

Well Name: ANDERSON FED COM	Well Location: T22S / R32E / SEC 2 / LOT 1 /	County or Parish/State:
Well Number: 508H	Type of Well: OIL WELL	Allottee or Tribe Name:
Lease Number: NMNM120905	Unit or CA Name:	Unit or CA Number:
US Well Number:	Well Status: Approved Application for Permit to Drill	Operator: ADVANCE ENERGY PARTNERS HAT MESA LLC

Notice of Intent

Sundry ID: 2636154

Type of Submission: Notice of Intent Type of Action: Other

Date Sundry Submitted: 09/27/2021 Time Sundry Submitted: 03:05

Date proposed operation will begin: 10/15/2021

Procedure Description: Request to move Surface Hole Location from 630' FNL & 1090' FEL, Section 2, T-22-S, R-32-E, Lot 1 to 630' FNL & 1057' FEL, Section 2, T-22-S, R-32-E, Lot 1. Request to move Bottom Hole Location from 1220' FSL & 990' FEL, Section 26, T-21-S, R-32-E, SESE to 1220' FSL & 330' FEL, Section 26, T-21-S, R-32-E, SESE. Please see attached drill plan, directional plan, and plats for detailed information regarding changes to casing, cement, and mud programs.

Surface Disturbance

Is any additional surface disturbance proposed?: No

NOI Attachments

Procedure Description

Anderson_508H_SHL_BHL_etc_Sundry_Attachment_20210927150440.pdf

Well Name: ANDERSON FED COM	Well Location: T22S / R32E / SEC 2 / LOT 1 /	County or Parish/State:
Well Number: 508H	Type of Well: OIL WELL	Allottee or Tribe Name:
Lease Number: NMNM120905	Unit or CA Name:	Unit or CA Number:
US Well Number:	Well Status: Approved Application for Permit to Drill	Operator: ADVANCE ENERGY PARTNERS HAT MESA LLC

Operator Certification

I certify that the foregoing is true and correct. Title 18 U.S.C. Section 1001 and Title 43 U.S.C. Section 1212, make it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction. Electronic submission of Sundry Notices through this system satisfies regulations requiring a submission of Form 3160-5 or a Sundry Notice.

Operator Electronic Signature: BRIAN WOOD	Signed on: SEP 27, 2021 03:04 PM
Name: ADVANCE ENERGY PARTNERS HAT MESA LLC	
Title: President	
Street Address: 37 VERANO LOOP	
City: SANTA FE	State: NM
Phone: (505) 466-8120	
Email address: AFMSS@PERMITSWEST.COM	

Field Representative

Representative Name:		
Street Address:		
City:	State:	Zip:
Phone:		
Email address:		

BLM Point of Contact

BLM POC Name: CHRISTOPHER WALLS	BLM POC Title: Petroleum Engineer
BLM POC Phone: 5752342234	BLM POC Email Address: cwalls@blm.gov
Disposition: Approved	Disposition Date: 10/13/2021
Signature: Chris Walls	

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

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

DISTRICT III
1000 Rio Brazos Rd., Aztec, NM 87410
Phone (505) 334-6178 Fax: (505) 334-6170

DISTRICT IV
1220 S. St. Francis Dr., Santa Fe, NM 87505
Phone (505) 476-3480 Fax: (505) 476-3482

State of New Mexico
Energy, Minerals and Natural Resources Department

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

Form C-102

Revised August 4, 2011

Submit one copy to appropriate
District Office

WELL LOCATION AND ACREAGE DEDICATION PLAT

☐ AMENDED REPORT

API Number 30-025-	Pool Code 51683	Pool Name RED TANK; BONE SPRING
Property Code	Property Name ANDERSON FED COM	Well Number 508H
OGRID No. 372417	Operator Name ADVANCE ENERGY PARTNERS HAT MESA, LLC	Elevation 3658'

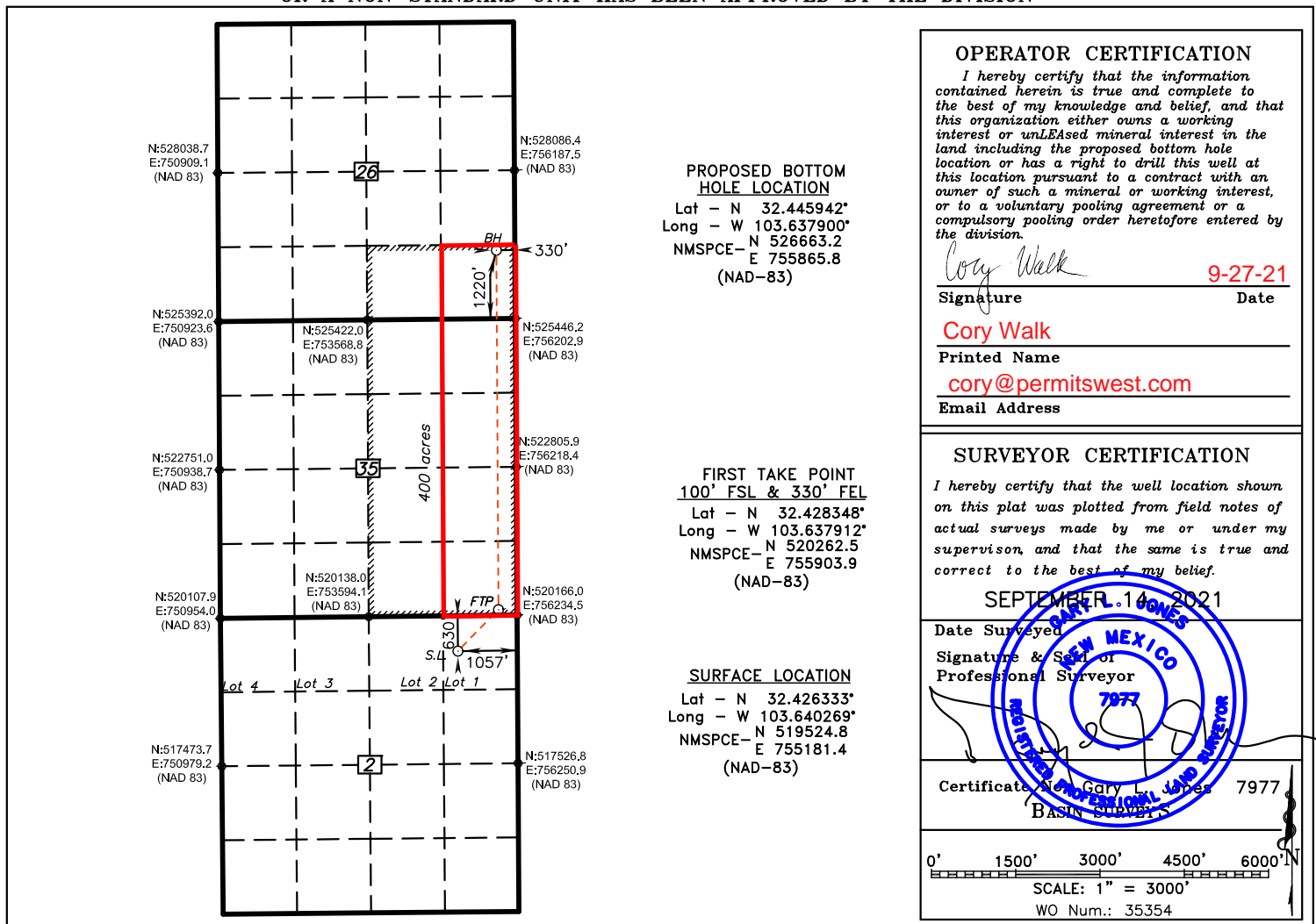
Surface Location

UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	SOUTH/South line	Feet from the	East/West line	County
LOT 1	2	22 S	32 E		630	NORTH	1057	EAST	LEA

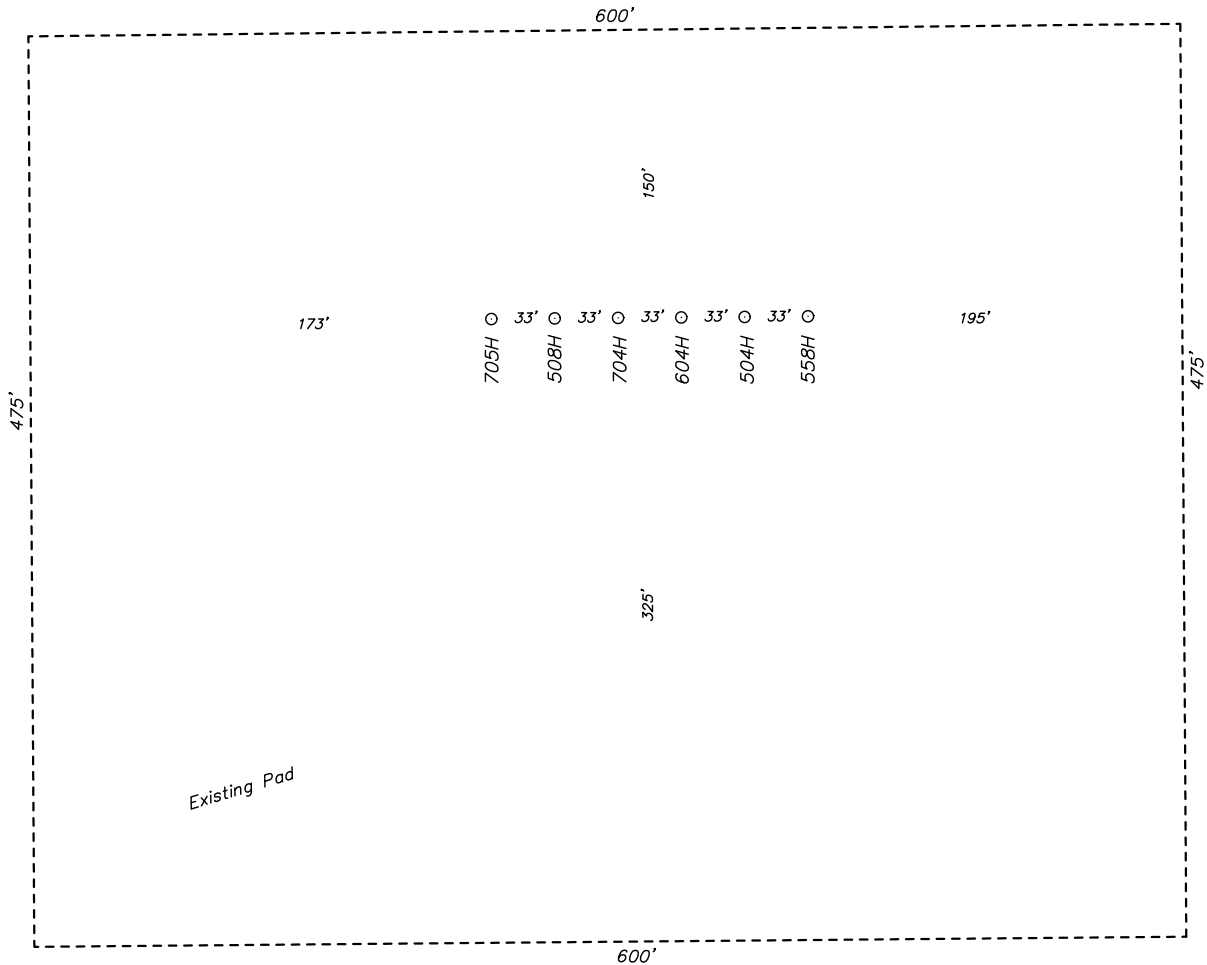
Bottom Hole Location If Different From Surface

UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	SOUTH/South line	Feet from the	East/West line	County
P	26	21 S	32 E		1220	SOUTH	330	EAST	LEA
Dedicated Acres 200	Joint or Infill	Consolidation Code C	Order No.						

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



**SECTION 2, TOWNSHIP 22 SOUTH, RANGE 32 EAST. N.M.P.M.,
LEA COUNTY, NEW MEXICO.**



basin
surveys
focused on excellence
in the oilfield

P.O. Box 1786 (575) 393-7316 - Office
1120 N. West County Rd. (575) 392-2206 - Fax
Hobbs, New Mexico 88241 basin-surveys.com

100 0 100 200 FEET
SCALE: 1" = 100'

ADVANCE ENERGY PARTNERS HAT MESA, LLC

REF: ANDERSON FED COM 508H / WELL PAD TOPO

THE ANDERSON FED COM 508H LOCATED 630' FROM
THE NORTH LINE AND 1057' FROM THE EAST LINE OF
SECTION 2, TOWNSHIP 22 SOUTH, RANGE 32 EAST.

N.M.P.M., LEA COUNTY, NEW MEXICO.

W.O. Number: 35354 Drawn By: K. GOAD Date: 09-14-2021 Survey Date: 09-14-2021 Sheet 1 of 1 Sheets

CHANGE TO PLANS

Move Surface Hole Location

From: 630' FNL & 1090' FEL, Section 2, T-22-S, R-32-E, Lot 1

To: 630' FNL & 1057' FEL, Section 2, T-22-S, R-32-E, Lot 1

Move First Take Point

From: 100' FSL & 990' FEL, Section 35, T-21-S, R-32-E, SESE

To: 100' FSL & 330' FEL, Section 35, T-21-S, R-32-E, SESE

Move Bottom Hole Location

From: 1220' FSL & 990' FEL, Section 26, T-21-S, R-32-E, SESE

To: 1220' FSL & 330' FEL, Section 26, T-21-S, R-32-E, SESE

Target Formation

From: 2nd Bone Spring sandstone

To: 1st Bone Spring sandstone

Please see attached drill plan, directional plan, and plats for additional information.

Advance Energy Partners Hat Mesa, LLC
 Anderson Fed Com 508H
 SHL 630' FNL & 1057' FEL Section 2, T22S, R32E
 BHL 1220' FSL & 330' FEL Section 26, T21S, R32E
 Lea County, NM

DRILL PLAN PAGE 1

Drilling Program

1. ESTIMATED TOPS

Formation Name	TVD	MD	Bearing
Quaternary caliche	000'	000'	water
Rustler anhydrite (surface csg set @ 1218')	1193'	1193'	N/A
Salado salt	1348'	1348'	Salt
Tansil limestone (Intermediate csg set @ TVD 4720')	3259'	3259'	N/A
Bell Canyon sandstone	4770'	4770'	hydrocarbons
Lower Brushy Canyon sandstone	8417'	8434'	hydrocarbons
Bone Spring Lime	8744'	8754'	hydrocarbons
Avalon shale	8937'	8957'	Hydrocarbons
KOP	9923'	9973'	hydrocarbons
1 st Bone Spring sandstone	9804'	9833'	hydrocarbons
TD	10200'	16986'	hydrocarbons

2. NOTABLE ZONES

Bone Spring sand is the goal. Closest water well (CP 01701 POD 1) is 0.89 miles northwest. Depth to water was reported at 560' in the 840' deep well.

3. PRESSURE CONTROL

See attached Helmerich & Payne BOP Testing – BLM manual for equipment and procedures for a 5000-psi system.

Variance is requested to use a co-flex hose between the BOP and choke instead of a steel line. See attached 3" I. D. x 10K test certificate. If this hose is unavailable, then a hose of equal or higher-pressure rating will be used.

Advance Energy Partners Hat Mesa, LLC
 Anderson Fed Com 508H
 SHL 630' FNL & 1057' FEL Section 2, T22S, R32E
 BHL 1220' FSL & 330' FEL Section 26, T21S, R32E
 Lea County, NM

DRILL PLAN PAGE 2

Variance is requested to use a speed head (aka, multi-bowl wellhead) after setting intermediate 1. Advance has drilled >50 wells in immediate area to depths >5,000' and never encountered any type of flows. This will allow Advance to land the intermediate 1 and use the current proposed wellhead design. Advance will then NU BOPE on the 13.375" and continue using the BOPE to the completion of the well.

4. CASING & CEMENT

Name	Hole OD	Casing OD	Tapered	Top MD	Bottom MD	Top TVD	BTM TVD	Grade	Weight	Thread	Collapse	Burst	Tension
Surface	17.5"	13.375"	No	0	1218	0	1218	J-55	54.5	BTC	1.125	1.125	1.6
1st Intermediate	12.25"	9.625"	No	0	4000	0	4000	J-55	40	LTC	1.125	1.125	1.6
1st Intermediate	12.25"	9.625"	No	4000	4720	4000	4720	HCL-80	40	LTC	1.125	1.125	1.6
Production	8.75"	5.5"	No	0	16986	0	10200	HCP-110	20	CDC-HTQ	1.125	1.125	1.6

All casing will be API and new. See attached casing assumption worksheet.

Variance is requested for an option to use a surface rig to drill the surface hole and set and cement the surface casing. If time between rigs would not be allow presetting the surface casing, then the primary rig will drill all of the well.

Cement additive names in following table are West Texas Cementers trade names. They, or equivalent, products will be used.

Advance Energy Partners Hat Mesa, LLC
 Anderson Fed Com 508H
 SHL 630' FNL & 1057' FEL Section 2, T22S, R32E
 BHL 1220' FSL & 330' FEL Section 26, T21S, R32E
 Lea County, NM

DRILL PLAN PAGE 3

Name	Type	Top MD	Sacks	Yield	Cu. Ft	Weight	Excess	Cement	Additives
Surface	Lead	0	505	1.9	960	12.8	50%	B Poz + C	6% Gel + 5% SALT + 0.25PPS Pol-E-Flake + 0.005GPS NoFoam V1A
	Tail	918	215	1.35	290	14.8	20%	C	2% CaCl ₂ + 0.005GPS NoFoam V1A
1st Intermediate (stage 1)	Lead	2800	1380	1.84	2539	12.8	727%	B Poz + C	2% Gel + 5% SALT + 0.15% R1300 + 0.25PPS Pol-E-Flake + 0.005GPS NoFoam V1A
	Tail	3776	275	1.37	377	14.8	20%	C	5% SALT + 0.005GPS NoFoam V1A
1st Intermediate (stage 2)	Lead	0	460	3	1380	11	153%	Prolite	5PPS Plexcrete STE + 2% SMS + 0.05% SuspendedCem 6302 + 0.5% C-47B + 3PPS Gilsonite + 0.005GPS NoFoam V1A
	Tail	2395	100	1.33	133	14.8	0%	C	0.005GPS NoFoam V1A
Production	Lead	0	900	3.39	3051	10.7	50%	Prolite	5PPS Plexcrete STE + 2% SMS + 0.05% SuspendedCem 6302 + 0.4% R-1300 + 0.5% C-47B + 3PPS Gilsonite + 0.005GPS NoFoam V1A
	Tail	9973	1595	1.22	1946	14.5	20%	B Poz + H	5% SALT + 0.05% SuspendedCem 6302 + 0.65% C-20 + 0.5% C-47B + 0.005GPS NoFoam V1A

Note: Intermediate 1 is a two-stage cement job. DVT will be placed at approximately 2,800'.

5. MUD PROGRAM

An electronic pit volume totalizer (PVT) will be used to monitor volume, flow rate, pump pressure, and stroke rate. All necessary additives (e. g., barite, bentonite, LCM) to maintain mud properties and meet minimum lost circulation and weight increase needs will be on site at all times. Mud program may change due to hole conditions. A closed loop system will be used.

Name	Top	Bottom	Type	Mud Weight (ppg)	Visc	Fluid Loss
Surface	0	1218	FW Spud Mud	8.4 - 10.0	28 - 36	NC
Intermediate 1	1218	4770	Brine Water	10.0 - 10.5	28 - 32	NC
Production	4770	9973	Cut Brine	9.2 - 9.5	28 - 30	NC
Production	9973	16986	OBM	9.5 - 9.8	55 - 65	6 - 8

Advance Energy Partners Hat Mesa, LLC
Anderson Fed Com 508H
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BHL 1220' FSL & 330' FEL Section 26, T21S, R32E
Lea County, NM

DRILL PLAN PAGE 4

6. CORES, TESTS, & LOGS

No core, drill stem test, or open hole log is planned.

7. DOWN HOLE CONDITIONS

No abnormal pressure or temperature is expected. Maximum expected bottom hole pressure is ≈ 5427 psi. Expected bottom hole temperature is $\approx 218^{\circ}$ F.

H2S monitoring and detection equipment will be used from surface casing point to TD.

8. OTHER INFORMATION

Anticipated spud date is upon approval. It is expected it will take ≈ 3 -4 months to drill and complete the well.

**WELL DETAILS: Anderson Fed Com 508H**

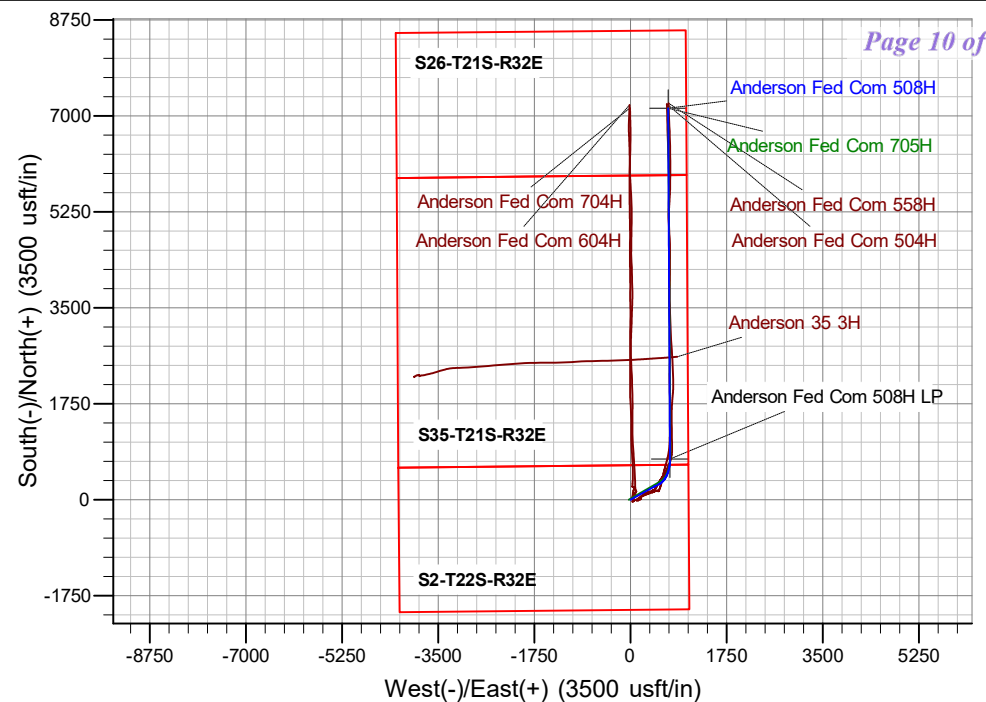
Ground Elev: 3658.0 KB: 3690.5

+N/-S	+E/-W	Northing	Easting	Latitude	Longitude
0.0	0.0	519524.63	755181.35	32° 25' 34.799 N	103° 38' 24.968 W

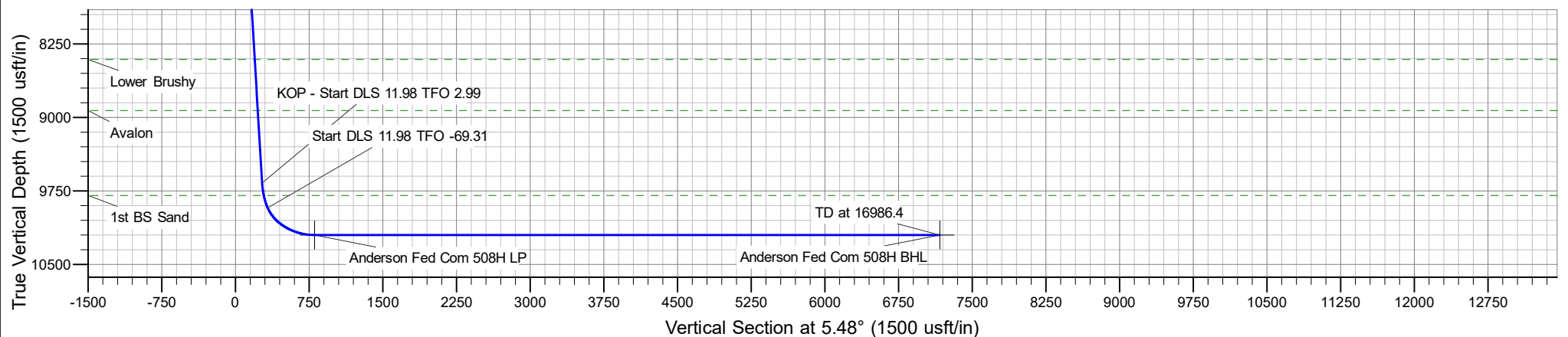
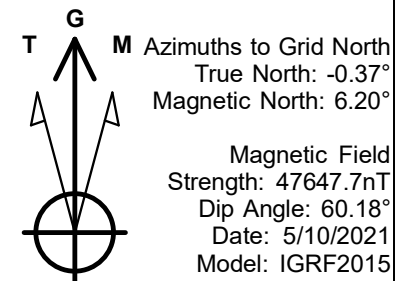
PROJECT DETAILS: Hat Mesa

Geodetic System: US State Plane 1983
 Datum: North American Datum 1983
 Ellipsoid: GRS 1980
 Zone: New Mexico Eastern Zone

System Datum: Mean Sea Level

**SECTION DETAILS**

Sec	MD	Inc	Azi	TVD	+N/-S	+E/-W	Dleg	TFace	Vsect	Annotation
1	0.0	0.00	0.00	0.0	0.0	0.0	0.00	0.00	0.0	
2	4800.0	0.00	0.00	4800.0	0.0	0.0	0.00	0.00	0.0	KOP - Start Build 1.00
3	5400.0	6.00	61.00	5398.9	15.2	27.5	1.00	61.00	17.8	Start 4293.6 hold at 5400.0 MD
4	9693.6	6.00	61.00	9669.0	232.8	420.0	0.00	0.00	271.8	KOP - Start DLS 11.98 TFO 2.99
5	9973.1	39.48	63.60	9923.1	280.8	515.1	11.98	2.99	328.6	Start DLS 11.98 TFO -69.31
6	10588.7	90.00	359.67	10200.0	741.0	717.3	11.98	-69.31	806.1	LP - Start DLS 0.00 TFO 90.00
7	16986.4	90.00	359.74	10200.0	7138.6	684.5	0.00	90.00	7171.3	TD at 16986.4





Advance Energy Partners

Hat Mesa

Anderson Fed Com - Pad A

Anderson Fed Com 508H

Anderson Fed Com 508H

Plan: Anderson Fed Com 508H

Standard Planning Report

23 September, 2021



Planning Report

Database:	EDM 5000.16 Single User Db	Local Co-ordinate Reference:	Well Anderson Fed Com 508H
Company:	Advance Energy Partners	TVD Reference:	WELL @ 3690.5usft (Original Well Elev)
Project:	Hat Mesa	MD Reference:	WELL @ 3690.5usft (Original Well Elev)
Site:	Anderson Fed Com - Pad A	North Reference:	Grid
Well:	Anderson Fed Com 508H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Anderson Fed Com 508H		
Design:	Anderson Fed Com 508H		

Project	Hat Mesa, Lea County, NM		
Map System:	US State Plane 1983	System Datum:	Mean Sea Level
Geo Datum:	North American Datum 1983		
Map Zone:	New Mexico Eastern Zone		

Site		Anderson Fed Com - Pad A			
Site Position:		Northing:	519,525.43 usft	Latitude:	32° 25' 34.802 N
From:	Lat/Long	Easting:	755,247.69 usft	Longitude:	103° 38' 24.194 W
Position Uncertainty:	0.0 usft	Slot Radius:	13-3/16 "		

Well	Anderson Fed Com 508H					
Well Position	+N/-S	0.0 usft	Northing:	519,524.63 usft	Latitude:	32° 25' 34.799 N
	+E/-W	0.0 usft	Easting:	755,181.35 usft	Longitude:	103° 38' 24.968 W
Position Uncertainty		0.0 usft	Wellhead Elevation:	usft	Ground Level:	3,658.0 usft
Grid Convergence:		0.37 °				

Wellbore	Anderson Fed Com 508H				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2015	5/10/2021	6.58	60.18	47,647.67785295

Design	Anderson Fed Com 508H			
Audit Notes:				
Version:	Phase:	PROTOTYPE	Tie On Depth:	0.0
Vertical Section:	Depth From (TVD) (usft)	+N/-S (usft)	+E/-W (usft)	Direction (°)
	0.0	0.0	0.0	5.48

Plan Survey Tool Program	Date	9/23/2021		
Depth From (usft)	Depth To (usft)	Survey (Wellbore)	Tool Name	Remarks
1	0.0	16,986.4	Anderson Fed Com 508H (Ander	MWD+HRGM
				OWSG MWD + HRGM

Plan Sections										
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)	TFO (°)	Target
0.0	0.00	0.00	0.0	0.0	0.0	0.00	0.00	0.00	0.00	
4,800.0	0.00	0.00	4,800.0	0.0	0.0	0.00	0.00	0.00	0.00	
5,400.0	6.00	61.00	5,398.9	15.2	27.5	1.00	1.00	0.00	61.00	
9,693.6	6.00	61.00	9,669.0	232.8	420.0	0.00	0.00	0.00	0.00	
9,973.1	39.48	63.60	9,923.1	280.8	515.1	11.98	11.98	0.93	2.99	
10,588.7	90.00	359.67	10,200.0	741.0	717.3	11.98	8.21	-10.38	-69.31	Anderson Fed Com 5
16,986.4	90.00	359.74	10,200.0	7,138.6	684.5	0.00	0.00	0.00	90.00	Anderson Fed Com 5



Planning Report

Database:	EDM 5000.16 Single User Db	Local Co-ordinate Reference:	Well Anderson Fed Com 508H
Company:	Advance Energy Partners	TVD Reference:	WELL @ 3690.5usft (Original Well Elev)
Project:	Hat Mesa	MD Reference:	WELL @ 3690.5usft (Original Well Elev)
Site:	Anderson Fed Com - Pad A	North Reference:	Grid
Well:	Anderson Fed Com 508H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Anderson Fed Com 508H		
Design:	Anderson Fed Com 508H		

Planned Survey									
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
0.0	0.00	0.00	0.0	0.0	0.0	0.0	0.00	0.00	0.00
100.0	0.00	0.00	100.0	0.0	0.0	0.0	0.00	0.00	0.00
200.0	0.00	0.00	200.0	0.0	0.0	0.0	0.00	0.00	0.00
300.0	0.00	0.00	300.0	0.0	0.0	0.0	0.00	0.00	0.00
400.0	0.00	0.00	400.0	0.0	0.0	0.0	0.00	0.00	0.00
500.0	0.00	0.00	500.0	0.0	0.0	0.0	0.00	0.00	0.00
600.0	0.00	0.00	600.0	0.0	0.0	0.0	0.00	0.00	0.00
700.0	0.00	0.00	700.0	0.0	0.0	0.0	0.00	0.00	0.00
800.0	0.00	0.00	800.0	0.0	0.0	0.0	0.00	0.00	0.00
900.0	0.00	0.00	900.0	0.0	0.0	0.0	0.00	0.00	0.00
1,000.0	0.00	0.00	1,000.0	0.0	0.0	0.0	0.00	0.00	0.00
1,100.0	0.00	0.00	1,100.0	0.0	0.0	0.0	0.00	0.00	0.00
1,184.5	0.00	0.00	1,184.5	0.0	0.0	0.0	0.00	0.00	0.00
Rustler									
1,200.0	0.00	0.00	1,200.0	0.0	0.0	0.0	0.00	0.00	0.00
1,300.0	0.00	0.00	1,300.0	0.0	0.0	0.0	0.00	0.00	0.00
1,400.0	0.00	0.00	1,400.0	0.0	0.0	0.0	0.00	0.00	0.00
1,500.0	0.00	0.00	1,500.0	0.0	0.0	0.0	0.00	0.00	0.00
1,600.0	0.00	0.00	1,600.0	0.0	0.0	0.0	0.00	0.00	0.00
1,700.0	0.00	0.00	1,700.0	0.0	0.0	0.0	0.00	0.00	0.00
1,800.0	0.00	0.00	1,800.0	0.0	0.0	0.0	0.00	0.00	0.00
1,900.0	0.00	0.00	1,900.0	0.0	0.0	0.0	0.00	0.00	0.00
2,000.0	0.00	0.00	2,000.0	0.0	0.0	0.0	0.00	0.00	0.00
2,100.0	0.00	0.00	2,100.0	0.0	0.0	0.0	0.00	0.00	0.00
2,200.0	0.00	0.00	2,200.0	0.0	0.0	0.0	0.00	0.00	0.00
2,300.0	0.00	0.00	2,300.0	0.0	0.0	0.0	0.00	0.00	0.00
2,400.0	0.00	0.00	2,400.0	0.0	0.0	0.0	0.00	0.00	0.00
2,500.0	0.00	0.00	2,500.0	0.0	0.0	0.0	0.00	0.00	0.00
2,600.0	0.00	0.00	2,600.0	0.0	0.0	0.0	0.00	0.00	0.00
2,700.0	0.00	0.00	2,700.0	0.0	0.0	0.0	0.00	0.00	0.00
2,800.0	0.00	0.00	2,800.0	0.0	0.0	0.0	0.00	0.00	0.00
2,900.0	0.00	0.00	2,900.0	0.0	0.0	0.0	0.00	0.00	0.00
3,000.0	0.00	0.00	3,000.0	0.0	0.0	0.0	0.00	0.00	0.00
3,100.0	0.00	0.00	3,100.0	0.0	0.0	0.0	0.00	0.00	0.00
3,200.0	0.00	0.00	3,200.0	0.0	0.0	0.0	0.00	0.00	0.00
3,300.0	0.00	0.00	3,300.0	0.0	0.0	0.0	0.00	0.00	0.00
3,400.0	0.00	0.00	3,400.0	0.0	0.0	0.0	0.00	0.00	0.00
3,500.0	0.00	0.00	3,500.0	0.0	0.0	0.0	0.00	0.00	0.00
3,600.0	0.00	0.00	3,600.0	0.0	0.0	0.0	0.00	0.00	0.00
3,700.0	0.00	0.00	3,700.0	0.0	0.0	0.0	0.00	0.00	0.00
3,800.0	0.00	0.00	3,800.0	0.0	0.0	0.0	0.00	0.00	0.00
3,900.0	0.00	0.00	3,900.0	0.0	0.0	0.0	0.00	0.00	0.00
4,000.0	0.00	0.00	4,000.0	0.0	0.0	0.0	0.00	0.00	0.00
4,100.0	0.00	0.00	4,100.0	0.0	0.0	0.0	0.00	0.00	0.00
4,200.0	0.00	0.00	4,200.0	0.0	0.0	0.0	0.00	0.00	0.00
4,300.0	0.00	0.00	4,300.0	0.0	0.0	0.0	0.00	0.00	0.00
4,400.0	0.00	0.00	4,400.0	0.0	0.0	0.0	0.00	0.00	0.00
4,500.0	0.00	0.00	4,500.0	0.0	0.0	0.0	0.00	0.00	0.00
4,600.0	0.00	0.00	4,600.0	0.0	0.0	0.0	0.00	0.00	0.00
4,700.0	0.00	0.00	4,700.0	0.0	0.0	0.0	0.00	0.00	0.00
4,762.5	0.00	0.00	4,762.5	0.0	0.0	0.0	0.00	0.00	0.00
Base of Limestone									
4,800.0	0.00	0.00	4,800.0	0.0	0.0	0.0	0.00	0.00	0.00



Planning Report

Database:	EDM 5000.16 Single User Db	Local Co-ordinate Reference:	Well Anderson Fed Com 508H
Company:	Advance Energy Partners	TVD Reference:	WELL @ 3690.5usft (Original Well Elev)
Project:	Hat Mesa	MD Reference:	WELL @ 3690.5usft (Original Well Elev)
Site:	Anderson Fed Com - Pad A	North Reference:	Grid
Well:	Anderson Fed Com 508H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Anderson Fed Com 508H		
Design:	Anderson Fed Com 508H		

Planned Survey									
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
KOP - Start Build 1.00									
4,900.0	1.00	61.00	4,900.0	0.4	0.8	0.5	1.00	1.00	0.00
5,000.0	2.00	61.00	5,000.0	1.7	3.1	2.0	1.00	1.00	0.00
5,100.0	3.00	61.00	5,099.9	3.8	6.9	4.4	1.00	1.00	0.00
5,200.0	4.00	61.00	5,199.7	6.8	12.2	7.9	1.00	1.00	0.00
5,300.0	5.00	61.00	5,299.4	10.6	19.1	12.3	1.00	1.00	0.00
5,400.0	6.00	61.00	5,398.9	15.2	27.5	17.8	1.00	1.00	0.00
Start 4293.6 hold at 5400.0 MD									
5,500.0	6.00	61.00	5,498.4	20.3	36.6	23.7	0.00	0.00	0.00
5,600.0	6.00	61.00	5,597.8	25.4	45.7	29.6	0.00	0.00	0.00
5,700.0	6.00	61.00	5,697.3	30.4	54.9	35.5	0.00	0.00	0.00
5,800.0	6.00	61.00	5,796.7	35.5	64.0	41.4	0.00	0.00	0.00
5,900.0	6.00	61.00	5,896.2	40.6	73.2	47.4	0.00	0.00	0.00
6,000.0	6.00	61.00	5,995.6	45.6	82.3	53.3	0.00	0.00	0.00
6,100.0	6.00	61.00	6,095.1	50.7	91.4	59.2	0.00	0.00	0.00
6,200.0	6.00	61.00	6,194.5	55.8	100.6	65.1	0.00	0.00	0.00
6,300.0	6.00	61.00	6,294.0	60.8	109.7	71.0	0.00	0.00	0.00
6,400.0	6.00	61.00	6,393.4	65.9	118.9	76.9	0.00	0.00	0.00
6,500.0	6.00	61.00	6,492.9	71.0	128.0	82.9	0.00	0.00	0.00
6,600.0	6.00	61.00	6,592.3	76.0	137.2	88.8	0.00	0.00	0.00
6,700.0	6.00	61.00	6,691.8	81.1	146.3	94.7	0.00	0.00	0.00
6,800.0	6.00	61.00	6,791.2	86.2	155.4	100.6	0.00	0.00	0.00
6,900.0	6.00	61.00	6,890.7	91.2	164.6	106.5	0.00	0.00	0.00
7,000.0	6.00	61.00	6,990.1	96.3	173.7	112.4	0.00	0.00	0.00
7,100.0	6.00	61.00	7,089.6	101.4	182.9	118.4	0.00	0.00	0.00
7,200.0	6.00	61.00	7,189.0	106.4	192.0	124.3	0.00	0.00	0.00
7,300.0	6.00	61.00	7,288.5	111.5	201.2	130.2	0.00	0.00	0.00
7,400.0	6.00	61.00	7,387.9	116.6	210.3	136.1	0.00	0.00	0.00
7,500.0	6.00	61.00	7,487.4	121.6	219.4	142.0	0.00	0.00	0.00
7,600.0	6.00	61.00	7,586.9	126.7	228.6	147.9	0.00	0.00	0.00
7,700.0	6.00	61.00	7,686.3	131.8	237.7	153.9	0.00	0.00	0.00
7,800.0	6.00	61.00	7,785.8	136.8	246.9	159.8	0.00	0.00	0.00
7,900.0	6.00	61.00	7,885.2	141.9	256.0	165.7	0.00	0.00	0.00
8,000.0	6.00	61.00	7,984.7	147.0	265.2	171.6	0.00	0.00	0.00
8,100.0	6.00	61.00	8,084.1	152.0	274.3	177.5	0.00	0.00	0.00
8,200.0	6.00	61.00	8,183.6	157.1	283.4	183.4	0.00	0.00	0.00
8,300.0	6.00	61.00	8,283.0	162.2	292.6	189.4	0.00	0.00	0.00
8,400.0	6.00	61.00	8,382.5	167.2	301.7	195.3	0.00	0.00	0.00
8,427.2	6.00	61.00	8,409.5	168.6	304.2	196.9	0.00	0.00	0.00
Lower Brushy									
8,500.0	6.00	61.00	8,481.9	172.3	310.9	201.2	0.00	0.00	0.00
8,600.0	6.00	61.00	8,581.4	177.4	320.0	207.1	0.00	0.00	0.00
8,700.0	6.00	61.00	8,680.8	182.4	329.1	213.0	0.00	0.00	0.00
8,800.0	6.00	61.00	8,780.3	187.5	338.3	219.0	0.00	0.00	0.00
8,900.0	6.00	61.00	8,879.7	192.6	347.4	224.9	0.00	0.00	0.00
8,950.0	6.00	61.00	8,929.5	195.1	352.0	227.8	0.00	0.00	0.00
Avalon									
9,000.0	6.00	61.00	8,979.2	197.7	356.6	230.8	0.00	0.00	0.00
9,100.0	6.00	61.00	9,078.6	202.7	365.7	236.7	0.00	0.00	0.00
9,200.0	6.00	61.00	9,178.1	207.8	374.9	242.6	0.00	0.00	0.00
9,300.0	6.00	61.00	9,277.5	212.9	384.0	248.5	0.00	0.00	0.00
9,400.0	6.00	61.00	9,377.0	217.9	393.1	254.5	0.00	0.00	0.00
9,500.0	6.00	61.00	9,476.4	223.0	402.3	260.4	0.00	0.00	0.00



Planning Report

Database:	EDM 5000.16 Single User Db	Local Co-ordinate Reference:	Well Anderson Fed Com 508H
Company:	Advance Energy Partners	TVD Reference:	WELL @ 3690.5usft (Original Well Elev)
Project:	Hat Mesa	MD Reference:	WELL @ 3690.5usft (Original Well Elev)
Site:	Anderson Fed Com - Pad A	North Reference:	Grid
Well:	Anderson Fed Com 508H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Anderson Fed Com 508H		
Design:	Anderson Fed Com 508H		

Planned Survey									
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
9,600.0	6.00	61.00	9,575.9	228.1	411.4	266.3	0.00	0.00	0.00
9,693.6	6.00	61.00	9,669.0	232.8	420.0	271.8	0.00	0.00	0.00
KOP - Start DLS 11.98 TFO 2.99									
9,700.0	6.76	61.34	9,675.3	233.1	420.6	272.2	11.98	11.97	5.31
9,800.0	18.74	63.05	9,772.7	243.3	440.2	284.2	11.98	11.98	1.72
9,825.4	21.78	63.19	9,796.5	247.3	448.0	288.9	11.98	11.98	0.55
1st BS Sand									
9,900.0	30.73	63.45	9,863.4	262.1	477.5	306.4	11.98	11.98	0.34
9,973.1	39.48	63.60	9,923.1	280.8	515.1	328.6	11.98	11.98	0.20
Start DLS 11.98 TFO -69.31									
10,000.0	40.72	58.97	9,943.7	289.1	530.3	338.4	11.98	4.58	-17.20
10,100.0	46.70	43.89	10,016.1	332.3	583.6	386.5	11.98	5.98	-15.08
10,200.0	54.28	31.82	10,079.9	393.2	630.4	451.6	11.98	7.58	-12.07
10,300.0	62.85	21.98	10,132.1	469.3	668.6	530.9	11.98	8.57	-9.84
10,400.0	72.00	13.58	10,170.5	557.1	696.5	621.0	11.98	9.15	-8.39
10,500.0	81.48	6.04	10,193.4	652.8	713.0	717.9	11.98	9.48	-7.55
10,588.7	90.00	359.67	10,200.0	741.0	717.3	806.1	11.98	9.61	-7.18
LP - Start DLS 0.00 TFO 90.00 - Anderson Fed Com 508H LP									
10,600.0	90.00	359.67	10,200.0	752.3	717.3	817.4	0.00	0.00	0.00
10,700.0	90.00	359.67	10,200.0	852.3	716.7	916.8	0.00	0.00	0.00
10,800.0	90.00	359.67	10,200.0	952.3	716.1	1,016.3	0.00	0.00	0.00
10,900.0	90.00	359.67	10,200.0	1,052.3	715.6	1,115.8	0.00	0.00	0.00
11,000.0	90.00	359.67	10,200.0	1,152.3	715.0	1,215.3	0.00	0.00	0.00
11,100.0	90.00	359.68	10,200.0	1,252.3	714.4	1,314.8	0.00	0.00	0.00
11,200.0	90.00	359.68	10,200.0	1,352.3	713.9	1,414.3	0.00	0.00	0.00
11,300.0	90.00	359.68	10,200.0	1,452.3	713.3	1,513.8	0.00	0.00	0.00
11,400.0	90.00	359.68	10,200.0	1,552.3	712.7	1,613.3	0.00	0.00	0.00
11,500.0	90.00	359.68	10,200.0	1,652.3	712.2	1,712.7	0.00	0.00	0.00
11,600.0	90.00	359.68	10,200.0	1,752.3	711.6	1,812.2	0.00	0.00	0.00
11,700.0	90.00	359.68	10,200.0	1,852.3	711.1	1,911.7	0.00	0.00	0.00
11,800.0	90.00	359.68	10,200.0	1,952.3	710.5	2,011.2	0.00	0.00	0.00
11,900.0	90.00	359.68	10,200.0	2,052.3	710.0	2,110.7	0.00	0.00	0.00
12,000.0	90.00	359.69	10,200.0	2,152.3	709.4	2,210.2	0.00	0.00	0.00
12,100.0	90.00	359.69	10,200.0	2,252.3	708.9	2,309.7	0.00	0.00	0.00
12,200.0	90.00	359.69	10,200.0	2,352.3	708.3	2,409.2	0.00	0.00	0.00
12,300.0	90.00	359.69	10,200.0	2,452.3	707.8	2,508.7	0.00	0.00	0.00
12,400.0	90.00	359.69	10,200.0	2,552.3	707.2	2,608.2	0.00	0.00	0.00
12,500.0	90.00	359.69	10,200.0	2,652.3	706.7	2,707.6	0.00	0.00	0.00
12,600.0	90.00	359.69	10,200.0	2,752.3	706.2	2,807.1	0.00	0.00	0.00
12,700.0	90.00	359.69	10,200.0	2,852.3	705.6	2,906.6	0.00	0.00	0.00
12,800.0	90.00	359.69	10,200.0	2,952.3	705.1	3,006.1	0.00	0.00	0.00
12,900.0	90.00	359.70	10,200.0	3,052.3	704.6	3,105.6	0.00	0.00	0.00
13,000.0	90.00	359.70	10,200.0	3,152.3	704.0	3,205.1	0.00	0.00	0.00
13,100.0	90.00	359.70	10,200.0	3,252.3	703.5	3,304.6	0.00	0.00	0.00
13,200.0	90.00	359.70	10,200.0	3,352.3	703.0	3,404.1	0.00	0.00	0.00
13,300.0	90.00	359.70	10,200.0	3,452.3	702.4	3,503.6	0.00	0.00	0.00
13,400.0	90.00	359.70	10,200.0	3,552.3	701.9	3,603.1	0.00	0.00	0.00
13,500.0	90.00	359.70	10,200.0	3,652.3	701.4	3,702.6	0.00	0.00	0.00
13,600.0	90.00	359.70	10,200.0	3,752.3	700.9	3,802.1	0.00	0.00	0.00
13,700.0	90.00	359.71	10,200.0	3,852.3	700.4	3,901.5	0.00	0.00	0.00
13,800.0	90.00	359.71	10,200.0	3,952.3	699.9	4,001.0	0.00	0.00	0.00
13,900.0	90.00	359.71	10,200.0	4,052.3	699.3	4,100.5	0.00	0.00	0.00
14,000.0	90.00	359.71	10,200.0	4,152.3	698.8	4,200.0	0.00	0.00	0.00
14,100.0	90.00	359.71	10,200.0	4,252.3	698.3	4,299.5	0.00	0.00	0.00



Planning Report

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Project:	Hat Mesa	MD Reference:	WELL @ 3690.5usft (Original Well Elev)
Site:	Anderson Fed Com - Pad A	North Reference:	Grid
Well:	Anderson Fed Com 508H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Anderson Fed Com 508H		
Design:	Anderson Fed Com 508H		

Planned Survey									
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
14,200.0	90.00	359.71	10,200.0	4,352.3	697.8	4,399.0	0.00	0.00	0.00
14,300.0	90.00	359.71	10,200.0	4,452.3	697.3	4,498.5	0.00	0.00	0.00
14,400.0	90.00	359.71	10,200.0	4,552.3	696.8	4,598.0	0.00	0.00	0.00
14,500.0	90.00	359.71	10,200.0	4,652.3	696.3	4,697.5	0.00	0.00	0.00
14,600.0	90.00	359.72	10,200.0	4,752.3	695.8	4,797.0	0.00	0.00	0.00
14,700.0	90.00	359.72	10,200.0	4,852.3	695.3	4,896.5	0.00	0.00	0.00
14,800.0	90.00	359.72	10,200.0	4,952.3	694.8	4,996.0	0.00	0.00	0.00
14,900.0	90.00	359.72	10,200.0	5,052.3	694.3	5,095.5	0.00	0.00	0.00
15,000.0	90.00	359.72	10,200.0	5,152.3	693.8	5,195.0	0.00	0.00	0.00
15,100.0	90.00	359.72	10,200.0	5,252.3	693.4	5,294.5	0.00	0.00	0.00
15,200.0	90.00	359.72	10,200.0	5,352.3	692.9	5,394.0	0.00	0.00	0.00
15,300.0	90.00	359.72	10,200.0	5,452.3	692.4	5,493.5	0.00	0.00	0.00
15,400.0	90.00	359.72	10,200.0	5,552.3	691.9	5,593.0	0.00	0.00	0.00
15,500.0	90.00	359.73	10,200.0	5,652.3	691.4	5,692.4	0.00	0.00	0.00
15,600.0	90.00	359.73	10,200.0	5,752.3	690.9	5,791.9	0.00	0.00	0.00
15,700.0	90.00	359.73	10,200.0	5,852.3	690.5	5,891.4	0.00	0.00	0.00
15,800.0	90.00	359.73	10,200.0	5,952.3	690.0	5,990.9	0.00	0.00	0.00
15,900.0	90.00	359.73	10,200.0	6,052.3	689.5	6,090.4	0.00	0.00	0.00
16,000.0	90.00	359.73	10,200.0	6,152.3	689.1	6,189.9	0.00	0.00	0.00
16,100.0	90.00	359.73	10,200.0	6,252.3	688.6	6,289.4	0.00	0.00	0.00
16,200.0	90.00	359.73	10,200.0	6,352.3	688.1	6,388.9	0.00	0.00	0.00
16,300.0	90.00	359.73	10,200.0	6,452.3	687.7	6,488.4	0.00	0.00	0.00
16,400.0	90.00	359.74	10,200.0	6,552.2	687.2	6,587.9	0.00	0.00	0.00
16,500.0	90.00	359.74	10,200.0	6,652.2	686.7	6,687.4	0.00	0.00	0.00
16,600.0	90.00	359.74	10,200.0	6,752.2	686.3	6,786.9	0.00	0.00	0.00
16,700.0	90.00	359.74	10,200.0	6,852.2	685.8	6,886.4	0.00	0.00	0.00
16,800.0	90.00	359.74	10,200.0	6,952.2	685.4	6,985.9	0.00	0.00	0.00
16,900.0	90.00	359.74	10,200.0	7,052.2	684.9	7,085.4	0.00	0.00	0.00
16,986.4	90.00	359.74	10,200.0	7,138.6	684.5	7,171.3	0.00	0.00	0.00
TD at 16986.4 - Anderson Fed Com 508H BHL									

Design Targets									
Target Name	Dip Angle (°)	Dip Dir. (°)	TVD (usft)	+N/-S (usft)	+E/-W (usft)	Northing (usft)	Easting (usft)	Latitude	Longitude
- hit/miss target									
- Shape									
Anderson Fed Com 508H	0.00	0.01	10,200.0	7,138.6	684.5	526,663.23	755,865.87	32° 26' 45.391 N	103° 38' 16.440 W
- plan hits target center									
- Point									
Anderson Fed Com 508H	0.00	0.00	10,200.0	741.0	717.3	520,265.63	755,898.69	32° 25' 42.085 N	103° 38' 16.543 W
- plan hits target center									
- Point									

Casing Points					
Measured Depth (usft)	Vertical Depth (usft)	Name	Casing Diameter (")	Hole Diameter (")	
10,588.7	10,200.0	5 1/2"	5-1/2	5-1/2	



Planning Report

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Project:	Hat Mesa	MD Reference:	WELL @ 3690.5usft (Original Well Elev)
Site:	Anderson Fed Com - Pad A	North Reference:	Grid
Well:	Anderson Fed Com 508H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Anderson Fed Com 508H		
Design:	Anderson Fed Com 508H		

Formations						
Measured Depth (usft)	Vertical Depth (usft)	Name	Lithology	Dip (°)	Dip Direction (°)	
1,184.5	1,184.5	Rustler				
4,762.5	4,762.5	Base of Limestone				
8,427.2	8,409.5	Lower Brushy				
8,950.0	8,929.5	Avalon				
9,825.4	9,796.5	1st BS Sand				

Plan Annotations					
Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates			
		+N/-S (usft)	+E/-W (usft)	Comment	
4,800.0	4,800.0	0.0	0.0	KOP - Start Build 1.00	
5,400.0	5,398.9	15.2	27.5	Start 4293.6 hold at 5400.0 MD	
9,693.6	9,669.0	232.8	420.0	KOP - Start DLS 11.98 TFO 2.99	
9,973.1	9,923.1	280.8	515.1	Start DLS 11.98 TFO -69.31	
10,588.7	10,200.0	741.0	717.3	LP - Start DLS 0.00 TFO 90.00	
16,986.4	10,200.0	7,138.6	684.5	TD at 16986.4	



Advance Energy Partners

Hat Mesa

Anderson Fed Com - Pad A

Anderson Fed Com 508H

Anderson Fed Com 508H

Anderson Fed Com 508H

Anticollision Summary Report

23 September, 2021



Anticollision Summary Report

Company:	Advance Energy Partners	Local Co-ordinate Reference:	Well Anderson Fed Com 508H
Project:	Hat Mesa	TVD Reference:	WELL @ 3690.5usft (Original Well Elev)
Reference Site:	Anderson Fed Com - Pad A	MD Reference:	WELL @ 3690.5usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	Anderson Fed Com 508H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.79 sigma
Reference Wellbore	Anderson Fed Com 508H	Database:	EDM 5000.16 Single User Db
Reference Design:	Anderson Fed Com 508H	Offset TVD Reference:	Offset Datum

Reference	Anderson Fed Com 508H		
Filter type:	NO GLOBAL FILTER: Using user defined selection & filtering criteria		
Interpolation Method:	Stations	Error Model:	ISCWSA
Depth Range:	Unlimited	Scan Method:	Closest Approach 3D
Results Limited by:	Maximum centre distance of 1,000.0usft	Error Surface:	Pedal Curve
Warning Levels Evaluated at:	2.79 Sigma	Casing Method:	Not applied

Survey Tool Program	Date	9/23/2021			
From (usft)	To (usft)	Survey (Wellbore)	Tool Name	Description	
0.0	16,986.4	Anderson Fed Com 508H (Anderson Fed C	MWD+HRGM	OWSG MWD + HRGM	

Summary						
Site Name	Reference Measured Depth (usft)	Offset Measured Depth (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Separation Factor	Warning
Offset Well - Wellbore - Design						
Anderson Fed Com - Pad A						
Anderson 35 3H - Anderson 35 3H - Anderson 35 3H	12,443.9	14,957.9	480.4	382.9	4.930	CC, ES
Anderson 35 3H - Anderson 35 3H - Anderson 35 3H	12,800.0	14,984.5	597.3	456.0	4.226	SF
Anderson Fed Com 504H - Anderson Fed Com 504H - A	7,760.7	7,747.5	39.1	1.0	1.026	Level 3, CC, ES, SF
Anderson Fed Com 558H - Anderson Fed Com 558H - A	9,750.0	9,737.5	100.4	57.7	2.352	SF
Anderson Fed Com 558H - Anderson Fed Com 558H - A	9,834.3	9,816.8	96.9	55.9	2.364	CC, ES
Anderson Fed Com 604H - PH - Anderson Fed Com 604	5,420.6	5,415.3	30.2	1.8	1.063	Level 3, CC, ES, SF
Anderson Fed Com 604H - ST01 - Anderson Fed Com 6	5,420.6	5,415.3	30.2	1.8	1.063	Level 3, CC, ES, SF
Anderson Fed Com 704H - Anderson Fed Com 704H - A	2,028.1	2,020.8	24.2	8.0	1.495	Level 3, CC
Anderson Fed Com 704H - Anderson Fed Com 704H - A	2,100.0	2,092.6	24.4	8.0	1.486	Level 3, ES
Anderson Fed Com 704H - Anderson Fed Com 704H - A	5,535.3	5,526.1	39.3	11.5	1.412	Level 3, SF
Anderson Fed Com 705H - Anderson Fed Com 705H - A	4,800.0	4,799.0	32.7	7.2	1.282	Level 3, CC, ES
Anderson Fed Com 705H - Anderson Fed Com 705H - A	9,693.6	9,695.6	79.3	17.0	1.274	Level 3, SF

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation

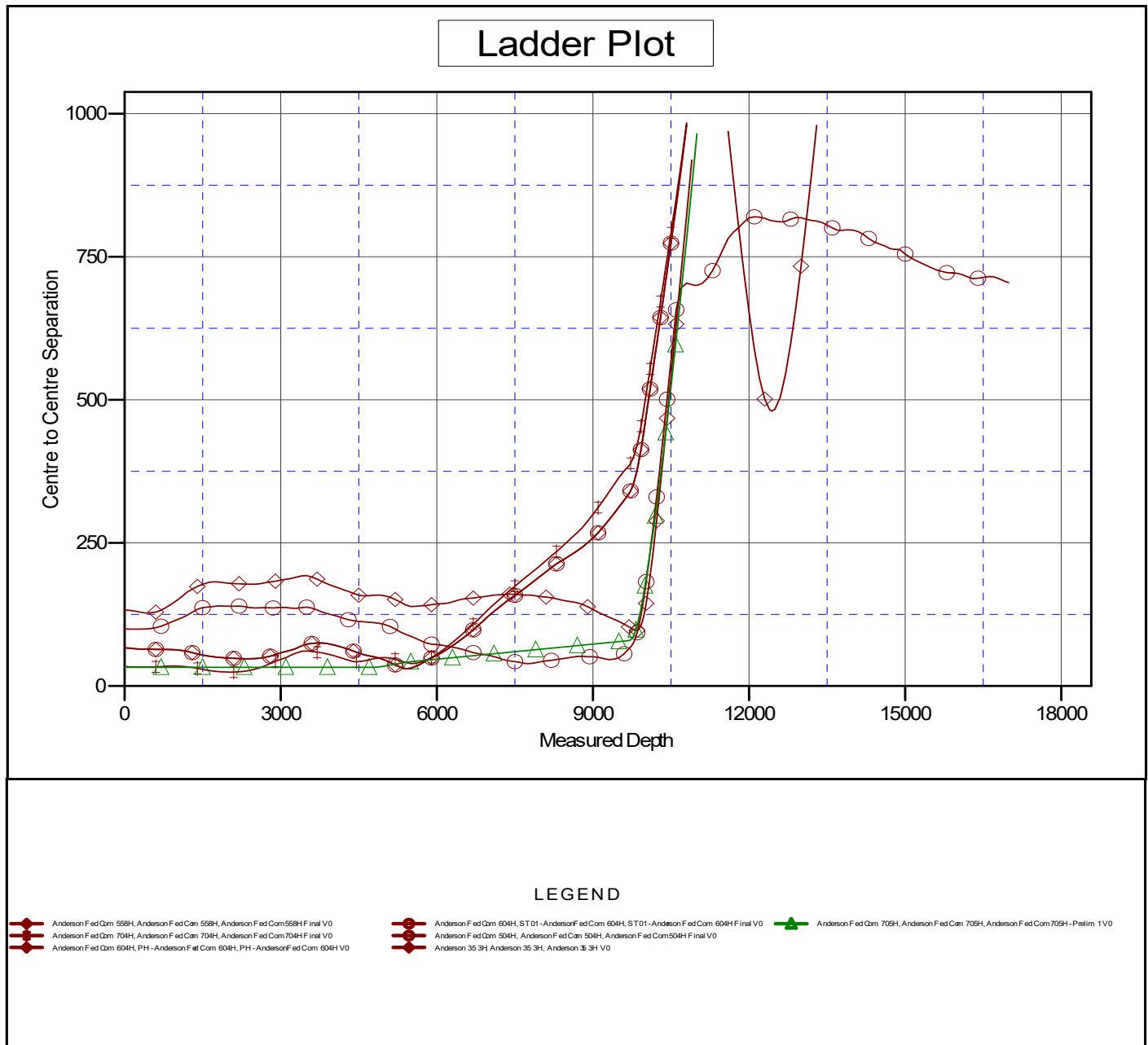


Anticollision Summary Report

Company:	Advance Energy Partners	Local Co-ordinate Reference:	Well Anderson Fed Com 508H
Project:	Hat Mesa	TVD Reference:	WELL @ 3690.5usft (Original Well Elev)
Reference Site:	Anderson Fed Com - Pad A	MD Reference:	WELL @ 3690.5usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	Anderson Fed Com 508H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.79 sigma
Reference Wellbore	Anderson Fed Com 508H	Database:	EDM 5000.16 Single User Db
Reference Design:	Anderson Fed Com 508H	Offset TVD Reference:	Offset Datum

Reference Depths are relative to WELL @ 3690.5usft (Original Well Ele)
 Offset Depths are relative to Offset Datum
 Central Meridian is 104° 20' 0.000 W

Coordinates are relative to: Anderson Fed Com 508H
 Coordinate System is US State Plane 1983, New Mexico Eastern Zone
 Grid Convergence at Surface is: 0.37°



CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation



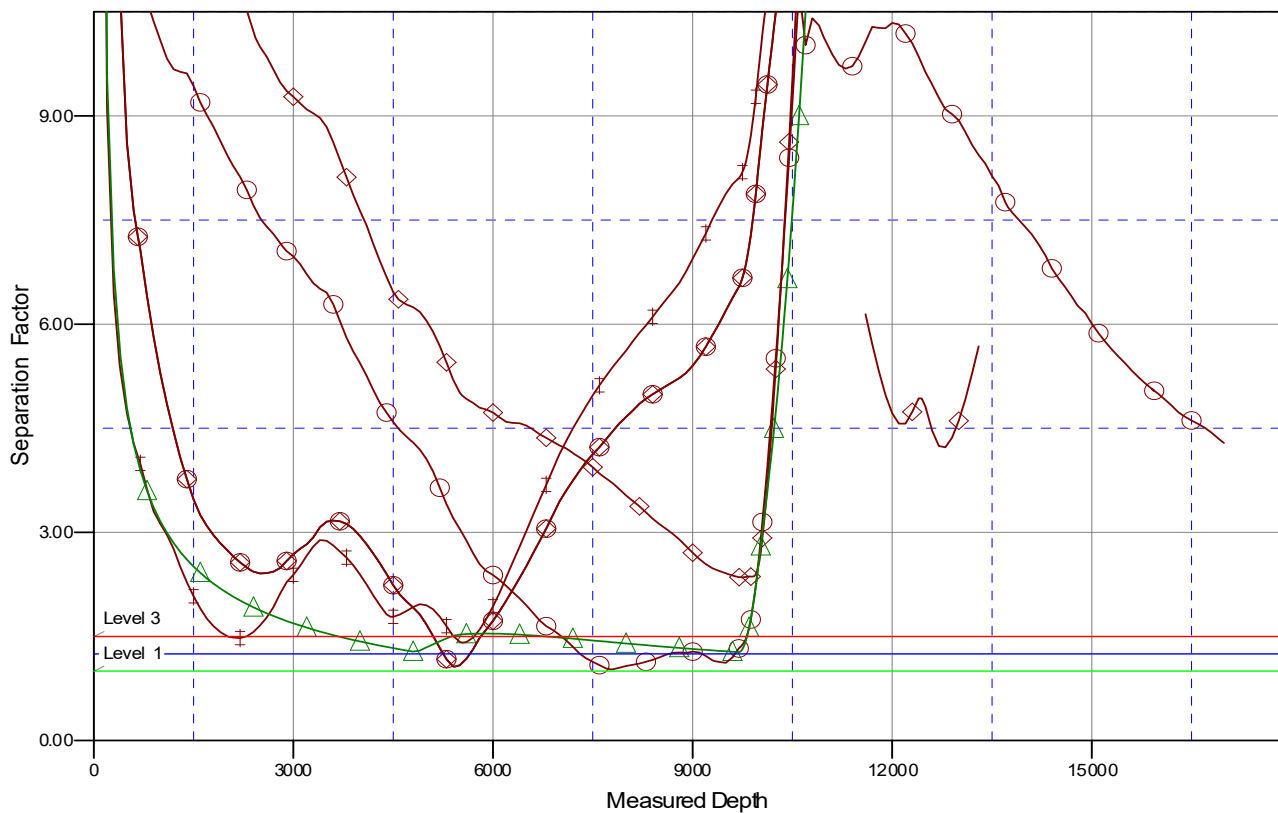
Anticollision Summary Report

Company:	Advance Energy Partners	Local Co-ordinate Reference:	Well Anderson Fed Com 508H
Project:	Hat Mesa	TVD Reference:	WELL @ 3690.5usft (Original Well Elev)
Reference Site:	Anderson Fed Com - Pad A	MD Reference:	WELL @ 3690.5usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	Anderson Fed Com 508H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.79 sigma
Reference Wellbore	Anderson Fed Com 508H	Database:	EDM 5000.16 Single User Db
Reference Design:	Anderson Fed Com 508H	Offset TVD Reference:	Offset Datum

Reference Depths are relative to WELL @ 3690.5usft (Original Well Ele
Offset Depths are relative to Offset Datum
Central Meridian is 104° 20' 0.000 W

Coordinates are relative to: Anderson Fed Com 508H
Coordinate System is US State Plane 1983, New Mexico Eastern Zone
Grid Convergence at Surface is: 0.37°

Separation Factor Plot



LEGEND

Anderson Fed Com 558H, Anderson Fed Com 558H, Anderson Fed Com 558H Final V0	Anderson Fed Com 604H, ST01-Anderson Fed Com 604H, ST01-Anderson Fed Com 604H Final V0	Anderson Fed Com 709H, Anderson Fed Com 709H, Anderson Fed Com 709H-Prelim 1 V0
Anderson Fed Com 704H, Anderson Fed Com 704H, Anderson Fed Com 704H Final V0	Anderson Fed Com 504H, Anderson Fed Com 504H, Anderson Fed Com 504H Final V0	
Anderson Fed Com 604H, PH-Anderson Fed Com 604H, PH-Anderson Fed Com 604H V0	Anderson 35 3H, Anderson 35 3H, Anderson 35 3H V0	

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation

State of New Mexico
Energy, Minerals and Natural Resources Department
Oil Conservation Division
1220 South St. Francis Dr.
Santa Fe, NM 87505

Submit Electronically
Via E-permitting

NATURAL GAS MANAGEMENT PLAN

This Natural Gas Management Plan must be submitted with each Application for Permit to Drill (APD) for a new or recompleted well.

Section 1 – Plan Description

Effective May 25, 2021

I. Operator: _Advance Energy Partners Hat Mesa, LLC_ **OGRID:** _372417_ **Date:** September 27, 2021

II. Type: ☒ Original ☐ Amendment due to ☐ 19.15.27.9.D(6)(a) NMAC ☐ 19.15.27.9.D(6)(b) NMAC ☐ Other.

If Other, please describe: _____

III. Well(s): Provide the following information for each new or recompleted well or set of wells proposed to be drilled or proposed to be recompleted from a single well pad or connected to a central delivery point.

Well Name	API	ULSTR	Footages	Anticipated Oil BBL/D	Anticipated Gas MCF/D	Anticipated Produced Water BBL/D
Anderson Fed Com 508H		Lot 1-Sec 2 22S-32E	630 FNL & 1090 FEL	1280	1500	3200
Anderson Fed Com 705H		Lot 1-Sec 2 22S-32E	630 FNL & 892 FEL	1280	1500	3200

IV. Central Delivery Point Name: _Anderson Pad A_ [See 19.15.27.9(D)(1) NMAC]

V. Anticipated Schedule: Provide the following information for each new or recompleted well or set of wells proposed to be drilled or proposed to be recompleted from a single well pad or connected to a central delivery point.

Well Name	API	Spud Date	TD Reached Date	Completion Commencement Date	Initial Flow Back Date	First Production Date
Anderson Fed Com 508H		11/10/21	12/10/21	03/30/2022	05/30/2022	07/01/2022
Anderson Fed Com 705H		11/15/21	12/10/21	03/30/2022	05/30/2022	07/01/2022

VI. Separation Equipment: ☒ Attach a complete description of how Operator will size separation equipment to optimize gas capture.

VII. Operational Practices: ☒ Attach a complete description of the actions Operator will take to comply with the requirements of Subsection A through F of 19.15.27.8 NMAC.

VIII. Best Management Practices: ☒ Attach a complete description of Operator's best management practices to minimize venting during active and planned maintenance.

Section 2 – Enhanced Plan
EFFECTIVE APRIL 1, 2022

Beginning April 1, 2022, an operator that is not in compliance with its statewide natural gas capture requirement for the applicable reporting area must complete this section.

☐ Operator certifies that it is not required to complete this section because Operator is in compliance with its statewide natural gas capture requirement for the applicable reporting area.

IX. Anticipated Natural Gas Production:

Well	API	Anticipated Average Natural Gas Rate MCF/D	Anticipated Volume of Natural Gas for the First Year MCF

X. Natural Gas Gathering System (NGGS):

Operator	System	ULSTR of Tie-in	Anticipated Gathering Start Date	Available Maximum Daily Capacity of System Segment Tie-in

XI. Map. ☐ Attach an accurate and legible map depicting the location of the well(s), the anticipated pipeline route(s) connecting the production operations to the existing or planned interconnect of the natural gas gathering system(s), and the maximum daily capacity of the segment or portion of the natural gas gathering system(s) to which the well(s) will be connected.

XII. Line Capacity. The natural gas gathering system ☐ will ☐ will not have capacity to gather 100% of the anticipated natural gas production volume from the well prior to the date of first production.

XIII. Line Pressure. Operator ☐ does ☐ does not anticipate that its existing well(s) connected to the same segment, or portion, of the natural gas gathering system(s) described above will continue to meet anticipated increases in line pressure caused by the new well(s).

☐ Attach Operator's plan to manage production in response to the increased line pressure.

XIV. Confidentiality: ☐ Operator asserts confidentiality pursuant to Section 71-2-8 NMSA 1978 for the information provided in Section 2 as provided in Paragraph (2) of Subsection D of 19.15.27.9 NMAC, and attaches a full description of the specific information for which confidentiality is asserted and the basis for such assertion.

Section 3 - Certifications

Effective May 25, 2021

Operator certifies that, after reasonable inquiry and based on the available information at the time of submittal:

☒ Operator will be able to connect the well(s) to a natural gas gathering system in the general area with sufficient capacity to transport one hundred percent of the anticipated volume of natural gas produced from the well(s) commencing on the date of first production, taking into account the current and anticipated volumes of produced natural gas from other wells connected to the pipeline gathering system; or

☐ Operator will not be able to connect to a natural gas gathering system in the general area with sufficient capacity to transport one hundred percent of the anticipated volume of natural gas produced from the well(s) commencing on the date of first production, taking into account the current and anticipated volumes of produced natural gas from other wells connected to the pipeline gathering system.

If Operator checks this box, Operator will select one of the following:

Well Shut-In. ☐ Operator will shut-in and not produce the well until it submits the certification required by Paragraph (4) of Subsection D of 19.15.27.9 NMAC; or

Venting and Flaring Plan. ☐ Operator has attached a venting and flaring plan that evaluates and selects one or more of the potential alternative beneficial uses for the natural gas until a natural gas gathering system is available, including:

- (a) power generation on lease;
- (b) power generation for grid;
- (c) compression on lease;
- (d) liquids removal on lease;
- (e) reinjection for underground storage;
- (f) reinjection for temporary storage;
- (g) reinjection for enhanced oil recovery;
- (h) fuel cell production; and
- (i) other alternative beneficial uses approved by the division.

Section 4 - Notices


1. If, at any time after Operator submits this Natural Gas Management Plan and before the well is spud:

(a) Operator becomes aware that the natural gas gathering system it planned to connect the well(s) to has become unavailable or will not have capacity to transport one hundred percent of the production from the well(s), no later than 20 days after becoming aware of such information, Operator shall submit for OCD's approval a new or revised venting and flaring plan containing the information specified in Paragraph (5) of Subsection D of 19.15.27.9 NMAC; or

(b) Operator becomes aware that it has, cumulatively for the year, become out of compliance with its baseline natural gas capture rate or natural gas capture requirement, no later than 20 days after becoming aware of such information, Operator shall submit for OCD's approval a new or revised Natural Gas Management Plan for each well it plans to spud during the next 90 days containing the information specified in Paragraph (2) of Subsection D of 19.15.27.9 NMAC, and shall file an update for each Natural Gas Management Plan until Operator is back in compliance with its baseline natural gas capture rate or natural gas capture requirement.

2. OCD may deny or conditionally approve an APD if Operator does not make a certification, fails to submit an adequate venting and flaring plan which includes alternative beneficial uses for the anticipated volume of natural gas produced, or if OCD determines that Operator will not have adequate natural gas takeaway capacity at the time a well will be spud.

I certify that, after reasonable inquiry, the statements in and attached to this Natural Gas Management Plan are true and correct to the best of my knowledge and acknowledge that a false statement may be subject to civil and criminal penalties under the Oil and Gas Act.

Signature: 
Printed Name: Cory Walk
Title: Consultant
E-mail Address: cory@permitswest.com
Date: 9/30/21
Phone: (505) 466-8120
OIL CONSERVATION DIVISION (Only applicable when submitted as a standalone form)
Approved By:
Title:
Approval Date:
Conditions of Approval:

Natural Gas Management Plan - Attachment

- VI. Separation equipment will be sized by construction engineering staff based on stated manufacturer daily throughput capacities and anticipated daily production rates to ensure adequate capacity. Closed vent system piping, compression needs, and VRUs will be sized utilizing ProMax modelling software to ensure adequate capacity for anticipated production volumes and conditions.
- VII. Advance Energy Partners Hat Mesa, LLC (AEP) will take the following actions to comply with the regulations listed in 19.15.27.8:
- A. AEP will maximize the recovery of natural gas by minimizing the waste, as defined by 19.15.2 NMAC, of natural gas through venting and flaring. AEP will ensure that well(s) will be connected to a natural gas gathering system with sufficient capacity to transport natural gas. If there is no adequate takeaway for the gas, well(s) will be shut in until the natural gas gathering system is available.
 - B. All drilling operations will be equipped with a rig flare located at least 100' from the nearest surface hole. Rig flare will be utilized to combust any natural gas that is brought to surface during normal drilling operations. In the case of emergency venting or flaring the volumes will be estimated and reported appropriately.
 - C. During completion operations any natural gas brought to surface will be flared. Immediately following the finish of completion operations, all well flowback will be directed to permanent separation equipment. Produced natural gas from separation equipment will be sent to sales. It is not anticipated that gas will not meet pipeline standards. However, if natural gas does not meet gathering pipeline quality specifications, AEP will flare the natural gas for 60 days or until the natural gas meets the pipeline quality specifications, whichever is sooner. AEP will ensure that the flare is sized properly and is equipped with automatic igniter or continuous pilot. The gas sample will be analyzed twice per week and the gas will be routed into a gathering system as soon as pipeline specifications are met.
 - D. Natural gas will not be flared with the exceptions and provisions listed in the 19.15.27.8 D.(I) through (4). If there is no adequate takeaway for the separator gas, well(s) will be shut in until the natural gas gathering system is available with exception of emergency or malfunction situations. Venting and/or flaring volumes will be estimated and reported appropriately.
 - E. AEP will comply with the performance standards requirements and provisions listed in 19.15.27.8 E.(I) through (8). All equipment will be designed and sized to handle maximum anticipated pressures and throughputs to minimize the waste. Production storage tanks constructed after May 25, 2021, will be equipped with automatic gauging system. Flares constructed after May 25, 2021, will be equipped with automatic igniter or continuous pilot. Flares will be located at least 100' from the well and storage tanks unless otherwise approved by the division. AEP will conduct AVO inspections as described in 19.15.27.8 E (5) (a) with frequencies specified in 19.15.27.8 E (5) (b) and (c). All emergencies will be resolved as quickly and safely as feasible to minimize waste.
 - F. The volume of natural gas that is vented or flared as the result of malfunction or emergency during drilling and completions operations will be estimated. The volume of natural gas that is vented, flared, or beneficially used during production operations, will be measured, or estimated. AEP will install equipment to measure

the volume of natural gas flared from existing process piping, or a flowline piped from equipment such as high-pressure separators, heater treaters, or vapor recovery units associated with a well or facility associated with a well authorized by an APD issued after May 25, 2021, that has an average daily production greater than 60 Mcf/day. If metering is not practicable due to circumstances such as low flow rate or low pressure venting and flaring, AEP will estimate the volume of vented or flared natural gas. Measuring equipment will conform to industry standards and will not be designed or equipped with a manifold that allows the diversion of natural gas around the metering element except for the sole purpose of inspecting and servicing the measurement equipment.

- VIII. For maintenance activities involving production equipment and compression, venting will be limited to the depressurization of the subject equipment to ensure safe working conditions. For maintenance of production and compression equipment the associated producing wells will be shut in to eliminate venting. For maintenance of VRUs all gas normally routed to the VRU will be routed to flare to eliminate venting.

District I
1625 N. French Dr., Hobbs, NM 88240
Phone:(575) 393-6161 Fax:(575) 393-0720
District II
811 S. First St., Artesia, NM 88210
Phone:(575) 748-1283 Fax:(575) 748-9720
District III
1000 Rio Brazos Rd., Aztec, NM 87410
Phone:(505) 334-6178 Fax:(505) 334-6170
District IV
1220 S. St Francis Dr., Santa Fe, NM 87505
Phone:(505) 476-3470 Fax:(505) 476-3462

State of New Mexico
Energy, Minerals and Natural Resources
Oil Conservation Division
1220 S. St Francis Dr.
Santa Fe, NM 87505

CONDITIONS

Action 57955

CONDITIONS

Operator: ADVANCE ENERGY PARTNERS HAT MESA, LLC 11490 Westheimer Rd., Ste 950 Houston, TX 77077	OGRID: 372417
	Action Number: 57955
	Action Type: [C-103] NOI Change of Plans (C-103A)

CONDITIONS

Created By	Condition	Condition Date
pkautz	None	11/4/2021