

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 30-025-48995	⁵ Pool Name Red Tank; Bone Spring		⁶ Pool Code 51683
⁷ Property Code 326484	⁸ Property Name Anderson Federal Com		⁹ Well Number 551H

II. ¹⁰ Surface Location

Ul or lot no. LOT 4	Section 2	Township 22S	Range 32E	Lot Idn	Feet from the 180	North/South Line NORTH	Feet from the 677	East/West line WEST	County Lea
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¹¹ Bottom Hole Location

UL or lot no. L	Section 26	Township 21S	Range 32E	Lot Idn	Feet from the 2559	North/South line SOUTH	Feet from the 337	East/West line WEST	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 11/24/21	²² Ready Date 5/31/22	²³ TD 19,092'	²⁴ PBTD 19,062'	²⁵ Perforations 11,361' – 18,913'	²⁶ DHC, MC
²⁷ Hole Size		²⁸ Casing & Tubing Size	²⁹ Depth Set		³⁰ Sacks Cement
17.5"		13.375"	1275'		735
12.25"		9.625"	3775'/4805'		1140
8.5"		5.5"	19,073'		3110

V. Well Test Data

³¹ Date New Oil 6/1/22	³² Gas Delivery Date 6/2/22	³³ Test Date 7/4/22	³⁴ Test Length 24 HRS	³⁵ Tbg. Pressure N/A	³⁶ Csg. Pressure 1200
³⁷ Choke Size 28	³⁸ Oil 649	³⁹ Water 1308	⁴⁰ Gas 806		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 30-025-48995	Pool Code 51683	Pool Name RED TANK;BONE SPRING
Property Code 326484	Property Name ANDERSON FEDERAL COM	Well Number 551H
OGRID No. 372417	Operator Name ADVANCE ENERGY PARTNERS HAT MESA, LLC	Elevation 3692'

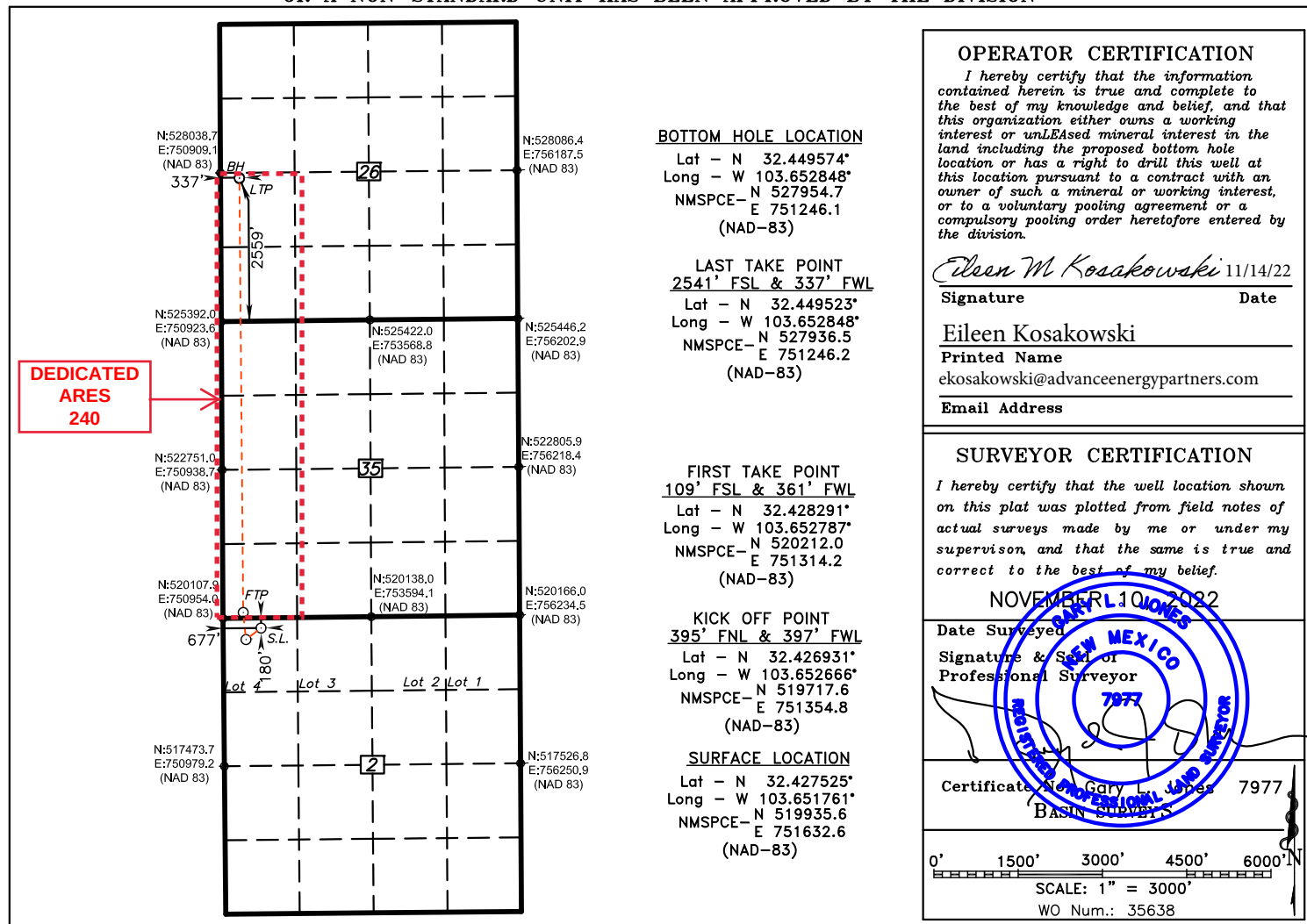
Surface Location

UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	SOUTH/South line	Feet from the	East/West line	County
LOT 4	2	22 S	32 E		180	NORTH	677	WEST	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
L	26	21 S	32 E		2559	SOUTH	337	WEST	LEA
Dedicated Acres 240	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. 551H Lea County, New Mexico

Rig: Nabors X50

Job No.: WT-21-183

Start Date: 11/24/2021

End Date: 01/29/2022

Directional Drillers:

Joseph Lanham, Advance Directional

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 551H (WT-21-183)

2021-11-24 to 2022-01-29

Lea, New Mexico, US (32.43, -103.65)

BHA Performance

BHA 1

BHA #1 (17.5"
Surface)

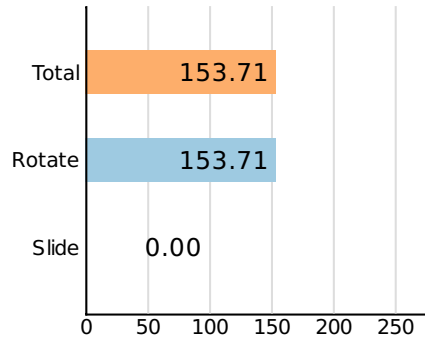
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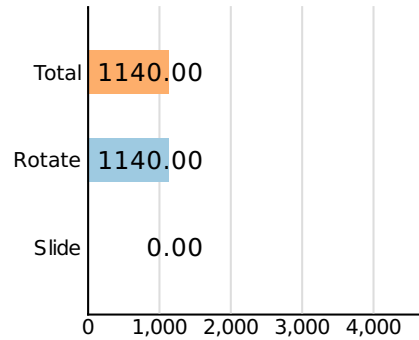
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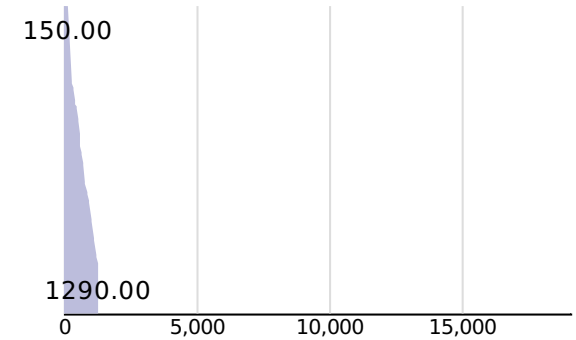
Rate of Penetration (ft/h)



Distance (ft)



Depth (ft)



BHA 2

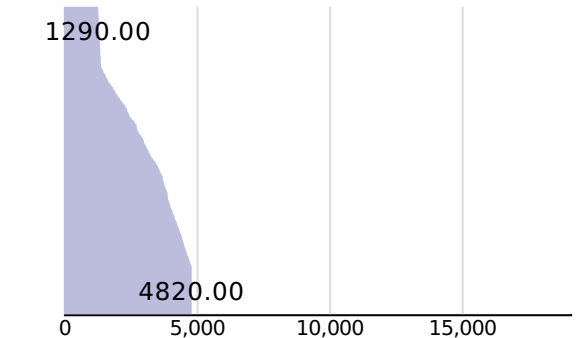
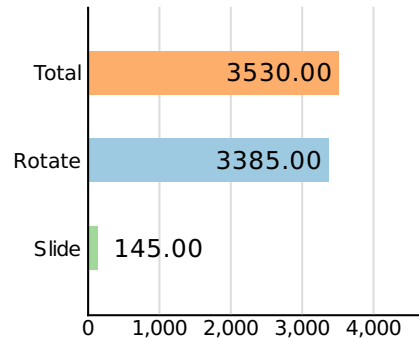
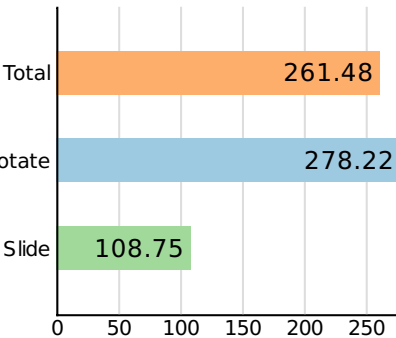
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Intermediate

In: 11/30/2021

12:15

Out: 12/01/2021

12:30



BHA 3

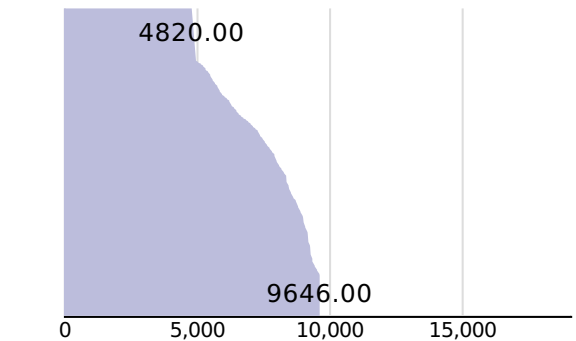
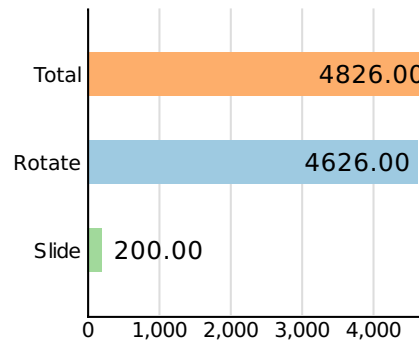
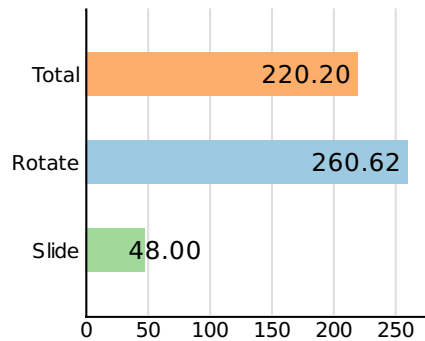
8.75"
INTERMEDIATE

In: 01/17/2022

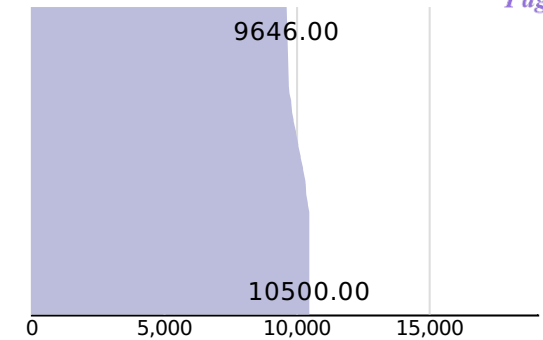
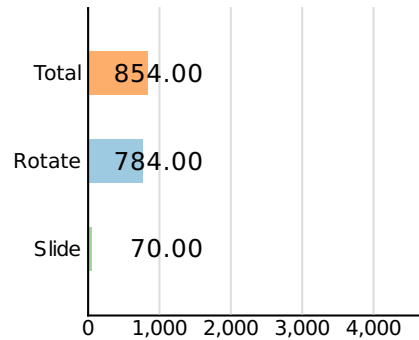
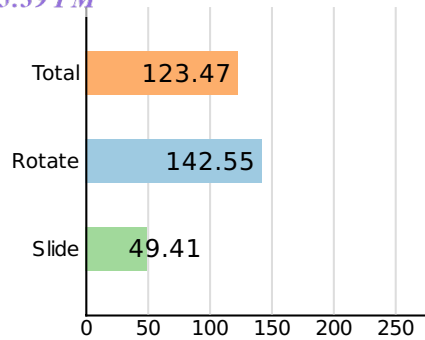
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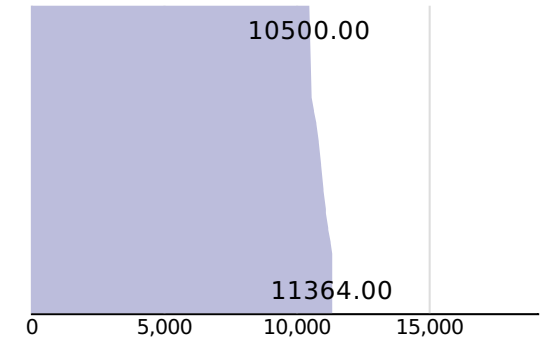
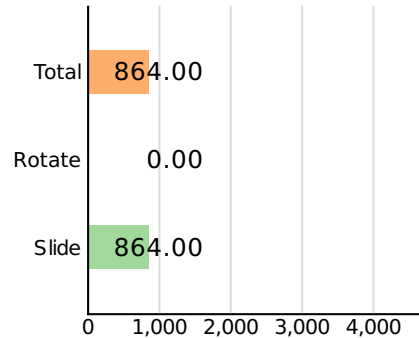
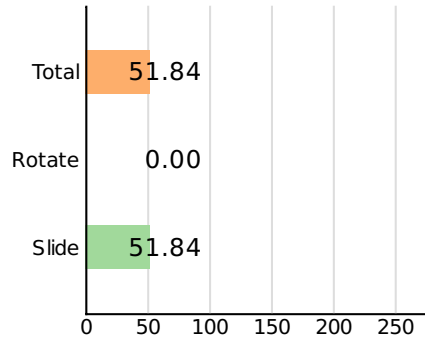
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BHA 4

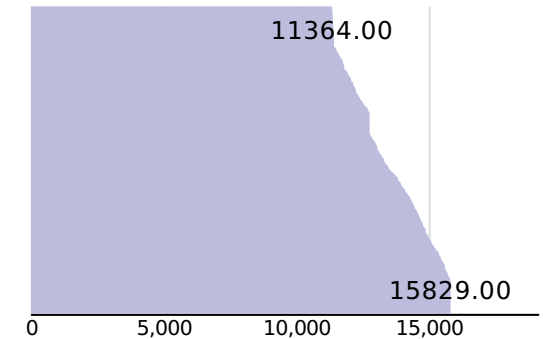
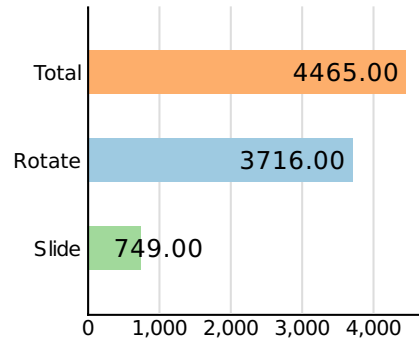
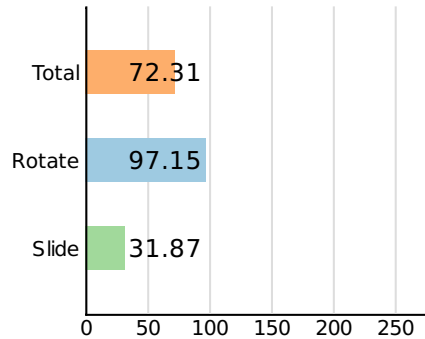
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INTERMEDIATEIn: **01/19/2022**
00:30
Out: **01/19/2022**
18:00

BHA 5

BHA #5 (Curve
Assy)In: **01/19/2022**
18:00
Out: **01/21/2022**
01:00

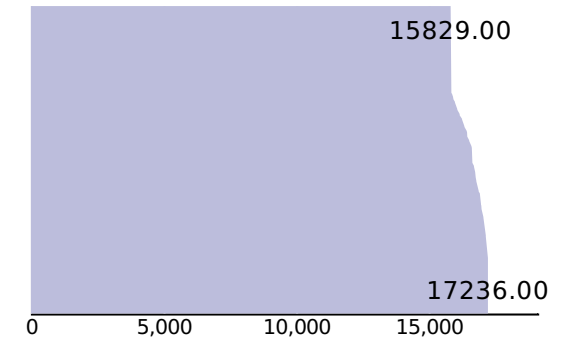
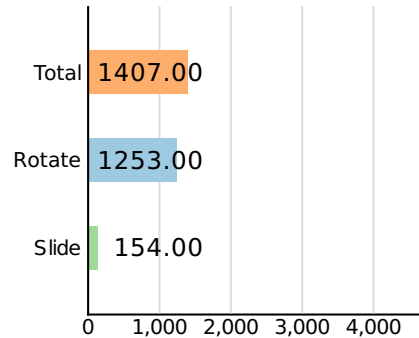
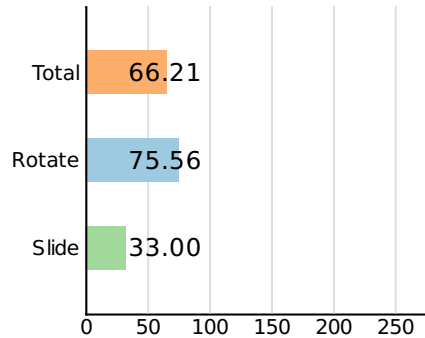
BHA 6

8.75" LATERAL

In: **01/21/2022**
02:30
Out: **01/25/2022**
02:00

BHA 7

8.75" LATERAL

In: **01/25/2022**
02:00
Out: **01/26/2022**
20:00

BHA 8

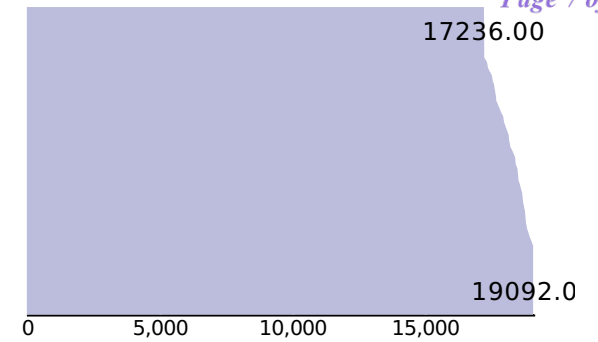
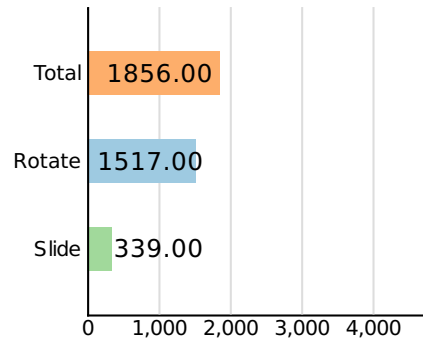
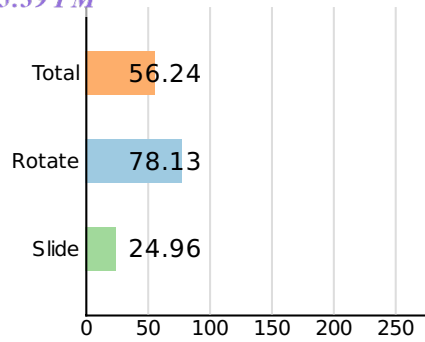
8.75" LATERAL

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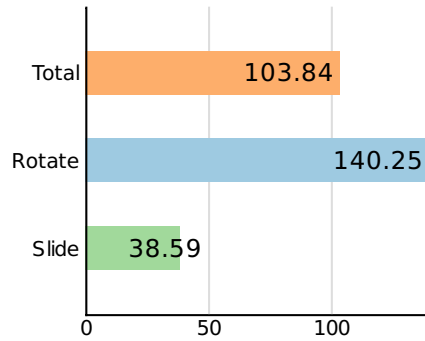
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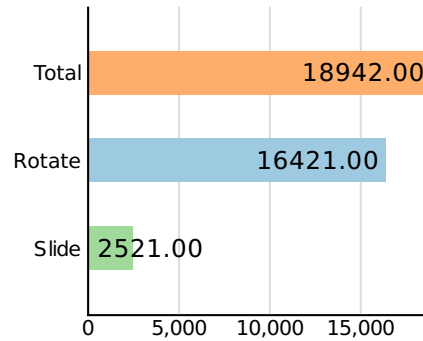


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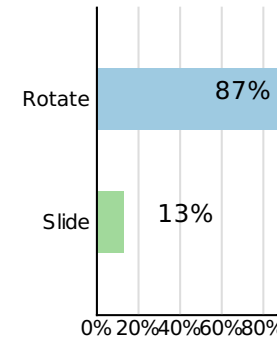
Rate of Penetration (ft/h)



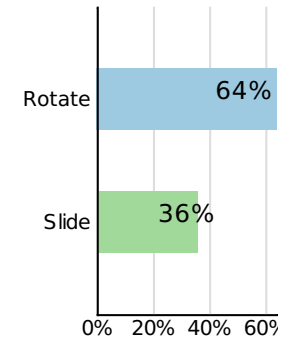
Distance (ft)



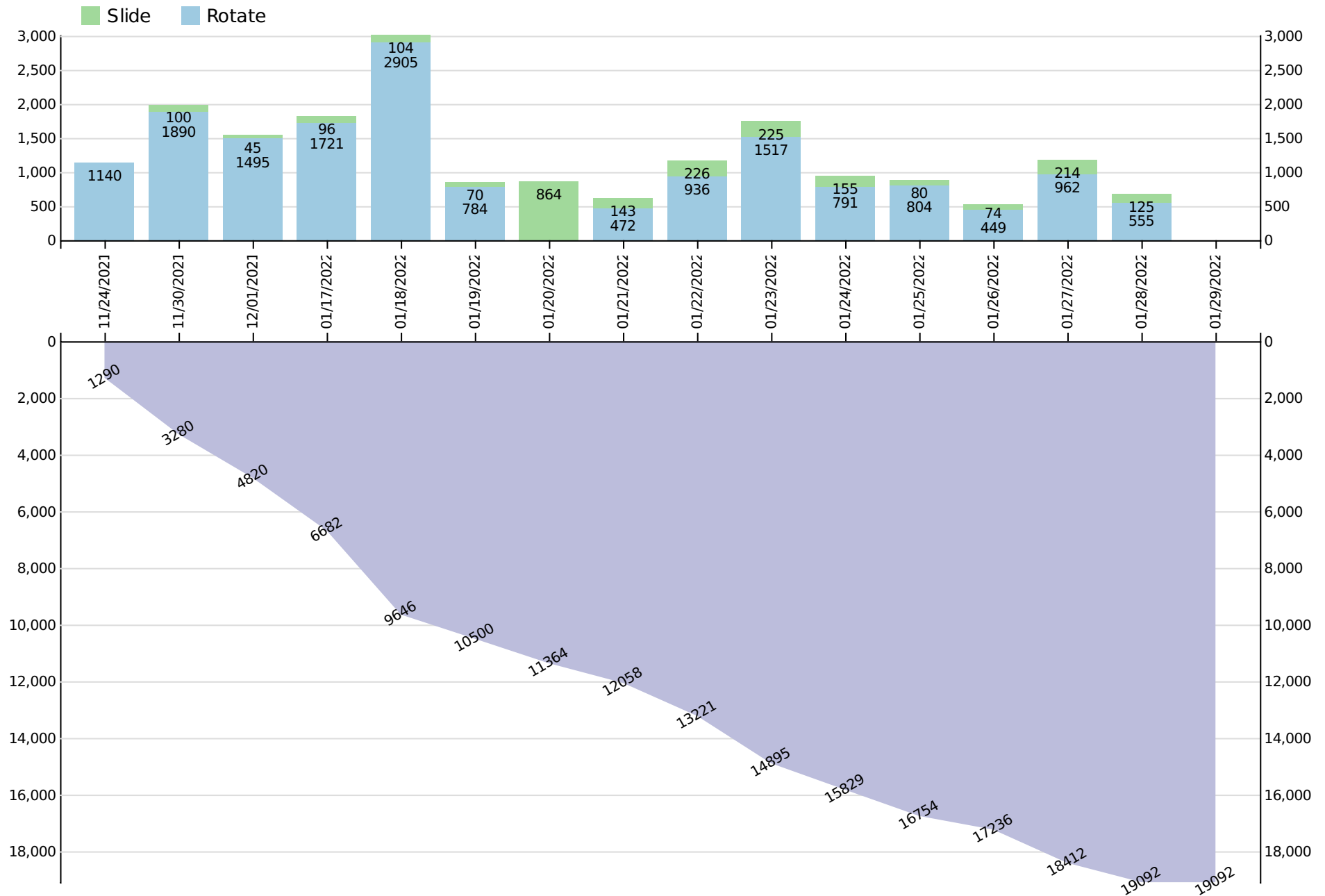
Distance Percentage



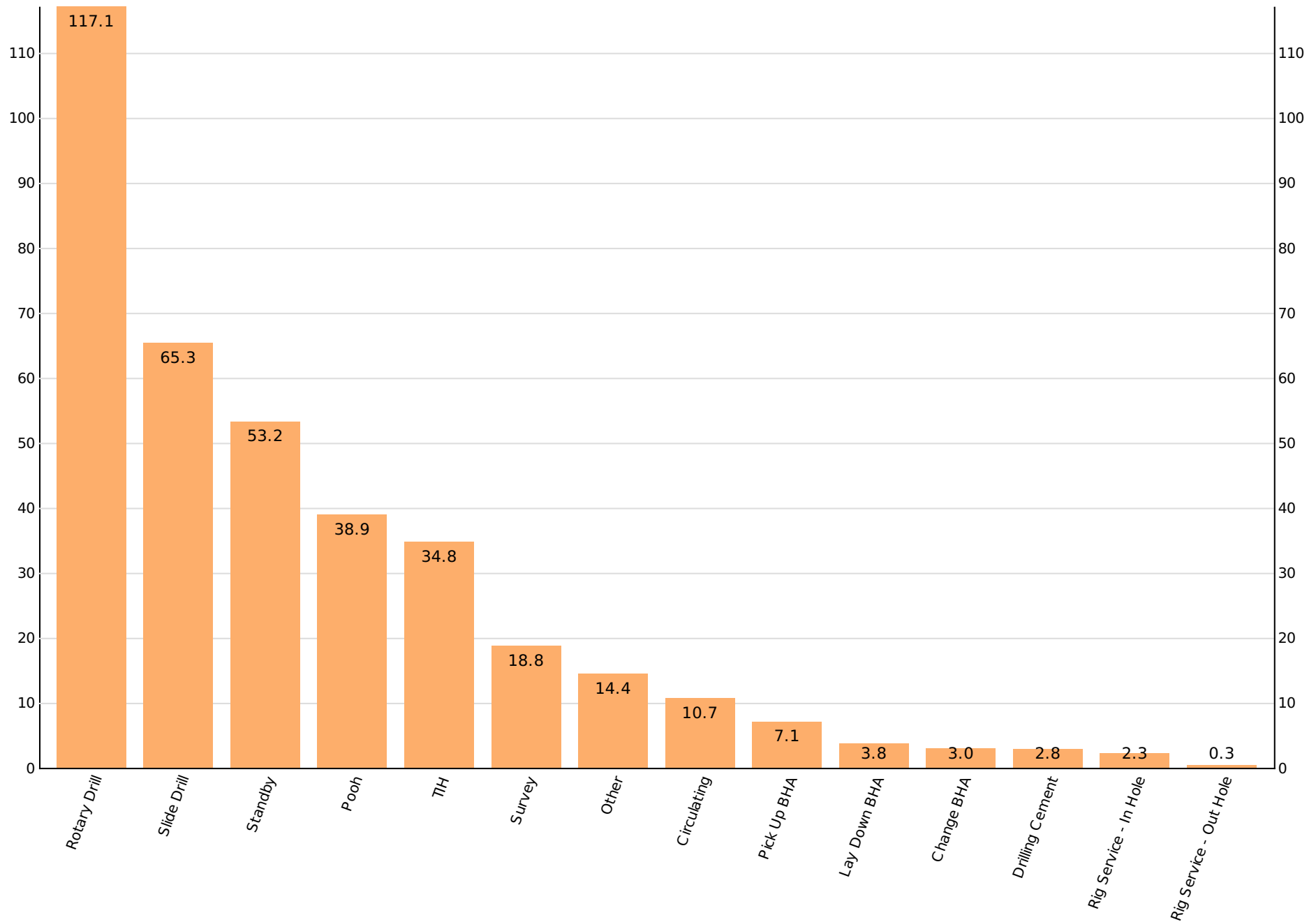
Time Percentage



Days vs. Depth



Directional Activity Hours





Proposed vs. As Drilled

Anderson Fed Com 551H (WT-21-183)

2021-11-24 to 2022-01-29

Lea, New Mexico, US (32.43, -103.65)



Anderson Fed Com 551H
Lea County, New Mexico
Job No. WT-21-183
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	5400.00	0.00	0.00	5400.00	0.00	0.00	0.000	0.00	0.00	Build: 1°/100
3	5803.29	4.03	231.89	5802.96	-8.76	-11.16	1.000	231.89	-8.20	Hold: 4.03° Inc, 231.89° Azm
4	10007.79	4.03	231.89	9997.04	-191.24	-243.84	0.000	0.00	-179.06	Drop: 1°/100'
5	10411.08	0.00	0.00	10400.00	-200.00	-255.00	1.000	180.00	-187.26	Hold
6	10602.62	0.00	0.00	10591.54	-200.00	-255.00	0.000	0.00	-187.26	KOP: 12°/100' @ 10602.62' MD
7	11352.62	90.00	351.99	11069.00	272.81	-321.53	12.000	351.99	288.24	LP: 11352.62' MD, 90.00° Inc, 351.99° Azm
8	11355.99	90.00	351.99	11069.00	276.15	-322.00	0.000	0.00	291.60	Build: 2°/100
9	11741.26	90.72	359.66	11066.59	660.10	-350.02	2.000	84.65	676.47	Hold: 90.72° Inc, 359.66° Azm
10	12908.07	90.72	359.66	11052.00	1826.80	-356.90	0.000	0.00	1842.10	Drop: 2°/100'
11	12916.53	90.55	359.66	11051.91	1835.26	-356.95	2.000	-179.98	1850.55	Hold: 90.55° Inc, 359.66° Azm
12	14791.09	90.55	359.66	11034.00	3709.70	-368.00	0.000	0.00	3723.28	Drop: 2°/100'
13	14830.63	89.76	359.66	11033.90	3749.24	-368.23	2.000	-179.71	3762.78	Hold: 89.76° Inc, 359.66° Azm
14	16032.03	89.76	359.66	11039.00	4950.60	-375.40	0.000	0.00	4963.05	Build: 2°/100
15	16051.79	90.15	359.67	11039.02	4970.36	-375.52	2.000	1.67	4982.79	Hold: 90.15° Inc, 359.67° Azm
16	19081.71	90.15	359.67	11031.00	8000.23	-392.98	0.000	0.00	8009.87	PBHL @ 19081.71' MD/11031.00' TVD

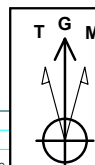
DESIGN TARGET DETAILS

Name	TVD	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude
Anderson #551H PBHL	11031.00	8000.23	-392.98	527935.70	751239.70	32° 26' 58.277 N	103° 39' 10.330 W
Anderson #551H WP2	11034.00	3709.70	-368.00	523645.17	751264.68	32° 26' 15.821 N	103° 39' 10.357 W
Anderson #551H WP3	11039.00	4950.60	-375.40	524886.07	751257.28	32° 26' 28.100 N	103° 39' 10.351 W
Anderson #551H WP1	11052.00	1826.80	-356.90	521762.27	751275.78	32° 25' 57.189 N	103° 39' 10.368 W
Anderson #551H FTP	11069.00	276.23	-349.28	520211.70	751283.40	32° 25' 41.845 N	103° 39' 10.394 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



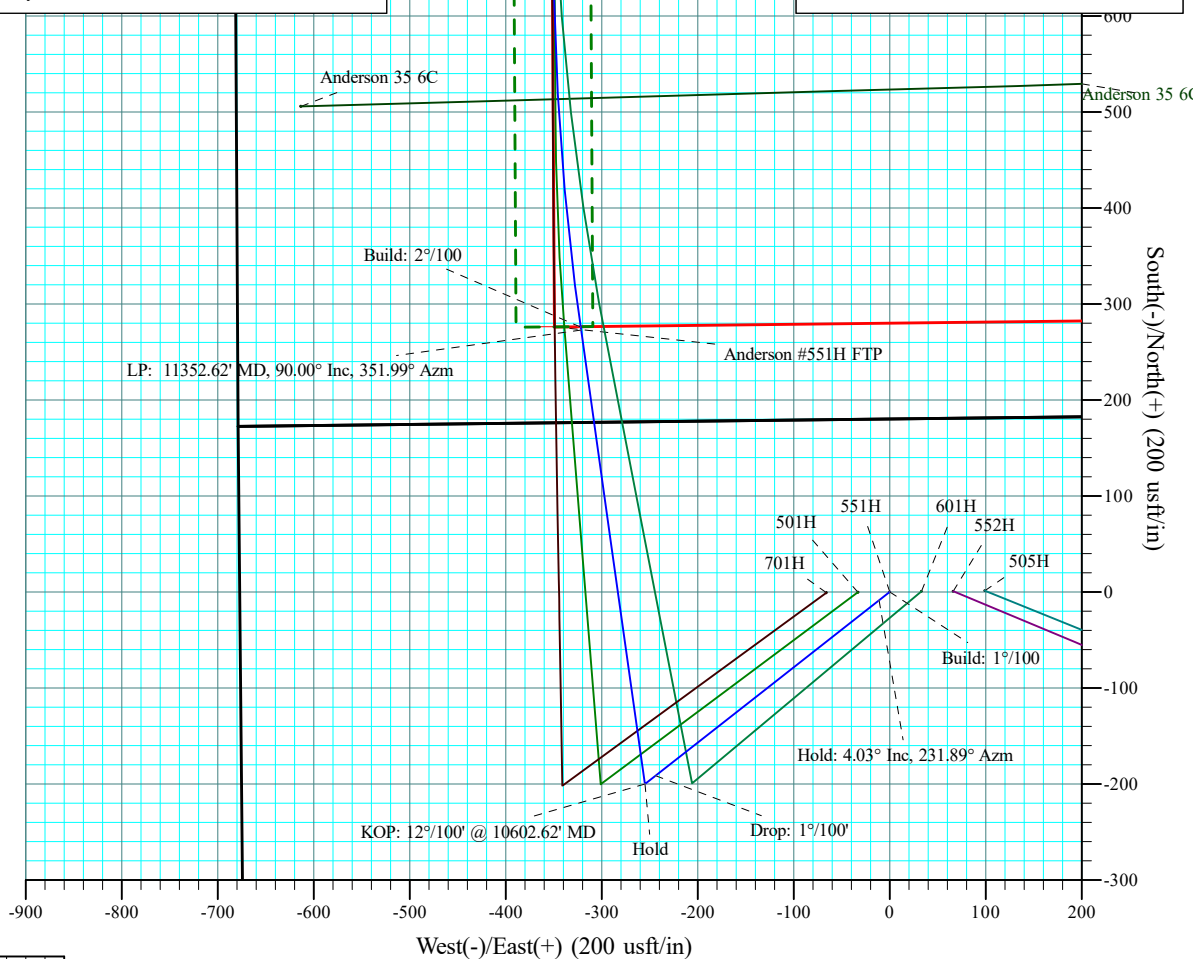
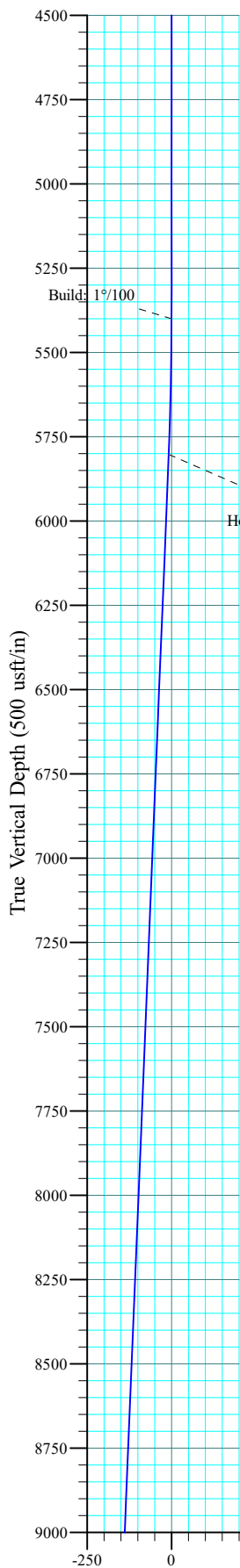
Azimuths to Grid North
True North: -0.37°
Magnetic North: 6.08°

Magnetic Field
Strength: 47848.0nT
Dip Angle: 60.12°
Date: 11/16/2021
Model: MVHD

SITE DETAILS: Anderson Fed Com 551H

Site Centre Northing: 519935.47
Easting: 751632.68

Positional Uncertainty: 0.00
Convergence: 0.37
Local North: Grid



Revised to Imaging: 4/30/2026 9:50:13 AM

Revised by OCD: 11/24/2022 5:25:39 PM

Page 12 of 18

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	5400.00	0.00	0.00	5400.00	0.00	0.00	0.000	0.00	0.00		Build: 1°/100
3	5803.29	4.03	231.89	5802.96	-8.76	-11.16	1.000	231.89	-8.20		Hold: 4.03° Inc, 231.89° Azm
4	10007.79	4.03	231.89	9997.04	-191.24	-243.84	0.000	0.00	-179.06		Drop: 1°/100'
5	10411.08	0.00	0.00	10400.00	-200.00	-255.00	1.000	180.00	-187.26		Hold
6	10602.62	0.00	0.00	10591.54	-200.00	-255.00	0.000	0.00	-187.26		KOP: 12°/100' @ 10602.62' MD
7	11352.62	90.00	351.99	11069.00	272.81	-321.53	12.000	351.99	288.24		LP: 11352.62' MD, 90.00° Inc, 351.99° Azm
8	11355.99	90.00	351.99	11069.00	276.15	-322.00	0.000	0.00	291.60		Build: 2°/100
9	11741.26	90.72	359.66	11066.59	660.10	-350.02	2.000	84.65	676.47		Hold: 90.72° Inc, 359.66° Azm
10	12908.07	90.72	359.66	11052.00	1826.80	-356.90	0.000	0.00	1842.10	Anderson #551H WP1	Drop: 2°/100'
11	12916.53	90.55	359.66	11051.91	1835.26	-356.95	2.000	-179.98	1850.55		Hold: 90.55° Inc, 359.66° Azm
12	14791.09	90.55	359.66	11034.00	3709.70	-368.00	0.000	0.00	3723.28	Anderson #551H WP2	Drop: 2°/100'
13	14830.63	89.76	359.66	11033.90	3749.24	-368.23	2.000	-179.71	3762.78		Hold: 89.76° Inc, 359.66° Azm
14	16032.03	89.76	359.66	11039.00	4950.60	-375.40	0.000	0.00	4963.05	Anderson #551H WP3	Build: 2°/100
15	16051.79	90.15	359.67	11039.02	4970.36	-375.52	2.000	1.67	4982.79		Hold: 90.15° Inc, 359.67° Azm
16	19081.71	90.15	359.67	11031.00	8000.23	-392.98	0.000	0.00	8009.87	Anderson #551H PBHL	PBHL @ 19081.71' MD/11031.00' TVD

DESIGN TARGET DETAILS

Name	TVD	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude
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Anderson #551H WP2	11034.00	3709.70	-368.00	523645.17	751264.68	32° 26' 15.821 N 103° 39' 10.357 W	
Anderson #551H WP3	11039.00	4950.60	-375.40	524886.07	751257.28	32° 26' 28.100 N 103° 39' 10.351 W	
Anderson #551H WP1	11052.00	1826.80	-356.90	521762.27	751275.78	32° 25' 57.189 N 103° 39' 10.368 W	
Anderson #551H FTP	11069.00	276.23	-349.28	520211.70	751283.40	32° 25' 41.845 N 103° 39' 10.394 W	

SITE DETAILS: Anderson Fed Com 551H

Site Centre Northing: 519935.47
Easting: 751632.68

Positional Uncertainty: 0.00
Convergence: 0.37
Local North: Grid

PROJECT DETAILS: Lea County, New Mexico

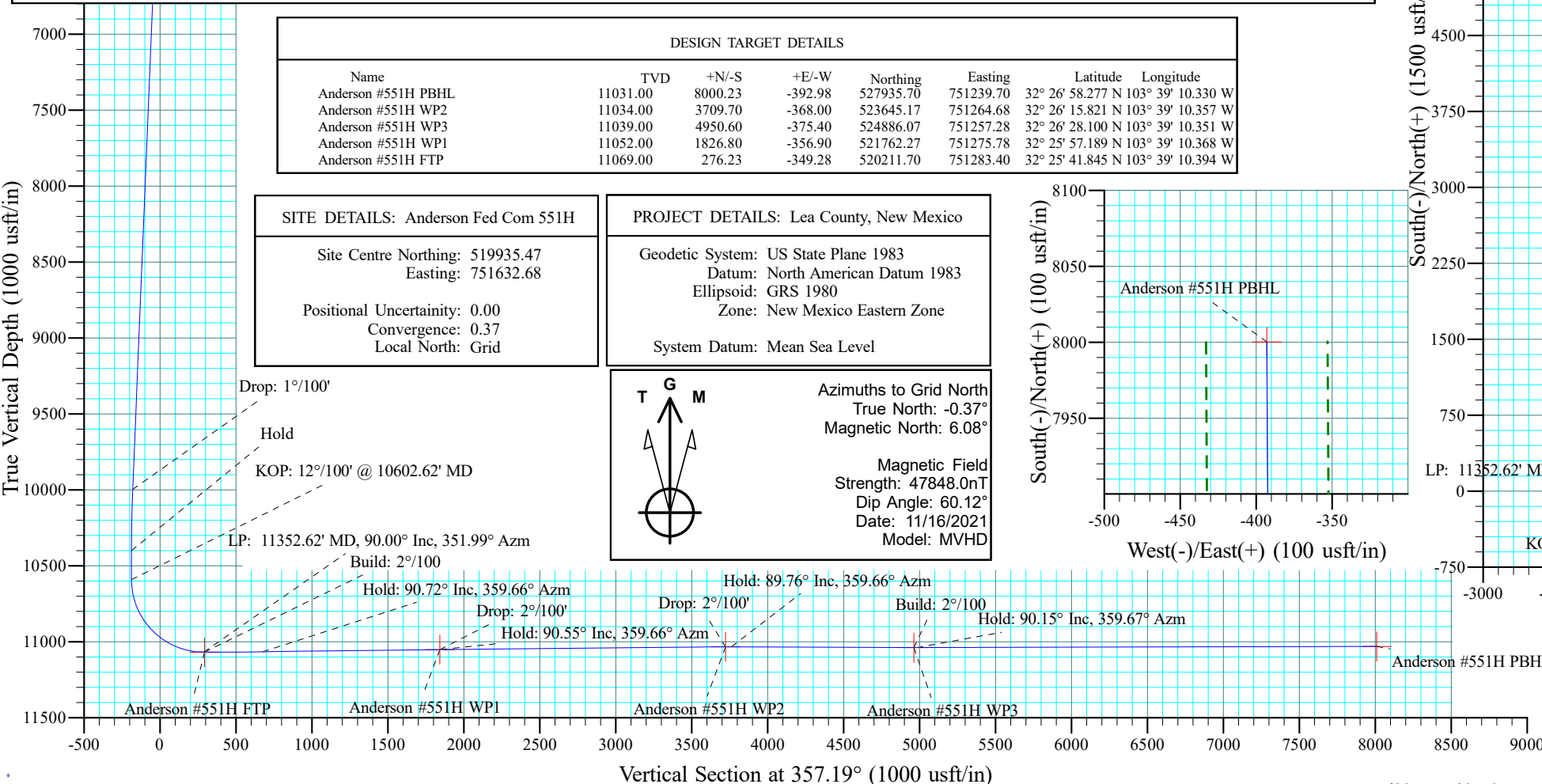
Geodetic System: US State Plane 1983
Datum: North American Datum 1983
Ellipsoid: GRS 1980
Zone: New Mexico Eastern Zone

System Datum: Mean Sea Level

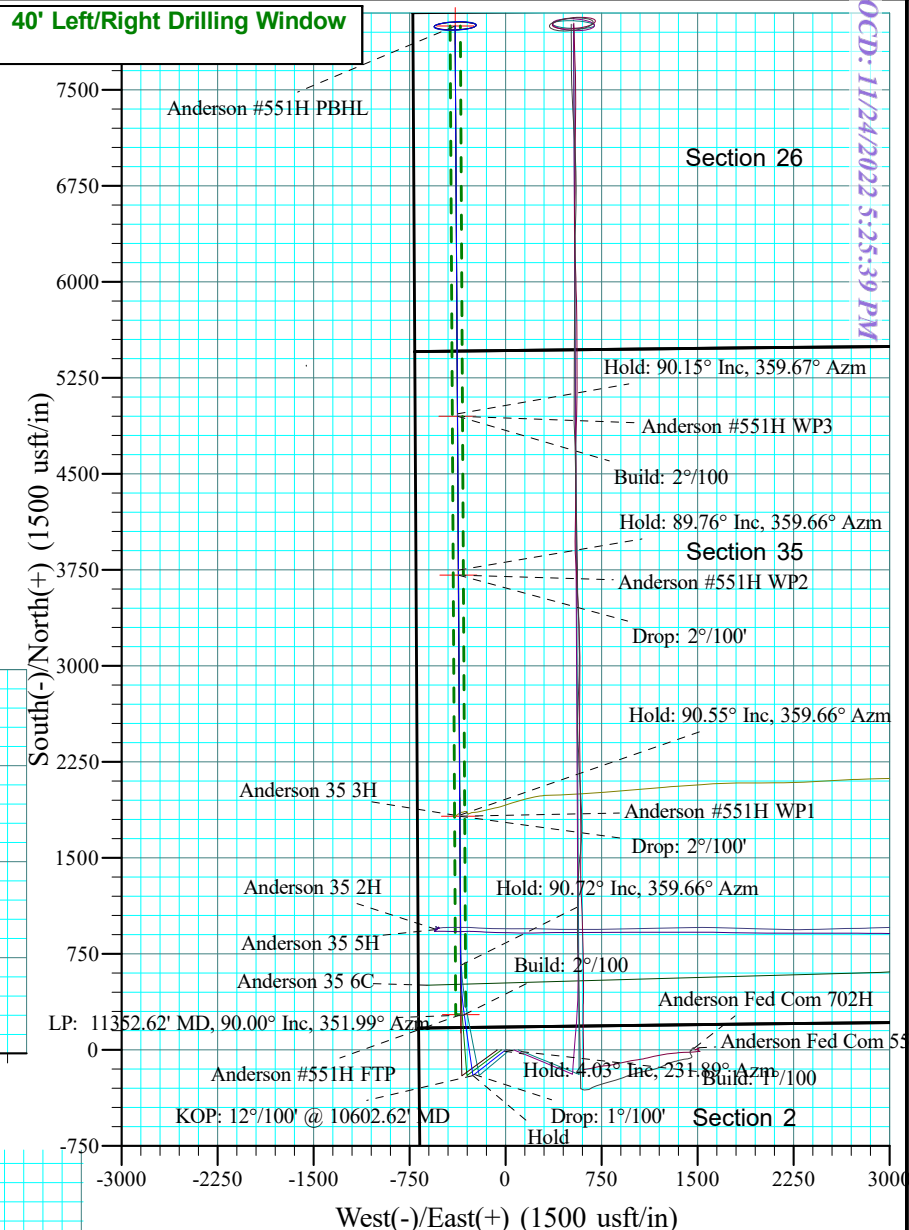


Azimuths to Grid North
True North: -0.37°
Magnetic North: 6.08°

Magnetic Field
Strength: 47848.0nT
Dip Angle: 60.12°
Date: 11/16/2021
Model: MVHD



40' Left/Right Drilling Window



Drawn By: KEN

Date Created: 11/18/2021

Date Revised: 11/18/2021

File: Advance Energy - Anderson Fed Com 551H - 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 #551H
Project:	Lea County, New Mexico	TVD Reference:	Well @ 3724.50usft (Nabors X50)
Site:	Anderson Fed Com 551H	MD Reference:	Well @ 3724.50usft (Nabors X50)
Well:	Anderson #551H	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 551H		
Site Position:		Northing:	519,935.48 usft
From:	Lat/Long	Easting:	751,632.67 usft
Position Uncertainty:	0.00 usft	Slot Radius:	13-3/16 "
		Latitude:	32° 25' 39.090 N
		Longitude:	103° 39' 6.340 W
		Grid Convergence:	0.37 °

Well	Anderson #551H		
Well Position	+N/-S	0.00 usft	Northing: 519,935.48 usft
	+E/-W	0.00 usft	Easting: 751,632.67 usft
Position Uncertainty	0.00 usft		Wellhead Elevation: usft
			Latitude: 32° 25' 39.090 N
			Longitude: 103° 39' 6.340 W
			Ground Level: 3,692.00 usft

Wellbore	Planning		
Magnetics	Model Name	Sample Date	Declination (°)
	MVHD	11/16/2021	6.45
			Dip Angle (°) 60.12
			Field Strength (nT) 47,848.033

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 (°) 357.19

Survey Tool Program	Date	11/17/2021		
From (usft)	To (usft)	Survey (Wellbore)	Tool Name	Description
0.00	19,081.67	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 #551H
Project:	Lea County, New Mexico	TVD Reference:	Well @ 3724.50usft (Nabors X50)
Site:	Anderson Fed Com 551H	MD Reference:	Well @ 3724.50usft (Nabors X50)
Well:	Anderson #551H	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
4,900.00	0.00	0.00	4,900.00	0.00	0.00	0.00	0.000	0.000	0.000
5,000.00	0.00	0.00	5,000.00	0.00	0.00	0.00	0.000	0.000	0.000
5,100.00	0.00	0.00	5,100.00	0.00	0.00	0.00	0.000	0.000	0.000
5,200.00	0.00	0.00	5,200.00	0.00	0.00	0.00	0.000	0.000	0.000
5,300.00	0.00	0.00	5,300.00	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 #551H
Project:	Lea County, New Mexico	TVD Reference:	Well @ 3724.50usft (Nabors X50)
Site:	Anderson Fed Com 551H	MD Reference:	Well @ 3724.50usft (Nabors X50)
Well:	Anderson #551H	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)
5,400.00	0.00	0.00	5,400.00	0.00	0.00	0.00	0.000	0.000	0.000
Build: 1°/100									
5,500.00	1.00	231.89	5,500.00	-0.54	-0.69	-0.50	1.000	1.000	0.000
5,600.00	2.00	231.89	5,599.96	-2.15	-2.75	-2.02	1.000	1.000	0.000
5,700.00	3.00	231.89	5,699.86	-4.85	-6.18	-4.54	1.000	1.000	0.000
5,803.29	4.03	231.89	5,802.96	-8.76	-11.16	-8.20	1.000	1.000	0.000
Hold: 4.03° Inc, 231.89° Azm									
5,900.00	4.03	231.89	5,899.43	-12.95	-16.52	-12.13	0.000	0.000	0.000
6,000.00	4.03	231.89	5,999.18	-17.29	-22.05	-16.19	0.000	0.000	0.000
6,100.00	4.03	231.89	6,098.93	-21.63	-27.58	-20.26	0.000	0.000	0.000
6,200.00	4.03	231.89	6,198.68	-25.97	-33.12	-24.32	0.000	0.000	0.000
6,300.00	4.03	231.89	6,298.44	-30.31	-38.65	-28.38	0.000	0.000	0.000
6,400.00	4.03	231.89	6,398.19	-34.65	-44.18	-32.45	0.000	0.000	0.000
6,500.00	4.03	231.89	6,497.94	-39.00	-49.72	-36.51	0.000	0.000	0.000
6,600.00	4.03	231.89	6,597.69	-43.34	-55.25	-40.57	0.000	0.000	0.000
6,700.00	4.03	231.89	6,697.45	-47.68	-60.79	-44.64	0.000	0.000	0.000
6,800.00	4.03	231.89	6,797.20	-52.02	-66.32	-48.70	0.000	0.000	0.000
6,900.00	4.03	231.89	6,896.95	-56.36	-71.85	-52.77	0.000	0.000	0.000
7,000.00	4.03	231.89	6,996.70	-60.70	-77.39	-56.83	0.000	0.000	0.000
7,100.00	4.03	231.89	7,096.46	-65.04	-82.92	-60.89	0.000	0.000	0.000
7,200.00	4.03	231.89	7,196.21	-69.38	-88.46	-64.96	0.000	0.000	0.000
7,300.00	4.03	231.89	7,295.96	-73.72	-93.99	-69.02	0.000	0.000	0.000
7,400.00	4.03	231.89	7,395.71	-78.06	-99.52	-73.09	0.000	0.000	0.000
7,500.00	4.03	231.89	7,495.47	-82.40	-105.06	-77.15	0.000	0.000	0.000
7,600.00	4.03	231.89	7,595.22	-86.74	-110.59	-81.21	0.000	0.000	0.000
7,700.00	4.03	231.89	7,694.97	-91.08	-116.13	-85.28	0.000	0.000	0.000
7,800.00	4.03	231.89	7,794.72	-95.42	-121.66	-89.34	0.000	0.000	0.000
7,900.00	4.03	231.89	7,894.48	-99.76	-127.19	-93.40	0.000	0.000	0.000
8,000.00	4.03	231.89	7,994.23	-104.10	-132.73	-97.47	0.000	0.000	0.000
8,100.00	4.03	231.89	8,093.98	-108.44	-138.26	-101.53	0.000	0.000	0.000
8,200.00	4.03	231.89	8,193.73	-112.78	-143.80	-105.60	0.000	0.000	0.000
8,300.00	4.03	231.89	8,293.48	-117.12	-149.33	-109.66	0.000	0.000	0.000
8,400.00	4.03	231.89	8,393.24	-121.46	-154.86	-113.72	0.000	0.000	0.000
8,500.00	4.03	231.89	8,492.99	-125.80	-160.40	-117.79	0.000	0.000	0.000
8,600.00	4.03	231.89	8,592.74	-130.14	-165.93	-121.85	0.000	0.000	0.000
8,700.00	4.03	231.89	8,692.49	-134.48	-171.46	-125.91	0.000	0.000	0.000
8,800.00	4.03	231.89	8,792.25	-138.82	-177.00	-129.98	0.000	0.000	0.000
8,900.00	4.03	231.89	8,892.00	-143.16	-182.53	-134.04	0.000	0.000	0.000
9,000.00	4.03	231.89	8,991.75	-147.50	-188.07	-138.11	0.000	0.000	0.000
9,100.00	4.03	231.89	9,091.50	-151.84	-193.60	-142.17	0.000	0.000	0.000
9,200.00	4.03	231.89	9,191.26	-156.18	-199.13	-146.23	0.000	0.000	0.000
9,300.00	4.03	231.89	9,291.01	-160.52	-204.67	-150.30	0.000	0.000	0.000
9,400.00	4.03	231.89	9,390.76	-164.86	-210.20	-154.36	0.000	0.000	0.000



Aim Directional Services, LLC

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Wellbore:	Planning	Survey Calculation Method:	Minimum Curvature
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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)
9,500.00	4.03	231.89	9,490.51	-169.20	-215.74	-158.43	0.000	0.000	0.000
9,600.00	4.03	231.89	9,590.27	-173.55	-221.27	-162.49	0.000	0.000	0.000
9,700.00	4.03	231.89	9,690.02	-177.89	-226.80	-166.55	0.000	0.000	0.000
9,800.00	4.03	231.89	9,789.77	-182.23	-232.34	-170.62	0.000	0.000	0.000
9,900.00	4.03	231.89	9,889.52	-186.57	-237.87	-174.68	0.000	0.000	0.000
10,007.79	4.03	231.89	9,997.04	-191.24	-243.84	-179.06	0.000	0.000	0.000
Drop: 1°/100'									
10,100.00	3.11	231.89	10,089.08	-194.79	-248.36	-182.38	1.000	-1.000	0.000
10,200.00	2.11	231.89	10,188.97	-197.60	-251.94	-185.01	1.000	-1.000	0.000
10,300.00	1.11	231.89	10,288.93	-199.34	-254.15	-186.64	1.000	-1.000	0.000
10,400.00	0.11	231.89	10,388.92	-199.99	-254.99	-187.25	1.000	-1.000	0.000
10,411.08	0.00	0.00	10,400.00	-200.00	-255.00	-187.26	1.000	-1.000	0.000
Hold									
10,500.00	0.00	0.00	10,488.92	-200.00	-255.00	-187.26	0.000	0.000	0.000
10,602.62	0.00	0.00	10,591.54	-200.00	-255.00	-187.26	0.000	0.000	0.000
KOP: 12°/100' @ 10602.62' MD									
10,625.00	2.69	351.99	10,613.92	-199.48	-255.07	-186.74	12.000	12.000	0.000
10,650.00	5.69	351.99	10,638.85	-197.67	-255.33	-184.92	12.000	12.000	0.000
10,675.00	8.69	351.99	10,663.65	-194.58	-255.76	-181.80	12.000	12.000	0.000
10,700.00	11.69	351.99	10,688.25	-190.20	-256.38	-177.40	12.000	12.000	0.000
10,725.00	14.69	351.99	10,712.59	-184.55	-257.17	-171.72	12.000	12.000	0.000
10,750.00	17.69	351.99	10,736.59	-177.65	-258.14	-164.78	12.000	12.000	0.000
10,775.00	20.69	351.99	10,760.20	-169.52	-259.29	-156.60	12.000	12.000	0.000
10,800.00	23.69	351.99	10,783.35	-160.17	-260.60	-147.20	12.000	12.000	0.000
10,825.00	26.69	351.99	10,805.97	-149.64	-262.09	-136.61	12.000	12.000	0.000
10,850.00	29.69	351.99	10,828.00	-137.95	-263.73	-124.85	12.000	12.000	0.000
10,875.00	32.69	351.99	10,849.39	-125.13	-265.54	-111.96	12.000	12.000	0.000
10,900.00	35.69	351.99	10,870.07	-111.22	-267.49	-97.97	12.000	12.000	0.000
10,925.00	38.69	351.99	10,889.98	-96.26	-269.60	-82.93	12.000	12.000	0.000
10,950.00	41.69	351.99	10,909.08	-80.29	-271.85	-66.86	12.000	12.000	0.000
10,975.00	44.69	351.99	10,927.30	-63.35	-274.23	-49.83	12.000	12.000	0.000
11,000.00	47.69	351.99	10,944.61	-45.48	-276.74	-31.86	12.000	12.000	0.000
11,025.00	50.69	351.99	10,960.95	-26.75	-279.38	-13.02	12.000	12.000	0.000
11,050.00	53.69	351.99	10,976.27	-7.19	-282.13	6.65	12.000	12.000	0.000
11,075.00	56.69	351.99	10,990.54	13.13	-284.99	27.08	12.000	12.000	0.000
11,100.00	59.69	351.99	11,003.72	34.16	-287.95	48.24	12.000	12.000	0.000
11,125.00	62.69	351.99	11,015.77	55.85	-291.00	70.05	12.000	12.000	0.000
11,150.00	65.69	351.99	11,026.65	78.13	-294.14	92.46	12.000	12.000	0.000
11,175.00	68.69	351.99	11,036.35	100.95	-297.35	115.41	12.000	12.000	0.000
11,200.00	71.69	351.99	11,044.82	124.24	-300.63	138.83	12.000	12.000	0.000
11,225.00	74.69	351.99	11,052.05	147.93	-303.96	162.66	12.000	12.000	0.000
11,250.00	77.69	351.99	11,058.02	171.97	-307.34	186.83	12.000	12.000	0.000
11,275.00	80.69	351.99	11,062.71	196.29	-310.76	211.28	12.000	12.000	0.000
11,300.00	83.69	351.99	11,066.11	220.81	-314.22	235.95	12.000	12.000	0.000



Aim Directional Services, LLC

Survey Report



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Site:	Anderson Fed Com 551H	MD Reference:	Well @ 3724.50usft (Nabors X50)
Well:	Anderson #551H	North Reference:	Grid
Wellbore:	Planning	Survey Calculation Method:	Minimum Curvature
Design:	Plan 1.0	Database:	ROTOC- 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)
11,325.00	86.69	351.99	11,068.21	245.47	-317.69	260.75	12.000	12.000	0.000
11,350.00	89.69	351.99	11,069.00	270.22	-321.17	285.64	12.000	12.000	0.000
11,352.62	90.00	351.99	11,069.00	272.81	-321.53	288.24	12.000	12.000	0.000
LP: 11352.62' MD, 90.00° Inc, 351.99° Azm									
11,355.99	90.00	351.99	11,069.00	276.15	-322.00	291.60	0.000	0.000	0.000
Build: 2°/100									
11,400.00	90.08	352.87	11,068.97	319.77	-327.80	335.46	2.000	0.187	1.991
11,500.00	90.27	354.86	11,068.67	419.19	-338.49	435.28	2.000	0.186	1.991
11,600.00	90.45	356.85	11,068.04	518.93	-345.72	535.25	2.000	0.186	1.991
11,700.00	90.64	358.84	11,067.08	618.85	-349.48	635.23	2.000	0.186	1.991
11,741.26	90.72	359.66	11,066.59	660.10	-350.02	676.47	2.000	0.185	1.992
Hold: 90.72° Inc, 359.66° Azm									
11,800.00	90.72	359.66	11,065.86	718.83	-350.37	735.14	0.000	0.000	0.000
11,900.00	90.72	359.66	11,064.61	818.82	-350.96	835.04	0.000	0.000	0.000
12,000.00	90.72	359.66	11,063.36	918.81	-351.55	934.94	0.000	0.000	0.000
12,100.00	90.72	359.66	11,062.11	1,018.80	-352.14	1,034.84	0.000	0.000	0.000
12,200.00	90.72	359.66	11,060.85	1,118.79	-352.73	1,134.74	0.000	0.000	0.000
12,300.00	90.72	359.66	11,059.60	1,218.78	-353.32	1,234.64	0.000	0.000	0.000
12,400.00	90.72	359.66	11,058.35	1,318.78	-353.91	1,334.54	0.000	0.000	0.000
12,500.00	90.72	359.66	11,057.10	1,418.77	-354.50	1,434.44	0.000	0.000	0.000
12,600.00	90.72	359.66	11,055.85	1,518.76	-355.08	1,534.34	0.000	0.000	0.000
12,700.00	90.72	359.66	11,054.60	1,618.75	-355.67	1,634.24	0.000	0.000	0.000
12,800.00	90.72	359.66	11,053.35	1,718.74	-356.26	1,734.14	0.000	0.000	0.000
12,908.07	90.72	359.66	11,052.00	1,826.80	-356.90	1,842.10	0.000	0.000	0.000
Drop: 2°/100'									
12,916.53	90.55	359.66	11,051.91	1,835.26	-356.95	1,850.55	2.000	-2.000	-0.001
Hold: 90.55° Inc, 359.66° Azm									
13,000.00	90.55	359.66	11,051.11	1,918.72	-357.44	1,933.94	0.000	0.000	0.000
13,100.00	90.55	359.66	11,050.15	2,018.71	-358.03	2,033.84	0.000	0.000	0.000
13,200.00	90.55	359.66	11,049.20	2,118.71	-358.62	2,133.74	0.000	0.000	0.000
13,300.00	90.55	359.66	11,048.24	2,218.70	-359.21	2,233.64	0.000	0.000	0.000
13,400.00	90.55	359.66	11,047.29	2,318.70	-359.80	2,333.55	0.000	0.000	0.000
13,500.00	90.55	359.66	11,046.33	2,418.69	-360.39	2,433.45	0.000	0.000	0.000
13,600.00	90.55	359.66	11,045.38	2,518.68	-360.98	2,533.35	0.000	0.000	0.000
13,700.00	90.55	359.66	11,044.42	2,618.68	-361.57	2,633.25	0.000	0.000	0.000
13,800.00	90.55	359.66	11,043.47	2,718.67	-362.16	2,733.16	0.000	0.000	0.000
13,900.00	90.55	359.66	11,042.51	2,818.66	-362.75	2,833.06	0.000	0.000	0.000
14,000.00	90.55	359.66	11,041.56	2,918.66	-363.34	2,932.96	0.000	0.000	0.000
14,100.00	90.55	359.66	11,040.60	3,018.65	-363.93	3,032.86	0.000	0.000	0.000
14,200.00	90.55	359.66	11,039.65	3,118.65	-364.52	3,132.77	0.000	0.000	0.000
14,300.00	90.55	359.66	11,038.69	3,218.64	-365.11	3,232.67	0.000	0.000	0.000
14,400.00	90.55	359.66	11,037.74	3,318.63	-365.69	3,332.57	0.000	0.000	0.000
14,500.00	90.55	359.66	11,036.78	3,418.63	-366.28	3,432.47	0.000	0.000	0.000
14,600.00	90.55	359.66	11,035.83	3,518.62	-366.87	3,532.37	0.000	0.000	0.000



Aim Directional Services, LLC

Survey Report



Company:	Advance Energy Partners, LLC	Local Co-ordinate Reference:	Well Anderson #551H
Project:	Lea County, New Mexico	TVD Reference:	Well @ 3724.50usft (Nabors X50)
Site:	Anderson Fed Com 551H	MD Reference:	Well @ 3724.50usft (Nabors X50)
Well:	Anderson #551H	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)
14,700.00	90.55	359.66	11,034.87	3,618.61	-367.46	3,632.28	0.000	0.000	0.000
14,791.09	90.55	359.66	11,034.00	3,709.70	-368.00	3,723.28	0.000	0.000	0.000
Drop: 2°/100'									
14,800.00	90.37	359.66	11,033.93	3,718.61	-368.05	3,732.18	2.000	-2.000	-0.010
14,830.63	89.76	359.66	11,033.90	3,749.24	-368.23	3,762.78	2.000	-2.000	-0.010
Hold: 89.76° Inc, 359.66° Azm									
14,900.00	89.76	359.66	11,034.19	3,818.61	-368.65	3,832.09	0.000	0.000	0.000
15,000.00	89.76	359.66	11,034.62	3,918.60	-369.24	3,931.99	0.000	0.000	0.000
15,100.00	89.76	359.66	11,035.04	4,018.60	-369.84	4,031.90	0.000	0.000	0.000
15,200.00	89.76	359.66	11,035.46	4,118.60	-370.44	4,131.81	0.000	0.000	0.000
15,300.00	89.76	359.66	11,035.89	4,218.59	-371.03	4,231.71	0.000	0.000	0.000
15,400.00	89.76	359.66	11,036.31	4,318.59	-371.63	4,331.62	0.000	0.000	0.000
15,500.00	89.76	359.66	11,036.74	4,418.59	-372.23	4,431.52	0.000	0.000	0.000
15,600.00	89.76	359.66	11,037.16	4,518.59	-372.82	4,531.43	0.000	0.000	0.000
15,700.00	89.76	359.66	11,037.59	4,618.58	-373.42	4,631.34	0.000	0.000	0.000
15,800.00	89.76	359.66	11,038.01	4,718.58	-374.02	4,731.24	0.000	0.000	0.000
15,900.00	89.76	359.66	11,038.44	4,818.58	-374.61	4,831.15	0.000	0.000	0.000
16,000.00	89.76	359.66	11,038.86	4,918.58	-375.21	4,931.06	0.000	0.000	0.000
16,032.03	89.76	359.66	11,039.00	4,950.60	-375.40	4,963.05	0.000	0.000	0.000
Build: 2°/100									
16,051.79	90.15	359.67	11,039.02	4,970.36	-375.52	4,982.79	2.000	1.999	0.058
Hold: 90.15° Inc, 359.67° Azm									
16,100.00	90.15	359.67	11,038.89	5,018.57	-375.79	5,030.96	0.000	0.000	0.000
16,200.00	90.15	359.67	11,038.62	5,118.57	-376.37	5,130.87	0.000	0.000	0.000
16,300.00	90.15	359.67	11,038.36	5,218.57	-376.95	5,230.77	0.000	0.000	0.000
16,400.00	90.15	359.67	11,038.09	5,318.57	-377.52	5,330.68	0.000	0.000	0.000
16,500.00	90.15	359.67	11,037.83	5,418.57	-378.10	5,430.59	0.000	0.000	0.000
16,600.00	90.15	359.67	11,037.57	5,518.56	-378.68	5,530.49	0.000	0.000	0.000
16,700.00	90.15	359.67	11,037.30	5,618.56	-379.25	5,630.40	0.000	0.000	0.000
16,800.00	90.15	359.67	11,037.04	5,718.56	-379.83	5,730.30	0.000	0.000	0.000
16,900.00	90.15	359.67	11,036.77	5,818.56	-380.40	5,830.21	0.000	0.000	0.000
17,000.00	90.15	359.67	11,036.51	5,918.56	-380.98	5,930.12	0.000	0.000	0.000
17,100.00	90.15	359.67	11,036.24	6,018.55	-381.56	6,030.02	0.000	0.000	0.000
17,200.00	90.15	359.67	11,035.98	6,118.55	-382.13	6,129.93	0.000	0.000	0.000
17,300.00	90.15	359.67	11,035.71	6,218.55	-382.71	6,229.83	0.000	0.000	0.000
17,400.00	90.15	359.67	11,035.45	6,318.55	-383.29	6,329.74	0.000	0.000	0.000
17,500.00	90.15	359.67	11,035.18	6,418.55	-383.86	6,429.65	0.000	0.000	0.000
17,600.00	90.15	359.67	11,034.92	6,518.54	-384.44	6,529.55	0.000	0.000	0.000
17,700.00	90.15	359.67	11,034.66	6,618.54	-385.01	6,629.46	0.000	0.000	0.000
17,800.00	90.15	359.67	11,034.39	6,718.54	-385.59	6,729.36	0.000	0.000	0.000
17,900.00	90.15	359.67	11,034.13	6,818.54	-386.17	6,829.27	0.000	0.000	0.000
18,000.00	90.15	359.67	11,033.86	6,918.54	-386.74	6,929.18	0.000	0.000	0.000
18,100.00	90.15	359.67	11,033.60	7,018.53	-387.32	7,029.08	0.000	0.000	0.000
18,200.00	90.15	359.67	11,033.33	7,118.53	-387.90	7,128.99	0.000	0.000	0.000



Aim Directional Services, LLC

Survey Report



Company:	Advance Energy Partners, LLC	Local Co-ordinate Reference:	Well Anderson #551H
Project:	Lea County, New Mexico	TVD Reference:	Well @ 3724.50usft (Nabors X50)
Site:	Anderson Fed Com 551H	MD Reference:	Well @ 3724.50usft (Nabors X50)
Well:	Anderson #551H	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)
18,300.00	90.15	359.67	11,033.07	7,218.53	-388.47	7,228.89	0.000	0.000	0.000
18,400.00	90.15	359.67	11,032.80	7,318.53	-389.05	7,328.80	0.000	0.000	0.000
18,500.00	90.15	359.67	11,032.54	7,418.53	-389.62	7,428.71	0.000	0.000	0.000
18,600.00	90.15	359.67	11,032.27	7,518.52	-390.20	7,528.61	0.000	0.000	0.000
18,700.00	90.15	359.67	11,032.01	7,618.52	-390.78	7,628.52	0.000	0.000	0.000
18,800.00	90.15	359.67	11,031.75	7,718.52	-391.35	7,728.42	0.000	0.000	0.000
18,900.00	90.15	359.67	11,031.48	7,818.52	-391.93	7,828.33	0.000	0.000	0.000
19,000.00	90.15	359.67	11,031.22	7,918.52	-392.51	7,928.24	0.000	0.000	0.000
19,081.71	90.15	359.67	11,031.00	8,000.23	-392.98	8,009.87	0.000	0.000	0.000
PBHL @ 19081.71' MD/11031.00' TVD									

Design Targets

Target Name - hit/miss target - Shape	Dip Angle (°)	Dip Dir. (°)	TVD (usft)	+N/-S (usft)	+E/-W (usft)	Northing (usft)	Easting (usft)	Latitude	Longitude
Anderson #551H PBH - plan hits target center - Point	0.00	0.00	11,031.00	8,000.23	-392.98	527,935.70	751,239.70	32° 26' 58.277 N	103° 39' 10.330 W
Anderson #551H WP2 - plan hits target center - Point	0.00	0.00	11,034.00	3,709.70	-368.00	523,645.18	751,264.67	32° 26' 15.821 N	103° 39' 10.357 W
Anderson #551H WP3 - plan hits target center - Point	0.00	0.00	11,039.00	4,950.60	-375.40	524,886.08	751,257.27	32° 26' 28.100 N	103° 39' 10.351 W
Anderson #551H WP4 - plan hits target center - Point	0.00	0.00	11,052.00	1,826.80	-356.90	521,762.28	751,275.77	32° 25' 57.189 N	103° 39' 10.368 W
Anderson #551H FTP - plan misses target center by 27.00usft at 11359.66usft MD (11069.00 TVD, 279.78 N, -322.51 E) - Point	0.00	0.00	11,069.00	276.23	-349.28	520,211.70	751,283.40	32° 25' 41.845 N	103° 39' 10.394 W



Aim Directional Services, LLC

Survey Report



Company:	Advance Energy Partners, LLC	Local Co-ordinate Reference:	Well Anderson #551H
Project:	Lea County, New Mexico	TVD Reference:	Well @ 3724.50usft (Nabors X50)
Site:	Anderson Fed Com 551H	MD Reference:	Well @ 3724.50usft (Nabors X50)
Well:	Anderson #551H	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)	
5400	5400	0	0	Build: 1°/100
5803	5803	-9	-11	Hold: 4.03° Inc, 231.89° Azm
10,008	9997	-191	-244	Drop: 1°/100'
10,411	10,400	-200	-255	Hold
10,603	10,592	-200	-255	KOP: 12°/100' @ 10602.62' MD
11,353	11,069	273	-322	LP: 11352.62' MD, 90.00° Inc, 351.99° Azm
11,356	11,069	276	-322	Build: 2°/100
11,741	11,067	660	-350	Hold: 90.72° Inc, 359.66° Azm
12,908	11,052	1827	-357	Drop: 2°/100'
12,917	11,052	1835	-357	Hold: 90.55° Inc, 359.66° Azm
14,791	11,034	3710	-368	Drop: 2°/100'
14,831	11,034	3749	-368	Hold: 89.76° Inc, 359.66° Azm
16,032	11,039	4951	-375	Build: 2°/100
16,052	11,039	4970	-376	Hold: 90.15° Inc, 359.67° Azm
19,082	11,031	8000	-393	PBHL @ 19081.71' MD/11031.00' TVD

Released to Imaging: 4/30/2026 9:50:13 AM



Advance Energy Partners, LLC

Anderson Fed Com 551H
Lea County, New Mexico
Job No. WT-21-183
Plan 1.0 As Drilled



Received by ODE: 1/24/2022 5:25:39 PM

Page 1 of 1

SECTION DETAILS

Sec	MD	Inc	Azi	TVD	+N/-S	+E/-W	Dleg	TFace	VSect	Target	Annotation
1	19023.00	90.37	359.49	11116.87	7950.09	-385.96	0.000	0.00	7959.45		Last Aim Svy
2	19092.00	90.37	359.49	11116.42	8019.09	-386.57	0.000	0.00	8028.40		Proj to BHL

DESIGN TARGET DETAILS

Name	TVD	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude
Anderson #551H PBHL	11031.00	8000.23	-392.98	527935.70	751239.70	32° 26' 58.277 N 103° 39' 10.330 W	
Anderson #551H WP2	11034.00	3709.70	-368.00	523645.17	751264.68	32° 26' 15.821 N 103° 39' 10.357 W	
Anderson #551H WP3	11039.00	4950.60	-375.40	524886.07	751257.28	32° 26' 28.100 N 103° 39' 10.351 W	
Anderson #551H WP1	11052.00	1826.80	-356.90	521762.27	751275.78	32° 25' 57.189 N 103° 39' 10.368 W	
Anderson #551H FTP	11069.00	276.23	-349.28	520211.70	751283.40	32° 25' 41.845 N 103° 39' 10.394 W	

SITE DETAILS: Anderson Fed Com 551H

Site Centre Northing: 519935.47
Easting: 751632.68

Positional Uncertainty: 0.00
Convergence: 0.37
Local North: Grid

PROJECT DETAILS: Lea County, New Mexico

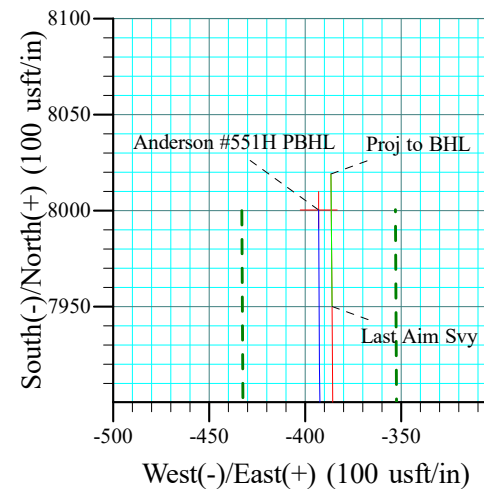
Geodetic System: US State Plane 1983
Datum: North American Datum 1983
Ellipsoid: GRS 1980
Zone: New Mexico Eastern Zone

System Datum: Mean Sea Level

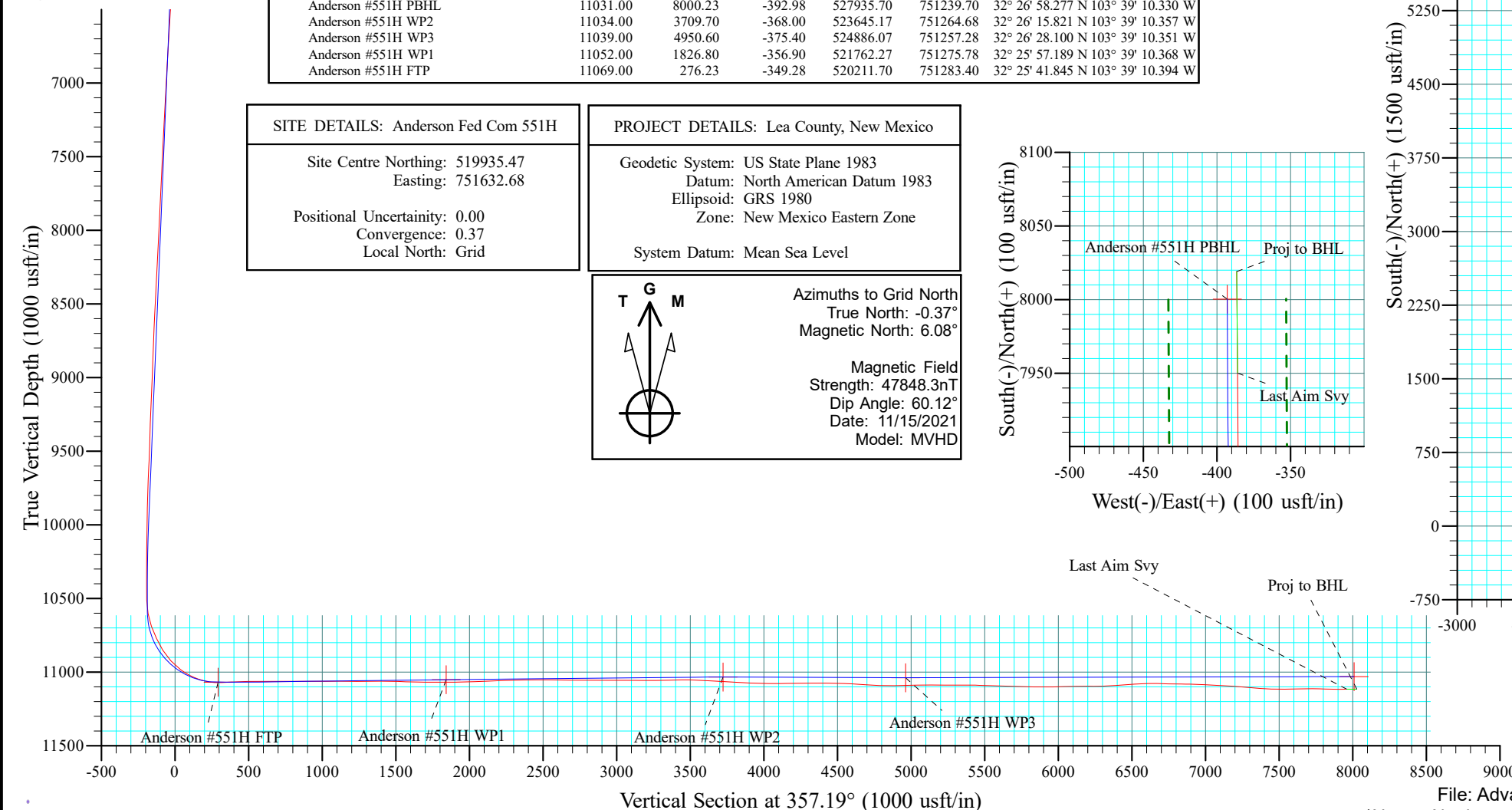
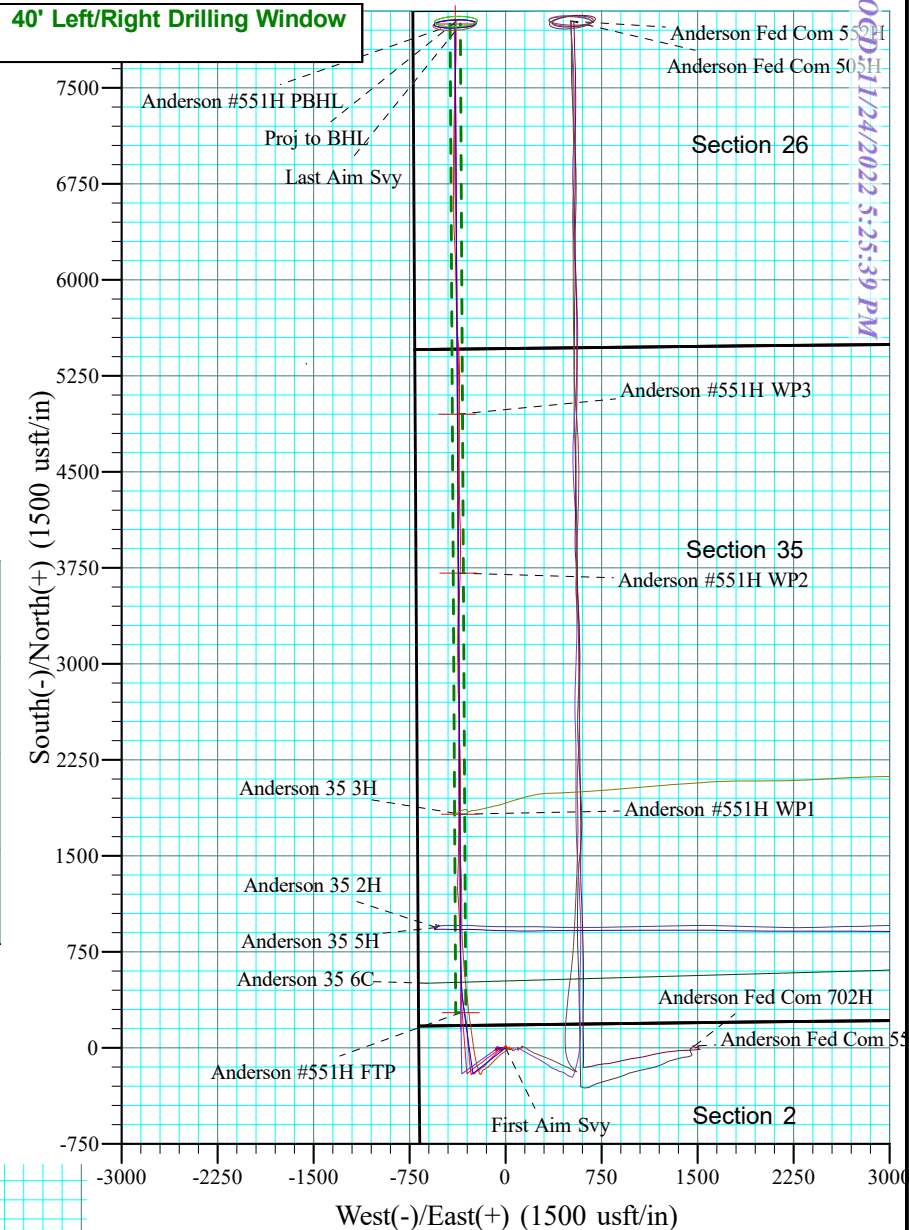


Azimuths to Grid North
True North: -0.37°
Magnetic North: 6.08°

Magnetic Field
Strength: 47848.3nT
Dip Angle: 60.12°
Date: 11/15/2021
Model: MVHD



40' Left/Right Drilling Window





Survey Reports

Anderson Fed Com 551H (WT-21-183)

2021-11-24 to 2022-01-29

Lea, New Mexico, US (32.43, -103.65)



Aim Directional Services, LLC

Survey Report



Company:	Advance Energy Partners, LLC	Local Co-ordinate Reference:	Well Anderson #551H
Project:	Lea County, New Mexico	TVD Reference:	Well @ 3724.50usft (Nabors X50)
Site:	Anderson Fed Com 551H	MD Reference:	Well @ 3724.50usft (Nabors X50)
Well:	Anderson #551H	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 551H		
Site Position:		Northing:	519,935.48 usft
From:	Lat/Long	Easting:	751,632.67 usft
Position Uncertainty:	0.00 usft	Slot Radius:	13-3/16 "
		Latitude:	32° 25' 39.090 N
		Longitude:	103° 39' 6.340 W
		Grid Convergence:	0.37 °

Well	Anderson #551H		
Well Position	+N/-S	0.00 usft	Northing: 519,935.48 usft
	+E/-W	0.00 usft	Easting: 751,632.67 usft
Position Uncertainty	0.00 usft	Wellhead Elevation:	usft
		Latitude:	32° 25' 39.090 N
		Longitude:	103° 39' 6.340 W
		Ground Level:	3,692.00 usft

Wellbore	Drilling		
Magnetics	Model Name	Sample Date	Declination (°)
	MVHD	11/15/2021	6.45
			Dip Angle (°) 60.12
			Field Strength (nT) 47,848.322

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 (°) 357.19

Survey Program	Date	1/29/2022		
From (usft)	To (usft)	Survey (Wellbore)	Tool Name	Description
229.00	19,092.00	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
229.00	0.22	327.50	229.00	0.37	-0.24	0.38	0.096	0.096	0.000
First Aim Svy									
291.00	0.22	239.69	291.00	0.41	-0.40	0.43	0.492	0.000	-141.629
352.00	0.13	238.20	352.00	0.32	-0.56	0.34	0.148	-0.148	-2.443
413.00	0.44	215.52	413.00	0.09	-0.76	0.13	0.531	0.508	-37.180
475.00	0.31	212.10	475.00	-0.25	-0.99	-0.20	0.213	-0.210	-5.516
536.00	0.35	228.79	536.00	-0.51	-1.21	-0.45	0.170	0.066	27.361
597.00	0.40	211.39	596.99	-0.81	-1.46	-0.74	0.203	0.082	-28.525
659.00	0.48	222.64	658.99	-1.19	-1.75	-1.10	0.189	0.129	18.145
720.00	0.70	228.97	719.99	-1.62	-2.21	-1.51	0.376	0.361	10.377



Aim Directional Services, LLC

Survey Report



Company:	Advance Energy Partners, LLC	Local Co-ordinate Reference:	Well Anderson #551H
Project:	Lea County, New Mexico	TVD Reference:	Well @ 3724.50usft (Nabors X50)
Site:	Anderson Fed Com 551H	MD Reference:	Well @ 3724.50usft (Nabors X50)
Well:	Anderson #551H	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)
816.00	0.92	230.46	815.98	-2.50	-3.24	-2.34	0.230	0.229	1.552
878.00	1.10	242.51	877.97	-3.09	-4.16	-2.88	0.448	0.290	19.435
973.00	1.41	242.86	972.95	-4.04	-6.00	-3.74	0.326	0.326	0.368
1,066.00	1.36	256.66	1,065.92	-4.82	-8.10	-4.42	0.362	-0.054	14.839
1,155.00	1.27	256.04	1,154.90	-5.30	-10.08	-4.80	0.102	-0.101	-0.697
1,220.00	1.23	258.41	1,219.88	-5.62	-11.46	-5.05	0.101	-0.062	3.646
1,335.00	0.75	275.03	1,334.86	-5.80	-13.42	-5.13	0.482	-0.417	14.452
1,424.00	0.53	289.53	1,423.86	-5.61	-14.39	-4.90	0.305	-0.247	16.292
1,514.00	0.31	273.71	1,513.86	-5.45	-15.03	-4.71	0.274	-0.244	-17.578
1,603.00	0.09	274.32	1,602.86	-5.43	-15.34	-4.68	0.247	-0.247	0.685
1,693.00	0.18	35.17	1,692.86	-5.31	-15.33	-4.56	0.266	0.100	134.278
1,783.00	0.35	18.56	1,782.85	-4.94	-15.16	-4.19	0.205	0.189	-18.456
1,872.00	0.53	25.06	1,871.85	-4.31	-14.90	-3.57	0.210	0.202	7.303
1,962.00	0.75	41.85	1,961.85	-3.49	-14.33	-2.78	0.319	0.244	18.656
2,052.00	0.79	38.16	2,051.84	-2.56	-13.55	-1.90	0.071	0.044	-4.100
2,141.00	1.14	41.06	2,140.83	-1.41	-12.59	-0.79	0.397	0.393	3.258
2,231.00	1.49	46.25	2,230.80	0.07	-11.16	0.62	0.410	0.389	5.767
2,320.00	1.93	52.13	2,319.76	1.79	-9.14	2.24	0.532	0.494	6.607
2,409.00	1.05	90.10	2,408.73	2.71	-7.14	3.06	1.435	-0.989	42.663
2,498.00	1.19	123.59	2,497.72	2.20	-5.55	2.47	0.741	0.157	37.629
2,588.00	1.67	108.38	2,587.69	1.27	-3.53	1.44	0.675	0.533	-16.900
2,677.00	2.42	101.71	2,676.63	0.48	-0.46	0.50	0.883	0.843	-7.494
2,766.00	1.67	105.13	2,765.57	-0.24	2.63	-0.37	0.853	-0.843	3.843
2,856.00	1.01	70.24	2,855.55	-0.32	4.65	-0.55	1.134	-0.733	-38.767
2,946.00	1.54	59.08	2,945.53	0.57	6.43	0.26	0.648	0.589	-12.400
3,036.00	0.66	132.38	3,035.51	0.84	7.85	0.46	1.657	-0.978	81.444
3,125.00	1.63	191.88	3,124.50	-0.74	7.97	-1.13	1.589	1.090	66.854
3,215.00	0.35	188.10	3,214.48	-2.27	7.67	-2.64	1.423	-1.422	-4.200
3,304.00	1.54	25.86	3,303.47	-1.46	8.15	-1.86	2.108	1.337	-182.292
3,394.00	1.54	64.97	3,393.44	0.14	9.77	-0.34	1.145	0.000	43.455
3,483.00	1.67	71.03	3,482.41	1.07	12.08	0.48	0.240	0.146	6.809
3,573.00	1.45	78.85	3,572.37	1.72	14.44	1.01	0.340	-0.244	8.689
3,663.00	1.41	87.73	3,662.35	1.98	16.66	1.16	0.250	-0.044	9.867
3,752.00	1.23	182.30	3,751.33	1.07	17.72	0.20	2.184	-0.202	106.258
3,842.00	2.42	207.17	3,841.29	-1.59	16.81	-2.41	1.559	1.322	27.633
3,932.00	1.27	247.08	3,931.24	-3.67	15.03	-4.40	1.844	-1.278	44.344
4,021.00	1.41	318.53	4,020.22	-3.23	13.39	-3.88	1.763	0.157	80.281
4,111.00	1.27	340.24	4,110.20	-1.46	12.32	-2.06	0.581	-0.156	24.122
4,200.00	1.01	335.67	4,199.18	0.18	11.67	-0.39	0.309	-0.292	-5.135
4,290.00	1.10	321.61	4,289.17	1.58	10.80	1.05	0.304	0.100	-15.622
4,379.00	1.01	325.12	4,378.15	2.89	9.82	2.41	0.124	-0.101	3.944
4,469.00	1.05	330.04	4,468.14	4.26	8.96	3.82	0.108	0.044	5.467
4,559.00	0.97	340.59	4,558.12	5.69	8.29	5.28	0.225	-0.089	11.722



Aim Directional Services, LLC

Survey Report



Company:	Advance Energy Partners, LLC	Local Co-ordinate Reference:	Well Anderson #551H
Project:	Lea County, New Mexico	TVD Reference:	Well @ 3724.50usft (Nabors X50)
Site:	Anderson Fed Com 551H	MD Reference:	Well @ 3724.50usft (Nabors X50)
Well:	Anderson #551H	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)
4,648.00	1.10	354.30	4,647.11	7.25	7.96	6.85	0.313	0.146	15.404
4,755.00	1.27	0.19	4,754.08	9.46	7.86	9.06	0.195	0.159	5.505
4,911.00	0.70	340.33	4,910.06	12.09	7.54	11.70	0.421	-0.365	-12.731
5,001.00	0.75	346.04	5,000.05	13.18	7.22	12.81	0.098	0.056	6.344
5,091.00	0.66	343.58	5,090.05	14.24	6.93	13.89	0.105	-0.100	-2.733
5,180.00	0.75	338.83	5,179.04	15.28	6.57	14.94	0.120	0.101	-5.337
5,270.00	0.18	339.71	5,269.04	15.96	6.31	15.63	0.633	-0.633	0.978
5,359.00	1.63	317.48	5,358.02	17.03	5.41	16.74	1.646	1.629	-24.977
5,448.00	2.68	258.59	5,446.97	17.55	2.51	17.40	2.592	1.180	-66.168
5,538.00	4.88	235.65	5,536.77	14.97	-2.71	15.09	2.920	2.444	-25.489
5,628.00	5.36	234.86	5,626.41	10.39	-9.31	10.83	0.539	0.533	-0.878
5,717.00	5.41	237.50	5,715.02	5.74	-16.25	6.53	0.284	0.056	2.966
5,807.00	4.79	227.39	5,804.67	0.92	-22.59	2.03	1.211	-0.689	-11.233
5,896.00	4.66	226.42	5,893.36	-4.09	-27.95	-2.71	0.171	-0.146	-1.090
5,986.00	4.75	226.51	5,983.06	-9.17	-33.30	-7.53	0.100	0.100	0.100
6,076.00	4.62	223.79	6,072.76	-14.35	-38.51	-12.45	0.286	-0.144	-3.022
6,165.00	4.66	222.29	6,161.47	-19.62	-43.42	-17.46	0.144	0.045	-1.685
6,255.00	4.18	237.50	6,251.20	-24.08	-48.65	-21.67	1.402	-0.533	16.900
6,344.00	4.40	240.66	6,339.95	-27.50	-54.36	-24.80	0.363	0.247	3.551
6,433.00	4.22	241.19	6,428.70	-30.75	-60.21	-27.76	0.207	-0.202	0.596
6,523.00	5.01	228.79	6,518.41	-34.93	-66.06	-31.65	1.409	0.878	-13.778
6,613.00	4.84	225.54	6,608.08	-40.18	-71.73	-36.62	0.363	-0.189	-3.611
6,702.00	4.40	223.52	6,696.79	-45.29	-76.76	-41.47	0.527	-0.494	-2.270
6,791.00	4.57	223.26	6,785.52	-50.35	-81.54	-46.29	0.192	0.191	-0.292
6,881.00	4.84	226.16	6,875.21	-55.59	-86.74	-51.27	0.400	0.300	3.222
6,970.00	4.62	224.49	6,963.91	-60.74	-91.96	-56.16	0.292	-0.247	-1.876
7,060.00	4.70	222.12	7,053.61	-66.06	-96.97	-61.23	0.232	0.089	-2.633
7,150.00	4.62	222.20	7,143.32	-71.48	-101.88	-66.40	0.089	-0.089	0.089
7,239.00	4.40	222.29	7,232.04	-76.67	-106.58	-71.35	0.247	-0.247	0.101
7,329.00	4.35	221.76	7,321.78	-81.77	-111.18	-76.22	0.071	-0.056	-0.589
7,419.00	4.40	222.47	7,411.52	-86.86	-115.78	-81.08	0.082	0.056	0.789
7,508.00	4.40	221.76	7,500.25	-91.92	-120.36	-85.91	0.061	0.000	-0.798
7,597.00	4.18	224.14	7,589.00	-96.80	-124.90	-90.56	0.318	-0.247	2.674
7,687.00	4.04	225.98	7,678.77	-101.35	-129.46	-94.89	0.214	-0.156	2.044
7,777.00	3.69	226.25	7,768.57	-105.56	-133.83	-98.87	0.389	-0.389	0.300
7,867.00	3.43	229.15	7,858.39	-109.32	-137.96	-102.43	0.351	-0.289	3.222
7,956.00	3.78	219.83	7,947.22	-113.32	-141.85	-106.23	0.766	0.393	-10.472
8,046.00	3.82	222.64	8,037.02	-117.80	-145.78	-110.51	0.212	0.044	3.122
8,136.00	3.69	219.82	8,126.83	-122.23	-149.67	-114.75	0.251	-0.144	-3.133
8,225.00	3.65	216.40	8,215.65	-126.71	-153.18	-119.05	0.250	-0.045	-3.843
8,314.00	3.65	215.26	8,304.46	-131.31	-156.50	-123.47	0.082	0.000	-1.281
8,404.00	4.75	220.09	8,394.22	-136.50	-160.55	-128.46	1.283	1.222	5.367
8,493.00	5.10	234.42	8,482.90	-141.62	-166.15	-133.30	1.433	0.393	16.101



Aim Directional Services, LLC

Survey Report



Company:	Advance Energy Partners, LLC	Local Co-ordinate Reference:	Well Anderson #551H
Project:	Lea County, New Mexico	TVD Reference:	Well @ 3724.50usft (Nabors X50)
Site:	Anderson Fed Com 551H	MD Reference:	Well @ 3724.50usft (Nabors X50)
Well:	Anderson #551H	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)
8,583.00	5.23	236.27	8,572.53	-146.22	-172.81	-137.57	0.235	0.144	2.056
8,672.00	4.84	238.73	8,661.19	-150.42	-179.39	-141.45	0.501	-0.438	2.764
8,762.00	4.31	236.09	8,750.90	-154.28	-185.44	-145.00	0.634	-0.589	-2.933
8,851.00	3.78	234.77	8,839.68	-157.84	-190.62	-148.30	0.605	-0.596	-1.483
8,941.00	3.25	222.82	8,929.51	-161.42	-194.77	-151.68	1.002	-0.589	-13.278
9,031.00	4.00	225.10	9,019.33	-165.51	-198.73	-155.57	0.848	0.833	2.533
9,120.00	3.56	215.96	9,108.14	-169.94	-202.55	-159.80	0.837	-0.494	-10.270
9,210.00	3.52	225.98	9,197.97	-174.12	-206.18	-163.80	0.688	-0.044	11.133
9,300.00	4.97	249.71	9,287.72	-177.39	-211.82	-166.79	2.498	1.611	26.367
9,390.00	4.79	251.12	9,377.40	-179.96	-219.04	-169.00	0.240	-0.200	1.567
9,479.00	4.22	238.29	9,466.12	-182.88	-225.34	-171.61	1.297	-0.640	-14.416
9,569.00	4.13	227.39	9,555.89	-186.82	-230.54	-175.29	0.886	-0.100	-12.111
9,658.00	3.03	217.54	9,644.71	-190.85	-234.33	-179.13	1.412	-1.236	-11.067
9,748.00	3.03	217.72	9,734.59	-194.62	-237.24	-182.75	0.011	0.000	0.200
9,838.00	3.74	234.77	9,824.43	-198.19	-241.09	-186.14	1.360	0.789	18.944
9,928.00	4.13	254.72	9,914.22	-200.74	-246.62	-188.41	1.573	0.433	22.167
10,017.00	3.78	254.72	10,003.01	-202.36	-252.54	-189.74	0.393	-0.393	0.000
10,107.00	3.56	255.60	10,092.83	-203.84	-258.11	-190.94	0.252	-0.244	0.978
10,196.00	2.42	255.25	10,181.70	-205.00	-262.60	-191.88	1.281	-1.281	-0.393
10,286.00	2.42	266.76	10,271.62	-205.59	-266.33	-192.29	0.539	0.000	12.789
10,376.00	0.92	272.74	10,361.58	-205.67	-268.95	-192.23	1.676	-1.667	6.644
10,431.00	0.35	204.10	10,416.58	-205.80	-269.46	-192.34	1.558	-1.036	-124.800
10,528.00	1.63	29.90	10,513.57	-204.87	-268.90	-191.44	2.040	1.320	-179.587
10,618.00	10.07	354.04	10,603.03	-195.92	-269.07	-182.49	9.778	9.378	-39.844
10,707.00	19.25	351.40	10,689.05	-173.63	-272.08	-160.08	10.339	10.315	-2.966
10,797.00	25.89	351.84	10,772.11	-139.47	-277.10	-125.72	7.380	7.378	0.489
10,886.00	31.47	354.39	10,850.16	-97.08	-282.13	-83.13	6.417	6.270	2.865
10,976.00	41.98	356.24	10,922.20	-43.51	-286.41	-29.42	11.741	11.678	2.056
11,066.00	53.01	355.71	10,982.91	22.57	-291.09	36.81	12.263	12.256	-0.589
11,155.00	64.48	356.41	11,029.01	98.35	-296.28	112.75	12.905	12.888	0.787
11,245.00	75.52	353.42	11,059.75	182.44	-303.84	197.11	12.656	12.267	-3.322
11,305.00	84.62	350.17	11,070.09	240.86	-312.29	255.88	16.076	15.167	-5.417
11,346.14	90.16	350.23	11,071.96	281.34	-319.28	296.66	13.476	13.475	0.148
Anderson #551H FTP									
11,366.00	92.84	350.26	11,071.44	300.91	-322.64	316.36	13.476	13.475	0.147
11,456.00	92.00	352.54	11,067.64	389.81	-336.09	405.82	2.698	-0.933	2.533
11,546.00	91.43	356.41	11,064.95	479.33	-344.75	495.66	4.344	-0.633	4.300
11,635.00	89.76	359.05	11,064.02	568.25	-348.27	584.64	3.510	-1.876	2.966
11,725.00	90.90	358.96	11,063.50	658.23	-349.83	674.59	1.271	1.267	-0.100
11,815.00	89.23	358.79	11,063.40	748.21	-351.60	764.55	1.865	-1.856	-0.189
11,904.00	89.89	358.26	11,064.09	837.18	-353.89	853.52	0.951	0.742	-0.596
11,994.00	90.42	358.17	11,063.84	927.13	-356.70	943.50	0.597	0.589	-0.100
12,083.00	90.55	357.20	11,063.09	1,016.06	-360.29	1,032.50	1.100	0.146	-1.090
12,173.00	89.71	355.27	11,062.88	1,105.86	-366.20	1,122.48	2.339	-0.933	-2.144



Aim Directional Services, LLC

Survey Report



Company:	Advance Energy Partners, LLC	Local Co-ordinate Reference:	Well Anderson #551H
Project:	Lea County, New Mexico	TVD Reference:	Well @ 3724.50usft (Nabors X50)
Site:	Anderson Fed Com 551H	MD Reference:	Well @ 3724.50usft (Nabors X50)
Well:	Anderson #551H	North Reference:	Grid
Wellbore:	Drilling	Survey Calculation Method:	Minimum Curvature
Design:	Surveys	Database:	ROTOC- 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)
12,262.00	89.76	356.94	11,063.30	1,194.65	-372.24	1,211.46	1.877	0.056	1.876
12,352.00	90.46	1.16	11,063.12	1,284.61	-373.74	1,301.39	4.753	0.778	4.689
12,441.00	90.07	1.60	11,062.71	1,373.59	-371.59	1,390.15	0.661	-0.438	0.494
12,531.00	88.62	1.42	11,063.74	1,463.55	-369.22	1,479.89	1.623	-1.611	-0.200
12,620.00	88.00	1.16	11,066.37	1,552.48	-367.22	1,568.62	0.755	-0.697	-0.292
12,710.00	88.97	0.28	11,068.74	1,642.44	-366.09	1,658.42	1.455	1.078	-0.978
12,799.00	90.02	1.25	11,069.53	1,731.43	-364.90	1,747.24	1.606	1.180	1.090
12,889.00	90.55	0.45	11,069.08	1,821.42	-363.57	1,837.05	1.066	0.589	-0.889
12,894.49	90.54	0.35	11,069.03	1,826.91	-363.53	1,842.53	1.868	-0.101	-1.865
Anderson #551H WP1									
12,978.00	90.46	358.79	11,068.30	1,910.41	-364.16	1,925.97	1.868	-0.101	-1.865
13,067.00	91.60	359.14	11,066.70	1,999.38	-365.76	2,014.91	1.340	1.281	0.393
13,157.00	92.66	359.31	11,063.35	2,089.31	-366.98	2,104.79	1.193	1.178	0.189
13,246.00	92.35	0.02	11,059.46	2,178.22	-367.50	2,193.62	0.870	-0.348	0.798
13,335.00	90.90	0.98	11,056.94	2,267.18	-366.72	2,282.43	1.954	-1.629	1.079
13,425.00	91.82	0.28	11,054.80	2,357.15	-365.73	2,372.24	1.284	1.022	-0.778
13,514.00	89.80	0.63	11,053.54	2,446.13	-365.03	2,461.08	2.303	-2.270	0.393
13,603.00	90.11	0.81	11,053.61	2,535.12	-363.91	2,549.91	0.403	0.348	0.202
13,692.00	89.19	358.96	11,054.16	2,624.12	-364.09	2,638.81	2.321	-1.034	-2.079
13,781.00	89.45	357.99	11,055.21	2,713.08	-366.46	2,727.78	1.128	0.292	-1.090
13,871.00	89.41	358.70	11,056.11	2,803.03	-369.05	2,817.76	0.790	-0.044	0.789
13,961.00	90.37	0.89	11,056.28	2,893.03	-369.38	2,907.66	2.657	1.067	2.433
14,050.00	90.11	1.07	11,055.91	2,982.01	-367.85	2,996.46	0.355	-0.292	0.202
14,140.00	89.67	0.54	11,056.08	3,072.00	-366.59	3,086.28	0.765	-0.489	-0.589
14,230.00	89.14	359.58	11,057.02	3,162.00	-366.50	3,176.16	1.218	-0.589	-1.067
14,319.00	90.29	0.10	11,057.46	3,250.99	-366.74	3,265.06	1.418	1.292	0.584
14,409.00	92.04	0.98	11,055.63	3,340.97	-365.90	3,354.89	2.176	1.944	0.978
14,498.00	90.86	1.60	11,053.38	3,429.91	-363.89	3,443.63	1.498	-1.326	0.697
14,588.00	86.46	2.74	11,055.48	3,519.80	-360.49	3,533.24	5.050	-4.889	1.267
14,677.00	87.87	2.21	11,059.88	3,608.61	-356.65	3,621.75	1.692	1.584	-0.596
14,766.00	87.25	1.60	11,063.67	3,697.48	-353.69	3,710.37	0.977	-0.697	-0.685
14,775.99	86.99	1.41	11,064.17	3,707.45	-353.43	3,720.32	3.242	-2.591	-1.951
Anderson #551H WP2									
14,856.00	84.92	359.84	11,069.82	3,787.25	-352.56	3,799.98	3.242	-2.589	-1.956
14,945.00	88.66	359.49	11,074.80	3,876.09	-353.08	3,888.74	4.221	4.202	-0.393
15,034.00	89.14	0.19	11,076.51	3,965.07	-353.33	3,977.63	0.954	0.539	0.787
15,124.00	89.93	359.14	11,077.24	4,055.07	-353.86	4,067.54	1.460	0.878	-1.167
15,213.00	90.33	358.70	11,077.04	4,144.05	-355.54	4,156.50	0.668	0.449	-0.494
15,302.00	90.81	358.35	11,076.15	4,233.02	-357.83	4,245.47	0.667	0.539	-0.393
15,391.00	90.46	358.79	11,075.17	4,321.98	-360.05	4,334.44	0.632	-0.393	0.494
15,481.00	88.48	359.84	11,076.00	4,411.97	-361.12	4,424.37	2.490	-2.200	1.167
15,570.00	89.19	0.19	11,077.81	4,500.95	-361.10	4,513.24	0.889	0.798	0.393
15,659.00	86.86	358.70	11,080.88	4,589.88	-361.96	4,602.11	3.107	-2.618	-1.674



Aim Directional Services, LLC

Survey Report



Company:	Advance Energy Partners, LLC	Local Co-ordinate Reference:	Well Anderson #551H
Project:	Lea County, New Mexico	TVD Reference:	Well @ 3724.50usft (Nabors X50)
Site:	Anderson Fed Com 551H	MD Reference:	Well @ 3724.50usft (Nabors X50)
Well:	Anderson #551H	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)
15,748.00	85.98	359.40	11,086.43	4,678.70	-363.43	4,690.89	1.262	-0.989	0.787
15,838.00	87.52	0.28	11,091.53	4,768.55	-363.68	4,780.64	1.970	1.711	0.978
15,927.00	90.86	1.33	11,092.79	4,857.51	-362.43	4,869.44	3.934	3.753	1.180
16,017.00	91.38	1.07	11,091.03	4,947.48	-360.55	4,959.20	0.646	0.578	-0.289
16,021.00	91.36	1.05	11,090.94	4,951.47	-360.48	4,963.19	0.632	-0.393	-0.494
Anderson #551H WP3									
16,106.00	91.03	0.63	11,089.16	5,036.45	-359.23	5,048.00	0.632	-0.393	-0.494
16,196.00	89.54	359.84	11,088.71	5,126.44	-358.86	5,137.87	1.874	-1.656	-0.878
16,285.00	89.67	359.93	11,089.33	5,215.44	-359.04	5,226.77	0.178	0.146	0.101
16,375.00	90.64	358.61	11,089.08	5,305.43	-360.19	5,316.71	1.820	1.078	-1.467
16,464.00	89.32	358.26	11,089.12	5,394.39	-362.62	5,405.69	1.534	-1.483	-0.393
16,554.00	87.87	356.85	11,091.32	5,484.28	-366.45	5,495.65	2.247	-1.611	-1.567
16,644.00	87.78	355.62	11,094.74	5,574.02	-372.36	5,585.57	1.369	-0.100	-1.367
16,733.00	88.66	356.15	11,097.50	5,662.75	-378.74	5,674.51	1.154	0.989	0.596
16,823.00	88.48	357.91	11,099.75	5,752.59	-383.40	5,764.47	1.965	-0.200	1.956
16,912.00	89.27	358.70	11,101.50	5,841.54	-386.04	5,853.44	1.255	0.888	0.888
17,002.00	90.81	359.66	11,101.43	5,931.52	-387.32	5,943.38	2.016	1.711	1.067
17,092.00	91.38	359.66	11,099.71	6,021.51	-387.86	6,033.28	0.633	0.633	0.000
17,180.00	91.12	358.43	11,097.79	6,109.47	-389.32	6,121.21	1.428	-0.295	-1.398
17,269.00	90.07	357.20	11,096.87	6,198.40	-392.72	6,210.20	1.817	-1.180	-1.382
17,359.00	91.96	357.29	11,095.28	6,288.28	-397.04	6,300.18	2.102	2.100	0.100
17,448.00	92.84	358.17	11,091.55	6,377.13	-400.56	6,389.10	1.398	0.989	0.989
17,538.00	94.29	357.91	11,085.95	6,466.90	-403.64	6,478.91	1.637	1.611	-0.289
17,627.00	93.85	359.75	11,079.63	6,555.65	-405.45	6,567.64	2.121	-0.494	2.067
17,716.00	87.91	359.75	11,078.27	6,644.60	-405.84	6,656.50	6.674	-6.674	0.000
17,806.00	88.92	359.66	11,080.76	6,734.56	-406.30	6,746.38	1.127	1.122	-0.100
17,895.00	89.71	359.75	11,081.82	6,823.55	-406.76	6,835.29	0.893	0.888	0.101
17,985.00	87.87	1.60	11,083.72	6,913.52	-405.70	6,925.10	2.899	-2.044	2.056
18,074.00	87.52	1.07	11,087.30	7,002.42	-403.63	7,013.79	0.713	-0.393	-0.596
18,163.00	86.86	0.72	11,091.67	7,091.30	-402.24	7,102.50	0.839	-0.742	-0.393
18,253.00	85.49	0.02	11,097.67	7,181.10	-401.66	7,192.16	1.709	-1.522	-0.778
18,343.00	85.67	0.28	11,104.61	7,270.83	-401.42	7,281.77	0.351	0.200	0.289
18,432.00	85.85	1.16	11,111.19	7,359.58	-400.31	7,370.36	1.007	0.202	0.989
18,522.00	87.78	2.39	11,116.19	7,449.39	-397.52	7,459.92	2.542	2.144	1.367
18,611.00	91.91	3.09	11,116.43	7,538.27	-393.27	7,548.49	4.707	4.640	0.787
18,701.00	90.64	1.60	11,114.42	7,628.17	-389.59	7,638.09	2.175	-1.411	-1.656
18,791.00	89.80	1.33	11,114.08	7,718.14	-387.29	7,727.84	0.980	-0.933	-0.300
18,880.00	88.26	0.54	11,115.58	7,807.11	-385.84	7,816.64	1.945	-1.730	-0.888
18,970.00	89.93	359.75	11,117.01	7,897.09	-385.61	7,906.50	2.053	1.856	-0.878
19,023.00	90.37	359.49	11,116.87	7,950.09	-385.96	7,959.45	0.964	0.830	-0.491
Last Aim Svy									
19,073.75	90.37	359.49	11,116.54	8,000.84	-386.41	8,010.16	0.000	0.000	0.000
Anderson #551H PBHL									
19,092.00	90.37	359.49	11,116.42	8,019.09	-386.57	8,028.40	0.000	0.000	0.000



Aim Directional Services, LLC

Survey Report



Company:	Advance Energy Partners, LLC	Local Co-ordinate Reference:	Well Anderson #551H
Project:	Lea County, New Mexico	TVD Reference:	Well @ 3724.50usft (Nabors X50)
Site:	Anderson Fed Com 551H	MD Reference:	Well @ 3724.50usft (Nabors X50)
Well:	Anderson #551H	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)
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Proj to BHL

Survey Annotations

Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates		Comment
		+N/-S (usft)	+E/-W (usft)	
229.00	229.00	0.37	-0.24	First Aim Svy
19,023.00	11,116.87	7,950.09	-385.96	Last Aiim Svy
19,092.00	11,116.42	8,019.09	-386.57	Proj to BHL



BHA Reports

Anderson Fed Com 551H (WT-21-183)

2021-11-24 to 2022-01-29

Lea, New Mexico, US (32.43, -103.65)



Job Number WT-21-183	Operator Advance Energy Partners	Rig Name Nabors X50
Start Date 2021-11-24	Well Name Anderson Fed Com 551H	Legal Well Name AFE Anderson Fed Com 551H
Play Delaware Basin	State/Province and Country New Mexico, US	County Lea
		Company Man

BHA #1 - BHA #1 (17.5" Surface) (Directional)

Motor Details		Date/Depth/Distances	Hours
Size (in)	8.00	Date In	2021-11-24 10:15
Lobe/Stage	7/8, 5.9	Depth In (ft)	150.00
Bend Angle	1.75	Date Out	2021-11-24 22:30
Speed (rev/gal)	0.17	Depth Out (ft)	1290.00
Wear Pad OD (in)	8.437	Distance Slid (ft)	0.00
Incident	No	Distance Rotated (ft)	1140.00
Motor Post Run/Notes		% Distance Sliding	0.00%
Average Total ROP (ft/h)	153.71	% Distance Rotating	100.00%
Average Slide ROP (ft/h)	0.00		
Average Rotating ROP (ft/h)	153.71		

Notes: N/A	BHA Objective
	DRILL OUT SURFACE

Bit Details		POOH Reason/Notes	
OD (in)	17.500		
Vendor	ULTERRA		
Nozzles	1x14 - 8x12's	Total Depth/Casing Point: MOTOR LOOKED GREAT BIT HAD 1 CHIPPED CUTTER	
Total Flow Area (in²)	1.034		

Bit Distances		Incident Notes	
Bit To Survey: 70.00 ft		Directional: NONE	
		MWD:	

Bit Post Run/Notes		Comments	
Dull Grading	1-1	Directional: FLOW RANGE 400-900 GPM, REV PER GALLON .166, MAX DIFF 1330, MAX TORQUE 22020 BIT RUNS: 2	
Notes: N/A			

MWD		Parameters	
Max Downhole Temp (°F)	N/A		

Mud Properties		Parameters	
Type	Water Based	Flow Rate (gpm)	601.00 - 897.00
WT	9.90	On Bottom Pressure (psi)	1250.00 - 2350.00
VIS	31.00	Off Bottom Pressure (psi)	700.00 - 1750.00
PV	2.00	Stall Pressure (psi)	0.00
YP	5.00	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: CF616, Type: PDC (Polycrystalline Diamond Compacts), Gauge Length (in): 6.00, Size (in): 17.50	ULTERRA	57377	6 5/8" Reg Pin			17.500		1.50	1.50
Mud Motor Description: 8" 7/8 5.9 Stg. 1.5" FBH w/17" NBS, Size (in): 8.00, Bend Angle (°): 1.75, Rotor Lobe: 7, Stator Lobe: 8, Stator Stage: 5.9	Aim	800-40-011	6 5/8" Reg Box	6 5/8" Reg Box		8.000		40.21	41.71
Stabilizer Description: 17" STAB	JA	17635	6 5/8" Reg Box	6 5/8" Reg Pin	2.813	8.250		7.17	48.88
UBHO Sub Description: NM DAO SUB, Material: Non-Magnetic	AIM	800614	6 5/8" Reg Box	6 5/8" Reg Pin	3.250	8.000		2.98	51.86
Drill Collar Description: NMDC (MWD TOOL), Material: Non-Magnetic, Type: Slick Drill	GATOR	GT 8030374	6 5/8" Reg Box	6 5/8" Reg Pin	3.250	8.063		30.52	82.38
Drill Collar Description: NMDC, Material: Non-Magnetic, Type: Slick Drill	GATOR	GT 8230395	6 5/8" Reg Box	6 5/8" Reg Pin	3.250	8.375		30.48	112.86
Crossover Sub Description: X-O SUB, Material: Steel	JA	JA8610	CET54 Box	6 5/8" Reg Pin	2.500	6.625		3.23	116.09



	Job Number	Operator			Rig Name	
	WT-21-183	Advance Energy Partners			Nabors X50	
	Start Date	Well Name			Legal Well Name AFE	
	2021-11-24	Anderson Fed Com 551H			Anderson Fed Com 551H	
	Play	State/Province and Country		County	Company Man	
	Delaware Basin	New Mexico, US		Lea		

BHA #2 - 12.25" Intermediate (Directional)

Motor Details		Date/Depth/Distances		Hours	
Size(in)	8.00	Date In	2021-11-30 12:15	Downhole Hours	24.25
Lobe/Stage	7/8, 5.9	Depth In (ft)	1290.00	Drilling/Circulating Hours	15.83
Bend Angle	1.75	Date Out	2021-12-01 12:30	Drilling Hours	13.50
Speed (rev/gal)	0.15	Depth Out (ft)	4820.00	Circulating Hours	2.33
Wear Pad OD (in)	8.125	Distance Slid (ft)	145.00	Sliding Hours	1.33
Incident	No	Distance Rotated (ft)	3385.00	Rotating Hours	12.17
Motor Post Run/Notes		% Distance Sliding	4.11%	% Hours Sliding	9.88%
Average Total ROP (ft/h)	261.48	% Distance Rotating	95.89%	% Hours Rotating	90.12%
Average Slide ROP (ft/h)	108.75	BHA Objective			
Average Rotating ROP (ft/h)	278.22	Drill 12.25" Intermediate section			
Notes: Good Motor Run					
Bit Details					
OD (in)	12.250				
Vendor	Reed				
Nozzles	6 x 16	POOH Reason/Notes			
Total Flow Area (in²)	1.178	Total Depth/Casing Point: Good Run. POOH for Casing.			
Bit Distances		Incident Notes			
Bit To Survey: 65.00 ft		Directional:			
		MWD:			
Bit Post Run/Notes		Comments			
Dull Grading	2-3	Directional: FLOW RANGE 400-900 GPM, REV PER GALLON .150, MAX DIFF 1330, MAX TORQUE 22020 BIT RUNS: 2 , Bit to Bend: 5.05			
Notes: Broken cutters on guage. 1/16 under gauge					
MWD					
Max Downhole Temp (°F)	N/A				
Mud Properties		Parameters			
Type	Water Based	Flow Rate (gpm)	895.00 - 897.00	Motor RPM	40.00 - 70.00
WT	10.50	On Bottom Pressure (psi)	2350.00 - 2600.00	Surface RPM	60.00 - 70.00
VIS	29.00	Off Bottom Pressure (psi)	1750.00 - 2100.00	Rotating WOB (klbs)	25.00 - 50.00
PV	2.00	Stall Pressure (psi)	0.00	Sliding WOB (klbs)	50.00 - 50.00
YP	3.00	Stalls	0	Temp (°F)	90.00 - 120.00
		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>TKC66-H3</i> , Type: <i>PDC (Polycrystalline Diamond Compacts)</i> , Gauge Length (in): 6.00, Size (in): 12.25	Reed	A280421	6 5/8" Reg Pin			12.250		1.50	1.50
Mud Motor Description: <i>8" 7/8 5.9 Stg. 1.75° FBH w/12" NBS</i> , Size (in): 8.00, Bend Angle (°): 1.75, Rotor Lobe: 7, Stator Lobe: 8, Stator Stage: 5.9	Sniper	DR-800-01	6 5/8" Reg Box	6 5/8" Reg Box		8.000		35.66	37.16
Stabilizer Description: <i>12" STAB</i>	JA	12502	6 5/8" Reg Box	6 5/8" Reg Pin	2.813	8.250		7.11	44.27
UBHO Sub Description: <i>NM DAO SUB</i> , Material: <i>Non-Magnetic</i>	AIM	800614	6 5/8" Reg Box	6 5/8" Reg Pin	3.250	8.000		2.98	47.25
Drill Collar Description: <i>NMDC (MWD TOOL)</i> , Material: <i>Non-Magnetic</i> , Type: <i>Slick Drill</i>	GATOR	GT8030374	6 5/8" Reg Box	6 5/8" Reg Pin	3.250	8.063		30.52	77.77
Drill Collar Description: <i>NMDC</i> , Material: <i>Non-Magnetic</i> , Type: <i>Slick Drill</i>	GATOR	GT8230395	6 5/8" Reg Box	6 5/8" Reg Pin	3.250	8.375		30.48	108.25
Crossover Sub Description: <i>X-O SUB</i> , Material: <i>Steel</i>	JA	JA8610	CET54 Box	6 5/8" Reg Pin	2.500	6.625		3.23	111.48
HWDP Description: <i>8 Stands 5.5" HWDP</i> , Type: <i>Slick</i>	Platinum		CET54 Box	CET54 Pin	4.000	5.500		735.63	847.11
Crossover Sub Description: <i>CET54 (P) x EverDrlg 54 (B)</i> , Material: <i>Steel</i>	BLACK DIAMOND	BD18238	EverDrlg54 Box	CET54 Pin	4.000	6.938		3.42	850.53
HWDP Description: <i>3 Stands 5.5" HWDP</i> , Type: <i>Slick</i>	BLACK DIAMOND		EverDrlg54 Box	EverDrlg54 Pin	3.625	5.500		281.18	1131.71





Job Number WT-21-183	Operator Advance Energy Partners	Rig Name Nabors X50
Start Date 2021-11-24	Well Name Anderson Fed Com 551H	Legal Well Name AFE Anderson Fed Com 551H
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)	7.00	Date In	2022-01-17 11:15	Downhole Hours	36.75
Lobe/Stage	7/8, 8.5	Depth In (ft)	4820.00	Drilling/Circulating Hours	23.17
Bend Angle	1.75	Date Out	2022-01-19 00:00	Drilling Hours	21.92
Speed (rev/gal)	0.26	Depth Out (ft)	9646.00	Circulating Hours	1.25
Wear Pad OD (in)	7.375	Distance Slid (ft)	200.00	Sliding Hours	4.17
Incident	Yes	Distance Rotated (ft)	4626.00	Rotating Hours	17.75
Motor Post Run/Notes		% Distance Sliding	4.14%	% Hours Sliding	19.01%
Average Total ROP (ft/h)	220.20	% Distance Rotating	95.86%	% Hours Rotating	80.99%
Average Slide ROP (ft/h)	48.00	BHA Objective			
Average Rotating ROP (ft/h)	260.62	Drill 8.75" Intermediate			

Notes: Motor was empty, Bit box spun freely by hand

Bit Details		POOH Reason/Notes	
OD (in)	8.750	Downhole Motor Incident: Motor Dropped Pressure And Stopped Drilling	
Vendor	Reed		
Nozzles	6 x15's		
Total Flow Area (in²)	1.035		

Bit Distances		Incident Notes	
Bit To Survey:	69.00 ft, Gamma (Bit To Gamma): 53.00 ft	Directional: Upon Surface BHA Inspection Found Motor To be Dry no fluid say no visible sign of any issues. Bit min. wear. Bit box spun freely	

Bit Post Run/Notes		Comments	
Dull Grading	1-1	Directional: FLOW RANGE: 500-750 GPM, REV PER GALLON .26, MAX DIFF: 1910, MAX TORQUE : 18,710 BIT RUNS: 0 , Bit to Bend: 5.30	
Notes:			

MWD			
Max Downhole Temp (°F)	N/A		

Mud Properties		Parameters	
Type	Water Based	Flow Rate (gpm)	597.00 - 700.00
WT	9.20	On Bottom Pressure (psi)	1950.00 - 2800.00
VIS	32.00	Off Bottom Pressure (psi)	1250.00 - 2100.00
PV	2.00	Stall Pressure (psi)	4100.07
YP	3.00	Stalls	4
		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>TKC66</i> , Type: <i>PDC (Polycrystalline Diamond Compacts)</i> , Gauge Length (in): <i>4.00</i> , Size (in): <i>8.75</i>	Reed	A283351	4 1/2" Reg Pin			8.750		1.00	1.00
Mud Motor Description: <i>7" 7/8 8.5 Stg. 1.75° FBH w/8.5" NBS</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>8.5</i>	Aim	700-40-005	4 1/2" IF Box	4 1/2" Reg Box		7.000		37.46	38.46
Stabilizer Description: <i>8.5" STAB</i>	JA	JA085812	4 1/2" IF Box	4 1/2" IF Pin	2.563	6.750		6.37	44.83
UBHO Sub Description: <i>NM DAO SUB</i> , Material: <i>Non-Magnetic</i>	AIM	AIM675-364	4 1/2" IF Box	4 1/2" IF Pin	3.250	6.750		3.04	47.87
Drill Collar Description: <i>NMDC (MWD TOOL)</i> , Material: <i>Non-Magnetic</i> , Type: <i>Slick Drill</i>	GATOR	67-30-296	4 1/2" IF Box	4 1/2" IF Pin	3.250	6.750		30.65	78.52
Drill Collar Description: <i>NMDC</i> , Material: <i>Non-Magnetic</i> , Type: <i>Slick Drill</i>	GATOR	67-30-193	4 1/2" IF Box	4 1/2" IF Pin	3.250	6.750		29.44	107.96
Crossover Sub Description: <i>X-O SUB</i> , Material: <i>Steel</i>	Platinum	PPR5372	CET54 Box	4 1/2" IF Pin	2.750	6.250		2.38	110.34
HWDP Description: <i>8 Stands 5.5" HWDP</i> , Type: <i>Slick</i>	Platinum		CET54 Box	CET54 Pin	4.000	5.500		735.63	845.97
Crossover Sub Description: <i>CET54 (P) x EverDrlg 54 (B)</i> , Material: <i>Steel</i>	BLACK DIAMOND	BD18238	EverDrlg54 Box	CET54 Pin	4.000	6.938		3.42	849.39
HWDP Description: <i>3 Stands 5.5" HWDP</i> , Type: <i>Slick</i>	BLACK DIAMOND		EverDrlg54 Box	EverDrlg54 Pin	3.625	5.500		281.18	1130.57





Job Number WT-21-183	Operator Advance Energy Partners	Rig Name Nabors X50
Start Date 2021-11-24	Well Name Anderson Fed Com 551H	Legal Well Name AFE Anderson Fed Com 551H
Play Delaware Basin	State/Province and Country New Mexico, US	County Lea
		Company Man

BHA #4 - 8.75" INTERMEDIATE (Directional)

Motor Details		Date/Depth/Distances	Hours
Size (in)	7.00	Date In	2022-01-19 00:30
Lobe/Stage	7/8, 8.5	Depth In (ft)	9646.00
Bend Angle	1.75	Date Out	2022-01-19 18:00
Speed (rev/gal)	0.26	Depth Out (ft)	10500.00
Wear Pad OD (in)	7.375	Distance Slid (ft)	70.00
Incident	No	Distance Rotated (ft)	784.00
Motor Post Run/Notes		% Distance Sliding	8.20%
Average Total ROP (ft/h)	123.47	% Distance Rotating	91.80%
Average Slide ROP (ft/h)	49.41	% Hours Sliding	20.48%
Average Rotating ROP (ft/h)	142.55	% Hours Rotating	79.52%

Notes: Good Motor Run	BHA Objective
	Drill 8.75" Intermediate

Bit Details		POOH Reason/Notes
OD (in)	8.750	
Vendor	ULTERRA	
Nozzles	9 x12's	Change Bottom Hole Assembly: POOH for curve assembly
Total Flow Area (in²)	1.035	

Bit Distances		Incident Notes
Bit To Survey: 69.00 ft, Gamma (Bit To Gamma): 53.00 ft		Directional:
		MWD:
Bit Post Run/Notes		Comments
Dull Grading	1-1	Directional: FLOW RANGE: 500-750 GPM, REV PER GALLON .26, MAX DIFF: 1910, MAX TORQUE : 18,710 BIT RUNS: 0 , Bit to Bend: 5.37
Notes:		

MWD		
Max Downhole Temp (°F)	N/A	
Mud Properties		Parameters
Type	Water Based	Flow Rate (gpm) 700.00 - 700.00
WT	9.30	Motor RPM 182.00 - 222.00
VIS	29.00	On Bottom Pressure (psi) 2900.00 - 3200.00
PV	2.00	Surface RPM 40.00 - 40.00
YP	3.00	Off Bottom Pressure (psi) 2500.00 - 2500.00
		Rotating WOB (klbs) 40.00 - 40.00
		Stall Pressure (psi) 2199.93
		Sliding WOB (klbs) 20.00 - 20.00
		Stalls 0
		Temp (°F) 125.00 - 130.00
		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>SPL616</i> , Type: <i>PDC (Polycrystalline Diamond Compacts)</i> , Gauge Length (in): 4.00, Size (in): 8.75	ULTERRA	55347	4 1/2" Reg Pin			8.750		1.00	1.00
Mud Motor Description: 7" 7/8 8.5 Stg. 1.75° FBH w/8.5" NBS, Size (in): 7.00, Bend Angle (°): 1.75, Rotor Lobe: 7, Stator Lobe: 8, Stator Stage: 8.5	AIM	700-40-035	4 1/2" IF Box	4 1/2" Reg Box		7.000		37.72	38.72
Stabilizer Description: 8.5" STAB	JA	JA085812	4 1/2" IF Box	4 1/2" IF Pin	2.563	6.750		6.37	45.09
UBHO Sub Description: <i>NM DAO SUB</i> , Material: <i>Non-Magnetic</i>	AIM	AIM675-364	4 1/2" IF Box	4 1/2" IF Pin	3.250	6.750		3.04	48.13
Drill Collar Description: <i>NMDC (MWD TOOL)</i> , Material: <i>Non-Magnetic</i> , Type: <i>Slick Drill</i>	GATOR	67-30-296	4 1/2" IF Box	4 1/2" IF Pin	3.250	6.750		30.65	78.78
Drill Collar Description: <i>NMDC</i> , Material: <i>Non-Magnetic</i> , Type: <i>Slick Drill</i>	GATOR	67-30-193	4 1/2" IF Box	4 1/2" IF Pin	3.250	6.750		29.44	108.22
Crossover Sub Description: <i>X-O SUB</i> , Material: <i>Steel</i>	Platinum	PPR5372	CET54 Box	4 1/2" IF Pin	2.750	6.250		2.38	110.60
HWDP Description: 8 Stands 5.5" HWDP, Type: <i>Slick</i>	Platinum		CET54 Box	CET54 Pin	4.000	5.500		735.63	846.23
Crossover Sub Description: <i>CET54 (P) x EverDrlg 54 (B)</i> , Material: <i>Steel</i>	BLACK DIAMOND	BD18238	EverDrlg54 Box	CET54 Pin	4.000	6.938		3.42	849.65
HWDP Description: 3 Stands 5.5" HWDP, Type: <i>Slick</i>	BLACK DIAMOND		EverDrlg54 Box	EverDrlg54 Pin	3.625	5.500		281.18	1130.83





Job Number WT-21-183	Operator Advance Energy Partners	Rig Name Nabors X50
Start Date 2021-11-24	Well Name Anderson Fed Com 551H	Legal Well Name AFE Anderson Fed Com 551H
Play Delaware Basin	State/Province and Country New Mexico, US	County Lea
Company Man		

BHA #5 - BHA #5 (Curve Assy) (Directional)

Motor Details		Date/Depth/Distances		Hours	
Size(in)	6.75	Date In	2022-01-19 18:00	Downhole Hours31.00	
Lobe/Stage	7/8, 5.0	Depth In (ft)	10500.00	Drilling/Circulating Hours18.33	
Bend Angle	2.25	Date Out	2022-01-21 01:00	Drilling Hours16.67	
Speed (rev/gal)	0.27	Depth Out (ft)	11364.00	Circulating Hours1.67	
Wear Pad OD (in)	7.000	Distance Slid (ft)	864.00	Sliding Hours16.67	
Incident	No	Distance Rotated (ft)	0.00	Rotating Hours0.00	
Motor Post Run/Notes		% Distance Sliding	100.00%	% Hours Sliding100.00%	
Average Total ROP (ft/h)	51.84	% Distance Rotating	0.00%	% Hours Rotating0.00%	
Average Slide ROP (ft/h)	51.84	BHA Objective			
Average Rotating ROP (ft/h)	0.00	Drill 8.75" Curve section			
Notes: N/A					
Bit Details					
OD (in)	8.750				
Vendor	ULTERRA	POOH Reason/Notes			
Nozzles	6x15's	Change Bottom Hole Assembly: POOH At EOC			
Total Flow Area (in²)	1.035				
Bit Distances		Incident Notes			
Bit To Survey: 59.00 ft, Gamma (Bit To Gamma): 35.00 ft, Resistivity (Bit to Resistivity): 45.00 ft		Directional:			
		MWD:			
Bit Post Run/Notes		Comments			
Dull Grading	1-1	Directional: FLOW RANGE: 300-650 GPM, REV PER GALLON .27, MAX DIFF: 1860, MAX TORQUE : 16,770 BIT RUNS: 0 , Bit to Bend: 3.85			
Notes:					
MWD					
Max Downhole Temp (°F)	N/A				
Mud Properties		Parameters			
Type	Water Based	Flow Rate (gpm)	550.00 - 600.00	Motor RPM	149.00 - 149.00
WT	9.30	On Bottom Pressure (psi)	1700.00 - 2100.00	Surface RPM	40.00 - 40.00
VIS	34.00	Off Bottom Pressure (psi)	1350.00 - 1480.00	Rotating WOB (klbs)	40.00 - 40.00
PV	2.00	Stall Pressure (psi)	0.00	Sliding WOB (klbs)	23.00 - 25.00
YP	1.00	Stalls	0	Temp (°F)	121.00 - 130.00
		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): 4.00, Size (in): 8.75	ULTERRA	556957	4 1/2" Reg Pin			8.750		1.00	1.00
Mud Motor Description: 6.75" 7/8L, 5.0 Stg. 2.25° FBH (True Slick), Size (in): 6.75, Bend Angle (°): 2.25, Rotor Lobe: 7, Stator Lobe: 8, Stator Stage: 5.0	Paradigm	675101SS	4 1/2" IF Box	4 1/2" Reg Box		6.750		25.66	26.66
Resistivity Description: RESISTIVITY MWD	Bench Tree	650-1005						31.26	57.92
Battery Description: BATTERY	Bench Tree	B6002						17.33	75.25
Drill Collar Description: NMDC , Material: Non-Magnetic, Type: Slick Drill	GATOR	67-30-296	4 1/2" IF Box	4 1/2" IF Pin	3.250	6.750		30.65	105.90
Crossover Sub Description: X-O SUB, Material: Steel	BLACK DIAMOND	BD15201	EverDrig54 Box	4 1/2" IF Pin	3.000	6.625		3.57	109.47





Job Number WT-21-183	Operator Advance Energy Partners	Rig Name Nabors X50
Start Date 2021-11-24	Well Name Anderson Fed Com 551H	Legal Well Name AFE Anderson Fed Com 551H
Play Delaware Basin	State/Province and Country New Mexico, US	County Lea
		Company Man

BHA #6 - 8.75" LATERAL (Directional)

Motor Details		Date/Depth/Distances	Hours
Size (in)	7.00	Date In	2022-01-21 02:30
Lobe/Stage	7/5, 9.0	Depth In (ft)	11364.00
Bend Angle	1.83	Date Out	2022-01-25 02:00
Speed (rev/gal)	0.23	Depth Out (ft)	15829.00
Wear Pad OD (in)	7.375	Distance Slid (ft)	749.00
Incident	No	Distance Rotated (ft)	3716.00
Motor Post Run/Notes		% Distance Sliding	16.77%
Average Total ROP (ft/h)	72.31	% Distance Rotating	83.23%
Average Slide ROP (ft/h)	31.87	% Hours Sliding	38.06%
Average Rotating ROP (ft/h)	97.15	% Hours Rotating	61.94%

Notes:	
Bit Details	

OD (in)	8.750
Vendor	Reed

POOH Reason/Notes

Nozzles	7x15's	Change Bottom Hole Assembly:	Erratic Differential PSI. TF control was highly difficult.
Total Flow Area (in²)	1.208		

Bit Distances		Incident Notes	
Bit To Survey:	64.00 ft	Directional:	
Gamma (Bit To Gamma):	40.00 ft	MWD:	
Resistivity (Bit to Resistivity):	50.00 ft		

Bit Post Run/Notes		Comments	
Dull Grading	1-2	Directional:	FLOW RANGE: 300-750 GPM, REV PER GALLON 0.23, MAX DIFF: 1,580, MAX TORQUE : 17,950 BIT RUNS: 0 , Bit to Bend: 5.37
Notes:	1 Broken outside cutter		

MWD	
Max Downhole Temp (°F)	N/A

Mud Properties		Parameters	
Type	Oil Based	Flow Rate (gpm)	493.00 - 695.00
WT	9.50	Motor RPM	115.00 - 161.00
VIS	63.00	On Bottom Pressure (psi)	2850.00 - 4575.00
PV	14.00	Off Bottom Pressure (psi)	2300.00 - 4100.00
YP	8.00	Rotating WOB (klbs)	38.00 - 45.00
		Stall Pressure (psi)	1580.04
		Sliding WOB (klbs)	25.00 - 45.00
		Stalls	0
		Temp (°F)	-0.00 - 179.00
		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</i> , Type: <i>PDC (Polycrystalline Diamond Compacts)</i> , Gauge Length (in): <i>4.00</i> , Size (in): <i>8.75</i>	Reed	A28369	4 1/2" Reg Pin			8.750		1.00	1.00
Mud Motor Description: <i>7.0" 7/8L, 5.7 Stg. 1.83° FBH (True Slick)</i> , Size (in): <i>7.00</i> , Bend Angle (°): <i>1.83</i> , Rotor Lobe: <i>7</i> , Stator Lobe: <i>5</i> , Stator Stage: <i>9</i>	NOV	675-36-384	4 1/2" IF Box	4 1/2" Reg Box		7.000		31.43	32.43
Resistivity Description: <i>RESISTIVITY MWD</i>	Bench Tree	650-1005						31.26	63.69
Battery Description: <i>BATTERY</i>	Bench Tree	B6002						17.33	81.02
Drill Collar Description: <i>NMDC</i> , Material: <i>Non-Magnetic</i> , Type: <i>Slick Drill</i>	GATOR	67-30-296	4 1/2" IF Box	4 1/2" IF Pin	3.250	6.750		30.65	111.67
Crossover Sub Description: <i>X-O SUB</i> , Material: <i>Steel</i>	BLACK DIAMOND	BD15201	EverDrlg54 Box	4 1/2" IF Pin	3.000	6.625		3.57	115.24
Drill Pipe Description: <i>22 Stands 5 1/2 Drill Pipe</i> , Type: <i>Slick</i>	Black Diamond		EverDrlg54 Box	EverDrlg54 Pin	3.000	5.500		1969.32	2084.56
Crossover Sub Description: <i>X-O SUB</i> , Material: <i>Steel</i>	BLACK DIAMOND	BD 22523	4 1/2" IF Box	EverDrlg54 Box	3.000	6.750		3.48	2088.04
Agitator Description: <i>6.75" Agitator</i> , Size (in): <i>6.75</i>	NOV	147-67001	4 1/2" FH Box	4 1/2" IF Pin		6.750		24.73	2112.77
Crossover Sub Description: <i>X-O SUB</i> , Material: <i>Steel</i>	BLACK DIAMOND	BD13511	EverDrlg54 Box	4 1/2" FH Pin	3.000	6.750		3.38	2116.15





Job Number WT-21-183	Operator Advance Energy Partners	Rig Name Nabors X50
Start Date 2021-11-24	Well Name Anderson Fed Com 551H	Legal Well Name AFE Anderson Fed Com 551H
Play Delaware Basin	State/Province and Country New Mexico, US	County Lea
		Company Man

BHA #7 - 8.75" LATERAL (Directional)

Motor Details	Date/Depth/Distances	Hours
Size(in) 7.00	Date In 2022-01-25 02:00	Downhole Hours 42.00
Lobe/Stage 7/5, 9.0	Depth In (ft) 15829.00	Drilling/Circulating Hours 21.83
Bend Angle 1.83	Date Out 2022-01-26 20:00	Drilling Hours 21.25
Speed (rev/gal) 0.23	Depth Out (ft) 17236.00	Circulating Hours 0.58
Wear Pad OD (in) 7.375	Distance Slid (ft) 154.00	Sliding Hours 4.67
Incident No	Distance Rotated (ft) 1253.00	Rotating Hours 16.58
Motor Post Run/Notes	% Distance Sliding 10.95%	% Hours Sliding 21.96%
Average Total ROP (ft/h) 66.21	% Distance Rotating 89.05%	% Hours Rotating 78.04%
Average Slide ROP (ft/h) 33.00	BHA Objective	
Average Rotating ROP (ft/h) 75.56	Drill 8.75" Lateral section	

Notes:	
Bit Details	
OD (in) 8.750	
Vendor Reed	POOH Reason/Notes
Nozzles 7x14's	Penetration Rate: POOH due to slow P Rate.
Total Flow Area (in²) 1.052	

Bit Distances	Incident Notes
Bit To Survey: 64.00 ft, Gamma (Bit To Gamma): 40.00 ft, Resistivity (Bit to Resistivity): 50.00 ft	Directional: Bit started to ring out. Bit grade 1-4 and 1/16 under gauge.
Bit Post Run/Notes	MWD:
Dull Grading 1-4	Comments
Notes: 1/8" Squat. Motor drained as expected. Bit was 1/16" under gauge.	Directional: FLOW RANGE: 300-750 GPM, REV PER GALLON 0.23, MAX DIFF: 1,580, MAX TORQUE : 17,950 BIT RUNS: 1 , Bit to Bend: 5.35
MWD	

Max Downhole Temp (°F) N/A	
Mud Properties	Parameters
Type Oil Based	Flow Rate (gpm) 694.00 - 695.00
WT 9.60	Motor RPM 0.00 - 40.00
VIS 61.00	On Bottom Pressure (psi) 4350.00 - 5250.00
PV 16.00	Surface RPM 40.00 - 40.00
YP 8.00	Off Bottom Pressure (psi) 4000.00 - 4700.00
	Rotating WOB (klbs) 42.00 - 55.00
	Stall Pressure (psi) 0.00
	Sliding WOB (klbs) 45.00 - 45.00
	Stalls 0
	Temp (°F) 122.00 - 134.00
	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>TKC 76</i> , Type: <i>PDC (Polycrystalline Diamond Compacts)</i> , Gauge Length (in): 4.00, Size (in): 8.75	Reed	A285076	4 1/2" Reg Pin			8.750		1.00	1.00
Mud Motor Description: <i>7.0" 7/8L, 5.7 Stg. 1.83° FBH (True Slick)</i> , Size (in): 7.00, Bend Angle (°): 1.83, Rotor Lobe: 7, Stator Lobe: 5, Stator Stage: 9	NOV	675-36-451	4 1/2" IF Box	4 1/2" Reg Box		7.000		31.71	32.71
Resistivity Description: <i>RESISTIVITY MWD</i>	Bench Tree	650-1005						31.26	63.97
Battery Description: <i>BATTERY</i>	Bench Tree	B6002						17.33	81.30
Drill Collar Description: <i>NMDC</i> , Material: <i>Non-Magnetic</i> , Type: <i>Slick Drill</i>	GATOR	67-30-296	4 1/2" IF Box	4 1/2" IF Pin	3.250	6.750		30.65	111.95
Crossover Sub Description: <i>X-O SUB</i> , Material: <i>Steel</i>	BLACK DIAMOND	BD15201	EverDrlg54 Box	4 1/2" IF Pin	3.000	6.625		3.57	115.52
Drill Pipe Description: <i>22 Stands 5 1/2 Drill Pipe</i> , Type: <i>Slick</i>	Black Diamond		EverDrlg54 Box	EverDrlg54 Pin	3.000	5.500		1969.32	2084.84
Crossover Sub Description: <i>X-O SUB</i> , Material: <i>Steel</i>	BLACK DIAMOND	BD 22523	4 1/2" IF Box	EverDrlg54 Box	3.000	6.750		3.48	2088.32
Agitator Description: <i>6.75" Agitator</i> , Size (in): 6.75	NOV	AGHF0675-0080	4 1/2" IF Box	4 1/2" IF Pin		6.750		24.82	2113.14
Crossover Sub Description: <i>X-O SUB</i> , Material: <i>Steel</i>	BLACK DIAMOND	BD13511	EverDrlg54 Box	4 1/2" FH Pin	3.000	6.750		3.38	2116.52





Job Number WT-21-183	Operator Advance Energy Partners	Rig Name Nabors X50
Start Date 2021-11-24	Well Name Anderson Fed Com 551H	Legal Well Name AFE Anderson Fed Com 551H
Play Delaware Basin	State/Province and Country New Mexico, US	County Lea
		Company Man

BHA #8 - 8.75" LATERAL (Directional)

Motor Details	Date/Depth/Distances	Hours
Size (in) 7.00	Date In 2022-01-26 20:00	Downhole Hours 57.17
Lobe/Stage 7/8, 8.5	Depth In (ft) 17236.00	Drilling/Circulating Hours 37.25
Bend Angle 1.75	Date Out 2022-01-29 05:10	Drilling Hours 33.00
Speed (rev/gal) 0.24	Depth Out (ft) 19092.00	Circulating Hours 4.25
Wear Pad OD (in) 7.375	Distance Slid (ft) 339.00	Sliding Hours 13.58
Incident No	Distance Rotated (ft) 1517.00	Rotating Hours 19.42
Motor Post Run/Notes	% Distance Sliding 18.27%	% Hours Sliding 41.16%
Average Total ROP (ft/h) 56.24	% Distance Rotating 81.73%	% Hours Rotating 58.84%
Average Slide ROP (ft/h) 24.96	BHA Objective	
Average Rotating ROP (ft/h) 78.13	Drill 8.75" Lateral Section	

Notes: Motor drained good and had no visible damage.

Bit Details

OD (in)	8.750
Vendor	Reed
Nozzles	7x14's
Total Flow Area (in²)	1.052

POOH Reason/Notes

Total Depth/Casing Point: POOH for casing. Reached TD @ 19,092'

Bit Distances

Bit To Survey: 69.00 ft, **Gamma (Bit To Gamma):** 45.00 ft, **Resistivity (Bit to Resistivity):** 55.00 ft

Incident Notes

Directional:
MWD:

Bit Post Run/Notes

Dull Grading 2 - 2
Notes: 2 chipped cutters on face, 2 chipped cutters on gauge. In Gauge

Comments

Directional: FLOW RANGE: 500-750 GPM, REV PER GALLON 0.26, MAX DIFF: 1,910 MAX TORQUE : 18,710 BIT RUNS: 0 , Bit to Bend: 4.56

MWD

Max Downhole Temp (°F) N/A

Mud Properties

Type	Oil Based
WT	9.65
VIS	64.00
PV	17.00
YP	9.00

Parameters

Flow Rate (gpm)	652.00 - 695.00	Motor RPM	0.00 - 55.00
On Bottom Pressure (psi)	4300.00 - 4900.00	Surface RPM	40.00 - 40.00
Off Bottom Pressure (psi)	4000.00 - 4400.00	Rotating WOB (klbs)	45.00 - 55.00
Stall Pressure (psi)	0.00	Sliding WOB (klbs)	45.00 - 70.00
Stalls	0	Temp (°F)	125.00 - 136.00
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>TKC 76, Type: PDC (Polycrystalline Diamond Compacts), Gauge Length (in): 4.00, Size (in): 8.75</i>	Reed	A284576	4 1/2" Reg Pin			8.750		1.00	1.00
Mud Motor Description: <i>7.0" 7/8L, 8.5 Stg. 1.75° FBH (True Slick), Size (in): 7.00, Bend Angle (°): 1.75, Rotor Lobe: 7, Stator Lobe: 8, Stator Stage: 8.5</i>	SNIPER	DR70018	4 1/2" IF Box	4 1/2" Reg Box		7.000		35.59	36.59
Resistivity Description: <i>RESISTIVITY MWD</i>	Bench Tree	650-1005						31.26	67.85
Battery Description: <i>BATTERY</i>	Bench Tree	B6002						17.33	85.18
Drill Collar Description: <i>NMDC, Material: Non-Magnetic, Type: Slick Drill</i>	GATOR	67-30-296	4 1/2" IF Box	4 1/2" IF Pin	3.250	6.750		30.65	115.83
Crossover Sub Description: <i>X-O SUB, Material: Steel</i>	BLACK DIAMOND	BD15201	EverDrlg54 Box	4 1/2" IF Pin	3.000	6.625		3.57	119.40
Drill Pipe Description: <i>22 Stands 5 1/2 Drill Pipe, Type: Slick</i>	Black Diamond		EverDrlg54 Box	EverDrlg54 Pin	3.000	5.500		1969.32	2088.72
Crossover Sub Description: <i>X-O SUB, Material: Steel</i>	BLACK DIAMOND	BD 22523	4 1/2" IF Box	EverDrlg54 Box	3.000	6.750		3.48	2092.20
Agitator Description: <i>6.75" Agitator, Size (in): 6.75</i>	NOV	AGHF0675-0080	4 1/2" IF Box	4 1/2" IF Pin		6.750		24.82	2117.02
Crossover Sub Description: <i>X-O SUB, Material: Steel</i>	BLACK DIAMOND	BD13511	EverDrlg54 Box	4 1/2" FH Pin	3.000	6.750		3.38	2120.40





Mud Motor Reports

Anderson Fed Com 551H (WT-21-183)

2021-11-24 to 2022-01-29

Lea, New Mexico, US (32.43, -103.65)



Job Number WT-21-183	Operator Advance Energy Partners	Rig Name Nabors X50
Start Date 2021-11-24	Well Name Anderson Fed Com 551H	Legal Well Name AFE Anderson Fed Com 551H
Play Delaware Basin	State/Province and Country New Mexico, US	County Lea
		Company Man

Mud Motor Report - BHA 1 (BHA #1 (17.5" Surface))

Motor Details		Date/Depth/Distances	Hours
S/N	800-40-011	Date In	2021-11-24 10:15
Size (in)	8.0	Depth In (ft)	150.00
Lobe/Stage	7/8, 5.90	Date Out	2021-11-24 22:30
Bend Angle	1.75	Depth Out (ft)	1290.00
Speed (rev/gal)	0.17	Total Drilled (ft)	1140.00
Wear Pad OD (in)	8.437	Distance Slid (ft)	0.00
Manufacturer	Contender	Distance Rotated (ft)	1140.00
Motor Results		% Distance Sliding	0.00%
Motor Incident	No	% Distance Rotating	100.00%
Average Total ROP (ft/h)	153.71		
Motor Parameters			
Average Slide ROP (ft/h)	0.00	Flow Rate (gpm)	601.00 - 897.00
Average Rotating ROP (ft/h)	153.71	Stalls	0
Bit Details		Stall Pressure (psi)	0.00
OD (in)	17.500	On Bottom Pressure (psi)	1250.00 - 2350.00
Vendor	ULTERRA	Off Bottom Pressure (psi)	700.00 - 1750.00
S/N	57377	NPT	0.0
Nozzles	1x14 - 8x12's	BHA Objective	
Total Flow Area (in ²)	1.034	DRILL OUT SURFACE	
Bit Type	PDC (Polycrystalline Diamond Compacts)		
Bit Distances			
Survey: 70.00 ft			
Mud Properties			
Type	Water Based		
WT	9.90		
VIS	31.00		
PV	2.00		
YP	5.00		
POOH Reason/Notes			
Total Depth/Casing Point: MOTOR LOOKED GREAT BIT HAD 1 CHIPPED CUTTER			
Incident Notes			
Directional: NONE			
MWD:			
Comments			
Directional: FLOW RANGE 400-900 GPM, REV PER GALLON .166, MAX DIFF 1330, MAX TORQUE 22020 BIT RUNS: 2			
MWD:			



Job Number WT-21-183	Operator Advance Energy Partners	Rig Name Nabors X50
Start Date 2021-11-24	Well Name Anderson Fed Com 551H	Legal Well Name AFE Anderson Fed Com 551H
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	DR-800-01	Date In	2021-11-30 12:15	Downhole Hours	24.25
Size (in)	8.0	Depth In (ft)	1290.00	Drilling/Circulating Hours	15.83
Lobe/Stage	7/8, 5.90	Date Out	2021-12-01 12:30		
Bend Angle	1.75	Depth Out (ft)	4820.00	Circulating Hours	2.33
Speed (rev/gal)	0.15	Total Drilled (ft)	3530.00	Drilling Hours	13.50
Wear Pad OD (in)	8.125	Distance Slid (ft)	145.00	Sliding Hours	1.33
Manufacturer	Sniper	Distance Rotated (ft)	3385.00	Rotating Hours	12.17
Motor Results		% Distance Sliding	4.11%	% Hours Rotating	90.12%
Motor Incident	No	% Distance Rotating	95.89%	% Hours Sliding	9.88%
Average Total ROP (ft/h)	261.48	BHA Parameters			
Average Slide ROP (ft/h)	108.75	Flow Rate (gpm)	895.00 - 897.00	Motor RPM	40.00 - 70.00
Average Rotating ROP (ft/h)	278.22	Stalls	0	Surface RPM	60.00 - 70.00
Bit Details		Stall Pressure (psi)	0.00	Rotating WOB (klbs)	25.00 - 50.00
OD (in)	12.250	On Bottom Pressure (psi)	2350.00 - 2600.00	Sliding WOB (klbs)	50.00 - 50.00
Vendor	Reed	Off Bottom Pressure (psi)	1750.00 - 2100.00	Temp (°F)	90.00 - 120.00
S/N	A280421	NPT	0.0		
Nozzles	6 x 16	BHA Objective			
Total Flow Area (in²)	1.178	Drill 12.25" Intermediate section			
Bit Type	PDC (Polycrystalline Diamond Compacts)				
Bit Distances					
Survey: 65.00 ft					
Mud Properties					
Type	Water Based				
WT	10.50				
VIS	29.00				
PV	2.00				
YP	3.00				
POOH Reason/Notes					
Total Depth/Casing Point: Good Run. POOH for Casing.					
Incident Notes					
Directional:					
MWD:					
Comments					
Directional: FLOW RANGE 400-900 GPM, REV PER GALLON .150, MAX DIFF 1330, MAX TORQUE 22020 BIT RUNS: 2 , Bit to Bend: 5.05					
MWD:					



Job Number WT-21-183	Operator Advance Energy Partners	Rig Name Nabors X50
Start Date 2021-11-24	Well Name Anderson Fed Com 551H	Legal Well Name AFE Anderson Fed Com 551H
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	700-40-005	Date In	2022-01-17 11:15
Size (in)	7.0	Depth In (ft)	4820.00
Lobe/Stage	7/8, 8.50	Date Out	2022-01-19 00:00
Bend Angle	1.75	Depth Out (ft)	9646.00
Speed (rev/gal)	0.26	Total Drilled (ft)	4826.00
Wear Pad OD (in)	7.375	Distance Slid (ft)	200.00
Manufacturer	Contender	Distance Rotated (ft)	4626.00
Motor Results		% Distance Sliding	4.14%
Motor Incident	Yes	% Distance Rotating	95.86%
Average Total ROP (ft/h)	220.20	% Hours Rotating	80.99%
Average Slide ROP (ft/h)	48.00	% Hours Sliding	19.01%
Average Rotating ROP (ft/h)	260.62		
Bit Details		BHA Parameters	
OD (in)	8.750	Flow Rate (gpm)	597.00 - 700.00
Vendor	Reed	Motor RPM	40.00 - 220.00
S/N	A283351	Stalls	4
Nozzles	6 x15's	Stall Pressure (psi)	4100.07
Total Flow Area (in ²)	1.035	On Bottom Pressure (psi)	1950.00 - 2800.00
Bit Type	PDC (Polycrystalline Diamond Compacts)	Off Bottom Pressure (psi)	1250.00 - 2100.00
Bit Distances		NPT	0.0
Survey: 69.00 ft, Gamma (Bit To Gamma):		BHA Objective	
53.00 ft		Drill 8.75" Intermediate	
Mud Properties			
Type	Water Based		
WT	9.20		
VIS	32.00		
PV	2.00		
YP	3.00		
POOH Reason/Notes			
Downhole Motor Incident: Motor Dropped Pressure And Stopped Drilling			
Incident Notes			
Directional: Upon Surface BHA Inspection Found Motor To be Dry no fluid say no visible sign of any issues. Bit min. wear. Bit box spun freely			
MWD:			
Comments			
Directional: FLOW RANGE: 500-750 GPM, REV PER GALLON .26, MAX DIFF: 1910, MAX TORQUE : 18,710 BIT RUNS: 0 , Bit to Bend: 5.30			
MWD:			



Job Number WT-21-183	Operator Advance Energy Partners	Rig Name Nabors X50
Start Date 2021-11-24	Well Name Anderson Fed Com 551H	Legal Well Name AFE Anderson Fed Com 551H
Play Delaware Basin	State/Province and Country New Mexico, US	County Lea
		Company Man

Mud Motor Report - BHA 4 (8.75" INTERMEDIATE)

Motor Details		Date/Depth/Distances		Hours	
S/N	700-40-035	Date In	2022-01-19 00:30	Downhole Hours	17.50
Size (in)	7.0	Depth In (ft)	9646.00	Drilling/Circulating Hours	7.83
Lobe/Stage	7/8, 8.50	Date Out	2022-01-19 18:00		
Bend Angle	1.75	Depth Out (ft)	10500.00	Circulating Hours	0.92
Speed (rev/gal)	0.26	Total Drilled (ft)	854.00	Drilling Hours	6.92
Wear Pad OD (in)	7.375	Distance Slid (ft)	70.00	Sliding Hours	1.42
Manufacturer	AIM	Distance Rotated (ft)	784.00	Rotating Hours	5.50
Motor Results		% Distance Sliding	8.20%	% Hours Rotating	79.52%
Motor Incident	No	% Distance Rotating	91.80%	% Hours Sliding	20.48%
Average Total ROP (ft/h)	123.47	BHA Parameters			
Average Slide ROP (ft/h)	49.41	Flow Rate (gpm)	700.00 - 700.00	Motor RPM	182.00 - 222.00
Average Rotating ROP (ft/h)	142.55	Stalls	0	Surface RPM	40.00 - 40.00
Bit Details		Stall Pressure (psi)	2199.93	Rotating WOB (klbs)	40.00 - 40.00
OD (in)	8.750	On Bottom Pressure (psi)	2900.00 - 3200.00	Sliding WOB (klbs)	20.00 - 20.00
Vendor	ULTERRA	Off Bottom Pressure (psi)	2500.00 - 2500.00	Temp (°F)	125.00 - 130.00
S/N	55347	NPT	0.0		
Nozzles	9 x12's	BHA Objective			
Total Flow Area (in²)	1.035	Drill 8.75" Intermediate			
Bit Type	PDC (Polycrystalline Diamond Compacts)				
Bit Distances					
Survey: 69.00 ft, Gamma (Bit To Gamma): 53.00 ft					
Mud Properties					
Type	Water Based				
WT	9.30				
VIS	29.00				
PV	2.00				
YP	3.00				
POOH Reason/Notes					
Change Bottom Hole Assembly: POOH for curve assembly					
Incident Notes					
Directional:					
MWD:					
Comments					
Directional: FLOW RANGE: 500-750 GPM, REV PER GALLON .26, MAX DIFF: 1910, MAX TORQUE : 18,710 BIT RUNS: 0 , Bit to Bend: 5.37					
MWD:					



Job Number WT-21-183	Operator Advance Energy Partners	Rig Name Nabors X50
Start Date 2021-11-24	Well Name Anderson Fed Com 551H	Legal Well Name AFE Anderson Fed Com 551H
Play Delaware Basin	State/Province and Country New Mexico, US	County Lea
Company Man		

Mud Motor Report - BHA 5 (BHA #5 (Curve Assy))

Motor Details		Date/Depth/Distances	Hours
S/N	675101SS	Date In	2022-01-19 18:00
Size (in)	6.75	Depth In (ft)	10500.00
Lobe/Stage	7/8, 5.00	Date Out	2022-01-21 01:00
Bend Angle	2.25	Depth Out (ft)	11364.00
Speed (rev/gal)	0.27	Total Drilled (ft)	864.00
Wear Pad OD (in)	7.000	Distance Slid (ft)	864.00
Manufacturer	Paradigm	Distance Rotated (ft)	0.00
Motor Results		% Distance Sliding	100.00%
Motor Incident	No	% Distance Rotating	0.00%
Average Total ROP (ft/h)	51.84	% Hours Rotating	0.00%
Average Slide ROP (ft/h)	51.84	% Hours Sliding	100.00%
Average Rotating ROP (ft/h)	0.00	BHA Parameters	
Bit Details		Flow Rate (gpm)	550.00 - 600.00
OD (in)	8.750	Motor RPM	149.00 - 149.00
Vendor	ULTERRA	Stalls	0
S/N	556957	Surface RPM	40.00 - 40.00
Nozzles	6x15's	Rotating WOB (klbs)	40.00 - 40.00
Total Flow Area (in ²)	1.035	Sliding WOB (klbs)	23.00 - 25.00
Bit Type	PDC (Polycrystalline Diamond Compacts)	Temp (°F)	121.00 - 130.00
Bit Distances		NPT	0.0
Survey: 59.00 ft, Gamma (Bit To Gamma):		BHA Objective	
35.00 ft, Resistivity (Bit to Resistivity):		Drill 8.75" Curve section	
45.00 ft			
Mud Properties			
Type	Water Based		
WT	9.30		
VIS	34.00		
PV	2.00		
YP	1.00		
POOH Reason/Notes			
Change Bottom Hole Assembly: POOH At EOC			
Incident Notes			
Directional:			
MWD:			
Comments			
Directional: FLOW RANGE: 300-650 GPM, REV PER GALLON .27, MAX DIFF: 1860, MAX TORQUE : 16,770 BIT RUNS: 0 , Bit to Bend: 3.85			
MWD:			



Job Number WT-21-183	Operator Advance Energy Partners	Rig Name Nabors X50
Start Date 2021-11-24	Well Name Anderson Fed Com 551H	Legal Well Name AFE Anderson Fed Com 551H
Play Delaware Basin	State/Province and Country New Mexico, US	County Lea
		Company Man

Mud Motor Report - BHA 6 (8.75" LATERAL)

Motor Details		Date/Depth/Distances		Hours	
S/N	675-36-384	Date In	2022-01-21 02:30	Downhole Hours	95.50
Size (in)	7.0	Depth In (ft)	11364.00	Drilling/Circulating Hours	63.83
Lobe/Stage	7/5, 9.00	Date Out	2022-01-25 02:00		
Bend Angle	1.83	Depth Out (ft)	15829.00	Circulating Hours	2.08
Speed (rev/gal)	0.23	Total Drilled (ft)	4465.00	Drilling Hours	61.75
Wear Pad OD (in)	7.375	Distance Slid (ft)	749.00	Sliding Hours	23.50
Manufacturer	NOV	Distance Rotated (ft)	3716.00	Rotating Hours	38.25
Motor Results		% Distance Sliding	16.77%	% Hours Rotating	61.94%
Motor Incident	No	% Distance Rotating	83.23%	% Hours Sliding	38.06%
Average Total ROP (ft/h)	72.31	BHA Parameters			
Average Slide ROP (ft/h)	31.87	Flow Rate (gpm)	493.00 - 695.00	Motor RPM	115.00 - 161.00
Average Rotating ROP (ft/h)	97.15	Stalls	0	Surface RPM	30.00 - 40.00
Bit Details		Stall Pressure (psi)	1580.04	Rotating WOB (klbs)	38.00 - 45.00
OD (in)	8.750	On Bottom Pressure (psi)	2850.00 - 4575.00	Sliding WOB (klbs)	25.00 - 45.00
Vendor	Reed	Off Bottom Pressure (psi)	2300.00 - 4100.00	Temp (°F)	-0.00 - 179.00
S/N	A28369	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: 64.00 ft, Gamma (Bit To Gamma): 40.00 ft, Resistivity (Bit to Resistivity): 50.00 ft					
Mud Properties					
Type	Oil Based				
WT	9.50				
VIS	63.00				
PV	14.00				
YP	8.00				
POOH Reason/Notes					
Change Bottom Hole Assembly: Erratic Differential PSI. TF control was highly difficult.					
Incident Notes					
Directional:					
MWD:					
Comments					
Directional: FLOW RANGE: 300-750 GPM, REV PER GALLON 0.23, MAX DIFF: 1,580, MAX TORQUE : 17,950 BIT RUNS: 0 , Bit to Bend: 5.37					
MWD:					



Job Number WT-21-183	Operator Advance Energy Partners	Rig Name Nabors X50
Start Date 2021-11-24	Well Name Anderson Fed Com 551H	Legal Well Name AFE Anderson Fed Com 551H
Play Delaware Basin	State/Province and Country New Mexico, US	County Lea
Company Man		

Mud Motor Report - BHA 7 (8.75" LATERAL)

Motor Details		Date/Depth/Distances	Hours
S/N	675-36-451	Date In	2022-01-25 02:00
Size (in)	7.0	Depth In (ft)	15829.00
Lobe/Stage	7/5, 9.00	Date Out	2022-01-26 20:00
Bend Angle	1.83	Depth Out (ft)	17236.00
Speed (rev/gal)	0.23	Total Drilled (ft)	1407.00
Wear Pad OD (in)	7.375	Distance Slid (ft)	154.00
Manufacturer	NOV	Distance Rotated (ft)	1253.00
Motor Results		% Distance Sliding	10.95%
Motor Incident	No	% Distance Rotating	89.05%
Average Total ROP (ft/h)	66.21	% Hours Rotating	78.04%
Average Slide ROP (ft/h)	33.00	% Hours Sliding	21.96%
Average Rotating ROP (ft/h)	75.56	BHA Parameters	
Bit Details		Flow Rate (gpm)	694.00 - 695.00
OD (in)	8.750	Motor RPM	0.00 - 40.00
Vendor	Reed	Stalls	0
S/N	A285076	Surface RPM	40.00 - 40.00
Nozzles	7x14's	Rotating WOB (klbs)	42.00 - 55.00
Total Flow Area (in ²)	1.052	Sliding WOB (klbs)	45.00 - 45.00
Bit Type	PDC (Polycrystalline Diamond Compacts)	Temp (°F)	122.00 - 134.00
Bit Distances		NPT	0.0
Survey: 64.00 ft, Gamma (Bit To Gamma):		BHA Objective	
40.00 ft, Resistivity (Bit to Resistivity):		Drill 8.75" Lateral section	
50.00 ft			
Mud Properties			
Type	Oil Based		
WT	9.60		
VIS	61.00		
PV	16.00		
YP	8.00		
POOH Reason/Notes			
Penetration Rate:	POOH due to slow P Rate.		
Incident Notes			
Directional:	Bit started to ring out. Bit grade 1-4 and 1/16 under gauge.		
MWD:			
Comments			
Directional:	FLOW RANGE: 300-750 GPM, REV PER GALLON 0.23, MAX DIFF: 1,580, MAX TORQUE : 17,950 BIT RUNS: 1 , Bit to Bend: 5.35		
MWD:			



Job Number WT-21-183	Operator Advance Energy Partners	Rig Name Nabors X50
Start Date 2021-11-24	Well Name Anderson Fed Com 551H	Legal Well Name AFE Anderson Fed Com 551H
Play Delaware Basin	State/Province and Country New Mexico, US	County Lea
Company Man		

Mud Motor Report - BHA 8 (8.75" LATERAL)

Motor Details		Date/Depth/Distances		Hours	
S/N	DR70018	Date In	2022-01-26 20:00	Downhole Hours	57.17
Size (in)	7.0	Depth In (ft)	17236.00	Drilling/Circulating Hours	37.25
Lobe/Stage	7/8, 8.50	Date Out	2022-01-29 05:10		
Bend Angle	1.75	Depth Out (ft)	19092.00	Circulating Hours	4.25
Speed (rev/gal)	0.24	Total Drilled (ft)	1856.00	Drilling Hours	33.00
Wear Pad OD (in)	7.375	Distance Slid (ft)	339.00	Sliding Hours	13.58
Manufacturer	SNIPER	Distance Rotated (ft)	1517.00	Rotating Hours	19.42
Motor Results		% Distance Sliding	18.27%	% Hours Rotating	58.84%
Motor Incident	No	% Distance Rotating	81.73%	% Hours Sliding	41.16%
Average Total ROP (ft/h)	56.24	BHA Parameters			
Average Slide ROP (ft/h)	24.96	Flow Rate (gpm)	652.00 - 695.00	Motor RPM	0.00 - 55.00
Average Rotating ROP (ft/h)	78.13	Stalls	0	Surface RPM	40.00 - 40.00
Bit Details		Stall Pressure (psi)	0.00	Rotating WOB (klbs)	45.00 - 55.00
OD (in)	8.750	On Bottom Pressure (psi)	4300.00 - 4900.00	Sliding WOB (klbs)	45.00 - 70.00
Vendor	Reed	Off Bottom Pressure (psi)	4000.00 - 4400.00	Temp (°F)	125.00 - 136.00
S/N	A284576	NPT	0.0		
Nozzles	7x14's	BHA Objective			
Total Flow Area (in²)	1.052	Drill 8.75" Lateral Section			
Bit Type	PDC (Polycrystalline Diamond Compacts)				
Bit Distances					
Survey: 69.00 ft, Gamma (Bit To Gamma): 45.00 ft, Resistivity (Bit to Resistivity): 55.00 ft					
Mud Properties					
Type	Oil Based				
WT	9.65				
VIS	64.00				
PV	17.00				
YP	9.00				
POOH Reason/Notes					
Total Depth/Casing Point: POOH for casing. Reached TD @ 19,092'					
Incident Notes					
Directional:					
MWD:					
Comments					
Directional: FLOW RANGE: 500-750 GPM, REV PER GALLON 0.26, MAX DIFF: 1,910 MAX TORQUE : 18,710 BIT RUNS: 0 , Bit to Bend: 4.56					
MWD:					



Slide/Rotate Reports

Anderson Fed Com 551H (WT-21-183)

2021-11-24 to 2022-01-29

Lea, New Mexico, US (32.43, -103.65)



Job Number WT-21-183	Operator Advance Energy Partners	Rig Name Nabors X50
Start Date 2021-11-24	Well Name Anderson Fed Com 551H	Legal Well Name AFE Anderson Fed Com 551H
Play Delaware Basin	State/Province and Country New Mexico, US	County Lea
Company Man		

Slide/Rotate Report - BHA #1 (BHA #1 (17.5" 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	11-24	11:25	13:15	11-24	1.83	150.00	299.00	149.00	81.27	N/A	601.00	40.0	25.00	1250.00	700.00	Surface
Rotate	11-24	13:20	13:30	11-24	0.17	299.00	361.00	62.00	372.00	N/A	749.00	60.0	25.00	1900.00	1300.00	Surface
Rotate	11-24	13:35	14:00	11-24	0.42	361.00	422.00	61.00	146.40	N/A	897.00	60.0	25.00	2350.00	1750.00	Surface
Rotate	11-24	14:10	14:15	11-24	0.08	422.00	483.00	61.00	732.00	N/A	897.00	60.0	25.00	2350.00	1750.00	Surface
Rotate	11-24	14:20	14:45	11-24	0.42	483.00	545.00	62.00	148.80	N/A	897.00	60.0	25.00	2350.00	1750.00	Surface
Rotate	11-24	14:50	15:20	11-24	0.5	545.00	606.00	61.00	122.00	N/A	897.00	60.0	25.00	2350.00	1750.00	Surface
Rotate	11-24	15:50	16:05	11-24	0.25	606.00	667.00	61.00	244.00	N/A	897.00	60.0	25.00	2350.00	1750.00	Surface
Rotate	11-24	16:10	16:30	11-24	0.33	667.00	729.00	62.00	186.00	N/A	897.00	60.0	25.00	2350.00	1750.00	Surface
Rotate	11-24	16:35	17:15	11-24	0.67	729.00	790.00	61.00	91.50	N/A	897.00	60.0	25.00	2350.00	1750.00	Surface
Rotate	11-24	17:20	17:40	11-24	0.33	790.00	886.00	96.00	288.00	N/A	897.00	60.0	25.00	2350.00	1750.00	Surface
Rotate	11-24	17:45	18:00	11-24	0.25	886.00	948.00	62.00	248.00	N/A	897.00	60.0	25.00	2350.00	1750.00	Surface
Rotate	11-24	18:05	18:45	11-24	0.67	948.00	1043.00	95.00	142.50	N/A	897.00	60.0	25.00	2350.00	1750.00	Surface
Rotate	11-24	18:50	19:30	11-24	0.67	1043.00	1136.00	93.00	139.50	N/A	897.00	60.0	25.00	2350.00	1750.00	Surface
Rotate	11-24	19:35	20:10	11-24	0.58	1136.00	1225.00	89.00	152.57	N/A	897.00	60.0	25.00	2350.00	1750.00	Surface
Rotate	11-24	20:15	20:30	11-24	0.25	1225.00	1290.00	65.00	260.00	N/A	897.00	60.0	25.00	2350.00	1750.00	Surface, Intermediate

	Job Number WT-21-183	Operator Advance Energy Partners			Rig Name Nabors X50	
	Start Date 2021-11-24	Well Name Anderson Fed Com 551H			Legal Well Name AFE Anderson Fed Com 551H	
	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	11-30	16:05	16:55	11-30	0.83	1290.00	1400.00	110.00	132.00	N/A	897.00	60.0	25.00	2350.00	1750.00	Intermediate
Rotate	11-30	17:00	17:20	11-30	0.33	1400.00	1489.00	89.00	267.00	N/A	897.00	60.0	25.00	2350.00	1750.00	Intermediate
Rotate	11-30	17:25	17:40	11-30	0.25	1489.00	1579.00	90.00	360.00	N/A	897.00	60.0	25.00	2350.00	1750.00	Intermediate
Rotate	11-30	17:45	18:05	11-30	0.33	1579.00	1668.00	89.00	267.00	N/A	897.00	60.0	25.00	2350.00	1750.00	Intermediate
Rotate	11-30	18:10	18:20	11-30	0.17	1668.00	1758.00	90.00	540.00	N/A	897.00	60.0	25.00	2350.00	1750.00	Intermediate
Rotate	11-30	18:25	18:35	11-30	0.17	1758.00	1848.00	90.00	540.00	N/A	897.00	60.0	25.00	2350.00	1750.00	Intermediate
Rotate	11-30	18:40	18:55	11-30	0.25	1848.00	1937.00	89.00	356.00	N/A	897.00	60.0	25.00	2350.00	1750.00	Intermediate
Rotate	11-30	19:00	19:15	11-30	0.25	1937.00	2027.00	90.00	360.00	N/A	897.00	70.0	50.00	2600.00	2000.00	Intermediate
Rotate	11-30	19:20	19:30	11-30	0.17	2027.00	2117.00	90.00	540.00	N/A	897.00	70.0	50.00	2600.00	2100.00	Intermediate
Rotate	11-30	19:35	19:45	11-30	0.17	2117.00	2206.00	89.00	534.00	N/A	897.00	70.0	50.00	2600.00	2100.00	Intermediate
Rotate	11-30	19:50	20:00	11-30	0.17	2206.00	2296.00	90.00	540.00	N/A	897.00	70.0	50.00	2600.00	2100.00	Intermediate
Rotate	11-30	20:05	20:20	11-30	0.25	2296.00	2385.00	89.00	356.00	N/A	897.00	70.0	50.00	2600.00	2100.00	Intermediate
Rotate	11-30	20:25	20:30	11-30	0.08	2385.00	2395.00	10.00	120.00	N/A	897.00	70.0	50.00	2600.00	2100.00	Intermediate
Slide	11-30	20:30	20:35	11-30	0.08	2395.00	2415.00	20.00	240.00	230.0	895.00	N/A	50.00	2600.00	2100.00	Intermediate
Rotate	11-30	20:35	20:50	11-30	0.25	2415.00	2474.00	59.00	236.00	N/A	897.00	70.0	50.00	2600.00	2100.00	Intermediate
Rotate	11-30	20:55	21:05	11-30	0.17	2474.00	2563.00	89.00	534.00	N/A	897.00	70.0	50.00	2600.00	2100.00	Intermediate
Rotate	11-30	21:10	21:15	11-30	0.08	2563.00	2653.00	90.00	1080.00	N/A	897.00	70.0	50.00	2600.00	2100.00	Intermediate
Rotate	11-30	21:20	21:35	11-30	0.25	2653.00	2742.00	89.00	356.00	N/A	897.00	70.0	50.00	2600.00	2100.00	Intermediate
Slide	11-30	21:40	22:00	11-30	0.33	2742.00	2772.00	30.00	90.00	300.0	895.00	N/A	50.00	2600.00	2100.00	Intermediate
Rotate	11-30	22:00	22:10	11-30	0.17	2772.00	2831.00	59.00	354.00	N/A	897.00	70.0	50.00	2600.00	2100.00	Intermediate
Rotate	11-30	22:15	22:25	11-30	0.17	2831.00	2921.00	90.00	540.00	N/A	897.00	70.0	50.00	2600.00	2100.00	Intermediate
Rotate	11-30	22:30	22:45	11-30	0.25	2921.00	3011.00	90.00	360.00	N/A	897.00	70.0	50.00	2600.00	2100.00	Intermediate
Rotate	11-30	22:50	22:55	11-30	0.08	3011.00	3022.00	11.00	132.00	N/A	897.00	70.0	50.00	2600.00	2100.00	Intermediate
Slide	11-30	22:55	23:05	11-30	0.17	3022.00	3047.00	25.00	150.00	240.0	895.00	N/A	50.00	2600.00	2100.00	Intermediate
Rotate	11-30	23:05	23:15	11-30	0.17	3047.00	3101.00	54.00	324.00	N/A	897.00	70.0	50.00	2600.00	2100.00	Intermediate
Rotate	11-30	23:20	23:35	11-30	0.25	3101.00	3190.00	89.00	356.00	N/A	897.00	70.0	50.00	2600.00	2100.00	Intermediate
Rotate	11-30	23:40	23:45	11-30	0.08	3190.00	3202.00	12.00	144.00	N/A	897.00	70.0	50.00	2600.00	2100.00	Intermediate
Slide	11-30	23:45	23:50	11-30	0.08	3202.00	3227.00	25.00	300.00	10.0	895.00	N/A	50.00	2600.00	2100.00	Intermediate
Rotate	11-30	23:50	00:00	12-01	0.17	3227.00	3280.00	53.00	318.00	N/A	897.00	70.0	50.00	2600.00	2100.00	Intermediate
Rotate	12-01	00:05	00:15	12-01	0.17	3280.00	3369.00	89.00	534.00	N/A	897.00	70.0	50.00	2600.00	2100.00	Intermediate
Rotate	12-01	00:20	00:30	12-01	0.17	3369.00	3459.00	90.00	540.00	N/A	897.00	70.0	50.00	2600.00	2100.00	Intermediate
Rotate	12-01	00:35	00:50	12-01	0.25	3459.00	3548.00	89.00	356.00	N/A	897.00	70.0	50.00	2600.00	2100.00	Intermediate
Rotate	12-01	00:55	01:15	12-01	0.33	3548.00	3638.00	90.00	270.00	N/A	897.00	70.0	50.00	2600.00	2100.00	Intermediate
Rotate	12-01	01:20	01:40	12-01	0.33	3638.00	3728.00	90.00	270.00	N/A	897.00	70.0	50.00	2600.00	2100.00	Intermediate
Rotate	12-01	01:45	01:50	12-01	0.08	3728.00	3735.00	7.00	84.00	N/A	897.00	70.0	50.00	2600.00	2100.00	Intermediate
Slide	12-01	01:50	02:05	12-01	0.25	3735.00	3760.00	25.00	100.00	245.0	895.00	N/A	50.00	2600.00	2100.00	Intermediate

Rotate	12-01	02:05	02:25	12-01	0.33	3760.00	3817.00	57.00	171.00	N/A	897.00	70.0	50.00	2600.00	2100.00	Intermediate
Rotate	12-01	02:30	02:55	12-01	0.42	3817.00	3907.00	90.00	216.00	N/A	897.00	70.0	50.00	2600.00	2100.00	Intermediate
Slide	12-01	03:00	03:25	12-01	0.42	3907.00	3927.00	20.00	48.00	0.0	895.00	N/A	50.00	2600.00	2100.00	Intermediate
Rotate	12-01	03:25	03:50	12-01	0.42	3927.00	3997.00	70.00	168.00	N/A	897.00	70.0	50.00	2600.00	2100.00	Intermediate
Rotate	12-01	03:55	04:20	12-01	0.42	3997.00	4086.00	89.00	213.60	N/A	897.00	70.0	50.00	2600.00	2100.00	Intermediate
Rotate	12-01	04:25	04:50	12-01	0.42	4086.00	4176.00	90.00	216.00	N/A	897.00	70.0	50.00	2600.00	2100.00	Intermediate
Rotate	12-01	04:55	05:20	12-01	0.42	4176.00	4265.00	89.00	213.60	N/A	897.00	70.0	50.00	2600.00	2100.00	Intermediate
Rotate	12-01	05:25	05:50	12-01	0.42	4265.00	4355.00	90.00	216.00	N/A	897.00	70.0	50.00	2600.00	2100.00	Intermediate
Rotate	12-01	05:55	06:20	12-01	0.42	4355.00	4444.00	89.00	213.60	N/A	897.00	70.0	50.00	2600.00	2100.00	Intermediate
Rotate	12-01	06:25	07:00	12-01	0.58	4444.00	4534.00	90.00	154.29	N/A	897.00	70.0	50.00	2600.00	2100.00	Intermediate
Rotate	12-01	07:05	07:35	12-01	0.5	4534.00	4624.00	90.00	180.00	N/A	897.00	70.0	50.00	2600.00	2100.00	Intermediate
Rotate	12-01	07:40	08:05	12-01	0.42	4624.00	4713.00	89.00	213.60	N/A	897.00	70.0	50.00	2600.00	2100.00	Intermediate
Rotate	12-01	08:10	08:45	12-01	0.58	4713.00	4820.00	107.00	183.43	N/A	897.00	70.0	50.00	2600.00	2100.00	Intermediate



Job Number WT-21-183	Operator Advance Energy Partners			Rig Name Nabors X50
Start Date 2021-11-24	Well Name Anderson Fed Com 551H			Legal Well Name AFE Anderson Fed Com 551H
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	01-17	16:35	17:25	01-17	0.83	4820.00	4980.00	160.00	192.00	N/A	597.00	30.0	34.00	1950.00	1250.00	Intermediate
Rotate	01-17	17:30	17:40	01-17	0.17	4980.00	5070.00	90.00	540.00	N/A	597.00	30.0	34.00	1950.00	1250.00	Intermediate
Rotate	01-17	17:45	17:50	01-17	0.08	5070.00	5160.00	90.00	1080.00	N/A	696.00	40.0	40.00	2650.00	1900.00	Intermediate
Rotate	01-17	17:55	18:05	01-17	0.17	5160.00	5249.00	89.00	534.00	N/A	696.00	40.0	40.00	2650.00	1900.00	Intermediate
Rotate	01-17	18:10	18:25	01-17	0.25	5249.00	5339.00	90.00	360.00	N/A	696.00	40.0	40.00	2650.00	1900.00	Intermediate
Rotate	01-17	18:30	18:35	01-17	0.08	5339.00	5345.00	6.00	72.00	N/A	696.00	40.0	40.00	2650.00	1900.00	Intermediate
Slide	01-17	18:35	18:40	01-17	0.08	5345.00	5365.00	20.00	240.00	231.0	700.00	N/A	25.00	2200.00	1700.00	Intermediate
Rotate	01-17	18:40	18:45	01-17	0.08	5365.00	5428.00	63.00	756.00	N/A	696.00	40.0	40.00	2650.00	1900.00	Intermediate
Slide	01-17	18:50	18:55	01-17	0.08	5428.00	5453.00	25.00	300.00	230.0	700.00	N/A	25.00	2200.00	1700.00	Intermediate
Rotate	01-17	18:55	19:10	01-17	0.25	5453.00	5517.00	64.00	256.00	N/A	696.00	40.0	40.00	2650.00	1900.00	Intermediate
Slide	01-17	19:15	19:25	01-17	0.17	5517.00	5537.00	20.00	120.00	225.0	700.00	N/A	25.00	2200.00	1700.00	Intermediate
Rotate	01-17	19:25	19:45	01-17	0.33	5537.00	5607.00	70.00	210.00	N/A	696.00	40.0	40.00	2650.00	1900.00	Intermediate
Rotate	01-17	19:50	20:10	01-17	0.33	5607.00	5697.00	90.00	270.00	N/A	696.00	40.0	40.00	2650.00	1900.00	Intermediate
Rotate	01-17	20:15	20:30	01-17	0.25	5697.00	5786.00	89.00	356.00	N/A	696.00	40.0	40.00	2650.00	1900.00	Intermediate
Slide	01-17	20:35	20:40	01-17	0.08	5786.00	5797.00	11.00	132.00	97.0	700.00	N/A	25.00	2200.00	1700.00	Intermediate
Rotate	01-17	20:40	21:05	01-17	0.42	5797.00	5876.00	79.00	189.60	N/A	696.00	40.0	40.00	2650.00	1900.00	Intermediate
Rotate	01-17	21:10	21:30	01-17	0.33	5876.00	5965.00	89.00	267.00	N/A	696.00	40.0	40.00	2650.00	1900.00	Intermediate
Rotate	01-17	21:35	21:45	01-17	0.17	5965.00	6055.00	90.00	540.00	N/A	696.00	40.0	40.00	2650.00	1900.00	Intermediate
Rotate	01-17	21:50	22:00	01-17	0.17	6055.00	6145.00	90.00	540.00	N/A	696.00	40.0	40.00	2650.00	1900.00	Intermediate
Rotate	01-17	22:05	22:15	01-17	0.17	6145.00	6234.00	89.00	534.00	N/A	696.00	40.0	40.00	2650.00	1900.00	Intermediate
Slide	01-17	22:20	22:25	01-17	0.08	6234.00	6244.00	10.00	120.00	312.0	700.00	N/A	25.00	2200.00	1700.00	Intermediate
Rotate	01-17	22:25	22:50	01-17	0.42	6244.00	6324.00	80.00	192.00	N/A	696.00	40.0	40.00	2650.00	1900.00	Intermediate
Rotate	01-17	22:55	23:05	01-17	0.17	6324.00	6413.00	89.00	534.00	N/A	696.00	40.0	40.00	2650.00	1900.00	Intermediate
Rotate	01-17	23:10	23:25	01-17	0.25	6413.00	6502.00	89.00	356.00	N/A	696.00	40.0	40.00	2650.00	1900.00	Intermediate
Slide	01-17	23:30	23:35	01-17	0.08	6502.00	6512.00	10.00	120.00	160.0	700.00	N/A	25.00	2200.00	1700.00	Intermediate
Rotate	01-17	23:35	23:50	01-17	0.25	6512.00	6592.00	80.00	320.00	N/A	696.00	40.0	40.00	2650.00	1900.00	Intermediate
Rotate	01-17	23:55	00:05	01-18	0.17	6592.00	6682.00	90.00	540.00	N/A	696.00	40.0	40.00	2650.00	1900.00	Intermediate
Rotate	01-18	00:10	00:20	01-18	0.17	6682.00	6771.00	89.00	534.00	N/A	696.00	40.0	40.00	2650.00	1900.00	Intermediate
Rotate	01-18	00:25	00:30	01-18	0.08	6771.00	6860.00	89.00	1068.00	N/A	696.00	40.0	40.00	2650.00	1900.00	Intermediate
Rotate	01-18	00:35	00:45	01-18	0.17	6860.00	6950.00	90.00	540.00	N/A	696.00	40.0	40.00	2650.00	1900.00	Intermediate
Rotate	01-18	00:50	01:00	01-18	0.17	6950.00	7039.00	89.00	534.00	N/A	696.00	40.0	40.00	2650.00	1900.00	Intermediate
Rotate	01-18	01:05	01:20	01-18	0.25	7039.00	7129.00	90.00	360.00	N/A	696.00	40.0	40.00	2650.00	1900.00	Intermediate
Rotate	01-18	01:25	01:35	01-18	0.17	7129.00	7219.00	90.00	540.00	N/A	696.00	40.0	40.00	2650.00	1900.00	Intermediate
Rotate	01-18	01:40	01:50	01-18	0.17	7219.00	7308.00	89.00	534.00	N/A	696.00	40.0	40.00	2650.00	1900.00	Intermediate
Rotate	01-18	01:55	02:25	01-18	0.5	7308.00	7398.00	90.00	180.00	N/A	696.00	40.0	40.00	2650.00	1900.00	Intermediate
Rotate	01-18	02:30	02:45	01-18	0.25	7398.00	7488.00	90.00	360.00	N/A	696.00	40.0	40.00	2650.00	1900.00	Intermediate

Rotate	01-18	02:50	03:10	01-18	0.33	7488.00	7577.00	89.00	267.00	N/A	696.00	40.0	40.00	2650.00	1900.00	Intermediate
Rotate	01-18	03:15	03:35	01-18	0.33	7577.00	7666.00	89.00	267.00	N/A	696.00	40.0	40.00	2650.00	1900.00	Intermediate
Rotate	01-18	03:40	03:55	01-18	0.25	7666.00	7756.00	90.00	360.00	N/A	696.00	40.0	40.00	2650.00	1900.00	Intermediate
Rotate	01-18	04:00	04:20	01-18	0.33	7756.00	7846.00	90.00	270.00	N/A	696.00	40.0	40.00	2650.00	1900.00	Intermediate
Rotate	01-18	04:25	04:40	01-18	0.25	7846.00	7936.00	90.00	360.00	N/A	696.00	40.0	40.00	2650.00	1900.00	Intermediate
Slide	01-18	04:45	04:55	01-18	0.17	7936.00	7944.00	8.00	48.00	230.0	698.00	N/A	28.00	2350.00	2000.00	Intermediate
Rotate	01-18	04:55	05:30	01-18	0.58	7944.00	8025.00	81.00	138.86	N/A	696.00	40.0	40.00	2800.00	2100.00	Intermediate
Rotate	01-18	05:35	06:00	01-18	0.42	8025.00	8115.00	90.00	216.00	N/A	696.00	40.0	40.00	2800.00	2100.00	Intermediate
Rotate	01-18	06:05	06:25	01-18	0.33	8115.00	8205.00	90.00	270.00	N/A	696.00	40.0	40.00	2800.00	2100.00	Intermediate
Rotate	01-18	06:30	06:50	01-18	0.33	8205.00	8294.00	89.00	267.00	N/A	696.00	40.0	40.00	2800.00	2100.00	Intermediate
Rotate	01-18	06:55	07:15	01-18	0.33	8294.00	8383.00	89.00	267.00	N/A	696.00	40.0	40.00	2800.00	2100.00	Intermediate
Slide	01-18	07:20	08:00	01-18	0.67	8383.00	8397.00	14.00	21.00	235.0	698.00	N/A	28.00	2350.00	2000.00	Intermediate
Rotate	01-18	08:00	08:25	01-18	0.42	8397.00	8473.00	76.00	182.40	N/A	696.00	40.0	40.00	2800.00	2100.00	Intermediate
Rotate	01-18	08:30	08:35	01-18	0.08	8473.00	8480.00	7.00	84.00	N/A	696.00	40.0	40.00	2800.00	2100.00	Intermediate
Slide	01-18	08:35	08:50	01-18	0.25	8480.00	8495.00	15.00	60.00	290.0	698.00	N/A	28.00	2350.00	2000.00	Intermediate
Rotate	01-18	08:50	09:15	01-18	0.42	8495.00	8562.00	67.00	160.80	N/A	696.00	40.0	40.00	2800.00	2100.00	Intermediate
Rotate	01-18	09:20	09:50	01-18	0.5	8562.00	8652.00	90.00	180.00	N/A	696.00	40.0	40.00	2800.00	2100.00	Intermediate
Rotate	01-18	09:55	10:10	01-18	0.25	8652.00	8741.00	89.00	356.00	N/A	696.00	40.0	40.00	2800.00	2100.00	Intermediate
Rotate	01-18	10:15	10:55	01-18	0.67	8741.00	8831.00	90.00	135.00	N/A	696.00	40.0	40.00	2800.00	2100.00	Intermediate
Rotate	01-18	11:00	11:30	01-18	0.5	8831.00	8920.00	89.00	178.00	N/A	696.00	40.0	45.00	2800.00	2100.00	Intermediate
Rotate	01-18	11:35	12:05	01-18	0.5	8920.00	9010.00	90.00	180.00	N/A	696.00	40.0	45.00	2800.00	2100.00	Intermediate
Rotate	01-18	12:10	12:15	01-18	0.08	9010.00	9020.00	10.00	120.00	N/A	696.00	40.0	45.00	2800.00	2100.00	Intermediate
Slide	01-18	12:15	12:50	01-18	0.58	9020.00	9042.00	22.00	37.71	260.0	698.00	N/A	30.00	2350.00	2000.00	Intermediate
Rotate	01-18	12:50	13:20	01-18	0.5	9042.00	9100.00	58.00	116.00	N/A	696.00	40.0	45.00	2800.00	2100.00	Intermediate
Rotate	01-18	13:25	14:00	01-18	0.58	9100.00	9189.00	89.00	152.57	N/A	696.00	40.0	45.00	2800.00	2100.00	Intermediate
Rotate	01-18	14:05	14:10	01-18	0.08	9189.00	9195.00	6.00	72.00	N/A	696.00	40.0	45.00	2800.00	2100.00	Intermediate
Slide	01-18	14:10	15:10	01-18	1.0	9195.00	9220.00	25.00	25.00	280.0	698.00	N/A	30.00	2350.00	2000.00	Intermediate
Rotate	01-18	15:10	15:35	01-18	0.42	9220.00	9279.00	59.00	141.60	N/A	696.00	40.0	45.00	2800.00	2100.00	Intermediate
Rotate	01-18	15:40	15:45	01-18	0.08	9279.00	9286.00	7.00	84.00	N/A	696.00	40.0	45.00	2800.00	2100.00	Intermediate
Slide	01-18	15:45	16:40	01-18	0.92	9286.00	9306.00	20.00	21.82	260.0	698.00	N/A	30.00	2350.00	2000.00	Intermediate
Rotate	01-18	16:40	17:10	01-18	0.5	9306.00	9369.00	63.00	126.00	N/A	696.00	40.0	45.00	2800.00	2100.00	Intermediate
Rotate	01-18	17:30	18:00	01-18	0.5	9369.00	9459.00	90.00	180.00	N/A	696.00	40.0	45.00	2800.00	2100.00	Intermediate
Rotate	01-18	18:05	18:30	01-18	0.42	9459.00	9548.00	89.00	213.60	N/A	696.00	40.0	45.00	2800.00	2100.00	Intermediate
Rotate	01-18	18:35	19:00	01-18	0.42	9548.00	9638.00	90.00	216.00	N/A	696.00	40.0	45.00	2800.00	2100.00	Intermediate
Rotate	01-18	19:05	19:10	01-18	0.08	9638.00	9646.00	8.00	96.00	N/A	696.00	40.0	45.00	2800.00	2100.00	Intermediate



Job Number WT-21-183	Operator Advance Energy Partners	Rig Name Nabors X50
Start Date 2021-11-24	Well Name Anderson Fed Com 551H	Legal Well Name AFE Anderson Fed Com 551H
Play Delaware Basin	State/Province and Country New Mexico, US	County Lea
Company Man		

Slide/Rotate Report - BHA #4 (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	01-19	04:30	04:55	01-19	0.42	9646.00	9727.00	81.00	194.40	N/A	700.00	40.0	40.00	3200.00	2500.00	Intermediate
Rotate	01-19	05:00	05:05	01-19	0.08	9727.00	9733.00	6.00	72.00	N/A	700.00	40.0	40.00	3200.00	2500.00	Intermediate
Slide	01-19	05:05	05:25	01-19	0.33	9733.00	9753.00	20.00	60.00	270.0	700.00	N/A	20.00	2900.00	2500.00	Intermediate
Rotate	01-19	05:25	05:50	01-19	0.42	9753.00	9817.00	64.00	153.60	N/A	700.00	40.0	40.00	3200.00	2500.00	Intermediate
Rotate	01-19	05:55	06:00	01-19	0.08	9817.00	9822.00	5.00	60.00	N/A	700.00	40.0	40.00	3200.00	2500.00	Intermediate
Slide	01-19	06:00	06:30	01-19	0.5	9822.00	9852.00	30.00	60.00	270.0	700.00	N/A	20.00	2900.00	2500.00	Intermediate
Rotate	01-19	06:30	06:55	01-19	0.42	9852.00	9907.00	55.00	132.00	N/A	700.00	40.0	40.00	3200.00	2500.00	Intermediate
Rotate	01-19	07:00	07:35	01-19	0.58	9907.00	9997.00	90.00	154.29	N/A	700.00	40.0	40.00	3200.00	2500.00	Intermediate
Rotate	01-19	07:40	08:20	01-19	0.67	9997.00	10086.00	89.00	133.50	N/A	700.00	40.0	40.00	3200.00	2500.00	Intermediate
Rotate	01-19	08:25	09:00	01-19	0.58	10086.00	10175.00	89.00	152.57	N/A	700.00	40.0	40.00	3200.00	2500.00	Intermediate
Rotate	01-19	09:05	09:40	01-19	0.58	10175.00	10265.00	90.00	154.29	N/A	700.00	40.0	40.00	3200.00	2500.00	Intermediate
Rotate	01-19	09:45	10:25	01-19	0.67	10265.00	10355.00	90.00	135.00	N/A	700.00	40.0	40.00	3200.00	2500.00	Intermediate
Rotate	01-19	10:30	10:35	01-19	0.08	10355.00	10365.00	10.00	120.00	N/A	700.00	40.0	40.00	3200.00	2500.00	Intermediate
Slide	01-19	10:35	11:10	01-19	0.58	10365.00	10385.00	20.00	34.29	90.0	700.00	N/A	20.00	2900.00	2500.00	Intermediate
Rotate	01-19	11:10	11:40	01-19	0.5	10385.00	10445.00	60.00	120.00	N/A	700.00	40.0	40.00	3200.00	2500.00	Intermediate
Rotate	01-19	11:45	12:10	01-19	0.42	10445.00	10500.00	55.00	132.00	N/A	700.00	40.0	40.00	3200.00	2500.00	Intermediate, Curve



Job Number WT-21-183	Operator Advance Energy Partners	Rig Name Nabors X50
Start Date 2021-11-24	Well Name Anderson Fed Com 551H	Legal Well Name AFE Anderson Fed Com 551H
Play Delaware Basin	State/Province and Country New Mexico, US	County Lea
Company Man		

Slide/Rotate Report - BHA #5 (BHA #5 (Curve Assy))

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	01-20	01:05	03:10	01-20	2.08	10500.00	10587.00	87.00	41.76	352.0	550.00	N/A	23.00	1700.00	1350.00	Curve
Slide	01-20	03:15	04:35	01-20	1.33	10587.00	10677.00	90.00	67.50	321.0	600.00	N/A	23.00	1800.00	1480.00	Curve
Slide	01-20	04:40	05:50	01-20	1.17	10677.00	10766.00	89.00	76.29	0.0	600.00	N/A	25.00	2100.00	1480.00	Curve
Slide	01-20	05:55	07:40	01-20	1.75	10766.00	10856.00	90.00	51.43	0.0	600.00	N/A	25.00	2100.00	1480.00	Curve
Slide	01-20	07:45	10:00	01-20	2.25	10856.00	10945.00	89.00	39.56	0.0	600.00	N/A	25.00	2100.00	1480.00	Curve
Slide	01-20	10:05	12:30	01-20	2.42	10945.00	11035.00	90.00	37.24	0.0	600.00	N/A	25.00	2100.00	1480.00	Curve
Slide	01-20	12:40	14:30	01-20	1.83	11035.00	11125.00	90.00	49.09	340.0	600.00	N/A	25.00	2100.00	1480.00	Curve
Slide	01-20	14:55	16:25	01-20	1.5	11125.00	11214.00	89.00	59.33	345.0	600.00	N/A	25.00	2100.00	1480.00	Curve
Slide	01-20	16:35	17:50	01-20	1.25	11214.00	11304.00	90.00	72.00	330.0	600.00	N/A	25.00	2100.00	1480.00	Curve
Slide	01-20	17:55	19:00	01-20	1.08	11304.00	11364.00	60.00	55.38	0.0	600.00	N/A	25.00	2100.00	1480.00	Curve, Lateral



Job Number WT-21-183	Operator Advance Energy Partners	Rig Name Nabors X50
Start Date 2021-11-24	Well Name Anderson Fed Com 551H	Legal Well Name AFE Anderson Fed Com 551H
Play Delaware Basin	State/Province and Country New Mexico, US	County Lea
Company Man		

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

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	01-21	13:00	13:40	01-21	0.67	11364.00	11430.00	66.00	99.00	N/A	493.00	30.0	38.00	2850.00	2300.00	Lateral
Slide	01-21	14:40	15:10	01-21	0.5	11430.00	11458.00	28.00	56.00	120.0	545.00	N/A	25.00	3250.00	2800.00	Lateral
Rotate	01-21	15:10	15:50	01-21	0.67	11458.00	11520.00	62.00	93.00	N/A	546.00	40.0	42.00	2850.00	2300.00	Lateral
Slide	01-21	15:55	16:45	01-21	0.83	11520.00	11558.00	38.00	45.60	130.0	545.00	N/A	25.00	3250.00	2800.00	Lateral
Rotate	01-21	16:45	17:10	01-21	0.42	11558.00	11610.00	52.00	124.80	N/A	546.00	40.0	42.00	2850.00	2300.00	Lateral
Slide	01-21	17:15	18:00	01-21	0.75	11610.00	11645.00	35.00	46.67	140.0	545.00	N/A	25.00	3250.00	2800.00	Lateral
Rotate	01-21	18:00	18:35	01-21	0.58	11645.00	11699.00	54.00	92.57	N/A	546.00	40.0	42.00	2850.00	2300.00	Lateral
Rotate	01-21	18:40	19:05	01-21	0.42	11699.00	11754.00	55.00	132.00	N/A	546.00	40.0	42.00	2850.00	2300.00	Lateral
Slide	01-21	19:05	20:25	01-21	1.33	11754.00	11784.00	30.00	22.50	180.0		N/A				Lateral
Rotate	01-21	20:25	20:30	01-21	0.08	11784.00	11789.00	5.00	60.00	N/A	546.00	40.0	42.00	2850.00	2300.00	Lateral
Rotate	01-21	20:35	20:55	01-21	0.33	11789.00	11813.00	24.00	72.00	N/A	546.00	40.0	42.00	2850.00	2300.00	Lateral
Slide	01-21	20:55	22:05	01-21	1.17	11813.00	11825.00	12.00	10.29	150.0		N/A				Lateral
Rotate	01-21	22:05	22:20	01-21	0.25	11825.00	11879.00	54.00	216.00	N/A	546.00	40.0	42.00	2850.00	2300.00	Lateral
Rotate	01-21	22:25	23:20	01-21	0.92	11879.00	11968.00	89.00	97.09	N/A	546.00	40.0	42.00	2850.00	2300.00	Lateral
Rotate	01-21	23:55	00:35	01-22	0.67	11968.00	12058.00	90.00	135.00	N/A	615.00	40.0	42.00	3700.00	3200.00	Lateral
Rotate	01-22	00:40	00:45	01-22	0.08	12058.00	12062.00	4.00	48.00	N/A	615.00	40.0	42.00	3700.00	3200.00	Lateral
Slide	01-22	00:45	00:50	01-22	0.08	12062.00	12066.00	4.00	48.00	150.0		N/A				Lateral
Slide	01-22	01:05	01:40	01-22	0.58	12066.00	12082.00	16.00	27.43	150.0		N/A				Lateral
Rotate	01-22	01:40	02:10	01-22	0.5	12082.00	12147.00	65.00	130.00	N/A	615.00	40.0	42.00	3700.00	3200.00	Lateral
Rotate	01-22	02:15	02:20	01-22	0.08	12147.00	12152.00	5.00	60.00	N/A	615.00	40.0	42.00	3700.00	3200.00	Lateral
Slide	01-22	02:20	03:20	01-22	1.0	12152.00	12182.00	30.00	30.00	150.0		N/A				Lateral
Rotate	01-22	03:20	03:55	01-22	0.58	12182.00	12237.00	55.00	94.29	N/A	615.00	40.0	42.00	3700.00	3200.00	Lateral
Rotate	01-22	04:00	04:05	01-22	0.08	12237.00	12241.00	4.00	48.00	N/A	615.00	40.0	42.00	3700.00	3200.00	Lateral
Slide	01-22	04:05	05:25	01-22	1.33	12241.00	12276.00	35.00	26.25	120.0		N/A				Lateral
Rotate	01-22	05:25	05:45	01-22	0.33	12276.00	12326.00	50.00	150.00	N/A	615.00	40.0	42.00	3700.00	3200.00	Lateral
Rotate	01-22	05:50	05:55	01-22	0.08	12326.00	12335.00	9.00	108.00	N/A	615.00	40.0	42.00	3700.00	3200.00	Lateral
Slide	01-22	05:55	06:40	01-22	0.75	12335.00	12375.00	40.00	53.33	105.0	695.00	N/A	30.00	4475.00	3800.00	Lateral
Rotate	01-22	06:40	07:05	01-22	0.42	12375.00	12416.00	41.00	98.40	N/A	695.00	40.0	42.00	4325.00	3800.00	Lateral
Rotate	01-22	07:10	07:15	01-22	0.08	12416.00	12420.00	4.00	48.00	N/A	695.00	40.0	42.00	4325.00	3800.00	Lateral
Slide	01-22	07:15	07:25	01-22	0.17	12420.00	12430.00	10.00	60.00	180.0	695.00	N/A	30.00	4475.00	3800.00	Lateral
Rotate	01-22	07:25	08:05	01-22	0.67	12430.00	12505.00	75.00	112.50	N/A	695.00	40.0	42.00	4325.00	3800.00	Lateral
Rotate	01-22	08:10	08:20	01-22	0.17	12505.00	12517.00	12.00	72.00	N/A	695.00	40.0	42.00	4325.00	3800.00	Lateral
Slide	01-22	08:20	08:45	01-22	0.42	12517.00	12537.00	20.00	48.00	150.0	695.00	N/A	30.00	4475.00	3800.00	Lateral
Rotate	01-22	08:45	09:15	01-22	0.5	12537.00	12595.00	58.00	116.00	N/A	695.00	40.0	42.00	4325.00	3800.00	Lateral
Rotate	01-22	09:20	10:00	01-22	0.67	12595.00	12684.00	89.00	133.50	N/A	695.00	40.0	42.00	4325.00	3800.00	Lateral
Rotate	01-22	10:05	10:10	01-22	0.08	12684.00	12687.00	3.00	36.00	N/A	695.00	40.0	42.00	4325.00	3800.00	Lateral
Slide	01-22	10:10	10:40	01-22	0.5	12687.00	12711.00	24.00	48.00	0.0	695.00	N/A	30.00	4475.00	3800.00	Lateral
Rotate	01-22	10:40	11:45	01-22	1.08	12711.00	12774.00	63.00	58.15	N/A	695.00	40.0	42.00	4325.00	3800.00	Lateral
Rotate	01-22	17:50	17:55	01-22	0.08	12774.00	12786.00	12.00	144.00	N/A	695.00	40.0	42.00	4325.00	3800.00	Lateral
Slide	01-22	17:55	18:25	01-22	0.5	12786.00	12796.00	10.00	20.00	30.0	695.00	N/A	30.00	4475.00	3800.00	Lateral
Rotate	01-22	18:25	19:10	01-22	0.75	12796.00	12863.00	67.00	89.33	N/A	695.00	40.0	42.00	4325.00	3800.00	Lateral
Rotate	01-22	19:15	19:20	01-22	0.08	12863.00	12875.00	12.00	144.00	N/A	695.00	40.0	42.00	4325.00	3800.00	Lateral
Slide	01-22	19:20	19:50	01-22	0.5	12875.00	12885.00	10.00	20.00	0.0	694.00	N/A	35.00	4200.00	3700.00	Lateral
Rotate	01-22	19:50	20:20	01-22	0.5	12885.00	12953.00	68.00	136.00	N/A	695.00	40.0	42.00	4325.00	3800.00	Lateral
Rotate	01-22	20:25	20:40	01-22	0.25	12953.00	12982.00	29.00	116.00	N/A	695.00	40.0	42.00	4325.00	3800.00	Lateral
Slide	01-22	20:40	20:55	01-22	0.25	12982.00	12989.00	7.00	28.00	0.0	694.00	N/A	35.00	4200.00	3700.00	Lateral
Rotate	01-22	20:55	21:40	01-22	0.75	12989.00	13042.00	53.00	70.67	N/A	695.00	40.0	42.00	4325.00	3800.00	Lateral
Rotate	01-22	21:45	21:50	01-22	0.08	13042.00	13054.00	12.00	144.00	N/A	695.00	40.0	42.00	4325.00	3800.00	Lateral
Slide	01-22	21:55	22:45	01-22	0.83	13054.00	13074.00	20.00	24.00	45.0	694.00	N/A	35.00	4300.00	3800.00	Lateral
Rotate	01-22	22:45	23:45	01-22	1.0	13074.00	13131.00	57.00	57.00	N/A	695.00	40.0	42.00	4325.00	3800.00	Lateral
Rotate	01-22	23:55	00:40	01-23	0.75	13131.00	13221.00	90.00	120.00	N/A	695.00	40.0	42.00	4325.00	3800.00	Lateral
Rotate	01-23	00:45	00:50	01-23	0.08	13221.00	13231.00	10.00	120.00	N/A	695.00	40.0	45.00	4325.00	3800.00	Lateral
Slide	01-23	00:50	01:20	01-23	0.5	13231.00	13247.00	16.00	32.00	160.0	694.00	N/A	35.00	4300.00	3800.00	Lateral
Rotate	01-23	01:20	01:55	01-23	0.58	13247.00	13310.00	63.00	108.00	N/A	695.00	40.0	45.00	4325.00	3800.00	Lateral
Rotate	01-23	02:00	02:10	01-23	0.17	13310.00	13320.00	10.00	60.00	N/A	695.00	40.0	45.00	4325.00	3800.00	Lateral
Slide	01-23	02:10	02:55	01-23	0.75	13320.00	13335.00	15.00	20.00	170.0	694.00	N/A	45.00	4300.00	3800.00	Lateral
Rotate	01-23	02:55	03:30	01-23	0.58	13335.00	13399.00	64.00	109.71	N/A	695.00	40.0	45.00	4325.00	3800.00	Lateral
Rotate	01-23	03:35	03:45	01-23	0.17	13399.00	13437.00	38.00	228.00	N/A	695.00	40.0	45.00	4325.00	3800.00	Lateral
Rotate	01-23	03:55	04:25	01-23	0.5	13437.00	13489.00	52.00	104.00	N/A	695.00	40.0	45.00	4325.00	3800.00	Lateral
Rotate	01-23	04:30	04:40	01-23	0.17	13489.00	13501.00	12.00	72.00	N/A	695.00	40.0	45.00	4325.00	3800.00	Lateral
Slide	01-23	04:40	05:10	01-23	0.5	13501.00	13519.00	18.00	36.00	180.0	694.00	N/A	45.00	4300.00	3800.00	Lateral
Rotate	01-23	05:10	05:35	01-23	0.42	13519.00	13578.00	59.00	141.60	N/A	695.00	40.0	45.00	4325.00	3800.00	Lateral
Rotate	01-23	05:40	06:15	01-23	0.58	13578.00	13667.00	89.00	152.57	N/A	695.00	40.0	45.00	4325.00	3800.00	Lateral
Rotate	01-23	06:20	06:55	01-23	0.58	13667.00	13756.00	89.00	152.57	N/A	695.00	40.0	45.00	4325.00	3800.00	Lateral

Rotate	01-23	07:00	07:50	01-23	0.83	13756.00	13845.00	89.00	106.80	N/A	695.00	40.0	45.00	4325.00	3800.00	Lateral
Rotate	01-23	07:55	08:00	01-23	0.08	13845.00	13848.00	3.00	36.00	N/A	695.00	40.0	45.00	4325.00	3800.00	Lateral
Slide	01-23	08:00	08:45	01-23	0.75	13848.00	13870.00	22.00	29.33	70.0	694.00	N/A	45.00	4300.00	3800.00	Lateral
Rotate	01-23	08:45	09:10	01-23	0.42	13870.00	13935.00	65.00	156.00	N/A	695.00	40.0	45.00	4325.00	3800.00	Lateral
Rotate	01-23	09:15	09:30	01-23	0.25	13935.00	13947.00	12.00	48.00	N/A	695.00	40.0	45.00	4325.00	3800.00	Lateral
Slide	01-23	09:30	10:00	01-23	0.5	13947.00	13969.00	22.00	44.00	75.0	694.00	N/A	45.00	4300.00	3800.00	Lateral
Rotate	01-23	10:00	10:35	01-23	0.58	13969.00	14025.00	56.00	96.00	N/A	695.00	40.0	45.00	4325.00	3800.00	Lateral
Rotate	01-23	10:40	11:30	01-23	0.83	14025.00	14114.00	89.00	106.80	N/A	695.00	40.0	45.00	4325.00	3800.00	Lateral
Rotate	01-23	11:50	12:45	01-23	0.92	14114.00	14204.00	90.00	98.18	N/A	695.00	40.0	45.00	4325.00	3800.00	Lateral
Rotate	01-23	12:50	13:45	01-23	0.92	14204.00	14294.00	90.00	98.18	N/A	695.00	40.0	45.00	4325.00	3800.00	Lateral
Rotate	01-23	13:50	14:00	01-23	0.17	14294.00	14306.00	12.00	72.00	N/A	695.00	40.0	45.00	4325.00	3800.00	Lateral
Slide	01-23	14:00	14:30	01-23	0.5	14306.00	14328.00	22.00	44.00	30.0	694.00	N/A	45.00	4300.00	3800.00	Lateral
Rotate	01-23	14:30	15:10	01-23	0.67	14328.00	14383.00	55.00	82.50	N/A	695.00	40.0	45.00	4325.00	3800.00	Lateral
Rotate	01-23	15:15	16:15	01-23	1.0	14383.00	14440.00	57.00	57.00	N/A	695.00	40.0	45.00	4325.00	3800.00	Lateral
Slide	01-23	16:15	16:55	01-23	0.67	14440.00	14468.00	28.00	42.00	155.0	694.00	N/A	45.00	4300.00	3800.00	Lateral
Rotate	01-23	16:55	17:00	01-23	0.08	14468.00	14473.00	5.00	60.00	N/A	695.00	40.0	45.00	4325.00	3800.00	Lateral
Rotate	01-23	17:10	17:35	01-23	0.42	14473.00	14528.00	55.00	132.00	N/A	695.00	40.0	45.00	4325.00	3800.00	Lateral
Slide	01-23	17:35	18:10	01-23	0.58	14528.00	14562.00	34.00	58.29	180.0	694.00	N/A	45.00	4300.00	3800.00	Lateral
Rotate	01-23	18:15	19:40	01-23	1.42	14562.00	14652.00	90.00	63.53	N/A	695.00	40.0	45.00	4325.00	3800.00	Lateral
Rotate	01-23	19:45	19:50	01-23	0.08	14652.00	14662.00	10.00	120.00	N/A	695.00	40.0	45.00	4325.00	3800.00	Lateral
Slide	01-23	19:50	20:35	01-23	0.75	14662.00	14682.00	20.00	26.67	330.0	694.00	N/A	45.00	4300.00	3800.00	Lateral
Rotate	01-23	20:35	21:20	01-23	0.75	14682.00	14741.00	59.00	78.67	N/A	695.00	40.0	45.00	4325.00	3800.00	Lateral
Rotate	01-23	21:25	21:40	01-23	0.25	14741.00	14765.00	24.00	96.00	N/A	695.00	40.0	45.00	4325.00	3800.00	Lateral
Slide	01-23	21:40	22:35	01-23	0.92	14765.00	14785.00	20.00	21.82	270.0	694.00	N/A	45.00	4300.00	3800.00	Lateral
Rotate	01-23	22:35	23:00	01-23	0.42	14785.00	14830.00	45.00	108.00	N/A	695.00	40.0	45.00	4325.00	3800.00	Lateral
Rotate	01-23	23:05	23:25	01-23	0.33	14830.00	14875.00	45.00	135.00	N/A	695.00	40.0	45.00	4325.00	3800.00	Lateral
Slide	01-23	23:30	00:45	01-24	1.25	14875.00	14895.00	20.00	16.00	0.0	694.00	N/A	45.00	4300.00	3800.00	Lateral
Rotate	01-24	00:45	01:00	01-24	0.25	14895.00	14930.00	35.00	140.00	N/A	695.00	40.0	45.00	4325.00	3800.00	Lateral
Slide	01-24	01:05	01:20	01-24	0.25	14930.00	14955.00	25.00	100.00	0.0	694.00	N/A	45.00	4300.00	3800.00	Lateral
Rotate	01-24	01:20	02:25	01-24	1.08	14955.00	15009.00	54.00	49.85	N/A	695.00	40.0	45.00	4325.00	3800.00	Lateral
Rotate	01-24	02:30	03:30	01-24	1.0	15009.00	15098.00	89.00	89.00	N/A	695.00	40.0	45.00	4475.00	3950.00	Lateral
Rotate	01-24	03:35	03:40	01-24	0.08	15098.00	15108.00	10.00	120.00	N/A	695.00	40.0	45.00	4475.00	3950.00	Lateral
Slide	01-24	03:40	04:10	01-24	0.5	15108.00	15123.00	15.00	30.00	0.0	694.00	N/A	45.00	4300.00	3800.00	Lateral
Rotate	01-24	04:10	05:00	01-24	0.83	15123.00	15188.00	65.00	78.00	N/A	695.00	40.0	45.00	4475.00	3950.00	Lateral
Rotate	01-24	05:05	06:00	01-24	0.92	15188.00	15277.00	89.00	97.09	N/A	695.00	40.0	45.00	4475.00	3950.00	Lateral
Rotate	01-24	06:05	06:50	01-24	0.75	15277.00	15366.00	89.00	118.67	N/A	695.00	40.0	45.00	4475.00	3950.00	Lateral
Rotate	01-24	06:55	07:00	01-24	0.08	15366.00	15378.00	12.00	144.00	N/A	695.00	40.0	45.00	4475.00	3950.00	Lateral
Slide	01-24	07:00	07:45	01-24	0.75	15378.00	15398.00	20.00	26.67	135.0	694.00	N/A	45.00	4400.00	4100.00	Lateral
Rotate	01-24	07:45	08:20	01-24	0.58	15398.00	15455.00	57.00	97.71	N/A	695.00	40.0	45.00	4475.00	3950.00	Lateral
Slide	01-24	08:25	09:20	01-24	0.92	15455.00	15485.00	30.00	32.73	150.0	694.00	N/A	45.00	4400.00	4100.00	Lateral
Rotate	01-24	09:20	09:55	01-24	0.58	15485.00	15545.00	60.00	102.86	N/A	695.00	40.0	45.00	4575.00	4100.00	Lateral
Rotate	01-24	10:00	10:35	01-24	0.58	15545.00	15594.00	49.00	84.00	N/A	695.00	40.0	45.00	4575.00	4100.00	Lateral
Slide	01-24	10:35	10:50	01-24	0.25	15594.00	15600.00	6.00	24.00	250.0	694.00	N/A	45.00	4400.00	4100.00	Lateral
Slide	01-24	11:10	12:10	01-24	1.0	15600.00	15630.00	30.00	30.00	205.0	694.00	N/A	45.00	4400.00	4100.00	Lateral
Rotate	01-24	12:10	12:15	01-24	0.08	15630.00	15634.00	4.00	48.00	N/A	695.00	40.0	45.00	4575.00	4100.00	Lateral
Rotate	01-24	12:20	13:30	01-24	1.17	15634.00	15723.00	89.00	76.29	N/A	695.00	40.0	45.00	4575.00	4100.00	Lateral
Rotate	01-24	13:50	15:10	01-24	1.33	15723.00	15812.00	89.00	66.75	N/A	695.00	40.0	45.00	4575.00	4100.00	Lateral
Slide	01-24	15:15	15:55	01-24	0.67	15812.00	15829.00	17.00	25.50	50.0	694.00	N/A	45.00	4400.00	4100.00	Lateral



Job Number WT-21-183	Operator Advance Energy Partners	Rig Name Nabors X50
Start Date 2021-11-24	Well Name Anderson Fed Com 551H	Legal Well Name AFE Anderson Fed Com 551H
Play Delaware Basin	State/Province and Country New Mexico, US	County Lea
Company Man		

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

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	01-25	13:05	13:50	01-25	0.75	15829.00	15857.00	28.00	37.33	15.0	694.00	N/A	45.00	4750.00	4300.00	Lateral
Rotate	01-25	13:50	14:10	01-25	0.33	15857.00	15902.00	45.00	135.00	N/A	695.00	40.0	42.00	5250.00	4300.00	Lateral
Rotate	01-25	14:15	14:20	01-25	0.08	15902.00	15915.00	13.00	156.00	N/A	695.00	40.0	42.00	5250.00	4300.00	Lateral
Slide	01-25	14:20	14:45	01-25	0.42	15915.00	15937.00	22.00	52.80	15.0	694.00	N/A	45.00	4750.00	4300.00	Lateral
Rotate	01-25	14:45	15:05	01-25	0.33	15937.00	15991.00	54.00	162.00	N/A	695.00	40.0	42.00	5250.00	4300.00	Lateral
Rotate	01-25	15:10	16:05	01-25	0.92	15991.00	16081.00	90.00	98.18	N/A	695.00	40.0	42.00	5250.00	4300.00	Lateral
Rotate	01-25	16:10	16:45	01-25	0.58	16081.00	16170.00	89.00	152.57	N/A	695.00	40.0	42.00	5250.00	4300.00	Lateral
Rotate	01-25	16:55	17:25	01-25	0.5	16170.00	16260.00	90.00	180.00	N/A	695.00	40.0	42.00	5250.00	4300.00	Lateral
Rotate	01-25	17:30	18:25	01-25	0.92	16260.00	16349.00	89.00	97.09	N/A	695.00	40.0	42.00	5250.00	4300.00	Lateral
Rotate	01-25	18:30	19:05	01-25	0.58	16349.00	16439.00	90.00	154.29	N/A	695.00	40.0	42.00	5250.00	4300.00	Lateral
Rotate	01-25	19:10	19:15	01-25	0.08	16439.00	16449.00	10.00	120.00	N/A	695.00	40.0	42.00	5250.00	4300.00	Lateral
Slide	01-25	19:15	19:50	01-25	0.58	16449.00	16457.00	8.00	13.71	150.0	694.00	N/A	45.00	4750.00	4300.00	Lateral
Rotate	01-25	19:50	20:20	01-25	0.5	16457.00	16528.00	71.00	142.00	N/A	695.00	40.0	42.00	5250.00	4300.00	Lateral
Rotate	01-25	20:25	21:10	01-25	0.75	16528.00	16618.00	90.00	120.00	N/A	695.00	40.0	42.00	5250.00	4300.00	Lateral
Rotate	01-25	21:15	21:20	01-25	0.08	16618.00	16628.00	10.00	120.00	N/A	695.00	40.0	42.00	5250.00	4300.00	Lateral
Slide	01-25	22:00	23:25	01-25	1.42	16628.00	16650.00	22.00	15.53	50.0	694.00	N/A	45.00	4750.00	4300.00	Lateral
Rotate	01-25	23:25	23:50	01-25	0.42	16650.00	16708.00	58.00	139.20	N/A	695.00	40.0	42.00	5250.00	4300.00	Lateral
Rotate	01-25	23:55	00:40	01-26	0.75	16708.00	16754.00	46.00	61.33	N/A	695.00	40.0	42.00	5250.00	4300.00	Lateral
Slide	01-26	00:40	01:25	01-26	0.75	16754.00	16775.00	21.00	28.00	60.0	694.00	N/A	45.00	4750.00	4300.00	Lateral
Rotate	01-26	01:25	01:50	01-26	0.42	16775.00	16797.00	22.00	52.80	N/A	695.00	40.0	42.00	5250.00	4700.00	Lateral
Rotate	01-26	01:55	03:15	01-26	1.33	16797.00	16887.00	90.00	67.50	N/A	695.00	40.0	42.00	4350.00	4000.00	Lateral
Slide	01-26	03:20	03:35	01-26	0.25	16887.00	16930.00	43.00	172.00	60.0	694.00	N/A	45.00	4350.00	4000.00	Lateral
Rotate	01-26	03:35	05:05	01-26	1.5	16930.00	16976.00	46.00	30.67	N/A	695.00	40.0	42.00	4350.00	4000.00	Lateral
Rotate	01-26	05:10	05:15	01-26	0.08	16976.00	16986.00	10.00	120.00	N/A	695.00	40.0	42.00	4350.00	4000.00	Lateral
Slide	01-26	05:15	05:45	01-26	0.5	16986.00	16996.00	10.00	20.00	60.0	694.00	N/A	45.00	4350.00	4000.00	Lateral
Rotate	01-26	05:45	06:50	01-26	1.08	16996.00	17066.00	70.00	64.62	N/A	695.00	40.0	42.00	4350.00	4000.00	Lateral
Rotate	01-26	06:55	09:20	01-26	2.42	17066.00	17156.00	90.00	37.24	N/A	695.00	40.0	50.00	4350.00	4000.00	Lateral
Rotate	01-26	09:30	12:25	01-26	2.92	17156.00	17236.00	80.00	27.43	N/A	695.00	40.0	55.00	4350.00	4000.00	Lateral



Job Number WT-21-183	Operator Advance Energy Partners	Rig Name Nabors X50
Start Date 2021-11-24	Well Name Anderson Fed Com 551H	Legal Well Name AFE Anderson Fed Com 551H
Play Delaware Basin	State/Province and Country New Mexico, US	County Lea
Company Man		

Slide/Rotate Report - BHA #8 (8.75" LATERAL)

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	01-27	05:00	05:10	01-27	0.17	17236.00	17249.00	13.00	78.00	N/A	695.00	40.0	55.00	4350.00	4000.00	Lateral
Rotate	01-27	05:25	06:05	01-27	0.67	17249.00	17338.00	89.00	133.50	N/A	695.00	40.0	55.00	4350.00	4000.00	Lateral
Rotate	01-27	06:10	06:20	01-27	0.17	17338.00	17355.00	17.00	102.00	N/A	695.00	40.0	55.00	4350.00	4000.00	Lateral
Slide	01-27	06:20	07:20	01-27	1.0	17355.00	17390.00	35.00	35.00	80.0	694.00	N/A	45.00	4450.00	4200.00	Lateral
Rotate	01-27	07:20	07:40	01-27	0.33	17390.00	17428.00	38.00	114.00	N/A	695.00	40.0	55.00	4350.00	4000.00	Lateral
Rotate	01-27	07:45	08:30	01-27	0.75	17428.00	17517.00	89.00	118.67	N/A	695.00	40.0	55.00	4350.00	4000.00	Lateral
Rotate	01-27	08:35	08:45	01-27	0.17	17517.00	17537.00	20.00	120.00	N/A	695.00	40.0	55.00	4500.00	4200.00	Lateral
Slide	01-27	08:45	09:55	01-27	1.17	17537.00	17576.00	39.00	33.43	140.0	694.00	N/A	45.00	4450.00	4200.00	Lateral
Rotate	01-27	09:55	10:10	01-27	0.25	17576.00	17607.00	31.00	124.00	N/A	695.00	40.0	55.00	4500.00	4200.00	Lateral
Rotate	01-27	10:15	10:25	01-27	0.17	17607.00	17617.00	10.00	60.00	N/A	695.00	40.0	55.00	4500.00	4300.00	Lateral
Slide	01-27	10:25	12:50	01-27	2.42	17617.00	17696.00	79.00	32.69	170.0	694.00	N/A	60.00	4400.00	4200.00	Lateral
Rotate	01-27	13:20	14:20	01-27	1.0	17696.00	17785.00	89.00	89.00	N/A	695.00	40.0	45.00	4800.00	4400.00	Lateral
Rotate	01-27	14:25	15:25	01-27	1.0	17785.00	17875.00	90.00	90.00	N/A	695.00	40.0	45.00	4800.00	4400.00	Lateral
Rotate	01-27	15:30	16:20	01-27	0.83	17875.00	17964.00	89.00	106.80	N/A	695.00	40.0	45.00	4800.00	4400.00	Lateral
Slide	01-27	16:25	17:30	01-27	1.08	17964.00	18000.00	36.00	33.23	150.0	694.00	N/A	60.00	4400.00	4200.00	Lateral
Rotate	01-27	17:30	18:10	01-27	0.67	18000.00	18054.00	54.00	81.00	N/A	695.00	40.0	45.00	4800.00	4400.00	Lateral
Rotate	01-27	18:15	19:25	01-27	1.17	18054.00	18143.00	89.00	76.29	N/A	695.00	40.0	45.00	4800.00	4400.00	Lateral
Rotate	01-27	19:30	19:40	01-27	0.17	18143.00	18165.00	22.00	132.00	N/A	695.00	40.0	45.00	4800.00	4400.00	Lateral
Slide	01-27	19:40	20:50	01-27	1.17	18165.00	18190.00	25.00	21.43	180.0		N/A				Lateral
Rotate	01-27	20:50	21:55	01-27	1.08	18190.00	18232.00	42.00	38.77	N/A	695.00	40.0	45.00	4800.00	4400.00	Lateral
Rotate	01-27	22:00	22:50	01-27	0.83	18232.00	18322.00	90.00	108.00	N/A	695.00	40.0	45.00	4800.00	4400.00	Lateral
Rotate	01-27	22:55	23:55	01-27	1.0	18322.00	18412.00	90.00	90.00	N/A	695.00	40.0	45.00	4800.00	4400.00	Lateral
Rotate	01-28	00:00	00:25	01-28	0.42	18412.00	18420.00	8.00	19.20	N/A	695.00	40.0	45.00	4800.00	4400.00	Lateral
Slide	01-28	00:25	01:10	01-28	0.75	18420.00	18435.00	15.00	20.00	50.0		N/A				Lateral
Rotate	01-28	01:10	02:05	01-28	0.92	18435.00	18501.00	66.00	72.00	N/A	695.00	40.0	45.00	4800.00	4400.00	Lateral
Rotate	01-28	02:10	02:15	01-28	0.08	18501.00	18506.00	5.00	60.00	N/A	695.00	40.0	45.00	4800.00	4400.00	Lateral
Slide	01-28	02:15	04:15	01-28	2.0	18506.00	18541.00	35.00	17.50	0.0		N/A				Lateral
Rotate	01-28	04:15	04:55	01-28	0.67	18541.00	18591.00	50.00	75.00	N/A	695.00	40.0	45.00	4800.00	4400.00	Lateral
Rotate	01-28	05:00	06:35	01-28	1.58	18591.00	18680.00	89.00	56.21	N/A	695.00	40.0	45.00	4800.00	4400.00	Lateral
Slide	01-28	06:40	08:20	01-28	1.67	18680.00	18715.00	35.00	21.00	200.0	652.00	N/A	70.00	4300.00	4000.00	Lateral
Rotate	01-28	08:20	09:40	01-28	1.33	18715.00	18770.00	55.00	41.25	N/A	695.00	40.0	45.00	4800.00	4400.00	Lateral
Rotate	01-28	09:45	09:50	01-28	0.08	18770.00	18782.00	12.00	144.00	N/A	695.00	40.0	45.00	4800.00	4400.00	Lateral
Slide	01-28	09:50	12:10	01-28	2.33	18782.00	18822.00	40.00	17.14	190.0	652.00	N/A	70.00	4300.00	4000.00	Lateral
Rotate	01-28	12:10	13:05	01-28	0.92	18822.00	18860.00	38.00	41.45	N/A	695.00	40.0	45.00	4800.00	4400.00	Lateral
Rotate	01-28	13:10	14:30	01-28	1.33	18860.00	18949.00	89.00	66.75	N/A	695.00	40.0	45.00	4800.00	4400.00	Lateral
Rotate	01-28	14:35	15:40	01-28	1.08	18949.00	19039.00	90.00	83.08	N/A	695.00	40.0	45.00	4800.00	4400.00	Lateral
Rotate	01-28	15:45	16:20	01-28	0.58	19039.00	19092.00	53.00	90.86	N/A	695.00	40.0	48.00	4900.00	4400.00	Lateral



Daily Reports

Anderson Fed Com 551H (WT-21-183)

2021-11-24 to 2022-01-29

Lea, New Mexico, US (32.43, -103.65)



Job Number WT-21-183	Operator Advance Energy Partners	Rig Name Nabors X50
Start Date 2021-11-24	Well Name Anderson Fed Com 551H	Legal Well Name AFE Anderson Fed Com 551H
Play Delaware Basin	State/Province and Country New Mexico, US	County Lea
		Company Man

Wednesday, Nov 24 00:00 - 23:59 (Day 1 of 16)

Billing: \$17,400.00 (\$226,970.50 total)

Drilling Summary				Drilling Parameters	
Start Depth (ft)	150.00	Downhole Hours	12.25	Rotating WOB (klbs)	25.00 - 25.00
Bit Depth (ft)	1290.00	Drilling Hours	7.42	Sliding WOB (klbs)	
Bottom Hole Depth (ft)	1290.00	Hours Circulating	0.42	Rotating SPM	207.00 - 309.00
Total Distance (ft)	1140.00	Hours Sliding	0.00	Sliding SPM	
Distance Rotated (ft)	1140.00	Hours Rotating	7.42	Motor RPM	65.00 - 65.00
Distance Slid (ft)	0.00			Surface RPM	40.00 - 60.00
Inclination In	0.22			Flow Rate (gpm)	601.00 - 897.00
Inclination Out	1.23			On Bottom Pressure (psi)	1250.00 - 2350.00
Azimuth In	327.50	% Hours Rotating	100%	Off Bottom Pressure (psi)	700.00 - 1750.00
Azimuth Out	258.41	% Hours Sliding	0%		
AVG Total ROP (ft/h)	153.71	% Distance Sliding	0%		
AVG Rotating ROP (ft/h)	153.71	% Distance Rotating	100%		
AVG Sliding ROP (ft/h)	0.00				

Personnel

Name	Position
Advance Directional	Directional Driller
Francisco DeLeon	MWD Engineer

BHA #1 - BHA #1 (17.5" Surface)

Date In: Nov 24, 2021, 10:15 Date Out: Nov 24, 2021, 22:30

Bit Details		Motor Details	Directional Comments
OD (in)	17.500	Size (in)	8.0
Vendor	ULTERRA	Lobe/Stage	7/8, 5.9
S/N	57377	Bend Angle	1.75
Nozzles	1x14 - 8x12's	Speed (rev/gal)	0.17
Total Flow Area (in²)	1.034	Wear Pad OD (in)	8.437
Drilling Hours for Day	7.42	Bit Distances	
Total Drilled for Day (ft)	1140.00	Survey: 70.00 ft	
Drilling Hours for BHA	7.42		
Total Drilled for BHA (ft)	1140.00		
			POOH Reason
			Total Depth/Casing Point: MOTOR LOOKED GREAT BIT HAD 1 CHIPPED CUTTER

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): 6.00, Size (in): 17.50	ULTERRA	57377	6 5/8" Reg Pin			17.500		1.50	1.50
Mud Motor Description: 8" 7/8 5.9 Stg. 1.5° FBH w/17" NBS, Size (in): 8.00, Bend Angle (°): 1.75, Rotor Lobe: 7, Stator Lobe: 8, Stator Stage: 5.9	Aim	800-40-011	6 5/8" Reg Box	6 5/8" Reg Box		8.000		40.21	41.71
Stabilizer Description: 17" STAB	JA	17635	6 5/8" Reg Box	6 5/8" Reg Pin	2.813	8.250		7.17	48.88
UBHO Sub Description: NM DAO SUB, Material: Non-Magnetic	AIM	800614	6 5/8" Reg Box	6 5/8" Reg Pin	3.250	8.000		2.98	51.86
Drill Collar Description: NMDC (MWD TOOL), Material: Non-Magnetic, Type: Slick Drill	GATOR	GT 8030374	6 5/8" Reg Box	6 5/8" Reg Pin	3.250	8.063		30.52	82.38
Drill Collar Description: NMDC, Material: Non-Magnetic, Type: Slick Drill	GATOR	GT 8230395	6 5/8" Reg Box	6 5/8" Reg Pin	3.250	8.375		30.48	112.86
Crossover Sub Description: X-O SUB, Material: Steel	JA	JA8610	CET54 Box	6 5/8" Reg Pin	2.500	6.625		3.23	116.09

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	11-24	00:00	10:15	11-24			Standby- Skid Rig & R/U
Pick Up BHA	64	11-24	10:15	11:25	11-24			L/D Used motor & P/U BHA #1

Rotary Drill	1	11-24	11:25	13:15	11-24	150.00	299.00	Pressure On (psi): 1250.00, Pressure Off (psi): 700.00, Weight On Bit (klbs): 25.00, Surface RPM: 40, Surface Torque (ft lbf): 14000.00, Flow Rate (gpm): 601.00, Strokes Per Minute: 207.00
Survey	46	11-24	13:15	13:20	11-24	299.00	299.00	Inclination (°): 0.220, Azimuth (°): 327.500, TVD (ft): 229.00, Dogleg (%/100 ft): 0.10, Sensor Depth (ft): 229.00, Bit To Sensor (ft): 70.00
Rotary Drill	1	11-24	13:20	13:30	11-24	299.00	361.00	Pressure On (psi): 1900.00, Pressure Off (psi): 1300.00, Weight On Bit (klbs): 25.00, Surface RPM: 60, Surface Torque (ft lbf): 16000.00, Flow Rate (gpm): 749.00, Strokes Per Minute: 258.00
Survey	46	11-24	13:30	13:35	11-24	361.00	361.00	Inclination (°): 0.220, Azimuth (°): 239.690, TVD (ft): 291.00, Dogleg (%/100 ft): 0.49, Sensor Depth (ft): 291.00, Bit To Sensor (ft): 70.00
Rotary Drill	1	11-24	13:35	14:00	11-24	361.00	422.00	Pressure On (psi): 2350.00, Pressure Off (psi): 1750.00, Weight On Bit (klbs): 25.00, Surface RPM: 60, Surface Torque (ft lbf): 16000.00, Flow Rate (gpm): 897.00, Strokes Per Minute: 309.00
Survey	46	11-24	14:00	14:10	11-24	422.00	422.00	Inclination (°): 0.130, Azimuth (°): 238.200, TVD (ft): 352.00, Dogleg (%/100 ft): 0.15, Sensor Depth (ft): 352.00, Bit To Sensor (ft): 70.00
Rotary Drill	1	11-24	14:10	14:15	11-24	422.00	483.00	Pressure On (psi): 2350.00, Pressure Off (psi): 1750.00, Weight On Bit (klbs): 25.00, Surface RPM: 60, Surface Torque (ft lbf): 16000.00, Flow Rate (gpm): 897.00, Strokes Per Minute: 309.00
Survey	46	11-24	14:15	14:20	11-24	483.00	483.00	Inclination (°): 0.440, Azimuth (°): 215.520, TVD (ft): 413.00, Dogleg (%/100 ft): 0.53, Sensor Depth (ft): 413.00, Bit To Sensor (ft): 70.00
Rotary Drill	1	11-24	14:20	14:45	11-24	483.00	545.00	Pressure On (psi): 2350.00, Pressure Off (psi): 1750.00, Weight On Bit (klbs): 25.00, Surface RPM: 60, Surface Torque (ft lbf): 16000.00, Flow Rate (gpm): 897.00, Strokes Per Minute: 309.00
Survey	46	11-24	14:45	14:50	11-24	545.00	545.00	Inclination (°): 0.310, Azimuth (°): 212.100, TVD (ft): 475.00, Dogleg (%/100 ft): 0.21, Sensor Depth (ft): 475.00, Bit To Sensor (ft): 70.00
Rotary Drill	1	11-24	14:50	15:20	11-24	545.00	606.00	Pressure On (psi): 2350.00, Pressure Off (psi): 1750.00, Weight On Bit (klbs): 25.00, Surface RPM: 60, Surface Torque (ft lbf): 16000.00, Flow Rate (gpm): 897.00, Strokes Per Minute: 309.00
Rig Service - In Hole	19	11-24	15:20	15:45	11-24			Rig Service
Survey	46	11-24	15:45	15:50	11-24	606.00	606.00	Inclination (°): 0.350, Azimuth (°): 228.790, TVD (ft): 536.00, Dogleg (%/100 ft): 0.17, Sensor Depth (ft): 536.00, Bit To Sensor (ft): 70.00
Rotary Drill	1	11-24	15:50	16:05	11-24	606.00	667.00	Pressure On (psi): 2350.00, Pressure Off (psi): 1750.00, Weight On Bit (klbs): 25.00, Surface RPM: 60, Surface Torque (ft lbf): 16000.00, Flow Rate (gpm): 897.00, Strokes Per Minute: 309.00
Survey	46	11-24	16:05	16:10	11-24	667.00	667.00	Inclination (°): 0.400, Azimuth (°): 211.390, TVD (ft): 596.99, Dogleg (%/100 ft): 0.20, Sensor Depth (ft): 597.00, Bit To Sensor (ft): 70.00
Rotary Drill	1	11-24	16:10	16:30	11-24	667.00	729.00	Pressure On (psi): 2350.00, Pressure Off (psi): 1750.00, Weight On Bit (klbs): 25.00, Surface RPM: 60, Surface Torque (ft lbf): 16000.00, Flow Rate (gpm): 897.00, Strokes Per Minute: 309.00
Survey	46	11-24	16:30	16:35	11-24	729.00	729.00	Inclination (°): 0.480, Azimuth (°): 222.640, TVD (ft): 658.99, Dogleg (%/100 ft): 0.19, Sensor Depth (ft): 659.00, Bit To Sensor (ft): 70.00
Rotary Drill	1	11-24	16:35	17:15	11-24	729.00	790.00	Pressure On (psi): 2350.00, Pressure Off (psi): 1750.00, Weight On Bit (klbs): 25.00, Surface RPM: 60, Surface Torque (ft lbf): 16000.00, Flow Rate (gpm): 897.00, Strokes Per Minute: 309.00
Survey	46	11-24	17:15	17:20	11-24	790.00	790.00	Inclination (°): 0.700, Azimuth (°): 228.970, TVD (ft): 719.99, Dogleg (%/100 ft): 0.38, Sensor Depth (ft): 720.00, Bit To Sensor (ft): 70.00
Rotary Drill	1	11-24	17:20	17:40	11-24	790.00	886.00	Pressure On (psi): 2350.00, Pressure Off (psi): 1750.00, Weight On Bit (klbs): 25.00, Surface RPM: 60, Surface Torque (ft lbf): 16000.00, Flow Rate (gpm): 897.00, Strokes Per Minute: 309.00
Survey	46	11-24	17:40	17:45	11-24	886.00	886.00	Inclination (°): 0.920, Azimuth (°): 230.460, TVD (ft): 815.98, Dogleg (%/100 ft): 0.23, Sensor Depth (ft): 816.00, Bit To Sensor (ft): 70.00
Rotary Drill	1	11-24	17:45	18:00	11-24	886.00	948.00	Pressure On (psi): 2350.00, Pressure Off (psi): 1750.00, Weight On Bit (klbs): 25.00, Surface RPM: 60, Surface Torque (ft lbf): 16000.00, Flow Rate (gpm): 897.00, Strokes Per Minute: 309.00
Survey	46	11-24	18:00	18:05	11-24	948.00	948.00	Inclination (°): 1.100, Azimuth (°): 242.510, TVD (ft): 877.97, Dogleg (%/100 ft): 0.45, Sensor Depth (ft): 878.00, Bit To Sensor (ft): 70.00
Rotary Drill	1	11-24	18:05	18:45	11-24	948.00	1043.00	Pressure On (psi): 2350.00, Pressure Off (psi): 1750.00, Weight On Bit (klbs): 25.00, Surface RPM: 60, Surface Torque (ft lbf): 16000.00, Flow Rate (gpm): 897.00, Strokes Per Minute: 309.00
Survey	46	11-24	18:45	18:50	11-24	1043.00	1043.00	Inclination (°): 1.410, Azimuth (°): 242.860, TVD (ft): 972.95, Dogleg (%/100 ft): 0.33, Sensor Depth (ft): 973.00, Bit To Sensor (ft): 70.00
Rotary Drill	1	11-24	18:50	19:30	11-24	1043.00	1136.00	Pressure On (psi): 2350.00, Pressure Off (psi): 1750.00, Weight On Bit (klbs): 25.00, Surface RPM: 60, Surface Torque (ft lbf): 16000.00, Flow Rate (gpm): 897.00, Strokes Per Minute: 309.00

Survey	46	11-24	19:30	19:35	11-24	1136.00	1136.00	Inclination (°): 1.360, Azimuth (°): 256.660, TVD (ft): 1065.92, Dogleg (°/100 ft): 0.36, Sensor Depth (ft): 1066.00, Bit To Sensor (ft): 70.00
Rotary Drill	1	11-24	19:35	20:10	11-24	1136.00	1225.00	Pressure On (psi): 2350.00, Pressure Off (psi): 1750.00, Weight On Bit (klbs): 25.00, Surface RPM: 60, Surface Torque (ft lbf): 16000.00, Flow Rate (gpm): 897.00, Strokes Per Minute: 309.00
Survey	46	11-24	20:10	20:15	11-24	1225.00	1225.00	Inclination (°): 1.270, Azimuth (°): 256.040, TVD (ft): 1154.90, Dogleg (°/100 ft): 0.10, Sensor Depth (ft): 1155.00, Bit To Sensor (ft): 70.00
Rotary Drill	1	11-24	20:15	20:30	11-24	1225.00	1290.00	Pressure On (psi): 2350.00, Pressure Off (psi): 1750.00, Weight On Bit (klbs): 25.00, Surface RPM: 60, Surface Torque (ft lbf): 16000.00, Flow Rate (gpm): 897.00, Strokes Per Minute: 309.00
Survey	46	11-24	20:30	20:35	11-24	1290.00	1290.00	Inclination (°): 1.230, Azimuth (°): 258.410, TVD (ft): 1219.88, Dogleg (°/100 ft): 0.10, Sensor Depth (ft): 1220.00, Bit To Sensor (ft): 70.00
Circulating	3	11-24	20:35	21:00	11-24			cir btms up
Pooh	7	11-24	21:00	22:00	11-24			POOH
Lay Down BHA	65	11-24	22:00	22:30	11-24			rack back bha
Standby	15	11-24	22:30	23:59	11-24			Standby

MWD Activities

No Activities



Job Number WT-21-183	Operator Advance Energy Partners	Rig Name Nabors X50
Start Date 2021-11-24	Well Name Anderson Fed Com 551H	Legal Well Name AFE Anderson Fed Com 551H
Play Delaware Basin	State/Province and Country New Mexico, US	County Lea
		Company Man

Tuesday, Nov 30 00:00 - 23:59 (Day 2 of 16)

Billing: \$9,500.00 (\$226,970.50 total)

Drilling Summary				Drilling Parameters	
Start Depth (ft)	1290.00	Downhole Hours	11.75	Rotating WOB (klbs)	25.00 - 50.00
Bit Depth (ft)	3280.00	Drilling Hours	6.17	Sliding WOB (klbs)	50.00 - 50.00
Bottom Hole Depth (ft)	3280.00	Hours Circulating	1.75	Rotating SPM	309.00 - 309.00
Total Distance (ft)	1990.00	Hours Sliding	0.67	Sliding SPM	309.00 - 309.00
Distance Rotated (ft)	1890.00	Hours Rotating	5.50	Motor RPM	40.00 - 70.00
Distance Slid (ft)	100.00			Surface RPM	60.00 - 70.00
Inclination In	0.75			Flow Rate (gpm)	895.00 - 897.00
Inclination Out	1.63			On Bottom Pressure (psi)	2350.00 - 2600.00
Azimuth In	275.03	% Hours Rotating	89%	Off Bottom Pressure (psi)	1750.00 - 2100.00
Azimuth Out	191.88	% Hours Sliding	11%		
AVG Total ROP (ft/h)	322.70	% Distance Sliding	5%		
AVG Rotating ROP (ft/h)	343.64	% Distance Rotating	95%		
AVG Sliding ROP (ft/h)	150.00				

Personnel

Name	Position
Advance Directional	Directional Driller
Robert Olivarez	MWD Engineer
Francisco DeLeon	MWD Engineer

BHA #2 - 12.25" Intermediate

Date In: Nov 30, 2021, 12:15 Date Out: Dec 1, 2021, 12:30

Bit Details		Motor Details	Directional Comments
OD (in)	12.250	Size (in)	8.0
Vendor	Reed	Lobe/Stage	7/8, 5.9
S/N	A280421	Bend Angle	1.75
Nozzles	6 x 16	Speed (rev/gal)	0.15
Total Flow Area (in ²)	1.178	Wear Pad OD (in)	8.125
Drilling Hours for Day	6.17	Bit Distances	
Total Drilled for Day (ft)	1990.00	Survey: 65.00 ft	
Drilling Hours for BHA	13.50		
Total Drilled for BHA (ft)	3530.00		
			POOH Reason
			Total Depth/Casing Point: Good Run. POOH for Casing.

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-H3</i> , Type: <i>PDC (Polycrystalline Diamond Compacts)</i> , Gauge Length (in): 6.00, Size (in): 12.25	Reed	A280421	6 5/8" Reg Pin			12.250		1.50	1.50
Mud Motor Description: 8" 7/8 5.9 Stg. 1.75° FBH w/12" NBS, Size (in): 8.00, Bend Angle (°): 1.75, Rotor Lobe: 7, Stator Lobe: 8, Stator Stage: 5.9	Sniper	DR-800-01	6 5/8" Reg Box	6 5/8" Reg Box		8.000		35.66	37.16
Stabilizer Description: 12" STAB	JA	12502	6 5/8" Reg Box	6 5/8" Reg Pin	2.813	8.250		7.11	44.27
UBHO Sub Description: <i>NM DAO SUB</i> , Material: <i>Non-Magnetic</i>	AIM	800614	6 5/8" Reg Box	6 5/8" Reg Pin	3.250	8.000		2.98	47.25
Drill Collar Description: <i>NMDC (MWD TOOL)</i> , Material: <i>Non-Magnetic</i> , Type: <i>Slick Drill</i>	GATOR	GT8030374	6 5/8" Reg Box	6 5/8" Reg Pin	3.250	8.063		30.52	77.77
Drill Collar Description: <i>NMDC</i> , Material: <i>Non-Magnetic</i> , Type: <i>Slick Drill</i>	GATOR	GT8230395	6 5/8" Reg Box	6 5/8" Reg Pin	3.250	8.375		30.48	108.25
Crossover Sub Description: <i>X-O SUB</i> , Material: <i>Steel</i>	JA	JA8610	CET54 Box	6 5/8" Reg Pin	2.500	6.625		3.23	111.48
HWDP Description: 8 Stands 5.5" HWDP, Type: <i>Slick</i>	Platinum		CET54 Box	CET54 Pin	4.000	5.500		735.63	847.11
Crossover Sub Description: <i>CET54 (P) x EverDrlg 54 (B)</i> , Material: <i>Steel</i>	BLACK DIAMOND	BD18238	EverDrlg54 Box	CET54 Pin	4.000	6.938		3.42	850.53
HWDP Description: 3 Stands 5.5" HWDP, Type: <i>Slick</i>	BLACK DIAMOND		EverDrlg54 Box	EverDrlg54 Pin	3.625	5.500		281.18	1131.71

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	11-30	00:00	12:15	11-30			Standby- Casing run / Rig skid
Pick Up BHA	64	11-30	12:15	13:40	11-30			P/U BHA #2 , Shallow test
TIH	8	11-30	13:40	14:20	11-30			TIH W/ BHA #2
Drilling Cement	17	11-30	14:20	16:05	11-30	1290.00	1290.00	Drilling Cement and Float Equipment F/ 1220' - T/ 1290 [GPM = 500, RPM = 25, WOB = 20, DIF = 150]
Rotary Drill	1	11-30	16:05	16:55	11-30	1290.00	1400.00	Pressure On (psi): 2350.00, Pressure Off (psi): 1750.00, Weight On Bit (klbs): 25.00, Surface RPM: 60, Surface Torque (ft lbf): 16000.00, Flow Rate (gpm): 897.00, Strokes Per Minute: 309.00
Survey	46	11-30	16:55	17:00	11-30	1400.00	1400.00	Inclination (°): 0.750, Azimuth (°): 275.030, TVD (ft): 1334.86, Dogleg (%/100 ft): 0.48, Sensor Depth (ft): 1335.00, Bit To Sensor (ft): 65.00
Rotary Drill	1	11-30	17:00	17:20	11-30	1400.00	1489.00	Pressure On (psi): 2350.00, Pressure Off (psi): 1750.00, Weight On Bit (klbs): 25.00, Surface RPM: 60, Surface Torque (ft lbf): 16000.00, Flow Rate (gpm): 897.00, Strokes Per Minute: 309.00
Survey	46	11-30	17:20	17:25	11-30	1489.00	1489.00	Inclination (°): 0.530, Azimuth (°): 289.530, TVD (ft): 1423.86, Dogleg (%/100 ft): 0.31, Sensor Depth (ft): 1424.00, Bit To Sensor (ft): 65.00
Rotary Drill	1	11-30	17:25	17:40	11-30	1489.00	1579.00	Pressure On (psi): 2350.00, Pressure Off (psi): 1750.00, Weight On Bit (klbs): 25.00, Surface RPM: 60, Surface Torque (ft lbf): 16000.00, Flow Rate (gpm): 897.00, Strokes Per Minute: 309.00
Survey	46	11-30	17:40	17:45	11-30	1579.00	1579.00	Inclination (°): 0.310, Azimuth (°): 273.710, TVD (ft): 1513.86, Dogleg (%/100 ft): 0.27, Sensor Depth (ft): 1514.00, Bit To Sensor (ft): 65.00
Rotary Drill	1	11-30	17:45	18:05	11-30	1579.00	1668.00	Pressure On (psi): 2350.00, Pressure Off (psi): 1750.00, Weight On Bit (klbs): 25.00, Surface RPM: 60, Surface Torque (ft lbf): 16000.00, Flow Rate (gpm): 897.00, Strokes Per Minute: 309.00
Survey	46	11-30	18:05	18:10	11-30	1668.00	1668.00	Inclination (°): 0.090, Azimuth (°): 274.320, TVD (ft): 1602.86, Dogleg (%/100 ft): 0.25, Sensor Depth (ft): 1603.00, Bit To Sensor (ft): 65.00
Rotary Drill	1	11-30	18:10	18:20	11-30	1668.00	1758.00	Pressure On (psi): 2350.00, Pressure Off (psi): 1750.00, Weight On Bit (klbs): 25.00, Surface RPM: 60, Surface Torque (ft lbf): 16000.00, Flow Rate (gpm): 897.00, Strokes Per Minute: 309.00
Survey	46	11-30	18:20	18:25	11-30	1758.00	1758.00	Inclination (°): 0.180, Azimuth (°): 35.170, TVD (ft): 1692.86, Dogleg (%/100 ft): 0.27, Sensor Depth (ft): 1693.00, Bit To Sensor (ft): 65.00
Rotary Drill	1	11-30	18:25	18:35	11-30	1758.00	1848.00	Pressure On (psi): 2350.00, Pressure Off (psi): 1750.00, Weight On Bit (klbs): 25.00, Surface RPM: 60, Surface Torque (ft lbf): 16000.00, Flow Rate (gpm): 897.00, Strokes Per Minute: 309.00
Survey	46	11-30	18:35	18:40	11-30	1848.00	1848.00	Inclination (°): 0.350, Azimuth (°): 18.560, TVD (ft): 1782.85, Dogleg (%/100 ft): 0.21, Sensor Depth (ft): 1783.00, Bit To Sensor (ft): 65.00
Rotary Drill	1	11-30	18:40	18:55	11-30	1848.00	1937.00	Pressure On (psi): 2350.00, Pressure Off (psi): 1750.00, Weight On Bit (klbs): 25.00, Surface RPM: 60, Surface Torque (ft lbf): 16000.00, Flow Rate (gpm): 897.00, Strokes Per Minute: 309.00
Survey	46	11-30	18:55	19:00	11-30	1937.00	1937.00	Inclination (°): 0.530, Azimuth (°): 25.060, TVD (ft): 1871.85, Dogleg (%/100 ft): 0.21, Sensor Depth (ft): 1872.00, Bit To Sensor (ft): 65.00
Rotary Drill	1	11-30	19:00	19:15	11-30	1937.00	2027.00	Pressure On (psi): 2600.00, Pressure Off (psi): 2000.00, Weight On Bit (klbs): 50.00, Surface RPM: 70, Surface Torque (ft lbf): 16000.00, Flow Rate (gpm): 897.00, Strokes Per Minute: 309.00
Survey	46	11-30	19:15	19:20	11-30	2027.00	2027.00	Inclination (°): 0.750, Azimuth (°): 41.850, TVD (ft): 1961.85, Dogleg (%/100 ft): 0.32, Sensor Depth (ft): 1962.00, Bit To Sensor (ft): 65.00
Rotary Drill	1	11-30	19:20	19:30	11-30	2027.00	2117.00	Pressure On (psi): 2600.00, Pressure Off (psi): 2100.00, Weight On Bit (klbs): 50.00, Surface RPM: 70, Surface Torque (ft lbf): 16000.00, Flow Rate (gpm): 897.00, Strokes Per Minute: 309.00
Survey	46	11-30	19:30	19:35	11-30	2117.00	2117.00	Inclination (°): 0.790, Azimuth (°): 38.160, TVD (ft): 2051.84, Dogleg (%/100 ft): 0.07, Sensor Depth (ft): 2052.00, Bit To Sensor (ft): 65.00
Rotary Drill	1	11-30	19:35	19:45	11-30	2117.00	2206.00	Pressure On (psi): 2600.00, Pressure Off (psi): 2100.00, Weight On Bit (klbs): 50.00, Surface RPM: 70, Surface Torque (ft lbf): 16000.00, Flow Rate (gpm): 897.00, Strokes Per Minute: 309.00
Survey	46	11-30	19:45	19:50	11-30	2206.00	2206.00	Inclination (°): 1.140, Azimuth (°): 41.060, TVD (ft): 2140.83, Dogleg (%/100 ft): 0.40, Sensor Depth (ft): 2141.00, Bit To Sensor (ft): 65.00
Rotary Drill	1	11-30	19:50	20:00	11-30	2206.00	2296.00	Pressure On (psi): 2600.00, Pressure Off (psi): 2100.00, Weight On Bit (klbs): 50.00, Surface RPM: 70, Surface Torque (ft lbf): 16000.00, Flow Rate (gpm): 897.00, Strokes Per Minute: 309.00
Survey	46	11-30	20:00	20:05	11-30	2296.00	2296.00	Inclination (°): 1.490, Azimuth (°): 46.250, TVD (ft): 2230.80, Dogleg (%/100 ft): 0.41, Sensor Depth (ft): 2231.00, Bit To Sensor (ft): 65.00
Rotary Drill	1	11-30	20:05	20:20	11-30	2296.00	2385.00	Pressure On (psi): 2600.00, Pressure Off (psi): 2100.00, Weight On Bit (klbs): 50.00, Surface RPM: 70, Surface Torque (ft lbf): 16000.00, Flow Rate (gpm): 897.00, Strokes Per Minute: 309.00
Survey	46	11-30	20:20	20:25	11-30	2385.00	2385.00	Inclination (°): 1.930, Azimuth (°): 52.130, TVD (ft): 2319.76, Dogleg (%/100 ft): 0.53, Sensor Depth (ft): 2320.00, Bit To Sensor (ft): 65.00
Rotary Drill	1	11-30	20:25	20:30	11-30	2385.00	2395.00	Pressure On (psi): 2600.00, Pressure Off (psi): 2100.00, Weight On Bit (klbs): 50.00, Surface RPM: 70, Surface Torque (ft lbf): 16000.00, Flow Rate (gpm): 897.00, Strokes Per Minute: 309.00

Slide Drill	2	11-30	20:30	20:35	11-30	2395.00	2415.00	Pressure On (psi): 2600.00, Pressure Off (psi): 2100.00, Weight On Bit (klbs): 50.00, Flow Rate (gpm): 895.00, Strokes Per Minute: 309, Toolface: 230, Toolface Type: magnetic
Rotary Drill	1	11-30	20:35	20:50	11-30	2415.00	2474.00	Pressure On (psi): 2600.00, Pressure Off (psi): 2100.00, Weight On Bit (klbs): 50.00, Surface RPM: 70, Surface Torque (ft lbf): 16000.00, Flow Rate (gpm): 897.00, Strokes Per Minute: 309.00
Survey	46	11-30	20:50	20:55	11-30	2474.00	2474.00	Inclination (°): 1.050, Azimuth (°): 90.100, TVD (ft): 2408.73, Dogleg (°/100 ft): 1.44, Sensor Depth (ft): 2409.00, Bit To Sensor (ft): 65.00
Rotary Drill	1	11-30	20:55	21:05	11-30	2474.00	2563.00	Pressure On (psi): 2600.00, Pressure Off (psi): 2100.00, Weight On Bit (klbs): 50.00, Surface RPM: 70, Surface Torque (ft lbf): 16000.00, Flow Rate (gpm): 897.00, Strokes Per Minute: 309.00
Survey	46	11-30	21:05	21:10	11-30	2563.00	2563.00	Inclination (°): 1.190, Azimuth (°): 123.590, TVD (ft): 2497.72, Dogleg (°/100 ft): 0.74, Sensor Depth (ft): 2498.00, Bit To Sensor (ft): 65.00
Rotary Drill	1	11-30	21:10	21:15	11-30	2563.00	2653.00	Pressure On (psi): 2600.00, Pressure Off (psi): 2100.00, Weight On Bit (klbs): 50.00, Surface RPM: 70, Surface Torque (ft lbf): 16000.00, Flow Rate (gpm): 897.00, Strokes Per Minute: 309.00
Survey	46	11-30	21:15	21:20	11-30	2653.00	2653.00	Inclination (°): 1.670, Azimuth (°): 108.380, TVD (ft): 2587.69, Dogleg (°/100 ft): 0.68, Sensor Depth (ft): 2588.00, Bit To Sensor (ft): 65.00
Rotary Drill	1	11-30	21:20	21:35	11-30	2653.00	2742.00	Pressure On (psi): 2600.00, Pressure Off (psi): 2100.00, Weight On Bit (klbs): 50.00, Surface RPM: 70, Surface Torque (ft lbf): 16000.00, Flow Rate (gpm): 897.00, Strokes Per Minute: 309.00
Survey	46	11-30	21:35	21:40	11-30	2742.00	2742.00	Inclination (°): 2.420, Azimuth (°): 101.710, TVD (ft): 2676.63, Dogleg (°/100 ft): 0.88, Sensor Depth (ft): 2677.00, Bit To Sensor (ft): 65.00
Slide Drill	2	11-30	21:40	22:00	11-30	2742.00	2772.00	Pressure On (psi): 2600.00, Pressure Off (psi): 2100.00, Weight On Bit (klbs): 50.00, Flow Rate (gpm): 895.00, Strokes Per Minute: 309, Toolface: 300, Toolface Type: magnetic
Rotary Drill	1	11-30	22:00	22:10	11-30	2772.00	2831.00	Pressure On (psi): 2600.00, Pressure Off (psi): 2100.00, Weight On Bit (klbs): 50.00, Surface RPM: 70, Surface Torque (ft lbf): 16000.00, Flow Rate (gpm): 897.00, Strokes Per Minute: 309.00
Survey	46	11-30	22:10	22:15	11-30	2831.00	2831.00	Inclination (°): 1.670, Azimuth (°): 105.130, TVD (ft): 2765.57, Dogleg (°/100 ft): 0.85, Sensor Depth (ft): 2766.00, Bit To Sensor (ft): 65.00
Rotary Drill	1	11-30	22:15	22:25	11-30	2831.00	2921.00	Pressure On (psi): 2600.00, Pressure Off (psi): 2100.00, Weight On Bit (klbs): 50.00, Surface RPM: 70, Surface Torque (ft lbf): 16000.00, Flow Rate (gpm): 897.00, Strokes Per Minute: 309.00
Survey	46	11-30	22:25	22:30	11-30	2921.00	2921.00	Inclination (°): 1.010, Azimuth (°): 70.240, TVD (ft): 2855.55, Dogleg (°/100 ft): 1.13, Sensor Depth (ft): 2856.00, Bit To Sensor (ft): 65.00
Rotary Drill	1	11-30	22:30	22:45	11-30	2921.00	3011.00	Pressure On (psi): 2600.00, Pressure Off (psi): 2100.00, Weight On Bit (klbs): 50.00, Surface RPM: 70, Surface Torque (ft lbf): 16000.00, Flow Rate (gpm): 897.00, Strokes Per Minute: 309.00
Survey	46	11-30	22:45	22:50	11-30	3011.00	3011.00	Inclination (°): 1.540, Azimuth (°): 59.080, TVD (ft): 2945.53, Dogleg (°/100 ft): 0.65, Sensor Depth (ft): 2946.00, Bit To Sensor (ft): 65.00
Rotary Drill	1	11-30	22:50	22:55	11-30	3011.00	3022.00	Pressure On (psi): 2600.00, Pressure Off (psi): 2100.00, Weight On Bit (klbs): 50.00, Surface RPM: 70, Surface Torque (ft lbf): 16000.00, Flow Rate (gpm): 897.00, Strokes Per Minute: 309.00
Slide Drill	2	11-30	22:55	23:05	11-30	3022.00	3047.00	Pressure On (psi): 2600.00, Pressure Off (psi): 2100.00, Weight On Bit (klbs): 50.00, Flow Rate (gpm): 895.00, Strokes Per Minute: 309, Toolface: 240, Toolface Type: magnetic
Rotary Drill	1	11-30	23:05	23:15	11-30	3047.00	3101.00	Pressure On (psi): 2600.00, Pressure Off (psi): 2100.00, Weight On Bit (klbs): 50.00, Surface RPM: 70, Surface Torque (ft lbf): 16000.00, Flow Rate (gpm): 897.00, Strokes Per Minute: 309.00
Survey	46	11-30	23:15	23:20	11-30	3101.00	3101.00	Inclination (°): 0.660, Azimuth (°): 132.380, TVD (ft): 3035.51, Dogleg (°/100 ft): 1.66, Sensor Depth (ft): 3036.00, Bit To Sensor (ft): 65.00
Rotary Drill	1	11-30	23:20	23:35	11-30	3101.00	3190.00	Pressure On (psi): 2600.00, Pressure Off (psi): 2100.00, Weight On Bit (klbs): 50.00, Surface RPM: 70, Surface Torque (ft lbf): 16000.00, Flow Rate (gpm): 897.00, Strokes Per Minute: 309.00
Survey	46	11-30	23:35	23:40	11-30	3190.00	3190.00	Inclination (°): 1.630, Azimuth (°): 191.880, TVD (ft): 3124.50, Dogleg (°/100 ft): 1.59, Sensor Depth (ft): 3125.00, Bit To Sensor (ft): 65.00
Rotary Drill	1	11-30	23:40	23:45	11-30	3190.00	3202.00	Pressure On (psi): 2600.00, Pressure Off (psi): 2100.00, Weight On Bit (klbs): 50.00, Surface RPM: 70, Surface Torque (ft lbf): 16000.00, Flow Rate (gpm): 897.00, Strokes Per Minute: 309.00
Slide Drill	2	11-30	23:45	23:50	11-30	3202.00	3227.00	Pressure On (psi): 2600.00, Pressure Off (psi): 2100.00, Weight On Bit (klbs): 50.00, Flow Rate (gpm): 895.00, Strokes Per Minute: 309, Toolface: 10, Toolface Type: magnetic
Rotary Drill	1	11-30	23:50	00:00	12-01	3227.00	3280.00	Pressure On (psi): 2600.00, Pressure Off (psi): 2100.00, Weight On Bit (klbs): 50.00, Surface RPM: 70, Surface Torque (ft lbf): 16000.00, Flow Rate (gpm): 897.00, Strokes Per Minute: 309.00

MWD Activities

No Activities



Job Number WT-21-183	Operator Advance Energy Partners	Rig Name Nabors X50
Start Date 2021-11-24	Well Name Anderson Fed Com 551H	Legal Well Name AFE Anderson Fed Com 551H
Play Delaware Basin	State/Province and Country New Mexico, US	County Lea
Company Man		

Wednesday, Dec 01 00:00 - 23:59 (Day 3 of 16)

Billing: \$5,600.00 (\$226,970.50 total)

Drilling Summary				Drilling Parameters	
Start Depth (ft)	3280.00	Downhole Hours	12.50	Rotating WOB (klbs)	50.00 - 50.00
Bit Depth (ft)	4820.00	Drilling Hours	7.33	Sliding WOB (klbs)	50.00 - 50.00
Bottom Hole Depth (ft)	4820.00	Hours Circulating	0.58	Rotating SPM	309.00 - 309.00
Total Distance (ft)	1540.00	Hours Sliding	0.67	Sliding SPM	309.00 - 309.00
Distance Rotated (ft)	1495.00	Hours Rotating	6.67	Motor RPM	40.00 - 70.00
Distance Slid (ft)	45.00			Surface RPM	70.00 - 70.00
Inclination In	0.35			Flow Rate (gpm)	895.00 - 897.00
Inclination Out	1.27			On Bottom Pressure (psi)	2600.00 - 2600.00
Azimuth In	188.10	% Hours Rotating	91%	Off Bottom Pressure (psi)	2100.00 - 2100.00
Azimuth Out	0.19	% Hours Sliding	9%		
AVG Total ROP (ft/h)	212.40	% Distance Sliding	3%		
AVG Rotating ROP (ft/h)	226.54	% Distance Rotating	97%		
AVG Sliding ROP (ft/h)	67.50				

Personnel

Name	Position
Advance Directional	Directional Driller
Robert Olivarez	MWD Engineer
Francisco DeLeon	MWD Engineer

BHA #2 - 12.25" Intermediate

Date In: Nov 30, 2021, 12:15 Date Out: Dec 1, 2021, 12:30

Bit Details		Motor Details	Directional Comments
OD (in)	12.250	Size (in)	8.0
Vendor	Reed	Lobe/Stage	7/8, 5.9
S/N	A280421	Bend Angle	1.75
Nozzles	6 x 16	Speed (rev/gal)	0.15
Total Flow Area (in ²)	1.178	Wear Pad OD (in)	8.125
Drilling Hours for Day	7.33	Bit Distances	
Total Drilled for Day (ft)	1540.00	Survey: 65.00 ft	
Drilling Hours for BHA	13.50		
Total Drilled for BHA (ft)	3530.00		
			POOH Reason
			Total Depth/Casing Point: Good Run. POOH for Casing.

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-H3</i> , Type: <i>PDC (Polycrystalline Diamond Compacts)</i> , Gauge Length (in): 6.00, Size (in): 12.25	Reed	A280421	6 5/8" Reg Pin			12.250		1.50	1.50
Mud Motor Description: 8" 7/8 5.9 Stg. 1.75° FBH w/12" NBS, Size (in): 8.00, Bend Angle (°): 1.75, Rotor Lobe: 7, Stator Lobe: 8, Stator Stage: 5.9	Sniper	DR-800-01	6 5/8" Reg Box	6 5/8" Reg Box		8.000		35.66	37.16
Stabilizer Description: 12" STAB	JA	12502	6 5/8" Reg Box	6 5/8" Reg Pin	2.813	8.250		7.11	44.27
UBHO Sub Description: <i>NM DAO SUB</i> , Material: <i>Non-Magnetic</i>	AIM	800614	6 5/8" Reg Box	6 5/8" Reg Pin	3.250	8.000		2.98	47.25
Drill Collar Description: <i>NMDC (MWD TOOL)</i> , Material: <i>Non-Magnetic</i> , Type: <i>Slick Drill</i>	GATOR	GT 8030374	6 5/8" Reg Box	6 5/8" Reg Pin	3.250	8.063		30.52	77.77
Drill Collar Description: <i>NMDC</i> , Material: <i>Non-Magnetic</i> , Type: <i>Slick Drill</i>	GATOR	GT 8230395	6 5/8" Reg Box	6 5/8" Reg Pin	3.250	8.375		30.48	108.25
Crossover Sub Description: <i>X-O SUB</i> , Material: <i>Steel</i>	JA	JA8610	CET54 Box	6 5/8" Reg Pin	2.500	6.625		3.23	111.48
HWDP Description: 8 Stands 5.5" HWDP, Type: <i>Slick</i>	Platinum		CET54 Box	CET54 Pin	4.000	5.500		735.63	847.11
Crossover Sub Description: <i>CET54 (P) x EverDrlg 54 (B)</i> , Material: <i>Steel</i>	BLACK DIAMOND	BD18238	EverDrlg54 Box	CET54 Pin	4.000	6.938		3.42	850.53
HWDP Description: 3 Stands 5.5" HWDP, Type: <i>Slick</i>	BLACK DIAMOND		EverDrlg54 Box	EverDrlg54 Pin	3.625	5.500		281.18	1131.71

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	11-30	23:50	00:00	12-01	3227.00	3280.00	Pressure On (psi): 2600.00, Pressure Off (psi): 2100.00, Weight On Bit (klbs): 50.00, Surface RPM: 70, Surface Torque (ft lbf): 16000.00, Flow Rate (gpm): 897.00, Strokes Per Minute: 309.00
Survey	46	12-01	00:00	00:05	12-01	3280.00	3280.00	Inclination (°): 0.350, Azimuth (°): 188.100, TVD (ft): 3214.48, Dogleg (°/100 ft): 1.42, Sensor Depth (ft): 3215.00, Bit To Sensor (ft): 65.00
Rotary Drill	1	12-01	00:05	00:15	12-01	3280.00	3369.00	Pressure On (psi): 2600.00, Pressure Off (psi): 2100.00, Weight On Bit (klbs): 50.00, Surface RPM: 70, Surface Torque (ft lbf): 16000.00, Flow Rate (gpm): 897.00, Strokes Per Minute: 309.00
Survey	46	12-01	00:15	00:20	12-01	3369.00	3369.00	Inclination (°): 1.540, Azimuth (°): 25.860, TVD (ft): 3303.47, Dogleg (°/100 ft): 2.11, Sensor Depth (ft): 3304.00, Bit To Sensor (ft): 65.00
Rotary Drill	1	12-01	00:20	00:30	12-01	3369.00	3459.00	Pressure On (psi): 2600.00, Pressure Off (psi): 2100.00, Weight On Bit (klbs): 50.00, Surface RPM: 70, Surface Torque (ft lbf): 16000.00, Flow Rate (gpm): 897.00, Strokes Per Minute: 309.00
Survey	46	12-01	00:30	00:35	12-01	3459.00	3459.00	Inclination (°): 1.540, Azimuth (°): 64.970, TVD (ft): 3393.44, Dogleg (°/100 ft): 1.15, Sensor Depth (ft): 3394.00, Bit To Sensor (ft): 65.00
Rotary Drill	1	12-01	00:35	00:50	12-01	3459.00	3548.00	Pressure On (psi): 2600.00, Pressure Off (psi): 2100.00, Weight On Bit (klbs): 50.00, Surface RPM: 70, Surface Torque (ft lbf): 16000.00, Flow Rate (gpm): 897.00, Strokes Per Minute: 309.00
Survey	46	12-01	00:50	00:55	12-01	3548.00	3548.00	Inclination (°): 1.670, Azimuth (°): 71.030, TVD (ft): 3482.41, Dogleg (°/100 ft): 0.24, Sensor Depth (ft): 3483.00, Bit To Sensor (ft): 65.00
Rotary Drill	1	12-01	00:55	01:15	12-01	3548.00	3638.00	Pressure On (psi): 2600.00, Pressure Off (psi): 2100.00, Weight On Bit (klbs): 50.00, Surface RPM: 70, Surface Torque (ft lbf): 16000.00, Flow Rate (gpm): 897.00, Strokes Per Minute: 309.00
Survey	46	12-01	01:15	01:20	12-01	3638.00	3638.00	Inclination (°): 1.450, Azimuth (°): 78.850, TVD (ft): 3572.37, Dogleg (°/100 ft): 0.34, Sensor Depth (ft): 3573.00, Bit To Sensor (ft): 65.00
Rotary Drill	1	12-01	01:20	01:40	12-01	3638.00	3728.00	Pressure On (psi): 2600.00, Pressure Off (psi): 2100.00, Weight On Bit (klbs): 50.00, Surface RPM: 70, Surface Torque (ft lbf): 16000.00, Flow Rate (gpm): 897.00, Strokes Per Minute: 309.00
Survey	46	12-01	01:40	01:45	12-01	3728.00	3728.00	Inclination (°): 1.410, Azimuth (°): 87.730, TVD (ft): 3662.35, Dogleg (°/100 ft): 0.25, Sensor Depth (ft): 3663.00, Bit To Sensor (ft): 65.00
Rotary Drill	1	12-01	01:45	01:50	12-01	3728.00	3735.00	Pressure On (psi): 2600.00, Pressure Off (psi): 2100.00, Weight On Bit (klbs): 50.00, Surface RPM: 70, Surface Torque (ft lbf): 16000.00, Flow Rate (gpm): 897.00, Strokes Per Minute: 309.00
Slide Drill	2	12-01	01:50	02:05	12-01	3735.00	3760.00	Pressure On (psi): 2600.00, Pressure Off (psi): 2100.00, Weight On Bit (klbs): 50.00, Flow Rate (gpm): 895.00, Strokes Per Minute: 309, Toolface: 245, Toolface Type: magnetic
Rotary Drill	1	12-01	02:05	02:25	12-01	3760.00	3817.00	Pressure On (psi): 2600.00, Pressure Off (psi): 2100.00, Weight On Bit (klbs): 50.00, Surface RPM: 70, Surface Torque (ft lbf): 16000.00, Flow Rate (gpm): 897.00, Strokes Per Minute: 309.00
Survey	46	12-01	02:25	02:30	12-01	3817.00	3817.00	Inclination (°): 1.230, Azimuth (°): 182.300, TVD (ft): 3751.33, Dogleg (°/100 ft): 2.18, Sensor Depth (ft): 3752.00, Bit To Sensor (ft): 65.00
Rotary Drill	1	12-01	02:30	02:55	12-01	3817.00	3907.00	Pressure On (psi): 2600.00, Pressure Off (psi): 2100.00, Weight On Bit (klbs): 50.00, Surface RPM: 70, Surface Torque (ft lbf): 16000.00, Flow Rate (gpm): 897.00, Strokes Per Minute: 309.00
Survey	46	12-01	02:55	03:00	12-01	3907.00	3907.00	Inclination (°): 2.420, Azimuth (°): 207.170, TVD (ft): 3841.29, Dogleg (°/100 ft): 1.56, Sensor Depth (ft): 3842.00, Bit To Sensor (ft): 65.00
Slide Drill	2	12-01	03:00	03:25	12-01	3907.00	3927.00	Pressure On (psi): 2600.00, Pressure Off (psi): 2100.00, Weight On Bit (klbs): 50.00, Flow Rate (gpm): 895.00, Strokes Per Minute: 309, Toolface: 0, Toolface Type: magnetic
Rotary Drill	1	12-01	03:25	03:50	12-01	3927.00	3997.00	Pressure On (psi): 2600.00, Pressure Off (psi): 2100.00, Weight On Bit (klbs): 50.00, Surface RPM: 70, Surface Torque (ft lbf): 16000.00, Flow Rate (gpm): 897.00, Strokes Per Minute: 309.00
Survey	46	12-01	03:50	03:55	12-01	3997.00	3997.00	Inclination (°): 1.270, Azimuth (°): 247.080, TVD (ft): 3931.24, Dogleg (°/100 ft): 1.84, Sensor Depth (ft): 3932.00, Bit To Sensor (ft): 65.00
Rotary Drill	1	12-01	03:55	04:20	12-01	3997.00	4086.00	Pressure On (psi): 2600.00, Pressure Off (psi): 2100.00, Weight On Bit (klbs): 50.00, Surface RPM: 70, Surface Torque (ft lbf): 16000.00, Flow Rate (gpm): 897.00, Strokes Per Minute: 309.00
Survey	46	12-01	04:20	04:25	12-01	4086.00	4086.00	Inclination (°): 1.410, Azimuth (°): 318.530, TVD (ft): 4020.22, Dogleg (°/100 ft): 1.76, Sensor Depth (ft): 4021.00, Bit To Sensor (ft): 65.00
Rotary Drill	1	12-01	04:25	04:50	12-01	4086.00	4176.00	Pressure On (psi): 2600.00, Pressure Off (psi): 2100.00, Weight On Bit (klbs): 50.00, Surface RPM: 70, Surface Torque (ft lbf): 16000.00, Flow Rate (gpm): 897.00, Strokes Per Minute: 309.00

Survey	46	12-01	04:50	04:55	12-01	4176.00	4176.00	Inclination (°): 1.270, Azimuth (°): 340.240, TVD (ft): 4110.20, Dogleg (%/100 ft): 0.58, Sensor Depth (ft): 4111.00, Bit To Sensor (ft): 65.00
Rotary Drill	1	12-01	04:55	05:20	12-01	4176.00	4265.00	Pressure On (psi): 2600.00, Pressure Off (psi): 2100.00, Weight On Bit (klbs): 50.00, Surface RPM: 70, Surface Torque (ft lbf): 16000.00, Flow Rate (gpm): 897.00, Strokes Per Minute: 309.00
Survey	46	12-01	05:20	05:25	12-01	4265.00	4265.00	Inclination (°): 1.010, Azimuth (°): 335.670, TVD (ft): 4199.18, Dogleg (%/100 ft): 0.31, Sensor Depth (ft): 4200.00, Bit To Sensor (ft): 65.00
Rotary Drill	1	12-01	05:25	05:50	12-01	4265.00	4355.00	Pressure On (psi): 2600.00, Pressure Off (psi): 2100.00, Weight On Bit (klbs): 50.00, Surface RPM: 70, Surface Torque (ft lbf): 16000.00, Flow Rate (gpm): 897.00, Strokes Per Minute: 309.00
Survey	46	12-01	05:50	05:55	12-01	4355.00	4355.00	Inclination (°): 1.100, Azimuth (°): 321.610, TVD (ft): 4289.17, Dogleg (%/100 ft): 0.30, Sensor Depth (ft): 4290.00, Bit To Sensor (ft): 65.00
Rotary Drill	1	12-01	05:55	06:20	12-01	4355.00	4444.00	Pressure On (psi): 2600.00, Pressure Off (psi): 2100.00, Weight On Bit (klbs): 50.00, Surface RPM: 70, Surface Torque (ft lbf): 16000.00, Flow Rate (gpm): 897.00, Strokes Per Minute: 309.00
Survey	46	12-01	06:20	06:25	12-01	4444.00	4444.00	Inclination (°): 1.010, Azimuth (°): 325.120, TVD (ft): 4378.15, Dogleg (%/100 ft): 0.12, Sensor Depth (ft): 4379.00, Bit To Sensor (ft): 65.00
Rotary Drill	1	12-01	06:25	07:00	12-01	4444.00	4534.00	Pressure On (psi): 2600.00, Pressure Off (psi): 2100.00, Weight On Bit (klbs): 50.00, Surface RPM: 70, Surface Torque (ft lbf): 16000.00, Flow Rate (gpm): 897.00, Strokes Per Minute: 309.00
Survey	46	12-01	07:00	07:05	12-01	4534.00	4534.00	Inclination (°): 1.050, Azimuth (°): 330.040, TVD (ft): 4468.14, Dogleg (%/100 ft): 0.11, Sensor Depth (ft): 4469.00, Bit To Sensor (ft): 65.00
Rotary Drill	1	12-01	07:05	07:35	12-01	4534.00	4624.00	Pressure On (psi): 2600.00, Pressure Off (psi): 2100.00, Weight On Bit (klbs): 50.00, Surface RPM: 70, Surface Torque (ft lbf): 16000.00, Flow Rate (gpm): 897.00, Strokes Per Minute: 309.00
Survey	46	12-01	07:35	07:40	12-01	4624.00	4624.00	Inclination (°): 0.970, Azimuth (°): 340.590, TVD (ft): 4558.12, Dogleg (%/100 ft): 0.22, Sensor Depth (ft): 4559.00, Bit To Sensor (ft): 65.00
Rotary Drill	1	12-01	07:40	08:05	12-01	4624.00	4713.00	Pressure On (psi): 2600.00, Pressure Off (psi): 2100.00, Weight On Bit (klbs): 50.00, Surface RPM: 70, Surface Torque (ft lbf): 16000.00, Flow Rate (gpm): 897.00, Strokes Per Minute: 309.00
Survey	46	12-01	08:05	08:10	12-01	4713.00	4713.00	Inclination (°): 1.100, Azimuth (°): 354.300, TVD (ft): 4647.11, Dogleg (%/100 ft): 0.31, Sensor Depth (ft): 4648.00, Bit To Sensor (ft): 65.00
Rotary Drill	1	12-01	08:10	08:45	12-01	4713.00	4820.00	Pressure On (psi): 2600.00, Pressure Off (psi): 2100.00, Weight On Bit (klbs): 50.00, Surface RPM: 70, Surface Torque (ft lbf): 16000.00, Flow Rate (gpm): 897.00, Strokes Per Minute: 309.00
Survey	46	12-01	08:45	08:50	12-01	4820.00	4820.00	Inclination (°): 1.270, Azimuth (°): 0.190, TVD (ft): 4754.08, Dogleg (%/100 ft): 0.20, Sensor Depth (ft): 4755.00, Bit To Sensor (ft): 65.00
Circulating	3	12-01	08:50	09:25	12-01			cir btms up
Pooh	7	12-01	09:25	11:30	12-01			POOH
Lay Down BHA	65	12-01	11:30	12:30	12-01			l/d bha

MWD Activities

No Activities



Job Number WT-21-183	Operator Advance Energy Partners	Rig Name Nabors X50
Start Date 2021-11-24	Well Name Anderson Fed Com 551H	Legal Well Name AFE Anderson Fed Com 551H
Play Delaware Basin	State/Province and Country New Mexico, US	County Lea
		Company Man

Monday, Jan 17 00:00 - 23:59 (Day 4 of 16)

Billing: \$12,555.25 (\$226,970.50 total)

Drilling Summary				Drilling Parameters	
Start Depth (ft)	4820.00	Downhole Hours	12.75	Rotating WOB (klbs)	34.00 - 40.00
Bit Depth (ft)	6592.00	Drilling Hours	5.75	Sliding WOB (klbs)	25.00 - 25.00
Bottom Hole Depth (ft)	6592.00	Hours Circulating	1.08	Rotating SPM	206.00 - 240.00
Total Distance (ft)	1772.00	Hours Sliding	0.58	Sliding SPM	240.00 - 240.00
Distance Rotated (ft)	1676.00	Hours Rotating	5.17	Motor RPM	40.00 - 220.00
Distance Slid (ft)	96.00			Surface RPM	30.00 - 40.00
Inclination In	0.70			Flow Rate (gpm)	597.00 - 700.00
Inclination Out	5.01			On Bottom Pressure (psi)	1950.00 - 2650.00
Azimuth In	340.33	% Hours Rotating	90%	Off Bottom Pressure (psi)	1250.00 - 1900.00
Azimuth Out	228.79	% Hours Sliding	10%		
AVG Total ROP (ft/h)	314.70	% Distance Sliding	5%		
AVG Rotating ROP (ft/h)	331.13	% Distance Rotating	95%		
AVG Sliding ROP (ft/h)	164.57				

Personnel

Name	Position
Advance Directional	Directional Driller
Robert Olivarez	MWD Engineer
Francisco DeLeon	MWD Engineer

BHA #3 - 8.75" INTERMEDIATE

Date In: Jan 17, 2022, 11:15 Date Out: Jan 19, 2022, 0:00

Bit Details		Motor Details		Directional Comments
OD (in)	8.750	Size (in)	7.0	FLOW RANGE: 500-750 GPM, REV PER GALLON .26, MAX DIFF: 1910, MAX TORQUE : 18,710 BIT RUNS: 0 , Bit to Bend: 5.30
Vendor	Reed	Lobe/Stage	7/8, 8.5	
S/N	A283351	Bend Angle	1.75	
Nozzles	6 x15's	Speed (rev/gal)	0.26	MWD Comments
Total Flow Area (in²)	1.035	Wear Pad OD (in)	7.375	
Drilling Hours for Day	5.75	Bit Distances		
Total Drilled for Day (ft)	1772.00	Survey: 69.00 ft, Gamma (Bit To Gamma): 53.00 ft		POOH Reason
Drilling Hours for BHA	21.92			
Total Drilled for BHA (ft)	4826.00			

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</i> , Type: <i>PDC (Polycrystalline Diamond Compacts)</i> , Gauge Length (in): <i>4.00</i> , Size (in): <i>8.75</i>	Reed	A283351	4 1/2" Reg Pin			8.750		1.00	1.00
Mud Motor Description: <i>7" 7/8 8.5 Stg. 1.75° FBH w/8.5" NBS</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>8.5</i>	Aim	700-40-005	4 1/2" IF Box	4 1/2" Reg Box		7.000		37.46	38.46
Stabilizer Description: <i>8.5" STAB</i>	JA	JAO85812	4 1/2" IF Box	4 1/2" IF Pin	2.563	6.750		6.37	44.83
UBHO Sub Description: <i>NM DAO SUB</i> , Material: <i>Non-Magnetic</i>	AIM	AIM675-364	4 1/2" IF Box	4 1/2" IF Pin	3.250	6.750		3.04	47.87
Drill Collar Description: <i>NMDC (MWD TOOL)</i> , Material: <i>Non-Magnetic</i> , Type: <i>Slick Drill</i>	GATOR	67-30-296	4 1/2" IF Box	4 1/2" IF Pin	3.250	6.750		30.65	78.52
Drill Collar Description: <i>NMDC</i> , Material: <i>Non-Magnetic</i> , Type: <i>Slick Drill</i>	GATOR	67-30-193	4 1/2" IF Box	4 1/2" IF Pin	3.250	6.750		29.44	107.96
Crossover Sub Description: <i>X-O SUB</i> , Material: <i>Steel</i>	Platinum	PPR5372	CET54 Box	4 1/2" IF Pin	2.750	6.250		2.38	110.34
HWDP Description: <i>8 Stands 5.5" HWDP</i> , Type: <i>Slick</i>	Platinum		CET54 Box	CET54 Pin	4.000	5.500		735.63	845.97
Crossover Sub Description: <i>CET54 (P) x EverDrlg 54 (B)</i> , Material: <i>Steel</i>	BLACK DIAMOND	BD18238	EverDrlg54 Box	CET54 Pin	4.000	6.938		3.42	849.39
HWDP Description: <i>3 Stands 5.5" HWDP</i> , Type: <i>Slick</i>	BLACK DIAMOND		EverDrlg54 Box	EverDrlg54 Pin	3.625	5.500		281.18	1130.57

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	01-17	00:00	10:30	01-17			Standby- R/D, Skid Rig , Test BOP & R/U
Pick Up BHA	64	01-17	10:30	11:15	01-17			P/U BHA #3
TIH	8	01-17	11:15	13:00	01-17			TIH W/ BHA #3
Other	16	01-17	13:00	14:30	01-17			Slip & Cut Drill line
TIH	8	01-17	14:30	15:30	01-17			TIH W/ BHA #3
Drilling Cement	17	01-17	15:30	16:35	01-17	4820.00	4820.00	Drilling Cement and Float Equipment F/ 4712' - T/ 4820' [GPM = 499, RPM = 20, WOB = 15, DIFF = 150]
Rotary Drill	1	01-17	16:35	17:25	01-17	4820.00	4980.00	Pressure On (psi): 1950.00, Pressure Off (psi): 1250.00, Weight On Bit (klbs): 34.00, Surface RPM: 30, Surface Torque (ft lbf): 11750.00, Flow Rate (gpm): 597.00, Strokes Per Minute: 206.00
Survey	46	01-17	17:25	17:30	01-17	4980.00	4980.00	Inclination (°): 0.700, Azimuth (°): 340.330, TVD (ft): 4910.06, Dogleg (°/100 ft): 0.42, Sensor Depth (ft): 4911.00, Bit To Sensor (ft): 69.00
Rotary Drill	1	01-17	17:30	17:40	01-17	4980.00	5070.00	Pressure On (psi): 1950.00, Pressure Off (psi): 1250.00, Weight On Bit (klbs): 34.00, Surface RPM: 30, Surface Torque (ft lbf): 11750.00, Flow Rate (gpm): 597.00, Strokes Per Minute: 206.00
Survey	46	01-17	17:40	17:45	01-17	5066.00	5066.00	Inclination (°): 0.750, Azimuth (°): 346.040, TVD (ft): 5000.05, Dogleg (°/100 ft): 0.10, Sensor Depth (ft): 5001.00, Bit To Sensor (ft): 65.00
Rotary Drill	1	01-17	17:45	17:50	01-17	5070.00	5160.00	Pressure On (psi): 2650.00, Pressure Off (psi): 1900.00, Weight On Bit (klbs): 40.00, Surface RPM: 40, Surface Torque (ft lbf): 13750.00, Flow Rate (gpm): 696.00, Strokes Per Minute: 240.00
Survey	46	01-17	17:50	17:55	01-17	5160.00	5160.00	Inclination (°): 0.660, Azimuth (°): 343.580, TVD (ft): 5090.05, Dogleg (°/100 ft): 0.11, Sensor Depth (ft): 5091.00, Bit To Sensor (ft): 69.00
Rotary Drill	1	01-17	17:55	18:05	01-17	5160.00	5249.00	Pressure On (psi): 2650.00, Pressure Off (psi): 1900.00, Weight On Bit (klbs): 40.00, Surface RPM: 40, Surface Torque (ft lbf): 13750.00, Flow Rate (gpm): 696.00, Strokes Per Minute: 240.00
Survey	46	01-17	18:05	18:10	01-17	5249.00	5249.00	Inclination (°): 0.750, Azimuth (°): 338.830, TVD (ft): 5179.04, Dogleg (°/100 ft): 0.12, Sensor Depth (ft): 5180.00, Bit To Sensor (ft): 69.00
Rotary Drill	1	01-17	18:10	18:25	01-17	5249.00	5339.00	Pressure On (psi): 2650.00, Pressure Off (psi): 1900.00, Weight On Bit (klbs): 40.00, Surface RPM: 40, Surface Torque (ft lbf): 13750.00, Flow Rate (gpm): 696.00, Strokes Per Minute: 240.00
Survey	46	01-17	18:25	18:30	01-17	5339.00	5339.00	Inclination (°): 0.180, Azimuth (°): 339.710, TVD (ft): 5269.04, Dogleg (°/100 ft): 0.63, Sensor Depth (ft): 5270.00, Bit To Sensor (ft): 69.00
Rotary Drill	1	01-17	18:30	18:35	01-17	5339.00	5345.00	Pressure On (psi): 2650.00, Pressure Off (psi): 1900.00, Weight On Bit (klbs): 40.00, Surface RPM: 40, Surface Torque (ft lbf): 13750.00, Flow Rate (gpm): 696.00, Strokes Per Minute: 240.00
Slide Drill	2	01-17	18:35	18:40	01-17	5345.00	5365.00	Pressure On (psi): 2200.00, Pressure Off (psi): 1700.00, Weight On Bit (klbs): 25.00, Flow Rate (gpm): 700.00, Strokes Per Minute: 240, Toolface: 231, Toolface Type: magnetic
Rotary Drill	1	01-17	18:40	18:45	01-17	5365.00	5428.00	Pressure On (psi): 2650.00, Pressure Off (psi): 1900.00, Weight On Bit (klbs): 40.00, Surface RPM: 40, Surface Torque (ft lbf): 13750.00, Flow Rate (gpm): 696.00, Strokes Per Minute: 240.00
Survey	46	01-17	18:45	18:50	01-17	5428.00	5428.00	Inclination (°): 1.630, Azimuth (°): 317.480, TVD (ft): 5358.02, Dogleg (°/100 ft): 1.65, Sensor Depth (ft): 5359.00, Bit To Sensor (ft): 69.00
Slide Drill	2	01-17	18:50	18:55	01-17	5428.00	5453.00	Pressure On (psi): 2200.00, Pressure Off (psi): 1700.00, Weight On Bit (klbs): 25.00, Flow Rate (gpm): 700.00, Strokes Per Minute: 240, Toolface: 230, Toolface Type: magnetic
Rotary Drill	1	01-17	18:55	19:10	01-17	5453.00	5517.00	Pressure On (psi): 2650.00, Pressure Off (psi): 1900.00, Weight On Bit (klbs): 40.00, Surface RPM: 40, Surface Torque (ft lbf): 13750.00, Flow Rate (gpm): 696.00, Strokes Per Minute: 240.00
Survey	46	01-17	19:10	19:15	01-17	5517.00	5517.00	Inclination (°): 2.680, Azimuth (°): 258.590, TVD (ft): 5446.97, Dogleg (°/100 ft): 2.59, Sensor Depth (ft): 5448.00, Bit To Sensor (ft): 69.00
Slide Drill	2	01-17	19:15	19:25	01-17	5517.00	5537.00	Pressure On (psi): 2200.00, Pressure Off (psi): 1700.00, Weight On Bit (klbs): 25.00, Flow Rate (gpm): 700.00, Strokes Per Minute: 240, Toolface: 225, Toolface Type: magnetic
Rotary Drill	1	01-17	19:25	19:45	01-17	5537.00	5607.00	Pressure On (psi): 2650.00, Pressure Off (psi): 1900.00, Weight On Bit (klbs): 40.00, Surface RPM: 40, Surface Torque (ft lbf): 13750.00, Flow Rate (gpm): 696.00, Strokes Per Minute: 240.00
Survey	46	01-17	19:45	19:50	01-17	5607.00	5607.00	Inclination (°): 4.880, Azimuth (°): 235.650, TVD (ft): 5536.77, Dogleg (°/100 ft): 2.92, Sensor Depth (ft): 5538.00, Bit To Sensor (ft): 69.00
Rotary Drill	1	01-17	19:50	20:10	01-17	5607.00	5697.00	Pressure On (psi): 2650.00, Pressure Off (psi): 1900.00, Weight On Bit (klbs): 40.00, Surface RPM: 40, Surface Torque (ft lbf): 13750.00, Flow Rate (gpm): 696.00, Strokes Per Minute: 240.00
Survey	46	01-17	20:10	20:15	01-17	5697.00	5697.00	Inclination (°): 5.360, Azimuth (°): 234.860, TVD (ft): 5626.41, Dogleg (°/100 ft): 0.54, Sensor Depth (ft): 5628.00, Bit To Sensor (ft): 69.00
Rotary Drill	1	01-17	20:15	20:30	01-17	5697.00	5786.00	Pressure On (psi): 2650.00, Pressure Off (psi): 1900.00, Weight On Bit (klbs): 40.00, Surface RPM: 40, Surface Torque (ft lbf): 13750.00, Flow Rate (gpm): 696.00, Strokes Per Minute: 240.00
Survey	46	01-17	20:30	20:35	01-17	5786.00	5786.00	Inclination (°): 5.410, Azimuth (°): 237.500, TVD (ft): 5715.02, Dogleg (°/100 ft): 0.28, Sensor Depth (ft): 5717.00, Bit To Sensor (ft): 69.00
Slide Drill	2	01-17	20:35	20:40	01-17	5786.00	5797.00	Pressure On (psi): 2200.00, Pressure Off (psi): 1700.00, Weight On Bit (klbs): 25.00, Flow Rate (gpm): 700.00, Strokes Per Minute: 240, Toolface: 97, Toolface Type: magnetic

Rotary Drill	1	01-17	20:40	21:05	01-17	5797.00	5876.00	Pressure On (psi): 2650.00, Pressure Off (psi): 1900.00, Weight On Bit (klbs): 40.00, Surface RPM: 40, Surface Torque (ft lbf): 13750.00, Flow Rate (gpm): 696.00, Strokes Per Minute: 240.00
Survey	46	01-17	21:05	21:10	01-17	5876.00	5876.00	Inclination (°): 4.790, Azimuth (°): 227.390, TVD (ft): 5804.67, Dogleg (°/100 ft): 1.21, Sensor Depth (ft): 5807.00, Bit To Sensor (ft): 69.00
Rotary Drill	1	01-17	21:10	21:30	01-17	5876.00	5965.00	Pressure On (psi): 2650.00, Pressure Off (psi): 1900.00, Weight On Bit (klbs): 40.00, Surface RPM: 40, Surface Torque (ft lbf): 13750.00, Flow Rate (gpm): 696.00, Strokes Per Minute: 240.00
Survey	46	01-17	21:30	21:35	01-17	5965.00	5965.00	Inclination (°): 4.660, Azimuth (°): 226.420, TVD (ft): 5893.36, Dogleg (°/100 ft): 0.17, Sensor Depth (ft): 5896.00, Bit To Sensor (ft): 69.00
Rotary Drill	1	01-17	21:35	21:45	01-17	5965.00	6055.00	Pressure On (psi): 2650.00, Pressure Off (psi): 1900.00, Weight On Bit (klbs): 40.00, Surface RPM: 40, Surface Torque (ft lbf): 13750.00, Flow Rate (gpm): 696.00, Strokes Per Minute: 240.00
Survey	46	01-17	21:45	21:50	01-17	6055.00	6055.00	Inclination (°): 4.750, Azimuth (°): 226.510, TVD (ft): 5983.06, Dogleg (°/100 ft): 0.10, Sensor Depth (ft): 5986.00, Bit To Sensor (ft): 69.00
Rotary Drill	1	01-17	21:50	22:00	01-17	6055.00	6145.00	Pressure On (psi): 2650.00, Pressure Off (psi): 1900.00, Weight On Bit (klbs): 40.00, Surface RPM: 40, Surface Torque (ft lbf): 13750.00, Flow Rate (gpm): 696.00, Strokes Per Minute: 240.00
Survey	46	01-17	22:00	22:05	01-17	6145.00	6145.00	Inclination (°): 4.620, Azimuth (°): 223.790, TVD (ft): 6072.76, Dogleg (°/100 ft): 0.29, Sensor Depth (ft): 6076.00, Bit To Sensor (ft): 69.00
Rotary Drill	1	01-17	22:05	22:15	01-17	6145.00	6234.00	Pressure On (psi): 2650.00, Pressure Off (psi): 1900.00, Weight On Bit (klbs): 40.00, Surface RPM: 40, Surface Torque (ft lbf): 13750.00, Flow Rate (gpm): 696.00, Strokes Per Minute: 240.00
Survey	46	01-17	22:15	22:20	01-17	6234.00	6234.00	Inclination (°): 4.660, Azimuth (°): 222.290, TVD (ft): 6161.47, Dogleg (°/100 ft): 0.14, Sensor Depth (ft): 6165.00, Bit To Sensor (ft): 69.00
Slide Drill	2	01-17	22:20	22:25	01-17	6234.00	6244.00	Pressure On (psi): 2200.00, Pressure Off (psi): 1700.00, Weight On Bit (klbs): 25.00, Flow Rate (gpm): 700.00, Strokes Per Minute: 240, Toolface: 312, Toolface Type: magnetic
Rotary Drill	1	01-17	22:25	22:50	01-17	6244.00	6324.00	Pressure On (psi): 2650.00, Pressure Off (psi): 1900.00, Weight On Bit (klbs): 40.00, Surface RPM: 40, Surface Torque (ft lbf): 13750.00, Flow Rate (gpm): 696.00, Strokes Per Minute: 240.00
Survey	46	01-17	22:50	22:55	01-17	6324.00	6324.00	Inclination (°): 4.180, Azimuth (°): 237.500, TVD (ft): 6251.20, Dogleg (°/100 ft): 1.40, Sensor Depth (ft): 6255.00, Bit To Sensor (ft): 69.00
Rotary Drill	1	01-17	22:55	23:05	01-17	6324.00	6413.00	Pressure On (psi): 2650.00, Pressure Off (psi): 1900.00, Weight On Bit (klbs): 40.00, Surface RPM: 40, Surface Torque (ft lbf): 13750.00, Flow Rate (gpm): 696.00, Strokes Per Minute: 240.00
Survey	46	01-17	23:05	23:10	01-17	6413.00	6413.00	Inclination (°): 4.400, Azimuth (°): 240.660, TVD (ft): 6339.95, Dogleg (°/100 ft): 0.36, Sensor Depth (ft): 6344.00, Bit To Sensor (ft): 69.00
Rotary Drill	1	01-17	23:10	23:25	01-17	6413.00	6502.00	Pressure On (psi): 2650.00, Pressure Off (psi): 1900.00, Weight On Bit (klbs): 40.00, Surface RPM: 40, Surface Torque (ft lbf): 13750.00, Flow Rate (gpm): 696.00, Strokes Per Minute: 240.00
Survey	46	01-17	23:25	23:30	01-17	6502.00	6502.00	Inclination (°): 4.220, Azimuth (°): 241.190, TVD (ft): 6428.70, Dogleg (°/100 ft): 0.21, Sensor Depth (ft): 6433.00, Bit To Sensor (ft): 69.00
Slide Drill	2	01-17	23:30	23:35	01-17	6502.00	6512.00	Pressure On (psi): 2200.00, Pressure Off (psi): 1700.00, Weight On Bit (klbs): 25.00, Flow Rate (gpm): 700.00, Strokes Per Minute: 240, Toolface: 160, Toolface Type: magnetic
Rotary Drill	1	01-17	23:35	23:50	01-17	6512.00	6592.00	Pressure On (psi): 2650.00, Pressure Off (psi): 1900.00, Weight On Bit (klbs): 40.00, Surface RPM: 40, Surface Torque (ft lbf): 13750.00, Flow Rate (gpm): 696.00, Strokes Per Minute: 240.00
Survey	46	01-17	23:50	23:55	01-17	6592.00	6592.00	Inclination (°): 5.010, Azimuth (°): 228.790, TVD (ft): 6518.41, Dogleg (°/100 ft): 1.41, Sensor Depth (ft): 6523.00, Bit To Sensor (ft): 69.00
Rotary Drill	1	01-17	23:55	00:05	01-18	6592.00	6682.00	Pressure On (psi): 2650.00, Pressure Off (psi): 1900.00, Weight On Bit (klbs): 40.00, Surface RPM: 40, Surface Torque (ft lbf): 13750.00, Flow Rate (gpm): 696.00, Strokes Per Minute: 240.00

MWD Activities

No Activities



Job Number WT-21-183	Operator Advance Energy Partners	Rig Name Nabors X50
Start Date 2021-11-24	Well Name Anderson Fed Com 551H	Legal Well Name AFE Anderson Fed Com 551H
Play Delaware Basin	State/Province and Country New Mexico, US	County Lea
Company Man		

Tuesday, Jan 18 00:00 - 23:59 (Day 5 of 16)

Billing: \$8,855.25 (\$226,970.50 total)

Drilling Summary				Drilling Parameters	
Start Depth (ft)	6592.00	Downhole Hours	24.00	Rotating WOB (klbs)	40.00 - 45.00
Bit Depth (ft)	9646.00	Drilling Hours	16.17	Sliding WOB (klbs)	28.00 - 30.00
Bottom Hole Depth (ft)	9646.00	Hours Circulating	0.17	Rotating SPM	240.00 - 240.00
Total Distance (ft)	3054.00	Hours Sliding	3.58	Sliding SPM	240.00 - 240.00
Distance Rotated (ft)	2950.00	Hours Rotating	12.58	Motor RPM	40.00 - 220.00
Distance Slid (ft)	104.00			Surface RPM	40.00 - 40.00
Inclination In	4.84			Flow Rate (gpm)	696.00 - 698.00
Inclination Out	4.13			On Bottom Pressure (psi)	2350.00 - 2800.00
Azimuth In	225.54	% Hours Rotating	78%	Off Bottom Pressure (psi)	1900.00 - 2100.00
Azimuth Out	227.39	% Hours Sliding	22%		
AVG Total ROP (ft/h)	188.91	% Distance Sliding	3%		
AVG Rotating ROP (ft/h)	234.44	% Distance Rotating	97%		
AVG Sliding ROP (ft/h)	29.02				

Personnel

Name	Position
Advance Directional	Directional Driller
Robert Olivarez	MWD Engineer
Francisco DeLeon	MWD Engineer

BHA #3 - 8.75" INTERMEDIATE

Date In: Jan 17, 2022, 11:15 Date Out: Jan 19, 2022, 0:00

Bit Details		Motor Details		Directional Comments
OD (in)	8.750	Size (in)	7.0	FLOW RANGE: 500-750 GPM, REV PER GALLON .26, MAX DIFF: 1910, MAX TORQUE : 18,710 BIT RUNS: 0 , Bit to Bend: 5.30
Vendor	Reed	Lobe/Stage	7/8, 8.5	
S/N	A283351	Bend Angle	1.75	
Nozzles	6 x15's	Speed (rev/gal)	0.26	MWD Comments
Total Flow Area (in²)	1.035	Wear Pad OD (in)	7.375	
Drilling Hours for Day	16.17	Bit Distances		
Total Drilled for Day (ft)	3054.00	Survey: 69.00 ft, Gamma (Bit To Gamma):	53.00 ft	POOH Reason Downhole Motor Incident: Motor Dropped Pressure And Stopped Drilling
Drilling Hours for BHA	21.92			
Total Drilled for BHA (ft)	4826.00			

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</i> , Type: <i>PDC (Polycrystalline Diamond Compacts)</i> , Gauge Length (in): <i>4.00</i> , Size (in): <i>8.75</i>	Reed	A283351	4 1/2" Reg Pin			8.750		1.00	1.00
Mud Motor Description: <i>7" 7/8 8.5 Stg. 1.75° FBH w/8.5" NBS</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>8.5</i>	Aim	700-40-005	4 1/2" IF Box	4 1/2" Reg Box		7.000		37.46	38.46
Stabilizer Description: <i>8.5" STAB</i>	JA	JAO85812	4 1/2" IF Box	4 1/2" IF Pin	2.563	6.750		6.37	44.83
UBHO Sub Description: <i>NM DAO SUB</i> , Material: <i>Non-Magnetic</i>	AIM	AIM675-364	4 1/2" IF Box	4 1/2" IF Pin	3.250	6.750		3.04	47.87
Drill Collar Description: <i>NMDC (MWD TOOL)</i> , Material: <i>Non-Magnetic</i> , Type: <i>Slick Drill</i>	GATOR	67-30-296	4 1/2" IF Box	4 1/2" IF Pin	3.250	6.750		30.65	78.52
Drill Collar Description: <i>NMDC</i> , Material: <i>Non-Magnetic</i> , Type: <i>Slick Drill</i>	GATOR	67-30-193	4 1/2" IF Box	4 1/2" IF Pin	3.250	6.750		29.44	107.96
Crossover Sub Description: <i>X-O SUB</i> , Material: <i>Steel</i>	Platinum	PPR5372	CET54 Box	4 1/2" IF Pin	2.750	6.250		2.38	110.34
HWDP Description: <i>8 Stands 5.5" HWDP</i> , Type: <i>Slick</i>	Platinum		CET54 Box	CET54 Pin	4.000	5.500		735.63	845.97
Crossover Sub Description: <i>CET54 (P) x EverDrlg 54 (B)</i> , Material: <i>Steel</i>	BLACK DIAMOND	BD18238	EverDrlg54 Box	CET54 Pin	4.000	6.938		3.42	849.39
HWDP Description: <i>3 Stands 5.5" HWDP</i> , Type: <i>Slick</i>	BLACK DIAMOND		EverDrlg54 Box	EverDrlg54 Pin	3.625	5.500		281.18	1130.57

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	01-17	23:55	00:05	01-18	6592.00	6682.00	Pressure On (psi): 2650.00, Pressure Off (psi): 1900.00, Weight On Bit (klbs): 40.00, Surface RPM: 40, Surface Torque (ft lbf): 13750.00, Flow Rate (gpm): 696.00, Strokes Per Minute: 240.00
Survey	46	01-18	00:05	00:10	01-18	6682.00	6682.00	Inclination (°): 4.840, Azimuth (°): 225.540, TVD (ft): 6608.08, Dogleg (%/100 ft): 0.36, Sensor Depth (ft): 6613.00, Bit To Sensor (ft): 69.00
Rotary Drill	1	01-18	00:10	00:20	01-18	6682.00	6771.00	Pressure On (psi): 2650.00, Pressure Off (psi): 1900.00, Weight On Bit (klbs): 40.00, Surface RPM: 40, Surface Torque (ft lbf): 13750.00, Flow Rate (gpm): 696.00, Strokes Per Minute: 240.00
Survey	46	01-18	00:20	00:25	01-18	6771.00	6771.00	Inclination (°): 4.400, Azimuth (°): 223.520, TVD (ft): 6696.79, Dogleg (%/100 ft): 0.53, Sensor Depth (ft): 6702.00, Bit To Sensor (ft): 69.00
Rotary Drill	1	01-18	00:25	00:30	01-18	6771.00	6860.00	Pressure On (psi): 2650.00, Pressure Off (psi): 1900.00, Weight On Bit (klbs): 40.00, Surface RPM: 40, Surface Torque (ft lbf): 13750.00, Flow Rate (gpm): 696.00, Strokes Per Minute: 240.00
Survey	46	01-18	00:30	00:35	01-18	6860.00	6860.00	Inclination (°): 4.570, Azimuth (°): 223.260, TVD (ft): 6785.52, Dogleg (%/100 ft): 0.19, Sensor Depth (ft): 6791.00, Bit To Sensor (ft): 69.00
Rotary Drill	1	01-18	00:35	00:45	01-18	6860.00	6950.00	Pressure On (psi): 2650.00, Pressure Off (psi): 1900.00, Weight On Bit (klbs): 40.00, Surface RPM: 40, Surface Torque (ft lbf): 13750.00, Flow Rate (gpm): 696.00, Strokes Per Minute: 240.00
Survey	46	01-18	00:45	00:50	01-18	6950.00	6950.00	Inclination (°): 4.840, Azimuth (°): 226.160, TVD (ft): 6875.21, Dogleg (%/100 ft): 0.40, Sensor Depth (ft): 6881.00, Bit To Sensor (ft): 69.00
Rotary Drill	1	01-18	00:50	01:00	01-18	6950.00	7039.00	Pressure On (psi): 2650.00, Pressure Off (psi): 1900.00, Weight On Bit (klbs): 40.00, Surface RPM: 40, Surface Torque (ft lbf): 13750.00, Flow Rate (gpm): 696.00, Strokes Per Minute: 240.00
Survey	46	01-18	01:00	01:05	01-18	7039.00	7039.00	Inclination (°): 4.620, Azimuth (°): 224.490, TVD (ft): 6963.91, Dogleg (%/100 ft): 0.29, Sensor Depth (ft): 6970.00, Bit To Sensor (ft): 69.00
Rotary Drill	1	01-18	01:05	01:20	01-18	7039.00	7129.00	Pressure On (psi): 2650.00, Pressure Off (psi): 1900.00, Weight On Bit (klbs): 40.00, Surface RPM: 40, Surface Torque (ft lbf): 13750.00, Flow Rate (gpm): 696.00, Strokes Per Minute: 240.00
Survey	46	01-18	01:20	01:25	01-18	7129.00	7129.00	Inclination (°): 4.700, Azimuth (°): 222.120, TVD (ft): 7053.61, Dogleg (%/100 ft): 0.23, Sensor Depth (ft): 7060.00, Bit To Sensor (ft): 69.00
Rotary Drill	1	01-18	01:25	01:35	01-18	7129.00	7219.00	Pressure On (psi): 2650.00, Pressure Off (psi): 1900.00, Weight On Bit (klbs): 40.00, Surface RPM: 40, Surface Torque (ft lbf): 13750.00, Flow Rate (gpm): 696.00, Strokes Per Minute: 240.00
Survey	46	01-18	01:35	01:40	01-18	7219.00	7219.00	Inclination (°): 4.620, Azimuth (°): 222.200, TVD (ft): 7143.32, Dogleg (%/100 ft): 0.09, Sensor Depth (ft): 7150.00, Bit To Sensor (ft): 69.00
Rotary Drill	1	01-18	01:40	01:50	01-18	7219.00	7308.00	Pressure On (psi): 2650.00, Pressure Off (psi): 1900.00, Weight On Bit (klbs): 40.00, Surface RPM: 40, Surface Torque (ft lbf): 13750.00, Flow Rate (gpm): 696.00, Strokes Per Minute: 240.00
Survey	46	01-18	01:50	01:55	01-18	7308.00	7308.00	Inclination (°): 4.400, Azimuth (°): 222.290, TVD (ft): 7232.04, Dogleg (%/100 ft): 0.25, Sensor Depth (ft): 7239.00, Bit To Sensor (ft): 69.00
Rotary Drill	1	01-18	01:55	02:25	01-18	7308.00	7398.00	Pressure On (psi): 2650.00, Pressure Off (psi): 1900.00, Weight On Bit (klbs): 40.00, Surface RPM: 40, Surface Torque (ft lbf): 13750.00, Flow Rate (gpm): 696.00, Strokes Per Minute: 240.00
Survey	46	01-18	02:25	02:30	01-18	7398.00	7398.00	Inclination (°): 4.350, Azimuth (°): 221.760, TVD (ft): 7321.78, Dogleg (%/100 ft): 0.07, Sensor Depth (ft): 7329.00, Bit To Sensor (ft): 69.00
Rotary Drill	1	01-18	02:30	02:45	01-18	7398.00	7488.00	Pressure On (psi): 2650.00, Pressure Off (psi): 1900.00, Weight On Bit (klbs): 40.00, Surface RPM: 40, Surface Torque (ft lbf): 13750.00, Flow Rate (gpm): 696.00, Strokes Per Minute: 240.00
Survey	46	01-18	02:45	02:50	01-18	7488.00	7488.00	Inclination (°): 4.400, Azimuth (°): 222.470, TVD (ft): 7411.52, Dogleg (%/100 ft): 0.08, Sensor Depth (ft): 7419.00, Bit To Sensor (ft): 69.00
Rotary Drill	1	01-18	02:50	03:10	01-18	7488.00	7577.00	Pressure On (psi): 2650.00, Pressure Off (psi): 1900.00, Weight On Bit (klbs): 40.00, Surface RPM: 40, Surface Torque (ft lbf): 13750.00, Flow Rate (gpm): 696.00, Strokes Per Minute: 240.00
Survey	46	01-18	03:10	03:15	01-18	7577.00	7577.00	Inclination (°): 4.400, Azimuth (°): 221.760, TVD (ft): 7500.25, Dogleg (%/100 ft): 0.06, Sensor Depth (ft): 7508.00, Bit To Sensor (ft): 69.00
Rotary Drill	1	01-18	03:15	03:35	01-18	7577.00	7666.00	Pressure On (psi): 2650.00, Pressure Off (psi): 1900.00, Weight On Bit (klbs): 40.00, Surface RPM: 40, Surface Torque (ft lbf): 13750.00, Flow Rate (gpm): 696.00, Strokes Per Minute: 240.00
Survey	46	01-18	03:35	03:40	01-18	7666.00	7666.00	Inclination (°): 4.180, Azimuth (°): 224.140, TVD (ft): 7589.00, Dogleg (%/100 ft): 0.32, Sensor Depth (ft): 7597.00, Bit To Sensor (ft): 69.00

Rotary Drill	1	01-18	03:40	03:55	01-18	7666.00	7756.00	Pressure On (psi): 2650.00, Pressure Off (psi): 1900.00, Weight On Bit (klbs): 40.00, Surface RPM: 40, Surface Torque (ft lbf): 13750.00, Flow Rate (gpm): 696.00, Strokes Per Minute: 240.00
Survey	46	01-18	03:55	04:00	01-18	7756.00	7756.00	Inclination (°): 4.040, Azimuth (°): 225.980, TVD (ft): 7678.77, Dogleg (%/100 ft): 0.21, Sensor Depth (ft): 7687.00, Bit To Sensor (ft): 69.00
Rotary Drill	1	01-18	04:00	04:20	01-18	7756.00	7846.00	Pressure On (psi): 2650.00, Pressure Off (psi): 1900.00, Weight On Bit (klbs): 40.00, Surface RPM: 40, Surface Torque (ft lbf): 13750.00, Flow Rate (gpm): 696.00, Strokes Per Minute: 240.00
Survey	46	01-18	04:20	04:25	01-18	7846.00	7846.00	Inclination (°): 3.690, Azimuth (°): 226.250, TVD (ft): 7768.57, Dogleg (%/100 ft): 0.39, Sensor Depth (ft): 7777.00, Bit To Sensor (ft): 69.00
Rotary Drill	1	01-18	04:25	04:40	01-18	7846.00	7936.00	Pressure On (psi): 2650.00, Pressure Off (psi): 1900.00, Weight On Bit (klbs): 40.00, Surface RPM: 40, Surface Torque (ft lbf): 13750.00, Flow Rate (gpm): 696.00, Strokes Per Minute: 240.00
Survey	46	01-18	04:40	04:45	01-18	7936.00	7936.00	Inclination (°): 3.430, Azimuth (°): 229.150, TVD (ft): 7858.39, Dogleg (%/100 ft): 0.35, Sensor Depth (ft): 7867.00, Bit To Sensor (ft): 69.00
Slide Drill	2	01-18	04:45	04:55	01-18	7936.00	7944.00	Pressure On (psi): 2350.00, Pressure Off (psi): 2000.00, Weight On Bit (klbs): 28.00, Flow Rate (gpm): 698.00, Strokes Per Minute: 240, Toolface: 230, Toolface Type: magnetic
Rotary Drill	1	01-18	04:55	05:30	01-18	7944.00	8025.00	Pressure On (psi): 2800.00, Pressure Off (psi): 2100.00, Weight On Bit (klbs): 40.00, Surface RPM: 40, Surface Torque (ft lbf): 16500.00, Flow Rate (gpm): 696.00, Strokes Per Minute: 240.00
Survey	46	01-18	05:30	05:35	01-18	8025.00	8025.00	Inclination (°): 3.780, Azimuth (°): 219.830, TVD (ft): 7947.22, Dogleg (%/100 ft): 0.77, Sensor Depth (ft): 7956.00, Bit To Sensor (ft): 69.00
Rotary Drill	1	01-18	05:35	06:00	01-18	8025.00	8115.00	Pressure On (psi): 2800.00, Pressure Off (psi): 2100.00, Weight On Bit (klbs): 40.00, Surface RPM: 40, Surface Torque (ft lbf): 16500.00, Flow Rate (gpm): 696.00, Strokes Per Minute: 240.00
Survey	46	01-18	06:00	06:05	01-18	8115.00	8115.00	Inclination (°): 3.820, Azimuth (°): 222.640, TVD (ft): 8037.02, Dogleg (%/100 ft): 0.21, Sensor Depth (ft): 8046.00, Bit To Sensor (ft): 69.00
Rotary Drill	1	01-18	06:05	06:25	01-18	8115.00	8205.00	Pressure On (psi): 2800.00, Pressure Off (psi): 2100.00, Weight On Bit (klbs): 40.00, Surface RPM: 40, Surface Torque (ft lbf): 16500.00, Flow Rate (gpm): 696.00, Strokes Per Minute: 240.00
Survey	46	01-18	06:25	06:30	01-18	8205.00	8205.00	Inclination (°): 3.690, Azimuth (°): 219.820, TVD (ft): 8126.83, Dogleg (%/100 ft): 0.25, Sensor Depth (ft): 8136.00, Bit To Sensor (ft): 69.00
Rotary Drill	1	01-18	06:30	06:50	01-18	8205.00	8294.00	Pressure On (psi): 2800.00, Pressure Off (psi): 2100.00, Weight On Bit (klbs): 40.00, Surface RPM: 40, Surface Torque (ft lbf): 16500.00, Flow Rate (gpm): 696.00, Strokes Per Minute: 240.00
Survey	46	01-18	06:50	06:55	01-18	8294.00	8294.00	Inclination (°): 3.650, Azimuth (°): 216.400, TVD (ft): 8215.65, Dogleg (%/100 ft): 0.25, Sensor Depth (ft): 8225.00, Bit To Sensor (ft): 69.00
Rotary Drill	1	01-18	06:55	07:15	01-18	8294.00	8383.00	Pressure On (psi): 2800.00, Pressure Off (psi): 2100.00, Weight On Bit (klbs): 40.00, Surface RPM: 40, Surface Torque (ft lbf): 16500.00, Flow Rate (gpm): 696.00, Strokes Per Minute: 240.00
Survey	46	01-18	07:15	07:20	01-18	8383.00	8383.00	Inclination (°): 3.650, Azimuth (°): 215.260, TVD (ft): 8304.46, Dogleg (%/100 ft): 0.08, Sensor Depth (ft): 8314.00, Bit To Sensor (ft): 69.00
Slide Drill	2	01-18	07:20	08:00	01-18	8383.00	8397.00	Pressure On (psi): 2350.00, Pressure Off (psi): 2000.00, Weight On Bit (klbs): 28.00, Flow Rate (gpm): 698.00, Strokes Per Minute: 240, Toolface: 235, Toolface Type: magnetic
Rotary Drill	1	01-18	08:00	08:25	01-18	8397.00	8473.00	Pressure On (psi): 2800.00, Pressure Off (psi): 2100.00, Weight On Bit (klbs): 40.00, Surface RPM: 40, Surface Torque (ft lbf): 16500.00, Flow Rate (gpm): 696.00, Strokes Per Minute: 240.00
Survey	46	01-18	08:25	08:30	01-18	8473.00	8473.00	Inclination (°): 4.750, Azimuth (°): 220.090, TVD (ft): 8394.22, Dogleg (%/100 ft): 1.28, Sensor Depth (ft): 8404.00, Bit To Sensor (ft): 69.00
Rotary Drill	1	01-18	08:30	08:35	01-18	8473.00	8480.00	Pressure On (psi): 2800.00, Pressure Off (psi): 2100.00, Weight On Bit (klbs): 40.00, Surface RPM: 40, Surface Torque (ft lbf): 16500.00, Flow Rate (gpm): 696.00, Strokes Per Minute: 240.00
Slide Drill	2	01-18	08:35	08:50	01-18	8480.00	8495.00	Pressure On (psi): 2350.00, Pressure Off (psi): 2000.00, Weight On Bit (klbs): 28.00, Flow Rate (gpm): 698.00, Strokes Per Minute: 240, Toolface: 290, Toolface Type: magnetic
Rotary Drill	1	01-18	08:50	09:15	01-18	8495.00	8562.00	Pressure On (psi): 2800.00, Pressure Off (psi): 2100.00, Weight On Bit (klbs): 40.00, Surface RPM: 40, Surface Torque (ft lbf): 16500.00, Flow Rate (gpm): 696.00, Strokes Per Minute: 240.00
Survey	46	01-18	09:15	09:20	01-18	8562.00	8562.00	Inclination (°): 5.100, Azimuth (°): 234.420, TVD (ft): 8482.90, Dogleg (%/100 ft): 1.43, Sensor Depth (ft): 8493.00, Bit To Sensor (ft): 69.00
Rotary Drill	1	01-18	09:20	09:50	01-18	8562.00	8652.00	Pressure On (psi): 2800.00, Pressure Off (psi): 2100.00, Weight On Bit (klbs): 40.00, Surface RPM: 40, Surface Torque (ft lbf): 16500.00, Flow Rate (gpm): 696.00, Strokes Per Minute: 240.00

Survey	46	01-18	09:50	09:55	01-18	8652.00	8652.00	Inclination (°): 5.230, Azimuth (°): 236.270, TVD (ft): 8572.53, Dogleg (%/100 ft): 0.23, Sensor Depth (ft): 8583.00, Bit To Sensor (ft): 69.00
Rotary Drill	1	01-18	09:55	10:10	01-18	8652.00	8741.00	Pressure On (psi): 2800.00, Pressure Off (psi): 2100.00, Weight On Bit (klbs): 40.00, Surface RPM: 40, Surface Torque (ft lbf): 16500.00, Flow Rate (gpm): 696.00, Strokes Per Minute: 240.00
Survey	46	01-18	10:10	10:15	01-18	8741.00	8741.00	Inclination (°): 4.840, Azimuth (°): 238.730, TVD (ft): 8661.19, Dogleg (%/100 ft): 0.50, Sensor Depth (ft): 8672.00, Bit To Sensor (ft): 69.00
Rotary Drill	1	01-18	10:15	10:55	01-18	8741.00	8831.00	Pressure On (psi): 2800.00, Pressure Off (psi): 2100.00, Weight On Bit (klbs): 40.00, Surface RPM: 40, Surface Torque (ft lbf): 16500.00, Flow Rate (gpm): 696.00, Strokes Per Minute: 240.00
Survey	46	01-18	10:55	11:00	01-18	8831.00	8831.00	Inclination (°): 4.310, Azimuth (°): 236.090, TVD (ft): 8750.90, Dogleg (%/100 ft): 0.63, Sensor Depth (ft): 8762.00, Bit To Sensor (ft): 69.00
Rotary Drill	1	01-18	11:00	11:30	01-18	8831.00	8920.00	Pressure On (psi): 2800.00, Pressure Off (psi): 2100.00, Weight On Bit (klbs): 45.00, Surface RPM: 40, Surface Torque (ft lbf): 16500.00, Flow Rate (gpm): 696.00, Strokes Per Minute: 240.00
Survey	46	01-18	11:30	11:35	01-18	8920.00	8920.00	Inclination (°): 3.780, Azimuth (°): 234.770, TVD (ft): 8839.68, Dogleg (%/100 ft): 0.60, Sensor Depth (ft): 8851.00, Bit To Sensor (ft): 69.00
Rotary Drill	1	01-18	11:35	12:05	01-18	8920.00	9010.00	Pressure On (psi): 2800.00, Pressure Off (psi): 2100.00, Weight On Bit (klbs): 45.00, Surface RPM: 40, Surface Torque (ft lbf): 16500.00, Flow Rate (gpm): 696.00, Strokes Per Minute: 240.00
Survey	46	01-18	12:05	12:10	01-18	9010.00	9010.00	Inclination (°): 3.250, Azimuth (°): 222.820, TVD (ft): 8929.51, Dogleg (%/100 ft): 1.00, Sensor Depth (ft): 8941.00, Bit To Sensor (ft): 69.00
Rotary Drill	1	01-18	12:10	12:15	01-18	9010.00	9020.00	Pressure On (psi): 2800.00, Pressure Off (psi): 2100.00, Weight On Bit (klbs): 45.00, Surface RPM: 40, Surface Torque (ft lbf): 16500.00, Flow Rate (gpm): 696.00, Strokes Per Minute: 240.00
Slide Drill	2	01-18	12:15	12:50	01-18	9020.00	9042.00	Pressure On (psi): 2350.00, Pressure Off (psi): 2000.00, Weight On Bit (klbs): 30.00, Flow Rate (gpm): 698.00, Strokes Per Minute: 240, Toolface: 260, Toolface Type: magnetic
Rotary Drill	1	01-18	12:50	13:20	01-18	9042.00	9100.00	Pressure On (psi): 2800.00, Pressure Off (psi): 2100.00, Weight On Bit (klbs): 45.00, Surface RPM: 40, Surface Torque (ft lbf): 16500.00, Flow Rate (gpm): 696.00, Strokes Per Minute: 240.00
Survey	46	01-18	13:20	13:25	01-18	9100.00	9100.00	Inclination (°): 4.000, Azimuth (°): 225.100, TVD (ft): 9019.33, Dogleg (%/100 ft): 0.85, Sensor Depth (ft): 9031.00, Bit To Sensor (ft): 69.00
Rotary Drill	1	01-18	13:25	14:00	01-18	9100.00	9189.00	Pressure On (psi): 2800.00, Pressure Off (psi): 2100.00, Weight On Bit (klbs): 45.00, Surface RPM: 40, Surface Torque (ft lbf): 16500.00, Flow Rate (gpm): 696.00, Strokes Per Minute: 240.00
Survey	46	01-18	14:00	14:05	01-18	9189.00	9189.00	Inclination (°): 3.560, Azimuth (°): 215.960, TVD (ft): 9108.14, Dogleg (%/100 ft): 0.84, Sensor Depth (ft): 9120.00, Bit To Sensor (ft): 69.00
Rotary Drill	1	01-18	14:05	14:10	01-18	9189.00	9195.00	Pressure On (psi): 2800.00, Pressure Off (psi): 2100.00, Weight On Bit (klbs): 45.00, Surface RPM: 40, Surface Torque (ft lbf): 16500.00, Flow Rate (gpm): 696.00, Strokes Per Minute: 240.00
Slide Drill	2	01-18	14:10	15:10	01-18	9195.00	9220.00	Pressure On (psi): 2350.00, Pressure Off (psi): 2000.00, Weight On Bit (klbs): 30.00, Flow Rate (gpm): 698.00, Strokes Per Minute: 240, Toolface: 280, Toolface Type: magnetic
Rotary Drill	1	01-18	15:10	15:35	01-18	9220.00	9279.00	Pressure On (psi): 2800.00, Pressure Off (psi): 2100.00, Weight On Bit (klbs): 45.00, Surface RPM: 40, Surface Torque (ft lbf): 16500.00, Flow Rate (gpm): 696.00, Strokes Per Minute: 240.00
Survey	46	01-18	15:35	15:40	01-18	9279.00	9279.00	Inclination (°): 3.520, Azimuth (°): 225.980, TVD (ft): 9197.97, Dogleg (%/100 ft): 0.69, Sensor Depth (ft): 9210.00, Bit To Sensor (ft): 69.00
Rotary Drill	1	01-18	15:40	15:45	01-18	9279.00	9286.00	Pressure On (psi): 2800.00, Pressure Off (psi): 2100.00, Weight On Bit (klbs): 45.00, Surface RPM: 40, Surface Torque (ft lbf): 16500.00, Flow Rate (gpm): 696.00, Strokes Per Minute: 240.00
Slide Drill	2	01-18	15:45	16:40	01-18	9286.00	9306.00	Pressure On (psi): 2350.00, Pressure Off (psi): 2000.00, Weight On Bit (klbs): 30.00, Flow Rate (gpm): 698.00, Strokes Per Minute: 240, Toolface: 260, Toolface Type: magnetic
Rotary Drill	1	01-18	16:40	17:10	01-18	9306.00	9369.00	Pressure On (psi): 2800.00, Pressure Off (psi): 2100.00, Weight On Bit (klbs): 45.00, Surface RPM: 40, Surface Torque (ft lbf): 16500.00, Flow Rate (gpm): 696.00, Strokes Per Minute: 240.00
Rig Service - In Hole	19	01-18	17:10	17:25	01-18			Rig Service
Survey	46	01-18	17:25	17:30	01-18	9369.00	9369.00	Inclination (°): 4.970, Azimuth (°): 249.710, TVD (ft): 9287.72, Dogleg (%/100 ft): 2.50, Sensor Depth (ft): 9300.00, Bit To Sensor (ft): 69.00
Rotary Drill	1	01-18	17:30	18:00	01-18	9369.00	9459.00	Pressure On (psi): 2800.00, Pressure Off (psi): 2100.00, Weight On Bit (klbs): 45.00, Surface RPM: 40, Surface Torque (ft lbf): 16500.00, Flow Rate (gpm): 696.00, Strokes Per Minute: 240.00

Survey	46	01-18	18:00	18:05	01-18	9459.00	9459.00	Inclination (°): 4.790, Azimuth (°): 251.120, TVD (ft): 9377.40, Dogleg (%/100 ft): 0.24, Sensor Depth (ft): 9390.00, Bit To Sensor (ft): 69.00
Rotary Drill	1	01-18	18:05	18:30	01-18	9459.00	9548.00	Pressure On (psi): 2800.00, Pressure Off (psi): 2100.00, Weight On Bit (klbs): 45.00, Surface RPM: 40, Surface Torque (ft lbf): 16500.00, Flow Rate (gpm): 696.00, Strokes Per Minute: 240.00
Survey	46	01-18	18:30	18:35	01-18	9548.00	9548.00	Inclination (°): 4.220, Azimuth (°): 238.290, TVD (ft): 9466.12, Dogleg (%/100 ft): 1.30, Sensor Depth (ft): 9479.00, Bit To Sensor (ft): 69.00
Rotary Drill	1	01-18	18:35	19:00	01-18	9548.00	9638.00	Pressure On (psi): 2800.00, Pressure Off (psi): 2100.00, Weight On Bit (klbs): 45.00, Surface RPM: 40, Surface Torque (ft lbf): 16500.00, Flow Rate (gpm): 696.00, Strokes Per Minute: 240.00
Survey	46	01-18	19:00	19:05	01-18	9638.00	9638.00	Inclination (°): 4.130, Azimuth (°): 227.390, TVD (ft): 9555.89, Dogleg (%/100 ft): 0.89, Sensor Depth (ft): 9569.00, Bit To Sensor (ft): 69.00
Rotary Drill	1	01-18	19:05	19:10	01-18	9638.00	9646.00	Pressure On (psi): 2800.00, Pressure Off (psi): 2100.00, Weight On Bit (klbs): 45.00, Surface RPM: 40, Surface Torque (ft lbf): 16500.00, Flow Rate (gpm): 696.00, Strokes Per Minute: 240.00
Circulating	3	01-18	19:10	19:20	01-18			Circulate And Condition Hole
Pooh	7	01-18	19:20	23:30	01-18			POOH for Motor Issue
Lay Down BHA	65	01-18	23:30	00:00	01-19			L/D Bit, Motor

MWD Activities

No Activities



Job Number WT-21-183	Operator Advance Energy Partners	Rig Name Nabors X50
Start Date 2021-11-24	Well Name Anderson Fed Com 551H	Legal Well Name AFE Anderson Fed Com 551H
Play Delaware Basin	State/Province and Country New Mexico, US	County Lea
		Company Man

Wednesday, Jan 19 00:00 - 23:59 (Day 6 of 16)

Billing: \$20,965.00 (\$226,970.50 total)

Drilling Summary				Drilling Parameters	
Start Depth (ft)	9646.00	Downhole Hours	23.50	Rotating WOB (klbs)	40.00 - 40.00
Bit Depth (ft)	10500.00	Drilling Hours	6.92	Sliding WOB (klbs)	20.00 - 20.00
Bottom Hole Depth (ft)	10500.00	Hours Circulating	0.92	Rotating SPM	243.00 - 243.00
Total Distance (ft)	854.00	Hours Sliding	1.42	Sliding SPM	243.00 - 243.00
Distance Rotated (ft)	784.00	Hours Rotating	5.50	Motor RPM	40.00 - 222.00
Distance Slid (ft)	70.00			Surface RPM	40.00 - 40.00
Inclination In	3.03			Flow Rate (gpm)	700.00 - 700.00
Inclination Out	0.35			On Bottom Pressure (psi)	2900.00 - 3200.00
Azimuth In	217.54	% Hours Rotating	80%	Off Bottom Pressure (psi)	2500.00 - 2500.00
Azimuth Out	204.10	% Hours Sliding	20%		
AVG Total ROP (ft/h)	123.47	% Distance Sliding	8%		
AVG Rotating ROP (ft/h)	142.55	% Distance Rotating	92%		
AVG Sliding ROP (ft/h)	49.41				

Personnel

Name	Position
Advance Directional	Directional Driller
Robert Olivarez	MWD Engineer
Francisco DeLeon	MWD Engineer

BHA #3 - 8.75" INTERMEDIATE

Date In: Jan 17, 2022, 11:15 Date Out: Jan 19, 2022, 0:00

Bit Details		Motor Details		Directional Comments	
OD (in)	8.750	Size (in)	7.0	FLOW RANGE: 500-750 GPM, REV PER GALLON .26, MAX DIFF: 1910, MAX TORQUE : 18,710 BIT RUNS: 0 , Bit to Bend: 5.30	
Vendor	Reed	Lobe/Stage	7/8, 8.5		
S/N	A283351	Bend Angle	1.75		
Nozzles	6 x15's	Speed (rev/gal)	0.26	MWD Comments	
Total Flow Area (in²)	1.035	Wear Pad OD (in)	7.375		
Drilling Hours for Day		Bit Distances		POOH Reason Downhole Motor Incident: Motor Dropped Pressure And Stopped Drilling	
Total Drilled for Day (ft)		Survey: 69.00 ft, Gamma (Bit To Gamma): 53.00 ft			
Drilling Hours for BHA					
Total Drilled for BHA (ft)		4826.00			

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</i> , Type: <i>PDC (Polycrystalline Diamond Compacts)</i> , Gauge Length (in): <i>4.00</i> , Size (in): <i>8.75</i>	Reed	A283351	4 1/2" Reg Pin			8.750		1.00	1.00
Mud Motor Description: <i>7" 7/8 8.5 Stg. 1.75° FBH w/8.5" NBS</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>8.5</i>	Aim	700-40-005	4 1/2" IF Box	4 1/2" Reg Box		7.000		37.46	38.46
Stabilizer Description: <i>8.5" STAB</i>	JA	JAO85812	4 1/2" IF Box	4 1/2" IF Pin	2.563	6.750		6.37	44.83
UBHO Sub Description: <i>NM DAO SUB</i> , Material: <i>Non-Magnetic</i>	AIM	AIM675-364	4 1/2" IF Box	4 1/2" IF Pin	3.250	6.750		3.04	47.87
Drill Collar Description: <i>NMDC (MWD TOOL)</i> , Material: <i>Non-Magnetic</i> , Type: <i>Slick Drill</i>	GATOR	67-30-296	4 1/2" IF Box	4 1/2" IF Pin	3.250	6.750		30.65	78.52
Drill Collar Description: <i>NMDC</i> , Material: <i>Non-Magnetic</i> , Type: <i>Slick Drill</i>	GATOR	67-30-193	4 1/2" IF Box	4 1/2" IF Pin	3.250	6.750		29.44	107.96
Crossover Sub Description: <i>X-O SUB</i> , Material: <i>Steel</i>	Platinum	PPR5372	CET54 Box	4 1/2" IF Pin	2.750	6.250		2.38	110.34
HWDP Description: <i>8 Stands 5.5" HWDP</i> , Type: <i>Slick</i>	Platinum		CET54 Box	CET54 Pin	4.000	5.500		735.63	845.97
Crossover Sub Description: <i>CET54 (P) x EverDrlg 54 (B)</i> , Material: <i>Steel</i>	BLACK DIAMOND	BD18238	EverDrlg54 Box	CET54 Pin	4.000	6.938		3.42	849.39
HWDP Description: <i>3 Stands 5.5" HWDP</i> , Type: <i>Slick</i>	BLACK DIAMOND		EverDrlg54 Box	EverDrlg54 Pin	3.625	5.500		281.18	1130.57

MWD Items

No Items

BHA #4 - 8.75" INTERMEDIATE

Date In: Jan 19, 2022, 0:30 Date Out: Jan 19, 2022, 18:00

Bit Details		Motor Details		Directional Comments	
OD (in)	8.750	Size (in)	7.0	FLOW RANGE: 500-750 GPM, REV PER GALLON .26, MAX DIFF: 1910, MAX TORQUE : 18,710 BIT RUNS: 0 , Bit to Bend: 5.37	
Vendor	ULTERRA	Lobe/Stage	7/8, 8.5		
S/N	55347	Bend Angle	1.75		
Nozzles	9 x12's	Speed (rev/gal)	0.26	MWD Comments	
Total Flow Area (in²)	1.035	Wear Pad OD (in)	7.375	POOH Reason Change Bottom Hole Assembly: POOH for curve assembly	
Drilling Hours for Day	6.92	Bit Distances			
Total Drilled for Day (ft)	854.00	Survey: 69.00 ft, Gamma (Bit To Gamma): 53.00 ft			
Drilling Hours for BHA	6.92				
Total Drilled for BHA (ft)	854.00				

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>SPL616</i> , Type: <i>PDC (Polycrystalline Diamond Compacts)</i> , Gauge Length (in): 4.00, Size (in): 8.75	ULTERRA	55347	4 1/2" Reg Pin			8.750		1.00	1.00
Mud Motor Description: 7" 7/8 8.5 Stg. 1.75° FBH w/8.5" NBS, Size (in): 7.00, Bend Angle (°): 1.75, Rotor Lobe: 7, Stator Lobe: 8, Stator Stage: 8.5	AIM	700-40-035	4 1/2" IF Box	4 1/2" Reg Box		7.000		37.72	38.72
Stabilizer Description: 8.5" STAB	JA	JAO85812	4 1/2" IF Box	4 1/2" IF Pin	2.563	6.750		6.37	45.09
UBHO Sub Description: <i>NM DAO SUB</i> , Material: <i>Non-Magnetic</i>	AIM	AIM675-364	4 1/2" IF Box	4 1/2" IF Pin	3.250	6.750		3.04	48.13
Drill Collar Description: <i>NMDC (MWD TOOL)</i> , Material: <i>Non-Magnetic</i> , Type: <i>Slick Drill</i>	GATOR	67-30-296	4 1/2" IF Box	4 1/2" IF Pin	3.250	6.750		30.65	78.78
Drill Collar Description: <i>NMDC</i> , Material: <i>Non-Magnetic</i> , Type: <i>Slick Drill</i>	GATOR	67-30-193	4 1/2" IF Box	4 1/2" IF Pin	3.250	6.750		29.44	108.22
Crossover Sub Description: <i>X-O SUB</i> , Material: <i>Steel</i>	Platinum	PPR5372	CET54 Box	4 1/2" IF Pin	2.750	6.250		2.38	110.60
HWDP Description: 8 Stands 5.5" HWDP, Type: <i>Slick</i>	Platinum		CET54 Box	CET54 Pin	4.000	5.500		735.63	846.23
Crossover Sub Description: <i>CET54 (P) x EverDrlg 54 (B)</i> , Material: <i>Steel</i>	BLACK DIAMOND	BD18238	EverDrlg54 Box	CET54 Pin	4.000	6.938		3.42	849.65
HWDP Description: 3 Stands 5.5" HWDP, Type: <i>Slick</i>	BLACK DIAMOND		EverDrlg54 Box	EverDrlg54 Pin	3.625	5.500		281.18	1130.83

MWD Items

No Items

BHA #5 - BHA #5 (Curve Assy)

Date In: Jan 19, 2022, 18:00 Date Out: Jan 21, 2022, 1:00

Bit Details		Motor Details		Directional Comments	
OD (in)	8.750	Size (in)	6.75	FLOW RANGE: 300-650 GPM, REV PER GALLON .27, MAX DIFF: 1860, MAX TORQUE : 16,770 BIT RUNS: 0 , Bit to Bend: 3.85	
Vendor	ULTERRA	Lobe/Stage	7/8, 5.0		
S/N	556957	Bend Angle	2.25		
Nozzles	6x15's	Speed (rev/gal)	0.27		
Total Flow Area (in²)	1.035	Wear Pad OD (in)	7.000	MWD Comments	
Drilling Hours for Day	0.00	Bit Distances		POOH Reason Change Bottom Hole Assembly: POOH At EOC	
Total Drilled for Day (ft)		Survey: 59.00 ft, Gamma (Bit To Gamma): 35.00 ft, Resistivity (Bit to Resistivity): 45.00 ft			
Drilling Hours for BHA	16.67				
Total Drilled for BHA (ft)	864.00				

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>CF611</i> , Type: <i>PDC (Polycrystalline Diamond Compacts)</i> , Gauge Length (in): 4.00, Size (in): 8.75	ULTERRA	556957	4 1/2" Reg Pin			8.750		1.00	1.00
Mud Motor Description: 6.75" 7/8L, 5.0 Stg. 2.25° FBH (True Slick), Size (in): 6.75, Bend Angle (°): 2.25, Rotor Lobe: 7, Stator Lobe: 8, Stator Stage: 5.0	Paradigm	675101SS	4 1/2" IF Box	4 1/2" Reg Box		6.750		25.66	26.66
Resistivity Description: <i>RESISTIVITY MWD</i>	Bench Tree	650-1005						31.26	57.92
Battery Description: <i>BATTERY</i>	Bench Tree	B6002						17.33	75.25

Drill Collar Description: NMDC , Material: Non-Magnetic, Type: Slick Drill	GATOR	67-30-296	4 1/2" IF Box	4 1/2" IF Pin	3.250	6.750		30.65	105.90
Crossover Sub Description: X-O SUB, Material: Steel	BLACK DIAMOND	BD15201	EverDrlg54 Box	4 1/2" IF Pin	3.000	6.625		3.57	109.47

MWD Items

No Items

Directional Activities

Activity Type	Code	Start Date	Start Time	End Time	End Date	Start (ft)	End (ft)	Comments/Details
Lay Down BHA	65	01-18	23:30	00:00	01-19			L/D Bit, Motor
Pick Up BHA	64	01-19	00:00	00:30	01-19			P/U BHA #4
TIH	8	01-19	00:30	04:30	01-19			TIH W/ BHA #4
Rotary Drill	1	01-19	04:30	04:55	01-19	9646.00	9727.00	Pressure On (psi): 3200.00, Pressure Off (psi): 2500.00, Weight On Bit (klbs): 40.00, Surface RPM: 40, Surface Torque (ft lbf): 16000.00, Flow Rate (gpm): 700.00, Strokes Per Minute: 243.00
Survey	46	01-19	04:55	05:00	01-19	9727.00	9727.00	Inclination (°): 3.030, Azimuth (°): 217.540, TVD (ft): 9644.71, Dogleg (°/100 ft): 1.41, Sensor Depth (ft): 9658.00, Bit To Sensor (ft): 69.00
Rotary Drill	1	01-19	05:00	05:05	01-19	9727.00	9733.00	Pressure On (psi): 3200.00, Pressure Off (psi): 2500.00, Weight On Bit (klbs): 40.00, Surface RPM: 40, Surface Torque (ft lbf): 16000.00, Flow Rate (gpm): 700.00, Strokes Per Minute: 243.00
Slide Drill	2	01-19	05:05	05:25	01-19	9733.00	9753.00	Pressure On (psi): 2900.00, Pressure Off (psi): 2500.00, Weight On Bit (klbs): 20.00, Flow Rate (gpm): 700.00, Strokes Per Minute: 243, Toolface: 270, Toolface Type: magnetic
Rotary Drill	1	01-19	05:25	05:50	01-19	9753.00	9817.00	Pressure On (psi): 3200.00, Pressure Off (psi): 2500.00, Weight On Bit (klbs): 40.00, Surface RPM: 40, Surface Torque (ft lbf): 16000.00, Flow Rate (gpm): 700.00, Strokes Per Minute: 243.00
Survey	46	01-19	05:50	05:55	01-19	9817.00	9817.00	Inclination (°): 3.030, Azimuth (°): 217.720, TVD (ft): 9734.59, Dogleg (°/100 ft): 0.01, Sensor Depth (ft): 9748.00, Bit To Sensor (ft): 69.00
Rotary Drill	1	01-19	05:55	06:00	01-19	9817.00	9822.00	Pressure On (psi): 3200.00, Pressure Off (psi): 2500.00, Weight On Bit (klbs): 40.00, Surface RPM: 40, Surface Torque (ft lbf): 16000.00, Flow Rate (gpm): 700.00, Strokes Per Minute: 243.00
Slide Drill	2	01-19	06:00	06:30	01-19	9822.00	9852.00	Pressure On (psi): 2900.00, Pressure Off (psi): 2500.00, Weight On Bit (klbs): 20.00, Flow Rate (gpm): 700.00, Strokes Per Minute: 243, Toolface: 270, Toolface Type: magnetic
Rotary Drill	1	01-19	06:30	06:55	01-19	9852.00	9907.00	Pressure On (psi): 3200.00, Pressure Off (psi): 2500.00, Weight On Bit (klbs): 40.00, Surface RPM: 40, Surface Torque (ft lbf): 16000.00, Flow Rate (gpm): 700.00, Strokes Per Minute: 243.00
Survey	46	01-19	06:55	07:00	01-19	9907.00	9907.00	Inclination (°): 3.740, Azimuth (°): 234.770, TVD (ft): 9824.43, Dogleg (°/100 ft): 1.36, Sensor Depth (ft): 9838.00, Bit To Sensor (ft): 69.00
Rotary Drill	1	01-19	07:00	07:35	01-19	9907.00	9997.00	Pressure On (psi): 3200.00, Pressure Off (psi): 2500.00, Weight On Bit (klbs): 40.00, Surface RPM: 40, Surface Torque (ft lbf): 16000.00, Flow Rate (gpm): 700.00, Strokes Per Minute: 243.00
Survey	46	01-19	07:35	07:40	01-19	9997.00	9997.00	Inclination (°): 4.130, Azimuth (°): 254.720, TVD (ft): 9914.22, Dogleg (°/100 ft): 1.57, Sensor Depth (ft): 9928.00, Bit To Sensor (ft): 69.00
Rotary Drill	1	01-19	07:40	08:20	01-19	9997.00	10086.00	Pressure On (psi): 3200.00, Pressure Off (psi): 2500.00, Weight On Bit (klbs): 40.00, Surface RPM: 40, Surface Torque (ft lbf): 16000.00, Flow Rate (gpm): 700.00, Strokes Per Minute: 243.00
Survey	46	01-19	08:20	08:25	01-19	10086.00	10086.00	Inclination (°): 3.780, Azimuth (°): 254.720, TVD (ft): 10003.01, Dogleg (°/100 ft): 0.39, Sensor Depth (ft): 10017.00, Bit To Sensor (ft): 69.00
Rotary Drill	1	01-19	08:25	09:00	01-19	10086.00	10175.00	Pressure On (psi): 3200.00, Pressure Off (psi): 2500.00, Weight On Bit (klbs): 40.00, Surface RPM: 40, Surface Torque (ft lbf): 16000.00, Flow Rate (gpm): 700.00, Strokes Per Minute: 243.00
Survey	46	01-19	09:00	09:05	01-19	10175.00	10175.00	Inclination (°): 3.560, Azimuth (°): 255.600, TVD (ft): 10091.83, Dogleg (°/100 ft): 0.26, Sensor Depth (ft): 10106.00, Bit To Sensor (ft): 69.00
Rotary Drill	1	01-19	09:05	09:40	01-19	10175.00	10265.00	Pressure On (psi): 3200.00, Pressure Off (psi): 2500.00, Weight On Bit (klbs): 40.00, Surface RPM: 40, Surface Torque (ft lbf): 16000.00, Flow Rate (gpm): 700.00, Strokes Per Minute: 243.00
Survey	46	01-19	09:40	09:45	01-19	10265.00	10265.00	Inclination (°): 2.420, Azimuth (°): 255.250, TVD (ft): 10181.70, Dogleg (°/100 ft): 1.27, Sensor Depth (ft): 10196.00, Bit To Sensor (ft): 69.00
Rotary Drill	1	01-19	09:45	10:25	01-19	10265.00	10355.00	Pressure On (psi): 3200.00, Pressure Off (psi): 2500.00, Weight On Bit (klbs): 40.00, Surface RPM: 40, Surface Torque (ft lbf): 16000.00, Flow Rate (gpm): 700.00, Strokes Per Minute: 243.00
Survey	46	01-19	10:25	10:30	01-19	10355.00	10355.00	Inclination (°): 2.420, Azimuth (°): 266.760, TVD (ft): 10271.62, Dogleg (°/100 ft): 0.54, Sensor Depth (ft): 10286.00, Bit To Sensor (ft): 69.00

Rotary Drill	1	01-19	10:30	10:35	01-19	10355.00	10365.00	Pressure On (psi): 3200.00, Pressure Off (psi): 2500.00, Weight On Bit (klbs): 40.00, Surface RPM: 40, Surface Torque (ft lbf): 16000.00, Flow Rate (gpm): 700.00, Strokes Per Minute: 243.00
Slide Drill	2	01-19	10:35	11:10	01-19	10365.00	10385.00	Pressure On (psi): 2900.00, Pressure Off (psi): 2500.00, Weight On Bit (klbs): 20.00, Flow Rate (gpm): 700.00, Strokes Per Minute: 243, Toolface: 90, Toolface Type: magnetic
Rotary Drill	1	01-19	11:10	11:40	01-19	10385.00	10445.00	Pressure On (psi): 3200.00, Pressure Off (psi): 2500.00, Weight On Bit (klbs): 40.00, Surface RPM: 40, Surface Torque (ft lbf): 16000.00, Flow Rate (gpm): 700.00, Strokes Per Minute: 243.00
Survey	46	01-19	11:40	11:45	01-19	10445.00	10445.00	Inclination (°): 0.920, Azimuth (°): 272.740, TVD (ft): 10361.58, Dogleg (°/100 ft): 1.68, Sensor Depth (ft): 10376.00, Bit To Sensor (ft): 69.00
Rotary Drill	1	01-19	11:45	12:10	01-19	10445.00	10500.00	Pressure On (psi): 3200.00, Pressure Off (psi): 2500.00, Weight On Bit (klbs): 40.00, Surface RPM: 40, Surface Torque (ft lbf): 16000.00, Flow Rate (gpm): 700.00, Strokes Per Minute: 243.00
Survey	46	01-19	12:10	12:15	01-19	10500.00	10500.00	Inclination (°): 0.350, Azimuth (°): 204.100, TVD (ft): 10416.58, Dogleg (°/100 ft): 1.56, Sensor Depth (ft): 10431.00, Bit To Sensor (ft): 69.00
Circulating	3	01-19	12:15	13:10	01-19			Circulate @ KOP
Pooh	7	01-19	13:10	17:35	01-19			POOH for KOP
Lay Down BHA	65	01-19	17:35	18:00	01-19			L/D BHA #4
Pick Up BHA	64	01-19	18:00	19:45	01-19			P/U Curve Assembly And Resistivity Tool Program Tool
TIH	8	01-19	19:45	00:30	01-20			TIH W/ BHA #5

MWD Activities

No Activities



Job Number WT-21-183	Operator Advance Energy Partners	Rig Name Nabors X50
Start Date 2021-11-24	Well Name Anderson Fed Com 551H	Legal Well Name AFE Anderson Fed Com 551H
Play Delaware Basin	State/Province and Country New Mexico, US	County Lea
		Company Man

Thursday, Jan 20 00:00 - 23:59 (Day 7 of 16)

Billing: \$12,700.00 (\$226,970.50 total)

Drilling Summary				Drilling Parameters	
Start Depth (ft)	10500.00	Downhole Hours	24.00	Rotating WOB (klbs)	
Bit Depth (ft)	11364.00	Drilling Hours	16.67	Sliding WOB (klbs)	23.00 - 25.00
Bottom Hole Depth (ft)	11364.00	Hours Circulating	1.67	Rotating SPM	
Total Distance (ft)	864.00	Hours Sliding	16.67	Sliding SPM	190.00 - 206.00
Distance Rotated (ft)	0.00	Hours Rotating	0.00	Motor RPM	149.00 - 149.00
Distance Slid (ft)	864.00			Surface RPM	
Inclination In	1.63			Flow Rate (gpm)	550.00 - 600.00
Inclination Out	84.62			On Bottom Pressure (psi)	1700.00 - 2100.00
Azimuth In	29.90	% Hours Rotating	0%	Off Bottom Pressure (psi)	1350.00 - 1480.00
Azimuth Out	350.17	% Hours Sliding	100%		
AVG Total ROP (ft/h)	51.84	% Distance Sliding	100%		
AVG Rotating ROP (ft/h)	0.00	% Distance Rotating	0%		
AVG Sliding ROP (ft/h)	51.84				

Personnel

Name	Position
Advance Directional	Directional Driller
Robert Olivarez	MWD Engineer
Francisco DeLeon	MWD Engineer

BHA #5 - BHA #5 (Curve Assy)

Date In: Jan 19, 2022, 18:00 Date Out: Jan 21, 2022, 1:00

Bit Details		Motor Details		Directional Comments
OD (in)	8.750	Size (in)	6.75	FLOW RANGE: 300-650 GPM, REV PER GALLON .27, MAX DIFF: 1860, MAX TORQUE : 16,770 BIT RUNS: 0 , Bit to Bend: 3.85
Vendor	ULTERRA	Lobe/Stage	7/8, 5.0	
S/N	556957	Bend Angle	2.25	
Nozzles	6x15's	Speed (rev/gal)	0.27	
Total Flow Area (in²)	1.035	Wear Pad OD (in)	7.000	MWD Comments
Drilling Hours for Day	16.67	Bit Distances		POOH Reason Change Bottom Hole Assembly: POOH At EOC
Total Drilled for Day (ft)	864.00	Survey: 59.00 ft, Gamma (Bit To Gamma): 35.00 ft, Resistivity (Bit to Resistivity): 45.00 ft		
Drilling Hours for BHA	16.67			
Total Drilled for BHA (ft)	864.00			

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): 4.00, Size (in): 8.75	ULTERRA	556957	4 1/2" Reg Pin			8.750		1.00	1.00
Mud Motor Description: 6.75" 7/8L, 5.0 Stg. 2.25° FBH (True Slick), Size (in): 6.75, Bend Angle (°): 2.25, Rotor Lobe: 7, Stator Lobe: 8, Stator Stage: 5.0	Paradigm	675101SS	4 1/2" IF Box	4 1/2" Reg Box		6.750		25.66	26.66
Resistivity Description: RESISTIVITY MWD	Bench Tree	650-1005						31.26	57.92
Battery Description: BATTERY	Bench Tree	B6002						17.33	75.25
Drill Collar Description: NMDC, Material: Non-Magnetic, Type: Slick Drill	GATOR	67-30-296	4 1/2" IF Box	4 1/2" IF Pin	3.250	6.750		30.65	105.90
Crossover Sub Description: X-O SUB, Material: Steel	BLACK DIAMOND	BD15201	EverDrlg54 Box	4 1/2" IF Pin	3.000	6.625		3.57	109.47

MWD Items

No Items

Directional Activities

Activity Type	Code	Start Date	Start Time	End Time	End Date	Start (ft)	End (ft)	Comments/Details
TIH	8	01-19	19:45	00:30	01-20			TIH W/ BHA #5
Circulating	3	01-20	00:30	01:05	01-20			Relog Gamma F/ 10,432 T/ 10,482
Slide Drill	2	01-20	01:05	03:10	01-20	10500.00	10587.00	Pressure On (psi): 1700.00, Pressure Off (psi): 1350.00, Weight On Bit (klbs): 23.00, Flow Rate (gpm): 550.00, Strokes Per Minute: 190, Toolface: 352, Toolface Type: magnetic
Survey	46	01-20	03:10	03:15	01-20	10587.00	10587.00	Inclination (°): 1.630, Azimuth (°): 29.900, TVD (ft): 10513.57, Dogleg (°/100 ft): 2.04, Sensor Depth (ft): 10528.00, Bit To Sensor (ft): 59.00

Slide Drill	2	01-20	03:15	04:35	01-20	10587.00	10677.00	Pressure On (psi): 1800.00, Pressure Off (psi): 1480.00, Weight On Bit (klbs): 23.00, Flow Rate (gpm): 600.00, Strokes Per Minute: 206, Toolface: 321, Toolface Type: magnetic
Survey	46	01-20	04:35	04:40	01-20	10677.00	10677.00	Inclination (°): 10.070, Azimuth (°): 354.040, TVD (ft): 10603.03, Dogleg (°/100 ft): 9.78, Sensor Depth (ft): 10618.00, Bit To Sensor (ft): 59.00
Slide Drill	2	01-20	04:40	05:50	01-20	10677.00	10766.00	Pressure On (psi): 2100.00, Pressure Off (psi): 1480.00, Weight On Bit (klbs): 25.00, Flow Rate (gpm): 600.00, Strokes Per Minute: 206, Toolface: 0, Toolface Type: gravity
Survey	46	01-20	05:50	05:55	01-20	10766.00	10766.00	Inclination (°): 19.250, Azimuth (°): 351.400, TVD (ft): 10689.05, Dogleg (°/100 ft): 10.34, Sensor Depth (ft): 10707.00, Bit To Sensor (ft): 59.00
Slide Drill	2	01-20	05:55	07:40	01-20	10766.00	10856.00	Pressure On (psi): 2100.00, Pressure Off (psi): 1480.00, Weight On Bit (klbs): 25.00, Flow Rate (gpm): 600.00, Strokes Per Minute: 206, Toolface: 0, Toolface Type: gravity
Survey	46	01-20	07:40	07:45	01-20	10856.00	10856.00	Inclination (°): 25.890, Azimuth (°): 351.840, TVD (ft): 10772.11, Dogleg (°/100 ft): 7.38, Sensor Depth (ft): 10797.00, Bit To Sensor (ft): 59.00
Slide Drill	2	01-20	07:45	10:00	01-20	10856.00	10945.00	Pressure On (psi): 2100.00, Pressure Off (psi): 1480.00, Weight On Bit (klbs): 25.00, Flow Rate (gpm): 600.00, Strokes Per Minute: 206, Toolface: 0, Toolface Type: gravity
Survey	46	01-20	10:00	10:05	01-20	10945.00	10945.00	Inclination (°): 31.470, Azimuth (°): 354.390, TVD (ft): 10850.16, Dogleg (°/100 ft): 6.42, Sensor Depth (ft): 10886.00, Bit To Sensor (ft): 59.00
Slide Drill	2	01-20	10:05	12:30	01-20	10945.00	11035.00	Pressure On (psi): 2100.00, Pressure Off (psi): 1480.00, Weight On Bit (klbs): 25.00, Flow Rate (gpm): 600.00, Strokes Per Minute: 206, Toolface: 0, Toolface Type: gravity
Survey	46	01-20	12:30	12:40	01-20	11035.00	11035.00	Inclination (°): 41.980, Azimuth (°): 356.240, TVD (ft): 10922.20, Dogleg (°/100 ft): 11.74, Sensor Depth (ft): 10976.00, Bit To Sensor (ft): 59.00
Slide Drill	2	01-20	12:40	14:30	01-20	11035.00	11125.00	Pressure On (psi): 2100.00, Pressure Off (psi): 1480.00, Weight On Bit (klbs): 25.00, Flow Rate (gpm): 600.00, Strokes Per Minute: 206, Toolface: 340, Toolface Type: gravity
Rig Service - In Hole	19	01-20	14:30	14:45	01-20			Rig Service
Survey	46	01-20	14:45	14:55	01-20	11125.00	11125.00	Inclination (°): 53.010, Azimuth (°): 355.710, TVD (ft): 10982.91, Dogleg (°/100 ft): 12.26, Sensor Depth (ft): 11066.00, Bit To Sensor (ft): 59.00
Slide Drill	2	01-20	14:55	16:25	01-20	11125.00	11214.00	Pressure On (psi): 2100.00, Pressure Off (psi): 1480.00, Weight On Bit (klbs): 25.00, Flow Rate (gpm): 600.00, Strokes Per Minute: 206, Toolface: 345, Toolface Type: gravity
Survey	46	01-20	16:25	16:35	01-20	11214.00	11214.00	Inclination (°): 64.480, Azimuth (°): 356.410, TVD (ft): 11029.01, Dogleg (°/100 ft): 12.91, Sensor Depth (ft): 11155.00, Bit To Sensor (ft): 59.00
Slide Drill	2	01-20	16:35	17:50	01-20	11214.00	11304.00	Pressure On (psi): 2100.00, Pressure Off (psi): 1480.00, Weight On Bit (klbs): 25.00, Flow Rate (gpm): 600.00, Strokes Per Minute: 206, Toolface: 330, Toolface Type: gravity
Survey	46	01-20	17:50	17:55	01-20	11304.00	11304.00	Inclination (°): 75.520, Azimuth (°): 353.420, TVD (ft): 11059.75, Dogleg (°/100 ft): 12.66, Sensor Depth (ft): 11245.00, Bit To Sensor (ft): 59.00
Slide Drill	2	01-20	17:55	19:00	01-20	11304.00	11364.00	Pressure On (psi): 2100.00, Pressure Off (psi): 1480.00, Weight On Bit (klbs): 25.00, Flow Rate (gpm): 600.00, Strokes Per Minute: 206, Toolface: 0, Toolface Type: gravity
Survey	46	01-20	19:00	19:05	01-20	11364.00	11364.00	Inclination (°): 84.620, Azimuth (°): 350.170, TVD (ft): 11070.09, Dogleg (°/100 ft): 16.08, Sensor Depth (ft): 11305.00, Bit To Sensor (ft): 59.00
Circulating	3	01-20	19:05	20:10	01-20			Circulate And Condition Hole Clean
Pooh	7	01-20	20:10	00:45	01-21			POOH for Lateral Assembly

MWD Activities

No Activities



Job Number WT-21-183	Operator Advance Energy Partners	Rig Name Nabors X50
Start Date 2021-11-24	Well Name Anderson Fed Com 551H	Legal Well Name AFE Anderson Fed Com 551H
Play Delaware Basin	State/Province and Country New Mexico, US	County Lea
		Company Man

Friday, Jan 21 00:00 - 23:59 (Day 8 of 16)

Billing: \$25,925.00 (\$226,970.50 total)

Drilling Summary				Drilling Parameters	
Start Depth (ft)	11364.00	Downhole Hours	22.50	Rotating WOB (klbs)	38.00 - 42.00
Bit Depth (ft)	11968.00	Drilling Hours	8.92	Sliding WOB (klbs)	25.00 - 25.00
Bottom Hole Depth (ft)	11968.00	Hours Circulating	1.67	Rotating SPM	170.00 - 188.00
Total Distance (ft)	604.00	Hours Sliding	4.58	Sliding SPM	188.00 - 188.00
Distance Rotated (ft)	461.00	Hours Rotating	4.33	Motor RPM	115.00 - 161.00
Distance Slid (ft)	143.00			Surface RPM	30.00 - 40.00
Inclination In	92.84			Flow Rate (gpm)	493.00 - 546.00
Inclination Out	89.89			On Bottom Pressure (psi)	2850.00 - 3250.00
Azimuth In	350.26	% Hours Rotating	49%	Off Bottom Pressure (psi)	2300.00 - 2800.00
Azimuth Out	358.26	% Hours Sliding	51%		
AVG Total ROP (ft/h)	72.42	% Distance Sliding	24%		
AVG Rotating ROP (ft/h)	110.20	% Distance Rotating	76%		
AVG Sliding ROP (ft/h)	31.20				

Personnel

Name	Position
Advance Directional	Directional Driller
Robert Olivarez	MWD Engineer
Francisco DeLeon	MWD Engineer
Michael Saliba	Directional Driller

BHA #5 - BHA #5 (Curve Assy)

Date In: Jan 19, 2022, 18:00 Date Out: Jan 21, 2022, 1:00

Bit Details		Motor Details		Directional Comments
OD (in)	8.750	Size (in)	6.75	FLOW RANGE: 300-650 GPM, REV PER GALLON .27, MAX DIFF: 1860, MAX TORQUE : 16,770 BIT RUNS: 0 , Bit to Bend: 3.85
Vendor	ULTERRA	Lobe/Stage	7/8, 5.0	
S/N	556957	Bend Angle	2.25	
Nozzles	6x15's	Speed (rev/gal)	0.27	
Total Flow Area (in²)	1.035	Wear Pad OD (in)	7.000	MWD Comments
Drilling Hours for Day	0.00	Bit Distances		POOH Reason Change Bottom Hole Assembly: POOH At EOC
Total Drilled for Day (ft)		Survey: 59.00 ft, Gamma (Bit To Gamma): 35.00 ft, Resistivity (Bit to Resistivity): 45.00 ft		
Drilling Hours for BHA	16.67			
Total Drilled for BHA (ft)	864.00			

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): 4.00, Size (in): 8.75	ULTERRA	556957	4 1/2" Reg Pin			8.750		1.00	1.00
Mud Motor Description: 6.75" 7/8L, 5.0 Stg. 2.25° FBH (True Slick), Size (in): 6.75, Bend Angle (°): 2.25, Rotor Lobe: 7, Stator Lobe: 8, Stator Stage: 5.0	Paradigm	675101SS	4 1/2" IF Box	4 1/2" Reg Box		6.750		25.66	26.66
Resistivity Description: RESISTIVITY MWD	Bench Tree	650-1005						31.26	57.92
Battery Description: BATTERY	Bench Tree	B6002						17.33	75.25
Drill Collar Description: NMDC , Material: Non-Magnetic, Type: Slick Drill	GATOR	67-30-296	4 1/2" IF Box	4 1/2" IF Pin	3.250	6.750		30.65	105.90
Crossover Sub Description: X-O SUB, Material: Steel	BLACK DIAMOND	BD15201	EverDrig54 Box	4 1/2" IF Pin	3.000	6.625		3.57	109.47

MWD Items

No Items

BHA #6 - 8.75" LATERAL

Date In: Jan 21, 2022, 2:30 Date Out: Jan 25, 2022, 2:00

Bit Details		Motor Details		Directional Comments
OD (in)	8.750	Size (in)	7.0	FLOW RANGE: 300-750 GPM, REV PER GALLON 0.23, MAX DIFF: 1,580, MAX TORQUE : 17,950 BIT RUNS: 0 , Bit to Bend: 5.37
Vendor	Reed	Lobe/Stage	7/5, 9.0	
S/N	A28369	Bend Angle	1.83	
Nozzles	7x15's	Speed (rev/gal)	0.23	MWD Comments
Total Flow Area (in²)	1.208	Wear Pad OD (in)	7.375	POOH Reason Change Bottom Hole Assembly: Erratic Differential PSI. TF control was highly difficult.
Drilling Hours for Day	8.92	Bit Distances		
Total Drilled for Day (ft)	604.00	Survey: 64.00 ft, Gamma (Bit To Gamma): 40.00 ft, Resistivity (Bit to Resistivity): 50.00 ft		
Drilling Hours for BHA	61.75			
Total Drilled for BHA (ft)	4465.00			

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</i> , Type: <i>PDC (Polycrystalline Diamond Compacts)</i> , Gauge Length (in): <i>4.00</i> , Size (in): <i>8.75</i>	Reed	A28369	4 1/2" Reg Pin			8.750		1.00	1.00
Mud Motor Description: <i>7.0" 7/8L, 5.7 Stg. 1.83° FBH (True Slick)</i> , Size (in): <i>7.00</i> , Bend Angle (°): <i>1.83</i> , Rotor Lobe: <i>7</i> , Stator Lobe: <i>5</i> , Stator Stage: <i>9</i>	NOV	675-36-384	4 1/2" IF Box	4 1/2" Reg Box		7.000		31.43	32.43
Resistivity Description: <i>RESISTIVITY MWD</i>	Bench Tree	650-1005						31.26	63.69
Battery Description: <i>BATTERY</i>	Bench Tree	B6002						17.33	81.02
Drill Collar Description: <i>NMDC</i> , Material: <i>Non-Magnetic</i> , Type: <i>Slick Drill</i>	GATOR	67-30-296	4 1/2" IF Box	4 1/2" IF Pin	3.250	6.750		30.65	111.67
Crossover Sub Description: <i>X-O SUB</i> , Material: <i>Steel</i>	BLACK DIAMOND	BD15201	EverDrlg54 Box	4 1/2" IF Pin	3.000	6.625		3.57	115.24
Drill Pipe Description: <i>22 Stands 5 1/2 Drill Pipe</i> , Type: <i>Slick</i>	Black Diamond		EverDrlg54 Box	EverDrlg54 Pin	3.000	5.500		1969.32	2084.56
Crossover Sub Description: <i>X-O SUB</i> , Material: <i>Steel</i>	BLACK DIAMOND	BD 22523	4 1/2" IF Box	EverDrlg54 Box	3.000	6.750		3.48	2088.04
Agitator Description: <i>6.75" Agitator</i> , Size (in): <i>6.75</i>	NOV	147-67001	4 1/2" FH Box	4 1/2" IF Pin		6.750		24.73	2112.77
Crossover Sub Description: <i>X-O SUB</i> , Material: <i>Steel</i>	BLACK DIAMOND	BD13511	EverDrlg54 Box	4 1/2" FH Pin	3.000	6.750		3.38	2116.15

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	01-20	20:10	00:45	01-21			POOH for Lateral Assembly
Lay Down BHA	65	01-21	00:45	01:00	01-21			L/D BHA #5
Pick Up BHA	64	01-21	01:00	02:30	01-21			P/U BHA #6 Program Res Tool
TIH	8	01-21	02:30	05:15	01-21			TIH W/ BHA #6
Other	16	01-21	05:15	07:45	01-21			Slip & Cut Drill line
TIH	8	01-21	07:45	11:20	01-21			TIH W/ BHA #6
Circulating	3	01-21	11:20	13:00	01-21			Displace w/ OBM
Rotary Drill	1	01-21	13:00	13:40	01-21	11364.00	11430.00	Pressure On (psi): <i>2850.00</i> , Pressure Off (psi): <i>2300.00</i> , Weight On Bit (klbs): <i>38.00</i> , Surface RPM: <i>30</i> , Surface Torque (ft lbf): <i>18000.00</i> , Flow Rate (gpm): <i>493.00</i> , Strokes Per Minute: <i>170.00</i>
Other	16	01-21	13:40	14:35	01-21			Troubleshoot Resistivity/ MWD
Survey	46	01-21	14:35	14:40	01-21	11430.00	11430.00	Inclination (°): <i>92.840</i> , Azimuth (°): <i>350.260</i> , TVD (ft): <i>11071.44</i> , Dogleg (°/100 ft): <i>13.48</i> , Sensor Depth (ft): <i>11366.00</i> , Bit To Sensor (ft): <i>64.00</i>
Slide Drill	2	01-21	14:40	15:10	01-21	11430.00	11458.00	Pressure On (psi): <i>3250.00</i> , Pressure Off (psi): <i>2800.00</i> , Weight On Bit (klbs): <i>25.00</i> , Flow Rate (gpm): <i>545.00</i> , Strokes Per Minute: <i>188</i> , Toolface: <i>120</i> , Toolface Type: <i>gravity</i>
Rotary Drill	1	01-21	15:10	15:50	01-21	11458.00	11520.00	Pressure On (psi): <i>2850.00</i> , Pressure Off (psi): <i>2300.00</i> , Weight On Bit (klbs): <i>42.00</i> , Surface RPM: <i>40</i> , Surface Torque (ft lbf): <i>18500.00</i> , Flow Rate (gpm): <i>546.00</i> , Strokes Per Minute: <i>188.00</i>
Survey	46	01-21	15:50	15:55	01-21	11520.00	11520.00	Inclination (°): <i>92.000</i> , Azimuth (°): <i>352.540</i> , TVD (ft): <i>11067.64</i> , Dogleg (°/100 ft): <i>2.70</i> , Sensor Depth (ft): <i>11456.00</i> , Bit To Sensor (ft): <i>64.00</i>
Slide Drill	2	01-21	15:55	16:45	01-21	11520.00	11558.00	Pressure On (psi): <i>3250.00</i> , Pressure Off (psi): <i>2800.00</i> , Weight On Bit (klbs): <i>25.00</i> , Flow Rate (gpm): <i>545.00</i> , Strokes Per Minute: <i>188</i> , Toolface: <i>130</i> , Toolface Type: <i>gravity</i>

Rotary Drill	1	01-21	16:45	17:10	01-21	11558.00	11610.00	Pressure On (psi): 2850.00, Pressure Off (psi): 2300.00, Weight On Bit (klbs): 42.00, Surface RPM: 40, Surface Torque (ft lbf): 18500.00, Flow Rate (gpm): 546.00, Strokes Per Minute: 188.00
Survey	46	01-21	17:10	17:15	01-21	11610.00	11610.00	Inclination (°): 91.430, Azimuth (°): 356.410, TVD (ft): 11064.95, Dogleg (°/100 ft): 4.34, Sensor Depth (ft): 11546.00, Bit To Sensor (ft): 64.00
Slide Drill	2	01-21	17:15	18:00	01-21	11610.00	11645.00	Pressure On (psi): 3250.00, Pressure Off (psi): 2800.00, Weight On Bit (klbs): 25.00, Flow Rate (gpm): 545.00, Strokes Per Minute: 188, Toolface: 140, Toolface Type: gravity
Rotary Drill	1	01-21	18:00	18:35	01-21	11645.00	11699.00	Pressure On (psi): 2850.00, Pressure Off (psi): 2300.00, Weight On Bit (klbs): 42.00, Surface RPM: 40, Surface Torque (ft lbf): 18500.00, Flow Rate (gpm): 546.00, Strokes Per Minute: 188.00
Survey	46	01-21	18:35	18:40	01-21	11699.00	11699.00	Inclination (°): 89.760, Azimuth (°): 359.050, TVD (ft): 11064.02, Dogleg (°/100 ft): 3.51, Sensor Depth (ft): 11635.00, Bit To Sensor (ft): 64.00
Rotary Drill	1	01-21	18:40	19:05	01-21	11699.00	11754.00	Pressure On (psi): 2850.00, Pressure Off (psi): 2300.00, Weight On Bit (klbs): 42.00, Surface RPM: 40, Surface Torque (ft lbf): 18500.00, Flow Rate (gpm): 546.00, Strokes Per Minute: 188.00
Slide Drill	2	01-21	19:05	20:25	01-21	11754.00	11784.00	Toolface: 180, Toolface Type: gravity
Rotary Drill	1	01-21	20:25	20:30	01-21	11784.00	11789.00	Pressure On (psi): 2850.00, Pressure Off (psi): 2300.00, Weight On Bit (klbs): 42.00, Surface RPM: 40, Surface Torque (ft lbf): 18500.00, Flow Rate (gpm): 546.00, Strokes Per Minute: 188.00
Survey	46	01-21	20:30	20:35	01-21	11789.00	11789.00	Inclination (°): 90.900, Azimuth (°): 358.960, TVD (ft): 11063.50, Dogleg (°/100 ft): 1.27, Sensor Depth (ft): 11725.00, Bit To Sensor (ft): 64.00
Rotary Drill	1	01-21	20:35	20:55	01-21	11789.00	11813.00	Pressure On (psi): 2850.00, Pressure Off (psi): 2300.00, Weight On Bit (klbs): 42.00, Surface RPM: 40, Surface Torque (ft lbf): 18500.00, Flow Rate (gpm): 546.00, Strokes Per Minute: 188.00
Slide Drill	2	01-21	20:55	22:05	01-21	11813.00	11825.00	Toolface: 150, Toolface Type: gravity
Rotary Drill	1	01-21	22:05	22:20	01-21	11825.00	11879.00	Pressure On (psi): 2850.00, Pressure Off (psi): 2300.00, Weight On Bit (klbs): 42.00, Surface RPM: 40, Surface Torque (ft lbf): 18500.00, Flow Rate (gpm): 546.00, Strokes Per Minute: 188.00
Survey	46	01-21	22:20	22:25	01-21	11879.00	11879.00	Inclination (°): 89.230, Azimuth (°): 358.790, TVD (ft): 11063.40, Dogleg (°/100 ft): 1.87, Sensor Depth (ft): 11815.00, Bit To Sensor (ft): 64.00
Rotary Drill	1	01-21	22:25	23:20	01-21	11879.00	11968.00	Pressure On (psi): 2850.00, Pressure Off (psi): 2300.00, Weight On Bit (klbs): 42.00, Surface RPM: 40, Surface Torque (ft lbf): 18500.00, Flow Rate (gpm): 546.00, Strokes Per Minute: 188.00
Rig Service - In Hole	19	01-21	23:20	23:50	01-21			Rig Service @ 11968'
Survey	46	01-21	23:50	23:55	01-21	11968.00	11968.00	Inclination (°): 89.890, Azimuth (°): 358.260, TVD (ft): 11064.09, Dogleg (°/100 ft): 0.95, Sensor Depth (ft): 11904.00, Bit To Sensor (ft): 64.00
Rotary Drill	1	01-21	23:55	00:35	01-22	11968.00	12058.00	Pressure On (psi): 3700.00, Pressure Off (psi): 3200.00, Weight On Bit (klbs): 42.00, Surface RPM: 40, Surface Torque (ft lbf): 20000.00, Flow Rate (gpm): 615.00, Strokes Per Minute: 210.00

MWD Activities

No Activities



Job Number WT-21-183	Operator Advance Energy Partners	Rig Name Nabors X50
Start Date 2021-11-24	Well Name Anderson Fed Com 551H	Legal Well Name AFE Anderson Fed Com 551H
Play Delaware Basin	State/Province and Country New Mexico, US	County Lea
		Company Man

Saturday, Jan 22 00:00 - 23:59 (Day 9 of 16)

Billing: \$10,500.00 (\$226,970.50 total)

Drilling Summary

Start Depth (ft)	11968.00
Bit Depth (ft)	13131.00
Bottom Hole Depth (ft)	13131.00
Total Distance (ft)	1163.00
Distance Rotated (ft)	937.00
Distance Slid (ft)	226.00
Inclination In	90.42
Inclination Out	91.60
Azimuth In	358.17
Azimuth Out	359.14
AVG Total ROP (ft/h)	72.64
AVG Rotating ROP (ft/h)	99.39
AVG Sliding ROP (ft/h)	32.67

Drilling Parameters

Downhole Hours	24.00	Rotating WOB (klbs)	42.00 - 42.00
Drilling Hours	16.50	Sliding WOB (klbs)	30.00 - 35.00
Hours Circulating	0.00	Rotating SPM	210.00 - 240.00
Hours Sliding	6.92	Sliding SPM	237.00 - 240.00
Hours Rotating	9.58	Motor RPM	115.00 - 161.00
		Surface RPM	40.00 - 40.00
		Flow Rate (gpm)	615.00 - 695.00
		On Bottom Pressure (psi)	3700.00 - 4475.00
		Off Bottom Pressure (psi)	3200.00 - 3800.00
% Hours Rotating	58%		
% Hours Sliding	42%		
% Distance Sliding	19%		
% Distance Rotating	81%		

Personnel

Name	Position
Advance Directional	Directional Driller
Robert Olivarez	MWD Engineer
Michael Saliba	Directional Driller
Francisco DeLeon	MWD Engineer

BHA #6 - 8.75" LATERAL

Date In: Jan 21, 2022, 2:30 Date Out: Jan 25, 2022, 2:00

Bit Details	Motor Details	Directional Comments
OD (in)	8.750	FLOW RANGE: 300-750 GPM, REV PER GALLON 0.23, MAX DIFF: 1,580, MAX TORQUE : 17,950 BIT RUNS: 0 , Bit to Bend: 5.37
Vendor	Reed	
S/N	A28369	
Nozzles	7x15's	
Total Flow Area (in²)	1.208	MWD Comments
Drilling Hours for Day	16.50	
Total Drilled for Day (ft)	1163.00	
Drilling Hours for BHA	61.75	
Total Drilled for BHA (ft)	4465.00	POOH Reason Change Bottom Hole Assembly: Erratic Differential PSI. TF control was highly difficult.

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</i> , Type: <i>PDC (Polycrystalline Diamond Compacts)</i> , Gauge Length (in): 4.00, Size (in): 8.75	Reed	A28369	4 1/2" Reg Pin			8.750		1.00	1.00
Mud Motor Description: <i>7.0" 7/8L, 5.7 Stg. 1.83° FBH (True Slick)</i> , Size (in): 7.00, Bend Angle (°): 1.83, Rotor Lobe: 7, Stator Lobe: 5, Stator Stage: 9	NOV	675-36-384	4 1/2" IF Box	4 1/2" Reg Box		7.000		31.43	32.43
Resistivity Description: <i>RESISTIVITY MWD</i>	Bench Tree	650-1005						31.26	63.69
Battery Description: <i>BATTERY</i>	Bench Tree	B6002						17.33	81.02
Drill Collar Description: <i>NMDC</i> , Material: <i>Non-Magnetic</i> , Type: <i>Slick Drill</i>	GATOR	67-30-296	4 1/2" IF Box	4 1/2" IF Pin	3.250	6.750		30.65	111.67
Crossover Sub Description: <i>X-O SUB</i> , Material: <i>Steel</i>	BLACK DIAMOND	BD15201	EverDrlg54 Box	4 1/2" IF Pin	3.000	6.625		3.57	115.24
Drill Pipe Description: <i>22 Stands 5 1/2 Drill Pipe</i> , Type: <i>Slick</i>	Black Diamond		EverDrlg54 Box	EverDrlg54 Pin	3.000	5.500		1969.32	2084.56
Crossover Sub Description: <i>X-O SUB</i> , Material: <i>Steel</i>	BLACK DIAMOND	BD 22523	4 1/2" IF Box	EverDrlg54 Box	3.000	6.750		3.48	2088.04
Agitator Description: <i>6.75" Agitator</i> , Size (in): 6.75	NOV	147-67001	4 1/2" FH Box	4 1/2" IF Pin		6.750		24.73	2112.77
Crossover Sub Description: <i>X-O SUB</i> , Material: <i>Steel</i>	BLACK DIAMOND	BD13511	EverDrlg54 Box	4 1/2" FH Pin	3.000	6.750		3.38	2116.15

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	01-21	23:55	00:35	01-22	11968.00	12058.00	Pressure On (psi): 3700.00, Pressure Off (psi): 3200.00, Weight On Bit (klbs): 42.00, Surface RPM: 40, Surface Torque (ft lbf): 20000.00, Flow Rate (gpm): 615.00, Strokes Per Minute: 210.00
Survey	46	01-22	00:35	00:40	01-22	12058.00	12058.00	Inclination (°): 90.420, Azimuth (°): 358.170, TVD (ft): 11063.84, Dogleg (°/100 ft): 0.60, Sensor Depth (ft): 11994.00, Bit To Sensor (ft): 64.00
Rotary Drill	1	01-22	00:40	00:45	01-22	12058.00	12062.00	Pressure On (psi): 3700.00, Pressure Off (psi): 3200.00, Weight On Bit (klbs): 42.00, Surface RPM: 40, Surface Torque (ft lbf): 20000.00, Flow Rate (gpm): 615.00, Strokes Per Minute: 210.00
Slide Drill	2	01-22	00:45	00:50	01-22	12062.00	12066.00	Toolface: 150, Toolface Type: gravity
Other	16	01-22	00:50	01:05	01-22			Took Pump 1 off the Hole @ 12066'
Slide Drill	2	01-22	01:05	01:40	01-22	12066.00	12082.00	Toolface: 150, Toolface Type: gravity
Rotary Drill	1	01-22	01:40	02:10	01-22	12082.00	12147.00	Pressure On (psi): 3700.00, Pressure Off (psi): 3200.00, Weight On Bit (klbs): 42.00, Surface RPM: 40, Surface Torque (ft lbf): 20000.00, Flow Rate (gpm): 615.00, Strokes Per Minute: 210.00
Survey	46	01-22	02:10	02:15	01-22	12147.00	12147.00	Inclination (°): 90.550, Azimuth (°): 357.200, TVD (ft): 11063.09, Dogleg (°/100 ft): 1.10, Sensor Depth (ft): 12083.00, Bit To Sensor (ft): 64.00
Rotary Drill	1	01-22	02:15	02:20	01-22	12147.00	12152.00	Pressure On (psi): 3700.00, Pressure Off (psi): 3200.00, Weight On Bit (klbs): 42.00, Surface RPM: 40, Surface Torque (ft lbf): 20000.00, Flow Rate (gpm): 615.00, Strokes Per Minute: 210.00
Slide Drill	2	01-22	02:20	03:20	01-22	12152.00	12182.00	Toolface: 150, Toolface Type: gravity
Rotary Drill	1	01-22	03:20	03:55	01-22	12182.00	12237.00	Pressure On (psi): 3700.00, Pressure Off (psi): 3200.00, Weight On Bit (klbs): 42.00, Surface RPM: 40, Surface Torque (ft lbf): 20000.00, Flow Rate (gpm): 615.00, Strokes Per Minute: 210.00
Survey	46	01-22	03:55	04:00	01-22	12237.00	12237.00	Inclination (°): 89.710, Azimuth (°): 355.270, TVD (ft): 11062.89, Dogleg (°/100 ft): 2.34, Sensor Depth (ft): 12173.00, Bit To Sensor (ft): 64.00
Rotary Drill	1	01-22	04:00	04:05	01-22	12237.00	12241.00	Pressure On (psi): 3700.00, Pressure Off (psi): 3200.00, Weight On Bit (klbs): 42.00, Surface RPM: 40, Surface Torque (ft lbf): 20000.00, Flow Rate (gpm): 615.00, Strokes Per Minute: 210.00
Slide Drill	2	01-22	04:05	05:25	01-22	12241.00	12276.00	Toolface: 120, Toolface Type: gravity
Rotary Drill	1	01-22	05:25	05:45	01-22	12276.00	12326.00	Pressure On (psi): 3700.00, Pressure Off (psi): 3200.00, Weight On Bit (klbs): 42.00, Surface RPM: 40, Surface Torque (ft lbf): 20000.00, Flow Rate (gpm): 615.00, Strokes Per Minute: 210.00
Survey	46	01-22	05:45	05:50	01-22	12326.00	12326.00	Inclination (°): 89.760, Azimuth (°): 356.940, TVD (ft): 11063.30, Dogleg (°/100 ft): 1.88, Sensor Depth (ft): 12262.00, Bit To Sensor (ft): 64.00
Rotary Drill	1	01-22	05:50	05:55	01-22	12326.00	12335.00	Pressure On (psi): 3700.00, Pressure Off (psi): 3200.00, Weight On Bit (klbs): 42.00, Surface RPM: 40, Surface Torque (ft lbf): 20000.00, Flow Rate (gpm): 615.00, Strokes Per Minute: 210.00
Slide Drill	2	01-22	05:55	06:40	01-22	12335.00	12375.00	Pressure On (psi): 4475.00, Pressure Off (psi): 3800.00, Weight On Bit (klbs): 30.00, Flow Rate (gpm): 695.00, Strokes Per Minute: 240, Toolface: 105, Toolface Type: gravity
Rotary Drill	1	01-22	06:40	07:05	01-22	12375.00	12416.00	Pressure On (psi): 4325.00, Pressure Off (psi): 3800.00, Weight On Bit (klbs): 42.00, Surface RPM: 40, Surface Torque (ft lbf): 20000.00, Flow Rate (gpm): 695.00, Strokes Per Minute: 240.00
Survey	46	01-22	07:05	07:10	01-22	12416.00	12416.00	Inclination (°): 90.460, Azimuth (°): 1.160, TVD (ft): 11063.12, Dogleg (°/100 ft): 4.75, Sensor Depth (ft): 12352.00, Bit To Sensor (ft): 64.00
Rotary Drill	1	01-22	07:10	07:15	01-22	12416.00	12420.00	Pressure On (psi): 4325.00, Pressure Off (psi): 3800.00, Weight On Bit (klbs): 42.00, Surface RPM: 40, Surface Torque (ft lbf): 20000.00, Flow Rate (gpm): 695.00, Strokes Per Minute: 240.00
Slide Drill	2	01-22	07:15	07:25	01-22	12420.00	12430.00	Pressure On (psi): 4475.00, Pressure Off (psi): 3800.00, Weight On Bit (klbs): 30.00, Flow Rate (gpm): 695.00, Strokes Per Minute: 240, Toolface: 180, Toolface Type: gravity
Rotary Drill	1	01-22	07:25	08:05	01-22	12430.00	12505.00	Pressure On (psi): 4325.00, Pressure Off (psi): 3800.00, Weight On Bit (klbs): 42.00, Surface RPM: 40, Surface Torque (ft lbf): 20000.00, Flow Rate (gpm): 695.00, Strokes Per Minute: 240.00
Survey	46	01-22	08:05	08:10	01-22	12505.00	12505.00	Inclination (°): 90.070, Azimuth (°): 1.600, TVD (ft): 11062.71, Dogleg (°/100 ft): 0.66, Sensor Depth (ft): 12441.00, Bit To Sensor (ft): 64.00
Rotary Drill	1	01-22	08:10	08:20	01-22	12505.00	12517.00	Pressure On (psi): 4325.00, Pressure Off (psi): 3800.00, Weight On Bit (klbs): 42.00, Surface RPM: 40, Surface Torque (ft lbf): 20000.00, Flow Rate (gpm): 695.00, Strokes Per Minute: 240.00
Slide Drill	2	01-22	08:20	08:45	01-22	12517.00	12537.00	Pressure On (psi): 4475.00, Pressure Off (psi): 3800.00, Weight On Bit (klbs): 30.00, Flow Rate (gpm): 695.00, Strokes Per Minute: 240, Toolface: 150, Toolface Type: gravity
Rotary Drill	1	01-22	08:45	09:15	01-22	12537.00	12595.00	Pressure On (psi): 4325.00, Pressure Off (psi): 3800.00, Weight On Bit (klbs): 42.00, Surface RPM: 40, Surface Torque (ft lbf): 20000.00, Flow Rate (gpm): 695.00, Strokes Per Minute: 240.00

Survey	46	01-22	09:15	09:20	01-22	12595.00	12595.00	Inclination (°): 88.620, Azimuth (°): 1.420, TVD (ft): 11063.74, Dogleg (°/100 ft): 1.62, Sensor Depth (ft): 12531.00, Bit To Sensor (ft): 64.00
Rotary Drill	1	01-22	09:20	10:00	01-22	12595.00	12684.00	Pressure On (psi): 4325.00, Pressure Off (psi): 3800.00, Weight On Bit (klbs): 42.00, Surface RPM: 40, Surface Torque (ft lbf): 20000.00, Flow Rate (gpm): 695.00, Strokes Per Minute: 240.00
Survey	46	01-22	10:00	10:05	01-22	12684.00	12684.00	Inclination (°): 88.000, Azimuth (°): 1.160, TVD (ft): 11066.37, Dogleg (°/100 ft): 0.76, Sensor Depth (ft): 12620.00, Bit To Sensor (ft): 64.00
Rotary Drill	1	01-22	10:05	10:10	01-22	12684.00	12687.00	Pressure On (psi): 4325.00, Pressure Off (psi): 3800.00, Weight On Bit (klbs): 42.00, Surface RPM: 40, Surface Torque (ft lbf): 20000.00, Flow Rate (gpm): 695.00, Strokes Per Minute: 240.00
Slide Drill	2	01-22	10:10	10:40	01-22	12687.00	12711.00	Pressure On (psi): 4475.00, Pressure Off (psi): 3800.00, Weight On Bit (klbs): 30.00, Flow Rate (gpm): 695.00, Strokes Per Minute: 240, Toolface: 0, Toolface Type: gravity
Rotary Drill	1	01-22	10:40	11:45	01-22	12711.00	12774.00	Pressure On (psi): 4325.00, Pressure Off (psi): 3800.00, Weight On Bit (klbs): 42.00, Surface RPM: 40, Surface Torque (ft lbf): 20000.00, Flow Rate (gpm): 695.00, Strokes Per Minute: 240.00
Other	16	01-22	11:45	17:45	01-22			TOP DRIVE DOWN @ 12774'
Survey	46	01-22	17:45	17:50	01-22	12774.00	12774.00	Inclination (°): 88.970, Azimuth (°): 0.280, TVD (ft): 11068.75, Dogleg (°/100 ft): 1.45, Sensor Depth (ft): 12710.00, Bit To Sensor (ft): 64.00
Rotary Drill	1	01-22	17:50	17:55	01-22	12774.00	12786.00	Pressure On (psi): 4325.00, Pressure Off (psi): 3800.00, Weight On Bit (klbs): 42.00, Surface RPM: 40, Surface Torque (ft lbf): 20000.00, Flow Rate (gpm): 695.00, Strokes Per Minute: 240.00
Slide Drill	2	01-22	17:55	18:25	01-22	12786.00	12796.00	Pressure On (psi): 4475.00, Pressure Off (psi): 3800.00, Weight On Bit (klbs): 30.00, Flow Rate (gpm): 695.00, Strokes Per Minute: 240, Toolface: 30, Toolface Type: gravity
Rotary Drill	1	01-22	18:25	19:10	01-22	12796.00	12863.00	Pressure On (psi): 4325.00, Pressure Off (psi): 3800.00, Weight On Bit (klbs): 42.00, Surface RPM: 40, Surface Torque (ft lbf): 20000.00, Flow Rate (gpm): 695.00, Strokes Per Minute: 240.00
Survey	46	01-22	19:10	19:15	01-22	12863.00	12863.00	Inclination (°): 90.020, Azimuth (°): 1.250, TVD (ft): 11069.53, Dogleg (°/100 ft): 1.61, Sensor Depth (ft): 12799.00, Bit To Sensor (ft): 64.00
Rotary Drill	1	01-22	19:15	19:20	01-22	12863.00	12875.00	Pressure On (psi): 4325.00, Pressure Off (psi): 3800.00, Weight On Bit (klbs): 42.00, Surface RPM: 40, Surface Torque (ft lbf): 20000.00, Flow Rate (gpm): 695.00, Strokes Per Minute: 240.00
Slide Drill	2	01-22	19:20	19:50	01-22	12875.00	12885.00	Pressure On (psi): 4200.00, Pressure Off (psi): 3700.00, Weight On Bit (klbs): 35.00, Flow Rate (gpm): 694.00, Strokes Per Minute: 237, Toolface: 0, Toolface Type: gravity
Rotary Drill	1	01-22	19:50	20:20	01-22	12885.00	12953.00	Pressure On (psi): 4325.00, Pressure Off (psi): 3800.00, Weight On Bit (klbs): 42.00, Surface RPM: 40, Surface Torque (ft lbf): 20000.00, Flow Rate (gpm): 695.00, Strokes Per Minute: 240.00
Survey	46	01-22	20:20	20:25	01-22	12953.00	12953.00	Inclination (°): 90.550, Azimuth (°): 0.450, TVD (ft): 11069.08, Dogleg (°/100 ft): 1.07, Sensor Depth (ft): 12889.00, Bit To Sensor (ft): 64.00
Rotary Drill	1	01-22	20:25	20:40	01-22	12953.00	12982.00	Pressure On (psi): 4325.00, Pressure Off (psi): 3800.00, Weight On Bit (klbs): 42.00, Surface RPM: 40, Surface Torque (ft lbf): 20000.00, Flow Rate (gpm): 695.00, Strokes Per Minute: 240.00
Slide Drill	2	01-22	20:40	20:55	01-22	12982.00	12989.00	Pressure On (psi): 4200.00, Pressure Off (psi): 3700.00, Weight On Bit (klbs): 35.00, Flow Rate (gpm): 694.00, Strokes Per Minute: 237, Toolface: 0, Toolface Type: gravity
Rotary Drill	1	01-22	20:55	21:40	01-22	12989.00	13042.00	Pressure On (psi): 4325.00, Pressure Off (psi): 3800.00, Weight On Bit (klbs): 42.00, Surface RPM: 40, Surface Torque (ft lbf): 20000.00, Flow Rate (gpm): 695.00, Strokes Per Minute: 240.00
Survey	46	01-22	21:40	21:45	01-22	13042.00	13042.00	Inclination (°): 90.460, Azimuth (°): 358.790, TVD (ft): 11068.30, Dogleg (°/100 ft): 1.87, Sensor Depth (ft): 12978.00, Bit To Sensor (ft): 64.00
Rotary Drill	1	01-22	21:45	21:50	01-22	13042.00	13054.00	Pressure On (psi): 4325.00, Pressure Off (psi): 3800.00, Weight On Bit (klbs): 42.00, Surface RPM: 40, Surface Torque (ft lbf): 21500.00, Flow Rate (gpm): 695.00, Strokes Per Minute: 240.00
Other	16	01-22	21:50	21:55	01-22			CHECK SHOT @ 12990'
Slide Drill	2	01-22	21:55	22:45	01-22	13054.00	13074.00	Pressure On (psi): 4300.00, Pressure Off (psi): 3800.00, Weight On Bit (klbs): 35.00, Flow Rate (gpm): 694.00, Strokes Per Minute: 237, Toolface: 45, Toolface Type: gravity
Rotary Drill	1	01-22	22:45	23:45	01-22	13074.00	13131.00	Pressure On (psi): 4325.00, Pressure Off (psi): 3800.00, Weight On Bit (klbs): 42.00, Surface RPM: 40, Surface Torque (ft lbf): 21500.00, Flow Rate (gpm): 695.00, Strokes Per Minute: 240.00
Survey	46	01-22	23:45	23:55	01-22	13131.00	13131.00	Inclination (°): 91.600, Azimuth (°): 359.140, TVD (ft): 11066.70, Dogleg (°/100 ft): 1.34, Sensor Depth (ft): 13067.00, Bit To Sensor (ft): 64.00
Rotary Drill	1	01-22	23:55	00:40	01-23	13131.00	13221.00	Pressure On (psi): 4325.00, Pressure Off (psi): 3800.00, Weight On Bit (klbs): 42.00, Surface RPM: 40, Surface Torque (ft lbf): 21500.00, Flow Rate (gpm): 695.00, Strokes Per Minute: 240.00

MWD Activities

No Activities



Job Number WT-21-183	Operator Advance Energy Partners	Rig Name Nabors X50
Start Date 2021-11-24	Well Name Anderson Fed Com 551H	Legal Well Name AFE Anderson Fed Com 551H
Play Delaware Basin	State/Province and Country New Mexico, US	County Lea
		Company Man

Sunday, Jan 23 00:00 - 23:59 (Day 10 of 16)

Billing: \$10,500.00 (\$226,970.50 total)

Drilling Summary				Drilling Parameters	
Start Depth (ft)	13131.00	Downhole Hours	24.00	Rotating WOB (klbs)	42.00 - 45.00
Bit Depth (ft)	14875.00	Drilling Hours	21.42	Sliding WOB (klbs)	35.00 - 45.00
Bottom Hole Depth (ft)	14875.00	Hours Circulating	0.00	Rotating SPM	240.00 - 240.00
Total Distance (ft)	1744.00	Hours Sliding	6.42	Sliding SPM	237.00 - 237.00
Distance Rotated (ft)	1527.00	Hours Rotating	15.00	Motor RPM	115.00 - 161.00
Distance Slid (ft)	217.00			Surface RPM	40.00 - 40.00
Inclination In	92.66			Flow Rate (gpm)	694.00 - 695.00
Inclination Out	87.25			On Bottom Pressure (psi)	4300.00 - 4325.00
Azimuth In	359.31	% Hours Rotating	70%	Off Bottom Pressure (psi)	3800.00 - 3800.00
Azimuth Out	1.60	% Hours Sliding	30%		
AVG Total ROP (ft/h)	77.82	% Distance Sliding	12%		
AVG Rotating ROP (ft/h)	101.80	% Distance Rotating	88%		
AVG Sliding ROP (ft/h)	30.91				

Personnel

Name	Position
Advance Directional	Directional Driller
Robert Olivarez	MWD Engineer
Michael Saliba	Directional Driller
Francisco DeLeon	MWD Engineer

BHA #6 - 8.75" LATERAL

Date In: Jan 21, 2022, 2:30 Date Out: Jan 25, 2022, 2:00

Bit Details		Motor Details		Directional Comments
OD (in)	8.750	Size (in)	7.0	FLOW RANGE: 300-750 GPM, REV PER GALLON 0.23, MAX DIFF: 1,580, MAX TORQUE : 17,950 BIT RUNS: 0 , Bit to Bend: 5.37
Vendor	Reed	Lobe/Stage	7/5, 9.0	
S/N	A28369	Bend Angle	1.83	
Nozzles	7x15's	Speed (rev/gal)	0.23	MWD Comments
Total Flow Area (in²)	1.208	Wear Pad OD (in)	7.375	
Drilling Hours for Day	21.42	Bit Distances		
Total Drilled for Day (ft)	1744.00	Survey: 64.00 ft, Gamma (Bit To Gamma): 40.00 ft, Resistivity (Bit to Resistivity): 50.00 ft		POOH Reason Change Bottom Hole Assembly: Erratic Differential PSI. TF control was highly difficult.
Drilling Hours for BHA	61.75			
Total Drilled for BHA (ft)	4465.00			

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</i> , Type: <i>PDC (Polycrystalline Diamond Compacts)</i> , Gauge Length (in): <i>4.00</i> , Size (in): <i>8.75</i>	Reed	A28369	4 1/2" Reg Pin			8.750		1.00	1.00
Mud Motor Description: <i>7.0" 7/8L, 5.7 Stg. 1.83° FBH (True Slick)</i> , Size (in): <i>7.00</i> , Bend Angle (°): <i>1.83</i> , Rotor Lobe: <i>7</i> , Stator Lobe: <i>5</i> , Stator Stage: <i>9</i>	NOV	675-36-384	4 1/2" IF Box	4 1/2" Reg Box		7.000		31.43	32.43
Resistivity Description: <i>RESISTIVITY MWD</i>	Bench Tree	650-1005						31.26	63.69
Battery Description: <i>BATTERY</i>	Bench Tree	B6002						17.33	81.02
Drill Collar Description: <i>NMDC</i> , Material: <i>Non-Magnetic</i> , Type: <i>Slick Drill</i>	GATOR	67-30-296	4 1/2" IF Box	4 1/2" IF Pin	3.250	6.750		30.65	111.67
Crossover Sub Description: <i>X-O SUB</i> , Material: <i>Steel</i>	BLACK DIAMOND	BD15201	EverDrlg54 Box	4 1/2" IF Pin	3.000	6.625		3.57	115.24
Drill Pipe Description: <i>22 Stands 5 1/2 Drill Pipe</i> , Type: <i>Slick</i>	Black Diamond		EverDrlg54 Box	EverDrlg54 Pin	3.000	5.500		1969.32	2084.56
Crossover Sub Description: <i>X-O SUB</i> , Material: <i>Steel</i>	BLACK DIAMOND	BD 22523	4 1/2" IF Box	EverDrlg54 Box	3.000	6.750		3.48	2088.04
Agitator Description: <i>6.75" Agitator</i> , Size (in): <i>6.75</i>	NOV	147-67001	4 1/2" FH Box	4 1/2" IF Pin		6.750		24.73	2112.77
Crossover Sub Description: <i>X-O SUB</i> , Material: <i>Steel</i>	BLACK DIAMOND	BD13511	EverDrlg54 Box	4 1/2" FH Pin	3.000	6.750		3.38	2116.15

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	01-22	23:55	00:40	01-23	13131.00	13221.00	Pressure On (psi): 4325.00, Pressure Off (psi): 3800.00, Weight On Bit (klbs): 42.00, Surface RPM: 40, Surface Torque (ft lbf): 21500.00, Flow Rate (gpm): 695.00, Strokes Per Minute: 240.00
Survey	46	01-23	00:40	00:45	01-23	13221.00	13221.00	Inclination (°): 92.660, Azimuth (°): 359.310, TVD (ft): 11063.35, Dogleg (°/100 ft): 1.19, Sensor Depth (ft): 13157.00, Bit To Sensor (ft): 64.00
Rotary Drill	1	01-23	00:45	00:50	01-23	13221.00	13231.00	Pressure On (psi): 4325.00, Pressure Off (psi): 3800.00, Weight On Bit (klbs): 45.00, Surface RPM: 40, Surface Torque (ft lbf): 21500.00, Flow Rate (gpm): 695.00, Strokes Per Minute: 240.00
Slide Drill	2	01-23	00:50	01:20	01-23	13231.00	13247.00	Pressure On (psi): 4300.00, Pressure Off (psi): 3800.00, Weight On Bit (klbs): 35.00, Flow Rate (gpm): 694.00, Strokes Per Minute: 237, Toolface: 160, Toolface Type: gravity
Rotary Drill	1	01-23	01:20	01:55	01-23	13247.00	13310.00	Pressure On (psi): 4325.00, Pressure Off (psi): 3800.00, Weight On Bit (klbs): 45.00, Surface RPM: 40, Surface Torque (ft lbf): 21500.00, Flow Rate (gpm): 695.00, Strokes Per Minute: 240.00
Survey	46	01-23	01:55	02:00	01-23	13310.00	13310.00	Inclination (°): 92.350, Azimuth (°): 0.020, TVD (ft): 11059.46, Dogleg (°/100 ft): 0.87, Sensor Depth (ft): 13246.00, Bit To Sensor (ft): 64.00
Rotary Drill	1	01-23	02:00	02:10	01-23	13310.00	13320.00	Pressure On (psi): 4325.00, Pressure Off (psi): 3800.00, Weight On Bit (klbs): 45.00, Surface RPM: 40, Surface Torque (ft lbf): 21500.00, Flow Rate (gpm): 695.00, Strokes Per Minute: 240.00
Slide Drill	2	01-23	02:10	02:55	01-23	13320.00	13335.00	Pressure On (psi): 4300.00, Pressure Off (psi): 3800.00, Weight On Bit (klbs): 45.00, Flow Rate (gpm): 694.00, Strokes Per Minute: 237, Toolface: 170, Toolface Type: gravity
Rotary Drill	1	01-23	02:55	03:30	01-23	13335.00	13399.00	Pressure On (psi): 4325.00, Pressure Off (psi): 3800.00, Weight On Bit (klbs): 45.00, Surface RPM: 40, Surface Torque (ft lbf): 21500.00, Flow Rate (gpm): 695.00, Strokes Per Minute: 240.00
Survey	46	01-23	03:30	03:35	01-23	13399.00	13399.00	Inclination (°): 90.900, Azimuth (°): 0.980, TVD (ft): 11056.94, Dogleg (°/100 ft): 1.95, Sensor Depth (ft): 13335.00, Bit To Sensor (ft): 64.00
Rotary Drill	1	01-23	03:35	03:45	01-23	13399.00	13437.00	Pressure On (psi): 4325.00, Pressure Off (psi): 3800.00, Weight On Bit (klbs): 45.00, Surface RPM: 40, Surface Torque (ft lbf): 21500.00, Flow Rate (gpm): 695.00, Strokes Per Minute: 240.00
Other	16	01-23	03:45	03:55	01-23			DONWLINK MWD TOOL
Rotary Drill	1	01-23	03:55	04:25	01-23	13437.00	13489.00	Pressure On (psi): 4325.00, Pressure Off (psi): 3800.00, Weight On Bit (klbs): 45.00, Surface RPM: 40, Surface Torque (ft lbf): 21500.00, Flow Rate (gpm): 695.00, Strokes Per Minute: 240.00
Survey	46	01-23	04:25	04:30	01-23	13489.00	13489.00	Inclination (°): 91.820, Azimuth (°): 0.280, TVD (ft): 11054.80, Dogleg (°/100 ft): 1.28, Sensor Depth (ft): 13425.00, Bit To Sensor (ft): 64.00
Rotary Drill	1	01-23	04:30	04:40	01-23	13489.00	13501.00	Pressure On (psi): 4325.00, Pressure Off (psi): 3800.00, Weight On Bit (klbs): 45.00, Surface RPM: 40, Surface Torque (ft lbf): 21500.00, Flow Rate (gpm): 695.00, Strokes Per Minute: 240.00
Slide Drill	2	01-23	04:40	05:10	01-23	13501.00	13519.00	Pressure On (psi): 4300.00, Pressure Off (psi): 3800.00, Weight On Bit (klbs): 45.00, Flow Rate (gpm): 694.00, Strokes Per Minute: 237, Toolface: 180, Toolface Type: gravity
Rotary Drill	1	01-23	05:10	05:35	01-23	13519.00	13578.00	Pressure On (psi): 4325.00, Pressure Off (psi): 3800.00, Weight On Bit (klbs): 45.00, Surface RPM: 40, Surface Torque (ft lbf): 21500.00, Flow Rate (gpm): 695.00, Strokes Per Minute: 240.00
Survey	46	01-23	05:35	05:40	01-23	13578.00	13578.00	Inclination (°): 89.800, Azimuth (°): 0.630, TVD (ft): 11053.55, Dogleg (°/100 ft): 2.30, Sensor Depth (ft): 13514.00, Bit To Sensor (ft): 64.00
Rotary Drill	1	01-23	05:40	06:15	01-23	13578.00	13667.00	Pressure On (psi): 4325.00, Pressure Off (psi): 3800.00, Weight On Bit (klbs): 45.00, Surface RPM: 40, Surface Torque (ft lbf): 21500.00, Flow Rate (gpm): 695.00, Strokes Per Minute: 240.00
Survey	46	01-23	06:15	06:20	01-23	13667.00	13667.00	Inclination (°): 90.110, Azimuth (°): 0.810, TVD (ft): 11053.61, Dogleg (°/100 ft): 0.40, Sensor Depth (ft): 13603.00, Bit To Sensor (ft): 64.00
Rotary Drill	1	01-23	06:20	06:55	01-23	13667.00	13756.00	Pressure On (psi): 4325.00, Pressure Off (psi): 3800.00, Weight On Bit (klbs): 45.00, Surface RPM: 40, Surface Torque (ft lbf): 21500.00, Flow Rate (gpm): 695.00, Strokes Per Minute: 240.00
Survey	46	01-23	06:55	07:00	01-23	13756.00	13756.00	Inclination (°): 89.190, Azimuth (°): 358.960, TVD (ft): 11054.16, Dogleg (°/100 ft): 2.32, Sensor Depth (ft): 13692.00, Bit To Sensor (ft): 64.00
Rotary Drill	1	01-23	07:00	07:50	01-23	13756.00	13845.00	Pressure On (psi): 4325.00, Pressure Off (psi): 3800.00, Weight On Bit (klbs): 45.00, Surface RPM: 40, Surface Torque (ft lbf): 21500.00, Flow Rate (gpm): 695.00, Strokes Per Minute: 240.00
Survey	46	01-23	07:50	07:55	01-23	13845.00	13845.00	Inclination (°): 89.450, Azimuth (°): 357.990, TVD (ft): 11055.21, Dogleg (°/100 ft): 1.13, Sensor Depth (ft): 13781.00, Bit To Sensor (ft): 64.00
Rotary Drill	1	01-23	07:55	08:00	01-23	13845.00	13848.00	Pressure On (psi): 4325.00, Pressure Off (psi): 3800.00, Weight On Bit (klbs): 45.00, Surface RPM: 40, Surface Torque (ft lbf): 21500.00, Flow Rate (gpm): 695.00, Strokes Per Minute: 240.00

Slide Drill	2	01-23	08:00	08:45	01-23	13848.00	13870.00	Pressure On (psi): 4300.00, Pressure Off (psi): 3800.00, Weight On Bit (klbs): 45.00, Flow Rate (gpm): 694.00, Strokes Per Minute: 237, Toolface: 70, Toolface Type: gravity
Rotary Drill	1	01-23	08:45	09:10	01-23	13870.00	13935.00	Pressure On (psi): 4325.00, Pressure Off (psi): 3800.00, Weight On Bit (klbs): 45.00, Surface RPM: 40, Surface Torque (ft lbf): 21500.00, Flow Rate (gpm): 695.00, Strokes Per Minute: 240.00
Survey	46	01-23	09:10	09:15	01-23	13935.00	13935.00	Inclination (°): 89.410, Azimuth (°): 358.700, TVD (ft): 11056.11, Dogleg (°/100 ft): 0.79, Sensor Depth (ft): 13871.00, Bit To Sensor (ft): 64.00
Rotary Drill	1	01-23	09:15	09:30	01-23	13935.00	13947.00	Pressure On (psi): 4325.00, Pressure Off (psi): 3800.00, Weight On Bit (klbs): 45.00, Surface RPM: 40, Surface Torque (ft lbf): 21500.00, Flow Rate (gpm): 695.00, Strokes Per Minute: 240.00
Slide Drill	2	01-23	09:30	10:00	01-23	13947.00	13969.00	Pressure On (psi): 4300.00, Pressure Off (psi): 3800.00, Weight On Bit (klbs): 45.00, Flow Rate (gpm): 694.00, Strokes Per Minute: 237, Toolface: 75, Toolface Type: gravity
Rotary Drill	1	01-23	10:00	10:35	01-23	13969.00	14025.00	Pressure On (psi): 4325.00, Pressure Off (psi): 3800.00, Weight On Bit (klbs): 45.00, Surface RPM: 40, Surface Torque (ft lbf): 21500.00, Flow Rate (gpm): 695.00, Strokes Per Minute: 240.00
Survey	46	01-23	10:35	10:40	01-23	14025.00	14025.00	Inclination (°): 90.370, Azimuth (°): 0.890, TVD (ft): 11056.28, Dogleg (°/100 ft): 2.66, Sensor Depth (ft): 13961.00, Bit To Sensor (ft): 64.00
Rotary Drill	1	01-23	10:40	11:30	01-23	14025.00	14114.00	Pressure On (psi): 4325.00, Pressure Off (psi): 3800.00, Weight On Bit (klbs): 45.00, Surface RPM: 40, Surface Torque (ft lbf): 21500.00, Flow Rate (gpm): 695.00, Strokes Per Minute: 240.00
Rig Service - In Hole	19	01-23	11:30	11:45	01-23			Rig Serice
Survey	46	01-23	11:45	11:50	01-23	14114.00	14114.00	Inclination (°): 90.110, Azimuth (°): 1.070, TVD (ft): 11055.91, Dogleg (°/100 ft): 0.36, Sensor Depth (ft): 14050.00, Bit To Sensor (ft): 64.00
Rotary Drill	1	01-23	11:50	12:45	01-23	14114.00	14204.00	Pressure On (psi): 4325.00, Pressure Off (psi): 3800.00, Weight On Bit (klbs): 45.00, Surface RPM: 40, Surface Torque (ft lbf): 21500.00, Flow Rate (gpm): 695.00, Strokes Per Minute: 240.00
Survey	46	01-23	12:45	12:50	01-23	14204.00	14204.00	Inclination (°): 89.670, Azimuth (°): 0.540, TVD (ft): 11056.08, Dogleg (°/100 ft): 0.77, Sensor Depth (ft): 14140.00, Bit To Sensor (ft): 64.00
Rotary Drill	1	01-23	12:50	13:45	01-23	14204.00	14294.00	Pressure On (psi): 4325.00, Pressure Off (psi): 3800.00, Weight On Bit (klbs): 45.00, Surface RPM: 40, Surface Torque (ft lbf): 21500.00, Flow Rate (gpm): 695.00, Strokes Per Minute: 240.00
Survey	46	01-23	13:45	13:50	01-23	14294.00	14294.00	Inclination (°): 89.140, Azimuth (°): 359.580, TVD (ft): 11057.02, Dogleg (°/100 ft): 1.22, Sensor Depth (ft): 14230.00, Bit To Sensor (ft): 64.00
Rotary Drill	1	01-23	13:50	14:00	01-23	14294.00	14306.00	Pressure On (psi): 4325.00, Pressure Off (psi): 3800.00, Weight On Bit (klbs): 45.00, Surface RPM: 40, Surface Torque (ft lbf): 21500.00, Flow Rate (gpm): 695.00, Strokes Per Minute: 240.00
Slide Drill	2	01-23	14:00	14:30	01-23	14306.00	14328.00	Pressure On (psi): 4300.00, Pressure Off (psi): 3800.00, Weight On Bit (klbs): 45.00, Flow Rate (gpm): 694.00, Strokes Per Minute: 237, Toolface: 30, Toolface Type: gravity
Rotary Drill	1	01-23	14:30	15:10	01-23	14328.00	14383.00	Pressure On (psi): 4325.00, Pressure Off (psi): 3800.00, Weight On Bit (klbs): 45.00, Surface RPM: 40, Surface Torque (ft lbf): 21500.00, Flow Rate (gpm): 695.00, Strokes Per Minute: 240.00
Survey	46	01-23	15:10	15:15	01-23	14383.00	14383.00	Inclination (°): 90.290, Azimuth (°): 0.100, TVD (ft): 11057.46, Dogleg (°/100 ft): 1.42, Sensor Depth (ft): 14319.00, Bit To Sensor (ft): 64.00
Rotary Drill	1	01-23	15:15	16:15	01-23	14383.00	14440.00	Pressure On (psi): 4325.00, Pressure Off (psi): 3800.00, Weight On Bit (klbs): 45.00, Surface RPM: 40, Surface Torque (ft lbf): 21500.00, Flow Rate (gpm): 695.00, Strokes Per Minute: 240.00
Slide Drill	2	01-23	16:15	16:55	01-23	14440.00	14468.00	Pressure On (psi): 4300.00, Pressure Off (psi): 3800.00, Weight On Bit (klbs): 45.00, Flow Rate (gpm): 694.00, Strokes Per Minute: 237, Toolface: 155, Toolface Type: gravity
Rotary Drill	1	01-23	16:55	17:00	01-23	14468.00	14473.00	Pressure On (psi): 4325.00, Pressure Off (psi): 3800.00, Weight On Bit (klbs): 45.00, Surface RPM: 40, Surface Torque (ft lbf): 21500.00, Flow Rate (gpm): 695.00, Strokes Per Minute: 240.00
Survey	46	01-23	17:00	17:10	01-23	14473.00	14473.00	Inclination (°): 92.040, Azimuth (°): 0.980, TVD (ft): 11055.63, Dogleg (°/100 ft): 2.18, Sensor Depth (ft): 14409.00, Bit To Sensor (ft): 64.00
Rotary Drill	1	01-23	17:10	17:35	01-23	14473.00	14528.00	Pressure On (psi): 4325.00, Pressure Off (psi): 3800.00, Weight On Bit (klbs): 45.00, Surface RPM: 40, Surface Torque (ft lbf): 21500.00, Flow Rate (gpm): 695.00, Strokes Per Minute: 240.00
Slide Drill	2	01-23	17:35	18:10	01-23	14528.00	14562.00	Pressure On (psi): 4300.00, Pressure Off (psi): 3800.00, Weight On Bit (klbs): 45.00, Flow Rate (gpm): 694.00, Strokes Per Minute: 237, Toolface: 180, Toolface Type: gravity
Survey	46	01-23	18:10	18:15	01-23	14562.00	14562.00	Inclination (°): 90.860, Azimuth (°): 1.600, TVD (ft): 11053.38, Dogleg (°/100 ft): 1.50, Sensor Depth (ft): 14498.00, Bit To Sensor (ft): 64.00
Rotary Drill	1	01-23	18:15	19:40	01-23	14562.00	14652.00	Pressure On (psi): 4325.00, Pressure Off (psi): 3800.00, Weight On Bit (klbs): 45.00, Surface RPM: 40, Surface Torque (ft lbf): 21500.00, Flow Rate (gpm): 695.00, Strokes Per Minute: 240.00

Survey	46	01-23	19:40	19:45	01-23	14652.00	14652.00	Inclination (°): 86.460, Azimuth (°): 2.740, TVD (ft): 11055.48, Dogleg (°/100 ft): 5.05, Sensor Depth (ft): 14588.00, Bit To Sensor (ft): 64.00
Rotary Drill	1	01-23	19:45	19:50	01-23	14652.00	14662.00	Pressure On (psi): 4325.00, Pressure Off (psi): 3800.00, Weight On Bit (klbs): 45.00, Surface RPM: 40, Surface Torque (ft lbf): 21500.00, Flow Rate (gpm): 695.00, Strokes Per Minute: 240.00
Slide Drill	2	01-23	19:50	20:35	01-23	14662.00	14682.00	Pressure On (psi): 4300.00, Pressure Off (psi): 3800.00, Weight On Bit (klbs): 45.00, Flow Rate (gpm): 694.00, Strokes Per Minute: 237, Toolface: 330, Toolface Type: gravity
Rotary Drill	1	01-23	20:35	21:20	01-23	14682.00	14741.00	Pressure On (psi): 4325.00, Pressure Off (psi): 3800.00, Weight On Bit (klbs): 45.00, Surface RPM: 40, Surface Torque (ft lbf): 21500.00, Flow Rate (gpm): 695.00, Strokes Per Minute: 240.00
Survey	46	01-23	21:20	21:25	01-23	14741.00	14741.00	Inclination (°): 87.870, Azimuth (°): 2.210, TVD (ft): 11059.88, Dogleg (°/100 ft): 1.69, Sensor Depth (ft): 14677.00, Bit To Sensor (ft): 64.00
Rotary Drill	1	01-23	21:25	21:40	01-23	14741.00	14765.00	Pressure On (psi): 4325.00, Pressure Off (psi): 3800.00, Weight On Bit (klbs): 45.00, Surface RPM: 40, Surface Torque (ft lbf): 21500.00, Flow Rate (gpm): 695.00, Strokes Per Minute: 240.00
Slide Drill	2	01-23	21:40	22:35	01-23	14765.00	14785.00	Pressure On (psi): 4300.00, Pressure Off (psi): 3800.00, Weight On Bit (klbs): 45.00, Flow Rate (gpm): 694.00, Strokes Per Minute: 237, Toolface: 270, Toolface Type: gravity
Rotary Drill	1	01-23	22:35	23:00	01-23	14785.00	14830.00	Pressure On (psi): 4325.00, Pressure Off (psi): 3800.00, Weight On Bit (klbs): 45.00, Surface RPM: 40, Surface Torque (ft lbf): 21500.00, Flow Rate (gpm): 695.00, Strokes Per Minute: 240.00
Survey	46	01-23	23:00	23:05	01-23	14830.00	14830.00	Inclination (°): 87.250, Azimuth (°): 1.600, TVD (ft): 11063.67, Dogleg (°/100 ft): 0.98, Sensor Depth (ft): 14766.00, Bit To Sensor (ft): 64.00
Rotary Drill	1	01-23	23:05	23:25	01-23	14830.00	14875.00	Pressure On (psi): 4325.00, Pressure Off (psi): 3800.00, Weight On Bit (klbs): 45.00, Surface RPM: 40, Surface Torque (ft lbf): 21500.00, Flow Rate (gpm): 695.00, Strokes Per Minute: 240.00
Other	16	01-23	23:25	23:30	01-23			CHECK SHOT @ 14875'
Slide Drill	2	01-23	23:30	00:45	01-24	14875.00	14895.00	Pressure On (psi): 4300.00, Pressure Off (psi): 3800.00, Weight On Bit (klbs): 45.00, Flow Rate (gpm): 694.00, Strokes Per Minute: 237, Toolface: 0, Toolface Type: gravity

MWD Activities

No Activities



Job Number WT-21-183	Operator Advance Energy Partners	Rig Name Nabors X50
Start Date 2021-11-24	Well Name Anderson Fed Com 551H	Legal Well Name AFE Anderson Fed Com 551H
Play Delaware Basin	State/Province and Country New Mexico, US	County Lea
		Company Man

Monday, Jan 24 00:00 - 23:59 (Day 11 of 16)

Billing: \$10,500.00 (\$226,970.50 total)

Drilling Summary				Drilling Parameters	
Start Depth (ft)	14875.00	Downhole Hours	24.00	Rotating WOB (klbs)	45.00 - 45.00
Bit Depth (ft)	15829.00	Drilling Hours	14.92	Sliding WOB (klbs)	45.00 - 45.00
Bottom Hole Depth (ft)	15829.00	Hours Circulating	0.42	Rotating SPM	240.00 - 240.00
Total Distance (ft)	954.00	Hours Sliding	5.58	Sliding SPM	237.00 - 237.00
Distance Rotated (ft)	791.00	Hours Rotating	9.33	Motor RPM	115.00 - 161.00
Distance Slid (ft)	163.00			Surface RPM	40.00 - 40.00
Inclination In	84.92			Flow Rate (gpm)	694.00 - 695.00
Inclination Out	85.98			On Bottom Pressure (psi)	4300.00 - 4575.00
Azimuth In	359.84	% Hours Rotating	63%	Off Bottom Pressure (psi)	3800.00 - 4100.00
Azimuth Out	359.40	% Hours Sliding	37%		
AVG Total ROP (ft/h)	63.96	% Distance Sliding	17%		
AVG Rotating ROP (ft/h)	84.75	% Distance Rotating	83%		
AVG Sliding ROP (ft/h)	29.19				

Personnel

Name	Position
Advance Directional	Directional Driller
Robert Olivarez	MWD Engineer
Michael Saliba	Directional Driller
Francisco DeLeon	MWD Engineer

BHA #6 - 8.75" LATERAL

Date In: Jan 21, 2022, 2:30 Date Out: Jan 25, 2022, 2:00

Bit Details		Motor Details		Directional Comments
OD (in)	8.750	Size (in)	7.0	FLOW RANGE: 300-750 GPM, REV PER GALLON 0.23, MAX DIFF: 1,580, MAX TORQUE : 17,950 BIT RUNS: 0 , Bit to Bend: 5.37
Vendor	Reed	Lobe/Stage	7/5, 9.0	
S/N	A28369	Bend Angle	1.83	
Nozzles	7x15's	Speed (rev/gal)	0.23	
Total Flow Area (in²)	1.208	Wear Pad OD (in)	7.375	MWD Comments
Drilling Hours for Day	14.92	Bit Distances		
Total Drilled for Day (ft)	954.00	Survey: 64.00 ft, Gamma (Bit To Gamma):		
Drilling Hours for BHA	61.75	40.00 ft, Resistivity (Bit to Resistivity):		
Total Drilled for BHA (ft)	4465.00	50.00 ft		
				POOH Reason
				Change Bottom Hole Assembly: Erratic Differential PSI. TF control was highly difficult.

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</i> , Type: <i>PDC (Polycrystalline Diamond Compacts)</i> , Gauge Length (in): <i>4.00</i> , Size (in): <i>8.75</i>	Reed	A28369	4 1/2" Reg Pin			8.750		1.00	1.00
Mud Motor Description: <i>7.0" 7/8L, 5.7 Stg. 1.83° FBH (True Slick)</i> , Size (in): <i>7.00</i> , Bend Angle (°): <i>1.83</i> , Rotor Lobe: <i>7</i> , Stator Lobe: <i>5</i> , Stator Stage: <i>9</i>	NOV	675-36-384	4 1/2" IF Box	4 1/2" Reg Box		7.000		31.43	32.43
Resistivity Description: <i>RESISTIVITY MWD</i>	Bench Tree	650-1005						31.26	63.69
Battery Description: <i>BATTERY</i>	Bench Tree	B6002						17.33	81.02
Drill Collar Description: <i>NMDC</i> , Material: <i>Non-Magnetic</i> , Type: <i>Slick Drill</i>	GATOR	67-30-296	4 1/2" IF Box	4 1/2" IF Pin	3.250	6.750		30.65	111.67
Crossover Sub Description: <i>X-O SUB</i> , Material: <i>Steel</i>	BLACK DIAMOND	BD15201	EverDrlg54 Box	4 1/2" IF Pin	3.000	6.625		3.57	115.24
Drill Pipe Description: <i>22 Stands 5 1/2 Drill Pipe</i> , Type: <i>Slick</i>	Black Diamond		EverDrlg54 Box	EverDrlg54 Pin	3.000	5.500		1969.32	2084.56
Crossover Sub Description: <i>X-O SUB</i> , Material: <i>Steel</i>	BLACK DIAMOND	BD 22523	4 1/2" IF Box	EverDrlg54 Box	3.000	6.750		3.48	2088.04
Agitator Description: <i>6.75" Agitator</i> , Size (in): <i>6.75</i>	NOV	147-67001	4 1/2" FH Box	4 1/2" IF Pin		6.750		24.73	2112.77
Crossover Sub Description: <i>X-O SUB</i> , Material: <i>Steel</i>	BLACK DIAMOND	BD13511	EverDrlg54 Box	4 1/2" FH Pin	3.000	6.750		3.38	2116.15

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	01-23	23:30	00:45	01-24	14875.00	14895.00	Pressure On (psi): 4300.00, Pressure Off (psi): 3800.00, Weight On Bit (klbs): 45.00, Flow Rate (gpm): 694.00, Strokes Per Minute: 237, Toolface: 0, Toolface Type: gravity
Rotary Drill	1	01-24	00:45	01:00	01-24	14895.00	14930.00	Pressure On (psi): 4325.00, Pressure Off (psi): 3800.00, Weight On Bit (klbs): 45.00, Surface RPM: 40, Surface Torque (ft lbf): 21500.00, Flow Rate (gpm): 695.00, Strokes Per Minute: 240.00
Survey	46	01-24	01:00	01:05	01-24	14920.00	14920.00	Inclination (°): 84.920, Azimuth (°): 359.840, TVD (ft): 11069.82, Dogleg (°/100 ft): 3.24, Sensor Depth (ft): 14856.00, Bit To Sensor (ft): 64.00
Slide Drill	2	01-24	01:05	01:20	01-24	14930.00	14955.00	Pressure On (psi): 4300.00, Pressure Off (psi): 3800.00, Weight On Bit (klbs): 45.00, Flow Rate (gpm): 694.00, Strokes Per Minute: 237, Toolface: 0, Toolface Type: gravity
Rotary Drill	1	01-24	01:20	02:25	01-24	14955.00	15009.00	Pressure On (psi): 4325.00, Pressure Off (psi): 3800.00, Weight On Bit (klbs): 45.00, Surface RPM: 40, Surface Torque (ft lbf): 21500.00, Flow Rate (gpm): 695.00, Strokes Per Minute: 240.00
Survey	46	01-24	02:25	02:30	01-24	15009.00	15009.00	Inclination (°): 88.660, Azimuth (°): 359.490, TVD (ft): 11074.80, Dogleg (°/100 ft): 4.22, Sensor Depth (ft): 14945.00, Bit To Sensor (ft): 64.00
Rotary Drill	1	01-24	02:30	03:30	01-24	15009.00	15098.00	Pressure On (psi): 4475.00, Pressure Off (psi): 3950.00, Weight On Bit (klbs): 45.00, Surface RPM: 40, Surface Torque (ft lbf): 26500.00, Flow Rate (gpm): 695.00, Strokes Per Minute: 240.00
Survey	46	01-24	03:30	03:35	01-24	15098.00	15098.00	Inclination (°): 89.140, Azimuth (°): 0.190, TVD (ft): 11076.51, Dogleg (°/100 ft): 0.95, Sensor Depth (ft): 15034.00, Bit To Sensor (ft): 64.00
Rotary Drill	1	01-24	03:35	03:40	01-24	15098.00	15108.00	Pressure On (psi): 4475.00, Pressure Off (psi): 3950.00, Weight On Bit (klbs): 45.00, Surface RPM: 40, Surface Torque (ft lbf): 26500.00, Flow Rate (gpm): 695.00, Strokes Per Minute: 240.00
Slide Drill	2	01-24	03:40	04:10	01-24	15108.00	15123.00	Pressure On (psi): 4300.00, Pressure Off (psi): 3800.00, Weight On Bit (klbs): 45.00, Flow Rate (gpm): 694.00, Strokes Per Minute: 237, Toolface: 0, Toolface Type: gravity
Rotary Drill	1	01-24	04:10	05:00	01-24	15123.00	15188.00	Pressure On (psi): 4475.00, Pressure Off (psi): 3950.00, Weight On Bit (klbs): 45.00, Surface RPM: 40, Surface Torque (ft lbf): 26500.00, Flow Rate (gpm): 695.00, Strokes Per Minute: 240.00
Survey	46	01-24	05:00	05:05	01-24	15188.00	15188.00	Inclination (°): 89.930, Azimuth (°): 359.140, TVD (ft): 11077.24, Dogleg (°/100 ft): 1.46, Sensor Depth (ft): 15124.00, Bit To Sensor (ft): 64.00
Rotary Drill	1	01-24	05:05	06:00	01-24	15188.00	15277.00	Pressure On (psi): 4475.00, Pressure Off (psi): 3950.00, Weight On Bit (klbs): 45.00, Surface RPM: 40, Surface Torque (ft lbf): 26500.00, Flow Rate (gpm): 695.00, Strokes Per Minute: 240.00
Survey	46	01-24	06:00	06:05	01-24	15277.00	15277.00	Inclination (°): 90.330, Azimuth (°): 358.700, TVD (ft): 11077.04, Dogleg (°/100 ft): 0.67, Sensor Depth (ft): 15213.00, Bit To Sensor (ft): 64.00
Rotary Drill	1	01-24	06:05	06:50	01-24	15277.00	15366.00	Pressure On (psi): 4475.00, Pressure Off (psi): 3950.00, Weight On Bit (klbs): 45.00, Surface RPM: 40, Surface Torque (ft lbf): 26500.00, Flow Rate (gpm): 695.00, Strokes Per Minute: 240.00
Survey	46	01-24	06:50	06:55	01-24	15366.00	15366.00	Inclination (°): 90.810, Azimuth (°): 358.350, TVD (ft): 11076.15, Dogleg (°/100 ft): 0.67, Sensor Depth (ft): 15302.00, Bit To Sensor (ft): 64.00
Rotary Drill	1	01-24	06:55	07:00	01-24	15366.00	15378.00	Pressure On (psi): 4475.00, Pressure Off (psi): 3950.00, Weight On Bit (klbs): 45.00, Surface RPM: 40, Surface Torque (ft lbf): 26500.00, Flow Rate (gpm): 695.00, Strokes Per Minute: 240.00
Slide Drill	2	01-24	07:00	07:45	01-24	15378.00	15398.00	Pressure On (psi): 4400.00, Pressure Off (psi): 4100.00, Weight On Bit (klbs): 45.00, Flow Rate (gpm): 694.00, Strokes Per Minute: 237, Toolface: 135, Toolface Type: gravity
Rotary Drill	1	01-24	07:45	08:20	01-24	15398.00	15455.00	Pressure On (psi): 4475.00, Pressure Off (psi): 3950.00, Weight On Bit (klbs): 45.00, Surface RPM: 40, Surface Torque (ft lbf): 26500.00, Flow Rate (gpm): 695.00, Strokes Per Minute: 240.00
Survey	46	01-24	08:20	08:25	01-24	15455.00	15455.00	Inclination (°): 90.460, Azimuth (°): 358.790, TVD (ft): 11075.17, Dogleg (°/100 ft): 0.63, Sensor Depth (ft): 15391.00, Bit To Sensor (ft): 64.00
Slide Drill	2	01-24	08:25	09:20	01-24	15455.00	15485.00	Pressure On (psi): 4400.00, Pressure Off (psi): 4100.00, Weight On Bit (klbs): 45.00, Flow Rate (gpm): 694.00, Strokes Per Minute: 237, Toolface: 150, Toolface Type: gravity
Rotary Drill	1	01-24	09:20	09:55	01-24	15485.00	15545.00	Pressure On (psi): 4575.00, Pressure Off (psi): 4100.00, Weight On Bit (klbs): 45.00, Surface RPM: 40, Surface Torque (ft lbf): 26500.00, Flow Rate (gpm): 695.00, Strokes Per Minute: 240.00
Survey	46	01-24	09:55	10:00	01-24	15545.00	15545.00	Inclination (°): 88.480, Azimuth (°): 359.840, TVD (ft): 11076.00, Dogleg (°/100 ft): 2.49, Sensor Depth (ft): 15481.00, Bit To Sensor (ft): 64.00
Rotary Drill	1	01-24	10:00	10:35	01-24	15545.00	15594.00	Pressure On (psi): 4575.00, Pressure Off (psi): 4100.00, Weight On Bit (klbs): 45.00, Surface RPM: 40, Surface Torque (ft lbf): 26500.00, Flow Rate (gpm): 695.00, Strokes Per Minute: 240.00
Slide Drill	2	01-24	10:35	10:50	01-24	15594.00	15600.00	Pressure On (psi): 4400.00, Pressure Off (psi): 4100.00, Weight On Bit (klbs): 45.00, Flow Rate (gpm): 694.00, Strokes Per Minute: 237, Toolface: 250, Toolface Type: gravity

Other	16	01-24	10:50	11:10	01-24			Downlink Res/MWD tool
Slide Drill	2	01-24	11:10	12:10	01-24	15600.00	15630.00	Pressure On (psi): 4400.00, Pressure Off (psi): 4100.00, Weight On Bit (klbs): 45.00, Flow Rate (gpm): 694.00, Strokes Per Minute: 237, Toolface: 205, Toolface Type: gravity
Rotary Drill	1	01-24	12:10	12:15	01-24	15630.00	15634.00	Pressure On (psi): 4575.00, Pressure Off (psi): 4100.00, Weight On Bit (klbs): 45.00, Surface RPM: 40, Surface Torque (ft lbf): 26500.00, Flow Rate (gpm): 695.00, Strokes Per Minute: 240.00
Survey	46	01-24	12:15	12:20	01-24	15634.00	15634.00	Inclination (°): 89.190, Azimuth (°): 0.190, TVD (ft): 11077.81, Dogleg (°/100 ft): 0.89, Sensor Depth (ft): 15570.00, Bit To Sensor (ft): 64.00
Rotary Drill	1	01-24	12:20	13:30	01-24	15634.00	15723.00	Pressure On (psi): 4575.00, Pressure Off (psi): 4100.00, Weight On Bit (klbs): 45.00, Surface RPM: 40, Surface Torque (ft lbf): 26500.00, Flow Rate (gpm): 695.00, Strokes Per Minute: 240.00
Rig Service - In Hole	19	01-24	13:30	13:45	01-24			Rig Service
Survey	46	01-24	13:45	13:50	01-24	15723.00	15723.00	Inclination (°): 86.860, Azimuth (°): 358.700, TVD (ft): 11080.88, Dogleg (°/100 ft): 3.11, Sensor Depth (ft): 15659.00, Bit To Sensor (ft): 64.00
Rotary Drill	1	01-24	13:50	15:10	01-24	15723.00	15812.00	Pressure On (psi): 4575.00, Pressure Off (psi): 4100.00, Weight On Bit (klbs): 45.00, Surface RPM: 40, Surface Torque (ft lbf): 26500.00, Flow Rate (gpm): 695.00, Strokes Per Minute: 240.00
Survey	46	01-24	15:10	15:15	01-24	15812.00	15812.00	Inclination (°): 85.980, Azimuth (°): 359.400, TVD (ft): 11086.43, Dogleg (°/100 ft): 1.26, Sensor Depth (ft): 15748.00, Bit To Sensor (ft): 64.00
Slide Drill	2	01-24	15:15	15:55	01-24	15812.00	15829.00	Pressure On (psi): 4400.00, Pressure Off (psi): 4100.00, Weight On Bit (klbs): 45.00, Flow Rate (gpm): 694.00, Strokes Per Minute: 237, Toolface: 50, Toolface Type: gravity
Circulating	3	01-24	15:55	16:20	01-24			Circulate T/ POOH
Pooh	7	01-24	16:20	00:00	01-25			POOH to change out BHA

MWD Activities

No Activities



Job Number WT-21-183	Operator Advance Energy Partners	Rig Name Nabors X50
Start Date 2021-11-24	Well Name Anderson Fed Com 551H	Legal Well Name AFE Anderson Fed Com 551H
Play Delaware Basin	State/Province and Country New Mexico, US	County Lea
		Company Man

Tuesday, Jan 25 00:00 - 23:59 (Day 12 of 16)

Billing: \$25,925.00 (\$226,970.50 total)

Drilling Summary				Drilling Parameters	
Start Depth (ft)	15829.00	Downhole Hours	24.00	Rotating WOB (klbs)	42.00 - 42.00
Bit Depth (ft)	16708.00	Drilling Hours	9.25	Sliding WOB (klbs)	45.00 - 45.00
Bottom Hole Depth (ft)	16708.00	Hours Circulating	0.00	Rotating SPM	240.00 - 240.00
Total Distance (ft)	879.00	Hours Sliding	3.17	Sliding SPM	237.00 - 237.00
Distance Rotated (ft)	799.00	Hours Rotating	6.08	Motor RPM	0.00 - 161.00
Distance Slid (ft)	80.00			Surface RPM	40.00 - 40.00
Inclination In	87.52			Flow Rate (gpm)	694.00 - 695.00
Inclination Out	87.78			On Bottom Pressure (psi)	4750.00 - 5250.00
Azimuth In	0.28	% Hours Rotating	66%	Off Bottom Pressure (psi)	4300.00 - 4300.00
Azimuth Out	355.62	% Hours Sliding	34%		
AVG Total ROP (ft/h)	92.50	% Distance Sliding	9%		
AVG Rotating ROP (ft/h)	123.66	% Distance Rotating	91%		
AVG Sliding ROP (ft/h)	25.26				

Personnel

Name	Position
Advance Directional	Directional Driller
Robert Olivarez	MWD Engineer
Michael Saliba	Directional Driller
Francisco DeLeon	MWD Engineer

BHA #6 - 8.75" LATERAL

Date In: Jan 21, 2022, 2:30 Date Out: Jan 25, 2022, 2:00

Bit Details		Motor Details		Directional Comments
OD (in)	8.750	Size (in)	7.0	FLOW RANGE: 300-750 GPM, REV PER GALLON 0.23, MAX DIFF: 1,580, MAX TORQUE : 17,950 BIT RUNS: 0 , Bit to Bend: 5.37
Vendor	Reed	Lobe/Stage	7/5, 9.0	
S/N	A28369	Bend Angle	1.83	
Nozzles	7x15's	Speed (rev/gal)	0.23	
Total Flow Area (in²)	1.208	Wear Pad OD (in)	7.375	MWD Comments
Drilling Hours for Day	0.00	Bit Distances		POOH Reason Change Bottom Hole Assembly: Erratic Differential PSI. TF control was highly difficult.
Total Drilled for Day (ft)		Survey: 64.00 ft, Gamma (Bit To Gamma):		
Drilling Hours for BHA	61.75	40.00 ft, Resistivity (Bit to Resistivity):		
Total Drilled for BHA (ft)	4465.00	50.00 ft		

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: TKC 76, Type: PDC (Polycrystalline Diamond Compacts), Gauge Length (in): 4.00, Size (in): 8.75	Reed	A28369	4 1/2" Reg Pin			8.750		1.00	1.00
Mud Motor Description: 7.0" 7/8L, 5.7 Stg. 1.83° FBH (True Slick), Size (in): 7.00, Bend Angle (°): 1.83, Rotor Lobe: 7, Stator Lobe: 5, Stator Stage: 9	NOV	675-36-384	4 1/2" IF Box	4 1/2" Reg Box		7.000		31.43	32.43
Resistivity Description: RESISTIVITY MWD	Bench Tree	650-1005						31.26	63.69
Battery Description: BATTERY	Bench Tree	B6002						17.33	81.02
Drill Collar Description: NMDC , Material: Non-Magnetic, Type: Slick Drill	GATOR	67-30-296	4 1/2" IF Box	4 1/2" IF Pin	3.250	6.750		30.65	111.67
Crossover Sub Description: X-O SUB, Material: Steel	BLACK DIAMOND	BD15201	EverDrlg54 Box	4 1/2" IF Pin	3.000	6.625		3.57	115.24
Drill Pipe Description: 22 Stands 5 1/2 Drill Pipe, Type: Slick	Black Diamond		EverDrlg54 Box	EverDrlg54 Pin	3.000	5.500		1969.32	2084.56
Crossover Sub Description: X-O SUB, Material: Steel	BLACK DIAMOND	BD 22523	4 1/2" IF Box	EverDrlg54 Box	3.000	6.750		3.48	2088.04
Agitator Description: 6.75" Agitator, Size (in): 6.75	NOV	147-67001	4 1/2" FH Box	4 1/2" IF Pin		6.750		24.73	2112.77
Crossover Sub Description: X-O SUB, Material: Steel	BLACK DIAMOND	BD13511	EverDrlg54 Box	4 1/2" FH Pin	3.000	6.750		3.38	2116.15

MWD Items

No Items

BHA #7 - 8.75" LATERAL

Date In: Jan 25, 2022, 2:00 Date Out: Jan 26, 2022, 20:00

Bit Details		Motor Details		Directional Comments	
OD (in)	8.750	Size (in)	7.0	FLOW RANGE: 300-750 GPM, REV PER GALLON 0.23, MAX DIFF: 1,580, MAX TORQUE : 17,950 BIT RUNS: 1 , Bit to Bend: 5.35	
Vendor	Reed	Lobe/Stage	7/5, 9.0		
S/N	A285076	Bend Angle	1.83		
Nozzles	7x14's	Speed (rev/gal)	0.23	MWD Comments	
Total Flow Area (in²)	1.052	Wear Pad OD (in)	7.375	POOH Reason Penetration Rate: POOH due to slow P Rate.	
Drilling Hours for Day	9.25	Bit Distances			
Total Drilled for Day (ft)	879.00	Survey: 64.00 ft, Gamma (Bit To Gamma): 40.00 ft, Resistivity (Bit to Resistivity): 50.00 ft			
Drilling Hours for BHA	21.25				
Total Drilled for BHA (ft)	1407.00				

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</i> , Type: <i>PDC (Polycrystalline Diamond Compacts)</i> , Gauge Length (in): <i>4.00</i> , Size (in): <i>8.75</i>	Reed	A285076	4 1/2" Reg Pin			8.750		1.00	1.00
Mud Motor Description: <i>7.0" 7/8L, 5.7 Stg. 1.83° FBH (True Slick)</i> , Size (in): <i>7.00</i> , Bend Angle (°): <i>1.83</i> , Rotor Lobe: <i>7</i> , Stator Lobe: <i>5</i> , Stator Stage: <i>9</i>	NOV	675-36-451	4 1/2" IF Box	4 1/2" Reg Box		7.000		31.71	32.71
Resistivity Description: <i>RESISTIVITY MWD</i>	Bench Tree	650-1005						31.26	63.97
Battery Description: <i>BATTERY</i>	Bench Tree	B6002						17.33	81.30
Drill Collar Description: <i>NMDC</i> , Material: <i>Non-Magnetic</i> , Type: <i>Slick Drill</i>	GATOR	67-30-296	4 1/2" IF Box	4 1/2" IF Pin	3.250	6.750		30.65	111.95
Crossover Sub Description: <i>X-O SUB</i> , Material: <i>Steel</i>	BLACK DIAMOND	BD15201	EverDrlg54 Box	4 1/2" IF Pin	3.000	6.625		3.57	115.52
Drill Pipe Description: <i>22 Stands 5 1/2 Drill Pipe</i> , Type: <i>Slick</i>	Black Diamond		EverDrlg54 Box	EverDrlg54 Pin	3.000	5.500		1969.32	2084.84
Crossover Sub Description: <i>X-O SUB</i> , Material: <i>Steel</i>	BLACK DIAMOND	BD 22523	4 1/2" IF Box	EverDrlg54 Box	3.000	6.750		3.48	2088.32
Agitator Description: <i>6.75" Agitator</i> , Size (in): <i>6.75</i>	NOV	AGHF0675-0080	4 1/2" IF Box	4 1/2" IF Pin		6.750		24.82	2113.14
Crossover Sub Description: <i>X-O SUB</i> , Material: <i>Steel</i>	BLACK DIAMOND	BD13511	EverDrlg54 Box	4 1/2" FH Pin	3.000	6.750		3.38	2116.52

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	01-24	16:20	00:00	01-25			POOH to change out BHA
Change BHA	6	01-25	00:00	02:00	01-25			P/U BHA # 7
TIH	8	01-25	02:00	05:00	01-25			TIH W/ BHA # 7
Other	16	01-25	05:00	06:45	01-25			Slip & Cut Drill line
TIH	8	01-25	06:45	08:30	01-25			TIH W/ BHA #7
Rig Service - Out Hole	20	01-25	08:30	08:50	01-25			Rig Service
TIH	8	01-25	08:50	12:55	01-25			TIH W/ BHA #7
Other	16	01-25	12:55	13:05	01-25			Downlink Res./MWD
Slide Drill	2	01-25	13:05	13:50	01-25	15829.00	15857.00	Pressure On (psi): <i>4750.00</i> , Pressure Off (psi): <i>4300.00</i> , Weight On Bit (klbs): <i>45.00</i> , Flow Rate (gpm): <i>694.00</i> , Strokes Per Minute: <i>237</i> , Toolface: <i>15</i> , Toolface Type: <i>gravity</i>
Rotary Drill	1	01-25	13:50	14:10	01-25	15857.00	15902.00	Pressure On (psi): <i>5250.00</i> , Pressure Off (psi): <i>4300.00</i> , Weight On Bit (klbs): <i>42.00</i> , Surface RPM: <i>40</i> , Surface Torque (ft lbf): <i>27000.00</i> , Flow Rate (gpm): <i>695.00</i> , Strokes Per Minute: <i>240.00</i>
Survey	46	01-25	14:10	14:15	01-25	15902.00	15902.00	Inclination (°): <i>87.520</i> , Azimuth (°): <i>0.280</i> , TVD (ft): <i>11091.54</i> , Dogleg (%/100 ft): <i>1.97</i> , Sensor Depth (ft): <i>15838.00</i> , Bit To Sensor (ft): <i>64.00</i>
Rotary Drill	1	01-25	14:15	14:20	01-25	15902.00	15915.00	Pressure On (psi): <i>5250.00</i> , Pressure Off (psi): <i>4300.00</i> , Weight On Bit (klbs): <i>42.00</i> , Surface RPM: <i>40</i> , Surface Torque (ft lbf): <i>27000.00</i> , Flow Rate (gpm): <i>695.00</i> , Strokes Per Minute: <i>240.00</i>
Slide Drill	2	01-25	14:20	14:45	01-25	15915.00	15937.00	Pressure On (psi): <i>4750.00</i> , Pressure Off (psi): <i>4300.00</i> , Weight On Bit (klbs): <i>45.00</i> , Flow Rate (gpm): <i>694.00</i> , Strokes Per Minute: <i>237</i> , Toolface: <i>15</i> , Toolface Type: <i>gravity</i>

Rotary Drill	1	01-25	14:45	15:05	01-25	15937.00	15991.00	Pressure On (psi): 5250.00, Pressure Off (psi): 4300.00, Weight On Bit (klbs): 42.00, Surface RPM: 40, Surface Torque (ft lbf): 27000.00, Flow Rate (gpm): 695.00, Strokes Per Minute: 240.00
Survey	46	01-25	15:05	15:10	01-25	15991.00	15991.00	Inclination (°): 90.860, Azimuth (°): 1.330, TVD (ft): 11092.79, Dogleg (°/100 ft): 3.93, Sensor Depth (ft): 15927.00, Bit To Sensor (ft): 64.00
Rotary Drill	1	01-25	15:10	16:05	01-25	15991.00	16081.00	Pressure On (psi): 5250.00, Pressure Off (psi): 4300.00, Weight On Bit (klbs): 42.00, Surface RPM: 40, Surface Torque (ft lbf): 27000.00, Flow Rate (gpm): 695.00, Strokes Per Minute: 240.00
Survey	46	01-25	16:05	16:10	01-25	16081.00	16081.00	Inclination (°): 91.380, Azimuth (°): 1.070, TVD (ft): 11091.03, Dogleg (°/100 ft): 0.65, Sensor Depth (ft): 16017.00, Bit To Sensor (ft): 64.00
Rotary Drill	1	01-25	16:10	16:45	01-25	16081.00	16170.00	Pressure On (psi): 5250.00, Pressure Off (psi): 4300.00, Weight On Bit (klbs): 42.00, Surface RPM: 40, Surface Torque (ft lbf): 27000.00, Flow Rate (gpm): 695.00, Strokes Per Minute: 240.00
Survey	46	01-25	16:45	16:55	01-25	16170.00	16170.00	Inclination (°): 91.030, Azimuth (°): 0.630, TVD (ft): 11089.16, Dogleg (°/100 ft): 0.63, Sensor Depth (ft): 16106.00, Bit To Sensor (ft): 64.00
Rotary Drill	1	01-25	16:55	17:25	01-25	16170.00	16260.00	Pressure On (psi): 5250.00, Pressure Off (psi): 4300.00, Weight On Bit (klbs): 42.00, Surface RPM: 40, Surface Torque (ft lbf): 27000.00, Flow Rate (gpm): 695.00, Strokes Per Minute: 240.00
Survey	46	01-25	17:25	17:30	01-25	16260.00	16260.00	Inclination (°): 89.540, Azimuth (°): 359.840, TVD (ft): 11088.71, Dogleg (°/100 ft): 1.87, Sensor Depth (ft): 16196.00, Bit To Sensor (ft): 64.00
Rotary Drill	1	01-25	17:30	18:25	01-25	16260.00	16349.00	Pressure On (psi): 5250.00, Pressure Off (psi): 4300.00, Weight On Bit (klbs): 42.00, Surface RPM: 40, Surface Torque (ft lbf): 27000.00, Flow Rate (gpm): 695.00, Strokes Per Minute: 240.00
Survey	46	01-25	18:25	18:30	01-25	16349.00	16349.00	Inclination (°): 89.670, Azimuth (°): 359.930, TVD (ft): 11089.33, Dogleg (°/100 ft): 0.18, Sensor Depth (ft): 16285.00, Bit To Sensor (ft): 64.00
Rotary Drill	1	01-25	18:30	19:05	01-25	16349.00	16439.00	Pressure On (psi): 5250.00, Pressure Off (psi): 4300.00, Weight On Bit (klbs): 42.00, Surface RPM: 40, Surface Torque (ft lbf): 27000.00, Flow Rate (gpm): 695.00, Strokes Per Minute: 240.00
Survey	46	01-25	19:05	19:10	01-25	16439.00	16439.00	Inclination (°): 90.640, Azimuth (°): 358.610, TVD (ft): 11089.09, Dogleg (°/100 ft): 1.82, Sensor Depth (ft): 16375.00, Bit To Sensor (ft): 64.00
Rotary Drill	1	01-25	19:10	19:15	01-25	16439.00	16449.00	Pressure On (psi): 5250.00, Pressure Off (psi): 4300.00, Weight On Bit (klbs): 42.00, Surface RPM: 40, Surface Torque (ft lbf): 27000.00, Flow Rate (gpm): 695.00, Strokes Per Minute: 240.00
Slide Drill	2	01-25	19:15	19:50	01-25	16449.00	16457.00	Pressure On (psi): 4750.00, Pressure Off (psi): 4300.00, Weight On Bit (klbs): 45.00, Flow Rate (gpm): 694.00, Strokes Per Minute: 237, Toolface: 150, Toolface Type: gravity
Rotary Drill	1	01-25	19:50	20:20	01-25	16457.00	16528.00	Pressure On (psi): 5250.00, Pressure Off (psi): 4300.00, Weight On Bit (klbs): 42.00, Surface RPM: 40, Surface Torque (ft lbf): 27000.00, Flow Rate (gpm): 695.00, Strokes Per Minute: 240.00
Survey	46	01-25	20:20	20:25	01-25	16528.00	16528.00	Inclination (°): 89.320, Azimuth (°): 358.260, TVD (ft): 11089.12, Dogleg (°/100 ft): 1.53, Sensor Depth (ft): 16464.00, Bit To Sensor (ft): 64.00
Rotary Drill	1	01-25	20:25	21:10	01-25	16528.00	16618.00	Pressure On (psi): 5250.00, Pressure Off (psi): 4300.00, Weight On Bit (klbs): 42.00, Surface RPM: 40, Surface Torque (ft lbf): 27000.00, Flow Rate (gpm): 695.00, Strokes Per Minute: 240.00
Survey	46	01-25	21:10	21:15	01-25	16618.00	16618.00	Inclination (°): 87.870, Azimuth (°): 356.850, TVD (ft): 11091.32, Dogleg (°/100 ft): 2.25, Sensor Depth (ft): 16554.00, Bit To Sensor (ft): 64.00
Rotary Drill	1	01-25	21:15	21:20	01-25	16618.00	16628.00	Pressure On (psi): 5250.00, Pressure Off (psi): 4300.00, Weight On Bit (klbs): 42.00, Surface RPM: 40, Surface Torque (ft lbf): 27000.00, Flow Rate (gpm): 695.00, Strokes Per Minute: 240.00
Other	16	01-25	21:20	21:30	01-25			Recycle Pumps
Other	16	01-25	21:30	21:45	01-25			Take Pump off the hole
Other	16	01-25	21:45	22:00	01-25			Check all Pumps
Slide Drill	2	01-25	22:00	23:25	01-25	16628.00	16650.00	Pressure On (psi): 4750.00, Pressure Off (psi): 4300.00, Weight On Bit (klbs): 45.00, Flow Rate (gpm): 694.00, Strokes Per Minute: 237, Toolface: 50, Toolface Type: gravity
Rotary Drill	1	01-25	23:25	23:50	01-25	16650.00	16708.00	Pressure On (psi): 5250.00, Pressure Off (psi): 4300.00, Weight On Bit (klbs): 42.00, Surface RPM: 40, Surface Torque (ft lbf): 27000.00, Flow Rate (gpm): 695.00, Strokes Per Minute: 240.00
Survey	46	01-25	23:50	23:55	01-25	16708.00	16708.00	Inclination (°): 87.780, Azimuth (°): 355.620, TVD (ft): 11094.74, Dogleg (°/100 ft): 1.37, Sensor Depth (ft): 16644.00, Bit To Sensor (ft): 64.00
Rotary Drill	1	01-25	23:55	00:40	01-26	16708.00	16754.00	Pressure On (psi): 5250.00, Pressure Off (psi): 4300.00, Weight On Bit (klbs): 42.00, Surface RPM: 40, Surface Torque (ft lbf): 27000.00, Flow Rate (gpm): 695.00, Strokes Per Minute: 240.00

MWD Activities

No Activities



Job Number WT-21-183	Operator Advance Energy Partners	Rig Name Nabors X50
Start Date 2021-11-24	Well Name Anderson Fed Com 551H	Legal Well Name AFE Anderson Fed Com 551H
Play Delaware Basin	State/Province and Country New Mexico, US	County Lea
	Company Man	

Wednesday, Jan 26 00:00 - 23:59 (Day 13 of 16)

Billing: \$24,545.00 (\$226,970.50 total)

Drilling Summary				Drilling Parameters	
Start Depth (ft)	16708.00	Downhole Hours	24.00	Rotating WOB (klbs)	42.00 - 55.00
Bit Depth (ft)	17236.00	Drilling Hours	12.00	Sliding WOB (klbs)	45.00 - 45.00
Bottom Hole Depth (ft)	17236.00	Hours Circulating	1.17	Rotating SPM	240.00 - 240.00
Total Distance (ft)	528.00	Hours Sliding	1.50	Sliding SPM	237.00 - 237.00
Distance Rotated (ft)	454.00	Hours Rotating	10.50	Motor RPM	0.00 - 55.00
Distance Slid (ft)	74.00			Surface RPM	40.00 - 40.00
Inclination In	88.66			Flow Rate (gpm)	694.00 - 695.00
Inclination Out	91.38			On Bottom Pressure (psi)	4350.00 - 5250.00
Azimuth In	356.15	% Hours Rotating	88%	Off Bottom Pressure (psi)	4000.00 - 4700.00
Azimuth Out	359.66	% Hours Sliding	12%		
AVG Total ROP (ft/h)	44.00	% Distance Sliding	14%		
AVG Rotating ROP (ft/h)	43.24	% Distance Rotating	86%		
AVG Sliding ROP (ft/h)	49.33				

Personnel

Name	Position
Advance Directional	Directional Driller
Robert Olivarez	MWD Engineer
Michael Saliba	Directional Driller
Francisco DeLeon	MWD Engineer

BHA #7 - 8.75" LATERAL

Date In: Jan 25, 2022, 2:00 Date Out: Jan 26, 2022, 20:00

Bit Details		Motor Details		Directional Comments
OD (in)	8.750	Size (in)	7.0	FLOW RANGE: 300-750 GPM, REV PER GALLON 0.23, MAX DIFF: 1,580, MAX TORQUE : 17,950 BIT RUNS: 1 , Bit to Bend: 5.35
Vendor	Reed	Lobe/Stage	7/5, 9.0	
S/N	A285076	Bend Angle	1.83	
Nozzles	7x14's	Speed (rev/gal)	0.23	MWD Comments
Total Flow Area (in²)	1.052	Wear Pad OD (in)	7.375	POOH Reason Penetration Rate: POOH due to slow P Rate.
Drilling Hours for Day	12.00	Bit Distances		
Total Drilled for Day (ft)	528.00	Survey: 64.00 ft, Gamma (Bit To Gamma):		
Drilling Hours for BHA	21.25	40.00 ft, Resistivity (Bit to Resistivity):		
Total Drilled for BHA (ft)	1407.00	50.00 ft		

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, Type: PDC (Polycrystalline Diamond Compacts), Gauge Length (in): 4.00, Size (in): 8.75</i>	Reed	A285076	4 1/2" Reg Pin			8.750		1.00	1.00
Mud Motor Description: <i>7.0" 7/8L, 5.7 Stg. 1.83° FBH (True Slick), Size (in): 7.00, Bend Angle (°): 1.83, Rotor Lobe: 7, Stator Lobe: 5, Stator Stage: 9</i>	NOV	675-36-451	4 1/2" IF Box	4 1/2" Reg Box		7.000		31.71	32.71
Resistivity Description: <i>RESISTIVITY MWD</i>	Bench Tree	650-1005						31.26	63.97
Battery Description: <i>BATTERY</i>	Bench Tree	B6002						17.33	81.30
Drill Collar Description: <i>NMDC , Material: Non-Magnetic, Type: Slick Drill</i>	GATOR	67-30-296	4 1/2" IF Box	4 1/2" IF Pin	3.250	6.750		30.65	111.95
Crossover Sub Description: <i>X-O SUB, Material: Steel</i>	BLACK DIAMOND	BD15201	EverDrlg54 Box	4 1/2" IF Pin	3.000	6.625		3.57	115.52
Drill Pipe Description: <i>22 Stands 5 1/2 Drill Pipe, Type: Slick</i>	Black Diamond		EverDrlg54 Box	EverDrlg54 Pin	3.000	5.500		1969.32	2084.84
Crossover Sub Description: <i>X-O SUB, Material: Steel</i>	BLACK DIAMOND	BD 22523	4 1/2" IF Box	EverDrlg54 Box	3.000	6.750		3.48	2088.32
Agitator Description: <i>6.75" Agitator, Size (in): 6.75</i>	NOV	AGHF0675-0080	4 1/2" IF Box	4 1/2" IF Pin		6.750		24.82	2113.14
Crossover Sub Description: <i>X-O SUB, Material: Steel</i>	BLACK DIAMOND	BD13511	EverDrlg54 Box	4 1/2" FH Pin	3.000	6.750		3.38	2116.52

MWD Items

No Items

BHA #8 - 8.75" LATERAL

Date In: Jan 26, 2022, 20:00 Date Out: Jan 29, 2022, 5:10

Bit Details		Motor Details		Directional Comments	
OD (in)	8.750	Size (in)	7.0	FLOW RANGE: 500-750 GPM, REV PER GALLON 0.26, MAX DIFF: 1,910 MAX TORQUE : 18,710 BIT RUNS: 0 , Bit to Bend: 4.56	
Vendor	Reed	Lobe/Stage	7/8, 8.5		
S/N	A284576	Bend Angle	1.75		
Nozzles	7x14's	Speed (rev/gal)	0.24		
Total Flow Area (in²)	1.052	Wear Pad OD (in)	7.375	MWD Comments	
Drilling Hours for Day	0.00	Bit Distances			
Total Drilled for Day (ft)		Survey: 69.00 ft, Gamma (Bit To Gamma): 45.00 ft, Resistivity (Bit to Resistivity): 55.00 ft		POOH Reason	
Drilling Hours for BHA	33.00				
Total Drilled for BHA (ft)	1856.00				
				Total Depth/Casing Point: POOH for casing. Reached TD @ 19,092'	

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</i> , Type: <i>PDC (Polycrystalline Diamond Compacts)</i> , Gauge Length (in): <i>4.00</i> , Size (in): <i>8.75</i>	Reed	A284576	4 1/2" Reg Pin			8.750		1.00	1.00
Mud Motor Description: <i>7.0" 7/8L, 8.5 Stg. 1.75° FBH (True Slick)</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>8.5</i>	SNIPER	DR70018	4 1/2" IF Box	4 1/2" Reg Box		7.000		35.59	36.59
Resistivity Description: <i>RESISTIVITY MWD</i>	Bench Tree	650-1005						31.26	67.85
Battery Description: <i>BATTERY</i>	Bench Tree	B6002						17.33	85.18
Drill Collar Description: <i>NMDC</i> , Material: <i>Non-Magnetic</i> , Type: <i>Slick Drill</i>	GATOR	67-30-296	4 1/2" IF Box	4 1/2" IF Pin	3.250	6.750		30.65	115.83
Crossover Sub Description: <i>X-O SUB</i> , Material: <i>Steel</i>	BLACK DIAMOND	BD15201	EverDrlg54 Box	4 1/2" IF Pin	3.000	6.625		3.57	119.40
Drill Pipe Description: <i>22 Stands 5 1/2 Drill Pipe</i> , Type: <i>Slick</i>	Black Diamond		EverDrlg54 Box	EverDrlg54 Pin	3.000	5.500		1969.32	2088.72
Crossover Sub Description: <i>X-O SUB</i> , Material: <i>Steel</i>	BLACK DIAMOND	BD 22523	4 1/2" IF Box	EverDrlg54 Box	3.000	6.750		3.48	2092.20
Agitator Description: <i>6.75" Agitator</i> , Size (in): <i>6.75</i>	NOV	AGHF0675-0080	4 1/2" IF Box	4 1/2" IF Pin		6.750		24.82	2117.02
Crossover Sub Description: <i>X-O SUB</i> , Material: <i>Steel</i>	BLACK DIAMOND	BD13511	EverDrlg54 Box	4 1/2" FH Pin	3.000	6.750		3.38	2120.40

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	01-25	23:55	00:40	01-26	16708.00	16754.00	Pressure On (psi): <i>5250.00</i> , Pressure Off (psi): <i>4300.00</i> , Weight On Bit (klbs): <i>42.00</i> , Surface RPM: <i>40</i> , Surface Torque (ft lbf): <i>27000.00</i> , Flow Rate (gpm): <i>695.00</i> , Strokes Per Minute: <i>240.00</i>
Slide Drill	2	01-26	00:40	01:25	01-26	16754.00	16775.00	Pressure On (psi): <i>4750.00</i> , Pressure Off (psi): <i>4300.00</i> , Weight On Bit (klbs): <i>45.00</i> , Flow Rate (gpm): <i>694.00</i> , Strokes Per Minute: <i>237</i> , Toolface: <i>60</i> , Toolface Type: <i>gravity</i>
Rotary Drill	1	01-26	01:25	01:50	01-26	16775.00	16797.00	Pressure On (psi): <i>5250.00</i> , Pressure Off (psi): <i>4700.00</i> , Weight On Bit (klbs): <i>42.00</i> , Surface RPM: <i>40</i> , Surface Torque (ft lbf): <i>27000.00</i> , Flow Rate (gpm): <i>695.00</i> , Strokes Per Minute: <i>240.00</i>
Survey	46	01-26	01:50	01:55	01-26	16797.00	16797.00	Inclination (°): <i>88.660</i> , Azimuth (°): <i>356.150</i> , TVD (ft): <i>11097.50</i> , Dogleg (°/100 ft): <i>1.15</i> , Sensor Depth (ft): <i>16733.00</i> , Bit To Sensor (ft): <i>64.00</i>
Rotary Drill	1	01-26	01:55	03:15	01-26	16797.00	16887.00	Pressure On (psi): <i>4350.00</i> , Pressure Off (psi): <i>4000.00</i> , Weight On Bit (klbs): <i>42.00</i> , Surface RPM: <i>40</i> , Surface Torque (ft lbf): <i>27000.00</i> , Flow Rate (gpm): <i>695.00</i> , Strokes Per Minute: <i>240.00</i>
Survey	46	01-26	03:15	03:20	01-26	16887.00	16887.00	Inclination (°): <i>88.480</i> , Azimuth (°): <i>357.910</i> , TVD (ft): <i>11099.75</i> , Dogleg (°/100 ft): <i>1.97</i> , Sensor Depth (ft): <i>16823.00</i> , Bit To Sensor (ft): <i>64.00</i>
Slide Drill	2	01-26	03:20	03:35	01-26	16887.00	16930.00	Pressure On (psi): <i>4350.00</i> , Pressure Off (psi): <i>4000.00</i> , Weight On Bit (klbs): <i>45.00</i> , Flow Rate (gpm): <i>694.00</i> , Strokes Per Minute: <i>237</i> , Toolface: <i>60</i> , Toolface Type: <i>gravity</i>
Rotary Drill	1	01-26	03:35	05:05	01-26	16930.00	16976.00	Pressure On (psi): <i>4350.00</i> , Pressure Off (psi): <i>4000.00</i> , Weight On Bit (klbs): <i>42.00</i> , Surface RPM: <i>40</i> , Surface Torque (ft lbf): <i>27000.00</i> , Flow Rate (gpm): <i>695.00</i> , Strokes Per Minute: <i>240.00</i>
Survey	46	01-26	05:05	05:10	01-26	16976.00	16976.00	Inclination (°): <i>89.270</i> , Azimuth (°): <i>358.700</i> , TVD (ft): <i>11101.50</i> , Dogleg (°/100 ft): <i>1.26</i> , Sensor Depth (ft): <i>16912.00</i> , Bit To Sensor (ft): <i>64.00</i>

Rotary Drill	1	01-26	05:10	05:15	01-26	16976.00	16986.00	Pressure On (psi): 4350.00, Pressure Off (psi): 4000.00, Weight On Bit (klbs): 42.00, Surface RPM: 40, Surface Torque (ft lbf): 27000.00, Flow Rate (gpm): 695.00, Strokes Per Minute: 240.00
Slide Drill	2	01-26	05:15	05:45	01-26	16986.00	16996.00	Pressure On (psi): 4350.00, Pressure Off (psi): 4000.00, Weight On Bit (klbs): 45.00, Flow Rate (gpm): 694.00, Strokes Per Minute: 237, Toolface: 60, Toolface Type: gravity
Rotary Drill	1	01-26	05:45	06:50	01-26	16996.00	17066.00	Pressure On (psi): 4350.00, Pressure Off (psi): 4000.00, Weight On Bit (klbs): 42.00, Surface RPM: 40, Surface Torque (ft lbf): 27000.00, Flow Rate (gpm): 695.00, Strokes Per Minute: 240.00
Survey	46	01-26	06:50	06:55	01-26	17066.00	17066.00	Inclination (°): 90.810, Azimuth (°): 359.660, TVD (ft): 11101.43, Dogleg (°/100 ft): 2.02, Sensor Depth (ft): 17002.00, Bit To Sensor (ft): 64.00
Rotary Drill	1	01-26	06:55	09:20	01-26	17066.00	17156.00	Pressure On (psi): 4350.00, Pressure Off (psi): 4000.00, Weight On Bit (klbs): 50.00, Surface RPM: 40, Surface Torque (ft lbf): 30000.00, Flow Rate (gpm): 695.00, Strokes Per Minute: 240.00
Survey	46	01-26	09:20	09:30	01-26	17156.00	17156.00	Inclination (°): 91.380, Azimuth (°): 359.660, TVD (ft): 11099.71, Dogleg (°/100 ft): 0.63, Sensor Depth (ft): 17092.00, Bit To Sensor (ft): 64.00
Rotary Drill	1	01-26	09:30	12:25	01-26	17156.00	17236.00	Pressure On (psi): 4350.00, Pressure Off (psi): 4000.00, Weight On Bit (klbs): 55.00, Surface RPM: 40, Surface Torque (ft lbf): 30000.00, Flow Rate (gpm): 695.00, Strokes Per Minute: 240.00
Circulating	3	01-26	12:25	13:00	01-26			Pump Slug to POOH due to slow ROP.
Pooh	7	01-26	13:00	20:00	01-26			POOH for slow P Rate.
Change BHA	6	01-26	20:00	21:00	01-26			P/U BHA #8 New Bit & Motor.
Circulating	3	01-26	21:00	21:15	01-26			Test Bit & Motor.
TIH	8	01-26	21:15	21:50	01-26			TIH W/ BHA #8
Circulating	3	01-26	21:50	22:10	01-26			Test Agitator
TIH	8	01-26	22:10	05:00	01-27			TIH W/ BHA #8

MWD Activities

No Activities



Job Number WT-21-183	Operator Advance Energy Partners	Rig Name Nabors X50
Start Date 2021-11-24	Well Name Anderson Fed Com 551H	Legal Well Name AFE Anderson Fed Com 551H
Play Delaware Basin	State/Province and Country New Mexico, US	County Lea
		Company Man

Thursday, Jan 27 00:00 - 23:59 (Day 14 of 16)

Billing: \$10,500.00 (\$226,970.50 total)

Drilling Summary				Drilling Parameters	
Start Depth (ft)	17236.00	Downhole Hours	24.00	Rotating WOB (klbs)	45.00 - 55.00
Bit Depth (ft)	18412.00	Drilling Hours	17.25	Sliding WOB (klbs)	45.00 - 60.00
Bottom Hole Depth (ft)	18412.00	Hours Circulating	0.00	Rotating SPM	240.00 - 240.00
Total Distance (ft)	1176.00	Hours Sliding	6.83	Sliding SPM	237.00 - 237.00
Distance Rotated (ft)	962.00	Hours Rotating	10.42	Motor RPM	0.00 - 55.00
Distance Slid (ft)	214.00			Surface RPM	40.00 - 40.00
Inclination In	91.12			Flow Rate (gpm)	694.00 - 695.00
Inclination Out	85.67			On Bottom Pressure (psi)	4350.00 - 4800.00
Azimuth In	358.43	% Hours Rotating	60%	Off Bottom Pressure (psi)	4000.00 - 4400.00
Azimuth Out	0.28	% Hours Sliding	40%		
AVG Total ROP (ft/h)	68.17	% Distance Sliding	18%		
AVG Rotating ROP (ft/h)	92.35	% Distance Rotating	82%		
AVG Sliding ROP (ft/h)	31.32				

Personnel

Name	Position
Advance Directional	Directional Driller
Robert Olivarez	MWD Engineer
Michael Saliba	Directional Driller
Francisco DeLeon	MWD Engineer
Joseph Lanham	Directional Driller

BHA #8 - 8.75" LATERAL

Date In: Jan 26, 2022, 20:00 Date Out: Jan 29, 2022, 5:10

Bit Details		Motor Details		Directional Comments	
OD (in)	8.750	Size (in)	7.0	FLOW RANGE: 500-750 GPM, REV PER GALLON 0.26, MAX DIFF: 1,910 MAX TORQUE : 18,710 BIT RUNS: 0 , Bit to Bend: 4.56	
Vendor	Reed	Lobe/Stage	7/8, 8.5		
S/N	A284576	Bend Angle	1.75		
Nozzles	7x14's	Speed (rev/gal)	0.24	MWD Comments	
Total Flow Area (in²)	1.052	Wear Pad OD (in)	7.375	POOH Reason Total Depth/Casing Point: POOH for casing. Reached TD @ 19,092'	
Drilling Hours for Day	17.25	Bit Distances			
Total Drilled for Day (ft)	1176.00	Survey: 69.00 ft, Gamma (Bit To Gamma):			
Drilling Hours for BHA	33.00	45.00 ft, Resistivity (Bit to Resistivity):			
Total Drilled for BHA (ft)	1856.00	55.00 ft			

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</i> , Type: <i>PDC (Polycrystalline Diamond Compacts)</i> , Gauge Length (in): 4.00, Size (in): 8.75	Reed	A284576	4 1/2" Reg Pin			8.750		1.00	1.00
Mud Motor Description: 7.0" 7/8L, 8.5 Stg. 1.75° FBH (True Slick), Size (in): 7.00, Bend Angle (°): 1.75, Rotor Lobe: 7, Stator Lobe: 8, Stator Stage: 8.5	SNIPER	DR70018	4 1/2" IF Box	4 1/2" Reg Box		7.000		35.59	36.59
Resistivity Description: <i>RESISTIVITY MWD</i>	Bench Tree	650-1005						31.26	67.85
Battery Description: <i>BATTERY</i>	Bench Tree	B6002						17.33	85.18
Drill Collar Description: <i>NMDC</i> , Material: <i>Non-Magnetic</i> , Type: <i>Slick Drill</i>	GATOR	67-30-296	4 1/2" IF Box	4 1/2" IF Pin	3.250	6.750		30.65	115.83
Crossover Sub Description: <i>X-O SUB</i> , Material: <i>Steel</i>	BLACK DIAMOND	BD15201	EverDrlg54 Box	4 1/2" IF Pin	3.000	6.625		3.57	119.40
Drill Pipe Description: 22 Stands 5 1/2 Drill Pipe, Type: <i>Slick</i>	Black Diamond		EverDrlg54 Box	EverDrlg54 Pin	3.000	5.500		1969.32	2088.72
Crossover Sub Description: <i>X-O SUB</i> , Material: <i>Steel</i>	BLACK DIAMOND	BD 22523	4 1/2" IF Box	EverDrlg54 Box	3.000	6.750		3.48	2092.20
Agitator Description: 6.75" Agitator, Size (in): 6.75	NOV	AGHF0675-0080	4 1/2" IF Box	4 1/2" IF Pin		6.750		24.82	2117.02
Crossover Sub Description: <i>X-O SUB</i> , Material: <i>Steel</i>	BLACK DIAMOND	BD13511	EverDrlg54 Box	4 1/2" FH Pin	3.000	6.750		3.38	2120.40

MWD Items

No items

Directional Activities

Activity Type	Code	Start Date	Start Time	End Time	End Date	Start (ft)	End (ft)	Comments/Details
TIH	8	01-26	22:10	05:00	01-27			TIH W/ BHA #8
Rotary Drill	1	01-27	05:00	05:10	01-27	17236.00	17249.00	Pressure On (psi): 4350.00, Pressure Off (psi): 4000.00, Weight On Bit (klbs): 55.00, Surface RPM: 40, Surface Torque (ft lbf): 30000.00, Flow Rate (gpm): 695.00, Strokes Per Minute: 240.00
Survey	46	01-27	05:10	05:25	01-27	17249.00	17249.00	Inclination (°): 91.120, Azimuth (°): 358.430, TVD (ft): 11097.79, Dogleg (°/100 ft): 1.43, Sensor Depth (ft): 17180.00, Bit To Sensor (ft): 69.00
Rotary Drill	1	01-27	05:25	06:05	01-27	17249.00	17338.00	Pressure On (psi): 4350.00, Pressure Off (psi): 4000.00, Weight On Bit (klbs): 55.00, Surface RPM: 40, Surface Torque (ft lbf): 30000.00, Flow Rate (gpm): 695.00, Strokes Per Minute: 240.00
Survey	46	01-27	06:05	06:10	01-27	17338.00	17338.00	Inclination (°): 90.070, Azimuth (°): 357.200, TVD (ft): 11096.87, Dogleg (°/100 ft): 1.82, Sensor Depth (ft): 17269.00, Bit To Sensor (ft): 69.00
Rotary Drill	1	01-27	06:10	06:20	01-27	17338.00	17355.00	Pressure On (psi): 4350.00, Pressure Off (psi): 4000.00, Weight On Bit (klbs): 55.00, Surface RPM: 40, Surface Torque (ft lbf): 30000.00, Flow Rate (gpm): 695.00, Strokes Per Minute: 240.00
Slide Drill	2	01-27	06:20	07:20	01-27	17355.00	17390.00	Pressure On (psi): 4450.00, Pressure Off (psi): 4200.00, Weight On Bit (klbs): 45.00, Flow Rate (gpm): 694.00, Strokes Per Minute: 237, Toolface: 80, Toolface Type: gravity
Rotary Drill	1	01-27	07:20	07:40	01-27	17390.00	17428.00	Pressure On (psi): 4350.00, Pressure Off (psi): 4000.00, Weight On Bit (klbs): 55.00, Surface RPM: 40, Surface Torque (ft lbf): 30000.00, Flow Rate (gpm): 695.00, Strokes Per Minute: 240.00
Survey	46	01-27	07:40	07:45	01-27	17428.00	17428.00	Inclination (°): 91.960, Azimuth (°): 357.290, TVD (ft): 11095.28, Dogleg (°/100 ft): 2.10, Sensor Depth (ft): 17359.00, Bit To Sensor (ft): 69.00
Rotary Drill	1	01-27	07:45	08:30	01-27	17428.00	17517.00	Pressure On (psi): 4350.00, Pressure Off (psi): 4000.00, Weight On Bit (klbs): 55.00, Surface RPM: 40, Surface Torque (ft lbf): 30000.00, Flow Rate (gpm): 695.00, Strokes Per Minute: 240.00
Survey	46	01-27	08:30	08:35	01-27	17517.00	17517.00	Inclination (°): 92.840, Azimuth (°): 358.170, TVD (ft): 11091.55, Dogleg (°/100 ft): 1.40, Sensor Depth (ft): 17448.00, Bit To Sensor (ft): 69.00
Rotary Drill	1	01-27	08:35	08:45	01-27	17517.00	17537.00	Pressure On (psi): 4500.00, Pressure Off (psi): 4200.00, Weight On Bit (klbs): 55.00, Surface RPM: 40, Surface Torque (ft lbf): 30000.00, Flow Rate (gpm): 695.00, Strokes Per Minute: 240.00
Slide Drill	2	01-27	08:45	09:55	01-27	17537.00	17576.00	Pressure On (psi): 4450.00, Pressure Off (psi): 4200.00, Weight On Bit (klbs): 45.00, Flow Rate (gpm): 694.00, Strokes Per Minute: 237, Toolface: 140, Toolface Type: gravity
Rotary Drill	1	01-27	09:55	10:10	01-27	17576.00	17607.00	Pressure On (psi): 4500.00, Pressure Off (psi): 4200.00, Weight On Bit (klbs): 55.00, Surface RPM: 40, Surface Torque (ft lbf): 30000.00, Flow Rate (gpm): 695.00, Strokes Per Minute: 240.00
Survey	46	01-27	10:10	10:15	01-27	17607.00	17607.00	Inclination (°): 94.290, Azimuth (°): 357.910, TVD (ft): 11085.95, Dogleg (°/100 ft): 1.64, Sensor Depth (ft): 17538.00, Bit To Sensor (ft): 69.00
Rotary Drill	1	01-27	10:15	10:25	01-27	17607.00	17617.00	Pressure On (psi): 4500.00, Pressure Off (psi): 4300.00, Weight On Bit (klbs): 55.00, Surface RPM: 40, Surface Torque (ft lbf): 30000.00, Flow Rate (gpm): 695.00, Strokes Per Minute: 240.00
Slide Drill	2	01-27	10:25	12:50	01-27	17617.00	17696.00	Pressure On (psi): 4400.00, Pressure Off (psi): 4200.00, Weight On Bit (klbs): 60.00, Flow Rate (gpm): 694.00, Strokes Per Minute: 237, Toolface: 170, Toolface Type: gravity
Rig Service - In Hole	19	01-27	12:50	13:10	01-27			
Survey	46	01-27	13:10	13:20	01-27	17696.00	17696.00	Inclination (°): 93.850, Azimuth (°): 359.750, TVD (ft): 11079.64, Dogleg (°/100 ft): 2.12, Sensor Depth (ft): 17627.00, Bit To Sensor (ft): 69.00
Rotary Drill	1	01-27	13:20	14:20	01-27	17696.00	17785.00	Pressure On (psi): 4800.00, Pressure Off (psi): 4400.00, Weight On Bit (klbs): 45.00, Surface RPM: 40, Surface Torque (ft lbf): 30000.00, Flow Rate (gpm): 695.00, Strokes Per Minute: 240.00
Survey	46	01-27	14:20	14:25	01-27	17785.00	17785.00	Inclination (°): 87.910, Azimuth (°): 359.750, TVD (ft): 11078.27, Dogleg (°/100 ft): 6.67, Sensor Depth (ft): 17716.00, Bit To Sensor (ft): 69.00
Rotary Drill	1	01-27	14:25	15:25	01-27	17785.00	17875.00	Pressure On (psi): 4800.00, Pressure Off (psi): 4400.00, Weight On Bit (klbs): 45.00, Surface RPM: 40, Surface Torque (ft lbf): 30000.00, Flow Rate (gpm): 695.00, Strokes Per Minute: 240.00
Survey	46	01-27	15:25	15:30	01-27	17875.00	17875.00	Inclination (°): 88.920, Azimuth (°): 359.660, TVD (ft): 11080.76, Dogleg (°/100 ft): 1.13, Sensor Depth (ft): 17806.00, Bit To Sensor (ft): 69.00
Rotary Drill	1	01-27	15:30	16:20	01-27	17875.00	17964.00	Pressure On (psi): 4800.00, Pressure Off (psi): 4400.00, Weight On Bit (klbs): 45.00, Surface RPM: 40, Surface Torque (ft lbf): 30000.00, Flow Rate (gpm): 695.00, Strokes Per Minute: 240.00
Survey	46	01-27	16:20	16:25	01-27	17964.00	17964.00	Inclination (°): 89.710, Azimuth (°): 359.750, TVD (ft): 11081.82, Dogleg (°/100 ft): 0.89, Sensor Depth (ft): 17895.00, Bit To Sensor (ft): 69.00

Slide Drill	2	01-27	16:25	17:30	01-27	17964.00	18000.00	Pressure On (psi): 4400.00, Pressure Off (psi): 4200.00, Weight On Bit (klbs): 60.00, Flow Rate (gpm): 694.00, Strokes Per Minute: 237, Toolface: 150, Toolface Type: gravity
Rotary Drill	1	01-27	17:30	18:10	01-27	18000.00	18054.00	Pressure On (psi): 4800.00, Pressure Off (psi): 4400.00, Weight On Bit (klbs): 45.00, Surface RPM: 40, Surface Torque (ft lbf): 30000.00, Flow Rate (gpm): 695.00, Strokes Per Minute: 240.00
Survey	46	01-27	18:10	18:15	01-27	18054.00	18054.00	Inclination (°): 87.870, Azimuth (°): 1.600, TVD (ft): 11083.72, Dogleg (%/100 ft): 2.90, Sensor Depth (ft): 17985.00, Bit To Sensor (ft): 69.00
Rotary Drill	1	01-27	18:15	19:25	01-27	18054.00	18143.00	Pressure On (psi): 4800.00, Pressure Off (psi): 4400.00, Weight On Bit (klbs): 45.00, Surface RPM: 40, Surface Torque (ft lbf): 30000.00, Flow Rate (gpm): 695.00, Strokes Per Minute: 240.00
Survey	46	01-27	19:25	19:30	01-27	18143.00	18143.00	Inclination (°): 87.520, Azimuth (°): 1.070, TVD (ft): 11087.30, Dogleg (%/100 ft): 0.71, Sensor Depth (ft): 18074.00, Bit To Sensor (ft): 69.00
Rotary Drill	1	01-27	19:30	19:40	01-27	18143.00	18165.00	Pressure On (psi): 4800.00, Pressure Off (psi): 4400.00, Weight On Bit (klbs): 45.00, Surface RPM: 40, Surface Torque (ft lbf): 30000.00, Flow Rate (gpm): 695.00, Strokes Per Minute: 240.00
Slide Drill	2	01-27	19:40	20:50	01-27	18165.00	18190.00	Toolface: 180, Toolface Type: gravity
Rotary Drill	1	01-27	20:50	21:55	01-27	18190.00	18232.00	Pressure On (psi): 4800.00, Pressure Off (psi): 4400.00, Weight On Bit (klbs): 45.00, Surface RPM: 40, Surface Torque (ft lbf): 30000.00, Flow Rate (gpm): 695.00, Strokes Per Minute: 240.00
Survey	46	01-27	21:55	22:00	01-27	18232.00	18232.00	Inclination (°): 86.860, Azimuth (°): 0.720, TVD (ft): 11091.67, Dogleg (%/100 ft): 0.84, Sensor Depth (ft): 18163.00, Bit To Sensor (ft): 69.00
Rotary Drill	1	01-27	22:00	22:50	01-27	18232.00	18322.00	Pressure On (psi): 4800.00, Pressure Off (psi): 4400.00, Weight On Bit (klbs): 45.00, Surface RPM: 40, Surface Torque (ft lbf): 30000.00, Flow Rate (gpm): 695.00, Strokes Per Minute: 240.00
Survey	46	01-27	22:50	22:55	01-27	18322.00	18322.00	Inclination (°): 85.490, Azimuth (°): 0.020, TVD (ft): 11097.67, Dogleg (%/100 ft): 1.71, Sensor Depth (ft): 18253.00, Bit To Sensor (ft): 69.00
Rotary Drill	1	01-27	22:55	23:55	01-27	18322.00	18412.00	Pressure On (psi): 4800.00, Pressure Off (psi): 4400.00, Weight On Bit (klbs): 45.00, Surface RPM: 40, Surface Torque (ft lbf): 30000.00, Flow Rate (gpm): 695.00, Strokes Per Minute: 240.00
Survey	46	01-27	23:55	00:00	01-28	18412.00	18412.00	Inclination (°): 85.670, Azimuth (°): 0.280, TVD (ft): 11104.61, Dogleg (%/100 ft): 0.35, Sensor Depth (ft): 18343.00, Bit To Sensor (ft): 69.00

MWD Activities

No Activities



Job Number WT-21-183	Operator Advance Energy Partners	Rig Name Nabors X50
Start Date 2021-11-24	Well Name Anderson Fed Com 551H	Legal Well Name AFE Anderson Fed Com 551H
Play Delaware Basin	State/Province and Country New Mexico, US	County Lea
		Company Man

Friday, Jan 28 00:00 - 23:59 (Day 15 of 16)

Billing: \$10,500.00 (\$226,970.50 total)

Drilling Summary				Drilling Parameters	
Start Depth (ft)	18412.00	Downhole Hours	24.00	Rotating WOB (klbs)	45.00 - 48.00
Bit Depth (ft)	19092.00	Drilling Hours	15.75	Sliding WOB (klbs)	70.00 - 70.00
Bottom Hole Depth (ft)	19092.00	Hours Circulating	3.67	Rotating SPM	240.00 - 240.00
Total Distance (ft)	680.00	Hours Sliding	6.75	Sliding SPM	224.00 - 224.00
Distance Rotated (ft)	555.00	Hours Rotating	9.00	Motor RPM	0.00 - 55.00
Distance Slid (ft)	125.00			Surface RPM	40.00 - 40.00
Inclination In	85.85			Flow Rate (gpm)	652.00 - 695.00
Inclination Out	90.37			On Bottom Pressure (psi)	4300.00 - 4900.00
Azimuth In	1.16	% Hours Rotating	57%	Off Bottom Pressure (psi)	4000.00 - 4400.00
Azimuth Out	359.49	% Hours Sliding	43%		
AVG Total ROP (ft/h)	43.17	% Distance Sliding	18%		
AVG Rotating ROP (ft/h)	61.67	% Distance Rotating	82%		
AVG Sliding ROP (ft/h)	18.52				

Personnel

Name	Position
Advance Directional	Directional Driller
Robert Olivarez	MWD Engineer
Michael Saliba	Directional Driller
Francisco DeLeon	MWD Engineer
Joseph Lanham	Directional Driller

BHA #8 - 8.75" LATERAL

Date In: Jan 26, 2022, 20:00 Date Out: Jan 29, 2022, 5:10

Bit Details		Motor Details		Directional Comments	
OD (in)	8.750	Size (in)	7.0	FLOW RANGE: 500-750 GPM, REV PER GALLON 0.26, MAX DIFF: 1,910 MAX TORQUE : 18,710 BIT RUNS: 0 , Bit to Bend: 4.56	
Vendor	Reed	Lobe/Stage	7/8, 8.5		
S/N	A284576	Bend Angle	1.75		
Nozzles	7x14's	Speed (rev/gal)	0.24	MWD Comments	
Total Flow Area (in²)	1.052	Wear Pad OD (in)	7.375	POOH Reason Total Depth/Casing Point: POOH for casing. Reached TD @ 19,092'	
Drilling Hours for Day	15.75	Bit Distances			
Total Drilled for Day (ft)	680.00	Survey: 69.00 ft, Gamma (Bit To Gamma): 45.00 ft, Resistivity (Bit to Resistivity): 55.00 ft			
Drilling Hours for BHA	33.00				
Total Drilled for BHA (ft)	1856.00				

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</i> , Type: <i>PDC (Polycrystalline Diamond Compacts)</i> , Gauge Length (in): 4.00, Size (in): 8.75	Reed	A284576	4 1/2" Reg Pin			8.750		1.00	1.00
Mud Motor Description: <i>7.0" 7/8L, 8.5 Stg. 1.75° FBH (True Slick)</i> , Size (in): 7.00, Bend Angle (°): 1.75, Rotor Lobe: 7, Stator Lobe: 8, Stator Stage: 8.5	SNIPER	DR70018	4 1/2" IF Box	4 1/2" Reg Box		7.000		35.59	36.59
Resistivity Description: <i>RESISTIVITY MWD</i>	Bench Tree	650-1005						31.26	67.85
Battery Description: <i>BATTERY</i>	Bench Tree	B6002						17.33	85.18
Drill Collar Description: <i>NMDC</i> , Material: <i>Non-Magnetic</i> , Type: <i>Slick Drill</i>	GATOR	67-30-296	4 1/2" IF Box	4 1/2" IF Pin	3.250	6.750		30.65	115.83
Crossover Sub Description: <i>X-O SUB</i> , Material: <i>Steel</i>	BLACK DIAMOND	BD15201	EverDrlg54 Box	4 1/2" IF Pin	3.000	6.625		3.57	119.40
Drill Pipe Description: <i>22 Stands 5 1/2 Drill Pipe</i> , Type: <i>Slick</i>	Black Diamond		EverDrlg54 Box	EverDrlg54 Pin	3.000	5.500		1969.32	2088.72
Crossover Sub Description: <i>X-O SUB</i> , Material: <i>Steel</i>	BLACK DIAMOND	BD 22523	4 1/2" IF Box	EverDrlg54 Box	3.000	6.750		3.48	2092.20
Agitator Description: <i>6.75" Agitator</i> , Size (in): 6.75	NOV	AGHF0675-0080	4 1/2" IF Box	4 1/2" IF Pin		6.750		24.82	2117.02
Crossover Sub Description: <i>X-O SUB</i> , Material: <i>Steel</i>	BLACK DIAMOND	BD13511	EverDrlg54 Box	4 1/2" FH Pin	3.000	6.750		3.38	2120.40

MWD Items

No items

Directional Activities

Activity Type	Code	Start Date	Start Time	End Time	End Date	Start (ft)	End (ft)	Comments/Details
Survey	46	01-27	23:55	00:00	01-28	18412.00	18412.00	Inclination (°): 85.670, Azimuth (°): 0.280, TVD (ft): 11104.61, Dogleg (°/100 ft): 0.35, Sensor Depth (ft): 18343.00, Bit To Sensor (ft): 69.00
Rotary Drill	1	01-28	00:00	00:25	01-28	18412.00	18420.00	Pressure On (psi): 4800.00, Pressure Off (psi): 4400.00, Weight On Bit (klbs): 45.00, Surface RPM: 40, Surface Torque (ft lbf): 30000.00, Flow Rate (gpm): 695.00, Strokes Per Minute: 240.00
Slide Drill	2	01-28	00:25	01:10	01-28	18420.00	18435.00	Toolface: 50, Toolface Type: gravity
Rotary Drill	1	01-28	01:10	02:05	01-28	18435.00	18501.00	Pressure On (psi): 4800.00, Pressure Off (psi): 4400.00, Weight On Bit (klbs): 45.00, Surface RPM: 40, Surface Torque (ft lbf): 30000.00, Flow Rate (gpm): 695.00, Strokes Per Minute: 240.00
Survey	46	01-28	02:05	02:10	01-28	18501.00	18501.00	Inclination (°): 85.850, Azimuth (°): 1.160, TVD (ft): 11111.19, Dogleg (°/100 ft): 1.01, Sensor Depth (ft): 18432.00, Bit To Sensor (ft): 69.00
Rotary Drill	1	01-28	02:10	02:15	01-28	18501.00	18506.00	Pressure On (psi): 4800.00, Pressure Off (psi): 4400.00, Weight On Bit (klbs): 45.00, Surface RPM: 40, Surface Torque (ft lbf): 30000.00, Flow Rate (gpm): 695.00, Strokes Per Minute: 240.00
Slide Drill	2	01-28	02:15	04:15	01-28	18506.00	18541.00	Toolface: 0, Toolface Type: gravity
Rotary Drill	1	01-28	04:15	04:55	01-28	18541.00	18591.00	Pressure On (psi): 4800.00, Pressure Off (psi): 4400.00, Weight On Bit (klbs): 45.00, Surface RPM: 40, Surface Torque (ft lbf): 30000.00, Flow Rate (gpm): 695.00, Strokes Per Minute: 240.00
Survey	46	01-28	04:55	05:00	01-28	18591.00	18591.00	Inclination (°): 87.780, Azimuth (°): 2.390, TVD (ft): 11116.19, Dogleg (°/100 ft): 2.54, Sensor Depth (ft): 18522.00, Bit To Sensor (ft): 69.00
Rotary Drill	1	01-28	05:00	06:35	01-28	18591.00	18680.00	Pressure On (psi): 4800.00, Pressure Off (psi): 4400.00, Weight On Bit (klbs): 45.00, Surface RPM: 40, Surface Torque (ft lbf): 30000.00, Flow Rate (gpm): 695.00, Strokes Per Minute: 240.00
Survey	46	01-28	06:35	06:40	01-28	18680.00	18680.00	Inclination (°): 91.910, Azimuth (°): 3.090, TVD (ft): 11116.43, Dogleg (°/100 ft): 4.71, Sensor Depth (ft): 18611.00, Bit To Sensor (ft): 69.00
Slide Drill	2	01-28	06:40	08:20	01-28	18680.00	18715.00	Pressure On (psi): 4300.00, Pressure Off (psi): 4000.00, Weight On Bit (klbs): 70.00, Flow Rate (gpm): 652.00, Strokes Per Minute: 224, Toolface: 200, Toolface Type: gravity
Rotary Drill	1	01-28	08:20	09:40	01-28	18715.00	18770.00	Pressure On (psi): 4800.00, Pressure Off (psi): 4400.00, Weight On Bit (klbs): 45.00, Surface RPM: 40, Surface Torque (ft lbf): 30000.00, Flow Rate (gpm): 695.00, Strokes Per Minute: 240.00
Survey	46	01-28	09:40	09:45	01-28	18770.00	18770.00	Inclination (°): 90.640, Azimuth (°): 1.600, TVD (ft): 11114.42, Dogleg (°/100 ft): 2.18, Sensor Depth (ft): 18701.00, Bit To Sensor (ft): 69.00
Rotary Drill	1	01-28	09:45	09:50	01-28	18770.00	18782.00	Pressure On (psi): 4800.00, Pressure Off (psi): 4400.00, Weight On Bit (klbs): 45.00, Surface RPM: 40, Surface Torque (ft lbf): 30000.00, Flow Rate (gpm): 695.00, Strokes Per Minute: 240.00
Slide Drill	2	01-28	09:50	12:10	01-28	18782.00	18822.00	Pressure On (psi): 4300.00, Pressure Off (psi): 4000.00, Weight On Bit (klbs): 70.00, Flow Rate (gpm): 652.00, Strokes Per Minute: 224, Toolface: 190, Toolface Type: gravity
Rotary Drill	1	01-28	12:10	13:05	01-28	18822.00	18860.00	Pressure On (psi): 4800.00, Pressure Off (psi): 4400.00, Weight On Bit (klbs): 45.00, Surface RPM: 40, Surface Torque (ft lbf): 30000.00, Flow Rate (gpm): 695.00, Strokes Per Minute: 240.00
Survey	46	01-28	13:05	13:10	01-28	18860.00	18860.00	Inclination (°): 89.800, Azimuth (°): 1.330, TVD (ft): 11114.08, Dogleg (°/100 ft): 0.98, Sensor Depth (ft): 18791.00, Bit To Sensor (ft): 69.00
Rotary Drill	1	01-28	13:10	14:30	01-28	18860.00	18949.00	Pressure On (psi): 4800.00, Pressure Off (psi): 4400.00, Weight On Bit (klbs): 45.00, Surface RPM: 40, Surface Torque (ft lbf): 30000.00, Flow Rate (gpm): 695.00, Strokes Per Minute: 240.00
Survey	46	01-28	14:30	14:35	01-28	18949.00	18949.00	Inclination (°): 88.260, Azimuth (°): 0.540, TVD (ft): 11115.59, Dogleg (°/100 ft): 1.94, Sensor Depth (ft): 18880.00, Bit To Sensor (ft): 69.00
Rotary Drill	1	01-28	14:35	15:40	01-28	18949.00	19039.00	Pressure On (psi): 4800.00, Pressure Off (psi): 4400.00, Weight On Bit (klbs): 45.00, Surface RPM: 40, Surface Torque (ft lbf): 30000.00, Flow Rate (gpm): 695.00, Strokes Per Minute: 240.00
Survey	46	01-28	15:40	15:45	01-28	19039.00	19039.00	Inclination (°): 89.930, Azimuth (°): 359.750, TVD (ft): 11117.01, Dogleg (°/100 ft): 2.05, Sensor Depth (ft): 18970.00, Bit To Sensor (ft): 69.00
Rotary Drill	1	01-28	15:45	16:20	01-28	19039.00	19092.00	Pressure On (psi): 4900.00, Pressure Off (psi): 4400.00, Weight On Bit (klbs): 48.00, Surface RPM: 40, Surface Torque (ft lbf): 30000.00, Flow Rate (gpm): 695.00, Strokes Per Minute: 240.00
Survey	46	01-28	16:20	16:25	01-28	19092.00	19092.00	Inclination (°): 90.370, Azimuth (°): 359.490, TVD (ft): 11116.87, Dogleg (°/100 ft): 0.96, Sensor Depth (ft): 19023.00, Bit To Sensor (ft): 69.00
Circulating Pooh	3	01-28	16:25	20:05	01-28			Circulate
	7	01-28	20:05	04:05	01-29			POOH forTD

MWD Activities

No Activities



Job Number WT-21-183	Operator Advance Energy Partners	Rig Name Nabors X50
Start Date 2021-11-24	Well Name Anderson Fed Com 551H	Legal Well Name AFE Anderson Fed Com 551H
Play Delaware Basin	State/Province and Country New Mexico, US	County Lea
		Company Man

Saturday, Jan 29 00:00 - 23:59 (Day 16 of 16)

Billing: \$10,500.00 (\$226,970.50 total)

Drilling Summary			Drilling Parameters	
Start Depth (ft)		Downhole Hours	5.17	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			0.00 - 55.00
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
Advance Directional	Directional Driller
Robert Olivarez	MWD Engineer
Michael Saliba	Directional Driller
Francisco DeLeon	MWD Engineer
Joseph Lanham	Directional Driller

BHA #8 - 8.75" LATERAL

Date In: Jan 26, 2022, 20:00 Date Out: Jan 29, 2022, 5:10

Bit Details		Motor Details		Directional Comments
OD (in)	8.750	Size (in)	7.0	FLOW RANGE: 500-750 GPM, REV PER GALLON 0.26, MAX DIFF: 1,910 MAX TORQUE : 18,710 BIT RUNS: 0 , Bit to Bend: 4.56
Vendor	Reed	Lobe/Stage	7/8, 8.5	
S/N	A284576	Bend Angle	1.75	
Nozzles	7x14's	Speed (rev/gal)	0.24	MWD Comments
Total Flow Area (in²)	1.052	Wear Pad OD (in)	7.375	POOH Reason Total Depth/Casing Point: POOH for casing. Reached TD @ 19,092'
Drilling Hours for Day	0.00	Bit Distances		
Total Drilled for Day (ft)		Survey: 69.00 ft, Gamma (Bit To Gamma):		
Drilling Hours for BHA	33.00	45.00 ft, Resistivity (Bit to Resistivity):		
Total Drilled for BHA (ft)	1856.00	55.00 ft		

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</i> , Type: <i>PDC (Polycrystalline Diamond Compacts)</i> , Gauge Length (in): 4.00, Size (in): 8.75	Reed	A284576	4 1/2" Reg Pin			8.750		1.00	1.00
Mud Motor Description: <i>7.0" 7/8L, 8.5 Stg. 1.75° FBH (True Slick)</i> , Size (in): 7.00, Bend Angle (°): 1.75, Rotor Lobe: 7, Stator Lobe: 8, Stator Stage: 8.5	SNIPER	DR70018	4 1/2" IF Box	4 1/2" Reg Box		7.000		35.59	36.59
Resistivity Description: <i>RESISTIVITY MWD</i>	Bench Tree	650-1005						31.26	67.85
Battery Description: <i>BATTERY</i>	Bench Tree	B6002						17.33	85.18
Drill Collar Description: <i>NMDC</i> , Material: <i>Non-Magnetic</i> , Type: <i>Slick Drill</i>	GATOR	67-30-296	4 1/2" IF Box	4 1/2" IF Pin	3.250	6.750		30.65	115.83
Crossover Sub Description: <i>X-O SUB</i> , Material: <i>Steel</i>	BLACK DIAMOND	BD15201	EverDrlg54 Box	4 1/2" IF Pin	3.000	6.625		3.57	119.40
Drill Pipe Description: <i>22 Stands 5 1/2 Drill Pipe</i> , Type: <i>Slick</i>	Black Diamond		EverDrlg54 Box	EverDrlg54 Pin	3.000	5.500		1969.32	2088.72
Crossover Sub Description: <i>X-O SUB</i> , Material: <i>Steel</i>	BLACK DIAMOND	BD 22523	4 1/2" IF Box	EverDrlg54 Box	3.000	6.750		3.48	2092.20
Agitator Description: <i>6.75" Agitator</i> , Size (in): 6.75	NOV	AGHF0675-0080	4 1/2" IF Box	4 1/2" IF Pin		6.750		24.82	2117.02
Crossover Sub Description: <i>X-O SUB</i> , Material: <i>Steel</i>	BLACK DIAMOND	BD13511	EverDrlg54 Box	4 1/2" FH Pin	3.000	6.750		3.38	2120.40

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	01-28	20:05	04:05	01-29			POOH forTD
Lay Down BHA	65	01-29	04:05	05:10	01-29			LD BHA
Standby	15	01-29	05:10	23:55	01-29			Standby for casing Ops.

MWD Activities

No Activities



Surface Plat

Anderson Fed Com 551H (WT-21-183)

2021-11-24 to 2022-01-29

Lea, New Mexico, US (32.43, -103.65)

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

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

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

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

State of New Mexico
Energy, Minerals and Natural Resources Department

Form C-102
Revised August 4, 2011

Submit one copy to appropriate
District Office

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

WELL LOCATION AND ACREAGE DEDICATION PLAT

☐ AMENDED REPORT

API Number	Pool Code	Pool Name
Property Code	Property Name ANDERSON FED COM	Well Number 551H
OGRID No.	Operator Name ADVANCE ENERGY PARTNERS HAT MESA, LLC	Elevation 3692'

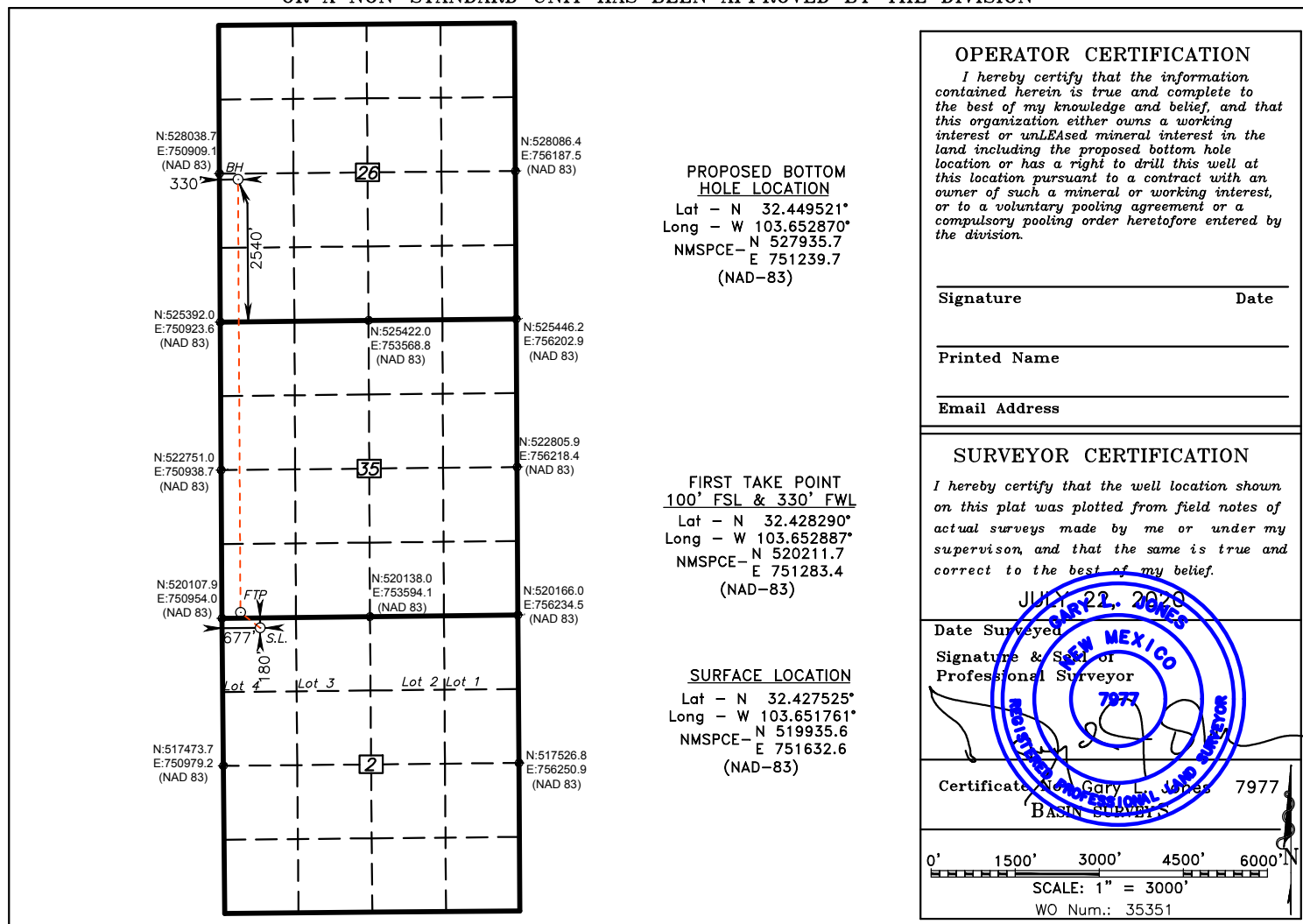
Surface Location

UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	SOUTH/South line	Feet from the	East/West line	County
LOT 4	2	22 S	32 E		180	NORTH	677	WEST	LEA

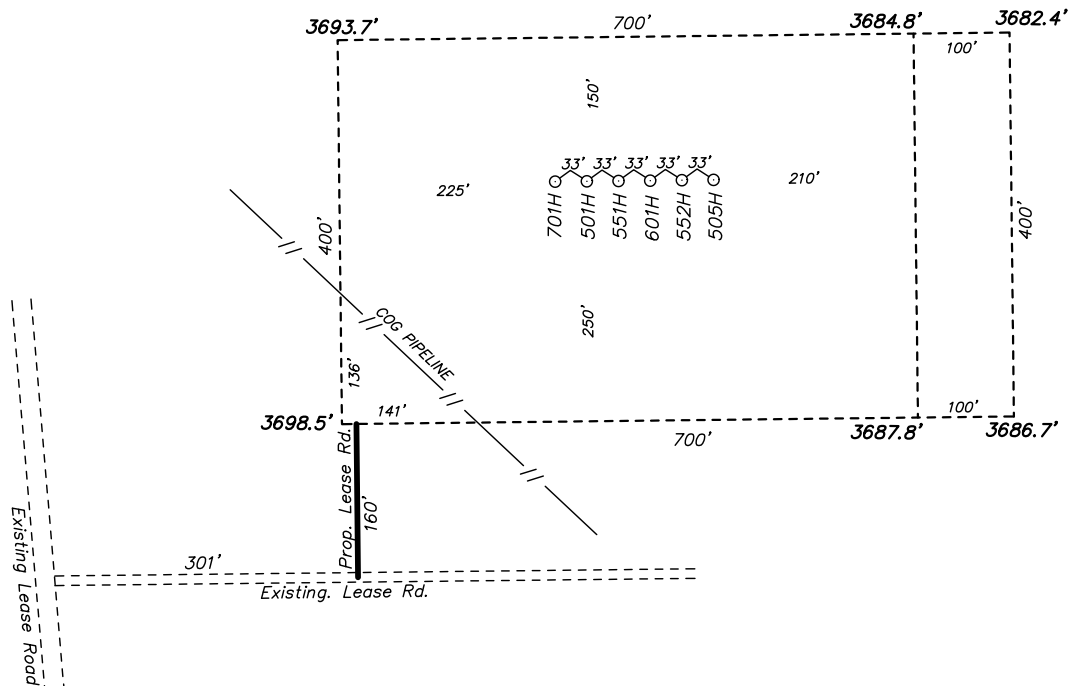
Bottom Hole Location If Different From Surface

UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	SOUTH/South line	Feet from the	East/West line	County
L	26	21 S	32 E		2540	SOUTH	330	WEST	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



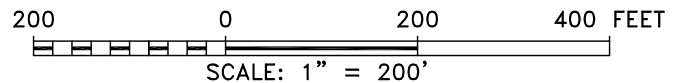
**SECTION 2, TOWNSHIP 22 SOUTH, RANGE 32 EAST. N.M.P.M.,
LEA COUNTY, NEW MEXICO.**



**ADVANCE ENERGY PARTNERS HAT MESA, LLC
ANDERSON FED COM 551H
ELEV. - 3692'**

Lat - N 32.427525°
Long - W 103.651975°
NMSPCE - N 519934.9
E 751566.6
(NAD-83)

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



ADVANCE ENERGY PARTNERS HAT MESA, LLC

REF: ANDERSON FED COM 551H / WELL PAD TOPO

THE ANDERSON FED COM 551H LOCATED 180' FROM
THE NORTH LINE AND 677' FROM THE WEST LINE OF
SECTION 2, TOWNSHIP 22 SOUTH, RANGE 32 EAST.

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

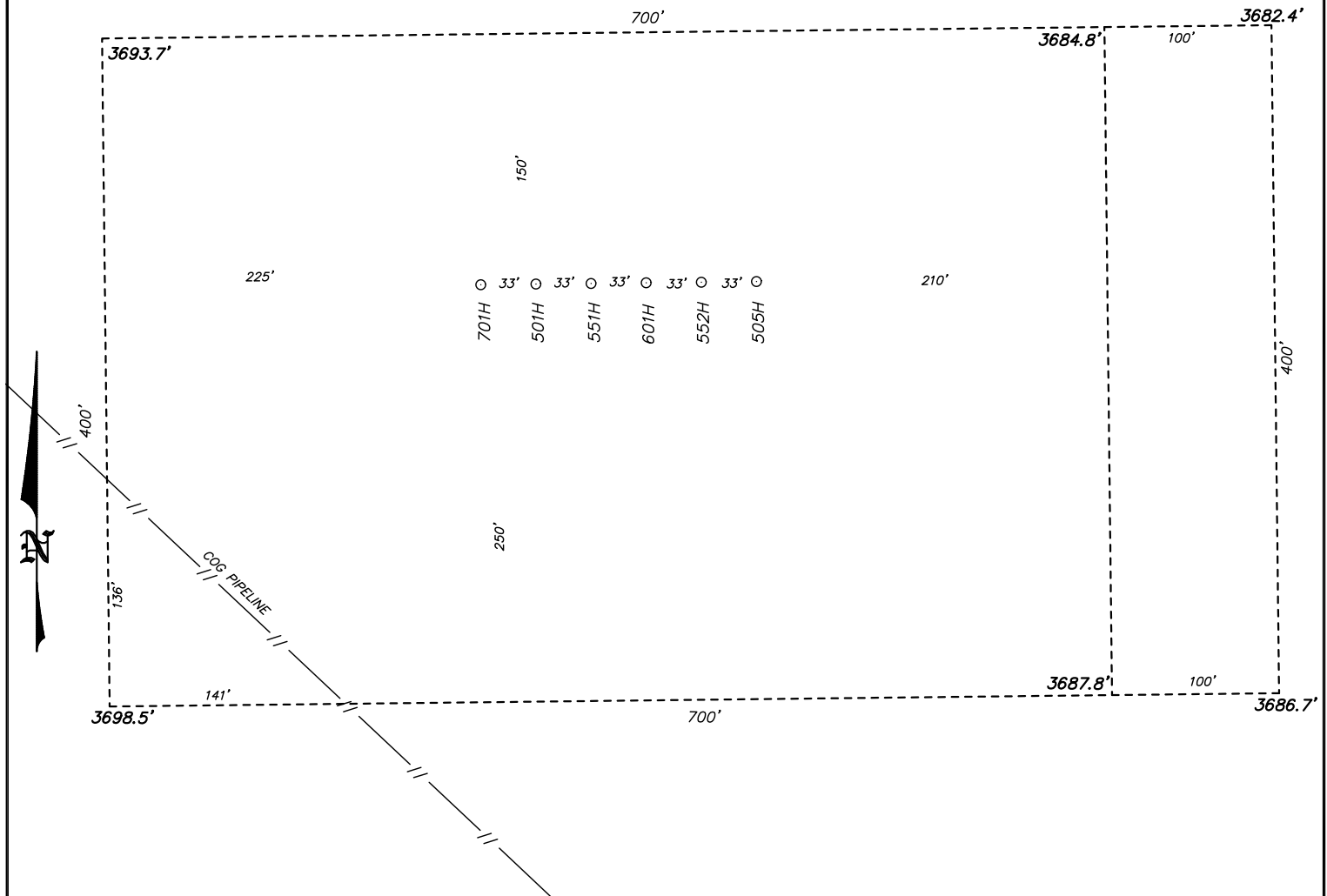


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in the oilfield

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

W.O. Number: 35351 | Drawn By: K. GOAD | Date: 07-30-2020 | Survey Date: 06-10-2021 | Sheet 1 of 1 Sheets

**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'

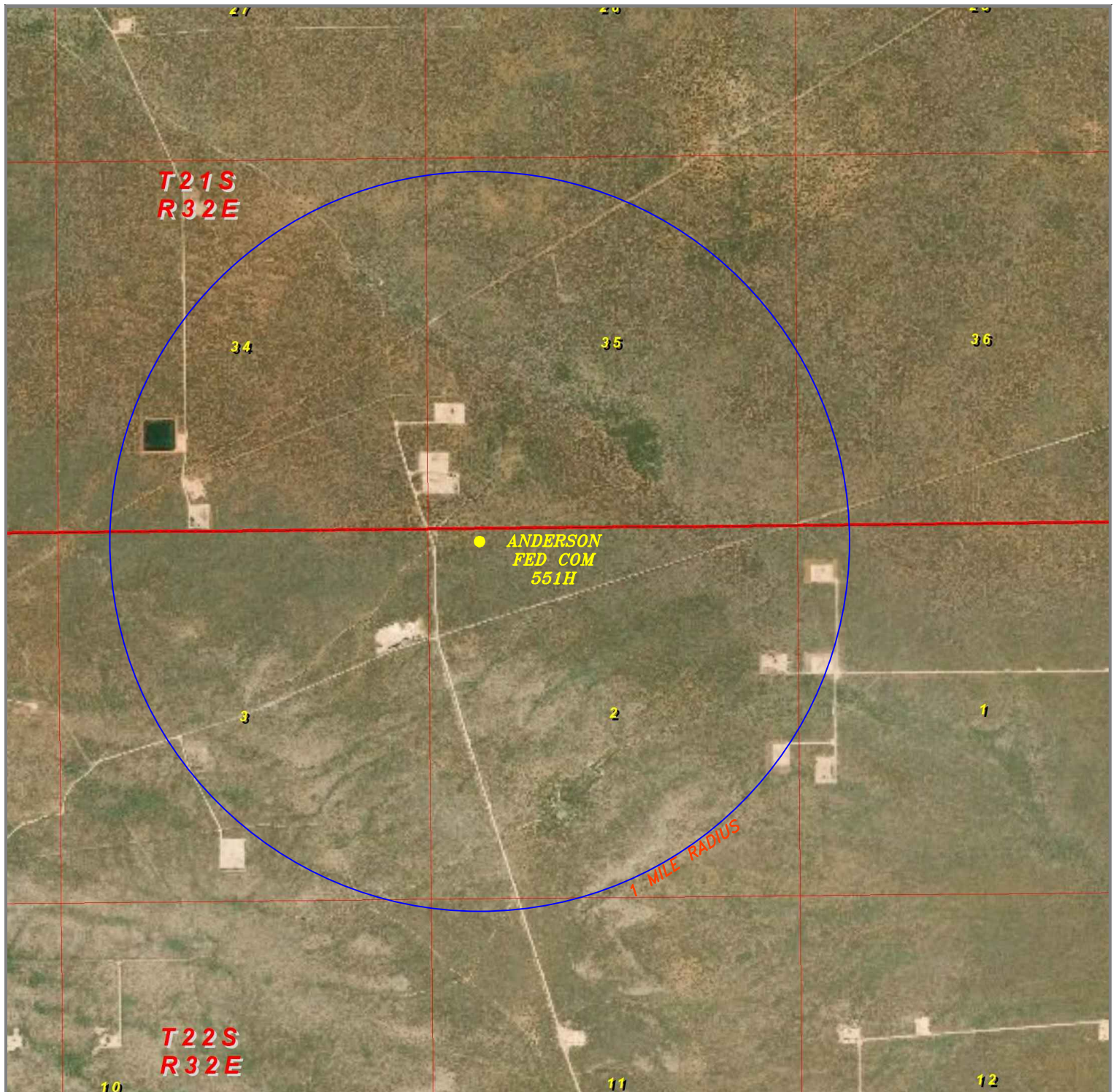
ADVANCE ENERGY PARTNERS HAT MESA, LLC

REF: ANDERSON FED COM 551H / WELL PAD TOPO

THE ANDERSON FED COM 551H LOCATED 180' FROM
THE NORTH LINE AND 677' FROM THE WEST LINE OF
SECTION 2, TOWNSHIP 22 SOUTH, RANGE 32 EAST.

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

W.O. Number: 35351 | Drawn By: K. GOAD | Date: 07-30-2020 | Survey Date: 06-10-2021 | Sheet 1 of 1 Sheets



ANDERSON FED COM 551H

Located 180' FNL and 677' FWL
 Section 2, Township 22 South, Range 32 East,
 N.M.P.M., Lea County, New Mexico.



P.O. Box 1786
 1120 N. West County Rd.
 Hobbs, New Mexico 88241
 (575) 393-7316 - Office
 (575) 392-2206 - Fax
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0' 1000' 2000' 3000' 1500'
 SCALE: 1" = 2000'

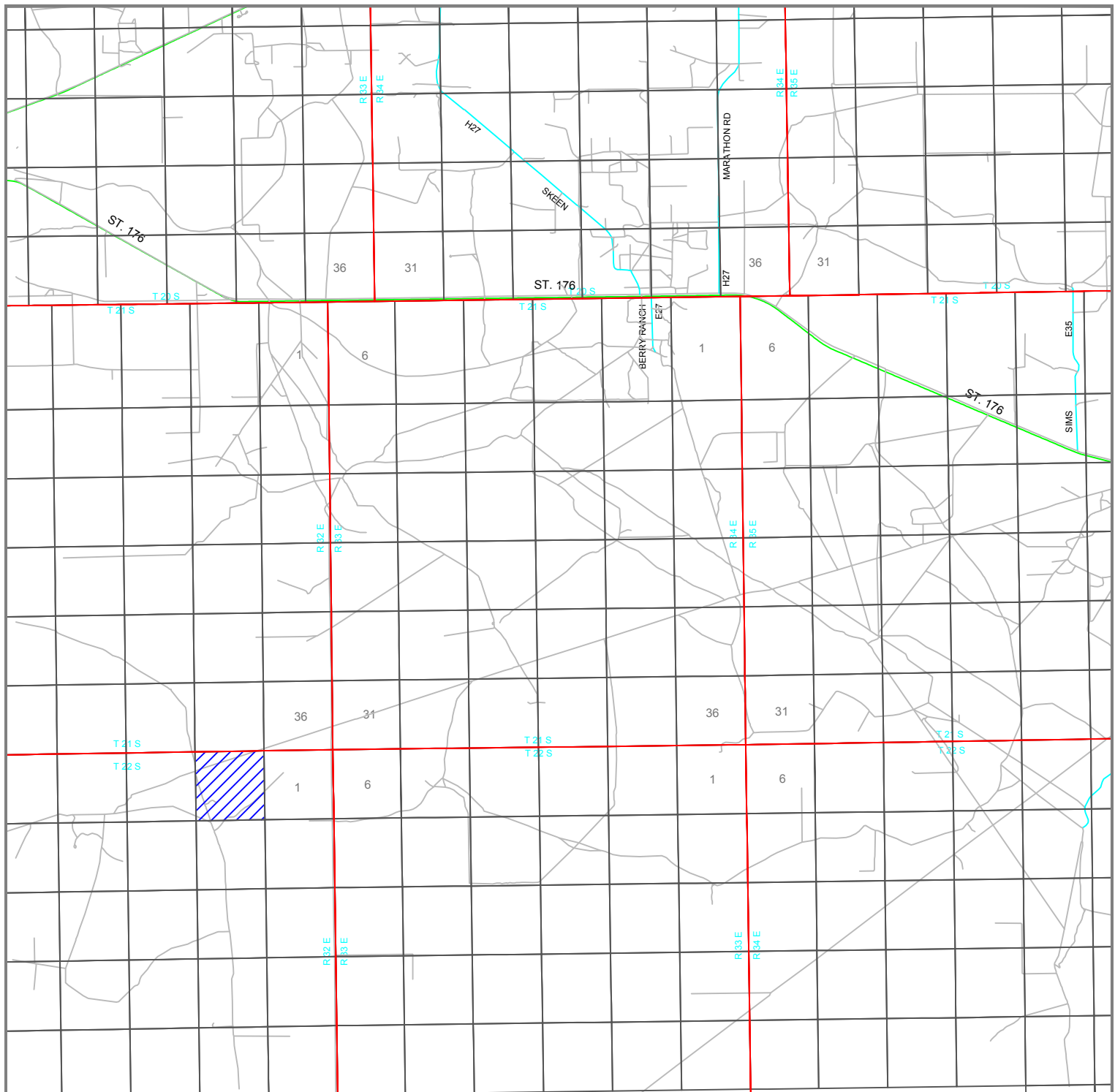
W.O. Number: KJG 35351

Survey Date: 06-10-2021

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



**ADVANCE
 ENERGY
 PARTNERS HAT
 MESA, LLC**



ANDERSON FED COM 551H

Located 180' FNL and 677' FWL
 Section 2, Township 22 South, Range 32 East,
 N.M.P.M., Lea County, New Mexico.



focused on excellence
in the oilfield

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 Hobbs, New Mexico 88241
 (575) 393-7316 - Office
 (575) 392-2206 - Fax
 basinsurveys.com

0 1 MI 2 MI 3 MI 4 MI

SCALE: 1" = 2 MILES

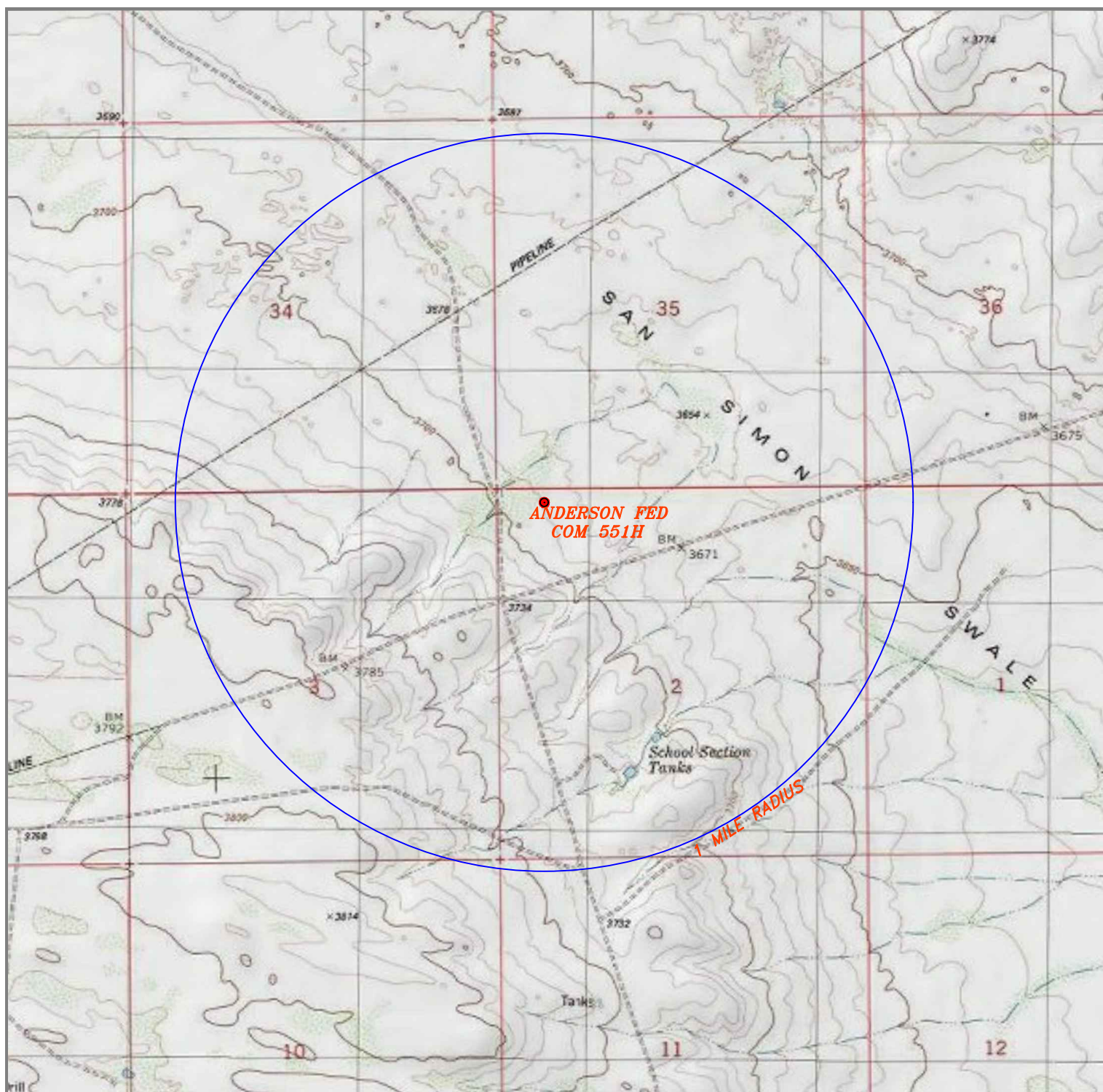
W.O. Number: KJG 35351

Survey Date: 06-10-2021

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



**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. 30-025-48995	
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 551H	
9. OGRID Number 372417	
10. Pool name or Wildcat RED TANK;BONE SPRING	

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 4</u> : <u>180</u> feet from the <u>North</u> line and <u>677</u> feet from the <u>West</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.) 3692'	

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.

4/3/22: Pressure test casing to 9500 psi for 30 minutes
4/5-4/23/22: Perforate from 11,361' – 18,913' (2450). Frac with 19,394,351 lbs sand and 23,968,937 gal fluid.
5/25-26/22: Drill all plugs out and clean out to a PBDT of 19,062'
5/31/2022: Begin flowback operations

Spud Date:

11/24/21

Rig Release Date:

1/30/22

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					
1. WELL API NO. 30-025-48995								2. Type of Lease ☐ STATE ☐ FEE ☒ FED/INDIAN		
3. State Oil & Gas Lease No. NMNM120905										
WELL COMPLETION OR RECOMPLETION REPORT AND LOG										
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: 551H				
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 4	2	22S	32E		180	N	677	W	LEA
BH:	L	26	21S	32E		2559	S	337	W	LEA
13. Date Spudded 11/24/21	14. Date T.D. Reached 1/28/22	15. Date Rig Released 1/30/22		16. Date Completed (Ready to Produce) 5/31/22		17. Elevations (DF and RKB, RT, GR, etc.) 3692'				
18. Total Measured Depth of Well 19,092'		19. Plug Back Measured Depth 19,062'		20. Was Directional Survey Made? YES		21. Type Electric and Other Logs Run GAMMA				
22. Producing Interval(s), of this completion - Top, Bottom, Name 11,361' – 18,913' 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#		1275'		17.5"		735 SXS		
9.625"		40#		3775'/4805'		12.25"		1140 SXS		
5.5"		20#		19,073'		8.5"		3110 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) 11,361' – 18,913' – 2450 holes						27. ACID, SHOT, FRACTURE, CEMENT, SQUEEZE, ETC. DEPTH INTERVAL AMOUNT AND KIND MATERIAL USED 11,361' – 18,913' 19,394,351 lbs sand, 23,968,937 bbls water				
28. PRODUCTION										
Date First Production 6/1/22		Production Method (<i>Flowing, gas lift, pumping - Size and type pump</i>) FLOWING				Well Status (<i>Prod. or Shut-in</i>) PROD				
Date of Test 7/4/22	Hours Tested 24	Choke Size 28	Prod'n For Test Period	Oil - Bbl 649	Gas - MCF 806	Water - Bbl. 1308	Gas - Oil Ratio 1242			
Flow Tubing Press. N/A	Casing Pressure 1200	Calculated 24-Hour Rate	Oil - Bbl. 649	Gas - MCF 806	Water - Bbl. 1308	Oil Gravity - API - (<i>Corr.</i>) 41.5				
29. Disposition of Gas (<i>Sold, used for fuel, vented, etc.</i>)								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: 1/30/22				
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 6919'MD/6913'TVD	T. Montoya	T. Point Lookout	T. Elbert
T. San Andres	T. Simpson	T. Mancos	T. McCracken
T. Glorieta 8468'MD/8458'TVD	T. McKee	T. Gallup	T. Ignacio Otzte
T. Paddock 8894'MD/8882'TVD	T. Ellenburger	Base Greenhorn	T. Granite
T. Blinebry	T. Gr. Wash	T. Dakota	
T. Tubb	T. Delaware Sand	T. Morrison	
T. Drinkard	T. Bone Springs	T. Todilto	
T. Abo	T. 1SS 9839'MD/9826'TVD	T. Entrada	
T. Wolfcamp	T. 2SS 10,423'MD/10,408'TVD	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 161341

ACKNOWLEDGMENTS

Operator: ADVANCE ENERGY PARTNERS HAT MESA, LLC 5400 LBJ Freeway, Suite 1500 Dallas, TX 75240	OGRID: 372417
	Action Number: 161341
	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.

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CONDITIONS

Action 161341

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	Action Number: 161341
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CONDITIONS

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