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
E-19.4 D	
Exhibit B	Self-Affirmed Statement of Edward Caamano
B-1	Location Map
B-2	Structure Map
B-3	Cross Section

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COMPULSORY POOLING APPLICATION CHECKLIST

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 thi 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 ocation, footages, completion target, orientation, completion status (standard or non-standard)	Add wells as needed
Nell #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	
Well #5	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	
Well #6	TVD: Approx. 10200'	
	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'	
lorizontal Well First and Last Take Points	Exhibit A-2	
Completion Target (Formation, TVD and MD)	Exhibit A-4	_
NFE Capex and Operating Costs		
Drilling Supervision/Month \$	8,000	
Production Supervision/Month \$	800	
ustification for Supervision Costs	Exhibit A	
Requested Risk Charge	200%	
lotice of Hearing	Exhibit A-1	0.2
roposed Notice of Hearing		

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):	Daniel D. Houden
Date:	11/29/2021

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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.

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,

ADVANCE ENERGY ARTNERS HAT MESA, LLC Case No. 22324 Exhibit A 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.

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;

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- 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.

 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.

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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.

Budik

Paul Burdick

November 16, 2021 Date

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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

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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. Page 12 of 75

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.

 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

<u>/s/ Dana S. Hardy</u> 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., Phones (575) 393-6561 DISTRICT II 811 S. First St., Phones (576) 746-1253 DISTRICT III 1000 Rio Brazos R Phones (505) 354-6176 DISTRICT IV	Artesia, NM Fax: (575) 748-4 d., Aztec, N Fax: (505) 334-6	88210 9720 M 87410 5170	OIL	CON		l Resources Departm ON DIVIS Francis Dr.	Su	Revised Aug	rm C-102 gust 4, 2011 appropriate strict Office
1220 S. St. Francis I Phone (505) 476-3460	Fr., Santa Fe, Fax: (505) 476-1	NM 87505 3462	WELL LO	OCATION	N AND ACREA	GE DEDICATI	ON PLAT	AMENDEI	D REPORT
API	Number			Pool Code			Pool Name		
Property	Code	I.			Property Nam			W-II N	umber
	oout			MAR	GARITA FEDER			5	
OGRID N	o.				Operator Nam		2040	Eleva	
			ADV	ANCE E	The second s	NERS HAT ME	SA	391	1
UL or lot No.	Section	Township	Range	Lot Idn	Surface Loca Feet from the	SOUTH/South line	Post from the	Part West New	Country
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UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	SOUTH/South line	Iace Feet from the	East/West line	County
G	25	21 S	32 E		2540	NORTH	2310	EAST	LEA
Dedicated Acre	s Joint o	or Infill Co	onsolidation	Code 0	rder No.				
	N:536655.7 E:756082.9 (NAD 83) N:536013.9 E:756093.8 (NAD 83)	 N:5380 E:7587 (NAD	32.6		538702.8 761348.4 NAD 83) FIRST T/ 1420' FNL Lat – N Long – W NMSPCE-	AKE POINT <u>& 2310' FEL</u> 32.482275' 103.627358' N 539902.9 E 759030.6 D-83)	land including location or has this location pu owner of such o or to a volunt compulsory pool the division. Signature Printed Name		role well at with an interest.
	N:533372.5 E:756115.7 (NAD 83)	·	_24+ + 	— — — E	:533424,6 781385.1 NAD 83)		I hereby certify on this plat wa actual surveys supervison and	R CERTIFICAT that the well locate is plotted from field made by me or i that the same is	ion shown notes of under my true and
	N:530730.1 E:756131.7 (NAD 83)	N:5307 E:7587 (NAD /	68.2	E:3	530783,4 761402.9 84AD 83)			best of my belies	
DVANCE ENERG NERS HAT MESA Case No. 22324		+-	-25 <u>0</u> 2 L.T.P./ B.H. 	<u>310'</u>	BOTTO Lat — N Long — W NMSPCE— E	KE POINT/ M HOLE 32.450164* 103.627400* 4 528220.1 5 759095.0 -83)	-10022	3000' 4500' ALE: 1" = 3000' Num.: 35213	7977
Exhibit A-2									

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DISTRICT I 1625 N. French Dr., 1 Phone (878) 393-6161 F. DISTRICT II 611 S. First St., A Phone (676) 746-1233 F. DISTRICT III 1000 Rio Brazos R. Phone (505) 334-6176 F. DISTRICT IV	ax: (575) 393-0 rtesia, NM (ax: (575) 748-0	7720 88210 7720	OIL	CON 12	inerals of SEF 220 So	and Natural RVATI outh St.	w Mexico Resources Departm ON DIVIS Francis Dr. Mexico 87505		Revised Au Submit one copy to	orm C-102 gust 4, 2011 appropriate strict Office
DISTRICT IV 1220 S. St. Francis Dr Phone (506) 476-3460 F	217 - 433	NM 87505 1482	WELL LO		I ANI) ACREA	GE DEDICATI	ON PLAT	AMENDE	D REPORT
API	Number			Pool Code				Pool Name		
Property C	Code	1		0 200 x 1997 R	Pi	roperty Nam	le		Well N	umber
OCDID N.				MARG			RAL COM		61	<u></u>
OGRID No	·		ADVANCE ENERGY PARTNERS HAT MESA 3910							
					Sur	face Loca	ation			
UL or lot No.	Section	Township	Range	Lot Idn		from the	SOUTH/South line	Feet from the	East/West line	County
G	13	21 S	32 E			1399	NORTH	1882	EAST	LEA
		-	I supported the second	USA CEDERAN COLOR		on neer seemend	rent From Sur	Classifier .		
UL or lot No. G	Section	Township	Range	Lot Idn		from the	SOUTH/South line	Feet from the	East/West line	County
Dedicated Acres	25 Joint o	21 S	32 E	Code Or	der No.	2540	NORTH	1430	EAST	LEA
					uer no.					
	N:53606.2 (NAD 83) N:538655.7 E:756082.9 (NAD 83) N:536013.9 E:756082.8 (NAD 83) N:533372.5 E:756115.7 (NAD 83) N:530730.1 E:756131.7 (NAD 83)	N:5413 E:7866 (NAD) 	28.9 692 12 21.0 $21.$	E77 (N 1882' F.T.P. NS E7. (N S.T.P. NS E7. (N S.T.P. NS E7. (N S.T.P. NS E7. (N S.T.P. NS E7. (N S.T.P. S.T.P. NS E7. (N S.T.P. S.T.P. NS E7. (N S.T.P. S.T	41338.4 61331.4 AD 83) 338702.8 61384.4 AD 83) 536052.9 761383.7 4AD 83) 534424.6 61385.1 (AD 83) 533424.6 61385.1 (AD 83)	Lat - N Long - W NMSPCE- ^N E (NAD <u>FIRST TA</u> 1420' FNL	1 539927.2 759458.1 -83) KE POINT & 1430' FEL 32.482276' 103.624504' 539908.8 759910.6	I hereby contained her the best of m this organisal interest or us land including location or ho this location or or to a volum compulsory pe the division. Signature Printed Nat Email Addre SURVEY I hereby certi on this plat actual survey supervison of correct to t	Torrest of the sent of the sen	TION Interest, or a entered by Date TION in of shown t notes of under my true and
	-	 	-25 	<u>_1430'</u>	1	LAST TAK BOTTOM Lat - N Long - W 1 NMSPCE- N (NAD-	HOLE 32.450171* 03.624547* 528229.0 759975.0		3000' 4500' CALE: 1" = 3000' /O Num: 35213	7977

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DISTRICT I 1625 N. French Dr., Hobbs, NM 682 Phone (675) 393-6161 Fax: (575) 393-67 DISTRICT II 811 S. First St., Artesia, NM 8 Fhoma (675) 746-123 Fax: (575) 746-97 DISTRICT III 1000 Rio Brazos Rd., Aztec, NM Phone (505) 334-6178 Fax: (505) 334-61	01L	Energy, Minerals and Nat CONSERVA 1220 South		S	Revised Aug ubmit one copy to	rm C-102 gust 4, 2011 appropriate strict Office
DISTRICT IV 1220 S. St. Francis Dr., Santa Fe, N Phone (506) 476-3460 Fax: (505) 476-34	WELL LO	OCATION AND ACH	EAGE DEDICAT	ION PLAT	AMENDEI) REPORT
API Number		Pool Code		Pool Name		
Property Code		Property	Name		Well N	umber
		MARGARITA FEDE	RAL COM 13		7⊦	1
OGRID No.	ADV	Operator ANCE ENERGY PA		SA	Eleva 390	
		Surface I	ocation			
UL or lot No. Section	Township Range	Lot Idn Feet from th		Feet from the	East/West line	County
A 13	21 S 32 E	460	NORTH	807	EAST	LEA
UL or lot No. Section	Township Range	Hole Location If Di				
G 25	21 S 32 E	2540	e SOUTH/South line NORTH	Feet from the 1430	East/West line EAST	County LEA
Dedicated Acres Joint or			Holdin	1400		
		Providence and				
NO ALLOWABLE W N:541297.7 E:756066.2 (NAD 83) N:538655.7 E:76028.9 (NAD 83) N:536013.9 E:756098.8 (NAD 83) N:533372.5 E:766115.7 (NAD 83) N:530730.1 E:756115.7 (NAD 83)	OR A NON-STAN	* (807' (NAD 83) Lot Long NMSPC (NAD 83) Lot Long NMSPC (NAD 83) 1420 F Lot Long - NMSPC (NAD 83) 1420 F Lot Long - NMSPC (NAD 83) NMSPC (NAD 83) Lot Long - NMSPC (NAD 83) Lot Lot Lot Long - NMSPC (NAD 83) Lot Lot Long - NMSPC (NAD 83) Lot Lot Long - NMSPC (NAD 83) Lot Long NMSPCE	Image: Control of the system Image: Control of the system ACE LOCATION N 32.484914* W 103.622483* Image: Control of the system Image:	THE DIVISION OPERATO I hereby ce contained here the best of my this organizatio interest or unil. land including location pu ourner of such. or to a volunda compulsory pool the division. Signature Printed Nam Email Addres SURVEYO I hereby certify on this plat wo actual surveys supervison and correct to the ADD Date Surveye	PR CERTIFICAT rify that the inform in is true and compl knowledge and belief n either owns a work Edsed mineral interess the proposed bottom 1 a right to drill this rruant to a contract a mineral or working ry pooling agreement ing order heretofore of that the well location that the well location is plotted from field made by me or d that the same is best of my belief. That 5, 2020 MEX	YION lation lete to and that ing the tin the uell at with an interest, or a mitered by Date Date ION con shown notes of under my true and

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DISTRICT I 1625 N. French Dr., Hobbs, NM 88240 760ns (675) 303-5101 Fax: (575) 303-0720 DISTRICT II 311 S. First St., Artesia, NM 68210 760ns (575) 748-1253 Fax: (575) 748-9720 DISTRICT III 1000 Rio Brazos Rd., Aztec, NM 87410 760ns (595) 334-6178 Fax: (505) 334-6170 DISTRICT IV		Energy, Minerals and 1 CONSERVA	New Mexico atural Resources Departr ATION DIVIS St. Francis Dr. ew Mexico 87505	Su	Revised Aug abmit one copy to	rm C-102 gust 4, 2011 appropriate strict Office		
220 S. St. Francis Dr., Santa Fe, NM 8750; Phone (505) 478-3460 Pax: (505) 478-3462 API Number	WELL L	OCATION AND A	CREAGE DEDICAT	ON PLAT	AMENDEI) REPORT		
				roor name				
Property Code			V Name		Well N			
OGRID No.		MARGARITA FEL	Name		8H Eleva			
1970 (4420) - 840-84	ADV	ADVANCE ENERGY PARTNERS HAT MESA 39						
			Location					
UL or lot No. Section Towns	hip 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 Sur	face				
UL or lot No. Section Towns	hip Range	Lot Idn Feet from	the SOUTH/South line	Feet from the	East/West line	County		
H 25 21	S 32 E	254	D NORTH	550	EAST	LEA		
Dedicated Acres Joint or Infill	Consolidation	Code Order No.						
N:541297.7 E:756066.2 (NAD 83) N:538655.7 E:756082.9 (NAD 83) N:536013.9 E:756098.8 (NAD 83) N:533372.5 E:756115.7 (NAD 83) N:530730.1 E:756131.7 (NAD 83)	A NON-STAI	F. T.P.1 N:541338.4 E:761331.4 (NAD 83) SL Lat Long N:538702.8 E:761348.4 <u>FIF</u> (NAD 83) <u>142C</u> Lat Lat Lat Lat Lat Lat Lat Lat	SEEN APPROVED BY ' RFACE LOCATION - N 32.484914' - W 103.622055' - SCE F 760659.4 (NAD-83) ST TAKE POINT - FNL & 550 FEL - W 103.6221650' - <td< td=""><td>OPERATO I hereby cer contained herei the best of my this organization interest or until land including i location pur ourser of such a or to a voluntar compulsory pool the division. Signature Printed Name Email Addresse SURVEYO I hereby certify on this plat wa actual surveys supervison, and</td><td></td><td>ation ete to and that ing the ole at in the ole well at with an interest, or a nterest by Date Date</td></td<>	OPERATO I hereby cer contained herei the best of my this organization interest or until land including i location pur ourser of such a or to a voluntar compulsory pool the division. Signature Printed Name Email Addresse SURVEYO I hereby certify on this plat wa actual surveys supervison, and		ation ete to and that ing the ole at in the ole well at with an interest, or a nterest by Date Date		

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DISTRICT I 1625 N. French Dr., H Phone (675) 393-6161 Fe DISTRICT II 611 S. First St., Ar Phone (676) 748-1203 Fe DISTRICT III 1000 Rio Brazos Rd Phone (605) 334-6176 Fe	x: (575) 393-0 tesia, NM (x: (575) 748-9	720 38210 720	OIL	со	Minerals NSE 1220 S	RVATI	w Mexico ^{1 Resources Departm} ON DIVIS <i>Francis Dr.</i> Mexico 87505	Su	Revised Aug	rm C-102 gust 4, 2011 appropriate strict Office
1220 S. St. Francis Dr. Phone (505) 475-3400 Fa	., Santa Fe, 1 m (505) 475-3	NM 87505 462	WELL LO	CATI	ON AN	D ACRE	AGE DEDICATI	ON PLAT	🗆 AMENDEI) REPORT
APIN	Vumber			Pool Cod	le			Pool Name		
Property Co	ode			MA		Property Nam TA FEDE			Well N 11	36 S.
OGRID No.			Operator Name ADVANCE ENERGY PARTNERS HAT MESA							tion 1'
					12257	rface Loca				<u>.)</u>
UL or lot No.	Section	Township	Range	Lot Id	n Fee	t 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	Locatio	on If Diffe	erent From Sur	face		· · · · · · · · · · · · · · · · · · ·
UL or lot No.	Section	Township	Range	Lot Id	n Fee	t from the	SOUTH/South line	Feet from the	East/West line	County
G Dedicated Acres	25 Joint of	21 S	32 E	Cada	Orden N	2540	NORTH	2310	EAST	LEA
beatened Acres	Joint 0		nsondacion	code	Order N	0.				
NO ALLOY	WABLE W	ILL BE AS	SSIGNED	TO THI	S COM	PLETION U	NTIL ALL INTER APPROVED BY	RESTS HAVE BE	EN CONSOLIDA	ATED
	*	N:54132 E:75869	0.6		N:541338.4		ATTROVED DI	THE DIVISION		
	N:541297.7 E:756066.2 (NAD 83) V:538655.7 E:756082.9			2047'	E:761331.4 (NAD 83) N:538702.8 E:761348.4 (NAD 83)	Lat - N Long - W NMSPCE-E (NAD <u>FIRST TA</u> 1420' FNL Lat - N Long - W	I 539926.1 759292.9 -83) <u>KE POINT</u> & 2310' FEL 32.482275'	I hereby cer contained herei the best of my this organization interest or until land including location or has this location pu owner of such o	R CERTIFICAT tify that the inform n is true and compi- knowledge and belief, n either owns a work Mased mineral interes the proposed bottom h a right to drill this resuant to a contract interest or working y pooling agreement ing order heretofore of	ation lete to and that ing t in the tole well at with an interest
	N:536013.9 E:756098.8 (NAD 83)	: E:	:536þ41[7 :758*32[6 NAU 83)	_	N:536052.9 E:761363.7 (NAD 83)	(NAD		Signature Printed Name	8	Date
		-+-						Email Address	•	
	N:533372.5 E:756115.7 (NAD 83)		-24+	-21-S	N:533424.6 E:761385.1 (NAD 83)			I hereby certify on this plat wa actual surveys supervison, and correct to the	R CERTIFICAT that the well locati s plotted from field made by me or i that the same is best of my belief	on shown notes of under my true and
1	N:530730.1 E:756131.7 (NAD 83)	N:53075 E:75876 (NAD 8 (NAD 8 	3) 		N:530783.4 E:761402.9 (NAD 83)	LAST TAK BOTTOM Lat – N Long – W 1 NMSPCE– R (NAD-	4 HOLE 32.450164* 03.627400* 528220.1 759095.0	Date Superver Signature & Professionel Certificate de BA	Surveyor Survey Survey Surveyor Surveyor Surveyor Surveyor Surveyor Surveyo	7977

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DISTRICT I 1625 N. French Dr., Hoht Prome (573) 363-5161 Part (DISTRICT II 6711 S. First St., Artes Frans (575) 745-1223 Fax (DISTRICT III 1000 Rio Brazos Rd., Phone (505) 334-5175 Part (DISTRICT IV 1220 S. St. Francis Dr., S Franse (505) Fax	sia, NM 8 (575) 748-97 Aztec, NM (505) 334-81	18210 720 (87410 170	OIL	CON	inerals and SERV 220 Sout	I Natural $VATI$	w Mexico Resources Departm ON DIVIS Francis Dr. fexico 87505	ຽນ	Revised Aug	rm C-102 gust 4, 2011 appropriate strict Office
		462	WELL LO	OCATION	AND	ACREA	GE DEDICATI	ON PLAT	AMENDEI	D REPORT
API Nur	mber			Pool Code				Pool Name		
Property Code	e			MARGA	Prop ARITA FI	erty Nam EDERA			Well N 12	1.25 C 1 C 1 C 1 C 1 C
OGRID No.					1100	ator Nam		24	Eleva 390	tion
			ADV.	ANCE E	Martin Village Sec	ce Loca	ERS HAT MES	SA	390	0
UL or lot No. Se	ection	Township	Range	Lot Idn	Feet fro	om the	SOUTH/South line	Feet from the	East/West line	County
A	13	21 S	32 E		46	60	NORTH	642	EAST	LEA
W an lat M		m					rent From Sur			
Press and decise the case in the	ection 25	Township 21 S	Range 32 E	Lot Idn	Feet fro	540	SOUTH/South line	Feet from the 550	East/West line EAST	County LEA
Dedicated Acres	Joint or	1976AV 6	Consolidation	Code O	rder No.	,10	North	550	LASI	
N:55 (N/ N:53 E:75 (NA N:55 E:72 (N/ N:55 E:72 (N/ N:55 E:72 (N/ N:55 E:72 (N/ N:55 E:72 (N/ N) E:72 (N/ N) E:75 (N) E:75 (N) E:75 (N) E:75 (N) E:75 (N) E:75 (N) E:75 (N) E:75 (N) E:75 (N) E:75 (N) E:75 (N) E:75 (N) E:75 (N) E:75)(N) E:75 (N) E:75)(N)(41297.7 56066.2 AD 83) 38655.7 56082.9 AD 83) 38013.9 56098.8 AD 83) 333372.5 56115.7 AD 83) 333372.5 56115.7 AD 83) 333372.5 56115.7 AD 83) 333372.5 56115.7 5617 57 57 57 57 57 57 57 57 57 5	OR A	NON-STAN 1320.6 1320		NIT HAS N:541338.4 E:761331.4 (NAD 83) L Loi N 538702.8 761348.4 L Loi N 538702.8 761348.4 L Loi N 538702.8 761348.4 L Loi N 538702.8 761348.4 L Loi N 538702.8 761348.4 L Loi N 538702.8 761348.4 L Loi N 538702.8 761348.4 L Loi N 538702.8 761348.4 Loi N 538702.8 761348.4 Loi N 538702.8 761348.4 Loi N 538702.8 761348.4 Loi N 538702.8 761348.4 Loi N 538702.8 761348.4 Loi N 538702.8 761348.4 Loi N 538702.8 761348.4 Loi N 538702.8 761348.4 Loi N 538702.8 761348.4 Loi N 533702.8 761348.4 Loi N 533702.8 761348.4 Loi N 533702.8 761348.4 Loi N 533702.8 761348.4 140 B 30 14 Loi 140 140 140 140 140 140 140 140	BEEN SURFACE ot - N mg - W MMSPCE-E (NAD FIRST TA 20 FNL at - N mg - W N (NAD CONTON OT - N g - W	KE POINT & 550 FEL 32.482276' 03.621650' 539914.7 760790.6 -83) E POINT/ HOLE 32.450179' 03.621694' 528237.8 760855.0	THE DIVISION OPERATO I hereby cer contained hereit the best of my this organization interest or until land including i location or has this location or has this location or has this location or has this location or has compulsory pool the division. Signature Printed Name Email Address SURVEYO I hereby certify on this plat wo actual surveys supervison and correct to the ADD	PR CERTIFICAT trify that the inform n is true and compo- knowledge and belief n either owns a work the proposed bottom. a right to drill this rouant to a contract s mineral or working y pooling agreement ing order hereisfore R CERTIFICAT that the well location is plotted from field made by me or is that the same is best of my belief that the same is best of my belief	CION vation lete to : and that ing f in the bole well at with an interest, or a entered by Date Date

DISTRICT I 1025 N. French Dr., Ho Phone (675) 393-6161 Fax DISTRICT II 811 S. First St., Art Phone (676) 749-1253 Fax DISTRICT III 1000 Rio Brazos Rd., Phone (605) 534-6176 Fax DISTRICT IV	: (575) 393-07 cesia, NM 8 : (575) 748-97	8210 20	OIL		vse 220 s	and Natura RVATI South St.	w Mexico I Resources Departn ON DIVIS Francis Dr. Mexico 87505		Revised Au, Submit one copy to	rm C-102 gust 4, 2011 appropriate strict Office
DISTRICT IV 1220 S. St. Francis Dr., Phone (505) 476-3460 Fax		M 87505 62	WELL LO	OCATIO	N AN	D ACREA	AGE DEDICATI	ON PLAT	□ AMENDE	D REPORT
API N	umber			Pool Code	1			Pool Name		
Property Co	de					Property Nam	1e		Well N	umber
				MAF	RGARI	TA FEDE	RAL COM		15	бН
OGRID No.			ADV	ANCE E		Operator Nam GY PARTN	NERS HAT ME	SA	Eleva 391	
					Su	rface Loca	ation			
12	Section	Township	Range	Lot Idn	Fee	t from the	SOUTH/South line	Feet from the	East/West line	County
G	13	21 S	32 E			1399	NORTH	1981	EAST	LEA
			CARDON DE LA COMPANY			2012_0125_7/0.007/330016	rent From Sur			
UL or lot No.	Section 25	Township 21 S	Range 32 E	Lot Idn	Fee	t from the	SOUTH/South line	Feet from the	East/West line	County
Dedicated Acres	Joint or		DZ L	Code (Order No	2540	NORTH	2310	EAST	LEA
		anales en				70				
NO ALLOW	ABLE W	ILL BE A	SSIGNED	TO THIS	сом	PLETION U	NTIL ALL INTER	ESTS HAVE I	BEEN CONSOLID	ATED
[ORAN	ION-STAN	IDARD U	INIT H	AS BEEN	APPROVED BY	THE DIVISION	u turken in talah salah salah Mari	
E: (1 N:: E:	541297.7 766066.2 NAD 83) 538655.7 766082.9 NAD 83)	N:5413; E:7586 (NAD I 			1:541338,4 1:761331,4 (NAD 83) 1:538702,8 1:761348,4 (NAD 83)	Lot – N Long – W NMSPCE – N (NAD <u>FIRST TA</u> 1420' FNL	539926.5 759359.0 -83) <u>AKE POINT</u> & 2310' FEL	I hereby contained her the best of m this organizat interest or un land including location or ha this location or owner of such	COR CERTIFICAT certify that the inform evin is true and comp y knowledge and belieg ion either owns a word LEAsed mineral interes of the proposed bottom. I is a right to drill this oursuant to a contract a mineral or working ary pooling agreement oling order heretofore	tation lete to , and that ting t in the role well at with an interest.
E:	536013.9 756098.8 NAD 83)	N:5360 E:7587 (NAD	32.6		1:536052.9 E:761363.7 (NAD 63)	Long - W NMSPCE-	32.482275' 103.627358' \$ 539902.9 5 759030.6 -83)	Signature Printed Nam	ne	Date
		-+-	-++					Email Addre	198	
E:	533372.5 756115.7 NAD 83)		-24	— — — 🕈 E	1:533424.6 E:761385.1 (NAD 83)			I hereby certi on this plat a actual survey supervison a correct to t	OR CERTIFICAT by that the well location of the second from field of made by me or and that the same is the best of my belief	on shown notes of under my true and
E:	.530730.1 756131.7 NAD 83)	N:53075 E:75876 (NAD 8 		E:	-530783.4 761402.9 NAD 83)	LAST TAK BOTTOM Lot – N Long – W 1 NMSPCE– N (NAD–	HOLE 32.450164* 03.627400* 528220.1 759095.0	Date Survey Signature & Professione Certificate B 0' 1500' S	Surveyor Surveyor ASCIV L. Shee	7977

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DISTRICT I 1625 N. French Dr., Hobbs, NM 88240 Phones (673) 303-6161 Fax: (575) 393-6720 DISTRICT II 811 S. First St., Artesia, NM 88210 Phones (675) 748-1283 Fax: (575) 748-9720 DISTRICT III 1000 Rio Brazos Rd., Aztec, NM 87410 Phones (603) 334-6170 DISTRICT IV 1220 S. St. Francis Dr., Santa Fe, NM 87505 Fhomes (606) 476-3460 Fax: (505) 478-3462	01L CO s	State of Ne Minerals and Natura NSERVATI 1220 South St. Santa Fe, New M	l Resources Departm ON DIVIS Francis Dr. fexico 87505	s, ION	Revised Aug abmit one copy to Dis	strict Office			
API Number	WELL LOCATIO	ON AND ACREA	GE DEDICATI	ON PLAT	□ AMENDEI	DREPORT			
				roor name					
Property Code	MAR	Property Nam GARITA FEDERA			well N 16				
OGRID No.		ADVANCE ENERGY PARTNERS HAT MESA							
	1011102	Surface Loca			390				
UL or lot No. Section Townshi	p Range Lot Id:	n Feet from the	SOUTH/South line	Feet from the	East/West line	County			
A 13 21 5	S 32 E	460	NORTH	774	EAST	LEA			
		Location If Diffe	rent From Sur	face					
UL or lot No. Section Townshi G 25 21 3			SOUTH/South line	Feet from the	East/West line	County			
Dedicated Acres Joint or Infill	S 32 E	2540 Order No.	NORTH	1430	EAST	LEA			
N:541297.7 N:54 E:756066.2 E:7	ASSIGNED TO THI NON-STANDARD 41320.6 56658.9 	UNIT HAS BEEN N:541338.4 (NAD 83) N:538702.8 E:761348.4 (NAD 83) N:538702.8 E:761348.4 (NAD 83) FIRST TA 1420 FNL	APPROVED BY 7 LOCATION 32.484914* 103.622376* 540873.2 760560.4 -83) KE POINT & 1430 FEL 32.482276* 03.624504* 539908.8 759910.6 -83) E_POINT/ HOLE 52.450171* 03.624547*	CHE DIVISION OPERATO I hereby cer contained herei the best of my this organisatio induction interest or until iand including i location or has this location pu this location or has this location or to a voluntar compulsory pool the division. Signature Printed Name Email Address SURVEYO I hereby certify on this plat wa actual surveys supervison, am correct to the ADE Date Surveyed Signature	PR CERTIFICAT rhify that the inform n is true and compl knowledge and belief, the proposed bottom h a right to drill this rswant to a contract a mineral or working ry pooling agreement ing order heretofore e R CERTIFICAT. that the well location is plotted from field made by me or i that the same is best of my belief. MEX	TION action lete to and that ing t in the well at with an interest, or a materest by Date Date ION notes of under my true and			

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DISTRICT I 1625 N. French Dr., Hobbs, NM 8824 Phone (575) 303-8161 Fax: (575) 305-07: DISTRICT II 811 S. First St., Artesia, NM 81 Phone (575) 746-1203 Fax: (575) 745-97: DISTRICT III 1000 Rio Brazos Rd., Aztec, NM Phone (505) 334-6170 DISTRICT IV	8210 20 67410 70	Energy, Minerals ar L CONSER 1220 Sou	of New Mexico ^{d Natural Resources Departm} VATION DIVIS oth St. Francis Dr. New Mexico 87505	Sul	Revised Aug	
1220 S. St. Francis Dr., Santa Fe, Ni Phone (505) 478-3480 Fax: (505) 478-34	WELL]	OCATION AND	ACREAGE DEDICATI	ON PLAT	AMENDEI	REPORT
API Number		Pool Code		Pool Name		
Property Code			perty Name		Well N	
OGRID No.			FEDERAL COM		19 Eleva	1317A
	AD'	ANCE ENERGY		SA	391	0'
UL or lot No. Section	Township Range		ce Location			
G 13	Township Range 21 S 32 E		399 SOUTH/South line	Feet from the 1915	East/West line EAST	County LEA
			If Different From Sur	N/17. 19790	<u> </u>	
UL or lot No. Section	Township Range		om the SOUTH/South line	Feet from the	East/West line	County
G 25	21 S 32 E	2	540 NORTH	1430	EAST	LEA
Dedicated Acres Joint or	Infill Consolidation	Code Order No.	h h	n		
NO ALLOWABLE WI	OR A NON-STA	NDARD UNIT HAS N:541338.4 (NAD 83) 1915' La Image: State of the state of	LAST TAKE POINT/ BOTTOM HOLE at - N 32.482334: NMSPCE-N 539927.0 (NAD-83) FIRST TAKE POINT 420' FNL & 1430' FEL Lot - N 32.482276: NMSPCE-N 539908.8 (NAD-83) LAST TAKE POINT 420' FNL & 1430' FEL Lot - N 32.482276: NMSPCE-N 539908.8 (NAD-83)	Certificate 0' 1 hareby certificate 1 hareby certificate	R CERTIFICAT ify that the inform is frue and compl included and belief, either owns a work sed mineral interess is proposed bottom. In right to drill this suant to a contract mineral or working y pooling agreement ng order heretofore e R CERTIFICAT: that the well location plotted from field made by me or that the same is best of my belief. R 21 2000 MEX 00 1000	ION ation ete to and that ing in the ole well at with an interest, or a niered by Date

DISTRICT I 1625 N. French Dr., Hobbs. NM 862 Phone (375) 393-8161 Fax: (575) 393-07 DISTRICT II 811 S. First St., Artesia, NM & Fhoms (576) 740-1233 Fax: (575) 748-07 DISTRICT III 1000 Rio Brazos Rd., Aztec, NM Fhoms (503) 534-6176 Fax: (505) 534-60 DISTRICT IV	720 36210 720 OIL 4 87410 170	Energy, Minerals and CONSER 1220 Sol	of New Mexico ad Natural Resources Departm VATION DIVIS ath St. Francis Dr. New Mexico 87505	Su	Revised Aug	- A - 855
1220 S. St. Francis Dr., Santa Fe, N Phone (506) 476-3460 Fax: (505) 476-3-	WELL L	OCATION AND	ACREAGE DEDICATI	ON PLAT	AMENDED	REPORT
API Number		Pool Code		Pool Name		
Property Code			operty Name		Well Nu	
OGRID No.			FEDERAL COM 13		20 Eleva	tion
	ADV.		PARTNERS HAT ME	SA	390	7'
UL or lot No. Section	Township Range	Distance - Distance	ace Location rom the SOUTH/South line	Feet from the	Back /Wash March	
A 13	21 S 32 E		60 NORTH	708	East/West line EAST	County LEA
	Bottom	Hole Location	If Different From Sur	face		
UL or lot No. Section	Township Range	Lot Idn Feet f	rom the SOUTH/South line	Feet from the	East/West line	County
H 25	21 S 32 E		540 NORTH	550	EAST	LEA
Dedicated Acres Joint or	r Infill Consolidation	Code Order No.				
NO ALLOWABLE W	OR A NON-STAN	VDARD UNIT HAS N:541338.4 N:541338.4 COB (NAD 83) CA N:538702.8 E:761348.4 (NAD 83) N:538702.8 E:761348.4 (NAD 83) L N:538702.8 E:761383.7 (NAD 83) L N:533424.6 E:761402.9 N:530783.4 E:761402.9 (NAD 83) L S50' S50'	ETION UNTIL ALL INTER <u>S BEEN APPROVED BY 7</u> <u>SURFACE LOCATION</u> Lot - N 32.484914' ong - W 103.622162' NMSPCE- N 540873.5 <u>FIRST TAKE POINT</u> <u>420 FNL & 550 FEL</u> Lot - N 32.482276' ong - W 103.621650' NMSPCE- N 539914.7 NMSPCE- N 539914.7 NMSPCE- N 539914.7 <u>NMSPCE- N 539914.7</u> <u>FIRST TAKE POINT/</u> <u>BOTTOM HOLE</u> Lot - N 32.450179' ing - W 103.621694' <u>HMSPCE- N 528237.8</u> <u>FIRST TAKE POINT/</u> <u>BOTTOM HOLE</u> Lot - N 32.450179' ing - W 103.621694' <u>HMSPCE- E 760855.0</u> (NAD-83)	Certificate 20 Certificate 20 Contained berein the best of my filt this organization interest or unLE land including ti location or has a this location prises or to a voluntary compulsory pools the division. Signature Printed Name Email Address SURVEYON I hereby certify on this plat was actual surveys supervison and correct to the ADDA Date Surveyed Signature & S Professionel S Certificate and BAS	R CERTIFICAT tify that the inform is true and compl mowledge and belief, either ours a work sed mineral interest to proposed bottom. In right to drill this suant to a contract mineral or working pooling agreement g order heretofore e CERTIFICAT! that the well location plotted from field made by me or that the same is best of my belief. TID, 2000 MEX CONTRACT that the same is best of my belief. TID, 2000 4500'	ION ation ete to and that ing isn the ole well at with an interest, or a ntered by Date

Released to Imaging: 11/30/2021 1:48:32 PM

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ADVANCE ENERGY ARTNERS 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



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)

WellName	Target	Surface Location in	Bottomhole Location in	Measured	True Verical	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	and the second se
Margarita Federal Com 13 #7H	Bone Spring	460' FNL, 774' FEL	2540' FNL, 1430' FEL	23,269	11,250	12,019	the second s
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	and the second se
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	and the second s
Margarita Federal Com 13 #19H	Bone Spring	1399' FNL, 1915' FEL	2540' FNL, 1430' FEL	23,319	10,520	12,799	
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: <u>PBurdick@AdvanceEnergyPartners.com</u>



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 producton 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 propant. 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 Tangible Drilling - 01			D	ry Hole		Completion		Facility		Total
			\$	979,302.00	\$		\$		\$ 979,30	
	9402	Production Casing	s	439,281	\$		\$		\$	439,281
	9401	Surface Casing	\$	118,394	s		s		\$	118,394
	9404-1	Wellhead & Equipment	s	43,977	s	-	s		s	43,977
	9412	Intermediate 1 Casing	s	377,650	\$		\$		\$	377,650
Tangible Compl	letion - 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	\$		\$	2	\$	25,000	\$	25,000
	9421	Production Battery	\$		\$		\$	18,000	\$	18,000
	9408	Vessels	s	-	\$	-	\$	150,000	\$	150,000
	9420	Pumps-Surface	s		\$		\$	35,000	\$	35,000
	9419	Flare	\$	-	\$		\$	6,000	s	6,000
	9417	Electrical	\$		\$		\$	75,000	s	75,000
	9424	Vapor Recovery Unit	\$		\$	12	\$	22,000	\$	22,000
	9416	Valves & Fittings	\$		\$		\$	145,000	\$	145,000
	9423	COMM- SCADA/Radio/Telecom	\$	-	\$	-	\$	6,000	s	6,000
	9490	Miscellaneous	\$	-	\$		\$	12,000	\$	12,000
	9418	Gas Meter	\$		\$		\$	6,000	s	6,000
TOTAL TANGIBLE COSTS >>>		\$	979,302.00	5	46,382.00	\$	500,000.00	s	1,525,684.00	

INTANGIBLE COSTS			Dry Hole	Completion	Facility		Total
Intangible D	rilling - 01	3	\$ 2,785,921.00	\$	- S	- \$	2,785,921.00
	9228	Mudlogging & Services	\$ 17,783	s	- \$	- 5	17,783
	9217	Inspection & Testing	\$ 25,848	\$	- \$	- 5	25,848
	9203	Drilling - Rig Move	\$ 97,588	\$	- \$	- \$	97,586
	9237	Mancamp \$	\$ 46,015	\$	- \$	- \$	46,015
	9215	Transportation \$	\$ 10,550	5	- \$	- S	10,550
	9219	Bits & BHA	5 125,937	s	- \$	- \$	125,937
	9232	Mud - Auxillary \$	\$ 22,157	\$	- \$	- \$	22,157
	9204	Directional	5 376,908	\$	- \$	- 5	376,908
	9235	Disposal \$	5 150,245	\$	- \$	- 5	150,245
	9206	Contract Labor \$	36,695	\$	- \$	- \$	36,695
	9218	Casing Services \$	98,261	\$	- \$	- \$	98,261
	9208	Cementing & Services \$	200,183	\$	- S	- \$	200,183
	9239	Company Supervision \$	2,862	\$	- \$	- \$	2,862
	9229	Geosteering Services \$	4,930	\$	- \$	- \$	4,930
	9236	Safety & Enviornmental \$	5,321	\$	- \$	- 5	5,321



AFE#: NM0189 R1

Date: Oct 8, 2021

()	9212	Equipment Rental	I \$ 142,717	s	\$	- \$ 142,717
	9224	Fuel		200 C	5	- \$ 142,717
	9222	Consulting Services			\$	- \$ 127,709
	9234	Solids Control / Closed Loop			5	- \$ 88,640
	9211	Location & Roads		1998	s	- \$ 46,730
	9205	Drilling Overhead		5 -	s	\$ 5,502
	9233	Mud - Diesel			s	\$ 91,746
	9207	Permits, surveys, land & legal	5 (214) (2007)	s -	s	\$ 43,255
	9220	Insurance		s -	\$	\$ 5,275
	9209	Mud - Chemicals & Engineering		s -	\$	\$ 141,800
	9231	Mud - Brine		s -	\$	\$ 17,073
	9290	Contingency (5%)		s .	s .	\$ 132,292
	9202	Drilling - Daywork		s -	5	\$ 512,240
	9230	Mud - Drill Water		s -	s .	\$ 32,021
ingible Complet	lon - 02		s -	\$ 4,719,301.00	s .	\$ 4,719,301.00
	9337	Sand	- <u>-</u>	\$ 539,922	s -	\$ 539,922
	9314	Stimulation		\$ 749,050	s .	\$ 749,050
	9327	Flowback/Testing		\$ 99,698	s -	\$ 99,698
	9336	Contingency (10%)	101	\$ 237,112		\$ 237,112
	9313	Rental Equipment - Downhole		\$ 21,795	s -	\$ 21,795
	9307	Water Disposal		\$ 64,656	s -	\$ 64,656
	9304	Safety & Environmental		\$ 10,545	s -	\$ 10,545
	9328	Company Supervision		\$ 6,277	s -	\$ 6,277
ł	9309	Fuel	s .	\$ 676,598	s -	\$ 676,598
	9321	Roustabout Services	100	\$ 3,165	s -	\$ 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	s -	\$ 49,156
	9315	Transportation	a hereine an	\$ 18,348	s -	\$ 18,348
	9332			\$ 337,073	s -	\$ 337,073
h	9306		\$ -	\$ 76,858	\$.	\$ 76,858
	9305	Completion Overhead	1991	\$ 10,932	\$ -	\$ 10,932
t t	9330	Mancamp			\$ -	\$ 32,077
t t	9322	Consulting Services			\$ -	\$ 120,527
	9312	Rental Equipment - Surface	11/2		\$ -	\$ 425,133
t i	9335	Packers, Frac Plugs & Accessories		\$ 67,204		\$ 67,204
L L	9343	WTR - AEP Water Recycle		\$ 24,533		\$ 24,533
	9339	WTR - Brackish Water		\$ 465,367		\$ 465,367
	9346	WTR - Water Transfers	s -	\$ 123,450		\$ 123,450
	9340	WTR - Fresh Water		\$ 6,469	and the second se	\$ 6,469
ngible Facility -	03	20/01/20/01/20/01/20/01/20/01/20/01/20/01/20/01/20/01/20/01/20/01/20/01/20/01/20/01/20/01/20/01/20/01/20/01/20	7453 Sec. 1			
	9360	Surface Rental	\$		\$ 13,000	\$ 13,000
F	9351	Installation Costs - Supervision	s -		\$ 15,000	\$ 15,000
F	9362	Consulting - Engineering	\$-		\$ 12,000	
F	9352	Instal-Labor Mechanical	\$ -		\$ 140,000	\$ 140,000
	9357	Location, Permit, Damages, Survey	s -	uter .	\$ 15,000	\$ 15,000
L L	9356	Fluids,Chemicals	\$ -		\$ 10,000	\$ 10,000
E	9354	Instal-Labor: Welding			\$ 15,000	\$ 15.000
F	9363				\$ 12,000	\$ 12,000
F	9359	Disposal	\$ -		\$ 12,000	\$ 12,000
F	9353	Instal Labor: Inst, Elec, Autom	\$ -		\$ 144,000	\$ 144.000
	9370	Miscellaneous	(in) (i)	s -	\$ 12,000	\$ 12,000

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ADVANCE

AFE#: NM0189 R1

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	\$ 9,430,905.00
	Dry Hole		Completion	Facility	Total

This Authroity 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:	Braden Harris	Date:	Oct 6, 2021
Name:		Title:	V.P. of Drilling & Completions
Signature:	Kevin Haye	Date:	Oct 7, 2021
Name:	Kevin Hayes	Title:	C.F.O.
Signature:	Peter Lellis	Date:	Oct 8, 2021
Name:		Title:	President & C.E.O.
WI Owner:		Date:	
Approved By:		Title:	
Printed Name:			

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 produciton 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 propant. 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			Dr	Dry Hole		Completion		Facility		Total
Tangible Drilli	ng - 01		\$	982,417.00	\$		\$		s	982,417.00
	9412	Intermediate 1 Casing	\$	377,650	\$		s		\$	377,650
	9402	Production Casing	s	442,396	\$		\$	-	\$	442,396
	9401	Surface Casing	\$	118,394	s		\$	-	s	118,394
	9404-1	Wellhead & Equipment	s	43,977	\$		\$		s	43,977
Tangible Com	pletion - 02		\$		\$	46,382.00	\$		\$	46,382.00
	9404-2	Wellhead & Equipment	\$		\$	46,382	\$		\$	46,382
Tangible Facil	ity - 03		\$	•	\$		\$	500,000.00	\$	500,000.00
	9424	Vapor Recovery Unit	\$		\$	12	\$	22,000	\$	22,000
	9419	Flare	\$		\$	-	\$	6,000	\$	6,000
	9423	COMM- SCADA/Radio/Telecom	\$		\$	-	\$	6,000	s	6,000
	9490	Miscellaneous	\$		\$	-	\$	12,000	s	12,000
	9416	Valves & Fittings	\$	-	\$	-	\$	145,000	\$	145,000
	9418	Gas Meter	\$		\$	-	\$	6,000	s	6,000
	9417	Electrical	\$		\$	-	\$	75,000	\$	75,000
	9407	Tanks	\$		\$	-	\$	25,000	s	25,000
	9420	Pumps-Surface	\$		\$	-	\$	35,000	\$	35,000
	9421	Production Battery	\$		\$	-	\$	18,000	\$	18,000
	9408	Vessels	\$	7	\$	-	\$	150,000	\$	150,000
	TOTAL TANGIB	LE COSTS >>>	\$	982,417.00	\$	46,382.00	\$	500,000.00	s	1,528,799.00

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



AFE#: NM0190 R1

Date: Oct 8, 2021

	9208	0			14	Lac-
	9208	Cementing & Services			- \$	- \$ 200,183
	9236	Safety & Enviornmenta			· 5	- \$ 5,330
	9231 9203	Mud - Brine		A designed and a	· \$	- \$ 17,073
		Drilling - Rig Move		1193	· \$	- \$ 97,588
	9207	Permits, surveys, land & legal		\$	\$	- \$ 43,255
	9239	Company Supervision		s .	\$	- \$ 2,868
	9233	Mud - Diesel	1 (100) (100) (100)	\$	\$	- \$ 91,746
	9224 9212	Fuel		5 .	S	- \$ 178,366
		Equipment Rental		s -	\$	- \$ 143,280
	9217	Inspection & Testing		\$ -	S	- \$ 25,848
	9229	Geosteering Services		s -	S	- \$ 4,943
	9228	Mudlogging & Services		s -	\$	- \$ 17,909
	9215	Transportation		s -	\$	- \$ 10,550
	9222	Consulting Services	and the second	\$.	\$	\$ 128,194
ngible Complet		1	\$ -	\$ 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	5 -	\$ 67,520
	9330	Mancamp		\$ 32,077	s -	\$ 32,077
	9336	Contingency (10%)	s .	\$ 237,112	5 -	\$ 237,112
	9337	Sand	s -	\$ 539,922	s -	\$ 539,922
	9315	Transportation		\$ 18,348	\$ -	\$ 18,348
	9325	Wireline/Perforating	\$ -	\$ 468,483	\$ -	\$ 468,483
	9307	Water Disposal	\$	\$ 64,656	s -	\$ 64,656
	9322	Consulting Services	\$ -	\$ 120,527	\$ -	\$ 120,527
	9327	Flowback/Testing	s -	\$ 99,698	s -	\$ 99,698
	9311	Location, Permit & Damages	s -	\$ 17,353	s -	\$ 17,353
	9313	Rental Equipment - Downhole	s -	\$ 21,795	s -	\$ 21,795
	9335	Packers, Frac Plugs & Accessories	s -	\$ 67,204	\$ -	\$ 67,204
	9314	Stimulation	\$ -	\$ 749,050	\$ -	\$ 749,050
	9304	Safety & Environmental	\$ -	\$ 10,545	s -	\$ 10,545
	9326	Coil Tubing Unit	\$ -	\$ 49,156	\$ -	\$ 49,156
	9343	WTR - AEP Water Recycle	s -	\$ 24,533	\$ -	\$ 24,533
	9340	WTR - Fresh Water	\$ -	\$ 6,469	\$ -	\$ 6,469
	9346	WTR - Water Transfers	s -	\$ 123,450	\$ -	\$ 123,450
	9339	WTR - Brackish Water	\$ -	\$ 465,367	\$ -	\$ 465,367
ngible Facility -	03		s -	s -	\$ 400,000.00	\$ 400,000.00
	9363	Trucking Costs	\$ -	\$-	\$ 12,000	
Γ	9353	Instal Labor: Inst, Elec, Autom	\$ -	\$ -	\$ 144,000	\$ 144,000
Г	9360	Surface Rental	\$ -	s -	\$ 13,000	\$ 13,000
L L	9354	Instal-Labor: Welding	s -	s -	\$ 15,000	\$ 15,000
L L	9359	Disposal	\$ -		\$ 12,000	\$ 12.000
F	9362	Consulting - Engineering	s -	s -	\$ 12,000	\$ 12.000
	9370		\$ -	\$ -	\$ 12,000	\$ 12.000
	9356	Fluids,Chemicals			\$ 10,000	\$ 10.000
F	9352	Instal-Labor Mechanical			\$ 140,000	\$ 140,000
F	9351	Installation Costs - Supervision			\$ 15,000	\$ 15,000
	9357	Location,Permit,Damages,Survey			\$ 15,000	\$ 15,000

ADVANCE Authorization For Expenditure

AFE#: NM0190 R1

Date: Oct 8, 2021

TOTAL INTANGIBLE COSTS >>>	s	2,792,292.00	\$ 4,719,301.00	\$ 400,000.00	\$	7,911,593.00
TOTAL PROJECT COSTS >>>	S	3,774,709.00	\$ 4,765,683.00	\$ 900,000.00	5	9,440,392.00
		Dry Hole	 Completion	Facility		Total

This Authroity 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:	Braden Harris	Date:	Oct 6, 2021
Name:		Title:	V.P. of Drilling & Completions
Signature:	Kevin Hayes	Date:	Oct 7, 2021
Name:		Title:	C.F.O.
Signature:	Peter Lellie	Date:	Oct 8, 2021
Name:	Peter Lellis	Title:	President & C.E.O.
WI Owner:		Date:	
Approved By:		Title:	
Printed Name:			



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 produciton 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 propant. 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			\$		s	990,613.0
	9401	Surface Casing	\$	118,394	\$		\$		\$	118,39
	9412	Intermediate 1 Casing	\$	377,650	s		\$		s	377,650
	9402	Production Casing	\$	450,592	\$		\$		s	450,593
	9404-1	Wellhead & Equipment	\$	43,977	\$		s		\$	43,977
Tangible Comple	etion - 02		s		\$	46,382.00	\$		s	46,382.00
	9404-2	Wellhead & Equipment	\$	-	\$	46,382	\$		\$	46,382
Tangible Facility	- 03		\$	-	\$		\$	500,000.00	s	500,000.00
	9420	Pumps-Surface	\$	-	\$	¥.	\$	35,000	\$	35,000
	9408	Vessels	\$	-	s		\$	150,000	\$	150,000
	9416	Valves & Fittings	\$	-	\$		\$	145,000	\$	145,000
	9407	Tanks	s	-	\$		\$	25,000	\$	25,000
	9418	Gas Meter	\$	-	\$	-	\$	6,000	s	6,000
	9421	Production Battery	\$	-	\$	-	\$	18,000	s	18,000
	9417	Electrical	\$	-	5	-	\$	75,000	\$	75,000
	9490	Miscellaneous	\$	-	\$		\$	12,000	\$	12,000
	9423	COMM- SCADA/Radio/Telecom	\$	-	\$	-	\$	6,000	s	6,000
	9419	Flare	\$	1	s	-	\$	6,000	\$	6,000
	9424	Vapor Recovery Unit	\$		\$		\$	22,000	<u>.</u>	22,000
	TOTAL TANGIB	LE COSTS >>>	\$	990,613.00	\$	46,382.00	\$	500,000.00		1,536,995.00

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


AFE#: NM0183 R1

Date: Oct 8, 2021

9204 9234 9233	Drilling - Daywork Directional Solids Control / Closed Loop		\$.		* 5 N10 A601
9233		\$ 382,868	s .	s	- \$ 519,460 - \$ 382,868
9233				s	- \$ 382,868
-	Mud - Diesel	\$ 91,746		\$	- \$ 91,746
9208	Cementing & Services	100		s	- \$ 200,183
9203	Drilling - Rig Move			s	- \$ 97,588
9209	Mud - Chemicals & Engineering			s	- \$ 142,150
9211			\$ -	\$	- \$ 46,703
9228	Mudlogging & Services		s -	\$	- \$ 18,175
9230	Mud - Drill Water	\$ 32,021	s -	s	5 32,021
9224	Fuel	\$ 179,936	\$ -	\$	\$ 179,936
9212	Equipment Rental	\$ 144,428	s -	s	\$ 144,428
9220	Insurance	\$ 5,275	s -	\$	\$ 5,275
9207	Permits, surveys, land & legal	\$ 43,255	\$ -	S .	\$ 43,255
- 02		s -	\$ 4,923,784.00	\$	\$ 4,923,784.00
9322	Consulting Services	s -	\$ 124,563	\$	\$ 124,563
9305	Completion Overhead	5 -	\$ 11,195	\$.	\$ 11,195
9330	Mancamp	\$.	\$ 32,480	\$	\$ 32,480
9315	Transportation	s -	\$ 18,348	\$	\$ 18,348
9331	Pump Down Services	s -	\$ 70,685	\$	\$ 70,685
9304	Safety & Environmental	s -	\$ 10,545	\$.	\$ 10,545
9332	Chemicals	s -	\$ 356,063	\$.	\$ 356,063
9307	Water Disposal	\$ -	\$ 64,656	\$	\$ 64,656
9313	Rental Equipment - Downhole	\$ -	\$ 21,795	s -	\$ 21,795
9309	Fuel	\$ -	\$ 714,472	\$ -	\$ 714,472
		100	\$ 791,250	\$ -	\$ 791,250
2002(3)(0			\$ 99,698	\$	\$ 99,698
			\$ 17,353		\$ 17,353
		859	200 Sec. 200	1997	\$ 3,165
					\$ 6,317
in the second				1918 (A	\$ 448,450
		1000 10	1000		\$ 570,340
CONSTRUCT.					\$ 248,579
					\$ 51,926
2.22/142		2008W			\$ 70,369
					\$ 494,858
				0.99	\$ 76,858
9346					\$ 6,469 \$ 123,450
9343			and the second se		\$ 123,450 \$ 24,533
9339		20.000		1018	\$ 24,533 \$ 465,367
5154270771					
9352				\$ 140,000	\$ 140,000
9363		6	10	\$ 12,000	\$ 12,000
9360				\$ 13,000	
9353				\$ 144,000	\$ 144.000
9370			1	\$ 12,000	\$ 12.000
9351	Installation Costs - Supervision	\$ -		\$ 15,000	\$ 15.000
9356	Fluids, Chemicals	\$-		\$ 10,000	\$ 10,000
9357	Location, Permit, Damages, Survey	\$ -	s -	\$ 15,000	\$ 15,000
9359	Disposal	\$ -	\$ -	\$ 12,000	\$ 12,000
9362	Consulting - Engineering	\$ -	\$ -	\$ 12,000	\$ 12,000
9354	Instal-Labor: Welding	S - 1	s -	\$ 15,000	\$ 15,000
	9228 9230 9224 9212 9220 9207 •02 9305 9330 9331 9304 9332 9303 9331 9304 9332 9333 9304 9327 9313 9309 9314 9327 9313 9309 9314 9327 9313 9328 9327 9318 9328 9329 9336 9328 9337 9336 9337 9336 9336 9340 9343 9343 9343 9343 9343 9353 9363 9363 9363 9353 9354 9355 9356 9357	9228 Mudiogging & Services 9230 Mud - Drill Water 9224 Fuel 9212 Equipment Rental 9220 Insurance 9207 Permits, surveys, land & legal •02 Ornsulting Services 9305 Consulting Services 9305 Consulting Services 9305 Completion Overhead 9330 Mancamp 9315 Transportation 9331 Pump Down Services 9304 Safety & Environmental 9332 Chemicals 9307 Water Disposal 9313 Rental Equipment - Downhole 9309 Fuel 9314 Stimulation 9327 Flowback/Testing 9311 Location, Permit & Damages 9321 Roustabout Services 9328 Company Supervision 9335 Packers, Frac Plugs & Accessories 9336 Contingency (10%) 9335 Packers, Frac Plugs & Accessories 9340 WTR -	9228 Mudloging & Service 5 18,175 9230 Mud-Drill Water \$ 32,021 9224 Fuel \$ 179,936 9212 Equipment Rental \$ 144,428 9220 Insurance \$ 5,275 9207 Permits, surveys, land & legal \$ 43,255 9202 Consulting Services \$ - 9302 Consulting Services \$ - 9303 Completion Overhead \$ - 9304 Safety & Environmental \$ - 9304 Safety & Environmental \$ - 9305 Completion Down Services \$ - 9304 Safety & Environmental \$ - 9304 Safety & Environmental \$ - 9305 Chemicals \$ - 9313 Rental Equipment - Downhole \$ - 9314 Location, Permit & Damages \$ - 9325 <	B228 Mudogging & Services 5 1000 5 9230 Mud - Dill Water \$ 32,021 \$ - 9244 Fuel \$ 179,936 \$ - 9224 Equipment Rental \$ 144,428 \$ - 9220 Insurance \$ 5,275 \$ - 9220 Permits, surveys, land & legal \$ 43,225 \$ - 9221 Consulting Services \$ \$ 124,563 \$ 124,563 9305 Completion Overhead \$ \$ \$ 124,563 9305 Completion Overhead \$ \$ 124,563 9305 Completion Overhead \$ \$ 324,483 9313 Pump Down Services \$ \$ 324,493,744,00 9314 Chemical \$ \$ 164,686 9313 Rental Equipment - Downhole \$ \$ 71,4472 9314 Servintit \$	9228 Mudogging & Services \$ 1 5 \$ 9230 Mud - Drill Water \$ 32,021 \$ \$ 9224 Fuel \$ 179,936 \$ \$ 9224 Equipment Rental \$ 144,428 \$ \$ 9212 Equipment Rental \$ 144,428 \$ \$ 9220 Insurance \$ 5,275 \$ \$ 9207 Permits, surveys, land & legal \$ 43,225 \$ \$ 9305 Consulting Services \$ \$ 11,165 \$

ADVANCE

AFE#: NM0183 R1

Date: Oct 8, 2021

TOTAL INTANGIBLE COSTS >>>	s	2,807,573.00	\$ 4	,923,784.00 S	400,000.00	\$ 8,13	31,357.00
TOTAL PROJECT COSTS >>>	\$	3,798,186.00	\$ 4	,970,166.00 \$	900,000.00	\$ 9,66	68,352.00
		Dry Hole	Comp	letion	Facility	Total	-

This Authroity 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:	Braden Harris	Date:	Oct 6, 2021
Name:		Title:	V.P. of Drilling & Completions
Signature:	Kevin Hayes	Date:	Oct 7, 2021
Name:		Title:	C.F.O.
Signature:	Peter Lellis	Date:	Oct 8, 2021
Name:		Title:	President & C.E.O.
WI Owner:		Date:	
Approved By:		Title:	
Printed Name:			

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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 produciton 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 propant. 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.

	TANGIBL	TANGIBLE COSTS				Completion	1	Facility		Total
Tangible Drillin	g - 01		\$ \$	97,147.00	\$	2	\$	-	\$	997,147.00
	9401	Surface Casing	s	118,394	s		\$		s	118,394
	9402	Production Casing	s	457,126	s	-	\$	-	s	457,126
	9412	Intermediate 1 Casing	s	377,650	\$		\$		\$	377,650
	9404-1	Wellhead & Equipment	\$	43,977	\$		\$		\$	43,977
Tangible Compl	letion - 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	\$	-	s	-	s	6,000	_	6,000
	9490	Miscellaneous	\$		\$		\$	12,000	s	12,000
	9407	Tanks	\$	-	\$	-	\$	25,000	\$	25,000
	9424	Vapor Recovery Unit	\$	-	\$	-	\$	22,000	\$	22,000
	9408	Vessels	\$	4	\$	-	\$	150,000	\$	150,000
	9421	Production Battery	s	-	\$	-	\$	18,000	s	18,000
	9417	Electrical	s		\$		\$	75,000	\$	75,000
	9419	Flare	s	-	s		s	6,000	s	6,000
	9423	COMM- SCADA/Radio/Telecom	\$		\$	-	\$	6,000	s	6,000
	9416	Valves & Fittings	\$		\$		\$	145,000	\$	145,000
	9420	Pumps-Surface	\$		\$		\$	35,000	<u></u>	35,000
	TOTAL TANGIB	LE COSTS >>>	\$ 9	97,147.00	5	46,382.00	\$	500,000.00	1998	1,543,529.00

	INTANGIB	LE COSTS	Dry Hole	Completion	Facility		Total
ntangible Drillin	g - 01		\$ 2,821,397.00	\$	- \$	- \$	2,821,397.0
	9211	Location & Roads	\$ 46,695	\$	- S	- \$	46,69
	9290	Contingency (5%)	\$ 133,968	\$	- \$	- \$	133,96
	9205	Drilling Overhead	\$ 5,626	\$	- S	- \$	5,62
	9224	Fuel	\$ 181,348	\$	- S	- \$	181,34
	9222	Consulting Services	\$ 130,183	S	- S	- \$	130,18
	9228	Mudlogging & Services	\$ 18,418	S	- \$	- S	18,418
	9206	Contract Labor	\$ 36,695	\$	- \$	- \$	36,69
	9209	Mud - Chemicals & Engineering	\$ 142,385	\$	- \$	- S	142,385
	9219	Bits & BHA	\$ 126,257	\$	- \$	- \$	126,257
	9217	Inspection & Testing	\$ 25,848	\$	- \$	- \$	25,848
	9203	Drilling - Rig Move	\$ 97,588	s	- S	- \$	97,588
	9230	Mud - Drill Water	\$ 32,021	s	- S	- \$	32,021
	9212	Equipment Rental	\$ 145,770	s	- \$	- \$	145,770
	9236	Safety & Enviornmental	\$ 5,371	\$	- \$	- 5	145,770 5,371 5,275 ated ByAuce
	9220	Insurance	\$ 5,275	\$	- \$	- S	5.275



AFE#: NM0184 R1

Date: Oct 8, 2021

	9231				1.	
	9231	Mud - Brine		397.	S	- \$ 17,073
	9208	Cementing & Services Company Supervision			\$	\$ 200,183
	9202			\$ -	\$	\$ 2,893
	9234	Drilling - Daywork Solids Control / Closed Loop			\$	\$ 523,840
	9234				\$	\$ 89,352
	9232	Mud - Auxillary		s -	\$	\$ 22,270
		Casing Services		s -	S	\$ 98,261
	9229	Geosteering Services		s -	S	\$ 5,166
	9235	Disposal		s -	\$	\$ 150,245
	9233	Mud - Diesel		s -	\$	\$ 91,746
-	9204	Directional	\$ 385,840	\$ -	\$	\$ 385,840
	9215	Transportation	\$ 10,550	s -	\$	\$ 10,550
	9237	Mancamp	\$ 47,275	s	s .	\$ 47,275
	9207	Permits, surveys, land & legal	\$ 43,255	\$	s .	\$ 43,255
ible Complet	tion - 02	1	s -	\$ 4,970,543.00	s .	\$ 4,970,543.00
	9322	Consulting Services	s -	\$ 124,675	\$.	\$ 124,675
1	9335	Packers, Frac Plugs & Accessories	s -	\$ 71,160	\$.	\$ 71,160
	9328	Company Supervision	s -	\$ 6,318	\$	\$ 6,318
	9315	Transportation	s -	\$ 18,348	\$.	\$ 18,348
	9336	Contingency (10%)	s -	\$ 251,127	\$ -	\$ 251,127
	9304	Safety & Environmental	\$	\$ 10,545	s -	\$ 10,545
1	9306	Contract Labor	s -	\$ 76,858	s -	\$ 76,858
	9325	Wireline/Perforating	s -	\$ 501,452	s -	\$ 501,452
	9307	Water Disposal	\$ -	the second s	\$ -	\$ 64,656
	9311	Location, Permit & Damages			\$ -	\$ 17,353
ł	9330				\$.	\$ 32,491
	9314	Stimulation			s -	\$ 801,800
	9327	Flowback/Testing		\$ 99,698	\$ -	\$ 99,698
	9309	Fuel			s -	\$ 722,781
	9321	Roustabout Services	530 AL		s -	\$ 3,165
ł	9332	Chemicals			s -	\$ 360,810
ŀ	9337	Sand			s -	
ŀ	9312	Rental Equipment - Surface	100 C		\$ - \$ -	and a state of the
ŀ	9312	Rental Equipment - Downhole				\$ 453,242
ŀ	9305	Completion Overhead			\$	\$ 21,795
ŀ	9305		1211	688 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6	\$ -	\$ 11,203
H		Pump Down Services		\$ 70,685		\$ 70,685
-	9326	Coll Tubing Unit		\$ 52,618		\$ 52,618
H	9343	WTR - AEP Water Recycle		\$ 24,533		\$ 24,533
-	9339	WTR - Brackish Water			s	\$ 465,367
	9340	WTR - Fresh Water		the second s	\$ -	\$ 6,469
	9346	WTR - Water Transfers			\$ -	\$ 123,450
ible Facility -					\$ 400,000.00	\$ 400,000.00
L	9362	Consulting - Engineering		AD 0.	\$ 12,000	\$ 12,000
	9359	Disposal	2000 A.	\$-	\$ 12,000	\$ 12,000
L	9354	Instal-Labor: Welding	\$ -	\$-	\$ 15,000	\$ 15,000
	9360	Surface Rental	13	s -	\$ 13,000	\$ 13,000
E	9356	Fluids,Chemicals	s -	\$-	\$ 10,000	\$ 10,000
[9370	Miscellaneous	s -	s -	\$ 12,000	\$ 12,000
	9351	Installation Costs - Supervision	s -	s -	\$ 15,000	§ 400,000,00 \$ 12,000 \$ 12,000 \$ 15,000 \$ 13,000 \$ 13,000 \$ 13,000 \$ 12,000 \$ 15,000 \$ 140,000 \$ 15,000 \$ 140,000
Г	9353	Instal Labor: Inst, Elec, Autom	s -	s -	\$ 144,000	\$ 144,000
Г	9363	Trucking Costs	\$ -	\$ -	\$ 12,000	\$ 12,000
L L	9357	Location, Permit, Damages, Survey	s -	s -	\$ 15,000	\$ 15,000
	9352	Instal-Labor Mechanical	13		\$ 140,000	\$ 140,000

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AFE#: NM0184 R1

Date: Oct 8, 2021

		Dry Hole	Comple	etion	Facility	Total	
TOTAL PROJECT COSTS >>>	s	3,818,544.00	\$5,	016,925.00 \$	900,000.00	\$ 9,73	5,469.00
TOTAL INTANGIBLE COSTS >>>	\$	2,821,397.00	\$ 4,	970,543.00 \$	400,000.00	\$ 8,191	1,940.00

This Authroity 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:	Braden Harris	Date:	Oct 6, 2021
Name:		Title:	V.P. of Drilling & Completions
Signature:	Kevin Hayes	Date:	Oct 7, 2021
Name:		Title:	C.F.O.
Signature:	Peter Lellis	Date:	Oct 8, 2021
Name:		Title:	President & C.E.O.
WI Owner:		Date:	
Approved By:		Title:	
Printed Name:			



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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 propant. 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.

	TANGIBL	E COSTS	Dry Hole		Completion	1.000	Facility		Total
Tangible Drillir	ng - 01		\$ 972	482.00	S	. \$		s	972,482.00
	9412	Intermediate 1 Casing	\$ 3	77,650	S	s		s	377,650
	9401	Surface Casing	\$ 1	18,394	\$	5		\$	118,394
	9402	Production Casing	\$ 4	32,461	\$	\$	1	\$	432,461
	9404-1	Wellhead & Equipment	\$	43,977	\$	\$		\$	43,977
Tangible Comp	letion - 02		\$		\$ 46,382.00	\$		\$	46,382.00
	9404-2	Wellhead & Equipment	\$		\$ 46,382	5		\$	46,382
Tangible Facility - 03		s		s .	\$	500,000.00	\$	500,000.00	
	9490	Miscellaneous	S	-	\$.	\$	12,000	s	12,000
	9419	Flare	\$	1	\$	\$	6,000	s	6,000
	9423	COMM- SCADA/Radio/Telecom	s		s .	\$	6,000	\$	6,000
	9408	Vessels	\$		s .	\$	150,000	\$	150,000
	9420	Pumps-Surface 5	\$		s .	\$	35,000	\$	35,000
	9407	Tanks	\$		s .	\$	25,000	\$	25,000
	9418	Gas Meter	\$	-	\$.	s	6,000	\$	6,000
	9424	Vapor Recovery Unit	5		\$ -	s	22,000	\$	22,000
	9421	Production Battery	5		\$ -	\$	18,000	\$	18,000
	9417	Electrical	5		\$ -	\$	75,000	5	75,000
	9416	Valves & Fittings \$	5	-	s -	\$	145,000		145,000
	TOTAL TANGIB	LE COSTS >>> s	972.	182.00	\$ 46,382.00	\$	500,000.00	182	1,518,864.00

	INTANGIBLE	COSTS		Dry Hole	Completion	Facility		Total
Intangible Drilling - 01			\$	2,771,897.00	\$	- \$	- \$	2,771,897.00
92	04	Directional	\$	374,564	\$	- \$	- \$	374,564
92	35	Disposal	\$	150,245	\$	- \$	- \$	150,245
92	19	Bits & BHA	\$	125,798	s	- \$	- S	125,798
92	32	Mud - Auxillary	\$	22,109	S	- \$	- \$	22,109
92	20	Insurance	\$	5,275	s	- S	- \$	5,275
92	05	Drilling Overhead	s	5,448	\$	- 5	- S	5,448
92	30	Mud - Drill Water	s	32,021	\$	- \$	- 5	32,021
92	34	Solids Control / Closed Loop	\$	87,616	\$	- \$	- \$	87,616
92	15	Transportation	\$	10,550	s	- \$	- \$	10,550
92	02	Drilling - Daywork	\$	507,332	s	- S	- \$	507,332
920	08	Cementing & Services	\$	200,183	s	- \$	- \$	200,183
92:	33	Mud - Diesel	s	91,746	\$	- \$	- S	91,746
92	24	Fuel	\$	176,028	\$	- \$	- \$	176,028
920	06	Contract Labor	\$	36,695	S	- \$	- 5	36,695
921	11	Location & Roads	\$	46,727	s	- 5	- \$	46,727



AFE#: NM0191 R1

Date: Oct 8, 2021

	9207	Permits, surveys, land & lega	43,255	s		le 10.005
	9237	Mancamp	1 A.S. 65703 AV		- \$ - \$	- \$ 43,255
	9229	Geosteering Service:			- 5	- \$ 45,743
	9228	Mudlogging & Services			- 5	- \$ 4,908 - \$ 17,504
	9217	Inspection & Testing	1. 2011 Ville 2. 2013	5(V)	- 5	- \$ 17,504 - \$ 25,848
	9222	Consulting Services			- 5	- \$ 25,848 - \$ 126,636
	9203	Drilling - Rig Move	the second s	AS(5)	- s	- \$ 125,636
	9212	Equipment Rental	5 (ATS)	17611-	. 5	- \$ 97,588 - \$ 141,469
	9209	Mud - Chemicals & Engineering		\$	5	- \$ 141,501
	9231	Mud - Brine	and the second	\$.	s	- \$ 17,073
	9239	Company Supervision	1. 10 1. 10 1. 10 1. 10 1. 10 1. 10 1. 10 1. 10 1. 10 1. 10 1. 10 1. 10 1. 10 1. 10 1. 10 1. 10 1. 10 1. 10 1.	s .	s	- \$ 2,849
	9290	Contingency (5%)		s .	s	- \$ 131,626
	9236	Safety & Enviornmental		\$ -	S	- \$ 5,299
	9218	. Casing Services		\$ -	\$	- \$ 98,261
ngible Complet	tion - 02		s -	\$ 4,719,301.00	\$	- \$ 4,719,301.00
	9306	Contract Labor	\$.	\$ 76,858		\$ 76,858
[9335	Packers, Frac Plugs & Accessories	s .	\$ 67,204	s	- \$ 67,204
[9314	Stimulation	s -	\$ 749,050	s	- \$ 749,050
[9332	Chemicals	s -	\$ 337,073	\$	\$ 337,073
[9305	Completion Overhead	\$ -	\$ 10,932	\$	\$ 10,932
[9328	Company Supervision	s -	\$ 6,277	\$	\$ 6,277
[9307	Water Disposal	s -	\$ 64,656	s	\$ 64,656
	9331	Pump Down Services	s -	\$ 67,520	\$	\$ 67,520
	9330	Mancamp		\$ 32,077	\$	\$ 32,077
	9322	Consulting Services		\$ 120,527	\$	\$ 120,527
Ļ	9304	Safety & Environmental	s -	\$ 10,545	\$	\$ 10,545
	9312	Rental Equipment - Surface		\$ 425,133	\$.	\$ 425,133
	9325	Wireline/Perforating	s -	\$ 468,483	s .	\$ 468,483
-	9336	Contingency (10%)	1357 257	\$ 237,112	\$	\$ 237,112
	9315	Transportation		\$ 18,348	\$.	\$ 18,348
ŀ	9327	Flowback/Testing		\$ 99,698	\$	\$ 99,698
-	9311	Location, Permit & Damages	124.1	\$ 17,353	\$ -	\$ 17,353
H	9326	Coil Tubing Unit			\$ -	\$ 49,156
ł.	9309 9337	Fuel		\$ 676,598	s -	\$ 676,598
	9337	Sand Roustabout Services		\$ 539,922		\$ 539,922
-	9313			\$ 3,165		\$ 3,165
H	9313	Rental Equipment - Downhole WTR - Brackish Water		\$ 21,795	1837/ D	\$ 21,795
H	9346	WTR - Brackish Water WTR - Water Transfers		\$ 465,367		\$ 465,367
H	9343	WTR - AEP Water Recycle		\$ 123,450 \$ 24,533		\$ 123,450
H	9340	WTR - Fresh Water	ili		500	\$ 24,533
ngible Facility - (02000000		100			\$ 6,469
	9353	Instal Labor: Inst, Elec, Autom			\$ 400,000.00 \$ 144,000	\$ 400,000.00
F	9359	Disposal	1934		\$ 144,000 \$ 12,000	* 144,000
F	9362	Consulting - Engineering			\$ 12,000	s 12,000
F	9363				\$ 12,000	s 12,000
-	9370		59		\$ 12,000	\$ 12,000
	9357				\$ 15,000	\$ 15,000
F	9360	Surface Rental			\$ 13,000	\$ 13,000
F	9352		\$		\$ 140,000	\$ 140,000
F	9356	Fluids,Chemicals			\$ 10,000	\$ 10,000
F	9354	Instal-Labor: Welding			\$ 15,000	1911 (J. 1917) (
	9351	Installation Costs - Supervision			\$ 15,000	\$ 15,000

ADVANCE Authorization For Expenditure

AFE#: NM0191 R1

Date: Oct 8, 2021

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

This Authroity 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:	Braden Harris	Date:	Oct 6, 2021
Name:		Title:	V.P. of Drilling & Completions
Signature:	Kevin Haye	Date:	Oct 7, 2021
Name:	Kevin Hayes	Title:	C.F.O.
Signature:	Peter Lellie	. Date:	Oct 8, 2021
Name:	Peter Lellis	Title:	President & C.E.O.
WI Owner:		Date:	
Approved By:		Title:	
Printed Name:			



AFE#: NM0185 R1

Date: Oct 8, 2021

Lease:	Margarita Federal	Target:	Bone Springs
Well No: N	Margarita Federal Com 13 #12H Projecte	d MD/TVD:	22932/10200
County: L	Lea S	Spud to TD:	20.1
State: N	NM Late	ral Length:	11700
SHL: S	S13-T21S-R32E 460 FNL, 708 FEL	Stages:	75
BHL: S	S25-T21S-R32E 2540 FNL, 550 FEL P	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 produciton 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 propant. 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.

	TANGIBL	E COSTS	Dry Hole	Completion		Facility		Total
Tangible Drilli	ng - 01		\$ 984,174.00	s	- \$		\$	984,174.0
	9404-1	Wellhead & Equipment	\$ 43,977	\$	- \$		\$	43,97
	9402	Production Casing	\$ 444,153	\$	- \$		s	444,153
	9401	Surface Casing	\$ 118,394	s	- \$		s	118,394
	9412	Intermediate 1 Casing	\$ 377,650	\$	- \$	-	\$	377,650
Tangible Com	pletion - 02	4	s .	\$ 46,382	.00 \$		\$	46,382.00
	9404-2	Wellhead & Equipment	\$ -	\$ 46,	382 \$		\$	46,382
Tangible Facili	ity - 03		s -	\$	- \$	500,000.00	\$	500,000.00
	9424	Vapor Recovery Unit	s -	s	- \$	22,000	\$	22,000
	9417	Electrical	\$	\$	- \$	75,000	\$	75,000
	9418	Gas Meter	ş -	\$	- \$	6,000	\$	6,000
	9419	Flare	\$ -	\$	- \$	6,000	\$	6,000
	9408	Vessels	s -	\$	- \$	150,000	\$	150,000
	9416	Valves & Fittings	5 -	\$	- \$	145,000	\$	145,000
	9421	Production Battery	5 -	\$	- \$	18,000	\$	18,000
	9423	COMM- SCADA/Radio/Telecom	5 -	\$	- \$	6,000	s	6,000
	9407	Tanks	5 -	\$	- \$	25,000	s	25,000
	9420	Pumps-Surface S	5 -	\$	- \$	35,000	s	35,000
	9490	Miscellaneous \$		\$	- \$	12,000	\$	12,000
	TOTAL TANGIB	LE COSTS >>> \$	984,174.00	\$ 46,382	.00 S	500,000.00	1517	1,530,556.00

	INTANGI	BLE COSTS		Dry Hole	Completion	Facility		Total
Intangible Drilling	- 01	A	\$	2,794,289.00	s	- \$	- \$	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	s	- \$	- \$	98,261
	9220	Insurance	S	5,275	s	- \$	- \$	5,275
	9208	Cementing & Services	\$	200,183	s	- \$	- \$	200,183
	9209	Mud - Chemicals & Engineering	\$	141,864	\$	- \$	- \$	141,864
	9215	Transportation	\$	10,550	\$	- \$	- 5	10,550
	9219	Bits & BHA	\$	126,003	s	- \$	- \$	126,003
	9205	Drilling Overhead	\$	5,528	\$	- \$	- \$	5,528
	9230	Mud - Drill Water	\$	32,021	\$	- \$	- \$	32,021
	9217	Inspection & Testing	\$	25,848	s	- \$	- \$	25,848
	9229	Geosteering Services	\$	5,082	\$	- \$	- \$	5,082
	9204	Directional	\$	380,715	\$	- \$	- \$	380,715
	9203	Drilling - Rig Move	\$	97,588	\$	- \$	- \$	97,588

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AFE#: NM0185 R1

Date: Oct 8, 2021

	0000		1.	1.		
	9239 9232	Company Supervision			- \$	- \$ 2,869
	9232	Mud - Auxillary Contingency (5%)		s	- \$	- \$ 22,181
	9234	Solids Control / Closed Loop			- \$	- \$ 132,683
	9207	Permits, surveys, land & legal			- \$	- \$ 87,874
	9235	Disposal			- \$	- \$ 43,255
	9212	Equipment Rental		5	- \$	- \$ 150,245
	9236	Safety & Enviornmental		s	- S - S	- \$ 143,239
	9222	Consulting Services		s	- 5	- \$ 5,332 - \$ 128,221
	9224	Fuel		5	- \$	and the second s
	9202	Drilling - Daywork	jest statements	s .	- S	- \$ 178,406 - \$ 514,799
	9228	Mudlogging & Services		s .	5	\$ 514,799 \$ 17,910
	9237	Mancamp	and the second se	s .	- S	\$ 46,145
	9231	Mud - Brine	100 m 000	\$	s	s 17,073
gible Completi	tion - 02		s -	\$ 4,923,784.00	15	\$ 4,923,784.00
	9315	Transportation	s -	\$ 18,348		\$ 18,348
	9326	Coll Tubing Unit	s -	\$ 51,926		\$ 51,926
t t	9305	Completion Overhead	s -	\$ 11,195		\$ 11,195
	9304	Safety & Environmental	\$ -	\$ 10,545		\$ 10,545
	9309	Fuel	s -	\$ 714,472		\$ 714,472
	9306	Contract Labor	s -	\$ 76,858		\$ 76,858
1	9313	Rental Equipment - Downhole	s -	\$ 21,795		\$ 21,795
	9335	Packers, Frac Plugs & Accessories	\$ -	\$ 70,369	s .	\$ 70,369
	9311	Location, Permit & Damages	\$.	\$ 17,353	\$	\$ 17,353
	9331	Pump Down Services	\$.	\$ 70,685	\$	\$ 70,685
	9328	Company Supervision	s .	\$ 6,317	5 -	\$ 6,317
	9332	Chemicals	\$ -	\$ 356,063	\$ -	\$ 356,063
	9337	Sand	\$.	\$ 570,340	\$ -	\$ 570,340
	9330		\$ -	\$ 32,480	s -	\$ 32,480
	9327		\$ -	\$ 99,698		\$ 99,698
L	9314			\$ 791,250		\$ 791,250
	9322	Consulting Services		\$ 124,563	0.07	\$ 124,563
-	9307	Water Disposal	1997	\$ 64,656		\$ 64,656
-	9336	Contingency (10%)	(internet)	\$ 248,579	\$ -	\$ 248,579
H	9312			\$ 448,450		\$ 448,450
H	9321			\$ 3,165		\$ 3,165
H	9325	Wireline/Perforating		\$ 494,858		\$ 494,858
H	9339		s -	\$ 465,367		\$ 465,367
H	9340	WTR - Fresh Water		\$ 6,469		\$ 6,469
F	9346 9343			\$ 123,450		\$ 123,450
gible Facility - (1999			\$ 24,533		\$ 24,533
, the full and y i t	9359	Disposal			\$ 400,000.00	\$ 400,000.00
H	9360	Surface Rental			\$ 12,000	3 12,000
F	9362	Consulting - Engineering			\$ 13,000 \$ 12,000	3 13,000
H	9363	Trucking Costs			\$ 12,000 \$ 12,000	\$ 12,000
F	9354				\$ 15,000	s 12,000
F	9352		97		\$ 140,000	\$ 140,000
F	9370				\$ 12,000	\$ 12,000
F	9356	Fluids,Chemicals		1.	\$ 10,000	\$ 10,000
F	9353	Instal Labor: Inst, Elec, Autom			\$ 144,000	\$ 10,000
F	9357	Location,Permit,Damages,Survey			\$ 15,000	
-	9351	Installation Costs - Supervision	- 17 - 17 - 17 - 17 - 17 - 17 - 17 - 17		\$ 15,000	\$ 15,000

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AFE#: NM0185 R1

Date: Oct 8, 2021

TOTAL INTANGIBLE COSTS >>>	\$ 2,794,289		0 \$ 400,000.00	\$ 8,118,073.00
TOTAL PROJECT COSTS >>>	\$ 3,778,463	.00 \$ 4,970,166.0	0 \$ 900,000.00	\$ 9,648,629.00
	Dry Hole	Completion	Facility	Total

This Authroity 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: Title:	Oct 6, 2021 V.P. of Drilling & Completions
Signature: Name:	Kevin Hayes		Date: Title:	Oct 7, 2021 C.F.O.
Signature: Name:	Peter Lellis		Date: Title:	Oct 8, 2021 President & C.E.O.
WI Owner:		—,.]	Date:	
Approved By:		_	Title:	
Printed Name:				



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 produciton 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 propant. 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.

	TANGIBL	E COSTS	Dry Hole		Completion		Facility		Total
Tangible Drilli	ng - 01		\$ 988,168.00	\$		\$		\$	988,168.0
	9402	Production Casing	\$ 448,147	s		\$		\$	448,147
	9412	Intermediate 1 Casing	\$ 377,650	s		\$		\$	377,650
	9401	Surface Casing	\$ 118,394	\$	2	s	2	\$	118,394
	9404-1	Wellhead & Equipment	\$ 43,977	\$		\$		\$	43,977
Tangible Com	pletion - 02		\$	\$	46,382.00	\$		\$	46,382.00
	9404-2	Wellhead & Equipment	\$ 14	\$	46,382	\$		\$	46,382
Tangible Facili	ity - 03		\$	\$		\$	500,000.00	\$	500,000.00
	9408	Vessels	\$ -	s	-	\$	150,000	\$	150,000
	9407	Tanks	\$ 	\$	-	s	25,000	\$	25,000
	9421	Production Battery	\$ -	\$	-	\$	18,000	\$	18,000
	9418	Gas Meter	\$	\$	-	\$	6,000	s	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 Unit	\$	\$	-	\$	22,000	\$	22,000
	9416	Valves & Fittings	\$ -	\$		\$	145,000	s	145,000
	9490	Miscellaneous	\$ 4	\$		\$	12,000	s	12,000
	TOTAL TANGIBI	E COSTS >>>	\$ 988,168.00	\$	46,382.00	\$	500,000.00	s	1,534,550.00

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



AFE#: NM0192 R1

Date: Oct 8, 2021

9230	Mud - Drill Water		5 -	\$	\$ 32,021
			190	1.100 ·····	\$ 518,605
			1011		\$ 142,185
			() () () () () () () () () () () () () (\$ 144,333
					\$ 10,550
					\$ 43,255
				10/6	\$ 97,588
110000.000					\$ 18,145
			10.00		\$ 46,735
				0.50	\$ 91,746
1994 - 1994 -					\$ 36,695
7.50.10.55			(f)(restal in	\$ 46,368 \$ 2.880
		Contractor of Co		100	
	Salety & Enviornmental				\$ 5,348 \$ 4,719,301.00
	Company Supervision			122 J	\$ 6,277
		a tampa	10010-0000		\$ 64,656
					\$ 120,527
					\$ 120,527 \$ 237,112
196723765					\$ 237,112 \$ 337,073
9309				10	\$ 576,598
9313		15			\$ 21,795
9304					s 10,545
9326	The second s		the second s		\$ 49,156
9315		10	\$ 18,348	s -	\$ 18,348
9331			\$ 67,520	\$.	\$ 67,520
9314					\$ 749,050
9325	Wireline/Perforating	s -	\$ 468,483	\$ -	\$ 468,483
9306	Contract Labor	\$ -	\$ 76,858	\$ -	\$ 76,858
9335	Packers, Frac Plugs & Accessories	s -	\$ 67,204	s -	\$ 67,204
9337	Sand	s -	\$ 539,922	\$ -	\$ 539,922
9321	Roustabout Services	\$ -	\$ 3,165	s -	\$ 3,165
9311	Location, Permit & Damages	s -	\$ 17,353	\$ -	\$ 17,353
9305	Completion Overhead	s -	\$ 10,932	s -	\$ 10,932
9312	Rental Equipment - Surface	s -	\$ 425,133	\$ -	\$ 425,133
9330	Mancamp	\$ -	\$ 32,077	\$ -	\$ 32,077
9327	Flowback/Testing	\$-	\$ 99,698	\$ -	\$ 99,698
9340	and the second	in the second se	200 A 1987		\$ 6,469
9343			Poperties,		\$ 24,533
					\$ 465,367
		<u>014</u>	an constants		\$ 123,450
03				\$ 400,000.00	\$ 400,000.00
150.000				\$ 144,000	CONTRACTOR OF THE OWNER
				\$ 15,000	s 15,000
122200.000				\$ 140,000	\$ 140,000
		<u>.</u>		\$ 10,000	5 10,000
		14-14 A	24	\$ 15,000	\$ 15,000
				\$ 12,000	\$ 12,000
				\$ 12,000	\$ 12,000
	1000AV 7.1287 (2018/00/07)		PL (*)	\$ 12,000	\$ 12,000
9359 9357	Disposal Location,Permit,Damages,Survey			3 12,000	\$ 12,000
9357	Localion,Permit,Damages,Survey Surface Rental		500	\$ 15,000 \$ 13,000	ə 15,000
	9313 9304 9326 9315 9331 9314 9325 9306 9335 9337 9337 9321 9337 9321 9311 9305 9312 9330 9312 9330 9327 9340 9343 9339 9346	9209 Mud - Chemicals & Engineering 9212 Equipment Rental 9215 Transportation 9207 Permits, surveys, land & legal 9203 Drilling - Rig Move 9228 Mudlogging & Services 9211 Location & Roads 9233 Mud - Diesel 9206 Contract Labor 9237 Mancamp 9238 Safety & Enviormental 9328 Company Supervision 9328 Consulting Services 9336 Contingency (10%) 9332 Chemicals 9336 Contingency (10%) 9332 Chemicals 9333 Rental Equipment - Downhole 9334 Safety & Environmental 9335 Coli Tubing Unit 9336 Contingency (10%) 9332 Chemicals 9334 Safety & Environmental 9335 Packers, Frac Plugs & Accessories 9331 Pump Down Services 9331 Pump Down Services 9335	9209 Mud - Chemicals & Engineering \$ 142,185 9212 Equipment Rental \$ 142,185 9213 Transportation \$ 10,550 9207 Permits, survays, land & legal \$ 43,255 9203 Ordinigo - Rig Move \$ 97,588 9214 Location & Roads \$ 161,145 9215 Mudoging & Services \$ 18,145 9211 Location & Roads \$ 46,735 9233 Mud - Diesel \$ 91,746 9206 Contract Labor \$ 36,665 9237 Mancamp \$ 46,388 9238 Company Supervision \$ 2,880 9238 Company Supervision \$ - 9328 Consulting Services \$ - 9332 Consulting Services \$ - 9332 Contingency (10%) \$ - 9333 Rental Equipment - Downhole \$ - 9334 Rental Equipment - Downhole \$ - 9335 Packers, Frac Plugs & Accessortes \$ - 9335 Packers, Frac Plugs & Accessortes	9200 Mud - Chemicals & Engineering 1.1.2.188 5 9212 Equipment Renatal 1.14.2.188 5 - 9215 Transportation 5 1.0.550 5 - 9207 Permits, survey, and & legal 5 4.3.255 5 - 9203 Drilling - Rig Move 5 4.6.255 5 - 9223 Mudrogging & Services 5 1.6.164 5 - 9233 Mud - Diesel 9 1.7.46 5 - - 9230 Contract Labor 5 3.6.669 5 - - 9238 Safety & Environmental 5 3.6.627 5 4.719,301.0 9328 Contract Labor 5 - 5 6.2277 9339 Contract Labor 5 - 5 23.7.112 9328 Contract Labor 5 - 5 23.7.12 9339 Fertat Equipment - Downhole 5 5 27.75	9200 Mud - Chemicals & Engineering \$ 1.42,185 \$ \$ 9212 Equipment Remial \$ 1.44,333 \$ \$ \$ \$ 9213 Transportation \$ 0.0500 \$ \$ \$ \$ 9203 Drilling - Rig Move \$ 0.7588 \$

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ADVANCE Authorization For Expenditure

AFE#: NM0192 R1

Date: Oct 8, 2021

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

This Authroity 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:	Braden Harris	Date:	Oct 6, 2021
Name:		Title:	V.P. of Drilling & Completions
Signature:	Kain Hays	Date:	Oct 7, 2021
Name:	Kevin Hayes	Title:	C.F.O.
Signature:	Peter Lellis	Date:	Oct 8, 2021
Name:		Title:	President & C.E.O.
WI Owner:		Date:	
Approved By:		Title:	
Printed Name:			



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 produciton 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 propant. 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.

	TANGIBI	LE COSTS		Dry Hole		Completion		Facility		Total
Tangible Drillin	g - 01		\$	998,122.00	\$	2	\$		\$	998,122.00
	9412	Intermediate 1 Casing	\$	377,650	\$		\$		s	377,650
	9402	Production Casing	\$	458,101	\$		\$		\$	458,10
	9404-1	Wellhead & Equipment	s	43,977	s	2	\$		\$	43,977
	9401	Surface Casing	\$	118,394	\$		\$		s	118,394
Tangible Compl	letion - 02		\$		s	46,382.00	\$		s	46,382.00
	9404-2	Wellhead & Equipment	\$		\$	46,382	\$		\$	46,382
Tangible Facility	y - 03		\$		s		\$	500,000.00	\$	500,000.00
	9417	Electrical	\$		\$		\$	75,000	s	75,000
	9423	COMM- SCADA/Radio/Telecom	\$	2	\$	-	\$	6,000	\$	6,000
	9424	Vapor Recovery Unit	\$		\$		\$	22,000	s	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	\$		s	-	5	25,000	\$	25,000
	9490	Miscellaneous	s		s		s	12,000	\$	12,000
	9408	Vessels	s		\$	-	\$	150,000	s	150,000
	9419	Flare	\$	2	\$		\$	6,000	\$	6,000
	9421	Production Battery	\$		\$		\$	18,000	s	18,000
	TOTAL TANGIE	ILE COSTS >>>	\$	998,122.00	s	46,382.00	\$	500,000.00	s	1,544,504.00

	INTANGIB	LE COSTS	Dry Hole	Completion	Facility		Total
Intangible Drilling	- 01	5	\$ 2,824,137.00	\$	- \$	- S	2,824,137.00
	9209	Mud - Chemicals & Engineering	\$ 142,494	\$	- \$	- \$	142,494
	9235	Disposal	\$ 150,245	\$	- \$	- \$	150,245
	9212	Equipment Rental	\$ 146,112	\$	- S	- \$	146,112
	9222	Consulting Services	\$ 130,450	s	- \$	- \$	130,450
	9229	Geosteering Services	\$ 5,108	s	- \$	- \$	5,108
	9230	Mud - Drill Water	\$ 32,021	s	- \$	- \$	32,021
	9224	Fuel	\$ 181,748	\$	- \$	- \$	181,748
	9237	Mancamp \$	\$ 47,343	\$	- \$	- \$	47,343
[9232	Mud - Auxillary \$	\$ 22,282	s	- \$	- \$	22,282
[9206	Contract Labor \$	\$ 36,695	s	- \$	- \$	36,695
	9236	Safety & Enviornmental \$	5,376	\$	- \$	- \$	5,376
1	9211	Location & Roads \$	46,711	\$	- \$	- \$	46,711
	9228	Mudlogging & Services \$	18,490	\$	- \$	- S	18,490
[9219	Bits & BHA \$	126,291	\$	- \$	- \$	126,291
ſ	9207	Permits, surveys, land & legal \$	43,255	s	- 5	- S	43,255



AFE#: NM0186 R1

Date: Oct 8, 2021

	0017		1.	1.	r	1
	9217	Inspection & Testing			S	- \$ 25,848
F	9233	Mud - Diese			\$	- \$ 91,746
-	9208	Cementing & Services			\$	- \$ 200,183
-	9204	Directiona			\$	- \$ 385,219
ŀ	9218	Casing Services	9 West		s	- \$ 98,261
F	9290	Contingency (5%)			s	- \$ 134,102
-	9239	Mud - Brine		114 11	\$	- \$ 17,073
H	9239	Company Supervision		\$ -	\$	- \$ 2,897
-	9205	Insurance			S	- \$ 5,275
-	9203	Drilling Overhead		s -	S	- \$ 5,640
-	9203	Drilling - Rig Move			\$	- S 97,588
-		Solids Control / Closed Loop			\$	- \$ 90,170
-	9202 9215	Drilling - Daywork	\$ 524,964	s -	\$	\$ 524,964
ible Completio	14173078	Transportation	\$ 10,550	\$ -	\$	\$ 10,550
Ible completio	9314		s -	\$ 4,877,023.00	\$	\$ 4,877,023.00
-	9314	Stimulation	\$ -	\$ 780,700	\$	\$ 780,700
-	9305	Mancamp		\$ 32,469	S	\$ 32,469
H	9305	Completion Overhead	and the second se	\$ 11,188	\$	\$ 11,188
F	9322	Consulting Services		\$ 124,450		\$ 124,450
F	9328	Company Supervision		\$ 6,315		\$ 6,315
F	Drive Warts	Coil Tubing Unit	s .		\$	\$ 51,233
F	9313 9332	Rental Equipment - Downhole	s -		\$	\$ 21,795
F	9332	Chemicals		\$ 351,315	s .	\$ 351,315
H	9315	Transportation	s -	\$ 18,348	\$	\$ 18,348
-	9321	Roustabout Services	s -	\$ 3,165	\$	\$ 3,165
-	9335	Safety & Environmental		\$ 10,545	\$	\$ 10,545
-	9335	Packers, Frac Plugs & Accessories	122 N.U.	\$ 69,577	\$.	\$ 69,577
-	9331			\$ 64,656	\$	\$ 64,656
-	9306			\$ 70,685	s -	\$ 70,685
-		Contract Labor		\$ 76,858	\$.	\$ 76,858
-	9325	Wireline/Perforating		\$ 488,265	\$	\$ 488,265
-	9311 9309	Location, Permit & Damages		and the second	\$ -	\$ 17,353
-	9309	Fuel			\$ -	\$ 706,164
-	9336				\$	\$ 562,735
-	9330				s -	\$ 246,031
-	9327	Flowback/Testing		no accession of	\$ -	\$ 99,698
-	9312	Rental Equipment - Surface			\$ -	\$ 443,659
-	9343	WTR - Brackish Water		\$ 465,367		\$ 465,367
-	1222	WTR - AEP Water Recycle	300	\$ 24,533		\$ 24,533
-	9340 9346	WTR - Fresh Water		\$ 6,469		\$ 6,469
ible Facility - 03		WTR - Water Transfers		245. 37 (201) (201) (201)	s -	\$ 123,450
and racinty - 03	9352				\$ 400,000.00	\$ 400,000.00
-	9352	Instal-Labor Mechanical			\$ 140,000	an and the second se
		Surface Rental			\$ 13,000	\$ 13,000
<u></u>	9362 9359	Consulting - Engineering			\$ 12,000	\$ 12,000
-		Disposal			\$ 12,000	\$ 12,000
-	9356	Fluids,Chemicals	20		\$ 10,000	\$ 10,000
H	9351	Installation Costs - Supervision			\$ 15,000	\$ 15,000
H	9354	Instal-Labor: Welding			\$ 15,000	\$ 15,000
-	9363	Trucking Costs			\$ 12,000	\$ 12,000
L	9357				\$ 15,000	\$ 15,000
-	9353		s - :		\$ 144,000	\$ 144,000
1	9370	Miscellaneous	\$ - !	\$ -	\$ 12,000	\$ 12,000

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AFE#: NM0186 R1

Date: Oct 8, 2021

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

This Authroity 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:	Braden Harris	Date:	Oct 6, 2021
Name:		Title:	V.P. of Drilling & Completions
Signature:	Kevin Hayes	Date:	Oct 7, 2021
Name:		Title:	C.F.O.
Signature:	Peter & Sellie	Date:	Oct 8, 2021
Name:	Peter Lellis	Title:	President & C.E.O.
WI Owner:		Date:	
Approved By:		Title:	
Printed Name:			



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 produciton 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 propant. 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			Completion	Facility	1	Total
Tangible Drilli	ng - 01		\$ 1,300,432.00	s	- 5 -	s	1,300,432.0
	9412	Intermediate 1 Casing	\$ 686,521	\$	- \$ -	\$	686,52
	9401	Surface Casing	\$ 118,387	\$	- \$ -	\$	118,38
	9402	Production Casing	\$ 451,547	\$	- \$ -	s	451,54
	9404-1	Wellhead & Equipment	\$ 43,977	\$	- \$ -	s	43,97
Tangible Com	pletion - 02		s -	\$ 46,382.0	s -	\$	46,382.00
	9404-2	Wellhead & Equipment	s -	\$ 46,38	2 \$ -	s	46,38
Tangible Facili	ity - 03		s -	\$	- \$ 500,000.00	\$	500,000.00
	9424	Vapor Recovery Unit	s -	\$	- \$ 22,000	\$	22,000
	9408	Vessels \$	s -	\$	- \$ 150,000	s	150,000
	9417	Electrical	5 -	s	- \$ 75,000	\$	75,000
	9421	Production Battery	5 -	\$	- \$ 18,000	s	18,000
	9418	Gas Meter	5 -	\$	\$ 6,000	s	6,000
	9416	Valves & Fittings	5 -	\$	\$ 145,000	s	145,000
	9490	Miscellaneous \$	5 -	\$	\$ 12,000	\$	12,000
	9419	Flare \$	5 -	\$	\$ 6,000	s	6,000
	9423	COMM- SCADA/Radio/Telecom \$	-	5	\$ 6,000	s	6,000
	9420	Pumps-Surface \$		\$	\$ 35,000	s	35,000
	9407	Tanks S		\$	\$ 25,000		25,000
	TOTAL TANGIB	LE COSTS >>> \$	1,300,432.00	\$ 46,382.00	\$ 500,000.00	s	1,846,814.00

	INTANGIBL	E COSTS	Dry Hole	Completion	Facility		Total
Intangible Drilli	ng - 01	\$	2,988,352.00	s	- \$	- \$	2,988,352.00
	9218	Casing Services \$	101,426	s	- S	- \$	101,420
	9205	Drilling Overhead \$	6,125	s	- \$	- S	6,125
	9235	Disposal \$	162,766	s	- \$	- 5	162,766
	9211	Location & Roads \$	46,818	\$	- \$	- \$	46,818
	9202	Drilling - Daywork \$	568,688	s	- \$	- \$	568,686
	9239	Company Supervision \$	3,017	s	- \$	- 5	3,017
	9212	Equipment Rental \$	157,726	s	- \$	- 5	157,726
	9234	Solids Control / Closed Loop \$	99,175	\$	- \$	- \$	99,175
	9208	Cementing & Services \$	217,005	\$	- \$	- S	217,005
	9215	Transportation \$	10,550	\$	- \$	- \$	10,550
	9233	Mud - Diesel \$	91,746	\$	- \$	- \$	91,746
	9229	Geosteering Services \$	4,966	\$	- S	- \$	4,966
	9220	Insurance \$	5,275	s	- \$	- 5	5,275
	9217	Inspection & Testing \$	25,848	\$	- \$	- S	25,848
	9204	Directional \$	400,365	\$	- \$	- S	400,365



AFE#: NM0193 R1

Date: Oct 8, 2021

ſ	9222					
-	9222 9203	Consulting Services			- \$	- \$ 140,064
ŀ	9203	Drilling - Rig Move			- 5	- \$ 97,588
	9219	Bits & BHA			- 5	- \$ 127,534
H	9224	Fue			- \$	- \$ 196,171
ŀ	9209	Mud - Chemicals & Engineering			- \$	- \$ 53,788
-	9236	Mud - Chemicals & Engineering Safety & Enviornmental		\$	\$	- \$ 156,904
H	9232	Mud - Auxillary	1999	s .	• \$	- \$ 5,537
-	9290	Contingency (5%)		s .	s s	- \$ 22,719
H	9207	Permits, surveys, land & legal		\$.	· \$	- \$ 141,922 - \$ 43,255
-	9228	Mudlogging & Services		s 5	- S	
F	9231	Mud - Brine		s -	s	- \$ 15,585 - \$ 17,073
L L	9206	Contract Labor	and the second se	\$	s	- \$ 36,695
	9230	Mud - Drill Water	and a second	s .	s	- \$ 32,021
ngible Completio	ion - 02		s .	\$ 4,719,301.00		\$ 4,719,301.00
	9304	Safety & Environmental	s -	\$ 10,545	0.8955	\$ 10,545
F	9336	Contingency (10%)		\$ 237,112		\$ 237,112
F	9306	Contract Labor		\$ 76,858	and the second se	\$ 76,858
F	9331	Pump Down Services		\$ 67,520		\$ 67,520
	9335	Packers, Frac Plugs & Accessories		\$ 67,204		\$ 67,204
	9322	Consulting Services	s -	\$ 120,527		\$ 120,527
	9315	Transportation	s -	\$ 18,348		s 18,348
	9327	Flowback/Testing	s -	\$ 99,698	\$	\$ 99,698
	9314	Stimulation	\$ -	\$ 749,050	\$.	\$ 749,050
	9326	Coil Tubing Unit	\$.	\$ 49,156	\$	\$ 49,156
	9332	Chemicals	s .	\$ 337,073	5	\$ 337,073
	9328	Company Supervision		\$ 6,277	\$ -	\$ 6,277
F	9311	Location, Permit & Damages		\$ 17,353	\$ -	\$ 17,353
	9312	Rental Equipment - Surface		\$ 425,133	\$ -	\$ 425,133
-	9330	CMDROLING M				\$ 32,077
F	9307			\$ 64,656		\$ 64,656
	9337	Sand	124	\$ 539,922	000 0	\$ 539,922
	9305 9325			\$ 10,932		\$ 10,932
-	9325				<u>s</u>	\$ 468,483
	9321	Roustabout Services	12 State 1	\$ 676,598 \$ 3,165		\$ 676,598
F	9313	Rental Equipment - Downhole		\$ 3,165 \$ 21,795		\$ 3,165
F	9340			\$ 6,469		\$ 21,795
	9339			\$ 465,367		\$ 6,469 \$ 465,367
	9346			\$ 123,450		\$ 123,450
	9343		()	\$ 24,533	LEN LE	\$ 24,533
ngible Facility - 0	03					
	9360	Surface Rental	\$ -		\$ 13,000	
Γ	9363	Trucking Costs	s -		\$ 12,000	\$ 12,000
	9351	Installation Costs - Supervision	s -	\$	\$ 15,000	\$ 15,000
	9359	Disposal	s -	\$ -	\$ 12,000	\$ 12,000
	9353	Instal Labor: Inst, Elec, Autom	\$ -	s -	\$ 144,000	\$ 144,000
	9357	Location,Permit,Damages,Survey	\$ -	s -	\$ 15,000	\$ 15,000
	9370	Miscellaneous	\$ - :	s -	\$ 12,000	\$ 12,000
	9354	Instal-Labor: Welding	\$ - :	5 -	\$ 15,000	\$ 15,000
	9352			5 -	\$ 140,000	\$ 140,000
	9362	Consulting - Engineering			\$ 12,000	\$ 12,000
	9356	Fluids,Chemicals	\$ - !		\$ 10,000	\$ 10,000

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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 Authroity 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:	Braden Harris	Date:	Oct 6, 2021
Name:		Title:	V.P. of Drilling & Completions
Signature:	Kevin Hayes	Date:	Oct 7, 2021
Name:		Title:	C.F.O.
Signature:	Peter & Sellie	Date:	Oct 8, 2021
Name:	Peter Lellis	Title:	President & C.E.O.
WI Owner:		Date:	
Approved By:			
Printed Name:		-	



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 produciton 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 propant. Pad Facility design consistent with a Merchant syle battery. Cost associated with off pad Power Lines or Pipelines is not included in this AFE.

	TANGIBL	E COSTS	Dry Hole	Completion		Facility		Total
Tangible Drilling	- 01		\$ 1,314,800.00	s	- 5		s	1,314,800.0
	9401	Surface Casing	\$ 118,387	s	- s		s	118,38
	9404-1	Wellhead & Equipment	\$ 43,977	s	- \$		s	43,97
	9402	Production Casing	\$ 465,915	s	- \$		s	465,915
	9412	Intermediate 1 Casing	\$ 686,521	s	- \$		s	686,52
Tangible Comple	tion - 02		\$	\$ 46,38	2.00 \$		s	46,382.00
	9404-2	Wellhead & Equipment	\$.	\$ 46.	382 \$		s	46,382
Tangible Facility	- 03		s -	s	- \$	500,000.00	s	500,000.00
	9408	Vessels	\$ -	s	- 5	150,000	(×.,	150,000
	9407	Tanks	\$ -	\$	- 5	25,000		25,000
	9424	Vapor Recovery Unit	s .	s	- 5	22,000	s	22,000
	9418	Gas Meter S	5 -	\$	- \$	6,000	s	6,000
	9419	Flare	5 -	s	- 5	6,000	s	6,000
	9420	Pumps-Surface \$	5 -	s	- 5	35,000	22	35,000
	9416	Valves & Fittings	s -	s	- \$	145,000	1.1.1.1	145,000
	9417	Electrical \$	5 -	s	- \$	75,000	_	75,000
	9490	Miscellaneous \$	s -	s	- \$	12,000	<u></u>	12,000
	9423	COMM- SCADA/Radio/Telecom \$		s	- \$	6,000	_	6,000
	9421	Production Battery \$; -	s	- 5	18,000		18,000
	TOTAL TANGIB	LE COSTS >>> \$	1,314,800.00	\$ 46,382	.00 S	500,000.00	222	1,861,182.00

	INTANGIBL	ECOSTS	Dry Hole		Completion	Facility		Total
Intangible Drill	ling - 01		\$ 3,015,87	0.00 \$		- \$	- \$	3,015,870.00
	9217	Inspection & Testing	\$ 25	.848 \$		- \$	- 5	25,848
	9290	Contingency (5%)	\$ 143	,221 \$		- \$	- \$	143,221
	9232	Mud - Auxillary	\$ 22	,807 \$		- \$	- \$	22,807
	9206	Contract Labor	\$ 36	,695 \$		- \$	- S	36,695
	9203	Drilling - Rig Move	\$ 97	,588 \$		- \$	- \$	97,588
	9233	Mud - Diesel	\$ 91,	746 \$		- \$	- 5	91,746
	9212	Equipment Rental	\$ 159,	893 \$		- \$	- S	159,893
	9215	Transportation	\$ 10,	550 \$		- \$	- S	10,550
	9230	Mud - Drill Water	\$ 32.	021 \$		- \$	- 5	32,021
	9204	Directional	\$ 407.	981 \$		- \$	- S	407,981
	9205	Drilling Overhead	\$6,	222 \$		- S	- \$	6,222
	9211	Location & Roads	\$ 46,	784 \$		- \$	- 5	46,784
	9234	Solids Control / Closed Loop \$	\$ 99,	405 \$		- \$	- 5	99,405
	9239	Company Supervision	\$ 3,	041 \$		- \$	- 5	3,041
	9236	Safety & Enviornmental	\$ 5.	576 \$		- s	- 5	5,576



AFE#: NM0187 R1

Date: Oct 8, 2021

ſ	0000						4
	9208 9202	Cementing & Services Drilling - Daywork			- \$	- \$ 217,005	-
ł	9224		in the second	1.773	- \$	- \$ 577,840	-
ł	9231	Fuel Mud - Brine			- \$	- \$ 199,082	-
-	9207	Permits, surveys, land & legal		922	- \$	- \$ 17,073	-
ŀ	9222	Consulting Services			- \$	- \$ 43,255	-
	9228	Mudlogging & Services			- S	- \$ 142,005	-
	9237	Mancamp	and the second se		- \$	- \$ 16,082	-
-	9219	Bits & BHA	1. States and the second secon	\$	- S	- \$ 54,280	-
H	9218	Casing Services		\$ \$	- \$	- \$ 127,785	-
H	9235	Disposal		5	· \$	- \$ 101,426	4
-	9220	Insurance			· S	- \$ 162,766	
H	9229	Geosteering Services		s .	\$	- \$ 5,275	4
H	9209	Mud - Chemicals & Engineering	CA STATUS	\$	\$	- \$ 5,184	-
jible Completio	20122772	indu - Chemicais & Engineering	\$ 157,434 \$	\$.	\$	- \$ 157,434	
, see sempreu	9306	Contract Labor		\$ 4,923,784.00		\$ 4,923,784.00	4
H	9305	Contract Labor Completion Overhead	- 1977 - 1978 - 1978 - 1978 - 1978 - 1978 - 1978 - 1978 - 1978 - 1978 - 1978 - 1978 - 1978 - 1978 - 1978 - 1978	\$ 76,858		- \$ 76,858	
-	9311	Location, Permit & Damages		\$ 11,195		- \$ 11,195	1
H	9304	Safety & Environmental		\$ 17,353	12	s 17,353	1
H	9332		s -	\$ 10,545		\$ 10,545	
H	9352		s -	\$ 356,063		\$ 356,063	1
H	9336			\$ 791,250		\$ 791,250	
H	9307	Contingency (10%) Water Disposal	\$. «	\$ 248,579	-	\$ 248,579	
-	9337	Sand		\$ 64,656		\$ 64,656	
-	9325	Sand Wireline/Perforating		\$ 570,340		\$ 570,340	
F	9325			\$ 494,858		\$ 494,858	
-	9328	Company Supervision		\$ 6,317		\$ 6,317	
-	9322	Consulting Services		\$ 124,563	235 25	\$ 124,563	
-	9330			\$ 51,926 \$ 32,480		\$ 51,926	
-	9313		1			\$ 32,480	
H	9335		200	\$ 21,795		\$ 21,795	
F	9335			\$ 70,369		\$ 70,369	
H	9309	Transportation		\$ 18,348 \$ 714,470		\$ 18,348	
H	9331	Pump Down Services		\$ 714,472 \$ 70.685		\$ 714,472	
H	9327	Flowback/Testing				\$ 70,685	
F	9312			\$ 99,698 \$ 448,450	2201 12	\$ 99,698	
	9321				1995	\$ 448,450	
H	9343	WTR - AEP Water Recycle		7.023		\$ 3,165	
H	9346	WTR - KEP Water Recycle		\$ 24,533 \$ 123,450	111	\$ 24,533	
H	9340					\$ 123,450	
F	9339			\$ 6,469		\$ 6,469	
gible Facility - 0					\$.	\$ 465,367	
1	9353	Instal Labor: Inst, Elec, Autom			\$ 400,000.00	\$ 400,000.00	
F	9363	Trucking Costs			\$ 144,000 \$ 12,000	s 144,000	
H	9353	Location,Permit,Damages,Survey			\$ 12,000	5 12,000	
F	9351				\$ 15,000	\$ 15,000	
F	9360				\$ 15,000	\$ 15,000	
F	9360		NU	W	\$ 13,000	\$ 13,000	
- F	9354				\$ 15,000	\$ 15,000	
-					\$ 140,000	5 140,000	
-				(R	\$ 10,000	\$ 10,000	
-	And Distance of the				5 12,000	\$ 12,000	
		the second se		2A	5 12,000	\$ 12,000	
	9356 9359 9370 9362	Fluids,Chemicals Disposal Miscelfaneous Consulting - Engineering	\$\$	5 - 5 -	\$ 10,000 \$ 12,000 \$ 12,000 \$ 12,000 \$ 12,000	s 1	10,000 2,000 2,000 2,000



AFE#: NM0187 R1

Date: Oct 8, 2021

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

This Authroity 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:	Braden Harris	Date:	Oct 6, 2021
Name:		Title:	V.P. of Drilling & Completions
Signature:	Kevin Hayes	Date:	Oct 7, 2021
Name:		Title:	C.F.O.
Signature:	Peter J. Sellie	Date:	Oct 8, 2021
Name:	Peter Lellis	Title:	President & C.E.O.
WI Owner:		Date:	
Approved By:		Title:	
Printed Name:			



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 produciton 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 propant. Pad Facility design consistent with a Merchant syle battery. Cost associated with off pad Power Lines or Pipelines is not included in this AFE.

	TANGIBL	E COSTS	Dry Hole	Completion	Facility	Total
Tangible Drilli	ng - 01	1	\$ 1,304,598.00	s .	s -	\$ 1,304,1
	9412	Intermediate 1 Casing	\$ 686,521	s -	s .	\$ 68
	9404-1	Wellhead & Equipment	\$ 43,977	\$.	\$ -	s .
	9401	Surface Casing	\$ 118,387	s .	s -	\$ 11
	9402	Production Casing	\$ 455,713	s .	s -	\$ 45
Tangible Com	pletion - 02	3	s -	\$ 46,382.00	s -	\$ 46,3
	9404-2	Wellhead & Equipment	s -	\$ 46,382	\$ -	\$ 4
Tangible Facili	ity - 03	ş	s -	s -	\$ 500,000.00	\$ 500,0
	9421	Production Battery \$	s -	\$ -	\$ 18,000	S 1
	9416	Valves & Fittings \$	s .	5 -	\$ 145,000	S 14
	9408	Vessels \$	5 -	s -	\$ 150,000	\$ 15
	9418	Gas Meter S	5 -	\$ -	\$ 6,000	\$
	9407	Tanks \$	5 -	s -	\$ 25,000	
	9424	Vapor Recovery Unit \$		ş .	\$ 22,000	\$ 2
	9423	COMM- SCADA/Radio/Telecom \$		ş .	\$ 6,000	
	9419	Flare S	-	s .	\$ 6,000	\$
	9420	Pumps-Surface \$	-	\$ -	\$ 35,000	\$ 3
	9490	Miscellaneous \$	-	s -	\$ 12,000	
	9417	Electrical \$	-	\$ -	\$ 75,000	
	TOTAL TANGIB	LE COSTS >>> \$	1,304,598.00	\$ 46,382.00		1921

INTANGIBLE COSTS		Dry Hole	Completion	Facility		Total		
tangible Drillin	g - 01		\$ 2,996,873.00	s -	- \$	- \$	\$ 2,996,873.00	
	9205	Drilling Overhead	\$ 6,157	\$	- \$	- S	6,15	
	9239	Company Supervision	\$ 3,025	\$	- \$	- \$	3,025	
	9233	Mud - Diesel	\$ 91,746	\$	- \$	- S	91,746	
	9211	Location & Roads	\$ 46,818	s	- \$	- \$	46,818	
	9206	Contract Labor	\$ 36,695	\$	- S	- 5	36,695	
	9290	Contingency (5%)	\$ 142,327	\$	- \$	- S	142,327	
	9202	Drilling - Daywork	\$ 571,653	\$	- \$	- S	571,653	
	9215	Transportation	\$ 10,550	\$	- \$	- \$	10,550	
	9234	Solids Control / Closed Loop	\$ 99,735	\$	- \$	- \$	99,735	
	9229	Geosteering Services	\$ 4,984	\$	- S	- 5	4,984	
	9219	Bits & BHA	\$ 127,618	5	- S	- 5	127,618	
	9236	Safety & Enviornmental	\$ 5,550	\$	- \$	- 5	5,550	
	9224	Fuel	\$ 197,140	\$	- \$	- \$	197,140	
	9207	Permits, surveys, land & legal	\$ 43,255	\$	- S	- \$	43,255	
	9222	Consulting Services	\$ 140,711	\$	- s	- 5	140,711	



AFE#: NM0194 R1

Date: Oct 8, 2021

	9230	Mud - Drill Wate	\$ 32,021	s		ls
	9208	Cementing & Services		- 18 D	- \$ - \$	- \$ 32,021 - \$ 217,005
	9212	Equipment Renta	1000 000 CONTRACTOR		- s	- \$ 217,005 - \$ 158,475
	9228	Mudlogging & Services			- s	- \$ 15,753
	9203	Drilling - Rig Move	/		5	- \$ 97,588
	9231	Mud - Brine			5	- \$ 17,073
	9204	Directiona	as and a second s		s	- \$ 401,869
	9232	Mud - Auxillary	- 2018 - 2018 - 2018 - 2018 - 2018 - 2018 - 2018 - 2018 - 2018 - 2018 - 2018 - 2018 - 2018 - 2018 - 2018 - 2018		s	- \$ 22,748
	9217	Inspection & Testing	\$ 25,848	s .	\$	- \$ 25,848
	9235	Disposa	\$ 162,766	\$.	\$	- \$ 162,766
	9218	Casing Services	\$ 101,426	s -	\$	- \$ 101,426
	9220	Insurance	\$ 5,275	s -	\$	\$ 5,275
	9237	Mancamp	\$ 53,952	s -	s	- \$ 53,952
	9209	Mud - Chemicals & Engineering	\$ 157,110	s -	S	- \$ 157,110
ngible Complet	lion - 02		s -	\$ 4,719,301.00	\$	- \$ 4,719,301.00
	9328	Company Supervision	s -	\$ 6,277	\$	\$ 6,277
	9322	Consulting Services	s -	\$ 120,527	\$	\$ 120,527
	9307	Water Disposal	s -	\$ 64,656	\$	\$ 64,656
ļ	9330	Mancamp		\$ 32,077	\$	\$ 32,077
ļ	9314	Stimulation		\$ 749,050	\$	\$ 749,050
	9306	Contract Labor		\$ 76,858	\$	\$ 76,858
ļ	9336	Contingency (10%)	s -	\$ 237,112	\$	\$ 237,112
-	9332	Chemicals	s .	\$ 337,073	\$	\$ 337,073
-	9325	Wireline/Perforating	74	\$ 468,483	\$	\$ 468,483
ŀ	9327	Flowback/Testing		\$ 99,698	\$.	\$ 99,698
H	9311	Location, Permit & Damages		\$ 17,353	\$.	\$ 17,353
	9326 9313	Coll Tubing Unit	A33	\$ 49,156	\$ -	\$ 49,156
H	9313	Rental Equipment - Downhole		\$ 21,795	\$	\$ 21,795
ŀ	9312	Rental Equipment - Surface		\$ 425,133	5 -	\$ 425,133
H	9305	Completion Overhead Packers, Frac Plugs & Accessories	23	\$ 10,932	<u>s</u>	\$ 10,932
ŀ	9315	Packers, Frac Plugs & Accessories Transportation		\$ 67,204	<u>s</u>	\$ 67,204
H	9321	Roustabout Services		\$ 18,348 \$ 3,165	\$ -	\$ 18,348
	9331	Pump Down Services	1953	\$ 3,165 \$ 67,520	\$	\$ 3,165
ŀ	9337	Sand		the second s	\$ \$	\$ 67,520
F	9304	Safety & Environmental		\$ 539,922 \$ 10,545		\$ 539,922
	9309				s -	\$ 10,545 \$ 676,598
	9343	WTR - AEP Water Recycle				
	9339	WTR - Brackish Water		\$ 24,533 \$ 465,367	1711	\$ 24,533 \$ 465,367
F	9340			\$ 6,469		\$ 6,469
L L	9346			\$ 123,450		\$ 123,450
ngible Facility - (03		1.1			
	9354	Instal-Labor: Welding			\$ 15,000	\$ 15,000
	9356	Fluids,Chemicals			\$ 10,000	\$ 10.000
F	9357	Location,Permit,Damages,Survey	25 UT-4	V4. 1111	\$ 15,000	\$ 15.000
	9359	Disposal	s -		\$ 12,000	\$ 12,000
	9353	Instal Labor: Inst, Elec, Autom	s -		\$ 144,000	Contraction of the second s
	9363	Trucking Costs	s -		\$ 12,000	\$ 12,000
	9362	Consulting - Engineering	\$ -	s -	\$ 12,000	\$ 12,000
	9360	Surface Rental	\$ -	s -	\$ 13,000	\$ 13,000
	9370	Miscellaneous	\$ - :	5 -	\$ 12,000	\$ 12,000
	9351	Installation Costs - Supervision	\$ - :	Б -	\$ 15,000	\$ 15,000
	9352	Instal-Labor Mechanical	s - :	Б –	\$ 140,000	\$ 140.000



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 Authroity 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:	Braden Harris	Date:	Oct 6, 2021
Name:		Title:	V.P. of Drilling & Completions
Signature:	Kain Haye	Date:	Oct 7, 2021
Name:		Title:	C.F.O.
Signature:	Peter Lellis	Date:	Oct 8, 2021
Name:		Title:	President & C.E.O.
WI Owner:		Date:	
Approved By:		Title:	
Printed Name:			



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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 produciton 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 propant. Pad Facility design consistent with a Merchant syle battery. Cost associated with off pad Power Lines or Pipelines is not included in this AFE.

	TANGIBL	E COSTS		Dry Hole		Completion		Facility		Total
Tangible Drillin	g - 01		\$	1,315,947.00	\$		\$		s	1,315,947.0
	9402	Production Casing	\$	467,062	\$		\$		\$	467,06
	9404-1	Wellhead & Equipment	\$	43,977	\$	-	\$		\$	43,97
	9412	Intermediate 1 Casing	s	686,521	s	-	5		s	686,52
	9401	Surface Casing	\$	118,387	\$		\$		s	118,387
Tangible Comp	letion - 02		\$		\$	46,382.00	\$		s	46,382.00
	9404-2	Wellhead & Equipment	\$		\$	46,382	\$	-	s	46,382
Tangible Facilit	y - 03		\$		\$		\$	500,000.00	\$	500,000.00
	9490	Miscellaneous	\$		\$		s	12,000		12,000
	9418	Gas Meter	s		\$	2	\$	6,000	s	6,000
	9417	Electrical	s		\$		\$	75,000	1245	75,000
	9423	COMM- SCADA/Radio/Telecom	\$		\$		\$	6,000	\$	6,000
	9420	Pumps-Surface	\$	-	\$		\$	35,000	s	35,000
	9416	Valves & Fittings	\$		\$		\$	145,000	\$	145,000
	9407	Tanks	s		\$	-	\$	25,000	s	25,000
	9421	Production Battery	s		\$		\$	18,000	-	18,000
	9408	Vessels	\$		\$		\$	150,000	10	150,000
	9424	Vapor Recovery Unit	\$		\$	-	\$	22,000	-	22,000
	9419	Flare	\$		\$	-	\$	6,000	-	6,000
	TOTAL TANGIB	LE COSTS >>>	5	1,315,947.00	s	46,382.00	s	500,000.00	<u> </u>	1,862,329.00

	INTANGIB	LE COSTS	Dry Hole	Completion	Facility		Total
Intangible Drillin	ıg - 01		\$ 3,018,638.00	s	- \$	- \$	3,018,638.00
	9203	Drilling - Rig Move	\$ 97,588	\$	- \$	- 5	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	\$	- S	- 5	407,849
	9212	Equipment Rental	\$ 160,193	\$	- \$	- 5	160,193
	9232	Mud - Auxillary S	\$ 22,818	\$	- \$	- S	22,818
	9218	Casing Services	\$ 101,426	s	- \$	- 5	101,426
	9209	Mud - Chemicals & Engineering \$	5 157,532	\$	- \$	- \$	157,532
	9236	Safety & Enviornmental \$	5,581	s	- \$	- \$	5,581
	9219	Bits & BHA \$	127,816	\$	- \$	- \$	127,816
	9234	Solids Control / Closed Loop \$	99,942	\$	- \$	- 5	99,942
	9224	Fuel \$	199,446	\$	- \$	- 5	199,446
	9202	Drilling - Daywork \$	578,898	s	- S	- 5	578,898

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Date: Oct 8, 2021

	9229	0		1.		
	9229	Geosteering Services			- \$	- \$ 5,154
	9215	Transportation			- \$	- \$ 25,848
	9206	Contract Labor			- \$ - \$	- \$ 10,550
	9228	Mudlogging & Services			- 5	- \$ 36,695 - \$ 16,147
	9211	Location & Roads	 502 USR05010182 		. \$	
	9220	Insurance			. s	- \$ 46,792 - \$ 5,275
	9230	Mud - Drill Water		150	· s	- \$ 5,275 - \$ 32,021
	9233	Mud - Diesel	a total a calendaria		s	
	9290	Contingency (5%)			s	- \$ 91,746 - \$ 143,354
	9239	Company Supervision	1.00.157.000 ·	s .	s	- \$ 3,044
	9237	Mancamp		s .	s	- \$ 54,341
	9208	Cementing & Services			s	- \$ 217,005
	9207	Permits, surveys, land & legal		s .	s	- \$ 43,255
gible Completi	ion - 02		s -	\$ 4,923,784.00		- \$ 4,923,784.00
	9321	Roustabout Services		\$ 3,165		- \$ 3,165
T T	9312	Rental Equipment - Surface		\$ 448,450	s	- \$ 448,450
Ē	9307	Water Disposal		\$ 64,656	s	- \$ 64,656
t t	9305	Completion Overhead		\$ 11,195	s	- \$ 11,195
t t	9306	Contract Labor	161	\$ 76,858	\$	\$ 76,858
ł	9331	Pump Down Services		\$ 70,685	s	- \$ 70,685
t t	9337	Sand	5 -	\$ 570,340	s	\$ 570,340
L I	9330	Mancamp	s -	\$ 32,480		\$ 32,480
	9309	Fuel	s .	\$ 714,472	s	\$ 714,472
	9304	Safety & Environmental	s -	\$ 10,545	10 ⁴	\$ 10,545
	9313	Rental Equipment - Downhole		\$ 21,795	\$	\$ 21,795
L L	9314	Stimulation		\$ 791,250		\$ 791,250
F	9325	Wireline/Perforating	s -	\$ 494,858	s .	\$ 494,858
	9322	Consulting Services	s .	\$ 124,563	s .	\$ 124,563
	9336	Contingency (10%)	s -		5 -	\$ 248,579
	9328	Company Supervision	\$-	\$ 6,317	1991	\$ 6,317
	9311	Location, Permit & Damages	\$		s .	\$ 17,353
	9326	Coil Tubing Unit	s -	\$ 51,926	\$ -	\$ 51,926
	9332	Chemicals	S -	\$ 356,063	s -	\$ 356,063
	9315	Transportation	s -	\$ 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	s -	\$ 123,450
	9339	WTR - Brackish Water	\$ -	\$ 465,367	S -	\$ 465,367
L	9343	WTR - AEP Water Recycle	s -	\$ 24,533	\$ -	\$ 24,533
	9340	WTR - Fresh Water	\$ -	\$ 6,469	\$ -	\$ 6,469
pible Facility - 0	26 J		\$-	\$-	\$ 400,000.00	\$ 400,000.00
L	9359			s -	\$ 12,000	\$ 12,000
	9351	Installation Costs - Supervision		s -	\$ 15,000	\$ 400,000.00 \$ 12,000 \$ 15,000 \$ 15,000 \$ 12,000 \$ 13,000 \$ 10,000 \$ 12,000 \$ 12,000 \$ 144,000 \$ 15,000 \$ 140,000 \$ 15,000
	9362	Consulting - Engineering		s -	\$ 12,000	\$ 12,000
L	9360	Surface Rental	\$-	\$	\$ 13,000	\$ 13,000
L	9356	Fluids,Chemicals	33) C.C. (s -	\$ 10,000	\$ 10,000
L	9370	Miscellaneous		\$-	\$ 12,000	\$ 12,000
L	9353	Instal Labor: Inst,Elec,Autom		s -	\$ 144,000	\$ 144,000
	9354	Instal-Labor: Welding	2.2		\$ 15,000	\$ 15,000
	9363	Trucking Costs		Б -	\$ 12,000	\$ 12,000
	9352		\$- 5	5 -	\$ 140,000	\$ 140,000
	9357	Location,Permit,Damages,Survey	\$ - 3	5 -	\$ 15,000	\$ 15,000

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Date: Oct 8, 2021

TOTAL INTANGIBLE COSTS >>>	s	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 Authroity 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: Title:	Oct 6, 2021 V.P. of Drilling & Completions
Signature: Name:	Kaun Hays Kevin Hayes	Date: Title:	Oct 7, 2021 C.F.O.
Signature: Name:	Peter J. Sellie Peter Lellis	Date: Title:	Oct 8, 2021 President & C.E.O.
			J
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

November 3, 2021

WRITER:

Dana S. Hardy, Partner dhardy@hinklelawfirm.com

<u>VIA CERTIFIED MAIL RETURN RECEIPT REQUESTED</u>

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: <u>https://www.emnrd.nm.gov/ocd/hearing-info/</u>. 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/ocd/ocdpermitting/) 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

ADVANCE ENERGY PARTNERS HAT MESA, LLC Case No. 22324 Exhibit A-6

Enclosure

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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

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PS Form 3811, July 2015 PSN 7530-02-000-9053

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70 of 75 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.

Black

Business Manager

My commission expires January 29, 2023



11/30/2021 1:39:38 PM NUMBER OF THE REPORT OF THE PARTY OF THE PAR This newspaper is duly qualified to publish legal notices or advertisements within the Received by OCL meaning of Section 3, Chapter 167, Laws of 1937 and payment of fees for said

LEGAL

LEGAL

LEGAL NOTICE November 14, 2021

LEGAL

("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 13 to a bottom hole 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 13 to a bottom hole 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 13 to a bottom hole 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 into a standard horizontal well spacing unit. The Wells are located approximately twenty-seven (27) miles west of Eunice, New Mexico.

02107475

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

00260672



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

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ADVANCE ENERGY ARTNERS HAT MESA, LLC Case No. 22324 Exhibit B

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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.

I understand this Self-Affirmed Statement will be used as written testimony in these 10. 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 tomy signature below.

Edward Caamano

11/18/21 Date

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Exhibit B-1

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



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ADVANCE ENERGY ARTNERS HAT MESA, LLC Case No. 22324





4

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Exhibit B-3 CROSS SECTION A – A'



