

District I
1625 N. French Dr., Hobbs, NM 88240
District II
811 S. First St., Artesia, NM 88210
District III
1000 Rio Brazos Rd., Aztec, NM 87410
District IV
1220 S. St. Francis Dr., Santa Fe, NM 87505

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

Submit one copy to appropriate District Office

☐ AMENDED REPORT

I. REQUEST FOR ALLOWABLE AND AUTHORIZATION TO TRANSPORT

¹ Operator name and Address Advance Energy Partners Hat Mesa, LLC 11490 Westheimer RD, Suite 950 Houston, TX		² OGRID Number 372417
		³ Reason for Filing Code/ Effective Date NW
⁴ API Number 30-025-49429	⁵ Pool Name Red Tank; Bone Spring	⁶ Pool Code 51683
⁷ Property Code 326484	⁸ Property Name Anderson Federal Com	⁹ Well Number 508H

II. ¹⁰ Surface Location

Ul or lot no. LOT 1	Section 2	Township 22S	Range 32E	Lot Idn	Feet from the 630	North/South Line NORTH	Feet from the 1057	East/West line EAST	County Lea
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¹¹ Bottom Hole Location

UL or lot no. P	Section 26	Township 21S	Range 32E	Lot Idn	Feet from the 1230	North/South line SOUTH	Feet from the 343	East/West line EAST	County Lea
¹² Lse Code	¹³ Producing Method Code	¹⁴ Gas Connection Date	¹⁵ C-129 Permit Number		¹⁶ C-129 Effective Date		¹⁷ C-129 Expiration Date		

III. Oil and Gas Transporters

¹⁸ Transporter OGRID	¹⁹ Transporter Name and Address	²⁰ O/G/W
214984	Plains Marketing, LP 10 Desta Drive, Suite 200E Midland, TX 79705	O
330291	3 Bear Energy-Cottonwood, LLC 1512 Larimer Street, Suite 540 Denver, CO 80202	G

IV. Well Completion Data

²¹ Spud Date 11/18/21	²² Ready Date 5/25/22	²³ TD 16,905'	²⁴ PBTD 16,875'	²⁵ Perforations 10,503' – 16,865'	²⁶ DHC, MC
²⁷ Hole Size		²⁸ Casing & Tubing Size	²⁹ Depth Set		³⁰ Sacks Cement
17.5"		13.375"	1255'		720
12.25"		9.625"	3456'/4760'		1235
8.5"		5.5"	16,885'		2495

V. Well Test Data

³¹ Date New Oil 6/7/22	³² Gas Delivery Date 5/25/22	³³ Test Date 8/8/22	³⁴ Test Length 24 HRS	³⁵ Tbg. Pressure N/A	³⁶ Csg. Pressure 275
³⁷ Choke Size 48	³⁸ Oil 427	³⁹ Water 2180	⁴⁰ Gas 499		⁴¹ Test Method FLOWING
⁴² I hereby certify that the rules of the Oil Conservation Division have been complied with and that the information given above is true and complete to the best of my knowledge and belief. Signature: <i>Eileen M Kosakowski</i>			OIL CONSERVATION DIVISION		
Printed name: Eileen M Kosakowski			Approved by:		
Title: Sr. Eng. Tech			Title:		
E-mail Address: ekosakowski@advanceenergypartners.com			Approval Date:		
Date: 11/24/22		Phone: 832-672-4604			

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
As Drilled

API Number 30-025-49429	Pool Code 51683	Pool Name RED TANK;BONE SPRING
Property Code 326484	Property Name ANDERSON FEDERAL COM	Well Number 508H
OGRID No. 372417	Operator Name ADVANCE ENERGY PARTNERS HAT MESA, LLC	Elevation 3658'

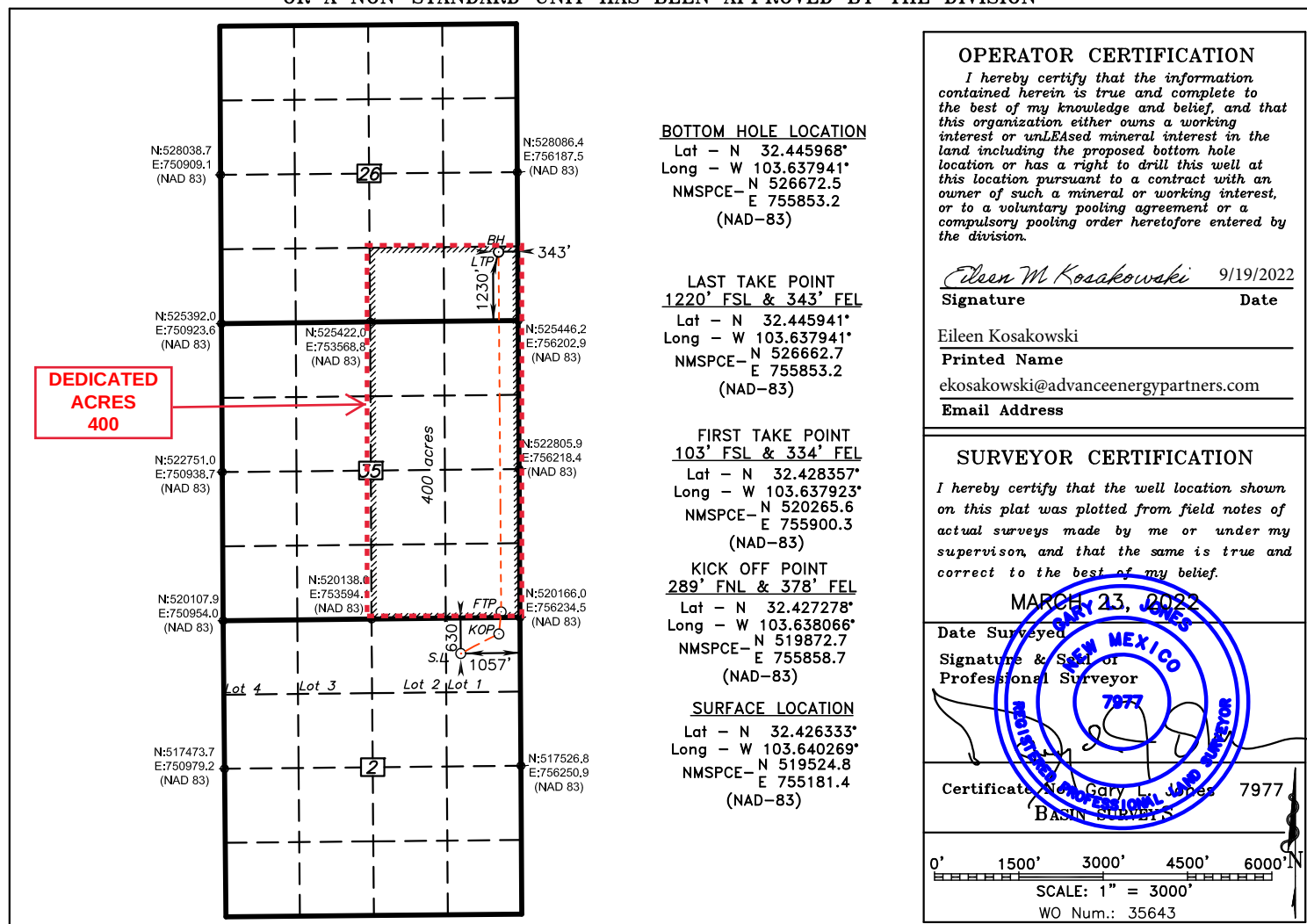
Surface Location

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		1230	SOUTH	343	EAST	LEA
Dedicated Acres 400	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





End of Well Report

Advance Energy Partners, LLC Anderson Fed Com, Well No. 508H Lea County, New Mexico

Rig: Nabors X47

Job No.: WT-21-179

Start Date: 11/15/2021

End Date: 12/20/2021

Directional Drillers:

Eddie Sheppard, Advance Nabors X47

Office Support:

Javier Alvarez

Directional Coordinator

E-mail: Javier.Alvarez@aimdir.com

Keith Noack

Well Planner

E-mail: Keith.Noack@aimdir.com

Allison Reinert

Executive VP

E-mail: Allison.Reinert@aimdir.com

Thomas Rinald

President

E-mail: Thomas.Rinald@aimdir.com

P.O. Box 181015 • Corpus Christi, Texas 78480

Phone: 361-653-6500 • Fax: 361-653-6599

www.aimdir.com





Performance Overview

Anderson Fed Com 508H (WT-21-179)

2021-11-15 to 2021-12-20

Lea, New Mexico, US (32.43, -103.64)

BHA Performance

BHA 1

17.50" SURFACE

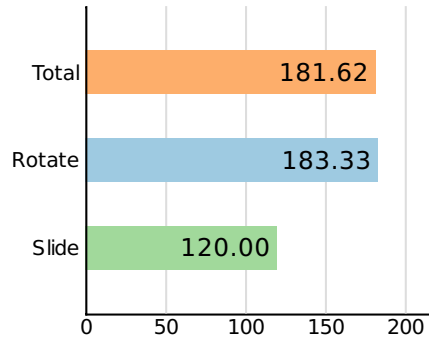
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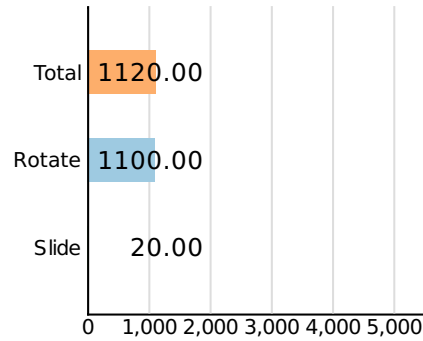
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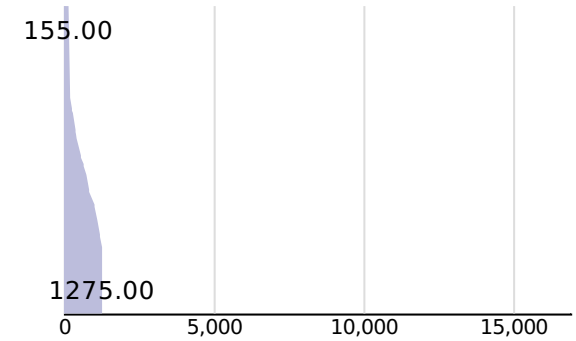
Rate of Penetration (ft/h)



Distance (ft)



Depth (ft)



BHA 2

12.25"
INTERMEDIATE

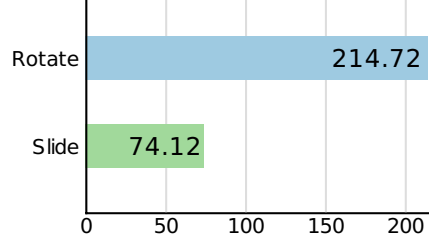
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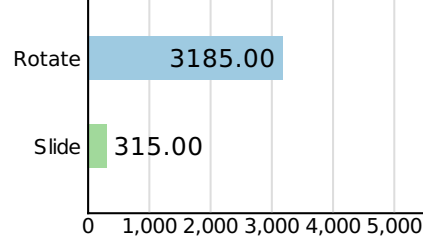
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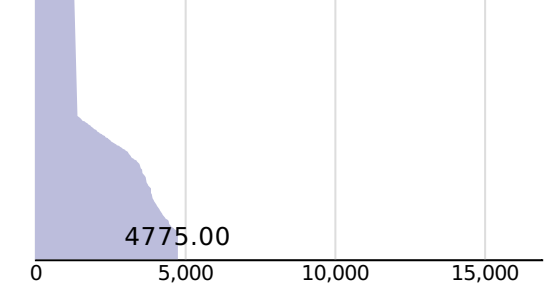
Rate of Penetration (ft/h)



Distance (ft)



Depth (ft)



BHA 3

8.75"
INTERMEDIATE

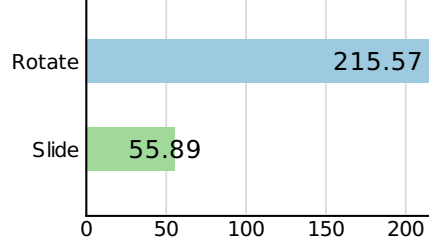
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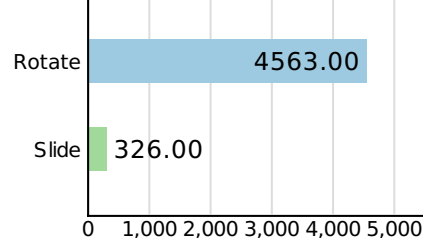
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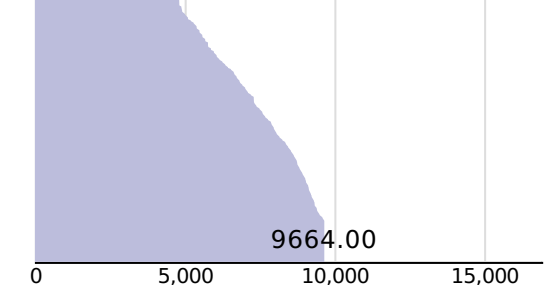
Rate of Penetration (ft/h)



Distance (ft)



Depth (ft)



BHA 4

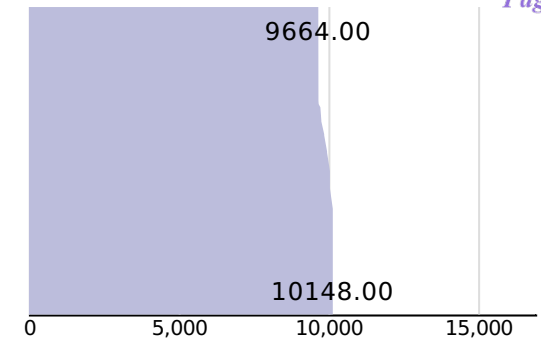
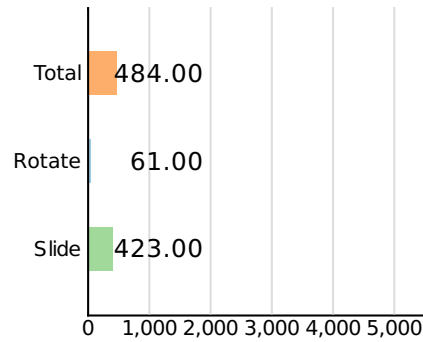
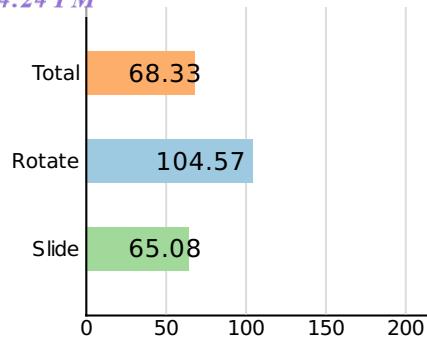
8.75" CURVE

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23:30

Out: 12/10/2021

23:15



BHA 5

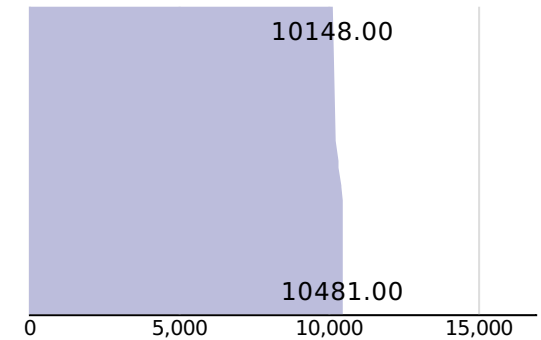
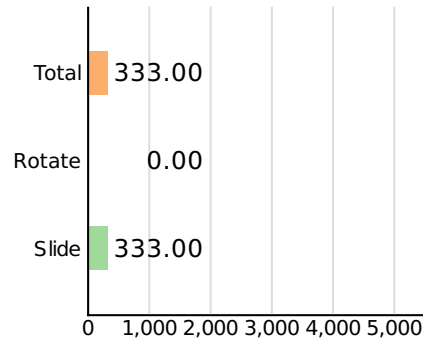
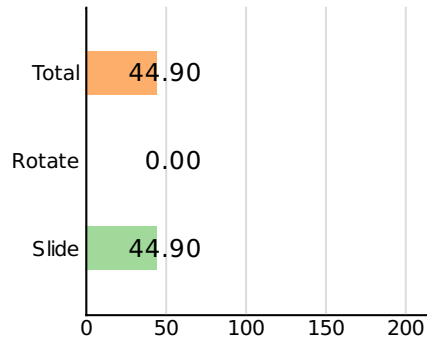
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Out: 12/11/2021

22:30



BHA 6

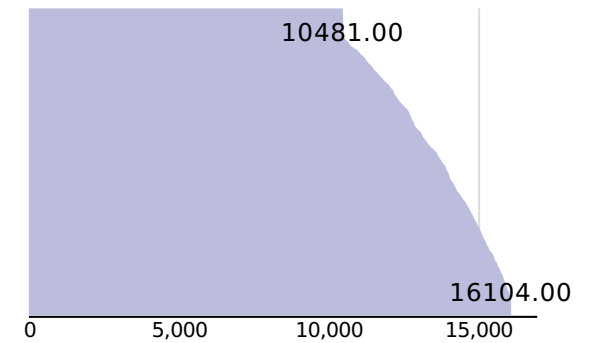
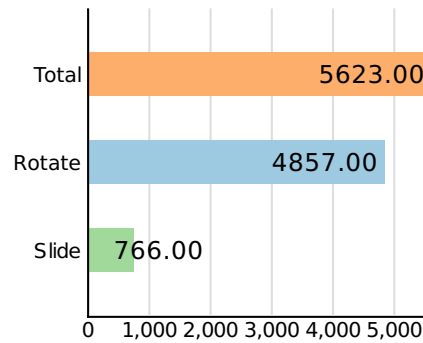
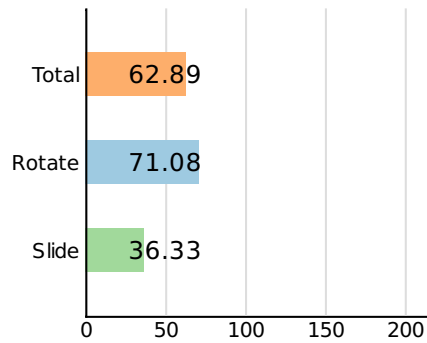
8.75" LATERAL
ASSEMBLY

In: 12/11/2021

22:30

Out: 12/16/2021

14:00



BHA 7

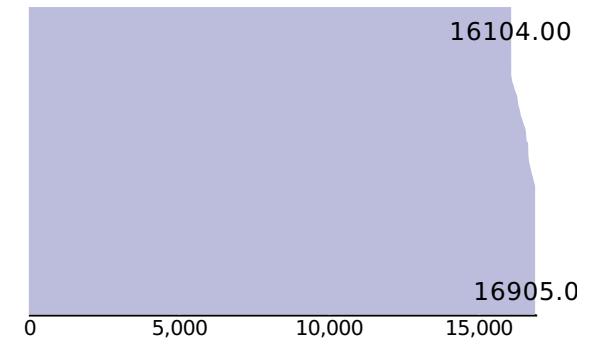
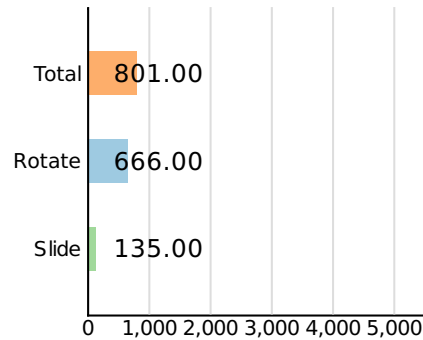
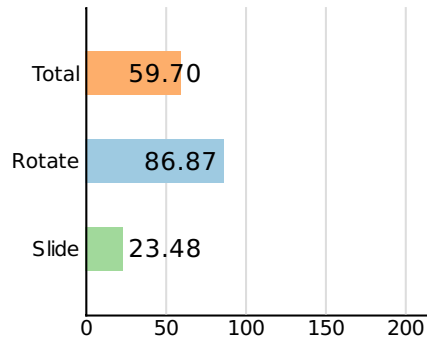
8.75" LATERAL
ASSEMBLY

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14:40

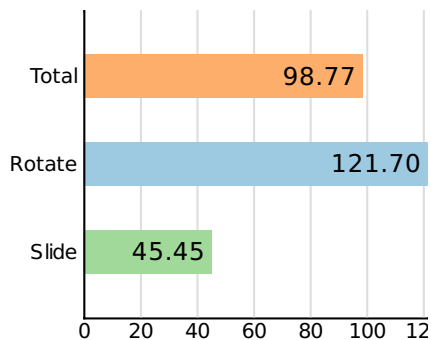
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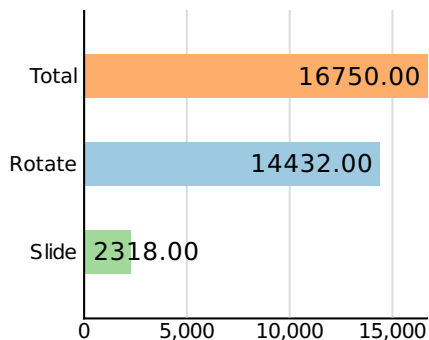


Total

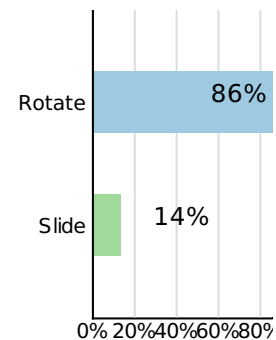
Rate of Penetration (ft/h)



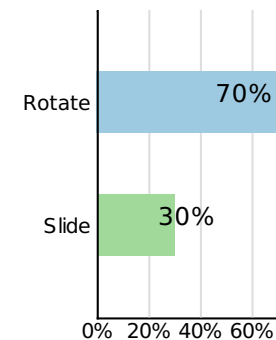
Distance (ft)



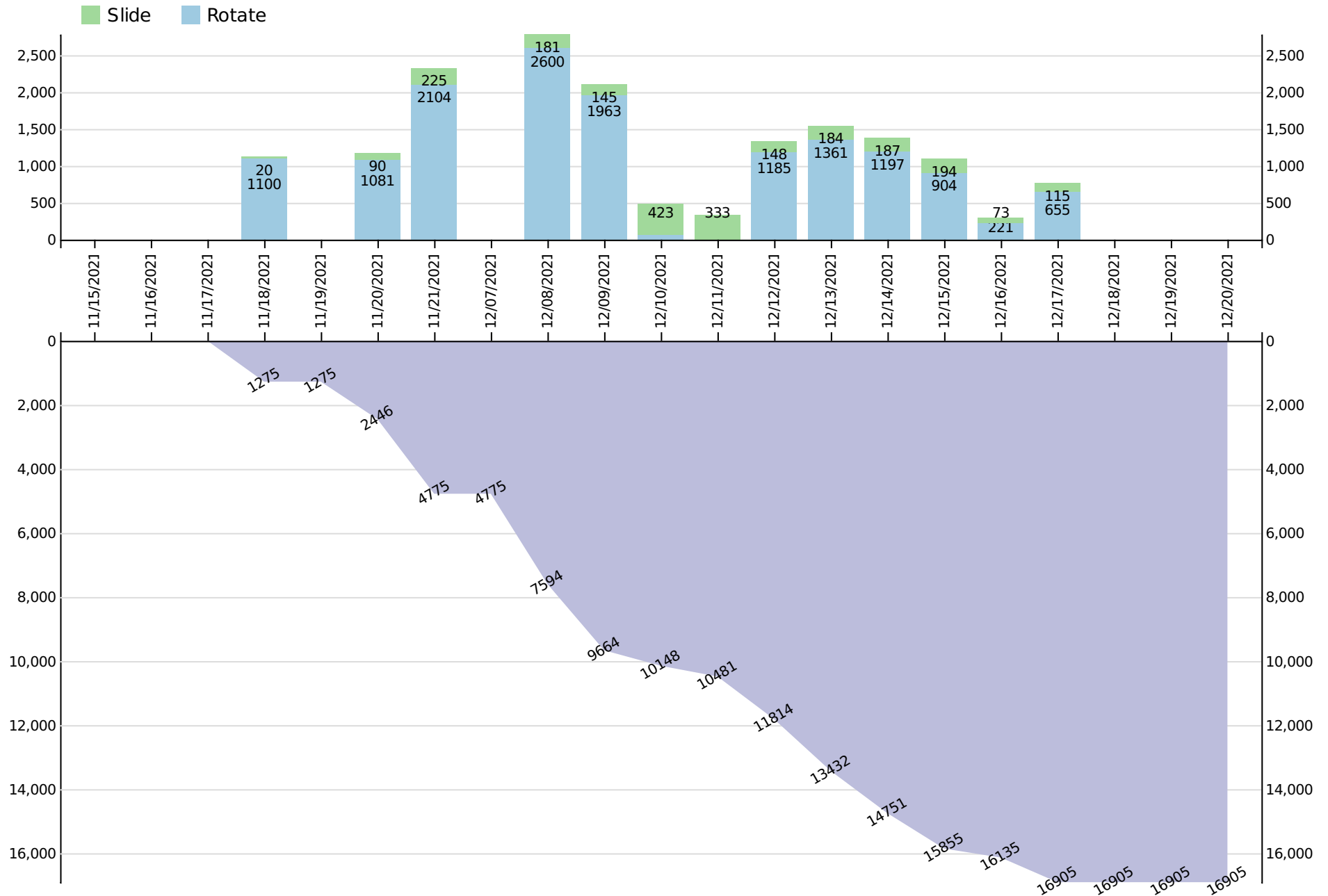
Distance Percentage



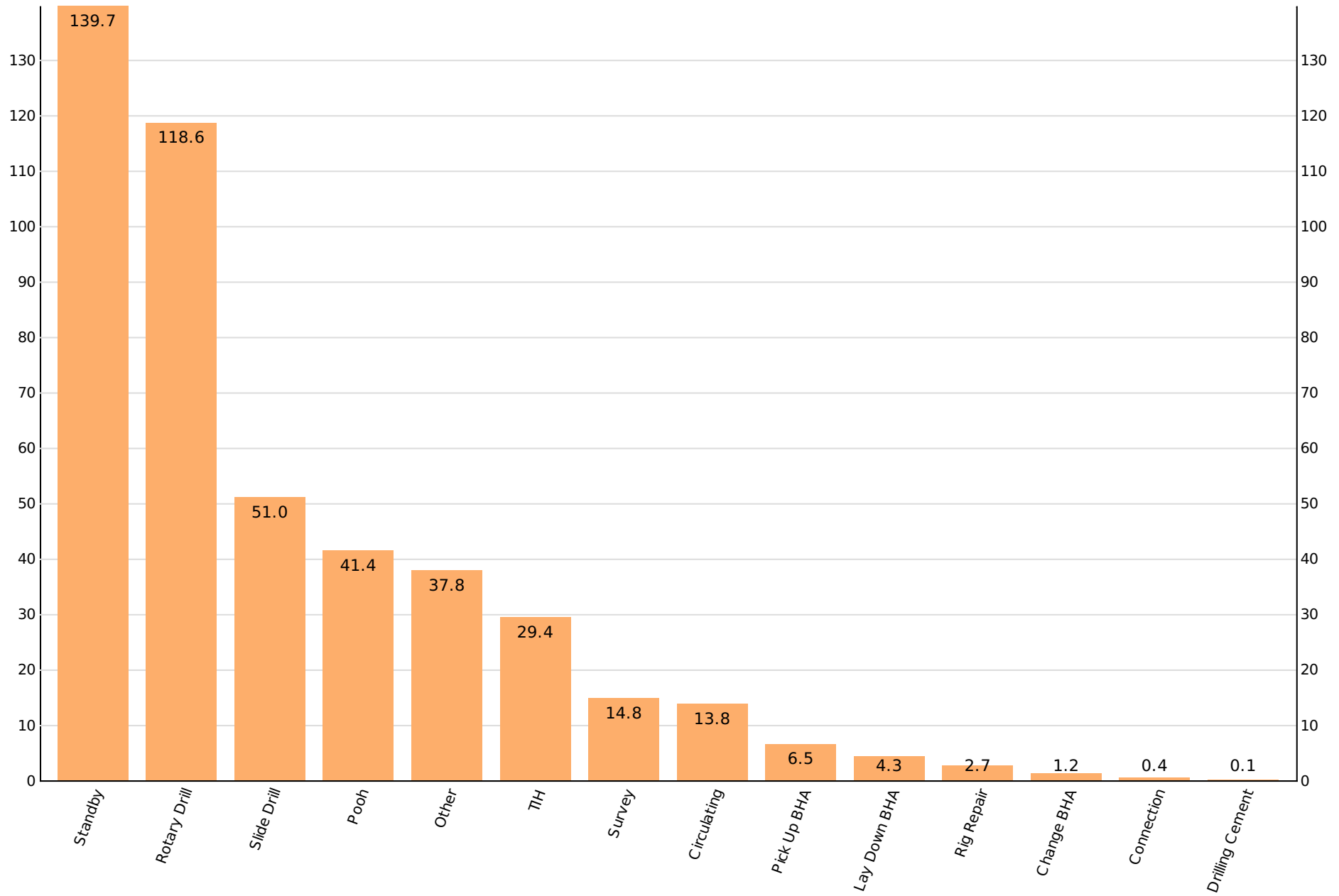
Time Percentage



Days vs. Depth



Directional Activity Hours





Proposed vs. As Drilled

Anderson Fed Com 508H (WT-21-179)

2021-11-15 to 2021-12-20

Lea, New Mexico, US (32.43, -103.64)



Anderson Fed Com 508H
Lea County, New Mexico
Job No. WT-21-179
Plan 1.0



SECTION DETAILS

Sec	MD	Inc	Azi	TVD	+N/-S	+E/-W	Dleg	TFace	VSect	Annotation
1	0.00	0.00	0.00	0.00	0.00	0.00	0.000	0.00	0.00	
2	4800.00	0.00	0.00	4800.00	0.00	0.00	0.000	0.00	0.00	Build: 1°/100'
3	6027.17	12.27	62.96	6017.81	59.52	116.60	1.000	62.96	70.39	Hold: 12.27° Inc, 62.96° Azm
4	8572.21	12.27	62.96	8504.69	305.48	598.40	0.000	0.00	361.23	Drop: 1°/100'
5	9799.37	0.00	0.00	9722.50	365.00	715.00	1.000	180.00	431.61	KOP: 12°/100' @ 9799.37' MD
6	10549.37	90.00	0.28	10199.96	842.46	717.33	12.000	0.28	907.11	LP: 10549.37' MD, 90.00° Inc, 0.28° Azm
7	10551.87	90.00	0.28	10199.96	844.96	717.35	0.000	0.00	909.60	Build: 2°/100'
8	10581.07	90.05	359.70	10199.95	874.16	717.34	2.000	-84.72	938.67	Hold: 90.05° Inc, 359.70° Azm
9	14788.98	90.05	359.70	10196.00	5082.00	695.20	0.000	0.00	5125.16	Build: 2°/100'
10	14936.30	93.00	359.70	10192.07	5229.26	694.42	2.000	0.04	5271.67	Hold: 93.00° Inc, 359.70° Azm
11	16848.26	93.00	359.70	10092.00	7138.57	684.45	0.000	0.00	7171.31	PBHL @ 16848.26' MD/10092.00' TVD

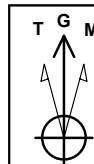
DESIGN TARGET DETAILS

Name	TVD	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude
Anderson #508H PBHL	10092.00	7138.57	684.45	526663.20	755865.80	32° 26' 45.391 N	103° 38' 16.441 W
Anderson #508H WP1	10196.00	5082.00	695.20	524606.63	755876.55	32° 26' 25.041 N	103° 38' 16.472 W
Anderson #508H FTP	10200.00	737.87	722.55	520262.50	755903.90	32° 25' 42.054 N	103° 38' 16.483 W

PROJECT DETAILS: Lea County, New Mexico

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

System Datum: Mean Sea Level



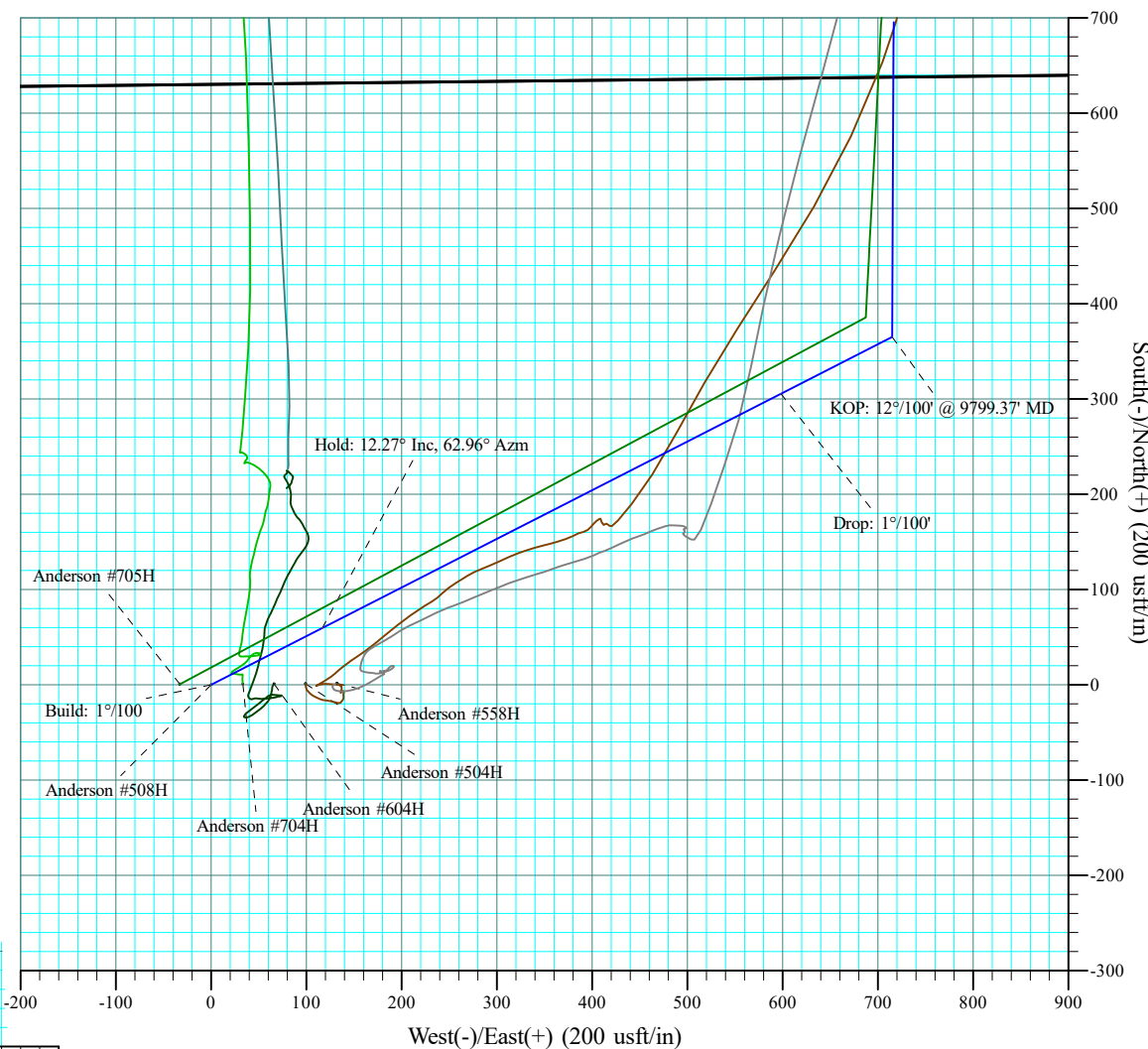
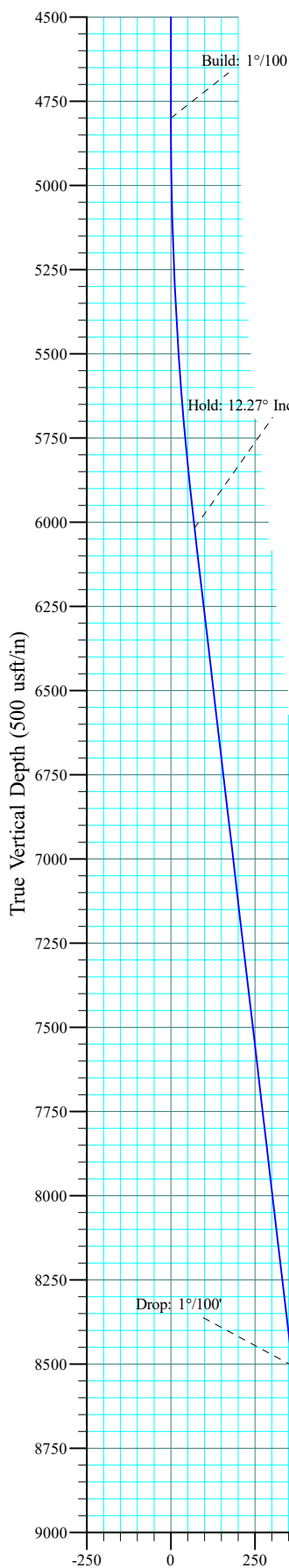
Azimuths to Grid North
True North: -0.37°
Magnetic North: 6.06°

Magnetic Field
Strength: 47845.5nT
Dip Angle: 60.12°
Date: 11/16/2021
Model: MVHDI

SITE DETAILS: Anderson Fed Com 508H

Site Centre Northing: 519524.63
Easting: 755181.35

Positional Uncertainty: 0.00
Convergence: 0.37
Local North: Grid



SECTION DETAILS

Sec	MD	Inc	Azi	TVD	+N/-S	+E/-W	Dleg	TFace	VSect	Target	Annotation
1	0.00	0.00	0.00	0.00			0.000	0.00	0.00		
2	4800.00	0.00	0.00	4800.00	0.00	0.00	0.000	0.00	0.00		Build: 1°/100
3	6027.17	12.27	62.96	6017.81	59.52	116.60	1.000	62.96	70.39		Hold: 12.27° Inc, 62.96° Azm
4	8572.21	12.27	62.96	8504.69	305.48	598.40	0.000	0.00	361.23		Drop: 1°/100'
5	9799.37	0.00	0.00	9722.50	365.00	715.00	1.000	180.00	431.61		KOP: 12°/100' @ 9799.37' MD
6	10549.37	90.00	0.28	10199.96	842.46	717.33	12.000	0.28	907.11		LP: 10549.37' MD, 90.00° Inc, 0.28° Azm
7	10551.87	90.00	0.28	10199.96	844.96	717.35	0.000	0.00	909.60		Build: 2°/100
8	10581.07	90.05	359.70	10199.95	874.16	717.34	2.000	-84.72	938.67		Hold: 90.05° Inc, 359.70° Azm
9	14788.98	90.05	359.70	10196.00	5082.00	695.20	0.000	0.00	5125.16	Anderson #508H WP1	Build: 2°/100
10	14936.30	93.00	359.70	10192.07	5229.26	694.42	2.000	0.04	5271.67		Hold: 93.00° Inc, 359.70° Azm
11	16848.26	93.00	359.70	10092.00	7138.57	684.45	0.000	0.00	7171.31	Anderson #508H PBHL	PBHL @ 16848.26' MD/10092.00' TVD

DESIGN TARGET DETAILS

Name	TVD	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude
Anderson #508H PBHL	10092.00	7138.57	684.45	526663.20	755865.80	32° 26' 45.391 N 103° 38' 16.441 W	
Anderson #508H WP1	10196.00	5082.00	695.20	524606.63	755876.55	32° 26' 25.041 N 103° 38' 16.472 W	
Anderson #508H FTP	10200.00	737.87	722.55	520262.50	755903.90	32° 25' 42.054 N 103° 38' 16.483 W	

SITE DETAILS: Anderson Fed Com 508H

Site Centre Northing: 519524.63
Easting: 755181.35

Positional Uncertainty: 0.00
Convergence: 0.37
Local North: Grid

PROJECT DETAILS: Lea County, New Mexico

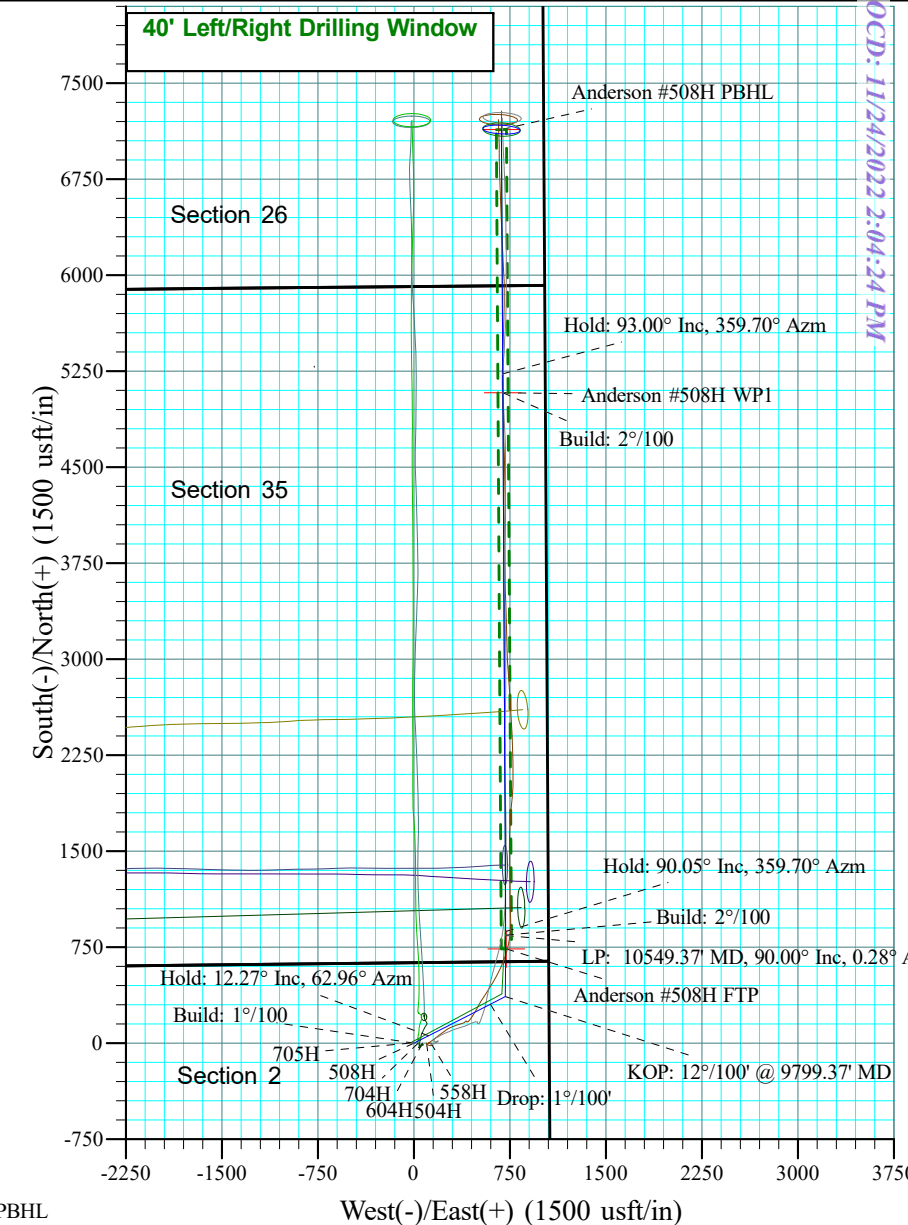
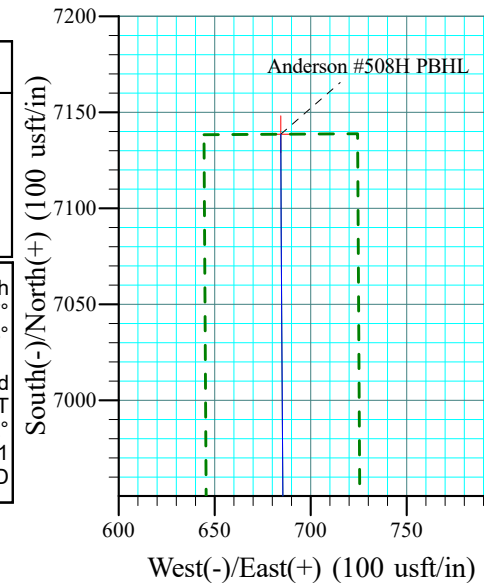
Geodetic System: US State Plane 1983
Datum: North American Datum 1983
Ellipsoid: GRS 1980
Zone: New Mexico Eastern Zone

System Datum: Mean Sea Level



Azimuths to Grid North
True North: -0.37°
Magnetic North: 6.06°

Magnetic Field
Strength: 47845.5nT
Dip Angle: 60.12°
Date: 11/16/2021
Model: MVHD



Drawn By: KAN

Date Created: 11/17/2021

Date Revised: 11/17/2021

File: Advance Energy - Anderson Fed Com 508H - Plan 1.0.dwg

*Note - Aim is not responsible for any collision issues against unknown offset wells.



Aim Directional Services, LLC

Survey Report



Company:	Advance Energy Partners, LLC	Local Co-ordinate Reference:	Well Anderson #508H
Project:	Lea County, New Mexico	TVD Reference:	Well @ 3690.50usft (Nabors X47)
Site:	Anderson Fed Com 508H	MD Reference:	Well @ 3690.50usft (Nabors X47)
Well:	Anderson #508H	North Reference:	Grid
Wellbore:	Planning	Survey Calculation Method:	Minimum Curvature
Design:	Plan 1.0	Database:	RTOC- EDM 5000.1 Single User Db

Project	Lea County, New Mexico		
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 508H		
Site Position:		Northing:	519,524.63 usft
From:	Lat/Long	Easting:	755,181.35 usft
Position Uncertainty:	0.00 usft	Slot Radius:	13-3/16 "
		Latitude:	32° 25' 34.799 N
		Longitude:	103° 38' 24.968 W
		Grid Convergence:	0.37 °

Well	Anderson #508H		
Well Position	+N/-S	0.00 usft	Northing: 519,524.63 usft
	+E/-W	0.00 usft	Easting: 755,181.35 usft
Position Uncertainty	0.00 usft	Wellhead Elevation:	usft
		Latitude:	32° 25' 34.799 N
		Longitude:	103° 38' 24.968 W
		Ground Level:	3,658.00 usft

Wellbore	Planning		
Magnetics	Model Name	Sample Date	Declination (°)
	MVHD	11/16/2021	6.43
			Dip Angle (°) 60.12
			Field Strength (nT) 47,845.515

Design	Plan 1.0		
Audit Notes:			
Version:	Phase:	PROTOTYPE	Tie On Depth: 0.00
Vertical Section:	Depth From (TVD) (usft)	+N/-S (usft)	+E/-W (usft)
	0.00	0.00	0.00
			Direction (°) 5.48

Survey Tool Program	Date	11/17/2021		
From (usft)	To (usft)	Survey (Wellbore)	Tool Name	Description
0.00	16,848.26	Plan 1.0 (Planning)	MWD+HRGM Advance	OWSG MWD + HRGM

Planned Survey									
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.000	0.000	0.000
100.00	0.00	0.00	100.00	0.00	0.00	0.00	0.000	0.000	0.000
200.00	0.00	0.00	200.00	0.00	0.00	0.00	0.000	0.000	0.000
300.00	0.00	0.00	300.00	0.00	0.00	0.00	0.000	0.000	0.000
400.00	0.00	0.00	400.00	0.00	0.00	0.00	0.000	0.000	0.000
500.00	0.00	0.00	500.00	0.00	0.00	0.00	0.000	0.000	0.000
600.00	0.00	0.00	600.00	0.00	0.00	0.00	0.000	0.000	0.000
700.00	0.00	0.00	700.00	0.00	0.00	0.00	0.000	0.000	0.000
800.00	0.00	0.00	800.00	0.00	0.00	0.00	0.000	0.000	0.000
900.00	0.00	0.00	900.00	0.00	0.00	0.00	0.000	0.000	0.000



Aim Directional Services, LLC

Survey Report



Company:	Advance Energy Partners, LLC	Local Co-ordinate Reference:	Well Anderson #508H
Project:	Lea County, New Mexico	TVD Reference:	Well @ 3690.50usft (Nabors X47)
Site:	Anderson Fed Com 508H	MD Reference:	Well @ 3690.50usft (Nabors X47)
Well:	Anderson #508H	North Reference:	Grid
Wellbore:	Planning	Survey Calculation Method:	Minimum Curvature
Design:	Plan 1.0	Database:	RTOC- EDM 5000.1 Single User Db

Planned Survey

Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)
1,000.00	0.00	0.00	1,000.00	0.00	0.00	0.00	0.000	0.000	0.000
1,100.00	0.00	0.00	1,100.00	0.00	0.00	0.00	0.000	0.000	0.000
1,200.00	0.00	0.00	1,200.00	0.00	0.00	0.00	0.000	0.000	0.000
1,300.00	0.00	0.00	1,300.00	0.00	0.00	0.00	0.000	0.000	0.000
1,400.00	0.00	0.00	1,400.00	0.00	0.00	0.00	0.000	0.000	0.000
1,500.00	0.00	0.00	1,500.00	0.00	0.00	0.00	0.000	0.000	0.000
1,600.00	0.00	0.00	1,600.00	0.00	0.00	0.00	0.000	0.000	0.000
1,700.00	0.00	0.00	1,700.00	0.00	0.00	0.00	0.000	0.000	0.000
1,800.00	0.00	0.00	1,800.00	0.00	0.00	0.00	0.000	0.000	0.000
1,900.00	0.00	0.00	1,900.00	0.00	0.00	0.00	0.000	0.000	0.000
2,000.00	0.00	0.00	2,000.00	0.00	0.00	0.00	0.000	0.000	0.000
2,100.00	0.00	0.00	2,100.00	0.00	0.00	0.00	0.000	0.000	0.000
2,200.00	0.00	0.00	2,200.00	0.00	0.00	0.00	0.000	0.000	0.000
2,300.00	0.00	0.00	2,300.00	0.00	0.00	0.00	0.000	0.000	0.000
2,400.00	0.00	0.00	2,400.00	0.00	0.00	0.00	0.000	0.000	0.000
2,500.00	0.00	0.00	2,500.00	0.00	0.00	0.00	0.000	0.000	0.000
2,600.00	0.00	0.00	2,600.00	0.00	0.00	0.00	0.000	0.000	0.000
2,700.00	0.00	0.00	2,700.00	0.00	0.00	0.00	0.000	0.000	0.000
2,800.00	0.00	0.00	2,800.00	0.00	0.00	0.00	0.000	0.000	0.000
2,900.00	0.00	0.00	2,900.00	0.00	0.00	0.00	0.000	0.000	0.000
3,000.00	0.00	0.00	3,000.00	0.00	0.00	0.00	0.000	0.000	0.000
3,100.00	0.00	0.00	3,100.00	0.00	0.00	0.00	0.000	0.000	0.000
3,200.00	0.00	0.00	3,200.00	0.00	0.00	0.00	0.000	0.000	0.000
3,300.00	0.00	0.00	3,300.00	0.00	0.00	0.00	0.000	0.000	0.000
3,400.00	0.00	0.00	3,400.00	0.00	0.00	0.00	0.000	0.000	0.000
3,500.00	0.00	0.00	3,500.00	0.00	0.00	0.00	0.000	0.000	0.000
3,600.00	0.00	0.00	3,600.00	0.00	0.00	0.00	0.000	0.000	0.000
3,700.00	0.00	0.00	3,700.00	0.00	0.00	0.00	0.000	0.000	0.000
3,800.00	0.00	0.00	3,800.00	0.00	0.00	0.00	0.000	0.000	0.000
3,900.00	0.00	0.00	3,900.00	0.00	0.00	0.00	0.000	0.000	0.000
4,000.00	0.00	0.00	4,000.00	0.00	0.00	0.00	0.000	0.000	0.000
4,100.00	0.00	0.00	4,100.00	0.00	0.00	0.00	0.000	0.000	0.000
4,200.00	0.00	0.00	4,200.00	0.00	0.00	0.00	0.000	0.000	0.000
4,300.00	0.00	0.00	4,300.00	0.00	0.00	0.00	0.000	0.000	0.000
4,400.00	0.00	0.00	4,400.00	0.00	0.00	0.00	0.000	0.000	0.000
4,500.00	0.00	0.00	4,500.00	0.00	0.00	0.00	0.000	0.000	0.000
4,600.00	0.00	0.00	4,600.00	0.00	0.00	0.00	0.000	0.000	0.000
4,700.00	0.00	0.00	4,700.00	0.00	0.00	0.00	0.000	0.000	0.000
4,800.00	0.00	0.00	4,800.00	0.00	0.00	0.00	0.000	0.000	0.000
Build: 1°/100									
4,900.00	1.00	62.96	4,900.00	0.40	0.78	0.47	1.000	1.000	0.000
5,000.00	2.00	62.96	4,999.96	1.59	3.11	1.88	1.000	1.000	0.000
5,100.00	3.00	62.96	5,099.86	3.57	6.99	4.22	1.000	1.000	0.000
5,200.00	4.00	62.96	5,199.68	6.35	12.43	7.50	1.000	1.000	0.000



Aim Directional Services, LLC

Survey Report



Company:	Advance Energy Partners, LLC	Local Co-ordinate Reference:	Well Anderson #508H
Project:	Lea County, New Mexico	TVD Reference:	Well @ 3690.50usft (Nabors X47)
Site:	Anderson Fed Com 508H	MD Reference:	Well @ 3690.50usft (Nabors X47)
Well:	Anderson #508H	North Reference:	Grid
Wellbore:	Planning	Survey Calculation Method:	Minimum Curvature
Design:	Plan 1.0	Database:	RTOC- EDM 5000.1 Single User Db

Planned Survey									
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)
5,300.00	5.00	62.96	5,299.37	9.91	19.42	11.72	1.000	1.000	0.000
5,400.00	6.00	62.96	5,398.90	14.27	27.96	16.88	1.000	1.000	0.000
5,500.00	7.00	62.96	5,498.26	19.42	38.04	22.96	1.000	1.000	0.000
5,600.00	8.00	62.96	5,597.40	25.35	49.66	29.98	1.000	1.000	0.000
5,700.00	9.00	62.96	5,696.30	32.07	62.83	37.93	1.000	1.000	0.000
5,800.00	10.00	62.96	5,794.93	39.58	77.53	46.80	1.000	1.000	0.000
5,900.00	11.00	62.96	5,893.26	47.86	93.76	56.60	1.000	1.000	0.000
6,000.00	12.00	62.96	5,991.25	56.93	111.52	67.32	1.000	1.000	0.000
6,027.17	12.27	62.96	6,017.81	59.52	116.60	70.39	1.000	1.000	0.000
Hold: 12.27° Inc, 62.96° Azm									
6,100.00	12.27	62.96	6,088.97	66.56	130.39	78.71	0.000	0.000	0.000
6,200.00	12.27	62.96	6,186.69	76.23	149.32	90.14	0.000	0.000	0.000
6,300.00	12.27	62.96	6,284.41	85.89	168.25	101.57	0.000	0.000	0.000
6,400.00	12.27	62.96	6,382.12	95.55	187.18	112.99	0.000	0.000	0.000
6,500.00	12.27	62.96	6,479.84	105.22	206.11	124.42	0.000	0.000	0.000
6,600.00	12.27	62.96	6,577.55	114.88	225.04	135.85	0.000	0.000	0.000
6,700.00	12.27	62.96	6,675.27	124.55	243.97	147.28	0.000	0.000	0.000
6,800.00	12.27	62.96	6,772.98	134.21	262.91	158.70	0.000	0.000	0.000
6,900.00	12.27	62.96	6,870.70	143.87	281.84	170.13	0.000	0.000	0.000
7,000.00	12.27	62.96	6,968.41	153.54	300.77	181.56	0.000	0.000	0.000
7,100.00	12.27	62.96	7,066.13	163.20	319.70	192.99	0.000	0.000	0.000
7,200.00	12.27	62.96	7,163.84	172.87	338.63	204.41	0.000	0.000	0.000
7,300.00	12.27	62.96	7,261.56	182.53	357.56	215.84	0.000	0.000	0.000
7,400.00	12.27	62.96	7,359.27	192.19	376.49	227.27	0.000	0.000	0.000
7,500.00	12.27	62.96	7,456.99	201.86	395.42	238.70	0.000	0.000	0.000
7,600.00	12.27	62.96	7,554.70	211.52	414.35	250.13	0.000	0.000	0.000
7,700.00	12.27	62.96	7,652.42	221.19	433.28	261.55	0.000	0.000	0.000
7,800.00	12.27	62.96	7,750.13	230.85	452.21	272.98	0.000	0.000	0.000
7,900.00	12.27	62.96	7,847.85	240.51	471.14	284.41	0.000	0.000	0.000
8,000.00	12.27	62.96	7,945.56	250.18	490.07	295.84	0.000	0.000	0.000
8,100.00	12.27	62.96	8,043.28	259.84	509.01	307.26	0.000	0.000	0.000
8,200.00	12.27	62.96	8,140.99	269.51	527.94	318.69	0.000	0.000	0.000
8,300.00	12.27	62.96	8,238.71	279.17	546.87	330.12	0.000	0.000	0.000
8,400.00	12.27	62.96	8,336.42	288.83	565.80	341.55	0.000	0.000	0.000
8,500.00	12.27	62.96	8,434.14	298.50	584.73	352.97	0.000	0.000	0.000
8,572.21	12.27	62.96	8,504.69	305.48	598.40	361.23	0.000	0.000	0.000
Drop: 1°/100'									
8,600.00	11.99	62.96	8,531.87	308.13	603.60	364.37	1.000	-1.000	0.000
8,700.00	10.99	62.96	8,629.86	317.19	621.35	375.08	1.000	-1.000	0.000
8,800.00	9.99	62.96	8,728.19	325.47	637.57	384.87	1.000	-1.000	0.000
8,900.00	8.99	62.96	8,826.81	332.97	652.26	393.74	1.000	-1.000	0.000
9,000.00	7.99	62.96	8,925.72	339.69	665.41	401.68	1.000	-1.000	0.000
9,100.00	6.99	62.96	9,024.86	345.62	677.03	408.69	1.000	-1.000	0.000
9,200.00	5.99	62.96	9,124.22	350.76	687.10	414.77	1.000	-1.000	0.000



Aim Directional Services, LLC

Survey Report



Company:	Advance Energy Partners, LLC	Local Co-ordinate Reference:	Well Anderson #508H
Project:	Lea County, New Mexico	TVD Reference:	Well @ 3690.50usft (Nabors X47)
Site:	Anderson Fed Com 508H	MD Reference:	Well @ 3690.50usft (Nabors X47)
Well:	Anderson #508H	North Reference:	Grid
Wellbore:	Planning	Survey Calculation Method:	Minimum Curvature
Design:	Plan 1.0	Database:	RTOC- EDM 5000.1 Single User Db

Planned Survey

Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)
9,300.00	4.99	62.96	9,223.76	355.11	695.63	419.92	1.000	-1.000	0.000
9,400.00	3.99	62.96	9,323.45	358.67	702.61	424.13	1.000	-1.000	0.000
9,500.00	2.99	62.96	9,423.26	361.44	708.04	427.41	1.000	-1.000	0.000
9,600.00	1.99	62.96	9,523.17	363.42	711.91	429.75	1.000	-1.000	0.000
9,700.00	0.99	62.96	9,623.13	364.61	714.23	431.15	1.000	-1.000	0.000
9,799.37	0.00	0.00	9,722.50	365.00	715.00	431.61	1.000	-1.000	0.000
KOP: 12°/100' @ 9799.37' MD									
9,825.00	3.08	0.28	9,748.11	365.69	715.00	432.30	12.000	12.000	0.000
9,850.00	6.08	0.28	9,773.03	367.68	715.01	434.28	12.000	12.000	0.000
9,875.00	9.08	0.28	9,797.81	370.98	715.03	437.57	12.000	12.000	0.000
9,900.00	12.08	0.28	9,822.38	375.56	715.05	442.13	12.000	12.000	0.000
9,925.00	15.08	0.28	9,846.68	381.43	715.08	447.98	12.000	12.000	0.000
9,950.00	18.08	0.28	9,870.64	388.56	715.12	455.08	12.000	12.000	0.000
9,975.00	21.08	0.28	9,894.19	396.94	715.16	463.42	12.000	12.000	0.000
10,000.00	24.08	0.28	9,917.27	406.53	715.20	472.98	12.000	12.000	0.000
10,025.00	27.08	0.28	9,939.82	417.32	715.26	483.72	12.000	12.000	0.000
10,050.00	30.08	0.28	9,961.77	429.28	715.31	495.63	12.000	12.000	0.000
10,075.00	33.08	0.28	9,983.07	442.37	715.38	508.66	12.000	12.000	0.000
10,100.00	36.08	0.28	10,003.65	456.55	715.45	522.79	12.000	12.000	0.000
10,125.00	39.08	0.28	10,023.46	471.80	715.52	537.97	12.000	12.000	0.000
10,150.00	42.08	0.28	10,042.45	488.06	715.60	554.16	12.000	12.000	0.000
10,175.00	45.08	0.28	10,060.56	505.29	715.69	571.32	12.000	12.000	0.000
10,200.00	48.08	0.28	10,077.74	523.44	715.77	589.40	12.000	12.000	0.000
10,225.00	51.08	0.28	10,093.95	542.47	715.87	608.36	12.000	12.000	0.000
10,250.00	54.08	0.28	10,109.14	562.32	715.96	628.13	12.000	12.000	0.000
10,275.00	57.08	0.28	10,123.28	582.94	716.07	648.66	12.000	12.000	0.000
10,300.00	60.08	0.28	10,136.31	604.27	716.17	669.90	12.000	12.000	0.000
10,325.00	63.08	0.28	10,148.21	626.26	716.28	691.80	12.000	12.000	0.000
10,350.00	66.08	0.28	10,158.94	648.83	716.39	714.28	12.000	12.000	0.000
10,375.00	69.08	0.28	10,168.48	671.94	716.50	737.29	12.000	12.000	0.000
10,400.00	72.08	0.28	10,176.79	695.51	716.62	760.77	12.000	12.000	0.000
10,425.00	75.08	0.28	10,183.86	719.49	716.73	784.65	12.000	12.000	0.000
10,450.00	78.08	0.28	10,189.66	743.80	716.85	808.86	12.000	12.000	0.000
10,475.00	81.08	0.28	10,194.18	768.39	716.97	833.34	12.000	12.000	0.000
10,500.00	84.08	0.28	10,197.41	793.17	717.09	858.03	12.000	12.000	0.000
10,525.00	87.08	0.28	10,199.34	818.10	717.21	882.85	12.000	12.000	0.000
10,549.37	90.00	0.28	10,199.96	842.46	717.33	907.11	12.000	12.000	0.000
LP: 10549.37' MD, 90.00° Inc, 0.28° Azm									
10,551.87	90.00	0.28	10,199.96	844.96	717.35	909.60	0.000	0.000	0.000
Build: 2°/100									
10,581.07	90.05	359.70	10,199.95	874.16	717.34	938.67	2.000	0.184	-1.991
Hold: 90.05° Inc, 359.70° Azm									
10,600.00	90.05	359.70	10,199.93	893.08	717.24	957.50	0.000	0.000	0.000
10,700.00	90.05	359.70	10,199.84	993.08	716.71	1,056.99	0.000	0.000	0.000



Aim Directional Services, LLC

Survey Report



Company:	Advance Energy Partners, LLC	Local Co-ordinate Reference:	Well Anderson #508H
Project:	Lea County, New Mexico	TVD Reference:	Well @ 3690.50usft (Nabors X47)
Site:	Anderson Fed Com 508H	MD Reference:	Well @ 3690.50usft (Nabors X47)
Well:	Anderson #508H	North Reference:	Grid
Wellbore:	Planning	Survey Calculation Method:	Minimum Curvature
Design:	Plan 1.0	Database:	RTOC- EDM 5000.1 Single User Db

Planned Survey

Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)
10,800.00	90.05	359.70	10,199.74	1,093.08	716.19	1,156.48	0.000	0.000	0.000
10,900.00	90.05	359.70	10,199.65	1,193.08	715.66	1,255.97	0.000	0.000	0.000
11,000.00	90.05	359.70	10,199.56	1,293.08	715.14	1,355.46	0.000	0.000	0.000
11,100.00	90.05	359.70	10,199.46	1,393.08	714.61	1,454.95	0.000	0.000	0.000
11,200.00	90.05	359.70	10,199.37	1,493.08	714.08	1,554.45	0.000	0.000	0.000
11,300.00	90.05	359.70	10,199.28	1,593.07	713.56	1,653.94	0.000	0.000	0.000
11,400.00	90.05	359.70	10,199.18	1,693.07	713.03	1,753.43	0.000	0.000	0.000
11,500.00	90.05	359.70	10,199.09	1,793.07	712.50	1,852.92	0.000	0.000	0.000
11,600.00	90.05	359.70	10,198.99	1,893.07	711.98	1,952.41	0.000	0.000	0.000
11,700.00	90.05	359.70	10,198.90	1,993.07	711.45	2,051.90	0.000	0.000	0.000
11,800.00	90.05	359.70	10,198.81	2,093.07	710.93	2,151.39	0.000	0.000	0.000
11,900.00	90.05	359.70	10,198.71	2,193.07	710.40	2,250.88	0.000	0.000	0.000
12,000.00	90.05	359.70	10,198.62	2,293.06	709.87	2,350.38	0.000	0.000	0.000
12,100.00	90.05	359.70	10,198.52	2,393.06	709.35	2,449.87	0.000	0.000	0.000
12,200.00	90.05	359.70	10,198.43	2,493.06	708.82	2,549.36	0.000	0.000	0.000
12,300.00	90.05	359.70	10,198.34	2,593.06	708.29	2,648.85	0.000	0.000	0.000
12,400.00	90.05	359.70	10,198.24	2,693.06	707.77	2,748.34	0.000	0.000	0.000
12,500.00	90.05	359.70	10,198.15	2,793.06	707.24	2,847.83	0.000	0.000	0.000
12,600.00	90.05	359.70	10,198.06	2,893.06	706.72	2,947.32	0.000	0.000	0.000
12,700.00	90.05	359.70	10,197.96	2,993.05	706.19	3,046.82	0.000	0.000	0.000
12,800.00	90.05	359.70	10,197.87	3,093.05	705.66	3,146.31	0.000	0.000	0.000
12,900.00	90.05	359.70	10,197.77	3,193.05	705.14	3,245.80	0.000	0.000	0.000
13,000.00	90.05	359.70	10,197.68	3,293.05	704.61	3,345.29	0.000	0.000	0.000
13,100.00	90.05	359.70	10,197.59	3,393.05	704.08	3,444.78	0.000	0.000	0.000
13,200.00	90.05	359.70	10,197.49	3,493.05	703.56	3,544.27	0.000	0.000	0.000
13,300.00	90.05	359.70	10,197.40	3,593.05	703.03	3,643.76	0.000	0.000	0.000
13,400.00	90.05	359.70	10,197.30	3,693.04	702.51	3,743.25	0.000	0.000	0.000
13,500.00	90.05	359.70	10,197.21	3,793.04	701.98	3,842.75	0.000	0.000	0.000
13,600.00	90.05	359.70	10,197.12	3,893.04	701.45	3,942.24	0.000	0.000	0.000
13,700.00	90.05	359.70	10,197.02	3,993.04	700.93	4,041.73	0.000	0.000	0.000
13,800.00	90.05	359.70	10,196.93	4,093.04	700.40	4,141.22	0.000	0.000	0.000
13,900.00	90.05	359.70	10,196.83	4,193.04	699.87	4,240.71	0.000	0.000	0.000
14,000.00	90.05	359.70	10,196.74	4,293.04	699.35	4,340.20	0.000	0.000	0.000
14,100.00	90.05	359.70	10,196.65	4,393.03	698.82	4,439.69	0.000	0.000	0.000
14,200.00	90.05	359.70	10,196.55	4,493.03	698.30	4,539.18	0.000	0.000	0.000
14,300.00	90.05	359.70	10,196.46	4,593.03	697.77	4,638.68	0.000	0.000	0.000
14,400.00	90.05	359.70	10,196.37	4,693.03	697.24	4,738.17	0.000	0.000	0.000
14,500.00	90.05	359.70	10,196.27	4,793.03	696.72	4,837.66	0.000	0.000	0.000
14,600.00	90.05	359.70	10,196.18	4,893.03	696.19	4,937.15	0.000	0.000	0.000
14,700.00	90.05	359.70	10,196.08	4,993.03	695.66	5,036.64	0.000	0.000	0.000
14,788.98	90.05	359.70	10,196.00	5,082.00	695.20	5,125.16	0.000	0.000	0.000
Build: 2°/100									
14,800.00	90.27	359.70	10,195.97	5,093.02	695.14	5,136.13	2.000	2.000	0.001



Aim Directional Services, LLC

Survey Report



Company:	Advance Energy Partners, LLC	Local Co-ordinate Reference:	Well Anderson #508H
Project:	Lea County, New Mexico	TVD Reference:	Well @ 3690.50usft (Nabors X47)
Site:	Anderson Fed Com 508H	MD Reference:	Well @ 3690.50usft (Nabors X47)
Well:	Anderson #508H	North Reference:	Grid
Wellbore:	Planning	Survey Calculation Method:	Minimum Curvature
Design:	Plan 1.0	Database:	RTOC- EDM 5000.1 Single User Db

Planned Survey

Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)
14,900.00	92.27	359.70	10,193.74	5,192.99	694.61	5,235.59	2.000	2.000	0.001
14,936.30	93.00	359.70	10,192.07	5,229.26	694.42	5,271.67	2.000	2.000	0.001
Hold: 93.00° Inc, 359.70° Azm									
15,000.00	93.00	359.70	10,188.74	5,292.87	694.09	5,334.96	0.000	0.000	0.000
15,100.00	93.00	359.70	10,183.51	5,392.73	693.57	5,434.32	0.000	0.000	0.000
15,200.00	93.00	359.70	10,178.27	5,492.59	693.05	5,533.67	0.000	0.000	0.000
15,300.00	93.00	359.70	10,173.04	5,592.45	692.53	5,633.03	0.000	0.000	0.000
15,400.00	93.00	359.70	10,167.80	5,692.31	692.00	5,732.38	0.000	0.000	0.000
15,500.00	93.00	359.70	10,162.57	5,792.17	691.48	5,831.74	0.000	0.000	0.000
15,600.00	93.00	359.70	10,157.34	5,892.04	690.96	5,931.09	0.000	0.000	0.000
15,700.00	93.00	359.70	10,152.10	5,991.90	690.44	6,030.45	0.000	0.000	0.000
15,800.00	93.00	359.70	10,146.87	6,091.76	689.92	6,129.80	0.000	0.000	0.000
15,900.00	93.00	359.70	10,141.63	6,191.62	689.40	6,229.16	0.000	0.000	0.000
16,000.00	93.00	359.70	10,136.40	6,291.48	688.87	6,328.51	0.000	0.000	0.000
16,100.00	93.00	359.70	10,131.17	6,391.34	688.35	6,427.87	0.000	0.000	0.000
16,200.00	93.00	359.70	10,125.93	6,491.20	687.83	6,527.22	0.000	0.000	0.000
16,300.00	93.00	359.70	10,120.70	6,591.07	687.31	6,626.58	0.000	0.000	0.000
16,400.00	93.00	359.70	10,115.46	6,690.93	686.79	6,725.93	0.000	0.000	0.000
16,500.00	93.00	359.70	10,110.23	6,790.79	686.26	6,825.29	0.000	0.000	0.000
16,600.00	93.00	359.70	10,104.99	6,890.65	685.74	6,924.65	0.000	0.000	0.000
16,700.00	93.00	359.70	10,099.76	6,990.51	685.22	7,024.00	0.000	0.000	0.000
16,800.00	93.00	359.70	10,094.53	7,090.37	684.70	7,123.36	0.000	0.000	0.000
16,848.26	93.00	359.70	10,092.00	7,138.57	684.45	7,171.31	0.000	0.000	0.000
PBHL @ 16848.26' MD/10092.00' TVD									

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 #508H PBH	0.00	0.00	10,092.00	7,138.57	684.45	526,663.20	755,865.80	32° 26' 45.391 N	103° 38' 16.441 W
- plan hits target center									
- Point									
Anderson #508H WP'	0.00	0.00	10,196.00	5,082.00	695.20	524,606.63	755,876.55	32° 26' 25.041 N	103° 38' 16.472 W
- plan hits target center									
- Point									
Anderson #508H FTP	0.00	0.00	10,200.00	737.87	722.55	520,262.50	755,903.90	32° 25' 42.054 N	103° 38' 16.483 W
- plan misses target center by 12.71usft at 10446.66usft MD (10188.96 TVD, 740.53 N, 716.84 E)									
- Point									



Aim Directional Services, LLC

Survey Report



Company:	Advance Energy Partners, LLC	Local Co-ordinate Reference:	Well Anderson #508H
Project:	Lea County, New Mexico	TVD Reference:	Well @ 3690.50usft (Nabors X47)
Site:	Anderson Fed Com 508H	MD Reference:	Well @ 3690.50usft (Nabors X47)
Well:	Anderson #508H	North Reference:	Grid
Wellbore:	Planning	Survey Calculation Method:	Minimum Curvature
Design:	Plan 1.0	Database:	RTOC- EDM 5000.1 Single User Db

Plan Annotations

Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates		Comment
		+N/-S (usft)	+E/-W (usft)	
4800	4800	0	0	Build: 1°/100
6027	6018	60	117	Hold: 12.27° Inc, 62.96° Azm
8572	8505	305	598	Drop: 1°/100'
9799	9723	365	715	KOP: 12°/100' @ 9799.37' MD
10,549	10,200	842	717	LP: 10549.37' MD, 90.00° Inc, 0.28° Azm
10,552	10,200	845	717	Build: 2°/100
10,581	10,200	874	717	Hold: 90.05° Inc, 359.70° Azm
14,789	10,196	5082	695	Build: 2°/100
14,936	10,192	5229	694	Hold: 93.00° Inc, 359.70° Azm
16,848	10,092	7139	684	PBHL @ 16848.26' MD/10092.00' TVD

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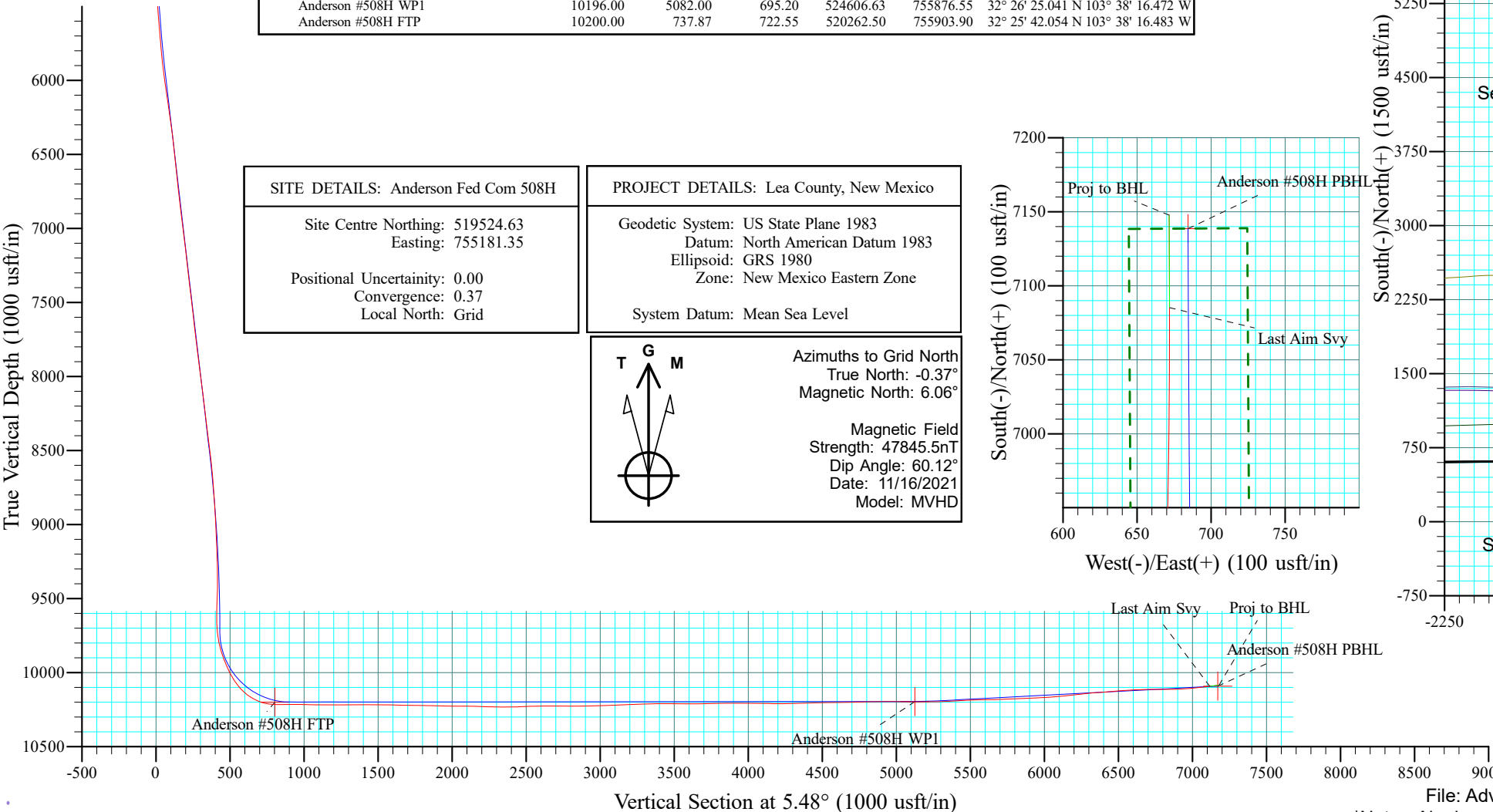


Advance Energy Partners, LLC

Anderson Fed Com 508H
Lea County, New Mexico
Job No. WT-21-179
Plan 1.0 As Drilled



Received by OCD: 11/24/2022 2:04:24 PM



SECTION DETAILS											
Sec	MD	Inc	Azi	TVD	+N/-S	+E/-W	Dleg	TFace	VSect	Target	Annotation
1	16842.00	97.10	359.82	10093.39	7085.23	671.92	0.000	0.00	7117.02		Last Aim Svy
2	16905.00	97.10	359.82	10085.60	7147.75	671.73	0.000	0.00	7179.23		Proj to BHL

DESIGN TARGET DETAILS							
Name	TVD	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude
Anderson #508H PBHL	10092.00	7138.57	684.45	526663.20	755865.80	32° 26' 45.391 N 103° 38' 16.441 W	
Anderson #508H WP1	10196.00	5082.00	695.20	524606.63	755876.55	32° 26' 25.041 N 103° 38' 16.472 W	
Anderson #508H FTP	10200.00	737.87	722.55	520262.50	755903.90	32° 25' 42.054 N 103° 38' 16.483 W	

SITE DETAILS: Anderson Fed Com 508H

Site Centre Northing: 519524.63
Easting: 755181.35

Positional Uncertainty: 0.00
Convergence: 0.37
Local North: Grid

PROJECT DETAILS: Lea County, New Mexico

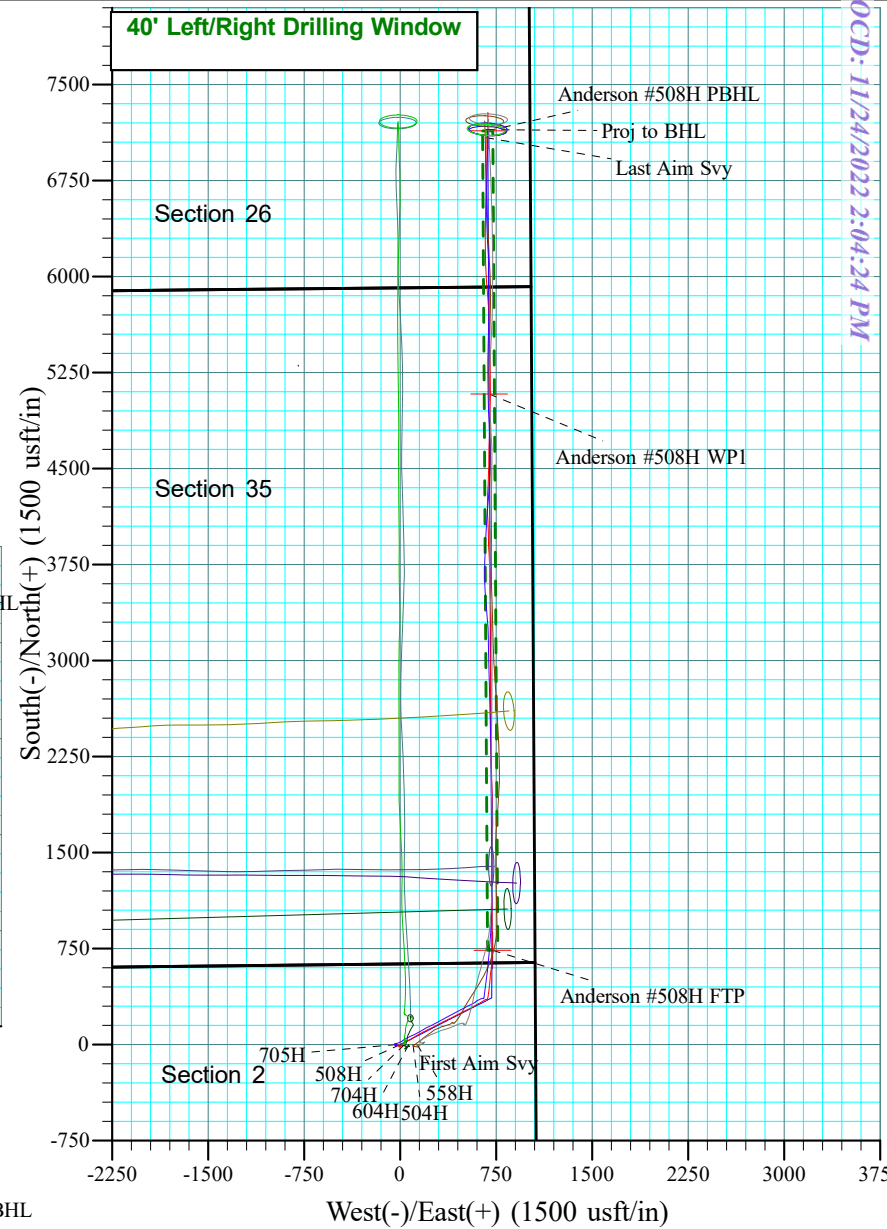
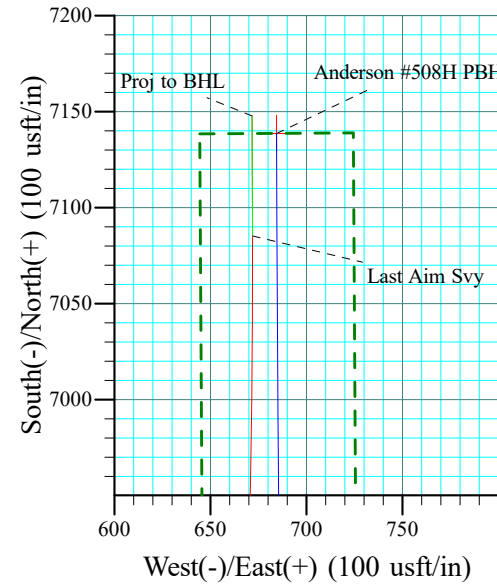
Geodetic System: US State Plane 1983
Datum: North American Datum 1983
Ellipsoid: GRS 1980
Zone: New Mexico Eastern Zone

System Datum: Mean Sea Level

T G M

Azimuths to Grid North
True North: -0.37°
Magnetic North: 6.06°

Magnetic Field
Strength: 47845.5nT
Dip Angle: 60.12°
Date: 11/16/2021
Model: MVHD



Page 4 of 21



Survey Reports

Anderson Fed Com 508H (WT-21-179)

2021-11-15 to 2021-12-20

Lea, New Mexico, US (32.43, -103.64)



Aim Directional Services, LLC

Survey Report



Company:	Advance Energy Partners, LLC	Local Co-ordinate Reference:	Well Anderson #508H
Project:	Lea County, New Mexico	TVD Reference:	Well @ 3690.50usft (Nabors X47)
Site:	Anderson Fed Com 508H	MD Reference:	Well @ 3690.50usft (Nabors X47)
Well:	Anderson #508H	North Reference:	Grid
Wellbore:	Drilling	Survey Calculation Method:	Minimum Curvature
Design:	Surveys	Database:	RTOC- EDM 5000.1 Single User Db

Project	Lea County, New Mexico		
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 508H		
Site Position:		Northing:	519,524.63 usft
From:	Lat/Long	Easting:	755,181.35 usft
Position Uncertainty:	0.00 usft	Slot Radius:	13-3/16 "
		Latitude:	32° 25' 34.799 N
		Longitude:	103° 38' 24.968 W
		Grid Convergence:	0.37 °

Well	Anderson #508H		
Well Position	+N/-S	0.00 usft	Northing: 519,524.63 usft
	+E/-W	0.00 usft	Easting: 755,181.35 usft
Position Uncertainty	0.00 usft	Wellhead Elevation:	usft
		Latitude:	32° 25' 34.799 N
		Longitude:	103° 38' 24.968 W
		Ground Level:	3,658.00 usft

Wellbore	Drilling		
Magnetics	Model Name	Sample Date	Declination (°)
	MVHD	11/16/2021	6.43
			Dip Angle (°) 60.12
			Field Strength (nT) 47,845.515

Design	Surveys		
Audit Notes:			
Version:	1.0	Phase:	ACTUAL
		Tie On Depth:	0.00
Vertical Section:	Depth From (TVD) (usft)	+N/-S (usft)	+E/-W (usft)
	0.00	0.00	0.00
			Direction (°) 5.48

Survey Program	Date	12/18/2021		
From (usft)	To (usft)	Survey (Wellbore)	Tool Name	Description
197.00	16,905.00	MWD Surveys (Drilling)	MWD+HRGM Advance	OWSG MWD + HRGM

Survey									
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.000	0.000	0.000
197.00	1.32	283.44	196.98	0.53	-2.21	0.31	0.670	0.670	0.000
First Aim Svy									
317.00	1.45	280.81	316.95	1.13	-5.04	0.65	0.121	0.108	-2.192
497.00	0.66	98.78	496.93	1.40	-6.26	0.80	1.172	-0.439	98.872
588.00	0.66	105.02	587.93	1.19	-5.23	0.68	0.079	0.000	6.857
770.00	0.48	136.05	769.92	0.37	-3.69	0.01	0.193	-0.099	17.049
951.00	0.57	216.82	950.91	-0.90	-3.70	-1.25	0.378	0.050	44.624
1,132.00	1.05	229.13	1,131.89	-2.71	-5.50	-3.22	0.281	0.265	6.801
1,203.00	1.05	223.41	1,202.88	-3.60	-6.44	-4.20	0.148	0.000	-8.056
1,352.00	1.54	219.55	1,351.84	-6.14	-8.65	-6.94	0.334	0.329	-2.591



Aim Directional Services, LLC

Survey Report



Company:	Advance Energy Partners, LLC	Local Co-ordinate Reference:	Well Anderson #508H
Project:	Lea County, New Mexico	TVD Reference:	Well @ 3690.50usft (Nabors X47)
Site:	Anderson Fed Com 508H	MD Reference:	Well @ 3690.50usft (Nabors X47)
Well:	Anderson #508H	North Reference:	Grid
Wellbore:	Drilling	Survey Calculation Method:	Minimum Curvature
Design:	Surveys	Database:	RTOC- EDM 5000.1 Single User Db

Survey									
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)
1,512.00	0.70	31.28	1,511.83	-6.96	-9.51	-7.84	1.397	-0.525	107.331
1,607.00	2.68	36.12	1,606.78	-4.67	-7.90	-5.41	2.088	2.084	5.095
1,702.00	2.68	40.43	1,701.68	-1.19	-5.15	-1.67	0.212	0.000	4.537
1,798.00	1.76	77.60	1,797.61	0.84	-2.25	0.62	1.731	-0.958	38.719
1,894.00	1.93	118.21	1,893.57	0.39	0.61	0.45	1.344	0.177	42.302
1,990.00	2.24	121.99	1,989.50	-1.37	3.63	-1.02	0.353	0.323	3.937
2,085.00	0.62	65.83	2,084.47	-2.14	5.67	-1.59	2.067	-1.705	-59.116
2,180.00	0.79	44.20	2,179.46	-1.46	6.60	-0.83	0.329	0.179	-22.768
2,276.00	1.14	71.54	2,275.45	-0.68	7.96	0.08	0.593	0.365	28.479
2,372.00	0.57	77.43	2,371.44	-0.28	9.33	0.61	0.600	-0.594	6.135
2,468.00	1.10	242.05	2,467.44	-0.61	8.99	0.25	1.726	0.552	171.479
2,659.00	1.05	220.60	2,658.40	-2.79	6.23	-2.19	0.211	-0.026	-11.230
2,755.00	0.75	186.85	2,754.39	-4.09	5.58	-3.53	0.621	-0.312	-35.156
2,851.00	0.79	125.50	2,850.38	-5.09	6.04	-4.49	0.819	0.042	-63.906
2,947.00	1.32	99.93	2,946.37	-5.67	7.67	-4.91	0.726	0.552	-26.635
3,042.00	2.11	83.67	3,041.33	-5.67	10.49	-4.64	0.969	0.832	-17.116
3,138.00	1.89	75.76	3,137.27	-5.08	13.78	-3.74	0.367	-0.229	-8.240
3,234.00	0.44	116.10	3,233.25	-4.85	15.64	-3.34	1.646	-1.510	42.021
3,330.00	2.15	174.11	3,329.22	-6.81	16.16	-5.23	2.034	1.781	60.427
3,425.00	2.07	199.51	3,424.16	-10.20	15.77	-8.64	0.980	-0.084	26.737
3,521.00	2.15	265.86	3,520.11	-11.96	13.40	-10.63	2.406	0.083	69.114
3,617.00	2.64	288.10	3,616.02	-11.40	9.50	-10.45	1.085	0.510	23.167
3,712.00	1.45	338.46	3,710.97	-9.61	6.98	-8.90	2.154	-1.253	53.010
3,808.00	1.93	26.01	3,806.93	-7.02	7.24	-6.30	1.491	0.500	49.531
3,904.00	0.40	35.77	3,902.91	-5.30	8.14	-4.50	1.601	-1.594	10.167
4,000.00	2.02	202.06	3,998.89	-6.60	7.70	-5.83	2.511	1.687	173.218
4,095.00	2.15	207.68	4,093.83	-9.73	6.25	-9.08	0.255	0.137	5.916
4,191.00	2.20	218.58	4,189.76	-12.76	4.26	-12.30	0.433	0.052	11.354
4,287.00	2.29	226.40	4,285.69	-15.52	1.72	-15.29	0.332	0.094	8.146
4,383.00	2.29	229.57	4,381.61	-18.09	-1.12	-18.11	0.132	0.000	3.302
4,478.00	1.41	270.96	4,476.56	-19.30	-3.74	-19.57	1.626	-0.926	43.568
4,574.00	1.71	298.65	4,572.53	-18.59	-6.18	-19.10	0.835	0.312	28.844
4,706.00	1.63	294.34	4,704.47	-16.88	-9.61	-17.72	0.113	-0.061	-3.265
4,826.00	1.45	291.18	4,824.43	-15.62	-12.59	-16.76	0.166	-0.150	-2.633
4,855.00	1.67	294.52	4,853.42	-15.32	-13.31	-16.52	0.821	0.759	11.517
4,951.00	2.55	56.77	4,949.38	-13.57	-12.80	-14.73	3.874	0.917	127.343
5,046.00	3.08	53.26	5,044.27	-10.88	-8.99	-11.69	0.586	0.558	-3.695
5,142.00	4.70	54.14	5,140.04	-7.03	-3.73	-7.36	1.689	1.687	0.917
5,238.00	4.79	56.42	5,235.72	-2.51	2.80	-2.23	0.218	0.094	2.375
5,334.00	4.70	55.19	5,331.39	1.95	9.36	2.83	0.141	-0.094	-1.281
5,429.00	5.67	59.67	5,426.00	6.54	16.61	8.10	1.106	1.021	4.716
5,525.00	6.99	65.56	5,521.41	11.35	26.02	13.79	1.531	1.375	6.135
5,620.00	8.44	60.46	5,615.55	17.18	37.35	20.67	1.686	1.526	-5.368



Aim Directional Services, LLC

Survey Report



Company:	Advance Energy Partners, LLC	Local Co-ordinate Reference:	Well Anderson #508H
Project:	Lea County, New Mexico	TVD Reference:	Well @ 3690.50usft (Nabors X47)
Site:	Anderson Fed Com 508H	MD Reference:	Well @ 3690.50usft (Nabors X47)
Well:	Anderson #508H	North Reference:	Grid
Wellbore:	Drilling	Survey Calculation Method:	Minimum Curvature
Design:	Surveys	Database:	RTOC- EDM 5000.1 Single User Db

Survey									
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)
5,716.00	8.88	60.29	5,710.45	24.33	49.92	28.98	0.459	0.458	-0.177
5,812.00	10.55	69.43	5,805.08	31.09	64.58	37.11	2.363	1.740	9.521
5,908.00	10.77	60.20	5,899.43	38.64	80.60	46.16	1.791	0.229	-9.615
6,003.00	12.09	56.51	5,992.55	48.54	96.60	57.54	1.588	1.389	-3.884
6,099.00	13.67	56.69	6,086.13	60.31	114.46	70.97	1.646	1.646	0.187
6,194.00	13.76	55.72	6,178.42	72.84	133.18	85.23	0.260	0.095	-1.021
6,289.00	13.19	61.17	6,270.81	84.43	152.01	98.56	1.465	-0.600	5.737
6,385.00	12.88	62.93	6,364.33	94.58	171.13	110.49	0.525	-0.323	1.833
6,480.00	12.22	63.63	6,457.06	103.87	189.57	121.50	0.713	-0.695	0.737
6,576.00	11.30	64.07	6,551.05	112.49	207.13	131.76	0.963	-0.958	0.458
6,671.00	11.47	61.78	6,644.18	121.03	223.82	141.85	0.508	0.179	-2.411
6,766.00	11.30	66.18	6,737.31	129.26	240.66	151.65	0.931	-0.179	4.632
6,861.00	12.75	62.75	6,830.22	137.82	258.50	161.87	1.701	1.526	-3.611
6,956.00	12.22	61.61	6,922.98	147.40	276.66	173.14	0.615	-0.558	-1.200
7,051.00	13.49	62.84	7,015.60	157.23	295.37	184.72	1.367	1.337	1.295
7,147.00	12.79	63.36	7,109.08	167.11	314.83	196.41	0.739	-0.729	0.542
7,243.00	11.52	64.60	7,202.93	175.99	332.99	206.98	1.351	-1.323	1.292
7,339.00	12.84	62.66	7,296.76	185.00	351.12	217.68	1.439	1.375	-2.021
7,434.00	12.79	63.54	7,389.40	194.53	369.91	228.97	0.212	-0.053	0.926
7,530.00	11.82	64.77	7,483.19	203.46	388.32	239.61	1.047	-1.010	1.281
7,625.00	12.92	62.31	7,575.99	212.54	406.53	250.39	1.284	1.158	-2.589
7,721.00	12.70	62.57	7,669.60	222.39	425.40	262.00	0.237	-0.229	0.271
7,817.00	11.56	64.24	7,763.45	231.43	443.43	272.72	1.242	-1.187	1.740
7,912.00	11.96	61.52	7,856.46	240.26	460.65	283.16	0.719	0.421	-2.863
8,008.00	13.85	61.61	7,950.03	250.47	479.50	295.12	1.969	1.969	0.094
8,104.00	14.11	63.01	8,043.19	261.24	500.04	307.80	0.444	0.271	1.458
8,199.00	12.97	64.42	8,135.54	271.10	519.98	319.52	1.249	-1.200	1.484
8,295.00	12.26	66.00	8,229.23	279.90	539.00	330.09	0.822	-0.740	1.646
8,391.00	12.92	60.82	8,322.92	289.28	557.69	341.21	1.362	0.687	-5.396
8,486.00	12.35	60.11	8,415.62	299.52	575.77	353.14	0.622	-0.600	-0.747
8,582.00	11.87	60.73	8,509.48	309.46	593.28	364.71	0.518	-0.500	0.646
8,678.00	11.52	61.69	8,603.49	318.84	610.33	375.67	0.417	-0.365	1.000
8,773.00	8.44	62.84	8,697.04	326.52	624.89	384.70	3.249	-3.242	1.211
8,869.00	6.46	58.35	8,792.23	332.57	635.76	391.76	2.148	-2.062	-4.677
8,964.00	5.27	52.11	8,886.73	338.05	643.75	397.99	1.419	-1.253	-6.568
9,059.00	4.48	59.32	8,981.39	342.63	650.39	403.17	1.051	-0.832	7.589
9,155.00	4.48	63.01	9,077.09	346.24	656.95	407.40	0.300	0.000	3.844
9,250.00	4.09	60.46	9,171.83	349.60	663.21	411.33	0.457	-0.411	-2.684
9,346.00	2.37	72.86	9,267.67	351.87	668.08	414.06	1.924	-1.792	12.917
9,441.00	1.45	84.02	9,362.62	352.57	671.15	415.06	1.040	-0.968	11.747
9,537.00	1.58	123.31	9,458.59	351.97	673.47	414.68	1.069	0.135	40.927
9,600.00	1.80	133.94	9,521.56	350.81	674.91	413.66	0.606	0.349	16.873
9,706.00	2.29	146.51	9,627.49	347.89	677.27	410.98	0.624	0.462	11.858



Aim Directional Services, LLC

Survey Report



Company:	Advance Energy Partners, LLC	Local Co-ordinate Reference:	Well Anderson #508H
Project:	Lea County, New Mexico	TVD Reference:	Well @ 3690.50usft (Nabors X47)
Site:	Anderson Fed Com 508H	MD Reference:	Well @ 3690.50usft (Nabors X47)
Well:	Anderson #508H	North Reference:	Grid
Wellbore:	Drilling	Survey Calculation Method:	Minimum Curvature
Design:	Surveys	Database:	RTOC- EDM 5000.1 Single User Db

Survey

Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)
9,802.00	6.29	23.73	9,723.31	351.11	680.45	414.48	8.095	4.167	-127.896
9,898.00	13.19	11.51	9,817.88	366.67	684.76	430.39	7.464	7.187	-12.729
9,993.00	21.01	8.35	9,908.61	394.19	689.40	458.22	8.287	8.232	-3.326
10,089.00	26.11	6.94	9,996.58	432.21	694.46	496.55	5.344	5.312	-1.469
10,185.00	36.62	4.83	10,078.44	481.85	699.44	546.44	11.006	10.948	-2.198
10,280.00	51.43	6.32	10,146.56	547.36	705.95	612.28	15.627	15.589	1.568
10,376.00	68.04	5.71	10,194.78	629.54	714.57	694.90	17.311	17.302	-0.635
10,422.00	77.85	2.19	10,208.25	673.35	717.56	738.80	22.542	21.326	-7.652
10,485.63	88.17	0.18	10,215.99	736.40	718.85	801.68	16.521	16.221	-3.160
Anderson #508H FTP									
10,503.00	90.99	359.64	10,216.11	753.77	718.82	818.97	16.521	16.226	-3.105
10,599.00	90.20	0.35	10,215.12	849.77	718.81	914.53	1.106	-0.823	0.740
10,694.00	88.44	359.38	10,216.25	944.76	718.59	1,009.06	2.115	-1.853	-1.021
10,789.00	88.79	359.03	10,218.54	1,039.72	717.27	1,103.46	0.521	0.368	-0.368
10,885.00	89.93	359.29	10,219.61	1,135.70	715.86	1,198.87	1.218	1.187	0.271
10,980.00	91.74	358.06	10,218.23	1,230.66	713.67	1,293.19	2.303	1.905	-1.295
11,076.00	89.45	1.23	10,217.23	1,326.63	713.07	1,388.67	4.073	-2.385	3.302
11,172.00	89.71	0.96	10,217.94	1,422.61	714.91	1,484.38	0.390	0.271	-0.281
11,267.00	88.31	1.67	10,219.58	1,517.57	717.09	1,579.12	1.652	-1.474	0.747
11,363.00	89.49	1.58	10,221.42	1,613.51	719.81	1,674.88	1.233	1.229	-0.094
11,459.00	89.19	0.96	10,222.53	1,709.48	721.94	1,770.61	0.717	-0.312	-0.646
11,554.00	88.44	359.73	10,224.49	1,804.46	722.51	1,865.21	1.516	-0.789	-1.295
11,650.00	89.14	358.68	10,226.52	1,900.43	721.18	1,960.61	1.314	0.729	-1.094
11,745.00	90.20	358.06	10,227.07	1,995.38	718.48	2,054.88	1.293	1.116	-0.653
11,840.00	88.40	358.24	10,228.23	2,090.32	715.41	2,149.09	1.904	-1.895	0.189
11,936.00	87.91	357.27	10,231.32	2,186.20	711.65	2,244.17	1.132	-0.510	-1.010
12,031.00	89.05	357.36	10,233.84	2,281.06	707.20	2,338.17	1.204	1.200	0.095
12,127.00	92.53	0.43	10,232.51	2,377.01	705.35	2,433.50	4.833	3.625	3.198
12,222.00	91.87	0.26	10,228.87	2,471.93	705.92	2,528.05	0.717	-0.695	-0.179
12,318.00	90.37	359.56	10,226.99	2,567.91	705.77	2,623.57	1.724	-1.562	-0.729
12,414.00	89.67	1.05	10,226.96	2,663.91	706.28	2,719.18	1.715	-0.729	1.552
12,509.00	89.80	0.17	10,227.40	2,758.90	707.29	2,813.84	0.936	0.137	-0.926
12,605.00	91.16	0.00	10,226.59	2,854.89	707.44	2,909.40	1.428	1.417	-0.177
12,700.00	91.38	358.77	10,224.49	2,949.86	706.42	3,003.84	1.315	0.232	-1.295
12,796.00	93.01	359.20	10,220.81	3,045.77	704.72	3,099.15	1.756	1.698	0.448
12,892.00	92.04	359.29	10,216.58	3,141.67	703.45	3,194.49	1.015	-1.010	0.094
12,988.00	92.22	0.79	10,213.01	3,237.60	703.52	3,289.99	1.573	0.187	1.562
13,083.00	91.16	0.08	10,210.21	3,332.56	704.24	3,384.58	1.343	-1.116	-0.747
13,179.00	88.75	0.26	10,210.29	3,428.55	704.53	3,480.16	2.517	-2.510	0.187
13,274.00	89.27	359.73	10,211.93	3,523.53	704.52	3,574.71	0.782	0.547	-0.558
13,369.00	91.08	358.68	10,211.64	3,618.52	703.20	3,669.14	2.203	1.905	-1.105
13,464.00	91.12	357.71	10,209.81	3,713.45	700.21	3,763.35	1.022	0.042	-1.021
13,560.00	91.25	356.92	10,207.83	3,809.33	695.71	3,858.36	0.834	0.135	-0.823
13,655.00	89.63	357.89	10,207.10	3,904.22	691.41	3,952.41	1.988	-1.705	1.021



Aim Directional Services, LLC

Survey Report



Company:	Advance Energy Partners, LLC	Local Co-ordinate Reference:	Well Anderson #508H
Project:	Lea County, New Mexico	TVD Reference:	Well @ 3690.50usft (Nabors X47)
Site:	Anderson Fed Com 508H	MD Reference:	Well @ 3690.50usft (Nabors X47)
Well:	Anderson #508H	North Reference:	Grid
Wellbore:	Drilling	Survey Calculation Method:	Minimum Curvature
Design:	Surveys	Database:	RTOC- EDM 5000.1 Single User Db

Survey									
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)
13,750.00	89.01	358.68	10,208.23	3,999.17	688.57	4,046.65	1.057	-0.653	0.832
13,846.00	89.19	357.10	10,209.73	4,095.09	685.03	4,141.79	1.656	0.187	-1.646
13,941.00	90.37	359.47	10,210.10	4,190.04	682.19	4,236.04	2.787	1.242	2.495
14,037.00	92.13	1.75	10,208.00	4,286.00	683.21	4,331.66	3.000	1.833	2.375
14,132.00	91.25	3.25	10,205.20	4,380.87	687.35	4,426.48	1.830	-0.926	1.579
14,228.00	90.37	1.49	10,203.84	4,476.77	691.32	4,522.33	2.050	-0.917	-1.833
14,324.00	90.77	0.35	10,202.89	4,572.75	692.86	4,618.02	1.258	0.417	-1.187
14,419.00	92.26	0.61	10,200.38	4,667.71	693.66	4,712.62	1.592	1.568	0.274
14,515.00	90.33	2.81	10,198.21	4,763.63	696.52	4,808.38	3.048	-2.010	2.292
14,565.00	91.38	3.34	10,197.46	4,813.56	699.21	4,858.33	2.352	2.100	1.060
14,663.00	89.54	1.49	10,196.68	4,911.46	703.33	4,956.18	2.662	-1.878	-1.888
14,752.00	89.10	0.70	10,197.73	5,000.43	705.04	5,044.91	1.016	-0.494	-0.888
14,802.00	89.01	0.96	10,198.56	5,050.42	705.76	5,094.74	0.550	-0.180	0.520
14,833.55	89.60	0.41	10,198.94	5,081.97	706.14	5,126.18	2.558	1.875	-1.740
Anderson #508H WP1									
14,898.00	90.81	359.29	10,198.71	5,146.41	705.97	5,190.31	2.558	1.875	-1.740
14,993.00	91.08	358.41	10,197.14	5,241.38	704.06	5,284.66	0.969	0.284	-0.926
15,088.00	93.19	358.41	10,193.60	5,336.27	701.43	5,378.87	2.221	2.221	0.000
15,184.00	93.54	0.08	10,187.97	5,432.10	700.17	5,474.13	1.774	0.365	1.740
15,280.00	90.02	358.77	10,184.98	5,528.03	699.20	5,569.53	3.912	-3.667	-1.365
15,376.00	91.96	357.97	10,183.33	5,623.97	696.47	5,664.78	2.186	2.021	-0.833
15,471.00	92.62	357.27	10,179.53	5,718.81	692.53	5,758.81	1.012	0.695	-0.737
15,566.00	92.26	355.86	10,175.49	5,813.55	686.84	5,852.57	1.531	-0.379	-1.484
15,661.00	92.18	354.46	10,171.80	5,908.14	678.83	5,945.96	1.475	-0.084	-1.474
15,757.00	94.15	356.57	10,166.50	6,003.69	671.34	6,040.36	3.004	2.052	2.198
15,853.00	95.38	358.06	10,158.53	6,099.25	666.86	6,135.05	2.008	1.281	1.552
15,948.00	96.22	359.38	10,148.93	6,193.73	664.74	6,228.91	1.641	0.884	1.389
16,043.00	95.96	0.26	10,138.85	6,288.20	664.45	6,322.91	0.961	-0.274	0.926
16,139.00	93.36	1.31	10,131.05	6,383.86	665.76	6,418.26	2.919	-2.708	1.094
16,234.00	95.21	1.23	10,123.95	6,478.57	667.86	6,512.74	1.949	1.947	-0.084
16,330.00	93.05	1.31	10,117.04	6,574.29	669.98	6,608.22	2.252	-2.250	0.083
16,426.00	90.07	0.61	10,114.43	6,670.23	671.59	6,703.88	3.189	-3.104	-0.729
16,521.00	89.41	359.03	10,114.86	6,765.22	671.29	6,798.41	1.802	-0.695	-1.663
16,616.00	92.35	359.64	10,113.40	6,860.19	670.19	6,892.84	3.161	3.095	0.642
16,712.00	95.08	1.14	10,107.18	6,955.98	670.84	6,988.25	3.243	2.844	1.562
16,842.00	97.10	359.82	10,093.39	7,085.23	671.92	7,117.02	1.853	1.554	-1.015
Last Aim Svy									
16,895.06	97.10	359.82	10,086.83	7,137.89	671.76	7,169.41	0.000	0.000	0.000
Anderson #508H PBHL									
16,905.00	97.10	359.82	10,085.60	7,147.75	671.73	7,179.23	0.000	0.000	0.000
Proj to BHL									



Aim Directional Services, LLC

Survey Report



Company:	Advance Energy Partners, LLC	Local Co-ordinate Reference:	Well Anderson #508H
Project:	Lea County, New Mexico	TVD Reference:	Well @ 3690.50usft (Nabors X47)
Site:	Anderson Fed Com 508H	MD Reference:	Well @ 3690.50usft (Nabors X47)
Well:	Anderson #508H	North Reference:	Grid
Wellbore:	Drilling	Survey Calculation Method:	Minimum Curvature
Design:	Surveys	Database:	RTOC- EDM 5000.1 Single User Db

Survey Annotations

Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates		Comment
		+N/-S (usft)	+E/-W (usft)	
197.00	196.98	0.53	-2.21	First Aim Svy
16,842.00	10,093.39	7,085.23	671.92	Last Aim Svy
16,905.00	10,085.60	7,147.75	671.73	Proj to BHL



BHA Reports

Anderson Fed Com 508H (WT-21-179)

2021-11-15 to 2021-12-20

Lea, New Mexico, US (32.43, -103.64)



Job Number WT-21-179	Operator Advance Energy Partners	Rig Name Nabors X47
Start Date 2021-11-15	Well Name Anderson Fed Com 508H	Legal Well Name AFE Anderson Fed Com 508H
Play Delaware Basin	State/Province and Country New Mexico, US	County Lea
Company Man		

BHA #1 - 17.50" SURFACE (Directional)

Motor Details		Date/Depth/Distances		Hours	
Size(in)	8.00	Date In	2021-11-18 09:30	Downhole Hours	12.00
Lobe/Stage	7/8, 5.9	Depth In (ft)	155.00	Drilling/Circulating Hours	6.67
Bend Angle	1.75	Date Out	2021-11-18 21:30	Drilling Hours	6.17
Speed (rev/gal)	0.16	Depth Out (ft)	1275.00	Circulating Hours	0.50
Wear Pad OD (in)	8.250	Distance Slid (ft)	20.00	Sliding Hours	0.17
Incident	No	Distance Rotated (ft)	1100.00	Rotating Hours	6.00
Motor Post Run/Notes		% Distance Sliding	1.79%	% Hours Sliding	2.70%
Average Total ROP (ft/h)	181.62	% Distance Rotating	98.21%	% Hours Rotating	97.30%
Average Slide ROP (ft/h)	120.00	BHA Objective			
Average Rotating ROP (ft/h)	183.33	Drill 17.5 Surface			
Notes: NO VISIBLE DAMAGE					
Bit Details					
OD (in)	17.500	POOH Reason/Notes			
Vendor	ULTERRA				
Nozzles	9x12's	Total Depth/Casing Point: POOH Surface TD			
Total Flow Area (in²)	0.994	Incident Notes			
Bit Distances					
Bit To Survey (Bit To Survey): 72.00 ft, Bend (Bit To Bend): 6.19 ft		Directional: N/A			
Bit Post Run/Notes		MWD:			
Dull Grading	1/1	Comments			
Notes: 1-1		Directional: Directional: 8" Motor: 1.75° FXD 7/8 5.9 Stg w/ 17" STAB, Flow Range: 400-900 GPM, Max Diff: 1330 psi, Max Torque: 22,020 ft/lbs, RPG: 0.16 Bit Runs: 4			
MWD		Parameters			
Max Downhole Temp (°F)	N/A				
Mud Properties					
Type	Water Based	Flow Rate (gpm)	550.00 - 854.00	Motor RPM	100.00 - 136.00
WT	9.30	On Bottom Pressure (psi)	650.00 - 2900.00	Surface RPM	50.00 - 60.00
VIS	32.00	Off Bottom Pressure (psi)	600.00 - 1600.00	Rotating WOB (klbs)	5.00 - 20.00
PV	10.00	Stall Pressure (psi)	0.00	Sliding WOB (klbs)	15.00 - 15.00
YP	8.00	Stalls	0	Temp (°F)	91.00 - -0.00
		NPT	0.0		

Items (Directional)

Description	Vendor	SN#	Top Conn	Btm Conn	ID (in)	OD (in)	Fn Len. (ft)	Len (ft)	Aggr. Len (ft)
Bit (Fixed Cutter) Description: CF616, Type: PDC (Polycrystalline Diamond Compacts), Gauge Length (in): 1.00, Size (in): 17.50	ULTERRA	56546	6 5/8" Reg Pin			17.500		1.50	1.50
Mud Motor Description: 8" Motor 7/8 5.9 1.75 FXD w/ 17"NBS, Size (in): 8.00, Bend Angle (°): 1.75, Rotor Lobe: 7, Stator Lobe: 8, Stator Stage: 5.9	Aim	800-40-008	6 5/8" Reg Box	6 5/8" Reg Box		8.000		40.57	42.07
Stabilizer Description: 17" STABILIZER	JAO	JAO 7623	6 5/8" Reg Box	6 5/8" Reg Pin	3.063	8.250		7.53	49.60
UBHO Sub Description: NM UBHO, Material: Steel	AIM	800226	6 5/8" Reg Box	6 5/8" Reg Pin	2.875	8.000		3.97	53.57
Drill Collar Description: 8" NMDC, Material: Non-Magnetic, Type: Slick Drill	Gator Tech	GT8030287	6 5/8" Reg Box	6 5/8" Reg Pin	3.250	8.000		30.41	83.98
Drill Collar Description: 8" NMDC, Material: Non-Magnetic, Type: Slick Drill	Gator Tech	GT8030601	6 5/8" Reg Box	6 5/8" Reg Pin	3.250	8.063		30.67	114.65
Crossover Sub Description: Crossover, Material: Steel	PLATINUM	PPR6258	CET54 Box	6 5/8" Reg Pin	3.000	6.750		3.37	118.02





Job Number WT-21-179	Operator Advance Energy Partners	Rig Name Nabors X47
Start Date 2021-11-15	Well Name Anderson Fed Com 508H	Legal Well Name AFE Anderson Fed Com 508H
Play Delaware Basin	State/Province and Country New Mexico, US	County Lea
		Company Man

BHA #2 - 12.25" INTERMEDIATE (Directional)

Motor Details	Date/Depth/Distances	Hours
Size (in) 8.75	Date In 2021-11-19 11:45	Downhole Hours 59.75
Lobe/Stage 6/7, 6.6	Depth In (ft) 1275.00	Drilling/Circulating Hours 20.50
Bend Angle 1.75	Date Out 2021-11-21 23:30	Drilling Hours 19.08
Speed (rev/gal) 0.16	Depth Out (ft) 4775.00	Circulating Hours 1.42
Wear Pad OD (in) 8.250	Distance Slid (ft) 315.00	Sliding Hours 4.25
Incident No	Distance Rotated (ft) 3185.00	Rotating Hours 14.83
Motor Post Run/Notes	% Distance Sliding 9.00%	% Hours Sliding 22.27%
Average Total ROP (ft/h) 183.41	% Distance Rotating 91.00%	% Hours Rotating 77.73%
Average Slide ROP (ft/h) 74.12		
Average Rotating ROP (ft/h) 214.72		

Notes: NO VISIBLE DAMAGE	BHA Objective
	12 1/4" Intermediate

Bit Details	
OD (in) 12.250	
Vendor ULTERRA	

Nozzles 9x12's	POOH Reason/Notes
Total Flow Area (in²) 0.994	Total Depth/Casing Point: POOH To L/D Intermediate Assembly. Intermediate Section TD

Bit Distances	Incident Notes
Bit To Survey (Bit To Survey): 69.00 ft,	Directional: N/A
Bend (Bit To Bend): 6.55 ft	MWD:

Bit Post Run/Notes	Comments
Dull Grading 1/1	Directional: Directional: 8 3/4" Motor: 1.75° FXD 6.7 6.6 Stg w/ 12" STAB, Flow Range: 600-1300 GPM, Max Diff: 1650 psi, Max Torque: 31,480 ft/lbs, RPG: 0.155 Bit Runs: 1
Notes: 0	

MWD	
Max Downhole Temp (°F) N/A	

Mud Properties	Parameters
Type Water Based	Flow Rate (gpm) 800.00 - 850.00
WT 10.55	Motor RPM 136.00 - 40.00
VIS 30.00	On Bottom Pressure (psi) 1700.00 - 3150.00
PV 1.00	Surface RPM 40.00 - 50.00
YP 1.00	Off Bottom Pressure (psi) 1300.00 - 14550.01
	Rotating WOB (klbs) 10.00 - 54.00
	Stall Pressure (psi) 0.00
	Sliding WOB (klbs) 21.00 - 30.00
	Stalls 0
	Temp (°F) 77.00 - 118.40
	NPT 0.0

Items (Directional)

Description	Vendor	SN#	Top Conn	Btm Conn	ID (in)	OD (in)	Fn Len. (ft)	Len (ft)	Aggr. Len (ft)
Bit (Fixed Cutter) Description: RPS616, Type: PDC (Polycrystalline Diamond Compacts), Gauge Length (in): 1.00, Size (in): 12.25	ULTERRA	56281	6 5/8" Reg Pin			12.250		1.50	1.50
Mud Motor Description: 8" Motor 6/7 6.6 1.75 FXD w/ 12"NBS, Size (in): 8.75, Bend Angle (°): 1.75, Rotor Lobe: 6, Stator Lobe: 7, Stator Stage: 6.6	Aim	CDM875-003	6 5/8" Reg Box	6 5/8" Reg Box		8.000		38.95	40.45
Stabilizer Description: 12" STABILIZER	JAO	JAO 12584	6 5/8" Reg Box	6 5/8" Reg Pin	2.600	8.250		6.76	47.21
UBHO Sub Description: NM UBHO, Material: Steel	AIM	800228	6 5/8" Reg Box	6 5/8" Reg Pin	2.875	8.000		4.12	51.33
Drill Collar Description: 8" NMDC, Material: Non-Magnetic, Type: Slick Drill	Gator Tech	GT8030287	6 5/8" Reg Box	6 5/8" Reg Pin	3.250	8.000		30.41	81.74
Drill Collar Description: 8" NMDC, Material: Non-Magnetic, Type: Slick Drill	Gator Tech	GT8030601	6 5/8" Reg Box	6 5/8" Reg Pin	3.250	8.063		30.67	112.41
Crossover Sub Description: Crossover, Material: Steel	PLATINUM	PPR6258	CET54 Box	6 5/8" Reg Pin	3.000	6.750		3.37	115.78





Job Number WT-21-179	Operator Advance Energy Partners	Rig Name Nabors X47
Start Date 2021-11-15	Well Name Anderson Fed Com 508H	Legal Well Name AFE Anderson Fed Com 508H
Play Delaware Basin	State/Province and Country New Mexico, US	County Lea
		Company Man

BHA #3 - 8.75" INTERMEDIATE (Directional)

Motor Details		Date/Depth/Distances	Hours
Size (in)	8.75	Date In	2021-12-08 01:30
Lobe/Stage	7/8, 8.5	Depth In (ft)	4775.00
Bend Angle	1.75	Date Out	2021-12-09 21:45
Speed (rev/gal)	0.26	Depth Out (ft)	9664.00
Wear Pad OD (in)	5.350	Distance Slid (ft)	326.00
Incident	No	Distance Rotated (ft)	4563.00
Motor Post Run/Notes		% Distance Sliding	6.67%
Average Total ROP (ft/h)	181.07	% Distance Rotating	93.33%
Average Slide ROP (ft/h)	55.89	BHA Objective	
Average Rotating ROP (ft/h)	215.57	8.75" INTERMEDIATE	
Notes: NO VISIBLE DAMAGE			

Bit Details	
OD (in)	8.750
Vendor	REED
Nozzles	6x15's
Total Flow Area (in²)	1.035

Bit Distances	
Bit To Survey (Bit To Survey): 64.00 ft, Bend (Bit To Bend): 5.35 ft, Gamma (Bit to Gamma): 49.00 ft	
Bit Post Run/Notes	
Dull Grading	1/1
Notes: 0	
MWD	
Max Downhole Temp (°F)	N/A

Mud Properties	
Type	Oil Based
WT	9.20
VIS	28.00
PV	1.00
YP	1.00

Parameters	
Flow Rate (gpm)	600.00 - 749.00
On Bottom Pressure (psi)	2050.00 - 3050.00
Off Bottom Pressure (psi)	1550.00 - 2400.00
Stall Pressure (psi)	0.00
Stalls	0
NPT	0.0

Comments	
Directional: Contender 40s 7" 7/8 8.5, 1.75° Fxd w/ 8.50" NBS, Flow Range: 500-750 GPM, Max Diff: 1910 psi, Max Torque: 18,710 ft/lbs, RPG: 0.26 Bit Runs: 0	

Notes: 0		Diff: 1910 psi, Max Torque: 18,710 ft/lbs, RPG: 0.26 Bit Runs: 0	
MWD			
Max Downhole Temp (°F)	N/A		

Bit (Fixed Cutter) Description: <i>TKC66-AZ2, Type: PDC (Polycrystalline Diamond Compacts), Gauge Length (in): 1.00, Size (in): 8.75</i>	REED	A283082	4 1/2" Reg Pin			8.750		1.00	1.00
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Mud Motor Description: <i>7" Motor 7/8 8.5 1.75 Fxd w/ 8.50" NBS, Size (in): 8.75, Bend Angle (°): 1.75, Rotor Lobe: 7, Stator Lobe: 8, Stator Stage: 8.5</i>	Aim	700-40-021	4 1/2" IF Box	4 1/2" Reg Box		7.000		34.85	35.85
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Stabilizer Description: <i>8.50" STABILIZER</i>	JAO	JAO 86989	4 1/2" IF Box	4 1/2" IF Pin	2.310	6.460		3.98	39.83
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UBHO Sub Description: <i>NM UBHO, Material: Non-Magnetic</i>	AIM	675300	4 1/2" IF Box	4 1/2" IF Box	2.875	6.880		2.91	42.74
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Drill Collar Description: <i>6.75" NMDC, Material: Non-Magnetic, Type: Slick Drill</i>	Gator Tech	6730196	4 1/2" IF Box	4 1/2" IF Pin	3.300	6.750		28.94	71.68
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Drill Collar Description: <i>6.75" NMDC, Material: Non-Magnetic, Type: Slick Drill</i>	Gator Tech	6732371	4 1/2" IF Box	4 1/2" IF Pin	3.100	6.960		29.50	101.18
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Crossover Sub Description: <i>Crossover, Material: Steel</i>	PLATINUM	PPR6255	CET54 Box	4 1/2" IF Pin	2.500	6.460		3.44	104.62
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HWDP Description: <i>13 Stands 5.5 HWDP, Type: Slick</i>	rig		CET54 Box	CET54 Pin	3.250	5.500		1177.85	1282.47
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Job Number WT-21-179	Operator Advance Energy Partners	Rig Name Nabors X47
Start Date 2021-11-15	Well Name Anderson Fed Com 508H	Legal Well Name AFE Anderson Fed Com 508H
Play Delaware Basin	State/Province and Country New Mexico, US	County Lea
Company Man		

BHA #4 - 8.75" CURVE (Directional)

Motor Details	Date/Depth/Distances	Hours
Size (in) 8.75	Date In 2021-12-09 23:30	Downhole Hours 23.75
Lobe/Stage 7/8, 5.0	Depth In (ft) 9664.00	Drilling/Circulating Hours 10.33
Bend Angle 2.12	Date Out 2021-12-10 23:15	Drilling Hours 7.08
Speed (rev/gal) 0.28	Depth Out (ft) 10148.00	Circulating Hours 3.25
Wear Pad OD (in) 6.920	Distance Slid (ft) 423.00	Sliding Hours 6.50
Incident No	Distance Rotated (ft) 61.00	Rotating Hours 0.58
Motor Post Run/Notes	% Distance Sliding 87.40%	% Hours Sliding 91.76%
Average Total ROP (ft/h) 68.33	% Distance Rotating 12.60%	% Hours Rotating 8.24%
Average Slide ROP (ft/h) 65.08	BHA Objective	
Average Rotating ROP (ft/h) 104.57	8.75" CURVE	

Notes: NO VISIBLE DAMAGE

Bit Details

OD (in) 8.750	POOH Reason/Notes
Vendor ULTERRA	Build Rate: POOH For Build Rates
Nozzles 6x15's	
Total Flow Area (in²) 1.035	

Bit Distances	Incident Notes
Bit To Survey (Bit To Survey): 59.00 ft, Bend (Bit To Bend): 4.05 ft, Gamma (Bit to Gamma): 35.00 ft	Directional: N/A
	MWD:

Bit Post Run/Notes	Comments
Dull Grading 0/1	Directional: Contender 6 3/4" 7/8 5.0, 2.12° Fxd w/ SLK, Flow Range: 300-600 GPM, Max Diff: 1130 psi, Max Torque: 15,690 ft/lbs, RPG: 0.28 Bit Runs: 0
Notes: 0	

MWD	
Max Downhole Temp (°F) N/A	

Mud Properties	Parameters
Type Water Based	Flow Rate (gpm) 496.00 - 500.00
WT 9.10	Motor RPM 128.00 - 128.00
VIS 32.00	On Bottom Pressure (psi) 1750.00 - 1900.00
PV 1.00	Surface RPM 0.00 - 0.00
YP 1.00	Off Bottom Pressure (psi) 1100.00 - 1050.00
	Rotating WOB (klbs) 0.00 - 0.00
	Stall Pressure (psi) 0.00
	Sliding WOB (klbs) 35.00 - 40.00
	Temp (°F) 118.00 - 125.00
	Stalls 0
	NPT 0.0

Items (Directional)									
Description	Vendor	SN#	Top Conn	Btm Conn	ID (in)	OD (in)	Fn Len. (ft)	Len (ft)	Aggr. Len (ft)
Bit (Fixed Cutter) Description: CF611, Type: PDC (Polycrystalline Diamond Compacts), Gauge Length (in): 1.00, Size (in): 8.75	ULTERRA	57264	4 1/2" Reg Pin			8.750		1.00	1.00
Mud Motor Description: 6 3/4" Motor 7/8 5.0 2.12 FXD / SLK, Size (in): 8.75, Bend Angle (°): 2.12, Rotor Lobe: 7, Stator Lobe: 8, Stator Stage: 5	Aim	700-40-002	4 1/2" IF Box	4 1/2" Reg Box		6.750		26.02	27.02
Other Description: Resistivity Tool NM	Benchtree	650-1010	4 1/2" IF Box	4 1/2" IF Pin	3.250	6.500		31.27	58.29
Other Description: Battery Sub NM	Benchtree	B6003xx	4 1/2" IF Box	4 1/2" IF Pin	3.250	6.500		17.21	75.50
Drill Collar Description: 6.75" NMDC, Material: Non-Magnetic, Type: Slick Drill	Gator Tech	6730196	4 1/2" IF Box	4 1/2" IF Pin	3.300	6.750		28.94	104.44
Crossover Sub Description: Crossover, Material: Steel	PLATINUM	PPR6255	CET54 Box	4 1/2" IF Pin	2.500	6.460		3.44	107.88





Job Number WT-21-179	Operator Advance Energy Partners	Rig Name Nabors X47
Start Date 2021-11-15	Well Name Anderson Fed Com 508H	Legal Well Name AFE Anderson Fed Com 508H
Play Delaware Basin	State/Province and Country New Mexico, US	County Lea
Company Man		

BHA #5 - 8.75" CURVE (Directional)

Motor Details		Date/Depth/Distances		Hours	
Size(in)	8.75	Date In	2021-12-10 23:45	Downhole Hours	22.75
Lobe/Stage	7/8, 5.7	Depth In (ft)	10148.00	Drilling/Circulating Hours	8.50
Bend Angle	2.89	Date Out	2021-12-11 22:30	Drilling Hours	7.42
Speed (rev/gal)	0.24	Depth Out (ft)	10481.00	Circulating Hours	1.08
Wear Pad OD (in)	7.520	Distance Slid (ft)	333.00	Sliding Hours	7.42
Incident	No	Distance Rotated (ft)	0.00	Rotating Hours	0.00
Motor Post Run/Notes		% Distance Sliding	100.00%	% Hours Sliding	100.00%
Average Total ROP (ft/h)	44.90	% Distance Rotating	0.00%	% Hours Rotating	0.00%

BHA Objective

8.75" CURVE

POOH Reason/Notes

Change Bottom Hole Assembly: P/U Lateral Assembly

Incident Notes**Directional:****MWD:****Comments****Directional:** Contender 7" 7/8 5.7, 2.89° Adj w/ SLK, Flow Range: 300-650 GPM, Max Diff: 1,280 psi, Max Torque: 20,580 ft/lbs, RPG: 0.24 Bit Runs: 2**Parameters**

Flow Rate (gpm)	300.00 - 450.00	Motor RPM	72.00 - 132.00
On Bottom Pressure (psi)	750.00 - 1200.00	Surface RPM	72.00 - 132.00
Off Bottom Pressure (psi)	700.00 - 1200.00	Rotating WOB (klbs)	0.00 - 0.00
Stall Pressure (psi)	0.00	Sliding WOB (klbs)	30.00 - 40.00
Stalls	0	Temp (°F)	118.00 - 124.00
NPT	0.0		

Items (Directional)

Description	Vendor	SN#	Top Conn	Btm Conn	ID (in)	OD (in)	Fn Len. (ft)	Len (ft)	Aggr. Len (ft)
Bit (Fixed Cutter) Description: CF611, Type: PDC (Polycrystalline Diamond Compacts), Gauge Length (in): 1.00, Size (in): 8.75	ULTERRA	57218	4 1/2" Reg Pin			8.750		1.00	1.00
Mud Motor Description: 7" Motor 7/8 5.7 2.89 Adj/SLK, Size (in): 8.75, Bend Angle (°): 2.89, Rotor Lobe: 7, Stator Lobe: 8, Stator Stage: 5.7	Aim	700-40-008	4 1/2" IF Box	4 1/2" Reg Box		6.750		26.38	27.38
Other Description: Resistivity Tool NM	Benchtree	650-1010	4 1/2" IF Box	4 1/2" IF Pin	3.250	6.500		31.27	58.65
Other Description: Battery Sub NM	Benchtree	B6003xx	4 1/2" IF Box	4 1/2" IF Pin	3.250	6.500		17.21	75.86
Drill Collar Description: 6.75" NMDC, Material: Non-Magnetic, Type: Slick Drill	Gator Tech	6730196	4 1/2" IF Box	4 1/2" IF Pin	3.300	6.750		28.94	104.80
Crossover Sub Description: Crossover, Material: Steel	PLATINUM	PPR6255	CET54 Box	4 1/2" IF Pin	2.500	6.460		3.44	108.24





Job Number WT-21-179	Operator Advance Energy Partners	Rig Name Nabors X47
Start Date 2021-11-15	Well Name Anderson Fed Com 508H	Legal Well Name AFE Anderson Fed Com 508H
Play Delaware Basin	State/Province and Country New Mexico, US	County Lea
		Company Man

BHA #6 - 8.75" LATERAL ASSEMBLY (Directional)

Motor Details		Date/Depth/Distances		Hours	
Size(in)	7.00	Date In	2021-12-11 22:30	Downhole Hours	111.50
Lobe/Stage	7/8, 6.1	Depth In (ft)	10481.00	Drilling/Circulating Hours	93.42
Bend Angle	1.75	Date Out	2021-12-16 14:00	Drilling Hours	89.42
Speed (rev/gal)	0.25	Depth Out (ft)	16104.00	Circulating Hours	4.00
Wear Pad OD (in)	7.250	Distance Slid (ft)	766.00	Sliding Hours	21.08
Incident	No	Distance Rotated (ft)	4857.00	Rotating Hours	68.33
Motor Post Run/Notes		% Distance Sliding	13.62%	% Hours Sliding	23.58%
Average Total ROP (ft/h)	62.89	% Distance Rotating	86.38%	% Hours Rotating	76.42%
Average Slide ROP (ft/h)	36.33	BHA Objective			
Average Rotating ROP (ft/h)	71.08	8.75" LATERAL ASSEMBLY			
Notes: NO VISIBLE DAMAGE					
Bit Details					
OD (in)	8.750				
Vendor	REED	POOH Reason/Notes			
Nozzles	7X14's	Other: POOH for slow ROP, motor drained well and had minimal slack in between bit and power section, no visible damage			
Total Flow Area (in²)	1.520				
Bit Distances		Incident Notes			
Bit To Survey (Bit To Survey): 63.00 ft, Bend (Bit To Bend): 5.23 ft, Gamma (Bit to Gamma): 39.00 ft		Directional:			
Bit Post Run/Notes		MWD:			
Dull Grading		Comments			
Notes: 0		Directional: (BICO)7" SSS100 Motor: 1.75° FXD 7/8 6.1 Stg w/ SLICK, Flow Range: 300-700 GPM, Max Diff: 1,800 psi, Max Torque: 17,100 ft/lbs, RPG: 0.25 Bit Runs: 2			
MWD					
Max Downhole Temp (°F)	N/A				
Mud Properties		Parameters			
Type	Water Based	Flow Rate (gpm)	222.00 - 700.00	Motor RPM	0.00 - 0.00
WT	9.30	On Bottom Pressure (psi)	3600.00 - 4260.00	Surface RPM	30.00 - 40.00
VIS	64.00	Off Bottom Pressure (psi)	3000.00 - 3960.00	Rotating WOB (klbs)	32.00 - 42.00
PV	18.00	Stall Pressure (psi)	18000.05	Sliding WOB (klbs)	28.00 - 45.00
YP	12.00	Stalls	0	Temp (°F)	170.00 - 210.00
		NPT	0.0		

Items (Directional)

Description	Vendor	SN#	Top Conn	Btm Conn	ID (in)	OD (in)	Fn Len. (ft)	Len (ft)	Aggr. Len (ft)
Bit (Fixed Cutter) Description: <i>TKC76-U1</i> , Type: <i>PDC (Polycrystalline Diamond Compacts)</i> , Gauge Length (in): <i>1.00</i> , Size (in): <i>8.75</i>	REED	A281412	4 1/2" Reg Pin			8.750		1.00	1.00
Mud Motor Description: <i>7" BICO Motor 7/8 6.1 1.75 Fxd / SLK</i> , Size (in): <i>7.00</i> , Bend Angle (°): <i>1.75</i> , Rotor Lobe: <i>7</i> , Stator Lobe: <i>8</i> , Stator Stage: <i>6.1</i>	Bico	BPB5700-0069	4 1/2" IF Box	4 1/2" Reg Box		7.000		30.23	31.23
Other Description: <i>Resistivity Tool NM</i>	Benchtree	650-1010	4 1/2" IF Box	4 1/2" IF Pin	3.250	6.500		31.27	62.50
Other Description: <i>Battery Sub NM</i>	Benchtree	B6003xx	4 1/2" IF Box	4 1/2" IF Pin	3.250	6.500		17.21	79.71
Drill Collar Description: <i>6.75" NMDC</i> , Material: <i>Non-Magnetic</i> , Type: <i>Slick Drill</i>	Gator Tech	6730196	4 1/2" IF Box	4 1/2" IF Pin	3.300	6.750		28.94	108.65
Crossover Sub Description: <i>Crossover</i> , Material: <i>Steel</i>	PLATINUM	PPR6255	CET54 Box	4 1/2" IF Pin	2.500	6.460		3.44	112.09
Drill Pipe Description: <i>20 Stands of 5.5" DP</i> , Type: <i>Slick</i>	RIG		CET54 Box	CET54 Box	2.520	5.500		1913.72	2025.81
Crossover Sub Description: <i>Crossover</i> , Material: <i>Steel</i>	PLATINUM	PPR7092	CET54 Box	4 1/2" IF Pin	2.500	6.460		3.50	2029.31
Agitator Description: <i>ADJITATOR w/ 1.85 Plt</i> , Size, Size (in): <i>7.00</i>	NOV	AGHF0675-0078	4 1/2" IF Box	4 1/2" IF Pin		7.000		24.95	2054.26
Crossover Sub Description: <i>Crossover</i> , Material: <i>Steel</i>	PLATINUM	PPR6255	4 1/2" IF Box	CET54 Pin	2.500	6.460		3.44	2057.70



	Job Number WT-21-179	Operator Advance Energy Partners		Rig Name Nabors X47
	Start Date 2021-11-15	Well Name Anderson Fed Com 508H		Legal Well Name AFE Anderson Fed Com 508H
	Play Delaware Basin	State/Province and Country New Mexico, US	County Lea	Company Man

BHA #7 - 8.75" LATERAL ASSEMBLY (Directional)

Motor Details		Date/Depth/Distances		Hours	
Size(in)	7.00	Date In	2021-12-16 14:40	Downhole Hours	38.83
Lobe/Stage	7/8, 6.1	Depth In (ft)	16104.00	Drilling/Circulating Hours	15.67
Bend Angle	1.75	Date Out	2021-12-18 05:30	Drilling Hours	13.42
Speed (rev/gal)	0.25	Depth Out (ft)	16905.00	Circulating Hours	2.25
Wear Pad OD (in)	7.250	Distance Slid (ft)	135.00	Sliding Hours	5.75
Incident	No	Distance Rotated (ft)	666.00	Rotating Hours	7.67
Motor Post Run/Notes		% Distance Sliding	16.85%	% Hours Sliding	42.86%
Average Total ROP (ft/h)	59.70	% Distance Rotating	83.15%	% Hours Rotating	57.14%
Average Slide ROP (ft/h)	23.48	BHA Objective			
Average Rotating ROP (ft/h)	86.87	8.75" LATERAL ASSEMBLY			
Notes: NO VISIBLE DAMAGE					
Bit Details					
OD (in)	8.750				
Vendor	REED	POOH Reason/Notes			
Nozzles	7X15's	Total Depth/Casing Point: N/A			
Total Flow Area (in²)	1.208				
Bit Distances		Incident Notes			
Bit To Survey (Bit To Survey): 63.00 ft, Bend (Bit To Bend): 5.23 ft, Gamma (Bit to Gamma): 39.00 ft		Directional: N/A			
		MWD:			
Bit Post Run/Notes		Comments			
Dull Grading	1/1	Directional: (BICO)7" SSS100 Motor: 1.75° FXD 7/8 6.1 Stg w/ SLICK, Flow Range: 300-700 GPM, Max Diff: 1,800 psi, Max Torque: 17,100 ft/lbs, RPG: 0.25 Bit Runs: 0			
Notes: 0					
MWD					
Max Downhole Temp (°F)	N/A				
Mud Properties		Parameters			
Type	Oil Based	Flow Rate (gpm)	650.00 - 700.00	Motor RPM	175.00 - 175.00
WT	9.30	On Bottom Pressure (psi)	3950.00 - 4700.00	Surface RPM	30.00 - 50.00
VIS	32.00	Off Bottom Pressure (psi)	3400.00 - 4200.00	Rotating WOB (klbs)	42.00 - 42.00
PV	1.00	Stall Pressure (psi)	0.00	Sliding WOB (klbs)	30.00 - 35.00
YP	1.00	Stalls	0	Temp (°F)	134.00 - 145.00
		NPT	0.0		

Items (Directional)

Description	Vendor	SN#	Top Conn	Btm Conn	ID (in)	OD (in)	Fn Len. (ft)	Len (ft)	Aggr. Len (ft)
Bit (Fixed Cutter) Description: <i>TKC76-U1</i> , Type: <i>PDC (Polycrystalline Diamond Compacts)</i> , Gauge Length (in): <i>1.00</i> , Size (in): <i>8.75</i>	REED	A281863	4 1/2" Reg Pin			8.750		1.00	1.00
Mud Motor Description: <i>7" BICO Motor 7/8 6.1 1.75 Fxd / SLK</i> , Size (in): <i>7.00</i> , Bend Angle (°): <i>1.75</i> , Rotor Lobe: <i>7</i> , Stator Lobe: <i>8</i> , Stator Stage: <i>6.1</i>	Bico	BPB5700-0016	4 1/2" IF Box	4 1/2" Reg Box		7.000		30.21	31.21
Other Description: <i>Resistivity Tool NM</i>	Benchtree	650-1010	4 1/2" IF Box	4 1/2" IF Pin	3.250	6.500		31.27	62.48
Other Description: <i>Battery Sub NM</i>	Benchtree	B6003xx	4 1/2" IF Box	4 1/2" IF Pin	3.250	6.500		17.21	79.69
Drill Collar Description: <i>6.75" NMDC</i> , Material: <i>Non-Magnetic</i> , Type: <i>Slick Drill</i>	Gator Tech	6730196	4 1/2" IF Box	4 1/2" IF Pin	3.300	6.750		28.94	108.63
Crossover Sub Description: <i>Crossover</i> , Material: <i>Steel</i>	PLATINUM	PPR6255	CET54 Box	4 1/2" IF Pin	2.500	6.460		3.44	112.07
Drill Pipe Description: <i>20 Stands of 5.5" DP</i> , Type: <i>Slick</i>	RIG		CET54 Box	CET54 Box	2.520	5.500		1913.72	2025.79
Crossover Sub Description: <i>Crossover</i> , Material: <i>Steel</i>	PLATINUM	PPR7092	CET54 Box	4 1/2" IF Pin	2.500	6.460		3.50	2029.29
Agitator Description: <i>ADJITATOR w/ 1.85 Plt</i> , Size, Size (in): <i>7.00</i>	NOV	AGHF0675-0183	4 1/2" IF Box	4 1/2" IF Pin		7.000		24.42	2053.71
Crossover Sub Description: <i>Crossover</i> , Material: <i>Steel</i>	PLATINUM	PPR6255	4 1/2" IF Box	CET54 Pin	2.500	6.460		3.44	2057.15





Mud Motor Reports

Anderson Fed Com 508H (WT-21-179)

2021-11-15 to 2021-12-20

Lea, New Mexico, US (32.43, -103.64)



Job Number WT-21-179	Operator Advance Energy Partners	Rig Name Nabors X47
Start Date 2021-11-15	Well Name Anderson Fed Com 508H	Legal Well Name AFE Anderson Fed Com 508H
Play Delaware Basin	State/Province and Country New Mexico, US	County Lea
		Company Man

Mud Motor Report - BHA 1 (17.50" SURFACE)

Motor Details		Date/Depth/Distances		Hours	
S/N	800-40-008	Date In	2021-11-18 09:30	Downhole Hours	12.00
Size (in)	8.0	Depth In (ft)	155.00	Drilling/Circulating Hours	6.67
Lobe/Stage	7/8, 5.90	Date Out	2021-11-18 21:30		
Bend Angle	1.75	Depth Out (ft)	1275.00	Circulating Hours	0.50
Speed (rev/gal)	0.16	Total Drilled (ft)	1120.00	Drilling Hours	6.17
Wear Pad OD (in)	8.250	Distance Slid (ft)	20.00	Sliding Hours	0.17
Manufacturer	Contender	Distance Rotated (ft)	1100.00	Rotating Hours	6.00
Motor Results		% Distance Sliding	1.79%	% Hours Rotating	97.30%
Motor Incident	No	% Distance Rotating	98.21%	% Hours Sliding	2.70%
Average Total ROP (ft/h)	181.62	BHA Parameters			
Average Slide ROP (ft/h)	120.00	Flow Rate (gpm)	550.00 - 854.00	Motor RPM	100.00 - 136.00
Average Rotating ROP (ft/h)	183.33	Stalls	0	Surface RPM	50.00 - 60.00
Bit Details		Stall Pressure (psi)	0.00	Rotating WOB (klbs)	5.00 - 20.00
OD (in)	17.500	On Bottom Pressure (psi)	650.00 - 2900.00	Sliding WOB (klbs)	15.00 - 15.00
Vendor	ULTERRA	Off Bottom Pressure (psi)	600.00 - 1600.00	Temp (°F)	91.00 - -0.00
S/N	56546	NPT	0.0		
Nozzles	9x12's	BHA Objective			
Total Flow Area (in²)	0.994	Drill 17.5 Surface			
Bit Type	PDC (Polycrystalline Diamond Compacts)				
Bit Distances					
Survey (Bit To Survey): 72.00 ft, Bend (Bit To Bend): 6.19 ft					
Mud Properties					
Type	Water Based				
WT	9.30				
VIS	32.00				
PV	10.00				
YP	8.00				
POOH Reason/Notes					
Total Depth/Casing Point: POOH Surface TD					
Incident Notes					
Directional: N/A					
MWD:					
Comments					
Directional: Directional: 8" Motor: 1.75° FXD 7/8 5.9 Stg w/ 17" STAB, Flow Range: 400-900 GPM, Max Diff: 1330 psi, Max Torque: 22,020 ft/lbs, RPG: 0.16 Bit Runs: 4					
MWD:					



Job Number WT-21-179	Operator Advance Energy Partners	Rig Name Nabors X47
Start Date 2021-11-15	Well Name Anderson Fed Com 508H	Legal Well Name AFE Anderson Fed Com 508H
Play Delaware Basin	State/Province and Country New Mexico, US	County Lea
		Company Man

Mud Motor Report - BHA 2 (12.25" INTERMEDIATE)

Motor Details		Date/Depth/Distances		Hours	
S/N	CDM875-003	Date In	2021-11-19 11:45	Downhole Hours	59.75
Size (in)	8.75	Depth In (ft)	1275.00	Drilling/Circulating Hours	20.50
Lobe/Stage	6/7, 6.60	Date Out	2021-11-21 23:30		
Bend Angle	1.75	Depth Out (ft)	4775.00	Circulating Hours	1.42
Speed (rev/gal)	0.16	Total Drilled (ft)	3500.00	Drilling Hours	19.08
Wear Pad OD (in)	8.250	Distance Slid (ft)	315.00	Sliding Hours	4.25
Manufacturer	Contender	Distance Rotated (ft)	3185.00	Rotating Hours	14.83
Motor Results		% Distance Sliding	9.00%	% Hours Rotating	77.73%
Motor Incident	No	% Distance Rotating	91.00%	% Hours Sliding	22.27%
Average Total ROP (ft/h)	183.41	BHA Parameters			
Average Slide ROP (ft/h)	74.12	Flow Rate (gpm)	800.00 - 850.00	Motor RPM	136.00 - 40.00
Average Rotating ROP (ft/h)	214.72	Stalls	0	Surface RPM	40.00 - 50.00
Bit Details		Stall Pressure (psi)	0.00	Rotating WOB (klbs)	10.00 - 54.00
OD (in)	12.250	On Bottom Pressure (psi)	1700.00 - 3150.00	Sliding WOB (klbs)	21.00 - 30.00
Vendor	ULTERRA	Off Bottom Pressure (psi)	1300.00 - 14550.01	Temp (°F)	77.00 - 118.40
S/N	56281	NPT	0.0		
Nozzles	9x12's	BHA Objective			
Total Flow Area (in²)	0.994	12 1/4" Intermediate			
Bit Type	PDC (Polycrystalline Diamond Compacts)				
Bit Distances					
Survey (Bit To Survey): 69.00 ft, Bend (Bit To Bend): 6.55 ft					
Mud Properties					
Type	Water Based				
WT	10.55				
VIS	30.00				
PV	1.00				
YP	1.00				
POOH Reason/Notes					
Total Depth/Casing Point: POOH To L/D Intermediate Assembly. Intermediate Section TD					
Incident Notes					
Directional: N/A					
MWD:					
Comments					
Directional: Directional: 8 3/4" Motor: 1.75° FXD 6.7 6.6 Stg w/ 12" STAB, Flow Range: 600-1300 GPM, Max Diff: 1650 psi, Max Torque: 31,480 ft/lbs, RPG: 0.155 Bit Runs: 1					
MWD:					

	Job Number WT-21-179	Operator Advance Energy Partners		Rig Name Nabors X47
	Start Date 2021-11-15	Well Name Anderson Fed Com 508H		Legal Well Name AFE Anderson Fed Com 508H
	Play Delaware Basin	State/Province and Country New Mexico, US	County Lea	Company Man

Mud Motor Report - BHA 3 (8.75" INTERMEDIATE)

Motor Details		Date/Depth/Distances		Hours	
S/N	700-40-021	Date In	2021-12-08 01:30	Downhole Hours	44.25
Size (in)	8.75	Depth In (ft)	4775.00	Drilling/Circulating Hours	29.17
Lobe/Stage	7/8, 8.50	Date Out	2021-12-09 21:45		
Bend Angle	1.75	Depth Out (ft)	9664.00	Circulating Hours	2.17
Speed (rev/gal)	0.26	Total Drilled (ft)	4889.00	Drilling Hours	27.00
Wear Pad OD (in)	5.350	Distance Slid (ft)	326.00	Sliding Hours	5.83
Manufacturer	Contender	Distance Rotated (ft)	4563.00	Rotating Hours	21.17
Motor Results		% Distance Sliding	6.67%	% Hours Rotating	78.40%
Motor Incident	No	% Distance Rotating	93.33%	% Hours Sliding	21.60%
Average Total ROP (ft/h)	181.07	BHA Parameters			
Average Slide ROP (ft/h)	55.89	Flow Rate (gpm)	600.00 - 749.00	Motor RPM	188.00 - 228.00
Average Rotating ROP (ft/h)	215.57	Stalls	0	Surface RPM	30.00 - 50.00
Bit Details		Stall Pressure (psi)	0.00	Rotating WOB (klbs)	40.00 - 48.00
OD (in)	8.750	On Bottom Pressure (psi)	2050.00 - 3050.00	Sliding WOB (klbs)	26.00 - 30.00
Vendor	REED	Off Bottom Pressure (psi)	1550.00 - 2400.00	Temp (°F)	121.00 - 135.00
S/N	A283082	NPT	0.0		
Nozzles	6x15's	BHA Objective			
Total Flow Area (in²)	1.035	8.75" INTERMEDIATE			
Bit Type	PDC (Polycrystalline Diamond Compacts)				
Bit Distances					
Survey (Bit To Survey): 64.00 ft, Bend (Bit To Bend): 5.35 ft, Gamma (Bit to Gamma): 49.00 ft					
Mud Properties					
Type	Oil Based				
WT	9.20				
VIS	28.00				
PV	1.00				
YP	1.00				
POOH Reason/Notes					
Change Bottom Hole Assembly: POOH For curve assembly					
Incident Notes					
Directional: N/A					
MWD:					
Comments					
Directional: Contender 40s 7" 7/8 8.5, 1.75° Fxd w/ 8.50" NBS, Flow Range: 500-750 GPM, Max Diff: 1910 psi, Max Torque: 18,710 ft/lbs, RPG: 0.26 Bit Runs: 0					
MWD:					



Job Number WT-21-179	Operator Advance Energy Partners	Rig Name Nabors X47
Start Date 2021-11-15	Well Name Anderson Fed Com 508H	Legal Well Name AFE Anderson Fed Com 508H
Play Delaware Basin	State/Province and Country New Mexico, US	County Lea
		Company Man

Mud Motor Report - BHA 4 (8.75" CURVE)

Motor Details		Date/Depth/Distances		Hours	
S/N	700-40-002	Date In	2021-12-09 23:30	Downhole Hours	23.75
Size (in)	8.75	Depth In (ft)	9664.00	Drilling/Circulating Hours	10.33
Lobe/Stage	7/8, 5.00	Date Out	2021-12-10 23:15		
Bend Angle	2.12	Depth Out (ft)	10148.00	Circulating Hours	3.25
Speed (rev/gal)	0.28	Total Drilled (ft)	484.00	Drilling Hours	7.08
Wear Pad OD (in)	6.920	Distance Slid (ft)	423.00	Sliding Hours	6.50
Manufacturer	Contender	Distance Rotated (ft)	61.00	Rotating Hours	0.58
Motor Results		% Distance Sliding	87.40%	% Hours Rotating	8.24%
Motor Incident	No	% Distance Rotating	12.60%	% Hours Sliding	91.76%
Average Total ROP (ft/h)	68.33	BHA Parameters			
Average Slide ROP (ft/h)	65.08	Flow Rate (gpm)	496.00 - 500.00	Motor RPM	128.00 - 128.00
Average Rotating ROP (ft/h)	104.57	Stalls	0	Surface RPM	0.00 - 0.00
Bit Details		Stall Pressure (psi)	0.00	Rotating WOB (klbs)	0.00 - 0.00
OD (in)	8.750	On Bottom Pressure (psi)	1750.00 - 1900.00	Sliding WOB (klbs)	35.00 - 40.00
Vendor	ULTERRA	Off Bottom Pressure (psi)	1100.00 - 1050.00	Temp (°F)	118.00 - 125.00
S/N	57264	NPT	0.0		
Nozzles	6x15's	BHA Objective			
Total Flow Area (in²)	1.035	8.75" CURVE			
Bit Type	PDC (Polycrystalline Diamond Compacts)				
Bit Distances					
Survey (Bit To Survey): 59.00 ft, Bend (Bit To Bend): 4.05 ft, Gamma (Bit to Gamma): 35.00 ft					
Mud Properties					
Type	Water Based				
WT	9.10				
VIS	32.00				
PV	1.00				
YP	1.00				
POOH Reason/Notes					
Build Rate: POOH For Build Rates					
Incident Notes					
Directional: N/A					
MWD:					
Comments					
Directional: Contender 6 3/4" 7/8 5.0, 2.12° Fxd w/ SLK, Flow Range: 300-600 GPM, Max Diff: 1130 psi, Max Torque: 15,690 ft/lbs, RPG: 0.28 Bit Runs: 0					
MWD:					



Job Number WT-21-179	Operator Advance Energy Partners	Rig Name Nabors X47
Start Date 2021-11-15	Well Name Anderson Fed Com 508H	Legal Well Name AFE Anderson Fed Com 508H
Play Delaware Basin	State/Province and Country New Mexico, US	County Lea
Company Man		

Mud Motor Report - BHA 5 (8.75" CURVE)

Motor Details		Date/Depth/Distances		Hours	
S/N	700-40-008	Date In	2021-12-10 23:45	Downhole Hours	22.75
Size (in)	8.75	Depth In (ft)	10148.00	Drilling/Circulating Hours	8.50
Lobe/Stage	7/8, 5.70	Date Out	2021-12-11 22:30		
Bend Angle	2.89	Depth Out (ft)	10481.00	Circulating Hours	1.08
Speed (rev/gal)	0.24	Total Drilled (ft)	333.00	Drilling Hours	7.42
Wear Pad OD (in)	7.520	Distance Slid (ft)	333.00	Sliding Hours	7.42
Manufacturer	Contender	Distance Rotated (ft)	0.00	Rotating Hours	0.00
Motor Results		% Distance Sliding	100.00%	% Hours Rotating	0.00%
Motor Incident	No	% Distance Rotating	0.00%	% Hours Sliding	100.00%
Average Total ROP (ft/h)	44.90	BHA Parameters			
Average Slide ROP (ft/h)	44.90	Flow Rate (gpm)	300.00 - 450.00	Motor RPM	72.00 - 132.00
Average Rotating ROP (ft/h)	0.00	Stalls	0	Surface RPM	72.00 - 132.00
Bit Details		Stall Pressure (psi)	0.00	Rotating WOB (klbs)	0.00 - 0.00
OD (in)	8.750	On Bottom Pressure (psi)	750.00 - 1200.00	Sliding WOB (klbs)	30.00 - 40.00
Vendor	ULTERRA	Off Bottom Pressure (psi)	700.00 - 1200.00	Temp (°F)	118.00 - 124.00
S/N	57218	NPT	0.0		
Nozzles	6x15's	BHA Objective			
Total Flow Area (in²)	1.035	8.75" CURVE			
Bit Type	PDC (Polycrystalline Diamond Compacts)				
Bit Distances					
Survey (Bit To Survey): 59.00 ft, Bend (Bit To Bend): 4.05 ft, Gamma (Bit to Gamma): 35.00 ft					
Mud Properties					
Type	Water Based				
WT	9.10				
VIS	32.00				
PV	1.00				
YP	1.00				
POOH Reason/Notes					
Change Bottom Hole Assembly: P/U Lateral Assembly					
Incident Notes					
Directional:					
MWD:					
Comments					
Directional: Contender 7" 7/8 5.7, 2.89° Adj w/ SLK, Flow Range: 300-650 GPM, Max Diff: 1,280 psi, Max Torque: 20,580 ft/lbs, RPG: 0.24 Bit Runs: 2					
MWD:					

	Job Number WT-21-179	Operator Advance Energy Partners		Rig Name Nabors X47
	Start Date 2021-11-15	Well Name Anderson Fed Com 508H		Legal Well Name AFE Anderson Fed Com 508H
	Play Delaware Basin	State/Province and Country New Mexico, US	County Lea	Company Man

Mud Motor Report - BHA 6 (8.75" LATERAL ASSEMBLY)

Motor Details		Date/Depth/Distances		Hours	
S/N	BPB5700-0069	Date In	2021-12-11 22:30	Downhole Hours	111.50
Size (in)	7.0	Depth In (ft)	10481.00	Drilling/Circulating Hours	93.42
Lobe/Stage	7/8, 6.10	Date Out	2021-12-16 14:00		
Bend Angle	1.75	Depth Out (ft)	16104.00	Circulating Hours	4.00
Speed (rev/gal)	0.25	Total Drilled (ft)	5623.00	Drilling Hours	89.42
Wear Pad OD (in)	7.250	Distance Slid (ft)	766.00	Sliding Hours	21.08
Manufacturer	SSS100	Distance Rotated (ft)	4857.00	Rotating Hours	68.33
Motor Results		% Distance Sliding	13.62%	% Hours Rotating	76.42%
Motor Incident	No	% Distance Rotating	86.38%	% Hours Sliding	23.58%
Average Total ROP (ft/h)	62.89	BHA Parameters			
Average Slide ROP (ft/h)	36.33	Flow Rate (gpm)	222.00 - 700.00	Motor RPM	0.00 - 0.00
Average Rotating ROP (ft/h)	71.08	Stalls	0	Surface RPM	30.00 - 40.00
Bit Details		Stall Pressure (psi)	18000.05	Rotating WOB (klbs)	32.00 - 42.00
OD (in)	8.750	On Bottom Pressure (psi)	3600.00 - 4260.00	Sliding WOB (klbs)	28.00 - 45.00
Vendor	REED	Off Bottom Pressure (psi)	3000.00 - 3960.00	Temp (°F)	170.00 - 210.00
S/N	A281412	NPT	0.0		
Nozzles	7X14's	BHA Objective			
Total Flow Area (in²)	1.520	8.75" LATERAL ASSEMBLY			
Bit Type	PDC (Polycrystalline Diamond Compacts)				
Bit Distances					
Survey (Bit To Survey): 63.00 ft, Bend (Bit To Bend): 5.23 ft, Gamma (Bit to Gamma): 39.00 ft					
Mud Properties					
Type	Water Based				
WT	9.30				
VIS	64.00				
PV	18.00				
YP	12.00				
POOH Reason/Notes					
Other: POOH for slow ROP, motor drained well and had minimal slack in between bit and power section, no visible damage					
Incident Notes					
Directional:					
MWD:					
Comments					
Directional: (BICO)7" SSS100 Motor: 1.75° FXD 7/8 6.1 Stg w/ SLICK, Flow Range: 300-700 GPM, Max Diff: 1,800 psi, Max Torque: 17,100 ft/lbs, RPG: 0.25 Bit Runs: 2					
MWD:					



Job Number WT-21-179	Operator Advance Energy Partners	Rig Name Nabors X47
Start Date 2021-11-15	Well Name Anderson Fed Com 508H	Legal Well Name AFE Anderson Fed Com 508H
Play Delaware Basin	State/Province and Country New Mexico, US	County Lea
		Company Man

Mud Motor Report - BHA 7 (8.75" LATERAL ASSEMBLY)

Motor Details		Date/Depth/Distances		Hours	
S/N	BPB5700-0016	Date In	2021-12-16 14:40	Downhole Hours	38.83
Size (in)	7.0	Depth In (ft)	16104.00	Drilling/Circulating Hours	15.67
Lobe/Stage	7/8, 6.10	Date Out	2021-12-18 05:30		
Bend Angle	1.75	Depth Out (ft)	16905.00	Circulating Hours	2.25
Speed (rev/gal)	0.25	Total Drilled (ft)	801.00	Drilling Hours	13.42
Wear Pad OD (in)	7.250	Distance Slid (ft)	135.00	Sliding Hours	5.75
Manufacturer	SSS100	Distance Rotated (ft)	666.00	Rotating Hours	7.67
Motor Results		% Distance Sliding	16.85%	% Hours Rotating	57.14%
Motor Incident	No	% Distance Rotating	83.15%	% Hours Sliding	42.86%
Average Total ROP (ft/h)	59.70	BHA Parameters			
Average Slide ROP (ft/h)	23.48	Flow Rate (gpm)	650.00 - 700.00	Motor RPM	175.00 - 175.00
Average Rotating ROP (ft/h)	86.87	Stalls	0	Surface RPM	30.00 - 50.00
Bit Details		Stall Pressure (psi)	0.00	Rotating WOB (klbs)	42.00 - 42.00
OD (in)	8.750	On Bottom Pressure (psi)	3950.00 - 4700.00	Sliding WOB (klbs)	30.00 - 35.00
Vendor	REED	Off Bottom Pressure (psi)	3400.00 - 4200.00	Temp (°F)	134.00 - 145.00
S/N	A281863	NPT	0.0		
Nozzles	7X15's	BHA Objective			
Total Flow Area (in²)	1.208	8.75" LATERAL ASSEMBLY			
Bit Type	PDC (Polycrystalline Diamond Compacts)				
Bit Distances					
Survey (Bit To Survey): 63.00 ft, Bend (Bit To Bend): 5.23 ft, Gamma (Bit to Gamma): 39.00 ft					
Mud Properties					
Type	Oil Based				
WT	9.30				
VIS	32.00				
PV	1.00				
YP	1.00				
POOH Reason/Notes					
Total Depth/Casing Point: N/A					
Incident Notes					
Directional: N/A					
MWD:					
Comments					
Directional: (BICO) 7" SSS100 Motor: 1.75° FXD 7/8 6.1 Stg w/ SLICK, Flow Range: 300-700 GPM, Max Diff: 1,800 psi, Max Torque: 17,100 ft/lbs, RPG: 0.25 Bit Runs: 0					
MWD:					



Slide/Rotate Reports

Anderson Fed Com 508H (WT-21-179)

2021-11-15 to 2021-12-20

Lea, New Mexico, US (32.43, -103.64)



Job Number WT-21-179	Operator Advance Energy Partners	Rig Name Nabors X47
Start Date 2021-11-15	Well Name Anderson Fed Com 508H	Legal Well Name AFE Anderson Fed Com 508H
Play Delaware Basin	State/Province and Country New Mexico, US	County Lea
Company Man		

Slide/Rotate Report - BHA #1 (17.50" SURFACE)

Activity	Start Date	Start Time	End Time	End Date	Hours	Start Depth (ft)	End Depth (ft)	Distance (ft)	RoP (ft/h)	Toolface	Flow Rate (gpm)	Surface RPM	WOB (klbs)	Press On (psi)	Press Off (psi)	Hole Section Type
Rotate	11-18	11:45	13:05	11-18	1.33	155.00	209.00	54.00	40.50	N/A	550.00	50.0	5.00	650.00	600.00	Surface
Rotate	11-18	13:10	13:30	11-18	0.33	209.00	269.00	60.00	180.00	N/A	654.00	60.0	10.00	1300.00	900.00	Surface
Rotate	11-18	13:35	13:40	11-18	0.08	269.00	299.00	30.00	360.00	N/A	654.00	60.0	10.00	1300.00	900.00	Surface
Rotate	11-18	13:45	14:20	11-18	0.58	299.00	389.00	90.00	154.29	N/A	654.00	60.0	10.00	1300.00	900.00	Surface
Rotate	11-18	14:25	14:30	11-18	0.08	389.00	404.00	15.00	180.00	N/A	654.00	60.0	10.00	1300.00	900.00	Surface
Slide	11-18	14:30	14:40	11-18	0.17	404.00	424.00	20.00	120.00	100.0	654.00	N/A	15.00	1500.00	900.00	Surface
Rotate	11-18	14:40	14:55	11-18	0.25	424.00	479.00	55.00	220.00	N/A	654.00	60.0	10.00	1300.00	900.00	Surface
Rotate	11-18	15:00	15:20	11-18	0.33	479.00	569.00	90.00	270.00	N/A	854.00	60.0	20.00	2150.00	1550.00	Surface
Rotate	11-18	15:25	15:40	11-18	0.25	569.00	660.00	91.00	364.00	N/A	854.00	60.0	20.00	2150.00	1550.00	Surface
Rotate	11-18	15:45	16:05	11-18	0.33	660.00	751.00	91.00	273.00	N/A	854.00	60.0	20.00	2150.00	1550.00	Surface
Rotate	11-18	16:10	16:40	11-18	0.5	751.00	842.00	91.00	182.00	N/A	854.00	60.0	20.00	2150.00	1550.00	Surface
Rotate	11-18	16:45	17:00	11-18	0.25	842.00	932.00	90.00	360.00	N/A	854.00	60.0	20.00	2900.00	1600.00	Surface
Rotate	11-18	17:05	17:15	11-18	0.17	932.00	1023.00	91.00	546.00	N/A	854.00	60.0	20.00	2900.00	1600.00	Surface
Rotate	11-18	17:20	17:50	11-18	0.5	1023.00	1113.00	90.00	180.00	N/A	854.00	60.0	20.00	2900.00	1600.00	Surface
Rotate	11-18	17:50	18:25	11-18	0.58	1113.00	1204.00	91.00	156.00	N/A	854.00	60.0	20.00	2900.00	1600.00	Surface
Rotate	11-18	18:30	18:55	11-18	0.42	1204.00	1275.00	71.00	170.40	N/A	854.00	60.0	20.00	2900.00	1600.00	Surface, Intermediate



Job Number WT-21-179	Operator Advance Energy Partners	Rig Name Nabors X47
Start Date 2021-11-15	Well Name Anderson Fed Com 508H	Legal Well Name AFE Anderson Fed Com 508H
Play Delaware Basin	State/Province and Country New Mexico, US	County Lea
Company Man		

Slide/Rotate Report - BHA #2 (12.25" INTERMEDIATE)

Activity	Start Date	Start Time	End Time	End Date	Hours	Start Depth (ft)	End Depth (ft)	Distance (ft)	RoP (ft/h)	Toolface	Flow Rate (gpm)	Surface RPM	WOB (klbs)	Press On (psi)	Press Off (psi)	Hole Section Type
Rotate	11-20	19:00	19:35	11-20	0.58	1275.00	1421.00	146.00	250.29	N/A	800.00	40.0	10.00	1700.00	1300.00	Intermediate
Rotate	11-20	19:40	20:00	11-20	0.33	1421.00	1499.00	78.00	234.00	N/A	800.00	40.0	10.00	1700.00	1300.00	Intermediate
Slide	11-20	20:00	20:10	11-20	0.17	1499.00	1529.00	30.00	180.00	30.0	800.00	N/A	21.00	1900.00	14550.01	Intermediate
Rotate	11-20	20:10	20:30	11-20	0.33	1529.00	1581.00	52.00	156.00	N/A	800.00	40.0	35.00	1700.00	1300.00	Intermediate
Rotate	11-20	20:35	20:45	11-20	0.17	1581.00	1676.00	95.00	570.00	N/A	800.00	40.0	35.00	1700.00	1300.00	Intermediate
Rotate	11-20	20:50	21:10	11-20	0.33	1676.00	1771.00	95.00	285.00	N/A	800.00	40.0	35.00	1700.00	1300.00	Intermediate
Rotate	11-20	21:15	21:20	11-20	0.08	1771.00	1798.00	27.00	324.00	N/A	800.00	40.0	35.00	1700.00	1300.00	Intermediate
Slide	11-20	21:20	21:25	11-20	0.08	1798.00	1818.00	20.00	240.00	200.0	800.00	N/A	26.00	2100.00	1400.00	Intermediate
Rotate	11-20	21:25	21:35	11-20	0.17	1818.00	1867.00	49.00	294.00	N/A	800.00	40.0	35.00	1700.00	1300.00	Intermediate
Rotate	11-20	21:40	22:05	11-20	0.42	1867.00	1963.00	96.00	230.40	N/A	800.00	40.0	35.00	1700.00	1300.00	Intermediate
Rotate	11-20	22:10	22:25	11-20	0.25	1963.00	2059.00	96.00	384.00	N/A	800.00	40.0	35.00	1700.00	1300.00	Intermediate
Slide	11-20	22:30	22:40	11-20	0.17	2059.00	2079.00	20.00	120.00	300.0	800.00	N/A	26.00	2100.00	1400.00	Intermediate
Rotate	11-20	22:40	22:55	11-20	0.25	2079.00	2154.00	75.00	300.00	N/A	800.00	40.0	35.00	1700.00	1300.00	Intermediate
Rotate	11-20	23:00	23:15	11-20	0.25	2154.00	2249.00	95.00	380.00	N/A	800.00	40.0	35.00	1700.00	1300.00	Intermediate
Rotate	11-20	23:20	23:35	11-20	0.25	2249.00	2345.00	96.00	384.00	N/A	800.00	40.0	35.00	1700.00	1300.00	Intermediate
Rotate	11-20	23:40	23:45	11-20	0.08	2345.00	2350.00	5.00	60.00	N/A	800.00	40.0	35.00	1700.00	1300.00	Intermediate
Slide	11-20	23:45	23:50	11-20	0.08	2350.00	2370.00	20.00	240.00	270.0	800.00	N/A	26.00	2100.00	1400.00	Intermediate
Rotate	11-20	23:50	00:00	11-21	0.17	2370.00	2446.00	76.00	456.00	N/A	800.00	40.0	35.00	1700.00	1300.00	Intermediate
Slide	11-21	00:05	00:10	11-21	0.08	2446.00	2466.00	20.00	240.00	270.0	800.00	N/A	26.00	2100.00	1400.00	Intermediate
Rotate	11-21	00:10	00:30	11-21	0.33	2466.00	2537.00	71.00	213.00	N/A	800.00	40.0	35.00	1700.00	1300.00	Intermediate
Rotate	11-21	00:35	01:15	11-21	0.67	2537.00	2728.00	191.00	286.50	N/A	800.00	40.0	35.00	1700.00	1300.00	Intermediate
Rotate	11-21	01:20	01:30	11-21	0.17	2728.00	2824.00	96.00	576.00	N/A	800.00	40.0	35.00	1700.00	1300.00	Intermediate
Rotate	11-21	01:35	01:55	11-21	0.33	2824.00	2920.00	96.00	288.00	N/A	800.00	40.0	35.00	1700.00	1300.00	Intermediate
Rotate	11-21	02:00	02:15	11-21	0.25	2920.00	3016.00	96.00	384.00	N/A	800.00	40.0	35.00	1700.00	1300.00	Intermediate
Rotate	11-21	02:20	02:40	11-21	0.33	3016.00	3111.00	95.00	285.00	N/A	800.00	40.0	35.00	1700.00	1300.00	Intermediate
Rotate	11-21	02:45	02:50	11-21	0.08	3111.00	3117.00	6.00	72.00	N/A	800.00	40.0	35.00	1700.00	1300.00	Intermediate
Slide	11-21	02:50	03:05	11-21	0.25	3117.00	3147.00	30.00	120.00	270.0	800.00	N/A	29.00	2340.00	1550.00	Intermediate
Rotate	11-21	03:05	03:30	11-21	0.42	3147.00	3207.00	60.00	144.00	N/A	800.00	40.0	48.00	2400.00	1600.00	Intermediate
Rotate	11-21	03:35	03:40	11-21	0.08	3207.00	3216.00	9.00	108.00	N/A	800.00	40.0	48.00	2400.00	1600.00	Intermediate
Slide	11-21	03:40	03:50	11-21	0.17	3216.00	3246.00	30.00	180.00	260.0	800.00	N/A	29.00	2340.00	1550.00	Intermediate
Rotate	11-21	03:50	04:00	11-21	0.17	3246.00	3303.00	57.00	342.00	N/A	800.00	40.0	48.00	2400.00	1600.00	Intermediate
Rotate	11-21	04:05	04:20	11-21	0.25	3303.00	3399.00	96.00	384.00	N/A	800.00	40.0	48.00	2400.00	1600.00	Intermediate
Rotate	11-21	04:25	04:30	11-21	0.08	3399.00	3407.00	8.00	96.00	N/A	800.00	40.0	48.00	2400.00	1600.00	Intermediate
Slide	11-21	04:30	04:40	11-21	0.17	3407.00	3437.00	30.00	180.00	350.0	800.00	N/A	29.00	2340.00	1550.00	Intermediate
Rotate	11-21	04:40	05:00	11-21	0.33	3437.00	3494.00	57.00	171.00	N/A	800.00	40.0	48.00	2400.00	1600.00	Intermediate
Rotate	11-21	05:05	05:10	11-21	0.08	3494.00	3501.00	7.00	84.00	N/A	800.00	40.0	48.00	2400.00	1600.00	Intermediate

Slide	11-21	05:10	05:50	11-21	0.67	3501.00	3536.00	35.00	52.50	0.0	800.00	N/A	29.00	2340.00	1550.00	Intermediate
Rotate	11-21	05:50	06:05	11-21	0.25	3536.00	3578.00	42.00	168.00	N/A	800.00	40.0	48.00	2400.00	1600.00	Intermediate
Rotate	11-21	06:30	06:40	11-21	0.17	3578.00	3590.00	12.00	72.00	N/A	800.00	40.0	48.00	2400.00	1600.00	Intermediate
Rotate	11-21	06:45	07:25	11-21	0.67	3590.00	3686.00	96.00	144.00	N/A	800.00	40.0	48.00	2400.00	1600.00	Intermediate
Rotate	11-21	07:30	07:35	11-21	0.08	3686.00	3700.00	14.00	168.00	N/A	800.00	40.0	48.00	2400.00	1600.00	Intermediate
Slide	11-21	07:35	08:35	11-21	1.0	3700.00	3730.00	30.00	30.00	100.0	800.00	N/A	29.00	2340.00	1550.00	Intermediate
Rotate	11-21	08:35	09:05	11-21	0.5	3730.00	3781.00	51.00	102.00	N/A	800.00	40.0	48.00	2400.00	1600.00	Intermediate
Rotate	11-21	09:10	09:45	11-21	0.58	3781.00	3877.00	96.00	164.57	N/A	800.00	40.0	48.00	2400.00	1600.00	Intermediate
Rotate	11-21	10:40	10:50	11-21	0.17	3877.00	3900.00	23.00	138.00	N/A	850.00	50.0	50.00	2800.00	1900.00	Intermediate
Slide	11-21	10:50	11:40	11-21	0.83	3900.00	3930.00	30.00	36.00	200.0	850.00	N/A	30.00	2475.00	1900.00	Intermediate
Rotate	11-21	11:40	12:05	11-21	0.42	3930.00	3973.00	43.00	103.20	N/A	850.00	50.0	50.00	2800.00	1900.00	Intermediate
Rotate	11-21	12:10	13:00	11-21	0.83	3973.00	4069.00	96.00	115.20	N/A	850.00	50.0	50.00	2800.00	1900.00	Intermediate
Rotate	11-21	13:05	13:50	11-21	0.75	4069.00	4164.00	95.00	126.67	N/A	850.00	50.0	50.00	2800.00	1900.00	Intermediate
Rotate	11-21	13:55	14:45	11-21	0.83	4164.00	4260.00	96.00	115.20	N/A	850.00	50.0	50.00	2800.00	1900.00	Intermediate
Rotate	11-21	14:50	15:30	11-21	0.67	4260.00	4356.00	96.00	144.00	N/A	850.00	50.0	50.00	2800.00	1900.00	Intermediate
Rotate	11-21	15:35	15:55	11-21	0.33	4356.00	4452.00	96.00	288.00	N/A	850.00	50.0	50.00	2800.00	1900.00	Intermediate
Rotate	11-21	16:00	16:05	11-21	0.08	4452.00	4465.00	13.00	156.00	N/A	850.00	50.0	50.00	2800.00	1900.00	Intermediate
Slide	11-21	16:05	16:40	11-21	0.58	4465.00	4485.00	20.00	34.29	50.0	850.00	N/A	30.00	2475.00	1900.00	Intermediate
Rotate	11-21	16:40	17:05	11-21	0.42	4485.00	4547.00	62.00	148.80	N/A	850.00	50.0	54.00	3150.00	2150.00	Intermediate
Rotate	11-21	17:10	17:30	11-21	0.33	4547.00	4643.00	96.00	288.00	N/A	850.00	50.0	54.00	3150.00	2150.00	Intermediate
Rotate	11-21	17:35	18:05	11-21	0.5	4643.00	4775.00	132.00	264.00	N/A	850.00	50.0	54.00	3150.00	2150.00	Intermediate



Job Number WT-21-179	Operator Advance Energy Partners	Rig Name Nabors X47
Start Date 2021-11-15	Well Name Anderson Fed Com 508H	Legal Well Name AFE Anderson Fed Com 508H
Play Delaware Basin	State/Province and Country New Mexico, US	County Lea
Company Man		

Slide/Rotate Report - BHA #3 (8.75" INTERMEDIATE)

Activity	Start Date	Start Time	End Time	End Date	Hours	Start Depth (ft)	End Depth (ft)	Distance (ft)	RoP (ft/h)	Toolface	Flow Rate (gpm)	Surface RPM	WOB (klbs)	Press On (psi)	Press Off (psi)	Hole Section Type
Rotate	12-08	07:40	08:50	12-08	1.17	4775.00	4824.00	49.00	42.00	N/A						Intermediate
Rotate	12-08	08:50	09:00	12-08	0.17	4824.00	4890.00	66.00	396.00	N/A						Intermediate
Slide	12-08	09:05	09:35	12-08	0.5	4890.00	4915.00	25.00	50.00	60.0		N/A				Intermediate
Rotate	12-08	09:35	09:40	12-08	0.08	4915.00	4919.00	4.00	48.00	N/A						Intermediate
Rotate	12-08	09:45	10:05	12-08	0.33	4919.00	5015.00	96.00	288.00	N/A						Intermediate
Rotate	12-08	10:10	10:35	12-08	0.42	5015.00	5110.00	95.00	228.00	N/A	650.00	50.0	40.00	2550.00	1550.00	Intermediate
Slide	12-08	10:40	10:50	12-08	0.17	5110.00	5118.00	8.00	48.00	30.0		N/A				Intermediate
Rotate	12-08	10:50	11:00	12-08	0.17	5118.00	5206.00	88.00	528.00	N/A						Intermediate
Rotate	12-08	11:05	11:20	12-08	0.25	5206.00	5302.00	96.00	384.00	N/A						Intermediate
Rotate	12-08	11:25	11:50	12-08	0.42	5302.00	5398.00	96.00	230.40	N/A	650.00	50.0	40.00	2700.00	1700.00	Intermediate
Slide	12-08	11:55	12:10	12-08	0.25	5398.00	5408.00	10.00	40.00	40.0		N/A				Intermediate
Rotate	12-08	12:10	12:25	12-08	0.25	5408.00	5493.00	85.00	340.00	N/A						Intermediate
Slide	12-08	12:30	12:45	12-08	0.25	5493.00	5503.00	10.00	40.00	0.0		N/A				Intermediate
Rotate	12-08	12:45	13:05	12-08	0.33	5503.00	5589.00	86.00	258.00	N/A						Intermediate
Slide	12-08	13:10	13:25	12-08	0.25	5589.00	5599.00	10.00	40.00	340.0		N/A				Intermediate
Rotate	12-08	13:25	13:40	12-08	0.25	5599.00	5684.00	85.00	340.00	N/A						Intermediate
Slide	12-08	13:45	14:00	12-08	0.25	5684.00	5694.00	10.00	40.00	0.0		N/A				Intermediate
Rotate	12-08	14:00	14:10	12-08	0.17	5694.00	5780.00	86.00	516.00	N/A						Intermediate
Slide	12-08	14:35	14:50	12-08	0.25	5780.00	5792.00	12.00	48.00	30.0		N/A				Intermediate
Rotate	12-08	14:50	15:00	12-08	0.17	5792.00	5876.00	84.00	504.00	N/A						Intermediate
Slide	12-08	15:05	15:15	12-08	0.17	5876.00	5884.00	8.00	48.00	290.0		N/A				Intermediate
Rotate	12-08	15:15	15:25	12-08	0.17	5884.00	5972.00	88.00	528.00	N/A						Intermediate
Slide	12-08	15:30	15:40	12-08	0.17	5972.00	5984.00	12.00	72.00	340.0		N/A				Intermediate
Rotate	12-08	15:40	16:00	12-08	0.33	5984.00	6067.00	83.00	249.00	N/A						Intermediate
Slide	12-08	16:05	16:15	12-08	0.17	6067.00	6079.00	12.00	72.00	20.0		N/A				Intermediate
Rotate	12-08	16:15	16:35	12-08	0.33	6079.00	6162.00	83.00	249.00	N/A	650.00	40.0	40.00	2600.00	1750.00	Intermediate
Rotate	12-08	16:40	16:55	12-08	0.25	6162.00	6258.00	96.00	384.00	N/A	650.00	40.0	40.00	2600.00	1750.00	Intermediate
Rotate	12-08	17:00	17:20	12-08	0.33	6258.00	6353.00	95.00	285.00	N/A						Intermediate
Rotate	12-08	17:25	17:45	12-08	0.33	6353.00	6449.00	96.00	288.00	N/A	650.00	40.0	40.00	2600.00	1750.00	Intermediate
Rotate	12-08	17:50	18:00	12-08	0.17	6449.00	6544.00	95.00	570.00	N/A	650.00	40.0	40.00	2600.00	1750.00	Intermediate
Rotate	12-08	18:05	18:25	12-08	0.33	6544.00	6640.00	96.00	288.00	N/A	650.00	40.0	40.00	2600.00	1750.00	Intermediate
Rotate	12-08	18:30	18:35	12-08	0.08	6640.00	6650.00	10.00	120.00	N/A	650.00	40.0	40.00	2600.00	1750.00	Intermediate
Slide	12-08	18:35	18:45	12-08	0.17	6650.00	6662.00	12.00	72.00	345.0	653.00	N/A	30.00	2050.00	1700.00	Intermediate
Rotate	12-08	18:45	19:05	12-08	0.33	6662.00	6735.00	73.00	219.00	N/A	650.00	40.0	40.00	2600.00	1750.00	Intermediate
Rotate	12-08	19:10	19:15	12-08	0.08	6735.00	6746.00	11.00	132.00	N/A	650.00	40.0	40.00	2600.00	1750.00	Intermediate
Slide	12-08	19:15	19:20	12-08	0.08	6746.00	6756.00	10.00	120.00	0.0	653.00	N/A	30.00	2050.00	1700.00	Intermediate

Rotate	12-08	19:20	19:40	12-08	0.33	6756.00	6830.00	74.00	222.00	N/A	650.00	40.0	40.00	2600.00	1750.00	Intermediate
Rotate	12-08	19:45	19:50	12-08	0.08	6830.00	6842.00	12.00	144.00	N/A	650.00	40.0	40.00	2600.00	1750.00	Intermediate
Slide	12-08	19:50	20:00	12-08	0.17	6842.00	6857.00	15.00	90.00	340.0	653.00	N/A	30.00	2050.00	1700.00	Intermediate
Rotate	12-08	20:00	20:15	12-08	0.25	6857.00	6925.00	68.00	272.00	N/A	650.00	40.0	40.00	2600.00	1750.00	Intermediate
Rotate	12-08	20:20	20:40	12-08	0.33	6925.00	7020.00	95.00	285.00	N/A	650.00	40.0	40.00	2600.00	1750.00	Intermediate
Rotate	12-08	20:45	20:50	12-08	0.08	7020.00	7028.00	8.00	96.00	N/A	650.00	40.0	40.00	2600.00	1750.00	Intermediate
Slide	12-08	20:50	20:55	12-08	0.08	7028.00	7040.00	12.00	144.00	15.0	748.00	N/A	26.00	2550.00	2300.00	Intermediate
Rotate	12-08	20:55	21:20	12-08	0.42	7040.00	7115.00	75.00	180.00	N/A	749.00	40.0	47.00	3050.00	2400.00	Intermediate
Rotate	12-08	21:25	21:40	12-08	0.25	7115.00	7211.00	96.00	384.00	N/A	749.00	40.0	47.00	3050.00	2400.00	Intermediate
Rotate	12-08	21:45	22:00	12-08	0.25	7211.00	7307.00	96.00	384.00	N/A	749.00	40.0	47.00	3050.00	2400.00	Intermediate
Rotate	12-08	22:40	22:45	12-08	0.08	7307.00	7315.00	8.00	96.00	N/A	652.00	40.0	47.00	2600.00	1900.00	Intermediate
Slide	12-08	22:45	22:55	12-08	0.17	7315.00	7330.00	15.00	90.00	345.0	748.00	N/A	26.00	2550.00	2300.00	Intermediate
Rotate	12-08	22:55	23:20	12-08	0.42	7330.00	7403.00	73.00	175.20	N/A	748.00	40.0	48.00	2650.00	2100.00	Intermediate
Rotate	12-08	23:25	23:40	12-08	0.25	7403.00	7498.00	95.00	380.00	N/A	748.00	40.0	48.00	2650.00	2100.00	Intermediate
Rotate	12-08	23:45	00:10	12-09	0.42	7498.00	7594.00	96.00	230.40	N/A	748.00	40.0	48.00	2650.00	2100.00	Intermediate
Rotate	12-09	00:15	00:20	12-09	0.08	7594.00	7600.00	6.00	72.00	N/A	748.00	40.0	48.00	2650.00	2100.00	Intermediate
Slide	12-09	00:20	00:30	12-09	0.17	7600.00	7620.00	20.00	120.00	345.0	748.00	N/A	26.00	2550.00	2300.00	Intermediate
Rotate	12-09	00:30	00:50	12-09	0.33	7620.00	7689.00	69.00	207.00	N/A	748.00	40.0	48.00	2650.00	2100.00	Intermediate
Rotate	12-09	00:55	01:15	12-09	0.33	7689.00	7785.00	96.00	288.00	N/A	748.00	40.0	48.00	2650.00	2100.00	Intermediate
Rotate	12-09	01:20	01:35	12-09	0.25	7785.00	7881.00	96.00	384.00	N/A	748.00	40.0	48.00	2650.00	2100.00	Intermediate
Rotate	12-09	01:40	01:45	12-09	0.08	7881.00	7889.00	8.00	96.00	N/A	748.00	40.0	48.00	2650.00	2100.00	Intermediate
Slide	12-09	01:45	02:00	12-09	0.25	7889.00	7909.00	20.00	80.00	340.0	748.00	N/A	26.00	2550.00	2300.00	Intermediate
Rotate	12-09	02:00	02:25	12-09	0.42	7909.00	7976.00	67.00	160.80	N/A	748.00	40.0	48.00	2650.00	2100.00	Intermediate
Rotate	12-09	02:30	02:35	12-09	0.08	7976.00	7981.00	5.00	60.00	N/A	748.00	40.0	48.00	2650.00	2100.00	Intermediate
Slide	12-09	02:35	02:45	12-09	0.17	7981.00	8001.00	20.00	120.00	0.0	748.00	N/A	26.00	2550.00	2300.00	Intermediate
Rotate	12-09	02:45	03:15	12-09	0.5	8001.00	8072.00	71.00	142.00	N/A	748.00	40.0	48.00	2650.00	2100.00	Intermediate
Rotate	12-09	03:20	03:45	12-09	0.42	8072.00	8168.00	96.00	230.40	N/A	748.00	40.0	48.00	2650.00	2100.00	Intermediate
Rotate	12-09	03:50	04:10	12-09	0.33	8168.00	8263.00	95.00	285.00	N/A	748.00	40.0	48.00	2650.00	2100.00	Intermediate
Rotate	12-09	04:15	04:30	12-09	0.25	8263.00	8359.00	96.00	384.00	N/A	748.00	40.0	48.00	2650.00	2100.00	Intermediate
Rotate	12-09	04:35	04:40	12-09	0.08	8359.00	8373.00	14.00	168.00	N/A	748.00	40.0	48.00	2650.00	2100.00	Intermediate
Slide	12-09	04:40	04:50	12-09	0.17	8373.00	8388.00	15.00	90.00	330.0	748.00	N/A	26.00	2550.00	2300.00	Intermediate
Rotate	12-09	04:50	05:10	12-09	0.33	8388.00	8455.00	67.00	201.00	N/A	748.00	40.0	48.00	2650.00	2100.00	Intermediate
Rotate	12-09	05:15	05:45	12-09	0.5	8455.00	8550.00	95.00	190.00	N/A	748.00	40.0	48.00	2650.00	2100.00	Intermediate
Rotate	12-09	05:50	06:25	12-09	0.58	8550.00	8646.00	96.00	164.57	N/A	748.00	40.0	48.00	2650.00	2100.00	Intermediate
Rotate	12-09	06:30	07:10	12-09	0.67	8646.00	8742.00	96.00	144.00	N/A						Intermediate
Rotate	12-09	07:15	07:20	12-09	0.08	8742.00	8752.00	10.00	120.00	N/A	600.00	30.0	42.00	2100.00	1600.00	Intermediate
Slide	12-09	07:20	07:45	12-09	0.42	8752.00	8767.00	15.00	36.00	180.0		N/A				Intermediate
Rotate	12-09	07:45	08:15	12-09	0.5	8767.00	8837.00	70.00	140.00	N/A	600.00	30.0	42.00	2100.00	1600.00	Intermediate
Rotate	12-09	08:20	09:00	12-09	0.67	8837.00	8933.00	96.00	144.00	N/A	600.00	30.0	42.00	2100.00	1600.00	Intermediate
Rotate	12-09	09:05	09:45	12-09	0.67	8933.00	9028.00	95.00	142.50	N/A						Intermediate
Rotate	12-09	09:50	10:05	12-09	0.25	9028.00	9048.00	20.00	80.00	N/A	700.00	40.0	44.00	2450.00	2000.00	Intermediate
Slide	12-09	10:05	10:20	12-09	0.25	9048.00	9058.00	10.00	40.00	60.0		N/A				Intermediate

Rotate	12-09	10:20	10:45	12-09	0.42	9058.00	9123.00	65.00	156.00	N/A	700.00	40.0	44.00	2450.00	2000.00	Intermediate
Rotate	12-09	10:50	11:00	12-09	0.17	9123.00	9138.00	15.00	90.00	N/A						Intermediate
Slide	12-09	11:00	11:25	12-09	0.42	9138.00	9153.00	15.00	36.00	60.0		N/A				Intermediate
Rotate	12-09	11:25	12:00	12-09	0.58	9153.00	9219.00	66.00	113.14	N/A						Intermediate
Rotate	12-09	12:05	12:10	12-09	0.08	9219.00	9234.00	15.00	180.00	N/A						Intermediate
Slide	12-09	12:10	12:25	12-09	0.25	9234.00	9244.00	10.00	40.00	60.0		N/A				Intermediate
Rotate	12-09	12:25	12:55	12-09	0.5	9244.00	9314.00	70.00	140.00	N/A						Intermediate
Rotate	12-09	13:00	13:10	12-09	0.17	9314.00	9334.00	20.00	120.00	N/A	700.00	40.0	44.00	2450.00	2000.00	Intermediate
Slide	12-09	13:10	13:40	12-09	0.5	9334.00	9346.00	12.00	24.00	70.0		N/A				Intermediate
Rotate	12-09	13:40	14:00	12-09	0.33	9346.00	9410.00	64.00	192.00	N/A						Intermediate
Rotate	12-09	14:05	14:15	12-09	0.17	9410.00	9420.00	10.00	60.00	N/A						Intermediate
Slide	12-09	14:15	14:25	12-09	0.17	9420.00	9428.00	8.00	48.00	70.0		N/A				Intermediate
Rotate	12-09	14:25	14:55	12-09	0.5	9428.00	9505.00	77.00	154.00	N/A						Intermediate
Rotate	12-09	15:00	15:20	12-09	0.33	9505.00	9601.00	96.00	288.00	N/A						Intermediate
Rotate	12-09	15:25	15:50	12-09	0.42	9601.00	9664.00	63.00	151.20	N/A						Intermediate, Curve



Job Number WT-21-179	Operator Advance Energy Partners	Rig Name Nabors X47
Start Date 2021-11-15	Well Name Anderson Fed Com 508H	Legal Well Name AFE Anderson Fed Com 508H
Play Delaware Basin	State/Province and Country New Mexico, US	County Lea
Company Man		

Slide/Rotate Report - BHA #4 (8.75" CURVE)

Activity	Start Date	Start Time	End Time	End Date	Hours	Start Depth (ft)	End Depth (ft)	Distance (ft)	RoP (ft/h)	Toolface	Flow Rate (gpm)	Surface RPM	WOB (klbs)	Press On (psi)	Press Off (psi)	Hole Section Type
Rotate	12-10	06:25	06:45	12-10	0.33	9664.00	9669.00	5.00	15.00	N/A						Curve
Slide	12-10	06:45	07:00	12-10	0.25	9669.00	9677.00	8.00	32.00	320.0		N/A				Curve
Rotate	12-10	07:00	07:15	12-10	0.25	9677.00	9733.00	56.00	224.00	N/A						Curve
Slide	12-10	07:15	08:15	12-10	1.0	9733.00	9765.00	32.00	32.00	2.0		N/A				Curve
Slide	12-10	08:20	09:20	12-10	1.0	9765.00	9861.00	96.00	96.00	2.0		N/A				Curve
Slide	12-10	09:25	10:40	12-10	1.25	9861.00	9957.00	96.00	76.80	340.0		N/A				Curve
Slide	12-10	10:45	12:10	12-10	1.42	9957.00	10052.00	95.00	67.06	0.0		N/A				Curve
Slide	12-10	13:30	15:05	12-10	1.58	10052.00	10148.00	96.00	60.63	0.0		N/A				Curve



Job Number WT-21-179	Operator Advance Energy Partners	Rig Name Nabors X47
Start Date 2021-11-15	Well Name Anderson Fed Com 508H	Legal Well Name AFE Anderson Fed Com 508H
Play Delaware Basin	State/Province and Country New Mexico, US	County Lea
Company Man		

Slide/Rotate Report - BHA #5 (8.75" CURVE)

Activity	Start Date	Start Time	End Time	End Date	Hours	Start Depth (ft)	End Depth (ft)	Distance (ft)	RoP (ft/h)	Toolface	Flow Rate (gpm)	Surface RPM	WOB (klbs)	Press On (psi)	Press Off (psi)	Hole Section Type
Slide	12-11	06:00	09:35	12-11	3.58	10148.00	10244.00	96.00	26.79	0.0		N/A				Curve
Slide	12-11	09:40	11:10	12-11	1.5	10244.00	10339.00	95.00	63.33	0.0		N/A				Curve
Slide	12-11	11:40	13:00	12-11	1.33	10339.00	10435.00	96.00	72.00	0.0		N/A				Curve
Slide	12-11	13:05	14:05	12-11	1.0	10435.00	10481.00	46.00	46.00	330.0		N/A				Curve, Lateral



Job Number WT-21-179	Operator Advance Energy Partners		Rig Name Nabors X47
Start Date 2021-11-15	Well Name Anderson Fed Com 508H		Legal Well Name AFE Anderson Fed Com 508H
Play Delaware Basin	State/Province and Country New Mexico, US	County Lea	Company Man

Slide/Rotate Report - BHA #6 (8.75" LATERAL ASSEMBLY)

Activity	Start Date	Start Time	End Time	End Date	Hours	Start Depth (ft)	End Depth (ft)	Distance (ft)	RoP (ft/h)	Toolface	Flow Rate (gpm)	Surface RPM	WOB (klbs)	Press On (psi)	Press Off (psi)	Hole Section Type
Slide	12-12	08:30	08:50	12-12	0.33	10481.00	10510.00	29.00	87.00	0.0		N/A				Lateral
Rotate	12-12	08:50	09:25	12-12	0.58	10510.00	10540.00	30.00	51.43	N/A						Lateral
Rotate	12-12	09:25	09:40	12-12	0.25	10540.00	10566.00	26.00	104.00	N/A						Lateral
Rotate	12-12	09:45	09:55	12-12	0.17	10566.00	10585.00	19.00	114.00	N/A	600.00	40.0	32.00	3600.00	3000.00	Lateral
Slide	12-12	09:55	10:15	12-12	0.33	10585.00	10605.00	20.00	60.00	180.0		N/A				Lateral
Rotate	12-12	10:15	10:35	12-12	0.33	10605.00	10662.00	57.00	171.00	N/A	600.00	40.0	32.00	3600.00	3000.00	Lateral
Rotate	12-12	10:40	10:50	12-12	0.17	10662.00	10672.00	10.00	60.00	N/A						Lateral
Slide	12-12	10:50	11:25	12-12	0.58	10672.00	10694.00	22.00	37.71	210.0		N/A				Lateral
Rotate	12-12	11:25	12:10	12-12	0.75	10694.00	10757.00	63.00	84.00	N/A						Lateral
Rotate	12-12	12:15	12:50	12-12	0.58	10757.00	10852.00	95.00	162.86	N/A	222.00	40.0	40.00	3600.00	3000.00	Lateral
Rotate	12-12	12:55	13:30	12-12	0.58	10852.00	10948.00	96.00	164.57	N/A	222.00	40.0	40.00	3600.00	3000.00	Lateral
Rotate	12-12	13:35	14:30	12-12	0.92	10948.00	11043.00	95.00	103.64	N/A	222.00	40.0	40.00	3600.00	3000.00	Lateral
Rotate	12-12	14:35	14:40	12-12	0.08	11043.00	11053.00	10.00	120.00	N/A	222.00	40.0	40.00	3600.00	3000.00	Lateral
Slide	12-12	14:40	15:15	12-12	0.58	11053.00	11088.00	35.00	60.00	160.0		N/A				Lateral
Rotate	12-12	15:15	15:30	12-12	0.25	11088.00	11139.00	51.00	204.00	N/A	222.00	40.0	40.00	3600.00	3000.00	Lateral
Rotate	12-12	15:35	16:40	12-12	1.08	11139.00	11235.00	96.00	88.62	N/A	222.00	40.0	40.00	3600.00	3000.00	Lateral
Rotate	12-12	16:45	17:00	12-12	0.25	11235.00	11250.00	15.00	60.00	N/A	222.00	40.0	40.00	3600.00	3000.00	Lateral
Slide	12-12	17:00	17:25	12-12	0.42	11250.00	11265.00	15.00	36.00	160.0		N/A				Lateral
Rotate	12-12	17:25	18:10	12-12	0.75	11265.00	11330.00	65.00	86.67	N/A	222.00	40.0	40.00	3600.00	3000.00	Lateral
Rotate	12-12	18:15	19:10	12-12	0.92	11330.00	11426.00	96.00	104.73	N/A	650.00	40.0	40.00	3700.00	3220.00	Lateral
Rotate	12-12	19:15	19:20	12-12	0.08	11426.00	11434.00	8.00	96.00	N/A	650.00	40.0	40.00	3700.00	3220.00	Lateral
Slide	12-12	19:20	19:25	12-12	0.08	11434.00	11446.00	12.00	144.00	200.0	650.00	N/A	31.00	3600.00	3250.00	Lateral
Rotate	12-12	19:25	20:30	12-12	1.08	11446.00	11522.00	76.00	70.15	N/A	650.00	40.0	40.00	3700.00	3220.00	Lateral
Rotate	12-12	20:35	20:40	12-12	0.08	11522.00	11527.00	5.00	60.00	N/A	650.00	40.0	40.00	3700.00	3220.00	Lateral
Slide	12-12	20:40	20:50	12-12	0.17	11527.00	11542.00	15.00	90.00	210.0	650.00	N/A	31.00	3600.00	3250.00	Lateral
Rotate	12-12	20:50	21:40	12-12	0.83	11542.00	11617.00	75.00	90.00	N/A	650.00	40.0	40.00	3700.00	3220.00	Lateral
Rotate	12-12	21:45	22:50	12-12	1.08	11617.00	11713.00	96.00	88.62	N/A	650.00	40.0	40.00	3700.00	3220.00	Lateral
Rotate	12-12	22:55	23:50	12-12	0.92	11713.00	11808.00	95.00	103.64	N/A	650.00	40.0	40.00	3700.00	3220.00	Lateral
Rotate	12-12	23:55	00:00	12-13	0.08	11808.00	11814.00	6.00	72.00	N/A	650.00	40.0	40.00	3700.00	3220.00	Lateral
Slide	12-13	00:00	00:15	12-13	0.25	11814.00	11829.00	15.00	60.00	150.0	650.00	N/A	31.00	3600.00	3250.00	Lateral
Rotate	12-13	00:15	01:05	12-13	0.83	11829.00	11903.00	74.00	88.80	N/A	650.00	40.0	40.00	3700.00	3220.00	Lateral
Rotate	12-13	01:10	02:00	12-13	0.83	11903.00	11999.00	96.00	115.20	N/A						Lateral
Rotate	12-13	02:05	02:10	12-13	0.08	11999.00	12005.00	6.00	72.00	N/A	650.00	40.0	41.00	3750.00	3220.00	Lateral
Slide	12-13	02:10	02:20	12-13	0.17	12005.00	12020.00	15.00	90.00	50.0	650.00	N/A	31.00	3650.00	3250.00	Lateral
Rotate	12-13	02:20	03:20	12-13	1.0	12020.00	12094.00	74.00	74.00	N/A	650.00	40.0	41.00	3750.00	3220.00	Lateral
Rotate	12-13	03:25	03:30	12-13	0.08	12094.00	12100.00	6.00	72.00	N/A	650.00	40.0	41.00	3750.00	3220.00	Lateral
Slide	12-13	03:30	03:45	12-13	0.25	12100.00	12125.00	25.00	100.00	60.0	650.00	N/A	31.00	3650.00	3250.00	Lateral
Rotate	12-13	03:45	04:25	12-13	0.67	12125.00	12172.00	47.00	70.50	N/A	650.00	40.0	41.00	3750.00	3220.00	Lateral
Rotate	12-13	05:00	05:15	12-13	0.25	12172.00	12190.00	18.00	72.00	N/A	650.00	40.0	40.00	3700.00	3220.00	Lateral
Rotate	12-13	05:20	05:25	12-13	0.08	12190.00	12199.00	9.00	108.00	N/A	650.00	40.0	40.00	3700.00	3220.00	Lateral
Slide	12-13	05:25	05:40	12-13	0.25	12199.00	12214.00	15.00	60.00	180.0	650.00	N/A	31.00	3650.00	3250.00	Lateral
Rotate	12-13	05:40	06:40	12-13	1.0	12214.00	12285.00	71.00	71.00	N/A	650.00	40.0	40.00	3700.00	3220.00	Lateral
Rotate	12-13	06:45	06:55	12-13	0.17	12285.00	12300.00	15.00	90.00	N/A	650.00	40.0	40.00	3700.00	3220.00	Lateral
Slide	12-13	06:55	07:35	12-13	0.67	12300.00	12330.00	30.00	45.00	160.0		N/A				Lateral
Rotate	12-13	07:35	08:15	12-13	0.67	12330.00	12381.00	51.00	76.50	N/A	650.00	40.0	40.00	3700.00	3220.00	Lateral
Rotate	12-13	08:20	08:25	12-13	0.08	12381.00	12400.00	19.00	228.00	N/A	650.00	40.0	40.00	3700.00	3220.00	Lateral
Slide	12-13	08:25	08:45	12-13	0.33	12400.00	12412.00	12.00	36.00	160.0		N/A				Lateral
Rotate	12-13	08:45	09:15	12-13	0.5	12412.00	12477.00	65.00	130.00	N/A						Lateral
Rotate	12-13	09:20	10:25	12-13	1.08	12477.00	12572.00	95.00	87.69	N/A	650.00	30.0	42.00	3700.00	3200.00	Lateral
Rotate	12-13	10:30	11:30	12-13	1.0	12572.00	12668.00	96.00	96.00	N/A	650.00	30.0	42.00	3700.00	3200.00	Lateral
Rotate	12-13	11:35	13:50	12-13	2.25	12668.00	12763.00	95.00	42.22	N/A						Lateral
Rotate	12-13	13:55	14:30	12-13	0.58	12763.00	12785.00	22.00	37.71	N/A	650.00	30.0	42.00	3950.00	3400.00	Lateral
Slide	12-13	14:30	14:55	12-13	0.42	12785.00	12790.00	5.00	12.00	30.0		N/A				Lateral
Rotate	12-13	14:55	15:55	12-13	1.0	12790.00	12859.00	69.00	69.00	N/A	650.00	30.0	42.00	3950.00	3400.00	Lateral
Rotate	12-13	16:00	16:05	12-13	0.08	12859.00	12869.00	10.00	120.00	N/A	650.00	30.0	42.00	3950.00	3400.00	Lateral
Slide	12-13	16:05	17:05	12-13	1.0	12869.00	12884.00	15.00	15.00	16.0		N/A				Lateral
Rotate	12-13	17:05	18:00	12-13	0.92	12884.00	12955.00	71.00	77.45	N/A	650.00	30.0	42.00	3950.00	3400.00	Lateral
Rotate	12-13	18:05	18:10	12-13	0.08	12955.00	12961.00	6.00	72.00	N/A	650.00	30.0	42.00	3950.00	3400.00	Lateral
Slide	12-13	18:10	18:20	12-13	0.17	12961.00	12976.00	15.00	90.00	130.0	650.00	N/A	45.00	3750.00	3300.00	Lateral
Rotate	12-13	18:20	18:55	12-13	0.58	12976.00	13051.00	75.00	128.57	N/A	650.00	30.0	42.00	3950.00	3400.00	Lateral
Rotate	12-13	19:00	19:05	12-13	0.08	13051.00	13060.00	9.00	108.00	N/A	650.00	30.0	42.00	3950.00	3400.00	Lateral
Slide	12-13	19:05	19:30	12-13	0.42	13060.00	13085.00	25.00	60.00	180.0	650.00	N/A	45.00	3750.00	3300.00	Lateral
Rotate	12-13	19:30	20:40	12-13	1.17	13085.00	13146.00	61.00	52.29	N/A	650.00	30.0	42.00	3950.00	3400.00	Lateral
Rotate	12-13	20:45	20:50	12-13	0.08	13146.00	13151.00	5.00	60.00	N/A	650.00	30.0	42.00	3950.00	3400.00	Lateral

Slide	12-13	20:50	21:10	12-13	0.33	13151.00	13163.00	12.00	36.00	180.0	650.00	N/A	45.00	3750.00	3300.00	Lateral
Rotate	12-13	21:10	22:10	12-13	1.0	13163.00	13242.00	79.00	79.00	N/A	650.00	30.0	42.00	3950.00	3400.00	Lateral
Rotate	12-13	22:15	23:40	12-13	1.42	13242.00	13337.00	95.00	67.06	N/A	650.00	30.0	42.00	3950.00	3400.00	Lateral
Rotate	12-13	23:45	00:50	12-14	1.08	13337.00	13432.00	95.00	87.69	N/A	650.00	30.0	42.00	3950.00	3400.00	Lateral
Rotate	12-14	00:55	01:40	12-14	0.75	13432.00	13527.00	95.00	126.67	N/A	650.00	30.0	42.00	3950.00	3400.00	Lateral
Rotate	12-14	01:45	02:50	12-14	1.08	13527.00	13623.00	96.00	88.62	N/A	650.00	30.0	42.00	3950.00	3400.00	Lateral
Rotate	12-14	02:55	03:00	12-14	0.08	13623.00	13628.00	5.00	60.00	N/A	650.00	30.0	42.00	3950.00	3400.00	Lateral
Slide	12-14	03:00	03:45	12-14	0.75	13628.00	13653.00	25.00	33.33	120.0	650.00	N/A	45.00	3750.00	3300.00	Lateral
Rotate	12-14	03:45	04:50	12-14	1.08	13653.00	13718.00	65.00	60.00	N/A	650.00	30.0	42.00	3950.00	3400.00	Lateral
Rotate	12-14	04:55	05:00	12-14	0.08	13718.00	13725.00	7.00	84.00	N/A	650.00	30.0	42.00	3950.00	3400.00	Lateral
Slide	12-14	05:00	05:15	12-14	0.25	13725.00	13740.00	15.00	60.00	90.0	650.00	N/A	45.00	3750.00	3300.00	Lateral
Rotate	12-14	05:15	06:25	12-14	1.17	13740.00	13813.00	73.00	62.57	N/A	650.00	30.0	42.00	3950.00	3400.00	Lateral
Rotate	12-14	06:30	07:45	12-14	1.25	13813.00	13909.00	96.00	76.80	N/A	650.00	30.0	42.00	3950.00	3400.00	Lateral
Rotate	12-14	07:50	07:55	12-14	0.08	13909.00	13919.00	10.00	120.00	N/A	650.00	30.0	42.00	3950.00	3400.00	Lateral
Slide	12-14	07:55	09:15	12-14	1.33	13919.00	13949.00	30.00	22.50	90.0		N/A				Lateral
Rotate	12-14	09:15	10:00	12-14	0.75	13949.00	14004.00	55.00	73.33	N/A	650.00	30.0	42.00	3950.00	3400.00	Lateral
Rotate	12-14	10:05	10:25	12-14	0.33	14004.00	14019.00	15.00	45.00	N/A	650.00	30.0	42.00	3950.00	3400.00	Lateral
Slide	12-14	10:25	11:15	12-14	0.83	14019.00	14039.00	20.00	24.00	90.0		N/A				Lateral
Rotate	12-14	11:15	11:35	12-14	0.33	14039.00	14049.00	10.00	30.00	N/A	650.00	30.0	42.00	3950.00	3400.00	Lateral
Slide	12-14	11:35	12:20	12-14	0.75	14049.00	14069.00	20.00	26.67	110.0		N/A				Lateral
Rotate	12-14	12:20	12:45	12-14	0.42	14069.00	14100.00	31.00	74.40	N/A	650.00	30.0	42.00	3950.00	3400.00	Lateral
Rotate	12-14	12:50	14:20	12-14	1.5	14100.00	14195.00	95.00	63.33	N/A	650.00	30.0	42.00	3950.00	3400.00	Lateral
Rotate	12-14	14:25	16:25	12-14	2.0	14195.00	14291.00	96.00	48.00	N/A	650.00	30.0	42.00	3950.00	3400.00	Lateral
Rotate	12-14	16:40	17:50	12-14	1.17	14291.00	14387.00	96.00	82.29	N/A	650.00	30.0	42.00	3950.00	3400.00	Lateral
Rotate	12-14	17:55	19:20	12-14	1.42	14387.00	14482.00	95.00	67.06	N/A	650.00	30.0	42.00	3950.00	3400.00	Lateral
Rotate	12-14	19:25	19:30	12-14	0.08	14482.00	14489.00	7.00	84.00	N/A	650.00	30.0	42.00	3950.00	3400.00	Lateral
Slide	12-14	19:30	19:55	12-14	0.42	14489.00	14514.00	25.00	60.00	180.0	700.00	N/A	28.00	4200.00	3800.00	Lateral
Rotate	12-14	19:55	20:45	12-14	0.83	14514.00	14578.00	64.00	76.80	N/A	650.00	30.0	42.00	3950.00	3400.00	Lateral
Rotate	12-14	20:50	21:40	12-14	0.83	14578.00	14628.00	50.00	60.00	N/A	650.00	30.0	42.00	3950.00	3400.00	Lateral
Slide	12-14	21:45	22:25	12-14	0.67	14628.00	14663.00	35.00	52.50	210.0	700.00	N/A	28.00	4200.00	3800.00	Lateral
Rotate	12-14	22:25	23:35	12-14	1.17	14663.00	14726.00	63.00	54.00	N/A	650.00	30.0	42.00	3950.00	3400.00	Lateral
Slide	12-14	23:40	00:10	12-15	0.5	14726.00	14751.00	25.00	50.00	220.0	700.00	N/A	28.00	4200.00	3800.00	Lateral
Rotate	12-15	00:10	01:25	12-15	1.25	14751.00	14815.00	64.00	51.20	N/A	650.00	30.0	42.00	3950.00	3400.00	Lateral
Rotate	12-15	01:30	02:25	12-15	0.92	14815.00	14865.00	50.00	54.55	N/A	650.00	30.0	42.00	3950.00	3400.00	Lateral
Rotate	12-15	02:30	02:35	12-15	0.08	14865.00	14871.00	6.00	72.00	N/A	650.00	30.0	42.00	3950.00	3400.00	Lateral
Slide	12-15	02:35	03:05	12-15	0.5	14871.00	14886.00	15.00	30.00	315.0	700.00	N/A	28.00	4200.00	3800.00	Lateral
Rotate	12-15	03:05	04:25	12-15	1.33	14886.00	14961.00	75.00	56.25	N/A	650.00	30.0	42.00	3950.00	3400.00	Lateral
Rotate	12-15	04:30	04:35	12-15	0.08	14961.00	14967.00	6.00	72.00	N/A	650.00	30.0	42.00	3950.00	3400.00	Lateral
Slide	12-15	04:35	05:05	12-15	0.5	14967.00	14982.00	15.00	30.00	320.0	700.00	N/A	28.00	4200.00	3800.00	Lateral
Rotate	12-15	05:05	06:30	12-15	1.42	14982.00	15056.00	74.00	52.24	N/A	650.00	30.0	42.00	3950.00	3400.00	Lateral
Rotate	12-15	06:35	08:50	12-15	2.25	15056.00	15151.00	95.00	42.22	N/A	650.00	30.0	42.00	3950.00	3400.00	Lateral
Rotate	12-15	08:55	09:15	12-15	0.33	15151.00	15166.00	15.00	45.00	N/A	650.00	30.0	42.00	3950.00	3400.00	Lateral
Slide	12-15	09:15	10:00	12-15	0.75	15166.00	15196.00	30.00	40.00	160.0		N/A				Lateral
Rotate	12-15	10:00	11:00	12-15	1.0	15196.00	15247.00	51.00	51.00	N/A	650.00	30.0	42.00	3950.00	3400.00	Lateral
Rotate	12-15	11:05	11:15	12-15	0.17	15247.00	15262.00	15.00	90.00	N/A	650.00	30.0	42.00	3950.00	3400.00	Lateral
Slide	12-15	11:15	12:20	12-15	1.08	15262.00	15292.00	30.00	27.69	180.0		N/A				Lateral
Rotate	12-15	12:20	13:00	12-15	0.67	15292.00	15343.00	51.00	76.50	N/A	650.00	30.0	42.00	3950.00	3400.00	Lateral
Rotate	12-15	13:05	13:30	12-15	0.42	15343.00	15358.00	15.00	36.00	N/A	650.00	30.0	42.00	3950.00	3400.00	Lateral
Slide	12-15	13:30	14:05	12-15	0.58	15358.00	15373.00	15.00	25.71	30.0		N/A				Lateral
Rotate	12-15	14:05	14:45	12-15	0.67	15373.00	15439.00	66.00	99.00	N/A	650.00	30.0	42.00	3950.00	3400.00	Lateral
Rotate	12-15	14:50	16:30	12-15	1.67	15439.00	15534.00	95.00	57.00	N/A	650.00	30.0	42.00	3950.00	3400.00	Lateral
Rotate	12-15	16:55	17:05	12-15	0.17	15534.00	15544.00	10.00	60.00	N/A	650.00	30.0	42.00	3950.00	3400.00	Lateral
Slide	12-15	17:05	17:35	12-15	0.5	15544.00	15554.00	10.00	20.00	30.0		N/A				Lateral
Rotate	12-15	17:35	18:50	12-15	1.25	15554.00	15629.00	75.00	60.00	N/A	650.00	30.0	42.00	3950.00	3400.00	Lateral
Rotate	12-15	18:55	19:00	12-15	0.08	15629.00	15635.00	6.00	72.00	N/A	650.00	30.0	42.00	3950.00	3400.00	Lateral
Slide	12-15	19:00	20:00	12-15	1.0	15635.00	15660.00	25.00	25.00	50.0	700.00	N/A	30.00	4260.00	3960.00	Lateral
Rotate	12-15	20:00	21:05	12-15	1.08	15660.00	15724.00	64.00	59.08	N/A	650.00	30.0	42.00	3950.00	3400.00	Lateral
Rotate	12-15	21:10	21:15	12-15	0.08	15724.00	15730.00	6.00	72.00	N/A	650.00	30.0	42.00	3950.00	3400.00	Lateral
Slide	12-15	21:15	22:05	12-15	0.83	15730.00	15760.00	30.00	36.00	70.0	700.00	N/A	30.00	4260.00	3960.00	Lateral
Rotate	12-15	22:05	23:15	12-15	1.17	15760.00	15820.00	60.00	51.43	N/A	650.00	30.0	42.00	3950.00	3400.00	Lateral
Rotate	12-15	23:20	23:25	12-15	0.08	15820.00	15825.00	5.00	60.00	N/A	650.00	30.0	42.00	3950.00	3400.00	Lateral
Slide	12-15	23:25	00:30	12-16	1.08	15825.00	15855.00	30.00	27.69	90.0	700.00	N/A	30.00	4260.00	3960.00	Lateral
Rotate	12-16	00:30	02:10	12-16	1.67	15855.00	15916.00	61.00	36.60	N/A	650.00	30.0	42.00	3950.00	3400.00	Lateral
Rotate	12-16	02:15	02:20	12-16	0.08	15916.00	15924.00	8.00	96.00	N/A	650.00	30.0	42.00	3950.00	3400.00	Lateral
Slide	12-16	02:20	03:05	12-16	0.75	15924.00	15943.00	19.00	25.33	130.0	700.00	N/A	30.00	4260.00	3960.00	Lateral
Rotate	12-16	03:05	03:35	12-16	0.5	15943.00	15952.00	9.00	18.00	N/A	650.00	30.0	42.00	3950.00	3400.00	Lateral
Slide	12-16	03:35	04:05	12-16	0.5	15952.00	15962.00	10.00	20.00	90.0	700.00	N/A	30.00	4260.00	3960.00	Lateral
Rotate	12-16	04:05	04:55	12-16	0.83	15962.00	16011.00	49.00	58.80	N/A	650.00	30.0	42.00	3950.00	3400.00	Lateral
Rotate	12-16	05:00	05:05	12-16	0.08	16011.00	16029.00	18.00	216.00	N/A	650.00	30.0	42.00	3950.00	3400.00	Lateral
Slide	12-16	05:05	05:50	12-16	0.75	16029.00	16039.00	10.00	13.33	150.0	700.00	N/A	30.00	4260.00	3960.00	Lateral
Rotate	12-16	05:50	07:55	12-16	2.08	16039.00	16104.00	65.00	31.20	N/A	650.00	30.0	42.00	3950.00	3400.00	Lateral



Job Number WT-21-179	Operator Advance Energy Partners	Rig Name Nabors X47
Start Date 2021-11-15	Well Name Anderson Fed Com 508H	Legal Well Name AFE Anderson Fed Com 508H
Play Delaware Basin	State/Province and Country New Mexico, US	County Lea
Company Man		

Slide/Rotate Report - BHA #7 (8.75" LATERAL ASSEMBLY)

Activity	Start Date	Start Time	End Time	End Date	Hours	Start Depth (ft)	End Depth (ft)	Distance (ft)	RoP (ft/h)	Toolface	Flow Rate (gpm)	Surface RPM	WOB (klbs)	Press On (psi)	Press Off (psi)	Hole Section Type
Rotate	12-16	23:10	23:15	12-16	0.08	16104.00	16106.00	2.00	24.00	N/A	650.00	30.0	42.00	3950.00	3400.00	Lateral
Rotate	12-16	23:20	23:25	12-16	0.08	16106.00	16115.00	9.00	108.00	N/A	650.00	40.0	42.00	4300.00	3800.00	Lateral
Slide	12-16	23:25	00:00	12-17	0.58	16115.00	16135.00	20.00	34.29	150.0	650.00	N/A	30.00	4150.00	3800.00	Lateral
Rotate	12-17	00:00	00:45	12-17	0.75	16135.00	16202.00	67.00	89.33	N/A	650.00	40.0	42.00	4300.00	3800.00	Lateral
Rotate	12-17	00:50	01:50	12-17	1.0	16202.00	16297.00	95.00	95.00	N/A	650.00	40.0	42.00	4300.00	3800.00	Lateral
Rotate	12-17	01:55	02:00	12-17	0.08	16297.00	16310.00	13.00	156.00	N/A	650.00	40.0	42.00	4300.00	3800.00	Lateral
Slide	12-17	02:00	02:55	12-17	0.92	16310.00	16340.00	30.00	32.73	180.0	650.00	N/A	30.00	4150.00	3800.00	Lateral
Rotate	12-17	02:55	03:40	12-17	0.75	16340.00	16393.00	53.00	70.67	N/A	650.00	40.0	42.00	4300.00	3800.00	Lateral
Rotate	12-17	03:45	03:50	12-17	0.08	16393.00	16403.00	10.00	120.00	N/A	700.00	50.0	42.00	4700.00	4200.00	Lateral
Slide	12-17	03:50	04:20	12-17	0.5	16403.00	16423.00	20.00	40.00	180.0	700.00	N/A	35.00	4500.00	4200.00	Lateral
Rotate	12-17	04:20	05:00	12-17	0.67	16423.00	16489.00	66.00	99.00	N/A	700.00	50.0	42.00	4700.00	4200.00	Lateral
Rotate	12-17	05:05	06:05	12-17	1.0	16489.00	16584.00	95.00	95.00	N/A	700.00	50.0	42.00	4700.00	4200.00	Lateral
Rotate	12-17	06:10	06:20	12-17	0.17	16584.00	16594.00	10.00	60.00	N/A	700.00	50.0	42.00	4700.00	4200.00	Lateral
Slide	12-17	06:20	07:40	12-17	1.33	16594.00	16624.00	30.00	22.50	30.0		N/A				Lateral
Rotate	12-17	07:40	07:45	12-17	0.08	16624.00	16669.00	45.00	540.00	N/A	700.00	50.0	42.00	4700.00	4200.00	Lateral
Slide	12-17	07:45	09:15	12-17	1.5	16669.00	16679.00	10.00	6.67	60.0		N/A				Lateral
Slide	12-17	09:20	10:15	12-17	0.92	16679.00	16704.00	25.00	27.27	30.0		N/A				Lateral
Rotate	12-17	10:15	11:20	12-17	1.08	16704.00	16775.00	71.00	65.54	N/A	700.00	50.0	42.00	4700.00	4200.00	Lateral
Rotate	12-17	11:25	13:15	12-17	1.83	16775.00	16905.00	130.00	70.91	N/A	700.00	50.0	42.00	4700.00	4200.00	Lateral



Daily Reports

Anderson Fed Com 508H (WT-21-179)

2021-11-15 to 2021-12-20

Lea, New Mexico, US (32.43, -103.64)



Job Number WT-21-179	Operator Advance Energy Partners	Rig Name Nabors X47
Start Date 2021-11-15	Well Name Anderson Fed Com 508H	Legal Well Name AFE Anderson Fed Com 508H
Play Delaware Basin	State/Province and Country New Mexico, US	County Lea
Company Man		

Monday, Nov 15 00:00 - 23:59 (Day 1 of 21)

Billing: \$500.00 (\$153,503.78 total)

Drilling Summary**Drilling Parameters**

Start Depth (ft)		Downhole Hours	0.00	Rotating WOB (klbs)	
Bit Depth (ft)		Drilling Hours	0.00	Sliding WOB (klbs)	
Bottom Hole Depth (ft)		Hours Circulating	0.00	Rotating SPM	
Total Distance (ft)	0.00	Hours Sliding	0.00	Sliding SPM	
Distance Rotated (ft)	0.00	Hours Rotating	0.00	Motor RPM	-
Distance Slid (ft)	0.00			Surface RPM	
Inclination In				Flow Rate (gpm)	
Inclination Out				On Bottom Pressure (psi)	
Azimuth In		% Hours Rotating		Off Bottom Pressure (psi)	
Azimuth Out		% Hours Sliding			
AVG Total ROP (ft/h)	0.00	% Distance Sliding			
AVG Rotating ROP (ft/h)	0.00	% Distance Rotating			
AVG Sliding ROP (ft/h)	0.00				

Personnel

Name	Position
Advance Nabors X47	Directional Driller
Francisco DeLeon	MWD Engineer
Kyle Kusak	MWD Engineer

No BHAs**Directional Activities**

Activity Type	Code	Start Date	Start Time	End Time	End Date	Start (ft)	End (ft)	Comments/Details
Standby	15	11-15	00:00	23:55	11-15			Rig Move

MWD Activities

No Activities



Job Number WT-21-179	Operator Advance Energy Partners	Rig Name Nabors X47
Start Date 2021-11-15	Well Name Anderson Fed Com 508H	Legal Well Name AFE Anderson Fed Com 508H
Play Delaware Basin	State/Province and Country New Mexico, US	County Lea
Company Man		

Tuesday, Nov 16 00:00 - 23:59 (Day 2 of 21)

Billing: \$500.00 (\$153,503.78 total)

Drilling Summary			Drilling Parameters		
Start Depth (ft)			Downhole Hours	0.00	Rotating WOB (klbs)
Bit Depth (ft)			Drilling Hours		Sliding WOB (klbs)
Bottom Hole Depth (ft)			Hours Circulating		Rotating SPM
Total Distance (ft)			Hours Sliding		Sliding SPM
Distance Rotated (ft)			Hours Rotating		Motor RPM
Distance Slid (ft)					Surface RPM
Inclination In					Flow Rate (gpm)
Inclination Out					On Bottom Pressure (psi)
Azimuth In			% Hours Rotating		Off Bottom Pressure (psi)
Azimuth Out			% Hours Sliding		
AVG Total ROP (ft/h)	0.00		% Distance Sliding		
AVG Rotating ROP (ft/h)	0.00		% Distance Rotating		
AVG Sliding ROP (ft/h)	0.00				

Personnel

Name	Position
Advance Nabors X47	Directional Driller
Francisco DeLeon	MWD Engineer
Kyle Kusak	MWD Engineer

No BHAs**Directional Activities**

Activity Type	Code	Start Date	Start Time	End Time	End Date	Start (ft)	End (ft)	Comments/Details
Standby	15	11-16	00:00	09:00	11-18			Standby while move rig & rig up on new location

MWD Activities

No Activities



Job Number WT-21-179	Operator Advance Energy Partners	Rig Name Nabors X47
Start Date 2021-11-15	Well Name Anderson Fed Com 508H	Legal Well Name AFE Anderson Fed Com 508H
Play Delaware Basin	State/Province and Country New Mexico, US	County Lea
Company Man		

Wednesday, Nov 17 00:00 - 23:59 (Day 3 of 21)

Billing: \$8,900.00 (\$153,503.78 total)

Drilling Summary

Start Depth (ft)	Downhole Hours	0.00	Rotating WOB (klbs)
Bit Depth (ft)	Drilling Hours		Sliding WOB (klbs)
Bottom Hole Depth (ft)	Hours Circulating		Rotating SPM
Total Distance (ft)	Hours Sliding		Sliding SPM
Distance Rotated (ft)	Hours Rotating		Motor RPM
Distance Slid (ft)			Surface RPM
Inclination In			Flow Rate (gpm)
Inclination Out			On Bottom Pressure (psi)
Azimuth In	% Hours Rotating		Off Bottom Pressure (psi)
Azimuth Out	% Hours Sliding		
AVG Total ROP (ft/h)	0.00	% Distance Sliding	
AVG Rotating ROP (ft/h)	0.00	% Distance Rotating	
AVG Sliding ROP (ft/h)	0.00		

Personnel

Name	Position
Advance Nabors X47	Directional Driller
Francisco DeLeon	MWD Engineer
Kyle Kusak	MWD Engineer

No BHAs**Directional Activities**

Activity Type	Code	Start Date	Start Time	End Time	End Date	Start (ft)	End (ft)	Comments/Details
Standby	15	11-16	00:00	09:00	11-18			Standby while move rig & rig up on new location

MWD Activities

No Activities



Job Number WT-21-179	Operator Advance Energy Partners	Rig Name Nabors X47
Start Date 2021-11-15	Well Name Anderson Fed Com 508H	Legal Well Name AFE Anderson Fed Com 508H
Play Delaware Basin	State/Province and Country New Mexico, US	County Lea
Company Man		

Thursday, Nov 18 00:00 - 23:59 (Day 4 of 21)

Billing: \$9,500.00 (\$153,503.78 total)

Drilling Summary				Drilling Parameters	
Start Depth (ft)	155.00	Downhole Hours	12.00	Rotating WOB (klbs)	5.00 - 20.00
Bit Depth (ft)	1275.00	Drilling Hours	6.17	Sliding WOB (klbs)	15.00 - 15.00
Bottom Hole Depth (ft)	1275.00	Hours Circulating	0.50	Rotating SPM	189.00 - 294.00
Total Distance (ft)	1120.00	Hours Sliding	0.17	Sliding SPM	225.00 - 225.00
Distance Rotated (ft)	1100.00	Hours Rotating	6.00	Motor RPM	100.00 - 136.00
Distance Slid (ft)	20.00			Surface RPM	50.00 - 60.00
Inclination In	1.32			Flow Rate (gpm)	550.00 - 854.00
Inclination Out	1.05			On Bottom Pressure (psi)	650.00 - 2900.00
Azimuth In	283.44	% Hours Rotating	97%	Off Bottom Pressure (psi)	600.00 - 1600.00
Azimuth Out	223.41	% Hours Sliding	3%		
AVG Total ROP (ft/h)	181.62	% Distance Sliding	2%		
AVG Rotating ROP (ft/h)	183.33	% Distance Rotating	98%		
AVG Sliding ROP (ft/h)	120.00				

Personnel

Name	Position
Advance Nabors X47	Directional Driller
Francisco DeLeon	MWD Engineer
Kyle Kusak	MWD Engineer

BHA #1 - 17.50" SURFACE

Date In: Nov 18, 2021, 9:30 Date Out: Nov 18, 2021, 21:30

Bit Details		Motor Details		Directional Comments
OD (in)	17.500	Size (in)	8.0	Directional: 8" Motor: 1.75° FXD 7/8 5.9 Stg w/ 17" STAB, Flow Range: 400-900 GPM, Max Diff: 1330 psi, Max Torque: 22,020 ft/lbs, RPG: 0.16 Bit Runs: 4
Vendor	ULTERRA	Lobe/Stage	7/8, 5.9	
S/N	56546	Bend Angle	1.75	
Nozzles	9x12's	Speed (rev/gal)	0.16	
Total Flow Area (in²)	0.994	Wear Pad OD (in)	8.250	MWD Comments
Drilling Hours for Day	6.17	Bit Distances		
Total Drilled for Day (ft)	1120.00	Survey (Bit To Survey):	72.00 ft,	POOH Reason Total Depth/Casing Point: POOH Surface TD
Drilling Hours for BHA	6.17	Bend (Bit To Bend):	6.19 ft	
Total Drilled for BHA (ft)	1120.00			

Directional Items

Description	Vendor	SN#	Top Conn	Btm Conn	ID (in)	OD (in)	Fn Len. (ft)	Len (ft)	Aggr. Len (ft)
Bit (Fixed Cutter) Description: CF616, Type: PDC (Polycrystalline Diamond Compacts), Gauge Length (in): 1.00, Size (in): 17.50	ULTERRA	56546	6 5/8" Reg Pin			17.500		1.50	1.50
Mud Motor Description: 8" Motor 7/8 5.9 1.75 FXD w/ 17"NBS, Size (in): 8.00, Bend Angle (°): 1.75, Rotor Lobe: 7, Stator Lobe: 8, Stator Stage: 5.9	Aim	800-40-008	6 5/8" Reg Box	6 5/8" Reg Box		8.000		40.57	42.07
Stabilizer Description: 17" STABILIZER	JAO	JAO 7623	6 5/8" Reg Box	6 5/8" Reg Pin	3.063	8.250		7.53	49.60
UBHO Sub Description: NM UBHO, Material: Steel	AIM	800226	6 5/8" Reg Box	6 5/8" Reg Pin	2.875	8.000		3.97	53.57
Drill Collar Description: 8" NMDC, Material: Non-Magnetic, Type: Slick Drill	Gator Tech	GT8030287	6 5/8" Reg Box	6 5/8" Reg Pin	3.250	8.000		30.41	83.98
Drill Collar Description: 8" NMDC, Material: Non-Magnetic, Type: Slick Drill	Gator Tech	GT8030601	6 5/8" Reg Box	6 5/8" Reg Pin	3.250	8.063		30.67	114.65
Crossover Sub Description: Crossover, Material: Steel	PLATINUM	PPR6258	CET54 Box	6 5/8" Reg Pin	3.000	6.750		3.37	118.02

MWD Items

No Items

Directional Activities

Activity Type	Code	Start Date	Start Time	End Time	End Date	Start (ft)	End (ft)	Comments/Details
Standby	15	11-16	00:00	09:00	11-18			Standby while move rig & rig up on new location
Pick Up BHA	64	11-18	09:00	09:30	11-18			P/U BHA#1
Rig Repair	14	11-18	09:30	10:30	11-18			Rig Repair
Pick Up BHA	64	11-18	10:30	11:45	11-18			Continue P/U BHA#1

Rotary Drill	1	11-18	11:45	13:05	11-18	155.00	209.00	Pressure On (psi): 650.00, Pressure Off (psi): 600.00, Weight On Bit (klbs): 5.00, Surface RPM: 50, Surface Torque (ft lbf): 2000.00, Flow Rate (gpm): 550.00, Strokes Per Minute: 189.00
Connection	33	11-18	13:05	13:10	11-18			Connection
Rotary Drill	1	11-18	13:10	13:30	11-18	209.00	269.00	Pressure On (psi): 1300.00, Pressure Off (psi): 900.00, Weight On Bit (klbs): 10.00, Surface RPM: 60, Surface Torque (ft lbf): 5000.00, Flow Rate (gpm): 654.00, Strokes Per Minute: 225.00
Survey	46	11-18	13:30	13:35	11-18	269.00	269.00	Inclination (°): 1.320, Azimuth (°): 283.440, TVD (ft): 196.98, Dogleg (°/100 ft): 0.67, Sensor Depth (ft): 197.00, Bit To Sensor (ft): 72.00
Rotary Drill	1	11-18	13:35	13:40	11-18	269.00	299.00	Pressure On (psi): 1300.00, Pressure Off (psi): 900.00, Weight On Bit (klbs): 10.00, Surface RPM: 60, Surface Torque (ft lbf): 5000.00, Flow Rate (gpm): 654.00, Strokes Per Minute: 225.00
Connection	33	11-18	13:40	13:45	11-18			Connection
Rotary Drill	1	11-18	13:45	14:20	11-18	299.00	389.00	Pressure On (psi): 1300.00, Pressure Off (psi): 900.00, Weight On Bit (klbs): 10.00, Surface RPM: 60, Surface Torque (ft lbf): 5000.00, Flow Rate (gpm): 654.00, Strokes Per Minute: 225.00
Survey	46	11-18	14:20	14:25	11-18	389.00	389.00	Inclination (°): 1.450, Azimuth (°): 280.810, TVD (ft): 316.95, Dogleg (°/100 ft): 0.12, Sensor Depth (ft): 317.00, Bit To Sensor (ft): 72.00
Rotary Drill	1	11-18	14:25	14:30	11-18	389.00	404.00	Pressure On (psi): 1300.00, Pressure Off (psi): 900.00, Weight On Bit (klbs): 10.00, Surface RPM: 60, Surface Torque (ft lbf): 5000.00, Flow Rate (gpm): 654.00, Strokes Per Minute: 225.00
Slide Drill	2	11-18	14:30	14:40	11-18	404.00	424.00	Pressure On (psi): 1500.00, Pressure Off (psi): 900.00, Weight On Bit (klbs): 15.00, Flow Rate (gpm): 654.00, Strokes Per Minute: 225, Toolface: 100, Toolface Type: magnetic
Rotary Drill	1	11-18	14:40	14:55	11-18	424.00	479.00	Pressure On (psi): 1300.00, Pressure Off (psi): 900.00, Weight On Bit (klbs): 10.00, Surface RPM: 60, Surface Torque (ft lbf): 5000.00, Flow Rate (gpm): 654.00, Strokes Per Minute: 225.00
Connection	33	11-18	14:55	15:00	11-18			Connection
Rotary Drill	1	11-18	15:00	15:20	11-18	479.00	569.00	Pressure On (psi): 2150.00, Pressure Off (psi): 1550.00, Weight On Bit (klbs): 20.00, Surface RPM: 60, Surface Torque (ft lbf): 14000.00, Flow Rate (gpm): 854.00, Strokes Per Minute: 294.00
Survey	46	11-18	15:20	15:25	11-18	569.00	569.00	Inclination (°): 0.660, Azimuth (°): 98.780, TVD (ft): 496.93, Dogleg (°/100 ft): 1.17, Sensor Depth (ft): 497.00, Bit To Sensor (ft): 72.00
Rotary Drill	1	11-18	15:25	15:40	11-18	569.00	660.00	Pressure On (psi): 2150.00, Pressure Off (psi): 1550.00, Weight On Bit (klbs): 20.00, Surface RPM: 60, Surface Torque (ft lbf): 14000.00, Flow Rate (gpm): 854.00, Strokes Per Minute: 294.00
Survey	46	11-18	15:40	15:45	11-18	660.00	660.00	Inclination (°): 0.660, Azimuth (°): 105.020, TVD (ft): 587.93, Dogleg (°/100 ft): 0.08, Sensor Depth (ft): 588.00, Bit To Sensor (ft): 72.00
Rotary Drill	1	11-18	15:45	16:05	11-18	660.00	751.00	Pressure On (psi): 2150.00, Pressure Off (psi): 1550.00, Weight On Bit (klbs): 20.00, Surface RPM: 60, Surface Torque (ft lbf): 14000.00, Flow Rate (gpm): 854.00, Strokes Per Minute: 294.00
Connection	33	11-18	16:05	16:10	11-18			Connection
Rotary Drill	1	11-18	16:10	16:40	11-18	751.00	842.00	Pressure On (psi): 2150.00, Pressure Off (psi): 1550.00, Weight On Bit (klbs): 20.00, Surface RPM: 60, Surface Torque (ft lbf): 14000.00, Flow Rate (gpm): 854.00, Strokes Per Minute: 294.00
Survey	46	11-18	16:40	16:45	11-18	842.00	842.00	Inclination (°): 0.480, Azimuth (°): 136.050, TVD (ft): 769.92, Dogleg (°/100 ft): 0.19, Sensor Depth (ft): 770.00, Bit To Sensor (ft): 72.00
Rotary Drill	1	11-18	16:45	17:00	11-18	842.00	932.00	Pressure On (psi): 2900.00, Pressure Off (psi): 1600.00, Weight On Bit (klbs): 20.00, Surface RPM: 60, Surface Torque (ft lbf): 25000.00, Flow Rate (gpm): 854.00, Strokes Per Minute: 294.00
Connection	33	11-18	17:00	17:05	11-18			Connection
Rotary Drill	1	11-18	17:05	17:15	11-18	932.00	1023.00	Pressure On (psi): 2900.00, Pressure Off (psi): 1600.00, Weight On Bit (klbs): 20.00, Surface RPM: 60, Surface Torque (ft lbf): 25000.00, Flow Rate (gpm): 854.00, Strokes Per Minute: 294.00
Survey	46	11-18	17:15	17:20	11-18	1023.00	1023.00	Inclination (°): 0.570, Azimuth (°): 216.820, TVD (ft): 950.91, Dogleg (°/100 ft): 0.38, Sensor Depth (ft): 951.00, Bit To Sensor (ft): 72.00
Rotary Drill	1	11-18	17:20	17:50	11-18	1023.00	1113.00	Pressure On (psi): 2900.00, Pressure Off (psi): 1600.00, Weight On Bit (klbs): 20.00, Surface RPM: 60, Surface Torque (ft lbf): 25000.00, Flow Rate (gpm): 854.00, Strokes Per Minute: 294.00
Rotary Drill	1	11-18	17:50	18:25	11-18	1113.00	1204.00	Pressure On (psi): 2900.00, Pressure Off (psi): 1600.00, Weight On Bit (klbs): 20.00, Surface RPM: 60, Surface Torque (ft lbf): 25000.00, Flow Rate (gpm): 854.00, Strokes Per Minute: 294.00
Survey	46	11-18	18:25	18:30	11-18	1204.00	1204.00	Inclination (°): 1.050, Azimuth (°): 229.130, TVD (ft): 1131.89, Dogleg (°/100 ft): 0.28, Sensor Depth (ft): 1132.00, Bit To Sensor (ft): 72.00
Rotary Drill	1	11-18	18:30	18:55	11-18	1204.00	1275.00	Pressure On (psi): 2900.00, Pressure Off (psi): 1600.00, Weight On Bit (klbs): 20.00, Surface RPM: 60, Surface Torque (ft lbf): 25000.00, Flow Rate (gpm): 854.00, Strokes Per Minute: 294.00
Survey	46	11-18	18:55	19:00	11-18	1275.00	1275.00	Inclination (°): 1.050, Azimuth (°): 223.410, TVD (ft): 1202.88, Dogleg (°/100 ft): 0.15, Sensor Depth (ft): 1203.00, Bit To Sensor (ft): 72.00
Circulating	3	11-18	19:00	19:30	11-18			Circulate And Condition Hole Clean Surface TD
Pooh	7	11-18	19:30	20:30	11-18			POOH To Surface BHA

Lay Down BHA	65	11-18	20:30	21:30	11-18			L/D MWD, Stab, Bit, Rack Back Surface BHA In Derrick
Other	16	11-18	21:30	00:00	11-19			R/U And Run Surface Casing

MWD Activities

No Activities



Job Number WT-21-179	Operator Advance Energy Partners	Rig Name Nabors X47
Start Date 2021-11-15	Well Name Anderson Fed Com 508H	Legal Well Name AFE Anderson Fed Com 508H
Play Delaware Basin	State/Province and Country New Mexico, US	County Lea
Company Man		

Friday, Nov 19 00:00 - 23:59 (Day 5 of 21)

Billing: N/A (\$153,503.78 total)

Drilling Summary				Drilling Parameters	
Start Depth (ft)		Downhole Hours	12.25	Rotating WOB (klbs)	
Bit Depth (ft)		Drilling Hours	0.00	Sliding WOB (klbs)	
Bottom Hole Depth (ft)		Hours Circulating	0.08	Rotating SPM	
Total Distance (ft)	0.00	Hours Sliding	0.00	Sliding SPM	
Distance Rotated (ft)	0.00	Hours Rotating	0.00	Motor RPM	136.00 - 40.00
Distance Slid (ft)	0.00			Surface RPM	
Inclination In				Flow Rate (gpm)	
Inclination Out				On Bottom Pressure (psi)	
Azimuth In		% Hours Rotating		Off Bottom Pressure (psi)	
Azimuth Out		% Hours Sliding			
AVG Total ROP (ft/h)	0.00	% Distance Sliding			
AVG Rotating ROP (ft/h)	0.00	% Distance Rotating			
AVG Sliding ROP (ft/h)	0.00				

Personnel

Name	Position
Advance Nabors X47	Directional Driller
Francisco DeLeon	MWD Engineer
Kyle Kusak	MWD Engineer

BHA #2 - 12.25" INTERMEDIATE

Date In: Nov 19, 2021, 11:45 Date Out: Nov 21, 2021, 23:30

Bit Details		Motor Details		Directional Comments
OD (in)	12.250	Size (in)	8.75	Directional: 8 3/4" Motor: 1.75° FXD 6.7 6.6 Stg w/ 12" STAB, Flow Range: 600-1300 GPM, Max Diff: 1650 psi, Max Torque: 31,480 ft/lbs, RPG: 0.155 Bit Runs: 1
Vendor	ULTERRA	Lobe/Stage	6/7, 6.6	
S/N	56281	Bend Angle	1.75	
Nozzles	9x12's	Speed (rev/gal)	0.16	
Total Flow Area (in²)	0.994	Wear Pad OD (in)	8.250	MWD Comments
Drilling Hours for Day		Bit Distances		
Total Drilled for Day (ft)		Survey (Bit To Survey) :		POOH Reason Total Depth/Casing Point: POOH To L/D Intermediate Assembly. Intermediate Section TD
Drilling Hours for BHA	19.08	Bend (Bit To Bend) :	6.55 ft	
Total Drilled for BHA (ft)	3500.00			

Directional Items

Description	Vendor	SN#	Top Conn	Btm Conn	ID (in)	OD (in)	Fn Len. (ft)	Len (ft)	Aggr. Len (ft)
Bit (Fixed Cutter) Description: RPS616, Type: PDC (Polycrystalline Diamond Compacts), Gauge Length (in): 1.00, Size (in): 12.25	ULTERRA	56281	6 5/8" Reg Pin			12.250		1.50	1.50
Mud Motor Description: 8" Motor 6/7 6.6 1.75 FXD w/ 12"NBS, Size (in): 8.75, Bend Angle (°): 1.75, Rotor Lobe: 6, Stator Lobe: 7, Stator Stage: 6.6	Aim	CDM875-003	6 5/8" Reg Box	6 5/8" Reg Box		8.000		38.95	40.45
Stabilizer Description: 12" STABILIZER	JAO	JAO 12584	6 5/8" Reg Box	6 5/8" Reg Pin	2.600	8.250		6.76	47.21
UBHO Sub Description: NM UBHO, Material: Steel	AIM	800228	6 5/8" Reg Box	6 5/8" Reg Pin	2.875	8.000		4.12	51.33
Drill Collar Description: 8" NMDC, Material: Non-Magnetic, Type: Slick Drill	Gator Tech	GT8030287	6 5/8" Reg Box	6 5/8" Reg Pin	3.250	8.000		30.41	81.74
Drill Collar Description: 8" NMDC, Material: Non-Magnetic, Type: Slick Drill	Gator Tech	GT8030601	6 5/8" Reg Box	6 5/8" Reg Pin	3.250	8.063		30.67	112.41
Crossover Sub Description: Crossover, Material: Steel	PLATINUM	PPR6258	CET54 Box	6 5/8" Reg Pin	3.000	6.750		3.37	115.78

MWD Items

No Items

Directional Activities

Activity Type	Code	Start Date	Start Time	End Time	End Date	Start (ft)	End (ft)	Comments/Details
Other	16	11-18	21:30	00:00	11-19			R/U And Run Surface Casing
Drilling Cement	17	11-19	00:00	00:05	11-19	1275.00	1275.00	

MWD Activities

No Activities



Job Number WT-21-179	Operator Advance Energy Partners	Rig Name Nabors X47
Start Date 2021-11-15	Well Name Anderson Fed Com 508H	Legal Well Name AFE Anderson Fed Com 508H
Play Delaware Basin	State/Province and Country New Mexico, US	County Lea
Company Man		

Saturday, Nov 20 00:00 - 23:59 (Day 6 of 21)

Billing: \$5,600.00 (\$153,503.78 total)

Drilling Summary

Start Depth (ft)	1275.00	Downhole Hours	24.00	Rotating WOB (klbs)	10.00 - 35.00
Bit Depth (ft)	2446.00	Drilling Hours	4.17	Sliding WOB (klbs)	21.00 - 26.00
Bottom Hole Depth (ft)	2446.00	Hours Circulating	0.50	Rotating SPM	276.00 - 276.00
Total Distance (ft)	1171.00	Hours Sliding	0.50	Sliding SPM	276.00 - 276.00
Distance Rotated (ft)	1081.00	Hours Rotating	3.67	Motor RPM	136.00 - 40.00
Distance Slid (ft)	90.00			Surface RPM	40.00 - 40.00
Inclination In	1.54			Flow Rate (gpm)	800.00 - 800.00
Inclination Out	1.14			On Bottom Pressure (psi)	1700.00 - 2100.00
Azimuth In	219.55	% Hours Rotating	88%	Off Bottom Pressure (psi)	1300.00 - 14550.01
Azimuth Out	71.54	% Hours Sliding	12%		
AVG Total ROP (ft/h)	281.04	% Distance Sliding	8%		
AVG Rotating ROP (ft/h)	294.82	% Distance Rotating	92%		
AVG Sliding ROP (ft/h)	180.00				

Personnel

Name	Position
Advance Nabors X47	Directional Driller
Francisco DeLeon	MWD Engineer
Kyle Kusak	MWD Engineer

BHA #2 - 12.25" INTERMEDIATE

Date In: Nov 19, 2021, 11:45 Date Out: Nov 21, 2021, 23:30

Bit Details	Motor Details	Directional Comments
OD (in) 12.250	Size (in) 8.75	Directional: 8 3/4" Motor: 1.75° FXD 6.7 6.6 Stg w/ 12" STAB, Flow Range: 600-1300 GPM, Max Diff: 1650 psi, Max Torque: 31,480 ft/lbs, RPG: 0.155 Bit Runs: 1
Vendor ULTERRA	Lobe/Stage 6/7, 6.6	
S/N 56281	Bend Angle 1.75	
Nozzles 9x12's	Speed (rev/gal) 0.16	
Total Flow Area (in²) 0.994	Wear Pad OD (in) 8.250	MWD Comments
Drilling Hours for Day 4.17	Bit Distances	POOH Reason Total Depth/Casing Point: POOH To L/D Intermediate Assembly. Intermediate Section TD
Total Drilled for Day (ft) 1171.00	Survey (Bit To Survey): 69.00 ft, Bend (Bit To Bend): 6.55 ft	
Drilling Hours for BHA 19.08		
Total Drilled for BHA (ft) 3500.00		

Directional Items

Description	Vendor	SN#	Top Conn	Btm Conn	ID (in)	OD (in)	Fn Len. (ft)	Len (ft)	Aggr. Len (ft)
Bit (Fixed Cutter) Description: RPS616, Type: PDC (Polycrystalline Diamond Compacts), Gauge Length (in): 1.00, Size (in): 12.25	ULTERRA	56281	6 5/8" Reg Pin			12.250		1.50	1.50
Mud Motor Description: 8" Motor 6/7 6.6 1.75 FXD w/ 12"NBS, Size (in): 8.75, Bend Angle (°): 1.75, Rotor Lobe: 6, Stator Lobe: 7, Stator Stage: 6.6	Aim	CDM875-003	6 5/8" Reg Box	6 5/8" Reg Box		8.000		38.95	40.45
Stabilizer Description: 12" STABILIZER	JAO	JAO 12584	6 5/8" Reg Box	6 5/8" Reg Pin	2.600	8.250		6.76	47.21
UBHO Sub Description: NM UBHO, Material: Steel	AIM	800228	6 5/8" Reg Box	6 5/8" Reg Pin	2.875	8.000		4.12	51.33
Drill Collar Description: 8" NMDC, Material: Non-Magnetic, Type: Slick Drill	Gator Tech	GT8030287	6 5/8" Reg Box	6 5/8" Reg Pin	3.250	8.000		30.41	81.74
Drill Collar Description: 8" NMDC, Material: Non-Magnetic, Type: Slick Drill	Gator Tech	GT8030601	6 5/8" Reg Box	6 5/8" Reg Pin	3.250	8.063		30.67	112.41
Crossover Sub Description: Crossover, Material: Steel	PLATINUM	PPR6258	CET54 Box	6 5/8" Reg Pin	3.000	6.750		3.37	115.78

MWD Items

No Items

Directional Activities

Activity Type	Code	Start Date	Start Time	End Time	End Date	Start (ft)	End (ft)	Comments/Details
Standby	15	11-20	00:00	15:45	11-20			Standby Skid Rig, Rig Up BOPE
Pick Up BHA	64	11-20	15:45	17:00	11-20			P/U Intermediate Assembly
TIH	8	11-20	17:00	18:30	11-20			TIH to Float Collar
Circulating	3	11-20	18:30	19:00	11-20			Drill Out Float And Shoe

Rotary Drill	1	11-20	19:00	19:35	11-20	1275.00	1421.00	Pressure On (psi): 1700.00, Pressure Off (psi): 1300.00, Weight On Bit (klbs): 10.00, Surface RPM: 40, Surface Torque (ft lbf): 5000.00, Flow Rate (gpm): 800.00, Strokes Per Minute: 276.00
Survey	46	11-20	19:35	19:40	11-20	1421.00	1421.00	Inclination (°): 1.540, Azimuth (°): 219.550, TVD (ft): 1351.84, Dogleg (%/100 ft): 0.33, Sensor Depth (ft): 1352.00, Bit To Sensor (ft): 69.00
Rotary Drill	1	11-20	19:40	20:00	11-20	1421.00	1499.00	Pressure On (psi): 1700.00, Pressure Off (psi): 1300.00, Weight On Bit (klbs): 10.00, Surface RPM: 40, Surface Torque (ft lbf): 5000.00, Flow Rate (gpm): 800.00, Strokes Per Minute: 276.00
Slide Drill	2	11-20	20:00	20:10	11-20	1499.00	1529.00	Pressure On (psi): 1900.00, Pressure Off (psi): 14550.01, Weight On Bit (klbs): 21.00, Flow Rate (gpm): 800.00, Strokes Per Minute: 276, Toolface: 30, Toolface Type: magnetic
Rotary Drill	1	11-20	20:10	20:30	11-20	1529.00	1581.00	Pressure On (psi): 1700.00, Pressure Off (psi): 1300.00, Weight On Bit (klbs): 35.00, Surface RPM: 40, Surface Torque (ft lbf): 5000.00, Flow Rate (gpm): 800.00, Strokes Per Minute: 276.00
Survey	46	11-20	20:30	20:35	11-20	1581.00	1581.00	Inclination (°): 0.700, Azimuth (°): 31.280, TVD (ft): 1511.83, Dogleg (%/100 ft): 1.40, Sensor Depth (ft): 1512.00, Bit To Sensor (ft): 69.00
Rotary Drill	1	11-20	20:35	20:45	11-20	1581.00	1676.00	Pressure On (psi): 1700.00, Pressure Off (psi): 1300.00, Weight On Bit (klbs): 35.00, Surface RPM: 40, Surface Torque (ft lbf): 5000.00, Flow Rate (gpm): 800.00, Strokes Per Minute: 276.00
Survey	46	11-20	20:45	20:50	11-20	1676.00	1676.00	Inclination (°): 2.680, Azimuth (°): 36.120, TVD (ft): 1606.78, Dogleg (%/100 ft): 2.09, Sensor Depth (ft): 1607.00, Bit To Sensor (ft): 69.00
Rotary Drill	1	11-20	20:50	21:10	11-20	1676.00	1771.00	Pressure On (psi): 1700.00, Pressure Off (psi): 1300.00, Weight On Bit (klbs): 35.00, Surface RPM: 40, Surface Torque (ft lbf): 5000.00, Flow Rate (gpm): 800.00, Strokes Per Minute: 276.00
Survey	46	11-20	21:10	21:15	11-20	1771.00	1771.00	Inclination (°): 2.680, Azimuth (°): 40.430, TVD (ft): 1701.68, Dogleg (%/100 ft): 0.21, Sensor Depth (ft): 1702.00, Bit To Sensor (ft): 69.00
Rotary Drill	1	11-20	21:15	21:20	11-20	1771.00	1798.00	Pressure On (psi): 1700.00, Pressure Off (psi): 1300.00, Weight On Bit (klbs): 35.00, Surface RPM: 40, Surface Torque (ft lbf): 5000.00, Flow Rate (gpm): 800.00, Strokes Per Minute: 276.00
Slide Drill	2	11-20	21:20	21:25	11-20	1798.00	1818.00	Pressure On (psi): 2100.00, Pressure Off (psi): 1400.00, Weight On Bit (klbs): 26.00, Flow Rate (gpm): 800.00, Strokes Per Minute: 276, Toolface: 200, Toolface Type: magnetic
Rotary Drill	1	11-20	21:25	21:35	11-20	1818.00	1867.00	Pressure On (psi): 1700.00, Pressure Off (psi): 1300.00, Weight On Bit (klbs): 35.00, Surface RPM: 40, Surface Torque (ft lbf): 5000.00, Flow Rate (gpm): 800.00, Strokes Per Minute: 276.00
Survey	46	11-20	21:35	21:40	11-20	1867.00	1867.00	Inclination (°): 1.760, Azimuth (°): 77.600, TVD (ft): 1797.61, Dogleg (%/100 ft): 1.73, Sensor Depth (ft): 1798.00, Bit To Sensor (ft): 69.00
Rotary Drill	1	11-20	21:40	22:05	11-20	1867.00	1963.00	Pressure On (psi): 1700.00, Pressure Off (psi): 1300.00, Weight On Bit (klbs): 35.00, Surface RPM: 40, Surface Torque (ft lbf): 5000.00, Flow Rate (gpm): 800.00, Strokes Per Minute: 276.00
Survey	46	11-20	22:05	22:10	11-20	1963.00	1963.00	Inclination (°): 1.930, Azimuth (°): 118.210, TVD (ft): 1893.57, Dogleg (%/100 ft): 1.34, Sensor Depth (ft): 1894.00, Bit To Sensor (ft): 69.00
Rotary Drill	1	11-20	22:10	22:25	11-20	1963.00	2059.00	Pressure On (psi): 1700.00, Pressure Off (psi): 1300.00, Weight On Bit (klbs): 35.00, Surface RPM: 40, Surface Torque (ft lbf): 5000.00, Flow Rate (gpm): 800.00, Strokes Per Minute: 276.00
Survey	46	11-20	22:25	22:30	11-20	2059.00	2059.00	Inclination (°): 2.240, Azimuth (°): 121.990, TVD (ft): 1989.50, Dogleg (%/100 ft): 0.35, Sensor Depth (ft): 1990.00, Bit To Sensor (ft): 69.00
Slide Drill	2	11-20	22:30	22:40	11-20	2059.00	2079.00	Pressure On (psi): 2100.00, Pressure Off (psi): 1400.00, Weight On Bit (klbs): 26.00, Flow Rate (gpm): 800.00, Strokes Per Minute: 276, Toolface: 300, Toolface Type: magnetic
Rotary Drill	1	11-20	22:40	22:55	11-20	2079.00	2154.00	Pressure On (psi): 1700.00, Pressure Off (psi): 1300.00, Weight On Bit (klbs): 35.00, Surface RPM: 40, Surface Torque (ft lbf): 5000.00, Flow Rate (gpm): 800.00, Strokes Per Minute: 276.00
Survey	46	11-20	22:55	23:00	11-20	2154.00	2154.00	Inclination (°): 0.620, Azimuth (°): 65.830, TVD (ft): 2084.47, Dogleg (%/100 ft): 2.07, Sensor Depth (ft): 2085.00, Bit To Sensor (ft): 69.00
Rotary Drill	1	11-20	23:00	23:15	11-20	2154.00	2249.00	Pressure On (psi): 1700.00, Pressure Off (psi): 1300.00, Weight On Bit (klbs): 35.00, Surface RPM: 40, Surface Torque (ft lbf): 5000.00, Flow Rate (gpm): 800.00, Strokes Per Minute: 276.00
Survey	46	11-20	23:15	23:20	11-20	2249.00	2249.00	Inclination (°): 0.790, Azimuth (°): 44.200, TVD (ft): 2179.46, Dogleg (%/100 ft): 0.33, Sensor Depth (ft): 2180.00, Bit To Sensor (ft): 69.00
Rotary Drill	1	11-20	23:20	23:35	11-20	2249.00	2345.00	Pressure On (psi): 1700.00, Pressure Off (psi): 1300.00, Weight On Bit (klbs): 35.00, Surface RPM: 40, Surface Torque (ft lbf): 5000.00, Flow Rate (gpm): 800.00, Strokes Per Minute: 276.00
Survey	46	11-20	23:35	23:40	11-20	2345.00	2345.00	Inclination (°): 1.140, Azimuth (°): 71.540, TVD (ft): 2275.45, Dogleg (%/100 ft): 0.59, Sensor Depth (ft): 2276.00, Bit To Sensor (ft): 69.00
Rotary Drill	1	11-20	23:40	23:45	11-20	2345.00	2350.00	Pressure On (psi): 1700.00, Pressure Off (psi): 1300.00, Weight On Bit (klbs): 35.00, Surface RPM: 40, Surface Torque (ft lbf): 5000.00, Flow Rate (gpm): 800.00, Strokes Per Minute: 276.00
Slide Drill	2	11-20	23:45	23:50	11-20	2350.00	2370.00	Pressure On (psi): 2100.00, Pressure Off (psi): 1400.00, Weight On Bit (klbs): 26.00, Flow Rate (gpm): 800.00, Strokes Per Minute: 276, Toolface: 270, Toolface Type: magnetic
Rotary Drill	1	11-20	23:50	00:00	11-21	2370.00	2446.00	Pressure On (psi): 1700.00, Pressure Off (psi): 1300.00, Weight On Bit (klbs): 35.00, Surface RPM: 40, Surface Torque (ft lbf): 5000.00, Flow Rate (gpm): 800.00, Strokes Per Minute: 276.00

MWD Activities

No Activities



Job Number WT-21-179	Operator Advance Energy Partners	Rig Name Nabors X47
Start Date 2021-11-15	Well Name Anderson Fed Com 508H	Legal Well Name AFE Anderson Fed Com 508H
Play Delaware Basin	State/Province and Country New Mexico, US	County Lea
		Company Man

Sunday, Nov 21 00:00 - 23:59 (Day 7 of 21)

Billing: \$5,600.00 (\$153,503.78 total)

Drilling Summary				Drilling Parameters	
Start Depth (ft)	2441.00	Downhole Hours	23.50	Rotating WOB (klbs)	35.00 - 54.00
Bit Depth (ft)	4775.00	Drilling Hours	14.92	Sliding WOB (klbs)	26.00 - 30.00
Bottom Hole Depth (ft)	4775.00	Hours Circulating	0.92	Rotating SPM	276.00 - 294.00
Total Distance (ft)	2329.00	Hours Sliding	3.75	Sliding SPM	276.00 - 294.00
Distance Rotated (ft)	2104.00	Hours Rotating	11.17	Motor RPM	136.00 - 40.00
Distance Slid (ft)	225.00			Surface RPM	40.00 - 50.00
Inclination In	0.57			Flow Rate (gpm)	800.00 - 850.00
Inclination Out	1.63			On Bottom Pressure (psi)	1700.00 - 3150.00
Azimuth In	77.43	% Hours Rotating	75%	Off Bottom Pressure (psi)	1300.00 - 2150.00
Azimuth Out	294.34	% Hours Sliding	25%		
AVG Total ROP (ft/h)	159.45	% Distance Sliding	10%		
AVG Rotating ROP (ft/h)	192.35	% Distance Rotating	90%		
AVG Sliding ROP (ft/h)	60.00				

Personnel

Name	Position
Advance Nabors X47	Directional Driller
Francisco DeLeon	MWD Engineer
Kyle Kusak	MWD Engineer

BHA #2 - 12.25" INTERMEDIATE

Date In: Nov 19, 2021, 11:45 Date Out: Nov 21, 2021, 23:30

Bit Details		Motor Details		Directional Comments
OD (in)	12.250	Size (in)	8.75	Directional: 8 3/4" Motor: 1.75° FXD 6.7 6.6 Stg w/ 12" STAB, Flow Range: 600-1300 GPM, Max Diff: 1650 psi, Max Torque: 31,480 ft/lbs, RPG: 0.155 Bit Runs: 1
Vendor	ULTERRA	Lobe/Stage	6/7, 6.6	
S/N	56281	Bend Angle	1.75	
Nozzles	9x12's	Speed (rev/gal)	0.16	
Total Flow Area (in²)	0.994	Wear Pad OD (in)	8.250	MWD Comments
Drilling Hours for Day	14.92	Bit Distances		
Total Drilled for Day (ft)	2334.00	Survey (Bit To Survey):	69.00 ft	POOH Reason Total Depth/Casing Point: POOH To L/D Intermediate Assembly. Intermediate Section TD
Drilling Hours for BHA	19.08	Bend (Bit To Bend):	6.55 ft	
Total Drilled for BHA (ft)	3500.00			

Directional Items

Description	Vendor	SN#	Top Conn	Btm Conn	ID (in)	OD (in)	Fn Len. (ft)	Len (ft)	Aggr. Len (ft)
Bit (Fixed Cutter) Description: RPS616, Type: PDC (Polycrystalline Diamond Compacts), Gauge Length (in): 1.00, Size (in): 12.25	ULTERRA	56281	6 5/8" Reg Pin			12.250		1.50	1.50
Mud Motor Description: 8" Motor 6/7 6.6 1.75 FXD w/ 12"NBS, Size (in): 8.75, Bend Angle (°): 1.75, Rotor Lobe: 6, Stator Lobe: 7, Stator Stage: 6.6	Aim	CDM875-003	6 5/8" Reg Box	6 5/8" Reg Box		8.000		38.95	40.45
Stabilizer Description: 12" STABILIZER	JAO	JAO 12584	6 5/8" Reg Box	6 5/8" Reg Pin	2.600	8.250		6.76	47.21
UBHO Sub Description: NM UBHO, Material: Steel	AIM	800228	6 5/8" Reg Box	6 5/8" Reg Pin	2.875	8.000		4.12	51.33
Drill Collar Description: 8" NMDC, Material: Non-Magnetic, Type: Slick Drill	Gator Tech	GT8030287	6 5/8" Reg Box	6 5/8" Reg Pin	3.250	8.000		30.41	81.74
Drill Collar Description: 8" NMDC, Material: Non-Magnetic, Type: Slick Drill	Gator Tech	GT8030601	6 5/8" Reg Box	6 5/8" Reg Pin	3.250	8.063		30.67	112.41
Crossover Sub Description: Crossover, Material: Steel	PLATINUM	PPR6258	CET54 Box	6 5/8" Reg Pin	3.000	6.750		3.37	115.78

MWD Items

No Items

Directional Activities

Activity Type	Code	Start Date	Start Time	End Time	End Date	Start (ft)	End (ft)	Comments/Details
Rotary Drill	1	11-20	23:50	00:00	11-21	2370.00	2446.00	Pressure On (psi): 1700.00, Pressure Off (psi): 1300.00, Weight On Bit (klbs): 35.00, Surface RPM: 40, Surface Torque (ft lbf): 5000.00, Flow Rate (gpm): 800.00, Strokes Per Minute: 276.00
Survey	46	11-21	00:00	00:05	11-21	2441.00	2441.00	Inclination (°): 0.570, Azimuth (°): 77.430, TVD (ft): 2371.44, Dogleg (°/100 ft): 0.60, Sensor Depth (ft): 2372.00, Bit To Sensor (ft): 69.00

Slide Drill	2	11-21	00:05	00:10	11-21	2446.00	2466.00	Pressure On (psi): 2100.00, Pressure Off (psi): 1400.00, Weight On Bit (klbs): 26.00, Flow Rate (gpm): 800.00, Strokes Per Minute: 276, Toolface: 270, Toolface Type: <i>magnetic</i>
Rotary Drill	1	11-21	00:10	00:30	11-21	2466.00	2537.00	Pressure On (psi): 1700.00, Pressure Off (psi): 1300.00, Weight On Bit (klbs): 35.00, Surface RPM: 40, Surface Torque (ft lbf): 5000.00, Flow Rate (gpm): 800.00, Strokes Per Minute: 276.00
Survey	46	11-21	00:30	00:35	11-21	2537.00	2537.00	Inclination (°): 1.100, Azimuth (°): 242.050, TVD (ft): 2467.44, Dogleg (%/100 ft): 1.73, Sensor Depth (ft): 2468.00, Bit To Sensor (ft): 69.00
Rotary Drill	1	11-21	00:35	01:15	11-21	2537.00	2728.00	Pressure On (psi): 1700.00, Pressure Off (psi): 1300.00, Weight On Bit (klbs): 35.00, Surface RPM: 40, Surface Torque (ft lbf): 5000.00, Flow Rate (gpm): 800.00, Strokes Per Minute: 276.00
Survey	46	11-21	01:15	01:20	11-21	2728.00	2728.00	Inclination (°): 1.050, Azimuth (°): 220.600, TVD (ft): 2658.40, Dogleg (%/100 ft): 0.21, Sensor Depth (ft): 2659.00, Bit To Sensor (ft): 69.00
Rotary Drill	1	11-21	01:20	01:30	11-21	2728.00	2824.00	Pressure On (psi): 1700.00, Pressure Off (psi): 1300.00, Weight On Bit (klbs): 35.00, Surface RPM: 40, Surface Torque (ft lbf): 5000.00, Flow Rate (gpm): 800.00, Strokes Per Minute: 276.00
Survey	46	11-21	01:30	01:35	11-21	2824.00	2824.00	Inclination (°): 0.750, Azimuth (°): 186.850, TVD (ft): 2754.39, Dogleg (%/100 ft): 0.62, Sensor Depth (ft): 2755.00, Bit To Sensor (ft): 69.00
Rotary Drill	1	11-21	01:35	01:55	11-21	2824.00	2920.00	Pressure On (psi): 1700.00, Pressure Off (psi): 1300.00, Weight On Bit (klbs): 35.00, Surface RPM: 40, Surface Torque (ft lbf): 5000.00, Flow Rate (gpm): 800.00, Strokes Per Minute: 276.00
Survey	46	11-21	01:55	02:00	11-21	2920.00	2920.00	Inclination (°): 0.790, Azimuth (°): 125.500, TVD (ft): 2850.38, Dogleg (%/100 ft): 0.82, Sensor Depth (ft): 2851.00, Bit To Sensor (ft): 69.00
Rotary Drill	1	11-21	02:00	02:15	11-21	2920.00	3016.00	Pressure On (psi): 1700.00, Pressure Off (psi): 1300.00, Weight On Bit (klbs): 35.00, Surface RPM: 40, Surface Torque (ft lbf): 5000.00, Flow Rate (gpm): 800.00, Strokes Per Minute: 276.00
Survey	46	11-21	02:15	02:20	11-21	3016.00	3016.00	Inclination (°): 1.320, Azimuth (°): 99.930, TVD (ft): 2946.37, Dogleg (%/100 ft): 0.73, Sensor Depth (ft): 2947.00, Bit To Sensor (ft): 69.00
Rotary Drill	1	11-21	02:20	02:40	11-21	3016.00	3111.00	Pressure On (psi): 1700.00, Pressure Off (psi): 1300.00, Weight On Bit (klbs): 35.00, Surface RPM: 40, Surface Torque (ft lbf): 5000.00, Flow Rate (gpm): 800.00, Strokes Per Minute: 276.00
Survey	46	11-21	02:40	02:45	11-21	3111.00	3111.00	Inclination (°): 2.110, Azimuth (°): 83.670, TVD (ft): 3041.33, Dogleg (%/100 ft): 0.97, Sensor Depth (ft): 3042.00, Bit To Sensor (ft): 69.00
Rotary Drill	1	11-21	02:45	02:50	11-21	3111.00	3117.00	Pressure On (psi): 1700.00, Pressure Off (psi): 1300.00, Weight On Bit (klbs): 35.00, Surface RPM: 40, Surface Torque (ft lbf): 5000.00, Flow Rate (gpm): 800.00, Strokes Per Minute: 276.00
Slide Drill	2	11-21	02:50	03:05	11-21	3117.00	3147.00	Pressure On (psi): 2340.00, Pressure Off (psi): 1550.00, Weight On Bit (klbs): 29.00, Flow Rate (gpm): 800.00, Strokes Per Minute: 276, Toolface: 270, Toolface Type: <i>magnetic</i>
Rotary Drill	1	11-21	03:05	03:30	11-21	3147.00	3207.00	Pressure On (psi): 2400.00, Pressure Off (psi): 1600.00, Weight On Bit (klbs): 48.00, Surface RPM: 40, Surface Torque (ft lbf): 13000.00, Flow Rate (gpm): 800.00, Strokes Per Minute: 276.00
Survey	46	11-21	03:30	03:35	11-21	3207.00	3207.00	Inclination (°): 1.890, Azimuth (°): 75.760, TVD (ft): 3137.27, Dogleg (%/100 ft): 0.37, Sensor Depth (ft): 3138.00, Bit To Sensor (ft): 69.00
Rotary Drill	1	11-21	03:35	03:40	11-21	3207.00	3216.00	Pressure On (psi): 2400.00, Pressure Off (psi): 1600.00, Weight On Bit (klbs): 48.00, Surface RPM: 40, Surface Torque (ft lbf): 13000.00, Flow Rate (gpm): 800.00, Strokes Per Minute: 276.00
Slide Drill	2	11-21	03:40	03:50	11-21	3216.00	3246.00	Pressure On (psi): 2340.00, Pressure Off (psi): 1550.00, Weight On Bit (klbs): 29.00, Flow Rate (gpm): 800.00, Strokes Per Minute: 276, Toolface: 260, Toolface Type: <i>magnetic</i>
Rotary Drill	1	11-21	03:50	04:00	11-21	3246.00	3303.00	Pressure On (psi): 2400.00, Pressure Off (psi): 1600.00, Weight On Bit (klbs): 48.00, Surface RPM: 40, Surface Torque (ft lbf): 13000.00, Flow Rate (gpm): 800.00, Strokes Per Minute: 276.00
Survey	46	11-21	04:00	04:05	11-21	3303.00	3303.00	Inclination (°): 0.440, Azimuth (°): 116.100, TVD (ft): 3233.25, Dogleg (%/100 ft): 1.65, Sensor Depth (ft): 3234.00, Bit To Sensor (ft): 69.00
Rotary Drill	1	11-21	04:05	04:20	11-21	3303.00	3399.00	Pressure On (psi): 2400.00, Pressure Off (psi): 1600.00, Weight On Bit (klbs): 48.00, Surface RPM: 40, Surface Torque (ft lbf): 13000.00, Flow Rate (gpm): 800.00, Strokes Per Minute: 276.00
Survey	46	11-21	04:20	04:25	11-21	3399.00	3399.00	Inclination (°): 2.150, Azimuth (°): 174.110, TVD (ft): 3329.22, Dogleg (%/100 ft): 2.03, Sensor Depth (ft): 3330.00, Bit To Sensor (ft): 69.00
Rotary Drill	1	11-21	04:25	04:30	11-21	3399.00	3407.00	Pressure On (psi): 2400.00, Pressure Off (psi): 1600.00, Weight On Bit (klbs): 48.00, Surface RPM: 40, Surface Torque (ft lbf): 13000.00, Flow Rate (gpm): 800.00, Strokes Per Minute: 276.00
Slide Drill	2	11-21	04:30	04:40	11-21	3407.00	3437.00	Pressure On (psi): 2340.00, Pressure Off (psi): 1550.00, Weight On Bit (klbs): 29.00, Flow Rate (gpm): 800.00, Strokes Per Minute: 276, Toolface: 350, Toolface Type: <i>magnetic</i>
Rotary Drill	1	11-21	04:40	05:00	11-21	3437.00	3494.00	Pressure On (psi): 2400.00, Pressure Off (psi): 1600.00, Weight On Bit (klbs): 48.00, Surface RPM: 40, Surface Torque (ft lbf): 13000.00, Flow Rate (gpm): 800.00, Strokes Per Minute: 276.00
Survey	46	11-21	05:00	05:05	11-21	3494.00	3494.00	Inclination (°): 2.070, Azimuth (°): 199.510, TVD (ft): 3424.16, Dogleg (%/100 ft): 0.98, Sensor Depth (ft): 3425.00, Bit To Sensor (ft): 69.00

Rotary Drill	1	11-21	05:05	05:10	11-21	3494.00	3501.00	Pressure On (psi): 2400.00, Pressure Off (psi): 1600.00, Weight On Bit (klbs): 48.00, Surface RPM: 40, Surface Torque (ft lbf): 13000.00, Flow Rate (gpm): 800.00, Strokes Per Minute: 276.00
Slide Drill	2	11-21	05:10	05:50	11-21	3501.00	3536.00	Pressure On (psi): 2340.00, Pressure Off (psi): 1550.00, Weight On Bit (klbs): 29.00, Flow Rate (gpm): 800.00, Strokes Per Minute: 276, Toolface: 0, Toolface Type: magnetic
Rotary Drill	1	11-21	05:50	06:05	11-21	3536.00	3578.00	Pressure On (psi): 2400.00, Pressure Off (psi): 1600.00, Weight On Bit (klbs): 48.00, Surface RPM: 40, Surface Torque (ft lbf): 13000.00, Flow Rate (gpm): 800.00, Strokes Per Minute: 276.00
Rig Repair	14	11-21	06:05	06:30	11-21			Rig Repair
Rotary Drill	1	11-21	06:30	06:40	11-21	3578.00	3590.00	Pressure On (psi): 2400.00, Pressure Off (psi): 1600.00, Weight On Bit (klbs): 48.00, Surface RPM: 40, Surface Torque (ft lbf): 13000.00, Flow Rate (gpm): 800.00, Strokes Per Minute: 276.00
Survey	46	11-21	06:40	06:45	11-21	3590.00	3590.00	Inclination (°): 2.150, Azimuth (°): 265.860, TVD (ft): 3520.11, Dogleg (°/100 ft): 2.41, Sensor Depth (ft): 3521.00, Bit To Sensor (ft): 69.00
Rotary Drill	1	11-21	06:45	07:25	11-21	3590.00	3686.00	Pressure On (psi): 2400.00, Pressure Off (psi): 1600.00, Weight On Bit (klbs): 48.00, Surface RPM: 40, Surface Torque (ft lbf): 13000.00, Flow Rate (gpm): 800.00, Strokes Per Minute: 276.00
Survey	46	11-21	07:25	07:30	11-21	3686.00	3686.00	Inclination (°): 2.640, Azimuth (°): 288.100, TVD (ft): 3616.02, Dogleg (°/100 ft): 1.08, Sensor Depth (ft): 3617.00, Bit To Sensor (ft): 69.00
Rotary Drill	1	11-21	07:30	07:35	11-21	3686.00	3700.00	Pressure On (psi): 2400.00, Pressure Off (psi): 1600.00, Weight On Bit (klbs): 48.00, Surface RPM: 40, Surface Torque (ft lbf): 13000.00, Flow Rate (gpm): 800.00, Strokes Per Minute: 276.00
Slide Drill	2	11-21	07:35	08:35	11-21	3700.00	3730.00	Pressure On (psi): 2340.00, Pressure Off (psi): 1550.00, Weight On Bit (klbs): 29.00, Flow Rate (gpm): 800.00, Strokes Per Minute: 276, Toolface: 100, Toolface Type: magnetic
Rotary Drill	1	11-21	08:35	09:05	11-21	3730.00	3781.00	Pressure On (psi): 2400.00, Pressure Off (psi): 1600.00, Weight On Bit (klbs): 48.00, Surface RPM: 40, Surface Torque (ft lbf): 13000.00, Flow Rate (gpm): 800.00, Strokes Per Minute: 276.00
Survey	46	11-21	09:05	09:10	11-21	3781.00	3781.00	Inclination (°): 1.450, Azimuth (°): 338.460, TVD (ft): 3710.97, Dogleg (°/100 ft): 2.15, Sensor Depth (ft): 3712.00, Bit To Sensor (ft): 69.00
Rotary Drill	1	11-21	09:10	09:45	11-21	3781.00	3877.00	Pressure On (psi): 2400.00, Pressure Off (psi): 1600.00, Weight On Bit (klbs): 48.00, Surface RPM: 40, Surface Torque (ft lbf): 13000.00, Flow Rate (gpm): 800.00, Strokes Per Minute: 276.00
Rig Repair	14	11-21	09:45	10:35	11-21			Work on top drive
Survey	46	11-21	10:35	10:40	11-21	3877.00	3877.00	Inclination (°): 1.930, Azimuth (°): 26.010, TVD (ft): 3806.93, Dogleg (°/100 ft): 1.49, Sensor Depth (ft): 3808.00, Bit To Sensor (ft): 69.00
Rotary Drill	1	11-21	10:40	10:50	11-21	3877.00	3900.00	Pressure On (psi): 2800.00, Pressure Off (psi): 1900.00, Weight On Bit (klbs): 50.00, Surface RPM: 50, Surface Torque (ft lbf): 22000.00, Flow Rate (gpm): 850.00, Strokes Per Minute: 294.00
Slide Drill	2	11-21	10:50	11:40	11-21	3900.00	3930.00	Pressure On (psi): 2475.00, Pressure Off (psi): 1900.00, Weight On Bit (klbs): 30.00, Flow Rate (gpm): 850.00, Strokes Per Minute: 294, Toolface: 200, Toolface Type: magnetic
Rotary Drill	1	11-21	11:40	12:05	11-21	3930.00	3973.00	Pressure On (psi): 2800.00, Pressure Off (psi): 1900.00, Weight On Bit (klbs): 50.00, Surface RPM: 50, Surface Torque (ft lbf): 22000.00, Flow Rate (gpm): 850.00, Strokes Per Minute: 294.00
Survey	46	11-21	12:05	12:10	11-21	3973.00	3973.00	Inclination (°): 0.400, Azimuth (°): 35.770, TVD (ft): 3902.91, Dogleg (°/100 ft): 1.60, Sensor Depth (ft): 3904.00, Bit To Sensor (ft): 69.00
Rotary Drill	1	11-21	12:10	13:00	11-21	3973.00	4069.00	Pressure On (psi): 2800.00, Pressure Off (psi): 1900.00, Weight On Bit (klbs): 50.00, Surface RPM: 50, Surface Torque (ft lbf): 22000.00, Flow Rate (gpm): 850.00, Strokes Per Minute: 294.00
Survey	46	11-21	13:00	13:05	11-21	4069.00	4069.00	Inclination (°): 2.020, Azimuth (°): 202.060, TVD (ft): 3998.89, Dogleg (°/100 ft): 2.51, Sensor Depth (ft): 4000.00, Bit To Sensor (ft): 69.00
Rotary Drill	1	11-21	13:05	13:50	11-21	4069.00	4164.00	Pressure On (psi): 2800.00, Pressure Off (psi): 1900.00, Weight On Bit (klbs): 50.00, Surface RPM: 50, Surface Torque (ft lbf): 22000.00, Flow Rate (gpm): 850.00, Strokes Per Minute: 294.00
Survey	46	11-21	13:50	13:55	11-21	4164.00	4164.00	Inclination (°): 2.150, Azimuth (°): 207.680, TVD (ft): 4093.83, Dogleg (°/100 ft): 0.25, Sensor Depth (ft): 4095.00, Bit To Sensor (ft): 69.00
Rotary Drill	1	11-21	13:55	14:45	11-21	4164.00	4260.00	Pressure On (psi): 2800.00, Pressure Off (psi): 1900.00, Weight On Bit (klbs): 50.00, Surface RPM: 50, Surface Torque (ft lbf): 22000.00, Flow Rate (gpm): 850.00, Strokes Per Minute: 294.00
Survey	46	11-21	14:45	14:50	11-21	4260.00	4260.00	Inclination (°): 2.200, Azimuth (°): 218.580, TVD (ft): 4189.76, Dogleg (°/100 ft): 0.43, Sensor Depth (ft): 4191.00, Bit To Sensor (ft): 69.00
Rotary Drill	1	11-21	14:50	15:30	11-21	4260.00	4356.00	Pressure On (psi): 2800.00, Pressure Off (psi): 1900.00, Weight On Bit (klbs): 50.00, Surface RPM: 50, Surface Torque (ft lbf): 22000.00, Flow Rate (gpm): 850.00, Strokes Per Minute: 294.00
Survey	46	11-21	15:30	15:35	11-21	4356.00	4356.00	Inclination (°): 2.290, Azimuth (°): 226.400, TVD (ft): 4285.69, Dogleg (°/100 ft): 0.33, Sensor Depth (ft): 4287.00, Bit To Sensor (ft): 69.00

Rotary Drill	1	11-21	15:35	15:55	11-21	4356.00	4452.00	Pressure On (psi): 2800.00, Pressure Off (psi): 1900.00, Weight On Bit (klbs): 50.00, Surface RPM: 50, Surface Torque (ft lbf): 22000.00, Flow Rate (gpm): 850.00, Strokes Per Minute: 294.00
Survey	46	11-21	15:55	16:00	11-21	4452.00	4452.00	Inclination (°): 2.290, Azimuth (°): 229.570, TVD (ft): 4381.61, Dogleg (°/100 ft): 0.13, Sensor Depth (ft): 4383.00, Bit To Sensor (ft): 69.00
Rotary Drill	1	11-21	16:00	16:05	11-21	4452.00	4465.00	Pressure On (psi): 2800.00, Pressure Off (psi): 1900.00, Weight On Bit (klbs): 50.00, Surface RPM: 50, Surface Torque (ft lbf): 22000.00, Flow Rate (gpm): 850.00, Strokes Per Minute: 294.00
Slide Drill	2	11-21	16:05	16:40	11-21	4465.00	4485.00	Pressure On (psi): 2475.00, Pressure Off (psi): 1900.00, Weight On Bit (klbs): 30.00, Flow Rate (gpm): 850.00, Strokes Per Minute: 294, Toolface: 50, Toolface Type: magnetic
Rotary Drill	1	11-21	16:40	17:05	11-21	4485.00	4547.00	Pressure On (psi): 3150.00, Pressure Off (psi): 2150.00, Weight On Bit (klbs): 54.00, Surface RPM: 50, Surface Torque (ft lbf): 28000.00, Flow Rate (gpm): 850.00, Strokes Per Minute: 294.00
Survey	46	11-21	17:05	17:10	11-21	4547.00	4547.00	Inclination (°): 1.410, Azimuth (°): 270.960, TVD (ft): 4476.56, Dogleg (°/100 ft): 1.63, Sensor Depth (ft): 4478.00, Bit To Sensor (ft): 69.00
Rotary Drill	1	11-21	17:10	17:30	11-21	4547.00	4643.00	Pressure On (psi): 3150.00, Pressure Off (psi): 2150.00, Weight On Bit (klbs): 54.00, Surface RPM: 50, Surface Torque (ft lbf): 28000.00, Flow Rate (gpm): 850.00, Strokes Per Minute: 294.00
Survey	46	11-21	17:30	17:35	11-21	4643.00	4643.00	Inclination (°): 1.710, Azimuth (°): 298.650, TVD (ft): 4572.53, Dogleg (°/100 ft): 0.83, Sensor Depth (ft): 4574.00, Bit To Sensor (ft): 69.00
Rotary Drill	1	11-21	17:35	18:05	11-21	4643.00	4775.00	Pressure On (psi): 3150.00, Pressure Off (psi): 2150.00, Weight On Bit (klbs): 54.00, Surface RPM: 50, Surface Torque (ft lbf): 28000.00, Flow Rate (gpm): 850.00, Strokes Per Minute: 294.00
Survey	46	11-21	18:05	18:10	11-21	4775.00	4775.00	Inclination (°): 1.630, Azimuth (°): 294.340, TVD (ft): 4704.47, Dogleg (°/100 ft): 0.11, Sensor Depth (ft): 4706.00, Bit To Sensor (ft): 69.00
Circulating	3	11-21	18:10	19:05	11-21			Circulate And Condition Hole Clean Intermediate TD
Pooh	7	11-21	19:05	22:45	11-21			POOH To BHA
Lay Down BHA	65	11-21	22:45	23:30	11-21			L/D MWD, Bit, Motor, P/U Motor, Rack BHA Back In Derrick
MWD Activities								
No Activities								



Job Number WT-21-179	Operator Advance Energy Partners	Rig Name Nabors X47
Start Date 2021-11-15	Well Name Anderson Fed Com 508H	Legal Well Name AFE Anderson Fed Com 508H
Play Delaware Basin	State/Province and Country New Mexico, US	County Lea
Company Man		

Tuesday, Dec 07 00:00 - 23:59 (Day 8 of 21)

Billing: N/A (\$153,503.78 total)

Drilling Summary

Start Depth (ft)	Downhole Hours	0.00	Rotating WOB (klbs)
Bit Depth (ft)	Drilling Hours		Sliding WOB (klbs)
Bottom Hole Depth (ft)	Hours Circulating		Rotating SPM
Total Distance (ft)	Hours Sliding		Sliding SPM
Distance Rotated (ft)	Hours Rotating		Motor RPM
Distance Slid (ft)			Surface RPM
Inclination In			Flow Rate (gpm)
Inclination Out			On Bottom Pressure (psi)
Azimuth In	% Hours Rotating		Off Bottom Pressure (psi)
Azimuth Out	% Hours Sliding		
AVG Total ROP (ft/h)	0.00	% Distance Sliding	
AVG Rotating ROP (ft/h)	0.00	% Distance Rotating	
AVG Sliding ROP (ft/h)	0.00		

Personnel

Name	Position
Eddie Sheppard	Directional Driller
Advance Nabors X47	Directional Driller
Francisco DeLeon	MWD Engineer
Kyle Kusak	MWD Engineer

No BHAs**Directional Activities**

Activity Type	Code	Start Date	Start Time	End Time	End Date	Start (ft)	End (ft)	Comments/Details
Standby	15	12-07	00:00	01:30	12-08			Standby while rig skids to 508H, rig up and nipple up

MWD Activities

No Activities



Job Number WT-21-179	Operator Advance Energy Partners	Rig Name Nabors X47
Start Date 2021-11-15	Well Name Anderson Fed Com 508H	Legal Well Name AFE Anderson Fed Com 508H
Play Delaware Basin	State/Province and Country New Mexico, US	County Lea
		Company Man

Wednesday, Dec 08 00:00 - 23:59 (Day 9 of 21)

Billing: \$9,400.00 (\$153,503.78 total)

Drilling Summary				Drilling Parameters	
Start Depth (ft)	4775.00	Downhole Hours	22.50	Rotating WOB (klbs)	40.00 - 48.00
Bit Depth (ft)	7498.00	Drilling Hours	12.75	Sliding WOB (klbs)	26.00 - 30.00
Bottom Hole Depth (ft)	7498.00	Hours Circulating	1.25	Rotating SPM	224.00 - 258.00
Total Distance (ft)	2723.00	Hours Sliding	3.08	Sliding SPM	225.00 - 258.00
Distance Rotated (ft)	2542.00	Hours Rotating	9.67	Motor RPM	188.00 - 228.00
Distance Slid (ft)	181.00			Surface RPM	40.00 - 50.00
Inclination In	1.45			Flow Rate (gpm)	650.00 - 749.00
Inclination Out	12.79			On Bottom Pressure (psi)	2050.00 - 3050.00
Azimuth In	291.18	% Hours Rotating	76%	Off Bottom Pressure (psi)	1550.00 - 2400.00
Azimuth Out	63.54	% Hours Sliding	24%		
AVG Total ROP (ft/h)	214.10	% Distance Sliding	7%		
AVG Rotating ROP (ft/h)	261.62	% Distance Rotating	93%		
AVG Sliding ROP (ft/h)	58.70				

Personnel

Name	Position
Eddie Sheppard	Directional Driller
Advance Nabors X47	Directional Driller
Francisco DeLeon	MWD Engineer
Kyle Kusak	MWD Engineer

BHA #3 - 8.75" INTERMEDIATE

Date In: Dec 8, 2021, 1:30 Date Out: Dec 9, 2021, 21:45

Bit Details		Motor Details		Directional Comments
OD (in)	8.750	Size (in)	8.75	Contender 40s 7" 7/8 8.5, 1.75° Fxd w/ 8.50" NBS, Flow Range: 500-750 GPM, Max Diff: 1910 psi, Max Torque: 18,710 ft/lbs, RPG: 0.26 Bit Runs: 0
Vendor	REED	Lobe/Stage	7/8, 8.5	
S/N	A283082	Bend Angle	1.75	
Nozzles	6x15's	Speed (rev/gal)	0.26	MWD Comments
Total Flow Area (in²)	1.035	Wear Pad OD (in)	5.350	
Drilling Hours for Day	12.75	Bit Distances		
Total Drilled for Day (ft)	2723.00	Survey (Bit To Survey):	64.00 ft, Bend	POOH Reason
Drilling Hours for BHA	27.00	(Bit To Bend):	5.35 ft, Gamma (Bit to	
Total Drilled for BHA (ft)	4889.00	Gamma):	49.00 ft	
				Change Bottom Hole Assembly: POOH For curve assembly

Directional Items

Description	Vendor	SN#	Top Conn	Btm Conn	ID (in)	OD (in)	Fn Len. (ft)	Len (ft)	Aggr. Len (ft)
Bit (Fixed Cutter) Description: <i>TKC66-AZ2, Type: PDC (Polycrystalline Diamond Compacts), Gauge Length (in): 1.00, Size (in): 8.75</i>	REED	A283082	4 1/2" Reg Pin			8.750		1.00	1.00
Mud Motor Description: <i>7" Motor 7/8 8.5 1.75 FXD w/ 8.50" NBS, Size (in): 8.75, Bend Angle (°): 1.75, Rotor Lobe: 7, Stator Lobe: 8, Stator Stage: 8.5</i>	Aim	700-40-021	4 1/2" IF Box	4 1/2" Reg Box		7.000		34.85	35.85
Stabilizer Description: <i>8.50" STABILIZER</i>	JAO	JAO 86989	4 1/2" IF Box	4 1/2" IF Pin	2.310	6.460		3.98	39.83
UBHO Sub Description: <i>NM UBHO, Material: Non-Magnetic</i>	AIM	675300	4 1/2" IF Box	4 1/2" IF Box	2.875	6.880		2.91	42.74
Drill Collar Description: <i>6.75" NMDC, Material: Non-Magnetic, Type: Slick Drill</i>	Gator Tech	6730196	4 1/2" IF Box	4 1/2" IF Pin	3.300	6.750		28.94	71.68
Drill Collar Description: <i>6.75" NMDC, Material: Non-Magnetic, Type: Slick Drill</i>	Gator Tech	6732371	4 1/2" IF Box	4 1/2" IF Pin	3.100	6.960		29.50	101.18
Crossover Sub Description: <i>Crossover, Material: Steel</i>	PLATINUM	PPR6255	CET54 Box	4 1/2" IF Pin	2.500	6.460		3.44	104.62
HWDP Description: <i>13 Stands 5.5 HWDP, Type: Slick</i>	rig		CET54 Box	CET54 Pin	3.250	5.500		1177.85	1282.47

MWD Items

No Items

Directional Activities

Activity Type	Code	Start Date	Start Time	End Time	End Date	Start (ft)	End (ft)	Comments/Details
Standby	15	12-07	00:00	01:30	12-08			Standby while rig skids to 508H, rig up and nipple up
Pick Up BHA	64	12-08	01:30	02:45	12-08			M/up Bit, SHT MWD

TIH	8	12-08	02:45	06:20	12-08			TIH W/ BHA #3
Other	16	12-08	06:20	07:15	12-08			Drilling cement
Other	16	12-08	07:15	07:40	12-08			Fit test
Rotary Drill	1	12-08	07:40	08:50	12-08	4775.00	4824.00	
Rotary Drill	1	12-08	08:50	09:00	12-08	4824.00	4890.00	
Survey	46	12-08	09:00	09:05	12-08	4890.00	4890.00	Inclination (°): 1.450, Azimuth (°): 291.180, TVD (ft): 4824.43, Dogleg (°/100 ft): 0.17, Sensor Depth (ft): 4826.00, Bit To Sensor (ft): 64.00
Slide Drill	2	12-08	09:05	09:35	12-08	4890.00	4915.00	Toolface: 60, Toolface Type: magnetic
Rotary Drill	1	12-08	09:35	09:40	12-08	4915.00	4919.00	
Survey	46	12-08	09:40	09:45	12-08	4919.00	4919.00	Inclination (°): 1.670, Azimuth (°): 294.520, TVD (ft): 4853.42, Dogleg (°/100 ft): 0.82, Sensor Depth (ft): 4855.00, Bit To Sensor (ft): 64.00
Rotary Drill	1	12-08	09:45	10:05	12-08	4919.00	5015.00	
Survey	46	12-08	10:05	10:10	12-08	5015.00	5015.00	Inclination (°): 2.550, Azimuth (°): 56.770, TVD (ft): 4949.38, Dogleg (°/100 ft): 3.87, Sensor Depth (ft): 4951.00, Bit To Sensor (ft): 64.00
Rotary Drill	1	12-08	10:10	10:35	12-08	5015.00	5110.00	Pressure On (psi): 2550.00, Pressure Off (psi): 1550.00, Weight On Bit (klbs): 40.00, Surface RPM: 50, Surface Torque (ft lbf): 16000.00, Flow Rate (gpm): 650.00, Strokes Per Minute: 258.00
Survey	46	12-08	10:35	10:40	12-08	5110.00	5110.00	Inclination (°): 3.080, Azimuth (°): 53.260, TVD (ft): 5044.27, Dogleg (°/100 ft): 0.59, Sensor Depth (ft): 5046.00, Bit To Sensor (ft): 64.00
Slide Drill	2	12-08	10:40	10:50	12-08	5110.00	5118.00	Toolface: 30, Toolface Type: gravity
Rotary Drill	1	12-08	10:50	11:00	12-08	5118.00	5206.00	
Survey	46	12-08	11:00	11:05	12-08	5206.00	5206.00	Inclination (°): 4.700, Azimuth (°): 54.140, TVD (ft): 5140.04, Dogleg (°/100 ft): 1.69, Sensor Depth (ft): 5142.00, Bit To Sensor (ft): 64.00
Rotary Drill	1	12-08	11:05	11:20	12-08	5206.00	5302.00	
Survey	46	12-08	11:20	11:25	12-08	5302.00	5302.00	Inclination (°): 4.790, Azimuth (°): 56.420, TVD (ft): 5235.72, Dogleg (°/100 ft): 0.22, Sensor Depth (ft): 5238.00, Bit To Sensor (ft): 64.00
Rotary Drill	1	12-08	11:25	11:50	12-08	5302.00	5398.00	Pressure On (psi): 2700.00, Pressure Off (psi): 1700.00, Weight On Bit (klbs): 40.00, Surface RPM: 50, Surface Torque (ft lbf): 16000.00, Flow Rate (gpm): 650.00, Strokes Per Minute: 224.00
Survey	46	12-08	11:50	11:55	12-08	5398.00	5398.00	Inclination (°): 4.700, Azimuth (°): 55.190, TVD (ft): 5331.39, Dogleg (°/100 ft): 0.14, Sensor Depth (ft): 5334.00, Bit To Sensor (ft): 64.00
Slide Drill	2	12-08	11:55	12:10	12-08	5398.00	5408.00	Toolface: 40, Toolface Type: gravity
Rotary Drill	1	12-08	12:10	12:25	12-08	5408.00	5493.00	
Survey	46	12-08	12:25	12:30	12-08	5493.00	5493.00	Inclination (°): 5.670, Azimuth (°): 59.670, TVD (ft): 5426.00, Dogleg (°/100 ft): 1.11, Sensor Depth (ft): 5429.00, Bit To Sensor (ft): 64.00
Slide Drill	2	12-08	12:30	12:45	12-08	5493.00	5503.00	Toolface: 0, Toolface Type: gravity
Rotary Drill	1	12-08	12:45	13:05	12-08	5503.00	5589.00	
Survey	46	12-08	13:05	13:10	12-08	5589.00	5589.00	Inclination (°): 6.990, Azimuth (°): 65.560, TVD (ft): 5521.41, Dogleg (°/100 ft): 1.53, Sensor Depth (ft): 5525.00, Bit To Sensor (ft): 64.00
Slide Drill	2	12-08	13:10	13:25	12-08	5589.00	5599.00	Toolface: 340, Toolface Type: gravity
Rotary Drill	1	12-08	13:25	13:40	12-08	5599.00	5684.00	
Survey	46	12-08	13:40	13:45	12-08	5684.00	5684.00	Inclination (°): 8.440, Azimuth (°): 60.460, TVD (ft): 5615.55, Dogleg (°/100 ft): 1.69, Sensor Depth (ft): 5620.00, Bit To Sensor (ft): 64.00
Slide Drill	2	12-08	13:45	14:00	12-08	5684.00	5694.00	Toolface: 0, Toolface Type: gravity
Rotary Drill	1	12-08	14:00	14:10	12-08	5694.00	5780.00	
Circulating	3	12-08	14:10	14:30	12-08			RIG SERVICE
Survey	46	12-08	14:30	14:35	12-08	5780.00	5780.00	Inclination (°): 8.880, Azimuth (°): 60.290, TVD (ft): 5710.45, Dogleg (°/100 ft): 0.46, Sensor Depth (ft): 5716.00, Bit To Sensor (ft): 64.00
Slide Drill	2	12-08	14:35	14:50	12-08	5780.00	5792.00	Toolface: 30, Toolface Type: gravity
Rotary Drill	1	12-08	14:50	15:00	12-08	5792.00	5876.00	
Survey	46	12-08	15:00	15:05	12-08	5876.00	5876.00	Inclination (°): 10.550, Azimuth (°): 69.430, TVD (ft): 5805.08, Dogleg (°/100 ft): 2.36, Sensor Depth (ft): 5812.00, Bit To Sensor (ft): 64.00
Slide Drill	2	12-08	15:05	15:15	12-08	5876.00	5884.00	Toolface: 290, Toolface Type: gravity
Rotary Drill	1	12-08	15:15	15:25	12-08	5884.00	5972.00	
Survey	46	12-08	15:25	15:30	12-08	5972.00	5972.00	Inclination (°): 10.770, Azimuth (°): 60.200, TVD (ft): 5899.43, Dogleg (°/100 ft): 1.79, Sensor Depth (ft): 5908.00, Bit To Sensor (ft): 64.00
Slide Drill	2	12-08	15:30	15:40	12-08	5972.00	5984.00	Toolface: 340, Toolface Type: gravity
Rotary Drill	1	12-08	15:40	16:00	12-08	5984.00	6067.00	
Survey	46	12-08	16:00	16:05	12-08	6067.00	6067.00	Inclination (°): 12.090, Azimuth (°): 56.510, TVD (ft): 5992.55, Dogleg (°/100 ft): 1.59, Sensor Depth (ft): 6003.00, Bit To Sensor (ft): 64.00
Slide Drill	2	12-08	16:05	16:15	12-08	6067.00	6079.00	Toolface: 20, Toolface Type: gravity
Rotary Drill	1	12-08	16:15	16:35	12-08	6079.00	6162.00	Pressure On (psi): 2600.00, Pressure Off (psi): 1750.00, Weight On Bit (klbs): 40.00, Surface RPM: 40, Surface Torque (ft lbf): 18000.00, Flow Rate (gpm): 650.00, Strokes Per Minute: 225.00
Survey	46	12-08	16:35	16:40	12-08	6163.00	6163.00	Inclination (°): 13.670, Azimuth (°): 56.690, TVD (ft): 6086.13, Dogleg (°/100 ft): 1.65, Sensor Depth (ft): 6099.00, Bit To Sensor (ft): 64.00

Rotary Drill	1	12-08	16:40	16:55	12-08	6162.00	6258.00	Pressure On (psi): 2600.00, Pressure Off (psi): 1750.00, Weight On Bit (klbs): 40.00, Surface RPM: 40, Surface Torque (ft lbf): 18000.00, Flow Rate (gpm): 650.00, Strokes Per Minute: 225.00
Survey	46	12-08	16:55	17:00	12-08	6258.00	6258.00	Inclination (°): 13.760, Azimuth (°): 55.720, TVD (ft): 6178.42, Dogleg (%/100 ft): 0.26, Sensor Depth (ft): 6194.00, Bit To Sensor (ft): 64.00
Rotary Drill	1	12-08	17:00	17:20	12-08	6258.00	6353.00	
Survey	46	12-08	17:20	17:25	12-08	6353.00	6353.00	Inclination (°): 13.190, Azimuth (°): 61.170, TVD (ft): 6270.81, Dogleg (%/100 ft): 1.46, Sensor Depth (ft): 6289.00, Bit To Sensor (ft): 64.00
Rotary Drill	1	12-08	17:25	17:45	12-08	6353.00	6449.00	Pressure On (psi): 2600.00, Pressure Off (psi): 1750.00, Weight On Bit (klbs): 40.00, Surface RPM: 40, Surface Torque (ft lbf): 18000.00, Flow Rate (gpm): 650.00, Strokes Per Minute: 225.00
Survey	46	12-08	17:45	17:50	12-08	6449.00	6449.00	Inclination (°): 12.880, Azimuth (°): 62.930, TVD (ft): 6364.33, Dogleg (%/100 ft): 0.52, Sensor Depth (ft): 6385.00, Bit To Sensor (ft): 64.00
Rotary Drill	1	12-08	17:50	18:00	12-08	6449.00	6544.00	Pressure On (psi): 2600.00, Pressure Off (psi): 1750.00, Weight On Bit (klbs): 40.00, Surface RPM: 40, Surface Torque (ft lbf): 18000.00, Flow Rate (gpm): 650.00, Strokes Per Minute: 225.00
Survey	46	12-08	18:00	18:05	12-08	6544.00	6544.00	Inclination (°): 12.220, Azimuth (°): 63.630, TVD (ft): 6457.06, Dogleg (%/100 ft): 0.71, Sensor Depth (ft): 6480.00, Bit To Sensor (ft): 64.00
Rotary Drill	1	12-08	18:05	18:25	12-08	6544.00	6640.00	Pressure On (psi): 2600.00, Pressure Off (psi): 1750.00, Weight On Bit (klbs): 40.00, Surface RPM: 40, Surface Torque (ft lbf): 18000.00, Flow Rate (gpm): 650.00, Strokes Per Minute: 225.00
Survey	46	12-08	18:25	18:30	12-08	6640.00	6640.00	Inclination (°): 11.300, Azimuth (°): 64.070, TVD (ft): 6551.05, Dogleg (%/100 ft): 0.96, Sensor Depth (ft): 6576.00, Bit To Sensor (ft): 64.00
Rotary Drill	1	12-08	18:30	18:35	12-08	6640.00	6650.00	Pressure On (psi): 2600.00, Pressure Off (psi): 1750.00, Weight On Bit (klbs): 40.00, Surface RPM: 40, Surface Torque (ft lbf): 18000.00, Flow Rate (gpm): 650.00, Strokes Per Minute: 225.00
Slide Drill	2	12-08	18:35	18:45	12-08	6650.00	6662.00	Pressure On (psi): 2050.00, Pressure Off (psi): 1700.00, Weight On Bit (klbs): 30.00, Flow Rate (gpm): 653.00, Strokes Per Minute: 225, Toolface: 345, Toolface Type: gravity
Rotary Drill	1	12-08	18:45	19:05	12-08	6662.00	6735.00	Pressure On (psi): 2600.00, Pressure Off (psi): 1750.00, Weight On Bit (klbs): 40.00, Surface RPM: 40, Surface Torque (ft lbf): 18000.00, Flow Rate (gpm): 650.00, Strokes Per Minute: 225.00
Survey	46	12-08	19:05	19:10	12-08	6735.00	6735.00	Inclination (°): 11.470, Azimuth (°): 61.780, TVD (ft): 6644.18, Dogleg (%/100 ft): 0.51, Sensor Depth (ft): 6671.00, Bit To Sensor (ft): 64.00
Rotary Drill	1	12-08	19:10	19:15	12-08	6735.00	6746.00	Pressure On (psi): 2600.00, Pressure Off (psi): 1750.00, Weight On Bit (klbs): 40.00, Surface RPM: 40, Surface Torque (ft lbf): 18000.00, Flow Rate (gpm): 650.00, Strokes Per Minute: 225.00
Slide Drill	2	12-08	19:15	19:20	12-08	6746.00	6756.00	Pressure On (psi): 2050.00, Pressure Off (psi): 1700.00, Weight On Bit (klbs): 30.00, Flow Rate (gpm): 653.00, Strokes Per Minute: 225, Toolface: 0, Toolface Type: gravity
Rotary Drill	1	12-08	19:20	19:40	12-08	6756.00	6830.00	Pressure On (psi): 2600.00, Pressure Off (psi): 1750.00, Weight On Bit (klbs): 40.00, Surface RPM: 40, Surface Torque (ft lbf): 18000.00, Flow Rate (gpm): 650.00, Strokes Per Minute: 225.00
Survey	46	12-08	19:40	19:45	12-08	6830.00	6830.00	Inclination (°): 11.300, Azimuth (°): 66.180, TVD (ft): 6737.31, Dogleg (%/100 ft): 0.93, Sensor Depth (ft): 6766.00, Bit To Sensor (ft): 64.00
Rotary Drill	1	12-08	19:45	19:50	12-08	6830.00	6842.00	Pressure On (psi): 2600.00, Pressure Off (psi): 1750.00, Weight On Bit (klbs): 40.00, Surface RPM: 40, Surface Torque (ft lbf): 18000.00, Flow Rate (gpm): 650.00, Strokes Per Minute: 225.00
Slide Drill	2	12-08	19:50	20:00	12-08	6842.00	6857.00	Pressure On (psi): 2050.00, Pressure Off (psi): 1700.00, Weight On Bit (klbs): 30.00, Flow Rate (gpm): 653.00, Strokes Per Minute: 225, Toolface: 340, Toolface Type: gravity
Rotary Drill	1	12-08	20:00	20:15	12-08	6857.00	6925.00	Pressure On (psi): 2600.00, Pressure Off (psi): 1750.00, Weight On Bit (klbs): 40.00, Surface RPM: 40, Surface Torque (ft lbf): 18000.00, Flow Rate (gpm): 650.00, Strokes Per Minute: 225.00
Survey	46	12-08	20:15	20:20	12-08	6925.00	6925.00	Inclination (°): 12.750, Azimuth (°): 62.750, TVD (ft): 6830.22, Dogleg (%/100 ft): 1.70, Sensor Depth (ft): 6861.00, Bit To Sensor (ft): 64.00
Rotary Drill	1	12-08	20:20	20:40	12-08	6925.00	7020.00	Pressure On (psi): 2600.00, Pressure Off (psi): 1750.00, Weight On Bit (klbs): 40.00, Surface RPM: 40, Surface Torque (ft lbf): 18000.00, Flow Rate (gpm): 650.00, Strokes Per Minute: 225.00
Survey	46	12-08	20:40	20:45	12-08	7020.00	7020.00	Inclination (°): 12.220, Azimuth (°): 61.610, TVD (ft): 6922.98, Dogleg (%/100 ft): 0.62, Sensor Depth (ft): 6956.00, Bit To Sensor (ft): 64.00
Rotary Drill	1	12-08	20:45	20:50	12-08	7020.00	7028.00	Pressure On (psi): 2600.00, Pressure Off (psi): 1750.00, Weight On Bit (klbs): 40.00, Surface RPM: 40, Surface Torque (ft lbf): 18000.00, Flow Rate (gpm): 650.00, Strokes Per Minute: 225.00
Slide Drill	2	12-08	20:50	20:55	12-08	7028.00	7040.00	Pressure On (psi): 2550.00, Pressure Off (psi): 2300.00, Weight On Bit (klbs): 26.00, Flow Rate (gpm): 748.00, Strokes Per Minute: 258, Toolface: 15, Toolface Type: gravity

Rotary Drill	1	12-08	20:55	21:20	12-08	7040.00	7115.00	Pressure On (psi): 3050.00, Pressure Off (psi): 2400.00, Weight On Bit (klbs): 47.00, Surface RPM: 40, Surface Torque (ft lbf): 21000.00, Flow Rate (gpm): 749.00, Strokes Per Minute: 258.00
Survey	46	12-08	21:20	21:25	12-08	7115.00	7115.00	Inclination (°): 13.490, Azimuth (°): 62.840, TVD (ft): 7015.60, Dogleg (%/100 ft): 1.37, Sensor Depth (ft): 7051.00, Bit To Sensor (ft): 64.00
Rotary Drill	1	12-08	21:25	21:40	12-08	7115.00	7211.00	Pressure On (psi): 3050.00, Pressure Off (psi): 2400.00, Weight On Bit (klbs): 47.00, Surface RPM: 40, Surface Torque (ft lbf): 21000.00, Flow Rate (gpm): 749.00, Strokes Per Minute: 258.00
Survey	46	12-08	21:40	21:45	12-08	7211.00	7211.00	Inclination (°): 12.790, Azimuth (°): 63.360, TVD (ft): 7109.08, Dogleg (%/100 ft): 0.74, Sensor Depth (ft): 7147.00, Bit To Sensor (ft): 64.00
Rotary Drill	1	12-08	21:45	22:00	12-08	7211.00	7307.00	Pressure On (psi): 3050.00, Pressure Off (psi): 2400.00, Weight On Bit (klbs): 47.00, Surface RPM: 40, Surface Torque (ft lbf): 21000.00, Flow Rate (gpm): 749.00, Strokes Per Minute: 258.00
Survey	46	12-08	22:00	22:05	12-08	7307.00	7307.00	Inclination (°): 11.520, Azimuth (°): 64.600, TVD (ft): 7202.93, Dogleg (%/100 ft): 1.35, Sensor Depth (ft): 7243.00, Bit To Sensor (ft): 64.00
Other	16	12-08	22:05	22:40	12-08			Work On Mud Pumps
Rotary Drill	1	12-08	22:40	22:45	12-08	7307.00	7315.00	Pressure On (psi): 2600.00, Pressure Off (psi): 1900.00, Weight On Bit (klbs): 47.00, Surface RPM: 40, Surface Torque (ft lbf): 21000.00, Flow Rate (gpm): 652.00, Strokes Per Minute: 224.00
Slide Drill	2	12-08	22:45	22:55	12-08	7315.00	7330.00	Pressure On (psi): 2550.00, Pressure Off (psi): 2300.00, Weight On Bit (klbs): 26.00, Flow Rate (gpm): 748.00, Strokes Per Minute: 258, Toolface: 345, Toolface Type: gravity
Rotary Drill	1	12-08	22:55	23:20	12-08	7330.00	7403.00	Pressure On (psi): 2650.00, Pressure Off (psi): 2100.00, Weight On Bit (klbs): 48.00, Surface RPM: 40, Surface Torque (ft lbf): 20000.00, Flow Rate (gpm): 748.00, Strokes Per Minute: 258.00
Survey	46	12-08	23:20	23:25	12-08	7403.00	7403.00	Inclination (°): 12.840, Azimuth (°): 62.660, TVD (ft): 7296.76, Dogleg (%/100 ft): 1.44, Sensor Depth (ft): 7339.00, Bit To Sensor (ft): 64.00
Rotary Drill	1	12-08	23:25	23:40	12-08	7403.00	7498.00	Pressure On (psi): 2650.00, Pressure Off (psi): 2100.00, Weight On Bit (klbs): 48.00, Surface RPM: 40, Surface Torque (ft lbf): 20000.00, Flow Rate (gpm): 748.00, Strokes Per Minute: 258.00
Survey	46	12-08	23:40	23:45	12-08	7498.00	7498.00	Inclination (°): 12.790, Azimuth (°): 63.540, TVD (ft): 7389.40, Dogleg (%/100 ft): 0.21, Sensor Depth (ft): 7434.00, Bit To Sensor (ft): 64.00
Rotary Drill	1	12-08	23:45	00:10	12-09	7498.00	7594.00	Pressure On (psi): 2650.00, Pressure Off (psi): 2100.00, Weight On Bit (klbs): 48.00, Surface RPM: 40, Surface Torque (ft lbf): 20000.00, Flow Rate (gpm): 748.00, Strokes Per Minute: 258.00

MWD Activities

No Activities



Job Number WT-21-179	Operator Advance Energy Partners	Rig Name Nabors X47
Start Date 2021-11-15	Well Name Anderson Fed Com 508H	Legal Well Name AFE Anderson Fed Com 508H
Play Delaware Basin	State/Province and Country New Mexico, US	County Lea
		Company Man

Thursday, Dec 09 00:00 - 23:59 (Day 10 of 21)

Billing: \$11,055.25 (\$153,503.78 total)

Drilling Summary				Drilling Parameters	
Start Depth (ft)	7498.00	Downhole Hours	22.25	Rotating WOB (klbs)	42.00 - 48.00
Bit Depth (ft)	9664.00	Drilling Hours	14.25	Sliding WOB (klbs)	26.00 - 26.00
Bottom Hole Depth (ft)	9664.00	Hours Circulating	1.42	Rotating SPM	207.00 - 258.00
Total Distance (ft)	2166.00	Hours Sliding	2.75	Sliding SPM	258.00 - 258.00
Distance Rotated (ft)	2021.00	Hours Rotating	11.50	Motor RPM	128.00 - 228.00
Distance Slid (ft)	145.00			Surface RPM	30.00 - 40.00
Inclination In	11.82			Flow Rate (gpm)	600.00 - 748.00
Inclination Out	1.80			On Bottom Pressure (psi)	2100.00 - 2650.00
Azimuth In	64.77	% Hours Rotating	81%	Off Bottom Pressure (psi)	1600.00 - 2300.00
Azimuth Out	133.94	% Hours Sliding	19%		
AVG Total ROP (ft/h)	152.00	% Distance Sliding	7%		
AVG Rotating ROP (ft/h)	175.74	% Distance Rotating	93%		
AVG Sliding ROP (ft/h)	52.73				

Personnel

Name	Position
Eddie Sheppard	Directional Driller
Advance Nabors X47	Directional Driller
Francisco DeLeon	MWD Engineer
Kyle Kusak	MWD Engineer

BHA #3 - 8.75" INTERMEDIATE

Date In: Dec 8, 2021, 1:30 Date Out: Dec 9, 2021, 21:45

Bit Details		Motor Details		Directional Comments
OD (in)	8.750	Size (in)	8.75	Contender 40s 7" 7/8 8.5, 1.75° Fxd w/ 8.50" NBS, Flow Range: 500-750 GPM, Max Diff: 1910 psi, Max Torque: 18,710 ft/lbs, RPG: 0.26 Bit Runs: 0
Vendor	REED	Lobe/Stage	7/8, 8.5	
S/N	A283082	Bend Angle	1.75	
Nozzles	6x15's	Speed (rev/gal)	0.26	MWD Comments
Total Flow Area (in²)	1.035	Wear Pad OD (in)	5.350	POOH Reason Change Bottom Hole Assembly: POOH For curve assembly
Drilling Hours for Day	14.25	Bit Distances		
Total Drilled for Day (ft)	2166.00	Survey (Bit To Survey): 64.00 ft, Bend (Bit To Bend): 5.35 ft, Gamma (Bit to Gamma): 49.00 ft		
Drilling Hours for BHA	27.00			
Total Drilled for BHA (ft)	4889.00			

Directional Items

Description	Vendor	SN#	Top Conn	Btm Conn	ID (in)	OD (in)	Fn Len. (ft)	Len (ft)	Aggr. Len (ft)
Bit (Fixed Cutter) Description: <i>TKC66-AZ2</i> , Type: <i>PDC (Polycrystalline Diamond Compacts)</i> , Gauge Length (in): 1.00, Size (in): 8.75	REED	A283082	4 1/2" Reg Pin			8.750		1.00	1.00
Mud Motor Description: <i>7" Motor 7/8 8.5 1.75 FXD w/ 8.50" NBS</i> , Size (in): 8.75, Bend Angle (°): 1.75, Rotor Lobe: 7, Stator Lobe: 8, Stator Stage: 8.5	Aim	700-40-021	4 1/2" IF Box	4 1/2" Reg Box		7.000		34.85	35.85
Stabilizer Description: <i>8.50" STABILIZER</i>	JAO	JAO 86989	4 1/2" IF Box	4 1/2" IF Pin	2.310	6.460		3.98	39.83
UBHO Sub Description: <i>NM UBHO</i> , Material: <i>Non-Magnetic</i>	AIM	675300	4 1/2" IF Box	4 1/2" IF Box	2.875	6.880		2.91	42.74
Drill Collar Description: <i>6.75" NMDC</i> , Material: <i>Non-Magnetic</i> , Type: <i>Slick Drill</i>	Gator Tech	6730196	4 1/2" IF Box	4 1/2" IF Pin	3.300	6.750		28.94	71.68
Drill Collar Description: <i>6.75" NMDC</i> , Material: <i>Non-Magnetic</i> , Type: <i>Slick Drill</i>	Gator Tech	6732371	4 1/2" IF Box	4 1/2" IF Pin	3.100	6.960		29.50	101.18
Crossover Sub Description: <i>Crossover</i> , Material: <i>Steel</i>	PLATINUM	PPR6255	CET54 Box	4 1/2" IF Pin	2.500	6.460		3.44	104.62
HWDP Description: <i>13 Stands 5.5 HWDP</i> , Type: <i>Slick</i>	rig		CET54 Box	CET54 Pin	3.250	5.500		1177.85	1282.47

MWD Items

No Items

BHA #4 - 8.75" CURVE

Date In: Dec 9, 2021, 23:30 Date Out: Dec 10, 2021, 23:15

Bit Details		Motor Details		Directional Comments
OD (in)	8.750	Size (in)	8.75	Contender 6 3/4" 7/8 5.0, 2.12° Fxd w/ SLK, Flow Range: 300-600 GPM, Max Diff: 1130 psi, Max Torque: 15,690 ft/lbs, RPG: 0.28 Bit Runs: 0
Vendor	ULTERRA	Lobe/Stage	7/8, 5.0	
S/N	57264	Bend Angle	2.12	
Nozzles	6x15's	Speed (rev/gal)	0.28	MWD Comments
Total Flow Area (in²)	1.035	Wear Pad OD (in)	6.920	POOH Reason Build Rate: POOH For Build Rates
Drilling Hours for Day	0.00	Bit Distances		
Total Drilled for Day (ft)		Survey (Bit To Survey): 59.00 ft, Bend (Bit To Bend): 4.05 ft, Gamma (Bit to Gamma): 35.00 ft		
Drilling Hours for BHA	7.08			
Total Drilled for BHA (ft)	484.00			

Directional Items

Description	Vendor	SN#	Top Conn	Btm Conn	ID (in)	OD (in)	Fn Len. (ft)	Len (ft)	Aggr. Len (ft)
Bit (Fixed Cutter) Description: CF611, Type: PDC (Polycrystalline Diamond Compacts), Gauge Length (in): 1.00, Size (in): 8.75	ULTERRA	57264	4 1/2" Reg Pin			8.750		1.00	1.00
Mud Motor Description: 6 3/4" Motor 7/8 5.0 2.12 FXD / SLK, Size (in): 8.75, Bend Angle (°): 2.12, Rotor Lobe: 7, Stator Lobe: 8, Stator Stage: 5	Aim	700-40-002	4 1/2" IF Box	4 1/2" Reg Box		6.750		26.02	27.02
Other Description: Resistivity Tool NM	Benchtree	650-1010	4 1/2" IF Box	4 1/2" IF Pin	3.250	6.500		31.27	58.29
Other Description: Battery Sub NM	Benchtree	B6003xx	4 1/2" IF Box	4 1/2" IF Pin	3.250	6.500		17.21	75.50
Drill Collar Description: 6.75" NMDC, Material: Non-Magnetic, Type: Slick Drill	Gator Tech	6730196	4 1/2" IF Box	4 1/2" IF Pin	3.300	6.750		28.94	104.44
Crossover Sub Description: Crossover, Material: Steel	PLATINUM	PPR6255	CET54 Box	4 1/2" IF Pin	2.500	6.460		3.44	107.88

MWD Items

No Items

Directional Activities

Activity Type	Code	Start Date	Start Time	End Time	End Date	Start (ft)	End (ft)	Comments/Details
Rotary Drill	1	12-08	23:45	00:10	12-09	7498.00	7594.00	Pressure On (psi): 2650.00, Pressure Off (psi): 2100.00, Weight On Bit (klbs): 48.00, Surface RPM: 40, Surface Torque (ft lbf): 20000.00, Flow Rate (gpm): 748.00, Strokes Per Minute: 258.00
Survey	46	12-09	00:10	00:15	12-09	7594.00	7594.00	Inclination (°): 11.820, Azimuth (°): 64.770, TVD (ft): 7483.19, Dogleg (°/100 ft): 1.05, Sensor Depth (ft): 7530.00, Bit To Sensor (ft): 64.00
Rotary Drill	1	12-09	00:15	00:20	12-09	7594.00	7600.00	Pressure On (psi): 2650.00, Pressure Off (psi): 2100.00, Weight On Bit (klbs): 48.00, Surface RPM: 40, Surface Torque (ft lbf): 20000.00, Flow Rate (gpm): 748.00, Strokes Per Minute: 258.00
Slide Drill	2	12-09	00:20	00:30	12-09	7600.00	7620.00	Pressure On (psi): 2550.00, Pressure Off (psi): 2300.00, Weight On Bit (klbs): 26.00, Flow Rate (gpm): 748.00, Strokes Per Minute: 258.00, Toolface: 345, Toolface Type: gravity
Rotary Drill	1	12-09	00:30	00:50	12-09	7620.00	7689.00	Pressure On (psi): 2650.00, Pressure Off (psi): 2100.00, Weight On Bit (klbs): 48.00, Surface RPM: 40, Surface Torque (ft lbf): 20000.00, Flow Rate (gpm): 748.00, Strokes Per Minute: 258.00
Survey	46	12-09	00:50	00:55	12-09	7689.00	7689.00	Inclination (°): 12.920, Azimuth (°): 62.310, TVD (ft): 7575.99, Dogleg (°/100 ft): 1.28, Sensor Depth (ft): 7625.00, Bit To Sensor (ft): 64.00
Rotary Drill	1	12-09	00:55	01:15	12-09	7689.00	7785.00	Pressure On (psi): 2650.00, Pressure Off (psi): 2100.00, Weight On Bit (klbs): 48.00, Surface RPM: 40, Surface Torque (ft lbf): 20000.00, Flow Rate (gpm): 748.00, Strokes Per Minute: 258.00
Survey	46	12-09	01:15	01:20	12-09	7785.00	7785.00	Inclination (°): 12.700, Azimuth (°): 62.570, TVD (ft): 7669.60, Dogleg (°/100 ft): 0.24, Sensor Depth (ft): 7721.00, Bit To Sensor (ft): 64.00
Rotary Drill	1	12-09	01:20	01:35	12-09	7785.00	7881.00	Pressure On (psi): 2650.00, Pressure Off (psi): 2100.00, Weight On Bit (klbs): 48.00, Surface RPM: 40, Surface Torque (ft lbf): 20000.00, Flow Rate (gpm): 748.00, Strokes Per Minute: 258.00
Survey	46	12-09	01:35	01:40	12-09	7881.00	7881.00	Inclination (°): 11.560, Azimuth (°): 64.240, TVD (ft): 7763.45, Dogleg (°/100 ft): 1.24, Sensor Depth (ft): 7817.00, Bit To Sensor (ft): 64.00
Rotary Drill	1	12-09	01:40	01:45	12-09	7881.00	7889.00	Pressure On (psi): 2650.00, Pressure Off (psi): 2100.00, Weight On Bit (klbs): 48.00, Surface RPM: 40, Surface Torque (ft lbf): 20000.00, Flow Rate (gpm): 748.00, Strokes Per Minute: 258.00
Slide Drill	2	12-09	01:45	02:00	12-09	7889.00	7909.00	Pressure On (psi): 2550.00, Pressure Off (psi): 2300.00, Weight On Bit (klbs): 26.00, Flow Rate (gpm): 748.00, Strokes Per Minute: 258.00, Toolface: 340, Toolface Type: gravity

Rotary Drill	1	12-09	02:00	02:25	12-09	7909.00	7976.00	Pressure On (psi): 2650.00, Pressure Off (psi): 2100.00, Weight On Bit (klbs): 48.00, Surface RPM: 40, Surface Torque (ft lbf): 20000.00, Flow Rate (gpm): 748.00, Strokes Per Minute: 258.00
Survey	46	12-09	02:25	02:30	12-09	7976.00	7976.00	Inclination (°): 11.960, Azimuth (°): 61.520, TVD (ft): 7856.46, Dogleg (°/100 ft): 0.72, Sensor Depth (ft): 7912.00, Bit To Sensor (ft): 64.00
Rotary Drill	1	12-09	02:30	02:35	12-09	7976.00	7981.00	Pressure On (psi): 2650.00, Pressure Off (psi): 2100.00, Weight On Bit (klbs): 48.00, Surface RPM: 40, Surface Torque (ft lbf): 20000.00, Flow Rate (gpm): 748.00, Strokes Per Minute: 258.00
Slide Drill	2	12-09	02:35	02:45	12-09	7981.00	8001.00	Pressure On (psi): 2550.00, Pressure Off (psi): 2300.00, Weight On Bit (klbs): 26.00, Flow Rate (gpm): 748.00, Strokes Per Minute: 258, Toolface: 0, Toolface Type: gravity
Rotary Drill	1	12-09	02:45	03:15	12-09	8001.00	8072.00	Pressure On (psi): 2650.00, Pressure Off (psi): 2100.00, Weight On Bit (klbs): 48.00, Surface RPM: 40, Surface Torque (ft lbf): 20000.00, Flow Rate (gpm): 748.00, Strokes Per Minute: 258.00
Survey	46	12-09	03:15	03:20	12-09	8072.00	8072.00	Inclination (°): 13.850, Azimuth (°): 61.610, TVD (ft): 7950.03, Dogleg (°/100 ft): 1.97, Sensor Depth (ft): 8008.00, Bit To Sensor (ft): 64.00
Rotary Drill	1	12-09	03:20	03:45	12-09	8072.00	8168.00	Pressure On (psi): 2650.00, Pressure Off (psi): 2100.00, Weight On Bit (klbs): 48.00, Surface RPM: 40, Surface Torque (ft lbf): 20000.00, Flow Rate (gpm): 748.00, Strokes Per Minute: 258.00
Survey	46	12-09	03:45	03:50	12-09	8168.00	8168.00	Inclination (°): 14.110, Azimuth (°): 63.010, TVD (ft): 8043.19, Dogleg (°/100 ft): 0.44, Sensor Depth (ft): 8104.00, Bit To Sensor (ft): 64.00
Rotary Drill	1	12-09	03:50	04:10	12-09	8168.00	8263.00	Pressure On (psi): 2650.00, Pressure Off (psi): 2100.00, Weight On Bit (klbs): 48.00, Surface RPM: 40, Surface Torque (ft lbf): 20000.00, Flow Rate (gpm): 748.00, Strokes Per Minute: 258.00
Survey	46	12-09	04:10	04:15	12-09	8263.00	8263.00	Inclination (°): 12.970, Azimuth (°): 64.420, TVD (ft): 8135.54, Dogleg (°/100 ft): 1.25, Sensor Depth (ft): 8199.00, Bit To Sensor (ft): 64.00
Rotary Drill	1	12-09	04:15	04:30	12-09	8263.00	8359.00	Pressure On (psi): 2650.00, Pressure Off (psi): 2100.00, Weight On Bit (klbs): 48.00, Surface RPM: 40, Surface Torque (ft lbf): 20000.00, Flow Rate (gpm): 748.00, Strokes Per Minute: 258.00
Survey	46	12-09	04:30	04:35	12-09	8359.00	8359.00	Inclination (°): 12.260, Azimuth (°): 66.000, TVD (ft): 8229.23, Dogleg (°/100 ft): 0.82, Sensor Depth (ft): 8295.00, Bit To Sensor (ft): 64.00
Rotary Drill	1	12-09	04:35	04:40	12-09	8359.00	8373.00	Pressure On (psi): 2650.00, Pressure Off (psi): 2100.00, Weight On Bit (klbs): 48.00, Surface RPM: 40, Surface Torque (ft lbf): 20000.00, Flow Rate (gpm): 748.00, Strokes Per Minute: 258.00
Slide Drill	2	12-09	04:40	04:50	12-09	8373.00	8388.00	Pressure On (psi): 2550.00, Pressure Off (psi): 2300.00, Weight On Bit (klbs): 26.00, Flow Rate (gpm): 748.00, Strokes Per Minute: 258, Toolface: 330, Toolface Type: gravity
Rotary Drill	1	12-09	04:50	05:10	12-09	8388.00	8455.00	Pressure On (psi): 2650.00, Pressure Off (psi): 2100.00, Weight On Bit (klbs): 48.00, Surface RPM: 40, Surface Torque (ft lbf): 20000.00, Flow Rate (gpm): 748.00, Strokes Per Minute: 258.00
Survey	46	12-09	05:10	05:15	12-09	8455.00	8455.00	Inclination (°): 12.920, Azimuth (°): 60.820, TVD (ft): 8322.92, Dogleg (°/100 ft): 1.36, Sensor Depth (ft): 8391.00, Bit To Sensor (ft): 64.00
Rotary Drill	1	12-09	05:15	05:45	12-09	8455.00	8550.00	Pressure On (psi): 2650.00, Pressure Off (psi): 2100.00, Weight On Bit (klbs): 48.00, Surface RPM: 40, Surface Torque (ft lbf): 20000.00, Flow Rate (gpm): 748.00, Strokes Per Minute: 258.00
Survey	46	12-09	05:45	05:50	12-09	8550.00	8550.00	Inclination (°): 12.350, Azimuth (°): 60.110, TVD (ft): 8415.62, Dogleg (°/100 ft): 0.62, Sensor Depth (ft): 8486.00, Bit To Sensor (ft): 64.00
Rotary Drill	1	12-09	05:50	06:25	12-09	8550.00	8646.00	Pressure On (psi): 2650.00, Pressure Off (psi): 2100.00, Weight On Bit (klbs): 48.00, Surface RPM: 40, Surface Torque (ft lbf): 20000.00, Flow Rate (gpm): 748.00, Strokes Per Minute: 258.00
Survey	46	12-09	06:25	06:30	12-09	8646.00	8646.00	Inclination (°): 11.870, Azimuth (°): 60.730, TVD (ft): 8509.48, Dogleg (°/100 ft): 0.52, Sensor Depth (ft): 8582.00, Bit To Sensor (ft): 64.00
Rotary Drill	1	12-09	06:30	07:10	12-09	8646.00	8742.00	
Survey	46	12-09	07:10	07:15	12-09	8742.00	8742.00	Inclination (°): 11.520, Azimuth (°): 61.690, TVD (ft): 8603.49, Dogleg (°/100 ft): 0.42, Sensor Depth (ft): 8678.00, Bit To Sensor (ft): 64.00
Rotary Drill	1	12-09	07:15	07:20	12-09	8742.00	8752.00	Pressure On (psi): 2100.00, Pressure Off (psi): 1600.00, Weight On Bit (klbs): 42.00, Surface RPM: 30, Surface Torque (ft lbf): 23000.00, Flow Rate (gpm): 600.00, Strokes Per Minute: 207.00
Slide Drill	2	12-09	07:20	07:45	12-09	8752.00	8767.00	Toolface: 180, Toolface Type: gravity
Rotary Drill	1	12-09	07:45	08:15	12-09	8767.00	8837.00	Pressure On (psi): 2100.00, Pressure Off (psi): 1600.00, Weight On Bit (klbs): 42.00, Surface RPM: 30, Surface Torque (ft lbf): 23000.00, Flow Rate (gpm): 600.00, Strokes Per Minute: 207.00
Survey	46	12-09	08:15	08:20	12-09	8837.00	8837.00	Inclination (°): 8.440, Azimuth (°): 62.840, TVD (ft): 8697.04, Dogleg (°/100 ft): 3.25, Sensor Depth (ft): 8773.00, Bit To Sensor (ft): 64.00

Rotary Drill	1	12-09	08:20	09:00	12-09	8837.00	8933.00	Pressure On (psi): 2100.00, Pressure Off (psi): 1600.00, Weight On Bit (klbs): 42.00, Surface RPM: 30, Surface Torque (ft lbf): 23000.00, Flow Rate (gpm): 600.00, Strokes Per Minute: 207.00
Survey	46	12-09	09:00	09:05	12-09	8933.00	8933.00	Inclination (°): 6.460, Azimuth (°): 58.350, TVD (ft): 8792.23, Dogleg (%/100 ft): 2.15, Sensor Depth (ft): 8869.00, Bit To Sensor (ft): 64.00
Rotary Drill	1	12-09	09:05	09:45	12-09	8933.00	9028.00	
Survey	46	12-09	09:45	09:50	12-09	9028.00	9028.00	Inclination (°): 5.270, Azimuth (°): 52.110, TVD (ft): 8886.73, Dogleg (%/100 ft): 1.42, Sensor Depth (ft): 8964.00, Bit To Sensor (ft): 64.00
Rotary Drill	1	12-09	09:50	10:05	12-09	9028.00	9048.00	Pressure On (psi): 2450.00, Pressure Off (psi): 2000.00, Weight On Bit (klbs): 44.00, Surface RPM: 40, Surface Torque (ft lbf): 20000.00, Flow Rate (gpm): 700.00, Strokes Per Minute: 243.00
Slide Drill	2	12-09	10:05	10:20	12-09	9048.00	9058.00	Toolface: 60, Toolface Type: gravity
Rotary Drill	1	12-09	10:20	10:45	12-09	9058.00	9123.00	Pressure On (psi): 2450.00, Pressure Off (psi): 2000.00, Weight On Bit (klbs): 44.00, Surface RPM: 40, Surface Torque (ft lbf): 20000.00, Flow Rate (gpm): 700.00, Strokes Per Minute: 243.00
Survey	46	12-09	10:45	10:50	12-09	9123.00	9123.00	Inclination (°): 4.480, Azimuth (°): 59.320, TVD (ft): 8981.39, Dogleg (%/100 ft): 1.05, Sensor Depth (ft): 9059.00, Bit To Sensor (ft): 64.00
Rotary Drill	1	12-09	10:50	11:00	12-09	9123.00	9138.00	
Slide Drill	2	12-09	11:00	11:25	12-09	9138.00	9153.00	Toolface: 60, Toolface Type: gravity
Rotary Drill	1	12-09	11:25	12:00	12-09	9153.00	9219.00	
Survey	46	12-09	12:00	12:05	12-09	9219.00	9219.00	Inclination (°): 4.480, Azimuth (°): 63.010, TVD (ft): 9077.09, Dogleg (%/100 ft): 0.30, Sensor Depth (ft): 9155.00, Bit To Sensor (ft): 64.00
Rotary Drill	1	12-09	12:05	12:10	12-09	9219.00	9234.00	
Slide Drill	2	12-09	12:10	12:25	12-09	9234.00	9244.00	Toolface: 60, Toolface Type: gravity
Rotary Drill	1	12-09	12:25	12:55	12-09	9244.00	9314.00	
Survey	46	12-09	12:55	13:00	12-09	9314.00	9314.00	Inclination (°): 4.090, Azimuth (°): 60.460, TVD (ft): 9171.83, Dogleg (%/100 ft): 0.46, Sensor Depth (ft): 9250.00, Bit To Sensor (ft): 64.00
Rotary Drill	1	12-09	13:00	13:10	12-09	9314.00	9334.00	Pressure On (psi): 2450.00, Pressure Off (psi): 2000.00, Weight On Bit (klbs): 44.00, Surface RPM: 40, Surface Torque (ft lbf): 23000.00, Flow Rate (gpm): 700.00, Strokes Per Minute: 243.00
Slide Drill	2	12-09	13:10	13:40	12-09	9334.00	9346.00	Toolface: 70, Toolface Type: gravity
Rotary Drill	1	12-09	13:40	14:00	12-09	9346.00	9410.00	
Survey	46	12-09	14:00	14:05	12-09	9410.00	9410.00	Inclination (°): 2.370, Azimuth (°): 72.860, TVD (ft): 9267.67, Dogleg (%/100 ft): 1.92, Sensor Depth (ft): 9346.00, Bit To Sensor (ft): 64.00
Rotary Drill	1	12-09	14:05	14:15	12-09	9410.00	9420.00	
Slide Drill	2	12-09	14:15	14:25	12-09	9420.00	9428.00	Toolface: 70, Toolface Type: magnetic
Rotary Drill	1	12-09	14:25	14:55	12-09	9428.00	9505.00	
Survey	46	12-09	14:55	15:00	12-09	9505.00	9505.00	Inclination (°): 1.450, Azimuth (°): 84.020, TVD (ft): 9362.62, Dogleg (%/100 ft): 1.04, Sensor Depth (ft): 9441.00, Bit To Sensor (ft): 64.00
Rotary Drill	1	12-09	15:00	15:20	12-09	9505.00	9601.00	
Survey	46	12-09	15:20	15:25	12-09	9601.00	9601.00	Inclination (°): 1.580, Azimuth (°): 123.310, TVD (ft): 9458.59, Dogleg (%/100 ft): 1.07, Sensor Depth (ft): 9537.00, Bit To Sensor (ft): 64.00
Rotary Drill	1	12-09	15:25	15:50	12-09	9601.00	9664.00	
Survey	46	12-09	15:50	16:05	12-09	9664.00	9664.00	Inclination (°): 1.800, Azimuth (°): 133.940, TVD (ft): 9521.56, Dogleg (%/100 ft): 0.61, Sensor Depth (ft): 9600.00, Bit To Sensor (ft): 64.00
Circulating	3	12-09	16:05	17:00	12-09			Circulate And Condition Hole Clean
Pooh	7	12-09	17:00	21:15	12-09			POOH for Curve Assembly
Lay Down BHA	65	12-09	21:15	21:45	12-09			L/D BHA #3
Pick Up BHA	64	12-09	21:45	23:30	12-09			P/U Curve Assembly And Program MWD Tool
Circulating	3	12-09	23:30	00:00	12-10			Test Motor And MWD Tool (Good Test)

MWD Activities

No Activities



Job Number WT-21-179	Operator Advance Energy Partners	Rig Name Nabors X47
Start Date 2021-11-15	Well Name Anderson Fed Com 508H	Legal Well Name AFE Anderson Fed Com 508H
Play Delaware Basin	State/Province and Country New Mexico, US	County Lea
		Company Man

Friday, Dec 10 00:00 - 23:59 (Day 11 of 21)

Billing: \$18,465.00 (\$153,503.78 total)

Drilling Summary				Drilling Parameters	
Start Depth (ft)	9664.00	Downhole Hours	23.50	Rotating WOB (klbs)	
Bit Depth (ft)	10148.00	Drilling Hours	7.08	Sliding WOB (klbs)	
Bottom Hole Depth (ft)	10148.00	Hours Circulating	3.00	Rotating SPM	
Total Distance (ft)	484.00	Hours Sliding	6.50	Sliding SPM	
Distance Rotated (ft)	61.00	Hours Rotating	0.58	Motor RPM	72.00 - 132.00
Distance Slid (ft)	423.00			Surface RPM	
Inclination In	2.29			Flow Rate (gpm)	
Inclination Out	26.11			On Bottom Pressure (psi)	
Azimuth In	146.51	% Hours Rotating	8%	Off Bottom Pressure (psi)	
Azimuth Out	6.94	% Hours Sliding	92%		
AVG Total ROP (ft/h)	68.33	% Distance Sliding	87%		
AVG Rotating ROP (ft/h)	104.57	% Distance Rotating	13%		
AVG Sliding ROP (ft/h)	65.08				

Personnel

Name	Position
Eddie Sheppard	Directional Driller
Advance Nabors X47	Directional Driller
Francisco DeLeon	MWD Engineer
Kyle Kusak	MWD Engineer

BHA #4 - 8.75" CURVE

Date In: Dec 9, 2021, 23:30 Date Out: Dec 10, 2021, 23:15

Bit Details		Motor Details		Directional Comments
OD (in)	8.750	Size (in)	8.75	Contender 6 3/4" 7/8 5.0, 2.12° Fxd w/ SLK, Flow Range: 300-600 GPM, Max Diff: 1130 psi, Max Torque: 15,690 ft/lbs, RPG: 0.28 Bit Runs: 0
Vendor	ULTERRA	Lobe/Stage	7/8, 5.0	
S/N	57264	Bend Angle	2.12	
Nozzles	6x15's	Speed (rev/gal)	0.28	
Total Flow Area (in²)	1.035	Wear Pad OD (in)	6.920	MWD Comments
Drilling Hours for Day	7.08	Bit Distances		
Total Drilled for Day (ft)	484.00	Survey (Bit To Survey): 59.00 ft, Bend (Bit To Bend): 4.05 ft, Gamma (Bit to Gamma): 35.00 ft		
Drilling Hours for BHA	7.08			
Total Drilled for BHA (ft)	484.00			POOH Reason
				Build Rate: POOH For Build Rates

Directional Items

Description	Vendor	SN#	Top Conn	Btm Conn	ID (in)	OD (in)	Fn Len. (ft)	Len (ft)	Aggr. Len (ft)
Bit (Fixed Cutter) Description: CF611, Type: PDC (Polycrystalline Diamond Compacts), Gauge Length (in): 1.00, Size (in): 8.75	ULTERRA	57264	4 1/2" Reg Pin			8.750		1.00	1.00
Mud Motor Description: 6 3/4" Motor 7/8 5.0 2.12 FXD / SLK, Size (in): 8.75, Bend Angle (°): 2.12, Rotor Lobe: 7, Stator Lobe: 8, Stator Stage: 5	Aim	700-40-002	4 1/2" IF Box	4 1/2" Reg Box		6.750		26.02	27.02
Other Description: Resistivity Tool NM	Benchtree	650-1010	4 1/2" IF Box	4 1/2" IF Pin	3.250	6.500		31.27	58.29
Other Description: Battery Sub NM	Benchtree	B6003xx	4 1/2" IF Box	4 1/2" IF Pin	3.250	6.500		17.21	75.50
Drill Collar Description: 6.75" NMDC, Material: Non-Magnetic, Type: Slick Drill	Gator Tech	6730196	4 1/2" IF Box	4 1/2" IF Pin	3.300	6.750		28.94	104.44
Crossover Sub Description: Crossover, Material: Steel	PLATINUM	PPR6255	CET54 Box	4 1/2" IF Pin	2.500	6.460		3.44	107.88

MWD Items

No Items

BHA #5 - 8.75" CURVE

Date In: Dec 10, 2021, 23:45 Date Out: Dec 11, 2021, 22:30

Bit Details		Motor Details		Directional Comments	
OD (in)	8.750	Size (in)	8.75	Contender 7" 7/8 5.7, 2.89° Adj w/ SLK, Flow Range: 300-650 GPM, Max Diff: 1,280 psi, Max Torque: 20,580 ft/lbs, RPG: 0.24 Bit Runs: 2	
Vendor	ULTERRA	Lobe/Stage	7/8, 5.7		
S/N	57218	Bend Angle	2.89		
Nozzles	6x15's	Speed (rev/gal)	0.24		
Total Flow Area (in²)	1.035	Wear Pad OD (in)	7.520	MWD Comments	
Drilling Hours for Day	0.00	Bit Distances			
Total Drilled for Day (ft)		Survey (Bit To Survey): 59.00 ft, Bend (Bit To Bend): 4.05 ft, Gamma (Bit to Gamma): 35.00 ft		POOH Reason	
Drilling Hours for BHA	7.42				
Total Drilled for BHA (ft)	333.00			Change Bottom Hole Assembly: P/U Lateral Assembly	

Directional Items

Description	Vendor	SN#	Top Conn	Btm Conn	ID (in)	OD (in)	Fn Len. (ft)	Len (ft)	Aggr. Len (ft)
Bit (Fixed Cutter) Description: CF611, Type: PDC (Polycrystalline Diamond Compacts), Gauge Length (in): 1.00, Size (in): 8.75	ULTERRA	57218	4 1/2" Reg Pin			8.750		1.00	1.00
Mud Motor Description: 7" Motor 7/8 5.7 2.89 Adj/SLK, Size (in): 8.75, Bend Angle (°): 2.89, Rotor Lobe: 7, Stator Lobe: 8, Stator Stage: 5.7	Aim	700-40-008	4 1/2" IF Box	4 1/2" Reg Box		6.750		26.38	27.38
Other Description: Resistivity Tool NM	Benchtree	650-1010	4 1/2" IF Box	4 1/2" IF Pin	3.250	6.500		31.27	58.65
Other Description: Battery Sub NM	Benchtree	B6003xx	4 1/2" IF Box	4 1/2" IF Pin	3.250	6.500		17.21	75.86
Drill Collar Description: 6.75" NMDC, Material: Non-Magnetic, Type: Slick Drill	Gator Tech	6730196	4 1/2" IF Box	4 1/2" IF Pin	3.300	6.750		28.94	104.80
Crossover Sub Description: Crossover, Material: Steel	PLATINUM	PPR6255	CET54 Box	4 1/2" IF Pin	2.500	6.460		3.44	108.24

MWD Items

No Items

Directional Activities

Activity Type	Code	Start Date	Start Time	End Time	End Date	Start (ft)	End (ft)	Comments/Details
Circulating	3	12-09	23:30	00:00	12-10			Test Motor And MWD Tool (Good Test)
TIH	8	12-10	00:00	05:00	12-10			TIH W/ BHA #4
Circulating	3	12-10	05:00	06:25	12-10			Relog Gamma F/ 9,591 T/ 9,664
Rotary Drill	1	12-10	06:25	06:45	12-10	9664.00	9669.00	
Slide Drill	2	12-10	06:45	07:00	12-10	9669.00	9677.00	Toolface: 320, Toolface Type: magnetic
Rotary Drill	1	12-10	07:00	07:15	12-10	9677.00	9733.00	
Slide Drill	2	12-10	07:15	08:15	12-10	9733.00	9765.00	Toolface: 2, Toolface Type: magnetic
Survey	46	12-10	08:15	08:20	12-10	9765.00	9765.00	Inclination (°): 2.290, Azimuth (°): 146.510, TVD (ft): 9627.49, Dogleg (°/100 ft): 0.62, Sensor Depth (ft): 9706.00, Bit To Sensor (ft): 59.00
Slide Drill	2	12-10	08:20	09:20	12-10	9765.00	9861.00	Toolface: 2, Toolface Type: magnetic
Survey	46	12-10	09:20	09:25	12-10	9861.00	9861.00	Inclination (°): 6.290, Azimuth (°): 23.730, TVD (ft): 9723.31, Dogleg (°/100 ft): 8.09, Sensor Depth (ft): 9802.00, Bit To Sensor (ft): 59.00
Slide Drill	2	12-10	09:25	10:40	12-10	9861.00	9957.00	Toolface: 340, Toolface Type: gravity
Survey	46	12-10	10:40	10:45	12-10	9957.00	9957.00	Inclination (°): 13.190, Azimuth (°): 11.510, TVD (ft): 9817.88, Dogleg (°/100 ft): 7.46, Sensor Depth (ft): 9898.00, Bit To Sensor (ft): 59.00
Slide Drill	2	12-10	10:45	12:10	12-10	9957.00	10052.00	Toolface: 0, Toolface Type: gravity
Circulating	3	12-10	12:10	13:25	12-10			Change saver sub
Survey	46	12-10	13:25	13:30	12-10	10052.00	10052.00	Inclination (°): 21.010, Azimuth (°): 8.350, TVD (ft): 9908.61, Dogleg (°/100 ft): 8.29, Sensor Depth (ft): 9993.00, Bit To Sensor (ft): 59.00
Slide Drill	2	12-10	13:30	15:05	12-10	10052.00	10148.00	Toolface: 0, Toolface Type: gravity
Survey	46	12-10	15:05	15:10	12-10	10148.00	10148.00	Inclination (°): 26.110, Azimuth (°): 6.940, TVD (ft): 9996.58, Dogleg (°/100 ft): 5.34, Sensor Depth (ft): 10089.00, Bit To Sensor (ft): 59.00
Circulating	3	12-10	15:10	15:15	12-10			Circulate And Condition Hole Clean
Pooh	7	12-10	15:15	22:45	12-10			POOH To Dial Up Mud Motor
Lay Down BHA	65	12-10	22:45	23:15	12-10			L/D BHA #4
Pick Up BHA	64	12-10	23:15	23:45	12-10			P/U BHA #5 Dial Up Motor
Circulating	3	12-10	23:45	00:00	12-11			Down Loading MWD Data

MWD Activities

No Activities



Job Number WT-21-179	Operator Advance Energy Partners	Rig Name Nabors X47
Start Date 2021-11-15	Well Name Anderson Fed Com 508H	Legal Well Name AFE Anderson Fed Com 508H
Play Delaware Basin	State/Province and Country New Mexico, US	County Lea
		Company Man

Saturday, Dec 11 00:00 - 23:59 (Day 12 of 21)

Billing: \$9,000.00 (\$153,503.78 total)

Drilling Summary				Drilling Parameters	
Start Depth (ft)	10148.00	Downhole Hours	24.00	Rotating WOB (klbs)	
Bit Depth (ft)	10481.00	Drilling Hours	7.42	Sliding WOB (klbs)	
Bottom Hole Depth (ft)	10481.00	Hours Circulating	0.83	Rotating SPM	
Total Distance (ft)	333.00	Hours Sliding	7.42	Sliding SPM	
Distance Rotated (ft)	0.00	Hours Rotating	0.00	Motor RPM	0.00 - 132.00
Distance Slid (ft)	333.00			Surface RPM	
Inclination In	36.62			Flow Rate (gpm)	
Inclination Out	77.85			On Bottom Pressure (psi)	
Azimuth In	4.83	% Hours Rotating	0%	Off Bottom Pressure (psi)	
Azimuth Out	2.19	% Hours Sliding	100%		
AVG Total ROP (ft/h)	44.90	% Distance Sliding	100%		
AVG Rotating ROP (ft/h)	0.00	% Distance Rotating	0%		
AVG Sliding ROP (ft/h)	44.90				

Personnel

Name	Position
Eddie Sheppard	Directional Driller
Advance Nabors X47	Directional Driller
Francisco DeLeon	MWD Engineer
Kyle Kusak	MWD Engineer

BHA #5 - 8.75" CURVE

Date In: Dec 10, 2021, 23:45 Date Out: Dec 11, 2021, 22:30

Bit Details		Motor Details		Directional Comments
OD (in)	8.750	Size (in)	8.75	Contender 7" 7/8 5.7, 2.89° Adj w/ SLK, Flow Range: 300-650 GPM, Max Diff: 1,280 psi, Max Torque: 20,580 ft/lbs, RPG: 0.24 Bit Runs: 2
Vendor	ULTERRA	Lobe/Stage	7/8, 5.7	
S/N	57218	Bend Angle	2.89	
Nozzles	6x15's	Speed (rev/gal)	0.24	
Total Flow Area (in²)	1.035	Wear Pad OD (in)	7.520	MWD Comments
Drilling Hours for Day	7.42	Bit Distances		
Total Drilled for Day (ft)	333.00	Survey (Bit To Survey): 59.00 ft, Bend (Bit To Bend): 4.05 ft, Gamma (Bit to Gamma): 35.00 ft		
Drilling Hours for BHA	7.42			
Total Drilled for BHA (ft)	333.00			POOH Reason Change Bottom Hole Assembly: P/U Lateral Assembly

Directional Items

Description	Vendor	SN#	Top Conn	Btm Conn	ID (in)	OD (in)	Fn Len. (ft)	Len (ft)	Aggr. Len (ft)
Bit (Fixed Cutter) Description: CF611, Type: PDC (Polycrystalline Diamond Compacts), Gauge Length (in): 1.00, Size (in): 8.75	ULTERRA	57218	4 1/2" Reg Pin			8.750		1.00	1.00
Mud Motor Description: 7" Motor 7/8 5.7 2.89 Adj / SLK, Size (in): 8.75, Bend Angle (°): 2.89, Rotor Lobe: 7, Stator Lobe: 8, Stator Stage: 5.7	Aim	700-40-008	4 1/2" IF Box	4 1/2" Reg Box		6.750		26.38	27.38
Other Description: Resistivity Tool NM	Benchtree	650-1010	4 1/2" IF Box	4 1/2" IF Pin	3.250	6.500		31.27	58.65
Other Description: Battery Sub NM	Benchtree	B6003xx	4 1/2" IF Box	4 1/2" IF Pin	3.250	6.500		17.21	75.86
Drill Collar Description: 6.75" NMDC, Material: Non-Magnetic, Type: Slick Drill	Gator Tech	6730196	4 1/2" IF Box	4 1/2" IF Pin	3.300	6.750		28.94	104.80
Crossover Sub Description: Crossover, Material: Steel	PLATINUM	PPR6255	CET54 Box	4 1/2" IF Pin	2.500	6.460		3.44	108.24

MWD Items

No Items

BHA #6 - 8.75" LATERAL ASSEMBLY

Date In: Dec 11, 2021, 22:30 Date Out: Dec 16, 2021, 14:00

Bit Details		Motor Details		Directional Comments	
OD (in)	8.750	Size (in)	7.0	(BICO)7" SSS100 Motor: 1.75° FXD 7/8 6.1 Stg w/ SLICK, Flow Range: 300-700 GPM, Max Diff: 1,800 psi, Max Torque: 17,100 ft/lbs, RPG: 0.25 Bit Runs: 2	
Vendor	REED	Lobe/Stage	7/8, 6.1		
S/N	A281412	Bend Angle	1.75		
Nozzles	7X14's	Speed (rev/gal)	0.25	MWD Comments	
Total Flow Area (in²)	1.520	Wear Pad OD (in)	7.250		
Drilling Hours for Day	0.00	Bit Distances			
Total Drilled for Day (ft)		Survey (Bit To Survey): 63.00 ft, Bend (Bit To Bend): 5.23 ft, Gamma (Bit to Gamma): 39.00 ft			
Drilling Hours for BHA	89.42				
Total Drilled for BHA (ft)	5623.00				
				POOH Reason	
				Other: POOH for slow ROP, motor drained well and had minimal slack in between bit and power section, no visible damage	

Directional Items

Description	Vendor	SN#	Top Conn	Btm Conn	ID (in)	OD (in)	Fn Len. (ft)	Len (ft)	Aggr. Len (ft)
Bit (Fixed Cutter) Description: <i>TKC76-U1</i> , Type: <i>PDC (Polycrystalline Diamond Compacts)</i> , Gauge Length (in): <i>1.00</i> , Size (in): <i>8.75</i>	REED	A281412	4 1/2" Reg Pin			8.750		1.00	1.00
Mud Motor Description: <i>7" BICO Motor 7/8 6.1 1.75 Fxd / SLK</i> , Size (in): <i>7.00</i> , Bend Angle (°): <i>1.75</i> , Rotor Lobe: <i>7</i> , Stator Lobe: <i>8</i> , Stator Stage: <i>6.1</i>	Bico	BPB5700-0069	4 1/2" IF Box	4 1/2" Reg Box		7.000		30.23	31.23
Other Description: <i>Resistivity Tool NM</i>	Benchtree	650-1010	4 1/2" IF Box	4 1/2" IF Pin	3.250	6.500		31.27	62.50
Other Description: <i>Battery Sub NM</i>	Benchtree	B6003xx	4 1/2" IF Box	4 1/2" IF Pin	3.250	6.500		17.21	79.71
Drill Collar Description: <i>6.75" NMDC</i> , Material: <i>Non-Magnetic</i> , Type: <i>Slick Drill</i>	Gator Tech	6730196	4 1/2" IF Box	4 1/2" IF Pin	3.300	6.750		28.94	108.65
Crossover Sub Description: <i>Crossover</i> , Material: <i>Steel</i>	PLATINUM	PPR6255	CET54 Box	4 1/2" IF Pin	2.500	6.460		3.44	112.09
Drill Pipe Description: <i>20 Stands of 5.5" DP</i> , Type: <i>Slick</i>	RIG		CET54 Box	CET54 Box	2.520	5.500		1913.72	2025.81
Crossover Sub Description: <i>Crossover</i> , Material: <i>Steel</i>	PLATINUM	PPR7092	CET54 Box	4 1/2" IF Pin	2.500	6.460		3.50	2029.31
Agitator Description: <i>ADJITATOR w/ 1.85 P/t</i> Size, Size (in): <i>7.00</i>	NOV	AGHF0675-0078	4 1/2" IF Box	4 1/2" IF Pin		7.000		24.95	2054.26
Crossover Sub Description: <i>Crossover</i> , Material: <i>Steel</i>	PLATINUM	PPR6255	4 1/2" IF Box	CET54 Pin	2.500	6.460		3.44	2057.70

MWD Items

No Items

Directional Activities

Activity Type	Code	Start Date	Start Time	End Time	End Date	Start (ft)	End (ft)	Comments/Details
Circulating	3	12-10	23:45	00:00	12-11			Down Loading MWD Data
Circulating	3	12-11	00:00	00:15	12-11			Test Motor And MWD
TIH	8	12-11	00:15	06:00	12-11			TIH W/ BHA #5
Slide Drill	2	12-11	06:00	09:35	12-11	10148.00	10244.00	Toolface: <i>0</i> , Toolface Type: <i>gravity</i>
Survey	46	12-11	09:35	09:40	12-11	10244.00	10244.00	Inclination (°): <i>36.620</i> , Azimuth (°): <i>4.830</i> , TVD (ft): <i>10078.44</i> , Dogleg (°/100 ft): <i>11.01</i> , Sensor Depth (ft): <i>10185.00</i> , Bit To Sensor (ft): <i>59.00</i>
Slide Drill	2	12-11	09:40	11:10	12-11	10244.00	10339.00	Toolface: <i>0</i> , Toolface Type: <i>gravity</i>
Rig Repair	14	12-11	11:10	11:35	12-11			
Survey	46	12-11	11:35	11:40	12-11	10339.00	10339.00	Inclination (°): <i>51.430</i> , Azimuth (°): <i>6.320</i> , TVD (ft): <i>10146.56</i> , Dogleg (°/100 ft): <i>15.63</i> , Sensor Depth (ft): <i>10280.00</i> , Bit To Sensor (ft): <i>59.00</i>
Slide Drill	2	12-11	11:40	13:00	12-11	10339.00	10435.00	Toolface: <i>0</i> , Toolface Type: <i>gravity</i>
Survey	46	12-11	13:00	13:05	12-11	10435.00	10435.00	Inclination (°): <i>68.040</i> , Azimuth (°): <i>5.710</i> , TVD (ft): <i>10194.78</i> , Dogleg (°/100 ft): <i>17.31</i> , Sensor Depth (ft): <i>10376.00</i> , Bit To Sensor (ft): <i>59.00</i>
Slide Drill	2	12-11	13:05	14:05	12-11	10435.00	10481.00	Toolface: <i>330</i> , Toolface Type: <i>gravity</i>
Survey	46	12-11	14:05	14:10	12-11	10481.00	10481.00	Inclination (°): <i>77.850</i> , Azimuth (°): <i>2.190</i> , TVD (ft): <i>10208.25</i> , Dogleg (°/100 ft): <i>22.54</i> , Sensor Depth (ft): <i>10422.00</i> , Bit To Sensor (ft): <i>59.00</i>
Circulating	3	12-11	14:10	14:45	12-11			Circulate And Condition Hole Clean
Pooh	7	12-11	14:45	22:00	12-11			POOH for Lateral Assembly
Lay Down BHA	65	12-11	22:00	22:30	12-11			L/D BHA # 5
Change BHA	6	12-11	22:30	23:00	12-11			P/U BHA # 6
Other	16	12-11	23:00	00:00	12-12			Down Load MWD,

MWD Activities

No Activities



Job Number WT-21-179	Operator Advance Energy Partners	Rig Name Nabors X47
Start Date 2021-11-15	Well Name Anderson Fed Com 508H	Legal Well Name AFE Anderson Fed Com 508H
Play Delaware Basin	State/Province and Country New Mexico, US	County Lea
		Company Man

Sunday, Dec 12 00:00 - 23:59 (Day 13 of 21)

Billing: \$9,000.00 (\$153,503.78 total)

Drilling Summary				Drilling Parameters	
Start Depth (ft)	10481.00	Downhole Hours	24.00	Rotating WOB (klbs)	32.00 - 40.00
Bit Depth (ft)	11814.00	Drilling Hours	14.33	Sliding WOB (klbs)	31.00 - 31.00
Bottom Hole Depth (ft)	11814.00	Hours Circulating	2.00	Rotating SPM	210.00 - 650.00
Total Distance (ft)	1333.00	Hours Sliding	2.50	Sliding SPM	225.00 - 225.00
Distance Rotated (ft)	1185.00	Hours Rotating	11.83	Motor RPM	0.00 - 0.00
Distance Slid (ft)	148.00			Surface RPM	40.00 - 40.00
Inclination In	90.99			Flow Rate (gpm)	222.00 - 650.00
Inclination Out	90.20			On Bottom Pressure (psi)	3600.00 - 3700.00
Azimuth In	359.64	% Hours Rotating	83%	Off Bottom Pressure (psi)	3000.00 - 3250.00
Azimuth Out	358.06	% Hours Sliding	17%		
AVG Total ROP (ft/h)	93.00	% Distance Sliding	11%		
AVG Rotating ROP (ft/h)	100.14	% Distance Rotating	89%		
AVG Sliding ROP (ft/h)	59.20				

Personnel

Name	Position
Eddie Sheppard	Directional Driller
Advance Nabors X47	Directional Driller
Francisco DeLeon	MWD Engineer
Kyle Kusak	MWD Engineer

BHA #6 - 8.75" LATERAL ASSEMBLY

Date In: Dec 11, 2021, 22:30 Date Out: Dec 16, 2021, 14:00

Bit Details		Motor Details		Directional Comments
OD (in)	8.750	Size (in)	7.0	(BICO)7" SSS100 Motor: 1.75° FXD 7/8 6.1 Stg w/ SLICK, Flow Range: 300-700 GPM, Max Diff: 1,800 psi, Max Torque: 17,100 ft/lbs, RPG: 0.25 Bit Runs: 2
Vendor	REED	Lobe/Stage	7/8, 6.1	
S/N	A281412	Bend Angle	1.75	
Nozzles	7X14's	Speed (rev/gal)	0.25	MWD Comments
Total Flow Area (in²)	1.520	Wear Pad OD (in)	7.250	
Drilling Hours for Day	14.33	Bit Distances		
Total Drilled for Day (ft)	1333.00	Survey (Bit To Survey): 63.00 ft, Bend (Bit To Bend): 5.23 ft, Gamma (Bit to Gamma): 39.00 ft		POOH Reason
Drilling Hours for BHA	89.42			
Total Drilled for BHA (ft)	5623.00			

Directional Items

Description	Vendor	SN#	Top Conn	Btm Conn	ID (in)	OD (in)	Fn Len. (ft)	Len (ft)	Aggr. Len (ft)
Bit (Fixed Cutter) Description: <i>TKC 76-U1</i> , Type: <i>PDC (Polycrystalline Diamond Compacts)</i> , Gauge Length (in): <i>1.00</i> , Size (in): <i>8.75</i>	REED	A281412	4 1/2" Reg Pin			8.750		1.00	1.00
Mud Motor Description: <i>7" BICO Motor 7/8 6.1 1.75 Fxd / SLK</i> , Size (in): <i>7.00</i> , Bend Angle (°): <i>1.75</i> , Rotor Lobe: <i>7</i> , Stator Lobe: <i>8</i> , Stator Stage: <i>6.1</i>	Bico	BPB5700-0069	4 1/2" IF Box	4 1/2" Reg Box		7.000		30.23	31.23
Other Description: <i>Resistivity Tool NM</i>	Benchtree	650-1010	4 1/2" IF Box	4 1/2" IF Pin	3.250	6.500		31.27	62.50
Other Description: <i>Battery Sub NM</i>	Benchtree	B6003xx	4 1/2" IF Box	4 1/2" IF Pin	3.250	6.500		17.21	79.71
Drill Collar Description: <i>6.75" NMDC</i> , Material: <i>Non-Magnetic</i> , Type: <i>Slick Drill</i>	Gator Tech	6730196	4 1/2" IF Box	4 1/2" IF Pin	3.300	6.750		28.94	108.65
Crossover Sub Description: <i>Crossover</i> , Material: <i>Steel</i>	PLATINUM	PPR6255	CET54 Box	4 1/2" IF Pin	2.500	6.460		3.44	112.09
Drill Pipe Description: <i>20 Stands of 5.5" DP</i> , Type: <i>Slick</i>	RIG		CET54 Box	CET54 Box	2.520	5.500		1913.72	2025.81
Crossover Sub Description: <i>Crossover</i> , Material: <i>Steel</i>	PLATINUM	PPR7092	CET54 Box	4 1/2" IF Pin	2.500	6.460		3.50	2029.31
Agitator Description: <i>ADJITATOR w/ 1.85 Plt Size</i> , Size (in): <i>7.00</i>	NOV	AGHF0675-0078	4 1/2" IF Box	4 1/2" IF Pin		7.000		24.95	2054.26
Crossover Sub Description: <i>Crossover</i> , Material: <i>Steel</i>	PLATINUM	PPR6255	4 1/2" IF Box	CET54 Pin	2.500	6.460		3.44	2057.70

MWD Items

No items

Directional Activities

Activity Type	Code	Start Date	Start Time	End Time	End Date	Start (ft)	End (ft)	Comments/Details
Other	16	12-11	23:00	00:00	12-12			Down Load MWD,
Other	16	12-12	00:00	00:15	12-12			Down Load MWD, M/U Bit
Circulating	3	12-12	00:15	00:45	12-12			Test Motor And MWD
TIH	8	12-12	00:45	03:00	12-12			TIH W/ BHA #6
Other	16	12-12	03:00	04:00	12-12			Slip And Cut DL
TIH	8	12-12	04:00	07:00	12-12			TIH W/ BHA #6
Circulating	3	12-12	07:00	08:30	12-12			Displace with OBM
Slide Drill	2	12-12	08:30	08:50	12-12	10481.00	10510.00	Toolface: 0, Toolface Type: <i>gravity</i>
Rotary Drill	1	12-12	08:50	09:25	12-12	10510.00	10540.00	Waggle
Rotary Drill	1	12-12	09:25	09:40	12-12	10540.00	10566.00	
Survey	46	12-12	09:40	09:45	12-12	10566.00	10566.00	Inclination (°): 90.990, Azimuth (°): 359.640, TVD (ft): 10216.11, Dogleg (°/100 ft): 16.52, Sensor Depth (ft): 10503.00, Bit To Sensor (ft): 63.00
Rotary Drill	1	12-12	09:45	09:55	12-12	10566.00	10585.00	Pressure On (psi): 3600.00, Pressure Off (psi): 3000.00, Weight On Bit (klbs): 32.00, Surface RPM: 40, Surface Torque (ft lbf): 24000.00, Flow Rate (gpm): 600.00, Strokes Per Minute: 210.00
Slide Drill	2	12-12	09:55	10:15	12-12	10585.00	10605.00	Toolface: 180, Toolface Type: <i>gravity</i>
Rotary Drill	1	12-12	10:15	10:35	12-12	10605.00	10662.00	Pressure On (psi): 3600.00, Pressure Off (psi): 3000.00, Weight On Bit (klbs): 32.00, Surface RPM: 40, Surface Torque (ft lbf): 24000.00, Flow Rate (gpm): 600.00, Strokes Per Minute: 210.00
Survey	46	12-12	10:35	10:40	12-12	10662.00	10662.00	Inclination (°): 90.200, Azimuth (°): 0.350, TVD (ft): 10215.12, Dogleg (°/100 ft): 1.11, Sensor Depth (ft): 10599.00, Bit To Sensor (ft): 63.00
Rotary Drill	1	12-12	10:40	10:50	12-12	10662.00	10672.00	
Slide Drill	2	12-12	10:50	11:25	12-12	10672.00	10694.00	Toolface: 210, Toolface Type: <i>gravity</i>
Rotary Drill	1	12-12	11:25	12:10	12-12	10694.00	10757.00	
Survey	46	12-12	12:10	12:15	12-12	10757.00	10757.00	Inclination (°): 88.440, Azimuth (°): 359.380, TVD (ft): 10216.25, Dogleg (°/100 ft): 2.12, Sensor Depth (ft): 10694.00, Bit To Sensor (ft): 63.00
Rotary Drill	1	12-12	12:15	12:50	12-12	10757.00	10852.00	Pressure On (psi): 3600.00, Pressure Off (psi): 3000.00, Weight On Bit (klbs): 40.00, Surface RPM: 40, Surface Torque (ft lbf): 24000.00, Flow Rate (gpm): 222.00, Strokes Per Minute: 650.00
Survey	46	12-12	12:50	12:55	12-12	10852.00	10852.00	Inclination (°): 88.790, Azimuth (°): 359.030, TVD (ft): 10218.54, Dogleg (°/100 ft): 0.52, Sensor Depth (ft): 10789.00, Bit To Sensor (ft): 63.00
Rotary Drill	1	12-12	12:55	13:30	12-12	10852.00	10948.00	Pressure On (psi): 3600.00, Pressure Off (psi): 3000.00, Weight On Bit (klbs): 40.00, Surface RPM: 40, Surface Torque (ft lbf): 24000.00, Flow Rate (gpm): 222.00, Strokes Per Minute: 650.00
Survey	46	12-12	13:30	13:35	12-12	10948.00	10948.00	Inclination (°): 89.930, Azimuth (°): 359.290, TVD (ft): 10219.61, Dogleg (°/100 ft): 1.22, Sensor Depth (ft): 10885.00, Bit To Sensor (ft): 63.00
Rotary Drill	1	12-12	13:35	14:30	12-12	10948.00	11043.00	Pressure On (psi): 3600.00, Pressure Off (psi): 3000.00, Weight On Bit (klbs): 40.00, Surface RPM: 40, Surface Torque (ft lbf): 24000.00, Flow Rate (gpm): 222.00, Strokes Per Minute: 650.00
Survey	46	12-12	14:30	14:35	12-12	11043.00	11043.00	Inclination (°): 91.740, Azimuth (°): 358.060, TVD (ft): 10218.23, Dogleg (°/100 ft): 2.30, Sensor Depth (ft): 10980.00, Bit To Sensor (ft): 63.00
Rotary Drill	1	12-12	14:35	14:40	12-12	11043.00	11053.00	Pressure On (psi): 3600.00, Pressure Off (psi): 3000.00, Weight On Bit (klbs): 40.00, Surface RPM: 40, Surface Torque (ft lbf): 24000.00, Flow Rate (gpm): 222.00, Strokes Per Minute: 650.00
Slide Drill	2	12-12	14:40	15:15	12-12	11053.00	11088.00	Toolface: 160, Toolface Type: <i>gravity</i>
Rotary Drill	1	12-12	15:15	15:30	12-12	11088.00	11139.00	Pressure On (psi): 3600.00, Pressure Off (psi): 3000.00, Weight On Bit (klbs): 40.00, Surface RPM: 40, Surface Torque (ft lbf): 24000.00, Flow Rate (gpm): 222.00, Strokes Per Minute: 650.00
Survey	46	12-12	15:30	15:35	12-12	11139.00	11139.00	Inclination (°): 89.450, Azimuth (°): 1.230, TVD (ft): 10217.23, Dogleg (°/100 ft): 4.07, Sensor Depth (ft): 11076.00, Bit To Sensor (ft): 63.00
Rotary Drill	1	12-12	15:35	16:40	12-12	11139.00	11235.00	Pressure On (psi): 3600.00, Pressure Off (psi): 3000.00, Weight On Bit (klbs): 40.00, Surface RPM: 40, Surface Torque (ft lbf): 24000.00, Flow Rate (gpm): 222.00, Strokes Per Minute: 650.00
Survey	46	12-12	16:40	16:45	12-12	11235.00	11235.00	Inclination (°): 89.710, Azimuth (°): 0.960, TVD (ft): 10217.94, Dogleg (°/100 ft): 0.39, Sensor Depth (ft): 11172.00, Bit To Sensor (ft): 63.00
Rotary Drill	1	12-12	16:45	17:00	12-12	11235.00	11250.00	Pressure On (psi): 3600.00, Pressure Off (psi): 3000.00, Weight On Bit (klbs): 40.00, Surface RPM: 40, Surface Torque (ft lbf): 24000.00, Flow Rate (gpm): 222.00, Strokes Per Minute: 650.00
Slide Drill	2	12-12	17:00	17:25	12-12	11250.00	11265.00	Toolface: 160, Toolface Type: <i>gravity</i>
Rotary Drill	1	12-12	17:25	18:10	12-12	11265.00	11330.00	Pressure On (psi): 3600.00, Pressure Off (psi): 3000.00, Weight On Bit (klbs): 40.00, Surface RPM: 40, Surface Torque (ft lbf): 24000.00, Flow Rate (gpm): 222.00, Strokes Per Minute: 650.00

Survey	46	12-12	18:10	18:15	12-12	11330.00	11330.00	Inclination (°): 88.310, Azimuth (°): 1.670, TVD (ft): 10219.58, Dogleg (°/100 ft): 1.65, Sensor Depth (ft): 11267.00, Bit To Sensor (ft): 63.00
Rotary Drill	1	12-12	18:15	19:10	12-12	11330.00	11426.00	Pressure On (psi): 3700.00, Pressure Off (psi): 3220.00, Weight On Bit (klbs): 40.00, Surface RPM: 40, Surface Torque (ft lbf): 24000.00, Flow Rate (gpm): 650.00, Strokes Per Minute: 225.00
Survey	46	12-12	19:10	19:15	12-12	11426.00	11426.00	Inclination (°): 89.490, Azimuth (°): 1.580, TVD (ft): 10221.42, Dogleg (°/100 ft): 1.23, Sensor Depth (ft): 11363.00, Bit To Sensor (ft): 63.00
Rotary Drill	1	12-12	19:15	19:20	12-12	11426.00	11434.00	Pressure On (psi): 3700.00, Pressure Off (psi): 3220.00, Weight On Bit (klbs): 40.00, Surface RPM: 40, Surface Torque (ft lbf): 24000.00, Flow Rate (gpm): 650.00, Strokes Per Minute: 225.00
Slide Drill	2	12-12	19:20	19:25	12-12	11434.00	11446.00	Pressure On (psi): 3600.00, Pressure Off (psi): 3250.00, Weight On Bit (klbs): 31.00, Flow Rate (gpm): 650.00, Strokes Per Minute: 225, Toolface: 200, Toolface Type: gravity
Rotary Drill	1	12-12	19:25	20:30	12-12	11446.00	11522.00	Pressure On (psi): 3700.00, Pressure Off (psi): 3220.00, Weight On Bit (klbs): 40.00, Surface RPM: 40, Surface Torque (ft lbf): 24000.00, Flow Rate (gpm): 650.00, Strokes Per Minute: 225.00
Survey	46	12-12	20:30	20:35	12-12	11522.00	11522.00	Inclination (°): 89.190, Azimuth (°): 0.960, TVD (ft): 10222.53, Dogleg (°/100 ft): 0.72, Sensor Depth (ft): 11459.00, Bit To Sensor (ft): 63.00
Rotary Drill	1	12-12	20:35	20:40	12-12	11522.00	11527.00	Pressure On (psi): 3700.00, Pressure Off (psi): 3220.00, Weight On Bit (klbs): 40.00, Surface RPM: 40, Surface Torque (ft lbf): 24000.00, Flow Rate (gpm): 650.00, Strokes Per Minute: 225.00
Slide Drill	2	12-12	20:40	20:50	12-12	11527.00	11542.00	Pressure On (psi): 3600.00, Pressure Off (psi): 3250.00, Weight On Bit (klbs): 31.00, Flow Rate (gpm): 650.00, Strokes Per Minute: 225, Toolface: 210, Toolface Type: gravity
Rotary Drill	1	12-12	20:50	21:40	12-12	11542.00	11617.00	Pressure On (psi): 3700.00, Pressure Off (psi): 3220.00, Weight On Bit (klbs): 40.00, Surface RPM: 40, Surface Torque (ft lbf): 24000.00, Flow Rate (gpm): 650.00, Strokes Per Minute: 225.00
Survey	46	12-12	21:40	21:45	12-12	11617.00	11617.00	Inclination (°): 88.440, Azimuth (°): 359.730, TVD (ft): 10224.49, Dogleg (°/100 ft): 1.52, Sensor Depth (ft): 11554.00, Bit To Sensor (ft): 63.00
Rotary Drill	1	12-12	21:45	22:50	12-12	11617.00	11713.00	Pressure On (psi): 3700.00, Pressure Off (psi): 3220.00, Weight On Bit (klbs): 40.00, Surface RPM: 40, Surface Torque (ft lbf): 24000.00, Flow Rate (gpm): 650.00, Strokes Per Minute: 225.00
Survey	46	12-12	22:50	22:55	12-12	11713.00	11713.00	Inclination (°): 89.140, Azimuth (°): 358.680, TVD (ft): 10226.52, Dogleg (°/100 ft): 1.31, Sensor Depth (ft): 11650.00, Bit To Sensor (ft): 63.00
Rotary Drill	1	12-12	22:55	23:50	12-12	11713.00	11808.00	Pressure On (psi): 3700.00, Pressure Off (psi): 3220.00, Weight On Bit (klbs): 40.00, Surface RPM: 40, Surface Torque (ft lbf): 24000.00, Flow Rate (gpm): 650.00, Strokes Per Minute: 225.00
Survey	46	12-12	23:50	23:55	12-12	11808.00	11808.00	Inclination (°): 90.200, Azimuth (°): 358.060, TVD (ft): 10227.07, Dogleg (°/100 ft): 1.29, Sensor Depth (ft): 11745.00, Bit To Sensor (ft): 63.00
Rotary Drill	1	12-12	23:55	00:00	12-13	11808.00	11814.00	Pressure On (psi): 3700.00, Pressure Off (psi): 3220.00, Weight On Bit (klbs): 40.00, Surface RPM: 40, Surface Torque (ft lbf): 24000.00, Flow Rate (gpm): 650.00, Strokes Per Minute: 225.00

MWD Activities

No Activities



Job Number WT-21-179	Operator Advance Energy Partners	Rig Name Nabors X47
Start Date 2021-11-15	Well Name Anderson Fed Com 508H	Legal Well Name AFE Anderson Fed Com 508H
Play Delaware Basin	State/Province and Country New Mexico, US	County Lea
		Company Man

Monday, Dec 13 00:00 - 23:59 (Day 14 of 21)

Billing: \$9,000.00 (\$153,503.78 total)

Drilling Summary				Drilling Parameters	
Start Depth (ft)	11814.00	Downhole Hours	24.00	Rotating WOB (klbs)	40.00 - 42.00
Bit Depth (ft)	13337.00	Drilling Hours	21.83	Sliding WOB (klbs)	31.00 - 45.00
Bottom Hole Depth (ft)	13337.00	Hours Circulating	0.58	Rotating SPM	225.00 - 225.00
Total Distance (ft)	1523.00	Hours Sliding	4.25	Sliding SPM	225.00 - 225.00
Distance Rotated (ft)	1339.00	Hours Rotating	17.58	Motor RPM	0.00 - 0.00
Distance Slid (ft)	184.00			Surface RPM	30.00 - 40.00
Inclination In	88.40			Flow Rate (gpm)	650.00 - 650.00
Inclination Out	89.27			On Bottom Pressure (psi)	3600.00 - 3950.00
Azimuth In	358.24	% Hours Rotating	81%	Off Bottom Pressure (psi)	3200.00 - 3400.00
Azimuth Out	359.73	% Hours Sliding	19%		
AVG Total ROP (ft/h)	70.61	% Distance Sliding	12%		
AVG Rotating ROP (ft/h)	76.80	% Distance Rotating	88%		
AVG Sliding ROP (ft/h)	43.29				

Personnel

Name	Position
Eddie Sheppard	Directional Driller
Advance Nabors X47	Directional Driller
Francisco DeLeon	MWD Engineer
Kyle Kusak	MWD Engineer

BHA #6 - 8.75" LATERAL ASSEMBLY

Date In: Dec 11, 2021, 22:30 Date Out: Dec 16, 2021, 14:00

Bit Details		Motor Details		Directional Comments
OD (in)	8.750	Size (in)	7.0	(BICO)7" SSS100 Motor: 1.75° FXD 7/8 6.1 Stg w/ SLICK, Flow Range: 300-700 GPM, Max Diff: 1,800 psi, Max Torque: 17,100 ft/lbs, RPG: 0.25 Bit Runs: 2
Vendor	REED	Lobe/Stage	7/8, 6.1	
S/N	A281412	Bend Angle	1.75	
Nozzles	7X14's	Speed (rev/gal)	0.25	MWD Comments
Total Flow Area (in²)	1.520	Wear Pad OD (in)	7.250	
Drilling Hours for Day	21.83	Bit Distances		
Total Drilled for Day (ft)	1523.00	Survey (Bit To Survey): 63.00 ft, Bend (Bit To Bend): 5.23 ft, Gamma (Bit to Gamma): 39.00 ft		POOH Reason
Drilling Hours for BHA	89.42			
Total Drilled for BHA (ft)	5623.00			
				Other: POOH for slow ROP, motor drained well and had minimal slack in between bit and power section, no visible damage

Directional Items

Description	Vendor	SN#	Top Conn	Btm Conn	ID (in)	OD (in)	Fn Len. (ft)	Len (ft)	Aggr. Len (ft)
Bit (Fixed Cutter) Description: <i>TKC76-U1</i> , Type: <i>PDC (Polycrystalline Diamond Compacts)</i> , Gauge Length (in): <i>1.00</i> , Size (in): <i>8.75</i>	REED	A281412	4 1/2" Reg Pin			8.750		1.00	1.00
Mud Motor Description: <i>7" BICO Motor 7/8 6.1 1.75 Fxd / SLK</i> , Size (in): <i>7.00</i> , Bend Angle (°): <i>1.75</i> , Rotor Lobe: <i>7</i> , Stator Lobe: <i>8</i> , Stator Stage: <i>6.1</i>	Bico	BPB5700-0069	4 1/2" IF Box	4 1/2" Reg Box		7.000		30.23	31.23
Other Description: <i>Resistivity Tool NM</i>	Benchtree	650-1010	4 1/2" IF Box	4 1/2" IF Pin	3.250	6.500		31.27	62.50
Other Description: <i>Battery Sub NM</i>	Benchtree	B6003xx	4 1/2" IF Box	4 1/2" IF Pin	3.250	6.500		17.21	79.71
Drill Collar Description: <i>6.75" NMDC</i> , Material: <i>Non-Magnetic</i> , Type: <i>Slick Drill</i>	Gator Tech	6730196	4 1/2" IF Box	4 1/2" IF Pin	3.300	6.750		28.94	108.65
Crossover Sub Description: <i>Crossover</i> , Material: <i>Steel</i>	PLATINUM	PPR6255	CET54 Box	4 1/2" IF Pin	2.500	6.460		3.44	112.09
Drill Pipe Description: <i>20 Stands of 5.5" DP</i> , Type: <i>Slick</i>	RIG		CET54 Box	CET54 Box	2.520	5.500		1913.72	2025.81
Crossover Sub Description: <i>Crossover</i> , Material: <i>Steel</i>	PLATINUM	PPR7092	CET54 Box	4 1/2" IF Pin	2.500	6.460		3.50	2029.31
Agitator Description: <i>ADJITATOR w/ 1.85 Plt Size</i> , Size (in): <i>7.00</i>	NOV	AGHF0675-0078	4 1/2" IF Box	4 1/2" IF Pin		7.000		24.95	2054.26
Crossover Sub Description: <i>Crossover</i> , Material: <i>Steel</i>	PLATINUM	PPR6255	4 1/2" IF Box	CET54 Pin	2.500	6.460		3.44	2057.70

MWD Items

No items

Directional Activities

Activity Type	Code	Start Date	Start Time	End Time	End Date	Start (ft)	End (ft)	Comments/Details
Rotary Drill	1	12-12	23:55	00:00	12-13	11808.00	11814.00	Pressure On (psi): 3700.00, Pressure Off (psi): 3220.00, Weight On Bit (klbs): 40.00, Surface RPM: 40, Surface Torque (ft lbf): 24000.00, Flow Rate (gpm): 650.00, Strokes Per Minute: 225.00
Slide Drill	2	12-13	00:00	00:15	12-13	11814.00	11829.00	Pressure On (psi): 3600.00, Pressure Off (psi): 3250.00, Weight On Bit (klbs): 31.00, Flow Rate (gpm): 650.00, Strokes Per Minute: 225, Toolface: 150, Toolface Type: gravity
Rotary Drill	1	12-13	00:15	01:05	12-13	11829.00	11903.00	Pressure On (psi): 3700.00, Pressure Off (psi): 3220.00, Weight On Bit (klbs): 40.00, Surface RPM: 40, Surface Torque (ft lbf): 24000.00, Flow Rate (gpm): 650.00, Strokes Per Minute: 225.00
Survey	46	12-13	01:05	01:10	12-13	11903.00	11903.00	Inclination (°): 88.400, Azimuth (°): 358.240, TVD (ft): 10228.23, Dogleg (°/100 ft): 1.13, Sensor Depth (ft): 11840.00, Bit To Sensor (ft): 63.00
Rotary Drill	1	12-13	01:10	02:00	12-13	11903.00	11999.00	
Survey	46	12-13	02:00	02:05	12-13	11999.00	11999.00	Inclination (°): 87.910, Azimuth (°): 357.270, TVD (ft): 10231.32, Dogleg (°/100 ft): 1.13, Sensor Depth (ft): 11936.00, Bit To Sensor (ft): 63.00
Rotary Drill	1	12-13	02:05	02:10	12-13	11999.00	12005.00	Pressure On (psi): 3750.00, Pressure Off (psi): 3220.00, Weight On Bit (klbs): 41.00, Surface RPM: 40, Surface Torque (ft lbf): 24000.00, Flow Rate (gpm): 650.00, Strokes Per Minute: 225.00
Slide Drill	2	12-13	02:10	02:20	12-13	12005.00	12020.00	Pressure On (psi): 3650.00, Pressure Off (psi): 3250.00, Weight On Bit (klbs): 31.00, Flow Rate (gpm): 650.00, Strokes Per Minute: 225, Toolface: 50, Toolface Type: gravity
Rotary Drill	1	12-13	02:20	03:20	12-13	12020.00	12094.00	Pressure On (psi): 3750.00, Pressure Off (psi): 3220.00, Weight On Bit (klbs): 41.00, Surface RPM: 40, Surface Torque (ft lbf): 24000.00, Flow Rate (gpm): 650.00, Strokes Per Minute: 225.00
Survey	46	12-13	03:20	03:25	12-13	12094.00	12094.00	Inclination (°): 89.050, Azimuth (°): 357.360, TVD (ft): 10233.84, Dogleg (°/100 ft): 1.20, Sensor Depth (ft): 12031.00, Bit To Sensor (ft): 63.00
Rotary Drill	1	12-13	03:25	03:30	12-13	12094.00	12100.00	Pressure On (psi): 3750.00, Pressure Off (psi): 3220.00, Weight On Bit (klbs): 41.00, Surface RPM: 40, Surface Torque (ft lbf): 24000.00, Flow Rate (gpm): 650.00, Strokes Per Minute: 225.00
Slide Drill	2	12-13	03:30	03:45	12-13	12100.00	12125.00	Pressure On (psi): 3650.00, Pressure Off (psi): 3250.00, Weight On Bit (klbs): 31.00, Flow Rate (gpm): 650.00, Strokes Per Minute: 225, Toolface: 60, Toolface Type: gravity
Rotary Drill	1	12-13	03:45	04:25	12-13	12125.00	12172.00	Pressure On (psi): 3750.00, Pressure Off (psi): 3220.00, Weight On Bit (klbs): 41.00, Surface RPM: 40, Surface Torque (ft lbf): 24000.00, Flow Rate (gpm): 650.00, Strokes Per Minute: 225.00
Circulating	3	12-13	04:25	05:00	12-13			Down Link MWD Tool
Rotary Drill	1	12-13	05:00	05:15	12-13	12172.00	12190.00	Pressure On (psi): 3700.00, Pressure Off (psi): 3220.00, Weight On Bit (klbs): 40.00, Surface RPM: 40, Surface Torque (ft lbf): 24000.00, Flow Rate (gpm): 650.00, Strokes Per Minute: 225.00
Survey	46	12-13	05:15	05:20	12-13	12190.00	12190.00	Inclination (°): 92.530, Azimuth (°): 0.430, TVD (ft): 10232.51, Dogleg (°/100 ft): 4.83, Sensor Depth (ft): 12127.00, Bit To Sensor (ft): 63.00
Rotary Drill	1	12-13	05:20	05:25	12-13	12190.00	12199.00	Pressure On (psi): 3700.00, Pressure Off (psi): 3220.00, Weight On Bit (klbs): 40.00, Surface RPM: 40, Surface Torque (ft lbf): 24000.00, Flow Rate (gpm): 650.00, Strokes Per Minute: 225.00
Slide Drill	2	12-13	05:25	05:40	12-13	12199.00	12214.00	Pressure On (psi): 3650.00, Pressure Off (psi): 3250.00, Weight On Bit (klbs): 31.00, Flow Rate (gpm): 650.00, Strokes Per Minute: 225, Toolface: 180, Toolface Type: gravity
Rotary Drill	1	12-13	05:40	06:40	12-13	12214.00	12285.00	Pressure On (psi): 3700.00, Pressure Off (psi): 3220.00, Weight On Bit (klbs): 40.00, Surface RPM: 40, Surface Torque (ft lbf): 24000.00, Flow Rate (gpm): 650.00, Strokes Per Minute: 225.00
Survey	46	12-13	06:40	06:45	12-13	12285.00	12285.00	Inclination (°): 91.870, Azimuth (°): 0.260, TVD (ft): 10228.87, Dogleg (°/100 ft): 0.72, Sensor Depth (ft): 12222.00, Bit To Sensor (ft): 63.00
Rotary Drill	1	12-13	06:45	06:55	12-13	12285.00	12300.00	Pressure On (psi): 3700.00, Pressure Off (psi): 3220.00, Weight On Bit (klbs): 40.00, Surface RPM: 40, Surface Torque (ft lbf): 24000.00, Flow Rate (gpm): 650.00, Strokes Per Minute: 225.00
Slide Drill	2	12-13	06:55	07:35	12-13	12300.00	12330.00	Toolface: 160, Toolface Type: gravity
Rotary Drill	1	12-13	07:35	08:15	12-13	12330.00	12381.00	Pressure On (psi): 3700.00, Pressure Off (psi): 3220.00, Weight On Bit (klbs): 40.00, Surface RPM: 40, Surface Torque (ft lbf): 24000.00, Flow Rate (gpm): 650.00, Strokes Per Minute: 225.00
Survey	46	12-13	08:15	08:20	12-13	12381.00	12381.00	Inclination (°): 90.370, Azimuth (°): 359.560, TVD (ft): 10226.99, Dogleg (°/100 ft): 1.72, Sensor Depth (ft): 12318.00, Bit To Sensor (ft): 63.00
Rotary Drill	1	12-13	08:20	08:25	12-13	12381.00	12400.00	Pressure On (psi): 3700.00, Pressure Off (psi): 3220.00, Weight On Bit (klbs): 40.00, Surface RPM: 40, Surface Torque (ft lbf): 24000.00, Flow Rate (gpm): 650.00, Strokes Per Minute: 225.00
Slide Drill	2	12-13	08:25	08:45	12-13	12400.00	12412.00	Toolface: 160, Toolface Type: gravity
Rotary Drill	1	12-13	08:45	09:15	12-13	12412.00	12477.00	

Survey	46	12-13	09:15	09:20	12-13	12477.00	12477.00	Inclination (°): 89.670, Azimuth (°): 1.050, TVD (ft): 10226.96, Dogleg (°/100 ft): 1.71, Sensor Depth (ft): 12414.00, Bit To Sensor (ft): 63.00
Rotary Drill	1	12-13	09:20	10:25	12-13	12477.00	12572.00	Pressure On (psi): 3700.00, Pressure Off (psi): 3200.00, Weight On Bit (klbs): 42.00, Surface RPM: 30, Surface Torque (ft lbf): 22000.00, Flow Rate (gpm): 650.00, Strokes Per Minute: 225.00
Survey	46	12-13	10:25	10:30	12-13	12572.00	12572.00	Inclination (°): 89.800, Azimuth (°): 0.170, TVD (ft): 10227.40, Dogleg (°/100 ft): 0.94, Sensor Depth (ft): 12509.00, Bit To Sensor (ft): 63.00
Rotary Drill	1	12-13	10:30	11:30	12-13	12572.00	12668.00	Pressure On (psi): 3700.00, Pressure Off (psi): 3200.00, Weight On Bit (klbs): 42.00, Surface RPM: 30, Surface Torque (ft lbf): 22000.00, Flow Rate (gpm): 650.00, Strokes Per Minute: 225.00
Survey	46	12-13	11:30	11:35	12-13	12668.00	12668.00	Inclination (°): 91.160, Azimuth (°): 0.000, TVD (ft): 10226.59, Dogleg (°/100 ft): 1.43, Sensor Depth (ft): 12605.00, Bit To Sensor (ft): 63.00
Rotary Drill	1	12-13	11:35	13:50	12-13	12668.00	12763.00	
Survey	46	12-13	13:50	13:55	12-13	12763.00	12763.00	Inclination (°): 91.380, Azimuth (°): 358.770, TVD (ft): 10224.49, Dogleg (°/100 ft): 1.31, Sensor Depth (ft): 12700.00, Bit To Sensor (ft): 63.00
Rotary Drill	1	12-13	13:55	14:30	12-13	12763.00	12785.00	Pressure On (psi): 3950.00, Pressure Off (psi): 3400.00, Weight On Bit (klbs): 42.00, Surface RPM: 30, Surface Torque (ft lbf): 26000.00, Flow Rate (gpm): 650.00, Strokes Per Minute: 225.00
Slide Drill	2	12-13	14:30	14:55	12-13	12785.00	12790.00	Toolface: 30, Toolface Type: gravity
Rotary Drill	1	12-13	14:55	15:55	12-13	12790.00	12859.00	Pressure On (psi): 3950.00, Pressure Off (psi): 3400.00, Weight On Bit (klbs): 42.00, Surface RPM: 30, Surface Torque (ft lbf): 26000.00, Flow Rate (gpm): 650.00, Strokes Per Minute: 225.00
Survey	46	12-13	15:55	16:00	12-13	12859.00	12859.00	Inclination (°): 93.010, Azimuth (°): 359.200, TVD (ft): 10220.81, Dogleg (°/100 ft): 1.76, Sensor Depth (ft): 12796.00, Bit To Sensor (ft): 63.00
Rotary Drill	1	12-13	16:00	16:05	12-13	12859.00	12869.00	Pressure On (psi): 3950.00, Pressure Off (psi): 3400.00, Weight On Bit (klbs): 42.00, Surface RPM: 30, Surface Torque (ft lbf): 26000.00, Flow Rate (gpm): 650.00, Strokes Per Minute: 225.00
Slide Drill	2	12-13	16:05	17:05	12-13	12869.00	12884.00	Toolface: 16, Toolface Type: gravity
Rotary Drill	1	12-13	17:05	18:00	12-13	12884.00	12955.00	Pressure On (psi): 3950.00, Pressure Off (psi): 3400.00, Weight On Bit (klbs): 42.00, Surface RPM: 30, Surface Torque (ft lbf): 26000.00, Flow Rate (gpm): 650.00, Strokes Per Minute: 225.00
Survey	46	12-13	18:00	18:05	12-13	12955.00	12955.00	Inclination (°): 92.040, Azimuth (°): 359.290, TVD (ft): 10216.58, Dogleg (°/100 ft): 1.01, Sensor Depth (ft): 12892.00, Bit To Sensor (ft): 63.00
Rotary Drill	1	12-13	18:05	18:10	12-13	12955.00	12961.00	Pressure On (psi): 3950.00, Pressure Off (psi): 3400.00, Weight On Bit (klbs): 42.00, Surface RPM: 30, Surface Torque (ft lbf): 26000.00, Flow Rate (gpm): 650.00, Strokes Per Minute: 225.00
Slide Drill	2	12-13	18:10	18:20	12-13	12961.00	12976.00	Pressure On (psi): 3750.00, Pressure Off (psi): 3300.00, Weight On Bit (klbs): 45.00, Flow Rate (gpm): 650.00, Strokes Per Minute: 225, Toolface: 130, Toolface Type: gravity
Rotary Drill	1	12-13	18:20	18:55	12-13	12976.00	13051.00	Pressure On (psi): 3950.00, Pressure Off (psi): 3400.00, Weight On Bit (klbs): 42.00, Surface RPM: 30, Surface Torque (ft lbf): 26000.00, Flow Rate (gpm): 650.00, Strokes Per Minute: 225.00
Survey	46	12-13	18:55	19:00	12-13	13051.00	13051.00	Inclination (°): 92.220, Azimuth (°): 0.790, TVD (ft): 10213.01, Dogleg (°/100 ft): 1.57, Sensor Depth (ft): 12988.00, Bit To Sensor (ft): 63.00
Rotary Drill	1	12-13	19:00	19:05	12-13	13051.00	13060.00	Pressure On (psi): 3950.00, Pressure Off (psi): 3400.00, Weight On Bit (klbs): 42.00, Surface RPM: 30, Surface Torque (ft lbf): 26000.00, Flow Rate (gpm): 650.00, Strokes Per Minute: 225.00
Slide Drill	2	12-13	19:05	19:30	12-13	13060.00	13085.00	Pressure On (psi): 3750.00, Pressure Off (psi): 3300.00, Weight On Bit (klbs): 45.00, Flow Rate (gpm): 650.00, Strokes Per Minute: 225, Toolface: 180, Toolface Type: gravity
Rotary Drill	1	12-13	19:30	20:40	12-13	13085.00	13146.00	Pressure On (psi): 3950.00, Pressure Off (psi): 3400.00, Weight On Bit (klbs): 42.00, Surface RPM: 30, Surface Torque (ft lbf): 26000.00, Flow Rate (gpm): 650.00, Strokes Per Minute: 225.00
Survey	46	12-13	20:40	20:45	12-13	13146.00	13146.00	Inclination (°): 91.160, Azimuth (°): 0.080, TVD (ft): 10210.21, Dogleg (°/100 ft): 1.34, Sensor Depth (ft): 13083.00, Bit To Sensor (ft): 63.00
Rotary Drill	1	12-13	20:45	20:50	12-13	13146.00	13151.00	Pressure On (psi): 3950.00, Pressure Off (psi): 3400.00, Weight On Bit (klbs): 42.00, Surface RPM: 30, Surface Torque (ft lbf): 26000.00, Flow Rate (gpm): 650.00, Strokes Per Minute: 225.00
Slide Drill	2	12-13	20:50	21:10	12-13	13151.00	13163.00	Pressure On (psi): 3750.00, Pressure Off (psi): 3300.00, Weight On Bit (klbs): 45.00, Flow Rate (gpm): 650.00, Strokes Per Minute: 225, Toolface: 180, Toolface Type: gravity
Rotary Drill	1	12-13	21:10	22:10	12-13	13163.00	13242.00	Pressure On (psi): 3950.00, Pressure Off (psi): 3400.00, Weight On Bit (klbs): 42.00, Surface RPM: 30, Surface Torque (ft lbf): 26000.00, Flow Rate (gpm): 650.00, Strokes Per Minute: 225.00
Survey	46	12-13	22:10	22:15	12-13	13242.00	13242.00	Inclination (°): 88.750, Azimuth (°): 0.260, TVD (ft): 10210.28, Dogleg (°/100 ft): 2.52, Sensor Depth (ft): 13179.00, Bit To Sensor (ft): 63.00

Rotary Drill	1	12-13	22:15	23:40	12-13	13242.00	13337.00	Pressure On (psi): 3950.00, Pressure Off (psi): 3400.00, Weight On Bit (klbs): 42.00, Surface RPM: 30, Surface Torque (ft lbf): 26000.00, Flow Rate (gpm): 650.00, Strokes Per Minute: 225.00
Survey	46	12-13	23:40	23:45	12-13	13337.00	13337.00	Inclination (°): 89.270, Azimuth (°): 359.730, TVD (ft): 10211.93, Dogleg (°/100 ft): 0.78, Sensor Depth (ft): 13274.00, Bit To Sensor (ft): 63.00
Rotary Drill	1	12-13	23:45	00:50	12-14	13337.00	13432.00	Pressure On (psi): 3950.00, Pressure Off (psi): 3400.00, Weight On Bit (klbs): 42.00, Surface RPM: 30, Surface Torque (ft lbf): 26000.00, Flow Rate (gpm): 650.00, Strokes Per Minute: 225.00

MWD Activities

No Activities



Job Number WT-21-179	Operator Advance Energy Partners	Rig Name Nabors X47
Start Date 2021-11-15	Well Name Anderson Fed Com 508H	Legal Well Name AFE Anderson Fed Com 508H
Play Delaware Basin	State/Province and Country New Mexico, US	County Lea
		Company Man

Tuesday, Dec 14 00:00 - 23:59 (Day 15 of 21)

Billing: \$9,500.00 (\$153,503.78 total)

Drilling Summary				Drilling Parameters	
Start Depth (ft)	13337.00	Downhole Hours	24.00	Rotating WOB (klbs)	42.00 - 42.00
Bit Depth (ft)	14726.00	Drilling Hours	22.50	Sliding WOB (klbs)	28.00 - 45.00
Bottom Hole Depth (ft)	14726.00	Hours Circulating	0.00	Rotating SPM	225.00 - 225.00
Total Distance (ft)	1389.00	Hours Sliding	5.00	Sliding SPM	225.00 - 243.00
Distance Rotated (ft)	1219.00	Hours Rotating	17.50	Motor RPM	0.00 - 0.00
Distance Slid (ft)	170.00			Surface RPM	30.00 - 30.00
Inclination In	91.08			Flow Rate (gpm)	650.00 - 700.00
Inclination Out	89.54			On Bottom Pressure (psi)	3750.00 - 4200.00
Azimuth In	358.68	% Hours Rotating	78%	Off Bottom Pressure (psi)	3300.00 - 3800.00
Azimuth Out	1.49	% Hours Sliding	22%		
AVG Total ROP (ft/h)	61.48	% Distance Sliding	12%		
AVG Rotating ROP (ft/h)	69.66	% Distance Rotating	88%		
AVG Sliding ROP (ft/h)	35.45				

Personnel

Name	Position
Eddie Sheppard	Directional Driller
Advance Nabors X47	Directional Driller
Francisco DeLeon	MWD Engineer
Kyle Kusak	MWD Engineer

BHA #6 - 8.75" LATERAL ASSEMBLY

Date In: Dec 11, 2021, 22:30 Date Out: Dec 16, 2021, 14:00

Bit Details		Motor Details		Directional Comments
OD (in)	8.750	Size (in)	7.0	(BICO)7" SSS100 Motor: 1.75° FXD 7/8 6.1 Stg w/ SLICK, Flow Range: 300-700 GPM, Max Diff: 1,800 psi, Max Torque: 17,100 ft/lbs, RPG: 0.25 Bit Runs: 2
Vendor	REED	Lobe/Stage	7/8, 6.1	
S/N	A281412	Bend Angle	1.75	
Nozzles	7X14's	Speed (rev/gal)	0.25	
Total Flow Area (in²)	1.520	Wear Pad OD (in)	7.250	MWD Comments
Drilling Hours for Day	22.50	Bit Distances		
Total Drilled for Day (ft)	1389.00	Survey (Bit To Survey): 63.00 ft, Bend (Bit To Bend): 5.23 ft, Gamma (Bit to Gamma): 39.00 ft		
Drilling Hours for BHA	89.42			
Total Drilled for BHA (ft)	5623.00			POOH Reason
				Other: POOH for slow ROP, motor drained well and had minimal slack in between bit and power section, no visible damage

Directional Items

Description	Vendor	SN#	Top Conn	Btm Conn	ID (in)	OD (in)	Fn Len. (ft)	Len (ft)	Aggr. Len (ft)
Bit (Fixed Cutter) Description: <i>TKC 76-U1</i> , Type: <i>PDC (Polycrystalline Diamond Compacts)</i> , Gauge Length (in): <i>1.00</i> , Size (in): <i>8.75</i>	REED	A281412	4 1/2" Reg Pin			8.750		1.00	1.00
Mud Motor Description: <i>7" BICO Motor 7/8 6.1 1.75 Fxd / SLK</i> , Size (in): <i>7.00</i> , Bend Angle (°): <i>1.75</i> , Rotor Lobe: <i>7</i> , Stator Lobe: <i>8</i> , Stator Stage: <i>6.1</i>	Bico	BPB5700-0069	4 1/2" IF Box	4 1/2" Reg Box		7.000		30.23	31.23
Other Description: <i>Resistivity Tool NM</i>	Benchtree	650-1010	4 1/2" IF Box	4 1/2" IF Pin	3.250	6.500		31.27	62.50
Other Description: <i>Battery Sub NM</i>	Benchtree	B6003xx	4 1/2" IF Box	4 1/2" IF Pin	3.250	6.500		17.21	79.71
Drill Collar Description: <i>6.75" NMDC</i> , Material: <i>Non-Magnetic</i> , Type: <i>Slick Drill</i>	Gator Tech	6730196	4 1/2" IF Box	4 1/2" IF Pin	3.300	6.750		28.94	108.65
Crossover Sub Description: <i>Crossover</i> , Material: <i>Steel</i>	PLATINUM	PPR6255	CET54 Box	4 1/2" IF Pin	2.500	6.460		3.44	112.09
Drill Pipe Description: <i>20 Stands of 5.5" DP</i> , Type: <i>Slick</i>	RIG		CET54 Box	CET54 Box	2.520	5.500		1913.72	2025.81
Crossover Sub Description: <i>Crossover</i> , Material: <i>Steel</i>	PLATINUM	PPR7092	CET54 Box	4 1/2" IF Pin	2.500	6.460		3.50	2029.31
Agitator Description: <i>ADJITATOR w/ 1.85 Plt Size</i> , Size (in): <i>7.00</i>	NOV	AGHF0675-0078	4 1/2" IF Box	4 1/2" IF Pin		7.000		24.95	2054.26
Crossover Sub Description: <i>Crossover</i> , Material: <i>Steel</i>	PLATINUM	PPR6255	4 1/2" IF Box	CET54 Pin	2.500	6.460		3.44	2057.70

MWD Items

No items

Directional Activities

Activity Type	Code	Start Date	Start Time	End Time	End Date	Start (ft)	End (ft)	Comments/Details
Rotary Drill	1	12-13	23:45	00:50	12-14	13337.00	13432.00	Pressure On (psi): 3950.00, Pressure Off (psi): 3400.00, Weight On Bit (klbs): 42.00, Surface RPM: 30, Surface Torque (ft lbf): 26000.00, Flow Rate (gpm): 650.00, Strokes Per Minute: 225.00
Survey	46	12-14	00:50	00:55	12-14	13432.00	13432.00	Inclination (°): 91.080, Azimuth (°): 358.680, TVD (ft): 10211.64, Dogleg (°/100 ft): 2.20, Sensor Depth (ft): 13369.00, Bit To Sensor (ft): 63.00
Rotary Drill	1	12-14	00:55	01:40	12-14	13432.00	13527.00	Pressure On (psi): 3950.00, Pressure Off (psi): 3400.00, Weight On Bit (klbs): 42.00, Surface RPM: 30, Surface Torque (ft lbf): 26000.00, Flow Rate (gpm): 650.00, Strokes Per Minute: 225.00
Survey	46	12-14	01:40	01:45	12-14	13527.00	13527.00	Inclination (°): 91.120, Azimuth (°): 357.710, TVD (ft): 10209.81, Dogleg (°/100 ft): 1.02, Sensor Depth (ft): 13464.00, Bit To Sensor (ft): 63.00
Rotary Drill	1	12-14	01:45	02:50	12-14	13527.00	13623.00	Pressure On (psi): 3950.00, Pressure Off (psi): 3400.00, Weight On Bit (klbs): 42.00, Surface RPM: 30, Surface Torque (ft lbf): 26000.00, Flow Rate (gpm): 650.00, Strokes Per Minute: 225.00
Survey	46	12-14	02:50	02:55	12-14	13623.00	13623.00	Inclination (°): 91.250, Azimuth (°): 356.920, TVD (ft): 10207.83, Dogleg (°/100 ft): 0.83, Sensor Depth (ft): 13560.00, Bit To Sensor (ft): 63.00
Rotary Drill	1	12-14	02:55	03:00	12-14	13623.00	13628.00	Pressure On (psi): 3950.00, Pressure Off (psi): 3400.00, Weight On Bit (klbs): 42.00, Surface RPM: 30, Surface Torque (ft lbf): 26000.00, Flow Rate (gpm): 650.00, Strokes Per Minute: 225.00
Slide Drill	2	12-14	03:00	03:45	12-14	13628.00	13653.00	Pressure On (psi): 3750.00, Pressure Off (psi): 3300.00, Weight On Bit (klbs): 45.00, Flow Rate (gpm): 650.00, Strokes Per Minute: 225, Toolface: 120, Toolface Type: gravity
Rotary Drill	1	12-14	03:45	04:50	12-14	13653.00	13718.00	Pressure On (psi): 3950.00, Pressure Off (psi): 3400.00, Weight On Bit (klbs): 42.00, Surface RPM: 30, Surface Torque (ft lbf): 26000.00, Flow Rate (gpm): 650.00, Strokes Per Minute: 225.00
Survey	46	12-14	04:50	04:55	12-14	13718.00	13718.00	Inclination (°): 89.630, Azimuth (°): 357.890, TVD (ft): 10207.10, Dogleg (°/100 ft): 1.99, Sensor Depth (ft): 13655.00, Bit To Sensor (ft): 63.00
Rotary Drill	1	12-14	04:55	05:00	12-14	13718.00	13725.00	Pressure On (psi): 3950.00, Pressure Off (psi): 3400.00, Weight On Bit (klbs): 42.00, Surface RPM: 30, Surface Torque (ft lbf): 26000.00, Flow Rate (gpm): 650.00, Strokes Per Minute: 225.00
Slide Drill	2	12-14	05:00	05:15	12-14	13725.00	13740.00	Pressure On (psi): 3750.00, Pressure Off (psi): 3300.00, Weight On Bit (klbs): 45.00, Flow Rate (gpm): 650.00, Strokes Per Minute: 225, Toolface: 90, Toolface Type: gravity
Rotary Drill	1	12-14	05:15	06:25	12-14	13740.00	13813.00	Pressure On (psi): 3950.00, Pressure Off (psi): 3400.00, Weight On Bit (klbs): 42.00, Surface RPM: 30, Surface Torque (ft lbf): 26000.00, Flow Rate (gpm): 650.00, Strokes Per Minute: 225.00
Survey	46	12-14	06:25	06:30	12-14	13813.00	13813.00	Inclination (°): 89.010, Azimuth (°): 358.680, TVD (ft): 10208.23, Dogleg (°/100 ft): 1.06, Sensor Depth (ft): 13750.00, Bit To Sensor (ft): 63.00
Rotary Drill	1	12-14	06:30	07:45	12-14	13813.00	13909.00	Pressure On (psi): 3950.00, Pressure Off (psi): 3400.00, Weight On Bit (klbs): 42.00, Surface RPM: 30, Surface Torque (ft lbf): 26000.00, Flow Rate (gpm): 650.00, Strokes Per Minute: 225.00
Survey	46	12-14	07:45	07:50	12-14	13909.00	13909.00	Inclination (°): 89.190, Azimuth (°): 357.100, TVD (ft): 10209.73, Dogleg (°/100 ft): 1.66, Sensor Depth (ft): 13846.00, Bit To Sensor (ft): 63.00
Rotary Drill	1	12-14	07:50	07:55	12-14	13909.00	13919.00	Pressure On (psi): 3950.00, Pressure Off (psi): 3400.00, Weight On Bit (klbs): 42.00, Surface RPM: 30, Surface Torque (ft lbf): 26000.00, Flow Rate (gpm): 650.00, Strokes Per Minute: 225.00
Slide Drill	2	12-14	07:55	09:15	12-14	13919.00	13949.00	Toolface: 90, Toolface Type: gravity
Rotary Drill	1	12-14	09:15	10:00	12-14	13949.00	14004.00	Pressure On (psi): 3950.00, Pressure Off (psi): 3400.00, Weight On Bit (klbs): 42.00, Surface RPM: 30, Surface Torque (ft lbf): 26000.00, Flow Rate (gpm): 650.00, Strokes Per Minute: 225.00
Survey	46	12-14	10:00	10:05	12-14	14004.00	14004.00	Inclination (°): 90.370, Azimuth (°): 359.470, TVD (ft): 10210.10, Dogleg (°/100 ft): 2.79, Sensor Depth (ft): 13941.00, Bit To Sensor (ft): 63.00
Rotary Drill	1	12-14	10:05	10:25	12-14	14004.00	14019.00	Pressure On (psi): 3950.00, Pressure Off (psi): 3400.00, Weight On Bit (klbs): 42.00, Surface RPM: 30, Surface Torque (ft lbf): 26000.00, Flow Rate (gpm): 650.00, Strokes Per Minute: 225.00
Slide Drill	2	12-14	10:25	11:15	12-14	14019.00	14039.00	Toolface: 90, Toolface Type: gravity
Rotary Drill	1	12-14	11:15	11:35	12-14	14039.00	14049.00	Pressure On (psi): 3950.00, Pressure Off (psi): 3400.00, Weight On Bit (klbs): 42.00, Surface RPM: 30, Surface Torque (ft lbf): 26000.00, Flow Rate (gpm): 650.00, Strokes Per Minute: 225.00
Slide Drill	2	12-14	11:35	12:20	12-14	14049.00	14069.00	Toolface: 110, Toolface Type: gravity
Rotary Drill	1	12-14	12:20	12:45	12-14	14069.00	14100.00	Pressure On (psi): 3950.00, Pressure Off (psi): 3400.00, Weight On Bit (klbs): 42.00, Surface RPM: 30, Surface Torque (ft lbf): 26000.00, Flow Rate (gpm): 650.00, Strokes Per Minute: 225.00

Survey	46	12-14	12:45	12:50	12-14	14100.00	14100.00	Inclination (°): 92.130, Azimuth (°): 1.750, TVD (ft): 10208.00, Dogleg (%/100 ft): 3.00, Sensor Depth (ft): 14037.00, Bit To Sensor (ft): 63.00
Rotary Drill	1	12-14	12:50	14:20	12-14	14100.00	14195.00	Pressure On (psi): 3950.00, Pressure Off (psi): 3400.00, Weight On Bit (klbs): 42.00, Surface RPM: 30, Surface Torque (ft lbf): 26000.00, Flow Rate (gpm): 650.00, Strokes Per Minute: 225.00
Survey	46	12-14	14:20	14:25	12-14	14195.00	14195.00	Inclination (°): 91.250, Azimuth (°): 3.250, TVD (ft): 10205.20, Dogleg (%/100 ft): 1.83, Sensor Depth (ft): 14132.00, Bit To Sensor (ft): 63.00
Rotary Drill	1	12-14	14:25	16:25	12-14	14195.00	14291.00	Pressure On (psi): 3950.00, Pressure Off (psi): 3400.00, Weight On Bit (klbs): 42.00, Surface RPM: 30, Surface Torque (ft lbf): 26000.00, Flow Rate (gpm): 650.00, Strokes Per Minute: 225.00
Survey	46	12-14	16:25	16:40	12-14	14291.00	14291.00	Inclination (°): 90.370, Azimuth (°): 1.490, TVD (ft): 10203.84, Dogleg (%/100 ft): 2.05, Sensor Depth (ft): 14228.00, Bit To Sensor (ft): 63.00
Rotary Drill	1	12-14	16:40	17:50	12-14	14291.00	14387.00	Pressure On (psi): 3950.00, Pressure Off (psi): 3400.00, Weight On Bit (klbs): 42.00, Surface RPM: 30, Surface Torque (ft lbf): 26000.00, Flow Rate (gpm): 650.00, Strokes Per Minute: 225.00
Survey	46	12-14	17:50	17:55	12-14	14387.00	14387.00	Inclination (°): 90.770, Azimuth (°): 0.350, TVD (ft): 10202.89, Dogleg (%/100 ft): 1.26, Sensor Depth (ft): 14324.00, Bit To Sensor (ft): 63.00
Rotary Drill	1	12-14	17:55	19:20	12-14	14387.00	14482.00	Pressure On (psi): 3950.00, Pressure Off (psi): 3400.00, Weight On Bit (klbs): 42.00, Surface RPM: 30, Surface Torque (ft lbf): 26000.00, Flow Rate (gpm): 650.00, Strokes Per Minute: 225.00
Survey	46	12-14	19:20	19:25	12-14	14482.00	14482.00	Inclination (°): 92.260, Azimuth (°): 0.610, TVD (ft): 10200.38, Dogleg (%/100 ft): 1.59, Sensor Depth (ft): 14419.00, Bit To Sensor (ft): 63.00
Rotary Drill	1	12-14	19:25	19:30	12-14	14482.00	14489.00	Pressure On (psi): 3950.00, Pressure Off (psi): 3400.00, Weight On Bit (klbs): 42.00, Surface RPM: 30, Surface Torque (ft lbf): 26000.00, Flow Rate (gpm): 650.00, Strokes Per Minute: 225.00
Slide Drill	2	12-14	19:30	19:55	12-14	14489.00	14514.00	Pressure On (psi): 4200.00, Pressure Off (psi): 3800.00, Weight On Bit (klbs): 28.00, Flow Rate (gpm): 700.00, Strokes Per Minute: 243, Toolface: 180, Toolface Type: gravity
Rotary Drill	1	12-14	19:55	20:45	12-14	14514.00	14578.00	Pressure On (psi): 3950.00, Pressure Off (psi): 3400.00, Weight On Bit (klbs): 42.00, Surface RPM: 30, Surface Torque (ft lbf): 26000.00, Flow Rate (gpm): 650.00, Strokes Per Minute: 225.00
Survey	46	12-14	20:45	20:50	12-14	14578.00	14578.00	Inclination (°): 90.330, Azimuth (°): 2.810, TVD (ft): 10198.21, Dogleg (%/100 ft): 3.05, Sensor Depth (ft): 14515.00, Bit To Sensor (ft): 63.00
Rotary Drill	1	12-14	20:50	21:40	12-14	14578.00	14628.00	Pressure On (psi): 3950.00, Pressure Off (psi): 3400.00, Weight On Bit (klbs): 42.00, Surface RPM: 30, Surface Torque (ft lbf): 26000.00, Flow Rate (gpm): 650.00, Strokes Per Minute: 225.00
Survey	46	12-14	21:40	21:45	12-14	14628.00	14628.00	Inclination (°): 91.380, Azimuth (°): 3.340, TVD (ft): 10197.46, Dogleg (%/100 ft): 2.35, Sensor Depth (ft): 14565.00, Bit To Sensor (ft): 63.00
Slide Drill	2	12-14	21:45	22:25	12-14	14628.00	14663.00	Pressure On (psi): 4200.00, Pressure Off (psi): 3800.00, Weight On Bit (klbs): 28.00, Flow Rate (gpm): 700.00, Strokes Per Minute: 243, Toolface: 210, Toolface Type: gravity
Rotary Drill	1	12-14	22:25	23:35	12-14	14663.00	14726.00	Pressure On (psi): 3950.00, Pressure Off (psi): 3400.00, Weight On Bit (klbs): 42.00, Surface RPM: 30, Surface Torque (ft lbf): 26000.00, Flow Rate (gpm): 650.00, Strokes Per Minute: 225.00
Survey	46	12-14	23:35	23:40	12-14	14726.00	14726.00	Inclination (°): 89.540, Azimuth (°): 1.490, TVD (ft): 10196.67, Dogleg (%/100 ft): 2.66, Sensor Depth (ft): 14663.00, Bit To Sensor (ft): 63.00
Slide Drill	2	12-14	23:40	00:10	12-15	14726.00	14751.00	Pressure On (psi): 4200.00, Pressure Off (psi): 3800.00, Weight On Bit (klbs): 28.00, Flow Rate (gpm): 700.00, Strokes Per Minute: 243, Toolface: 220, Toolface Type: gravity

MWD Activities

No Activities



Job Number WT-21-179	Operator Advance Energy Partners	Rig Name Nabors X47
Start Date 2021-11-15	Well Name Anderson Fed Com 508H	Legal Well Name AFE Anderson Fed Com 508H
Play Delaware Basin	State/Province and Country New Mexico, US	County Lea
		Company Man

Wednesday, Dec 15 00:00 - 23:59 (Day 16 of 21)

Billing: \$9,500.00 (\$153,503.78 total)

Drilling Summary				Drilling Parameters	
Start Depth (ft)	14726.00	Downhole Hours	24.00	Rotating WOB (klbs)	42.00 - 42.00
Bit Depth (ft)	15825.00	Drilling Hours	22.42	Sliding WOB (klbs)	28.00 - 30.00
Bottom Hole Depth (ft)	15825.00	Hours Circulating	0.33	Rotating SPM	225.00 - 225.00
Total Distance (ft)	1099.00	Hours Sliding	6.25	Sliding SPM	243.00 - 243.00
Distance Rotated (ft)	904.00	Hours Rotating	16.17	Motor RPM	0.00 - 0.00
Distance Slid (ft)	195.00			Surface RPM	30.00 - 30.00
Inclination In	89.10			Flow Rate (gpm)	650.00 - 700.00
Inclination Out	94.15			On Bottom Pressure (psi)	3950.00 - 4260.00
Azimuth In	0.70	% Hours Rotating	72%	Off Bottom Pressure (psi)	3400.00 - 3960.00
Azimuth Out	356.57	% Hours Sliding	28%		
AVG Total ROP (ft/h)	48.04	% Distance Sliding	18%		
AVG Rotating ROP (ft/h)	55.92	% Distance Rotating	82%		
AVG Sliding ROP (ft/h)	30.68				

Personnel

Name	Position
Eddie Sheppard	Directional Driller
Advance Nabors X47	Directional Driller
Francisco DeLeon	MWD Engineer
Kyle Kusak	MWD Engineer

BHA #6 - 8.75" LATERAL ASSEMBLY

Date In: Dec 11, 2021, 22:30 Date Out: Dec 16, 2021, 14:00

Bit Details		Motor Details		Directional Comments
OD (in)	8.750	Size (in)	7.0	(BICO)7" SSS100 Motor: 1.75° FXD 7/8 6.1 Stg w/ SLICK, Flow Range: 300-700 GPM, Max Diff: 1,800 psi, Max Torque: 17,100 ft/lbs, RPG: 0.25 Bit Runs: 2
Vendor	REED	Lobe/Stage	7/8, 6.1	
S/N	A281412	Bend Angle	1.75	
Nozzles	7X14's	Speed (rev/gal)	0.25	MWD Comments
Total Flow Area (in²)	1.520	Wear Pad OD (in)	7.250	
Drilling Hours for Day	22.42	Bit Distances		
Total Drilled for Day (ft)	1099.00	Survey (Bit To Survey): 63.00 ft, Bend (Bit To Bend): 5.23 ft, Gamma (Bit to Gamma): 39.00 ft		POOH Reason Other: POOH for slow ROP, motor drained well and had minimal slack in between bit and power section, no visible damage
Drilling Hours for BHA	89.42			
Total Drilled for BHA (ft)	5623.00			

Directional Items

Description	Vendor	SN#	Top Conn	Btm Conn	ID (in)	OD (in)	Fn Len. (ft)	Len (ft)	Aggr. Len (ft)
Bit (Fixed Cutter) Description: <i>TKC 76-U1</i> , Type: <i>PDC (Polycrystalline Diamond Compacts)</i> , Gauge Length (in): <i>1.00</i> , Size (in): <i>8.75</i>	REED	A281412	4 1/2" Reg Pin			8.750		1.00	1.00
Mud Motor Description: <i>7" BICO Motor 7/8 6.1 1.75 Fxd / SLK</i> , Size (in): <i>7.00</i> , Bend Angle (°): <i>1.75</i> , Rotor Lobe: <i>7</i> , Stator Lobe: <i>8</i> , Stator Stage: <i>6.1</i>	Bico	BPB5700-0069	4 1/2" IF Box	4 1/2" Reg Box		7.000		30.23	31.23
Other Description: <i>Resistivity Tool NM</i>	Benchtree	650-1010	4 1/2" IF Box	4 1/2" IF Pin	3.250	6.500		31.27	62.50
Other Description: <i>Battery Sub NM</i>	Benchtree	B6003xx	4 1/2" IF Box	4 1/2" IF Pin	3.250	6.500		17.21	79.71
Drill Collar Description: <i>6.75" NMDC</i> , Material: <i>Non-Magnetic</i> , Type: <i>Slick Drill</i>	Gator Tech	6730196	4 1/2" IF Box	4 1/2" IF Pin	3.300	6.750		28.94	108.65
Crossover Sub Description: <i>Crossover</i> , Material: <i>Steel</i>	PLATINUM	PPR6255	CET54 Box	4 1/2" IF Pin	2.500	6.460		3.44	112.09
Drill Pipe Description: <i>20 Stands of 5.5" DP</i> , Type: <i>Slick</i>	RIG		CET54 Box	CET54 Box	2.520	5.500		1913.72	2025.81
Crossover Sub Description: <i>Crossover</i> , Material: <i>Steel</i>	PLATINUM	PPR7092	CET54 Box	4 1/2" IF Pin	2.500	6.460		3.50	2029.31
Agitator Description: <i>ADJITATOR w/ 1.85 Plt Size</i> , Size (in): <i>7.00</i>	NOV	AGHF0675-0078	4 1/2" IF Box	4 1/2" IF Pin		7.000		24.95	2054.26
Crossover Sub Description: <i>Crossover</i> , Material: <i>Steel</i>	PLATINUM	PPR6255	4 1/2" IF Box	CET54 Pin	2.500	6.460		3.44	2057.70

MWD Items

No items

Directional Activities

Activity Type	Code	Start Date	Start Time	End Time	End Date	Start (ft)	End (ft)	Comments/Details
Slide Drill	2	12-14	23:40	00:10	12-15	14726.00	14751.00	Pressure On (psi): 4200.00, Pressure Off (psi): 3800.00, Weight On Bit (klbs): 28.00, Flow Rate (gpm): 700.00, Strokes Per Minute: 243, Toolface: 220, Toolface Type: gravity
Rotary Drill	1	12-15	00:10	01:25	12-15	14751.00	14815.00	Pressure On (psi): 3950.00, Pressure Off (psi): 3400.00, Weight On Bit (klbs): 42.00, Surface RPM: 30, Surface Torque (ft lbf): 26000.00, Flow Rate (gpm): 650.00, Strokes Per Minute: 225.00
Survey	46	12-15	01:25	01:30	12-15	14815.00	14815.00	Inclination (°): 89.100, Azimuth (°): 0.700, TVD (ft): 10197.73, Dogleg (°/100 ft): 1.02, Sensor Depth (ft): 14752.00, Bit To Sensor (ft): 63.00
Rotary Drill	1	12-15	01:30	02:25	12-15	14815.00	14865.00	Pressure On (psi): 3950.00, Pressure Off (psi): 3400.00, Weight On Bit (klbs): 42.00, Surface RPM: 30, Surface Torque (ft lbf): 26000.00, Flow Rate (gpm): 650.00, Strokes Per Minute: 225.00
Survey	46	12-15	02:25	02:30	12-15	14865.00	14865.00	Inclination (°): 89.010, Azimuth (°): 0.960, TVD (ft): 10198.56, Dogleg (°/100 ft): 0.55, Sensor Depth (ft): 14802.00, Bit To Sensor (ft): 63.00
Rotary Drill	1	12-15	02:30	02:35	12-15	14865.00	14871.00	Pressure On (psi): 3950.00, Pressure Off (psi): 3400.00, Weight On Bit (klbs): 42.00, Surface RPM: 30, Surface Torque (ft lbf): 26000.00, Flow Rate (gpm): 650.00, Strokes Per Minute: 225.00
Slide Drill	2	12-15	02:35	03:05	12-15	14871.00	14886.00	Pressure On (psi): 4200.00, Pressure Off (psi): 3800.00, Weight On Bit (klbs): 28.00, Flow Rate (gpm): 700.00, Strokes Per Minute: 243, Toolface: 315, Toolface Type: gravity
Rotary Drill	1	12-15	03:05	04:25	12-15	14886.00	14961.00	Pressure On (psi): 3950.00, Pressure Off (psi): 3400.00, Weight On Bit (klbs): 42.00, Surface RPM: 30, Surface Torque (ft lbf): 26000.00, Flow Rate (gpm): 650.00, Strokes Per Minute: 225.00
Survey	46	12-15	04:25	04:30	12-15	14961.00	14961.00	Inclination (°): 90.810, Azimuth (°): 359.290, TVD (ft): 10198.71, Dogleg (°/100 ft): 2.56, Sensor Depth (ft): 14898.00, Bit To Sensor (ft): 63.00
Rotary Drill	1	12-15	04:30	04:35	12-15	14961.00	14967.00	Pressure On (psi): 3950.00, Pressure Off (psi): 3400.00, Weight On Bit (klbs): 42.00, Surface RPM: 30, Surface Torque (ft lbf): 26000.00, Flow Rate (gpm): 650.00, Strokes Per Minute: 225.00
Slide Drill	2	12-15	04:35	05:05	12-15	14967.00	14982.00	Pressure On (psi): 4200.00, Pressure Off (psi): 3800.00, Weight On Bit (klbs): 28.00, Flow Rate (gpm): 700.00, Strokes Per Minute: 243, Toolface: 320, Toolface Type: gravity
Rotary Drill	1	12-15	05:05	06:30	12-15	14982.00	15056.00	Pressure On (psi): 3950.00, Pressure Off (psi): 3400.00, Weight On Bit (klbs): 42.00, Surface RPM: 30, Surface Torque (ft lbf): 26000.00, Flow Rate (gpm): 650.00, Strokes Per Minute: 225.00
Survey	46	12-15	06:30	06:35	12-15	15056.00	15056.00	Inclination (°): 91.080, Azimuth (°): 358.410, TVD (ft): 10197.14, Dogleg (°/100 ft): 0.97, Sensor Depth (ft): 14993.00, Bit To Sensor (ft): 63.00
Rotary Drill	1	12-15	06:35	08:50	12-15	15056.00	15151.00	Pressure On (psi): 3950.00, Pressure Off (psi): 3400.00, Weight On Bit (klbs): 42.00, Surface RPM: 30, Surface Torque (ft lbf): 26000.00, Flow Rate (gpm): 650.00, Strokes Per Minute: 225.00
Survey	46	12-15	08:50	08:55	12-15	15151.00	15151.00	Inclination (°): 93.190, Azimuth (°): 358.410, TVD (ft): 10193.60, Dogleg (°/100 ft): 2.22, Sensor Depth (ft): 15088.00, Bit To Sensor (ft): 63.00
Rotary Drill	1	12-15	08:55	09:15	12-15	15151.00	15166.00	Pressure On (psi): 3950.00, Pressure Off (psi): 3400.00, Weight On Bit (klbs): 42.00, Surface RPM: 30, Surface Torque (ft lbf): 26000.00, Flow Rate (gpm): 650.00, Strokes Per Minute: 225.00
Slide Drill	2	12-15	09:15	10:00	12-15	15166.00	15196.00	Toolface: 160, Toolface Type: gravity
Rotary Drill	1	12-15	10:00	11:00	12-15	15196.00	15247.00	Pressure On (psi): 3950.00, Pressure Off (psi): 3400.00, Weight On Bit (klbs): 42.00, Surface RPM: 30, Surface Torque (ft lbf): 26000.00, Flow Rate (gpm): 650.00, Strokes Per Minute: 225.00
Survey	46	12-15	11:00	11:05	12-15	15247.00	15247.00	Inclination (°): 93.540, Azimuth (°): 0.080, TVD (ft): 10187.97, Dogleg (°/100 ft): 1.77, Sensor Depth (ft): 15184.00, Bit To Sensor (ft): 63.00
Rotary Drill	1	12-15	11:05	11:15	12-15	15247.00	15262.00	Pressure On (psi): 3950.00, Pressure Off (psi): 3400.00, Weight On Bit (klbs): 42.00, Surface RPM: 30, Surface Torque (ft lbf): 26000.00, Flow Rate (gpm): 650.00, Strokes Per Minute: 225.00
Slide Drill	2	12-15	11:15	12:20	12-15	15262.00	15292.00	Toolface: 180, Toolface Type: gravity
Rotary Drill	1	12-15	12:20	13:00	12-15	15292.00	15343.00	Pressure On (psi): 3950.00, Pressure Off (psi): 3400.00, Weight On Bit (klbs): 42.00, Surface RPM: 30, Surface Torque (ft lbf): 26000.00, Flow Rate (gpm): 650.00, Strokes Per Minute: 225.00
Survey	46	12-15	13:00	13:05	12-15	15343.00	15343.00	Inclination (°): 90.020, Azimuth (°): 358.770, TVD (ft): 10184.98, Dogleg (°/100 ft): 3.91, Sensor Depth (ft): 15280.00, Bit To Sensor (ft): 63.00
Rotary Drill	1	12-15	13:05	13:30	12-15	15343.00	15358.00	Pressure On (psi): 3950.00, Pressure Off (psi): 3400.00, Weight On Bit (klbs): 42.00, Surface RPM: 30, Surface Torque (ft lbf): 26000.00, Flow Rate (gpm): 650.00, Strokes Per Minute: 225.00
Slide Drill	2	12-15	13:30	14:05	12-15	15358.00	15373.00	Toolface: 30, Toolface Type: gravity

Rotary Drill	1	12-15	14:05	14:45	12-15	15373.00	15439.00	Pressure On (psi): 3950.00, Pressure Off (psi): 3400.00, Weight On Bit (klbs): 42.00, Surface RPM: 30, Surface Torque (ft lbf): 26000.00, Flow Rate (gpm): 650.00, Strokes Per Minute: 225.00
Survey	46	12-15	14:45	14:50	12-15	15439.00	15439.00	Inclination (°): 91.960, Azimuth (°): 357.970, TVD (ft): 10183.33, Dogleg (°/100 ft): 2.19, Sensor Depth (ft): 15376.00, Bit To Sensor (ft): 63.00
Rotary Drill	1	12-15	14:50	16:30	12-15	15439.00	15534.00	Pressure On (psi): 3950.00, Pressure Off (psi): 3400.00, Weight On Bit (klbs): 42.00, Surface RPM: 30, Surface Torque (ft lbf): 26000.00, Flow Rate (gpm): 650.00, Strokes Per Minute: 225.00
Circulating Survey	3 46	12-15 12-15	16:30 16:50	16:50 16:55	12-15 12-15	 15534.00	 15534.00	Rig Service
Rotary Drill	1	12-15	16:55	17:05	12-15	15534.00	15544.00	Pressure On (psi): 3950.00, Pressure Off (psi): 3400.00, Weight On Bit (klbs): 42.00, Surface RPM: 30, Surface Torque (ft lbf): 26000.00, Flow Rate (gpm): 650.00, Strokes Per Minute: 225.00
Slide Drill	2	12-15	17:05	17:35	12-15	15544.00	15554.00	Toolface: 30, Toolface Type: gravity
Rotary Drill	1	12-15	17:35	18:50	12-15	15554.00	15629.00	Pressure On (psi): 3950.00, Pressure Off (psi): 3400.00, Weight On Bit (klbs): 42.00, Surface RPM: 30, Surface Torque (ft lbf): 26000.00, Flow Rate (gpm): 650.00, Strokes Per Minute: 225.00
Survey	46	12-15	18:50	18:55	12-15	15629.00	15629.00	Inclination (°): 92.260, Azimuth (°): 355.860, TVD (ft): 10175.48, Dogleg (°/100 ft): 1.53, Sensor Depth (ft): 15566.00, Bit To Sensor (ft): 63.00
Rotary Drill	1	12-15	18:55	19:00	12-15	15629.00	15635.00	Pressure On (psi): 3950.00, Pressure Off (psi): 3400.00, Weight On Bit (klbs): 42.00, Surface RPM: 30, Surface Torque (ft lbf): 26000.00, Flow Rate (gpm): 650.00, Strokes Per Minute: 225.00
Slide Drill	2	12-15	19:00	20:00	12-15	15635.00	15660.00	Pressure On (psi): 4260.00, Pressure Off (psi): 3960.00, Weight On Bit (klbs): 30.00, Flow Rate (gpm): 700.00, Strokes Per Minute: 243, Toolface: 50, Toolface Type: gravity
Rotary Drill	1	12-15	20:00	21:05	12-15	15660.00	15724.00	Pressure On (psi): 3950.00, Pressure Off (psi): 3400.00, Weight On Bit (klbs): 42.00, Surface RPM: 30, Surface Torque (ft lbf): 26000.00, Flow Rate (gpm): 650.00, Strokes Per Minute: 225.00
Survey	46	12-15	21:05	21:10	12-15	15724.00	15724.00	Inclination (°): 92.180, Azimuth (°): 354.460, TVD (ft): 10171.80, Dogleg (°/100 ft): 1.47, Sensor Depth (ft): 15661.00, Bit To Sensor (ft): 63.00
Rotary Drill	1	12-15	21:10	21:15	12-15	15724.00	15730.00	Pressure On (psi): 3950.00, Pressure Off (psi): 3400.00, Weight On Bit (klbs): 42.00, Surface RPM: 30, Surface Torque (ft lbf): 26000.00, Flow Rate (gpm): 650.00, Strokes Per Minute: 225.00
Slide Drill	2	12-15	21:15	22:05	12-15	15730.00	15760.00	Pressure On (psi): 4260.00, Pressure Off (psi): 3960.00, Weight On Bit (klbs): 30.00, Flow Rate (gpm): 700.00, Strokes Per Minute: 243, Toolface: 70, Toolface Type: gravity
Rotary Drill	1	12-15	22:05	23:15	12-15	15760.00	15820.00	Pressure On (psi): 3950.00, Pressure Off (psi): 3400.00, Weight On Bit (klbs): 42.00, Surface RPM: 30, Surface Torque (ft lbf): 26000.00, Flow Rate (gpm): 650.00, Strokes Per Minute: 225.00
Survey	46	12-15	23:15	23:20	12-15	15820.00	15820.00	Inclination (°): 94.150, Azimuth (°): 356.570, TVD (ft): 10166.50, Dogleg (°/100 ft): 3.00, Sensor Depth (ft): 15757.00, Bit To Sensor (ft): 63.00
Rotary Drill	1	12-15	23:20	23:25	12-15	15820.00	15825.00	Pressure On (psi): 3950.00, Pressure Off (psi): 3400.00, Weight On Bit (klbs): 42.00, Surface RPM: 30, Surface Torque (ft lbf): 26000.00, Flow Rate (gpm): 650.00, Strokes Per Minute: 225.00
Slide Drill	2	12-15	23:25	00:30	12-16	15825.00	15855.00	Pressure On (psi): 4260.00, Pressure Off (psi): 3960.00, Weight On Bit (klbs): 30.00, Flow Rate (gpm): 700.00, Strokes Per Minute: 243, Toolface: 90, Toolface Type: gravity

MWD Activities

No Activities



Job Number WT-21-179	Operator Advance Energy Partners	Rig Name Nabors X47
Start Date 2021-11-15	Well Name Anderson Fed Com 508H	Legal Well Name AFE Anderson Fed Com 508H
Play Delaware Basin	State/Province and Country New Mexico, US	County Lea
		Company Man

Thursday, Dec 16 00:00 - 23:59 (Day 17 of 21)

Billing: \$9,500.00 (\$153,503.78 total)

Drilling Summary				Drilling Parameters	
Start Depth (ft)	15825.00	Downhole Hours	23.33	Rotating WOB (klbs)	42.00 - 42.00
Bit Depth (ft)	16135.00	Drilling Hours	9.08	Sliding WOB (klbs)	30.00 - 30.00
Bottom Hole Depth (ft)	16135.00	Hours Circulating	1.08	Rotating SPM	225.00 - 225.00
Total Distance (ft)	310.00	Hours Sliding	3.67	Sliding SPM	225.00 - 243.00
Distance Rotated (ft)	221.00	Hours Rotating	5.42	Motor RPM	0.00 - 175.00
Distance Slid (ft)	89.00			Surface RPM	30.00 - 40.00
Inclination In	95.38			Flow Rate (gpm)	650.00 - 700.00
Inclination Out	95.96			On Bottom Pressure (psi)	3950.00 - 4300.00
Azimuth In	358.06	% Hours Rotating	60%	Off Bottom Pressure (psi)	3400.00 - 3960.00
Azimuth Out	0.26	% Hours Sliding	40%		
AVG Total ROP (ft/h)	34.13	% Distance Sliding	29%		
AVG Rotating ROP (ft/h)	40.80	% Distance Rotating	71%		
AVG Sliding ROP (ft/h)	24.27				

Personnel

Name	Position
Eddie Sheppard	Directional Driller
Advance Nabors X47	Directional Driller
Francisco DeLeon	MWD Engineer
Kyle Kusak	MWD Engineer

BHA #6 - 8.75" LATERAL ASSEMBLY

Date In: Dec 11, 2021, 22:30 Date Out: Dec 16, 2021, 14:00

Bit Details		Motor Details		Directional Comments
OD (in)	8.750	Size (in)	7.0	(BICO)7" SSS100 Motor: 1.75° FXD 7/8 6.1 Stg w/ SLICK, Flow Range: 300-700 GPM, Max Diff: 1,800 psi, Max Torque: 17,100 ft/lbs, RPG: 0.25 Bit Runs: 2
Vendor	REED	Lobe/Stage	7/8, 6.1	
S/N	A281412	Bend Angle	1.75	
Nozzles	7X14's	Speed (rev/gal)	0.25	
Total Flow Area (in²)	1.520	Wear Pad OD (in)	7.250	MWD Comments
Drilling Hours for Day	8.33	Bit Distances		
Total Drilled for Day (ft)	279.00	Survey (Bit To Survey): 63.00 ft, Bend (Bit To Bend): 5.23 ft, Gamma (Bit to Gamma): 39.00 ft		
Drilling Hours for BHA	89.42			
Total Drilled for BHA (ft)	5623.00			
				POOH Reason
				Other: POOH for slow ROP, motor drained well and had minimal slack in between bit and power section, no visible damage

Directional Items

Description	Vendor	SN#	Top Conn	Btm Conn	ID (in)	OD (in)	Fn Len. (ft)	Len (ft)	Aggr. Len (ft)
Bit (Fixed Cutter) Description: <i>TKC76-U1</i> , Type: <i>PDC (Polycrystalline Diamond Compacts)</i> , Gauge Length (in): <i>1.00</i> , Size (in): <i>8.75</i>	REED	A281412	4 1/2" Reg Pin			8.750		1.00	1.00
Mud Motor Description: <i>7" BICO Motor 7/8 6.1 1.75 Fxd / SLK</i> , Size (in): <i>7.00</i> , Bend Angle (°): <i>1.75</i> , Rotor Lobe: <i>7</i> , Stator Lobe: <i>8</i> , Stator Stage: <i>6.1</i>	Bico	BPB5700-0069	4 1/2" IF Box	4 1/2" Reg Box		7.000		30.23	31.23
Other Description: <i>Resistivity Tool NM</i>	Benchtree	650-1010	4 1/2" IF Box	4 1/2" IF Pin	3.250	6.500		31.27	62.50
Other Description: <i>Battery Sub NM</i>	Benchtree	B6003xx	4 1/2" IF Box	4 1/2" IF Pin	3.250	6.500		17.21	79.71
Drill Collar Description: <i>6.75" NMDC</i> , Material: <i>Non-Magnetic</i> , Type: <i>Slick Drill</i>	Gator Tech	6730196	4 1/2" IF Box	4 1/2" IF Pin	3.300	6.750		28.94	108.65
Crossover Sub Description: <i>Crossover</i> , Material: <i>Steel</i>	PLATINUM	PPR6255	CET54 Box	4 1/2" IF Pin	2.500	6.460		3.44	112.09
Drill Pipe Description: <i>20 Stands of 5.5" DP</i> , Type: <i>Slick</i>	RIG		CET54 Box	CET54 Box	2.520	5.500		1913.72	2025.81
Crossover Sub Description: <i>Crossover</i> , Material: <i>Steel</i>	PLATINUM	PPR7092	CET54 Box	4 1/2" IF Pin	2.500	6.460		3.50	2029.31
Agitator Description: <i>ADJITATOR w/ 1.85 Plt Size</i> , Size (in): <i>7.00</i>	NOV	AGHF0675-0078	4 1/2" IF Box	4 1/2" IF Pin		7.000		24.95	2054.26
Crossover Sub Description: <i>Crossover</i> , Material: <i>Steel</i>	PLATINUM	PPR6255	4 1/2" IF Box	CET54 Pin	2.500	6.460		3.44	2057.70

MWD Items

No items

BHA #7 - 8.75" LATERAL ASSEMBLY

Date In: Dec 16, 2021, 14:40 Date Out: Dec 18, 2021, 5:30

Bit Details		Motor Details		Directional Comments
OD (in)	8.750	Size (in)	7.0	(BICO)7" SSS100 Motor: 1.75° FXD 7/8 6.1 Stg w/ SLICK, Flow Range: 300-700 GPM, Max Diff: 1,800 psi, Max Torque: 17,100 ft/lbs, RPG: 0.25 Bit Runs: 0
Vendor	REED	Lobe/Stage	7/8, 6.1	
S/N	A281863	Bend Angle	1.75	
Nozzles	7X15's	Speed (rev/gal)	0.25	MWD Comments
Total Flow Area (in²)	1.208	Wear Pad OD (in)	7.250	
Drilling Hours for Day	0.75	Bit Distances		
Total Drilled for Day (ft)	31.00	Survey (Bit To Survey): 63.00 ft, Bend (Bit To Bend): 5.23 ft, Gamma (Bit to Gamma): 39.00 ft		POOH Reason
Drilling Hours for BHA	13.42			
Total Drilled for BHA (ft)	801.00			
				Total Depth/Casing Point: N/A

Directional Items

Description	Vendor	SN#	Top Conn	Btm Conn	ID (in)	OD (in)	Fn Len. (ft)	Len (ft)	Aggr. Len (ft)
Bit (Fixed Cutter) Description: <i>TKC76-U1</i> , Type: <i>PDC (Polycrystalline Diamond Compacts)</i> , Gauge Length (in): 1.00, Size (in): 8.75	REED	A281863	4 1/2" Reg Pin			8.750		1.00	1.00
Mud Motor Description: <i>7" BICO Motor 7/8 6.1 1.75 Fxd / SLK</i> , Size (in): 7.00, Bend Angle (°): 1.75, Rotor Lobe: 7, Stator Lobe: 8, Stator Stage: 6.1	Bico	BPB5700-0016	4 1/2" IF Box	4 1/2" Reg Box		7.000		30.21	31.21
Other Description: <i>Resistivity Tool NM</i>	Benchtree	650-1010	4 1/2" IF Box	4 1/2" IF Pin	3.250	6.500		31.27	62.48
Other Description: <i>Battery Sub NM</i>	Benchtree	B6003xx	4 1/2" IF Box	4 1/2" IF Pin	3.250	6.500		17.21	79.69
Drill Collar Description: <i>6.75" NMDC</i> , Material: <i>Non-Magnetic</i> , Type: <i>Slick Drill</i>	Gator Tech	6730196	4 1/2" IF Box	4 1/2" IF Pin	3.300	6.750		28.94	108.63
Crossover Sub Description: <i>Crossover</i> , Material: <i>Steel</i>	PLATINUM	PPR6255	CET54 Box	4 1/2" IF Pin	2.500	6.460		3.44	112.07
Drill Pipe Description: <i>20 Stands of 5.5" DP</i> , Type: <i>Slick</i>	RIG		CET54 Box	CET54 Box	2.520	5.500		1913.72	2025.79
Crossover Sub Description: <i>Crossover</i> , Material: <i>Steel</i>	PLATINUM	PPR7092	CET54 Box	4 1/2" IF Pin	2.500	6.460		3.50	2029.29
Agitator Description: <i>ADJITATOR w/ 1.85 Plt Size</i> , Size (in): 7.00	NOV	AGHF0675-0183	4 1/2" IF Box	4 1/2" IF Pin		7.000		24.42	2053.71
Crossover Sub Description: <i>Crossover</i> , Material: <i>Steel</i>	PLATINUM	PPR6255	4 1/2" IF Box	CET54 Pin	2.500	6.460		3.44	2057.15

MWD Items

No Items

Directional Activities

Activity Type	Code	Start Date	Start Time	End Time	End Date	Start (ft)	End (ft)	Comments/Details
Slide Drill	2	12-15	23:25	00:30	12-16	15825.00	15855.00	Pressure On (psi): 4260.00, Pressure Off (psi): 3960.00, Weight On Bit (klbs): 30.00, Flow Rate (gpm): 700.00, Strokes Per Minute: 243, Toolface: 90, Toolface Type: gravity
Rotary Drill	1	12-16	00:30	02:10	12-16	15855.00	15916.00	Pressure On (psi): 3950.00, Pressure Off (psi): 3400.00, Weight On Bit (klbs): 42.00, Surface RPM: 30, Surface Torque (ft lbf): 26000.00, Flow Rate (gpm): 650.00, Strokes Per Minute: 225.00
Survey	46	12-16	02:10	02:15	12-16	15916.00	15916.00	Inclination (°): 95.380, Azimuth (°): 358.060, TVD (ft): 10158.53, Dogleg (°/100 ft): 2.01, Sensor Depth (ft): 15853.00, Bit To Sensor (ft): 63.00
Rotary Drill	1	12-16	02:15	02:20	12-16	15916.00	15924.00	Pressure On (psi): 3950.00, Pressure Off (psi): 3400.00, Weight On Bit (klbs): 42.00, Surface RPM: 30, Surface Torque (ft lbf): 26000.00, Flow Rate (gpm): 650.00, Strokes Per Minute: 225.00
Slide Drill	2	12-16	02:20	03:05	12-16	15924.00	15943.00	Pressure On (psi): 4260.00, Pressure Off (psi): 3960.00, Weight On Bit (klbs): 30.00, Flow Rate (gpm): 700.00, Strokes Per Minute: 243, Toolface: 130, Toolface Type: gravity
Rotary Drill	1	12-16	03:05	03:35	12-16	15943.00	15952.00	Pressure On (psi): 3950.00, Pressure Off (psi): 3400.00, Weight On Bit (klbs): 42.00, Surface RPM: 30, Surface Torque (ft lbf): 26000.00, Flow Rate (gpm): 650.00, Strokes Per Minute: 225.00
Slide Drill	2	12-16	03:35	04:05	12-16	15952.00	15962.00	Pressure On (psi): 4260.00, Pressure Off (psi): 3960.00, Weight On Bit (klbs): 30.00, Flow Rate (gpm): 700.00, Strokes Per Minute: 243, Toolface: 90, Toolface Type: gravity
Rotary Drill	1	12-16	04:05	04:55	12-16	15962.00	16011.00	Pressure On (psi): 3950.00, Pressure Off (psi): 3400.00, Weight On Bit (klbs): 42.00, Surface RPM: 30, Surface Torque (ft lbf): 26000.00, Flow Rate (gpm): 650.00, Strokes Per Minute: 225.00
Survey	46	12-16	04:55	05:00	12-16	16011.00	16011.00	Inclination (°): 96.220, Azimuth (°): 359.380, TVD (ft): 10148.93, Dogleg (°/100 ft): 1.64, Sensor Depth (ft): 15948.00, Bit To Sensor (ft): 63.00

Rotary Drill	1	12-16	05:00	05:05	12-16	16011.00	16029.00	Pressure On (psi): 3950.00, Pressure Off (psi): 3400.00, Weight On Bit (klbs): 42.00, Surface RPM: 30, Surface Torque (ft lbf): 26000.00, Flow Rate (gpm): 650.00, Strokes Per Minute: 225.00
Slide Drill	2	12-16	05:05	05:50	12-16	16029.00	16039.00	Pressure On (psi): 4260.00, Pressure Off (psi): 3960.00, Weight On Bit (klbs): 30.00, Flow Rate (gpm): 700.00, Strokes Per Minute: 243, Toolface: 150, Toolface Type: gravity
Rotary Drill	1	12-16	05:50	07:55	12-16	16039.00	16104.00	Pressure On (psi): 3950.00, Pressure Off (psi): 3400.00, Weight On Bit (klbs): 42.00, Surface RPM: 30, Surface Torque (ft lbf): 26000.00, Flow Rate (gpm): 650.00, Strokes Per Minute: 225.00
Circulating	3	12-16	07:55	09:00	12-16			Circulating Bottoms Up to POOH to change BHA
Pooh	7	12-16	09:00	14:00	12-16			POOH for [Change Bit & Motor]
Change BHA	6	12-16	14:00	14:40	12-16			P/U BHA # 7
TIH	8	12-16	14:40	23:00	12-16			TIH W/ BHA #7
Other	16	12-16	23:00	23:10	12-16			Down Link MWD
Rotary Drill	1	12-16	23:10	23:15	12-16	16104.00	16106.00	Pressure On (psi): 3950.00, Pressure Off (psi): 3400.00, Weight On Bit (klbs): 42.00, Surface RPM: 30, Surface Torque (ft lbf): 26000.00, Flow Rate (gpm): 650.00, Strokes Per Minute: 225.00
Survey	46	12-16	23:15	23:20	12-16	16106.00	16106.00	Inclination (°): 95.960, Azimuth (°): 0.260, TVD (ft): 10138.85, Dogleg (°/100 ft): 0.96, Sensor Depth (ft): 16043.00, Bit To Sensor (ft): 63.00
Rotary Drill	1	12-16	23:20	23:25	12-16	16106.00	16115.00	Pressure On (psi): 4300.00, Pressure Off (psi): 3800.00, Weight On Bit (klbs): 42.00, Surface RPM: 40, Surface Torque (ft lbf): 31000.00, Flow Rate (gpm): 650.00, Strokes Per Minute: 225.00
Slide Drill	2	12-16	23:25	00:00	12-17	16115.00	16135.00	Pressure On (psi): 4150.00, Pressure Off (psi): 3800.00, Weight On Bit (klbs): 30.00, Flow Rate (gpm): 650.00, Strokes Per Minute: 225, Toolface: 150, Toolface Type: gravity
MWD Activities								
No Activities								



Job Number WT-21-179	Operator Advance Energy Partners	Rig Name Nabors X47
Start Date 2021-11-15	Well Name Anderson Fed Com 508H	Legal Well Name AFE Anderson Fed Com 508H
Play Delaware Basin	State/Province and Country New Mexico, US	County Lea
		Company Man

Friday, Dec 17 00:00 - 23:59 (Day 18 of 21)

Billing: \$9,500.00 (\$153,503.78 total)

Drilling Summary				Drilling Parameters	
Start Depth (ft)	16135.00	Downhole Hours	24.00	Rotating WOB (klbs)	42.00 - 42.00
Bit Depth (ft)	16905.00	Drilling Hours	12.67	Sliding WOB (klbs)	30.00 - 35.00
Bottom Hole Depth (ft)	16905.00	Hours Circulating	2.25	Rotating SPM	225.00 - 243.00
Total Distance (ft)	770.00	Hours Sliding	5.17	Sliding SPM	225.00 - 243.00
Distance Rotated (ft)	655.00	Hours Rotating	7.50	Motor RPM	175.00 - 175.00
Distance Slid (ft)	115.00			Surface RPM	40.00 - 50.00
Inclination In	93.36			Flow Rate (gpm)	650.00 - 700.00
Inclination Out	97.10			On Bottom Pressure (psi)	4150.00 - 4700.00
Azimuth In	1.31	% Hours Rotating	59%	Off Bottom Pressure (psi)	3800.00 - 4200.00
Azimuth Out	359.82	% Hours Sliding	41%		
AVG Total ROP (ft/h)	59.62	% Distance Sliding	15%		
AVG Rotating ROP (ft/h)	87.33	% Distance Rotating	85%		
AVG Sliding ROP (ft/h)	23.48				

Personnel

Name	Position
Eddie Sheppard	Directional Driller
Advance Nabors X47	Directional Driller
Francisco DeLeon	MWD Engineer
Kyle Kusak	MWD Engineer

BHA #7 - 8.75" LATERAL ASSEMBLY

Date In: Dec 16, 2021, 14:40 Date Out: Dec 18, 2021, 5:30

Bit Details		Motor Details		Directional Comments	
OD (in)	8.750	Size (in)	7.0	(BICO)7" SSS100 Motor: 1.75° FXD 7/8 6.1 Stg w/ SLICK, Flow Range: 300-700 GPM, Max Diff: 1,800 psi, Max Torque: 17,100 ft/lbs, RPG: 0.25 Bit Runs: 0	
Vendor	REED	Lobe/Stage	7/8, 6.1		
S/N	A281863	Bend Angle	1.75		
Nozzles	7X15's	Speed (rev/gal)	0.25		
Total Flow Area (in²)	1.208	Wear Pad OD (in)	7.250	MWD Comments	
Drilling Hours for Day	12.67	Bit Distances		POOH Reason Total Depth/Casing Point: N/A	
Total Drilled for Day (ft)	770.00	Survey (Bit To Survey): 63.00 ft, Bend (Bit To Bend): 5.23 ft, Gamma (Bit to Gamma): 39.00 ft			
Drilling Hours for BHA	13.42				
Total Drilled for BHA (ft)	801.00				

Directional Items

Description	Vendor	SN#	Top Conn	Btm Conn	ID (in)	OD (in)	Fn Len. (ft)	Len (ft)	Aggr. Len (ft)
Bit (Fixed Cutter) Description: <i>TKC76-U1</i> , Type: <i>PDC (Polycrystalline Diamond Compacts)</i> , Gauge Length (in): 1.00, Size (in): 8.75	REED	A281863	4 1/2" Reg Pin			8.750		1.00	1.00
Mud Motor Description: <i>7" BICO Motor 7/8 6.1 1.75 Fxd / SLK</i> , Size (in): 7.00, Bend Angle (°): 1.75, Rotor Lobe: 7, Stator Lobe: 8, Stator Stage: 6.1	Bico	BPB5700-0016	4 1/2" IF Box	4 1/2" Reg Box		7.000		30.21	31.21
Other Description: <i>Resistivity Tool NM</i>	Benchtree	650-1010	4 1/2" IF Box	4 1/2" IF Pin	3.250	6.500		31.27	62.48
Other Description: <i>Battery Sub NM</i>	Benchtree	B6003xx	4 1/2" IF Box	4 1/2" IF Pin	3.250	6.500		17.21	79.69
Drill Collar Description: <i>6.75" NMDC</i> , Material: <i>Non-Magnetic</i> , Type: <i>Slick Drill</i>	Gator Tech	6730196	4 1/2" IF Box	4 1/2" IF Pin	3.300	6.750		28.94	108.63
Crossover Sub Description: <i>Crossover</i> , Material: <i>Steel</i>	PLATINUM	PPR6255	CET54 Box	4 1/2" IF Pin	2.500	6.460		3.44	112.07
Drill Pipe Description: <i>20 Stands of 5.5" DP</i> , Type: <i>Slick</i>	RIG		CET54 Box	CET54 Box	2.520	5.500		1913.72	2025.79
Crossover Sub Description: <i>Crossover</i> , Material: <i>Steel</i>	PLATINUM	PPR7092	CET54 Box	4 1/2" IF Pin	2.500	6.460		3.50	2029.29
Agitator Description: <i>ADJITATOR w/ 1.85 P/t Size</i> , Size (in): 7.00	NOV	AGHF0675-0183	4 1/2" IF Box	4 1/2" IF Pin		7.000		24.42	2053.71
Crossover Sub Description: <i>Crossover</i> , Material: <i>Steel</i>	PLATINUM	PPR6255	4 1/2" IF Box	CET54 Pin	2.500	6.460		3.44	2057.15

MWD Items

No Items

Directional Activities

Activity Type	Code	Start Date	Start Time	End Time	End Date	Start (ft)	End (ft)	Comments/Details
Slide Drill	2	12-16	23:25	00:00	12-17	16115.00	16135.00	Pressure On (psi): 4150.00, Pressure Off (psi): 3800.00, Weight On Bit (klbs): 30.00, Flow Rate (gpm): 650.00, Strokes Per Minute: 225, Toolface: 150, Toolface Type: gravity
Rotary Drill	1	12-17	00:00	00:45	12-17	16135.00	16202.00	Pressure On (psi): 4300.00, Pressure Off (psi): 3800.00, Weight On Bit (klbs): 42.00, Surface RPM: 40, Surface Torque (ft lbf): 31000.00, Flow Rate (gpm): 650.00, Strokes Per Minute: 225.00
Survey	46	12-17	00:45	00:50	12-17	16202.00	16202.00	Inclination (°): 93.360, Azimuth (°): 1.310, TVD (ft): 10131.05, Dogleg (°/100 ft): 2.92, Sensor Depth (ft): 16139.00, Bit To Sensor (ft): 63.00
Rotary Drill	1	12-17	00:50	01:50	12-17	16202.00	16297.00	Pressure On (psi): 4300.00, Pressure Off (psi): 3800.00, Weight On Bit (klbs): 42.00, Surface RPM: 40, Surface Torque (ft lbf): 31000.00, Flow Rate (gpm): 650.00, Strokes Per Minute: 225.00
Survey	46	12-17	01:50	01:55	12-17	16297.00	16297.00	Inclination (°): 95.210, Azimuth (°): 1.230, TVD (ft): 10123.95, Dogleg (°/100 ft): 1.95, Sensor Depth (ft): 16234.00, Bit To Sensor (ft): 63.00
Rotary Drill	1	12-17	01:55	02:00	12-17	16297.00	16310.00	Pressure On (psi): 4300.00, Pressure Off (psi): 3800.00, Weight On Bit (klbs): 42.00, Surface RPM: 40, Surface Torque (ft lbf): 31000.00, Flow Rate (gpm): 650.00, Strokes Per Minute: 225.00
Slide Drill	2	12-17	02:00	02:55	12-17	16310.00	16340.00	Pressure On (psi): 4150.00, Pressure Off (psi): 3800.00, Weight On Bit (klbs): 30.00, Flow Rate (gpm): 650.00, Strokes Per Minute: 225, Toolface: 180, Toolface Type: gravity
Rotary Drill	1	12-17	02:55	03:40	12-17	16340.00	16393.00	Pressure On (psi): 4300.00, Pressure Off (psi): 3800.00, Weight On Bit (klbs): 42.00, Surface RPM: 40, Surface Torque (ft lbf): 31000.00, Flow Rate (gpm): 650.00, Strokes Per Minute: 225.00
Survey	46	12-17	03:40	03:45	12-17	16393.00	16393.00	Inclination (°): 93.050, Azimuth (°): 1.310, TVD (ft): 10117.04, Dogleg (°/100 ft): 2.25, Sensor Depth (ft): 16330.00, Bit To Sensor (ft): 63.00
Rotary Drill	1	12-17	03:45	03:50	12-17	16393.00	16403.00	Pressure On (psi): 4700.00, Pressure Off (psi): 4200.00, Weight On Bit (klbs): 42.00, Surface RPM: 50, Surface Torque (ft lbf): 31000.00, Flow Rate (gpm): 700.00, Strokes Per Minute: 243.00
Slide Drill	2	12-17	03:50	04:20	12-17	16403.00	16423.00	Pressure On (psi): 4500.00, Pressure Off (psi): 4200.00, Weight On Bit (klbs): 35.00, Flow Rate (gpm): 700.00, Strokes Per Minute: 243, Toolface: 180, Toolface Type: gravity
Rotary Drill	1	12-17	04:20	05:00	12-17	16423.00	16489.00	Pressure On (psi): 4700.00, Pressure Off (psi): 4200.00, Weight On Bit (klbs): 42.00, Surface RPM: 50, Surface Torque (ft lbf): 31000.00, Flow Rate (gpm): 700.00, Strokes Per Minute: 243.00
Survey	46	12-17	05:00	05:05	12-17	16489.00	16489.00	Inclination (°): 90.070, Azimuth (°): 0.610, TVD (ft): 10114.43, Dogleg (°/100 ft): 3.19, Sensor Depth (ft): 16426.00, Bit To Sensor (ft): 63.00
Rotary Drill	1	12-17	05:05	06:05	12-17	16489.00	16584.00	Pressure On (psi): 4700.00, Pressure Off (psi): 4200.00, Weight On Bit (klbs): 42.00, Surface RPM: 50, Surface Torque (ft lbf): 31000.00, Flow Rate (gpm): 700.00, Strokes Per Minute: 243.00
Survey	46	12-17	06:05	06:10	12-17	16584.00	16584.00	Inclination (°): 89.410, Azimuth (°): 359.030, TVD (ft): 10114.86, Dogleg (°/100 ft): 1.80, Sensor Depth (ft): 16521.00, Bit To Sensor (ft): 63.00
Rotary Drill	1	12-17	06:10	06:20	12-17	16584.00	16594.00	Pressure On (psi): 4700.00, Pressure Off (psi): 4200.00, Weight On Bit (klbs): 42.00, Surface RPM: 50, Surface Torque (ft lbf): 31000.00, Flow Rate (gpm): 700.00, Strokes Per Minute: 243.00
Slide Drill	2	12-17	06:20	07:40	12-17	16594.00	16624.00	Toolface: 30, Toolface Type: gravity
Rotary Drill	1	12-17	07:40	07:45	12-17	16624.00	16669.00	Pressure On (psi): 4700.00, Pressure Off (psi): 4200.00, Weight On Bit (klbs): 42.00, Surface RPM: 50, Surface Torque (ft lbf): 31000.00, Flow Rate (gpm): 700.00, Strokes Per Minute: 243.00
Slide Drill	2	12-17	07:45	09:15	12-17	16669.00	16679.00	Toolface: 60, Toolface Type: gravity
Survey	46	12-17	09:15	09:20	12-17	16679.00	16679.00	Inclination (°): 92.350, Azimuth (°): 359.640, TVD (ft): 10113.40, Dogleg (°/100 ft): 3.16, Sensor Depth (ft): 16616.00, Bit To Sensor (ft): 63.00
Slide Drill	2	12-17	09:20	10:15	12-17	16679.00	16704.00	Toolface: 30, Toolface Type: gravity
Rotary Drill	1	12-17	10:15	11:20	12-17	16704.00	16775.00	Pressure On (psi): 4700.00, Pressure Off (psi): 4200.00, Weight On Bit (klbs): 42.00, Surface RPM: 50, Surface Torque (ft lbf): 31000.00, Flow Rate (gpm): 700.00, Strokes Per Minute: 243.00
Survey	46	12-17	11:20	11:25	12-17	16775.00	16775.00	Inclination (°): 95.080, Azimuth (°): 1.140, TVD (ft): 10107.18, Dogleg (°/100 ft): 3.24, Sensor Depth (ft): 16712.00, Bit To Sensor (ft): 63.00
Rotary Drill	1	12-17	11:25	13:15	12-17	16775.00	16905.00	Pressure On (psi): 4700.00, Pressure Off (psi): 4200.00, Weight On Bit (klbs): 42.00, Surface RPM: 50, Surface Torque (ft lbf): 31000.00, Flow Rate (gpm): 700.00, Strokes Per Minute: 243.00
Survey	46	12-17	13:15	13:30	12-17	16905.00	16905.00	Inclination (°): 97.100, Azimuth (°): 359.820, TVD (ft): 10093.39, Dogleg (°/100 ft): 1.85, Sensor Depth (ft): 16842.00, Bit To Sensor (ft): 63.00
Circulating	3	12-17	13:30	15:45	12-17			Circulate And Condition Hole Clean
Pooh	7	12-17	15:45	04:30	12-18			POOH Laying Down DP Well TD

MWD Activities

No Activities



Job Number WT-21-179	Operator Advance Energy Partners	Rig Name Nabors X47
Start Date 2021-11-15	Well Name Anderson Fed Com 508H	Legal Well Name AFE Anderson Fed Com 508H
Play Delaware Basin	State/Province and Country New Mexico, US	County Lea
	Company Man	

Saturday, Dec 18 00:00 - 23:59 (Day 19 of 21)

Billing: \$9,500.00 (\$153,503.78 total)

Drilling Summary			Drilling Parameters	
Start Depth (ft)		Downhole Hours	5.50	Rotating WOB (klbs)
Bit Depth (ft)		Drilling Hours	0.00	Sliding WOB (klbs)
Bottom Hole Depth (ft)		Hours Circulating	0.00	Rotating SPM
Total Distance (ft)	0.00	Hours Sliding	0.00	Sliding SPM
Distance Rotated (ft)	0.00	Hours Rotating	0.00	Motor RPM
Distance Slid (ft)	0.00			175.00 - 175.00
Inclination In				Surface RPM
Inclination Out				Flow Rate (gpm)
Azimuth In		% Hours Rotating		On Bottom Pressure (psi)
Azimuth Out		% Hours Sliding		Off Bottom Pressure (psi)
AVG Total ROP (ft/h)	0.00	% Distance Sliding		
AVG Rotating ROP (ft/h)	0.00	% Distance Rotating		
AVG Sliding ROP (ft/h)	0.00			

Personnel

Name	Position
Eddie Sheppard	Directional Driller
Advance Nabors X47	Directional Driller
Francisco DeLeon	MWD Engineer
Kyle Kusak	MWD Engineer

BHA #7 - 8.75" LATERAL ASSEMBLY

Date In: Dec 16, 2021, 14:40 Date Out: Dec 18, 2021, 5:30

Bit Details		Motor Details		Directional Comments
OD (in)	8.750	Size (in)	7.0	(BICO)7" SSS100 Motor: 1.75° FXD 7/8 6.1 Stg w/ SLICK, Flow Range: 300-700 GPM, Max Diff: 1,800 psi, Max Torque: 17,100 ft/lbs, RPG: 0.25 Bit Runs: 0
Vendor	REED	Lobe/Stage	7/8, 6.1	
S/N	A281863	Bend Angle	1.75	
Nozzles	7X15's	Speed (rev/gal)	0.25	
Total Flow Area (in²)	1.208	Wear Pad OD (in)	7.250	MWD Comments
Drilling Hours for Day	0.00	Bit Distances		
Total Drilled for Day (ft)		Survey (Bit To Survey): 63.00 ft, Bend (Bit To Bend): 5.23 ft, Gamma (Bit to Gamma): 39.00 ft		
Drilling Hours for BHA	13.42			POOH Reason
Total Drilled for BHA (ft)	801.00			
				Total Depth/Casing Point: N/A

Directional Items

Description	Vendor	SN#	Top Conn	Btm Conn	ID (in)	OD (in)	Fn Len. (ft)	Len (ft)	Aggr. Len (ft)
Bit (Fixed Cutter) Description: <i>TKC76-U1</i> , Type: <i>PDC (Polycrystalline Diamond Compacts)</i> , Gauge Length (in): 1.00, Size (in): 8.75	REED	A281863	4 1/2" Reg Pin			8.750		1.00	1.00
Mud Motor Description: <i>7" BICO Motor 7/8 6.1 1.75 Fxd / SLK</i> , Size (in): 7.00, Bend Angle (°): 1.75, Rotor Lobe: 7, Stator Lobe: 8, Stator Stage: 6.1	Bico	BPB5700-0016	4 1/2" IF Box	4 1/2" Reg Box		7.000		30.21	31.21
Other Description: <i>Resistivity Tool NM</i>	Benchtree	650-1010	4 1/2" IF Box	4 1/2" IF Pin	3.250	6.500		31.27	62.48
Other Description: <i>Battery Sub NM</i>	Benchtree	B6003xx	4 1/2" IF Box	4 1/2" IF Pin	3.250	6.500		17.21	79.69
Drill Collar Description: <i>6.75" NMDC</i> , Material: <i>Non-Magnetic</i> , Type: <i>Slick Drill</i>	Gator Tech	6730196	4 1/2" IF Box	4 1/2" IF Pin	3.300	6.750		28.94	108.63
Crossover Sub Description: <i>Crossover</i> , Material: <i>Steel</i>	PLATINUM	PPR6255	CET54 Box	4 1/2" IF Pin	2.500	6.460		3.44	112.07
Drill Pipe Description: <i>20 Stands of 5.5" DP</i> , Type: <i>Slick</i>	RIG		CET54 Box	CET54 Box	2.520	5.500		1913.72	2025.79
Crossover Sub Description: <i>Crossover</i> , Material: <i>Steel</i>	PLATINUM	PPR7092	CET54 Box	4 1/2" IF Pin	2.500	6.460		3.50	2029.29
Agitator Description: <i>ADJITATOR w/ 1.85 P/t Size</i> , Size (in): 7.00	NOV	AGHF0675-0183	4 1/2" IF Box	4 1/2" IF Pin		7.000		24.42	2053.71
Crossover Sub Description: <i>Crossover</i> , Material: <i>Steel</i>	PLATINUM	PPR6255	4 1/2" IF Box	CET54 Pin	2.500	6.460		3.44	2057.15

MWD Items

No Items

Directional Activities

Activity Type	Code	Start Date	Start Time	End Time	End Date	Start (ft)	End (ft)	Comments/Details
Pooh	7	12-17	15:45	04:30	12-18			POOH Laying Down DP Well TD
Lay Down BHA	65	12-18	04:30	05:30	12-18			L/D BHA #7
Standby	15	12-18	05:30	23:00	12-18			Standby Casing Ops.
Other	16	12-18	23:00	03:00	12-19			Cement Production Casing

MWD Activities

No Activities



Job Number WT-21-179	Operator Advance Energy Partners	Rig Name Nabors X47
Start Date 2021-11-15	Well Name Anderson Fed Com 508H	Legal Well Name AFE Anderson Fed Com 508H
Play Delaware Basin	State/Province and Country New Mexico, US	County Lea
Company Man		

Sunday, Dec 19 00:00 - 23:59 (Day 20 of 21)

Billing: \$1,000.00 (\$153,503.78 total)

Drilling Summary				Drilling Parameters	
Start Depth (ft)		Downhole Hours	0.00	Rotating WOB (klbs)	
Bit Depth (ft)		Drilling Hours	0.00	Sliding WOB (klbs)	
Bottom Hole Depth (ft)		Hours Circulating	0.00	Rotating SPM	
Total Distance (ft)	0.00	Hours Sliding	0.00	Sliding SPM	
Distance Rotated (ft)	0.00	Hours Rotating	0.00	Motor RPM	-
Distance Slid (ft)	0.00			Surface RPM	
Inclination In				Flow Rate (gpm)	
Inclination Out				On Bottom Pressure (psi)	
Azimuth In		% Hours Rotating		Off Bottom Pressure (psi)	
Azimuth Out		% Hours Sliding			
AVG Total ROP (ft/h)	0.00	% Distance Sliding			
AVG Rotating ROP (ft/h)	0.00	% Distance Rotating			
AVG Sliding ROP (ft/h)	0.00				

Personnel	
Name	Position
Eddie Sheppard	Directional Driller
Advance Nabors X47	Directional Driller
Francisco DeLeon	MWD Engineer
Kyle Kusak	MWD Engineer

No BHAs

Directional Activities								
Activity Type	Code	Start Date	Start Time	End Time	End Date	Start (ft)	End (ft)	Comments/Details
Other	16	12-18	23:00	03:00	12-19			Cement Production Casing
Other	16	12-19	03:00	06:00	12-20			Standby Rig Down, Rig Move

MWD Activities
No Activities



Job Number WT-21-179	Operator Advance Energy Partners	Rig Name Nabors X47
Start Date 2021-11-15	Well Name Anderson Fed Com 508H	Legal Well Name AFE Anderson Fed Com 508H
Play Delaware Basin	State/Province and Country New Mexico, US	County Lea
Company Man		

Monday, Dec 20 00:00 - 23:59 (Day 21 of 21)

Billing: \$8,483.53 (\$153,503.78 total)

Drilling Summary				Drilling Parameters			
Start Depth (ft)		Downhole Hours		0.00	Rotating WOB (klbs)		
Bit Depth (ft)		Drilling Hours		0.00	Sliding WOB (klbs)		
Bottom Hole Depth (ft)		Hours Circulating		0.00	Rotating SPM		
Total Distance (ft)	0.00	Hours Sliding		0.00	Sliding SPM		
Distance Rotated (ft)	0.00	Hours Rotating		0.00	Motor RPM		-
Distance Slid (ft)	0.00				Surface RPM		
Inclination In					Flow Rate (gpm)		
Inclination Out					On Bottom Pressure (psi)		
Azimuth In		% Hours Rotating			Off Bottom Pressure (psi)		
Azimuth Out		% Hours Sliding					
AVG Total ROP (ft/h)	0.00	% Distance Sliding					
AVG Rotating ROP (ft/h)	0.00	% Distance Rotating					
AVG Sliding ROP (ft/h)	0.00						

Personnel

Name	Position
Eddie Sheppard	Directional Driller
Advance Nabors X47	Directional Driller
Francisco DeLeon	MWD Engineer
Kyle Kusak	MWD Engineer

No BHAs**Directional Activities**

Activity Type	Code	Start Date	Start Time	End Time	End Date	Start (ft)	End (ft)	Comments/Details
Other	16	12-19	03:00	06:00	12-20			Standby Rig Down, Rig Move

MWD Activities

No Activities



Surface Plat

Anderson Fed Com 508H (WT-21-179)

2021-11-15 to 2021-12-20

Lea, New Mexico, US (32.43, -103.64)

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	Pool Code	Pool Name
Property Code	Property Name ANDERSON FED COM	Well Number 508H
OGRID No.	Operator Name ADVANCE ENERGY PARTNERS HAT MESA, LLC	Elevation 3658'

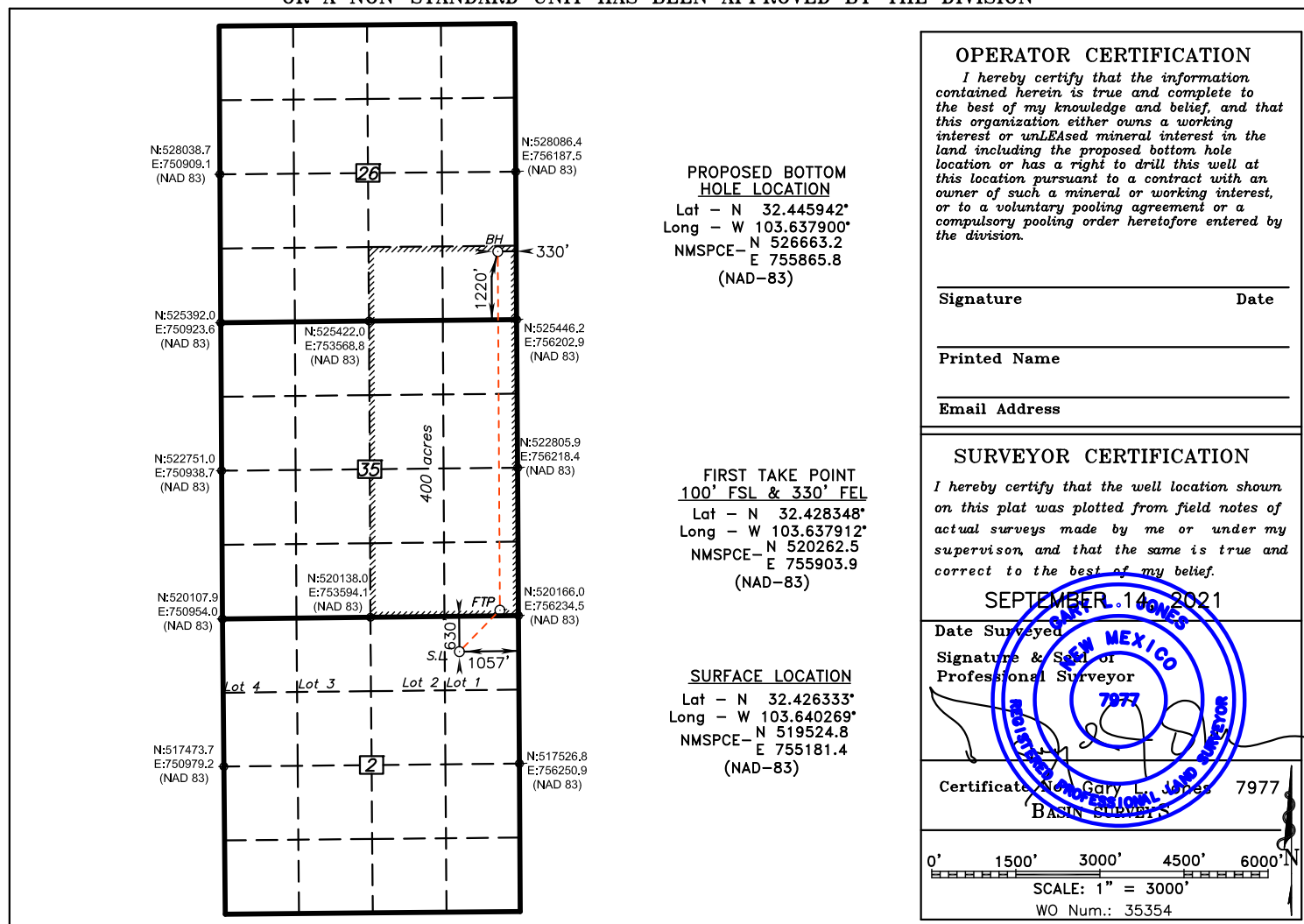
Surface Location

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

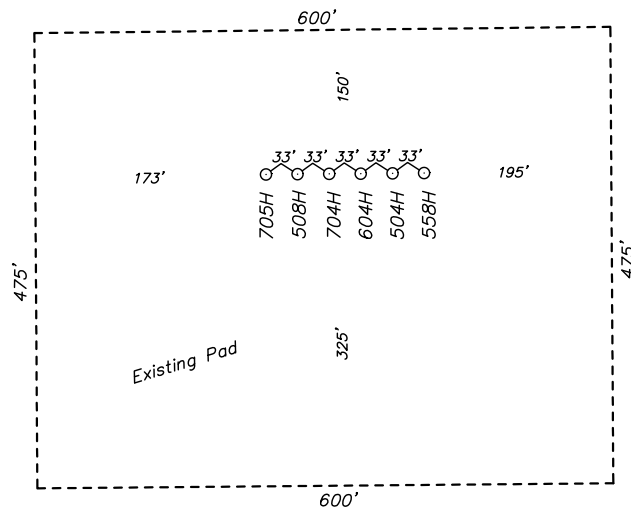
Bottom Hole Location If Different From Surface

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	Joint or Infill	Consolidation Code	Order No.						

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



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



ADVANCE ENERGY PARTNERS HAT MESA, LLC
ANDERSON FED COM 508H
ELEV. - 3658'

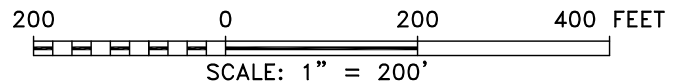
Lat - N 32.426333°
 Long - W 103.640269°
 NMSPCE - N 519524.8
 E 755181.4
 (NAD-83)



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 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

EUNICE, NM IS ±28 MILES TO THE EAST OF LOCATION.



ADVANCE ENERGY PARTNERS HAT MESA, LLC

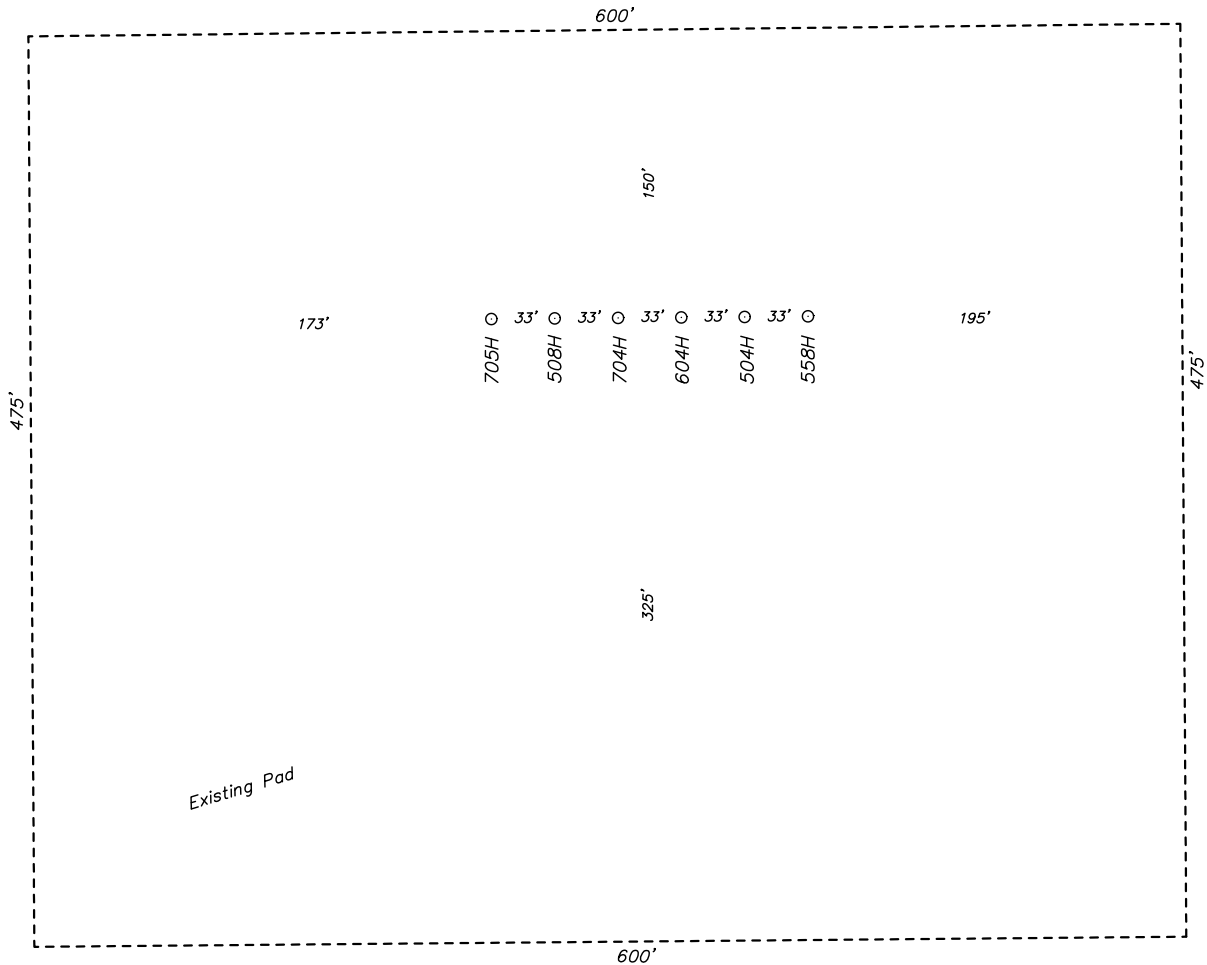
REF: ANDERSON FED COM 508H / WELL PAD TOPO

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



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1120 N. West County Rd. (575) 392-2206 - Fax
Hobbs, New Mexico 88241 basin-surveys.com

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

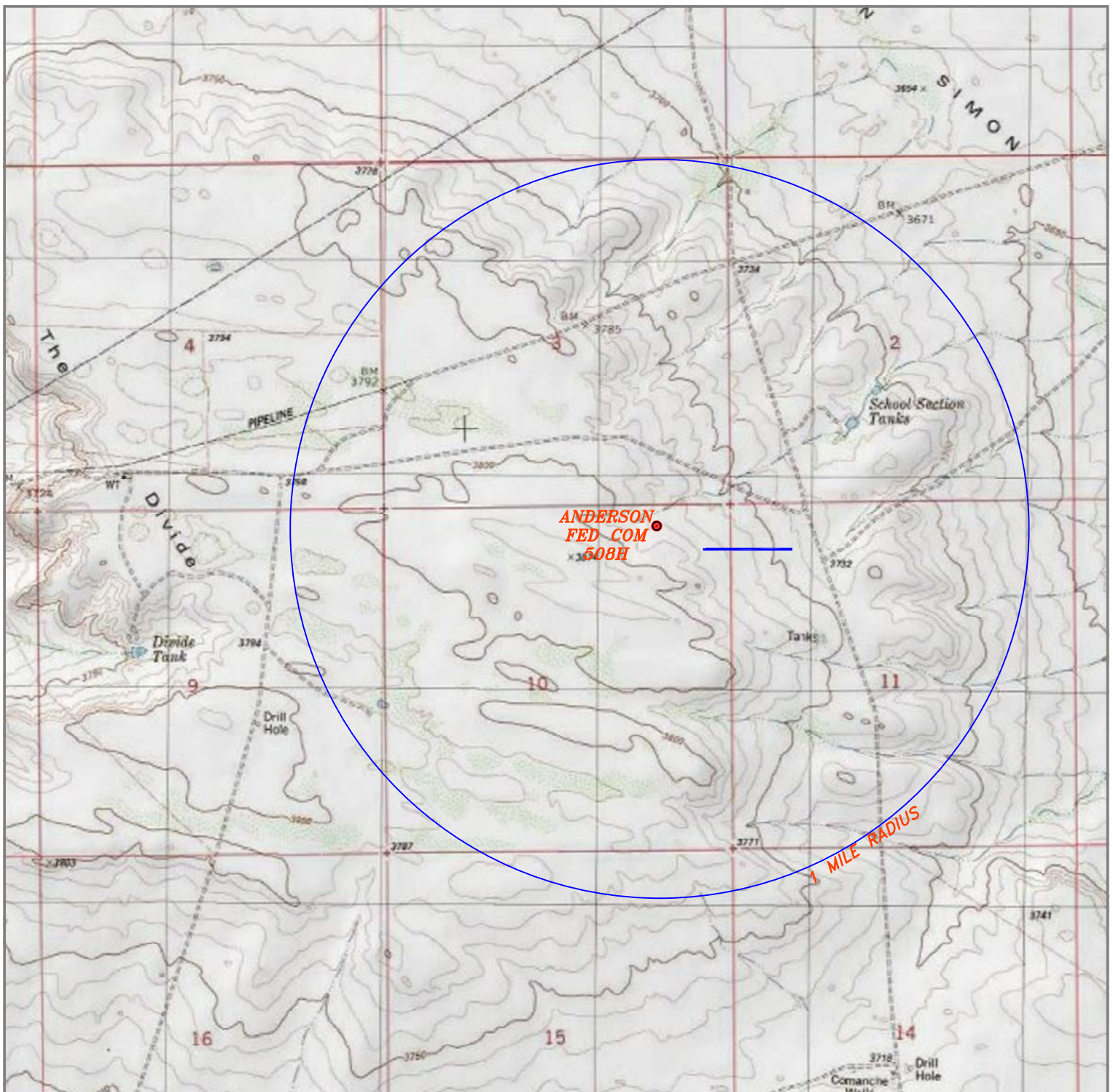
ADVANCE ENERGY PARTNERS HAT MESA, LLC

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
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ANDERSON FED COM 508H

Located 630' FNL and 1057' FEL
 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
 1120 N. West County Rd.
 Hobbs, New Mexico 88241
 (575) 393-7316 - Office
 (575) 392-2206 - Fax
 basinsurveys.com

0' 1000' 2000' 3000' 1500'
 SCALE: 1" = 2000'

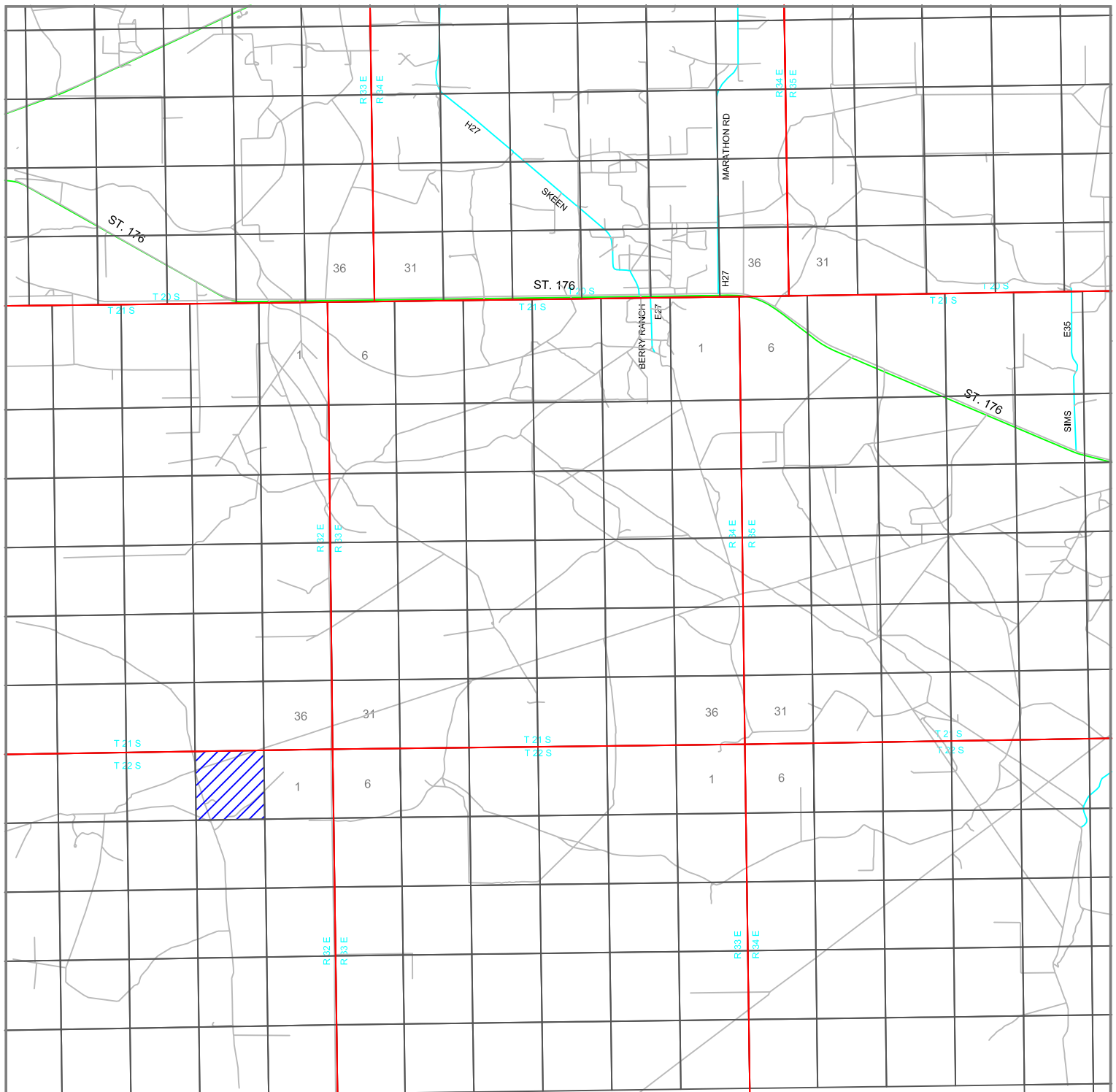
W.O. Number: 35354

Survey Date: 09-14-2021

YELLOW TINT - USA LAND
 BLUE TINT - STATE LAND
 NATURAL COLOR - FEE LAND



ADVANCE
ENERGY
PARTNERS HAT
MESA, LLC



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0 1 MI 2 MI 3 MI 4 MI
SCALE: 1" = 2 MILES

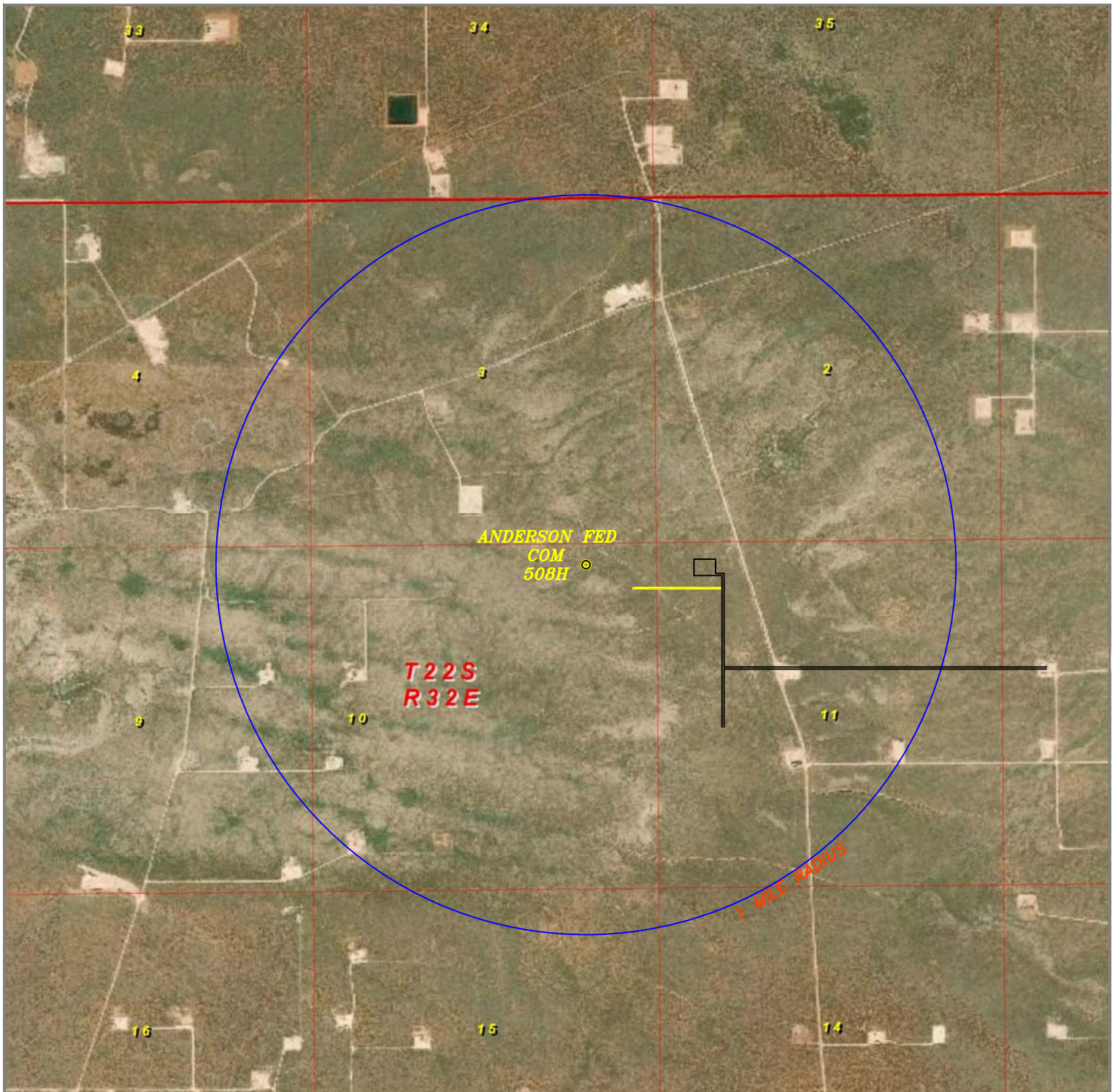
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**ADVANCE
ENERGY
PARTNERS HAT
MESA, LLC**

Intent ☐ As Drilled ☐

API #		
Operator Name:	Property Name:	Well Number

Kick Off Point (KOP)

UL	Section	Township	Range	Lot	Feet	From N/S	Feet	From E/W	County
Latitude					Longitude				NAD

First Take Point (FTP)

UL	Section	Township	Range	Lot	Feet	From N/S	Feet	From E/W	County
Latitude					Longitude				NAD

Last Take Point (LTP)

UL	Section	Township	Range	Lot	Feet	From N/S	Feet	From E/W	County
Latitude					Longitude				NAD

Is this well the defining well for the Horizontal Spacing Unit? ☐Is this well an infill well? ☐

If infill is yes please provide API if available, Operator Name and well number for Defining well for Horizontal Spacing Unit.

API #		
Operator Name:	Property Name:	Well Number

KZ 06/29/2018

Submit a Copy To Appropriate District
Office
District I – (575) 393-6161
1625 N. French Dr., Hobbs, NM 88240
District II – (575) 748-1283
811 S. First St., Artesia, NM 88210
District III – (505) 334-6178
1000 Rio Brazos Rd., Aztec, NM 87410
District IV – (505) 476-3460
1220 S. St. Francis Dr., Santa Fe, NM
87505

State of New Mexico
Energy, Minerals and Natural Resources

Form C-103
Revised July 18, 2013

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

WELL API NO. 30-025-49429
5. Indicate Type of Lease ☒ FEDERAL STATE ☐ FEE ☐
6. State Oil & Gas Lease No. NMNM120905
7. Lease Name or Unit Agreement Name ANDERSON FEDERAL COM
8. Well Number 508H
9. OGRID Number 372417
10. Pool name or Wildcat RED TANK;BONE SPRING
11. Elevation (Show whether DR, RKB, RT, GR, etc.) 3658'

SUNDRY NOTICES AND REPORTS ON WELLS
(DO NOT USE THIS FORM FOR PROPOSALS TO DRILL OR TO DEEPEN OR PLUG BACK TO A DIFFERENT RESERVOIR. USE "APPLICATION FOR PERMIT" (FORM C-101) FOR SUCH PROPOSALS.)

1. Type of Well: Oil Well ☒ Gas Well ☐ Other ☐
2. Name of Operator Advance Energy Partners Hat Mesa
3. Address of Operator 11490 Westheimer Rd, Houston, TX 77077
4. Well Location Unit Letter <u>LOT 1</u> : <u>630</u> feet from the <u>North</u> line and <u>1057</u> feet from the <u>East</u> line Section <u>2</u> Township <u>22S</u> Range <u>32E</u> NMPM County <u>LEA</u>
11. Elevation (Show whether DR, RKB, RT, GR, etc.) 3658'

12. Check Appropriate Box to Indicate Nature of Notice, Report or Other Data

NOTICE OF INTENTION TO:		SUBSEQUENT REPORT OF:	
PERFORM REMEDIAL WORK ☐	PLUG AND ABANDON ☐	REMEDIAL WORK ☐	ALTERING CASING ☐
TEMPORARILY ABANDON ☐	CHANGE PLANS ☐	COMMENCE DRILLING OPNS. ☐	P AND A ☐
PULL OR ALTER CASING ☐	MULTIPLE COMPL ☐	CASING/CEMENT JOB ☐	
DOWNHOLE COMMINGLE ☐			
CLOSED-LOOP SYSTEM ☐			
OTHER: ☐		OTHER: ☒	

13. Describe proposed or completed operations. (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work). SEE RULE 19.15.7.14 NMAC. For Multiple Completions: Attach wellbore diagram of proposed completion or recompletion.

4/20/22: Pressure test casing to 9500 psi for 30 minutes
4/21-5/1/22: Perforate from 10,503' – 16,865' (2050). Frac with 15,965,462 lbs sand and 17,135,504 gal fluid.
5/25/2022: Begin Flowback operations (dissolvable plugs in hole)
5/30/2022: Stop flowback operations and shut well in. Plugs not dissolving as planned.
6/2-6/3/22: Drill all plugs out and clean out to a PBD of 16,875'
6/7/2022: Turn well over to production.

Spud Date: 11/18/21

Rig Release Date: 12/19/21

I hereby certify that the information above is true and complete to the best of my knowledge and belief.

SIGNATURE: Eileen M Kosakowski

TITLE: Sr. Eng. Tech

DATE: 11/24/22

PRINT NAME: Eileen M Koskowski

E-mail address: ekosakowski@advanceenergypartners.com

PHONE: 832-672-4604

For State Use Only

APPROVED BY: _____ TITLE _____ DATE _____

Conditions of Approval (if any):

Submit To Appropriate District Office Two Copies District I 1625 N. French Dr., Hobbs, NM 88240 District II 811 S. First St., Artesia, NM 88210 District III 1000 Rio Brazos Rd., Aztec, NM 87410 District IV 1220 S. St. Francis Dr., Santa Fe, NM 87505		State of New Mexico Energy, Minerals and Natural Resources Oil Conservation Division 1220 South St. Francis Dr. Santa Fe, NM 87505			Form C-105 Revised April 3, 2017					
WELL COMPLETION OR RECOMPLETION REPORT AND LOG								1. WELL API NO. 30-025-49429		
4. Reason for filing: ☒ COMPLETION REPORT (Fill in boxes #1 through #31 for State and Fee wells only) ☐ C-144 CLOSURE ATTACHMENT (Fill in boxes #1 through #9, #15 Date Rig Released and #32 and/or #33; attach this and the plat to the C-144 closure report in accordance with 19.15.17.13.K NMAC)								5. Lease Name or Unit Agreement Name ANDERSON FEDERAL COM		
								6. Well Number: 508H		
7. Type of Completion: ☒ NEW WELL ☐ WORKOVER ☐ DEEPENING ☐ PLUGBACK ☐ DIFFERENT RESERVOIR ☐ OTHER										
8. Name of Operator Advance Energy Partners Hat Mesa, LLC							9. OGRID 372417			
10. Address of Operator 11490 Westheimer RD, Suite 950 Houston, TX 77077							11. Pool name or Wildcat RED TANK;BONE SPRING			
12. Location	Unit Ltr	Section	Township	Range	Lot	Feet from the	N/S Line	Feet from the	E/W Line	County
Surface:	LOT 1	2	22S	32E		630	N	1057	E	LEA
BH:	P	26	21S	32E		1230	S	343	E	LEA
13. Date Spudded 11/18/21	14. Date T.D. Reached 12/17/21	15. Date Rig Released 12/19/21		16. Date Completed (Ready to Produce) 5/25/22			17. Elevations (DF and RKB, RT, GR, etc.) 3658'			
18. Total Measured Depth of Well 16,905'			19. Plug Back Measured Depth 16,875'		20. Was Directional Survey Made? YES			21. Type Electric and Other Logs Run GAMMA		
22. Producing Interval(s), of this completion - Top, Bottom, Name 10,503' – 16,865' RED TANK;BONE SPRING										
23. CASING RECORD (Report all strings set in well)										
CASING SIZE		WEIGHT LB./FT.		DEPTH SET		HOLE SIZE		CEMENTING RECORD		AMOUNT PULLED
13.375"		54.4#		1255'		17.5"		720 SXS		
9.625"		40#		3456'/4760'		12.25"		1235 SXS		
5.5"		23#		16,885'		8.5"		2495 SXS		
24. LINER RECORD										
SIZE	TOP	BOTTOM		SACKS CEMENT		SCREEN		25. TUBING RECORD		
								SIZE		
								DEPTH SET		
								PACKER SET		
26. Perforation record (interval, size, and number) 10,503' – 16,865' – 2050 holes						27. ACID, SHOT, FRACTURE, CEMENT, SQUEEZE, ETC. DEPTH INTERVAL AMOUNT AND KIND MATERIAL USED 10,503' – 16,865' 15,965,462 lbs sand, 17,135,504 bbls water				
28. PRODUCTION										
Date First Production 5/25/22		Production Method (Flowing, gas lift, pumping - Size and type pump) FLOWING				Well Status (Prod. or Shut-in) PROD				
Date of Test 8/8/22	Hours Tested 24	Choke Size 48	Prod'n For Test Period	Oil - Bbl 427	Gas - MCF 499	Water - Bbl. 2180	Gas - Oil Ratio 1169			
Flow Tubing Press. N/A	Casing Pressure 275	Calculated 24-Hour Rate	Oil - Bbl. 427	Gas - MCF 499	Water - Bbl. 2180	Oil Gravity - API - (Corr.) 41.5				
29. Disposition of Gas (Sold, used for fuel, vented, etc.)								30. Test Witnessed By AMIT KUMAR		
31. List Attachments										
32. If a temporary pit was used at the well, attach a plat with the location of the temporary pit.						33. Rig Release Date: 12/19/21				
34. If an on-site burial was used at the well, report the exact location of the on-site burial:										
Latitude _____						Longitude _____ NAD83				
I hereby certify that the information shown on both sides of this form is true and complete to the best of my knowledge and belief										
Signature <i>Eileen M Kosakowski</i>				Date: 11/24/22		E-mail Address: ekosakowski@advanceenergypartners.com				
Printed Name: Eileen M Kosakowski				Title: Sr. Eng. Tech						

This form is to be filed with the appropriate District Office of the Division not later than 20 days after the completion of any newly-drilled or deepened well and not later than 60 days after completion of closure. When submitted as a completion report, this shall be accompanied by one copy of all electrical and radio-activity logs run on the well and a summary of all special tests conducted, including drill stem tests. All depths reported shall be measured depths. In the case of directionally drilled wells, true vertical depths shall also be reported. For multiple completions, items 11, 12 and 26-31 shall be reported for each zone.

Southeastern New Mexico		Northwestern New Mexico	
T. Anhy	T. Canyon	T. Ojo Alamo	T. Penn A"
T. Salt	T. Strawn	T. Kirtland	T. Penn. "B"
B. Salt	T. Atoka	T. Fruitland	T. Penn. "C"
T. Yates	T. Miss	T. Pictured Cliffs	T. Penn. "D"
T. 7 Rivers	T. Devonian	T. Cliff House	T. Leadville
T. Queen	T. Silurian	T. Menefee	T. Madison
T. Grayburg 6899'MD/6867'TVD	T. Montoya	T. Point Lookout	T. Elbert
T. San Andres	T. Simpson	T. Mancos	T. McCracken
T. Glorieta 8459'MD/8390'TVD	T. McKee	T. Gallup	T. Ignacio Otzte
T. Paddock 8952'MD/8874'TVD	T. Ellenburger	Base Greenhorn	T.Granite
T. Blinebry	T. Gr. Wash	T. Dakota	
T.Tubb	T. Delaware Sand 4835'MD/4834'TVD	T. Morrison	
T. Drinkard	T. Bone Springs	T.Todilto	
T. Abo	T.1SS 9936'MD/9854'TVD	T. Entrada	
T. Wolfcamp	T.	T. Wingate	
T. Penn	T.	T. Chinle	
T. Cisco (Bough C)	T.	T. Permian	

No. 1, from.....to.....

No. 2, from.....to.....

No. 3, from.....to.....

No. 4, from.....to.....

Include data on rate of water inflow and elevation to which water rose in hole.

No. 1, from.....to.....feet.....
 No. 2, from.....to.....feet.....
 No. 3, from.....to.....feet.....

From	To	Thickness In Feet	Lithology

Sante Fe Main Office
Phone: (505) 476-3441

General Information
Phone: (505) 629-6116

Online Phone Directory
<https://www.emnrd.nm.gov/ocd/contact-us>

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

ACKNOWLEDGMENTS

Action 161335

ACKNOWLEDGMENTS

Operator: ADVANCE ENERGY PARTNERS HAT MESA, LLC 5400 LBJ Freeway, Suite 1500 Dallas, TX 75240	OGRID: 372417
	Action Number: 161335
	Action Type: [C-104] Completion Packet (C-104C)

ACKNOWLEDGMENTS

☒	I hereby certify that the required Water Use Report has been, or will be, submitted for this wells completion.
☒	I hereby certify that the required FracFocus disclosure has been, or will be, submitted for this wells completion.

Sante Fe Main Office
Phone: (505) 476-3441

General Information
Phone: (505) 629-6116

Online Phone Directory
<https://www.emnrd.nm.gov/ocd/contact-us>

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

CONDITIONS

Action 161335

CONDITIONS

Operator: ADVANCE ENERGY PARTNERS HAT MESA, LLC 5400 LBJ Freeway, Suite 1500 Dallas, TX 75240	OGRID: 372417
	Action Number: 161335
	Action Type: [C-104] Completion Packet (C-104C)

CONDITIONS

Created By	Condition	Condition Date
raul.robles	None	4/30/2026