ 4,719,301.00
9304	Safety & Environmental	\$ -	\$ 10,545	\$ -	\$ 10,545
9336	Contingency (10%)	\$ -	\$ 237,112	\$ -	\$ 237,112
9306	Contract Labor	\$ -	\$ 76,858	\$ -	\$ 76,858
9331	Pump Down Services	\$ -	\$ 67,520	\$ -	\$ 67,520
9335	Packers, Frac Plugs & Accessories	\$ -	\$ 67,204	\$ -	\$ 67,204
9322	Consulting Services	\$ -	\$ 120,527	\$ -	\$ 120,527
9315	Transportation	\$ -	\$ 18,348	\$ -	\$ 18,348
9327	Flowback/Testing	\$ -	\$ 99,698	\$ -	\$ 99,698
9314	Stimulation	\$ -	\$ 749,050	\$ -	\$ 749,050
9326	Coil Tubing Unit	\$ -	\$ 49,156	\$ -	\$ 49,156
9332	Chemicals	\$ -	\$ 337,073	\$ -	\$ 337,073
9328	Company Supervision	\$ -	\$ 6,277	\$ -	\$ 6,277
9311	Location, Permit & Damages	\$ -	\$ 17,353	\$ -	\$ 17,353
9312	Rental Equipment - Surface	\$ -	\$ 425,133	\$ -	\$ 425,133
9330	Mancamp	\$ -	\$ 32,077	\$ -	\$ 32,077
9307	Water Disposal	\$ -	\$ 64,656	\$ -	\$ 64,656
9337	Sand	\$ -	\$ 539,922	\$ -	\$ 539,922
9305	Completion Overhead	\$ -	\$ 10,932	\$ -	\$ 10,932
9325	Wireline/Perforating	\$ -	\$ 468,483	\$ -	\$ 468,483
9309	Fuel	\$ -	\$ 676,598	\$ -	\$ 676,598
9321	Roustabout Services	\$ -	\$ 3,165	\$ -	\$ 3,165
9313	Rental Equipment - Downhole	\$ -	\$ 21,795	\$ -	\$ 21,795
9340	WTR - Fresh Water	\$ -	\$ 6,469	\$ -	\$ 6,469
9339	WTR - Brackish Water	\$ -	\$ 465,367	\$ -	\$ 465,367
9346	WTR - Water Transfers	\$ -	\$ 123,450	\$ -	\$ 123,450
9343	WTR - AEP Water Recycle	\$ -	\$ 24,533	\$ -	\$ 24,533
Intangible Facility - 03		\$ -	\$ -	\$ 400,000.00	\$ 400,000.00
9360	Surface Rental	\$ -	\$ -	\$ 13,000	\$ 13,000
9363	Trucking Costs	\$ -	\$ -	\$ 12,000	\$ 12,000
9351	Installation Costs - Supervision	\$ -	\$ -	\$ 15,000	\$ 15,000
9359	Disposal	\$ -	\$ -	\$ 12,000	\$ 12,000
9353	Instal Labor: Inst,Elec,Autom	\$ -	\$ -	\$ 144,000	\$ 144,000
9357	Location,Permit,Damages,Survey	\$ -	\$ -	\$ 15,000	\$ 15,000
9370	Miscellaneous	\$ -	\$ -	\$ 12,000	\$ 12,000
9354	Instal-Labor: Welding	\$ -	\$ -	\$ 15,000	\$ 15,000
9352	Instal-Labor Mechanical	\$ -	\$ -	\$ 140,000	\$ 140,000
9362	Consulting - Engineering	\$ -	\$ -	\$ 12,000	\$ 12,000
9356	Fluids,Chemicals	\$ -	\$ -	\$ 10,000	\$ 10,000



Authorization For Expenditure

AFE#: NM0193 R1

Date: Oct 8, 2021

TOTAL INTANGIBLE COSTS >>>	\$ 2,988,352.00	\$ 4,719,301.00	\$ 400,000.00	\$ 8,107,653.00
TOTAL PROJECT COSTS >>>	\$ 4,288,784.00	\$ 4,765,683.00	\$ 900,000.00	\$ 9,954,467.00
	Dry Hole	Completion	Facility	Total

This Authority for Expenditure is based on cost estimates. Billing will reflect your proportionate share of the actual invoice costs.

Operator: ADVANCE ENERGY PARTNERS HAT MESA

Signature: 
Name: Braden Harris

Date: Oct 6, 2021
Title: V.P. of Drilling & Completions

Signature: 
Name: Kevin Hayes

Date: Oct 7, 2021
Title: C.F.O.

Signature: 
Name: Peter Lellis

Date: Oct 8, 2021
Title: President & C.E.O.

WI Owner: _____

Date: _____

Approved By: _____

Title: _____

Printed Name: _____



Authorization For Expenditure

AFE#: NM0187 R1

Date: Oct 8, 2021

Lease: Margarita Federal	Target: Bone Spring
Well No: Margarita Federal Com 13 #20H	Projected MD/TVD: 24071/11450
County: Lea	Spud to TD: 23
State: NM	Lateral Length: 11800
SHL: S13-T21S-R32E 460 FNL, 675 'FEL	Stages: 75
BHL: S25-T21S-R32E 2540 FNL, 550 FEL	Proppant/ft: 2500

Project Description:

The proposed AFE is for the Margarita Fed Com 20H, a 2.25 section Wolfcamp to be drilled in Lea County, NM. This is a 4 string casing design consisting of the following: 24" surface hole drilled on Water to +/- 1700' and 20" 94# J-55 BTC casing set and cemented in place; 17.5" first intermediate hole drilled on Brine to +/-5600' and 13" 68# HCL-80 BTC casing set and cemented in place; 12.25" second intermediate drilled on Water to +/-10500' and 9.625" 40# HCP-110 LTC set and cemented in place; 8.5" production hole drilled on OBM to TD at +/-24071' and 5.5" 20# HCP-110 GBCD production casing set and cemented in place. There will be ~11800' of treatable lateral and completion design will consist of +/-75 stages and 2500 lbs/ft of proppant. Pad Facility design consistent with a Merchant syle battery. Cost associated with off pad Power Lines or Pipelines is not included in this AFE.

TANGIBLE COSTS		Dry Hole	Completion	Facility	Total
Tangible Drilling - 01		\$ 1,314,800.00	\$ -	\$ -	\$ 1,314,800.00
9401	Surface Casing	\$ 118,387	\$ -	\$ -	\$ 118,387
9404-1	Wellhead & Equipment	\$ 43,977	\$ -	\$ -	\$ 43,977
9402	Production Casing	\$ 465,915	\$ -	\$ -	\$ 465,915
9412	Intermediate 1 Casing	\$ 686,521	\$ -	\$ -	\$ 686,521
Tangible Completion - 02		\$ -	\$ 46,382.00	\$ -	\$ 46,382.00
9404-2	Wellhead & Equipment	\$ -	\$ 46,382	\$ -	\$ 46,382
Tangible Facility - 03		\$ -	\$ -	\$ 500,000.00	\$ 500,000.00
9408	Vessels	\$ -	\$ -	\$ 150,000	\$ 150,000
9407	Tanks	\$ -	\$ -	\$ 25,000	\$ 25,000
9424	Vapor Recovery Unit	\$ -	\$ -	\$ 22,000	\$ 22,000
9418	Gas Meter	\$ -	\$ -	\$ 6,000	\$ 6,000
9419	Flare	\$ -	\$ -	\$ 6,000	\$ 6,000
9420	Pumps-Surface	\$ -	\$ -	\$ 35,000	\$ 35,000
9416	Valves & Fittings	\$ -	\$ -	\$ 145,000	\$ 145,000
9417	Electrical	\$ -	\$ -	\$ 75,000	\$ 75,000
9490	Miscellaneous	\$ -	\$ -	\$ 12,000	\$ 12,000
9423	COMM- SCADA/Radio/Telecom	\$ -	\$ -	\$ 6,000	\$ 6,000
9421	Production Battery	\$ -	\$ -	\$ 18,000	\$ 18,000
TOTAL TANGIBLE COSTS >>>		\$ 1,314,800.00	\$ 46,382.00	\$ 500,000.00	\$ 1,861,182.00

INTANGIBLE COSTS		Dry Hole	Completion	Facility	Total
Intangible Drilling - 01		\$ 3,015,870.00	\$ -	\$ -	\$ 3,015,870.00
9217	Inspection & Testing	\$ 25,848	\$ -	\$ -	\$ 25,848
9290	Contingency (5%)	\$ 143,221	\$ -	\$ -	\$ 143,221
9232	Mud - Auxillary	\$ 22,807	\$ -	\$ -	\$ 22,807
9206	Contract Labor	\$ 36,695	\$ -	\$ -	\$ 36,695
9203	Drilling - Rig Move	\$ 97,588	\$ -	\$ -	\$ 97,588
9233	Mud - Diesel	\$ 91,746	\$ -	\$ -	\$ 91,746
9212	Equipment Rental	\$ 159,893	\$ -	\$ -	\$ 159,893
9215	Transportation	\$ 10,550	\$ -	\$ -	\$ 10,550
9230	Mud - Drill Water	\$ 32,021	\$ -	\$ -	\$ 32,021
9204	Directional	\$ 407,981	\$ -	\$ -	\$ 407,981
9205	Drilling Overhead	\$ 6,222	\$ -	\$ -	\$ 6,222
9211	Location & Roads	\$ 46,784	\$ -	\$ -	\$ 46,784
9234	Solids Control / Closed Loop	\$ 99,405	\$ -	\$ -	\$ 99,405
9239	Company Supervision	\$ 3,041	\$ -	\$ -	\$ 3,041
9236	Safety & Enviromental	\$ 5,576	\$ -	\$ -	\$ 5,576



Authorization For Expenditure

Date: Oct 8, 2021

9208	Cementing & Services	\$	217,005	\$	-	\$	-	\$	217,005
9202	Drilling - Daywork	\$	577,840	\$	-	\$	-	\$	577,840
9224	Fuel	\$	199,082	\$	-	\$	-	\$	199,082
9231	Mud - Brine	\$	17,073	\$	-	\$	-	\$	17,073
9207	Permits, surveys, land & legal	\$	43,255	\$	-	\$	-	\$	43,255
9222	Consulting Services	\$	142,005	\$	-	\$	-	\$	142,005
9228	Mudlogging & Services	\$	16,082	\$	-	\$	-	\$	16,082
9237	Mancamp	\$	54,280	\$	-	\$	-	\$	54,280
9219	Bits & BHA	\$	127,785	\$	-	\$	-	\$	127,785
9218	Casing Services	\$	101,426	\$	-	\$	-	\$	101,426
9235	Disposal	\$	162,766	\$	-	\$	-	\$	162,766
9220	Insurance	\$	5,275	\$	-	\$	-	\$	5,275
9229	Geosteering Services	\$	5,184	\$	-	\$	-	\$	5,184
9209	Mud - Chemicals & Engineering	\$	157,434	\$	-	\$	-	\$	157,434
Intangible Completion - 02		\$	-	\$	4,923,784.00	\$	-	\$	4,923,784.00
9306	Contract Labor	\$	-	\$	76,858	\$	-	\$	76,858
9305	Completion Overhead	\$	-	\$	11,195	\$	-	\$	11,195
9311	Location, Permit & Damages	\$	-	\$	17,353	\$	-	\$	17,353
9304	Safety & Environmental	\$	-	\$	10,545	\$	-	\$	10,545
9332	Chemicals	\$	-	\$	356,063	\$	-	\$	356,063
9314	Stimulation	\$	-	\$	791,250	\$	-	\$	791,250
9336	Contingency (10%)	\$	-	\$	248,579	\$	-	\$	248,579
9307	Water Disposal	\$	-	\$	64,656	\$	-	\$	64,656
9337	Sand	\$	-	\$	570,340	\$	-	\$	570,340
9325	Wireline/Perforating	\$	-	\$	494,858	\$	-	\$	494,858
9328	Company Supervision	\$	-	\$	6,317	\$	-	\$	6,317
9322	Consulting Services	\$	-	\$	124,563	\$	-	\$	124,563
9326	Coil Tubing Unit	\$	-	\$	51,926	\$	-	\$	51,926
9330	Mancamp	\$	-	\$	32,480	\$	-	\$	32,480
9313	Rental Equipment - Downhole	\$	-	\$	21,795	\$	-	\$	21,795
9335	Packers, Frac Plugs & Accessories	\$	-	\$	70,369	\$	-	\$	70,369
9315	Transportation	\$	-	\$	18,348	\$	-	\$	18,348
9309	Fuel	\$	-	\$	714,472	\$	-	\$	714,472
9331	Pump Down Services	\$	-	\$	70,685	\$	-	\$	70,685
9327	Flowback/Testing	\$	-	\$	99,698	\$	-	\$	99,698
9312	Rental Equipment - Surface	\$	-	\$	448,450	\$	-	\$	448,450
9321	Roustabout Services	\$	-	\$	3,165	\$	-	\$	3,165
9343	WTR - AEP Water Recycle	\$	-	\$	24,533	\$	-	\$	24,533
9346	WTR - Water Transfers	\$	-	\$	123,450	\$	-	\$	123,450
9340	WTR - Fresh Water	\$	-	\$	6,469	\$	-	\$	6,469
9339	WTR - Brackish Water	\$	-	\$	465,367	\$	-	\$	465,367
Intangible Facility - 03		\$	-	\$	-	\$	400,000.00	\$	400,000.00
9353	Instal Labor: Inst,Elec,Autom	\$	-	\$	-	\$	144,000	\$	144,000
9363	Trucking Costs	\$	-	\$	-	\$	12,000	\$	12,000
9357	Location,Permit,Damages,Survey	\$	-	\$	-	\$	15,000	\$	15,000
9351	Installation Costs - Supervision	\$	-	\$	-	\$	15,000	\$	15,000
9360	Surface Rental	\$	-	\$	-	\$	13,000	\$	13,000
9354	Instal-Labor: Welding	\$	-	\$	-	\$	15,000	\$	15,000
9352	Instal-Labor Mechanical	\$	-	\$	-	\$	140,000	\$	140,000
9356	Fluids,Chemicals	\$	-	\$	-	\$	10,000	\$	10,000
9359	Disposal	\$	-	\$	-	\$	12,000	\$	12,000
9370	Miscellaneous	\$	-	\$	-	\$	12,000	\$	12,000
9362	Consulting - Engineering	\$	-	\$	-	\$	12,000	\$	12,000



AFE#: NM0187 R1


Authorization For Expenditure

Date: Oct 8, 2021

TOTAL INTANGIBLE COSTS >>>	\$ 3,015,870.00	\$ 4,923,784.00	\$ 400,000.00	\$ 8,339,654.00
TOTAL PROJECT COSTS >>>	\$ 4,330,670.00	\$ 4,970,166.00	\$ 900,000.00	\$ 10,200,836.00
	Dry Hole	Completion	Facility	Total

This Authority for Expenditure is based on cost estimates. Billing will reflect your proportionate share of the actual invoice costs.

Operator: ADVANCE ENERGY PARTNERS HAT MESA

Signature: 
 Name: Braden Harris

Date: Oct 6, 2021
 Title: V.P. of Drilling & Completions

Signature: 
 Name: Kevin Hayes

Date: Oct 7, 2021
 Title: C.F.O.

Signature: 
 Name: Peter Lellis

Date: Oct 8, 2021
 Title: President & C.E.O.

WI Owner: _____

Date: _____

Approved By: _____

Title: _____

Printed Name: _____



Authorization For Expenditure

AFE#: NM0194 R1

Date: Oct 8, 2021

Lease: Margarita Federal	Target: Wolfcamp
Well No: Margarita Federal Com 13 #23H	Projected MD/TVD: 23537/11820
County: Lea	Spud to TD: 22.7
State: NM	Lateral Length: 11100
SHL: S13-T21S-R32E 1399 FNL, 1981 FEL	Stages: 71
BHL: S25-T21S-R32E 2540 FNL, 2310 FEL	Proppant/ft: 2500

Project Description:

The proposed AFE is for the Margarita Fed Com 23H, a 2.25 section Wolfcamp to be drilled in Lea County, NM. This is a 4 string casing design consisting of the following: 24" surface hole drilled on Water to +/- 1700' and 20" 94# J-55 BTC casing set and cemented in place; 17.5" first intermediate hole drilled on Brine to +/-5600' and 13" 68# HCL-80 BTC casing set and cemented in place; 12.25" second intermediate drilled on Water to +/-10500' and 9.625" 40# HCP-110 LTC set and cemented in place; 8.5" production hole drilled on OBM to TD at +/-23537' and 5.5" 20# HCP-110 GBCD production casing set and cemented in place. There will be ~11100' of treatable lateral and completion design will consist of +/-71 stages and 2500 lbs/ft of proppant. Pad Facility design consistent with a Merchant style battery. Cost associated with off pad Power Lines or Pipelines is not included in this AFE.

TANGIBLE COSTS		Dry Hole	Completion	Facility	Total
Tangible Drilling - 01		\$ 1,304,598.00	\$ -	\$ -	\$ 1,304,598.00
9412	Intermediate 1 Casing	\$ 686,521	\$ -	\$ -	\$ 686,521
9404-1	Wellhead & Equipment	\$ 43,977	\$ -	\$ -	\$ 43,977
9401	Surface Casing	\$ 118,387	\$ -	\$ -	\$ 118,387
9402	Production Casing	\$ 455,713	\$ -	\$ -	\$ 455,713
Tangible Completion - 02		\$ -	\$ 46,382.00	\$ -	\$ 46,382.00
9404-2	Wellhead & Equipment	\$ -	\$ 46,382	\$ -	\$ 46,382
Tangible Facility - 03		\$ -	\$ -	\$ 500,000.00	\$ 500,000.00
9421	Production Battery	\$ -	\$ -	\$ 18,000	\$ 18,000
9416	Valves & Fittings	\$ -	\$ -	\$ 145,000	\$ 145,000
9408	Vessels	\$ -	\$ -	\$ 150,000	\$ 150,000
9418	Gas Meter	\$ -	\$ -	\$ 6,000	\$ 6,000
9407	Tanks	\$ -	\$ -	\$ 25,000	\$ 25,000
9424	Vapor Recovery Unil	\$ -	\$ -	\$ 22,000	\$ 22,000
9423	COMM- SCADA/Radio/Telecom	\$ -	\$ -	\$ 6,000	\$ 6,000
9419	Flare	\$ -	\$ -	\$ 6,000	\$ 6,000
9420	Pumps-Surface	\$ -	\$ -	\$ 35,000	\$ 35,000
9490	Miscellaneous	\$ -	\$ -	\$ 12,000	\$ 12,000
9417	Electrical	\$ -	\$ -	\$ 75,000	\$ 75,000
TOTAL TANGIBLE COSTS >>>		\$ 1,304,598.00	\$ 46,382.00	\$ 500,000.00	\$ 1,850,980.00

INTANGIBLE COSTS		Dry Hole	Completion	Facility	Total
Intangible Drilling - 01		\$ 2,996,873.00	\$ -	\$ -	\$ 2,996,873.00
9205	Drilling Overhead	\$ 6,157	\$ -	\$ -	\$ 6,157
9239	Company Supervision	\$ 3,025	\$ -	\$ -	\$ 3,025
9233	Mud - Diesel	\$ 91,746	\$ -	\$ -	\$ 91,746
9211	Location & Roads	\$ 46,818	\$ -	\$ -	\$ 46,818
9206	Contract Labor	\$ 36,695	\$ -	\$ -	\$ 36,695
9290	Contingency (5%)	\$ 142,327	\$ -	\$ -	\$ 142,327
9202	Drilling - Daywork	\$ 571,653	\$ -	\$ -	\$ 571,653
9215	Transportation	\$ 10,550	\$ -	\$ -	\$ 10,550
9234	Solids Control / Closed Loop	\$ 99,735	\$ -	\$ -	\$ 99,735
9229	Geosteering Services	\$ 4,984	\$ -	\$ -	\$ 4,984
9219	Bits & BHA	\$ 127,618	\$ -	\$ -	\$ 127,618
9236	Safety & Environmental	\$ 5,550	\$ -	\$ -	\$ 5,550
9224	Fuel	\$ 197,140	\$ -	\$ -	\$ 197,140
9207	Permits, surveys, land & legal	\$ 43,255	\$ -	\$ -	\$ 43,255
9222	Consulting Services	\$ 140,711	\$ -	\$ -	\$ 140,711



Authorization For Expenditure

AFE#: NM0194 R1

Date: Oct 8, 2021

9230	Mud - Drill Water	\$ 32,021	\$ -	\$ -	\$ 32,021
9208	Cementing & Services	\$ 217,005	\$ -	\$ -	\$ 217,005
9212	Equipment Rental	\$ 158,475	\$ -	\$ -	\$ 158,475
9228	Mudlogging & Services	\$ 15,753	\$ -	\$ -	\$ 15,753
9203	Drilling - Rig Move	\$ 97,588	\$ -	\$ -	\$ 97,588
9231	Mud - Brine	\$ 17,073	\$ -	\$ -	\$ 17,073
9204	Directional	\$ 401,869	\$ -	\$ -	\$ 401,869
9232	Mud - Auxiliary	\$ 22,748	\$ -	\$ -	\$ 22,748
9217	Inspection & Testing	\$ 25,848	\$ -	\$ -	\$ 25,848
9235	Disposal	\$ 162,766	\$ -	\$ -	\$ 162,766
9218	Casing Services	\$ 101,426	\$ -	\$ -	\$ 101,426
9220	Insurance	\$ 5,275	\$ -	\$ -	\$ 5,275
9237	Mancamp	\$ 53,952	\$ -	\$ -	\$ 53,952
9209	Mud - Chemicals & Engineering	\$ 157,110	\$ -	\$ -	\$ 157,110
Intangible Completion - 02		\$ -	\$ 4,719,301.00	\$ -	\$ 4,719,301.00
9328	Company Supervision	\$ -	\$ 6,277	\$ -	\$ 6,277
9322	Consulting Services	\$ -	\$ 120,527	\$ -	\$ 120,527
9307	Water Disposal	\$ -	\$ 64,656	\$ -	\$ 64,656
9330	Mancamp	\$ -	\$ 32,077	\$ -	\$ 32,077
9314	Stimulation	\$ -	\$ 749,050	\$ -	\$ 749,050
9306	Contract Labor	\$ -	\$ 76,858	\$ -	\$ 76,858
9336	Contingency (10%)	\$ -	\$ 237,112	\$ -	\$ 237,112
9332	Chemicals	\$ -	\$ 337,073	\$ -	\$ 337,073
9325	Wireline/Perforating	\$ -	\$ 468,483	\$ -	\$ 468,483
9327	Flowback/Testing	\$ -	\$ 99,698	\$ -	\$ 99,698
9311	Location, Permit & Damages	\$ -	\$ 17,353	\$ -	\$ 17,353
9326	Coil Tubing Unit	\$ -	\$ 49,156	\$ -	\$ 49,156
9313	Rental Equipment - Downhole	\$ -	\$ 21,795	\$ -	\$ 21,795
9312	Rental Equipment - Surface	\$ -	\$ 425,133	\$ -	\$ 425,133
9305	Completion Overhead	\$ -	\$ 10,932	\$ -	\$ 10,932
9335	Packers, Frac Plugs & Accessories	\$ -	\$ 67,204	\$ -	\$ 67,204
9315	Transportation	\$ -	\$ 18,348	\$ -	\$ 18,348
9321	Roustabout Services	\$ -	\$ 3,165	\$ -	\$ 3,165
9331	Pump Down Services	\$ -	\$ 67,520	\$ -	\$ 67,520
9337	Sand	\$ -	\$ 539,922	\$ -	\$ 539,922
9304	Safety & Environmental	\$ -	\$ 10,545	\$ -	\$ 10,545
9309	Fuel	\$ -	\$ 676,598	\$ -	\$ 676,598
9343	WTR - AEP Water Recycle	\$ -	\$ 24,533	\$ -	\$ 24,533
9339	WTR - Brackish Water	\$ -	\$ 465,367	\$ -	\$ 465,367
9340	WTR - Fresh Water	\$ -	\$ 6,469	\$ -	\$ 6,469
9346	WTR - Water Transfers	\$ -	\$ 123,450	\$ -	\$ 123,450
Intangible Facility - 03		\$ -	\$ -	\$ 400,000.00	\$ 400,000.00
9354	Instal-Labor: Welding	\$ -	\$ -	\$ 15,000	\$ 15,000
9356	Fluids, Chemicals	\$ -	\$ -	\$ 10,000	\$ 10,000
9357	Location, Permit, Damages, Survey	\$ -	\$ -	\$ 15,000	\$ 15,000
9359	Disposal	\$ -	\$ -	\$ 12,000	\$ 12,000
9353	Instal Labor: Inst, Elec, Autom	\$ -	\$ -	\$ 144,000	\$ 144,000
9363	Trucking Costs	\$ -	\$ -	\$ 12,000	\$ 12,000
9362	Consulting - Engineering	\$ -	\$ -	\$ 12,000	\$ 12,000
9360	Surface Rental	\$ -	\$ -	\$ 13,000	\$ 13,000
9370	Miscellaneous	\$ -	\$ -	\$ 12,000	\$ 12,000
9351	Installation Costs - Supervision	\$ -	\$ -	\$ 15,000	\$ 15,000
9352	Instal-Labor Mechanical	\$ -	\$ -	\$ 140,000	\$ 140,000



Authorization For Expenditure

AFE#: NM0194 R1

Date: Oct 8, 2021

TOTAL INTANGIBLE COSTS >>>	\$ 2,996,873.00	\$ 4,719,301.00	\$ 400,000.00	\$ 8,116,174.00
TOTAL PROJECT COSTS >>>	\$ 4,301,471.00	\$ 4,765,683.00	\$ 900,000.00	\$ 9,967,154.00
	Dry Hole	Completion	Facility	Total

This Authority for Expenditure is based on cost estimates. Billing will reflect your proportionate share of the actual invoice costs.

Operator: ADVANCE ENERGY PARTNERS HAT MESA

Signature: Name: Braden Harris

Date: Oct 6, 2021
Title: V.P. of Drilling & Completions

Signature: Name: Kevin Hayes

Date: Oct 7, 2021
Title: C.F.O.

Signature: Name: Peter Lellis

Date: Oct 8, 2021
Title: President & C.E.O.

WI Owner: _____

Date: _____

Approved By: _____

Title: _____

Printed Name: _____



Authorization For Expenditure

AFE#: NM0188 R1

Date: Oct 8, 2021

Lease: Margarita Federal	Target: Wolfcamp
Well No: Margarita Federal Com 13 #24H	Projected MD/TVD: 24131/11820
County: Lea	Spud to TD: 23.1
State: NM	Lateral Length: 11700
SHL: S13-T21S-R32E 460 FNL, 741 FEL	Stages: 75
BHL: S25-T21S-R32E 2540 FNL, 550 FEL	Proppant/ft: 2500

Project Description:

The proposed AFE is for the Margarita Fed Com 24H, a 2.25 section Wolfcamp to be drilled in Lea County, NM. This is a 4 string casing design consisting of the following: 24" surface hole drilled on Water to +/- 1700' and 20" 94# J-55 BTC casing set and cemented in place; 17.5" first intermediate hole drilled on Brine to +/-5600' and 13" 68# HCL-80 BTC casing set and cemented in place; 12.25" second intermediate drilled on Water to +/-10500' and 9.625" 40# HCP-110 LTC set and cemented in place; 8.5" production hole drilled on OBM to TD at +/-24131' and 5.5" 20# HCP-110 GBCD production casing set and cemented in place. There will be ~11700' of treatable lateral and completion design will consist of +/-75 stages and 2500 lbs/ft of proppant. Pad Facility design consistent with a Merchant syle battery. Cost associated with off pad Power Lines or Pipelines is not included in this AFE.

TANGIBLE COSTS		Dry Hole	Completion	Facility	Total
Tangible Drilling - 01		\$ 1,315,947.00	\$ -	\$ -	\$ 1,315,947.00
9402	Production Casing	\$ 467,062	\$ -	\$ -	\$ 467,062
9404-1	Wellhead & Equipment	\$ 43,977	\$ -	\$ -	\$ 43,977
9412	Intermediate 1 Casing	\$ 686,521	\$ -	\$ -	\$ 686,521
9401	Surface Casing	\$ 118,387	\$ -	\$ -	\$ 118,387
Tangible Completion - 02		\$ -	\$ 46,382.00	\$ -	\$ 46,382.00
9404-2	Wellhead & Equipment	\$ -	\$ 46,382	\$ -	\$ 46,382
Tangible Facility - 03		\$ -	\$ -	\$ 500,000.00	\$ 500,000.00
9490	Miscellaneous	\$ -	\$ -	\$ 12,000	\$ 12,000
9418	Gas Meter	\$ -	\$ -	\$ 6,000	\$ 6,000
9417	Electrical	\$ -	\$ -	\$ 75,000	\$ 75,000
9423	COMM- SCADA/Radio/Telecom	\$ -	\$ -	\$ 6,000	\$ 6,000
9420	Pumps-Surface	\$ -	\$ -	\$ 35,000	\$ 35,000
9416	Valves & Fittings	\$ -	\$ -	\$ 145,000	\$ 145,000
9407	Tanks	\$ -	\$ -	\$ 25,000	\$ 25,000
9421	Production Battery	\$ -	\$ -	\$ 18,000	\$ 18,000
9408	Vessels	\$ -	\$ -	\$ 150,000	\$ 150,000
9424	Vapor Recovery Unit	\$ -	\$ -	\$ 22,000	\$ 22,000
9419	Flare	\$ -	\$ -	\$ 6,000	\$ 6,000
TOTAL TANGIBLE COSTS >>>		\$ 1,315,947.00	\$ 46,382.00	\$ 500,000.00	\$ 1,862,329.00

INTANGIBLE COSTS		Dry Hole	Completion	Facility	Total
Intangible Drilling - 01		\$ 3,018,638.00	\$ -	\$ -	\$ 3,018,638.00
9203	Drilling - Rig Move	\$ 97,588	\$ -	\$ -	\$ 97,588
9231	Mud - Brine	\$ 17,073	\$ -	\$ -	\$ 17,073
9222	Consulting Services	\$ 142,248	\$ -	\$ -	\$ 142,248
9235	Disposal	\$ 162,766	\$ -	\$ -	\$ 162,766
9205	Drilling Overhead	\$ 6,235	\$ -	\$ -	\$ 6,235
9204	Directional	\$ 407,849	\$ -	\$ -	\$ 407,849
9212	Equipment Rental	\$ 160,193	\$ -	\$ -	\$ 160,193
9232	Mud - Auxillary	\$ 22,818	\$ -	\$ -	\$ 22,818
9218	Casing Services	\$ 101,426	\$ -	\$ -	\$ 101,426
9209	Mud - Chemicals & Engineering	\$ 157,532	\$ -	\$ -	\$ 157,532
9236	Safety & Environmental	\$ 5,581	\$ -	\$ -	\$ 5,581
9219	Bits & BHA	\$ 127,816	\$ -	\$ -	\$ 127,816
9234	Solids Control / Closed Loop	\$ 99,942	\$ -	\$ -	\$ 99,942
9224	Fuel	\$ 199,446	\$ -	\$ -	\$ 199,446
9202	Drilling - Daywork	\$ 578,898	\$ -	\$ -	\$ 578,898



Authorization For Expenditure

AFE#: NM0188 R1

Date: Oct 8, 2021

9229	Geosteering Services	\$ 5,154	\$ -	\$ -	\$ 5,154
9217	Inspection & Testing	\$ 25,848	\$ -	\$ -	\$ 25,848
9215	Transportation	\$ 10,550	\$ -	\$ -	\$ 10,550
9206	Contract Labor	\$ 36,695	\$ -	\$ -	\$ 36,695
9228	Mudlogging & Services	\$ 16,147	\$ -	\$ -	\$ 16,147
9211	Location & Roads	\$ 46,792	\$ -	\$ -	\$ 46,792
9220	Insurance	\$ 5,275	\$ -	\$ -	\$ 5,275
9230	Mud - Drill Water	\$ 32,021	\$ -	\$ -	\$ 32,021
9233	Mud - Diesel	\$ 91,746	\$ -	\$ -	\$ 91,746
9290	Contingency (5%)	\$ 143,354	\$ -	\$ -	\$ 143,354
9239	Company Supervision	\$ 3,044	\$ -	\$ -	\$ 3,044
9237	Mancamp	\$ 54,341	\$ -	\$ -	\$ 54,341
9208	Cementing & Services	\$ 217,005	\$ -	\$ -	\$ 217,005
9207	Permits, surveys, land & legal	\$ 43,255	\$ -	\$ -	\$ 43,255
Intangible Completion - 02		\$ -	\$ 4,923,784.00	\$ -	\$ 4,923,784.00
9321	Roustabout Services	\$ -	\$ 3,165	\$ -	\$ 3,165
9312	Rental Equipment - Surface	\$ -	\$ 448,450	\$ -	\$ 448,450
9307	Water Disposal	\$ -	\$ 64,656	\$ -	\$ 64,656
9305	Completion Overhead	\$ -	\$ 11,195	\$ -	\$ 11,195
9306	Contract Labor	\$ -	\$ 76,858	\$ -	\$ 76,858
9331	Pump Down Services	\$ -	\$ 70,685	\$ -	\$ 70,685
9337	Sand	\$ -	\$ 570,340	\$ -	\$ 570,340
9330	Mancamp	\$ -	\$ 32,480	\$ -	\$ 32,480
9309	Fuel	\$ -	\$ 714,472	\$ -	\$ 714,472
9304	Safety & Environmental	\$ -	\$ 10,545	\$ -	\$ 10,545
9313	Rental Equipment - Downhole	\$ -	\$ 21,795	\$ -	\$ 21,795
9314	Stimulation	\$ -	\$ 791,250	\$ -	\$ 791,250
9325	Wireline/Perforating	\$ -	\$ 494,858	\$ -	\$ 494,858
9322	Consulting Services	\$ -	\$ 124,563	\$ -	\$ 124,563
9336	Contingency (10%)	\$ -	\$ 248,579	\$ -	\$ 248,579
9328	Company Supervision	\$ -	\$ 6,317	\$ -	\$ 6,317
9311	Location, Permit & Damages	\$ -	\$ 17,353	\$ -	\$ 17,353
9326	Coil Tubing Unit	\$ -	\$ 51,926	\$ -	\$ 51,926
9332	Chemicals	\$ -	\$ 356,063	\$ -	\$ 356,063
9315	Transportation	\$ -	\$ 18,348	\$ -	\$ 18,348
9327	Flowback/Testing	\$ -	\$ 99,698	\$ -	\$ 99,698
9335	Packers, Frac Plugs & Accessories	\$ -	\$ 70,369	\$ -	\$ 70,369
9346	WTR - Water Transfers	\$ -	\$ 123,450	\$ -	\$ 123,450
9339	WTR - Brackish Water	\$ -	\$ 465,367	\$ -	\$ 465,367
9343	WTR - AEP Water Recycle	\$ -	\$ 24,533	\$ -	\$ 24,533
9340	WTR - Fresh Water	\$ -	\$ 6,469	\$ -	\$ 6,469
Intangible Facility - 03		\$ -	\$ -	\$ 400,000.00	\$ 400,000.00
9359	Disposal	\$ -	\$ -	\$ 12,000	\$ 12,000
9351	Installation Costs - Supervision	\$ -	\$ -	\$ 15,000	\$ 15,000
9362	Consulting - Engineering	\$ -	\$ -	\$ 12,000	\$ 12,000
9360	Surface Rental	\$ -	\$ -	\$ 13,000	\$ 13,000
9356	Fluids, Chemicals	\$ -	\$ -	\$ 10,000	\$ 10,000
9370	Miscellaneous	\$ -	\$ -	\$ 12,000	\$ 12,000
9353	Instal Labor: Inst, Elec, Autom	\$ -	\$ -	\$ 144,000	\$ 144,000
9354	Instal-Labor: Welding	\$ -	\$ -	\$ 15,000	\$ 15,000
9363	Trucking Costs	\$ -	\$ -	\$ 12,000	\$ 12,000
9352	Instal-Labor Mechanical	\$ -	\$ -	\$ 140,000	\$ 140,000
9357	Location, Permit, Damages, Survey	\$ -	\$ -	\$ 15,000	\$ 15,000



Authorization For Expenditure

AFE#: NM0188 R1

Date: Oct 8, 2021

TOTAL INTANGIBLE COSTS >>>	\$ 3,018,638.00	\$ 4,923,784.00	\$ 400,000.00	\$ 8,342,422.00
TOTAL PROJECT COSTS >>>	\$ 4,334,585.00	\$ 4,970,166.00	\$ 900,000.00	\$ 10,204,751.00
	Dry Hole	Completion	Facility	Total

This Authority for Expenditure is based on cost estimates. Billing will reflect your proportionate share of the actual invoice costs.

Operator: ADVANCE ENERGY PARTNERS HAT MESA

Signature: Name: Braden Harris

Date: Oct 6, 2021
Title: V.P. of Drilling & Completions

Signature: Name: Kevin Hayes

Date: Oct 7, 2021
Title: C.F.O.

Signature: Name: Peter Lellis

Date: Oct 8, 2021
Title: President & C.E.O.

WI Owner: _____

Date: _____

Approved By: _____

Title: _____

Printed Name: _____

Exhibit A-5

Communication with Parties

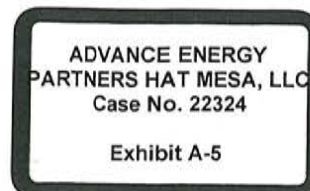
October 7, 2021: Revised Bone Spring Well proposals mailed to ConocoPhillips Company and Marathon Oil Permian, LLC via federal express mail and email for the following wells:

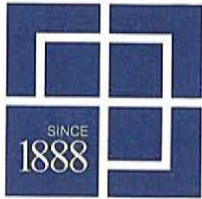
Margarita Federal Com 13 #5H
Margarita Federal Com 13 #6H
Margarita Federal Com 13 #7H
Margarita Federal Com 13 #8H
Margarita Federal Com 13 #11H
Margarita Federal Com 13 #12H
Margarita Federal Com 13 #15H
Margarita Federal Com 13 #16H
Margarita Federal Com 13 #19H
Margarita Federal Com 13 #20H

In the letter dated October 7, 2021 to ConocoPhillips and Marathon, Advance proposed to acquire the applicable interest either by purchase or by term assignment. Marathon did not respond.

Contacted marathon multiple times to inquire marathon's decision. The appropriate Marathon Landman did not provide an answer.

Various dates in October and November 2021: made multiple communications with ConocoPhillips to propose an acreage trade by which Conoco would trade its leasehold in Margarita Area for other leases. By email dated November 15, 2021, both Parties verbally agreed to a trade whereby Advance shall acquire Conoco's leasehold in the 720-acre Unit. Advance anticipates concluding this trade prior to drilling.





HINKLE SHANOR LLP
ATTORNEYS AT LAW
PO BOX 2068
SANTA FE, NEW MEXICO 87504
505-982-4554 (FAX) 505-982-8623

WRITER:

Dana S. Hardy, Partner
dhardy@hinklelawfirm.com

November 3, 2021

VIA CERTIFIED MAIL
RETURN RECEIPT REQUESTED

TO ALL INTERESTED PARTIES SUBJECT TO NOTICE

Re: Case No. 22324 - Application of Advance Energy Partners Hat Mesa, LLC to Amend Order Nos. R-21851 and R-21853 to Consolidate Horizontal Spacing Units, Revise Well Locations, and Include Additional Wells, Lea County, New Mexico.

To whom it may concern:

This letter is to advise you that the enclosed application was filed with the New Mexico Oil Conservation Division. The hearing will be conducted on **December 2, 2021** beginning at 8:15 a.m.

During the COVID-19 Public Health Emergency, state buildings are closed to the public and hearings will be conducted remotely. To participate in the electronic hearing, see the instructions posted on the OCD Hearings website: <https://www.emnrd.nm.gov/oed/hearing-info/>. You are not required to attend this hearing, but as an owner of an interest that may be affected by this application, you may appear and present testimony. Failure to appear at that time and become a party of record will preclude you from challenging the matter at a later date.

Pursuant to Division Rule 19.15.4.13.B, a party who intends to present evidence at the hearing shall file a pre-hearing statement and serve copies on other parties, or the attorneys of parties who are represented by counsel, at least four business days in advance of a scheduled hearing, but in no event later than 5:00 p.m. mountain time, on the Thursday preceding the scheduled hearing date. The statement must be filed at the Division's Santa Fe office or submitted through the OCD E-Permitting system (<https://wwwapps.emnrd.state.nm.us/oed/oedpermitting/>) and should include: the names of the parties and their attorneys, a concise statement of the case, the names of all witnesses the party will call to testify at the hearing, the approximate time the party will need to present its case, and identification of any procedural matters that are to be resolved prior to the hearing.

Please do not hesitate to contact me if you have any questions about this matter.

Sincerely,

/s/ Dana S. Hardy

Dana S. Hardy



Enclosure

PO BOX 10
ROSWELL, NEW MEXICO 88202
575-622-6510
(FAX) 575-623-9332

PO BOX 2068
SANTA FE, NEW MEXICO 87504
505-982-4554
(FAX) 505-982-8623

7601 JEFFERSON ST NE • SUITE 180
ALBUQUERQUE, NEW MEXICO 87109
505-858-8320
(FAX) 505-858-8321

7020 2450 0002 1364 9872

U.S. Postal Service
CERTIFIED MAIL® RECEIPT
 Domestic Mail Only

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OFFICIAL U.S. POST OFFICE

Certified Mail Fee \$ _____

Extra Services & Fees (check box, add fees appropriate)

Return Receipt (hardcopy) \$ _____

Return Receipt (electronic) \$ _____

Certified Mail Restricted Delivery \$ _____

Adult Signature Required \$ _____

Adult Signature Restricted Delivery \$ _____

Postage \$ _____

Total Postage and Fees \$ _____


Sent To _____

Street and Apt. ConocoPhillips Company
 Attn: JIV Department
 600 W. Illinois Avenue

City, State, ZIP Midland, TX 79701

PS Form 3800, April 2015 PSN 7530-02-000-9047 See Reverse for Instructions



SENDER: COMPLETE THIS SECTION	COMPLETE THIS SECTION ON DELIVERY
<ul style="list-style-type: none"> Complete items 1, 2, and 3. Print your name and address on the reverse so that we can return the card to you. Attach this card to the back of the mailpiece, or on the front if space permits. 	<p>A. Signature <input checked="" type="checkbox"/> <i>[Signature]</i> <input type="checkbox"/> Agent <input type="checkbox"/> Addressee</p> <p>B. Received by (Printed Name) <i>Danese</i> C. Date of Delivery <i>11/9/21</i></p> <p>D. Is delivery address different from item 1? <input checked="" type="checkbox"/> Yes If YES, enter delivery address below. <input type="checkbox"/> No</p>
<p>1. Article Addressed to:</p> <p>ConocoPhillips Company Attn: JIV Department 600 W. Illinois Avenue Midland, TX 79701</p> <p> 9590 9402 5760 0003 2673 85</p>	<p>3. Service Type</p> <p><input type="checkbox"/> Adult Signature <input type="checkbox"/> Priority Mail Express®</p> <p><input type="checkbox"/> Adult Signature Restricted Delivery <input type="checkbox"/> Registered Mail™</p> <p><input checked="" type="checkbox"/> Certified Mail® <input type="checkbox"/> Registered Mail Restricted Delivery</p> <p><input type="checkbox"/> Certified Mail Restricted Delivery <input type="checkbox"/> Return Receipt for Merchandise</p> <p><input type="checkbox"/> Collect on Delivery <input type="checkbox"/> Signature Confirmation™</p> <p><input type="checkbox"/> Collect on Delivery Restricted Delivery <input type="checkbox"/> Signature Confirmation Restricted Delivery</p> <p><input type="checkbox"/> Insured Mail</p> <p><input type="checkbox"/> Insured Mail Restricted Delivery (over \$500)</p>
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Attn: Jeff Broussard
5555 San Felipe Street
Houston, TX 77056

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<p>1. Article Addressed to:</p> <p>Marathon Oil Permian, LLC Attn: Jeff Broussard 5555 San Felipe Street Houston, TX 77056</p>  <p>9590 9402 5760 0003 2673 78</p>	<p>3. Service Type</p> <p><input type="checkbox"/> Adult Signature <input type="checkbox"/> Priority Mail Express®</p> <p><input type="checkbox"/> Adult Signature Restricted Delivery <input type="checkbox"/> Registered Mail™</p> <p><input checked="" type="checkbox"/> Certified Mail® <input type="checkbox"/> Registered Mail Restricted Delivery</p> <p><input type="checkbox"/> Certified Mail Restricted Delivery <input type="checkbox"/> Return Receipt for Merchandise</p> <p><input type="checkbox"/> Collect on Delivery <input type="checkbox"/> Signature Confirmation™</p> <p><input type="checkbox"/> Collect on Delivery Restricted Delivery <input type="checkbox"/> Signature Confirmation Restricted Delivery</p> <p><input type="checkbox"/> Insured Mail <input type="checkbox"/> Insured Mail Restricted Delivery (over \$500)</p>
<p>2. Article Number (Transfer from service label)</p> <p>7020 2450 0002 1364 9889</p>	

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Affidavit of Publication

STATE OF NEW MEXICO
COUNTY OF LEA

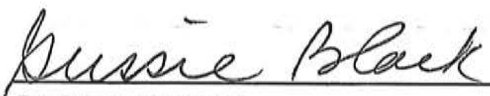
I, Daniel Russell, Publisher of the Hobbs News-Sun, a newspaper published at Hobbs, New Mexico, solemnly swear that the clipping attached hereto was published in the regular and entire issue of said newspaper, and not a supplement thereof for a period of 1 issue(s).

Beginning with the issue dated
November 14, 2021
and ending with the issue dated
November 14, 2021.



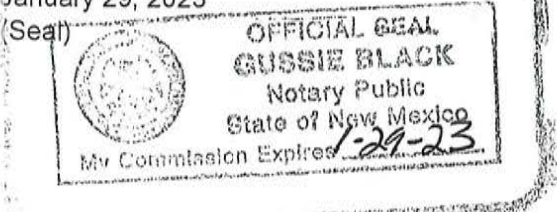
Publisher

Sworn and subscribed to before me this
14th day of November 2021.



Business Manager

My commission expires
January 29, 2023



This newspaper is duly qualified to publish legal notices or advertisements within the meaning of Section 3, Chapter 167, Laws of 1937 and payment of fees for said

LEGAL LEGAL LEGAL

LEGAL NOTICE November 14, 2021

This is to notify all interested parties, including ConocoPhillips Company; Marathon Oil Permian, LLC; and their successors and assigns, that the New Mexico Oil Conservation Division will conduct a hearing on an application submitted by Advance Energy Partners Hat Mesa, LLC (Case No. 22324). During the COVID-19 Public Health Emergency, state buildings are closed to the public and hearings will be conducted remotely. The hearing will be conducted on December 2, 2021 beginning at 8:15 a.m. To participate in the electronic hearing, see the instructions posted on the docket for that date: <https://www.emnrd.nm.gov/ocd/hearing-info/>. Applicant files this application to: (1) amend the locations of the wells approved under Order Nos. R-21851 and R-21853 ("Orders"); (2) consolidate the adjacent horizontal spacing units approved under the Orders into a 720-acre, more or less, standard horizontal spacing unit ("Unit") within the Bone Spring formation comprised of the S/2NE/4 and SE/4 of Section 13, E/2 of Section 24, and NE/4 of Section 25, Township 21 South, Range 32 East in Lea County, New Mexico; and (3) include the Margarita Federal Com 13 #19H and #20H wells in the Unit. Order No. R-21851 pooled all uncommitted mineral interests in the Bone Spring formation underlying a 360-acre, more or less, standard horizontal spacing unit comprised of the SE/4NE/4 and E/2SE/4 of Section 13, E/2 E/2 of Section 24, and E/2 NE/4 of Section 25, Township 21 South, Range 32 East in Lea County, New Mexico and dedicated the unit to the Margarita Federal Com #7H, #8H, #12H, and #16H wells. Order No. R-21853 pooled all uncommitted mineral interests in the Bone Spring formation underlying a 360-acre, more or less, standard horizontal spacing unit comprised of the SW/4NE/4 and W/2SE/4 of Section 13, W/2E/2 of Section 24, and W/2NE/4 of Section 25, Township 21 South, Range 32 East in Lea County, New Mexico and dedicated the unit to the Margarita Federal Com #15H, #5H, #6H, and #11H wells. The Orders designated Applicant as the operator of the units. Subsequent to the entry of the Orders, Applicant revised the proposed locations of the wells approved under the Orders and intends to include the Margarita Federal Com 13 #19H and #20H wells in its development plan. Accordingly, Applicant intends to dedicate the Unit to the following wells ("Wells"):

- Margarita Federal Com 13 #5H, #6H, #11H, #15H and #19H wells to be horizontally drilled from a surface location in the SW/4NE/4 (Unit G) of Section 13 to a bottom hole location in the SW/4NE/4 (Unit G) of Section 25;
- Margarita Federal Com 13 #7H and #16H wells to be horizontally drilled from a surface location in the NE/4NE/4 (Unit A) of Section 13 to a bottom hole location in the SW/4NE/4 (Unit G) of Section 25; and
- Margarita Federal Com 13 #8H, #12 and #20 wells to be horizontally drilled from a surface location in the NE/4NE/4 (Unit A) of Section 13 to a bottom hole location in the SE/4NE/4 (Unit H) of Section 25.

The completed intervals of the Wells will be orthodox. The completed interval for the proposed Margarita Federal Com 13 #6H well will be within 330' of the quarter-quarter line separating the W/2SE/4 from the E/2SE/4 and the SE/4NE/4 from the SW/4NE/4 of Section 13, the E/2E/2 from the W/2E/2 of Section 24, and the W/2NE/4 from the E/2NE/4 of Section 25 to allow inclusion of this acreage into a standard horizontal well spacing unit. The Wells are located approximately twenty-seven (27) miles west of Eunice, New Mexico.
#37025

02107475

00260672

GILBERT
HINKLE, SHANOR LLP
PO BOX 2068
SANTA FE, NM 87504



STATE OF NEW MEXICO
DEPARTMENT OF ENERGY, MINERALS AND NATURAL RESOURCES
OIL CONSERVATION DIVISION

APPLICATION OF ADVANCE ENERGY
PARTNERS HAT MESA, LLC FOR
COMPULSORY POOLING,
LEA COUNTY, NEW MEXICO

CASE NO. 22107

SELF-AFFIRMED STATEMENT
OF EDWARD CAAMANO

1. I am the Senior Vice President of Geoscience at Advance Energy Partners Hat Mesa, LLC ("AEP") and am over 18 years of age. I have personal knowledge of the matters addressed herein and am competent to provide this Self-Affirmed Statement. I have previously testified before the New Mexico Oil Conservation Division ("Division"), and my credentials as an expert in petroleum geology matters were accepted and made a matter of record.

2. I am familiar with the geological matters that pertain to the above-referenced case.

3. **Exhibit B-1** is a location map of the proposed horizontal spacing unit ("Unit") in the above-referenced case and shows the following proposed wells with black lines: Margarita Federal Com #5H, #6H, #7H, #8H, #11H, #12H, #15H, #16H, #19H and #20H wells ("Wells"). Offset Bone Spring producers are shown with green dots at BHL and DUCs or wells in process of completion are shown as blue diamonds. This exhibit also identifies three wells penetrating the targeted interval used to construct a structural cross-section from A to A'. I utilized these well logs because they penetrate the targeted interval, are of good quality, and are representative of the geology in the area.

4. **Exhibit B-2** is a structure map for the top of the Bone Spring formation which also reflects the surrounding area in relation to the Unit. The contour interval is 20'. The Wells are



depicted with black lines, and I have identified the bottom hole locations. The map demonstrates the formation within a very minor anticlinal feature trending NW-SE in this area. I do not observe any faulting, pinch-outs, or geologic impediments to developing the targeted intervals with horizontal wells.

5. **Exhibit B-3** is a structural cross-section using the representative wells identified on **Exhibit B-1**. It contains gamma ray, resistivity and porosity logs. The landing zone for the Wells are labeled on the exhibit. The cross-section demonstrates the target interval is continuous across the Unit.

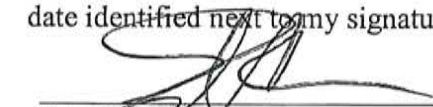
6. In my opinion, a standup orientation for the Wells is appropriate for the proper exploitation of subject acreage because of the of consistent rock properties throughout the Unit and in taking advantage the NE-SW maximum stress orientation in this area

7. Based on my geologic study of the area, the targeted interval underlying the subject areas and Unit is suitable for development by horizontal wells and the tracts comprising the Unit will contribute more or less equally to the production of the Wells.

8. In my opinion, the granting of AEP's application will serve the interests of conservation, the protection of correlative rights, and the prevention of waste.

9. The exhibits attached hereto were either prepared by me or under my supervision or were compiled from company business records.

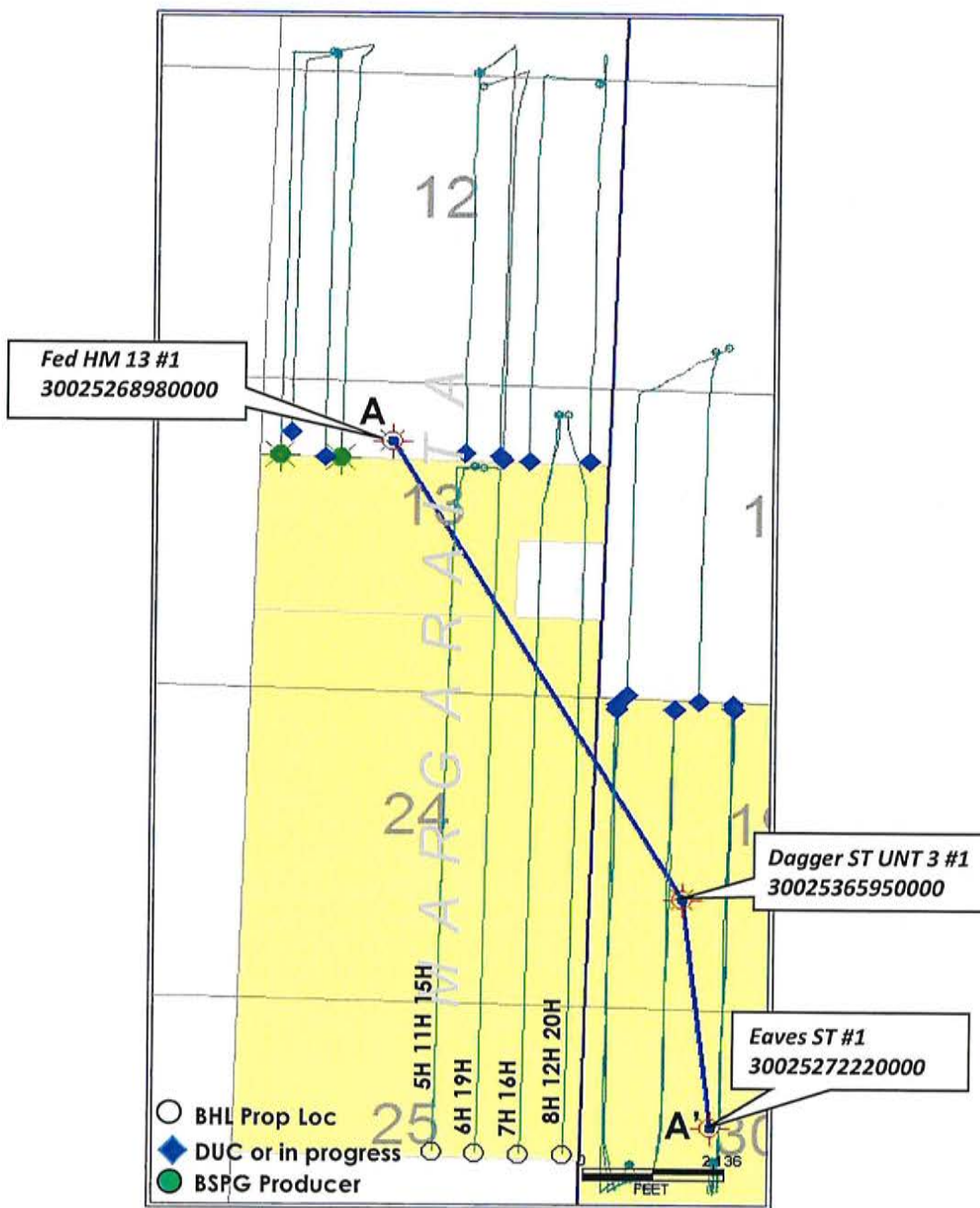
10. I understand this Self-Affirmed Statement will be used as written testimony in these cases. I affirm my testimony in paragraphs 1 through 9 above is true and correct and is made under penalty of perjury under the laws of the State of New Mexico. My testimony is made as of the date identified next to my signature below.


Edward Caamano

11/18/21
Date

Exhibit B-1

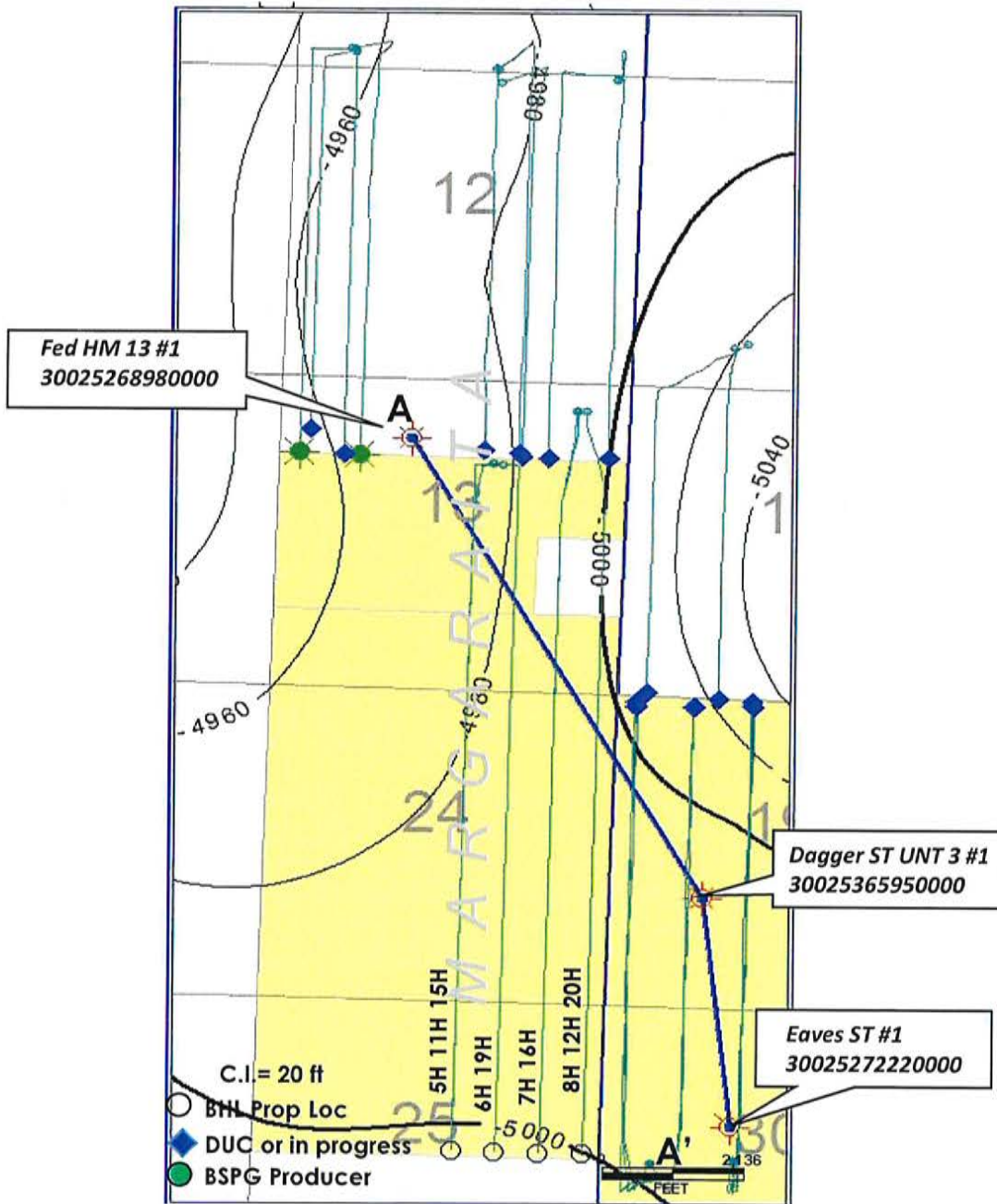
Location Map Margarita 5H, 6H, 7H, 8H, 11H, 12H, 15H, 16H, 19H, 20H



ADVANCE ENERGY
 PARTNERS HAT MESA, LLC
 Case No. 22324

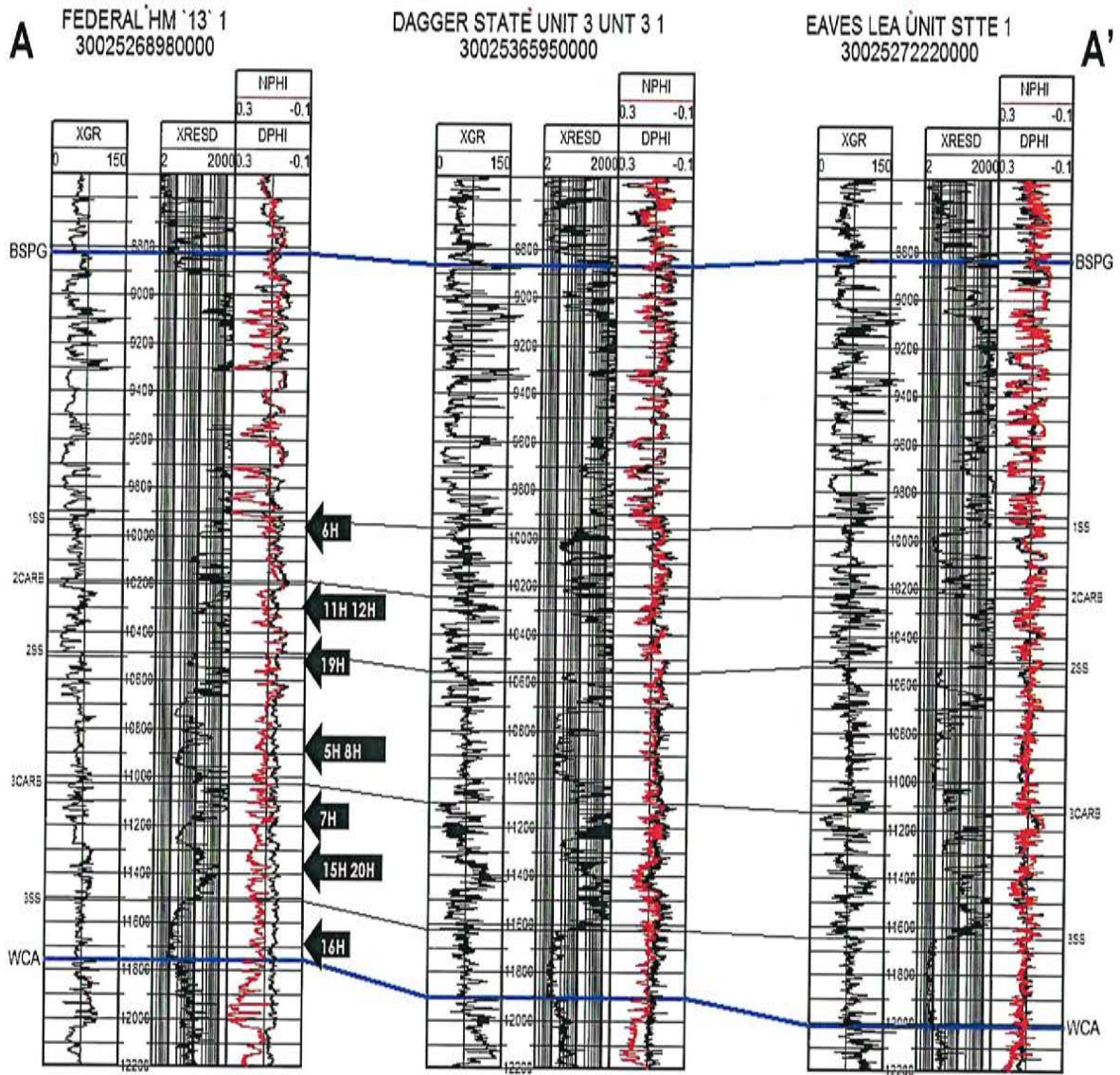
Exhibit B-1

Exhibit B-2 Structure Map Top Bone Spring (SSD)



ADVANCE ENERGY
 PARTNERS HAT MESA, LLC
 Case No. 22324
 Exhibit B-2

Exhibit B-3 CROSS SECTION A - A'



Proposed Landings annotated with arrows

ADVANCE ENERGY
 PARTNERS HAT MESA, LLC
 Case No. 22324
 Exhibit B-3