

WELL COMPLETION OR RECOMPLETION REPORT AND LOG

1a. Type of Well <input type="checkbox"/> Oil Well <input type="checkbox"/> Gas Well <input type="checkbox"/> Dry <input type="checkbox"/> Other		5. Lease Serial No.	
b. Type of Completion <input type="checkbox"/> New Well <input type="checkbox"/> Work Over <input type="checkbox"/> Deepen <input type="checkbox"/> Plug Back <input type="checkbox"/> Diff. Zones <input type="checkbox"/> Hydraulic Fracturing Other: _____		6. If Indian, Allottee or Tribe Name	
2. Name of Operator		7. Unit or CA Agreement Name and No.	
3. Address		8. Well Name and Well No.	
3a. Phone No. (Include area code)		9. API Well No.	
4. Location of Well (Report location clearly and in accordance with Federal requirements)* At surface At top prod. interval reported below At total depth		10. Field and Pool or Exploratory	
		11. Sec., T., R., M., on Block and Survey or Area	
		12. County or Parish	13. State
14. Date Spudded	15. Date T.D. Reached	16. Date Completed <input type="checkbox"/> D & A <input type="checkbox"/> Ready to Prod.	17. Elevations (DF, RKB, RT, GL)*
18. Total Depth: MD TVD	19. Plug Back T.D.: MD TVD	20. Depth Bridge Plug Set: MD TVD	
21. Type Electric & Other Mechanical Logs Run (Submit copy of each)		22. Was well cored? <input type="checkbox"/> No <input type="checkbox"/> Yes (Submit analysis) Was DST run? <input type="checkbox"/> No <input type="checkbox"/> Yes (Submit report) Directional Survey? <input type="checkbox"/> No <input type="checkbox"/> Yes (Submit copy)	

23. Casing and Liner Record (Report all strings set in well)

Hole Size	Size/Grade	Wt. (#ft.)	Top (MD)	Bottom (MD)	Stage Cementer Depth	No. of Sks. & Type of Cement	Slurry Vol. (BBL)	Cement Top*	Amount Pulled

24. Tubing Record

Size	Dept Set (MD)	Packer Dept (MD)	Size	Depth Set (MD)	Packer Depth (MD)	Size	Depth Set (MD)	Packer Depth (MD)

25. Producing Intervals			26. Perforation Record			
Formation	Top	Bottom	Perforated Interval	Size	No. Holes	Perf. Status
A)						
B)						
C)						
D)						

27. Acid, Fracture, Treatment, Cement Squeeze, Post hydraulic fracturing chemical disclosures on FracFocus.org when required by state or federal regulation

Depth Interval	Amount, Type of Material and Date of Chemical Disclosure upload on FracFocus.org as applicable

28. Production - Interval A

Date First Produced	Test Date	Hours Tested	Test Production	Oil BBL	Gas MCF	Water BBL	Oil Gravity Corr. API	Gas Gravity	Production Method
			➔						
Choke Size	Tbg. Press. Flwg. SI	Csg. Press.	24 Hr. Rate	Oil BBL	Gas MCF	Water BBL	Gas/Oil Ratio	Well Status	
			➔						

28a. Production - Interval B

Date First Produced	Test Date	Hours Tested	Test Production	Oil BBL	Gas MCF	Water BBL	Oil Gravity Corr. API	Gas Gravity	Production Method
			➔						
Choke Size	Tbg. Press. Flwg. SI	Csg. Press.	24 Hr. Rate	Oil BBL	Gas MCF	Water BBL	Gas/Oil Ratio	Well Status	
			➔						

*(See instructions and spaces for additional data on page 2)

28b. Production - Interval C

Date First Produced	Test Date	Hours Tested	Test Production →	Oil BBL	Gas MCF	Water BBL	Oil Gravity Corr. API.	Gas Gravity	Production Method
Choke Size	Tbg. Press. Flwg. SI	Csg. Press.	24 Hr. Rate →	Oil BBL	Gas MCF	Water BBL	Gas/Oil Ratio	Well Status	

28c. Production - Interval D

Date First Produced	Test Date	Hours Tested	Test Production →	Oil BBL	Gas MCF	Water BBL	Oil Gravity Corr. API.	Gas Gravity	Production Method
Choke Size	Tbg. Press. Flwg. SI	Csg. Press.	24 Hr. Rate →	Oil BBL	Gas MCF	Water BBL	Gas/Oil Ratio	Well Status	

29. Disposition of Gas (Solid, used for fuel, vented, etc.)

30. Summary of Porous Zones (Include Aquifers):

Show all important zones of porosity and contents thereof: Cored intervals and all drill-stem tests, including depth interval tested, cushion used, time tool open, flowing and shut-in pressures and recoveries.

31. Formation (Log) Markers

Formation	Top	Bottom	Descriptions, Contents, etc.	Name	Top
					Meas. Depth

32. Additional remarks (include plugging procedure).

33. Indicate which items have been attached by placing a check in the appropriate boxes:

- Electrical/Mechanical Logs (1 full set req'd.)
 Geologic Report
 DST Report
 Directional Survey
 Sundry Notice for plugging and cement verification
 Core Analysis
 Other:

34. I hereby certify that the foregoing and attached information is complete and correct as determined from all available records (see attached instructions)*

Name (please print) _____ Title _____
 Signature _____ Date _____

Title 18 U.S.C. Section 1001 and Title 43 U.S.C. Section 1212, make it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

INSTRUCTIONS

GENERAL: This form is designed for submitting a complete and correct well completion/recompletion report and log on all types of wells on Federal and Indian leases to a Federal agency, pursuant to applicable Federal laws and regulations. Any necessary special instructions concerning the use of this form and the number of copies to be submitted, particularly with regard to local, area, or regional procedures and practices, either are shown below or will be issued by, or may be obtained from, the local Federal office. If not filed prior to the time this summary record is submitted, copies of all currently available logs (drillers, geologists, sample and core analysis, and all types electric), formation and pressure tests, and directional surveys, should be attached hereto, to the extent required by applicable Federal laws and regulations. All attachments should be listed on this form, see item 33.

ITEM 4: Locations on Federal or Indian land should be described in accordance with Federal requirements. Consult local Federal office for specific instructions.

ITEM 17: Indicate which reported elevation is used as reference (where not otherwise shown) for depth measurements given in other spaces on this form and in any attachments.

ITEM 23: Show how reported top(s) of cement were determined, i.e. circulated (CIR), or calculated (CAL), or cement bond log (CBL), or temperature survey (TS).

NOTICES

The Privacy Act of 1974 and the regulation in 43 CFR 2.48 (d) provide that you be furnished the following information in connection with information required by this application.

AUTHORITY: 30 U.S.C. 181 et seq., 351 et seq., 25 U.S.C. et seq.; 43 CFR 3160.

PRINCIPAL PURPOSE: The information is to be used to evaluate the actual operations performed in the drilling, completing and testing of a well on a Federal or Indian lease.

ROUTINE USES: (1) Evaluate the equipment and procedures used during the drilling and completing/recompleting of a well. (2) The review of geologic zones and formation encountered during drilling. (3) Analyze future applications to drill in light of data obtained and methods used. (4)(5) Information from the record and/or the record will be transferred to appropriate Federal, State, local or foreign agencies, when relevant to civil, criminal or regulatory investigations or prosecutions.

EFFECT OF NOT PROVIDING INFORMATION: Filing of this report and disclosure of the information is mandatory once a well drilled on a Federal or Indian lease is completed/recompleted.

The Paperwork Reduction Act of 1995 requires us to inform you that:

The BLM collects this information to allow evaluation of the technical, safety, and environmental factors involved with drilling and completing/recompleting wells on Federal and Indian oil and gas leases.

This information will be used to analyze operations and to compare equipment and procedures actually used with those proposed and approved.

Response to this request is mandatory only if the operator elects to initiate drilling and completing/recompleting operations on an oil and gas lease.

The BLM would like you to know that you do not have to respond to this or any other Federal agency-sponsored information collection unless it displays a currently valid OMB control number.

BURDEN HOURS STATEMENT: Public reporting burden for this form is estimated to average 8 hours per response, including the time for reviewing instructions, gathering and maintaining data, and completing and reviewing the form. Direct comments regarding the burden estimate or any other aspect of this form to U.S. Department of the Interior, Bureau of Land Management (1004-0137), Bureau Information Collection Clearance Officer (WO-630), 1849 C Street, N.W., Mail Stop 401 LS, Washington, D.C. 20240.

Additional Information

Location information: 00S1

SHL: NWNW / LOT: 4 / 180 FNL / 743 FWL / TWSP: 22S / RNG: 32E / SEC: 2 / LAT: 32.427526 /
LONG: -103.651547

KOP: NWNW / LOT: 4 / 372 FNL / 1216 FWL / TWSP: 22S / RNG: 32E / SEC: 2 / LAT: 32.426871 /
LONG: -103.650108

PPP: SWNW / 2640 FSL / 1225 FWL / TWSP: 21S / RNG: 32E / SEC: 35 / LAT: 32.4353139 /
LONG: -103.649936

PPP: SWSW / 104 FSL / 1261 FWL / TWSP: 21S / RNG: 32E / SEC: 35 / LAT: 32.428315 / LONG:
-103.649871

PPP: SWSW / 0 FSL / 1242 FWL / TWSP: 21S / RNG: 32E / SEC: 26 / LAT: 32.4425712 / LONG:
-103.6498265

EXIT: NWSW / 2540 FSL / 1231 FWL / TWSP: 21S / RNG: 32E / SEC: 26 / LAT: 32.449534 /
LONG: -103.64995

BHL: NWSW / 2553 FSL / 1230 FWL / TWSP: 21S / RNG: 32E / SEC: 26 / LAT: 32.449568 /
LONG: -103.649953

Summary of Porous Zones Information:

Formation: AVALON SAND, Descriptions, Contents, etc: null, Bottom: 8896

Formation: BONE SPRING 1ST, Descriptions, Contents, etc: null, Bottom: 9874

Formation: BONE SPRING 2ND, Descriptions, Contents, etc: null, Bottom: 10289

Attachments: 00S1

Log Attachments:

- 1) Anderson_Fed_Com_552H___As_Drilled_WBS_20221125091353.pdf
- 2) C_102_ANDERSON_FEDERAL_COM_552H_AS DRILLED_20221125091410.pdf
- 3) 19330TD_Anderson_Fed_Com_552H_1_Inch_Final_20221125091323.pdf
- 4) Anderson_Fed_Com_552H_1_Inch_MD_Gamma_FINAL_20221125091045.pdf
- 5) Anderson_Fed_Com_552H_FINAL_SVY_RPT_20221125091123.pdf
- 6) Advance_Energy___Anderson_Fed_Com__552H_End_of_Well_Report_20221125091220.pdf

API: 30-025-48996

REGULATORY: NM Federal

OGRID # 372417

RIG: Nabors X50

KB: 3724.5'

GL: 3692'



AFE: NM0204

WELLHEAD
13-3/8" x 9-5/8" x 5-1/2"
MNDS

Anderson Fed Com #552H

BONE SPRING

AS-DRILLED

Sec. 2; T- 22S; R- 32E, 180' FNL; 743' FWL

SHL:

Lat: 32.427526 Long: -103.651547 NAD83

HOLE	MD	FORMATION	TVD	MUD	CASING	CEMENT	SPECIAL INSTRUCTIONS
	120'	20" Conductor	120'		13-3/8" 54.5 J-55 BTC		
17 1/2"	1,242	Rustler	1,242	SPUD MW 8.4 ppg FRESH TD MW 10 ppg	0' - 1262'	Top of Lead: Surface 12.8 ppg 50% Excess 515 sks Top of Tail: 1,009 14.8 ppg 20% Excess 215sks	MUD: Fresh water only CTS: 74 bbls (218 sx)
	1,262	SURF CSG PT	1,262				
12 1/4"	3,029	DV Tool	3,029	DRLOUT MW 10 ppg BRINE Minimum Chlorides - 180k TD MW <10.5 ppg	COMPLETE STRING 9-5/8" 40# J-55 BTC 0' - 3779' 9-5/8" 40# HCL-80 BTC 3779' - 4797'	2 STAGE CEMENT LEAD: 12.8 ppg 920 sks 107% Excess TAIL: 14.8 ppg Top of Tail 3,837 310 sks 20% Excess 1st STAGE LEAD: ppg Top of Lead 0 Not Pumped 96% Excess TAIL: ppg Top of Tail 2580 Not Pumped 0% Excess 2nd STAGE LEAD: ppg Top of Lead 0 Not Pumped 96% Excess TAIL: ppg Top of Tail 2580 Not Pumped 0% Excess	DV & PKR & FLOAT EQUIPMENT CTS: 47 bbls (144 sx)
	4,797	INTRM CSG PT	4,796				
8-3/4"	4,836	Base of Limestone	4,835	DRLOUT MW 9 ppg	5-1/2" 20# HCP-110 GBCD	Top of Lead: Surface 10.7 ppg 50% Excess 1060 sks Top of Tail: 10,111 14.5 ppg 20% Excess 2125 sks	CTS: 228 bbls (376 sx)
	8,476	Lower Bushy	8,459	CUT BRINE	0' - 19315'		
	8,896	Avalon	8,877	KOP MW 9.2 ppg			
	10,976	KOP	10,771	CUT BRINE EOC MW 9.5 ppg			
	9,874	1st BS Sand	9,853				
	10,289	2nd BS Sand	10,265				
	11,724	EOC	11,299				
	EOC VS = 455' Lat. Azi = VS Azi = 355.45 deg					Est BHST = 231 F Est BHCT = 190 F	
		LATERAL					
8-3/4"					5-1/2" 20# HCP-110 GBCD NO FLOTATION SUB ALL PREMIUM CONNECTIONS 5.5" Wet Shoe (1) Guide Shoe		BHL: 2553' FNL 1230' FWL LTP: LAT 32.449568 LON -103.649953

DIRECTIONS TO LOCATON:

DISTRICT I
1825 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

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
As Drilled

API Number 30-025-48996	Pool Code 51683	Pool Name RED TANK;BONE SPRING
Property Code 326484	Property Name ANDERSON FEDERAL COM	Well Number 552H
OGRID No. 372417	Operator Name ADVANCE ENERGY PARTNERS HAT MESA, LLC	Elevation 3690'

Surface Location

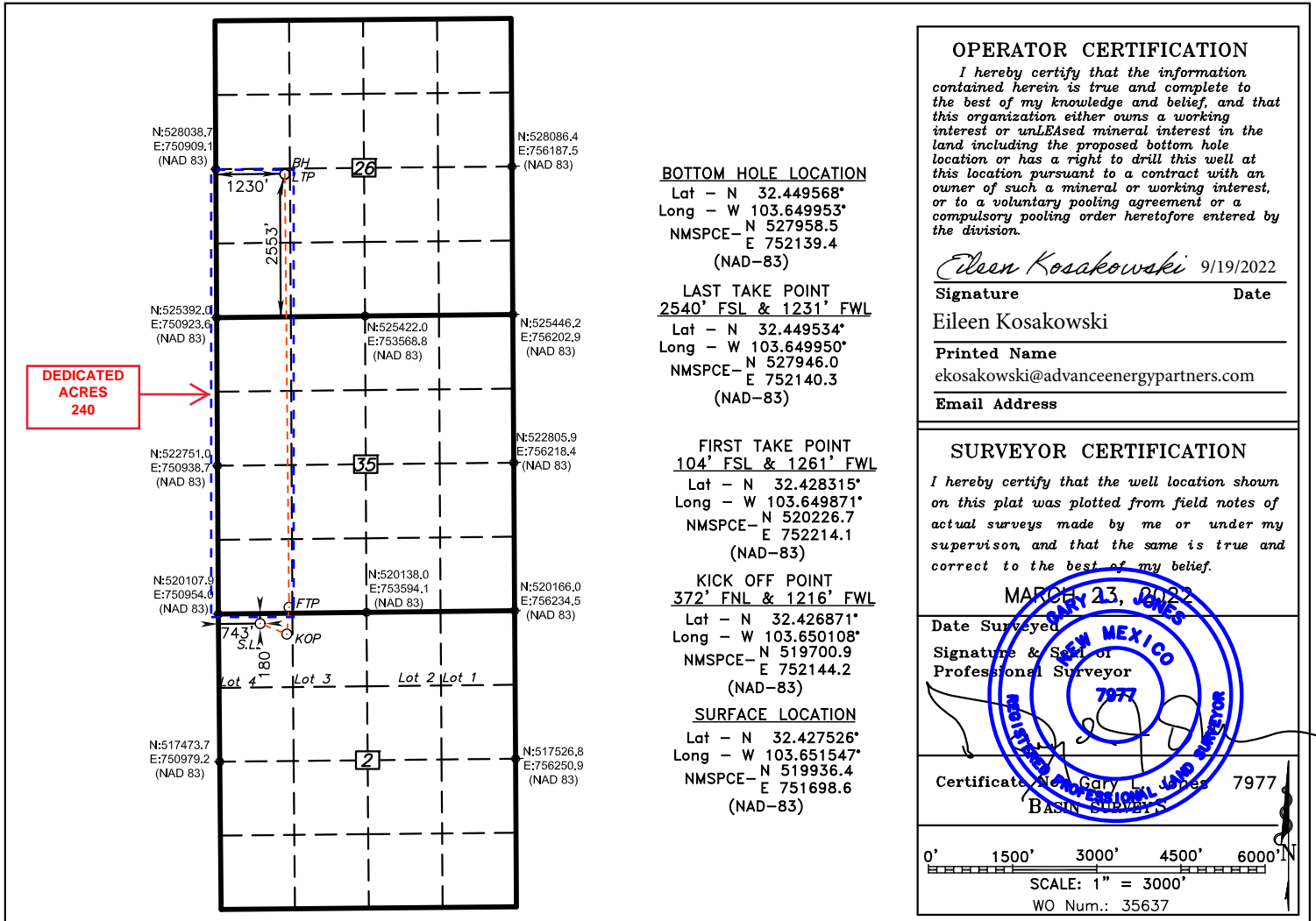
UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	SOUTH/South line	Feet from the	East/West line	County
LOT 4	2	22 S	32 E		180	NORTH	743	WEST	LEA

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		2553	SOUTH	1230	WEST	LEA

Dedicated Acres 240	Joint or Infill	Consolidation Code C	Order No. NSL-8474
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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





**MEASURED DEPTH
FORMATION EVALUATION
& GAS ANALYSIS
LOG
1" - 100'**

COUNTY Lea
 FIELD Red Tank/Bone Spring
 LOCATION 180 FNL 743 FWL SEC 2
26 miles W Eunice, NM
 WELL Anderson Fed Com 552H
 COMPANY Advance Energy Partners, LLC

COMPANY Advance Energy Partners, LLC
GEOLOGIST Brandy Hawkins
WELL Anderson Fed Com 552H
FIELD Red Tank/Bone Spring
COUNTY Lea
STATE New Mexico

LOCATION
 X: 751698.6, Y: 519936.4
 Lat: 32.427526°
 Long: -103.651547° NAD 83

API SERIAL NO 30-025-48996
 SEC 2
 TWP 22S
 RANGE 32E

OTHER SERVICES
 5" MD Log

SPUD DATE 11/22/2021
TOTAL DEPTH 19,330'
ELEV:

LOGGING STARTED 1/6/2022 @ 10,767' K.B. 3723.5
 D.F. 32.5
LOGGING FINISHED 1/14/2022 @ 19,330' G.L. 3691

BORE HOLE RECORD				CASING RECORD			
HOLE SIZE	FROM	TO	SIZE	WGT.	FROM	TO	
7.5	Surface	1244'	13.375"	54.5#	Surface	1234'	
2.25	1244'	4747'	9.625"	40#	Surface	4734	
1.75	4747'	19,330	5.5	20#	Surface	19,320'	

DILLING CONTRACTOR Nabors
MARKS X50

RECEIVED BY 5/3/2024 6:26:05 AM
PERSONNEL Shanman Ash / Charlie Kerack

Disclaimer: STRATAGRAPH, INC. will make every effort to render our services efficiently and accurately, but will not be liable for failure to report or interpret its analysis correctly.

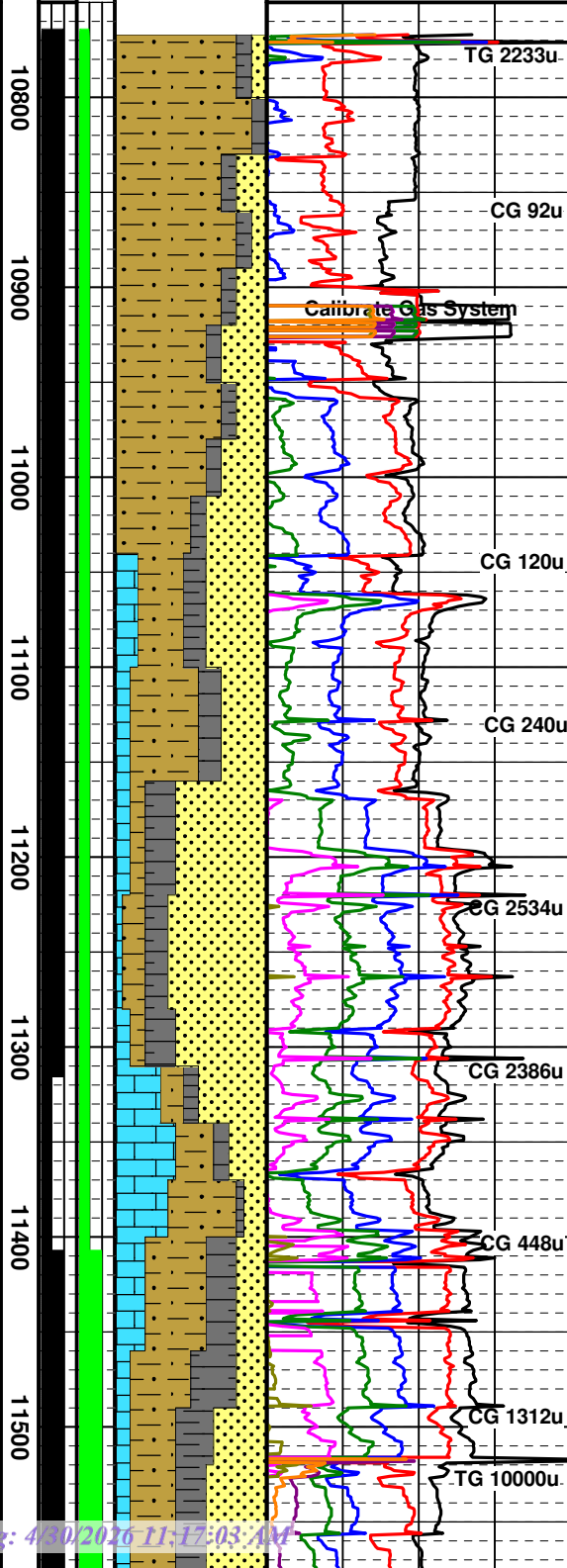
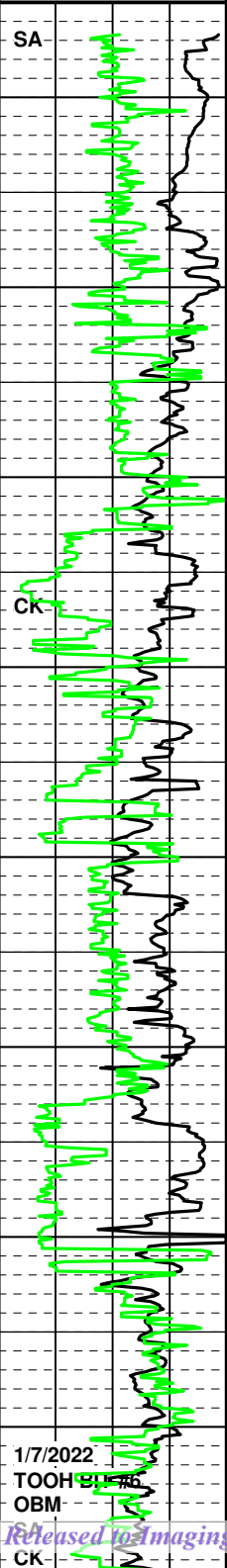
LEGEND

Abbreviations		Lithology Symbols		Other Symbols	
BG Background Gas	LAST Log After Short Trip		CLAY		CASING SEAT
CB Corebit	MW Mud Weight in lbs/gal		MARL		CORED INTERVAL
CG Connection Gas	NCB New Corebit		SILT		NO RECOVERY
CK Filter Cake	NB New Bit		LIMESTONE		SIDEWALL CORE
CKF Check For Flow	NR No Returns		LIMONITE		TEST INTERVAL
CL Salinity ppm	PDCB Polycrystalline Diamond Compact Bit		GYPSUM		WIRELINE TEST
CO Circulate Out	PERF Perforated		DOLOMITE		Oil Show
CR Circulate Returns	PPM Parts Per Million		ANHYDRITE		Gas Show
CT Carbide Test	PR Poor		CHERT		FLUORESCENCE
DB Diamond Bit	PRT Poor Returns		SALT		Bright
DBG Drilling Background Gas	PV Plastic Viscosity		COAL		Dull
DC Depth correction	RM Mud Resistivity OHM-METER		SHALE		Mineral
DCB Diamond Corebit	RMC Mud-Cake Resestivity OHM-METER		CHALK		
DF Derrick Floor	RMF Mud Filtrate Resestivity		ASH		
DG Drilling Gas	RPM Revolutions Per Minute		NO SAMPLE		
DS Directional Survey	RRB Return Bit				
DST Drill Stem Test	RT Rotary Table				
EL Electric Log	SF Sea Floor				
E.M.A. Equivalent Methane Gas	SO Show Of Oil				
F Filtrates API cc's	SOL Solids %				
F/T Flowline Temperature	SPP Stand Pipe Pressure				
FR Fair	STG Short Trip Gas				
FV Funnel Viscosity API sec	SWG Swab Gas				
GCM Gas Cut Mud	SVG Survey Gas				
GCW Gas Cut Water	S/T Suction Temperature				
GD Good	TB Turbo Drill				
G&OCM Gas & Oil Cut Mud	TD Total Depth				
GL Ground Level	TCL Trip Chlorides				
GTT Gas Trip Test	TG Trip Gas				
KB Kelley bushing	TVD Total Vertical Depth				
LAT Log After Trip	WOB Weight On Bit				

NOTE: All Lithological Symbols are as per the Shell Oil Exploration Training Manual, Acknowledged by the American Association of Petroleum Geologists.

Slide	ROP		Depth	Cut	Fluor	% Lith	Total Gas/Chromo		Drilling Parameters & Surveys	Descriptions	Images
	Average ROP	FPH					Total Gas	Unit			
300			0			1		10000			
							Methane				

100	PPM	1e+06
Ethane		
100	PPM	1e+06
Propane		
100	PPM	1e+06
Iso-Butane		
100	PPM	1e+06
Normal Butane		
100	PPM	1e+06
Iso-Pentane		
100	PPM	1e+06
Normal Pentane		
100	PPM	1e+06



Stratagraph on location and logging as of 1/5/2022 @ 20:00

MD 10796' Inc 4° Azm 44°
TVD 10770.7' VS -199.22

MWI 9.2
MWO 9.25

WOB 34 RPM 187
SPM 240 PP 2324

MD 10886' Inc 14° Azm 24°
TVD 10859.5' VS -186.61

MWI 9.2
MWO 9.25

WOB 39 RPM 203
SPM 240 PP 2504

MD 10975' Inc 24° Azm 18°
TVD 10943.6' VS -159.06

MWI 9.2
MWO 9.25

WOB 34 RPM 206
SPM 240 PP 2386

MD 11065' Inc 34° Azm 15°
TVD 11022' VS -116.31

MWI 9.2
MWO 9.25

WOB 40 RPM 206
SPM 240 PP 2418

MD 11154' Inc 45° Azm 12°
TVD 11090.6' VS -60.61

MWI 9.2
MWO 9.25

WOB 25 RPM 206
SPM 240 PP 2402

MD 11244' Inc 54° Azm 6°
TVD 11149' VS 7.46

MWI 9.2
MWO 9.25

WOB 33 RPM 198
SPM 240 PP 2365

MD 11333' Inc 59° Azm 5°
TVD 11197.7' VS 81.86

MWI 9.2
MWO 9.25

WOB 50 RPM 176
SPM 240 PP 2409

MD 11423' Inc 69° Azm 359°
TVD 11236.7' VS 162.77

MWI 9.2
MWO 9.25

WOB 34 RPM 206
SPM 240 PP 2386

10' Flare; 4 minutes

MD 11544' Inc 77° Azm 359°
TVD 11269.3' VS 278.8

SLT: dk gry - gry - occ v dk grey, rnd - sub ang, v fn grn, abd frm - occ hrd, arg, calc cmnt, abd calc incl, mod consol, dull yel flour, fst strm br yel cut, thk br yel res rng.

SST: clr - lt gry, vf-fg, ang-sb rnd, uncon-sli fria, p srt, calc cmt, no fluor, no cut.

SH: med-dk gry, frm- hd, blk-ply, v slty, sme vf lam SST, dull yel flour, fst strm yel - grn cut, yel-grn res rng

SLT: dk gry - gry, rnd - sub ang, v fn grn, abd frm - occ hrd, arg, calc cmnt, abd calc incl, mod consol, dull yel flour, fst strm br yel cut, thk br yel res rng.

SST: clr - lt gry, vf-fg, ang-sb rnd, uncon-sli fria, p srt, calc cmt, tr fd pyr, no fluor, no cut.

SH: med-dk gry, frm- hd, blk-ply, v slty, sme vf lam, dull yel flour, fst strm yel - grn cut, yel-grn res rng

SLT: gry- drk gry, sub rnd, sft - frm, occ hrd, arg, calc cmnt, ip calc incl, consol, dull yel flour, mod strm br yel - grn cut, yel wht res rng

SST: drk gry, mod consol, v f gr, sbrndd - rndd, sbang ip, mod srtg, calc cmt, mod yel flour, fst strm yel - grn cut, bri wht yel res rng

SH: dk gry - blk, frm, i.p. sft, blk, slty - frac, abd lam, v dull yel flour, mod fst stmg grn-yel cut, bri yel-blu res rng

SLT: dk gry - gry, rnd - sub ang, v fn grn, abd frm - occ hrd, arg, calc cmnt, abd calc incl, mod consol, dull yel flour, fst strm br yel cut, thk br yel res rng.

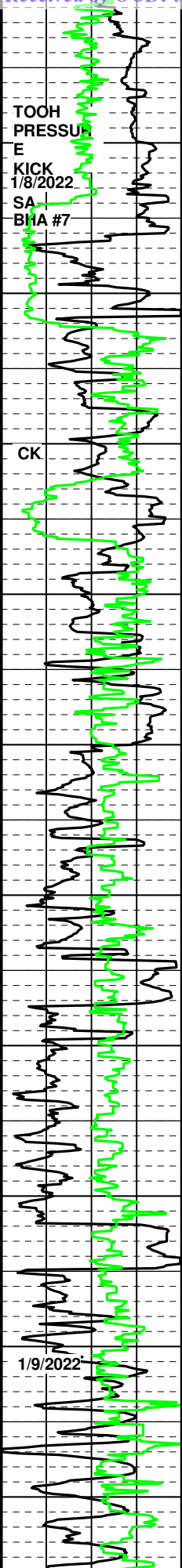
LS: mdst - wckst, lt - dk gry, microxin - vf xin, lam i.p., arg ip, fnt yel flour, slw yel grn cut, dll yel res rng

SST: med - lt grysh brn, vf gr occ, sb rnd - sb ang, fri, arg mtx, sl calc cmnt, dull org flour, mod fst stmg bri yel - bl cut, bri yel - grn res ring

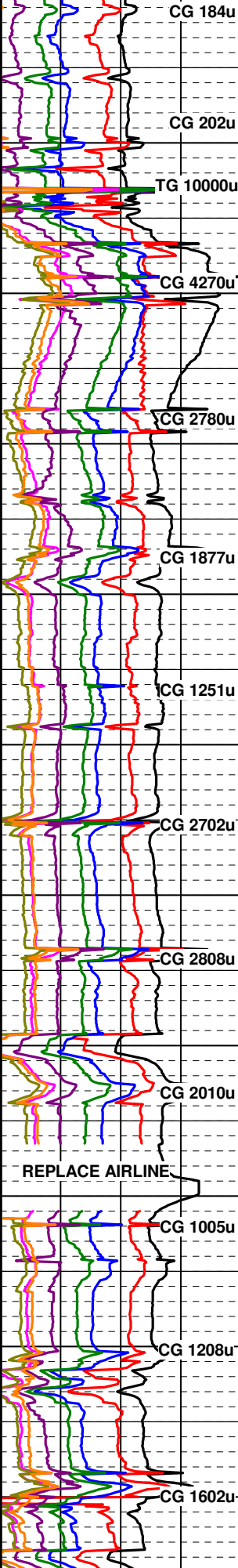
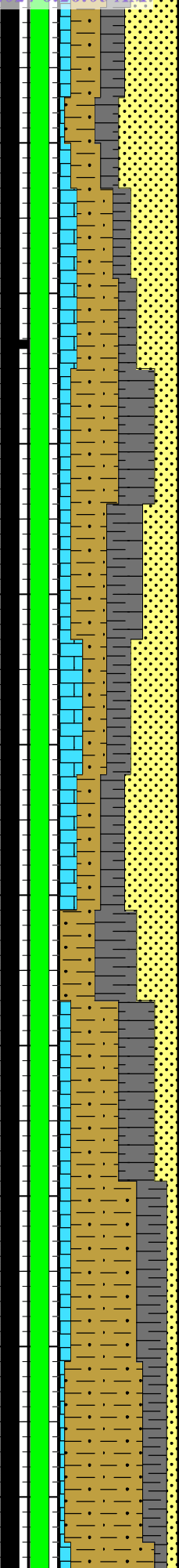
SH: dk gry, frm - v frm, blk, sil cmt/mtr, dns - dl - slty, brit, occ lam, mod carb incl, dull yel flour, stmg yll grn cut, wht res rng



1/7/2022
TOOH
OBM
CK



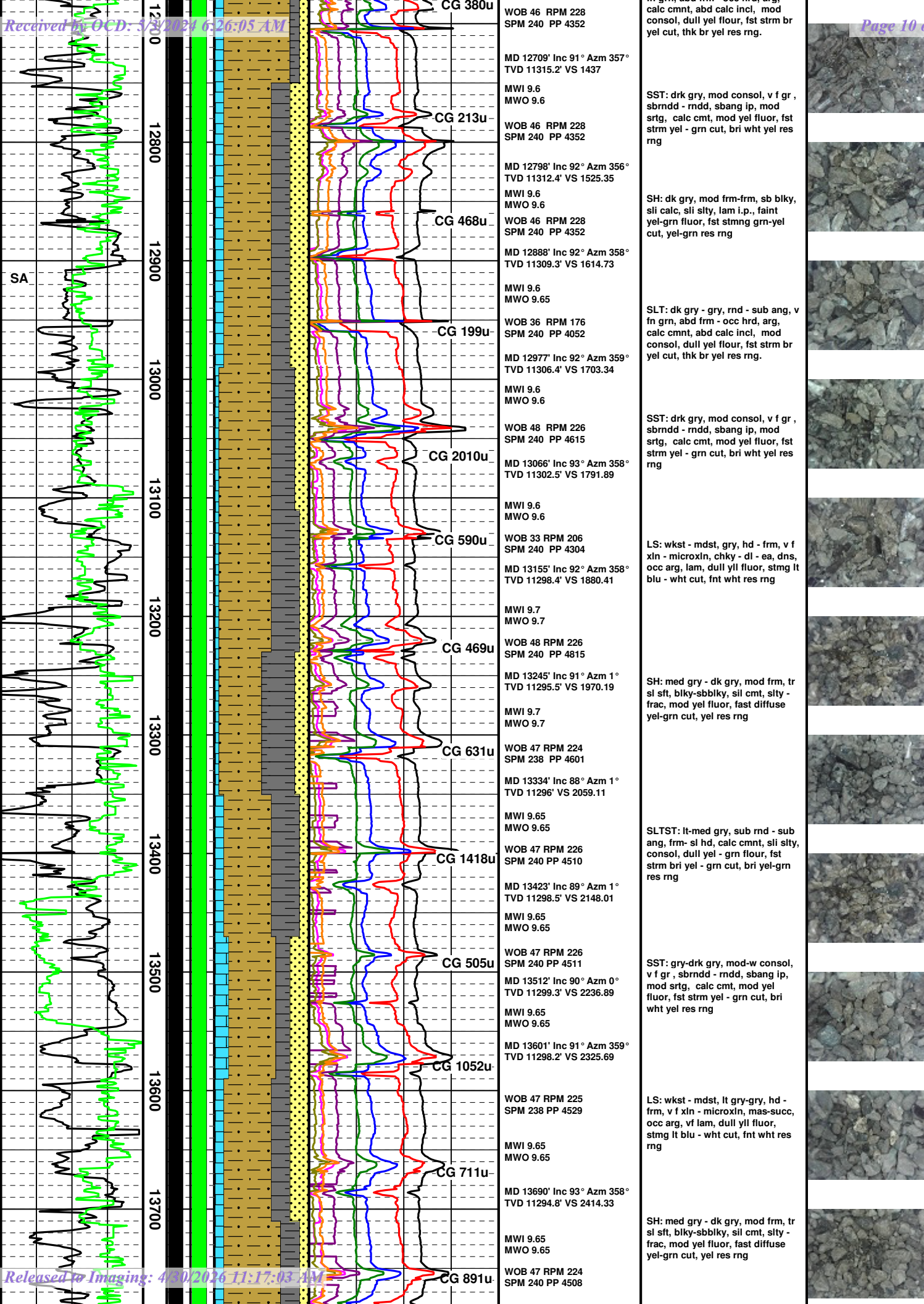
11700
11800
11900
12000
12100
12200
12300
12400
12500
12600



MWI 9.7
WMO 9.7
WOB 42 RPM 206
SPM 240 PP 4607
MD 11634' Inc 78° Azm 359°
TVD 11288.9' VS 366.4
MWI 9.7
WMO 9.7
WOB 54 RPM 176
SPM 240 PP 4123
MD 11724' Inc 88° Azm 0°
TVD 11299.4' VS 455.47
MWI 9.55
WMO 9.5
WOB 44 RPM 206
SPM 240 PP 4330
MD 11813' Inc 90° Azm 2°
TVD 11300.6' VS 544.37
MWI 9.55
WMO 9.5
WOB 44 RPM 226
SPM 240 PP 4130
MD 11903' Inc 87° Azm 2°
TVD 11302.8' VS 634.31
MWI 9.6
WMO 9.6
WOB 46 RPM 206
SPM 240 PP 4188
MD 11993' Inc 86° Azm 1°
TVD 11307.7' VS 724.14
MWI 9.6
WMO 9.6
WOB 45 RPM 227
SPM 240 PP 4224
MD 12082' Inc 87° Azm 360°
TVD 11312.5' VS 812.9
MWI 9.6
WMO 9.6
WOB 44 RPM 206
SPM 240 PP 4330
MD 12172' Inc 88° Azm 360°
TVD 11316.3' VS 902.64
MWI 9.6
WMO 9.6
WOB 44 RPM 181
SPM 240 PP 3987
MD 12261' Inc 89° Azm 359°
TVD 11318.8' VS 991.38
MWI 9.6
WMO 9.6
WOB 44 RPM 181
SPM 240 PP 3987
MD 12351' Inc 89° Azm 358°
TVD 11320.3' VS 1081.04
MWI 9.6
WMO 9.6
WOB 44 RPM 181
SPM 240 PP 3987
MD 12440' Inc 91° Azm 357°
TVD 11320.3' VS 1169.62
MWI 9.6
WMO 9.6
WOB 44 RPM 181
SPM 240 PP 3987
MD 12530' Inc 91° Azm 357°
TVD 11318.7' VS 1259.11
MWI 9.6
WMO 9.6
WOB 45 RPM 227
SPM 240 PP 4492
MD 12619' Inc 91° Azm 357°
TVD 11317.2' VS 1347.61
MWI 9.6
WMO 9.6

SLT: lt - dk gry, p sb rddd, frm - sft, wll srt, consol, arg w/ calc cmnt, dll yel fluor, fst stmg bri yel-bl cut, dll yel res rng
LS: wkst - mdst, gry, hd - frm, v f xln - microxln, chky - dl - ea, dns, occ arg, lam, dull yel, stmg cut
SST: drk gry, mod consol, v f gr, sbrddd - rddd, sbang ip, mod srtg, calc cmt, mod yel fluor, fst strm yel - grn cut, bri wht yel res rng
SH: dk gry - blk, frm, i.p. sft, blkly, slty - frac, abd lam, v dull yel fluor, mod fst stmg grn-yel cut, bri yel-blu res rng
SLT: lt - dk gry, p sb rddd, frm - sft, wll srt, consol, arg w/ calc cmnt, dll yel fluor, fst stmg bri yel-bl cut, dll yel res rng
LS: wkst - mdst, gry, hd - frm, v f xln - microxln, chky - dl - ea, dns, occ arg, lam, dull yll fluor, stmg lt blu - wht cut, fnt wht res rng
SST: med - lt grysh brn, vf gr occ, sb rnd - sb ang, fri, arg mtx, sl calc cmnt, dull orngr fluor, mod fst stmg bri yel - bl cut, bri yel - grn res ring
SH: dk gry - grysh blk, frm - mod hd, sb tab - sb blkly, occ slty, sli calc, no fluor, fst stmgng blu-grn cut, brt yel-grn res rng
SLT: dk gry - gry - occ v dk gry, rnd - sub ang, v fn grn, abd frm - occ hrd, arg, calc cmnt, mod consol, dll yll fluor, fst strm br yel cut, thk yel res rng.
LS: wkstn - mudst, tn, lt-gry, drk gry, mic- vf xln, mass, dns, aren ip, tr nod pyr, slty lamn, mnr fluor, mod yel lt blu stmgng cut, fnt wht res rng
SH: med- dk gry, mod frm-frm, sb blkly-blky, sli calc, v slty, lam i.p., faint yel-grn fluor, fst stmgng grn-yel cut, yel-grn res rng
SLT: wh lt-med gy, slit- vf grn, w srt, sb rnd-rnd, sl hd, arg mtx, lmy in, dull yel- grn fluor, med stmg whi- lt blu cut, mod br yel resd rng
SST: med - lt grysh brn, vf gr occ, sb rnd - sb ang, fri, arg mtx, sl calc cmnt, dull orngr fluor, mod fst stmg bri yel - bl cut, bri yel - grn res ring
LS: mdst - wackst, pred v lt gry-occ med gry,, microxln - vf xln, dull yel fluor, mod stmg yel-grn cut, yel-grn res rng
SH: dk gry, mod frm-frm, sb blkly, sli calc, sli slty, lam i.p., faint yel-grn fluor, fst stmgng grn-yel cut, yel-grn res rng
SLT: dk gry - gry, rnd - sub ang, v fn grn, abd frm - occ hrd, arg.





WOB 46 RPM 228
SPM 240 PP 4352

calc cmnt, abd calc incl, mod
consol, dull yel flour, fst strm br
yel cut, thk br yel res rng.

MD 12709' Inc 91° Azm 357°
TVD 11315.2' VS 1437

MWI 9.6
MWO 9.6

SST: drk gry, mod consol, v f gr,
sbrnrd - rndd, sbang ip, mod
strtg, calc cmt, mod yel flour, fst
strm yel - grn cut, bri wht yel res
rng

WOB 46 RPM 228
SPM 240 PP 4352

MD 12798' Inc 92° Azm 356°
TVD 11312.4' VS 1525.35

MWI 9.6
MWO 9.6

SH: dk gry, mod frm-frm, sb blkly,
sli calc, sli slty, lam i.p., faint
yel-grn flour, fst strmg grn-yel
cut, yel-grn res rng

WOB 46 RPM 228
SPM 240 PP 4352

MD 12888' Inc 92° Azm 358°
TVD 11309.3' VS 1614.73

MWI 9.6
MWO 9.65

SLT: dk gry - gry, rnd - sub ang, v
fn grn, abd frm - occ hrd, arg,
calc cmnt, abd calc incl, mod
consol, dull yel flour, fst strm br
yel cut, thk br yel res rng.

WOB 36 RPM 176
SPM 240 PP 4052

MD 12977' Inc 92° Azm 359°
TVD 11306.4' VS 1703.34

MWI 9.6
MWO 9.6

SST: drk gry, mod consol, v f gr,
sbrnrd - rndd, sbang ip, mod
strtg, calc cmt, mod yel flour, fst
strm yel - grn cut, bri wht yel res
rng

WOB 48 RPM 226
SPM 240 PP 4615

MD 13066' Inc 93° Azm 358°
TVD 11302.5' VS 1791.89

MWI 9.6
MWO 9.6

LS: wkst - mdst, gry, hd - frm, v f
xln - microxln, chky - dl - ea, dns,
occ arg, lam, dull yll flour, strmg lt
blu - wht cut, fnt wht res rng

WOB 33 RPM 206
SPM 240 PP 4304

MD 13155' Inc 92° Azm 358°
TVD 11298.4' VS 1880.41

MWI 9.7
MWO 9.7

SH: med gry - dk gry, mod frm, tr
sl sft, blkly-sbbkly, sil cmt, slty -
frac, mod yel flour, fast diffuse
yel-grn cut, yel res rng

WOB 48 RPM 226
SPM 240 PP 4815

MD 13245' Inc 91° Azm 1°
TVD 11295.5' VS 1970.19

MWI 9.7
MWO 9.7

SLTST: lt-med gry, sub rnd - sub
ang, frm- sl hd, calc cmnt, sli slty,
consol, dull yel - grn flour, fst
strm bri yel - grn cut, bri yel-grn
res rng

WOB 47 RPM 224
SPM 238 PP 4601

MD 13334' Inc 88° Azm 1°
TVD 11296' VS 2059.11

MWI 9.65
MWO 9.65

SST: gry-drk gry, mod-w consol,
v f gr, sbrnrd - rndd, sbang ip,
mod strtg, calc cmt, mod yel
flour, fst strm yel - grn cut, bri
wht yel res rng

WOB 47 RPM 226
SPM 240 PP 4510

MD 13423' Inc 89° Azm 1°
TVD 11298.5' VS 2148.01

MWI 9.65
MWO 9.65

LS: wkst - mdst, lt gry-gry, hd -
frm, v f xln - microxln, mas-succ,
occ arg, vf lam, dull yll flour,
strmg lt blu - wht cut, fnt wht res
rng

WOB 47 RPM 226
SPM 240 PP 4511

MD 13512' Inc 90° Azm 0°
TVD 11299.3' VS 2236.89

MWI 9.65
MWO 9.65

SST: gry-drk gry, mod-w consol,
v f gr, sbrnrd - rndd, sbang ip,
mod strtg, calc cmt, mod yel
flour, fst strm yel - grn cut, bri
wht yel res rng

WOB 47 RPM 225
SPM 238 PP 4529

MD 13601' Inc 91° Azm 359°
TVD 11298.2' VS 2325.69

MWI 9.65
MWO 9.65

LS: wkst - mdst, lt gry-gry, hd -
frm, v f xln - microxln, mas-succ,
occ arg, vf lam, dull yll flour,
strmg lt blu - wht cut, fnt wht res
rng

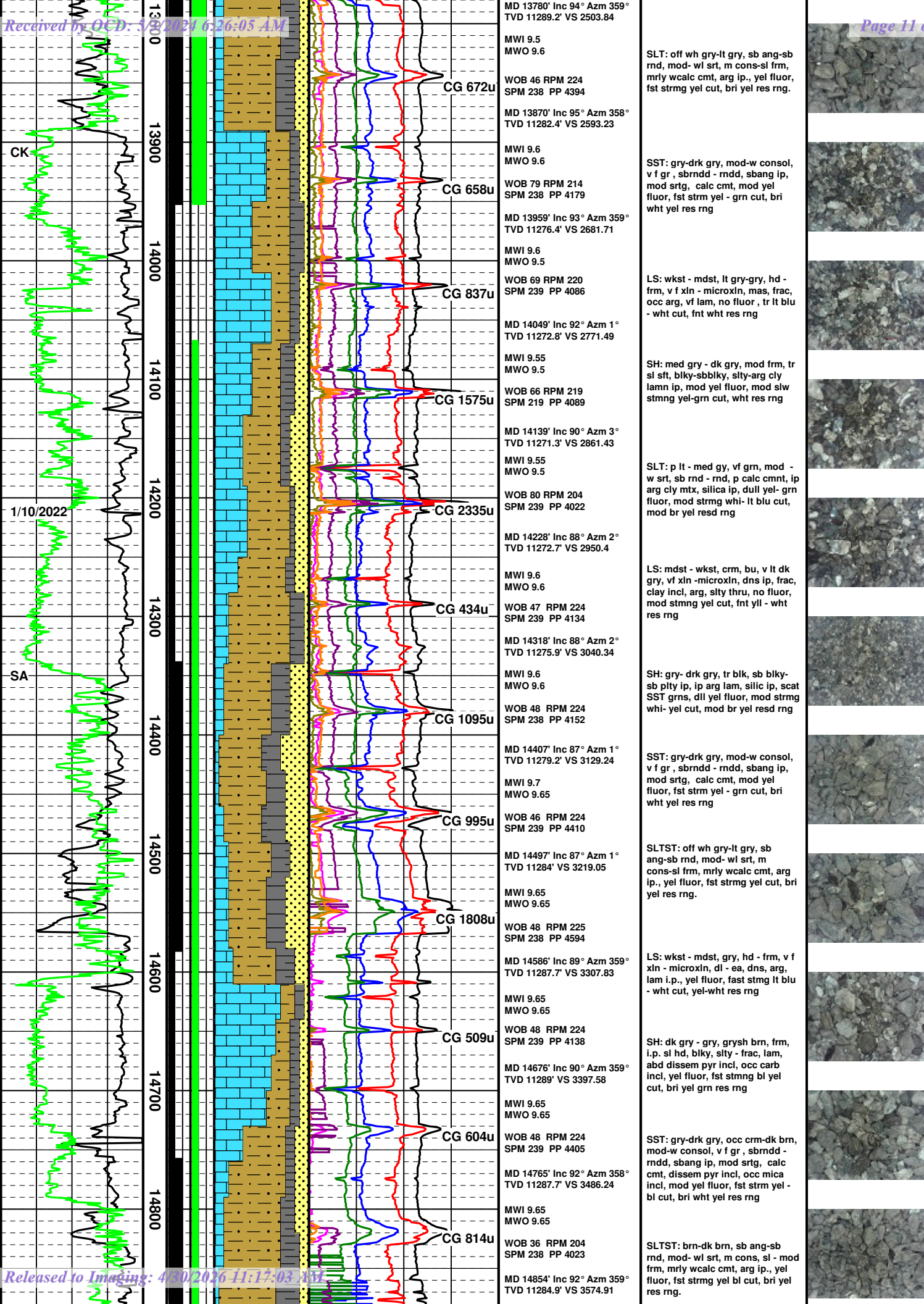
WOB 47 RPM 225
SPM 238 PP 4529

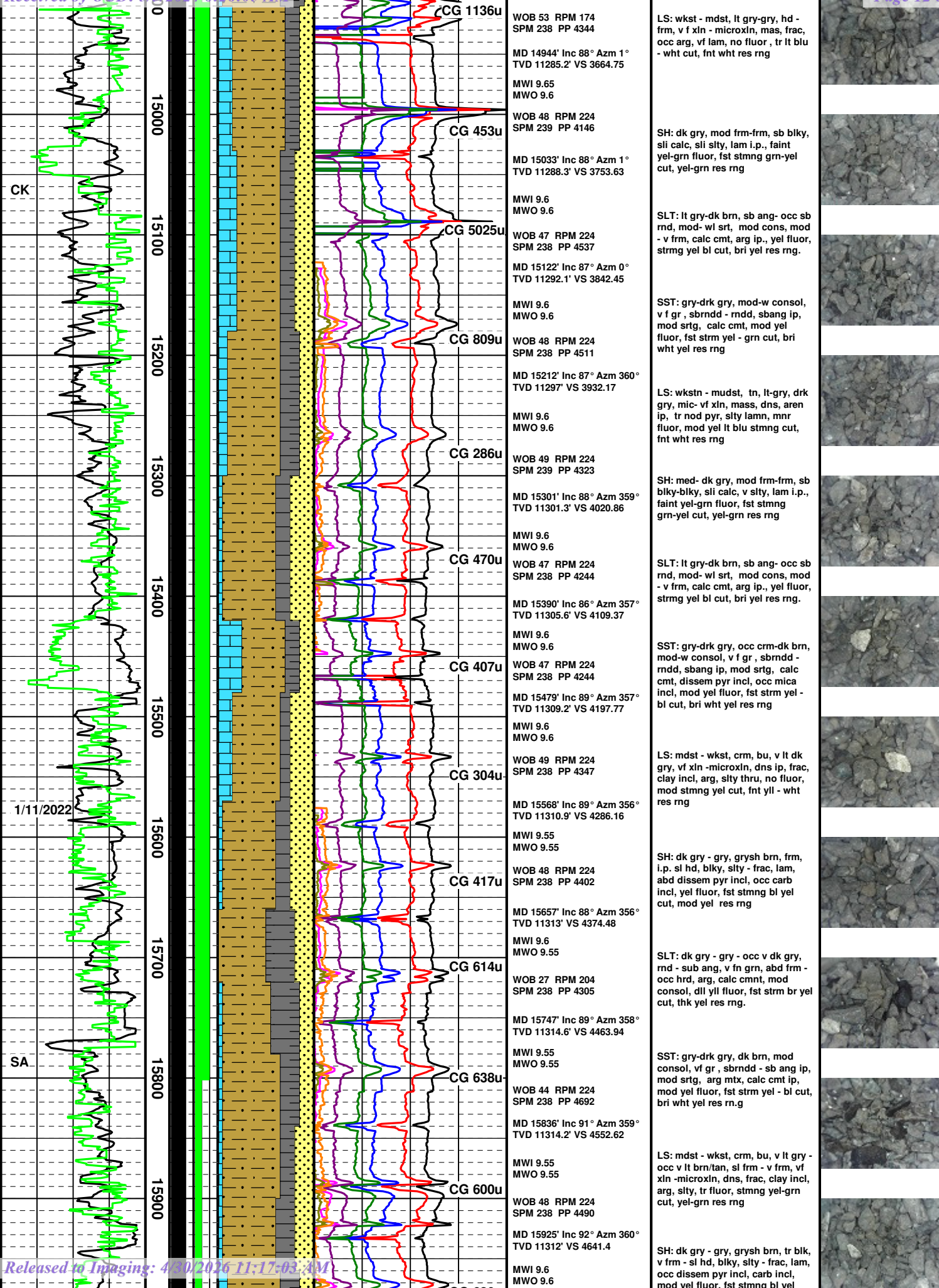
MD 13690' Inc 93° Azm 358°
TVD 11294.8' VS 2414.33

MWI 9.65
MWO 9.65

SH: med gry - dk gry, mod frm, tr
sl sft, blkly-sbbkly, sil cmt, slty -
frac, mod yel flour, fast diffuse
yel-grn cut, yel res rng

WOB 47 RPM 224
SPM 240 PP 4508





CK

1/12/2022

SA

16000
16100
16200
16300
16400
16500
16600
16700
16800
16900
17000

CG 895u
CG 318u
CG 301u
CG 258u
CG 1367u
CG 264u
CG 214u
CG 238u
CG 124u
CG 268u
CG 186u
CG 190u

WOB 48 RPM 224
SPM 238 PP 4664

MD 16015' Inc 92° Azm 2°
TVD 11308.9' VS 4731.25

MWI 9.55
MWO 9.6

WOB 48 RPM 225
SPM 240 PP 4456

MD 16104' Inc 92° Azm 3°
TVD 11306' VS 4820.19

MWI 9.6
MWO 9.6

WOB 49 RPM 224
SPM 239 PP 4576

MD 16194' Inc 91° Azm 2°
TVD 11303.6' VS 4910.15

MWI 9.6
MWO 9.6

WOB 25 RPM 174
SPM 239 PP 4219

MD 16283' Inc 87° Azm 4°
TVD 11304.9' VS 4999.12

MWI 9.65
MWO 9.65

WOB 48 RPM 224
SPM 238 PP 4460

MD 16373' Inc 88° Azm 4°
TVD 11308.9' VS 5089.02

MWI 9.65
MWO 9.65

WOB 48 RPM 224
SPM 238 PP 4460

MD 16463' Inc 88° Azm 2°
TVD 11312' VS 5178.96

MWI 9.65
MWO 9.65

WOB 48 RPM 224
SPM 238 PP 4460

MD 16552' Inc 89° Azm 2°
TVD 11314' VS 5267.91

MWI 9.65
MWO 9.65

WOB 48 RPM 224
SPM 238 PP 4460

MD 16642' Inc 86° Azm 1°
TVD 11317.4' VS 5357.78

MWI 9.6
MWO 9.6

WOB 44 RPM 224
SPM 238 PP 4566

MD 16732' Inc 87° Azm 2°
TVD 11323.1' VS 5447.56

MWI 9.6
MWO 9.6

WOB 48 RPM 224
SPM 238 PP 4660

MD 16821' Inc 86° Azm 1°
TVD 11328.6' VS 5536.33

MWI 9.6
MWO 9.6

WOB 47 RPM 224
SPM 238 PP 4721

MD 16911' Inc 86° Azm 359°
TVD 11334.4' VS 5626.01

MWI 9.6
MWO 9.6

WOB 48 RPM 224
SPM 238 PP 4827

MD 17000' Inc 85° Azm 358°
TVD 11340.7' VS 5714.51

MWI 9.55
MWO 9.55

WOB 49 RPM 224
SPM 238 PP 4729

cut, mod yel res rng

SLT: gry - v dk gry, dk brn, rnd - sub ang, v fn grn, frm - sl hrd, arg, calc cmnt, mod - wl consol, yel fluor, fst strm bl yel cut, thk yel - grn res rng.

SST: gry-drk gry, dk brn, occ grysh brn, mod consol, vf gr, sbrndd - sb ang, mod srtg, calc cmt, mod yel fluor, mod strm yel - grn cut, bri yel grn res rng

LS: mdst - wkst, crm, bu, v lt gry - tr v lt tan, frm - v frm, vf xln -microxln, dns, frac, arg, v slty, tr fluor, stmng yel-grn cut, yel-grn res rng

SH: dk gry - med gry, dk grysh brn, occ blk, v frm - sl hd, blkly - sbbkly, slty - frac - britt, occ mica incl, tr dissem pyr inc, tr carb incl, yel fluor, fst stmng yel - grn cut, bri yel res rng

SLT: gry - v dk gry, dk brn, rnd - sub ang, v fn grn, frm - sl hrd, arg, calc cmnt, mod - wl consol, yel fluor, fst strm bl yel cut, thk yel - grn res rng.

SST: gry-drk gry, dk brn, occ grysh brn, mod consol, vf gr, sbrndd - sb ang, mod srtg, calc cmt, mod yel fluor, mod strm yel - grn cut, bri yel grn res rng

LS: mdst - wkst, crm, bu, v lt gry - tr v lt tan, frm - v frm, vf xln -microxln, dns, frac, arg, v slty, tr fluor, stmng yel-grn cut, yel-grn res rng

SH: dk gry - med gry, dk grysh brn, occ blk, v frm - sl hd, blkly - sbbkly, slty - frac - britt, occ mica incl, tr dissem pyr inc, tr carb incl, yel fluor, fst stmng yel - grn cut, bri yel res rng

SLT: gry - v dk gry, dk brn, rnd - sub ang, v fn grn, frm - sl hrd, arg, calc cmnt, mod - wl consol, yel fluor, fst strm bl yel cut, thk yel - grn res rng.

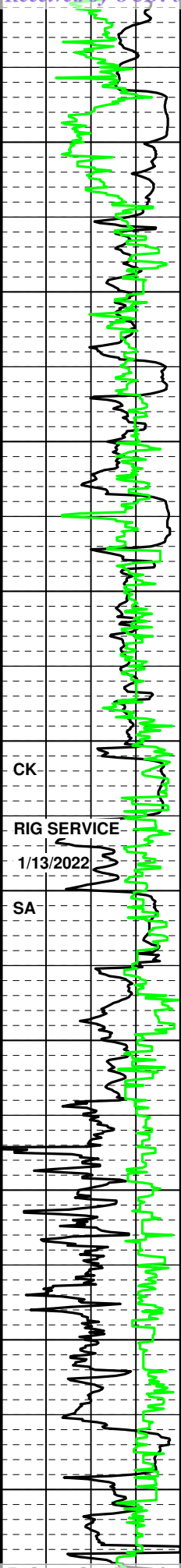
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LS: mdst - wackst, pred v lt gry-occ med gry,, microxln - vf xln, dull yel fluor, mod stmng yel-grn cut, yel-grn res rng

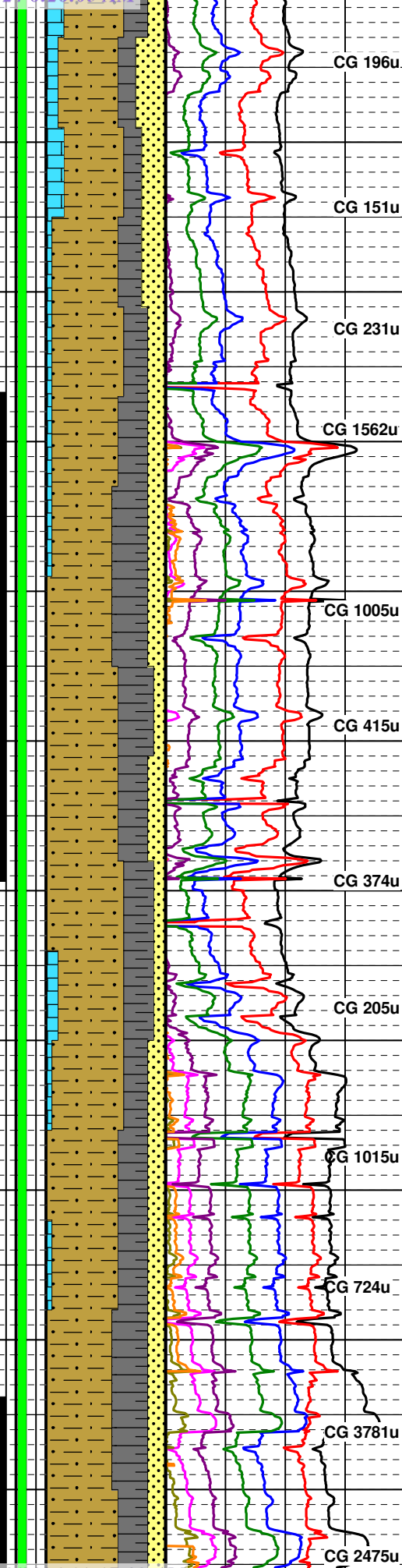
SH: dk gry - med gry, dk grysh brn, occ blk, v frm - sl hd, blkly - sbbkly, slty - frac - britt, yel fluor, fst stmng yel - grn cut, bri yel res rng

SLT: gry - v dk gry, dk brn, rnd - sub ang, v fn grn, frm - sl hrd, arg, calc cmnt, mod - wl consol, yel fluor, fst strm bl yel cut, thk yel - grn res rng.





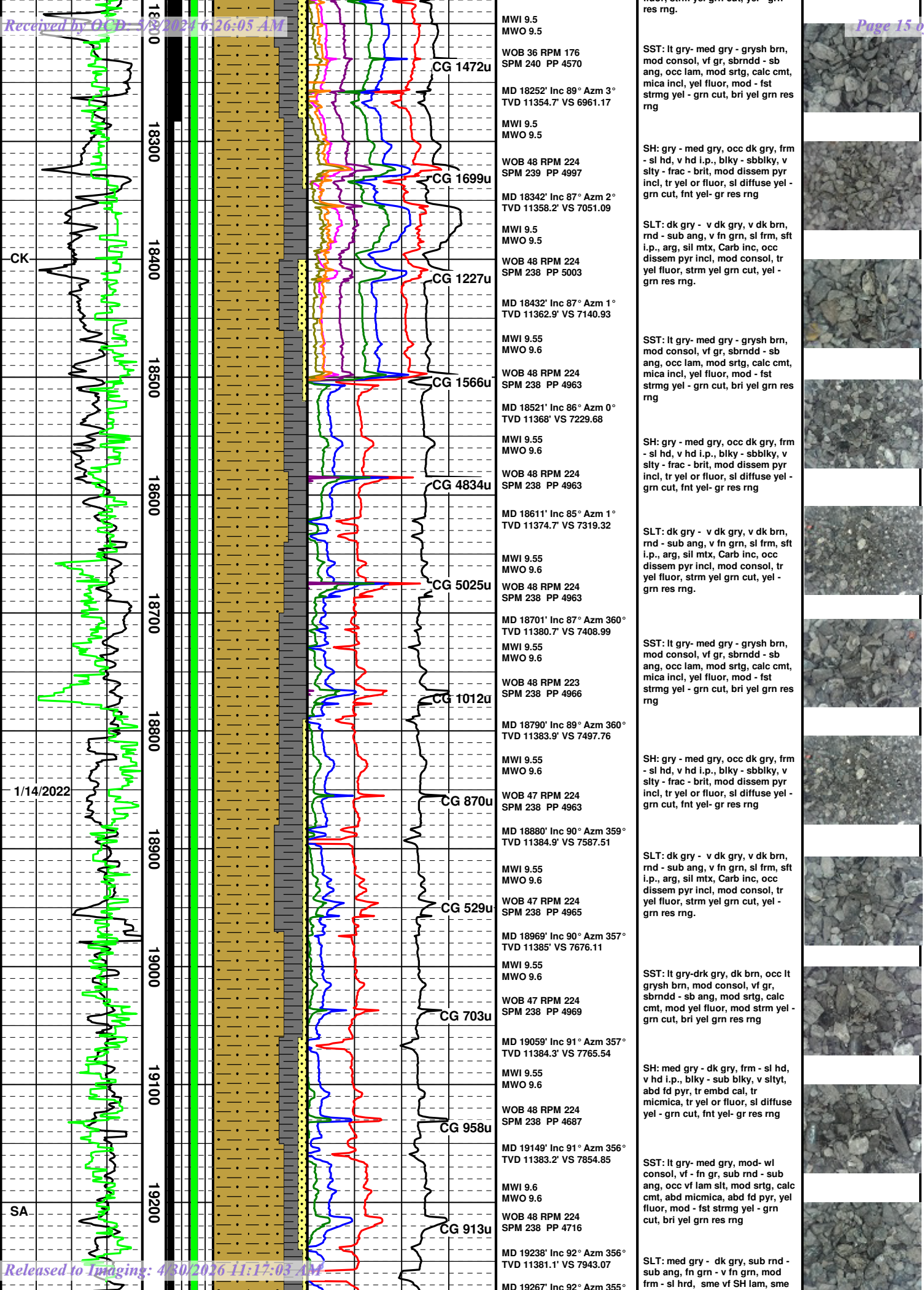
17100
17200
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17900
18000
18100



MD 17090' Inc 87° Azm 358°
TVD 11346.8' VS 5803.92
MWI 9.6
MWO 9.6
WOB 47 RPM 224
SPM 238 PP 4652
MD 17179' Inc 88° Azm 358°
TVD 11350.7' VS 5892.46
MWI 9.6
MWO 9.55
WOB 48 RPM 224
SPM 238 PP 4691
MD 17269' Inc 89° Azm 358°
TVD 11353' VS 5982.04
MWI 9.65
MWO 9.65
WOB 1 RPM 200
SPM 238 PP 4342
MD 17358' Inc 89° Azm 356°
TVD 11354.3' VS 6070.5
MWI 9.65
MWO 9.7
WOB 24 RPM 204
SPM 238 PP 4374
MD 17448' Inc 90° Azm 357°
TVD 11354.6' VS 6159.86
MWI 9.55
MWO 9.6
WOB 49 RPM 224
SPM 238 PP 4715
MD 17537' Inc 91° Azm 357°
TVD 11353.9' VS 6248.25
MWI 9.55
MWO 9.6
WOB 49 RPM 224
SPM 238 PP 4715
MD 17626' Inc 90° Azm 357°
TVD 11353.6' VS 6336.7
MWI 9.55
MWO 9.55
WOB 48 RPM 224
SPM 238 PP 4963
MD 17716' Inc 90° Azm 0°
TVD 11353.9' VS 6426.4
MWI 9.6
MWO 9.55
WOB 46 RPM 224
SPM 239 PP 5013
MD 17805' Inc 90° Azm 1°
TVD 11354.1' VS 6515.29
MWI 9.7
MWO 9.65
WOB 49 RPM 226
SPM 241 PP 5199
MD 17895' Inc 90° Azm 359°
TVD 11354.5' VS 6605.14
MWI 9.55
MWO 9.6
WOB 49 RPM 226
SPM 240 PP 5255
MD 17984' Inc 90° Azm 358°
TVD 11354.5' VS 6693.82
MWI 9.55
MWO 9.55
WOB 32 RPM 226
SPM 241 PP 4417
MD 18073' Inc 89° Azm 358°
TVD 11355.1' VS 6782.41
MWI 9.55
MWO 9.55
WOB 1 RPM 202
SPM 241 PP 4418
MD 18163' Inc 91° Azm 1°
TVD 11354.9' VS 6872.2

SST: lt gry-drk gry, dk brn, occ lt grysh brn, mod consol, vf gr, sbrndd - sb ang, mod srtg, calc cmt, mod yel fluor, mod strm yel - grn cut, bri yel grn res rng
LS: mdst - wkst, crm, v lt gry - tr v lt tan, frm - v frm, vf xln-microxln, dns, frac, arg, slty, tr fluor, stmng yel-grn cut, yel-grn res rng
SH: dk gry - med gry, dk grysh brn, occ blk, v frm - sl hd, blkly - sbbkly, slty - frac - brit, yel fluor, stmng yel - grn cut, bri yel-gr res rng
SLT: gry - v dk gry, brn-dk brn, rnd - sub ang, v fn grn, v frm - sl hrd, arg, calc cmnt, mod - wl consol, yel fluor, fst strm bl yel cut, thk yel - grn res rng.
SST: lt gry-drk gry, dk brn, occ lt grysh brn, mod consol, vf gr, sbrndd - sb ang, mod srtg, calc cmt, mod yel fluor, mod strm yel - grn cut, bri yel grn res rng
SH: dk gry - med gry, blk, v frm - sl hd, blkly - sbbkly, slty - frac, mica incl, dissem pyr incl, occ carb inc, yel fluor, stmng yel - grn cut, bri yel-gr res rng
SLT: gry - v dk gry, brn-dk brn, rnd - sub ang, v fn grn, v frm - sl hrd, arg, calc cmnt, mod - wl consol, yel fluor, fst strm bl yel cut, thk yel - grn res rng.
SST: lt gry-drk gry, dk brn, occ lt grysh brn, mod consol, vf gr, sbrndd - sb ang, mod srtg, calc cmt, mod yel fluor, mod strm yel - grn cut, bri yel grn res rng
LS: mdst - wkst, crm, lt tan, frm - v frm, vf xln-microxln, dns, frac, arg, v slty, tr fluor, stmng yel-grn cut, yel-grn res rng
SH: dk gry - med gry, blk, v frm - sl hd, blkly - sbbkly, slty - frac, mica incl, occ dissem pyr incl, carb inc, yel fluor, stmng yel - grn cut, yel-gr res rng
SLT: pred med gry - v dk gry, brn-dk brn, rnd - sub ang, v fn grn, v frm - sl hrd, lam, arg, calc cmnt, mod - wl consol, tr yel fluor, strm yel grb cut, yel - grn res rng.
SST: lt gry-drk gry, dk grysh brn, mod consol, vf gr, sbrndd - sb ang, lam, mod srtg, calc cmt, mod yel fluor, mod strm yel - grn cut, bri yel grn res rng
SH: dk gry - med gry, occ blk, v frm - hd, sl v hd i.p., blkly - sbbkly, slty - frac - brit, Carb incl, occ dissem pyr incl, mica inc, yel fluor, stmng yel - grn cut, yel-gr res rng
SLT: med gry - dk gry, brn-dk brn, rnd - sub ang, f grn - v fn grn, mod frm - sl hrd, lam i.p., arg, calc cmnt, wl consol, occ yel fluor, strm yel grn cut, yel - grn res rng





TD @ 19,330' AT 7:03 AM 1/14/2022					
Slide Depth Cut Fluor	Normal Pentane 100 PPM 1e+06		Drilling Parameters & Surveys	Descriptions	
	Iso-Pentane 100 PPM 1e+06				
	Normal Butane 100 PPM 1e+06				
	Iso-Butane 100 PPM 1e+06				
	Propane 100 PPM 1e+06				
	Ethane 100 PPM 1e+06				
	Methane 100 PPM 1e+06				
	Total Gas 1 Unit 10000				
Gamma Ray (MWD) 0 API 150					Images
Average ROP 300 FPH 0					
ROP	% Lith	Total Gas/Chromo			

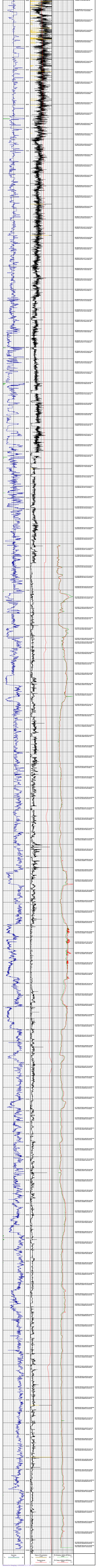


Anderson Fed Com 552H "1'10"

Company: Advance Energy Partners, LLC Well Name: Anderson Fed County/Parish: Lea State: New Mexico Country: USA Job number: WT-21-181 Field: Bore Spring Rig Id: Nabors X50 Survey Company: AIM Directional Services, LLC		Log measurements: Gamma, Temp, RSP, Resistivity Maximum temperature: 192.2 °F Depth: 19330 ft Start: 12222.0212 End: 19142.0221	
Depth 12222.0212 19142.0221		Date 11/22/2022 08:15 11/22/2022 23:40	
Casing 1277 ft 13.38" 4803 ft 9.38" Intermediate: 19330 Rmc:		Hole Size 17.5" 12.25" 9.875" DEF: 3722.5 GR: 3690.0	
Mud Type: OBM Resistivity: 9.7 Viscosity: 30 Density: Rmf:		Elevations 3722.5 3690.0	

Run	Tool	SN	Gamma	Cal	Bit Size	Survey	Offsets	Gamma	Resis	Mud Data	Weight	Depth	Start	End	Start	End	
1	EN-003	N/A	17.5"	70.00 ft				N/A ft	WBM	9.7	120 ft	1277 ft	11/22/2022 08:15	11/22/2022 23:40			
2	EN-007	N/A	12.5"	63.00 ft				N/A ft	WBM	9.7	1277 ft	4803 ft	11/22/2022 08:15	11/22/2022 11:30			
3	G-041	3.835	8.75"	60.00 ft				51.00 ft	WBM	9.2	4803 ft	8904 ft	11/22/2022 11:30	01/04/2023 16:00			
4	G-041	3.835	8.75"	63.00 ft				39.00 ft	N/A ft	WBM	9.3	8904 ft	10766 ft	01/04/2023 16:00	01/05/2022 18:30		
5	G-431	4.538	8.75"	63.00 ft				39.00 ft	50 ft	CBM	9.3	10766 ft	11516 ft	01/05/2022 22:50	01/07/2022 05:30		
6	G-431	4.538	8.75"	63.00 ft				39.00 ft	50 ft	CBM	9.3	11516 ft	11727 ft	01/07/2022 05:30	01/08/2022 04:20		
7	G-431	4.538	8.75"	63.00 ft				39.00 ft	50 ft	CBM	9.3	11727 ft	19330 ft	01/08/2022 04:20	01/10/2022 07:35		
8																	
9																	
10																	

AIM Directional Services, LLC uses its best efforts to provide its customers with accurate information and interpretations. It is not held liable or responsible for the accuracy of such information or interpretation.





Advance Energy Partners, LLC

**Hat Mesa
Anderson Fed Com - Pad D
Anderson Fed Com 552H**

Anderson Fed Com 552H

Plan: FINAL AD

Survey Report - Geographic

01 November, 2022



Survey Report - Geographic

Company:	Advance Energy Partners, LLC	Local Co-ordinate Reference:	Well Anderson Fed Com 552H
Project:	Hat Mesa	TVD Reference:	WELL @ 3722.5usft (Original Well Elev)
Site:	Anderson Fed Com - Pad D	MD Reference:	WELL @ 3722.5usft (Original Well Elev)
Well:	Anderson Fed Com 552H	North Reference:	Grid
Wellbore:	Anderson Fed Com 552H	Survey Calculation Method:	Minimum Curvature
Design:	FINAL AD	Database:	AUS-COMPASS - EDM_15 - 32bit

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

Site	Anderson Fed Com - Pad D				
Site Position:		Northing:	519,935.48 usft	Latitude:	32.4275250
From:	Lat/Long	Easting:	751,632.67 usft	Longitude:	-103.6517610
Position Uncertainty:	0.0 usft	Slot Radius:	13-3/16 "	Grid Convergence:	0.37 °

Well	Anderson Fed Com 552H					
Well Position	+N/-S	0.0 usft	Northing:	519,936.26 usft	Latitude:	32.4275260
	+E/-W	0.0 usft	Easting:	751,698.70 usft	Longitude:	-103.6515470
Position Uncertainty		0.0 usft	Wellhead Elevation:	usft	Ground Level:	3,690.0 usft

Wellbore	Anderson Fed Com 552H				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2015	8/17/2020	6.66	60.19	47,721.99899831

Design	FINAL AD				
Audit Notes:					
Version:	Phase:	PROTOTYPE	Tie On Depth:	0.0	
Vertical Section:	Depth From (TVD) (usft)	+N/-S (usft)	+E/-W (usft)	Direction (°)	
	0.0	0.0	0.0	3.14	

Survey Tool Program	Date	11/1/2022			
From (usft)	To (usft)	Survey (Wellbore)	Tool Name	Description	
0.0	19,330.0	FINAL AD (Anderson Fed Com 552H)	MWD	OWSG MWD - Standard	

Planned Survey									
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Map Northing (usft)	Map Easting (usft)	Latitude	Longitude
0.0	0.00	0.00	0.0	0.0	0.0	519,936.26	751,698.70	32.4275260	-103.6515470
100.0	0.15	240.31	100.0	-0.1	-0.1	519,936.19	751,698.59	32.4275258	-103.6515474
200.0	0.30	240.31	200.0	-0.3	-0.5	519,936.00	751,698.24	32.4275253	-103.6515485
230.0	0.35	240.31	230.0	-0.3	-0.6	519,935.91	751,698.09	32.4275251	-103.6515490
300.0	0.40	206.98	300.0	-0.7	-0.9	519,935.59	751,697.79	32.4275242	-103.6515499
322.0	0.44	199.09	322.0	-0.8	-1.0	519,935.44	751,697.73	32.4275238	-103.6515501
400.0	0.40	217.93	400.0	-1.3	-1.2	519,934.94	751,697.47	32.4275224	-103.6515510
414.0	0.40	221.59	414.0	-1.4	-1.3	519,934.87	751,697.40	32.4275222	-103.6515512
506.0	0.31	193.02	506.0	-1.9	-1.6	519,934.38	751,697.13	32.4275209	-103.6515521
598.0	0.44	201.46	598.0	-2.4	-1.8	519,933.81	751,696.95	32.4275193	-103.6515527
600.0	0.44	201.71	600.0	-2.5	-1.8	519,933.80	751,696.94	32.4275193	-103.6515527
690.0	0.26	221.32	690.0	-2.9	-2.0	519,933.33	751,696.68	32.4275180	-103.6515536



Survey Report - Geographic

Company:	Advance Energy Partners, LLC	Local Co-ordinate Reference:	Well Anderson Fed Com 552H
Project:	Hat Mesa	TVD Reference:	WELL @ 3722.5usft (Original Well Elev)
Site:	Anderson Fed Com - Pad D	MD Reference:	WELL @ 3722.5usft (Original Well Elev)
Well:	Anderson Fed Com 552H	North Reference:	Grid
Wellbore:	Anderson Fed Com 552H	Survey Calculation Method:	Minimum Curvature
Design:	FINAL AD	Database:	AUS-COMPASS - EDM_15 - 32bit

Planned Survey

Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Map Northing (usft)	Map Easting (usft)	Latitude	Longitude
700.0	0.29	222.62	700.0	-3.0	-2.1	519,933.29	751,696.65	32.4275179	-103.6515537
800.0	0.55	228.80	800.0	-3.5	-2.6	519,932.79	751,696.12	32.4275165	-103.6515554
878.0	0.75	230.64	878.0	-4.0	-3.3	519,932.23	751,695.45	32.4275150	-103.6515576
900.0	0.72	230.97	900.0	-4.2	-3.5	519,932.05	751,695.23	32.4275145	-103.6515583
973.0	0.62	232.31	973.0	-4.7	-4.1	519,931.52	751,694.56	32.4275131	-103.6515605
1,000.0	0.66	235.62	1,000.0	-4.9	-4.4	519,931.34	751,694.32	32.4275126	-103.6515613
1,066.0	0.75	242.33	1,066.0	-5.3	-5.1	519,930.93	751,693.62	32.4275114	-103.6515636
1,100.0	0.78	239.45	1,100.0	-5.6	-5.5	519,930.71	751,693.23	32.4275108	-103.6515648
1,156.0	0.84	235.21	1,156.0	-6.0	-6.1	519,930.28	751,692.56	32.4275097	-103.6515670
1,207.0	1.05	235.30	1,207.0	-6.5	-6.8	519,929.80	751,691.87	32.4275084	-103.6515693
1,300.0	1.25	213.68	1,299.9	-7.8	-8.1	519,928.47	751,690.61	32.4275047	-103.6515734
1,335.0	1.36	207.53	1,334.9	-8.5	-8.5	519,927.78	751,690.20	32.4275029	-103.6515747
1,400.0	1.40	205.99	1,399.9	-9.9	-9.2	519,926.39	751,689.50	32.4274990	-103.6515770
1,425.0	1.41	205.42	1,424.9	-10.4	-9.5	519,925.84	751,689.23	32.4274975	-103.6515779
1,500.0	1.37	201.44	1,499.9	-12.1	-10.2	519,924.17	751,688.51	32.4274930	-103.6515803
1,514.0	1.36	200.67	1,513.9	-12.4	-10.3	519,923.86	751,688.39	32.4274921	-103.6515807
1,604.0	1.19	189.07	1,603.8	-14.3	-10.8	519,921.94	751,687.87	32.4274868	-103.6515824
1,693.0	1.10	181.69	1,692.8	-16.1	-11.0	519,920.17	751,687.70	32.4274820	-103.6515830
1,700.0	1.09	181.35	1,699.8	-16.2	-11.0	519,920.04	751,687.69	32.4274816	-103.6515830
1,783.0	0.92	176.59	1,782.8	-17.7	-11.0	519,918.58	751,687.71	32.4274776	-103.6515830
1,800.0	0.91	174.80	1,799.8	-17.9	-11.0	519,918.31	751,687.73	32.4274769	-103.6515829
1,872.0	0.88	166.83	1,871.8	-19.1	-10.8	519,917.21	751,687.91	32.4274738	-103.6515824
1,900.0	0.85	162.51	1,899.8	-19.5	-10.7	519,916.80	751,688.02	32.4274727	-103.6515820
1,962.0	0.79	151.80	1,961.8	-20.3	-10.3	519,915.99	751,688.36	32.4274705	-103.6515809
2,000.0	0.79	148.98	1,999.8	-20.7	-10.1	519,915.53	751,688.62	32.4274692	-103.6515801
2,052.0	0.79	145.12	2,051.8	-21.3	-9.7	519,914.93	751,689.01	32.4274676	-103.6515788
2,100.0	0.78	133.63	2,099.8	-21.8	-9.3	519,914.43	751,689.43	32.4274662	-103.6515775
2,142.0	0.79	123.59	2,141.8	-22.2	-8.8	519,914.08	751,689.88	32.4274652	-103.6515760
2,200.0	0.95	111.03	2,199.8	-22.6	-8.0	519,913.68	751,690.66	32.4274641	-103.6515735
2,231.0	1.05	106.01	2,230.8	-22.7	-7.5	519,913.51	751,691.18	32.4274636	-103.6515718
2,300.0	1.35	94.67	2,299.8	-23.0	-6.1	519,913.27	751,692.60	32.4274629	-103.6515672
2,320.0	1.45	92.30	2,319.7	-23.0	-5.6	519,913.24	751,693.09	32.4274629	-103.6515657
2,409.0	1.93	86.15	2,408.7	-23.0	-3.0	519,913.30	751,695.71	32.4274630	-103.6515572
2,499.0	1.10	66.02	2,498.7	-22.5	-0.7	519,913.75	751,698.01	32.4274642	-103.6515497
2,500.0	1.10	65.66	2,499.7	-22.5	-0.7	519,913.76	751,698.03	32.4274642	-103.6515496
2,588.0	0.92	24.45	2,587.7	-21.5	0.4	519,914.75	751,699.08	32.4274669	-103.6515462
2,600.0	0.99	27.60	2,599.7	-21.3	0.5	519,914.93	751,699.17	32.4274674	-103.6515459
2,677.0	1.49	40.18	2,676.6	-20.0	1.4	519,916.28	751,700.13	32.4274711	-103.6515428
2,700.0	1.64	41.48	2,699.6	-19.5	1.8	519,916.76	751,700.54	32.4274724	-103.6515414
2,767.0	2.07	44.22	2,766.6	-17.9	3.3	519,918.34	751,702.01	32.4274767	-103.6515366
2,800.0	1.76	43.46	2,799.6	-17.1	4.1	519,919.14	751,702.78	32.4274789	-103.6515341
2,857.0	1.23	41.24	2,856.6	-16.0	5.1	519,920.23	751,703.79	32.4274819	-103.6515308
2,900.0	1.10	40.20	2,899.6	-15.4	5.7	519,920.90	751,704.36	32.4274837	-103.6515290
2,946.0	0.97	38.78	2,945.5	-14.7	6.2	519,921.54	751,704.89	32.4274855	-103.6515272
3,000.0	1.28	43.74	2,999.5	-13.9	6.9	519,922.33	751,705.59	32.4274876	-103.6515250
3,036.0	1.49	45.89	3,035.5	-13.3	7.5	519,922.95	751,706.20	32.4274893	-103.6515229
3,100.0	1.91	46.37	3,099.5	-12.0	8.9	519,924.26	751,707.57	32.4274929	-103.6515185
3,125.0	2.07	46.51	3,124.5	-11.4	9.5	519,924.86	751,708.20	32.4274945	-103.6515164
3,200.0	1.47	53.59	3,199.4	-9.9	11.3	519,926.37	751,709.96	32.4274986	-103.6515107
3,215.0	1.36	55.74	3,214.4	-9.7	11.6	519,926.58	751,710.26	32.4274992	-103.6515097
3,305.0	1.05	73.23	3,304.4	-8.8	13.2	519,927.42	751,711.94	32.4275015	-103.6515043
3,394.0	1.49	93.53	3,393.4	-8.7	15.2	519,927.58	751,713.87	32.4275019	-103.6514980
3,400.0	1.51	93.89	3,399.4	-8.7	15.3	519,927.57	751,714.03	32.4275019	-103.6514975
3,484.0	1.76	98.10	3,483.4	-8.9	17.7	519,927.32	751,716.41	32.4275011	-103.6514898
3,500.0	1.77	99.40	3,499.4	-9.0	18.2	519,927.24	751,716.89	32.4275009	-103.6514882



Survey Report - Geographic

Company:	Advance Energy Partners, LLC	Local Co-ordinate Reference:	Well Anderson Fed Com 552H
Project:	Hat Mesa	TVD Reference:	WELL @ 3722.5usft (Original Well Elev)
Site:	Anderson Fed Com - Pad D	MD Reference:	WELL @ 3722.5usft (Original Well Elev)
Well:	Anderson Fed Com 552H	North Reference:	Grid
Wellbore:	Anderson Fed Com 552H	Survey Calculation Method:	Minimum Curvature
Design:	FINAL AD	Database:	AUS-COMPASS - EDM_15 - 32bit

Planned Survey										
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Map Northing (usft)	Map Easting (usft)	Latitude	Longitude	
3,573.0	1.85	105.04	3,572.3	-9.5	20.4	519,926.75	751,719.15	32.4274995	-103.6514809	
3,600.0	1.87	107.37	3,599.3	-9.8	21.3	519,926.51	751,719.99	32.4274988	-103.6514782	
3,663.0	1.93	112.60	3,662.3	-10.5	23.2	519,925.79	751,721.95	32.4274968	-103.6514719	
3,700.0	2.00	114.24	3,699.2	-11.0	24.4	519,925.29	751,723.11	32.4274954	-103.6514681	
3,753.0	2.11	116.38	3,752.2	-11.8	26.1	519,924.47	751,724.83	32.4274932	-103.6514625	
3,800.0	1.53	123.09	3,799.2	-12.5	27.4	519,923.75	751,726.13	32.4274911	-103.6514583	
3,842.0	1.05	135.19	3,841.2	-13.1	28.2	519,923.17	751,726.88	32.4274895	-103.6514560	
3,900.0	0.85	153.76	3,899.2	-13.9	28.7	519,922.40	751,727.44	32.4274874	-103.6514541	
3,932.0	0.79	167.27	3,931.2	-14.3	28.9	519,921.98	751,727.59	32.4274863	-103.6514536	
4,000.0	0.76	162.74	3,999.2	-15.2	29.1	519,921.09	751,727.83	32.4274838	-103.6514529	
4,022.0	0.75	161.20	4,021.2	-15.4	29.2	519,920.81	751,727.92	32.4274831	-103.6514526	
4,100.0	0.63	146.84	4,099.2	-16.3	29.6	519,919.97	751,728.32	32.4274807	-103.6514513	
4,111.0	0.62	144.42	4,110.2	-16.4	29.7	519,919.87	751,728.39	32.4274805	-103.6514511	
4,200.0	0.53	129.04	4,199.2	-17.0	30.3	519,919.22	751,728.99	32.4274787	-103.6514492	
4,290.0	0.44	112.87	4,289.1	-17.4	30.9	519,918.82	751,729.63	32.4274775	-103.6514471	
4,300.0	0.44	112.36	4,299.1	-17.5	31.0	519,918.79	751,729.70	32.4274775	-103.6514469	
4,380.0	0.44	108.30	4,379.1	-17.7	31.6	519,918.58	751,730.28	32.4274769	-103.6514450	
4,400.0	0.41	104.08	4,399.1	-17.7	31.7	519,918.54	751,730.42	32.4274768	-103.6514446	
4,469.0	0.31	82.98	4,468.1	-17.8	32.1	519,918.50	751,730.84	32.4274766	-103.6514432	
4,500.0	0.34	68.05	4,499.1	-17.7	32.3	519,918.55	751,731.01	32.4274768	-103.6514427	
4,559.0	0.44	47.83	4,558.1	-17.5	32.6	519,918.76	751,731.34	32.4274774	-103.6514416	
4,600.0	0.53	35.96	4,599.1	-17.2	32.9	519,919.02	751,731.57	32.4274781	-103.6514408	
4,648.0	0.66	26.73	4,647.1	-16.8	33.1	519,919.45	751,731.82	32.4274792	-103.6514400	
4,700.0	0.81	15.16	4,699.1	-16.2	33.4	519,920.07	751,732.05	32.4274809	-103.6514392	
4,735.0	0.92	9.60	4,734.1	-15.7	33.5	519,920.59	751,732.16	32.4274824	-103.6514389	
4,800.0	1.01	1.53	4,799.1	-14.6	33.6	519,921.68	751,732.27	32.4274853	-103.6514385	
4,822.0	1.05	359.14	4,821.1	-14.2	33.6	519,922.07	751,732.27	32.4274864	-103.6514385	
4,900.0	1.09	353.87	4,899.1	-12.7	33.5	519,923.53	751,732.18	32.4274904	-103.6514388	
4,911.0	1.10	353.16	4,910.1	-12.5	33.5	519,923.74	751,732.15	32.4274910	-103.6514388	
5,001.0	1.27	341.03	5,000.1	-10.7	33.0	519,925.54	751,731.73	32.4274960	-103.6514402	
5,091.0	1.41	342.26	5,090.1	-8.7	32.4	519,927.54	751,731.06	32.4275015	-103.6514423	
5,100.0	1.40	341.93	5,099.1	-8.5	32.3	519,927.75	751,731.00	32.4275021	-103.6514425	
5,180.0	1.32	338.83	5,179.0	-6.7	31.7	519,929.53	751,730.36	32.4275070	-103.6514445	
5,200.0	1.32	338.40	5,199.0	-6.3	31.5	519,929.96	751,730.19	32.4275082	-103.6514451	
5,270.0	1.32	336.90	5,269.0	-4.8	30.9	519,931.45	751,729.58	32.4275123	-103.6514470	
5,300.0	1.36	336.68	5,299.0	-4.2	30.6	519,932.10	751,729.30	32.4275140	-103.6514479	
5,359.0	1.45	336.29	5,358.0	-2.8	30.0	519,933.43	751,728.72	32.4275177	-103.6514497	
5,400.0	1.49	335.75	5,399.0	-1.9	29.6	519,934.39	751,728.30	32.4275204	-103.6514511	
5,449.0	1.54	335.14	5,448.0	-0.7	29.1	519,935.57	751,727.76	32.4275236	-103.6514528	
5,500.0	1.46	333.16	5,498.9	0.5	28.5	519,936.77	751,727.18	32.4275269	-103.6514547	
5,538.0	1.41	331.54	5,536.9	1.4	28.0	519,937.62	751,726.73	32.4275293	-103.6514561	
5,600.0	1.17	78.71	5,598.9	2.2	28.3	519,938.41	751,726.99	32.4275314	-103.6514553	
5,628.0	1.98	96.61	5,626.9	2.2	29.0	519,938.41	751,727.75	32.4275314	-103.6514528	
5,700.0	4.76	117.52	5,698.8	0.6	32.9	519,936.89	751,731.64	32.4275272	-103.6514402	
5,717.0	5.45	119.28	5,715.7	-0.1	34.3	519,936.17	751,732.97	32.4275252	-103.6514359	
5,807.0	6.20	121.48	5,805.2	-4.7	42.1	519,931.54	751,740.84	32.4275123	-103.6514105	
5,896.0	6.29	121.66	5,893.7	-9.8	50.4	519,926.47	751,749.09	32.4274982	-103.6513839	
5,900.0	6.29	121.64	5,897.7	-10.0	50.8	519,926.24	751,749.46	32.4274976	-103.6513827	
5,986.0	6.33	121.30	5,983.2	-15.0	58.8	519,921.30	751,757.52	32.4274839	-103.6513567	
6,000.0	6.32	121.33	5,997.1	-15.8	60.1	519,920.50	751,758.84	32.4274817	-103.6513524	
6,076.0	6.24	121.48	6,072.6	-20.1	67.2	519,916.17	751,765.93	32.4274696	-103.6513295	
6,100.0	6.31	121.09	6,096.5	-21.5	69.5	519,914.81	751,768.18	32.4274658	-103.6513223	
6,165.0	6.51	120.07	6,161.1	-25.1	75.7	519,911.12	751,774.43	32.4274556	-103.6513021	
6,200.0	6.53	119.93	6,195.8	-27.1	79.2	519,909.13	751,777.87	32.4274501	-103.6512910	
6,255.0	6.55	119.72	6,250.5	-30.2	84.6	519,906.02	751,783.30	32.4274414	-103.6512734	



Survey Report - Geographic

Company:	Advance Energy Partners, LLC	Local Co-ordinate Reference:	Well Anderson Fed Com 552H
Project:	Hat Mesa	TVD Reference:	WELL @ 3722.5usft (Original Well Elev)
Site:	Anderson Fed Com - Pad D	MD Reference:	WELL @ 3722.5usft (Original Well Elev)
Well:	Anderson Fed Com 552H	North Reference:	Grid
Wellbore:	Anderson Fed Com 552H	Survey Calculation Method:	Minimum Curvature
Design:	FINAL AD	Database:	AUS-COMPASS - EDM_15 - 32bit

Planned Survey										
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Map Northing (usft)	Map Easting (usft)	Latitude	Longitude	
6,300.0	6.62	120.04	6,295.2	-32.8	89.1	519,903.45	751,787.77	32.4274343	-103.6512590	
6,344.0	6.68	120.34	6,338.9	-35.4	93.5	519,900.89	751,792.17	32.4274271	-103.6512448	
6,400.0	6.74	119.90	6,394.5	-38.7	99.1	519,897.60	751,797.83	32.4274180	-103.6512265	
6,434.0	6.77	119.63	6,428.3	-40.6	102.6	519,895.62	751,801.30	32.4274125	-103.6512153	
6,500.0	6.58	118.73	6,493.8	-44.4	109.3	519,891.88	751,808.00	32.4274021	-103.6511937	
6,523.0	6.51	118.40	6,516.7	-45.6	111.6	519,890.63	751,810.30	32.4273986	-103.6511863	
6,600.0	6.36	118.03	6,593.2	-49.7	119.2	519,886.55	751,817.90	32.4273873	-103.6511617	
6,613.0	6.33	117.96	6,606.1	-50.4	120.5	519,885.87	751,819.17	32.4273854	-103.6511576	
6,702.0	6.33	118.67	6,694.6	-55.0	129.1	519,881.22	751,827.81	32.4273725	-103.6511297	
6,791.0	6.33	117.53	6,783.0	-59.7	137.8	519,876.60	751,836.47	32.4273596	-103.6511018	
6,800.0	6.34	117.65	6,792.0	-60.1	138.6	519,876.14	751,837.35	32.4273583	-103.6510989	
6,881.0	6.42	118.67	6,872.5	-64.4	146.6	519,871.89	751,845.28	32.4273465	-103.6510733	
6,900.0	6.37	118.33	6,891.4	-65.4	148.4	519,870.88	751,847.14	32.4273437	-103.6510673	
6,971.0	6.20	117.00	6,961.9	-69.0	155.3	519,867.27	751,854.03	32.4273337	-103.6510450	
7,000.0	6.13	117.25	6,990.8	-70.4	158.1	519,865.85	751,856.80	32.4273297	-103.6510361	
7,060.0	5.98	117.79	7,050.4	-73.3	163.7	519,862.93	751,862.41	32.4273216	-103.6510180	
7,100.0	5.98	118.80	7,090.2	-75.3	167.4	519,860.95	751,866.08	32.4273161	-103.6510061	
7,150.0	5.98	120.07	7,139.9	-77.9	171.9	519,858.39	751,870.61	32.4273090	-103.6509915	
7,200.0	5.88	118.87	7,189.7	-80.4	176.4	519,855.85	751,875.11	32.4273019	-103.6509769	
7,240.0	5.80	117.88	7,229.5	-82.3	180.0	519,853.92	751,878.69	32.4272965	-103.6509654	
7,300.0	5.89	118.59	7,289.2	-85.2	185.4	519,851.03	751,884.07	32.4272885	-103.6509480	
7,329.0	5.93	118.93	7,318.0	-86.7	188.0	519,849.59	751,886.69	32.4272845	-103.6509395	
7,400.0	5.87	119.69	7,388.6	-90.2	194.3	519,846.02	751,893.05	32.4272746	-103.6509190	
7,419.0	5.85	119.90	7,407.5	-91.2	196.0	519,845.05	751,894.73	32.4272719	-103.6509136	
7,508.0	5.93	119.55	7,496.1	-95.7	204.0	519,840.53	751,902.67	32.4272593	-103.6508880	
7,598.0	5.93	121.22	7,585.6	-100.4	212.0	519,835.82	751,910.69	32.4272462	-103.6508621	
7,600.0	5.93	121.19	7,587.6	-100.5	212.2	519,835.72	751,910.86	32.4272459	-103.6508615	
7,688.0	5.89	119.99	7,675.1	-105.2	220.0	519,831.10	751,918.66	32.4272331	-103.6508363	
7,700.0	5.88	120.19	7,687.0	-105.8	221.0	519,830.49	751,919.73	32.4272314	-103.6508329	
7,777.0	5.85	121.48	7,763.6	-109.8	227.8	519,826.45	751,926.48	32.4272202	-103.6508111	
7,800.0	5.81	121.75	7,786.5	-111.0	229.8	519,825.23	751,928.47	32.4272168	-103.6508046	
7,867.0	5.71	122.54	7,853.2	-114.6	235.5	519,821.65	751,934.17	32.4272069	-103.6507862	
7,900.0	5.73	122.73	7,886.0	-116.4	238.2	519,819.88	751,936.94	32.4272019	-103.6507773	
7,956.0	5.76	123.06	7,941.7	-119.4	242.9	519,816.83	751,941.65	32.4271935	-103.6507621	
8,000.0	5.72	122.68	7,985.5	-121.8	246.6	519,814.44	751,945.34	32.4271869	-103.6507502	
8,046.0	5.67	122.27	8,031.3	-124.3	250.5	519,811.99	751,949.19	32.4271801	-103.6507378	
8,100.0	5.69	123.12	8,085.0	-127.2	255.0	519,809.11	751,953.69	32.4271720	-103.6507232	
8,136.0	5.71	123.68	8,120.8	-129.1	258.0	519,807.14	751,956.68	32.4271666	-103.6507136	
8,200.0	5.62	124.37	8,184.5	-132.7	263.2	519,803.60	751,961.91	32.4271568	-103.6506967	
8,225.0	5.58	124.64	8,209.4	-134.0	265.2	519,802.22	751,963.92	32.4271529	-103.6506902	
8,300.0	5.55	124.42	8,284.0	-138.2	271.2	519,798.10	751,969.91	32.4271415	-103.6506709	
8,315.0	5.54	124.38	8,299.0	-139.0	272.4	519,797.28	751,971.10	32.4271392	-103.6506671	
8,404.0	5.67	125.17	8,387.6	-143.9	279.5	519,792.32	751,978.24	32.4271255	-103.6506440	
8,493.0	5.49	125.87	8,476.1	-149.0	286.6	519,787.30	751,985.29	32.4271115	-103.6506213	
8,500.0	5.48	126.06	8,483.1	-149.4	287.1	519,786.90	751,985.83	32.4271105	-103.6506195	
8,583.0	5.41	128.34	8,565.7	-154.1	293.4	519,782.14	751,992.10	32.4270973	-103.6505993	
8,600.0	5.44	125.70	8,582.6	-155.1	294.7	519,781.18	751,993.39	32.4270946	-103.6505952	
8,672.0	5.71	115.06	8,654.3	-158.6	300.7	519,777.67	751,999.41	32.4270848	-103.6505757	
8,700.0	5.86	113.91	8,682.2	-159.8	303.3	519,776.50	752,001.98	32.4270816	-103.6505674	
8,762.0	6.20	111.55	8,743.8	-162.3	309.3	519,773.98	752,007.98	32.4270746	-103.6505480	
8,800.0	6.05	112.42	8,781.6	-163.8	313.0	519,772.47	752,011.74	32.4270703	-103.6505359	
8,851.0	5.85	113.66	8,832.3	-165.9	317.9	519,770.40	752,016.61	32.4270645	-103.6505201	
8,900.0	5.53	113.52	8,881.1	-167.8	322.4	519,768.45	752,021.06	32.4270591	-103.6505058	
8,941.0	5.27	113.39	8,921.9	-169.3	325.9	519,766.92	752,024.60	32.4270548	-103.6504943	
9,000.0	5.12	115.61	8,980.7	-171.6	330.8	519,764.70	752,029.46	32.4270487	-103.6504786	



Survey Report - Geographic

Company:	Advance Energy Partners, LLC	Local Co-ordinate Reference:	Well Anderson Fed Com 552H
Project:	Hat Mesa	TVD Reference:	WELL @ 3722.5usft (Original Well Elev)
Site:	Anderson Fed Com - Pad D	MD Reference:	WELL @ 3722.5usft (Original Well Elev)
Well:	Anderson Fed Com 552H	North Reference:	Grid
Wellbore:	Anderson Fed Com 552H	Survey Calculation Method:	Minimum Curvature
Design:	FINAL AD	Database:	AUS-COMPASS - EDM_15 - 32bit

Planned Survey										
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Map Northing (usft)	Map Easting (usft)	Latitude	Longitude	
9,031.0	5.05	116.82	9,011.5	-172.8	333.2	519,763.49	752,031.93	32.4270453	-103.6504706	
9,100.0	4.58	117.55	9,080.3	-175.4	338.4	519,760.85	752,037.08	32.4270379	-103.6504540	
9,120.0	4.44	117.79	9,100.2	-176.1	339.8	519,760.11	752,038.47	32.4270359	-103.6504495	
9,210.0	3.52	120.16	9,190.0	-179.2	345.2	519,757.10	752,043.94	32.4270275	-103.6504318	
9,300.0	5.41	116.91	9,279.7	-182.5	351.4	519,753.79	752,050.12	32.4270183	-103.6504119	
9,390.0	5.49	98.63	9,369.3	-185.0	359.5	519,751.23	752,058.16	32.4270111	-103.6503859	
9,400.0	5.33	98.47	9,379.3	-185.2	360.4	519,751.09	752,059.09	32.4270107	-103.6503829	
9,479.0	4.09	96.78	9,458.0	-186.0	366.8	519,750.21	752,065.52	32.4270082	-103.6503621	
9,500.0	4.17	99.94	9,479.0	-186.3	368.3	519,749.99	752,067.02	32.4270076	-103.6503572	
9,569.0	4.53	109.35	9,547.8	-187.6	373.4	519,748.66	752,072.06	32.4270038	-103.6503409	
9,600.0	4.54	110.67	9,578.7	-188.4	375.7	519,747.82	752,074.36	32.4270015	-103.6503334	
9,658.0	4.57	113.13	9,636.5	-190.2	379.9	519,746.10	752,078.64	32.4269967	-103.6503196	
9,700.0	3.87	105.22	9,678.4	-191.2	382.8	519,745.07	752,081.54	32.4269938	-103.6503102	
9,748.0	3.21	92.30	9,726.3	-191.7	385.8	519,744.59	752,084.45	32.4269924	-103.6503008	
9,800.0	2.70	108.99	9,778.2	-192.1	388.4	519,744.13	752,087.06	32.4269911	-103.6502924	
9,838.0	2.51	124.56	9,816.2	-192.9	389.9	519,743.37	752,088.59	32.4269890	-103.6502874	
9,900.0	4.13	131.15	9,878.1	-195.1	392.7	519,741.13	752,091.39	32.4269828	-103.6502784	
9,927.0	4.84	132.64	9,905.0	-196.5	394.3	519,739.72	752,092.96	32.4269789	-103.6502733	
10,000.0	6.71	124.82	9,977.6	-201.1	400.0	519,735.20	752,098.73	32.4269664	-103.6502547	
10,017.0	7.16	123.59	9,994.5	-202.2	401.7	519,734.05	752,100.43	32.4269632	-103.6502493	
10,107.0	6.46	125.17	10,083.9	-208.2	410.5	519,728.03	752,109.24	32.4269465	-103.6502208	
10,196.0	5.41	122.97	10,172.4	-213.4	418.1	519,722.86	752,116.85	32.4269321	-103.6501963	
10,200.0	5.41	122.89	10,176.4	-213.6	418.5	519,722.65	752,117.17	32.4269316	-103.6501952	
10,286.0	5.49	121.22	10,262.0	-217.9	425.4	519,718.32	752,124.09	32.4269195	-103.6501729	
10,300.0	5.40	119.61	10,275.9	-218.6	426.5	519,717.65	752,125.24	32.4269176	-103.6501692	
10,375.0	5.01	110.14	10,350.6	-221.5	432.7	519,714.77	752,131.38	32.4269096	-103.6501493	
10,400.0	4.85	110.01	10,375.5	-222.2	434.7	519,714.04	752,133.40	32.4269076	-103.6501428	
10,465.0	4.44	109.62	10,440.3	-224.0	439.7	519,712.25	752,138.35	32.4269026	-103.6501268	
10,500.0	4.08	109.59	10,475.2	-224.9	442.1	519,711.38	752,140.80	32.4269001	-103.6501189	
10,555.0	3.52	109.53	10,530.1	-226.1	445.5	519,710.16	752,144.24	32.4268967	-103.6501078	
10,600.0	3.36	106.77	10,575.0	-226.9	448.1	519,709.32	752,146.80	32.4268944	-103.6500995	
10,644.0	3.21	103.81	10,618.9	-227.6	450.5	519,708.65	752,149.23	32.4268925	-103.6500916	
10,703.0	2.64	101.97	10,677.9	-228.3	453.5	519,707.97	752,152.17	32.4268906	-103.6500821	
10,796.0	4.48	44.14	10,770.7	-226.1	458.1	519,710.14	752,156.79	32.4268964	-103.6500671	
10,800.0	4.86	41.73	10,774.7	-225.9	458.3	519,710.38	752,157.01	32.4268971	-103.6500664	
10,850.0	9.91	27.97	10,824.3	-220.5	461.7	519,715.76	752,160.44	32.4269118	-103.6500551	
10,886.0	13.67	24.45	10,859.5	-213.9	465.0	519,722.37	752,163.66	32.4269299	-103.6500446	
10,900.0	15.31	22.88	10,873.0	-210.7	466.4	519,725.58	752,165.06	32.4269387	-103.6500400	
10,925.0	18.27	20.76	10,897.0	-204.0	469.0	519,732.28	752,167.73	32.4269571	-103.6500312	
10,950.0	21.24	19.21	10,920.5	-196.0	471.9	519,740.23	752,170.61	32.4269789	-103.6500217	
10,975.0	24.22	18.03	10,943.6	-186.9	475.0	519,749.38	752,173.69	32.4270040	-103.6500115	
11,000.0	26.97	16.82	10,966.1	-176.6	478.2	519,759.69	752,176.92	32.4270323	-103.6500008	
11,050.0	32.49	14.97	11,009.5	-152.7	485.0	519,783.53	752,183.67	32.4270977	-103.6499784	
11,065.0	34.15	14.52	11,022.0	-144.8	487.1	519,791.50	752,185.77	32.4271196	-103.6499715	
11,075.0	35.35	14.18	11,030.3	-139.2	488.5	519,797.02	752,187.18	32.4271347	-103.6499668	
11,100.0	38.36	13.41	11,050.3	-124.7	492.1	519,811.58	752,190.75	32.4271747	-103.6499549	
11,125.0	41.38	12.74	11,069.4	-109.1	495.7	519,827.19	752,194.38	32.4272175	-103.6499428	
11,150.0	44.40	12.15	11,087.8	-92.5	499.3	519,843.80	752,198.04	32.4272631	-103.6499306	
11,154.0	44.88	12.06	11,090.6	-89.7	499.9	519,846.55	752,198.63	32.4272707	-103.6499287	
11,175.0	47.03	10.39	11,105.2	-74.9	502.9	519,861.36	752,201.57	32.4273113	-103.6499188	
11,200.0	49.62	8.56	11,121.8	-56.5	505.9	519,879.77	752,204.63	32.4273619	-103.6499085	
11,225.0	52.24	6.85	11,137.6	-37.3	508.5	519,899.01	752,207.23	32.4274147	-103.6498997	
11,244.0	54.24	5.64	11,149.0	-22.1	510.2	519,914.14	752,208.88	32.4274562	-103.6498940	
11,250.0	54.58	5.57	11,152.4	-17.3	510.7	519,918.99	752,209.36	32.4274696	-103.6498924	
11,300.0	57.45	5.02	11,180.4	24.0	514.5	519,960.27	752,213.18	32.4275830	-103.6498791	



Survey Report - Geographic

Company:	Advance Energy Partners, LLC	Local Co-ordinate Reference:	Well Anderson Fed Com 552H
Project:	Hat Mesa	TVD Reference:	WELL @ 3722.5usft (Original Well Elev)
Site:	Anderson Fed Com - Pad D	MD Reference:	WELL @ 3722.5usft (Original Well Elev)
Well:	Anderson Fed Com 552H	North Reference:	Grid
Wellbore:	Anderson Fed Com 552H	Survey Calculation Method:	Minimum Curvature
Design:	FINAL AD	Database:	AUS-COMPASS - EDM_15 - 32bit

Planned Survey										
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Map Northing (usft)	Map Easting (usft)	Latitude	Longitude	
11,333.0	59.34	4.67	11,197.7	52.0	516.9	519,988.27	752,215.55	32.4276599	-103.6498709	
11,350.0	61.19	3.55	11,206.1	66.7	517.9	520,003.00	752,216.61	32.4277004	-103.6498672	
11,375.0	63.93	1.97	11,217.6	88.9	519.0	520,025.15	752,217.68	32.4277612	-103.6498632	
11,400.0	66.68	0.47	11,228.1	111.6	519.5	520,047.86	752,218.16	32.4278236	-103.6498612	
11,423.0	69.23	359.14	11,236.7	132.9	519.4	520,069.18	752,218.08	32.4278822	-103.6498610	
11,425.0	69.52	359.08	11,237.4	134.8	519.4	520,071.05	752,218.05	32.4278874	-103.6498611	
11,450.0	73.21	358.37	11,245.4	158.5	518.8	520,094.73	752,217.52	32.4279525	-103.6498623	
11,454.0	73.80	358.26	11,246.5	162.3	518.7	520,098.56	752,217.41	32.4279630	-103.6498626	
11,493.0	75.12	358.41	11,257.0	199.8	517.6	520,136.10	752,216.32	32.4280662	-103.6498653	
NMMN 10669 6 Exit at 11493.0 MD										
11,500.0	75.35	358.44	11,258.8	206.6	517.4	520,142.89	752,216.14	32.4280849	-103.6498658	
11,544.0	76.84	358.61	11,269.3	249.3	516.3	520,185.58	752,215.04	32.4282022	-103.6498685	
11,587.6	77.46	358.87	11,279.0	291.8	515.4	520,228.10	752,214.10	32.4283191	-103.6498706	
Anderson Fed Com 552H LP										
11,600.0	77.63	358.94	11,281.7	303.9	515.2	520,240.18	752,213.87	32.4283523	-103.6498711	
11,634.0	78.11	359.14	11,288.9	337.2	514.6	520,273.42	752,213.31	32.4284437	-103.6498722	
11,650.0	79.95	359.30	11,291.9	352.9	514.4	520,289.13	752,213.10	32.4284869	-103.6498726	
11,675.0	82.83	359.55	11,295.6	377.6	514.1	520,313.84	752,212.85	32.4285548	-103.6498729	
11,700.0	85.71	359.79	11,298.1	402.5	514.0	520,338.71	752,212.71	32.4286232	-103.6498728	
11,724.0	88.48	0.02	11,299.4	426.4	514.0	520,362.68	752,212.67	32.4286891	-103.6498725	
11,800.0	89.68	1.37	11,300.6	502.4	514.9	520,438.66	752,213.59	32.4288979	-103.6498679	
11,813.0	89.89	1.60	11,300.6	515.4	515.2	520,451.66	752,213.92	32.4289336	-103.6498666	
11,903.0	87.34	2.21	11,302.8	605.3	518.2	520,541.57	752,216.91	32.4291807	-103.6498550	
11,993.0	86.37	1.33	11,307.7	695.1	521.0	520,631.39	752,219.69	32.4294275	-103.6498441	
12,000.0	86.46	1.21	11,308.2	702.1	521.1	520,638.38	752,219.84	32.4294467	-103.6498435	
12,082.0	87.47	359.75	11,312.5	784.0	521.8	520,720.26	752,220.53	32.4296718	-103.6498396	
12,100.0	87.51	359.73	11,313.3	802.0	521.7	520,738.24	752,220.45	32.4297212	-103.6498395	
12,172.0	87.69	359.66	11,316.3	873.9	521.4	520,810.17	752,220.06	32.4299189	-103.6498392	
12,200.0	88.12	359.41	11,317.3	901.9	521.1	520,838.15	752,219.84	32.4299598	-103.6498394	
12,261.0	89.05	358.87	11,318.8	962.9	520.2	520,899.13	752,218.92	32.4301634	-103.6498411	
12,300.0	89.07	358.53	11,319.5	1,001.9	519.3	520,938.11	752,218.04	32.4302706	-103.6498431	
12,351.0	89.10	358.08	11,320.3	1,052.8	517.8	520,989.08	752,216.53	32.4304107	-103.6498470	
12,400.0	90.12	357.69	11,320.6	1,101.8	516.0	521,038.05	752,214.72	32.4305454	-103.6498518	
12,440.0	90.95	357.38	11,320.3	1,141.7	514.3	521,078.01	752,213.00	32.4306552	-103.6498566	
12,500.0	90.98	357.32	11,319.3	1,201.7	511.5	521,137.94	752,210.23	32.4308200	-103.6498643	
12,530.0	90.99	357.29	11,318.7	1,231.6	510.1	521,167.90	752,208.82	32.4309024	-103.6498683	
12,600.0	91.02	357.29	11,317.5	1,301.5	506.8	521,237.81	752,205.51	32.4310946	-103.6498775	
12,619.0	91.03	357.29	11,317.2	1,320.5	505.9	521,256.79	752,204.61	32.4311468	-103.6498800	
12,709.0	91.38	356.85	11,315.3	1,410.4	501.3	521,346.65	752,200.01	32.4313938	-103.6498931	
12,798.0	92.26	355.88	11,312.4	1,499.2	495.7	521,435.42	752,194.37	32.4316379	-103.6499095	
12,800.0	92.25	355.93	11,312.4	1,501.2	495.5	521,437.42	752,194.23	32.4316434	-103.6499099	
12,888.0	91.74	357.99	11,309.3	1,589.0	490.9	521,525.23	752,189.56	32.4318849	-103.6499232	
12,900.0	91.78	358.06	11,308.9	1,601.0	490.4	521,537.22	752,189.15	32.4319178	-103.6499243	
12,977.0	92.00	358.52	11,306.4	1,677.9	488.2	521,614.14	752,186.85	32.4321293	-103.6499302	
13,000.0	92.25	358.32	11,305.6	1,700.9	487.5	521,637.12	752,186.22	32.4321925	-103.6499318	
13,066.0	92.97	357.73	11,302.5	1,766.7	485.2	521,703.01	752,183.95	32.4323736	-103.6499378	
13,100.0	92.72	357.97	11,300.9	1,800.7	484.0	521,736.94	752,182.67	32.4324669	-103.6499412	
13,155.0	92.31	358.35	11,298.4	1,855.6	482.2	521,791.86	752,180.91	32.4326179	-103.6499458	
13,200.0	91.85	359.80	11,296.8	1,900.6	481.5	521,836.83	752,180.18	32.4327415	-103.6499472	
13,245.0	91.38	1.25	11,295.5	1,945.5	481.9	521,881.81	752,180.59	32.4328651	-103.6499449	
13,300.0	89.29	1.25	11,295.2	2,000.5	483.1	521,936.79	752,181.79	32.4330162	-103.6499399	
13,334.0	88.00	1.25	11,296.0	2,034.5	483.8	521,970.77	752,182.53	32.4331096	-103.6499368	
13,400.0	88.62	0.92	11,298.0	2,100.5	485.1	522,036.73	752,183.78	32.4332909	-103.6499314	
13,423.0	88.84	0.81	11,298.5	2,123.5	485.4	522,059.72	752,184.13	32.4333541	-103.6499298	
13,500.0	89.90	0.27	11,299.3	2,200.5	486.2	522,136.71	752,184.86	32.4335657	-103.6499258	

FTP @ 11,581



Survey Report - Geographic

Company:	Advance Energy Partners, LLC	Local Co-ordinate Reference:	Well Anderson Fed Com 552H
Project:	Hat Mesa	TVD Reference:	WELL @ 3722.5usft (Original Well Elev)
Site:	Anderson Fed Com - Pad D	MD Reference:	WELL @ 3722.5usft (Original Well Elev)
Well:	Anderson Fed Com 552H	North Reference:	Grid
Wellbore:	Anderson Fed Com 552H	Survey Calculation Method:	Minimum Curvature
Design:	FINAL AD	Database:	AUS-COMPASS - EDM_15 - 32bit

Planned Survey

Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Map Northing (usft)	Map Easting (usft)	Latitude	Longitude
13,512.0	90.07	0.19	11,299.3	2,212.5	486.2	522,148.71	752,184.91	32.4335987	-103.6499254
13,546.7	90.58	359.68	11,299.1	2,247.2	486.2	522,183.42	752,184.87	32.4336941	-103.6499248
Anderson Fed Com 552H WP1									
13,601.0	91.38	358.87	11,298.2	2,301.4	485.5	522,237.70	752,184.18	32.4338433	-103.6499259
13,690.0	93.01	358.43	11,294.8	2,390.3	483.4	522,326.60	752,182.08	32.4340877	-103.6499309
13,700.0	93.13	358.46	11,294.3	2,400.3	483.1	522,336.59	752,181.81	32.4341151	-103.6499315
13,780.0	94.07	358.70	11,289.2	2,480.1	481.1	522,416.40	752,179.83	32.4343345	-103.6499363
13,800.0	94.20	358.48	11,287.8	2,500.1	480.6	522,436.34	752,179.34	32.4343894	-103.6499375
13,870.0	94.64	357.73	11,282.4	2,569.8	478.3	522,506.10	752,177.04	32.4345811	-103.6499435
13,900.0	94.10	358.29	11,280.1	2,599.7	477.3	522,535.99	752,176.00	32.4346633	-103.6499462
13,959.0	93.05	359.40	11,276.4	2,658.6	476.1	522,594.86	752,174.82	32.4348252	-103.6499489
14,000.0	92.35	0.00	11,274.5	2,699.6	475.9	522,635.82	752,174.60	32.4349377	-103.6499487
14,049.0	91.52	0.72	11,272.8	2,748.5	476.2	522,684.79	752,174.91	32.4350723	-103.6499467
14,100.0	90.92	1.76	11,271.8	2,799.5	477.3	522,735.76	752,176.02	32.4352124	-103.6499421
14,137.0	90.48	2.52	11,271.3	2,836.4	478.7	522,772.71	752,177.40	32.4353139	-103.6499368
NMMN 120905 Entry at 14137.0 MD									
14,139.0	90.46	2.56	11,271.3	2,838.5	478.8	522,774.73	752,177.49	32.4353195	-103.6499365
14,200.0	88.56	2.44	11,271.8	2,899.4	481.4	522,835.67	752,180.15	32.4354869	-103.6499266
14,228.0	87.69	2.39	11,272.7	2,927.4	482.6	522,863.63	752,181.33	32.4355638	-103.6499222
14,300.0	88.19	2.32	11,275.3	2,999.3	485.6	522,935.52	752,184.28	32.4357613	-103.6499111
14,318.0	88.31	2.30	11,275.9	3,017.2	486.3	522,953.50	752,185.01	32.4358107	-103.6499084
14,407.0	87.34	1.42	11,279.2	3,106.1	489.2	523,042.39	752,187.90	32.4360550	-103.6498972
14,497.0	86.59	0.98	11,284.0	3,196.0	491.1	523,132.24	752,189.78	32.4363019	-103.6498892
14,500.0	86.66	0.92	11,284.2	3,199.0	491.1	523,135.23	752,189.83	32.4363102	-103.6498890
14,586.0	88.62	359.31	11,287.7	3,284.9	491.3	523,221.15	752,190.00	32.4365463	-103.6498867
14,600.0	88.79	359.26	11,288.0	3,298.9	491.1	523,235.15	752,189.83	32.4365848	-103.6498869
14,676.0	89.71	358.96	11,289.0	3,374.9	489.9	523,311.13	752,188.64	32.4367937	-103.6498892
14,700.0	90.33	358.70	11,289.0	3,398.9	489.5	523,335.13	752,188.15	32.4368596	-103.6498903
14,763.2	91.95	358.01	11,287.8	3,462.0	487.6	523,398.25	752,186.34	32.4370332	-103.6498949
Anderson Fed Com 552H WP2									
14,765.0	92.00	357.99	11,287.7	3,463.8	487.6	523,400.08	752,186.28	32.4370382	-103.6498950
14,800.0	91.86	358.54	11,286.5	3,498.8	486.5	523,435.05	752,185.22	32.4371343	-103.6498977
14,854.0	91.65	359.40	11,284.9	3,552.8	485.5	523,489.01	752,184.25	32.4372827	-103.6498997
14,900.0	89.78	0.21	11,284.3	3,598.7	485.4	523,535.01	752,184.09	32.4374091	-103.6498993
14,944.0	88.00	0.98	11,285.2	3,642.7	485.8	523,578.99	752,184.55	32.4375300	-103.6498969
15,000.0	87.97	1.04	11,287.1	3,698.7	486.8	523,634.95	752,185.53	32.4376838	-103.6498926
15,033.0	87.96	1.07	11,288.3	3,731.7	487.4	523,667.92	752,186.14	32.4377744	-103.6498899
15,100.0	87.36	0.48	11,291.0	3,798.6	488.3	523,734.86	752,187.04	32.4379584	-103.6498856
15,122.0	87.16	0.28	11,292.1	3,820.6	488.5	523,756.84	752,187.19	32.4380188	-103.6498847
15,200.0	86.67	359.82	11,296.3	3,898.5	488.6	523,834.72	752,187.26	32.4382328	-103.6498828
15,212.0	86.59	359.75	11,297.0	3,910.4	488.5	523,846.70	752,187.21	32.4382658	-103.6498827
15,301.0	87.91	359.14	11,301.3	3,999.3	487.6	523,935.59	752,186.35	32.4385101	-103.6498837
15,390.0	86.46	357.03	11,305.6	4,088.2	484.7	524,024.43	752,183.38	32.4387543	-103.6498915
15,400.0	86.74	357.04	11,306.2	4,098.1	484.2	524,034.40	752,182.86	32.4387817	-103.6498929
15,479.0	88.97	357.12	11,309.2	4,177.0	480.1	524,113.23	752,178.84	32.4389985	-103.6499043
15,500.0	88.94	356.93	11,309.6	4,197.9	479.1	524,134.20	752,177.75	32.4390562	-103.6499074
15,568.0	88.84	356.32	11,310.9	4,265.8	475.1	524,202.07	752,173.75	32.4392428	-103.6499190
15,600.0	88.71	356.35	11,311.6	4,297.7	473.0	524,234.00	752,171.71	32.4393306	-103.6499250
15,657.0	88.48	356.41	11,313.0	4,354.6	469.4	524,290.87	752,168.11	32.4394869	-103.6499354
15,700.0	88.96	357.08	11,313.9	4,397.5	467.0	524,333.79	752,165.67	32.4396049	-103.6499424
15,747.0	89.49	357.82	11,314.6	4,444.5	464.9	524,380.74	752,163.58	32.4397340	-103.6499482
15,800.0	90.38	358.65	11,314.6	4,497.4	463.3	524,433.71	752,161.95	32.4398797	-103.6499524
15,836.0	90.99	359.22	11,314.2	4,533.4	462.6	524,469.70	752,161.28	32.4399786	-103.6499539
15,900.0	91.56	359.67	11,312.8	4,597.4	462.0	524,533.68	752,160.66	32.4401545	-103.6499545
15,925.0	91.78	359.84	11,312.0	4,622.4	461.9	524,558.67	752,160.55	32.4402232	-103.6499544



Survey Report - Geographic

Company:	Advance Energy Partners, LLC	Local Co-ordinate Reference:	Well Anderson Fed Com 552H
Project:	Hat Mesa	TVD Reference:	WELL @ 3722.5usft (Original Well Elev)
Site:	Anderson Fed Com - Pad D	MD Reference:	WELL @ 3722.5usft (Original Well Elev)
Well:	Anderson Fed Com 552H	North Reference:	Grid
Wellbore:	Anderson Fed Com 552H	Survey Calculation Method:	Minimum Curvature
Design:	FINAL AD	Database:	AUS-COMPASS - EDM_15 - 32bit

Planned Survey

Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Map Northing (usft)	Map Easting (usft)	Latitude	Longitude
16,000.0	92.11	1.38	11,309.5	4,697.4	462.7	524,633.62	752,161.35	32.4404292	-103.6499502
16,015.0	92.18	1.69	11,308.9	4,712.3	463.1	524,648.60	752,161.75	32.4404703	-103.6499486
16,104.0	91.60	3.00	11,306.0	4,801.2	466.7	524,737.48	752,165.39	32.4407145	-103.6499350
16,194.0	91.38	2.39	11,303.6	4,891.1	470.9	524,827.35	752,169.62	32.4409615	-103.6499194
16,200.0	91.08	2.49	11,303.5	4,897.1	471.2	524,833.34	752,169.88	32.4409780	-103.6499184
16,283.0	86.99	3.88	11,304.9	4,979.9	475.8	524,916.18	752,174.49	32.4412056	-103.6499018
16,300.0	87.17	3.93	11,305.8	4,996.9	476.9	524,933.12	752,175.65	32.4412521	-103.6498977
16,373.0	87.96	4.15	11,308.9	5,069.6	482.1	525,005.87	752,180.78	32.4414520	-103.6498795
16,400.0	87.98	3.54	11,309.8	5,096.5	483.9	525,032.80	752,182.59	32.4415260	-103.6498731
16,463.0	88.04	2.12	11,312.0	5,159.4	487.0	525,095.68	752,185.70	32.4416987	-103.6498617
16,500.0	88.63	1.87	11,313.1	5,196.4	488.3	525,132.64	752,186.99	32.4418003	-103.6498568
16,552.0	89.45	1.51	11,314.0	5,248.3	489.8	525,184.61	752,188.52	32.4419431	-103.6498507
16,600.0	87.72	1.46	11,315.2	5,296.3	491.1	525,232.58	752,189.77	32.4420750	-103.6498457
16,642.0	86.20	1.42	11,317.4	5,338.2	492.1	525,274.50	752,190.82	32.4421902	-103.6498414
16,700.0	86.43	1.59	11,321.1	5,396.1	493.6	525,332.36	752,192.34	32.4423492	-103.6498353
16,732.0	86.55	1.69	11,323.1	5,428.0	494.6	525,364.29	752,193.26	32.4424369	-103.6498317
16,781.0	86.43	1.30	11,326.1	5,476.9	495.8	525,413.15	752,194.53	32.4425712	-103.6498265
NMMN 120905 Exit at 16781.0 MD									
16,800.0	86.38	1.15	11,327.3	5,495.9	496.2	525,432.14	752,194.94	32.4426234	-103.6498248
16,821.0	86.33	0.98	11,328.6	5,516.8	496.6	525,453.09	752,195.33	32.4426810	-103.6498231
16,900.0	86.33	359.59	11,333.7	5,595.7	497.0	525,531.93	752,195.72	32.4428977	-103.6498202
16,911.0	86.33	359.40	11,334.4	5,606.6	496.9	525,542.91	752,195.63	32.4429278	-103.6498203
17,000.0	85.45	358.26	11,340.7	5,695.4	495.1	525,631.66	752,193.81	32.4431718	-103.6498243
17,090.0	86.81	357.82	11,346.8	5,785.1	492.0	525,721.40	752,190.74	32.4434185	-103.6498324
17,100.0	86.96	357.88	11,347.4	5,795.1	491.7	525,731.38	752,190.37	32.4434459	-103.6498334
17,179.0	88.18	358.35	11,350.7	5,874.0	489.1	525,810.26	752,187.77	32.4436628	-103.6498402
17,200.0	88.34	358.18	11,351.3	5,895.0	488.4	525,831.24	752,187.14	32.4437205	-103.6498418
17,269.0	88.88	357.64	11,353.0	5,963.9	485.9	525,900.17	752,184.62	32.4439100	-103.6498485
17,300.0	89.06	357.21	11,353.6	5,994.9	484.5	525,931.14	752,183.23	32.4439951	-103.6498524
17,358.0	89.41	356.41	11,354.3	6,052.8	481.3	525,989.04	752,180.00	32.4441544	-103.6498617
17,400.0	89.82	356.49	11,354.6	6,094.7	478.7	526,030.96	752,177.41	32.4442696	-103.6498692
17,448.0	90.29	356.59	11,354.6	6,142.6	475.8	526,078.87	752,174.51	32.4444014	-103.6498776
17,500.0	90.44	356.64	11,354.2	6,194.5	472.7	526,130.78	752,171.44	32.4445441	-103.6498865
17,537.0	90.55	356.68	11,353.9	6,231.5	470.6	526,167.72	752,169.29	32.4446457	-103.6498927
17,600.0	90.05	357.05	11,353.6	6,294.4	467.1	526,230.62	752,165.84	32.4448186	-103.6499026
17,626.0	89.85	357.20	11,353.6	6,320.3	465.8	526,256.59	752,164.54	32.4448900	-103.6499062
17,700.0	89.81	359.81	11,353.8	6,394.3	463.9	526,330.56	752,162.60	32.4450934	-103.6499110
17,716.0	89.80	0.37	11,353.9	6,410.3	463.9	526,346.56	752,162.63	32.4451373	-103.6499106
17,805.0	89.93	0.54	11,354.1	6,499.3	464.6	526,435.55	752,163.33	32.4453819	-103.6499064
17,851.6	89.75	359.95	11,354.2	6,545.9	464.8	526,482.19	752,163.53	32.4455101	-103.6499048
Anderson Fed Com 552H WP3									
17,895.0	89.58	359.40	11,354.5	6,589.3	464.6	526,525.55	752,163.29	32.4456293	-103.6499047
17,900.0	89.62	359.30	11,354.5	6,594.3	464.5	526,530.55	752,163.23	32.4456430	-103.6499048
17,984.0	90.33	357.64	11,354.5	6,678.3	462.3	526,614.52	752,160.99	32.4458739	-103.6499103
18,000.0	90.09	357.72	11,354.5	6,694.2	461.6	526,630.50	752,160.34	32.4459178	-103.6499121
18,073.0	89.01	358.08	11,355.1	6,767.2	459.0	526,703.45	752,157.67	32.4461184	-103.6499192
18,100.0	89.67	358.98	11,355.4	6,794.2	458.3	526,730.44	752,156.97	32.4461926	-103.6499209
18,163.0	91.21	1.07	11,354.9	6,857.2	458.3	526,793.43	752,157.00	32.4463657	-103.6499195
18,200.0	90.28	1.76	11,354.4	6,894.2	459.2	526,830.42	752,157.91	32.4464674	-103.6499158
18,252.0	88.97	2.74	11,354.7	6,946.1	461.3	526,882.37	752,159.96	32.4466101	-103.6499081
18,300.0	87.73	2.51	11,356.1	6,994.0	463.4	526,930.30	752,162.15	32.4467418	-103.6499000
18,342.0	86.64	2.30	11,358.2	7,036.0	465.2	526,972.22	752,163.91	32.4468570	-103.6498934
18,400.0	87.15	1.57	11,361.3	7,093.8	467.2	527,030.10	752,165.86	32.4470161	-103.6498859
18,432.0	87.43	1.16	11,362.9	7,125.8	467.9	527,062.05	752,166.62	32.4471039	-103.6498828
18,500.0	86.32	0.42	11,366.6	7,193.7	468.9	527,129.94	752,167.56	32.4472905	-103.6498783



Survey Report - Geographic

Company:	Advance Energy Partners, LLC	Local Co-ordinate Reference:	Well Anderson Fed Com 552H
Project:	Hat Mesa	TVD Reference:	WELL @ 3722.5usft (Original Well Elev)
Site:	Anderson Fed Com - Pad D	MD Reference:	WELL @ 3722.5usft (Original Well Elev)
Well:	Anderson Fed Com 552H	North Reference:	Grid
Wellbore:	Anderson Fed Com 552H	Survey Calculation Method:	Minimum Curvature
Design:	FINAL AD	Database:	AUS-COMPASS - EDM_15 - 32bit

Planned Survey										
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Map Northing (usft)	Map Easting (usft)	Latitude	Longitude	
18,521.0	85.98	0.19	11,368.0	7,214.6	469.0	527,150.90	752,167.67	32.4473481	-103.6498775	
18,600.0	85.51	0.58	11,373.8	7,293.4	469.5	527,229.68	752,168.20	32.4475646	-103.6498742	
18,611.0	85.45	0.63	11,374.7	7,304.4	469.6	527,240.64	752,168.31	32.4475947	-103.6498736	
18,701.0	86.90	359.93	11,380.7	7,394.2	470.0	527,330.44	752,168.75	32.4478415	-103.6498703	
18,790.0	89.01	359.66	11,383.9	7,483.1	469.7	527,419.37	752,168.43	32.4480860	-103.6498695	
18,800.0	89.08	359.54	11,384.0	7,493.1	469.7	527,429.37	752,168.36	32.4481135	-103.6498695	
18,880.0	89.67	358.61	11,384.9	7,573.1	468.4	527,509.36	752,167.07	32.4483333	-103.6498720	
18,900.0	89.78	358.29	11,385.0	7,593.1	467.8	527,529.35	752,166.53	32.4483883	-103.6498734	
18,969.0	90.15	357.20	11,385.0	7,662.0	465.1	527,598.29	752,163.82	32.4485779	-103.6498807	
19,000.0	90.36	356.99	11,384.9	7,693.0	463.5	527,629.25	752,162.25	32.4486630	-103.6498852	
19,059.0	90.77	356.59	11,384.3	7,751.9	460.2	527,688.16	752,158.95	32.4488249	-103.6498947	
19,100.0	90.73	356.31	11,383.8	7,792.8	457.7	527,729.08	752,156.41	32.4489375	-103.6499021	
19,149.0	90.68	355.97	11,383.2	7,841.7	454.4	527,777.96	752,153.11	32.4490719	-103.6499117	
19,200.0	91.46	355.82	11,382.2	7,892.6	450.8	527,828.82	752,149.46	32.4492117	-103.6499225	
19,238.0	92.04	355.71	11,381.1	7,930.4	448.0	527,866.70	752,146.65	32.4493159	-103.6499308	
19,267.0	91.91	355.45	11,380.1	7,959.3	445.7	527,895.60	752,144.42	32.4493954	-103.6499375	
19,300.0	91.91	355.45	11,379.0	7,992.2	443.1	527,928.47	752,141.80	32.4494858	-103.6499453	
19,316.4	91.91	355.45	11,378.4	8,008.5	441.8	527,944.77	752,140.51	32.4495306	-103.6499491	
Anderson Fed Com 552H BHL										
19,330.0	91.91	355.45	11,378.0	8,022.1	440.7	527,958.36	752,139.42	32.4495680	-103.6499523	

Plan Annotations					
Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates		Comment	
		+N/-S (usft)	+E/-W (usft)		
11,493	11,257	200	518	NMNM 10669 6 Exit at 11493.0 MD	
14,137	11,271	2836	479	NMNM 120905 Entry at 14137.0 MD	
16,781	11,326	5477	496	NMNM 120905 Exit at 16781.0 MD	

Design Annotations					
Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates		Comment	
		+N/-S (usft)	+E/-W (usft)		
230.00	230.00	-0.35	-0.61	First Aim Svy	
11,581.47	11,277.70	285.84	515.52	Actual FTP	
19,267.00	11,380.07	7,959.33	445.72	Last Aim Svy	
19,317.52	11,378.39	8,009.67	441.71	Actual LTP	
19,330.00	11,377.98	8,022.10	440.72	Proj to BHL	

Checked By: _____ Approved By: _____ Date: _____



End of Well Report

**Advance Energy Partners, LLC
Anderson Fed Com, Well No. 552H
Lea County, New Mexico**

**Rig: Nabors X50
Job No.: WT-21-181**

Start Date: 11/22/2021
End Date: 01/16/2022

Directional Drillers:
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 552H (WT-21-181)

2021-11-22 to 2022-01-16

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

BHA Performance

BHA 1

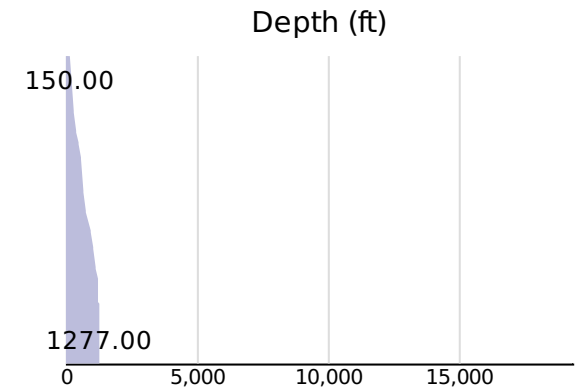
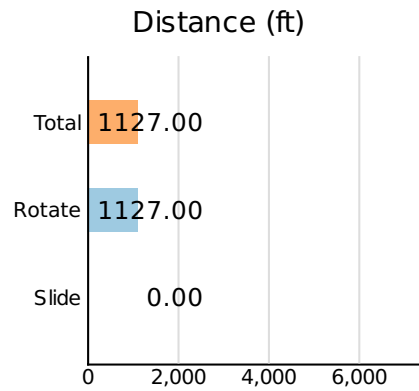
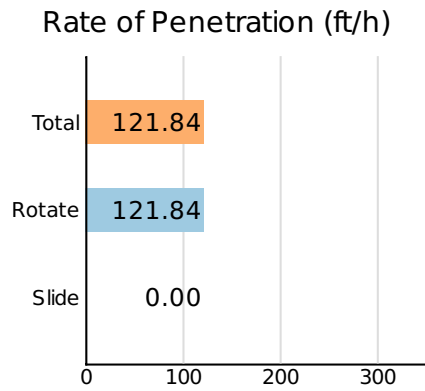
BHA #1 (17.5" Surface)

In: 11/22/2021

08:15

Out: 11/22/2021

23:40



BHA 2

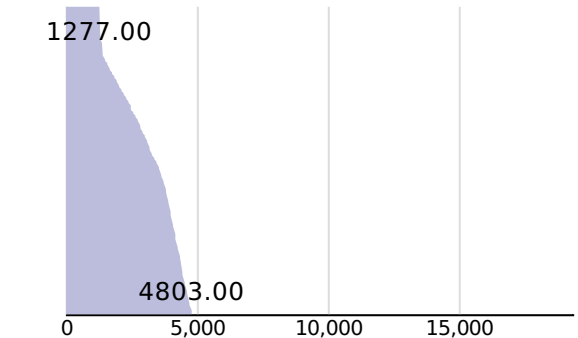
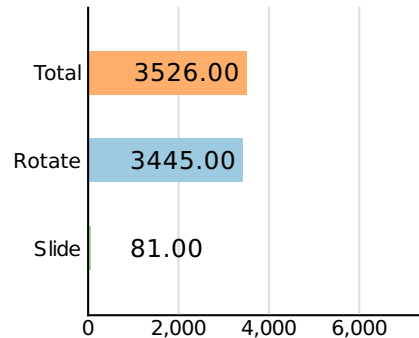
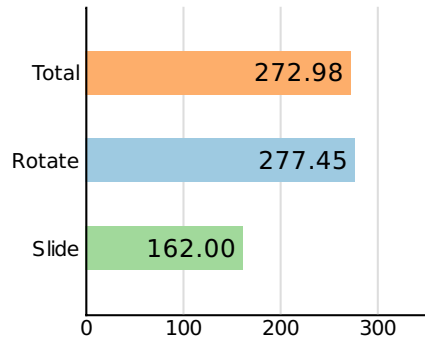
12.25" INTERMEDIATE

In: 12/03/2021

13:00

Out: 12/04/2021

08:30



BHA 3

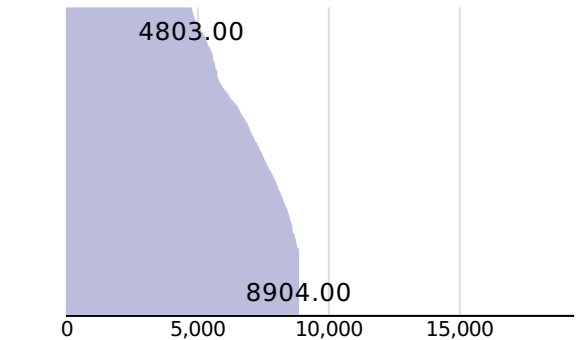
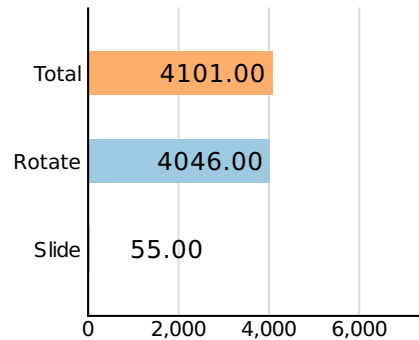
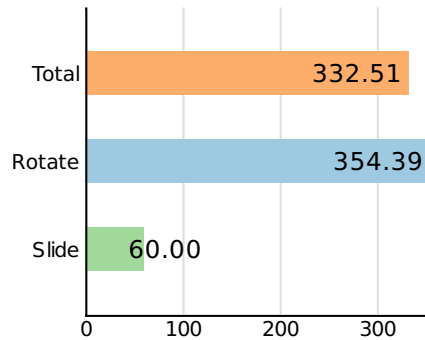
8.75" INTERMEDIATE

In: 01/03/2022

23:30

Out: 01/04/2022

20:15



BHA 4

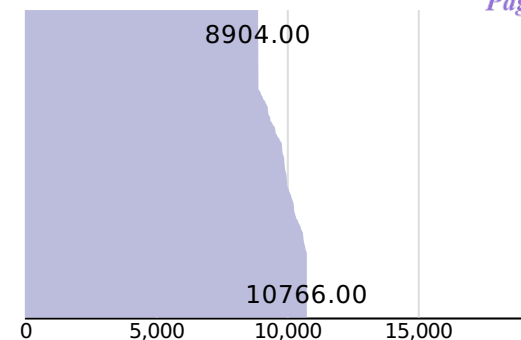
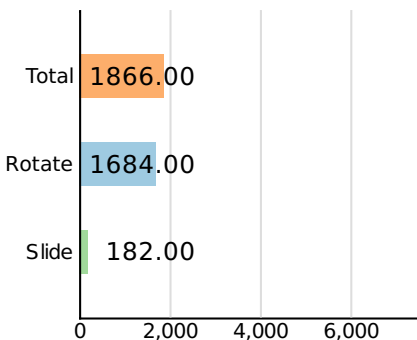
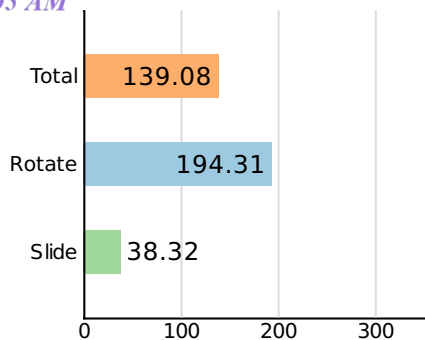
INTERMEDIATE

In: 01/04/2022

20:15

Out: 01/06/2022

00:30



BHA 5

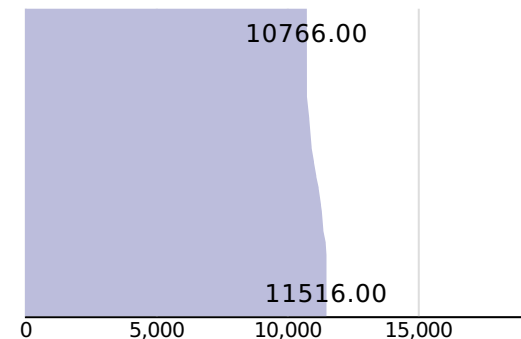
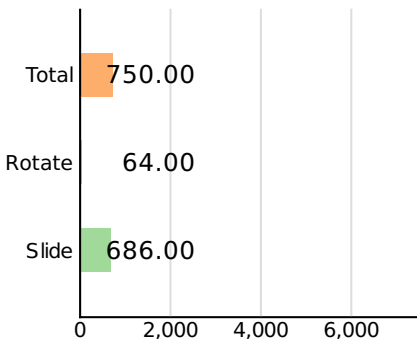
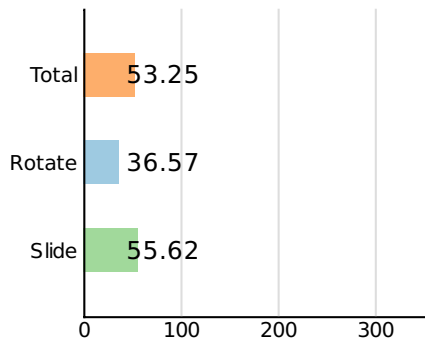
8.75 Curve Assy

In: 01/06/2022

00:30

Out: 01/07/2022

05:00



BHA 6

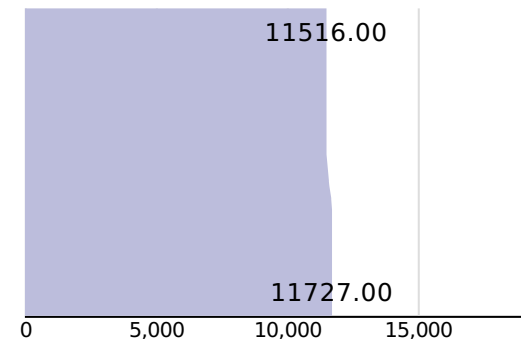
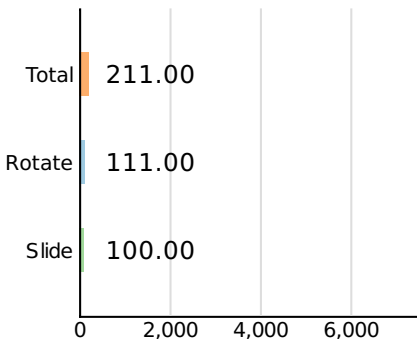
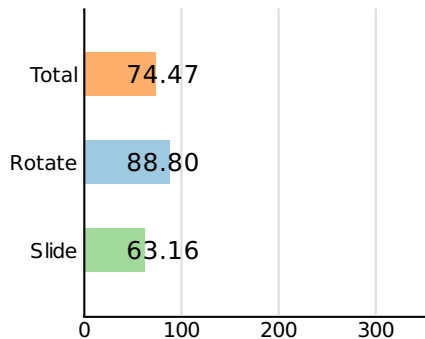
8.75" LATERAL

In: 01/07/2022

07:15

Out: 01/08/2022

05:00



BHA 7

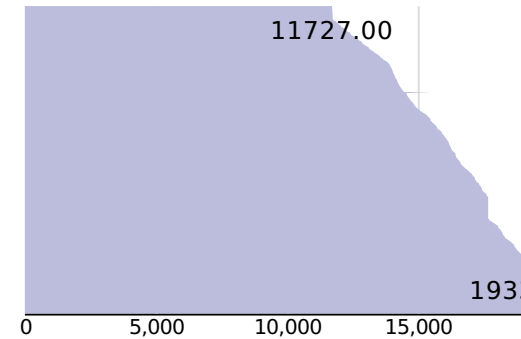
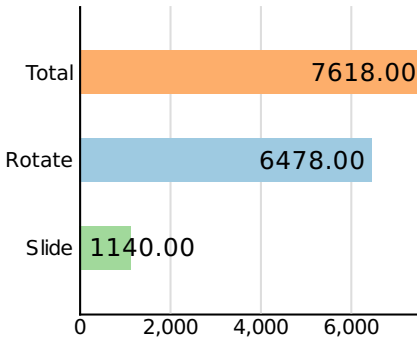
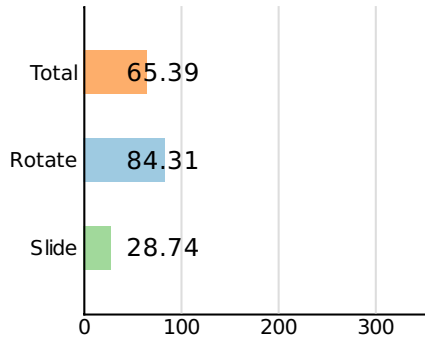
8.75" LATERAL

In: 01/08/2022

07:00

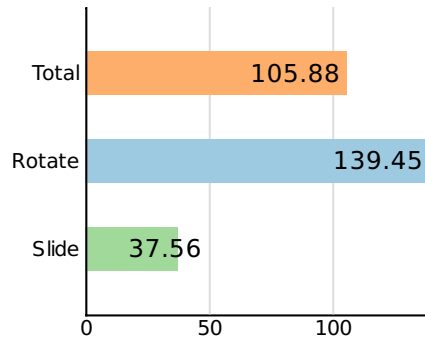
Out: 01/15/2022

10:00

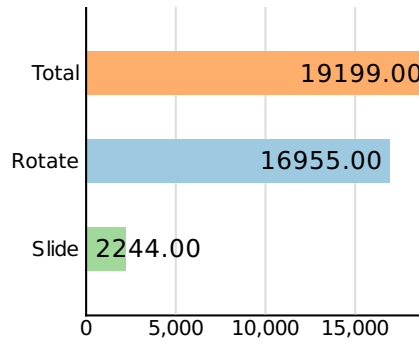


Total

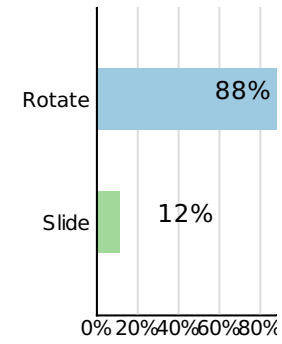
Rate of Penetration (ft/h)



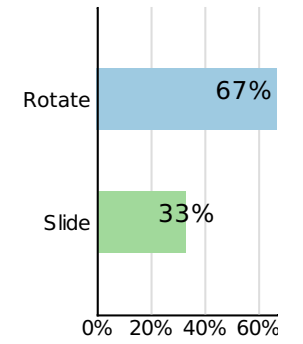
Distance (ft)



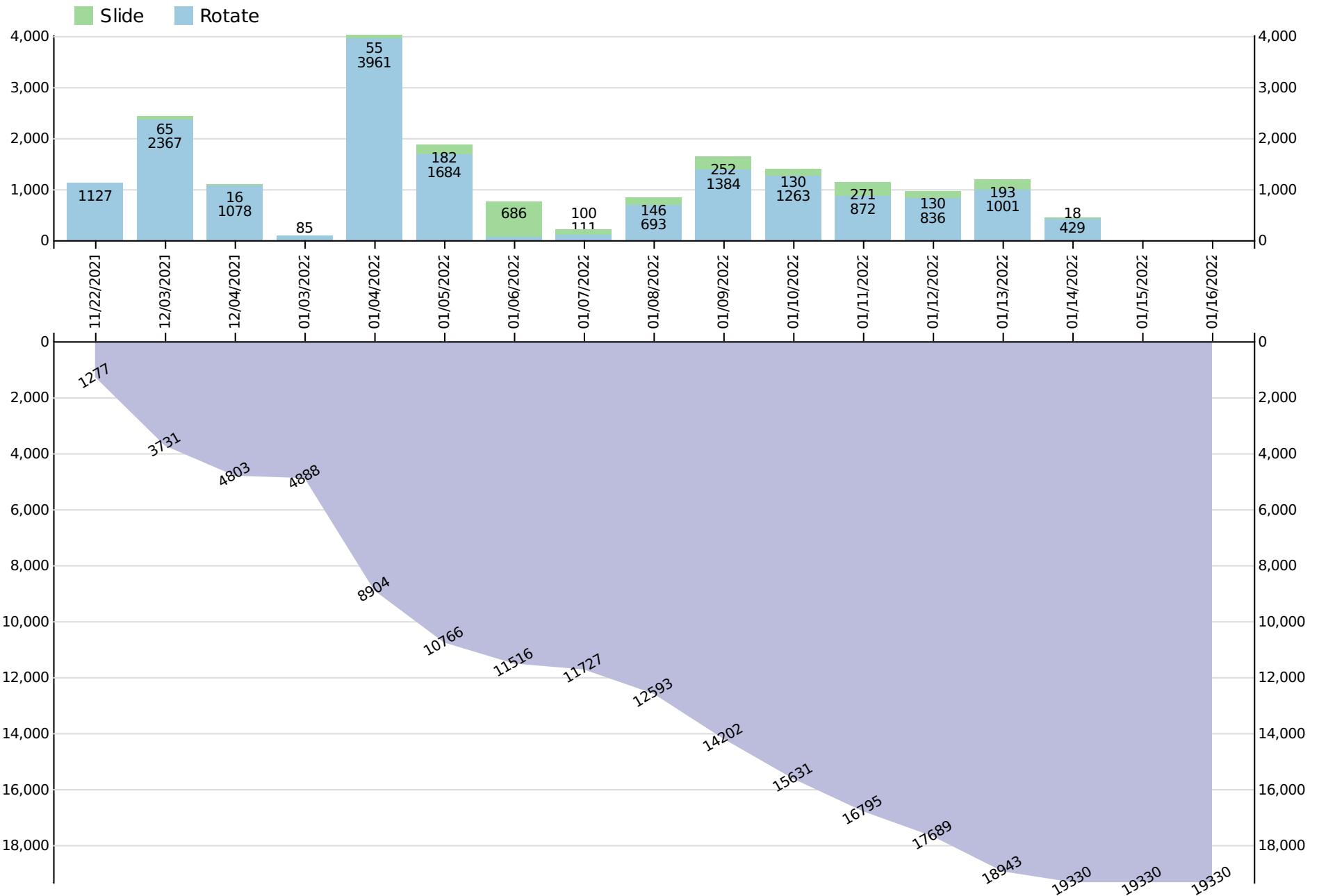
Distance Percentage



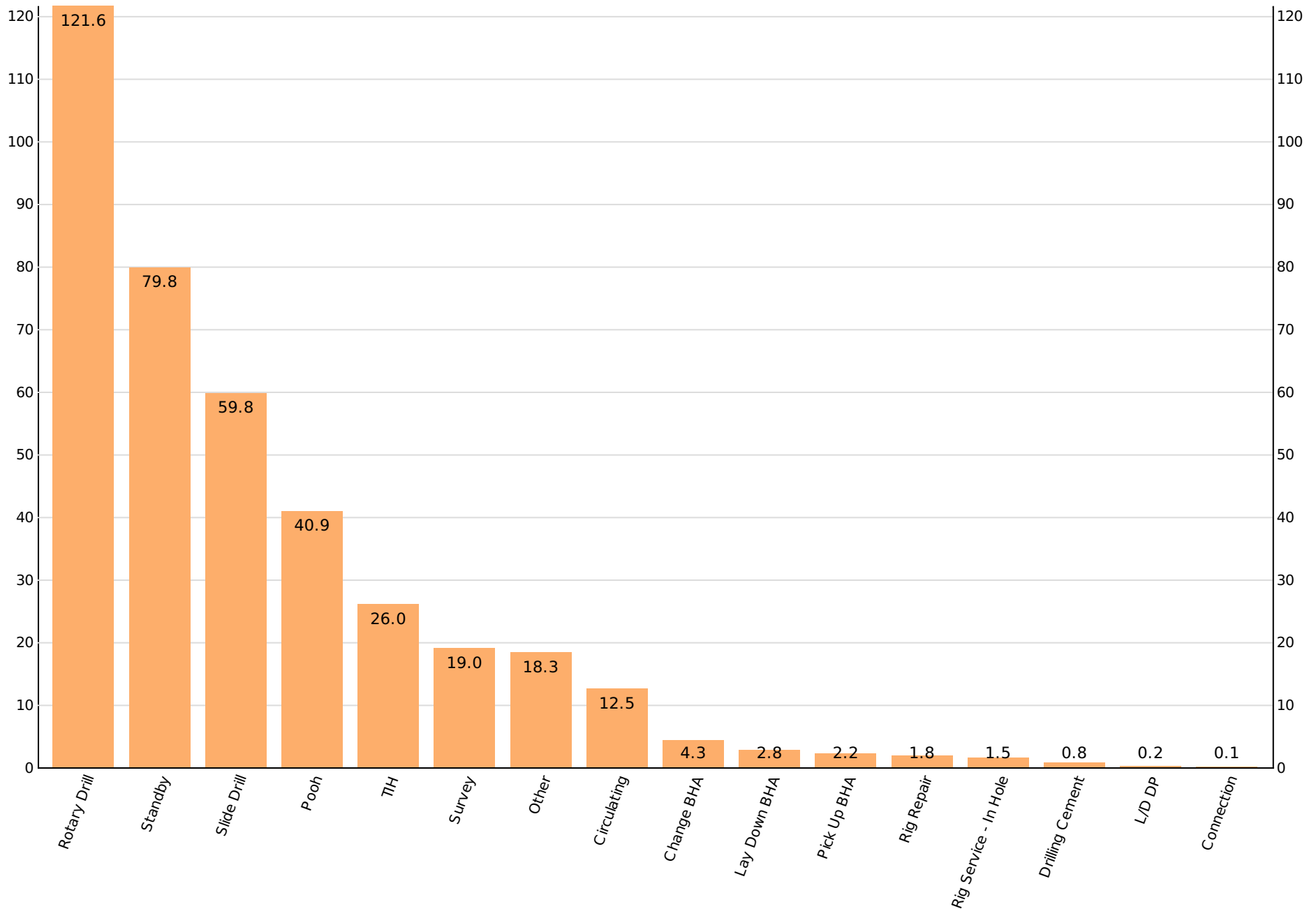
Time Percentage



Days vs. Depth



Directional Activity Hours





Proposed vs. As Drilled

Anderson Fed Com 552H (WT-21-181)

2021-11-22 to 2022-01-16

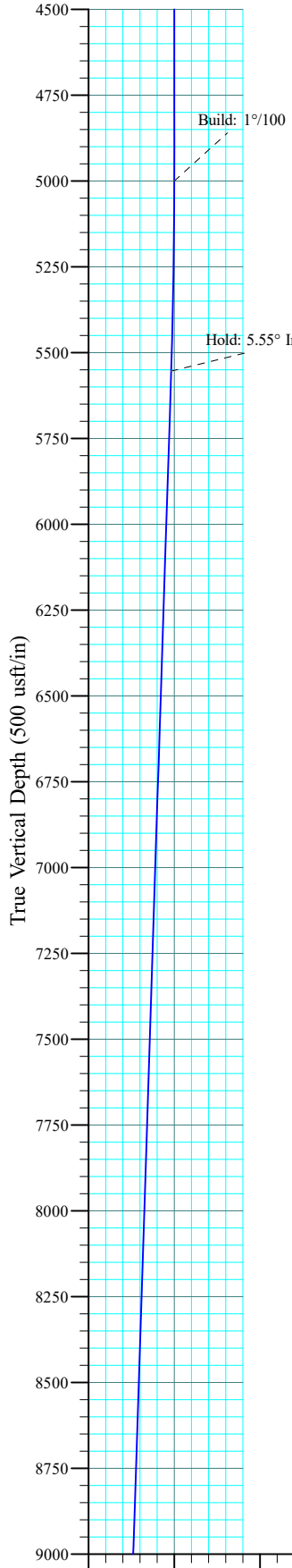
Lea, New Mexico, US (32.43, -103.65)



Anderson Fed Com 552H
Lea County, New Mexico
Job No. WT-21-181
Plan 1.0



SECTION DETAILS										
Sec	MD	Inc	Azi	TVD	+N/-S	+E/-W	Dleg	TFace	V Sect	Annotation
1	0.00	0.00	0.00	0.00	0.00	0.00	0.000	0.00	0.00	
2	5000.00	0.00	0.00	5000.00	0.00	0.00	0.000	0.00	0.00	Build: 1°/100
3	5554.85	5.55	112.58	5553.99	-10.31	24.79	1.000	112.58	-8.85	Hold: 5.55° Inc, 112.58° Azm
4	10118.26	5.55	112.58	10096.01	-179.69	432.21	0.000	0.00	-154.36	Drop: 1°/100'
5	10673.12	0.00	0.00	10650.00	-190.00	457.00	1.000	180.00	-163.22	Hold
6	10848.66	0.00	0.00	10825.54	-190.00	457.00	0.000	0.00	-163.22	KOP: 12°/100' @ 10848.66' MD
7	11598.65	90.00	4.33	11303.00	286.10	493.05	12.000	4.33	314.17	LP: 11598.65' MD, 90.00° Inc, 4.33° Azm
8	11600.60	90.00	4.33	11303.00	288.04	493.20	0.000	0.00	316.12	Build: 2°/100
9	11833.53	90.65	359.72	11301.68	520.76	501.42	2.000	-81.93	548.93	Hold: 90.65° Inc, 359.72° Azm
10	13559.90	90.65	359.72	11282.00	2247.00	492.90	0.000	0.00	2271.77	Build: 2°/100
11	13628.25	92.02	359.72	11280.41	2315.32	492.57	2.000	0.19	2339.96	Hold: 92.02° Inc, 359.72° Azm
12	14774.65	92.02	359.72	11240.00	3461.00	487.00	0.000	0.00	3483.39	Drop: 2°/100'
13	14973.98	88.03	359.72	11239.91	3660.28	486.03	2.000	179.98	3682.29	Hold: 88.03° Inc, 359.72° Azm
14	17861.43	88.03	359.72	11339.00	6546.00	472.10	0.000	0.00	6562.35	Build: 2°/100
15	17909.68	89.00	359.72	11340.25	6594.24	471.86	2.000	-0.32	6610.50	Hold: 89.00° Inc, 359.72° Azm
16	19325.62	89.00	359.72	11365.00	8009.94	464.90	0.000	0.00	8023.42	PBHL @ 19325.62' MD/11365.00' TVD



DESIGN TARGET DETAILS							
Name	TVD	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude
Anderson #552H WP2	11240.00	3461.00	487.00	523397.26	752185.70	32° 26' 13.310 N	103° 38' 59.629 W
Anderson #552H WP1	11282.00	2247.00	492.90	522183.26	752191.60	32° 26' 1.297 N	103° 38' 59.651 W
Anderson #552H FTP	11303.00	285.94	508.60	520222.20	752207.30	32° 25' 41.891 N	103° 38' 59.614 W
Anderson #552H WP3	11339.00	6546.00	472.10	526482.26	752170.80	32° 26' 43.837 N	103° 38' 59.573 W
Anderson #552H PBHL	11365.00	8009.94	464.90	527946.20	752163.60	32° 26' 58.323 N	103° 38' 59.547 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

TGM

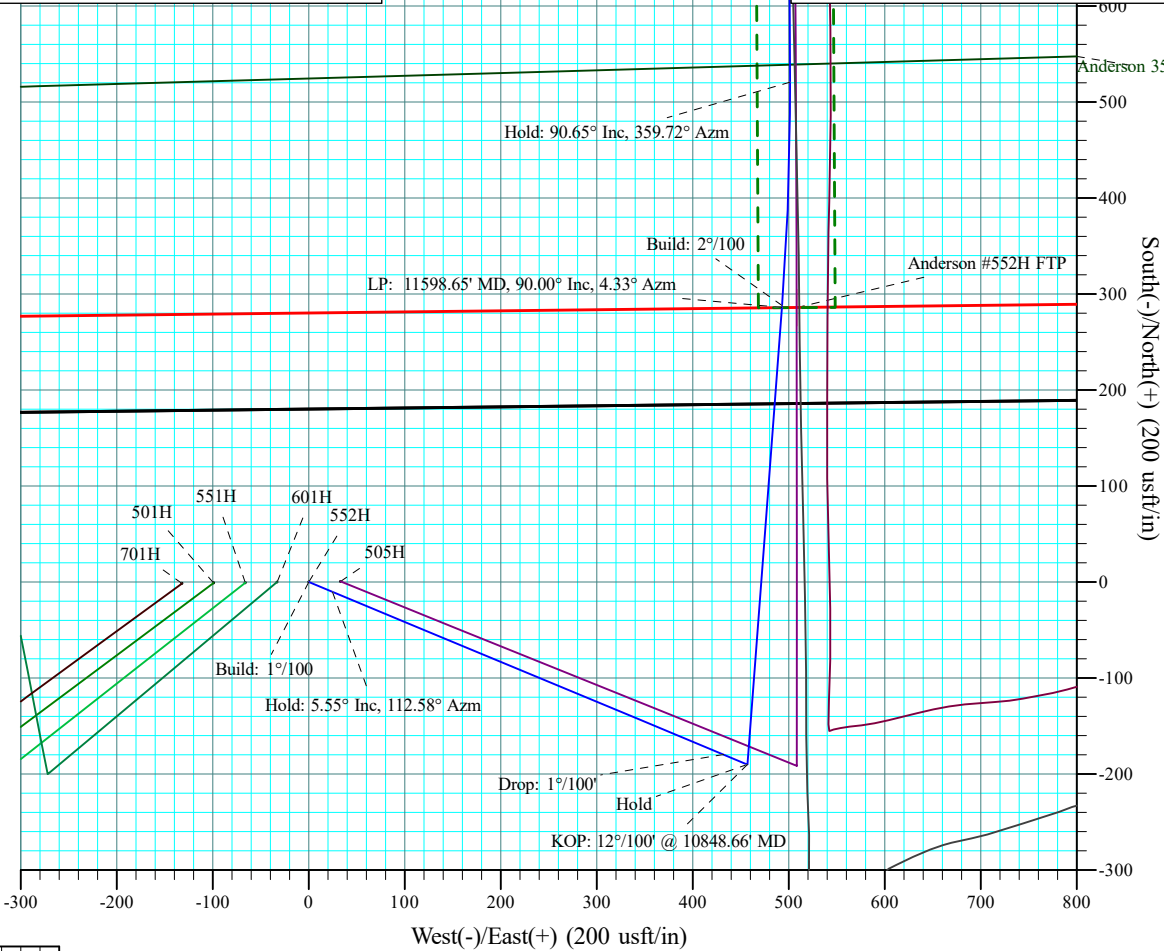
Azimuths to Grid North
True North: -0.37°
Magnetic North: 6.08°

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

SITE DETAILS: Anderson Fed Com 552H

Site Centre Northing: 519936.26
Easting: 751698.70

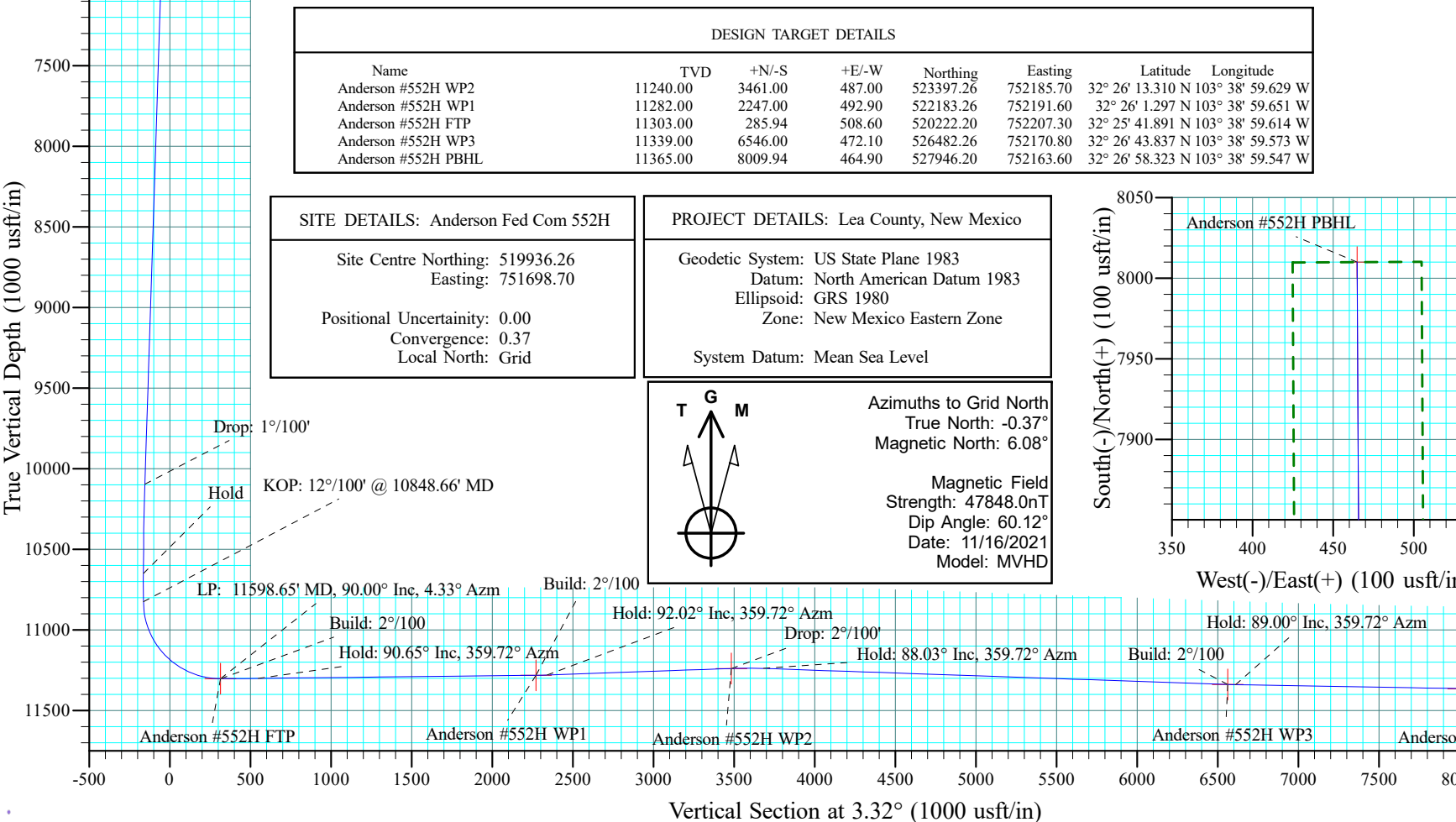
Positional Uncertainty: 0.00
Convergence: 0.37
Local North: Grid



Revised to Imaging: 4/20/2026 11:17:03 AM

Revised by OCD: 5/3/2024 5:26:05 AM

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	0.00	0.00	0.000	0.00	0.00		
2	5000.00	0.00	0.00	5000.00	0.00	0.00	0.000	0.00	0.00		Build: 1°/100
3	5554.85	5.55	112.58	5553.99	-10.31	24.79	1.000	112.58	-8.85		Hold: 5.55° Inc, 112.58° Azm
4	10118.26	5.55	112.58	10096.01	-179.69	432.21	0.000	0.00	-154.36		Drop: 1°/100'
5	10673.12	0.00	0.00	10650.00	-190.00	457.00	1.000	180.00	-163.22		Hold
6	10848.66	0.00	0.00	10825.54	-190.00	457.00	0.000	0.00	-163.22		KOP: 12°/100' @ 10848.66' MD
7	11598.65	90.00	4.33	11303.00	286.10	493.05	12.000	4.33	314.17		LP: 11598.65' MD, 90.00° Inc, 4.33° Azm
8	11600.60	90.00	4.33	11303.00	288.04	493.20	0.000	0.00	316.12		Build: 2°/100
9	11833.53	90.65	359.72	11301.68	520.76	501.42	2.000	-81.93	548.93		Hold: 90.65° Inc, 359.72° Azm
10	13559.90	90.65	359.72	11282.00	2247.00	492.90	0.000	0.00	2271.77	Anderson #552H WP1	Build: 2°/100
11	13628.25	92.02	359.72	11280.41	2315.32	492.57	2.000	0.19	2339.96		Hold: 92.02° Inc, 359.72° Azm
12	14774.65	92.02	359.72	11240.00	3461.00	487.00	0.000	0.00	3483.39	Anderson #552H WP2	Drop: 2°/100'
13	14973.98	88.03	359.72	11239.91	3660.28	486.03	2.000	179.98	3682.29		Hold: 88.03° Inc, 359.72° Azm
14	17861.43	88.03	359.72	11339.00	6546.00	472.10	0.000	0.00	6562.35	Anderson #552H WP3	Build: 2°/100
15	17909.68	89.00	359.72	11340.25	6594.24	471.86	2.000	-0.32	6610.50		Hold: 89.00° Inc, 359.72° Azm
16	19325.62	89.00	359.72	11365.00	8009.94	464.90	0.000	0.00	8023.42	Anderson #552H PBHL	PBHL @ 19325.62' MD/11365.00' TVD



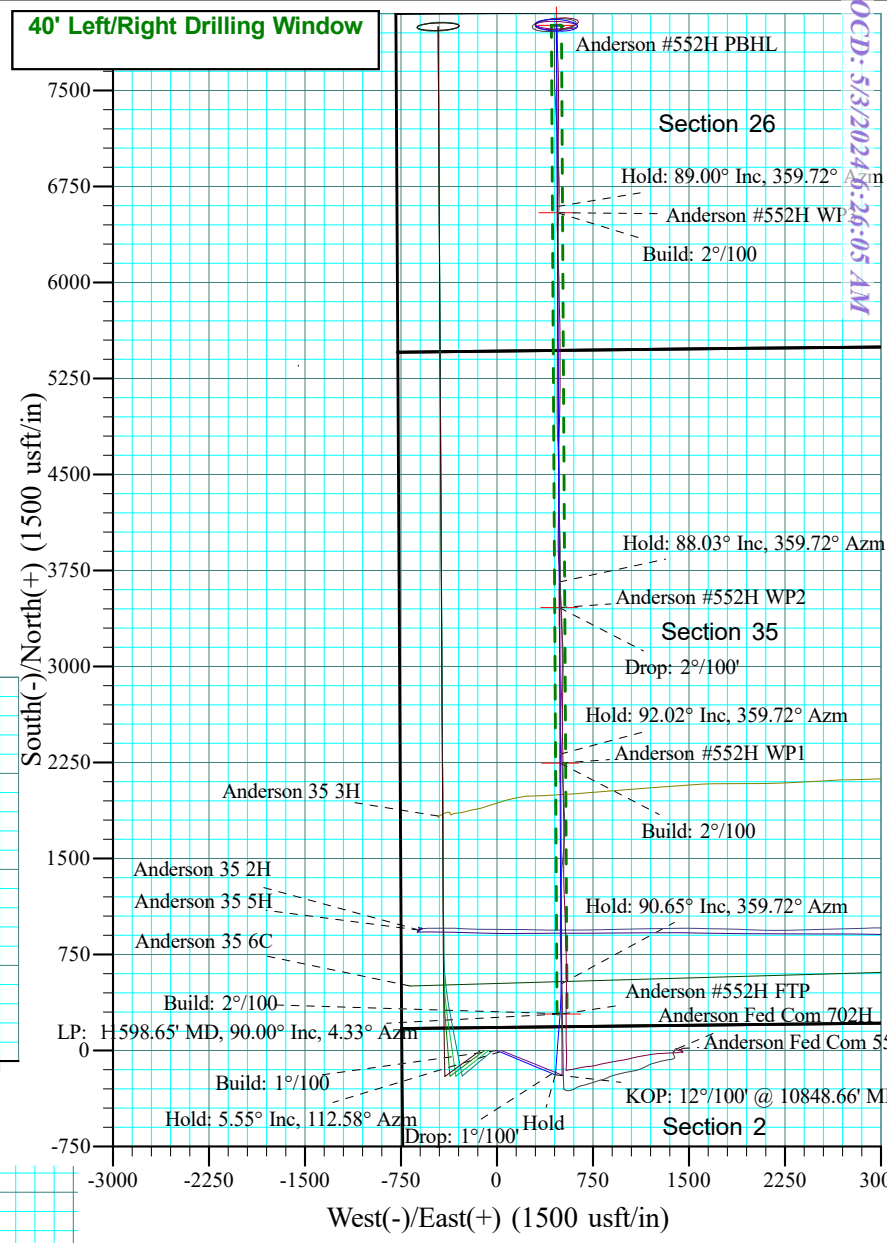
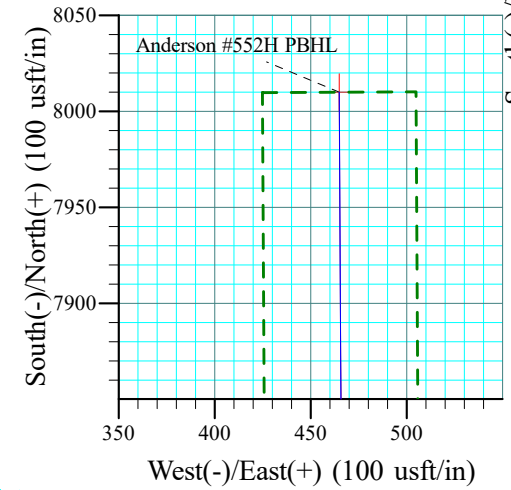
DESIGN TARGET DETAILS							
Name	TVD	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude
Anderson #552H WP2	11240.00	3461.00	487.00	523397.26	752185.70	32° 26' 13.310 N 103° 38' 59.629 W	
Anderson #552H WP1	11282.00	2247.00	492.90	522183.26	752191.60	32° 26' 1.297 N 103° 38' 59.651 W	
Anderson #552H FTP	11303.00	285.94	508.60	520222.20	752207.30	32° 25' 41.891 N 103° 38' 59.614 W	
Anderson #552H WP3	11339.00	6546.00	472.10	526482.26	752170.80	32° 26' 43.837 N 103° 38' 59.573 W	
Anderson #552H PBHL	11365.00	8009.94	464.90	527946.20	752163.60	32° 26' 58.323 N 103° 38' 59.547 W	

SITE DETAILS: Anderson Fed Com 552H	
Site Centre Northing:	519936.26
Easting:	751698.70
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



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Aim Directional Services, LLC
Survey Report



Company:	Advance Energy Partners, LLC	Local Co-ordinate Reference:	Well Anderson #552H
Project:	Lea County, New Mexico	TVD Reference:	Well @ 3722.50usft (Nabors X50)
Site:	Anderson Fed Com 552H	MD Reference:	Well @ 3722.50usft (Nabors X50)
Well:	Anderson #552H	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 552H				
Site Position:		Northing:	519,936.26 usft	Latitude:	32° 25' 39.094 N
From:	Lat/Long	Easting:	751,698.70 usft	Longitude:	103° 39' 5.569 W
Position Uncertainty:	0.00 usft	Slot Radius:	13-3/16 "	Grid Convergence:	0.37 °

Well	Anderson #552H					
Well Position	+N/-S	0.00 usft	Northing:	519,936.26 usft	Latitude:	32° 25' 39.094 N
	+E/-W	0.00 usft	Easting:	751,698.70 usft	Longitude:	103° 39' 5.569 W
Position Uncertainty		0.00 usft	Wellhead Elevation:	usft	Ground Level:	3,690.00 usft

Wellbore	Planning				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	MVHD	11/16/2021	6.44	60.12	47,848.023

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)	Direction (°)
	0.00	0.00	0.00	3.32

Survey Tool Program	Date	11/18/2021		
From (usft)	To (usft)	Survey (Wellbore)	Tool Name	Description
0.00	19,325.07	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 #552H
Project:	Lea County, New Mexico	TVD Reference:	Well @ 3722.50usft (Nabors X50)
Site:	Anderson Fed Com 552H	MD Reference:	Well @ 3722.50usft (Nabors X50)
Well:	Anderson #552H	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	
Build: 1°/100										
5,100.00	1.00	112.58	5,100.00	-0.34	0.81	-0.29	1.000	1.000	0.000	
5,200.00	2.00	112.58	5,199.96	-1.34	3.22	-1.15	1.000	1.000	0.000	



Aim Directional Services, LLC

Survey Report



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Site:	Anderson Fed Com 552H	MD Reference:	Well @ 3722.50usft (Nabors X50)
Well:	Anderson #552H	North Reference:	Grid
Wellbore:	Planning	Survey Calculation Method:	Minimum Curvature
Design:	Plan 1.0	Database:	RTOC- EDM 5000.1 Single User Db

Planned Survey										
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)	
5,300.00	3.00	112.58	5,299.86	-3.01	7.25	-2.59	1.000	1.000	0.000	
5,400.00	4.00	112.58	5,399.68	-5.36	12.89	-4.60	1.000	1.000	0.000	
5,500.00	5.00	112.58	5,499.37	-8.37	20.13	-7.19	1.000	1.000	0.000	
5,554.86	5.55	112.58	5,553.99	-10.31	24.79	-8.85	1.000	1.000	0.000	
Hold: 5.55° Inc, 112.58° Azm										
5,600.00	5.55	112.58	5,598.92	-11.98	28.82	-10.29	0.000	0.000	0.000	
5,700.00	5.55	112.58	5,698.45	-15.69	37.75	-13.48	0.000	0.000	0.000	
5,800.00	5.55	112.58	5,797.98	-19.41	46.67	-16.67	0.000	0.000	0.000	
5,900.00	5.55	112.58	5,897.52	-23.12	55.60	-19.86	0.000	0.000	0.000	
6,000.00	5.55	112.58	5,997.05	-26.83	64.53	-23.05	0.000	0.000	0.000	
6,100.00	5.55	112.58	6,096.58	-30.54	73.46	-26.24	0.000	0.000	0.000	
6,200.00	5.55	112.58	6,196.11	-34.25	82.39	-29.42	0.000	0.000	0.000	
6,300.00	5.55	112.58	6,295.64	-37.96	91.32	-32.61	0.000	0.000	0.000	
6,400.00	5.55	112.58	6,395.17	-41.68	100.24	-35.80	0.000	0.000	0.000	
6,500.00	5.55	112.58	6,494.70	-45.39	109.17	-38.99	0.000	0.000	0.000	
6,600.00	5.55	112.58	6,594.24	-49.10	118.10	-42.18	0.000	0.000	0.000	
6,700.00	5.55	112.58	6,693.77	-52.81	127.03	-45.37	0.000	0.000	0.000	
6,800.00	5.55	112.58	6,793.30	-56.52	135.96	-48.56	0.000	0.000	0.000	
6,900.00	5.55	112.58	6,892.83	-60.24	144.88	-51.74	0.000	0.000	0.000	
7,000.00	5.55	112.58	6,992.36	-63.95	153.81	-54.93	0.000	0.000	0.000	
7,100.00	5.55	112.58	7,091.89	-67.66	162.74	-58.12	0.000	0.000	0.000	
7,200.00	5.55	112.58	7,191.43	-71.37	171.67	-61.31	0.000	0.000	0.000	
7,300.00	5.55	112.58	7,290.96	-75.08	180.60	-64.50	0.000	0.000	0.000	
7,400.00	5.55	112.58	7,390.49	-78.80	189.52	-67.69	0.000	0.000	0.000	
7,500.00	5.55	112.58	7,490.02	-82.51	198.45	-70.88	0.000	0.000	0.000	
7,600.00	5.55	112.58	7,589.55	-86.22	207.38	-74.06	0.000	0.000	0.000	
7,700.00	5.55	112.58	7,689.08	-89.93	216.31	-77.25	0.000	0.000	0.000	
7,800.00	5.55	112.58	7,788.61	-93.64	225.24	-80.44	0.000	0.000	0.000	
7,900.00	5.55	112.58	7,888.15	-97.35	234.16	-83.63	0.000	0.000	0.000	
8,000.00	5.55	112.58	7,987.68	-101.07	243.09	-86.82	0.000	0.000	0.000	
8,100.00	5.55	112.58	8,087.21	-104.78	252.02	-90.01	0.000	0.000	0.000	
8,200.00	5.55	112.58	8,186.74	-108.49	260.95	-93.20	0.000	0.000	0.000	
8,300.00	5.55	112.58	8,286.27	-112.20	269.88	-96.38	0.000	0.000	0.000	
8,400.00	5.55	112.58	8,385.80	-115.91	278.80	-99.57	0.000	0.000	0.000	
8,500.00	5.55	112.58	8,485.33	-119.63	287.73	-102.76	0.000	0.000	0.000	
8,600.00	5.55	112.58	8,584.87	-123.34	296.66	-105.95	0.000	0.000	0.000	
8,700.00	5.55	112.58	8,684.40	-127.05	305.59	-109.14	0.000	0.000	0.000	
8,800.00	5.55	112.58	8,783.93	-130.76	314.52	-112.33	0.000	0.000	0.000	
8,900.00	5.55	112.58	8,883.46	-134.47	323.44	-115.52	0.000	0.000	0.000	
9,000.00	5.55	112.58	8,982.99	-138.19	332.37	-118.71	0.000	0.000	0.000	
9,100.00	5.55	112.58	9,082.52	-141.90	341.30	-121.89	0.000	0.000	0.000	
9,200.00	5.55	112.58	9,182.05	-145.61	350.23	-125.08	0.000	0.000	0.000	
9,300.00	5.55	112.58	9,281.59	-149.32	359.16	-128.27	0.000	0.000	0.000	



Aim Directional Services, LLC
Survey Report



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Site:	Anderson Fed Com 552H	MD Reference:	Well @ 3722.50usft (Nabors X50)
Well:	Anderson #552H	North Reference:	Grid
Wellbore:	Planning	Survey Calculation Method:	Minimum Curvature
Design:	Plan 1.0	Database:	RTOC- EDM 5000.1 Single User Db

Planned Survey

Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)
9,400.00	5.55	112.58	9,381.12	-153.03	368.09	-131.46	0.000	0.000	0.000
9,500.00	5.55	112.58	9,480.65	-156.75	377.01	-134.65	0.000	0.000	0.000
9,600.00	5.55	112.58	9,580.18	-160.46	385.94	-137.84	0.000	0.000	0.000
9,700.00	5.55	112.58	9,679.71	-164.17	394.87	-141.03	0.000	0.000	0.000
9,800.00	5.55	112.58	9,779.24	-167.88	403.80	-144.21	0.000	0.000	0.000
9,900.00	5.55	112.58	9,878.77	-171.59	412.73	-147.40	0.000	0.000	0.000
10,000.00	5.55	112.58	9,978.31	-175.30	421.65	-150.59	0.000	0.000	0.000
10,100.00	5.55	112.58	10,077.84	-179.02	430.58	-153.78	0.000	0.000	0.000
10,118.26	5.55	112.58	10,096.01	-179.69	432.21	-154.36	0.000	0.000	0.000
Drop: 1°/100'									
10,200.00	4.73	112.58	10,177.42	-182.51	438.97	-156.78	1.000	-1.000	0.000
10,300.00	3.73	112.58	10,277.15	-185.34	445.79	-159.21	1.000	-1.000	0.000
10,400.00	2.73	112.58	10,376.99	-187.50	450.99	-161.07	1.000	-1.000	0.000
10,500.00	1.73	112.58	10,476.91	-189.00	454.59	-162.35	1.000	-1.000	0.000
10,600.00	0.73	112.58	10,576.89	-189.82	456.57	-163.06	1.000	-1.000	0.000
10,673.12	0.00	0.00	10,650.00	-190.00	457.00	-163.22	1.000	-1.000	0.000
Hold									
10,700.00	0.00	0.00	10,676.89	-190.00	457.00	-163.22	0.000	0.000	0.000
10,800.00	0.00	0.00	10,776.89	-190.00	457.00	-163.22	0.000	0.000	0.000
10,848.66	0.00	0.00	10,825.54	-190.00	457.00	-163.22	0.000	0.000	0.000
KOP: 12°/100' @ 10848.66' MD									
10,850.00	0.16	4.33	10,826.89	-190.00	457.00	-163.21	12.000	12.000	0.000
10,875.00	3.16	4.33	10,851.87	-189.28	457.05	-162.49	12.000	12.000	0.000
10,900.00	6.16	4.33	10,876.79	-187.25	457.21	-160.46	12.000	12.000	0.000
10,925.00	9.16	4.33	10,901.56	-183.93	457.46	-157.13	12.000	12.000	0.000
10,950.00	12.16	4.33	10,926.13	-179.32	457.81	-152.50	12.000	12.000	0.000
10,975.00	15.16	4.33	10,950.42	-173.43	458.25	-146.60	12.000	12.000	0.000
11,000.00	18.16	4.33	10,974.36	-166.28	458.80	-139.43	12.000	12.000	0.000
11,025.00	21.16	4.33	10,997.90	-157.90	459.43	-131.02	12.000	12.000	0.000
11,050.00	24.16	4.33	11,020.97	-148.29	460.16	-121.39	12.000	12.000	0.000
11,075.00	27.16	4.33	11,043.50	-137.50	460.98	-110.57	12.000	12.000	0.000
11,100.00	30.16	4.33	11,065.44	-125.54	461.88	-98.58	12.000	12.000	0.000
11,125.00	33.16	4.33	11,086.71	-112.46	462.87	-85.46	12.000	12.000	0.000
11,150.00	36.16	4.33	11,107.27	-98.28	463.94	-71.25	12.000	12.000	0.000
11,175.00	39.16	4.33	11,127.06	-83.05	465.10	-55.98	12.000	12.000	0.000
11,200.00	42.16	4.33	11,146.02	-66.81	466.33	-39.69	12.000	12.000	0.000
11,225.00	45.16	4.33	11,164.11	-49.60	467.63	-22.44	12.000	12.000	0.000
11,250.00	48.16	4.33	11,181.26	-31.47	469.00	-4.26	12.000	12.000	0.000
11,275.00	51.16	4.33	11,197.44	-12.47	470.44	14.79	12.000	12.000	0.000
11,300.00	54.16	4.33	11,212.61	7.34	471.94	34.66	12.000	12.000	0.000
11,325.00	57.16	4.33	11,226.71	27.92	473.50	55.30	12.000	12.000	0.000
11,350.00	60.16	4.33	11,239.71	49.21	475.11	76.65	12.000	12.000	0.000
11,375.00	63.16	4.33	11,251.57	71.15	476.77	98.64	12.000	12.000	0.000
11,400.00	66.16	4.33	11,262.27	93.68	478.48	121.23	12.000	12.000	0.000



Aim Directional Services, LLC

Survey Report



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Project:	Lea County, New Mexico	TVD Reference:	Well @ 3722.50usft (Nabors X50)
Site:	Anderson Fed Com 552H	MD Reference:	Well @ 3722.50usft (Nabors X50)
Well:	Anderson #552H	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)
11,425.00	69.16	4.33	11,271.77	116.74	480.23	144.35	12.000	12.000	0.000
11,450.00	72.16	4.33	11,280.05	140.25	482.01	167.93	12.000	12.000	0.000
11,475.00	75.16	4.33	11,287.08	164.17	483.82	191.92	12.000	12.000	0.000
11,500.00	78.16	4.33	11,292.85	188.43	485.65	216.24	12.000	12.000	0.000
11,525.00	81.16	4.33	11,297.33	212.95	487.51	240.82	12.000	12.000	0.000
11,550.00	84.16	4.33	11,300.53	237.67	489.38	265.61	12.000	12.000	0.000
11,575.00	87.16	4.33	11,302.42	262.52	491.26	290.53	12.000	12.000	0.000
11,598.65	90.00	4.33	11,303.00	286.10	493.05	314.17	12.000	12.000	0.000
LP: 11598.65' MD, 90.00° Inc, 4.33° Azm									
11,600.60	90.00	4.33	11,303.00	288.04	493.20	316.12	0.000	0.000	0.000
Build: 2°/100									
11,700.00	90.28	2.36	11,302.76	387.27	499.00	415.52	2.000	0.281	-1.980
11,800.00	90.56	0.38	11,302.03	487.23	501.39	515.45	2.000	0.280	-1.980
11,833.53	90.65	359.72	11,301.68	520.76	501.42	548.93	2.000	0.280	-1.980
Hold: 90.65° Inc, 359.72° Azm									
11,900.00	90.65	359.72	11,300.92	587.22	501.09	615.26	0.000	0.000	0.000
12,000.00	90.65	359.72	11,299.78	687.22	500.60	715.05	0.000	0.000	0.000
12,100.00	90.65	359.72	11,298.64	787.21	500.10	814.85	0.000	0.000	0.000
12,200.00	90.65	359.72	11,297.50	887.20	499.61	914.65	0.000	0.000	0.000
12,300.00	90.65	359.72	11,296.36	987.19	499.12	1,014.44	0.000	0.000	0.000
12,400.00	90.65	359.72	11,295.22	1,087.19	498.62	1,114.24	0.000	0.000	0.000
12,500.00	90.65	359.72	11,294.08	1,187.18	498.13	1,214.03	0.000	0.000	0.000
12,600.00	90.65	359.72	11,292.94	1,287.17	497.64	1,313.83	0.000	0.000	0.000
12,700.00	90.65	359.72	11,291.80	1,387.16	497.14	1,413.62	0.000	0.000	0.000
12,800.00	90.65	359.72	11,290.66	1,487.15	496.65	1,513.42	0.000	0.000	0.000
12,900.00	90.65	359.72	11,289.52	1,587.15	496.16	1,613.22	0.000	0.000	0.000
13,000.00	90.65	359.72	11,288.38	1,687.14	495.66	1,713.01	0.000	0.000	0.000
13,100.00	90.65	359.72	11,287.24	1,787.13	495.17	1,812.81	0.000	0.000	0.000
13,200.00	90.65	359.72	11,286.10	1,887.12	494.68	1,912.60	0.000	0.000	0.000
13,300.00	90.65	359.72	11,284.96	1,987.12	494.18	2,012.40	0.000	0.000	0.000
13,400.00	90.65	359.72	11,283.82	2,087.11	493.69	2,112.20	0.000	0.000	0.000
13,500.00	90.65	359.72	11,282.68	2,187.10	493.20	2,211.99	0.000	0.000	0.000
13,559.90	90.65	359.72	11,282.00	2,247.00	492.90	2,271.77	0.000	0.000	0.000
Build: 2°/100									
13,600.00	91.45	359.72	11,281.26	2,287.09	492.70	2,311.78	2.000	2.000	0.006
13,628.25	92.02	359.72	11,280.41	2,315.32	492.57	2,339.96	2.000	2.000	0.006
Hold: 92.02° Inc, 359.72° Azm									
13,700.00	92.02	359.72	11,277.88	2,387.03	492.22	2,411.53	0.000	0.000	0.000
13,800.00	92.02	359.72	11,274.35	2,486.97	491.73	2,511.27	0.000	0.000	0.000
13,900.00	92.02	359.72	11,270.83	2,586.90	491.25	2,611.01	0.000	0.000	0.000
14,000.00	92.02	359.72	11,267.30	2,686.84	490.76	2,710.75	0.000	0.000	0.000
14,100.00	92.02	359.72	11,263.78	2,786.78	490.28	2,810.49	0.000	0.000	0.000
14,200.00	92.02	359.72	11,260.25	2,886.71	489.79	2,910.23	0.000	0.000	0.000
14,300.00	92.02	359.72	11,256.73	2,986.65	489.30	3,009.97	0.000	0.000	0.000



Aim Directional Services, LLC

Survey Report



Company:	Advance Energy Partners, LLC	Local Co-ordinate Reference:	Well Anderson #552H
Project:	Lea County, New Mexico	TVD Reference:	Well @ 3722.50usft (Nabors X50)
Site:	Anderson Fed Com 552H	MD Reference:	Well @ 3722.50usft (Nabors X50)
Well:	Anderson #552H	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)
14,400.00	92.02	359.72	11,253.21	3,086.59	488.82	3,109.71	0.000	0.000	0.000
14,500.00	92.02	359.72	11,249.68	3,186.52	488.33	3,209.46	0.000	0.000	0.000
14,600.00	92.02	359.72	11,246.16	3,286.46	487.85	3,309.20	0.000	0.000	0.000
14,700.00	92.02	359.72	11,242.63	3,386.40	487.36	3,408.94	0.000	0.000	0.000
14,774.65	92.02	359.72	11,240.00	3,461.00	487.00	3,483.39	0.000	0.000	0.000
Drop: 2°/100'									
14,800.00	91.51	359.72	11,239.22	3,486.34	486.88	3,508.68	2.000	-2.000	0.001
14,900.00	89.51	359.72	11,238.32	3,586.33	486.39	3,608.48	2.000	-2.000	0.001
14,973.98	88.03	359.72	11,239.91	3,660.28	486.03	3,682.29	2.000	-2.000	0.001
Hold: 88.03° Inc, 359.72° Azm									
15,000.00	88.03	359.72	11,240.80	3,686.29	485.91	3,708.24	0.000	0.000	0.000
15,100.00	88.03	359.72	11,244.23	3,786.23	485.43	3,807.99	0.000	0.000	0.000
15,200.00	88.03	359.72	11,247.66	3,886.17	484.94	3,907.73	0.000	0.000	0.000
15,300.00	88.03	359.72	11,251.10	3,986.11	484.46	4,007.48	0.000	0.000	0.000
15,400.00	88.03	359.72	11,254.53	4,086.05	483.98	4,107.22	0.000	0.000	0.000
15,500.00	88.03	359.72	11,257.96	4,185.99	483.50	4,206.97	0.000	0.000	0.000
15,600.00	88.03	359.72	11,261.39	4,285.93	483.01	4,306.71	0.000	0.000	0.000
15,700.00	88.03	359.72	11,264.82	4,385.87	482.53	4,406.45	0.000	0.000	0.000
15,800.00	88.03	359.72	11,268.26	4,485.81	482.05	4,506.20	0.000	0.000	0.000
15,900.00	88.03	359.72	11,271.69	4,585.75	481.57	4,605.94	0.000	0.000	0.000
16,000.00	88.03	359.72	11,275.12	4,685.69	481.08	4,705.69	0.000	0.000	0.000
16,100.00	88.03	359.72	11,278.55	4,785.63	480.60	4,805.43	0.000	0.000	0.000
16,200.00	88.03	359.72	11,281.98	4,885.57	480.12	4,905.18	0.000	0.000	0.000
16,300.00	88.03	359.72	11,285.41	4,985.51	479.64	5,004.92	0.000	0.000	0.000
16,400.00	88.03	359.72	11,288.85	5,085.45	479.15	5,104.66	0.000	0.000	0.000
16,500.00	88.03	359.72	11,292.28	5,185.39	478.67	5,204.41	0.000	0.000	0.000
16,600.00	88.03	359.72	11,295.71	5,285.33	478.19	5,304.15	0.000	0.000	0.000
16,700.00	88.03	359.72	11,299.14	5,385.27	477.71	5,403.90	0.000	0.000	0.000
16,800.00	88.03	359.72	11,302.57	5,485.21	477.22	5,503.64	0.000	0.000	0.000
16,900.00	88.03	359.72	11,306.01	5,585.15	476.74	5,603.38	0.000	0.000	0.000
17,000.00	88.03	359.72	11,309.44	5,685.09	476.26	5,703.13	0.000	0.000	0.000
17,100.00	88.03	359.72	11,312.87	5,785.03	475.77	5,802.87	0.000	0.000	0.000
17,200.00	88.03	359.72	11,316.30	5,884.97	475.29	5,902.62	0.000	0.000	0.000
17,300.00	88.03	359.72	11,319.73	5,984.91	474.81	6,002.36	0.000	0.000	0.000
17,400.00	88.03	359.72	11,323.16	6,084.85	474.33	6,102.11	0.000	0.000	0.000
17,500.00	88.03	359.72	11,326.60	6,184.79	473.84	6,201.85	0.000	0.000	0.000
17,600.00	88.03	359.72	11,330.03	6,284.73	473.36	6,301.59	0.000	0.000	0.000
17,700.00	88.03	359.72	11,333.46	6,384.67	472.88	6,401.34	0.000	0.000	0.000
17,800.00	88.03	359.72	11,336.89	6,484.61	472.40	6,501.08	0.000	0.000	0.000
17,861.43	88.03	359.72	11,339.00	6,546.00	472.10	6,562.35	0.000	0.000	0.000
Build: 2°/100'									
17,909.69	89.00	359.72	11,340.25	6,594.24	471.86	6,610.50	2.000	2.000	-0.011
Hold: 89.00° Inc, 359.72° Azm									
18,000.00	89.00	359.72	11,341.83	6,684.54	471.42	6,700.62	0.000	0.000	0.000



Aim Directional Services, LLC
Survey Report



Company:	Advance Energy Partners, LLC	Local Co-ordinate Reference:	Well Anderson #552H
Project:	Lea County, New Mexico	TVD Reference:	Well @ 3722.50usft (Nabors X50)
Site:	Anderson Fed Com 552H	MD Reference:	Well @ 3722.50usft (Nabors X50)
Well:	Anderson #552H	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)
18,100.00	89.00	359.72	11,343.58	6,784.52	470.93	6,800.41	0.000	0.000	0.000
18,200.00	89.00	359.72	11,345.32	6,884.51	470.44	6,900.20	0.000	0.000	0.000
18,300.00	89.00	359.72	11,347.07	6,984.49	469.94	6,999.98	0.000	0.000	0.000
18,400.00	89.00	359.72	11,348.82	7,084.47	469.45	7,099.77	0.000	0.000	0.000
18,500.00	89.00	359.72	11,350.57	7,184.46	468.96	7,199.56	0.000	0.000	0.000
18,600.00	89.00	359.72	11,352.32	7,284.44	468.47	7,299.35	0.000	0.000	0.000
18,700.00	89.00	359.72	11,354.06	7,384.42	467.97	7,399.13	0.000	0.000	0.000
18,800.00	89.00	359.72	11,355.81	7,484.41	467.48	7,498.92	0.000	0.000	0.000
18,900.00	89.00	359.72	11,357.56	7,584.39	466.99	7,598.71	0.000	0.000	0.000
19,000.00	89.00	359.72	11,359.31	7,684.37	466.50	7,698.49	0.000	0.000	0.000
19,100.00	89.00	359.72	11,361.06	7,784.36	466.01	7,798.28	0.000	0.000	0.000
19,200.00	89.00	359.72	11,362.80	7,884.34	465.51	7,898.07	0.000	0.000	0.000
19,300.00	89.00	359.72	11,364.55	7,984.33	465.02	7,997.86	0.000	0.000	0.000
19,325.62	89.00	359.72	11,365.00	8,009.94	464.90	8,023.42	0.000	0.000	0.000

PBHL @ 19325.62' MD/11365.00' TVD

Design Targets

Target Name	Dip Angle (°)	Dip Dir. (°)	TVD (usft)	+N/-S (usft)	+E/-W (usft)	Northing (usft)	Easting (usft)	Latitude	Longitude
Anderson #552H WP2 - hit/miss target - Shape - Point	0.00	0.00	11,240.00	3,461.00	487.00	523,397.26	752,185.70	32° 26' 13.310 N	103° 38' 59.629 W
Anderson #552H WP1 - plan hits target center - Point	0.00	0.00	11,282.00	2,247.00	492.90	522,183.26	752,191.60	32° 26' 1.297 N	103° 38' 59.651 W
Anderson #552H FTP - plan misses target center by 15.51usft at 11599.67usft MD (11303.00 TVD, 287.11 N, 493.13 E) - Point	0.00	0.00	11,303.00	285.94	508.60	520,222.20	752,207.30	32° 25' 41.891 N	103° 38' 59.614 W
Anderson #552H WP3 - plan hits target center - Point	0.00	0.00	11,339.00	6,546.00	472.10	526,482.26	752,170.80	32° 26' 43.837 N	103° 38' 59.573 W
Anderson #552H PBH - plan hits target center - Point	0.00	0.00	11,365.00	8,009.94	464.90	527,946.20	752,163.60	32° 26' 58.323 N	103° 38' 59.547 W



Aim Directional Services, LLC

Survey Report



Company:	Advance Energy Partners, LLC	Local Co-ordinate Reference:	Well Anderson #552H
Project:	Lea County, New Mexico	TVD Reference:	Well @ 3722.50usft (Nabors X50)
Site:	Anderson Fed Com 552H	MD Reference:	Well @ 3722.50usft (Nabors X50)
Well:	Anderson #552H	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)	
5000	5000	0	0	Build: 1°/100
5555	5554	-10	25	Hold: 5.55° Inc, 112.58° Azm
10,118	10,096	-180	432	Drop: 1°/100'
10,673	10,650	-190	457	Hold
10,849	10,826	-190	457	KOP: 12°/100' @ 10848.66' MD
11,599	11,303	286	493	LP: 11598.65' MD, 90.00° Inc, 4.33° Azm
11,601	11,303	288	493	Build: 2°/100
11,834	11,302	521	501	Hold: 90.65° Inc, 359.72° Azm
13,560	11,282	2247	493	Build: 2°/100
13,628	11,280	2315	493	Hold: 92.02° Inc, 359.72° Azm
14,775	11,240	3461	487	Drop: 2°/100'
14,974	11,240	3660	486	Hold: 88.03° Inc, 359.72° Azm
17,861	11,339	6546	472	Build: 2°/100
17,910	11,340	6594	472	Hold: 89.00° Inc, 359.72° Azm
19,326	11,365	8010	465	PBHL @ 19325.62' MD/11365.00' TVD

Retrieved to Imaging: 4/30/2026 11:17:03 AM

Retrieved by OCD: 5/3/2024 6:26:05 AM

SECTION DETAILS

Sec	MD	Inc	Azi	TVD	+N/-S	+E/-W	Dleg	TFace	Vsect	Target	Annotation
1	19267.00	91.91	355.45	11380.07	7959.33	445.72	0.000	0.00	7971.79		Last Aim Svy
2	19330.00	91.91	355.45	11377.97	8022.10	440.72	0.000	0.00	8034.16		Proj to BHL

DESIGN TARGET DETAILS

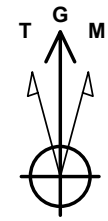
Name	TVD	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude
Anderson #552H WP2	11240.00	3461.00	487.00	523397.26	752185.70	32° 26' 13.310 N 103° 38' 59.629 W	
Anderson #552H WP1	11282.00	2247.00	492.90	522183.26	752191.60	32° 26' 1.297 N 103° 38' 59.651 W	
Anderson #552H FTP	11303.00	285.94	508.60	520222.20	752207.30	32° 25' 41.891 N 103° 38' 59.614 W	
Anderson #552H WP3	11339.00	6546.00	472.10	526482.26	752170.80	32° 26' 43.837 N 103° 38' 59.573 W	
Anderson #552H PBHL	11365.00	8009.94	464.90	527946.20	752163.60	32° 26' 58.323 N 103° 38' 59.547 W	

SITE DETAILS: Anderson Fed Com 552H

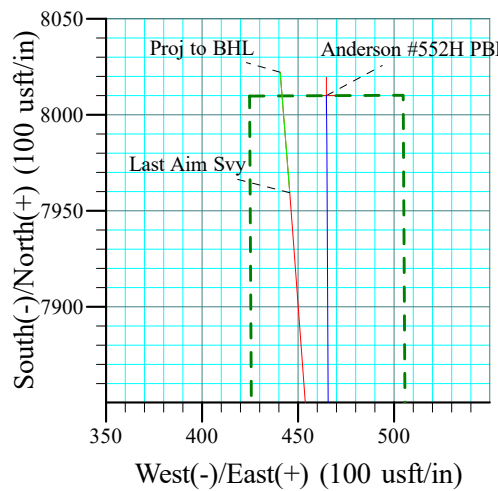
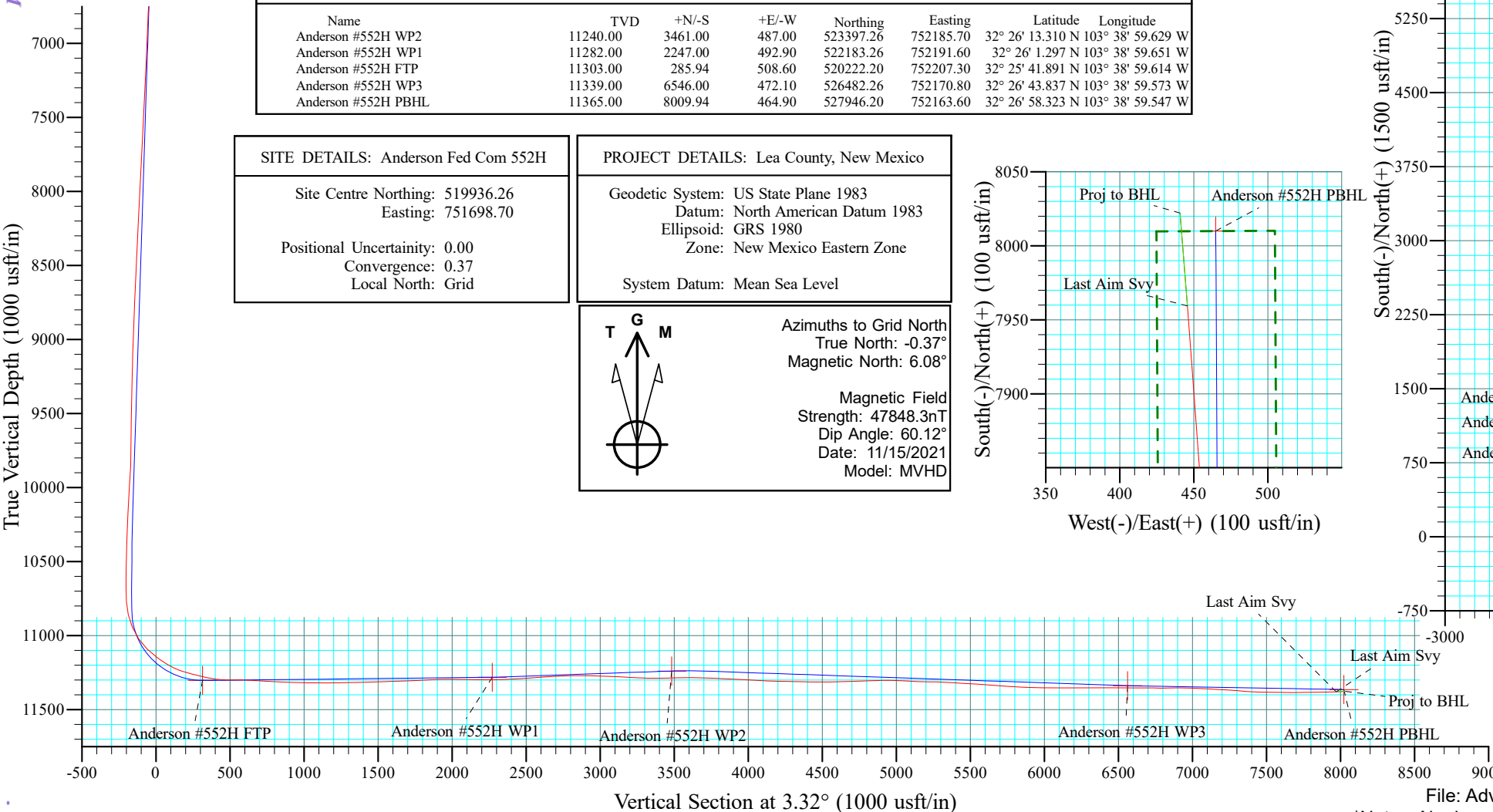
Site Centre Northing: 519936.26
Easting: 751698.70
Positional Uncertainty: 0.00
Convergence: 0.37
Local North: Grid

PROJECT DETAILS: Lea County, New Mexico

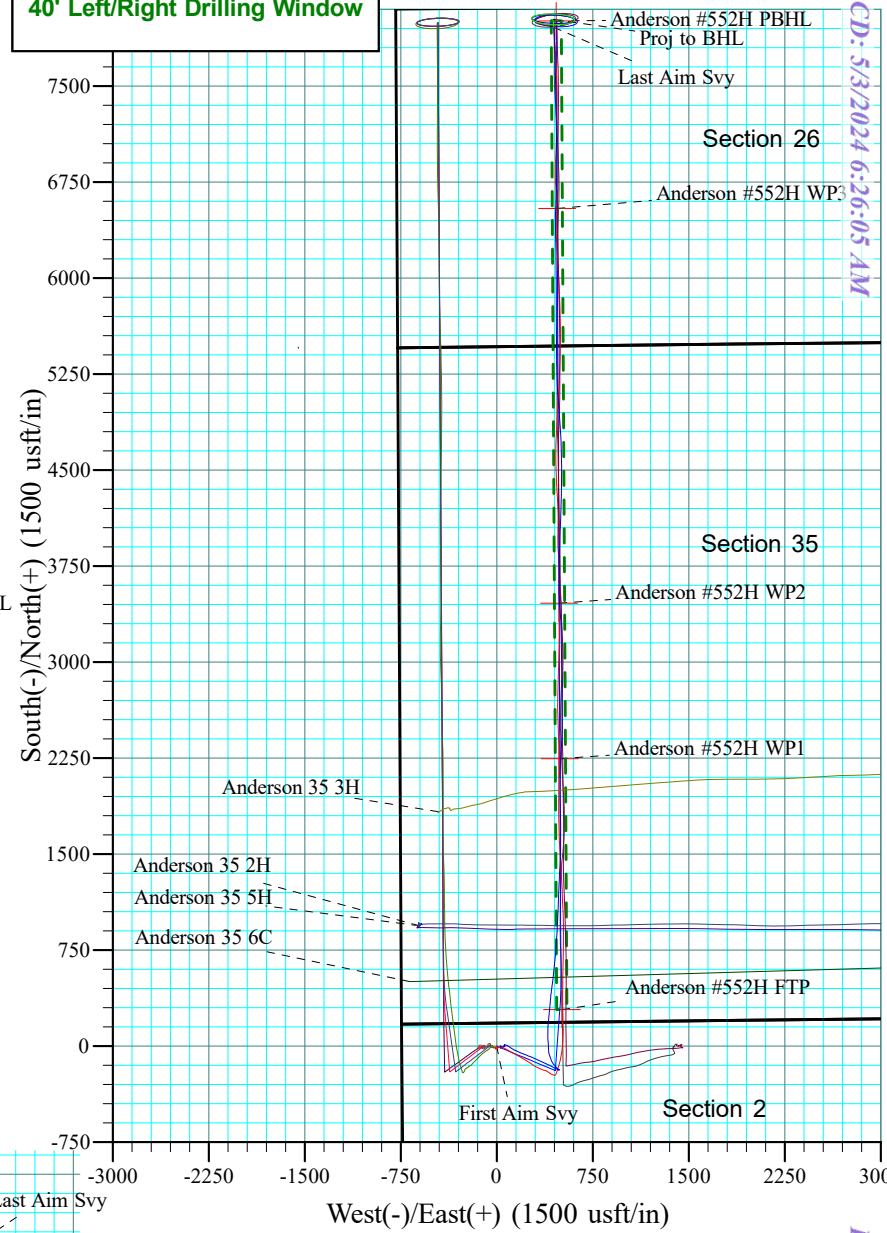
Geodetic System: US State Plane 1983
Datum: North American Datum 1983
Ellipsoid: GRS 1980
Zone: New Mexico Eastern Zone
System Datum: Mean Sea Level



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



Page 60 of 74



Survey Reports

Anderson Fed Com 552H (WT-21-181)

2021-11-22 to 2022-01-16

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 #552H
Project:	Lea County, New Mexico	TVD Reference:	Well @ 3722.50usft (Nabors X50)
Site:	Anderson Fed Com 552H	MD Reference:	Well @ 3722.50usft (Nabors X50)
Well:	Anderson #552H	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 552H				
Site Position:		Northing:	519,936.26 usft	Latitude:	32° 25' 39.094 N
From:	Lat/Long	Easting:	751,698.70 usft	Longitude:	103° 39' 5.569 W
Position Uncertainty:	0.00 usft	Slot Radius:	13-3/16 "	Grid Convergence:	0.37 °

Well	Anderson #552H					
Well Position	+N/-S	0.00 usft	Northing:	519,936.26 usft	Latitude:	32° 25' 39.094 N
	+E/-W	0.00 usft	Easting:	751,698.70 usft	Longitude:	103° 39' 5.569 W
Position Uncertainty		0.00 usft	Wellhead Elevation:	usft	Ground Level:	3,690.00 usft

Wellbore	Drilling				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	MVHD	11/15/2021	6.45	60.12	47,848.312

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)	Direction (°)	
	0.00	0.00	0.00	3.32	

Survey Program	Date	1/15/2022			
From (usft)	To (usft)	Survey (Wellbore)	Tool Name	Description	
230.00	19,330.00	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	
230.00	0.35	240.31	230.00	-0.35	-0.61	-0.38	0.152	0.152	0.000	
First Aim Svy										
322.00	0.44	199.09	322.00	-0.82	-0.97	-0.88	0.316	0.098	-44.804	
414.00	0.40	221.59	413.99	-1.39	-1.30	-1.47	0.183	-0.043	24.456	
506.00	0.31	193.02	505.99	-1.88	-1.57	-1.97	0.213	-0.098	-31.054	
598.00	0.44	201.46	597.99	-2.45	-1.75	-2.55	0.153	0.141	9.174	
690.00	0.26	221.32	689.99	-2.93	-2.02	-3.05	0.233	-0.196	21.587	
878.00	0.75	230.64	877.98	-4.04	-3.25	-4.22	0.263	0.261	4.957	
973.00	0.62	232.31	972.97	-4.74	-4.14	-4.98	0.138	-0.137	1.758	
1,066.00	0.75	242.33	1,065.97	-5.33	-5.08	-5.62	0.190	0.140	10.774	



Aim Directional Services, LLC

Survey Report



Company:	Advance Energy Partners, LLC	Local Co-ordinate Reference:	Well Anderson #552H
Project:	Lea County, New Mexico	TVD Reference:	Well @ 3722.50usft (Nabors X50)
Site:	Anderson Fed Com 552H	MD Reference:	Well @ 3722.50usft (Nabors X50)
Well:	Anderson #552H	North Reference:	Grid
Wellbore:	Drilling	Survey Calculation Method:	Minimum Curvature
Design:	Surveys	Database:	RTOC- EDM 5000.1 Single User Db

Survey									
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)
1,156.00	0.84	235.21	1,155.96	-5.98	-6.14	-6.33	0.148	0.100	-7.911
1,207.00	1.05	235.30	1,206.95	-6.46	-6.83	-6.85	0.412	0.412	0.176
1,335.00	1.36	207.53	1,334.92	-8.48	-8.50	-8.96	0.509	0.242	-21.695
1,425.00	1.41	205.42	1,424.90	-10.43	-9.47	-10.96	0.079	0.056	-2.344
1,514.00	1.36	200.67	1,513.87	-12.40	-10.31	-12.98	0.141	-0.056	-5.337
1,604.00	1.19	189.07	1,603.85	-14.32	-10.84	-14.93	0.342	-0.189	-12.889
1,693.00	1.10	181.69	1,692.83	-16.09	-11.01	-16.70	0.194	-0.101	-8.292
1,783.00	0.92	176.59	1,782.82	-17.68	-10.99	-18.28	0.223	-0.200	-5.667
1,872.00	0.88	166.83	1,871.81	-19.05	-10.79	-19.65	0.178	-0.045	-10.966
1,962.00	0.79	151.80	1,961.80	-20.27	-10.34	-20.84	0.262	-0.100	-16.700
2,052.00	0.79	145.12	2,051.79	-21.33	-9.69	-21.86	0.102	0.000	-7.422
2,142.00	0.79	123.59	2,141.78	-22.18	-8.82	-22.66	0.328	0.000	-23.922
2,231.00	1.05	106.01	2,230.77	-22.75	-7.52	-23.14	0.428	0.292	-19.753
2,320.00	1.45	92.30	2,319.75	-23.02	-5.62	-23.30	0.558	0.449	-15.404
2,409.00	1.93	86.15	2,408.71	-22.96	-3.00	-23.10	0.576	0.539	-6.910
2,499.00	1.10	66.02	2,498.68	-22.51	-0.69	-22.51	1.082	-0.922	-22.367
2,588.00	0.92	24.45	2,587.67	-21.51	0.38	-21.45	0.827	-0.202	-46.708
2,677.00	1.49	40.18	2,676.65	-19.98	1.42	-19.86	0.735	0.640	17.674
2,767.00	2.07	44.22	2,766.60	-17.92	3.31	-17.70	0.659	0.644	4.489
2,857.00	1.23	41.24	2,856.56	-16.03	5.08	-15.70	0.938	-0.933	-3.311
2,946.00	0.97	38.78	2,945.55	-14.72	6.19	-14.34	0.297	-0.292	-2.764
3,036.00	1.49	45.89	3,035.53	-13.31	7.50	-12.86	0.601	0.578	7.900
3,125.00	2.07	46.51	3,124.48	-11.40	9.50	-10.83	0.652	0.652	0.697
3,215.00	1.36	55.74	3,214.44	-9.68	11.56	-8.99	0.844	-0.789	10.256
3,305.00	1.05	73.23	3,304.42	-8.84	13.23	-8.06	0.531	-0.344	19.433
3,394.00	1.49	93.53	3,393.40	-8.68	15.17	-7.78	0.700	0.494	22.809
3,484.00	1.76	98.10	3,483.36	-8.94	17.71	-7.90	0.333	0.300	5.078
3,573.00	1.85	105.04	3,572.32	-9.51	20.45	-8.31	0.265	0.101	7.798
3,663.00	1.93	112.60	3,662.27	-10.47	23.25	-9.10	0.291	0.089	8.400
3,753.00	2.11	116.38	3,752.22	-11.79	26.13	-10.25	0.249	0.200	4.200
3,842.00	1.05	135.19	3,841.18	-13.09	28.17	-11.44	1.310	-1.191	21.135
3,932.00	0.79	167.27	3,931.17	-14.28	28.89	-12.59	0.629	-0.289	35.644
4,022.00	0.75	161.20	4,021.16	-15.45	29.22	-13.73	0.101	-0.044	-6.744
4,111.00	0.62	144.42	4,110.16	-16.39	29.69	-14.64	0.267	-0.146	-18.854
4,200.00	0.53	129.04	4,199.15	-17.04	30.29	-15.26	0.200	-0.101	-17.281
4,290.00	0.44	112.87	4,289.15	-17.44	30.93	-15.62	0.181	-0.100	-17.967
4,380.00	0.44	108.30	4,379.15	-17.68	31.57	-15.82	0.039	0.000	-5.078
4,469.00	0.31	82.98	4,468.14	-17.76	32.14	-15.87	0.233	-0.146	-28.449
4,559.00	0.44	47.83	4,558.14	-17.50	32.64	-15.58	0.287	0.144	-39.055
4,648.00	0.66	26.73	4,647.14	-16.81	33.12	-14.86	0.332	0.247	-23.708
4,735.00	0.92	9.60	4,734.13	-15.67	33.46	-13.71	0.401	0.299	-19.690
4,822.00	1.05	359.14	4,821.12	-14.19	33.57	-12.22	0.254	0.149	-12.023
4,911.00	1.10	353.16	4,910.10	-12.52	33.45	-10.57	0.138	0.056	-6.719



Aim Directional Services, LLC

Survey Report



Company:	Advance Energy Partners, LLC	Local Co-ordinate Reference:	Well Anderson #552H
Project:	Lea County, New Mexico	TVD Reference:	Well @ 3722.50usft (Nabors X50)
Site:	Anderson Fed Com 552H	MD Reference:	Well @ 3722.50usft (Nabors X50)
Well:	Anderson #552H	North Reference:	Grid
Wellbore:	Drilling	Survey Calculation Method:	Minimum Curvature
Design:	Surveys	Database:	RTOC- EDM 5000.1 Single User Db

Survey										
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)	
5,001.00	1.27	341.03	5,000.08	-10.72	33.02	-8.79	0.336	0.189	-13.478	
5,091.00	1.41	342.26	5,090.06	-8.72	32.36	-6.84	0.159	0.156	1.367	
5,180.00	1.32	338.83	5,179.03	-6.73	31.66	-4.88	0.137	-0.101	-3.854	
5,270.00	1.32	336.90	5,269.01	-4.81	30.88	-3.01	0.049	0.000	-2.144	
5,359.00	1.45	336.29	5,357.98	-2.83	30.02	-1.09	0.147	0.146	-0.685	
5,449.00	1.54	335.14	5,447.95	-0.69	29.06	0.99	0.105	0.100	-1.278	
5,538.00	1.41	331.54	5,536.92	1.36	28.03	2.98	0.179	-0.146	-4.045	
5,628.00	1.98	96.61	5,626.90	2.15	29.05	3.83	3.355	0.633	138.966	
5,717.00	5.45	119.28	5,715.71	-0.09	34.27	1.89	4.160	3.899	25.472	
5,807.00	6.20	121.48	5,805.24	-4.72	42.14	-2.27	0.869	0.833	2.444	
5,896.00	6.29	121.66	5,893.71	-9.79	50.39	-6.86	0.103	0.101	0.202	
5,986.00	6.33	121.30	5,983.17	-14.96	58.82	-11.53	0.063	0.044	-0.400	
6,076.00	6.24	121.48	6,072.63	-20.09	67.23	-16.16	0.102	-0.100	0.200	
6,165.00	6.51	120.07	6,161.08	-25.14	75.72	-20.71	0.351	0.303	-1.584	
6,255.00	6.55	119.72	6,250.49	-30.24	84.60	-25.29	0.063	0.044	-0.389	
6,344.00	6.68	120.34	6,338.90	-35.37	93.47	-29.90	0.167	0.146	0.697	
6,434.00	6.77	119.63	6,428.28	-40.64	102.60	-34.63	0.136	0.100	-0.789	
6,523.00	6.51	118.40	6,516.68	-45.63	111.60	-39.10	0.333	-0.292	-1.382	
6,613.00	6.33	117.96	6,606.12	-50.39	120.47	-43.33	0.207	-0.200	-0.489	
6,702.00	6.33	118.67	6,694.58	-55.04	129.11	-47.47	0.088	0.000	0.798	
6,791.00	6.33	117.53	6,783.03	-59.66	137.76	-51.59	0.141	0.000	-1.281	
6,881.00	6.42	118.67	6,872.48	-64.37	146.58	-55.77	0.173	0.100	1.267	
6,971.00	6.20	117.00	6,961.93	-68.99	155.32	-59.88	0.318	-0.244	-1.856	
7,060.00	5.98	117.79	7,050.43	-73.33	163.71	-63.73	0.265	-0.247	0.888	
7,150.00	5.98	120.07	7,139.94	-77.87	171.91	-67.78	0.264	0.000	2.533	
7,240.00	5.80	117.88	7,229.46	-82.34	179.99	-71.78	0.320	-0.200	-2.433	
7,329.00	5.93	118.93	7,318.00	-86.67	187.99	-75.64	0.189	0.146	1.180	
7,419.00	5.85	119.90	7,407.52	-91.21	196.03	-79.70	0.142	-0.089	1.078	
7,508.00	5.93	119.55	7,496.05	-95.74	203.96	-83.76	0.099	0.090	-0.393	
7,598.00	5.93	121.22	7,585.57	-100.44	211.98	-87.99	0.192	0.000	1.856	
7,688.00	5.89	119.99	7,675.09	-105.16	219.96	-92.24	0.148	-0.044	-1.367	
7,777.00	5.85	121.48	7,763.63	-109.81	227.78	-96.43	0.177	-0.045	1.674	
7,867.00	5.71	122.54	7,853.17	-114.61	235.47	-100.78	0.196	-0.156	1.178	
7,956.00	5.76	123.06	7,941.72	-119.43	242.94	-105.16	0.081	0.056	0.584	
8,046.00	5.67	122.27	8,031.28	-124.27	250.49	-109.55	0.133	-0.100	-0.878	
8,136.00	5.71	123.68	8,120.83	-129.12	257.97	-113.97	0.162	0.044	1.567	
8,225.00	5.58	124.64	8,209.40	-134.04	265.22	-118.45	0.181	-0.146	1.079	
8,315.00	5.54	124.38	8,298.98	-138.98	272.40	-122.97	0.053	-0.044	-0.289	
8,404.00	5.67	125.17	8,387.55	-143.94	279.54	-127.51	0.170	0.146	0.888	
8,493.00	5.49	125.87	8,476.13	-148.96	286.59	-132.12	0.216	-0.202	0.787	
8,583.00	5.41	128.34	8,565.72	-154.12	293.40	-136.87	0.275	-0.089	2.744	
8,672.00	5.71	115.06	8,654.31	-158.60	300.71	-140.91	1.481	0.337	-14.921	
8,762.00	6.20	111.55	8,743.82	-162.28	309.28	-144.09	0.678	0.544	-3.900	



Aim Directional Services, LLC

Survey Report



Company:	Advance Energy Partners, LLC	Local Co-ordinate Reference:	Well Anderson #552H
Project:	Lea County, New Mexico	TVD Reference:	Well @ 3722.50usft (Nabors X50)
Site:	Anderson Fed Com 552H	MD Reference:	Well @ 3722.50usft (Nabors X50)
Well:	Anderson #552H	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)	
8,851.00	5.85	113.66	8,832.33	-165.86	317.91	-147.17	0.465	-0.393	2.371	
8,941.00	5.27	113.39	8,921.91	-169.34	325.90	-150.19	0.645	-0.644	-0.300	
9,031.00	5.05	116.82	9,011.54	-172.77	333.23	-153.18	0.421	-0.244	3.811	
9,120.00	4.44	117.79	9,100.24	-176.15	339.77	-156.17	0.691	-0.685	1.090	
9,210.00	3.52	120.16	9,190.02	-179.16	345.24	-158.86	1.038	-1.022	2.633	
9,300.00	5.41	116.91	9,279.74	-182.47	351.42	-161.81	2.118	2.100	-3.611	
9,390.00	5.49	98.63	9,369.34	-185.03	359.46	-163.91	1.923	0.089	-20.311	
9,479.00	4.09	96.78	9,458.03	-186.05	366.82	-164.49	1.582	-1.573	-2.079	
9,569.00	4.53	109.35	9,547.78	-187.60	373.36	-165.67	1.155	0.489	13.967	
9,658.00	4.57	113.13	9,636.50	-190.16	379.93	-167.84	0.340	0.045	4.247	
9,748.00	3.21	92.30	9,726.29	-191.67	385.75	-169.01	2.156	-1.511	-23.144	
9,838.00	2.51	124.56	9,816.19	-192.89	389.89	-169.99	1.917	-0.778	35.844	
9,927.00	4.84	132.64	9,905.00	-196.54	394.26	-173.38	2.675	2.618	9.079	
10,017.00	7.16	123.59	9,994.50	-202.21	401.73	-178.61	2.776	2.578	-10.056	
10,107.00	6.46	125.17	10,083.86	-208.23	410.54	-184.11	0.805	-0.778	1.756	
10,196.00	5.41	122.97	10,172.39	-213.40	418.15	-188.83	1.207	-1.180	-2.472	
10,286.00	5.49	121.22	10,261.98	-217.94	425.39	-192.94	0.205	0.089	-1.944	
10,375.00	5.01	110.14	10,350.61	-221.49	432.68	-196.06	1.258	-0.539	-12.449	
10,465.00	4.44	109.62	10,440.30	-224.01	439.65	-198.17	0.635	-0.633	-0.578	
10,555.00	3.52	109.53	10,530.08	-226.10	445.54	-199.92	1.022	-1.022	-0.100	
10,644.00	3.21	103.81	10,618.93	-227.61	450.53	-201.14	0.513	-0.348	-6.427	
10,703.00	2.64	101.97	10,677.85	-228.29	453.46	-201.64	0.979	-0.966	-3.119	
10,796.00	4.48	44.14	10,770.70	-226.12	458.09	-199.22	4.085	1.978	-62.183	
10,886.00	13.67	24.45	10,859.49	-213.89	464.96	-186.61	10.633	10.211	-21.878	
10,975.00	24.22	18.03	10,943.56	-186.88	474.99	-159.06	12.066	11.854	-7.213	
11,065.00	34.15	14.52	11,022.04	-144.76	487.07	-116.31	11.192	11.033	-3.900	
11,154.00	44.88	12.06	11,090.60	-89.71	499.93	-60.61	12.182	12.056	-2.764	
11,244.00	54.24	5.64	11,148.95	-22.13	510.18	7.46	11.722	10.400	-7.133	
11,333.00	59.34	4.67	11,197.68	52.01	516.85	81.86	5.802	5.730	-1.090	
11,423.00	69.23	359.14	11,236.71	132.92	519.38	162.77	12.299	10.989	-6.144	
11,454.00	73.80	358.26	11,246.54	162.30	518.71	192.07	14.986	14.742	-2.839	
11,544.00	76.84	358.61	11,269.34	249.32	516.33	278.80	3.399	3.378	0.389	
11,587.19	77.45	358.87	11,278.95	291.42	515.41	320.78	1.524	1.411	0.590	
Anderson #552H FTP										
11,634.00	78.11	359.14	11,288.86	337.16	514.61	366.40	1.524	1.411	0.587	
11,724.00	88.48	0.02	11,299.35	426.42	513.96	455.47	11.563	11.522	0.978	
11,813.00	89.89	1.60	11,300.62	515.40	515.22	544.37	2.379	1.584	1.775	
11,903.00	87.34	2.21	11,302.79	605.31	518.21	634.31	2.913	-2.833	0.678	
11,993.00	86.37	1.33	11,307.73	695.13	520.99	724.14	1.454	-1.078	-0.978	
12,082.00	87.47	359.75	11,312.51	783.99	521.83	812.90	2.161	1.236	-1.775	
12,172.00	87.69	359.66	11,316.32	873.91	521.36	902.64	0.264	0.244	-0.100	
12,261.00	89.05	358.87	11,318.85	962.87	520.22	991.38	1.767	1.528	-0.888	
12,351.00	89.10	358.08	11,320.30	1,052.82	517.83	1,081.04	0.879	0.056	-0.878	
12,440.00	90.95	357.38	11,320.26	1,141.75	514.30	1,169.62	2.222	2.079	-0.787	



Aim Directional Services, LLC
Survey Report



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Site:	Anderson Fed Com 552H	MD Reference:	Well @ 3722.50usft (Nabors X50)
Well:	Anderson #552H	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)	
12,530.00	90.99	357.29	11,318.74	1,231.64	510.12	1,259.11	0.109	0.044	-0.100	
12,619.00	91.03	357.29	11,317.17	1,320.52	505.91	1,347.61	0.045	0.045	0.000	
12,709.00	91.38	356.85	11,315.28	1,410.39	501.31	1,437.05	0.625	0.389	-0.489	
12,798.00	92.26	355.88	11,312.45	1,499.16	495.67	1,525.35	1.471	0.989	-1.090	
12,888.00	91.74	357.99	11,309.31	1,588.97	490.86	1,614.73	2.413	-0.578	2.344	
12,977.00	92.00	358.52	11,306.40	1,677.88	488.15	1,703.34	0.663	0.292	0.596	
13,066.00	92.97	357.73	11,302.54	1,766.75	485.24	1,791.89	1.405	1.090	-0.888	
13,155.00	92.31	358.35	11,298.45	1,855.60	482.20	1,880.41	1.017	-0.742	0.697	
13,245.00	91.38	1.25	11,295.55	1,945.54	481.89	1,970.19	3.382	-1.033	3.222	
13,334.00	88.00	1.25	11,296.03	2,034.51	483.83	2,059.11	3.798	-3.798	0.000	
13,423.00	88.84	0.81	11,298.48	2,123.46	485.43	2,148.01	1.065	0.944	-0.494	
13,512.00	90.07	0.19	11,299.33	2,212.45	486.21	2,236.89	1.548	1.382	-0.697	
13,546.71	90.58	359.68	11,299.13	2,247.16	486.17	2,271.54	2.089	1.472	-1.483	
Anderson #552H WP1										
13,601.00	91.38	358.87	11,298.20	2,301.44	485.48	2,325.69	2.089	1.472	-1.483	
13,690.00	93.01	358.43	11,294.79	2,390.34	483.38	2,414.33	1.897	1.831	-0.494	
13,780.00	94.07	358.70	11,289.24	2,480.14	481.13	2,503.84	1.215	1.178	0.300	
13,870.00	94.64	357.73	11,282.40	2,569.84	478.34	2,593.23	1.247	0.633	-1.078	
13,959.00	93.05	359.40	11,276.43	2,658.60	476.12	2,681.71	2.588	-1.787	1.876	
14,049.00	91.52	0.72	11,272.85	2,748.53	476.21	2,771.49	2.244	-1.700	1.467	
14,139.00	90.46	2.56	11,271.29	2,838.47	478.79	2,861.44	2.359	-1.178	2.044	
14,228.00	87.69	2.39	11,272.73	2,927.37	482.63	2,950.41	3.118	-3.112	-0.191	
14,318.00	88.31	2.30	11,275.87	3,017.24	486.31	3,040.34	0.696	0.689	-0.100	
14,407.00	87.34	1.42	11,279.25	3,106.12	489.20	3,129.24	1.471	-1.090	-0.989	
14,497.00	86.59	0.98	11,284.01	3,195.98	491.08	3,219.05	0.966	-0.833	-0.489	
14,586.00	88.62	359.31	11,287.73	3,284.89	491.30	3,307.83	2.952	2.281	-1.876	
14,676.00	89.71	358.96	11,289.04	3,374.87	489.94	3,397.58	1.272	1.211	-0.389	
14,762.91	91.95	358.01	11,287.79	3,461.73	487.65	3,484.16	2.794	2.573	-1.090	
Anderson #552H WP2										
14,765.00	92.00	357.99	11,287.71	3,463.82	487.57	3,486.25	2.794	2.573	-1.091	
14,854.00	91.65	359.40	11,284.88	3,552.75	485.55	3,574.91	1.632	-0.393	1.584	
14,944.00	88.00	0.98	11,285.15	3,642.73	485.85	3,664.76	4.419	-4.056	1.756	
15,033.00	87.96	1.07	11,288.29	3,731.66	487.44	3,753.63	0.111	-0.045	0.101	
15,122.00	87.16	0.28	11,292.08	3,820.57	488.49	3,842.45	1.263	-0.899	-0.888	
15,212.00	86.59	359.75	11,296.99	3,910.44	488.51	3,932.17	0.864	-0.633	-0.589	
15,301.00	87.91	359.14	11,301.26	3,999.33	487.65	4,020.86	1.634	1.483	-0.685	
15,390.00	86.46	357.03	11,305.63	4,088.17	484.68	4,109.37	2.874	-1.629	-2.371	
15,479.00	88.97	357.12	11,309.18	4,176.97	480.14	4,197.77	2.822	2.820	0.101	
15,568.00	88.84	356.32	11,310.88	4,265.81	475.05	4,286.16	0.911	-0.146	-0.899	
15,657.00	88.48	356.41	11,312.96	4,354.61	469.41	4,374.48	0.417	-0.404	0.101	
15,747.00	89.49	357.82	11,314.55	4,444.48	464.88	4,463.94	1.927	1.122	1.567	
15,836.00	90.99	359.22	11,314.18	4,533.44	462.58	4,552.62	2.305	1.685	1.573	
15,925.00	91.78	359.84	11,312.03	4,622.41	461.85	4,641.40	1.128	0.888	0.697	



Aim Directional Services, LLC

Survey Report



Company:	Advance Energy Partners, LLC	Local Co-ordinate Reference:	Well Anderson #552H
Project:	Lea County, New Mexico	TVD Reference:	Well @ 3722.50usft (Nabors X50)
Site:	Anderson Fed Com 552H	MD Reference:	Well @ 3722.50usft (Nabors X50)
Well:	Anderson #552H	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)	
16,015.00	92.18	1.69	11,308.92	4,712.34	463.05	4,731.25	2.102	0.444	2.056	
16,104.00	91.60	3.00	11,305.98	4,801.22	466.69	4,820.19	1.609	-0.652	1.472	
16,194.00	91.38	2.39	11,303.64	4,891.09	470.92	4,910.15	0.720	-0.244	-0.678	
16,283.00	86.99	3.88	11,304.91	4,979.92	475.79	4,999.12	5.209	-4.933	1.674	
16,373.00	87.96	4.15	11,308.87	5,069.61	482.08	5,089.02	1.119	1.078	0.300	
16,463.00	88.04	2.12	11,312.02	5,159.42	487.00	5,178.96	2.256	0.089	-2.256	
16,552.00	89.45	1.51	11,313.96	5,248.35	489.82	5,267.91	1.726	1.584	-0.685	
16,642.00	86.20	1.42	11,317.38	5,338.24	492.12	5,357.78	3.612	-3.611	-0.100	
16,732.00	86.55	1.69	11,323.07	5,428.03	494.56	5,447.56	0.491	0.389	0.300	
16,821.00	86.33	0.98	11,328.60	5,516.83	496.63	5,536.34	0.834	-0.247	-0.798	
16,911.00	86.33	359.40	11,334.36	5,606.65	496.92	5,626.01	1.752	0.000	-1.756	
17,000.00	85.45	358.26	11,340.74	5,695.40	495.11	5,714.51	1.616	-0.989	-1.281	
17,090.00	86.81	357.82	11,346.81	5,785.14	492.04	5,803.92	1.588	1.511	-0.489	
17,179.00	88.18	358.35	11,350.70	5,874.00	489.07	5,892.46	1.650	1.539	0.596	
17,269.00	88.88	357.64	11,353.01	5,963.91	485.92	5,982.04	1.108	0.778	-0.789	
17,358.00	89.41	356.41	11,354.34	6,052.78	481.30	6,070.50	1.505	0.596	-1.382	
17,448.00	90.29	356.59	11,354.57	6,142.61	475.81	6,159.86	0.998	0.978	0.200	
17,537.00	90.55	356.68	11,353.92	6,231.46	470.58	6,248.25	0.309	0.292	0.101	
17,626.00	89.85	357.20	11,353.61	6,320.33	465.83	6,336.70	0.980	-0.787	0.584	
17,716.00	89.80	0.37	11,353.89	6,410.30	463.93	6,426.40	3.523	-0.056	3.522	
17,805.00	89.93	0.54	11,354.09	6,499.29	464.63	6,515.29	0.240	0.146	0.191	
17,851.64	89.75	359.95	11,354.23	6,545.93	464.83	6,561.86	1.325	-0.389	-1.267	
Anderson #552H WP3										
17,895.00	89.58	359.40	11,354.48	6,589.29	464.59	6,605.14	1.325	-0.389	-1.267	
17,984.00	90.33	357.64	11,354.55	6,678.26	462.29	6,693.82	2.150	0.843	-1.978	
18,073.00	89.01	358.08	11,355.06	6,767.19	458.96	6,782.41	1.563	-1.483	0.494	
18,163.00	91.21	1.07	11,354.89	6,857.17	458.30	6,872.20	4.124	2.444	3.322	
18,252.00	88.97	2.74	11,354.75	6,946.11	461.25	6,961.17	3.139	-2.517	1.876	
18,342.00	86.64	2.30	11,358.20	7,035.95	465.21	7,051.09	2.635	-2.589	-0.489	
18,432.00	87.43	1.16	11,362.85	7,125.79	467.92	7,140.93	1.540	0.878	-1.267	
18,521.00	85.98	0.19	11,367.97	7,214.63	468.97	7,229.69	1.959	-1.629	-1.090	
18,611.00	85.45	0.63	11,374.69	7,304.38	469.61	7,319.32	0.765	-0.589	0.489	
18,701.00	86.90	359.93	11,380.70	7,394.18	470.05	7,408.99	1.788	1.611	-0.778	
18,790.00	89.01	359.66	11,383.87	7,483.11	469.73	7,497.76	2.390	2.371	-0.303	
18,880.00	89.67	358.61	11,384.91	7,573.10	468.37	7,587.51	1.378	0.733	-1.167	
18,969.00	90.15	357.20	11,385.05	7,662.03	465.12	7,676.11	1.674	0.539	-1.584	
19,059.00	90.77	356.59	11,384.33	7,751.90	460.24	7,765.54	0.966	0.689	-0.678	
19,149.00	90.68	355.97	11,383.19	7,841.70	454.41	7,854.85	0.696	-0.100	-0.689	
19,238.00	92.04	355.71	11,381.07	7,930.44	447.95	7,943.07	1.556	1.528	-0.292	
19,267.00	91.91	355.45	11,380.07	7,959.33	445.72	7,971.79	1.002	-0.448	-0.897	
Last Aim Svy										
19,316.40	91.91	355.45	11,378.43	8,008.55	441.80	8,020.70	0.000	0.000	0.000	
Anderson #552H PBHL										
19,330.00	91.91	355.45	11,377.98	8,022.10	440.72	8,034.16	0.000	0.000	0.000	



Aim Directional Services, LLC
Survey Report



Company:	Advance Energy Partners, LLC	Local Co-ordinate Reference:	Well Anderson #552H
Project:	Lea County, New Mexico	TVD Reference:	Well @ 3722.50usft (Nabors X50)
Site:	Anderson Fed Com 552H	MD Reference:	Well @ 3722.50usft (Nabors X50)
Well:	Anderson #552H	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)
Proj to BHL									

Survey Annotations					
Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates		Comment	
		+N/-S (usft)	+E/-W (usft)		
230.00	230.00	-0.35	-0.61	First Aim Svy	
19,267.00	11,380.07	7,959.33	445.72	Last Aim Svy	
19,330.00	11,377.98	8,022.10	440.72	Proj to BHL	



BHA Reports

Anderson Fed Com 552H (WT-21-181)

2021-11-22 to 2022-01-16

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



Job Number WT-21-181	Operator Advance Energy Partners	Rig Name Nabors X50
Start Date 2021-11-22	Well Name Anderson Fed Com 552H	Legal Well Name AFE Anderson Fed Com 552H
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	2021-11-22 08:15	Downhole Hours	15.42
Lobe/Stage	7/8, 5.9	Depth In (ft)	150.00	Drilling/Circulating Hours	10.00
Bend Angle	1.75	Date Out	2021-11-22 23:40	Drilling Hours	9.25
Speed (rev/gal)	0.17	Depth Out (ft)	1277.00	Circulating Hours	0.75
Wear Pad OD (in)	8.313	Distance Slid (ft)	0.00	Sliding Hours	0.00
Incident	No	Distance Rotated (ft)	1127.00	Rotating Hours	9.25
Motor Post Run/Notes		% Distance Sliding	0.00%	% Hours Sliding	0.00%
Average Total ROP (ft/h)	121.84	% Distance Rotating	100.00%	% Hours Rotating	100.00%
Average Slide ROP (ft/h)	0.00	BHA Objective			
Average Rotating ROP (ft/h)	121.84	DRILL OUT SURFACE			

Notes: N/A

Bit Details	
OD (in)	17.500
Vendor	ULTERRA

Nozzles	9x12's	POOH Reason/Notes	
Total Flow Area (in ²)	0.994	Total Depth/Casing Point:	Good run.

Bit Distances		Incident Notes	
Bit To Survey:	70.00 ft	Directional:	
Bit Post Run/Notes		MWD:	
Dull Grading	1-1	Comments	
Notes: Bit was in gauge.		Directional:	FLOW RANGE 400-900 GPM, REV PER GALLON .166, MAX DIFF 1330, MAX TORQUE 22020 BIT RUNS: 2

MWD		Parameters			
Max Downhole Temp (°F)	N/A	Flow Rate (gpm)	550.00 - 895.00	Motor RPM	40.00 - 70.00
Mud Properties		On Bottom Pressure (psi)	1000.00 - 2450.00	Surface RPM	50.00 - 70.00
Type	Water Based	Off Bottom Pressure (psi)	850.00 - 1850.00	Rotating WOB (klbs)	20.00 - 25.00
WT	9.30	Stall Pressure (psi)	0.00	Sliding WOB (klbs)	5.00 - 20.00
VIS	33.00	Stalls	0	Temp (°F)	110.30 - 113.40
PV	3.00	NPT	0.0		
YP	6.00				

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	57215	6 5/8" Reg Pin			17.500		1.50	1.50
Mud Motor Description: 8" 7/8 5.9 Stg. 1.75° FBH w/17" NBS, Size (in): 8.00, Bend Angle (°): 1.75, Rotor Lobe: 7, Stator Lobe: 8, Stator Stage: 5.9	Aim	800-40-002	6 5/8" Reg Box	6 5/8" Reg Box		8.000		40.55	42.05
Stabilizer Description: 17" STAB	JA	17635	6 5/8" Reg Box	6 5/8" Reg Pin	2.813	8.250		7.17	49.22
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	52.20
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	82.72
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	113.20
Crossover Sub Description: X-O SUB, Material: Steel	JA	JA8610	CET54 Box	6 5/8" Reg Pin	2.500	6.625		3.23	116.43





Job Number WT-21-181	Operator Advance Energy Partners	Rig Name Nabors X50
Start Date 2021-11-22	Well Name Anderson Fed Com 552H	Legal Well Name AFE Anderson Fed Com 552H
Play Delaware Basin	State/Province and Country New Mexico, US	County Lea
		Company Man

BHA #2 - 12.25" INTERMEDIATE (Directional)

Motor Details		Date/Depth/Distances		Hours	
Size (in)	8.75	Date In	2021-12-03 13:00	Downhole Hours	19.50
Lobe/Stage	6/7, 6.6	Depth In (ft)	1277.00	Drilling/Circulating Hours	13.92
Bend Angle	1.75	Date Out	2021-12-04 08:30	Drilling Hours	12.92
Speed (rev/gal)	0.13	Depth Out (ft)	4803.00	Circulating Hours	1.00
Wear Pad OD (in)	9.250	Distance Slid (ft)	81.00	Sliding Hours	0.50
Incident	No	Distance Rotated (ft)	3445.00	Rotating Hours	12.42
Motor Post Run/Notes		% Distance Sliding	2.30%	% Hours Sliding	3.87%
Average Total ROP (ft/h)	272.98	% Distance Rotating	97.70%	% Hours Rotating	96.13%
Average Slide ROP (ft/h)	162.00	BHA Objective			
Average Rotating ROP (ft/h)	277.45	DRILL 12.25 TO CASING POINT			

Notes: Good Motor Run

Bit Details	
OD (in)	12.250
Vendor	Reed
Nozzles	6x16's
Total Flow Area (in ²)	1.178

Bit Distances		Incident Notes	
Bit To Survey:	68.00 ft	Directional:	
		MWD:	
Bit Post Run/Notes		Comments	
Dull Grading	1-2	Directional: Flow Range 600-1300 GPM, REV PER GPM .13, Max Diff 1650, Max Torque 31480, Bit Runs: 2, Bit to Bend 5.62'	
Notes:	Broken cutters on guage. In Guage		

Mud Properties		Parameters			
Type	Water Based	Flow Rate (gpm)	705.00 - 895.00	Motor RPM	30.00 - 70.00
WT	10.50	On Bottom Pressure (psi)	1600.00 - 2400.00	Surface RPM	40.00 - 70.00
VIS	29.00	Off Bottom Pressure (psi)	1200.00 - 2000.00	Rotating WOB (klbs)	40.00 - 48.00
PV	2.00	Stall Pressure (psi)	0.00	Sliding WOB (klbs)	20.00 - 20.00
YP	3.00	Stalls	0	Temp (°F)	125.00 - 135.00
		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: TKC66-H3, Type: PDC (Polycrystalline Diamond Compacts), Gauge Length (in): 6.00, Size (in): 12.25	Reed	A281282	6 5/8" Reg Pin			12.250		1.50	1.50
Mud Motor Description: 8 3/4" 6/7L, 6.6 Stg. 1.75° FBH w/12" NBS, Size (in): 8.75, Bend Angle (°): 1.75, Rotor Lobe: 6, Stator Lobe: 7, Stator Stage: 6.6	Aim	CDM875-001	6 5/8" Reg Box	6 5/8" Reg Box		8.750		38.91	40.41
Stabilizer Description: 12" STAB	JA	12502	6 5/8" Reg Box	6 5/8" Reg Pin	2.813	8.250		7.11	47.52
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	50.50
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	81.02
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	111.50
Crossover Sub Description: X-O SUB, Material: Steel	JA	JA8610	CET54 Box	6 5/8" Reg Pin	2.500	6.625		3.23	114.73
HWDP Description: 8 Stands 5.5" HWDP, Type: Slick	Platinum		CET54 Box	CET54 Pin	4.000	5.500		735.63	850.36
Crossover Sub Description: CET54 (P) x EverDrlg 54 (B), Material: Steel	BLACK DIAMOND	BD18238	EverDrlg54 Box	CET54 Pin	4.000	6.938		3.42	853.78
HWDP Description: 3 Stands 5.5" HWDP, Type: Slick	BLACK DIAMOND		EverDrlg54 Box	EverDrlg54 Pin	3.625	5.500		281.18	1134.96





Job Number WT-21-181	Operator Advance Energy Partners	Rig Name Nabors X50
Start Date 2021-11-22	Well Name Anderson Fed Com 552H	Legal Well Name AFE Anderson Fed Com 552H
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	2022-01-03 23:30	Downhole Hours	20.75
Lobe/Stage	7/8, 8.5	Depth In (ft)	4803.00	Drilling/Circulating Hours	12.75
Bend Angle	1.75	Date Out	2022-01-04 20:15	Drilling Hours	12.33
Speed (rev/gal)	0.26	Depth Out (ft)	8904.00	Circulating Hours	0.42
Wear Pad OD (in)	6.938	Distance Slid (ft)	55.00	Sliding Hours	0.92
Incident	Yes	Distance Rotated (ft)	4046.00	Rotating Hours	11.42
Motor Post Run/Notes		% Distance Sliding	1.34%	% Hours Sliding	7.43%
Average Total ROP (ft/h)	332.51	% Distance Rotating	98.66%	% Hours Rotating	92.57%
Average Slide ROP (ft/h)	60.00	BHA Objective			
Average Rotating ROP (ft/h)	354.39	Drill 8.75 Intermediate			

Notes: Experienced, Numerous Stalls (Stall Diff 1900). No Rubber witnessed across the Shakers. At Surface Motor had lateral play in bit box.

Bit Details

OD (in)	8.750
Vendor	Reed
Nozzles	5-15's, 1-16
Total Flow Area (in²)	1.059

POOH Reason/Notes

Downhole Tool Incident: Mud Motor Stalled 4 times as soon as we would tag bottom. POOH for new motor.

Bit Distances

Bit To Survey: 66.00 ft, **Gamma:** 51.00 ft

Incident Notes

Directional: Drilling ahead with 1000 diff. and motor just stalled. Mud Motor Stalled 4 times as soon as we would tag bottom with rotary on and with no rotary.

MWD:

Bit Post Run/Notes

Dull Grading 2-2
Notes: Broken cutters on face and gauge. In Gauge

Comments

Directional: Flow Range 500-750 GPM, REV PER GPM .26, Max Diff 1910, Max Torque 18710, Bit Runs: 1, Bit to Bend 4.30'

MWD

Max Downhole Temp (°F) N/A

Mud Properties

Type	Water Based
WT	9.25
VIS	28.00
PV	1.00
YP	3.00

Parameters

Flow Rate (gpm)	700.00 - 895.00	Motor RPM	30.00 - 50.00
On Bottom Pressure (psi)	2400.00 - 3000.00	Surface RPM	50.00 - 70.00
Off Bottom Pressure (psi)	1800.00 - 2300.00	Rotating WOB (klbs)	45.00 - 48.00
Stall Pressure (psi)	1899.99	Sliding WOB (klbs)	30.00 - 30.00
Stalls	4	Temp (°F)	120.00 - 128.00
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-AZZ</i> , Type: <i>PDC (Polycrystalline Diamond Compacts)</i> , Gauge Length (in): 4.00, Size (in): 8.75	Reed	A283984	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): 7.00, Bend Angle (°): 1.75, Rotor Lobe: 7, Stator Lobe: 8, Stator Stage: 8.5	Drilformance	DFM-700-004	4 1/2" IF Box	4 1/2" IF Box		7.000		35.87	36.87
Stabilizer Description: <i>8.5" STAB</i>	JA	85586	4 1/2" IF Box	4 1/2" IF Pin	2.250	6.500		5.19	42.06
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		3.05	45.11
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	75.76
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	105.20
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	107.58
HWDP Description: <i>8 Stands 5.5" HWDP</i> , Type: <i>Slick</i>	Platinum		CET50 Box	CET54 Pin	3.625	5.500		735.63	843.21
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	846.63
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	1127.81





Job Number WT-21-181	Operator Advance Energy Partners	Rig Name Nabors X50
Start Date 2021-11-22	Well Name Anderson Fed Com 552H	Legal Well Name AFE Anderson Fed Com 552H
Play Delaware Basin	State/Province and Country New Mexico, US	County Lea
		Company Man

BHA #4 - INTERMEDIATE (Directional)

Motor Details		Date/Depth/Distances		Hours	
Size (in)	7.00	Date In	2022-01-04 20:15	Downhole Hours	28.25
Lobe/Stage	6/7, 6.5	Depth In (ft)	8904.00	Drilling/Circulating Hours	13.42
Bend Angle	1.75	Date Out	2022-01-06 00:30	Drilling Hours	13.42
Speed (rev/gal)	0.23	Depth Out (ft)	10766.00	Circulating Hours	0.00
Wear Pad OD (in)	7.580	Distance Slid (ft)	182.00	Sliding Hours	4.75
Incident	No	Distance Rotated (ft)	1684.00	Rotating Hours	8.67
Motor Post Run/Notes		% Distance Sliding	9.75%	% Hours Sliding	35.40%
Average Total ROP (ft/h)	139.08	% Distance Rotating	90.25%	% Hours Rotating	64.60%
Average Slide ROP (ft/h)	38.32	BHA Objective			
Average Rotating ROP (ft/h)	194.31	8.75 INTERMEDIATE			

Notes: N/A

Bit Details	
OD (in)	8.750
Vendor	Reed
Nozzles	6-15's
Total Flow Area (in ²)	1.035

Bit Distances		Incident Notes	
Bit To Survey:	63.00 ft, Gamma: 48.00 ft	Directional:	
		MWD:	
Bit Post Run/Notes		Comments	
Dull Grading	1-2	Directional: BUTCH'S 7" 6/7 6.5 W/ 8.5 NBS Flow Range 400-750 GPM, REV .23, Max Diff 1530, Max Torque 26280, Bit Runs: 0, Bit to Bend 4.80'	
Notes:	In Gauge with worn cutters on shoulder.		

Mud Properties		Parameters	
Type	Water Based	Flow Rate (gpm)	700.00 - 750.00
WT	9.20	On Bottom Pressure (psi)	2500.00 - 3000.00
VIS	28.00	Off Bottom Pressure (psi)	2300.00 - 2300.00
PV	1.00	Stall Pressure (psi)	0.00
YP	3.00	Stalls	0
		NPT	0.0
Max Downhole Temp (°F)	N/A	Motor RPM	30.00 - 50.00
		Surface RPM	50.00 - 50.00
		Rotating WOB (klbs)	45.00 - 45.00
		Sliding WOB (klbs)	20.00 - 25.00
		Temp (°F)	125.00 - 135.00

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: TKC66-AZZ, Type: PDC (Polycrystalline Diamond Compacts), Gauge Length (in): 4.00, Size (in): 8.75	Reed	A284029	4 1/2" Reg Pin			8.750		1.00	1.00
Mud Motor Description: 7" 6/7 6.5 Stg. 1.75° FBH w/8.5" NBS, Size (in): 7.00, Bend Angle (°): 1.75, Rotor Lobe: 6, Stator Lobe: 7, Stator Stage: 6.5	Butch's	BDT-700ML-006	4 1/2" IF Box	4 1/2" Reg Box		7.000		32.74	33.74
Stabilizer Description: 8.5" STAB	JA	85586	4 1/2" IF Box	4 1/2" IF Pin	2.250	6.500		5.19	38.93
UBHO Sub Description: NM DAO SUB, Material: Non-Magnetic	AIM	AIM675-364	4 1/2" IF Box	4 1/2" IF Pin	3.250	6.750		3.05	41.98
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	72.63
Drill Collar Description: NMDC, Material: Non-Magnetic, Type: Slick Drill	GATOR	67-30-193	4 1/2" IF Box	4 1/2" IF Pin	3.250	6.750		29.44	102.07
Crossover Sub Description: X-O SUB, Material: Steel	Platinum	PPR5372	CET54 Box	4 1/2" IF Pin	2.750	6.250		2.38	104.45
HWDP Description: 8 Stands 5.5" HWDP, Type: Slick	Platinum		CET50 Box	CET54 Pin	3.625	5.500		735.63	840.08
Crossover Sub Description: CET54 (P) x EverDrlg 54 (B), Material: Steel	BLACK DIAMOND	BD18238	EverDrlg54 Box	CET54 Pin	4.000	6.938		3.42	843.50
HWDP Description: 3 Stands 5.5" HWDP, Type: Slick	BLACK DIAMOND		EverDrlg54 Box	EverDrlg54 Pin	3.625	5.500		281.18	1124.68





Job Number WT-21-181	Operator Advance Energy Partners	Rig Name Nabors X50
Start Date 2021-11-22	Well Name Anderson Fed Com 552H	Legal Well Name AFE Anderson Fed Com 552H
Play Delaware Basin	State/Province and Country New Mexico, US	County Lea
Company Man		

BHA #5 - 8.75 Curve Assy (Directional)

Motor Details		Date/Depth/Distances		Hours	
Size (in)	7.00	Date In	2022-01-06 00:30	Downhole Hours	28.50
Lobe/Stage	7/8, 6.1	Depth In (ft)	10766.00	Drilling/Circulating Hours	15.75
Bend Angle	2.25	Date Out	2022-01-07 05:00	Drilling Hours	14.08
Speed (rev/gal)	0.25	Depth Out (ft)	11516.00	Circulating Hours	1.67
Wear Pad OD (in)	7.250	Distance Slid (ft)	686.00	Sliding Hours	12.33
Incident	No	Distance Rotated (ft)	64.00	Rotating Hours	1.75
Motor Post Run/Notes		% Distance Sliding	91.47%	% Hours Sliding	87.57%
Average Total ROP (ft/h)	53.25	% Distance Rotating	8.53%	% Hours Rotating	12.43%
Average Slide ROP (ft/h)	55.62	BHA Objective			
Average Rotating ROP (ft/h)	36.57	Drill 8.75" Curve Section			

Notes: N/A	
Bit Details	
OD (in)	8.750
Vendor	ULTERRA

Nozzles	6x15's	POOH Reason/Notes	
Total Flow Area (in²)	1.035	Curve Landed: POOH for Lateral Assy.	

Bit Distances		Incident Notes	
Bit To Survey: 63.00 ft, Gamma: 39.00 ft, Resistivity: 50.00 ft		Directional:	
		MWD:	

Bit Post Run/Notes		Comments	
Dull Grading	1-1	Directional: Flow Range = 300-700 gpm's, Rev Per Gallon = .25, Max Diff = 1800, Max Torque = 17100, Bit Runs = 0, Bit to Bend = 4.85"	
Notes: N/A			

MWD	
Max Downhole Temp (°F)	N/A

Mud Properties		Parameters			
Type	Water Based	Flow Rate (gpm)	700.00 - 750.00	Motor RPM	0.00 - 30.00
WT	9.20	On Bottom Pressure (psi)	2600.00 - 3000.00	Surface RPM	30.00 - 50.00
VIS	28.00	Off Bottom Pressure (psi)	2300.00 - 2300.00	Rotating WOB (klbs)	30.00 - 45.00
PV	1.00	Stall Pressure (psi)	0.00	Sliding WOB (klbs)	30.00 - 60.00
YP	3.00	Stalls	0	Temp (°F)	125.00 - 135.00
		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	57710	4 1/2" Reg Pin			8.750		1.00	1.00
Mud Motor Description: 7" 7/8 6.1 Stg. 2.25° FBH Slick, Size (in): 7.00, Bend Angle (°): 2.25, Rotor Lobe: 7, Stator Lobe: 8, Stator Stage: 6.1	Bico	BPB5700-0043	4 1/2" IF Box	4 1/2" Reg Box		7.000		30.13	31.13
Resistivity Description: RESISTIVITY MWD	Bench Tree	650-1009						31.43	62.56
Battery Description: BATTERY	Bench Tree	B6008X						17.27	79.83
Drill Collar Description: NMDC, Material: Non-Magnetic, Type: Slick Drill	GATOR	67-30-193	4 1/2" IF Box	4 1/2" IF Pin	3.250	6.750		29.44	109.27
Crossover Sub Description: X-O SUB, Material: Steel	BLACK DIAMOND	BD13750	EverDrig54 Box	4 1/2" IF Pin	3.125	6.610		3.55	112.82





Job Number WT-21-181	Operator Advance Energy Partners	Rig Name Nabors X50
Start Date 2021-11-22	Well Name Anderson Fed Com 552H	Legal Well Name AFE Anderson Fed Com 552H
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	2022-01-07 07:15	Downhole Hours	21.75
Lobe/Stage	7/8, 6.1	Depth In (ft)	11516.00	Drilling/Circulating Hours	5.00
Bend Angle	1.75	Date Out	2022-01-08 05:00	Drilling Hours	2.83
Speed (rev/gal)	0.25	Depth Out (ft)	11727.00	Circulating Hours	2.17
Wear Pad OD (in)	7.230	Distance Slid (ft)	100.00	Sliding Hours	1.58
Incident	No	Distance Rotated (ft)	111.00	Rotating Hours	1.25
Motor Post Run/Notes		% Distance Sliding	47.39%	% Hours Sliding	55.88%
Average Total ROP (ft/h)	74.47	% Distance Rotating	52.61%	% Hours Rotating	44.12%
Average Slide ROP (ft/h)	63.16	BHA Objective			
Average Rotating ROP (ft/h)	88.80	8.75" Lateral			
Notes: N/A					
Bit Details					
OD (in)	8.750	POOH Reason/Notes			
Vendor	REED	Other: Pressure up 700 psi. and held pressure.			
Nozzles	6x15's				
Total Flow Area (in²)	1.035				
Bit Distances					
Bit To Survey: 63.00 ft, Gamma: 39.00 ft, Resistivity: 50.00 ft		Incident Notes			
		Directional: POOH and found MWD lowerend packed off.			
		MWD:			
Bit Post Run/Notes					
Dull Grading		Comments			
2-2		Directional: Bico 7" SSS100 7/8 6.1 1.75 BTB 300-700 gpm's, Rev.25, Max Diff = 1800, Max Torque =17100, Bit Runs = 0, Bit to Bend = 4.08			
Notes: No Squat motor drained like normal.					
MWD					
Max Downhole Temp (°F)	N/A				
Mud Properties					
Type	Oil Based	Flow Rate (gpm)		Motor RPM	
WT	9.50	550.00 - 700.00		0.00 - 30.00	
VIS	63.00	On Bottom Pressure (psi)		Surface RPM	
PV	22.00	1800.00 - 4500.00		30.00 - 30.00	
YP	8.00	Off Bottom Pressure (psi)		Rotating WOB (klbs)	
		1500.00 - 3800.00		30.00 - 40.00	
		Stall Pressure (psi)		Sliding WOB (klbs)	
		0.00		20.00 - 55.00	
		Stalls		Temp (°F)	
		0		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: TKC76, Type: PDC (Polycrystalline Diamond Compacts), Gauge Length (in): 4.00, Size (in): 8.75	REED	A282345	4 1/2" Reg Pin			8.750		1.00	1.00
Mud Motor Description: Bico 7" SSS100 Fixed @ 1.75 True Slick, Size (in): 7.00, Bend Angle (°): 1.75, Rotor Lobe: 7, Stator Lobe: 8, Stator Stage: 6.1	Bico	BPB5700-0072	4 1/2" IF Box	4 1/2" Reg Box		7.000		30.22	31.22
Resistivity Description: RESISTIVITY MWD	Bench Tree	650-1009						31.43	62.65
Battery Description: BATTERY	Bench Tree	B6008X						17.27	79.92
Drill Collar Description: NMDC, Material: Non-Magnetic, Type: Slick Drill	GATOR	67-30-193	4 1/2" IF Box	4 1/2" IF Pin	3.250	6.750		29.44	109.36
Crossover Sub Description: X-O SUB, Material: Steel	BLACK DIAMOND	BD13750	EverDrlg54 Box	4 1/2" IF Pin	3.125	6.610		3.55	112.91
Drill Pipe Description: 22 STDS 5" DP, Type: Slick	Rig		EverDrlg54 Box	EverDrlg54 Pin	2.500	5.000		1969.32	2082.23
Crossover Sub Description: EverDRL54 Pin x 4 1/2 IF Box X-Over Sub, Material: Steel	BLACK DIAMOND	BD22522	4 1/2" IF Box	EverDrlg54 Pin	3.000	6.750		3.44	2085.67
Agitator Description: NOV AGITATOR w/1.85 Plate Size, Size (in): 6.75	NOV	AGHF0675-0018	4 1/2" IF Box	4 1/2" IF Pin		6.750		24.71	2110.38
Crossover Sub Description: 4 1/2 IF (P) X EverDrlg 54 (B), Material: Steel	BLACK DIAMOND	BD11961	EverDrlg54 Box	4 1/2" IF Pin	3.000	6.625		3.41	2113.79





Job Number WT-21-181	Operator Advance Energy Partners	Rig Name Nabors X50
Start Date 2021-11-22	Well Name Anderson Fed Com 552H	Legal Well Name AFE Anderson Fed Com 552H
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	2022-01-08 07:00	Downhole Hours	171.00	
Lobe/Stage	7/8, 6.1	Depth In (ft)	11727.00	Drilling/Circulating Hours	123.42	
Bend Angle	1.75	Date Out	2022-01-15 10:00	Drilling Hours	116.50	
Speed (rev/gal)	0.25	Depth Out (ft)	19330.00	Circulating Hours	6.92	
Wear Pad OD (in)	7.230	Distance Slid (ft)	1140.00	Sliding Hours	39.67	
Incident	No	Distance Rotated (ft)	6478.00	Rotating Hours	76.83	
Motor Post Run/Notes		% Distance Sliding	14.96%	% Hours Sliding	34.05%	
Average Total ROP (ft/h)	65.39	% Distance Rotating	85.04%	% Hours Rotating	65.95%	
Average Slide ROP (ft/h)	28.74	BHA Objective				
Average Rotating ROP (ft/h)	84.31	Drill 8.75" LATERAL Section				
Notes: N/A						
Bit Details						
OD (in)	8.750	POOH Reason/Notes				
Vendor	REED	Total Depth/Casing Point				
Nozzles	6x15's					
Total Flow Area (in²)	1.035					
Bit Distances						
Bit To Survey: 63.00 ft, Gamma: 39.00 ft, Resistivity: 50.00 ft		Incident Notes				
		Directional:				
		MWD:				
Bit Post Run/Notes						
Dull Grading		Comments				
1-3 Notes: Worn/ Damaged Cutters on shoulders w/ 3/8 slack in bit box.		Directional: Bico 7" SSS100 7/8 6.1 1.75 BTB 300-700 GPM's, Rev.25, Max Diff = 1800, Max Torque = 17100, Bit Runs = 0, Bit to Bend = 4.08				
MWD						
Max Downhole Temp (°F)	N/A					
Mud Properties						
Type	Oil Based	Flow Rate (gpm)		696.00 - 700.00	Motor RPM	150.00 - 175.00
WT	9.65	On Bottom Pressure (psi)	4200.00 - 4600.00	Surface RPM	30.00 - 50.00	
VIS	63.00	Off Bottom Pressure (psi)	3800.00 - 4000.00	Rotating WOB (klbs)	40.00 - 48.00	
PV	17.00	Stall Pressure (psi)	1800.06	Sliding WOB (klbs)	10.00 - 60.00	
YP	10.00	Stalls	0	Temp (°F)	-0.00 - 190.00	
		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	A283089	4 1/2" Reg Pin			8.750		1.00	1.00
Mud Motor Description: <i>Bico 7" SSS100 Fixed @ 1.75 True Slick</i> , Size (in): 7.00, Bend Angle (°): 1.75, Rotor Lobe: 7, Stator Lobe: 8, Stator Stage: 6.1	Bico	BPB5700-0072	4 1/2" IF Box	4 1/2" Reg Box		7.000		30.22	31.22
Resistivity Description: <i>RESISTIVITY MWD</i>	Bench Tree	650-1009						31.43	62.65
Battery Description: <i>BATTERY</i>	Bench Tree	B6008X						17.27	79.92
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	109.36
Crossover Sub Description: <i>X-O SUB</i> , Material: <i>Steel</i>	BLACK DIAMOND	BD13750	EverDrlg54 Box	4 1/2" IF Pin	3.125	6.610		3.55	112.91
Drill Pipe Description: <i>22 STDS 5" DP</i> , Type: <i>Slick</i>	Rig		EverDrlg54 Box	EverDrlg54 Pin	2.500	5.000		1969.32	2082.23
Crossover Sub Description: <i>EverDRL54 Pin x 4 1/2 IF Box X-Over Sub</i> , Material: <i>Steel</i>	BLACK DIAMOND	BD22522	4 1/2" IF Box	EverDrlg54 Pin	3.000	6.750		3.44	2085.67
Agitator Description: <i>NOV AGITATOR w/1.85 Plate Size</i> , Size (in): 6.75	NOV	AGHF0675-0018	4 1/2" IF Box	4 1/2" IF Pin		6.750		24.71	2110.38
Crossover Sub Description: <i>4 1/2 IF (P) X EverDrlg 54 (B)</i> , Material: <i>Steel</i>	BLACK DIAMOND	BD11961	EverDrlg54 Box	4 1/2" IF Pin	3.000	6.625		3.41	2113.79





Mud Motor Reports

Anderson Fed Com 552H (WT-21-181)

2021-11-22 to 2022-01-16

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



Job Number WT-21-181	Operator Advance Energy Partners	Rig Name Nabors X50
Start Date 2021-11-22	Well Name Anderson Fed Com 552H	Legal Well Name AFE Anderson Fed Com 552H
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	800-40-002	Date In	2021-11-22 08:15	Downhole Hours	15.42
Size (in)	8.0	Depth In (ft)	150.00	Drilling/Circulating Hours	10.00
Lobe/Stage	7/8, 5.90	Date Out	2021-11-22 23:40		
Bend Angle	1.75	Depth Out (ft)	1277.00	Circulating Hours	0.75
Speed (rev/gal)	0.17	Total Drilled (ft)	1127.00	Drilling Hours	9.25
Wear Pad OD (in)	8.313	Distance Slid (ft)	0.00	Sliding Hours	0.00
Manufacturer	Contender	Distance Rotated (ft)	1127.00	Rotating Hours	9.25
Motor Results		% Distance Sliding	0.00%	% Hours Rotating	100.00%
Motor Incident	No	% Distance Rotating	100.00%	% Hours Sliding	0.00%
Average Total ROP (ft/h)	121.84	BHA Parameters			
Average Slide ROP (ft/h)	0.00	Flow Rate (gpm)	550.00 - 895.00	Motor RPM	40.00 - 70.00
Average Rotating ROP (ft/h)	121.84	Stalls	0	Surface RPM	50.00 - 70.00
Bit Details		Stall Pressure (psi)	0.00	Rotating WOB (klbs)	20.00 - 25.00
OD (in)	17.500	On Bottom Pressure (psi)	1000.00 - 2450.00	Sliding WOB (klbs)	5.00 - 20.00
Vendor	ULTERRA	Off Bottom Pressure (psi)	850.00 - 1850.00	Temp (°F)	110.30 - 113.40
S/N	57215	NPT	0.0		
Nozzles	9x12's	BHA Objective			
Total Flow Area (in ²)	0.994	DRILL OUT SURFACE			
Bit Type	PDC (Polycrystalline Diamond Compacts)				
Bit Distances					
Survey: 70.00 ft					
Mud Properties					
Type	Water Based				
WT	9.30				
VIS	33.00				
PV	3.00				
YP	6.00				
POOH Reason/Notes					
Total Depth/Casing Point: Good run.					
Incident Notes					
Directional:					
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-21-181	Operator Advance Energy Partners	Rig Name Nabors X50
Start Date 2021-11-22	Well Name Anderson Fed Com 552H	Legal Well Name AFE Anderson Fed Com 552H
Play Delaware Basin	State/Province and Country New Mexico, US	County Lea
Company Man		

Mud Motor Report - BHA 2 (12.25" INTERMEDIATE)

Motor Details		Date/Depth/Distances		Hours	
S/N	CDM875-001	Date In	2021-12-03 13:00	Downhole Hours	19.50
Size (in)	8.75	Depth In (ft)	1277.00	Drilling/Circulating Hours	13.92
Lobe/Stage	6/7, 6.60	Date Out	2021-12-04 08:30		
Bend Angle	1.75	Depth Out (ft)	4803.00	Circulating Hours	1.00
Speed (rev/gal)	0.13	Total Drilled (ft)	3526.00	Drilling Hours	12.92
Wear Pad OD (in)	9.250	Distance Slid (ft)	81.00	Sliding Hours	0.50
Manufacturer	Contender	Distance Rotated (ft)	3445.00	Rotating Hours	12.42
Motor Results		% Distance Sliding	2.30%	% Hours Rotating	96.13%
Motor Incident	No	% Distance Rotating	97.70%	% Hours Sliding	3.87%

Motor Results		BHA Parameters	
Average Total ROP (ft/h)	272.98	Flow Rate (gpm)	705.00 - 895.00
Average Slide ROP (ft/h)	162.00	Motor RPM	30.00 - 70.00
Average Rotating ROP (ft/h)	277.45	Stalls	0
Bit Details		Stall Pressure (psi)	0.00
OD (in)	12.250	Rotating WOB (klbs)	40.00 - 48.00
Vendor	Reed	On Bottom Pressure (psi)	1600.00 - 2400.00
S/N	A281282	Off Bottom Pressure (psi)	1200.00 - 2000.00
Nozzles	6x16's	Temp (°F)	125.00 - 135.00
Total Flow Area (in²)	1.178	NPT	0.0

BHA Objective
DRILL 12.25 TO CASING POINT

Bit Type	PDC (Polycrystalline Diamond Compacts)
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Bit Distances
Survey: 68.00 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 600-1300 GPM, REV PER GPM .13, Max Diff 1650, Max Torque 31480, Bit Runs: 2, Bit to Bend 5.62'

MWD:



Job Number WT-21-181	Operator Advance Energy Partners	Rig Name Nabors X50
Start Date 2021-11-22	Well Name Anderson Fed Com 552H	Legal Well Name AFE Anderson Fed Com 552H
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	DFM-700-004	Date In	2022-01-03 23:30	Downhole Hours	20.75
Size (in)	7.0	Depth In (ft)	4803.00	Drilling/Circulating Hours	12.75
Lobe/Stage	7/8, 8.50	Date Out	2022-01-04 20:15		
Bend Angle	1.75	Depth Out (ft)	8904.00	Circulating Hours	0.42
Speed (rev/gal)	0.26	Total Drilled (ft)	4101.00	Drilling Hours	12.33
Wear Pad OD (in)	6.938	Distance Slid (ft)	55.00	Sliding Hours	0.92
Manufacturer	Drilformance	Distance Rotated (ft)	4046.00	Rotating Hours	11.42
Motor Results		% Distance Sliding	1.34%	% Hours Rotating	92.57%
Motor Incident	Yes	% Distance Rotating	98.66%	% Hours Sliding	7.43%
Average Total ROP (ft/h)	332.51	BHA Parameters			
Average Slide ROP (ft/h)	60.00	Flow Rate (gpm)	700.00 - 895.00	Motor RPM	30.00 - 50.00
Average Rotating ROP (ft/h)	354.39	Stalls	4	Surface RPM	50.00 - 70.00
Bit Details		Stall Pressure (psi)	1899.99	Rotating WOB (klbs)	45.00 - 48.00
OD (in)	8.750	On Bottom Pressure (psi)	2400.00 - 3000.00	Sliding WOB (klbs)	30.00 - 30.00
Vendor	Reed	Off Bottom Pressure (psi)	1800.00 - 2300.00	Temp (°F)	120.00 - 128.00
S/N	A283984	NPT	0.0		
Nozzles	5-15's, 1-16	BHA Objective			
Total Flow Area (in ²)	1.059	Drill 8.75 Intermediate			
Bit Type	PDC (Polycrystalline Diamond Compacts)				
Bit Distances					
Survey: 66.00 ft, Gamma: 51.00 ft					
Mud Properties					
Type	Water Based				
WT	9.25				
VIS	28.00				
PV	1.00				
YP	3.00				
POOH Reason/Notes					
Downhole Tool Incident: Mud Motor Stalled 4 times as soon as we would tag bottom. POOH for new motor.					
Incident Notes					
Directional: Drilling ahead with 1000 diff. and motor just stalled. Mud Motor Stalled 4 times as soon as we would tag bottom with rotary on and with no rotary.					
MWD:					
Comments					
Directional: Flow Range 500-750 GPM, REV PER GPM .26, Max Diff 1910, Max Torque 18710, Bit Runs: 1, Bit to Bend 4.30'					
MWD:					



Job Number WT-21-181	Operator Advance Energy Partners	Rig Name Nabors X50
Start Date 2021-11-22	Well Name Anderson Fed Com 552H	Legal Well Name AFE Anderson Fed Com 552H
Play Delaware Basin	State/Province and Country New Mexico, US	County Lea
Company Man		

Mud Motor Report - BHA 4 (INTERMEDIATE)

Motor Details		Date/Depth/Distances		Hours	
S/N	BDT-700ML-006	Date In	2022-01-04 20:15	Downhole Hours	28.25
Size (in)	7.0	Depth In (ft)	8904.00	Drilling/Circulating Hours	13.42
Lobe/Stage	6/7, 6.50	Date Out	2022-01-06 00:30		
Bend Angle	1.75	Depth Out (ft)	10766.00	Circulating Hours	0.00
Speed (rev/gal)	0.23	Total Drilled (ft)	1866.00	Drilling Hours	13.42
Wear Pad OD (in)	7.580	Distance Slid (ft)	182.00	Sliding Hours	4.75
Manufacturer	Butch's	Distance Rotated (ft)	1684.00	Rotating Hours	8.67
Motor Results		% Distance Sliding	9.75%	% Hours Rotating	64.60%
Motor Incident	No	% Distance Rotating	90.25%	% Hours Sliding	35.40%
Average Total ROP (ft/h)	139.08	BHA Parameters			
Average Slide ROP (ft/h)	38.32	Flow Rate (gpm)	700.00 - 750.00	Motor RPM	30.00 - 50.00
Average Rotating ROP (ft/h)	194.31	Stalls	0	Surface RPM	50.00 - 50.00
Bit Details		Stall Pressure (psi)	0.00	Rotating WOB (klbs)	45.00 - 45.00
OD (in)	8.750	On Bottom Pressure (psi)	2500.00 - 3000.00	Sliding WOB (klbs)	20.00 - 25.00
Vendor	Reed	Off Bottom Pressure (psi)	2300.00 - 2300.00	Temp (°F)	125.00 - 135.00
S/N	A284029	NPT	0.0		
Nozzles	6-15's	BHA Objective			
Total Flow Area (in ²)	1.035	8.75 INTERMEDIATE			
Bit Type	PDC (Polycrystalline Diamond Compacts)				
Bit Distances					
Survey: 63.00 ft, Gamma: 48.00 ft					
Mud Properties					
Type	Water Based				
WT	9.20				
VIS	28.00				
PV	1.00				
YP	3.00				
POOH Reason/Notes					
Change Bottom Hole Assembly: POOH to P/U Curve Assy.					
Incident Notes					
Directional:					
MWD:					
Comments					
Directional: BUTCH'S 7" 6/7 6.5 W/ 8.5 NBS Flow Range 400-750 GPM, REV .23, Max Diff 1530, Max Torque 26280, Bit Runs: 0, Bit to Bend 4.80'					
MWD:					



Job Number WT-21-181	Operator Advance Energy Partners	Rig Name Nabors X50
Start Date 2021-11-22	Well Name Anderson Fed Com 552H	Legal Well Name AFE Anderson Fed Com 552H
Play Delaware Basin	State/Province and Country New Mexico, US	County Lea
Company Man		

Mud Motor Report - BHA 5 (8.75 Curve Assy)

Motor Details		Date/Depth/Distances		Hours	
S/N	BPB5700-0043	Date In	2022-01-06 00:30	Downhole Hours	28.50
Size (in)	7.0	Depth In (ft)	10766.00	Drilling/Circulating Hours	15.75
Lobe/Stage	7/8, 6.10	Date Out	2022-01-07 05:00		
Bend Angle	2.25	Depth Out (ft)	11516.00	Circulating Hours	1.67
Speed (rev/gal)	0.25	Total Drilled (ft)	750.00	Drilling Hours	14.08
Wear Pad OD (in)	7.250	Distance Slid (ft)	686.00	Sliding Hours	12.33
Manufacturer	Bico	Distance Rotated (ft)	64.00	Rotating Hours	1.75
Motor Results		% Distance Sliding	91.47%	% Hours Rotating	12.43%
Motor Incident	No	% Distance Rotating	8.53%	% Hours Sliding	87.57%

Motor Results		BHA Parameters	
Average Total ROP (ft/h)	53.25	Flow Rate (gpm)	700.00 - 750.00
Average Slide ROP (ft/h)	55.62	Motor RPM	0.00 - 30.00
Average Rotating ROP (ft/h)	36.57	Stalls	0
Bit Details		Stall Pressure (psi)	0.00
OD (in)	8.750	Rotating WOB (klbs)	30.00 - 45.00
Vendor	ULTERRA	On Bottom Pressure (psi)	2600.00 - 3000.00
S/N	57710	Off Bottom Pressure (psi)	2300.00 - 2300.00
Nozzles	6x15's	Temp (°F)	125.00 - 135.00
Total Flow Area (in²)	1.035	NPT	0.0

BHA Objective
Drill 8.75" Curve Section

Bit Type: PDC (Polycrystalline Diamond Compacts)

Bit Distances
Survey: 63.00 ft, Gamma: 39.00 ft, Resistivity: 50.00 ft

Mud Properties	
Type	Water Based
WT	9.20
VIS	28.00
PV	1.00
YP	3.00

POOH Reason/Notes
Curve Landed: POOH for Lateral Assy.

Incident Notes
Directional:
MWD:

Comments
Directional: Flow Range = 300-700 gpm's, Rev Per Gallon = .25, Max Diff = 1800, Max Torque =17100, Bit Runs = 0, Bit to Bend = 4.85"
MWD:



Job Number WT-21-181	Operator Advance Energy Partners	Rig Name Nabors X50
Start Date 2021-11-22	Well Name Anderson Fed Com 552H	Legal Well Name AFE Anderson Fed Com 552H
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	BPB5700-0072	Date In	2022-01-07 07:15	Downhole Hours	21.75
Size (in)	7.0	Depth In (ft)	11516.00	Drilling/Circulating Hours	5.00
Lobe/Stage	7/8, 6.10	Date Out	2022-01-08 05:00		
Bend Angle	1.75	Depth Out (ft)	11727.00	Circulating Hours	2.17
Speed (rev/gal)	0.25	Total Drilled (ft)	211.00	Drilling Hours	2.83
Wear Pad OD (in)	7.230	Distance Slid (ft)	100.00	Sliding Hours	1.58
Manufacturer	Bico	Distance Rotated (ft)	111.00	Rotating Hours	1.25
Motor Results		% Distance Sliding	47.39%	% Hours Rotating	44.12%
Motor Incident	No	% Distance Rotating	52.61%	% Hours Sliding	55.88%
Average Total ROP (ft/h)	74.47	BHA Parameters			
Average Slide ROP (ft/h)	63.16	Flow Rate (gpm)	550.00 - 700.00	Motor RPM	0.00 - 30.00
Average Rotating ROP (ft/h)	88.80	Stalls	0	Surface RPM	30.00 - 30.00
Bit Details		Stall Pressure (psi)	0.00	Rotating WOB (klbs)	30.00 - 40.00
OD (in)	8.750	On Bottom Pressure (psi)	1800.00 - 4500.00	Sliding WOB (klbs)	20.00 - 55.00
Vendor	REED	Off Bottom Pressure (psi)	1500.00 - 3800.00	Temp (°F)	125.00 - 130.00
S/N	A282345	NPT	0.0		
Nozzles	6x15's	BHA Objective			
Total Flow Area (in ²)	1.035	8.75" Lateral			
Bit Type	PDC (Polycrystalline Diamond Compacts)				
Bit Distances					
Survey: 63.00 ft, Gamma: 39.00 ft, Resistivity: 50.00 ft					
Mud Properties					
Type	Oil Based				
WT	9.50				
VIS	63.00				
PV	22.00				
YP	8.00				
POOH Reason/Notes					
Other: Pressure up 700 psi. and held pressure.					
Incident Notes					
Directional: POOH and found MWD lowerend packed off.					
MWD:					
Comments					
Directional: Bico 7" SSS100 7/8 6.1 1.75 BTB 300-700 gpm's, Rev.25, Max Diff = 1800, Max Torque =17100, Bit Runs = 0, Bit to Bend = 4.08					
MWD:					



Job Number WT-21-181	Operator Advance Energy Partners	Rig Name Nabors X50
Start Date 2021-11-22	Well Name Anderson Fed Com 552H	Legal Well Name AFE Anderson Fed Com 552H
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	BPB5700-0072	Date In	2022-01-08 07:00	Downhole Hours	171.00
Size (in)	7.0	Depth In (ft)	11727.00	Drilling/Circulating Hours	123.42
Lobe/Stage	7/8, 6.10	Date Out	2022-01-15 10:00		
Bend Angle	1.75	Depth Out (ft)	19330.00	Circulating Hours	6.92
Speed (rev/gal)	0.25	Total Drilled (ft)	7618.00	Drilling Hours	116.50
Wear Pad OD (in)	7.230	Distance Slid (ft)	1140.00	Sliding Hours	39.67
Manufacturer	Bico	Distance Rotated (ft)	6478.00	Rotating Hours	76.83
Motor Results		% Distance Sliding	14.96%	% Hours Rotating	65.95%
Motor Incident	No	% Distance Rotating	85.04%	% Hours Sliding	34.05%
Average Total ROP (ft/h)	65.39	BHA Parameters			
Average Slide ROP (ft/h)	28.74	Flow Rate (gpm)	696.00 - 700.00	Motor RPM	150.00 - 175.00
Average Rotating ROP (ft/h)	84.31	Stalls	0	Surface RPM	30.00 - 50.00
Bit Details		Stall Pressure (psi)	1800.06	Rotating WOB (klbs)	40.00 - 48.00
OD (in)	8.750	On Bottom Pressure (psi)	4200.00 - 4600.00	Sliding WOB (klbs)	10.00 - 60.00
Vendor	REED	Off Bottom Pressure (psi)	3800.00 - 4000.00	Temp (°F)	-0.00 - 190.00
S/N	A283089	NPT	0.0		
Nozzles	6x15's	BHA Objective			
Total Flow Area (in ²)	1.035	Drill 8.75" LATERAL Section			
Bit Type	PDC (Polycrystalline Diamond Compacts)				
Bit Distances					
Survey: 63.00 ft, Gamma: 39.00 ft, Resistivity: 50.00 ft					
Mud Properties					
Type	Oil Based				
WT	9.65				
VIS	63.00				
PV	17.00				
YP	10.00				
POOH Reason/Notes					
Total Depth/Casing Point					
Incident Notes					
Directional:					
MWD:					
Comments					
Directional: Bico 7" SSS100 7/8 6.1 1.75 BTB 300-700 GPM's, Rev.25, Max Diff = 1800, Max Torque =17100, Bit Runs = 0, Bit to Bend = 4.08					
MWD:					



Slide/Rotate Reports

Anderson Fed Com 552H (WT-21-181)

2021-11-22 to 2022-01-16

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



Job Number WT-21-181	Operator Advance Energy Partners	Rig Name Nabors X50
Start Date 2021-11-22	Well Name Anderson Fed Com 552H	Legal Well Name AFE Anderson Fed Com 552H
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	11-22	09:30	11:00	11-22	1.5	150.00	300.00	150.00	100.00	N/A	550.00	50.0	20.00	1000.00	850.00	Surface
Rotate	11-22	11:05	12:00	11-22	0.92	300.00	392.00	92.00	100.36	N/A	705.00	50.0	25.00	1575.00	1050.00	Surface
Rotate	11-22	12:05	12:35	11-22	0.5	392.00	484.00	92.00	184.00	N/A	705.00	50.0	25.00	1575.00	1050.00	Surface
Rotate	11-22	12:40	13:20	11-22	0.67	484.00	576.00	92.00	138.00	N/A	895.00	70.0	25.00	2450.00	1850.00	Surface
Rotate	11-22	13:25	15:00	11-22	1.58	576.00	668.00	92.00	58.11	N/A	895.00	70.0	25.00	2450.00	1850.00	Surface
Rotate	11-22	15:05	16:00	11-22	0.92	668.00	760.00	92.00	100.36	N/A	895.00	70.0	25.00	2450.00	1850.00	Surface
Rotate	11-22	16:05	17:00	11-22	0.92	760.00	948.00	188.00	205.09	N/A	895.00	70.0	25.00	2450.00	1850.00	Surface
Rotate	11-22	17:05	17:50	11-22	0.75	948.00	1043.00	95.00	126.67	N/A	895.00	70.0	25.00	2450.00	1850.00	Surface
Rotate	11-22	17:55	18:50	11-22	0.92	1043.00	1136.00	93.00	101.45	N/A	895.00	70.0	25.00	2450.00	1850.00	Surface
Rotate	11-22	18:55	19:25	11-22	0.5	1136.00	1226.00	90.00	180.00	N/A	895.00	70.0	25.00	2450.00	1850.00	Surface
Rotate	11-22	20:35	20:40	11-22	0.08	1226.00	1277.00	51.00	612.00	N/A	895.00	70.0	25.00	2450.00	1850.00	Surface, Intermediate



Job Number WT-21-181	Operator Advance Energy Partners	Rig Name Nabors X50
Start Date 2021-11-22	Well Name Anderson Fed Com 552H	Legal Well Name AFE Anderson Fed Com 552H
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	12-03	14:55	15:00	12-03	0.08	1277.00	1314.00	37.00	444.00	N/A	705.00	40.0	40.00	1600.00	1200.00	Intermediate
Rotate	12-03	15:05	15:20	12-03	0.25	1314.00	1378.00	64.00	256.00	N/A	705.00	40.0	40.00	1600.00	1200.00	Intermediate
Rotate	12-03	15:50	16:00	12-03	0.17	1378.00	1403.00	25.00	150.00	N/A	705.00	40.0	40.00	1600.00	1200.00	Intermediate
Rotate	12-03	16:05	16:20	12-03	0.25	1403.00	1493.00	90.00	360.00	N/A	895.00	70.0	48.00	2400.00	1800.00	Intermediate
Rotate	12-03	16:25	16:35	12-03	0.17	1493.00	1582.00	89.00	534.00	N/A	895.00	70.0	48.00	2400.00	1800.00	Intermediate
Rotate	12-03	16:40	16:55	12-03	0.25	1582.00	1672.00	90.00	360.00	N/A	895.00	70.0	48.00	2400.00	1800.00	Intermediate
Rotate	12-03	17:00	17:10	12-03	0.17	1672.00	1761.00	89.00	534.00	N/A	895.00	70.0	48.00	2400.00	1800.00	Intermediate
Rotate	12-03	17:15	17:25	12-03	0.17	1761.00	1851.00	90.00	540.00	N/A	895.00	70.0	48.00	2400.00	1800.00	Intermediate
Rotate	12-03	17:30	17:40	12-03	0.17	1851.00	1940.00	89.00	534.00	N/A	895.00	70.0	48.00	2400.00	1800.00	Intermediate
Rotate	12-03	17:45	18:00	12-03	0.25	1940.00	2030.00	90.00	360.00	N/A	895.00	70.0	48.00	2400.00	1800.00	Intermediate
Rotate	12-03	18:05	18:15	12-03	0.17	2030.00	2120.00	90.00	540.00	N/A	895.00	70.0	48.00	2400.00	1800.00	Intermediate
Rotate	12-03	18:20	18:30	12-03	0.17	2120.00	2210.00	90.00	540.00	N/A	895.00	70.0	48.00	2400.00	1800.00	Intermediate
Rotate	12-03	18:35	18:45	12-03	0.17	2210.00	2299.00	89.00	534.00	N/A	895.00	70.0	48.00	2400.00	1800.00	Intermediate
Rotate	12-03	18:50	19:00	12-03	0.17	2299.00	2388.00	89.00	534.00	N/A	895.00	70.0	48.00	2400.00	1800.00	Intermediate
Rotate	12-03	19:05	19:15	12-03	0.17	2388.00	2477.00	89.00	534.00	N/A	895.00	70.0	48.00	2400.00	1800.00	Intermediate
Slide	12-03	19:30	19:35	12-03	0.08	2477.00	2497.00	20.00	240.00	270.0	895.00	N/A	20.00	2400.00	2000.00	Intermediate
Rotate	12-03	19:35	19:40	12-03	0.08	2497.00	2567.00	70.00	840.00	N/A	895.00	70.0	48.00	2400.00	1800.00	Intermediate
Rotate	12-03	19:45	19:55	12-03	0.17	2567.00	2656.00	89.00	534.00	N/A	895.00	70.0	48.00	2400.00	1800.00	Intermediate
Rotate	12-03	20:00	20:10	12-03	0.17	2656.00	2745.00	89.00	534.00	N/A	895.00	70.0	48.00	2400.00	1800.00	Intermediate
Rotate	12-03	20:15	20:30	12-03	0.25	2745.00	2835.00	90.00	360.00	N/A	895.00	70.0	48.00	2400.00	1800.00	Intermediate
Slide	12-03	20:35	20:45	12-03	0.17	2835.00	2855.00	20.00	120.00	220.0	895.00	N/A	20.00	2400.00	2000.00	Intermediate
Rotate	12-03	20:45	20:55	12-03	0.17	2855.00	2925.00	70.00	420.00	N/A	895.00	70.0	48.00	2400.00	1800.00	Intermediate
Rotate	12-03	21:00	21:10	12-03	0.17	2925.00	3014.00	89.00	534.00	N/A	895.00	70.0	48.00	2400.00	1800.00	Intermediate
Rotate	12-03	21:15	21:30	12-03	0.25	3014.00	3104.00	90.00	360.00	N/A	895.00	70.0	48.00	2400.00	1800.00	Intermediate
Rotate	12-03	21:35	21:55	12-03	0.33	3104.00	3193.00	89.00	267.00	N/A	895.00	70.0	48.00	2400.00	1800.00	Intermediate
Rotate	12-03	22:00	22:05	12-03	0.08	3193.00	3202.00	9.00	108.00	N/A	895.00	70.0	48.00	2400.00	1800.00	Intermediate
Slide	12-03	22:05	22:10	12-03	0.08	3202.00	3227.00	25.00	300.00	200.0	895.00	N/A	20.00	2400.00	2000.00	Intermediate
Rotate	12-03	22:10	22:20	12-03	0.17	3227.00	3283.00	56.00	336.00	N/A	895.00	70.0	48.00	2400.00	1800.00	Intermediate
Rotate	12-03	22:25	22:35	12-03	0.17	3283.00	3373.00	90.00	540.00	N/A	895.00	70.0	48.00	2400.00	1800.00	Intermediate
Rotate	12-03	22:40	22:50	12-03	0.17	3373.00	3462.00	89.00	534.00	N/A	895.00	70.0	48.00	2400.00	1800.00	Intermediate
Rotate	12-03	22:55	23:10	12-03	0.25	3462.00	3552.00	90.00	360.00	N/A	895.00	70.0	48.00	2400.00	1800.00	Intermediate
Rotate	12-03	23:15	23:40	12-03	0.42	3552.00	3641.00	89.00	213.60	N/A	895.00	70.0	48.00	2400.00	1800.00	Intermediate
Rotate	12-03	23:45	00:05	12-04	0.33	3641.00	3731.00	90.00	270.00	N/A	895.00	70.0	48.00	2400.00	1800.00	Intermediate
Rotate	12-04	00:10	00:35	12-04	0.42	3731.00	3821.00	90.00	216.00	N/A	895.00	70.0	48.00	2400.00	1800.00	Intermediate
Rotate	12-04	00:40	00:45	12-04	0.08	3821.00	3826.00	5.00	60.00	N/A	895.00	70.0	48.00	2400.00	1800.00	Intermediate
Slide	12-04	00:45	00:55	12-04	0.17	3826.00	3842.00	16.00	96.00	285.0		N/A				Intermediate
Rotate	12-04	00:55	01:20	12-04	0.42	3842.00	3910.00	68.00	163.20	N/A	895.00	70.0	48.00	2400.00	1800.00	Intermediate
Rotate	12-04	01:25	02:00	12-04	0.58	3910.00	4000.00	90.00	154.29	N/A	895.00	70.0	48.00	2400.00	1800.00	Intermediate
Rotate	12-04	02:15	02:50	12-04	0.58	4000.00	4090.00	90.00	154.29	N/A	895.00	70.0	48.00	2400.00	1800.00	Intermediate
Rotate	12-04	02:55	03:25	12-04	0.5	4090.00	4179.00	89.00	178.00	N/A	895.00	70.0	48.00	2400.00	1800.00	Intermediate
Rotate	12-04	03:45	04:15	12-04	0.5	4179.00	4268.00	89.00	178.00	N/A	895.00	70.0	48.00	2400.00	1800.00	Intermediate
Rotate	12-04	04:20	04:50	12-04	0.5	4268.00	4358.00	90.00	180.00	N/A	895.00	70.0	48.00	2400.00	1800.00	Intermediate
Rotate	12-04	04:55	05:50	12-04	0.92	4358.00	4448.00	90.00	98.18	N/A	895.00	70.0	48.00	2400.00	1800.00	Intermediate
Rotate	12-04	06:00	06:30	12-04	0.5	4448.00	4537.00	89.00	178.00	N/A	895.00	70.0	48.00	2400.00	1800.00	Intermediate
Rotate	12-04	06:35	07:05	12-04	0.5	4537.00	4627.00	90.00	180.00	N/A	895.00	70.0	48.00	2400.00	1800.00	Intermediate
Rotate	12-04	07:10	07:50	12-04	0.67	4627.00	4716.00	89.00	133.50	N/A	895.00	70.0	48.00	2400.00	1800.00	Intermediate
Rotate	12-04	07:55	08:15	12-04	0.33	4716.00	4803.00	87.00	261.00	N/A	895.00	70.0	48.00	2400.00	1800.00	Intermediate



Job Number WT-21-181	Operator Advance Energy Partners		Rig Name Nabors X50
Start Date 2021-11-22	Well Name Anderson Fed Com 552H		Legal Well Name AFE Anderson Fed Com 552H
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	01-03	23:30	00:00	01-04	0.5	4803.00	4888.00	85.00	170.00	N/A	895.00	70.0	48.00	2400.00	1800.00	Intermediate
Rotate	01-04	00:05	00:30	01-04	0.42	4888.00	4977.00	89.00	213.60	N/A	895.00	70.0	48.00	2400.00	1800.00	Intermediate
Rotate	01-04	00:35	00:45	01-04	0.17	4977.00	5067.00	90.00	540.00	N/A	895.00	70.0	48.00	2400.00	1800.00	Intermediate
Rotate	01-04	00:50	01:00	01-04	0.17	5067.00	5157.00	90.00	540.00	N/A	895.00	70.0	48.00	2400.00	1800.00	Intermediate
Rotate	01-04	01:05	01:15	01-04	0.17	5157.00	5246.00	89.00	534.00	N/A	895.00	70.0	48.00	2400.00	1800.00	Intermediate
Rotate	01-04	01:20	01:30	01-04	0.17	5246.00	5336.00	90.00	540.00	N/A	895.00	70.0	48.00	2400.00	1800.00	Intermediate
Rotate	01-04	01:35	02:00	01-04	0.42	5336.00	5425.00	89.00	213.60	N/A	895.00	70.0	48.00	2400.00	1800.00	Intermediate
Rotate	01-04	02:05	02:15	01-04	0.17	5425.00	5515.00	90.00	540.00	N/A	895.00	70.0	48.00	2400.00	1800.00	Intermediate
Rotate	01-04	02:20	02:40	01-04	0.33	5515.00	5604.00	89.00	267.00	N/A						Intermediate
Slide	01-04	02:45	03:05	01-04	0.33	5604.00	5629.00	25.00	75.00	112.0		N/A				Intermediate
Rotate	01-04	03:05	03:15	01-04	0.17	5629.00	5694.00	65.00	390.00	N/A	700.00	50.0	45.00	2750.00	2000.00	Intermediate
Slide	01-04	03:20	03:35	01-04	0.25	5694.00	5709.00	15.00	60.00	115.0		N/A				Intermediate
Rotate	01-04	03:35	03:50	01-04	0.25	5709.00	5783.00	74.00	296.00	N/A	700.00	50.0	45.00	2750.00	2000.00	Intermediate
Rotate	01-04	04:10	04:30	01-04	0.33	5783.00	5873.00	90.00	270.00	N/A	700.00	50.0	45.00	2750.00	2000.00	Intermediate
Rotate	01-04	04:35	04:45	01-04	0.17	5873.00	5962.00	89.00	534.00	N/A	700.00	50.0	45.00	2750.00	2000.00	Intermediate
Rotate	01-04	04:50	05:00	01-04	0.17	5962.00	6052.00	90.00	540.00	N/A	700.00	50.0	45.00	2750.00	2000.00	Intermediate
Rotate	01-04	05:05	05:10	01-04	0.08	6052.00	6142.00	90.00	1080.00	N/A	700.00	50.0	45.00	2750.00	2000.00	Intermediate
Rotate	01-04	05:15	05:25	01-04	0.17	6142.00	6231.00	89.00	534.00	N/A	700.00	50.0	45.00	2750.00	2000.00	Intermediate
Rotate	01-04	05:30	05:40	01-04	0.17	6231.00	6321.00	90.00	540.00	N/A	700.00	50.0	45.00	2750.00	2000.00	Intermediate
Rotate	01-04	05:45	05:50	01-04	0.08	6321.00	6410.00	89.00	1068.00	N/A	700.00	50.0	45.00	2750.00	2000.00	Intermediate
Rotate	01-04	05:55	06:00	01-04	0.08	6410.00	6500.00	90.00	1080.00	N/A	750.00	50.0	45.00	2750.00	2000.00	Intermediate
Rotate	01-04	06:05	06:15	01-04	0.17	6500.00	6589.00	89.00	534.00	N/A	750.00	50.0	45.00	2750.00	2000.00	Intermediate
Rotate	01-04	06:20	06:35	01-04	0.25	6589.00	6679.00	90.00	360.00	N/A	750.00	50.0	45.00	2750.00	2000.00	Intermediate
Rotate	01-04	06:40	06:50	01-04	0.17	6679.00	6768.00	89.00	534.00	N/A	750.00	50.0	45.00	2750.00	2000.00	Intermediate
Rotate	01-04	06:55	07:05	01-04	0.17	6768.00	6857.00	89.00	534.00	N/A	750.00	50.0	45.00	2750.00	2000.00	Intermediate
Rotate	01-04	07:10	07:20	01-04	0.17	6857.00	6947.00	90.00	540.00	N/A	750.00	50.0	45.00	3000.00	2300.00	Intermediate
Rotate	01-04	07:25	07:45	01-04	0.33	6947.00	7037.00	90.00	270.00	N/A	750.00	50.0	45.00	3000.00	2300.00	Intermediate
Rotate	01-04	07:50	08:05	01-04	0.25	7037.00	7126.00	89.00	356.00	N/A	750.00	50.0	45.00	3000.00	2300.00	Intermediate
Rotate	01-04	08:10	08:25	01-04	0.25	7126.00	7216.00	90.00	360.00	N/A	750.00	50.0	45.00	3000.00	2300.00	Intermediate
Rotate	01-04	08:30	08:40	01-04	0.17	7216.00	7306.00	90.00	540.00	N/A	750.00	50.0	45.00	3000.00	2300.00	Intermediate
Rotate	01-04	08:45	09:00	01-04	0.25	7306.00	7395.00	89.00	356.00	N/A	750.00	50.0	45.00	3000.00	2300.00	Intermediate
Rotate	01-04	09:05	09:20	01-04	0.25	7395.00	7485.00	90.00	360.00	N/A	750.00	50.0	45.00	3000.00	2300.00	Intermediate
Rotate	01-04	09:25	09:40	01-04	0.25	7485.00	7574.00	89.00	356.00	N/A	750.00	50.0	45.00	3000.00	2300.00	Intermediate
Rotate	01-04	09:45	10:00	01-04	0.25	7574.00	7664.00	90.00	360.00	N/A	750.00	50.0	45.00	3000.00	2300.00	Intermediate
Rotate	01-04	10:05	10:20	01-04	0.25	7664.00	7754.00	90.00	360.00	N/A	750.00	50.0	45.00	3000.00	2300.00	Intermediate
Rotate	01-04	10:25	10:35	01-04	0.17	7754.00	7843.00	89.00	534.00	N/A	750.00	50.0	45.00	3000.00	2300.00	Intermediate

Rotate	01-04	10:40	10:55	01-04	0.25	7843.00	7933.00	90.00	360.00	N/A	750.00	50.0	45.00	3000.00	2300.00	intermediate
Rotate	01-04	11:00	11:15	01-04	0.25	7933.00	8022.00	89.00	356.00	N/A	750.00	50.0	45.00	3000.00	2300.00	Intermediate
Rotate	01-04	11:20	11:40	01-04	0.33	8022.00	8112.00	90.00	270.00	N/A	750.00	50.0	45.00	3000.00	2300.00	Intermediate
Rotate	01-04	11:45	12:00	01-04	0.25	8112.00	8202.00	90.00	360.00	N/A	750.00	50.0	45.00	3000.00	2300.00	Intermediate
Rotate	01-04	12:05	12:25	01-04	0.33	8202.00	8291.00	89.00	267.00	N/A	750.00	50.0	45.00	3000.00	2300.00	Intermediate
Rotate	01-04	12:30	12:50	01-04	0.33	8291.00	8381.00	90.00	270.00	N/A	750.00	50.0	45.00	3000.00	2300.00	Intermediate
Rotate	01-04	12:55	13:10	01-04	0.25	8381.00	8470.00	89.00	356.00	N/A	750.00	50.0	45.00	3000.00	2300.00	Intermediate
Rotate	01-04	13:15	13:45	01-04	0.5	8470.00	8559.00	89.00	178.00	N/A	750.00	50.0	45.00	3000.00	2300.00	Intermediate
Rotate	01-04	13:50	14:15	01-04	0.42	8559.00	8649.00	90.00	216.00	N/A	750.00	50.0	45.00	3000.00	2300.00	Intermediate
Slide	01-04	14:20	14:40	01-04	0.33	8649.00	8664.00	15.00	45.00	40.0	705.00	N/A	30.00	2500.00	2100.00	Intermediate
Rotate	01-04	14:40	14:50	01-04	0.17	8664.00	8738.00	74.00	444.00	N/A	750.00	50.0	45.00	3000.00	2300.00	Intermediate
Rotate	01-04	14:55	15:35	01-04	0.67	8738.00	8828.00	90.00	135.00	N/A	750.00	50.0	45.00	3000.00	2300.00	Intermediate
Rotate	01-04	15:40	15:50	01-04	0.17	8828.00	8904.00	76.00	456.00	N/A	750.00	50.0	45.00	3000.00	2300.00	Intermediate



Job Number WT-21-181	Operator Advance Energy Partners	Rig Name Nabors X50
Start Date 2021-11-22	Well Name Anderson Fed Com 552H	Legal Well Name AFE Anderson Fed Com 552H
Play Delaware Basin	State/Province and Country New Mexico, US	County Lea
Company Man		

Slide/Rotate Report - BHA #4 (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	01-05	03:15	03:25	01-05	0.17	8904.00	8918.00	14.00	84.00	N/A	750.00	50.0	45.00	3000.00	2300.00	Intermediate
Rotate	01-05	03:30	03:50	01-05	0.33	8914.00	9004.00	90.00	270.00	N/A	750.00	50.0	45.00	3000.00	2300.00	Intermediate
Rotate	01-05	03:55	04:20	01-05	0.42	9004.00	9094.00	90.00	216.00	N/A	750.00	50.0	45.00	3000.00	2300.00	Intermediate
Rotate	01-05	04:25	04:40	01-05	0.25	9094.00	9183.00	89.00	356.00	N/A	750.00	50.0	45.00	3000.00	2300.00	Intermediate
Rotate	01-05	04:45	05:10	01-05	0.42	9183.00	9273.00	90.00	216.00	N/A	750.00	50.0	45.00	3000.00	2300.00	Intermediate
Slide	01-05	05:15	05:50	01-05	0.58	9273.00	9298.00	25.00	42.86	75.0	700.00	N/A	20.00	2500.00	2300.00	Intermediate
Rotate	01-05	05:50	06:05	01-05	0.25	9298.00	9363.00	65.00	260.00	N/A	750.00	50.0	45.00	3000.00	2300.00	Intermediate
Rotate	01-05	06:10	06:15	01-05	0.08	9363.00	9367.00	4.00	48.00	N/A	750.00	50.0	45.00	3000.00	2300.00	Intermediate
Slide	01-05	06:15	06:25	01-05	0.17	9367.00	9377.00	10.00	60.00	30.0	750.00	N/A	25.00	2500.00	2300.00	Intermediate
Rotate	01-05	06:25	06:40	01-05	0.25	9377.00	9453.00	76.00	304.00	N/A	750.00	50.0	45.00	3000.00	2300.00	Intermediate
Rotate	01-05	06:45	07:00	01-05	0.25	9453.00	9542.00	89.00	356.00	N/A	750.00	50.0	45.00	3000.00	2300.00	Intermediate
Rotate	01-05	07:05	07:10	01-05	0.08	9542.00	9557.00	15.00	180.00	N/A	750.00	50.0	45.00	3000.00	2300.00	Intermediate
Slide	01-05	07:10	07:35	01-05	0.42	9557.00	9577.00	20.00	48.00	120.0	750.00	N/A	25.00	2500.00	2300.00	Intermediate
Rotate	01-05	07:35	07:45	01-05	0.17	9577.00	9632.00	55.00	330.00	N/A	750.00	50.0	45.00	3000.00	2300.00	Intermediate
Rotate	01-05	07:50	08:05	01-05	0.25	9632.00	9721.00	89.00	356.00	N/A	750.00	50.0	45.00	3000.00	2300.00	Intermediate
Rotate	01-05	08:10	08:30	01-05	0.33	9721.00	9811.00	90.00	270.00	N/A	750.00	50.0	45.00	3000.00	2300.00	Intermediate
Slide	01-05	08:35	09:25	01-05	0.83	9811.00	9841.00	30.00	36.00	140.0	750.00	N/A	25.00	2500.00	2300.00	Intermediate
Rotate	01-05	09:25	09:50	01-05	0.42	9841.00	9901.00	60.00	144.00	N/A	750.00	50.0	45.00	3000.00	2300.00	Intermediate
Rotate	01-05	10:05	10:10	01-05	0.08	9901.00	9906.00	5.00	60.00	N/A	750.00	50.0	45.00	3000.00	2300.00	Intermediate
Slide	01-05	10:10	10:55	01-05	0.75	9906.00	9936.00	30.00	40.00	120.0	750.00	N/A	25.00	2500.00	2300.00	Intermediate
Rotate	01-05	10:55	11:25	01-05	0.5	9936.00	9990.00	54.00	108.00	N/A	750.00	50.0	45.00	3000.00	2300.00	Intermediate
Rotate	01-05	11:30	11:40	01-05	0.17	9990.00	9997.00	7.00	42.00	N/A	750.00	50.0	45.00	3000.00	2300.00	Intermediate
Slide	01-05	11:40	12:25	01-05	0.75	9997.00	10017.00	20.00	26.67	110.0	750.00	N/A	25.00	2500.00	2300.00	Intermediate
Rotate	01-05	12:25	12:45	01-05	0.33	10017.00	10080.00	63.00	189.00	N/A	750.00	50.0	45.00	3000.00	2300.00	Intermediate
Rotate	01-05	12:50	13:20	01-05	0.5	10080.00	10170.00	90.00	180.00	N/A	750.00	50.0	45.00	3000.00	2300.00	Intermediate
Rotate	01-05	13:25	14:00	01-05	0.58	10170.00	10259.00	89.00	152.57	N/A	750.00	50.0	45.00	3000.00	2300.00	Intermediate
Rotate	01-05	14:05	14:10	01-05	0.08	10259.00	10268.00	9.00	108.00	N/A	750.00	50.0	45.00	3000.00	2300.00	Intermediate
Slide	01-05	14:10	14:45	01-05	0.58	10268.00	10284.00	16.00	27.43	100.0	750.00	N/A	25.00	2500.00	2300.00	Intermediate
Rotate	01-05	14:45	15:15	01-05	0.5	10284.00	10349.00	65.00	130.00	N/A	750.00	50.0	45.00	3000.00	2300.00	Intermediate
Rotate	01-05	15:20	15:40	01-05	0.33	10349.00	10438.00	89.00	267.00	N/A	750.00	50.0	45.00	3000.00	2300.00	Intermediate
Rotate	01-05	15:45	16:10	01-05	0.42	10438.00	10528.00	90.00	216.00	N/A	750.00	50.0	45.00	3000.00	2300.00	Intermediate
Rotate	01-05	16:15	16:45	01-05	0.5	10528.00	10618.00	90.00	180.00	N/A	750.00	50.0	45.00	3000.00	2300.00	Intermediate
Slide	01-05	16:50	17:30	01-05	0.67	10618.00	10649.00	31.00	46.50	330.0	750.00	N/A	25.00	2500.00	2300.00	Intermediate
Rotate	01-05	17:30	18:05	01-05	0.58	10649.00	10707.00	58.00	99.43	N/A	750.00	50.0	45.00	3000.00	2300.00	Intermediate
Rotate	01-05	18:10	18:35	01-05	0.42	10707.00	10766.00	59.00	141.60	N/A	750.00	50.0	45.00	3000.00	2300.00	Intermediate, Curve



Job Number WT-21-181	Operator Advance Energy Partners		Rig Name Nabors X50
Start Date 2021-11-22	Well Name Anderson Fed Com 552H		Legal Well Name AFE Anderson Fed Com 552H
Play Delaware Basin	State/Province and Country New Mexico, US	County Lea	Company Man

Slide/Rotate Report - BHA #5 (8.75 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
Rotate	01-06	08:30	08:40	01-06	0.17	10766.00	10770.00	4.00	24.00	N/A	750.00	50.0	45.00	3000.00	2300.00	Curve
Slide	01-06	08:40	10:40	01-06	2.0	10770.00	10859.00	89.00	44.50	0.0	700.00	N/A	30.00	2600.00	2300.00	Curve
Slide	01-06	10:45	13:20	01-06	2.58	10859.00	10949.00	90.00	34.84	315.0	700.00	N/A	30.00	2600.00	2300.00	Curve
Slide	01-06	13:25	14:40	01-06	1.25	10949.00	11038.00	89.00	71.20	330.0	700.00	N/A	30.00	2600.00	2300.00	Curve
Slide	01-06	14:45	16:00	01-06	1.25	11038.00	11128.00	90.00	72.00	310.0	700.00	N/A	30.00	2600.00	2300.00	Curve
Slide	01-06	16:05	17:05	01-06	1.0	11128.00	11217.00	89.00	89.00	330.0	700.00	N/A	30.00	2600.00	2300.00	Curve
Slide	01-06	17:10	18:40	01-06	1.5	11217.00	11307.00	90.00	60.00	280.0	700.00	N/A	60.00	2800.00	2300.00	Curve
Rotate	01-06	18:45	19:15	01-06	0.5	11307.00	11337.00	30.00	60.00	N/A	750.00	50.0	45.00	3000.00	2300.00	Curve
Slide	01-06	19:20	21:00	01-06	1.67	11337.00	11396.00	59.00	35.40	330.0	700.00	N/A	60.00	2800.00	2300.00	Curve
Slide	01-06	21:05	22:10	01-06	1.08	11396.00	11486.00	90.00	83.08	320.0	700.00	N/A	60.00	2800.00	2300.00	Curve
Rotate	01-06	22:15	23:20	01-06	1.08	11486.00	11516.00	30.00	27.69	N/A	700.00	30.0	30.00	3000.00	2300.00	Curve



Job Number WT-21-181	Operator Advance Energy Partners	Rig Name Nabors X50
Start Date 2021-11-22	Well Name Anderson Fed Com 552H	Legal Well Name AFE Anderson Fed Com 552H
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	01-07	17:00	17:30	01-07	0.5	11516.00	11517.00	1.00	2.00	N/A	550.00	30.0	30.00	1800.00	1500.00	Curve
Rotate	01-07	19:00	19:25	01-07	0.42	11517.00	11607.00	90.00	216.00	N/A	550.00	30.0	30.00	1800.00	1500.00	Curve
Rotate	01-07	19:30	19:50	01-07	0.33	11607.00	11627.00	20.00	60.00	N/A	700.00	30.0	40.00	4500.00	3800.00	Curve
Slide	01-07	19:50	20:40	01-07	0.83	11627.00	11697.00	70.00	84.00	20.0		N/A				Curve
Slide	01-07	20:45	21:30	01-07	0.75	11697.00	11727.00	30.00	40.00	0.0		N/A				Curve, Lateral



Job Number WT-21-181	Operator Advance Energy Partners		Rig Name Nabors X50
Start Date 2021-11-22	Well Name Anderson Fed Com 552H		Legal Well Name AFE Anderson Fed Com 552H
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	01-08	13:40	14:25	01-08	0.75	11727.00	11758.00	31.00	41.33	0.0	700.00	N/A	40.00	4400.00	3900.00	Lateral
Rotate	01-08	14:25	14:40	01-08	0.25	11758.00	11787.00	29.00	116.00	N/A	700.00	30.0	40.00	4500.00	3800.00	Lateral
Rotate	01-08	14:45	15:00	01-08	0.25	11787.00	11794.00	7.00	28.00	N/A	700.00	30.0	40.00	4500.00	3800.00	Lateral
Slide	01-08	15:00	15:15	01-08	0.25	11794.00	11809.00	15.00	60.00	170.0	700.00	N/A	40.00	4400.00	3900.00	Lateral
Rotate	01-08	15:15	15:30	01-08	0.25	11809.00	11876.00	67.00	268.00	N/A	700.00	30.0	40.00	4500.00	3800.00	Lateral
Slide	01-08	15:35	16:00	01-08	0.42	11876.00	11891.00	15.00	36.00	190.0	700.00	N/A	40.00	4400.00	3900.00	Lateral
Rotate	01-08	16:00	16:55	01-08	0.92	11891.00	11966.00	75.00	81.82	N/A	700.00	50.0	45.00	4500.00	3800.00	Lateral
Rotate	01-08	17:00	17:45	01-08	0.75	11966.00	12056.00	90.00	120.00	N/A	700.00	50.0	45.00	4500.00	3800.00	Lateral
Slide	01-08	17:50	18:40	01-08	0.83	12056.00	12086.00	30.00	36.00	330.0		N/A				Lateral
Rotate	01-08	18:40	19:00	01-08	0.33	12086.00	12145.00	59.00	177.00	N/A	700.00	50.0	45.00	4500.00	3800.00	Lateral
Rotate	01-08	19:05	19:40	01-08	0.58	12145.00	12235.00	90.00	154.29	N/A	700.00	50.0	45.00	4500.00	3800.00	Lateral
Rotate	01-08	19:55	20:00	01-08	0.08	12235.00	12240.00	5.00	60.00	N/A	700.00	50.0	45.00	4500.00	3800.00	Lateral
Slide	01-08	20:00	20:50	01-08	0.83	12240.00	12265.00	25.00	30.00	330.0		N/A				Lateral
Rotate	01-08	20:50	21:15	01-08	0.42	12265.00	12324.00	59.00	141.60	N/A	700.00	50.0	45.00	4500.00	3800.00	Lateral
Rotate	01-08	21:20	21:45	01-08	0.42	12324.00	12414.00	90.00	216.00	N/A	700.00	50.0	45.00	4500.00	3800.00	Lateral
Rotate	01-08	21:50	21:55	01-08	0.08	12414.00	12419.00	5.00	60.00	N/A	700.00	50.0	45.00	4500.00	3800.00	Lateral
Slide	01-08	21:55	23:00	01-08	1.08	12419.00	12449.00	30.00	27.69	20.0		N/A				Lateral
Rotate	01-08	23:00	23:20	01-08	0.33	12449.00	12503.00	54.00	162.00	N/A	700.00	50.0	45.00	4500.00	3800.00	Lateral
Rotate	01-08	23:25	00:15	01-09	0.83	12503.00	12593.00	90.00	108.00	N/A	700.00	50.0	45.00	4500.00	3800.00	Lateral
Rotate	01-09	00:20	01:00	01-09	0.67	12593.00	12682.00	89.00	133.50	N/A	700.00	50.0	45.00	4500.00	3800.00	Lateral
Rotate	01-09	01:05	01:20	01-09	0.25	12682.00	12702.00	20.00	80.00	N/A	700.00	50.0	45.00	4500.00	3800.00	Lateral
Rotate	01-09	01:40	02:10	01-09	0.5	12702.00	12772.00	70.00	140.00	N/A	700.00	50.0	45.00	4500.00	3800.00	Lateral
Rotate	01-09	02:15	02:50	01-09	0.58	12772.00	12861.00	89.00	152.57	N/A	700.00	50.0	45.00	4500.00	3800.00	Lateral
Rotate	01-09	02:55	03:00	01-09	0.08	12861.00	12866.00	5.00	60.00	N/A	700.00	50.0	45.00	4500.00	3800.00	Lateral
Slide	01-09	03:00	04:00	01-09	1.0	12866.00	12901.00	35.00	35.00	120.0		N/A				Lateral
Rotate	01-09	04:00	04:25	01-09	0.42	12901.00	12951.00	50.00	120.00	N/A	700.00	50.0	45.00	4500.00	3800.00	Lateral
Rotate	01-09	04:30	05:15	01-09	0.75	12951.00	13040.00	89.00	118.67	N/A	700.00	50.0	45.00	4500.00	3800.00	Lateral
Rotate	01-09	05:20	06:00	01-09	0.67	13040.00	13129.00	89.00	133.50	N/A	700.00	50.0	45.00	4500.00	3800.00	Lateral
Rotate	01-09	06:05	06:10	01-09	0.08	13129.00	13134.00	5.00	60.00	N/A	700.00	50.0	45.00	4500.00	3800.00	Lateral
Slide	01-09	06:10	07:05	01-09	0.92	13134.00	13169.00	35.00	38.18	140.0	700.00	N/A	50.00	4300.00	3800.00	Lateral
Rotate	01-09	07:05	07:20	01-09	0.25	13169.00	13218.00	49.00	196.00	N/A	700.00	50.0	45.00	4500.00	3800.00	Lateral
Rotate	01-09	07:25	07:30	01-09	0.08	13218.00	13223.00	5.00	60.00	N/A	700.00	50.0	45.00	4500.00	3800.00	Lateral
Slide	01-09	07:30	07:45	01-09	0.25	13223.00	13240.00	17.00	68.00	140.0	700.00	N/A	50.00	4300.00	3800.00	Lateral
Rotate	01-09	07:45	08:10	01-09	0.42	13240.00	13308.00	68.00	163.20	N/A	700.00	50.0	45.00	4500.00	3800.00	Lateral
Slide	01-09	08:15	08:50	01-09	0.58	13308.00	13338.00	30.00	51.43	180.0	700.00	N/A	50.00	4300.00	3800.00	Lateral
Rotate	01-09	08:50	09:15	01-09	0.42	13338.00	13397.00	59.00	141.60	N/A	700.00	50.0	45.00	4500.00	3800.00	Lateral
Rotate	01-09	09:20	10:00	01-09	0.67	13397.00	13486.00	89.00	133.50	N/A	700.00	50.0	45.00	4500.00	3800.00	Lateral
Rotate	01-09	10:05	11:15	01-09	1.17	13486.00	13575.00	89.00	76.29	N/A	700.00	50.0	45.00	4500.00	3800.00	Lateral
Slide	01-09	11:20	11:45	01-09	0.42	13575.00	13585.00	10.00	24.00	20.0	700.00	N/A	50.00	4300.00	3800.00	Lateral
Rotate	01-09	11:45	12:15	01-09	0.5	13585.00	13664.00	79.00	158.00	N/A	700.00	50.0	45.00	4500.00	3800.00	Lateral
Rotate	01-09	12:20	12:25	01-09	0.08	13664.00	13675.00	11.00	132.00	N/A	700.00	50.0	45.00	4500.00	3800.00	Lateral
Slide	01-09	12:25	12:50	01-09	0.42	13675.00	13690.00	15.00	36.00	35.0	700.00	N/A	50.00	4300.00	3800.00	Lateral
Rotate	01-09	12:50	13:15	01-09	0.42	13690.00	13753.00	63.00	151.20	N/A	700.00	50.0	45.00	4500.00	3800.00	Lateral
Rotate	01-09	13:20	14:05	01-09	0.75	13753.00	13843.00	90.00	120.00	N/A	700.00	50.0	45.00	4500.00	3800.00	Lateral
Rotate	01-09	14:10	15:35	01-09	1.42	13843.00	13933.00	90.00	63.53	N/A	700.00	50.0	45.00	4500.00	3800.00	Lateral
Slide	01-09	15:40	16:55	01-09	1.25	13933.00	13968.00	35.00	28.00	145.0	700.00	N/A	60.00	4200.00	3800.00	Lateral
Rotate	01-09	16:55	18:15	01-09	1.33	13968.00	14022.00	54.00	40.50	N/A	700.00	50.0	48.00	4200.00	3800.00	Lateral
Slide	01-09	18:20	19:55	01-09	1.58	14022.00	14057.00	35.00	22.11	150.0	700.00	N/A	60.00	4200.00	3800.00	Lateral
Rotate	01-09	19:55	21:25	01-09	1.5	14057.00	14112.00	55.00	36.67	N/A	700.00	50.0	48.00	4200.00	3800.00	Lateral
Slide	01-09	21:30	23:00	01-09	1.5	14112.00	14152.00	40.00	26.67	150.0		N/A				Lateral
Rotate	01-09	23:00	00:00	01-10	1.0	14152.00	14202.00	50.00	50.00	N/A	700.00	50.0	48.00	4200.00	3800.00	Lateral
Rotate	01-10	00:05	00:10	01-10	0.08	14202.00	14207.00	5.00	60.00	N/A	700.00	50.0	48.00	4200.00	3800.00	Lateral
Slide	01-10	00:10	01:10	01-10	1.0	14207.00	14227.00	20.00	20.00	210.0		N/A				Lateral
Rotate	01-10	01:10	03:00	01-10	1.83	14227.00	14291.00	64.00	34.91	N/A	700.00	50.0	48.00	4200.00	3800.00	Lateral
Rotate	01-10	03:05	05:00	01-10	1.92	14291.00	14381.00	90.00	46.96	N/A	700.00	50.0	48.00	4200.00	3800.00	Lateral
Rotate	01-10	05:05	06:40	01-10	1.58	14381.00	14470.00	89.00	56.21	N/A	700.00	50.0	48.00	4200.00	3800.00	Lateral
Rotate	01-10	06:45	07:00	01-10	0.25	15454.00	15469.00	15.00	60.00	N/A	700.00	50.0	48.00	4600.00	3800.00	Lateral
Rotate	01-10	07:00	07:25	01-10	0.42	14470.00	14560.00	90.00	216.00	N/A	700.00	50.0	48.00	4200.00	3800.00	Lateral
Rotate	01-10	07:30	07:35	01-10	0.08	14560.00	14565.00	5.00	60.00	N/A	700.00	50.0	48.00	4200.00	3800.00	Lateral
Slide	01-10	07:35	08:55	01-10	1.33	14565.00	14600.00	35.00	26.25	0.0		N/A				Lateral
Rotate	01-10	08:55	09:50	01-10	0.92	14600.00	14649.00	49.00	53.45	N/A	700.00	50.0	48.00	4200.00	3800.00	Lateral
Rotate	01-10	09:55	11:40	01-10	1.75	14649.00	14739.00	90.00	51.43	N/A	700.00	50.0	48.00	4200.00	3800.00	Lateral
Rotate	01-10	11:45	12:50	01-10	1.08	14739.00	14828.00	89.00	82.15	N/A	700.00	50.0	48.00	4200.00	3800.00	Lateral
Rotate	01-10	12:55	13:35	01-10	0.67	14828.00	14850.00	22.00	33.00	N/A	700.00	50.0	48.00	4200.00	3800.00	Lateral

Slide	01-10	13:35	14:25	01-10	0.83	14850.00	14885.00	35.00	42.00	160.0	700.00	N/A	50.00	4200.00	3800.00	Lateral
Rotate	01-10	14:25	14:50	01-10	0.42	14885.00	14917.00	32.00	76.80	N/A	700.00	50.0	48.00	4600.00	3800.00	Lateral
Rotate	01-10	14:55	15:00	01-10	0.08	14917.00	14927.00	10.00	120.00	N/A	700.00	50.0	48.00	4600.00	3800.00	Lateral
Slide	01-10	15:00	15:30	01-10	0.5	14927.00	14947.00	20.00	40.00	175.0	700.00	N/A	50.00	4200.00	3800.00	Lateral
Rotate	01-10	15:30	16:05	01-10	0.58	14947.00	15007.00	60.00	102.86	N/A	700.00	50.0	48.00	4600.00	3800.00	Lateral
Rotate	01-10	16:10	17:15	01-10	1.08	15007.00	15096.00	89.00	82.15	N/A	700.00	50.0	48.00	4600.00	3800.00	Lateral
Rotate	01-10	17:20	18:05	01-10	0.75	15096.00	15185.00	89.00	118.67	N/A	700.00	50.0	48.00	4600.00	3800.00	Lateral
Rotate	01-10	18:10	18:55	01-10	0.75	15185.00	15275.00	90.00	120.00	N/A	700.00	50.0	48.00	4600.00	3800.00	Lateral
Rotate	01-10	19:00	19:55	01-10	0.92	15275.00	15364.00	89.00	97.09	N/A	700.00	50.0	48.00	4600.00	3800.00	Lateral
Rotate	01-10	20:00	21:15	01-10	1.25	15364.00	15454.00	90.00	72.00	N/A	700.00	50.0	48.00	4600.00	3800.00	Lateral
Rotate	01-10	21:20	21:25	01-10	0.08	15454.00	15469.00	15.00	180.00	N/A	700.00	50.0	48.00	4600.00	3800.00	Lateral
Slide	01-10	21:25	22:40	01-10	1.25	15469.00	15489.00	20.00	16.00	40.0		N/A				Lateral
Rotate	01-10	22:40	23:25	01-10	0.75	15489.00	15542.00	53.00	70.67	N/A	700.00	50.0	48.00	4600.00	3800.00	Lateral
Rotate	01-10	23:30	00:40	01-11	1.17	15542.00	15631.00	89.00	76.29	N/A	700.00	50.0	48.00	4600.00	3800.00	Lateral
Rotate	01-11	00:45	01:55	01-11	1.17	15631.00	15720.00	89.00	76.29	N/A	700.00	50.0	48.00	4600.00	3800.00	Lateral
Rotate	01-11	02:00	02:15	01-11	0.25	15720.00	15725.00	5.00	20.00	N/A	700.00	50.0	48.00	4600.00	3800.00	Lateral
Slide	01-11	02:15	03:15	01-11	1.0	15725.00	15755.00	30.00	30.00	70.0		N/A				Lateral
Rotate	01-11	03:15	03:45	01-11	0.5	15755.00	15810.00	55.00	110.00	N/A	700.00	50.0	48.00	4600.00	3800.00	Lateral
Rotate	01-11	03:50	04:45	01-11	0.92	15810.00	15899.00	89.00	97.09	N/A	700.00	50.0	48.00	4600.00	3800.00	Lateral
Rotate	01-11	04:50	05:10	01-11	0.33	15899.00	15916.00	17.00	51.00	N/A	700.00	50.0	48.00	4600.00	3800.00	Lateral
Slide	01-11	05:10	06:10	01-11	1.0	15916.00	15936.00	20.00	20.00	150.0	700.00	N/A	60.00	4300.00	3800.00	Lateral
Rotate	01-11	06:10	06:40	01-11	0.5	15936.00	15988.00	52.00	104.00	N/A	700.00	50.0	48.00	4600.00	3800.00	Lateral
Rotate	01-11	06:45	06:55	01-11	0.17	15988.00	16005.00	17.00	102.00	N/A	700.00	50.0	48.00	4600.00	3800.00	Lateral
Slide	01-11	06:55	07:45	01-11	0.83	16005.00	16036.00	31.00	37.20	150.0		N/A				Lateral
Rotate	01-11	07:45	08:30	01-11	0.75	16036.00	16078.00	42.00	56.00	N/A	700.00	50.0	48.00	4600.00	3800.00	Lateral
Rotate	01-11	08:35	08:45	01-11	0.17	16078.00	16095.00	17.00	102.00	N/A	700.00	50.0	48.00	4600.00	3800.00	Lateral
Slide	01-11	08:45	09:40	01-11	0.92	16095.00	16127.00	32.00	34.91	170.0		N/A				Lateral
Rotate	01-11	09:40	10:15	01-11	0.58	16127.00	16167.00	40.00	68.57	N/A	700.00	50.0	48.00	4600.00	3800.00	Lateral
Slide	01-11	10:20	12:05	01-11	1.75	16167.00	16210.00	43.00	24.57	180.0	700.00	N/A	10.00	4200.00	4000.00	Lateral
Slide	01-11	12:05	12:35	01-11	0.5	16210.00	16218.00	8.00	16.00	180.0	700.00	N/A	10.00	4200.00	4000.00	Lateral
Rotate	01-11	12:35	13:00	01-11	0.42	16218.00	16248.00	30.00	72.00	N/A	700.00	50.0	48.00	4600.00	3800.00	Lateral
Slide	01-11	13:00	13:20	01-11	0.33	16248.00	16255.00	7.00	21.00	200.0	700.00	N/A	10.00	4200.00	4000.00	Lateral
Rotate	01-11	13:20	13:25	01-11	0.08	16255.00	16257.00	2.00	24.00	N/A	700.00	50.0	48.00	4600.00	3800.00	Lateral
Slide	01-11	13:30	15:00	01-11	1.5	16257.00	16297.00	40.00	26.67	180.0	700.00	N/A	60.00	4400.00	4000.00	Lateral
Rotate	01-11	15:00	15:50	01-11	0.83	16297.00	16346.00	49.00	58.80	N/A	700.00	50.0	48.00	4600.00	3800.00	Lateral
Rotate	01-11	15:55	16:50	01-11	0.92	16346.00	16436.00	90.00	98.18	N/A	700.00	50.0	48.00	4600.00	3800.00	Lateral
Slide	01-11	17:25	19:00	01-11	1.58	16436.00	16466.00	30.00	18.95	230.0		N/A				Lateral
Rotate	01-11	19:00	20:05	01-11	1.08	16466.00	16526.00	60.00	55.38	N/A	700.00	50.0	48.00	4600.00	3800.00	Lateral
Rotate	01-11	20:10	21:35	01-11	1.42	16526.00	16615.00	89.00	62.82	N/A	700.00	50.0	48.00	4600.00	3800.00	Lateral
Rotate	01-11	21:40	21:45	01-11	0.08	16615.00	16620.00	5.00	60.00	N/A	700.00	50.0	48.00	4600.00	3800.00	Lateral
Slide	01-11	21:45	23:00	01-11	1.25	16620.00	16650.00	30.00	24.00	160.0		N/A				Lateral
Rotate	01-11	23:00	23:40	01-11	0.67	16650.00	16705.00	55.00	82.50	N/A	700.00	50.0	48.00	4600.00	3800.00	Lateral
Rotate	01-11	23:45	01:00	01-12	1.25	16705.00	16795.00	90.00	72.00	N/A	700.00	50.0	48.00	4600.00	3800.00	Lateral
Rotate	01-12	01:05	02:00	01-12	0.92	16795.00	16884.00	89.00	97.09	N/A	700.00	50.0	48.00	4600.00	3800.00	Lateral
Rotate	01-12	02:05	03:10	01-12	1.08	16884.00	16974.00	90.00	83.08	N/A	700.00	50.0	48.00	4600.00	3800.00	Lateral
Rotate	01-12	03:15	04:15	01-12	1.0	16974.00	17063.00	89.00	89.00	N/A	700.00	50.0	48.00	4600.00	3800.00	Lateral
Slide	01-12	04:30	04:50	01-12	0.33	17063.00	17075.00	12.00	36.00	30.0	696.00	N/A	40.00	4400.00	3900.00	Lateral
Rotate	01-12	04:50	06:00	01-12	1.17	17075.00	17153.00	78.00	66.86	N/A	696.00	50.0	48.00	4600.00	3900.00	Lateral
Rotate	01-12	06:05	06:15	01-12	0.17	17153.00	17165.00	12.00	72.00	N/A	696.00	50.0	48.00	4600.00	3900.00	Lateral
Slide	01-12	06:15	07:30	01-12	1.25	17165.00	17196.00	31.00	24.80	50.0	696.00	N/A	40.00	4400.00	3900.00	Lateral
Rotate	01-12	07:30	08:35	01-12	1.08	17196.00	17242.00	46.00	42.46	N/A	696.00	50.0	48.00	4600.00	3900.00	Lateral
Rotate	01-12	08:40	09:40	01-12	1.0	17242.00	17332.00	90.00	90.00	N/A	696.00	50.0	48.00	4600.00	3900.00	Lateral
Rotate	01-12	09:45	09:55	01-12	0.17	17332.00	17345.00	13.00	78.00	N/A	696.00	50.0	48.00	4600.00	3900.00	Lateral
Slide	01-12	09:55	10:50	01-12	0.92	17345.00	17365.00	20.00	21.82	40.0	696.00	N/A	40.00	4400.00	3900.00	Lateral
Rotate	01-12	10:50	11:30	01-12	0.67	17365.00	17421.00	56.00	84.00	N/A	696.00	50.0	48.00	4600.00	3900.00	Lateral
Rotate	01-12	11:55	12:05	01-12	0.17	17421.00	17435.00	14.00	84.00	N/A	696.00	50.0	48.00	4600.00	3900.00	Lateral
Slide	01-12	12:05	13:40	01-12	1.58	17435.00	17467.00	32.00	20.21	115.0	696.00	N/A	40.00	4400.00	3900.00	Lateral
Rotate	01-12	13:40	14:10	01-12	0.5	17467.00	17511.00	44.00	88.00	N/A	696.00	50.0	48.00	4600.00	3900.00	Lateral
Rotate	01-12	14:15	15:15	01-12	1.0	17511.00	17600.00	89.00	89.00	N/A	696.00	50.0	48.00	4600.00	3900.00	Lateral
Rotate	01-12	15:20	15:30	01-12	0.17	17600.00	17612.00	12.00	72.00	N/A	696.00	50.0	48.00	4600.00	3900.00	Lateral
Slide	01-12	15:30	16:40	01-12	1.17	17612.00	17647.00	35.00	30.00	105.0	696.00	N/A	40.00	4400.00	3900.00	Lateral
Rotate	01-12	16:40	17:10	01-12	0.5	17647.00	17689.00	42.00	84.00	N/A	696.00	50.0	48.00	4600.00	3900.00	Lateral
Rotate	01-13	05:00	05:05	01-13	0.08	17689.00	17697.00	8.00	96.00	N/A	696.00	50.0	48.00	4600.00	3900.00	Lateral
Slide	01-13	05:05	06:05	01-13	1.0	17697.00	17732.00	35.00	35.00	110.0	696.00	N/A	40.00	4400.00	3900.00	Lateral
Rotate	01-13	06:05	06:30	01-13	0.42	17732.00	17779.00	47.00	112.80	N/A	696.00	50.0	48.00	4600.00	3900.00	Lateral
Rotate	01-13	06:35	07:20	01-13	0.75	17779.00	17868.00	89.00	118.67	N/A	696.00	50.0	48.00	4600.00	3900.00	Lateral
Rotate	01-13	07:25	08:10	01-13	0.75	17868.00	17958.00	90.00	120.00	N/A	696.00	50.0	48.00	4600.00	3900.00	Lateral
Rotate	01-13	08:15	09:00	01-13	0.75	17958.00	18047.00	89.00	118.67	N/A	696.00	50.0	48.00	4600.00	3900.00	Lateral
Rotate	01-13	09:05	09:15	01-13	0.17	18047.00	18059.00	12.00	72.00	N/A	696.00	50.0	48.00	4600.00	3900.00	Lateral
Slide	01-13	09:45	10:35	01-13	0.83	18059.00	18087.00	28.00	33.60	140.0	696.00	N/A	40.00	4400.00	3900.00	Lateral
Rotate	01-13	10:35	11:00	01-13	0.42	18087.00	18136.00	49.00	117.60	N/A	696.00	50.0	48.00	4600.00	3900.00	Lateral
Rotate	01-13	11:05	11:15	01-13	0.17	18136.00	18148.00	12.00	72.00	N/A	696.00	50.0	48.00	4600.00	3900.00	Lateral
Slide	01-13	11:15	12:05													

Rotate	01-13	14:15	15:05	01-13	0.83	18256.00	18315.00	59.00	70.80	N/A	696.00	50.0	48.00	4600.00	3900.00	Lateral
Rotate	01-13	15:10	15:20	01-13	0.17	18315.00	18322.00	7.00	42.00	N/A	696.00	50.0	48.00	4600.00	3900.00	Lateral
Slide	01-13	15:20	16:05	01-13	0.75	18322.00	18342.00	20.00	26.67	195.0	696.00	N/A	40.00	4400.00	3900.00	Lateral
Rotate	01-13	16:05	16:35	01-13	0.5	18342.00	18405.00	63.00	126.00	N/A	696.00	50.0	48.00	4600.00	3900.00	Lateral
Rotate	01-13	16:40	17:25	01-13	0.75	18405.00	18495.00	90.00	120.00	N/A	696.00	50.0	48.00	4600.00	4000.00	Lateral
Rotate	01-13	17:30	18:25	01-13	0.92	18495.00	18584.00	89.00	97.09	N/A	696.00	50.0	48.00	4600.00	4000.00	Lateral
Rotate	01-13	18:30	19:50	01-13	1.33	18584.00	18674.00	90.00	67.50	N/A	696.00	50.0	48.00	4600.00	4000.00	Lateral
Rotate	01-13	19:55	20:05	01-13	0.17	18674.00	18684.00	10.00	60.00	N/A	696.00	50.0	48.00	4600.00	4000.00	Lateral
Slide	01-13	20:05	21:00	01-13	0.92	18684.00	18704.00	20.00	21.82	0.0	696.00	N/A	40.00	4400.00	3900.00	Lateral
Rotate	01-13	21:00	22:00	01-13	1.0	18704.00	18764.00	60.00	60.00	N/A	696.00	50.0	48.00	4600.00	4000.00	Lateral
Rotate	01-13	22:05	22:15	01-13	0.17	18764.00	18774.00	10.00	60.00	N/A	696.00	50.0	48.00	4600.00	4000.00	Lateral
Slide	01-13	22:15	22:50	01-13	0.58	18774.00	18799.00	25.00	42.86	20.0	696.00	N/A	40.00	4400.00	3900.00	Lateral
Rotate	01-13	22:50	23:30	01-13	0.67	18799.00	18853.00	54.00	81.00	N/A	696.00	50.0	48.00	4600.00	4000.00	Lateral
Rotate	01-13	23:35	00:50	01-14	1.25	18853.00	18943.00	90.00	72.00	N/A	696.00	50.0	48.00	4600.00	4000.00	Lateral
Rotate	01-14	00:55	01:05	01-14	0.17	18943.00	18953.00	10.00	60.00	N/A	696.00	50.0	48.00	4600.00	4000.00	Lateral
Slide	01-14	01:05	01:35	01-14	0.5	18953.00	18971.00	18.00	36.00	50.0	696.00	N/A	40.00	4400.00	3900.00	Lateral
Rotate	01-14	01:35	02:30	01-14	0.92	18971.00	19032.00	61.00	66.55	N/A	696.00	50.0	48.00	4600.00	4000.00	Lateral
Rotate	01-14	02:35	03:50	01-14	1.25	19032.00	19122.00	90.00	72.00	N/A	696.00	50.0	48.00	4600.00	4000.00	Lateral
Rotate	01-14	03:55	05:20	01-14	1.42	19122.00	19212.00	90.00	63.53	N/A	696.00	50.0	48.00	4600.00	4000.00	Lateral
Rotate	01-14	05:25	06:35	01-14	1.17	19212.00	19301.00	89.00	76.29	N/A	696.00	50.0	48.00	4600.00	4000.00	Lateral
Rotate	01-14	06:40	07:00	01-14	0.33	19301.00	19330.00	29.00	87.00	N/A	696.00	50.0	48.00	4600.00	4000.00	Lateral



Daily Reports

Anderson Fed Com 552H (WT-21-181)

2021-11-22 to 2022-01-16

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



Job Number WT-21-181	Operator Advance Energy Partners	Rig Name Nabors X50
Start Date 2021-11-22	Well Name Anderson Fed Com 552H	Legal Well Name AFE Anderson Fed Com 552H
Play Delaware Basin	State/Province and Country New Mexico, US	County Lea
		Company Man

Monday, Nov 22 00:00 - 23:59 (Day 1 of 17)

Billing: \$13,500.00 (\$156,865.75 total)

Drilling Summary				Drilling Parameters			
Start Depth (ft)	150.00	Downhole Hours	15.42	Rotating WOB (klbs)	20.00 - 25.00		
Bit Depth (ft)	1277.00	Drilling Hours	9.25	Sliding WOB (klbs)			
Bottom Hole Depth (ft)	1277.00	Hours Circulating	0.75	Rotating SPM	189.00 - 309.00		
Total Distance (ft)	1127.00	Hours Sliding	0.00	Sliding SPM			
Distance Rotated (ft)	1127.00	Hours Rotating	9.25	Motor RPM	40.00 - 70.00		
Distance Slid (ft)	0.00			Surface RPM	50.00 - 70.00		
Inclination In	0.35			Flow Rate (gpm)	550.00 - 895.00		
Inclination Out	1.05			On Bottom Pressure (psi)	1000.00 - 2450.00		
Azimuth In	240.31	% Hours Rotating	100%	Off Bottom Pressure (psi)	850.00 - 1850.00		
Azimuth Out	235.30	% Hours Sliding	0%				
AVG Total ROP (ft/h)	121.84	% Distance Sliding	0%				
AVG Rotating ROP (ft/h)	121.84	% 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 22, 2021, 8:15 Date Out: Nov 22, 2021, 23:40**

Bit Details		Motor Details		Directional Comments	
OD (in)	17.500	Size (in)	8.0	FLOW RANGE 400-900 GPM, REV PER GALLON .166, MAX DIFF 1330, MAX TORQUE 22020 BIT RUNS: 2	
Vendor	ULTERRA	Lobe/Stage	7/8, 5.9		
S/N	57215	Bend Angle	1.75		
Nozzles	9x12's	Speed (rev/gal)	0.17	MWD Comments	
Total Flow Area (in²)	0.994	Wear Pad OD (in)	8.313		
Drilling Hours for Day	9.25	Bit Distances			
Total Drilled for Day (ft)	1127.00	Survey: 70.00 ft			
Drilling Hours for BHA	9.25	POOH Reason			
Total Drilled for BHA (ft)	1127.00	Total Depth/Casing Point: Good run.			

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	57215	6 5/8" Reg Pin			17.500		1.50	1.50
Mud Motor Description: 8" 7/8 5.9 Stg. 1.75° FBH w/17" NBS, Size (in): 8.00, Bend Angle (°): 1.75, Rotor Lobe: 7, Stator Lobe: 8, Stator Stage: 5.9	Aim	800-40-002	6 5/8" Reg Box	6 5/8" Reg Box		8.000		40.55	42.05
Stabilizer Description: 17" STAB	JA	17635	6 5/8" Reg Box	6 5/8" Reg Pin	2.813	8.250		7.17	49.22
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	52.20
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	82.72
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	113.20
Crossover Sub Description: X-O SUB, Material: Steel	JA	JA8610	CET54 Box	6 5/8" Reg Pin	2.500	6.625		3.23	116.43

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	11-22	00:00	03:45	11-22			Standby
Standby	15	11-22	03:45	07:25	11-22			Standby - R/U over well
Pick Up BHA	64	11-22	07:25	08:15	11-22			P/U BHA #1

Rig Service - In Hole	19	11-22	08:15	09:30	11-22			Rig Service
Rotary Drill	1	11-22	09:30	11:00	11-22	150.00	300.00	Pressure On (psi): 1000.00, Pressure Off (psi): 850.00, Weight On Bit (klbs): 20.00, Surface RPM: 50, Surface Torque (ft lbf): 14000.00, Flow Rate (gpm): 550.00, Strokes Per Minute: 189.00
Survey	46	11-22	11:00	11:05	11-22	300.00	300.00	Inclination (°): 0.350, Azimuth (°): 240.310, TVD (ft): 230.00, Dogleg (°/100 ft): 0.15, Sensor Depth (ft): 230.00, Bit To Sensor (ft): 70.00
Rotary Drill	1	11-22	11:05	12:00	11-22	300.00	392.00	Pressure On (psi): 1575.00, Pressure Off (psi): 1050.00, Weight On Bit (klbs): 25.00, Surface RPM: 50, Surface Torque (ft lbf): 15750.00, Flow Rate (gpm): 705.00, Strokes Per Minute: 243.00
Survey	46	11-22	12:00	12:05	11-22	392.00	392.00	Inclination (°): 0.440, Azimuth (°): 199.090, TVD (ft): 322.00, Dogleg (°/100 ft): 0.32, Sensor Depth (ft): 322.00, Bit To Sensor (ft): 70.00
Rotary Drill	1	11-22	12:05	12:35	11-22	392.00	484.00	Pressure On (psi): 1575.00, Pressure Off (psi): 1050.00, Weight On Bit (klbs): 25.00, Surface RPM: 50, Surface Torque (ft lbf): 15750.00, Flow Rate (gpm): 705.00, Strokes Per Minute: 243.00
Survey	46	11-22	12:35	12:40	11-22	484.00	484.00	Inclination (°): 0.400, Azimuth (°): 221.590, TVD (ft): 413.99, Dogleg (°/100 ft): 0.18, Sensor Depth (ft): 414.00, Bit To Sensor (ft): 70.00
Rotary Drill	1	11-22	12:40	13:20	11-22	484.00	576.00	Pressure On (psi): 2450.00, Pressure Off (psi): 1850.00, Weight On Bit (klbs): 25.00, Surface RPM: 70, Surface Torque (ft lbf): 15750.00, Flow Rate (gpm): 895.00, Strokes Per Minute: 309.00
Survey	46	11-22	13:20	13:25	11-22	576.00	576.00	Inclination (°): 0.310, Azimuth (°): 193.020, TVD (ft): 505.99, Dogleg (°/100 ft): 0.21, Sensor Depth (ft): 506.00, Bit To Sensor (ft): 70.00
Rotary Drill	1	11-22	13:25	15:00	11-22	576.00	668.00	Pressure On (psi): 2450.00, Pressure Off (psi): 1850.00, Weight On Bit (klbs): 25.00, Surface RPM: 70, Surface Torque (ft lbf): 15750.00, Flow Rate (gpm): 895.00, Strokes Per Minute: 309.00
Survey	46	11-22	15:00	15:05	11-22	668.00	668.00	Inclination (°): 0.440, Azimuth (°): 201.460, TVD (ft): 597.99, Dogleg (°/100 ft): 0.15, Sensor Depth (ft): 598.00, Bit To Sensor (ft): 70.00
Rotary Drill	1	11-22	15:05	16:00	11-22	668.00	760.00	Pressure On (psi): 2450.00, Pressure Off (psi): 1850.00, Weight On Bit (klbs): 25.00, Surface RPM: 70, Surface Torque (ft lbf): 15750.00, Flow Rate (gpm): 895.00, Strokes Per Minute: 309.00
Survey	46	11-22	16:00	16:05	11-22	760.00	760.00	Inclination (°): 0.260, Azimuth (°): 221.320, TVD (ft): 689.99, Dogleg (°/100 ft): 0.23, Sensor Depth (ft): 690.00, Bit To Sensor (ft): 70.00
Rotary Drill	1	11-22	16:05	17:00	11-22	760.00	948.00	Pressure On (psi): 2450.00, Pressure Off (psi): 1850.00, Weight On Bit (klbs): 25.00, Surface RPM: 70, Surface Torque (ft lbf): 15750.00, Flow Rate (gpm): 895.00, Strokes Per Minute: 309.00
Survey	46	11-22	17:00	17:05	11-22	948.00	948.00	Inclination (°): 0.750, Azimuth (°): 230.610, TVD (ft): 877.98, Dogleg (°/100 ft): 0.26, Sensor Depth (ft): 878.00, Bit To Sensor (ft): 70.00
Rotary Drill	1	11-22	17:05	17:50	11-22	948.00	1043.00	Pressure On (psi): 2450.00, Pressure Off (psi): 1850.00, Weight On Bit (klbs): 25.00, Surface RPM: 70, Surface Torque (ft lbf): 15750.00, Flow Rate (gpm): 895.00, Strokes Per Minute: 309.00
Survey	46	11-22	17:50	17:55	11-22	1043.00	1043.00	Inclination (°): 0.620, Azimuth (°): 232.310, TVD (ft): 972.97, Dogleg (°/100 ft): 0.14, Sensor Depth (ft): 973.00, Bit To Sensor (ft): 70.00
Rotary Drill	1	11-22	17:55	18:50	11-22	1043.00	1136.00	Pressure On (psi): 2450.00, Pressure Off (psi): 1850.00, Weight On Bit (klbs): 25.00, Surface RPM: 70, Surface Torque (ft lbf): 15750.00, Flow Rate (gpm): 895.00, Strokes Per Minute: 309.00
Survey	46	11-22	18:50	18:55	11-22	1136.00	1136.00	Inclination (°): 0.750, Azimuth (°): 242.330, TVD (ft): 1065.97, Dogleg (°/100 ft): 0.19, Sensor Depth (ft): 1066.00, Bit To Sensor (ft): 70.00
Rotary Drill	1	11-22	18:55	19:25	11-22	1136.00	1226.00	Pressure On (psi): 2450.00, Pressure Off (psi): 1850.00, Weight On Bit (klbs): 25.00, Surface RPM: 70, Surface Torque (ft lbf): 15750.00, Flow Rate (gpm): 895.00, Strokes Per Minute: 309.00
Rig Repair	14	11-22	19:25	20:30	11-22			Work on Top Drive.
Survey	46	11-22	20:30	20:35	11-22	1226.00	1226.00	Inclination (°): 0.840, Azimuth (°): 235.210, TVD (ft): 1155.96, Dogleg (°/100 ft): 0.15, Sensor Depth (ft): 1156.00, Bit To Sensor (ft): 70.00
Rotary Drill	1	11-22	20:35	20:40	11-22	1226.00	1277.00	Pressure On (psi): 2450.00, Pressure Off (psi): 1850.00, Weight On Bit (klbs): 25.00, Surface RPM: 70, Surface Torque (ft lbf): 15750.00, Flow Rate (gpm): 895.00, Strokes Per Minute: 309.00
Survey	46	11-22	20:40	20:45	11-22	1277.00	1277.00	Inclination (°): 1.050, Azimuth (°): 235.300, TVD (ft): 1206.95, Dogleg (°/100 ft): 0.41, Sensor Depth (ft): 1207.00, Bit To Sensor (ft): 70.00
Circulating	3	11-22	20:45	21:30	11-22			Circulating.
Pooh	7	11-22	21:30	22:40	11-22			POOH for Casing.
Lay Down BHA	65	11-22	22:40	23:40	11-22			R/B BHA #1
Standby	15	11-22	23:40	23:55	11-22			Standby while Running Casing.

MWD Activities

No Activities



Job Number WT-21-181	Operator Advance Energy Partners	Rig Name Nabors X50
Start Date 2021-11-22	Well Name Anderson Fed Com 552H	Legal Well Name AFE Anderson Fed Com 552H
Play Delaware Basin	State/Province and Country New Mexico, US	County Lea
		Company Man

Friday, Dec 03 00:00 - 23:59 (Day 2 of 17)

Billing: \$9,000.00 (\$156,865.75 total)

Drilling Summary				Drilling Parameters	
Start Depth (ft)	1277.00	Downhole Hours	11.00	Rotating WOB (klbs)	40.00 - 48.00
Bit Depth (ft)	3641.00	Drilling Hours	5.92	Sliding WOB (klbs)	20.00 - 20.00
Bottom Hole Depth (ft)	3641.00	Hours Circulating	1.00	Rotating SPM	243.00 - 309.00
Total Distance (ft)	2364.00	Hours Sliding	0.33	Sliding SPM	309.00 - 309.00
Distance Rotated (ft)	2299.00	Hours Rotating	5.58	Motor RPM	30.00 - 70.00
Distance Slid (ft)	65.00			Surface RPM	40.00 - 70.00
Inclination In	1.36			Flow Rate (gpm)	705.00 - 895.00
Inclination Out	1.85			On Bottom Pressure (psi)	1600.00 - 2400.00
Azimuth In	207.53	% Hours Rotating	94%	Off Bottom Pressure (psi)	1200.00 - 2000.00
Azimuth Out	105.04	% Hours Sliding	6%		
AVG Total ROP (ft/h)	392.64	% Distance Sliding	3%		
AVG Rotating ROP (ft/h)	403.77	% Distance Rotating	97%		
AVG Sliding ROP (ft/h)	195.00				

Personnel

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

BHA #2 - 12.25" INTERMEDIATE

Date In: Dec 3, 2021, 13:00 Date Out: Dec 4, 2021, 8:30

Bit Details		Motor Details		Directional Comments
OD (in)	12.250	Size (in)	8.75	Flow Range 600-1300 GPM, REV PER GPM .13, Max Diff 1650, Max Torque 31480, Bit Runs: 2, Bit to Bend 5.62'
Vendor	Reed	Lobe/Stage	6/7, 6.6	
S/N	A281282	Bend Angle	1.75	MWD Comments
Nozzles	6x16's	Speed (rev/gal)	0.13	
Total Flow Area (in ²)	1.178	Wear Pad OD (in)	9.250	
Drilling Hours for Day	5.92	Bit Distances		
Total Drilled for Day (ft)	2364.00	Survey: 68.00 ft		POOH Reason Total Depth/Casing Point: GOOD RUN. POOH FOR CASING
Drilling Hours for BHA	12.92			
Total Drilled for BHA (ft)	3526.00			

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: TKC66-H3, Type: PDC (Polycrystalline Diamond Compacts), Gauge Length (in): 6.00, Size (in): 12.25	Reed	A281282	6 5/8" Reg Pin			12.250		1.50	1.50
Mud Motor Description: 8 3/4" 6/7L, 6.6 Stg. 1.75° FBH w/12" NBS, Size (in): 8.75, Bend Angle (°): 1.75, Rotor Lobe: 6, Stator Lobe: 7, Stator Stage: 6.6	Aim	CDM875-001	6 5/8" Reg Box	6 5/8" Reg Box		8.750		38.91	40.41
Stabilizer Description: 12" STAB	JA	12502	6 5/8" Reg Box	6 5/8" Reg Pin	2.813	8.250		7.11	47.52
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	50.50
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	81.02
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	111.50
Crossover Sub Description: X-O SUB, Material: Steel	JA	JA8610	CET54 Box	6 5/8" Reg Pin	2.500	6.625		3.23	114.73
HWDP Description: 8 Stands 5.5" HWDP, Type: Slick	Platinum		CET54 Box	CET54 Pin	4.000	5.500		735.63	850.36
Crossover Sub Description: CET54 (P) x EverDrlg 54 (B), Material: Steel	BLACK DIAMOND	BD18238	EverDrlg54 Box	CET54 Pin	4.000	6.938		3.42	853.78
HWDP Description: 3 Stands 5.5" HWDP, Type: Slick	BLACK DIAMOND		EverDrlg54 Box	EverDrlg54 Pin	3.625	5.500		281.18	1134.96

MWD items

No Items

Directional Activities

Activity Type	Code	Start Date	Start Time	End Time	End Date	Start (ft)	End (ft)	Comments/Details
Standby	15	12-03	00:00	11:40	12-03			Standby while RUNNING CASING AND WALKING RIG.
Pick Up BHA	64	12-03	11:40	13:00	12-03			P/U BHA #2
TIH	8	12-03	13:00	13:30	12-03			TIH W/ BHA #2
Circulating	3	12-03	13:30	13:45	12-03			TEST MWD & MOTOR.
Drilling Cement	17	12-03	13:45	14:30	12-03	1277.00	1277.00	Drilling Cement and Float Equipment F/ 1216 - T/ 1275 [GPM = 505, RPM = 30, WOB = 10-30, DIFF = 200]
Other	16	12-03	14:30	14:55	12-03			FIT
Rotary Drill	1	12-03	14:55	15:00	12-03	1277.00	1314.00	Pressure On (psi): 1600.00, Pressure Off (psi): 1200.00, Weight On Bit (kbs): 40.00, Surface RPM: 40, Surface Torque (ft lbf): 13000.00, Flow Rate (gpm): 705.00, Strokes Per Minute: 243.00
Connection	33	12-03	15:00	15:05	12-03			CONNECTION @ 1246
Rotary Drill	1	12-03	15:05	15:20	12-03	1314.00	1378.00	Pressure On (psi): 1600.00, Pressure Off (psi): 1200.00, Weight On Bit (kbs): 40.00, Surface RPM: 40, Surface Torque (ft lbf): 13000.00, Flow Rate (gpm): 705.00, Strokes Per Minute: 243.00
Rig Repair	14	12-03	15:20	15:50	12-03			RIG REPAIR
Rotary Drill	1	12-03	15:50	16:00	12-03	1378.00	1403.00	Pressure On (psi): 1600.00, Pressure Off (psi): 1200.00, Weight On Bit (kbs): 40.00, Surface RPM: 40, Surface Torque (ft lbf): 13000.00, Flow Rate (gpm): 705.00, Strokes Per Minute: 243.00
Survey	46	12-03	16:00	16:05	12-03	1403.00	1403.00	Inclination (°): 1.360, Azimuth (°): 207.530, TVD (ft): 1334.92, Dogleg (°/100 ft): 0.51, Sensor Depth (ft): 1335.00, Bit To Sensor (ft): 68.00
Rotary Drill	1	12-03	16:05	16:20	12-03	1403.00	1493.00	Pressure On (psi): 2400.00, Pressure Off (psi): 1800.00, Weight On Bit (kbs): 48.00, Surface RPM: 70, Surface Torque (ft lbf): 16000.00, Flow Rate (gpm): 895.00, Strokes Per Minute: 309.00
Survey	46	12-03	16:20	16:25	12-03	1493.00	1493.00	Inclination (°): 1.410, Azimuth (°): 205.420, TVD (ft): 1424.90, Dogleg (°/100 ft): 0.08, Sensor Depth (ft): 1425.00, Bit To Sensor (ft): 68.00
Rotary Drill	1	12-03	16:25	16:35	12-03	1493.00	1582.00	Pressure On (psi): 2400.00, Pressure Off (psi): 1800.00, Weight On Bit (kbs): 48.00, Surface RPM: 70, Surface Torque (ft lbf): 16000.00, Flow Rate (gpm): 895.00, Strokes Per Minute: 309.00
Survey	46	12-03	16:35	16:40	12-03	1582.00	1582.00	Inclination (°): 1.360, Azimuth (°): 200.670, TVD (ft): 1513.87, Dogleg (°/100 ft): 0.14, Sensor Depth (ft): 1514.00, Bit To Sensor (ft): 68.00
Rotary Drill	1	12-03	16:40	16:55	12-03	1582.00	1672.00	Pressure On (psi): 2400.00, Pressure Off (psi): 1800.00, Weight On Bit (kbs): 48.00, Surface RPM: 70, Surface Torque (ft lbf): 16000.00, Flow Rate (gpm): 895.00, Strokes Per Minute: 309.00
Survey	46	12-03	16:55	17:00	12-03	1672.00	1672.00	Inclination (°): 1.190, Azimuth (°): 189.070, TVD (ft): 1603.85, Dogleg (°/100 ft): 0.34, Sensor Depth (ft): 1604.00, Bit To Sensor (ft): 68.00
Rotary Drill	1	12-03	17:00	17:10	12-03	1672.00	1761.00	Pressure On (psi): 2400.00, Pressure Off (psi): 1800.00, Weight On Bit (kbs): 48.00, Surface RPM: 70, Surface Torque (ft lbf): 16000.00, Flow Rate (gpm): 895.00, Strokes Per Minute: 309.00
Survey	46	12-03	17:10	17:15	12-03	1761.00	1761.00	Inclination (°): 1.100, Azimuth (°): 181.690, TVD (ft): 1692.83, Dogleg (°/100 ft): 0.19, Sensor Depth (ft): 1693.00, Bit To Sensor (ft): 68.00
Rotary Drill	1	12-03	17:15	17:25	12-03	1761.00	1851.00	Pressure On (psi): 2400.00, Pressure Off (psi): 1800.00, Weight On Bit (kbs): 48.00, Surface RPM: 70, Surface Torque (ft lbf): 16000.00, Flow Rate (gpm): 895.00, Strokes Per Minute: 309.00
Survey	46	12-03	17:25	17:30	12-03	1851.00	1851.00	Inclination (°): 0.920, Azimuth (°): 176.590, TVD (ft): 1782.82, Dogleg (°/100 ft): 0.22, Sensor Depth (ft): 1783.00, Bit To Sensor (ft): 68.00
Rotary Drill	1	12-03	17:30	17:40	12-03	1851.00	1940.00	Pressure On (psi): 2400.00, Pressure Off (psi): 1800.00, Weight On Bit (kbs): 48.00, Surface RPM: 70, Surface Torque (ft lbf): 16000.00, Flow Rate (gpm): 895.00, Strokes Per Minute: 309.00
Survey	46	12-03	17:40	17:45	12-03	1940.00	1940.00	Inclination (°): 0.880, Azimuth (°): 166.830, TVD (ft): 1871.81, Dogleg (°/100 ft): 0.18, Sensor Depth (ft): 1872.00, Bit To Sensor (ft): 68.00
Rotary Drill	1	12-03	17:45	18:00	12-03	1940.00	2030.00	Pressure On (psi): 2400.00, Pressure Off (psi): 1800.00, Weight On Bit (kbs): 48.00, Surface RPM: 70, Surface Torque (ft lbf): 16000.00, Flow Rate (gpm): 895.00, Strokes Per Minute: 309.00
Survey	46	12-03	18:00	18:05	12-03	2030.00	2030.00	Inclination (°): 0.790, Azimuth (°): 151.800, TVD (ft): 1961.80, Dogleg (°/100 ft): 0.26, Sensor Depth (ft): 1962.00, Bit To Sensor (ft): 68.00
Rotary Drill	1	12-03	18:05	18:15	12-03	2030.00	2120.00	Pressure On (psi): 2400.00, Pressure Off (psi): 1800.00, Weight On Bit (kbs): 48.00, Surface RPM: 70, Surface Torque (ft lbf): 16000.00, Flow Rate (gpm): 895.00, Strokes Per Minute: 309.00
Survey	46	12-03	18:15	18:20	12-03	2120.00	2120.00	Inclination (°): 0.790, Azimuth (°): 145.120, TVD (ft): 2051.79, Dogleg (°/100 ft): 0.10, Sensor Depth (ft): 2052.00, Bit To Sensor (ft): 68.00

Rotary Drill	1	12-03	18:20	18:30	12-03	2120.00	2210.00	Pressure On (psi): 2400.00, Pressure Off (psi): 1800.00, Weight On Bit (klbs): 48.00, Surface RPM: 70, Surface Torque (ft lbf): 16000.00, Flow Rate (gpm): 895.00, Strokes Per Minute: 309.00
Survey	46	12-03	18:30	18:35	12-03	2210.00	2210.00	Inclination (°): 0.790, Azimuth (°): 123.590, TVD (ft): 2141.78, Dogleg (%/100 ft): 0.33, Sensor Depth (ft): 2142.00, Bit To Sensor (ft): 68.00
Rotary Drill	1	12-03	18:35	18:45	12-03	2210.00	2299.00	Pressure On (psi): 2400.00, Pressure Off (psi): 1800.00, Weight On Bit (klbs): 48.00, Surface RPM: 70, Surface Torque (ft lbf): 16000.00, Flow Rate (gpm): 895.00, Strokes Per Minute: 309.00
Survey	46	12-03	18:45	18:50	12-03	2299.00	2299.00	Inclination (°): 1.050, Azimuth (°): 106.010, TVD (ft): 2230.77, Dogleg (%/100 ft): 0.43, Sensor Depth (ft): 2231.00, Bit To Sensor (ft): 68.00
Rotary Drill	1	12-03	18:50	19:00	12-03	2299.00	2388.00	Pressure On (psi): 2400.00, Pressure Off (psi): 1800.00, Weight On Bit (klbs): 48.00, Surface RPM: 70, Surface Torque (ft lbf): 16000.00, Flow Rate (gpm): 895.00, Strokes Per Minute: 309.00
Survey	46	12-03	19:00	19:05	12-03	2388.00	2388.00	Inclination (°): 1.450, Azimuth (°): 92.300, TVD (ft): 2319.75, Dogleg (%/100 ft): 0.56, Sensor Depth (ft): 2320.00, Bit To Sensor (ft): 68.00
Rotary Drill	1	12-03	19:05	19:15	12-03	2388.00	2477.00	Pressure On (psi): 2400.00, Pressure Off (psi): 1800.00, Weight On Bit (klbs): 48.00, Surface RPM: 70, Surface Torque (ft lbf): 16000.00, Flow Rate (gpm): 895.00, Strokes Per Minute: 309.00
Survey	46	12-03	19:15	19:30	12-03	2477.00	2477.00	Inclination (°): 1.930, Azimuth (°): 86.150, TVD (ft): 2408.71, Dogleg (%/100 ft): 0.58, Sensor Depth (ft): 2409.00, Bit To Sensor (ft): 68.00
Slide Drill	2	12-03	19:30	19:35	12-03	2477.00	2497.00	Pressure On (psi): 2400.00, Pressure Off (psi): 2000.00, Weight On Bit (klbs): 20.00, Flow Rate (gpm): 895.00, Strokes Per Minute: 309, Toolface: 270, Toolface Type: magnetic
Rotary Drill	1	12-03	19:35	19:40	12-03	2497.00	2567.00	Pressure On (psi): 2400.00, Pressure Off (psi): 1800.00, Weight On Bit (klbs): 48.00, Surface RPM: 70, Surface Torque (ft lbf): 16000.00, Flow Rate (gpm): 895.00, Strokes Per Minute: 309.00
Survey	46	12-03	19:40	19:45	12-03	2567.00	2567.00	Inclination (°): 1.100, Azimuth (°): 66.020, TVD (ft): 2498.68, Dogleg (%/100 ft): 1.08, Sensor Depth (ft): 2499.00, Bit To Sensor (ft): 68.00
Rotary Drill	1	12-03	19:45	19:55	12-03	2567.00	2656.00	Pressure On (psi): 2400.00, Pressure Off (psi): 1800.00, Weight On Bit (klbs): 48.00, Surface RPM: 70, Surface Torque (ft lbf): 16000.00, Flow Rate (gpm): 895.00, Strokes Per Minute: 309.00
Survey	46	12-03	19:55	20:00	12-03	2656.00	2656.00	Inclination (°): 0.920, Azimuth (°): 24.450, TVD (ft): 2587.67, Dogleg (%/100 ft): 0.83, Sensor Depth (ft): 2588.00, Bit To Sensor (ft): 68.00
Rotary Drill	1	12-03	20:00	20:10	12-03	2656.00	2745.00	Pressure On (psi): 2400.00, Pressure Off (psi): 1800.00, Weight On Bit (klbs): 48.00, Surface RPM: 70, Surface Torque (ft lbf): 16000.00, Flow Rate (gpm): 895.00, Strokes Per Minute: 309.00
Survey	46	12-03	20:10	20:15	12-03	2745.00	2745.00	Inclination (°): 1.490, Azimuth (°): 40.180, TVD (ft): 2676.65, Dogleg (%/100 ft): 0.73, Sensor Depth (ft): 2677.00, Bit To Sensor (ft): 68.00
Rotary Drill	1	12-03	20:15	20:30	12-03	2745.00	2835.00	Pressure On (psi): 2400.00, Pressure Off (psi): 1800.00, Weight On Bit (klbs): 48.00, Surface RPM: 70, Surface Torque (ft lbf): 16000.00, Flow Rate (gpm): 895.00, Strokes Per Minute: 309.00
Survey	46	12-03	20:30	20:35	12-03	2835.00	2835.00	Inclination (°): 2.070, Azimuth (°): 44.220, TVD (ft): 2766.60, Dogleg (%/100 ft): 0.66, Sensor Depth (ft): 2767.00, Bit To Sensor (ft): 68.00
Slide Drill	2	12-03	20:35	20:45	12-03	2835.00	2855.00	Pressure On (psi): 2400.00, Pressure Off (psi): 2000.00, Weight On Bit (klbs): 20.00, Flow Rate (gpm): 895.00, Strokes Per Minute: 309, Toolface: 220, Toolface Type: magnetic
Rotary Drill	1	12-03	20:45	20:55	12-03	2855.00	2925.00	Pressure On (psi): 2400.00, Pressure Off (psi): 1800.00, Weight On Bit (klbs): 48.00, Surface RPM: 70, Surface Torque (ft lbf): 16000.00, Flow Rate (gpm): 895.00, Strokes Per Minute: 309.00
Survey	46	12-03	20:55	21:00	12-03	2925.00	2925.00	Inclination (°): 1.230, Azimuth (°): 41.240, TVD (ft): 2856.56, Dogleg (%/100 ft): 0.94, Sensor Depth (ft): 2857.00, Bit To Sensor (ft): 68.00
Rotary Drill	1	12-03	21:00	21:10	12-03	2925.00	3014.00	Pressure On (psi): 2400.00, Pressure Off (psi): 1800.00, Weight On Bit (klbs): 48.00, Surface RPM: 70, Surface Torque (ft lbf): 16000.00, Flow Rate (gpm): 895.00, Strokes Per Minute: 309.00
Survey	46	12-03	21:10	21:15	12-03	3014.00	3014.00	Inclination (°): 0.970, Azimuth (°): 38.780, TVD (ft): 2945.55, Dogleg (%/100 ft): 0.30, Sensor Depth (ft): 2946.00, Bit To Sensor (ft): 68.00
Rotary Drill	1	12-03	21:15	21:30	12-03	3014.00	3104.00	Pressure On (psi): 2400.00, Pressure Off (psi): 1800.00, Weight On Bit (klbs): 48.00, Surface RPM: 70, Surface Torque (ft lbf): 16000.00, Flow Rate (gpm): 895.00, Strokes Per Minute: 309.00
Survey	46	12-03	21:30	21:35	12-03	3104.00	3104.00	Inclination (°): 1.490, Azimuth (°): 45.890, TVD (ft): 3035.53, Dogleg (%/100 ft): 0.60, Sensor Depth (ft): 3036.00, Bit To Sensor (ft): 68.00
Rotary Drill	1	12-03	21:35	21:55	12-03	3104.00	3193.00	Pressure On (psi): 2400.00, Pressure Off (psi): 1800.00, Weight On Bit (klbs): 48.00, Surface RPM: 70, Surface Torque (ft lbf): 16000.00, Flow Rate (gpm): 895.00, Strokes Per Minute: 309.00
Survey	46	12-03	21:55	22:00	12-03	3193.00	3193.00	Inclination (°): 2.070, Azimuth (°): 46.510, TVD (ft): 3124.48, Dogleg (%/100 ft): 0.65, Sensor Depth (ft): 3125.00, Bit To Sensor (ft): 68.00

Rotary Drill	1	12-03	22:00	22:05	12-03	3193.00	3202.00	Pressure On (psi): 2400.00, Pressure Off (psi): 1800.00, Weight On Bit (kbs): 48.00, Surface RPM: 70, Surface Torque (ft lbf): 16000.00, Flow Rate (gpm): 895.00, Strokes Per Minute: 309.00
Slide Drill	2	12-03	22:05	22:10	12-03	3202.00	3227.00	Pressure On (psi): 2400.00, Pressure Off (psi): 2000.00, Weight On Bit (kbs): 20.00, Flow Rate (gpm): 895.00, Strokes Per Minute: 309, Toolface: 200, Toolface Type: magnetic
Rotary Drill	1	12-03	22:10	22:20	12-03	3227.00	3283.00	Pressure On (psi): 2400.00, Pressure Off (psi): 1800.00, Weight On Bit (kbs): 48.00, Surface RPM: 70, Surface Torque (ft lbf): 16000.00, Flow Rate (gpm): 895.00, Strokes Per Minute: 309.00
Survey	46	12-03	22:20	22:25	12-03	3283.00	3283.00	Inclination (°): 1.360, Azimuth (°): 55.740, TVD (ft): 3214.44, Dogleg (°/100 ft): 0.84, Sensor Depth (ft): 3215.00, Bit To Sensor (ft): 68.00
Rotary Drill	1	12-03	22:25	22:35	12-03	3283.00	3373.00	Pressure On (psi): 2400.00, Pressure Off (psi): 1800.00, Weight On Bit (kbs): 48.00, Surface RPM: 70, Surface Torque (ft lbf): 16000.00, Flow Rate (gpm): 895.00, Strokes Per Minute: 309.00
Survey	46	12-03	22:35	22:40	12-03	3373.00	3373.00	Inclination (°): 1.050, Azimuth (°): 73.230, TVD (ft): 3304.42, Dogleg (°/100 ft): 0.53, Sensor Depth (ft): 3305.00, Bit To Sensor (ft): 68.00
Rotary Drill	1	12-03	22:40	22:50	12-03	3373.00	3462.00	Pressure On (psi): 2400.00, Pressure Off (psi): 1800.00, Weight On Bit (kbs): 48.00, Surface RPM: 70, Surface Torque (ft lbf): 16000.00, Flow Rate (gpm): 895.00, Strokes Per Minute: 309.00
Survey	46	12-03	22:50	22:55	12-03	3462.00	3462.00	Inclination (°): 1.490, Azimuth (°): 93.530, TVD (ft): 3393.40, Dogleg (°/100 ft): 0.70, Sensor Depth (ft): 3394.00, Bit To Sensor (ft): 68.00
Rotary Drill	1	12-03	22:55	23:10	12-03	3462.00	3552.00	Pressure On (psi): 2400.00, Pressure Off (psi): 1800.00, Weight On Bit (kbs): 48.00, Surface RPM: 70, Surface Torque (ft lbf): 16000.00, Flow Rate (gpm): 895.00, Strokes Per Minute: 309.00
Survey	46	12-03	23:10	23:15	12-03	3552.00	3552.00	Inclination (°): 1.760, Azimuth (°): 98.100, TVD (ft): 3483.36, Dogleg (°/100 ft): 0.33, Sensor Depth (ft): 3484.00, Bit To Sensor (ft): 68.00
Rotary Drill	1	12-03	23:15	23:40	12-03	3552.00	3641.00	Pressure On (psi): 2400.00, Pressure Off (psi): 1800.00, Weight On Bit (kbs): 48.00, Surface RPM: 70, Surface Torque (ft lbf): 16000.00, Flow Rate (gpm): 895.00, Strokes Per Minute: 309.00
Survey	46	12-03	23:40	23:45	12-03	3641.00	3641.00	Inclination (°): 1.850, Azimuth (°): 105.040, TVD (ft): 3572.32, Dogleg (°/100 ft): 0.27, Sensor Depth (ft): 3573.00, Bit To Sensor (ft): 68.00
Rotary Drill	1	12-03	23:45	00:05	12-04	3641.00	3731.00	Pressure On (psi): 2400.00, Pressure Off (psi): 1800.00, Weight On Bit (kbs): 48.00, Surface RPM: 70, Surface Torque (ft lbf): 16000.00, Flow Rate (gpm): 895.00, Strokes Per Minute: 309.00

MWD Activities

No Activities



Job Number WT-21-181	Operator Advance Energy Partners	Rig Name Nabors X50
Start Date 2021-11-22	Well Name Anderson Fed Com 552H	Legal Well Name AFE Anderson Fed Com 552H
Play Delaware Basin	State/Province and Country New Mexico, US	County Lea
		Company Man

Saturday, Dec 04 00:00 - 23:59 (Day 3 of 17)

Billing: N/A (\$156,865.75 total)

Drilling Summary				Drilling Parameters			
Start Depth (ft)	3641.00	Downhole Hours	8.50	Rotating WOB (klbs)	48.00 - 48.00		
Bit Depth (ft)	4803.00	Drilling Hours	7.00	Sliding WOB (klbs)			
Bottom Hole Depth (ft)	4803.00	Hours Circulating	0.00	Rotating SPM	309.00 - 309.00		
Total Distance (ft)	1162.00	Hours Sliding	0.17	Sliding SPM			
Distance Rotated (ft)	1146.00	Hours Rotating	6.83	Motor RPM	30.00 - 70.00		
Distance Slid (ft)	16.00			Surface RPM	70.00 - 70.00		
Inclination In	1.93			Flow Rate (gpm)	895.00 - 895.00		
Inclination Out	0.92			On Bottom Pressure (psi)	2400.00 - 2400.00		
Azimuth In	112.60	% Hours Rotating	98%	Off Bottom Pressure (psi)	1800.00 - 1800.00		
Azimuth Out	9.60	% Hours Sliding	2%				
AVG Total ROP (ft/h)	166.00	% Distance Sliding	1%				
AVG Rotating ROP (ft/h)	167.71	% Distance Rotating	99%				
AVG Sliding ROP (ft/h)	96.00						

Personnel

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

BHA #2 - 12.25" INTERMEDIATE

Date In: Dec 3, 2021, 13:00 Date Out: Dec 4, 2021, 8:30

Bit Details		Motor Details		Directional Comments	
OD (in)	12.250	Size (in)	8.75	Flow Range 600-1300 GPM, REV PER GPM .13, Max Diff 1650, Max Torque 31480, Bit Runs: 2, Bit to Bend 5.62'	
Vendor	Reed	Lobe/Stage	6/7, 6.6		
S/N	A281282	Bend Angle	1.75	MWD Comments	
Nozzles	6x16's	Speed (rev/gal)	0.13		
Total Flow Area (in ²)	1.178	Wear Pad OD (in)	9.250	POOH Reason	
Drilling Hours for Day	7.00	Bit Distances			
Total Drilled for Day (ft)	1162.00	Survey: 68.00 ft		Total Depth/Casing Point: GOOD RUN. POOH FOR CASING	
Drilling Hours for BHA	12.92				
Total Drilled for BHA (ft)	3526.00				

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: TKC66-H3, Type: PDC (Polycrystalline Diamond Compacts), Gauge Length (in): 6.00, Size (in): 12.25	Reed	A281282	6 5/8" Reg Pin			12.250		1.50	1.50
Mud Motor Description: 8 3/4" 6/7L, 6.6 Stg. 1.75° FBH w/12" NBS, Size (in): 8.75, Bend Angle (°): 1.75, Rotor Lobe: 6, Stator Lobe: 7, Stator Stage: 6.6	Aim	CDM875-001	6 5/8" Reg Box	6 5/8" Reg Box		8.750		38.91	40.41
Stabilizer Description: 12" STAB	JA	12502	6 5/8" Reg Box	6 5/8" Reg Pin	2.813	8.250		7.11	47.52
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	50.50
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	81.02
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	111.50
Crossover Sub Description: X-O SUB, Material: Steel	JA	JA8610	CET54 Box	6 5/8" Reg Pin	2.500	6.625		3.23	114.73
HWDP Description: 8 Stands 5.5" HWDP, Type: Slick	Platinum		CET54 Box	CET54 Pin	4.000	5.500		735.63	850.36
Crossover Sub Description: CET54 (P) x EverDrlg 54 (B), Material: Steel	BLACK DIAMOND	BD18238	EverDrlg54 Box	CET54 Pin	4.000	6.938		3.42	853.78
HWDP Description: 3 Stands 5.5" HWDP, Type: Slick	BLACK DIAMOND		EverDrlg54 Box	EverDrlg54 Pin	3.625	5.500		281.18	1134.96

MWD items

No Items

Directional Activities

Activity Type	Code	Start Date	Start Time	End Time	End Date	Start (ft)	End (ft)	Comments/Details
Rotary Drill	1	12-03	23:45	00:05	12-04	3641.00	3731.00	Pressure On (psi): 2400.00, Pressure Off (psi): 1800.00, Weight On Bit (klbs): 48.00, Surface RPM: 70, Surface Torque (ft lbf): 16000.00, Flow Rate (gpm): 895.00, Strokes Per Minute: 309.00
Survey	46	12-04	00:05	00:10	12-04	3731.00	3731.00	Inclination (°): 1.930, Azimuth (°): 112.600, TVD (ft): 3662.27, Dogleg (°/100 ft): 0.29, Sensor Depth (ft): 3663.00, Bit To Sensor (ft): 68.00
Rotary Drill	1	12-04	00:10	00:35	12-04	3731.00	3821.00	Pressure On (psi): 2400.00, Pressure Off (psi): 1800.00, Weight On Bit (klbs): 48.00, Surface RPM: 70, Surface Torque (ft lbf): 16000.00, Flow Rate (gpm): 895.00, Strokes Per Minute: 309.00
Survey	46	12-04	00:35	00:40	12-04	3821.00	3821.00	Inclination (°): 2.110, Azimuth (°): 116.380, TVD (ft): 3752.22, Dogleg (°/100 ft): 0.25, Sensor Depth (ft): 3753.00, Bit To Sensor (ft): 68.00
Rotary Drill	1	12-04	00:40	00:45	12-04	3821.00	3826.00	Pressure On (psi): 2400.00, Pressure Off (psi): 1800.00, Weight On Bit (klbs): 48.00, Surface RPM: 70, Surface Torque (ft lbf): 16000.00, Flow Rate (gpm): 895.00, Strokes Per Minute: 309.00
Slide Drill	2	12-04	00:45	00:55	12-04	3826.00	3842.00	Toolface: 285, Toolface Type: magnetic
Rotary Drill	1	12-04	00:55	01:20	12-04	3842.00	3910.00	Pressure On (psi): 2400.00, Pressure Off (psi): 1800.00, Weight On Bit (klbs): 48.00, Surface RPM: 70, Surface Torque (ft lbf): 16000.00, Flow Rate (gpm): 895.00, Strokes Per Minute: 309.00
Survey	46	12-04	01:20	01:25	12-04	3910.00	3910.00	Inclination (°): 1.050, Azimuth (°): 135.190, TVD (ft): 3841.18, Dogleg (°/100 ft): 1.31, Sensor Depth (ft): 3842.00, Bit To Sensor (ft): 68.00
Rotary Drill	1	12-04	01:25	02:00	12-04	3910.00	4000.00	Pressure On (psi): 2400.00, Pressure Off (psi): 1800.00, Weight On Bit (klbs): 48.00, Surface RPM: 70, Surface Torque (ft lbf): 16000.00, Flow Rate (gpm): 895.00, Strokes Per Minute: 309.00
Survey	46	12-04	02:00	02:15	12-04	4000.00	4000.00	Inclination (°): 0.790, Azimuth (°): 167.270, TVD (ft): 3931.17, Dogleg (°/100 ft): 0.63, Sensor Depth (ft): 3932.00, Bit To Sensor (ft): 68.00
Rotary Drill	1	12-04	02:15	02:50	12-04	4000.00	4090.00	Pressure On (psi): 2400.00, Pressure Off (psi): 1800.00, Weight On Bit (klbs): 48.00, Surface RPM: 70, Surface Torque (ft lbf): 16000.00, Flow Rate (gpm): 895.00, Strokes Per Minute: 309.00
Survey	46	12-04	02:50	02:55	12-04	4090.00	4090.00	Inclination (°): 0.750, Azimuth (°): 161.200, TVD (ft): 4021.16, Dogleg (°/100 ft): 0.10, Sensor Depth (ft): 4022.00, Bit To Sensor (ft): 68.00
Rotary Drill	1	12-04	02:55	03:25	12-04	4090.00	4179.00	Pressure On (psi): 2400.00, Pressure Off (psi): 1800.00, Weight On Bit (klbs): 48.00, Surface RPM: 70, Surface Torque (ft lbf): 16000.00, Flow Rate (gpm): 895.00, Strokes Per Minute: 309.00
Survey	46	12-04	03:25	03:45	12-04	4179.00	4179.00	Inclination (°): 0.620, Azimuth (°): 144.420, TVD (ft): 4110.16, Dogleg (°/100 ft): 0.27, Sensor Depth (ft): 4111.00, Bit To Sensor (ft): 68.00
Rotary Drill	1	12-04	03:45	04:15	12-04	4179.00	4268.00	Pressure On (psi): 2400.00, Pressure Off (psi): 1800.00, Weight On Bit (klbs): 48.00, Surface RPM: 70, Surface Torque (ft lbf): 16000.00, Flow Rate (gpm): 895.00, Strokes Per Minute: 309.00
Survey	46	12-04	04:15	04:20	12-04	4268.00	4268.00	Inclination (°): 0.530, Azimuth (°): 129.040, TVD (ft): 4199.15, Dogleg (°/100 ft): 0.20, Sensor Depth (ft): 4200.00, Bit To Sensor (ft): 68.00
Rotary Drill	1	12-04	04:20	04:50	12-04	4268.00	4358.00	Pressure On (psi): 2400.00, Pressure Off (psi): 1800.00, Weight On Bit (klbs): 48.00, Surface RPM: 70, Surface Torque (ft lbf): 16000.00, Flow Rate (gpm): 895.00, Strokes Per Minute: 309.00
Survey	46	12-04	04:50	04:55	12-04	4358.00	4358.00	Inclination (°): 0.440, Azimuth (°): 112.870, TVD (ft): 4289.15, Dogleg (°/100 ft): 0.18, Sensor Depth (ft): 4290.00, Bit To Sensor (ft): 68.00
Rotary Drill	1	12-04	04:55	05:50	12-04	4358.00	4448.00	Pressure On (psi): 2400.00, Pressure Off (psi): 1800.00, Weight On Bit (klbs): 48.00, Surface RPM: 70, Surface Torque (ft lbf): 16000.00, Flow Rate (gpm): 895.00, Strokes Per Minute: 309.00
Survey	46	12-04	05:50	06:00	12-04	4448.00	4448.00	Inclination (°): 0.440, Azimuth (°): 108.300, TVD (ft): 4379.15, Dogleg (°/100 ft): 0.04, Sensor Depth (ft): 4380.00, Bit To Sensor (ft): 68.00
Rotary Drill	1	12-04	06:00	06:30	12-04	4448.00	4537.00	Pressure On (psi): 2400.00, Pressure Off (psi): 1800.00, Weight On Bit (klbs): 48.00, Surface RPM: 70, Surface Torque (ft lbf): 16000.00, Flow Rate (gpm): 895.00, Strokes Per Minute: 309.00
Survey	46	12-04	06:30	06:35	12-04	4537.00	4537.00	Inclination (°): 0.310, Azimuth (°): 82.980, TVD (ft): 4468.14, Dogleg (°/100 ft): 0.23, Sensor Depth (ft): 4469.00, Bit To Sensor (ft): 68.00
Rotary Drill	1	12-04	06:35	07:05	12-04	4537.00	4627.00	Pressure On (psi): 2400.00, Pressure Off (psi): 1800.00, Weight On Bit (klbs): 48.00, Surface RPM: 70, Surface Torque (ft lbf): 16000.00, Flow Rate (gpm): 895.00, Strokes Per Minute: 309.00
Survey	46	12-04	07:05	07:10	12-04	4627.00	4627.00	Inclination (°): 0.440, Azimuth (°): 47.830, TVD (ft): 4558.14, Dogleg (°/100 ft): 0.29, Sensor Depth (ft): 4559.00, Bit To Sensor (ft): 68.00
Rotary Drill	1	12-04	07:10	07:50	12-04	4627.00	4716.00	Pressure On (psi): 2400.00, Pressure Off (psi): 1800.00, Weight On Bit (klbs): 48.00, Surface RPM: 70, Surface Torque (ft lbf): 16000.00, Flow Rate (gpm): 895.00, Strokes Per Minute: 309.00
Survey	46	12-04	07:50	07:55	12-04	4716.00	4716.00	Inclination (°): 0.660, Azimuth (°): 26.730, TVD (ft): 4647.14, Dogleg (°/100 ft): 0.33, Sensor Depth (ft): 4648.00, Bit To Sensor (ft): 68.00
Rotary Drill	1	12-04	07:55	08:15	12-04	4716.00	4803.00	Pressure On (psi): 2400.00, Pressure Off (psi): 1800.00, Weight On Bit (klbs): 48.00, Surface RPM: 70, Surface Torque (ft lbf): 16000.00, Flow Rate (gpm): 895.00, Strokes Per Minute: 309.00
Survey	46	12-04	08:15	08:30	12-04	4803.00	4803.00	Inclination (°): 0.920, Azimuth (°): 9.600, TVD (ft): 4734.13, Dogleg (°/100 ft): 0.40, Sensor Depth (ft): 4735.00, Bit To Sensor (ft): 68.00

MWD Activities

No Activities



Job Number WT-21-181	Operator Advance Energy Partners	Rig Name Nabors X50
Start Date 2021-11-22	Well Name Anderson Fed Com 552H	Legal Well Name AFE Anderson Fed Com 552H
Play Delaware Basin	State/Province and Country New Mexico, US	County Lea
		Company Man

Monday, Jan 03 00:00 - 23:59 (Day 4 of 17)

Billing: \$12,055.25 (\$156,865.75 total)

Drilling Summary		Drilling Parameters	
Start Depth (ft)	4803.00	Downhole Hours	0.50
Bit Depth (ft)	4888.00	Drilling Hours	0.50
Bottom Hole Depth (ft)	4888.00	Hours Circulating	0.00
Total Distance (ft)	85.00	Hours Sliding	0.00
Distance Rotated (ft)	85.00	Hours Rotating	0.50
Distance Slid (ft)	0.00	Motor RPM	30.00 - 50.00
Inclination In		Surface RPM	70.00 - 70.00
Inclination Out		Flow Rate (gpm)	895.00 - 895.00
Azimuth In		On Bottom Pressure (psi)	2400.00 - 2400.00
Azimuth Out		Off Bottom Pressure (psi)	1800.00 - 1800.00
AVG Total ROP (ft/h)	170.00	% Hours Rotating	100%
AVG Rotating ROP (ft/h)	170.00	% Hours Sliding	0%
AVG Sliding ROP (ft/h)	0.00	% Distance Sliding	0%
		% Distance Rotating	100%

Personnel

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

BHA #3 - 8.75" INTERMEDIATE

Date In: Jan 3, 2022, 23:30 Date Out: Jan 4, 2022, 20:15

Bit Details		Motor Details		Directional Comments
OD (in)	8.750	Size (in)	7.0	Flow Range 500-750 GPM, REV PER GPM .26, Max Diff 1910, Max Torque 18710, Bit Runs: 1, Bit to Bend 4.30'
Vendor	Reed	Lobe/Stage	7/8, 8.5	
S/N	A283984	Bend Angle	1.75	
Nozzles	5-15's, 1-16	Speed (rev/gal)	0.26	MWD Comments
Total Flow Area (in ²)	1.059	Wear Pad OD (in)	6.938	POOH Reason Downhole Tool Incident: Mud Motor Stalled 4 times as soon as we would tag bottom. POOH for new motor.
Drilling Hours for Day	0.50	Bit Distances		
Total Drilled for Day (ft)	85.00	Survey: 66.00 ft, Gamma: 51.00 ft		
Drilling Hours for BHA	12.33			
Total Drilled for BHA (ft)	4101.00			

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: TKC66-AZZ, Type: PDC (Polycrystalline Diamond Compacts), Gauge Length (in): 4.00, Size (in): 8.75	Reed	A283984	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	Drilformance	DFM-700-004	4 1/2" IF Box	4 1/2" IF Box		7.000		35.87	36.87
Stabilizer Description: 8.5" STAB	JA	85586	4 1/2" IF Box	4 1/2" IF Pin	2.250	6.500		5.19	42.06
UBHO Sub Description: NM DAO SUB, Material: Non-Magnetic	AIM	AIM675-364	4 1/2" IF Box	4 1/2" IF Pin	3.250	6.750		3.05	45.11
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	75.76
Drill Collar Description: NMDC, Material: Non-Magnetic, Type: Slick Drill	GATOR	67-30-193	4 1/2" IF Box	4 1/2" IF Pin	3.250	6.750		29.44	105.20
Crossover Sub Description: X-O SUB, Material: Steel	Platinum	PPR5372	CET54 Box	4 1/2" IF Pin	2.750	6.250		2.38	107.58
HWDP Description: 8 Stands 5.5" HWDP, Type: Slick	Platinum		CET50 Box	CET54 Pin	3.625	5.500		735.63	843.21
Crossover Sub Description: CET54 (P) x EverDrlg 54 (B), Material: Steel	BLACK DIAMOND	BD18238	EverDrlg54 Box	CET54 Pin	4.000	6.938		3.42	846.63
HWDP Description: 3 Stands 5.5" HWDP, Type: Slick	BLACK DIAMOND		EverDrlg54 Box	EverDrlg54 Pin	3.625	5.500		281.18	1127.81

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	01-03	00:00	23:30	01-03			Standby
Rotary Drill	1	01-03	23:30	00:00	01-04	4803.00	4888.00	Pressure On (psi): 2400.00, Pressure Off (psi): 1800.00, Weight On Bit (klbs): 48.00, Surface RPM: 70, Surface Torque (ft lbf): 16000.00, Flow Rate (gpm): 895.00, Strokes Per Minute: 309.00

MWD Activities

No Activities



Job Number WT-21-181	Operator Advance Energy Partners	Rig Name Nabors X50
Start Date 2021-11-22	Well Name Anderson Fed Com 552H	Legal Well Name AFE Anderson Fed Com 552H
Play Delaware Basin	State/Province and Country New Mexico, US	County Lea
		Company Man

Tuesday, Jan 04 00:00 - 23:59 (Day 5 of 17)

Billing: \$12,055.25 (\$156,865.75 total)

Drilling Summary				Drilling Parameters	
Start Depth (ft)	4888.00	Downhole Hours	24.00	Rotating WOB (klbs)	45.00 - 48.00
Bit Depth (ft)	8904.00	Drilling Hours	11.83	Sliding WOB (klbs)	30.00 - 30.00
Bottom Hole Depth (ft)	8904.00	Hours Circulating	0.42	Rotating SPM	240.00 - 309.00
Total Distance (ft)	4016.00	Hours Sliding	0.92	Sliding SPM	243.00 - 243.00
Distance Rotated (ft)	3961.00	Hours Rotating	10.92	Motor RPM	30.00 - 50.00
Distance Slid (ft)	55.00			Surface RPM	50.00 - 70.00
Inclination In	1.05			Flow Rate (gpm)	700.00 - 895.00
Inclination Out	6.20			On Bottom Pressure (psi)	2400.00 - 3000.00
Azimuth In	359.14	% Hours Rotating	92%	Off Bottom Pressure (psi)	1800.00 - 2300.00
Azimuth Out	111.55	% Hours Sliding	8%		
AVG Total ROP (ft/h)	332.51	% Distance Sliding	1%		
AVG Rotating ROP (ft/h)	354.39	% Distance Rotating	99%		
AVG Sliding ROP (ft/h)	60.00				

Personnel

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

BHA #3 - 8.75" INTERMEDIATE

Date In: Jan 3, 2022, 23:30 Date Out: Jan 4, 2022, 20:15

Bit Details		Motor Details		Directional Comments	
OD (in)	8.750	Size (in)	7.0	Flow Range 500-750 GPM, REV PER GPM .26, Max Diff 1910, Max Torque 18710, Bit Runs: 1, Bit to Bend 4.30'	
Vendor	Reed	Lobe/Stage	7/8, 8.5		
S/N	A283984	Bend Angle	1.75		
Nozzles	5-15's, 1-16	Speed (rev/gal)	0.26		
Total Flow Area (in ²)	1.059	Wear Pad OD (in)	6.938	MWD Comments	
Drilling Hours for Day	11.83	Bit Distances			
Total Drilled for Day (ft)	4016.00	Survey: 66.00 ft, Gamma: 51.00 ft		POOH Reason	
Drilling Hours for BHA	12.33			Downhole Tool Incident: Mud Motor Stalled 4 times as soon as we would tag bottom. POOH for new motor.	
Total Drilled for BHA (ft)	4101.00				

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: TKC66-AZZ, Type: PDC (Polycrystalline Diamond Compacts), Gauge Length (in): 4.00, Size (in): 8.75	Reed	A283984	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	Drilformance	DFM-700-004	4 1/2" IF Box	4 1/2" IF Box		7.000		35.87	36.87
Stabilizer Description: 8.5" STAB	JA	85586	4 1/2" IF Box	4 1/2" IF Pin	2.250	6.500		5.19	42.06
UBHO Sub Description: NM DAO SUB, Material: Non-Magnetic	AIM	AIM675-364	4 1/2" IF Box	4 1/2" IF Pin	3.250	6.750		3.05	45.11
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	75.76
Drill Collar Description: NMDC, Material: Non-Magnetic, Type: Slick Drill	GATOR	67-30-193	4 1/2" IF Box	4 1/2" IF Pin	3.250	6.750		29.44	105.20
Crossover Sub Description: X-O SUB, Material: Steel	Platinum	PPR5372	CET54 Box	4 1/2" IF Pin	2.750	6.250		2.38	107.58
HWDP Description: 8 Stands 5.5" HWDP, Type: Slick	Platinum		CET50 Box	CET54 Pin	3.625	5.500		735.63	843.21
Crossover Sub Description: CET54 (P) x EverDrlg 54 (B), Material: Steel	BLACK DIAMOND	BD18238	EverDrlg54 Box	CET54 Pin	4.000	6.938		3.42	846.63
HWDP Description: 3 Stands 5.5" HWDP, Type: Slick	BLACK DIAMOND		EverDrlg54 Box	EverDrlg54 Pin	3.625	5.500		281.18	1127.81

MWD Items

No Items

BHA #4 - INTERMEDIATE

Date In: Jan 4, 2022, 20:15 Date Out: Jan 6, 2022, 0:30

Bit Details		Motor Details		Directional Comments	
OD (in)	8.750	Size (in)	7.0	BUTCH'S 7" 6/7 6.5 W/ 8.5 NBS Flow Range 400-750 GPM, REV	
Vendor	Reed	Lobe/Stage	6/7, 6.5	.23, Max Diff 1530, Max Torque 26280, Bit Runs: 0, Bit to Bend	
S/N	A284029	Bend Angle	1.75	4.80'	
Nozzles	6-15's	Speed (rev/gal)	0.23	MWD Comments	
Total Flow Area (in ²)	1.035	Wear Pad OD (in)	7.580		
Drilling Hours for Day	0.00	Bit Distances			
Total Drilled for Day (ft)		Survey: 63.00 ft, Gamma: 48.00			
Drilling Hours for BHA	13.42			POOH Reason	
Total Drilled for BHA (ft)	1862.00			Change Bottom Hole Assembly: POOH to P/U Curve Assy.	

Directional Items

Description	Vendor	SN#	Top Conn	Btm Conn	ID (in)	OD (in)	Fn Len. (ft)	Len (ft)	Aggr. Len (ft)
Bit (Fixed Cutter) Description: <i>TKC66-AZ2</i> , Type: <i>PDC (Polycrystalline Diamond Compacts)</i> , Gauge Length (in): <i>4.00</i> , Size (in): <i>8.75</i>	Reed	A284029	4 1/2" Reg Pin			8.750		1.00	1.00
Mud Motor Description: <i>7" 6/7 6.5 Stg. 1.75° FBH w/8.5" NBS</i> , Size (in): <i>7.00</i> , Bend Angle (°): <i>1.75</i> , Rotor Lobe: <i>6</i> , Stator Lobe: <i>7</i> , Stator Stage: <i>6.5</i>	Butch's	BDT-700ML-006	4 1/2" IF Box	4 1/2" Reg Box		7.000		32.74	33.74
Stabilizer Description: <i>8.5" STAB</i>	JA	85586	4 1/2" IF Box	4 1/2" IF Pin	2.250	6.500		5.19	38.93
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		3.05	41.98
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	72.63
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	102.07
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	104.45
HWDP Description: <i>8 Stands 5.5" HWDP</i> , Type: <i>Slick</i>	Platinum		CET50 Box	CET54 Pin	3.625	5.500		735.63	840.08
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	843.50
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	1124.68

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	01-03	23:30	00:00	01-04	4803.00	4888.00	Pressure On (psi): <i>2400.00</i> , Pressure Off (psi): <i>1800.00</i> , Weight On Bit (klbs): <i>48.00</i> , Surface RPM: <i>70</i> , Surface Torque (ft lbf): <i>16000.00</i> , Flow Rate (gpm): <i>895.00</i> , Strokes Per Minute: <i>309.00</i>
Survey	46	01-04	00:00	00:05	01-04	4888.00	4888.00	Inclination (°): <i>1.050</i> , Azimuth (°): <i>359.140</i> , TVD (ft): <i>4821.12</i> , Dogleg (°/100 ft): <i>0.25</i> , Sensor Depth (ft): <i>4822.00</i> , Bit To Sensor (ft): <i>66.00</i>
Rotary Drill	1	01-04	00:05	00:30	01-04	4888.00	4977.00	Pressure On (psi): <i>2400.00</i> , Pressure Off (psi): <i>1800.00</i> , Weight On Bit (klbs): <i>48.00</i> , Surface RPM: <i>70</i> , Surface Torque (ft lbf): <i>16000.00</i> , Flow Rate (gpm): <i>895.00</i> , Strokes Per Minute: <i>309.00</i>
Survey	46	01-04	00:30	00:35	01-04	4977.00	4977.00	Inclination (°): <i>1.100</i> , Azimuth (°): <i>353.160</i> , TVD (ft): <i>4910.10</i> , Dogleg (°/100 ft): <i>0.14</i> , Sensor Depth (ft): <i>4911.00</i> , Bit To Sensor (ft): <i>66.00</i>
Rotary Drill	1	01-04	00:35	00:45	01-04	4977.00	5067.00	Pressure On (psi): <i>2400.00</i> , Pressure Off (psi): <i>1800.00</i> , Weight On Bit (klbs): <i>48.00</i> , Surface RPM: <i>70</i> , Surface Torque (ft lbf): <i>16000.00</i> , Flow Rate (gpm): <i>895.00</i> , Strokes Per Minute: <i>309.00</i>
Survey	46	01-04	00:45	00:50	01-04	5067.00	5067.00	Inclination (°): <i>1.270</i> , Azimuth (°): <i>341.030</i> , TVD (ft): <i>5000.08</i> , Dogleg (°/100 ft): <i>0.34</i> , Sensor Depth (ft): <i>5001.00</i> , Bit To Sensor (ft): <i>66.00</i>
Rotary Drill	1	01-04	00:50	01:00	01-04	5067.00	5157.00	Pressure On (psi): <i>2400.00</i> , Pressure Off (psi): <i>1800.00</i> , Weight On Bit (klbs): <i>48.00</i> , Surface RPM: <i>70</i> , Surface Torque (ft lbf): <i>16000.00</i> , Flow Rate (gpm): <i>895.00</i> , Strokes Per Minute: <i>309.00</i>
Survey	46	01-04	01:00	01:05	01-04	5157.00	5157.00	Inclination (°): <i>1.410</i> , Azimuth (°): <i>342.260</i> , TVD (ft): <i>5090.06</i> , Dogleg (°/100 ft): <i>0.16</i> , Sensor Depth (ft): <i>5091.00</i> , Bit To Sensor (ft): <i>66.00</i>

Rotary Drill	1	01-04	01:05	01:15	01-04	5157.00	5246.00	Pressure On (psi): 2400.00, Pressure Off (psi): 1800.00, Weight On Bit (klbs): 48.00, Surface RPM: 70, Surface Torque (ft lbf): 16000.00, Flow Rate (gpm): 895.00, Strokes Per Minute: 309.00
Survey	46	01-04	01:15	01:20	01-04	5246.00	5246.00	Inclination (°): 1.320, Azimuth (°): 338.830, TVD (ft): 5179.03, Dogleg (°/100 ft): 0.14, Sensor Depth (ft): 5180.00, Bit To Sensor (ft): 66.00
Rotary Drill	1	01-04	01:20	01:30	01-04	5246.00	5336.00	Pressure On (psi): 2400.00, Pressure Off (psi): 1800.00, Weight On Bit (klbs): 48.00, Surface RPM: 70, Surface Torque (ft lbf): 16000.00, Flow Rate (gpm): 895.00, Strokes Per Minute: 309.00
Survey	46	01-04	01:30	01:35	01-04	5336.00	5336.00	Inclination (°): 1.320, Azimuth (°): 336.900, TVD (ft): 5269.01, Dogleg (°/100 ft): 0.05, Sensor Depth (ft): 5270.00, Bit To Sensor (ft): 66.00
Rotary Drill	1	01-04	01:35	02:00	01-04	5336.00	5425.00	Pressure On (psi): 2400.00, Pressure Off (psi): 1800.00, Weight On Bit (klbs): 48.00, Surface RPM: 70, Surface Torque (ft lbf): 16000.00, Flow Rate (gpm): 895.00, Strokes Per Minute: 309.00
Survey	46	01-04	02:00	02:05	01-04	5425.00	5425.00	Inclination (°): 1.450, Azimuth (°): 336.290, TVD (ft): 5357.98, Dogleg (°/100 ft): 0.15, Sensor Depth (ft): 5359.00, Bit To Sensor (ft): 66.00
Rotary Drill	1	01-04	02:05	02:15	01-04	5425.00	5515.00	Pressure On (psi): 2400.00, Pressure Off (psi): 1800.00, Weight On Bit (klbs): 48.00, Surface RPM: 70, Surface Torque (ft lbf): 16000.00, Flow Rate (gpm): 895.00, Strokes Per Minute: 309.00
Survey	46	01-04	02:15	02:20	01-04	5515.00	5515.00	Inclination (°): 1.540, Azimuth (°): 335.140, TVD (ft): 5447.95, Dogleg (°/100 ft): 0.11, Sensor Depth (ft): 5449.00, Bit To Sensor (ft): 66.00
Rotary Drill	1	01-04	02:20	02:40	01-04	5515.00	5604.00	
Survey	46	01-04	02:40	02:45	01-04	5604.00	5604.00	Inclination (°): 1.410, Azimuth (°): 331.540, TVD (ft): 5536.92, Dogleg (°/100 ft): 0.18, Sensor Depth (ft): 5538.00, Bit To Sensor (ft): 66.00
Slide Drill	2	01-04	02:45	03:05	01-04	5604.00	5629.00	Toolface: 112, Toolface Type: magnetic
Rotary Drill	1	01-04	03:05	03:15	01-04	5629.00	5694.00	Pressure On (psi): 2750.00, Pressure Off (psi): 2000.00, Weight On Bit (klbs): 45.00, Surface RPM: 50, Surface Torque (ft lbf): 15500.00, Flow Rate (gpm): 700.00, Strokes Per Minute: 240.00
Survey	46	01-04	03:15	03:20	01-04	5694.00	5694.00	Inclination (°): 1.980, Azimuth (°): 96.610, TVD (ft): 5626.90, Dogleg (°/100 ft): 3.35, Sensor Depth (ft): 5628.00, Bit To Sensor (ft): 66.00
Slide Drill	2	01-04	03:20	03:35	01-04	5694.00	5709.00	Toolface: 115, Toolface Type: magnetic
Rotary Drill	1	01-04	03:35	03:50	01-04	5709.00	5783.00	Pressure On (psi): 2750.00, Pressure Off (psi): 2000.00, Weight On Bit (klbs): 45.00, Surface RPM: 50, Surface Torque (ft lbf): 15500.00, Flow Rate (gpm): 700.00, Strokes Per Minute: 240.00
Rig Repair	14	01-04	03:50	04:05	01-04			Replace 4" on Mud Pump
Survey	46	01-04	04:05	04:10	01-04	5783.00	5783.00	Inclination (°): 5.450, Azimuth (°): 119.280, TVD (ft): 5715.71, Dogleg (°/100 ft): 4.16, Sensor Depth (ft): 5717.00, Bit To Sensor (ft): 66.00
Rotary Drill	1	01-04	04:10	04:30	01-04	5783.00	5873.00	Pressure On (psi): 2750.00, Pressure Off (psi): 2000.00, Weight On Bit (klbs): 45.00, Surface RPM: 50, Surface Torque (ft lbf): 15500.00, Flow Rate (gpm): 700.00, Strokes Per Minute: 240.00
Survey	46	01-04	04:30	04:35	01-04	5873.00	5873.00	Inclination (°): 6.200, Azimuth (°): 121.480, TVD (ft): 5805.24, Dogleg (°/100 ft): 0.87, Sensor Depth (ft): 5807.00, Bit To Sensor (ft): 66.00
Rotary Drill	1	01-04	04:35	04:45	01-04	5873.00	5962.00	Pressure On (psi): 2750.00, Pressure Off (psi): 2000.00, Weight On Bit (klbs): 45.00, Surface RPM: 50, Surface Torque (ft lbf): 15500.00, Flow Rate (gpm): 700.00, Strokes Per Minute: 240.00
Survey	46	01-04	04:45	04:50	01-04	5962.00	5962.00	Inclination (°): 6.290, Azimuth (°): 121.660, TVD (ft): 5893.71, Dogleg (°/100 ft): 0.10, Sensor Depth (ft): 5896.00, Bit To Sensor (ft): 66.00
Rotary Drill	1	01-04	04:50	05:00	01-04	5962.00	6052.00	Pressure On (psi): 2750.00, Pressure Off (psi): 2000.00, Weight On Bit (klbs): 45.00, Surface RPM: 50, Surface Torque (ft lbf): 15500.00, Flow Rate (gpm): 700.00, Strokes Per Minute: 240.00
Survey	46	01-04	05:00	05:05	01-04	6052.00	6052.00	Inclination (°): 6.330, Azimuth (°): 121.300, TVD (ft): 5983.17, Dogleg (°/100 ft): 0.06, Sensor Depth (ft): 5986.00, Bit To Sensor (ft): 66.00
Rotary Drill	1	01-04	05:05	05:10	01-04	6052.00	6142.00	Pressure On (psi): 2750.00, Pressure Off (psi): 2000.00, Weight On Bit (klbs): 45.00, Surface RPM: 50, Surface Torque (ft lbf): 15500.00, Flow Rate (gpm): 700.00, Strokes Per Minute: 240.00
Survey	46	01-04	05:10	05:15	01-04	6142.00	6142.00	Inclination (°): 6.240, Azimuth (°): 121.480, TVD (ft): 6072.63, Dogleg (°/100 ft): 0.10, Sensor Depth (ft): 6076.00, Bit To Sensor (ft): 66.00
Rotary Drill	1	01-04	05:15	05:25	01-04	6142.00	6231.00	Pressure On (psi): 2750.00, Pressure Off (psi): 2000.00, Weight On Bit (klbs): 45.00, Surface RPM: 50, Surface Torque (ft lbf): 15500.00, Flow Rate (gpm): 700.00, Strokes Per Minute: 240.00
Survey	46	01-04	05:25	05:30	01-04	6231.00	6231.00	Inclination (°): 6.510, Azimuth (°): 120.070, TVD (ft): 6161.08, Dogleg (°/100 ft): 0.35, Sensor Depth (ft): 6165.00, Bit To Sensor (ft): 66.00
Rotary Drill	1	01-04	05:30	05:40	01-04	6231.00	6321.00	Pressure On (psi): 2750.00, Pressure Off (psi): 2000.00, Weight On Bit (klbs): 45.00, Surface RPM: 50, Surface Torque (ft lbf): 15500.00, Flow Rate (gpm): 700.00, Strokes Per Minute: 240.00

Survey	46	01-04	05:40	05:45	01-04	6321.00	6321.00	Inclination (°): 6.550, Azimuth (°): 119.720, TVD (ft): 6250.49, Dogleg (°/100 ft): 0.06, Sensor Depth (ft): 6255.00, Bit To Sensor (ft): 66.00
Rotary Drill	1	01-04	05:45	05:50	01-04	6321.00	6410.00	Pressure On (psi): 2750.00, Pressure Off (psi): 2000.00, Weight On Bit (klbs): 45.00, Surface RPM: 50, Surface Torque (ft lbf): 15500.00, Flow Rate (gpm): 700.00, Strokes Per Minute: 240.00
Survey	46	01-04	05:50	05:55	01-04	6410.00	6410.00	Inclination (°): 6.680, Azimuth (°): 120.340, TVD (ft): 6338.90, Dogleg (°/100 ft): 0.17, Sensor Depth (ft): 6344.00, Bit To Sensor (ft): 66.00
Rotary Drill	1	01-04	05:55	06:00	01-04	6410.00	6500.00	Pressure On (psi): 2750.00, Pressure Off (psi): 2000.00, Weight On Bit (klbs): 45.00, Surface RPM: 50, Surface Torque (ft lbf): 15500.00, Flow Rate (gpm): 750.00, Strokes Per Minute: 256.00
Survey	46	01-04	06:00	06:05	01-04	6500.00	6500.00	Inclination (°): 6.770, Azimuth (°): 119.630, TVD (ft): 6428.28, Dogleg (°/100 ft): 0.14, Sensor Depth (ft): 6434.00, Bit To Sensor (ft): 66.00
Rotary Drill	1	01-04	06:05	06:15	01-04	6500.00	6589.00	Pressure On (psi): 2750.00, Pressure Off (psi): 2000.00, Weight On Bit (klbs): 45.00, Surface RPM: 50, Surface Torque (ft lbf): 15500.00, Flow Rate (gpm): 750.00, Strokes Per Minute: 256.00
Survey	46	01-04	06:15	06:20	01-04	6589.00	6589.00	Inclination (°): 6.510, Azimuth (°): 118.400, TVD (ft): 6516.68, Dogleg (°/100 ft): 0.33, Sensor Depth (ft): 6523.00, Bit To Sensor (ft): 66.00
Rotary Drill	1	01-04	06:20	06:35	01-04	6589.00	6679.00	Pressure On (psi): 2750.00, Pressure Off (psi): 2000.00, Weight On Bit (klbs): 45.00, Surface RPM: 50, Surface Torque (ft lbf): 15500.00, Flow Rate (gpm): 750.00, Strokes Per Minute: 256.00
Survey	46	01-04	06:35	06:40	01-04	6679.00	6679.00	Inclination (°): 6.330, Azimuth (°): 117.960, TVD (ft): 6606.12, Dogleg (°/100 ft): 0.21, Sensor Depth (ft): 6613.00, Bit To Sensor (ft): 66.00
Rotary Drill	1	01-04	06:40	06:50	01-04	6679.00	6768.00	Pressure On (psi): 2750.00, Pressure Off (psi): 2000.00, Weight On Bit (klbs): 45.00, Surface RPM: 50, Surface Torque (ft lbf): 15500.00, Flow Rate (gpm): 750.00, Strokes Per Minute: 256.00
Survey	46	01-04	06:50	06:55	01-04	6768.00	6768.00	Inclination (°): 6.330, Azimuth (°): 118.670, TVD (ft): 6694.58, Dogleg (°/100 ft): 0.09, Sensor Depth (ft): 6702.00, Bit To Sensor (ft): 66.00
Rotary Drill	1	01-04	06:55	07:05	01-04	6768.00	6857.00	Pressure On (psi): 2750.00, Pressure Off (psi): 2000.00, Weight On Bit (klbs): 45.00, Surface RPM: 50, Surface Torque (ft lbf): 15500.00, Flow Rate (gpm): 750.00, Strokes Per Minute: 256.00
Survey	46	01-04	07:05	07:10	01-04	6857.00	6857.00	Inclination (°): 6.330, Azimuth (°): 117.530, TVD (ft): 6783.03, Dogleg (°/100 ft): 0.14, Sensor Depth (ft): 6791.00, Bit To Sensor (ft): 66.00
Rotary Drill	1	01-04	07:10	07:20	01-04	6857.00	6947.00	Pressure On (psi): 3000.00, Pressure Off (psi): 2300.00, Weight On Bit (klbs): 45.00, Surface RPM: 50, Surface Torque (ft lbf): 15500.00, Flow Rate (gpm): 750.00, Strokes Per Minute: 256.00
Survey	46	01-04	07:20	07:25	01-04	6947.00	6947.00	Inclination (°): 6.420, Azimuth (°): 118.670, TVD (ft): 6872.48, Dogleg (°/100 ft): 0.17, Sensor Depth (ft): 6881.00, Bit To Sensor (ft): 66.00
Rotary Drill	1	01-04	07:25	07:45	01-04	6947.00	7037.00	Pressure On (psi): 3000.00, Pressure Off (psi): 2300.00, Weight On Bit (klbs): 45.00, Surface RPM: 50, Surface Torque (ft lbf): 17000.00, Flow Rate (gpm): 750.00, Strokes Per Minute: 256.00
Survey	46	01-04	07:45	07:50	01-04	7037.00	7037.00	Inclination (°): 6.200, Azimuth (°): 117.000, TVD (ft): 6961.93, Dogleg (°/100 ft): 0.32, Sensor Depth (ft): 6971.00, Bit To Sensor (ft): 66.00
Rotary Drill	1	01-04	07:50	08:05	01-04	7037.00	7126.00	Pressure On (psi): 3000.00, Pressure Off (psi): 2300.00, Weight On Bit (klbs): 45.00, Surface RPM: 50, Surface Torque (ft lbf): 17000.00, Flow Rate (gpm): 750.00, Strokes Per Minute: 256.00
Survey	46	01-04	08:05	08:10	01-04	7126.00	7126.00	Inclination (°): 5.980, Azimuth (°): 117.790, TVD (ft): 7050.43, Dogleg (°/100 ft): 0.26, Sensor Depth (ft): 7060.00, Bit To Sensor (ft): 66.00
Rotary Drill	1	01-04	08:10	08:25	01-04	7126.00	7216.00	Pressure On (psi): 3000.00, Pressure Off (psi): 2300.00, Weight On Bit (klbs): 45.00, Surface RPM: 50, Surface Torque (ft lbf): 17000.00, Flow Rate (gpm): 750.00, Strokes Per Minute: 256.00
Survey	46	01-04	08:25	08:30	01-04	7216.00	7216.00	Inclination (°): 5.980, Azimuth (°): 120.070, TVD (ft): 7139.94, Dogleg (°/100 ft): 0.26, Sensor Depth (ft): 7150.00, Bit To Sensor (ft): 66.00
Rotary Drill	1	01-04	08:30	08:40	01-04	7216.00	7306.00	Pressure On (psi): 3000.00, Pressure Off (psi): 2300.00, Weight On Bit (klbs): 45.00, Surface RPM: 50, Surface Torque (ft lbf): 17000.00, Flow Rate (gpm): 750.00, Strokes Per Minute: 256.00
Survey	46	01-04	08:40	08:45	01-04	7306.00	7306.00	Inclination (°): 5.800, Azimuth (°): 117.880, TVD (ft): 7229.46, Dogleg (°/100 ft): 0.32, Sensor Depth (ft): 7240.00, Bit To Sensor (ft): 66.00
Rotary Drill	1	01-04	08:45	09:00	01-04	7306.00	7395.00	Pressure On (psi): 3000.00, Pressure Off (psi): 2300.00, Weight On Bit (klbs): 45.00, Surface RPM: 50, Surface Torque (ft lbf): 17000.00, Flow Rate (gpm): 750.00, Strokes Per Minute: 256.00
Survey	46	01-04	09:00	09:05	01-04	7395.00	7395.00	Inclination (°): 5.930, Azimuth (°): 118.930, TVD (ft): 7318.00, Dogleg (°/100 ft): 0.19, Sensor Depth (ft): 7329.00, Bit To Sensor (ft): 66.00

Rotary Drill	1	01-04	09:05	09:20	01-04	7395.00	7485.00	Pressure On (psi): 3000.00, Pressure Off (psi): 2300.00, Weight On Bit (klbs): 45.00, Surface RPM: 50, Surface Torque (ft lbf): 17000.00, Flow Rate (gpm): 750.00, Strokes Per Minute: 256.00
Survey	46	01-04	09:20	09:25	01-04	7485.00	7485.00	Inclination (°): 5.850, Azimuth (°): 119.900, TVD (ft): 7407.52, Dogleg (°/100 ft): 0.14, Sensor Depth (ft): 7419.00, Bit To Sensor (ft): 66.00
Rotary Drill	1	01-04	09:25	09:40	01-04	7485.00	7574.00	Pressure On (psi): 3000.00, Pressure Off (psi): 2300.00, Weight On Bit (klbs): 45.00, Surface RPM: 50, Surface Torque (ft lbf): 17000.00, Flow Rate (gpm): 750.00, Strokes Per Minute: 256.00
Survey	46	01-04	09:40	09:45	01-04	7574.00	7574.00	Inclination (°): 5.930, Azimuth (°): 119.550, TVD (ft): 7496.05, Dogleg (°/100 ft): 0.10, Sensor Depth (ft): 7508.00, Bit To Sensor (ft): 66.00
Rotary Drill	1	01-04	09:45	10:00	01-04	7574.00	7664.00	Pressure On (psi): 3000.00, Pressure Off (psi): 2300.00, Weight On Bit (klbs): 45.00, Surface RPM: 50, Surface Torque (ft lbf): 17000.00, Flow Rate (gpm): 750.00, Strokes Per Minute: 256.00
Survey	46	01-04	10:00	10:05	01-04	7664.00	7664.00	Inclination (°): 5.930, Azimuth (°): 121.220, TVD (ft): 7585.57, Dogleg (°/100 ft): 0.19, Sensor Depth (ft): 7598.00, Bit To Sensor (ft): 66.00
Rotary Drill	1	01-04	10:05	10:20	01-04	7664.00	7754.00	Pressure On (psi): 3000.00, Pressure Off (psi): 2300.00, Weight On Bit (klbs): 45.00, Surface RPM: 50, Surface Torque (ft lbf): 17000.00, Flow Rate (gpm): 750.00, Strokes Per Minute: 256.00
Survey	46	01-04	10:20	10:25	01-04	7754.00	7754.00	Inclination (°): 5.890, Azimuth (°): 119.990, TVD (ft): 7675.09, Dogleg (°/100 ft): 0.15, Sensor Depth (ft): 7688.00, Bit To Sensor (ft): 66.00
Rotary Drill	1	01-04	10:25	10:35	01-04	7754.00	7843.00	Pressure On (psi): 3000.00, Pressure Off (psi): 2300.00, Weight On Bit (klbs): 45.00, Surface RPM: 50, Surface Torque (ft lbf): 17000.00, Flow Rate (gpm): 750.00, Strokes Per Minute: 256.00
Survey	46	01-04	10:35	10:40	01-04	7843.00	7843.00	Inclination (°): 5.850, Azimuth (°): 121.480, TVD (ft): 7763.63, Dogleg (°/100 ft): 0.18, Sensor Depth (ft): 7777.00, Bit To Sensor (ft): 66.00
Rotary Drill	1	01-04	10:40	10:55	01-04	7843.00	7933.00	Pressure On (psi): 3000.00, Pressure Off (psi): 2300.00, Weight On Bit (klbs): 45.00, Surface RPM: 50, Surface Torque (ft lbf): 17000.00, Flow Rate (gpm): 750.00, Strokes Per Minute: 256.00
Survey	46	01-04	10:55	11:00	01-04	7933.00	7933.00	Inclination (°): 5.710, Azimuth (°): 122.540, TVD (ft): 7853.17, Dogleg (°/100 ft): 0.20, Sensor Depth (ft): 7867.00, Bit To Sensor (ft): 66.00
Rotary Drill	1	01-04	11:00	11:15	01-04	7933.00	8022.00	Pressure On (psi): 3000.00, Pressure Off (psi): 2300.00, Weight On Bit (klbs): 45.00, Surface RPM: 50, Surface Torque (ft lbf): 17000.00, Flow Rate (gpm): 750.00, Strokes Per Minute: 256.00
Survey	46	01-04	11:15	11:20	01-04	8022.00	8022.00	Inclination (°): 5.760, Azimuth (°): 123.060, TVD (ft): 7941.72, Dogleg (°/100 ft): 0.08, Sensor Depth (ft): 7956.00, Bit To Sensor (ft): 66.00
Rotary Drill	1	01-04	11:20	11:40	01-04	8022.00	8112.00	Pressure On (psi): 3000.00, Pressure Off (psi): 2300.00, Weight On Bit (klbs): 45.00, Surface RPM: 50, Surface Torque (ft lbf): 17000.00, Flow Rate (gpm): 750.00, Strokes Per Minute: 256.00
Survey	46	01-04	11:40	11:45	01-04	8112.00	8112.00	Inclination (°): 5.670, Azimuth (°): 122.270, TVD (ft): 8031.28, Dogleg (°/100 ft): 0.13, Sensor Depth (ft): 8046.00, Bit To Sensor (ft): 66.00
Rotary Drill	1	01-04	11:45	12:00	01-04	8112.00	8202.00	Pressure On (psi): 3000.00, Pressure Off (psi): 2300.00, Weight On Bit (klbs): 45.00, Surface RPM: 50, Surface Torque (ft lbf): 17000.00, Flow Rate (gpm): 750.00, Strokes Per Minute: 256.00
Survey	46	01-04	12:00	12:05	01-04	8202.00	8202.00	Inclination (°): 5.710, Azimuth (°): 123.680, TVD (ft): 8120.83, Dogleg (°/100 ft): 0.16, Sensor Depth (ft): 8136.00, Bit To Sensor (ft): 66.00
Rotary Drill	1	01-04	12:05	12:25	01-04	8202.00	8291.00	Pressure On (psi): 3000.00, Pressure Off (psi): 2300.00, Weight On Bit (klbs): 45.00, Surface RPM: 50, Surface Torque (ft lbf): 17000.00, Flow Rate (gpm): 750.00, Strokes Per Minute: 256.00
Survey	46	01-04	12:25	12:30	01-04	8291.00	8291.00	Inclination (°): 5.580, Azimuth (°): 124.640, TVD (ft): 8209.40, Dogleg (°/100 ft): 0.18, Sensor Depth (ft): 8225.00, Bit To Sensor (ft): 66.00
Rotary Drill	1	01-04	12:30	12:50	01-04	8291.00	8381.00	Pressure On (psi): 3000.00, Pressure Off (psi): 2300.00, Weight On Bit (klbs): 45.00, Surface RPM: 50, Surface Torque (ft lbf): 17000.00, Flow Rate (gpm): 750.00, Strokes Per Minute: 256.00
Survey	46	01-04	12:50	12:55	01-04	8381.00	8381.00	Inclination (°): 5.540, Azimuth (°): 124.380, TVD (ft): 8298.98, Dogleg (°/100 ft): 0.05, Sensor Depth (ft): 8315.00, Bit To Sensor (ft): 66.00
Rotary Drill	1	01-04	12:55	13:10	01-04	8381.00	8470.00	Pressure On (psi): 3000.00, Pressure Off (psi): 2300.00, Weight On Bit (klbs): 45.00, Surface RPM: 50, Surface Torque (ft lbf): 17000.00, Flow Rate (gpm): 750.00, Strokes Per Minute: 256.00
Survey	46	01-04	13:10	13:15	01-04	8470.00	8470.00	Inclination (°): 5.670, Azimuth (°): 125.170, TVD (ft): 8387.55, Dogleg (°/100 ft): 0.17, Sensor Depth (ft): 8404.00, Bit To Sensor (ft): 66.00
Rotary Drill	1	01-04	13:15	13:45	01-04	8470.00	8559.00	Pressure On (psi): 3000.00, Pressure Off (psi): 2300.00, Weight On Bit (klbs): 45.00, Surface RPM: 50, Surface Torque (ft lbf): 17000.00, Flow Rate (gpm): 750.00, Strokes Per Minute: 256.00

Survey	46	01-04	13:45	13:50	01-04	8559.00	8559.00	Inclination (°): 5.490, Azimuth (°): 125.870, TVD (ft): 8476.13, Dogleg (%/100 ft): 0.22, Sensor Depth (ft): 8493.00, Bit To Sensor (ft): 66.00
Rotary Drill	1	01-04	13:50	14:15	01-04	8559.00	8649.00	Pressure On (psi): 3000.00, Pressure Off (psi): 2300.00, Weight On Bit (klbs): 45.00, Surface RPM: 50, Surface Torque (ft lbf): 17000.00, Flow Rate (gpm): 750.00, Strokes Per Minute: 256.00
Survey	46	01-04	14:15	14:20	01-04	8649.00	8649.00	Inclination (°): 5.410, Azimuth (°): 128.340, TVD (ft): 8565.72, Dogleg (%/100 ft): 0.28, Sensor Depth (ft): 8583.00, Bit To Sensor (ft): 66.00
Slide Drill	2	01-04	14:20	14:40	01-04	8649.00	8664.00	Pressure On (psi): 2500.00, Pressure Off (psi): 2100.00, Weight On Bit (klbs): 30.00, Flow Rate (gpm): 705.00, Strokes Per Minute: 243, Toolface: 40, Toolface Type: magnetic
Rotary Drill	1	01-04	14:40	14:50	01-04	8664.00	8738.00	Pressure On (psi): 3000.00, Pressure Off (psi): 2300.00, Weight On Bit (klbs): 45.00, Surface RPM: 50, Surface Torque (ft lbf): 17000.00, Flow Rate (gpm): 750.00, Strokes Per Minute: 256.00
Survey	46	01-04	14:50	14:55	01-04	8738.00	8738.00	Inclination (°): 5.710, Azimuth (°): 115.060, TVD (ft): 8654.31, Dogleg (%/100 ft): 1.48, Sensor Depth (ft): 8672.00, Bit To Sensor (ft): 66.00
Rotary Drill	1	01-04	14:55	15:35	01-04	8738.00	8828.00	Pressure On (psi): 3000.00, Pressure Off (psi): 2300.00, Weight On Bit (klbs): 45.00, Surface RPM: 50, Surface Torque (ft lbf): 17000.00, Flow Rate (gpm): 750.00, Strokes Per Minute: 256.00
Survey	46	01-04	15:35	15:40	01-04	8828.00	8828.00	Inclination (°): 6.200, Azimuth (°): 111.550, TVD (ft): 8743.82, Dogleg (%/100 ft): 0.68, Sensor Depth (ft): 8762.00, Bit To Sensor (ft): 66.00
Rotary Drill	1	01-04	15:40	15:50	01-04	8828.00	8904.00	Pressure On (psi): 3000.00, Pressure Off (psi): 2300.00, Weight On Bit (klbs): 45.00, Surface RPM: 50, Surface Torque (ft lbf): 17000.00, Flow Rate (gpm): 750.00, Strokes Per Minute: 256.00
Circulating	3	01-04	15:50	16:15	01-04			Trouble shoot stalling out when tagging bottom.
Pooh	7	01-04	16:15	20:15	01-04			Motor stalling when tagging bottom.
Change BHA	6	01-04	20:15	21:00	01-04			P/U BHA #4
TIH	8	01-04	21:00	00:00	01-05			TIH W/ BHA #4

MWD Activities

No Activities



Job Number WT-21-181	Operator Advance Energy Partners	Rig Name Nabors X50
Start Date 2021-11-22	Well Name Anderson Fed Com 552H	Legal Well Name AFE Anderson Fed Com 552H
Play Delaware Basin	State/Province and Country New Mexico, US	County Lea
		Company Man

Wednesday, Jan 05 00:00 - 23:59 (Day 6 of 17)

Billing: \$12,055.25 (\$156,865.75 total)

Drilling Summary				Drilling Parameters	
Start Depth (ft)	8904.00	Downhole Hours	24.00	Rotating WOB (klbs)	45.00 - 45.00
Bit Depth (ft)	10766.00	Drilling Hours	13.42	Sliding WOB (klbs)	20.00 - 25.00
Bottom Hole Depth (ft)	10766.00	Hours Circulating	0.00	Rotating SPM	256.00 - 256.00
Total Distance (ft)	1866.00	Hours Sliding	4.75	Sliding SPM	240.00 - 258.00
Distance Rotated (ft)	1684.00	Hours Rotating	8.67	Motor RPM	30.00 - 50.00
Distance Slid (ft)	182.00			Surface RPM	50.00 - 50.00
Inclination In	5.85			Flow Rate (gpm)	700.00 - 750.00
Inclination Out	2.64			On Bottom Pressure (psi)	2500.00 - 3000.00
Azimuth In	113.66	% Hours Rotating	65%	Off Bottom Pressure (psi)	2300.00 - 2300.00
Azimuth Out	101.97	% Hours Sliding	35%		
AVG Total ROP (ft/h)	139.08	% Distance Sliding	10%		
AVG Rotating ROP (ft/h)	194.31	% Distance Rotating	90%		
AVG Sliding ROP (ft/h)	38.32				

Personnel

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

BHA #4 - INTERMEDIATE

Date In: Jan 4, 2022, 20:15 Date Out: Jan 6, 2022, 0:30

Bit Details		Motor Details		Directional Comments
OD (in)	8.750	Size (in)	7.0	BUTCH'S 7" 6/7 6.5 W/ 8.5 NBS Flow Range 400-750 GPM, REV .23, Max Diff 1530, Max Torque 26280, Bit Runs: 0, Bit to Bend 4.80'
Vendor	Reed	Lobe/Stage	6/7, 6.5	
S/N	A284029	Bend Angle	1.75	
Nozzles	6-15's	Speed (rev/gal)	0.23	MWD Comments
Total Flow Area (in ²)	1.035	Wear Pad OD (in)	7.580	
Drilling Hours for Day	13.42	Bit Distances		
Total Drilled for Day (ft)	1862.00	Survey: 63.00 ft, Gamma: 48.00 ft		
Drilling Hours for BHA	13.42			POOH Reason
Total Drilled for BHA (ft)	1862.00			Change Bottom Hole Assembly: POOH to P/U Curve Assy.

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: TKC66-AZZ, Type: PDC (Polycrystalline Diamond Compacts), Gauge Length (in): 4.00, Size (in): 8.75	Reed	A284029	4 1/2" Reg Pin			8.750		1.00	1.00
Mud Motor Description: 7" 6/7 6.5 Stg. 1.75° FBH w/8.5" NBS, Size (in): 7.00, Bend Angle (°): 1.75, Rotor Lobe: 6, Stator Lobe: 7, Stator Stage: 6.5	Butch's	BDT-700ML-006	4 1/2" IF Box	4 1/2" Reg Box		7.000		32.74	33.74
Stabilizer Description: 8.5" STAB	JA	85586	4 1/2" IF Box	4 1/2" IF Pin	2.250	6.500		5.19	38.93
UBHO Sub Description: NM DAO SUB, Material: Non-Magnetic	AIM	AIM675-364	4 1/2" IF Box	4 1/2" IF Pin	3.250	6.750		3.05	41.98
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	72.63
Drill Collar Description: NMDC, Material: Non-Magnetic, Type: Slick Drill	GATOR	67-30-193	4 1/2" IF Box	4 1/2" IF Pin	3.250	6.750		29.44	102.07
Crossover Sub Description: X-O SUB, Material: Steel	Platinum	PPR5372	CET54 Box	4 1/2" IF Pin	2.750	6.250		2.38	104.45
HWDP Description: 8 Stands 5.5" HWDP, Type: Slick	Platinum		CET50 Box	CET54 Pin	3.625	5.500		735.63	840.08
Crossover Sub Description: CET54 (P) x EverDrlg 54 (B), Material: Steel	BLACK DIAMOND	BD18238	EverDrlg54 Box	CET54 Pin	4.000	6.938		3.42	843.50
HWDP Description: 3 Stands 5.5" HWDP, Type: Slick	BLACK DIAMOND		EverDrlg54 Box	EverDrlg54 Pin	3.625	5.500		281.18	1124.68

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	01-04	21:00	00:00	01-05			TIH W/ BHA #4
TIH	8	01-05	00:00	03:15	01-05			TIH W/ BHA #4
Rotary Drill	1	01-05	03:15	03:25	01-05	8904.00	8918.00	Pressure On (psi): 3000.00, Pressure Off (psi): 2300.00, Weight On Bit (klbs): 45.00, Surface RPM: 50, Surface Torque (ft lbf): 17000.00, Flow Rate (gpm): 750.00, Strokes Per Minute: 256.00
Survey	46	01-05	03:25	03:30	01-05	8914.00	8914.00	Inclination (°): 5.850, Azimuth (°): 113.660, TVD (ft): 8832.33, Dogleg (°/100 ft): 0.47, Sensor Depth (ft): 8851.00, Bit To Sensor (ft): 63.00
Rotary Drill	1	01-05	03:30	03:50	01-05	8914.00	9004.00	Pressure On (psi): 3000.00, Pressure Off (psi): 2300.00, Weight On Bit (klbs): 45.00, Surface RPM: 50, Surface Torque (ft lbf): 17000.00, Flow Rate (gpm): 750.00, Strokes Per Minute: 256.00
Survey	46	01-05	03:50	03:55	01-05	9004.00	9004.00	Inclination (°): 5.270, Azimuth (°): 113.390, TVD (ft): 8921.91, Dogleg (°/100 ft): 0.65, Sensor Depth (ft): 8941.00, Bit To Sensor (ft): 63.00
Rotary Drill	1	01-05	03:55	04:20	01-05	9004.00	9094.00	Pressure On (psi): 3000.00, Pressure Off (psi): 2300.00, Weight On Bit (klbs): 45.00, Surface RPM: 50, Surface Torque (ft lbf): 17000.00, Flow Rate (gpm): 750.00, Strokes Per Minute: 256.00
Survey	46	01-05	04:20	04:25	01-05	9094.00	9094.00	Inclination (°): 5.050, Azimuth (°): 116.820, TVD (ft): 9011.54, Dogleg (°/100 ft): 0.42, Sensor Depth (ft): 9031.00, Bit To Sensor (ft): 63.00
Rotary Drill	1	01-05	04:25	04:40	01-05	9094.00	9183.00	Pressure On (psi): 3000.00, Pressure Off (psi): 2300.00, Weight On Bit (klbs): 45.00, Surface RPM: 50, Surface Torque (ft lbf): 17000.00, Flow Rate (gpm): 750.00, Strokes Per Minute: 256.00
Survey	46	01-05	04:40	04:45	01-05	9183.00	9183.00	Inclination (°): 4.440, Azimuth (°): 117.790, TVD (ft): 9100.24, Dogleg (°/100 ft): 0.69, Sensor Depth (ft): 9120.00, Bit To Sensor (ft): 63.00
Rotary Drill	1	01-05	04:45	05:10	01-05	9183.00	9273.00	Pressure On (psi): 3000.00, Pressure Off (psi): 2300.00, Weight On Bit (klbs): 45.00, Surface RPM: 50, Surface Torque (ft lbf): 17000.00, Flow Rate (gpm): 750.00, Strokes Per Minute: 256.00
Survey	46	01-05	05:10	05:15	01-05	9273.00	9273.00	Inclination (°): 3.520, Azimuth (°): 120.160, TVD (ft): 9190.02, Dogleg (°/100 ft): 1.04, Sensor Depth (ft): 9210.00, Bit To Sensor (ft): 63.00
Slide Drill	2	01-05	05:15	05:50	01-05	9273.00	9298.00	Pressure On (psi): 2500.00, Pressure Off (psi): 2300.00, Weight On Bit (klbs): 20.00, Flow Rate (gpm): 700.00, Strokes Per Minute: 240, Toolface: 75, Toolface Type: magnetic
Rotary Drill	1	01-05	05:50	06:05	01-05	9298.00	9363.00	Pressure On (psi): 3000.00, Pressure Off (psi): 2300.00, Weight On Bit (klbs): 45.00, Surface RPM: 50, Surface Torque (ft lbf): 17000.00, Flow Rate (gpm): 750.00, Strokes Per Minute: 256.00
Survey	46	01-05	06:05	06:10	01-05	9363.00	9363.00	Inclination (°): 5.410, Azimuth (°): 116.910, TVD (ft): 9279.74, Dogleg (°/100 ft): 2.12, Sensor Depth (ft): 9300.00, Bit To Sensor (ft): 63.00
Rotary Drill	1	01-05	06:10	06:15	01-05	9363.00	9367.00	Pressure On (psi): 3000.00, Pressure Off (psi): 2300.00, Weight On Bit (klbs): 45.00, Surface RPM: 50, Surface Torque (ft lbf): 17000.00, Flow Rate (gpm): 750.00, Strokes Per Minute: 256.00
Slide Drill	2	01-05	06:15	06:25	01-05	9367.00	9377.00	Pressure On (psi): 2500.00, Pressure Off (psi): 2300.00, Weight On Bit (klbs): 25.00, Flow Rate (gpm): 750.00, Strokes Per Minute: 258, Toolface: 30, Toolface Type: magnetic
Rotary Drill	1	01-05	06:25	06:40	01-05	9377.00	9453.00	Pressure On (psi): 3000.00, Pressure Off (psi): 2300.00, Weight On Bit (klbs): 45.00, Surface RPM: 50, Surface Torque (ft lbf): 17000.00, Flow Rate (gpm): 750.00, Strokes Per Minute: 256.00
Survey	46	01-05	06:40	06:45	01-05	9453.00	9453.00	Inclination (°): 5.490, Azimuth (°): 98.630, TVD (ft): 9369.34, Dogleg (°/100 ft): 1.92, Sensor Depth (ft): 9390.00, Bit To Sensor (ft): 63.00
Rotary Drill	1	01-05	06:45	07:00	01-05	9453.00	9542.00	Pressure On (psi): 3000.00, Pressure Off (psi): 2300.00, Weight On Bit (klbs): 45.00, Surface RPM: 50, Surface Torque (ft lbf): 17000.00, Flow Rate (gpm): 750.00, Strokes Per Minute: 256.00
Survey	46	01-05	07:00	07:05	01-05	9542.00	9542.00	Inclination (°): 4.090, Azimuth (°): 96.780, TVD (ft): 9458.03, Dogleg (°/100 ft): 1.58, Sensor Depth (ft): 9479.00, Bit To Sensor (ft): 63.00
Rotary Drill	1	01-05	07:05	07:10	01-05	9542.00	9557.00	Pressure On (psi): 3000.00, Pressure Off (psi): 2300.00, Weight On Bit (klbs): 45.00, Surface RPM: 50, Surface Torque (ft lbf): 17000.00, Flow Rate (gpm): 750.00, Strokes Per Minute: 256.00
Slide Drill	2	01-05	07:10	07:35	01-05	9557.00	9577.00	Pressure On (psi): 2500.00, Pressure Off (psi): 2300.00, Weight On Bit (klbs): 25.00, Flow Rate (gpm): 750.00, Strokes Per Minute: 258, Toolface: 120, Toolface Type: magnetic
Rotary Drill	1	01-05	07:35	07:45	01-05	9577.00	9632.00	Pressure On (psi): 3000.00, Pressure Off (psi): 2300.00, Weight On Bit (klbs): 45.00, Surface RPM: 50, Surface Torque (ft lbf): 17000.00, Flow Rate (gpm): 750.00, Strokes Per Minute: 256.00
Survey	46	01-05	07:45	07:50	01-05	9632.00	9632.00	Inclination (°): 4.530, Azimuth (°): 109.350, TVD (ft): 9547.78, Dogleg (°/100 ft): 1.15, Sensor Depth (ft): 9569.00, Bit To Sensor (ft): 63.00
Rotary Drill	1	01-05	07:50	08:05	01-05	9632.00	9721.00	Pressure On (psi): 3000.00, Pressure Off (psi): 2300.00, Weight On Bit (klbs): 45.00, Surface RPM: 50, Surface Torque (ft lbf): 17000.00, Flow Rate (gpm): 750.00, Strokes Per Minute: 256.00

Survey	46	01-05	08:05	08:10	01-05	9721.00	9721.00	Inclination (°): 4.570, Azimuth (°): 113.130, TVD (ft): 9636.50, Dogleg (°/100 ft): 0.34, Sensor Depth (ft): 9658.00, Bit To Sensor (ft): 63.00
Rotary Drill	1	01-05	08:10	08:30	01-05	9721.00	9811.00	Pressure On (psi): 3000.00, Pressure Off (psi): 2300.00, Weight On Bit (klbs): 45.00, Surface RPM: 50, Surface Torque (ft lbf): 17000.00, Flow Rate (gpm): 750.00, Strokes Per Minute: 256.00
Survey	46	01-05	08:30	08:35	01-05	9811.00	9811.00	Inclination (°): 3.210, Azimuth (°): 92.300, TVD (ft): 9726.29, Dogleg (°/100 ft): 2.16, Sensor Depth (ft): 9748.00, Bit To Sensor (ft): 63.00
Slide Drill	2	01-05	08:35	09:25	01-05	9811.00	9841.00	Pressure On (psi): 2500.00, Pressure Off (psi): 2300.00, Weight On Bit (klbs): 25.00, Flow Rate (gpm): 750.00, Strokes Per Minute: 258, Toolface: 140, Toolface Type: magnetic
Rotary Drill	1	01-05	09:25	09:50	01-05	9841.00	9901.00	Pressure On (psi): 3000.00, Pressure Off (psi): 2300.00, Weight On Bit (klbs): 45.00, Surface RPM: 50, Surface Torque (ft lbf): 17000.00, Flow Rate (gpm): 750.00, Strokes Per Minute: 256.00
Survey	46	01-05	09:50	09:55	01-05	9901.00	9901.00	Inclination (°): 2.510, Azimuth (°): 124.560, TVD (ft): 9816.18, Dogleg (°/100 ft): 1.92, Sensor Depth (ft): 9838.00, Bit To Sensor (ft): 63.00
L/D DP	28	01-05	09:55	10:05	01-05			L/D 3 joints of bent DP.
Rotary Drill	1	01-05	10:05	10:10	01-05	9901.00	9906.00	Pressure On (psi): 3000.00, Pressure Off (psi): 2300.00, Weight On Bit (klbs): 45.00, Surface RPM: 50, Surface Torque (ft lbf): 17000.00, Flow Rate (gpm): 750.00, Strokes Per Minute: 256.00
Slide Drill	2	01-05	10:10	10:55	01-05	9906.00	9936.00	Pressure On (psi): 2500.00, Pressure Off (psi): 2300.00, Weight On Bit (klbs): 25.00, Flow Rate (gpm): 750.00, Strokes Per Minute: 258, Toolface: 120, Toolface Type: magnetic
Rotary Drill	1	01-05	10:55	11:25	01-05	9936.00	9990.00	Pressure On (psi): 3000.00, Pressure Off (psi): 2300.00, Weight On Bit (klbs): 45.00, Surface RPM: 50, Surface Torque (ft lbf): 20000.00, Flow Rate (gpm): 750.00, Strokes Per Minute: 256.00
Survey	46	01-05	11:25	11:30	01-05	9990.00	9990.00	Inclination (°): 4.840, Azimuth (°): 132.640, TVD (ft): 9905.00, Dogleg (°/100 ft): 2.68, Sensor Depth (ft): 9927.00, Bit To Sensor (ft): 63.00
Rotary Drill	1	01-05	11:30	11:40	01-05	9990.00	9997.00	Pressure On (psi): 3000.00, Pressure Off (psi): 2300.00, Weight On Bit (klbs): 45.00, Surface RPM: 50, Surface Torque (ft lbf): 20000.00, Flow Rate (gpm): 750.00, Strokes Per Minute: 256.00
Slide Drill	2	01-05	11:40	12:25	01-05	9997.00	10017.00	Pressure On (psi): 2500.00, Pressure Off (psi): 2300.00, Weight On Bit (klbs): 25.00, Flow Rate (gpm): 750.00, Strokes Per Minute: 258, Toolface: 110, Toolface Type: magnetic
Rotary Drill	1	01-05	12:25	12:45	01-05	10017.00	10080.00	Pressure On (psi): 3000.00, Pressure Off (psi): 2300.00, Weight On Bit (klbs): 45.00, Surface RPM: 50, Surface Torque (ft lbf): 20000.00, Flow Rate (gpm): 750.00, Strokes Per Minute: 256.00
Survey	46	01-05	12:45	12:50	01-05	10080.00	10080.00	Inclination (°): 7.160, Azimuth (°): 123.590, TVD (ft): 9994.50, Dogleg (°/100 ft): 2.78, Sensor Depth (ft): 10017.00, Bit To Sensor (ft): 63.00
Rotary Drill	1	01-05	12:50	13:20	01-05	10080.00	10170.00	Pressure On (psi): 3000.00, Pressure Off (psi): 2300.00, Weight On Bit (klbs): 45.00, Surface RPM: 50, Surface Torque (ft lbf): 20000.00, Flow Rate (gpm): 750.00, Strokes Per Minute: 256.00
Survey	46	01-05	13:20	13:25	01-05	10170.00	10170.00	Inclination (°): 6.460, Azimuth (°): 125.170, TVD (ft): 10083.86, Dogleg (°/100 ft): 0.81, Sensor Depth (ft): 10107.00, Bit To Sensor (ft): 63.00
Rotary Drill	1	01-05	13:25	14:00	01-05	10170.00	10259.00	Pressure On (psi): 3000.00, Pressure Off (psi): 2300.00, Weight On Bit (klbs): 45.00, Surface RPM: 50, Surface Torque (ft lbf): 20000.00, Flow Rate (gpm): 750.00, Strokes Per Minute: 256.00
Survey	46	01-05	14:00	14:05	01-05	10259.00	10259.00	Inclination (°): 5.410, Azimuth (°): 122.970, TVD (ft): 10172.39, Dogleg (°/100 ft): 1.21, Sensor Depth (ft): 10196.00, Bit To Sensor (ft): 63.00
Rotary Drill	1	01-05	14:05	14:10	01-05	10259.00	10268.00	Pressure On (psi): 3000.00, Pressure Off (psi): 2300.00, Weight On Bit (klbs): 45.00, Surface RPM: 50, Surface Torque (ft lbf): 20000.00, Flow Rate (gpm): 750.00, Strokes Per Minute: 256.00
Slide Drill	2	01-05	14:10	14:45	01-05	10268.00	10284.00	Pressure On (psi): 2500.00, Pressure Off (psi): 2300.00, Weight On Bit (klbs): 25.00, Flow Rate (gpm): 750.00, Strokes Per Minute: 258, Toolface: 100, Toolface Type: magnetic
Rotary Drill	1	01-05	14:45	15:15	01-05	10284.00	10349.00	Pressure On (psi): 3000.00, Pressure Off (psi): 2300.00, Weight On Bit (klbs): 45.00, Surface RPM: 50, Surface Torque (ft lbf): 20000.00, Flow Rate (gpm): 750.00, Strokes Per Minute: 256.00
Survey	46	01-05	15:15	15:20	01-05	10349.00	10349.00	Inclination (°): 5.490, Azimuth (°): 121.220, TVD (ft): 10261.98, Dogleg (°/100 ft): 0.20, Sensor Depth (ft): 10286.00, Bit To Sensor (ft): 63.00
Rotary Drill	1	01-05	15:20	15:40	01-05	10349.00	10438.00	Pressure On (psi): 3000.00, Pressure Off (psi): 2300.00, Weight On Bit (klbs): 45.00, Surface RPM: 50, Surface Torque (ft lbf): 20000.00, Flow Rate (gpm): 750.00, Strokes Per Minute: 256.00
Survey	46	01-05	15:40	15:45	01-05	10438.00	10438.00	Inclination (°): 5.010, Azimuth (°): 110.140, TVD (ft): 10350.61, Dogleg (°/100 ft): 1.26, Sensor Depth (ft): 10375.00, Bit To Sensor (ft): 63.00
Rotary Drill	1	01-05	15:45	16:10	01-05	10438.00	10528.00	Pressure On (psi): 3000.00, Pressure Off (psi): 2300.00, Weight On Bit (klbs): 45.00, Surface RPM: 50, Surface Torque (ft lbf): 20000.00, Flow Rate (gpm): 750.00, Strokes Per Minute: 256.00

Survey	46	01-05	16:10	16:15	01-05	10528.00	10528.00	Inclination (°): 4.440, Azimuth (°): 109.620, TVD (ft): 10440.30, Dogleg (°/100 ft): 0.64, Sensor Depth (ft): 10465.00, Bit To Sensor (ft): 63.00
Rotary Drill	1	01-05	16:15	16:45	01-05	10528.00	10618.00	Pressure On (psi): 3000.00, Pressure Off (psi): 2300.00, Weight On Bit (klbs): 45.00, Surface RPM: 50, Surface Torque (ft lbf): 20000.00, Flow Rate (gpm): 750.00, Strokes Per Minute: 256.00
Survey	46	01-05	16:45	16:50	01-05	10618.00	10618.00	Inclination (°): 3.520, Azimuth (°): 109.530, TVD (ft): 10530.08, Dogleg (°/100 ft): 1.02, Sensor Depth (ft): 10555.00, Bit To Sensor (ft): 63.00
Slide Drill	2	01-05	16:50	17:30	01-05	10618.00	10649.00	Pressure On (psi): 2500.00, Pressure Off (psi): 2300.00, Weight On Bit (klbs): 25.00, Flow Rate (gpm): 750.00, Strokes Per Minute: 258, Toolface: 330, Toolface Type: magnetic
Rotary Drill	1	01-05	17:30	18:05	01-05	10649.00	10707.00	Pressure On (psi): 3000.00, Pressure Off (psi): 2300.00, Weight On Bit (klbs): 45.00, Surface RPM: 50, Surface Torque (ft lbf): 20000.00, Flow Rate (gpm): 750.00, Strokes Per Minute: 256.00
Survey	46	01-05	18:05	18:10	01-05	10707.00	10707.00	Inclination (°): 3.210, Azimuth (°): 103.810, TVD (ft): 10618.93, Dogleg (°/100 ft): 0.51, Sensor Depth (ft): 10644.00, Bit To Sensor (ft): 63.00
Rotary Drill	1	01-05	18:10	18:35	01-05	10707.00	10766.00	Pressure On (psi): 3000.00, Pressure Off (psi): 2300.00, Weight On Bit (klbs): 45.00, Surface RPM: 50, Surface Torque (ft lbf): 20000.00, Flow Rate (gpm): 750.00, Strokes Per Minute: 256.00
Survey	46	01-05	18:35	18:40	01-05	10766.00	10766.00	Inclination (°): 2.640, Azimuth (°): 101.970, TVD (ft): 10677.85, Dogleg (°/100 ft): 0.98, Sensor Depth (ft): 10703.00, Bit To Sensor (ft): 63.00
Pooh	7	01-05	18:40	23:00	01-05			POOH for Curve Assy
Change BHA	6	01-05	23:00	00:30	01-06			P/U BHA # 5

MWD Activities

No Activities



Job Number WT-21-181	Operator Advance Energy Partners	Rig Name Nabors X50
Start Date 2021-11-22	Well Name Anderson Fed Com 552H	Legal Well Name AFE Anderson Fed Com 552H
Play Delaware Basin	State/Province and Country New Mexico, US	County Lea
		Company Man

Thursday, Jan 06 00:00 - 23:59 (Day 7 of 17)

Billing: \$9,500.00 (\$156,865.75 total)

Drilling Summary				Drilling Parameters	
Start Depth (ft)	10766.00	Downhole Hours	24.00	Rotating WOB (klbs)	30.00 - 45.00
Bit Depth (ft)	11516.00	Drilling Hours	14.08	Sliding WOB (klbs)	30.00 - 60.00
Bottom Hole Depth (ft)	11516.00	Hours Circulating	1.67	Rotating SPM	240.00 - 256.00
Total Distance (ft)	750.00	Hours Sliding	12.33	Sliding SPM	240.00 - 240.00
Distance Rotated (ft)	64.00	Hours Rotating	1.75	Motor RPM	0.00 - 50.00
Distance Slid (ft)	686.00			Surface RPM	30.00 - 50.00
Inclination In	4.48			Flow Rate (gpm)	700.00 - 750.00
Inclination Out	69.23			On Bottom Pressure (psi)	2600.00 - 3000.00
Azimuth In	44.14	% Hours Rotating	12%	Off Bottom Pressure (psi)	2300.00 - 2300.00
Azimuth Out	359.14	% Hours Sliding	88%		
AVG Total ROP (ft/h)	53.25	% Distance Sliding	91%		
AVG Rotating ROP (ft/h)	36.57	% Distance Rotating	9%		
AVG Sliding ROP (ft/h)	55.62				

Personnel

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

BHA #4 - INTERMEDIATE

Date In: Jan 4, 2022, 20:15 Date Out: Jan 6, 2022, 0:30

Bit Details		Motor Details		Directional Comments
OD (in)	8.750	Size (in)	7.0	BUTCH'S 7" 6/7 6.5 W/ 8.5 NBS Flow Range 400-750 GPM, REV .23, Max Diff 1530, Max Torque 26280, Bit Runs: 0, Bit to Bend 4.80'
Vendor	Reed	Lobe/Stage	6/7, 6.5	
S/N	A284029	Bend Angle	1.75	
Nozzles	6-15's	Speed (rev/gal)	0.23	MWD Comments
Total Flow Area (in ²)	1.035	Wear Pad OD (in)	7.580	
Drilling Hours for Day	0.00	Bit Distances		
Total Drilled for Day (ft)		Survey: 63.00 ft, Gamma: 48.00 ft		
Drilling Hours for BHA	13.42			POOH Reason
Total Drilled for BHA (ft)	1862.00			Change Bottom Hole Assembly: POOH to P/U Curve Assy.

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: TKC66-AZZ, Type: PDC (Polycrystalline Diamond Compacts), Gauge Length (in): 4.00, Size (in): 8.75	Reed	A284029	4 1/2" Reg Pin			8.750		1.00	1.00
Mud Motor Description: 7" 6/7 6.5 Stg. 1.75° FBH w/8.5" NBS, Size (in): 7.00, Bend Angle (°): 1.75, Rotor Lobe: 6, Stator Lobe: 7, Stator Stage: 6.5	Butch's	BDT-700ML-006	4 1/2" IF Box	4 1/2" Reg Box		7.000		32.74	33.74
Stabilizer Description: 8.5" STAB	JA	85586	4 1/2" IF Box	4 1/2" IF Pin	2.250	6.500		5.19	38.93
UBHO Sub Description: NM DAO SUB, Material: Non-Magnetic	AIM	AIM675-364	4 1/2" IF Box	4 1/2" IF Pin	3.250	6.750		3.05	41.98
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	72.63
Drill Collar Description: NMDC, Material: Non-Magnetic, Type: Slick Drill	GATOR	67-30-193	4 1/2" IF Box	4 1/2" IF Pin	3.250	6.750		29.44	102.07
Crossover Sub Description: X-O SUB, Material: Steel	Platinum	PPR5372	CET54 Box	4 1/2" IF Pin	2.750	6.250		2.38	104.45
HWDP Description: 8 Stands 5.5" HWDP, Type: Slick	Platinum		CET50 Box	CET54 Pin	3.625	5.500		735.63	840.08
Crossover Sub Description: CET54 (P) x EverDrlg 54 (B), Material: Steel	BLACK DIAMOND	BD18238	EverDrlg54 Box	CET54 Pin	4.000	6.938		3.42	843.50
HWDP Description: 3 Stands 5.5" HWDP, Type: Slick	BLACK DIAMOND		EverDrlg54 Box	EverDrlg54 Pin	3.625	5.500		281.18	1124.68

MWD Items

No Items

BHA #5 - 8.75 Curve Assy

Date In: Jan 6, 2022, 0:30 Date Out: Jan 7, 2022, 5:00

Bit Details		Motor Details		Directional Comments	
OD (in)	8.750	Size (in)	7.0	Flow Range = 300-700 gpm's, Rev Per Gallon = .25, Max Diff = 1800, Max Torque =17100, Bit Runs = 0, Bit to Bend = 4.85"	
Vendor	ULTERRA	Lobe/Stage	7/8, 6.1		
S/N	57710	Bend Angle	2.25		
Nozzles	6x15's	Speed (rev/gal)	0.25	MWD Comments	
Total Flow Area (in ²)	1.035	Wear Pad OD (in)	7.250	POOH Reason Curve Landed: POOH for Lateral Assy.	
Drilling Hours for Day	14.08	Bit Distances			
Total Drilled for Day (ft)	750.00	Survey: 63.00 ft, Gamma: 39.00 ft,			
Drilling Hours for BHA	14.08	Resistivity: 50.00 ft			
Total Drilled for BHA (ft)	750.00				

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	57710	4 1/2" Reg Pin			8.750		1.00	1.00
Mud Motor Description: 7" 7/8 6.1 Stg. 2.25° FBH Slick, Size (in): 7.00, Bend Angle (°): 2.25, Rotor Lobe: 7, Stator Lobe: 8, Stator Stage: 6.1	Bico	BPB5700-0043	4 1/2" IF Box	4 1/2" Reg Box		7.000		30.13	31.13
Resistivity Description: RESISTIVITY MWD	Bench Tree	650-1009						31.43	62.56
Battery Description: BATTERY	Bench Tree	B6008X						17.27	79.83
Drill Collar Description: NMDC, Material: Non-Magnetic, Type: Slick Drill	GATOR	67-30-193	4 1/2" IF Box	4 1/2" IF Pin	3.250	6.750		29.44	109.27
Crossover Sub Description: X-O SUB, Material: Steel	BLACK DIAMOND	BD13750	EverDrlg54 Box	4 1/2" IF Pin	3.125	6.610		3.55	112.82

MWD Items

No Items

Directional Activities

Activity Type	Code	Start Date	Start Time	End Time	End Date	Start (ft)	End (ft)	Comments/Details
Change BHA	6	01-05	23:00	00:30	01-06			P/U BHA # 5
Other	16	01-06	00:30	01:00	01-06			Program Res.
Circulating	3	01-06	01:00	01:15	01-06			Test MWD & Motor
TIH	8	01-06	01:15	07:00	01-06			TIH W/ BHA #5
Circulating	3	01-06	07:00	08:15	01-06			Relog
Rig Service - In Hole	19	01-06	08:15	08:30	01-06			Grease Packing
Rotary Drill	1	01-06	08:30	08:40	01-06	10766.00	10770.00	Pressure On (psi): 3000.00, Pressure Off (psi): 2300.00, Weight On Bit (klbs): 45.00, Surface RPM: 50, Surface Torque (ft lbf): 20000.00, Flow Rate (gpm): 750.00, Strokes Per Minute: 256.00
Slide Drill	2	01-06	08:40	10:40	01-06	10770.00	10859.00	Pressure On (psi): 2600.00, Pressure Off (psi): 2300.00, Weight On Bit (klbs): 30.00, Flow Rate (gpm): 700.00, Strokes Per Minute: 240, Toolface: 0, Toolface Type: magnetic
Survey	46	01-06	10:40	10:45	01-06	10859.00	10859.00	Inclination (°): 4.480, Azimuth (°): 44.140, TVD (ft): 10770.70, Dogleg (°/100 ft): 4.09, Sensor Depth (ft): 10796.00, Bit To Sensor (ft): 63.00
Slide Drill	2	01-06	10:45	13:20	01-06	10859.00	10949.00	Pressure On (psi): 2600.00, Pressure Off (psi): 2300.00, Weight On Bit (klbs): 30.00, Flow Rate (gpm): 700.00, Strokes Per Minute: 240, Toolface: 315, Toolface Type: gravity
Survey	46	01-06	13:20	13:25	01-06	10949.00	10949.00	Inclination (°): 13.670, Azimuth (°): 24.450, TVD (ft): 10859.49, Dogleg (°/100 ft): 10.63, Sensor Depth (ft): 10886.00, Bit To Sensor (ft): 63.00
Slide Drill	2	01-06	13:25	14:40	01-06	10949.00	11038.00	Pressure On (psi): 2600.00, Pressure Off (psi): 2300.00, Weight On Bit (klbs): 30.00, Flow Rate (gpm): 700.00, Strokes Per Minute: 240, Toolface: 330, Toolface Type: gravity
Survey	46	01-06	14:40	14:45	01-06	11038.00	11038.00	Inclination (°): 24.220, Azimuth (°): 18.030, TVD (ft): 10943.56, Dogleg (°/100 ft): 12.07, Sensor Depth (ft): 10975.00, Bit To Sensor (ft): 63.00
Slide Drill	2	01-06	14:45	16:00	01-06	11038.00	11128.00	Pressure On (psi): 2600.00, Pressure Off (psi): 2300.00, Weight On Bit (klbs): 30.00, Flow Rate (gpm): 700.00, Strokes Per Minute: 240, Toolface: 310, Toolface Type: gravity
Survey	46	01-06	16:00	16:05	01-06	11128.00	11128.00	Inclination (°): 34.150, Azimuth (°): 14.520, TVD (ft): 11022.04, Dogleg (°/100 ft): 11.19, Sensor Depth (ft): 11065.00, Bit To Sensor (ft): 63.00
Slide Drill	2	01-06	16:05	17:05	01-06	11128.00	11217.00	Pressure On (psi): 2600.00, Pressure Off (psi): 2300.00, Weight On Bit (klbs): 30.00, Flow Rate (gpm): 700.00, Strokes Per Minute: 240, Toolface: 330, Toolface Type: gravity
Survey	46	01-06	17:05	17:10	01-06	11217.00	11217.00	Inclination (°): 44.880, Azimuth (°): 12.060, TVD (ft): 11090.60, Dogleg (°/100 ft): 12.18, Sensor Depth (ft): 11154.00, Bit To Sensor (ft): 63.00

Slide Drill	2	01-06	17:10	18:40	01-06	11217.00	11307.00	Pressure On (psi): 2800.00, Pressure Off (psi): 2300.00, Weight On Bit (klbs): 60.00, Flow Rate (gpm): 700.00, Strokes Per Minute: 240, Toolface: 280, Toolface Type: gravity
Survey	46	01-06	18:40	18:45	01-06	11307.00	11307.00	Inclination (°): 54.240, Azimuth (°): 5.640, TVD (ft): 11148.95, Dogleg (°/100 ft): 11.72, Sensor Depth (ft): 11244.00, Bit To Sensor (ft): 63.00
Rotary Drill	1	01-06	18:45	19:15	01-06	11307.00	11337.00	Pressure On (psi): 3000.00, Pressure Off (psi): 2300.00, Weight On Bit (klbs): 45.00, Surface RPM: 50, Surface Torque (ft lbf): 20000.00, Flow Rate (gpm): 750.00, Strokes Per Minute: 256.00
Circulating	3	01-06	19:15	19:20	01-06			MWD Check Shot
Slide Drill	2	01-06	19:20	21:00	01-06	11337.00	11396.00	Pressure On (psi): 2800.00, Pressure Off (psi): 2300.00, Weight On Bit (klbs): 60.00, Flow Rate (gpm): 700.00, Strokes Per Minute: 240, Toolface: 330, Toolface Type: gravity
Survey	46	01-06	21:00	21:05	01-06	11396.00	11396.00	Inclination (°): 59.340, Azimuth (°): 4.670, TVD (ft): 11197.68, Dogleg (°/100 ft): 5.80, Sensor Depth (ft): 11333.00, Bit To Sensor (ft): 63.00
Slide Drill	2	01-06	21:05	22:10	01-06	11396.00	11486.00	Pressure On (psi): 2800.00, Pressure Off (psi): 2300.00, Weight On Bit (klbs): 60.00, Flow Rate (gpm): 700.00, Strokes Per Minute: 240, Toolface: 320, Toolface Type: gravity
Survey	46	01-06	22:10	22:15	01-06	11486.00	11486.00	Inclination (°): 69.230, Azimuth (°): 359.140, TVD (ft): 11236.71, Dogleg (°/100 ft): 12.30, Sensor Depth (ft): 11423.00, Bit To Sensor (ft): 63.00
Rotary Drill	1	01-06	22:15	23:20	01-06	11486.00	11516.00	Pressure On (psi): 3000.00, Pressure Off (psi): 2300.00, Weight On Bit (klbs): 30.00, Surface RPM: 30, Surface Torque (ft lbf): 20000.00, Flow Rate (gpm): 700.00, Strokes Per Minute: 240.00
Circulating	3	01-06	23:20	23:25	01-06			MWD Check Shot
Pooh	7	01-06	23:25	05:00	01-07			POOH for Lateral Assy.

MWD Activities

No Activities



Job Number WT-21-181	Operator Advance Energy Partners	Rig Name Nabors X50
Start Date 2021-11-22	Well Name Anderson Fed Com 552H	Legal Well Name AFE Anderson Fed Com 552H
Play Delaware Basin	State/Province and Country New Mexico, US	County Lea
Company Man		

Friday, Jan 07 00:00 - 23:59 (Day 8 of 17)

Billing: \$9,500.00 (\$156,865.75 total)

Drilling Summary				Drilling Parameters	
Start Depth (ft)	11516.00	Downhole Hours	21.75	Rotating WOB (klbs)	30.00 - 40.00
Bit Depth (ft)	11727.00	Drilling Hours	2.83	Sliding WOB (klbs)	
Bottom Hole Depth (ft)	11727.00	Hours Circulating	2.17	Rotating SPM	192.00 - 243.00
Total Distance (ft)	211.00	Hours Sliding	1.58	Sliding SPM	
Distance Rotated (ft)	111.00	Hours Rotating	1.25	Motor RPM	0.00 - 30.00
Distance Slid (ft)	100.00			Surface RPM	30.00 - 30.00
Inclination In	73.80			Flow Rate (gpm)	550.00 - 700.00
Inclination Out	78.11			On Bottom Pressure (psi)	1800.00 - 4500.00
Azimuth In	358.26	% Hours Rotating	44%	Off Bottom Pressure (psi)	1500.00 - 3800.00
Azimuth Out	359.14	% Hours Sliding	56%		
AVG Total ROP (ft/h)	74.47	% Distance Sliding	47%		
AVG Rotating ROP (ft/h)	88.80	% Distance Rotating	53%		
AVG Sliding ROP (ft/h)	63.16				

Personnel

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

BHA #5 - 8.75 Curve Assy

Date In: Jan 6, 2022, 0:30 Date Out: Jan 7, 2022, 5:00

Bit Details		Motor Details		Directional Comments
OD (in)	8.750	Size (in)	7.0	Flow Range = 300-700 gpm's, Rev Per Gallon = .25, Max Diff = 1800, Max Torque =17100, Bit Runs = 0, Bit to Bend = 4.85"
Vendor	ULTERRA	Lobe/Stage	7/8, 6.1	
S/N	57710	Bend Angle	2.25	
Nozzles	6x15's	Speed (rev/gal)	0.25	MWD Comments
Total Flow Area (in ²)	1.035	Wear Pad OD (in)	7.250	
Drilling Hours for Day	0.00	Bit Distances		
Total Drilled for Day (ft)		Survey: 63.00 ft, Gamma: 39.00 ft,		
Drilling Hours for BHA	14.08	Resistivity: 50.00 ft		POOH Reason
Total Drilled for BHA (ft)	750.00			Curve Landed: POOH for Lateral Assy.

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	57710	4 1/2" Reg Pin			8.750		1.00	1.00
Mud Motor Description: 7" 7/8 6.1 Stg. 2.25° FBH Slick, Size (in): 7.00, Bend Angle (°): 2.25, Rotor Lobe: 7, Stator Lobe: 8, Stator Stage: 6.1	Bico	BPB5700-0043	4 1/2" IF Box	4 1/2" Reg Box		7.000		30.13	31.13
Resistivity Description: RESISTIVITY MWD	Bench Tree	650-1009						31.43	62.56
Battery Description: BATTERY	Bench Tree	B6008X						17.27	79.83
Drill Collar Description: NMDC, Material: Non-Magnetic, Type: Slick Drill	GATOR	67-30-193	4 1/2" IF Box	4 1/2" IF Pin	3.250	6.750		29.44	109.27
Crossover Sub Description: X-O SUB, Material: Steel	BLACK DIAMOND	BD13750	EverDrlg54 Box	4 1/2" IF Pin	3.125	6.610		3.55	112.82

MWD Items

No Items

BHA #6 - 8.75" LATERAL

Date In: Jan 7, 2022, 7:15 Date Out: Jan 8, 2022, 5:00

Bit Details		Motor Details		Directional Comments	
OD (in)	8.750	Size (in)	7.0	Bico 7" SSS100 7/8 6.1 1.75 BTB 300-700 gpm's, Rev.25, Max Diff = 1800, Max Torque =17100, Bit Runs = 0, Bit to Bend = 4.08	
Vendor	REED	Lobe/Stage	7/8, 6.1		
S/N	A282345	Bend Angle	1.75		
Nozzles	6x15's	Speed (rev/gal)	0.25	MWD Comments	
Total Flow Area (in ²)	1.035	Wear Pad OD (in)	7.230		
Drilling Hours for Day	2.83	Bit Distances			
Total Drilled for Day (ft)	211.00	Survey: 63.00 ft, Gamma: 39.00 ft,			
Drilling Hours for BHA	2.83	Resistivity: 50.00 ft		POOH Reason	
Total Drilled for BHA (ft)	211.00			Other: Pressure up 700 psi. and held pressure.	

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	A282345	4 1/2" Reg Pin			8.750		1.00	1.00
Mud Motor Description: <i>Bico 7" SSS100 Fixed @ 1.75 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>6.1</i>	Bico	BPB5700-0072	4 1/2" IF Box	4 1/2" Reg Box		7.000		30.22	31.22
Resistivity Description: <i>RESISTIVITY MWD</i>	Bench Tree	650-1009						31.43	62.65
Battery Description: <i>BATTERY</i>	Bench Tree	B6008X						17.27	79.92
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	109.36
Crossover Sub Description: <i>X-O SUB</i> , Material: <i>Steel</i>	BLACK DIAMOND	BD13750	EverDrlg54 Box	4 1/2" IF Pin	3.125	6.610		3.55	112.91
Drill Pipe Description: <i>22 STDS 5" DP</i> , Type: <i>Slick</i>	Rig		EverDrlg54 Box	EverDrlg54 Pin	2.500	5.000		1969.32	2082.23
Crossover Sub Description: <i>EverDRL54 Pin x 4 1/2 IF Box X-Over Sub</i> , Material: <i>Steel</i>	BLACK DIAMOND	BD22522	4 1/2" IF Box	EverDrlg54 Pin	3.000	6.750		3.44	2085.67
Agitator Description: <i>NOV AGITATOR w/1.85 Plate Size</i> , Size (in): <i>6.75</i>	NOV	AGHF0675-0018	4 1/2" IF Box	4 1/2" IF Pin		6.750		24.71	2110.38
Crossover Sub Description: <i>4 1/2 IF (P) X EverDrlg 54 (B)</i> , Material: <i>Steel</i>	BLACK DIAMOND	BD11961	EverDrlg54 Box	4 1/2" IF Pin	3.000	6.625		3.41	2113.79

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	01-06	23:25	05:00	01-07			POOH for Lateral Assy.
Lay Down BHA	65	01-07	05:00	05:15	01-07			
Change BHA	6	01-07	05:15	07:15	01-07			P/U BHA # 6
Circulating	3	01-07	07:15	07:45	01-07			Test MWD and Motor
TIH	8	01-07	07:45	12:00	01-07			TIH W/ BHA #6
Other	16	01-07	12:00	14:00	01-07			Slip & Cut Drill Line
TIH	8	01-07	14:00	17:00	01-07			TIH W/ BHA #6
Rotary Drill	1	01-07	17:00	17:30	01-07	11516.00	11517.00	Pressure On (psi): <i>1800.00</i> , Pressure Off (psi): <i>1500.00</i> , Weight On Bit (klbs): <i>30.00</i> , Surface RPM: <i>30</i> , Surface Torque (ft lbf): <i>20000.00</i> , Flow Rate (gpm): <i>550.00</i> , Strokes Per Minute: <i>192.00</i>
Survey	46	01-07	17:30	17:35	01-07	11517.00	11517.00	Inclination (°): <i>73.800</i> , Azimuth (°): <i>358.260</i> , TVD (ft): <i>11246.54</i> , Dogleg (°/100 ft): <i>14.99</i> , Sensor Depth (ft): <i>11454.00</i> , Bit To Sensor (ft): <i>63.00</i>
Circulating	3	01-07	17:35	19:00	01-07			Displace with OBM.
Rotary Drill	1	01-07	19:00	19:25	01-07	11517.00	11607.00	Pressure On (psi): <i>1800.00</i> , Pressure Off (psi): <i>1500.00</i> , Weight On Bit (klbs): <i>30.00</i> , Surface RPM: <i>30</i> , Surface Torque (ft lbf): <i>20000.00</i> , Flow Rate (gpm): <i>550.00</i> , Strokes Per Minute: <i>192.00</i>
Survey	46	01-07	19:25	19:30	01-07	11607.00	11607.00	Inclination (°): <i>76.840</i> , Azimuth (°): <i>358.610</i> , TVD (ft): <i>11269.34</i> , Dogleg (°/100 ft): <i>3.40</i> , Sensor Depth (ft): <i>11544.00</i> , Bit To Sensor (ft): <i>63.00</i>
Rotary Drill	1	01-07	19:30	19:50	01-07	11607.00	11627.00	Pressure On (psi): <i>4500.00</i> , Pressure Off (psi): <i>3800.00</i> , Weight On Bit (klbs): <i>40.00</i> , Surface RPM: <i>30</i> , Surface Torque (ft lbf): <i>20000.00</i> , Flow Rate (gpm): <i>700.00</i> , Strokes Per Minute: <i>243.00</i>
Slide Drill	2	01-07	19:50	20:40	01-07	11627.00	11697.00	Toolface: <i>20</i> , Toolface Type: <i>gravity</i>

Survey	46	01-07	20:40	20:45	01-07	11697.00	11697.00	Inclination (°): 78.110, Azimuth (°): 359.140, TVD (ft): 11288.86, Dogleg (°/100 ft): 1.52, Sensor Depth (ft): 11634.00, Bit To Sensor (ft): 63.00
Slide Drill	2	01-07	20:45	21:30	01-07	11697.00	11727.00	Toolface: 0, Toolface Type: gravity
Circulating	3	01-07	21:30	21:45	01-07			Circulate to POOH
Pooh	7	01-07	21:45	03:50	01-08			POOH for pressure increase

MWD Activities

No Activities



Job Number WT-21-181	Operator Advance Energy Partners	Rig Name Nabors X50
Start Date 2021-11-22	Well Name Anderson Fed Com 552H	Legal Well Name AFE Anderson Fed Com 552H
Play Delaware Basin	State/Province and Country New Mexico, US	County Lea
		Company Man

Saturday, Jan 08 00:00 - 23:59 (Day 9 of 17)

Billing: \$9,500.00 (\$156,865.75 total)

Drilling Summary				Drilling Parameters	
Start Depth (ft)	11727.00	Downhole Hours	22.00	Rotating WOB (klbs)	40.00 - 45.00
Bit Depth (ft)	12503.00	Drilling Hours	8.83	Sliding WOB (klbs)	40.00 - 40.00
Bottom Hole Depth (ft)	12503.00	Hours Circulating	0.75	Rotating SPM	243.00 - 243.00
Total Distance (ft)	776.00	Hours Sliding	4.17	Sliding SPM	240.00 - 240.00
Distance Rotated (ft)	630.00	Hours Rotating	4.67	Motor RPM	0.00 - 175.00
Distance Slid (ft)	146.00			Surface RPM	30.00 - 50.00
Inclination In	88.48			Flow Rate (gpm)	700.00 - 700.00
Inclination Out	90.95			On Bottom Pressure (psi)	4400.00 - 4500.00
Azimuth In	0.02	% Hours Rotating	53%	Off Bottom Pressure (psi)	3800.00 - 3900.00
Azimuth Out	357.38	% Hours Sliding	47%		
AVG Total ROP (ft/h)	89.59	% Distance Sliding	19%		
AVG Rotating ROP (ft/h)	130.91	% Distance Rotating	81%		
AVG Sliding ROP (ft/h)	35.04				

Personnel

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

BHA #6 - 8.75" LATERAL

Date In: Jan 7, 2022, 7:15 Date Out: Jan 8, 2022, 5:00

Bit Details		Motor Details		Directional Comments
OD (in)	8.750	Size (in)	7.0	Bico 7" SSS100 7/8 6.1 1.75 BTB 300-700 gpm's, Rev.25, Max Diff = 1800, Max Torque =17100, Bit Runs = 0, Bit to Bend = 4.08
Vendor	REED	Lobe/Stage	7/8, 6.1	
S/N	A282345	Bend Angle	1.75	
Nozzles	6x15's	Speed (rev/gal)	0.25	MWD Comments
Total Flow Area (in ²)	1.035	Wear Pad OD (in)	7.230	
Drilling Hours for Day	0.00	Bit Distances		
Total Drilled for Day (ft)		Survey: 63.00 ft, Gamma: 39.00 ft,		
Drilling Hours for BHA	2.83	Resistivity: 50.00 ft		POOH Reason
Total Drilled for BHA (ft)	211.00			Other: Pressure up 700 psi. and held pressure.

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: TKC76, Type: PDC (Polycrystalline Diamond Compacts), Gauge Length (in): 4.00, Size (in): 8.75	REED	A282345	4 1/2" Reg Pin			8.750		1.00	1.00
Mud Motor Description: Bico 7" SSS100 Fixed @ 1.75 True Slick, Size (in): 7.00, Bend Angle (°): 1.75, Rotor Lobe: 7, Stator Lobe: 8, Stator Stage: 6.1	Bico	BPB5700-0072	4 1/2" IF Box	4 1/2" Reg Box		7.000		30.22	31.22
Resistivity Description: RESISTIVITY MWD	Bench Tree	650-1009						31.43	62.65
Battery Description: BATTERY	Bench Tree	B6008X						17.27	79.92
Drill Collar Description: NMDC, Material: Non-Magnetic, Type: Slick Drill	GATOR	67-30-193	4 1/2" IF Box	4 1/2" IF Pin	3.250	6.750		29.44	109.36
Crossover Sub Description: X-O SUB, Material: Steel	BLACK DIAMOND	BD13750	EverDrlg54 Box	4 1/2" IF Pin	3.125	6.610		3.55	112.91
Drill Pipe Description: 22 STDS 5" DP, Type: Slick	Rig		EverDrlg54 Box	EverDrlg54 Pin	2.500	5.000		1969.32	2082.23
Crossover Sub Description: EverDRL54 Pin x 4 1/2 IF Box X-Over Sub, Material: Steel	BLACK DIAMOND	BD22522	4 1/2" IF Box	EverDrlg54 Pin	3.000	6.750		3.44	2085.67
Agitator Description: NOV AGITATOR w/1.85 Plate Size, Size (in): 6.75	NOV	AGHF0675-0018	4 1/2" IF Box	4 1/2" IF Pin		6.750		24.71	2110.38
Crossover Sub Description: 4 1/2 IF (P) X EverDrlg 54 (B), Material: Steel	BLACK DIAMOND	BD11961	EverDrlg54 Box	4 1/2" IF Pin	3.000	6.625		3.41	2113.79

MWD Items

No Items

BHA #7 - 8.75" LATERAL

Date In: Jan 8, 2022, 7:00 Date Out: Jan 15, 2022, 10:00

Bit Details		Motor Details		Directional Comments	
OD (in)	8.750	Size (in)	7.0	Bico 7" SSS100 7/8 6.1 1.75 BTB 300-700 GPM's, Rev.25, Max Diff = 1800, Max Torque =17100, Bit Runs = 0, Bit to Bend = 4.08	
Vendor	REED	Lobe/Stage	7/8, 6.1		
S/N	A283089	Bend Angle	1.75		
Nozzles	6x15's	Speed (rev/gal)	0.25	MWD Comments	
Total Flow Area (in ²)	1.035	Wear Pad OD (in)	7.230		
Drilling Hours for Day	8.83	Bit Distances			
Total Drilled for Day (ft)	776.00	Survey: 63.00 ft, Gamma: 39.00 ft,			
Drilling Hours for BHA	116.50	Resistivity: 50.00 ft		POOH Reason	
Total Drilled for BHA (ft)	7603.00			Total Depth/Casing Point	

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	A283089	4 1/2" Reg Pin			8.750		1.00	1.00
Mud Motor Description: <i>Bico 7" SSS100 Fixed @ 1.75 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>6.1</i>	Bico	BPB5700-0072	4 1/2" IF Box	4 1/2" Reg Box		7.000		30.22	31.22
Resistivity Description: <i>RESISTIVITY MWD</i>	Bench Tree	650-1009						31.43	62.65
Battery Description: <i>BATTERY</i>	Bench Tree	B6008X						17.27	79.92
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	109.36
Crossover Sub Description: <i>X-O SUB</i> , Material: <i>Steel</i>	BLACK DIAMOND	BD13750	EverDrlg54 Box	4 1/2" IF Pin	3.125	6.610		3.55	112.91
Drill Pipe Description: <i>22 STDS 5" DP</i> , Type: <i>Slick</i>	Rig		EverDrlg54 Box	EverDrlg54 Pin	2.500	5.000		1969.32	2082.23
Crossover Sub Description: <i>EverDRL54 Pin x 4 1/2 IF Box X-Over Sub</i> , Material: <i>Steel</i>	BLACK DIAMOND	BD22522	4 1/2" IF Box	EverDrlg54 Pin	3.000	6.750		3.44	2085.67
Agitator Description: <i>NOV AGITATOR w/1.85 Plate Size</i> , Size (in): <i>6.75</i>	NOV	AGHF0675-0018	4 1/2" IF Box	4 1/2" IF Pin		6.750		24.71	2110.38
Crossover Sub Description: <i>4 1/2 IF (P) X EverDrlg 54 (B)</i> , Material: <i>Steel</i>	BLACK DIAMOND	BD11961	EverDrlg54 Box	4 1/2" IF Pin	3.000	6.625		3.41	2113.79

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	01-07	21:45	03:50	01-08			POOH for pressure increase
Other	16	01-08	03:50	05:00	01-08			Inspect BHA and found MWD lowerend packed off.
Other	16	01-08	05:00	06:40	01-08			Changed MWD lowerend and muleshoe sleeve.
Circulating	3	01-08	06:40	07:00	01-08			Test MWD & Motor
TIH	8	01-08	07:00	13:15	01-08			TIH W/ BHA #7
Circulating	3	01-08	13:15	13:40	01-08			Circulating gas out.
Slide Drill	2	01-08	13:40	14:25	01-08	11727.00	11758.00	Pressure On (psi): <i>4400.00</i> , Pressure Off (psi): <i>3900.00</i> , Weight On Bit (klbs): <i>40.00</i> , Flow Rate (gpm): <i>700.00</i> , Strokes Per Minute: <i>240</i> , Toolface: <i>0</i> , Toolface Type: <i>gravity</i>
Rotary Drill	1	01-08	14:25	14:40	01-08	11758.00	11787.00	Pressure On (psi): <i>4500.00</i> , Pressure Off (psi): <i>3800.00</i> , Weight On Bit (klbs): <i>40.00</i> , Surface RPM: <i>30</i> , Surface Torque (ft lbf): <i>20000.00</i> , Flow Rate (gpm): <i>700.00</i> , Strokes Per Minute: <i>243.00</i>
Survey	46	01-08	14:40	14:45	01-08	11787.00	11787.00	Inclination (°): <i>88.480</i> , Azimuth (°): <i>0.020</i> , TVD (ft): <i>11299.35</i> , Dogleg (°/100 ft): <i>11.56</i> , Sensor Depth (ft): <i>11724.00</i> , Bit To Sensor (ft): <i>63.00</i>
Rotary Drill	1	01-08	14:45	15:00	01-08	11787.00	11794.00	Pressure On (psi): <i>4500.00</i> , Pressure Off (psi): <i>3800.00</i> , Weight On Bit (klbs): <i>40.00</i> , Surface RPM: <i>30</i> , Surface Torque (ft lbf): <i>20000.00</i> , Flow Rate (gpm): <i>700.00</i> , Strokes Per Minute: <i>243.00</i>
Slide Drill	2	01-08	15:00	15:15	01-08	11794.00	11809.00	Pressure On (psi): <i>4400.00</i> , Pressure Off (psi): <i>3900.00</i> , Weight On Bit (klbs): <i>40.00</i> , Flow Rate (gpm): <i>700.00</i> , Strokes Per Minute: <i>240</i> , Toolface: <i>170</i> , Toolface Type: <i>gravity</i>
Rotary Drill	1	01-08	15:15	15:30	01-08	11809.00	11876.00	Pressure On (psi): <i>4500.00</i> , Pressure Off (psi): <i>3800.00</i> , Weight On Bit (klbs): <i>40.00</i> , Surface RPM: <i>30</i> , Surface Torque (ft lbf): <i>20000.00</i> , Flow Rate (gpm): <i>700.00</i> , Strokes Per Minute: <i>243.00</i>
Survey	46	01-08	15:30	15:35	01-08	11876.00	11876.00	Inclination (°): <i>89.890</i> , Azimuth (°): <i>1.600</i> , TVD (ft): <i>11300.62</i> , Dogleg (°/100 ft): <i>2.38</i> , Sensor Depth (ft): <i>11813.00</i> , Bit To Sensor (ft): <i>63.00</i>

Slide Drill	2	01-08	15:35	16:00	01-08	11876.00	11891.00	Pressure On (psi): 4400.00, Pressure Off (psi): 3900.00, Weight On Bit (klbs): 40.00, Flow Rate (gpm): 700.00, Strokes Per Minute: 240, Toolface: 190, Toolface Type: gravity
Rotary Drill	1	01-08	16:00	16:55	01-08	11891.00	11966.00	Pressure On (psi): 4500.00, Pressure Off (psi): 3800.00, Weight On Bit (klbs): 45.00, Surface RPM: 50, Surface Torque (ft lbf): 16000.00, Flow Rate (gpm): 700.00, Strokes Per Minute: 243.00
Survey	46	01-08	16:55	17:00	01-08	11966.00	11966.00	Inclination (°): 87.340, Azimuth (°): 2.210, TVD (ft): 11302.79, Dogleg (°/100 ft): 2.91, Sensor Depth (ft): 11903.00, Bit To Sensor (ft): 63.00
Rotary Drill	1	01-08	17:00	17:45	01-08	11966.00	12056.00	Pressure On (psi): 4500.00, Pressure Off (psi): 3800.00, Weight On Bit (klbs): 45.00, Surface RPM: 50, Surface Torque (ft lbf): 16000.00, Flow Rate (gpm): 700.00, Strokes Per Minute: 243.00
Survey	46	01-08	17:45	17:50	01-08	12056.00	12056.00	Inclination (°): 86.370, Azimuth (°): 1.330, TVD (ft): 11307.73, Dogleg (°/100 ft): 1.45, Sensor Depth (ft): 11993.00, Bit To Sensor (ft): 63.00
Slide Drill	2	01-08	17:50	18:40	01-08	12056.00	12086.00	Toolface: 330, Toolface Type: gravity
Rotary Drill	1	01-08	18:40	19:00	01-08	12086.00	12145.00	Pressure On (psi): 4500.00, Pressure Off (psi): 3800.00, Weight On Bit (klbs): 45.00, Surface RPM: 50, Surface Torque (ft lbf): 16000.00, Flow Rate (gpm): 700.00, Strokes Per Minute: 243.00
Survey	46	01-08	19:00	19:05	01-08	12145.00	12145.00	Inclination (°): 87.470, Azimuth (°): 359.750, TVD (ft): 11312.51, Dogleg (°/100 ft): 2.16, Sensor Depth (ft): 12082.00, Bit To Sensor (ft): 63.00
Rotary Drill	1	01-08	19:05	19:40	01-08	12145.00	12235.00	Pressure On (psi): 4500.00, Pressure Off (psi): 3800.00, Weight On Bit (klbs): 45.00, Surface RPM: 50, Surface Torque (ft lbf): 16000.00, Flow Rate (gpm): 700.00, Strokes Per Minute: 243.00
Survey	46	01-08	19:40	19:55	01-08	12235.00	12235.00	Inclination (°): 87.690, Azimuth (°): 359.660, TVD (ft): 11316.31, Dogleg (°/100 ft): 0.26, Sensor Depth (ft): 12172.00, Bit To Sensor (ft): 63.00
Rotary Drill	1	01-08	19:55	20:00	01-08	12235.00	12240.00	Pressure On (psi): 4500.00, Pressure Off (psi): 3800.00, Weight On Bit (klbs): 45.00, Surface RPM: 50, Surface Torque (ft lbf): 16000.00, Flow Rate (gpm): 700.00, Strokes Per Minute: 243.00
Slide Drill	2	01-08	20:00	20:50	01-08	12240.00	12265.00	Toolface: 330, Toolface Type: gravity
Rotary Drill	1	01-08	20:50	21:15	01-08	12265.00	12324.00	Pressure On (psi): 4500.00, Pressure Off (psi): 3800.00, Weight On Bit (klbs): 45.00, Surface RPM: 50, Surface Torque (ft lbf): 16000.00, Flow Rate (gpm): 700.00, Strokes Per Minute: 243.00
Survey	46	01-08	21:15	21:20	01-08	12324.00	12324.00	Inclination (°): 89.050, Azimuth (°): 358.870, TVD (ft): 11318.85, Dogleg (°/100 ft): 1.77, Sensor Depth (ft): 12261.00, Bit To Sensor (ft): 63.00
Rotary Drill	1	01-08	21:20	21:45	01-08	12324.00	12414.00	Pressure On (psi): 4500.00, Pressure Off (psi): 3800.00, Weight On Bit (klbs): 45.00, Surface RPM: 50, Surface Torque (ft lbf): 16000.00, Flow Rate (gpm): 700.00, Strokes Per Minute: 243.00
Survey	46	01-08	21:45	21:50	01-08	12414.00	12414.00	Inclination (°): 89.100, Azimuth (°): 358.080, TVD (ft): 11320.30, Dogleg (°/100 ft): 0.88, Sensor Depth (ft): 12351.00, Bit To Sensor (ft): 63.00
Rotary Drill	1	01-08	21:50	21:55	01-08	12414.00	12419.00	Pressure On (psi): 4500.00, Pressure Off (psi): 3800.00, Weight On Bit (klbs): 45.00, Surface RPM: 50, Surface Torque (ft lbf): 16000.00, Flow Rate (gpm): 700.00, Strokes Per Minute: 243.00
Slide Drill	2	01-08	21:55	23:00	01-08	12419.00	12449.00	Toolface: 20, Toolface Type: gravity
Rotary Drill	1	01-08	23:00	23:20	01-08	12449.00	12503.00	Pressure On (psi): 4500.00, Pressure Off (psi): 3800.00, Weight On Bit (klbs): 45.00, Surface RPM: 50, Surface Torque (ft lbf): 16000.00, Flow Rate (gpm): 700.00, Strokes Per Minute: 243.00
Survey	46	01-08	23:20	23:25	01-08	12503.00	12503.00	Inclination (°): 90.950, Azimuth (°): 357.380, TVD (ft): 11320.26, Dogleg (°/100 ft): 2.22, Sensor Depth (ft): 12440.00, Bit To Sensor (ft): 63.00
Rotary Drill	1	01-08	23:25	00:15	01-09	12503.00	12593.00	Pressure On (psi): 4500.00, Pressure Off (psi): 3800.00, Weight On Bit (klbs): 45.00, Surface RPM: 50, Surface Torque (ft lbf): 16000.00, Flow Rate (gpm): 700.00, Strokes Per Minute: 243.00

MWD Activities

No Activities



Job Number WT-21-181	Operator Advance Energy Partners	Rig Name Nabors X50
Start Date 2021-11-22	Well Name Anderson Fed Com 552H	Legal Well Name AFE Anderson Fed Com 552H
Play Delaware Basin	State/Province and Country New Mexico, US	County Lea
		Company Man

Sunday, Jan 09 00:00 - 23:59 (Day 10 of 17)

Billing: \$9,500.00 (\$156,865.75 total)

Drilling Summary				Drilling Parameters	
Start Depth (ft)	12503.00	Downhole Hours	24.00	Rotating WOB (klbs)	45.00 - 48.00
Bit Depth (ft)	14202.00	Drilling Hours	22.75	Sliding WOB (klbs)	50.00 - 60.00
Bottom Hole Depth (ft)	14202.00	Hours Circulating	0.33	Rotating SPM	243.00 - 243.00
Total Distance (ft)	1699.00	Hours Sliding	7.92	Sliding SPM	242.00 - 242.00
Distance Rotated (ft)	1447.00	Hours Rotating	14.83	Motor RPM	150.00 - 175.00
Distance Slid (ft)	252.00			Surface RPM	50.00 - 50.00
Inclination In	90.99			Flow Rate (gpm)	700.00 - 700.00
Inclination Out	91.52			On Bottom Pressure (psi)	4200.00 - 4500.00
Azimuth In	357.29	% Hours Rotating	65%	Off Bottom Pressure (psi)	3800.00 - 3800.00
Azimuth Out	0.72	% Hours Sliding	35%		
AVG Total ROP (ft/h)	74.68	% Distance Sliding	15%		
AVG Rotating ROP (ft/h)	97.55	% Distance Rotating	85%		
AVG Sliding ROP (ft/h)	31.83				

Personnel

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

BHA #7 - 8.75" LATERAL

Date In: Jan 8, 2022, 7:00 Date Out: Jan 15, 2022, 10:00

Bit Details		Motor Details		Directional Comments
OD (in)	8.750	Size (in)	7.0	Bico 7" SSS100 7/8 6.1 1.75 BTB 300-700 GPM's, Rev.25, Max Diff = 1800, Max Torque =17100, Bit Runs = 0, Bit to Bend = 4.08
Vendor	REED	Lobe/Stage	7/8, 6.1	
S/N	A283089	Bend Angle	1.75	
Nozzles	6x15's	Speed (rev/gal)	0.25	MWD Comments
Total Flow Area (in ²)	1.035	Wear Pad OD (in)	7.230	
Drilling Hours for Day	22.75	Bit Distances		
Total Drilled for Day (ft)	1699.00	Survey: 63.00 ft, Gamma: 39.00 ft,		
Drilling Hours for BHA	116.50	Resistivity: 50.00 ft		POOH Reason
Total Drilled for BHA (ft)	7603.00			Total Depth/Casing Point

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: TKC76, Type: PDC (Polycrystalline Diamond Compacts), Gauge Length (in): 4.00, Size (in): 8.75	REED	A283089	4 1/2" Reg Pin			8.750		1.00	1.00
Mud Motor Description: Bico 7" SSS100 Fixed @ 1.75 True Slick, Size (in): 7.00, Bend Angle (°): 1.75, Rotor Lobe: 7, Stator Lobe: 8, Stator Stage: 6.1	Bico	BPB5700-0072	4 1/2" IF Box	4 1/2" Reg Box		7.000		30.22	31.22
Resistivity Description: RESISTIVITY MWD	Bench Tree	650-1009						31.43	62.65
Battery Description: BATTERY	Bench Tree	B6008X						17.27	79.92
Drill Collar Description: NMDC, Material: Non-Magnetic, Type: Slick Drill	GATOR	67-30-193	4 1/2" IF Box	4 1/2" IF Pin	3.250	6.750		29.44	109.36
Crossover Sub Description: X-O SUB, Material: Steel	BLACK DIAMOND	BD13750	EverDrlg54 Box	4 1/2" IF Pin	3.125	6.610		3.55	112.91
Drill Pipe Description: 22 STDS 5" DP, Type: Slick	Rig		EverDrlg54 Box	EverDrlg54 Pin	2.500	5.000		1969.32	2082.23
Crossover Sub Description: EverDRL54 Pin x 4 1/2 IF Box X-Over Sub, Material: Steel	BLACK DIAMOND	BD22522	4 1/2" IF Box	EverDrlg54 Pin	3.000	6.750		3.44	2085.67
Agitator Description: NOV AGITATOR w/1.85 Plate Size, Size (in): 6.75	NOV	AGHF0675-0018	4 1/2" IF Box	4 1/2" IF Pin		6.750		24.71	2110.38
Crossover Sub Description: 4 1/2 IF (P) X EverDrlg 54 (B), Material: Steel	BLACK DIAMOND	BD11961	EverDrlg54 Box	4 1/2" IF Pin	3.000	6.625		3.41	2113.79

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	01-08	23:25	00:15	01-09	12503.00	12593.00	Pressure On (psi): 4500.00, Pressure Off (psi): 3800.00, Weight On Bit (klbs): 45.00, Surface RPM: 50, Surface Torque (ft lbf): 16000.00, Flow Rate (gpm): 700.00, Strokes Per Minute: 243.00
Survey	46	01-09	00:15	00:20	01-09	12593.00	12593.00	Inclination (°): 90.990, Azimuth (°): 357.290, TVD (ft): 11318.74, Dogleg (°/100 ft): 0.11, Sensor Depth (ft): 12530.00, Bit To Sensor (ft): 63.00
Rotary Drill	1	01-09	00:20	01:00	01-09	12593.00	12682.00	Pressure On (psi): 4500.00, Pressure Off (psi): 3800.00, Weight On Bit (klbs): 45.00, Surface RPM: 50, Surface Torque (ft lbf): 16000.00, Flow Rate (gpm): 700.00, Strokes Per Minute: 243.00
Survey	46	01-09	01:00	01:05	01-09	12682.00	12682.00	Inclination (°): 91.030, Azimuth (°): 357.290, TVD (ft): 11317.17, Dogleg (°/100 ft): 0.04, Sensor Depth (ft): 12619.00, Bit To Sensor (ft): 63.00
Rotary Drill	1	01-09	01:05	01:20	01-09	12682.00	12702.00	Pressure On (psi): 4500.00, Pressure Off (psi): 3800.00, Weight On Bit (klbs): 45.00, Surface RPM: 50, Surface Torque (ft lbf): 16000.00, Flow Rate (gpm): 700.00, Strokes Per Minute: 243.00
Circulating	3	01-09	01:20	01:40	01-09			Downlink MWD Tool
Rotary Drill	1	01-09	01:40	02:10	01-09	12702.00	12772.00	Pressure On (psi): 4500.00, Pressure Off (psi): 3800.00, Weight On Bit (klbs): 45.00, Surface RPM: 50, Surface Torque (ft lbf): 16000.00, Flow Rate (gpm): 700.00, Strokes Per Minute: 243.00
Survey	46	01-09	02:10	02:15	01-09	12772.00	12772.00	Inclination (°): 91.380, Azimuth (°): 356.850, TVD (ft): 11315.28, Dogleg (°/100 ft): 0.62, Sensor Depth (ft): 12709.00, Bit To Sensor (ft): 63.00
Rotary Drill	1	01-09	02:15	02:50	01-09	12772.00	12861.00	Pressure On (psi): 4500.00, Pressure Off (psi): 3800.00, Weight On Bit (klbs): 45.00, Surface RPM: 50, Surface Torque (ft lbf): 16000.00, Flow Rate (gpm): 700.00, Strokes Per Minute: 243.00
Survey	46	01-09	02:50	02:55	01-09	12861.00	12861.00	Inclination (°): 92.260, Azimuth (°): 355.880, TVD (ft): 11312.45, Dogleg (°/100 ft): 1.47, Sensor Depth (ft): 12798.00, Bit To Sensor (ft): 63.00
Rotary Drill	1	01-09	02:55	03:00	01-09	12861.00	12866.00	Pressure On (psi): 4500.00, Pressure Off (psi): 3800.00, Weight On Bit (klbs): 45.00, Surface RPM: 50, Surface Torque (ft lbf): 16000.00, Flow Rate (gpm): 700.00, Strokes Per Minute: 243.00
Slide Drill	2	01-09	03:00	04:00	01-09	12866.00	12901.00	Toolface: 120, Toolface Type: gravity
Rotary Drill	1	01-09	04:00	04:25	01-09	12901.00	12951.00	Pressure On (psi): 4500.00, Pressure Off (psi): 3800.00, Weight On Bit (klbs): 45.00, Surface RPM: 50, Surface Torque (ft lbf): 16000.00, Flow Rate (gpm): 700.00, Strokes Per Minute: 243.00
Survey	46	01-09	04:25	04:30	01-09	12951.00	12951.00	Inclination (°): 91.740, Azimuth (°): 357.990, TVD (ft): 11309.31, Dogleg (°/100 ft): 2.41, Sensor Depth (ft): 12888.00, Bit To Sensor (ft): 63.00
Rotary Drill	1	01-09	04:30	05:15	01-09	12951.00	13040.00	Pressure On (psi): 4500.00, Pressure Off (psi): 3800.00, Weight On Bit (klbs): 45.00, Surface RPM: 50, Surface Torque (ft lbf): 16000.00, Flow Rate (gpm): 700.00, Strokes Per Minute: 243.00
Survey	46	01-09	05:15	05:20	01-09	13040.00	13040.00	Inclination (°): 92.000, Azimuth (°): 358.520, TVD (ft): 11306.40, Dogleg (°/100 ft): 0.66, Sensor Depth (ft): 12977.00, Bit To Sensor (ft): 63.00
Rotary Drill	1	01-09	05:20	06:00	01-09	13040.00	13129.00	Pressure On (psi): 4500.00, Pressure Off (psi): 3800.00, Weight On Bit (klbs): 45.00, Surface RPM: 50, Surface Torque (ft lbf): 16000.00, Flow Rate (gpm): 700.00, Strokes Per Minute: 243.00
Survey	46	01-09	06:00	06:05	01-09	13129.00	13129.00	Inclination (°): 92.970, Azimuth (°): 357.730, TVD (ft): 11302.54, Dogleg (°/100 ft): 1.41, Sensor Depth (ft): 13066.00, Bit To Sensor (ft): 63.00
Rotary Drill	1	01-09	06:05	06:10	01-09	13129.00	13134.00	Pressure On (psi): 4500.00, Pressure Off (psi): 3800.00, Weight On Bit (klbs): 45.00, Surface RPM: 50, Surface Torque (ft lbf): 16000.00, Flow Rate (gpm): 700.00, Strokes Per Minute: 243.00
Slide Drill	2	01-09	06:10	07:05	01-09	13134.00	13169.00	Pressure On (psi): 4300.00, Pressure Off (psi): 3800.00, Weight On Bit (klbs): 50.00, Flow Rate (gpm): 700.00, Strokes Per Minute: 242, Toolface: 140, Toolface Type: gravity
Rotary Drill	1	01-09	07:05	07:20	01-09	13169.00	13218.00	Pressure On (psi): 4500.00, Pressure Off (psi): 3800.00, Weight On Bit (klbs): 45.00, Surface RPM: 50, Surface Torque (ft lbf): 16000.00, Flow Rate (gpm): 700.00, Strokes Per Minute: 243.00
Survey	46	01-09	07:20	07:25	01-09	13218.00	13218.00	Inclination (°): 92.310, Azimuth (°): 358.350, TVD (ft): 11298.44, Dogleg (°/100 ft): 1.02, Sensor Depth (ft): 13155.00, Bit To Sensor (ft): 63.00
Rotary Drill	1	01-09	07:25	07:30	01-09	13218.00	13223.00	Pressure On (psi): 4500.00, Pressure Off (psi): 3800.00, Weight On Bit (klbs): 45.00, Surface RPM: 50, Surface Torque (ft lbf): 16000.00, Flow Rate (gpm): 700.00, Strokes Per Minute: 243.00
Slide Drill	2	01-09	07:30	07:45	01-09	13223.00	13240.00	Pressure On (psi): 4300.00, Pressure Off (psi): 3800.00, Weight On Bit (klbs): 50.00, Flow Rate (gpm): 700.00, Strokes Per Minute: 242, Toolface: 140, Toolface Type: gravity
Rotary Drill	1	01-09	07:45	08:10	01-09	13240.00	13308.00	Pressure On (psi): 4500.00, Pressure Off (psi): 3800.00, Weight On Bit (klbs): 45.00, Surface RPM: 50, Surface Torque (ft lbf): 16000.00, Flow Rate (gpm): 700.00, Strokes Per Minute: 243.00
Survey	46	01-09	08:10	08:15	01-09	13308.00	13308.00	Inclination (°): 91.380, Azimuth (°): 1.250, TVD (ft): 11295.55, Dogleg (°/100 ft): 3.38, Sensor Depth (ft): 13245.00, Bit To Sensor (ft): 63.00

Slide Drill	2	01-09	08:15	08:50	01-09	13308.00	13338.00	Pressure On (psi): 4300.00, Pressure Off (psi): 3800.00, Weight On Bit (klbs): 50.00, Flow Rate (gpm): 700.00, Strokes Per Minute: 242, Toolface: 180, Toolface Type: gravity
Rotary Drill	1	01-09	08:50	09:15	01-09	13338.00	13397.00	Pressure On (psi): 4500.00, Pressure Off (psi): 3800.00, Weight On Bit (klbs): 45.00, Surface RPM: 50, Surface Torque (ft lbf): 16000.00, Flow Rate (gpm): 700.00, Strokes Per Minute: 243.00
Survey	46	01-09	09:15	09:20	01-09	13397.00	13397.00	Inclination (°): 88.000, Azimuth (°): 1.250, TVD (ft): 11296.03, Dogleg (°/100 ft): 3.80, Sensor Depth (ft): 13334.00, Bit To Sensor (ft): 63.00
Rotary Drill	1	01-09	09:20	10:00	01-09	13397.00	13486.00	Pressure On (psi): 4500.00, Pressure Off (psi): 3800.00, Weight On Bit (klbs): 45.00, Surface RPM: 50, Surface Torque (ft lbf): 16000.00, Flow Rate (gpm): 700.00, Strokes Per Minute: 243.00
Survey	46	01-09	10:00	10:05	01-09	13486.00	13486.00	Inclination (°): 88.840, Azimuth (°): 0.810, TVD (ft): 11298.48, Dogleg (°/100 ft): 1.07, Sensor Depth (ft): 13423.00, Bit To Sensor (ft): 63.00
Rotary Drill	1	01-09	10:05	11:15	01-09	13486.00	13575.00	Pressure On (psi): 4500.00, Pressure Off (psi): 3800.00, Weight On Bit (klbs): 45.00, Surface RPM: 50, Surface Torque (ft lbf): 16000.00, Flow Rate (gpm): 700.00, Strokes Per Minute: 243.00
Survey	46	01-09	11:15	11:20	01-09	13575.00	13575.00	Inclination (°): 90.070, Azimuth (°): 0.190, TVD (ft): 11299.33, Dogleg (°/100 ft): 1.55, Sensor Depth (ft): 13512.00, Bit To Sensor (ft): 63.00
Slide Drill	2	01-09	11:20	11:45	01-09	13575.00	13585.00	Pressure On (psi): 4300.00, Pressure Off (psi): 3800.00, Weight On Bit (klbs): 50.00, Flow Rate (gpm): 700.00, Strokes Per Minute: 242, Toolface: 20, Toolface Type: gravity
Rotary Drill	1	01-09	11:45	12:15	01-09	13585.00	13664.00	Pressure On (psi): 4500.00, Pressure Off (psi): 3800.00, Weight On Bit (klbs): 45.00, Surface RPM: 50, Surface Torque (ft lbf): 16000.00, Flow Rate (gpm): 700.00, Strokes Per Minute: 243.00
Survey	46	01-09	12:15	12:20	01-09	13664.00	13664.00	Inclination (°): 91.380, Azimuth (°): 358.870, TVD (ft): 11298.20, Dogleg (°/100 ft): 2.09, Sensor Depth (ft): 13601.00, Bit To Sensor (ft): 63.00
Rotary Drill	1	01-09	12:20	12:25	01-09	13664.00	13675.00	Pressure On (psi): 4500.00, Pressure Off (psi): 3800.00, Weight On Bit (klbs): 45.00, Surface RPM: 50, Surface Torque (ft lbf): 16000.00, Flow Rate (gpm): 700.00, Strokes Per Minute: 243.00
Slide Drill	2	01-09	12:25	12:50	01-09	13675.00	13690.00	Pressure On (psi): 4300.00, Pressure Off (psi): 3800.00, Weight On Bit (klbs): 50.00, Flow Rate (gpm): 700.00, Strokes Per Minute: 242, Toolface: 35, Toolface Type: gravity
Rotary Drill	1	01-09	12:50	13:15	01-09	13690.00	13753.00	Pressure On (psi): 4500.00, Pressure Off (psi): 3800.00, Weight On Bit (klbs): 45.00, Surface RPM: 50, Surface Torque (ft lbf): 16000.00, Flow Rate (gpm): 700.00, Strokes Per Minute: 243.00
Survey	46	01-09	13:15	13:20	01-09	13753.00	13753.00	Inclination (°): 93.010, Azimuth (°): 358.430, TVD (ft): 11294.79, Dogleg (°/100 ft): 1.90, Sensor Depth (ft): 13690.00, Bit To Sensor (ft): 63.00
Rotary Drill	1	01-09	13:20	14:05	01-09	13753.00	13843.00	Pressure On (psi): 4500.00, Pressure Off (psi): 3800.00, Weight On Bit (klbs): 45.00, Surface RPM: 50, Surface Torque (ft lbf): 16000.00, Flow Rate (gpm): 700.00, Strokes Per Minute: 243.00
Survey	46	01-09	14:05	14:10	01-09	13843.00	13843.00	Inclination (°): 94.070, Azimuth (°): 358.700, TVD (ft): 11289.24, Dogleg (°/100 ft): 1.22, Sensor Depth (ft): 13780.00, Bit To Sensor (ft): 63.00
Rotary Drill	1	01-09	14:10	15:35	01-09	13843.00	13933.00	Pressure On (psi): 4500.00, Pressure Off (psi): 3800.00, Weight On Bit (klbs): 45.00, Surface RPM: 50, Surface Torque (ft lbf): 16000.00, Flow Rate (gpm): 700.00, Strokes Per Minute: 243.00
Survey	46	01-09	15:35	15:40	01-09	13933.00	13933.00	Inclination (°): 94.640, Azimuth (°): 357.730, TVD (ft): 11282.40, Dogleg (°/100 ft): 1.25, Sensor Depth (ft): 13870.00, Bit To Sensor (ft): 63.00
Slide Drill	2	01-09	15:40	16:55	01-09	13933.00	13968.00	Pressure On (psi): 4200.00, Pressure Off (psi): 3800.00, Weight On Bit (klbs): 60.00, Flow Rate (gpm): 700.00, Strokes Per Minute: 242, Toolface: 145, Toolface Type: gravity
Rotary Drill	1	01-09	16:55	18:15	01-09	13968.00	14022.00	Pressure On (psi): 4200.00, Pressure Off (psi): 3800.00, Weight On Bit (klbs): 48.00, Surface RPM: 50, Surface Torque (ft lbf): 20000.00, Flow Rate (gpm): 700.00, Strokes Per Minute: 243.00
Survey	46	01-09	18:15	18:20	01-09	14022.00	14022.00	Inclination (°): 93.050, Azimuth (°): 359.400, TVD (ft): 11276.43, Dogleg (°/100 ft): 2.59, Sensor Depth (ft): 13959.00, Bit To Sensor (ft): 63.00
Slide Drill	2	01-09	18:20	19:55	01-09	14022.00	14057.00	Pressure On (psi): 4200.00, Pressure Off (psi): 3800.00, Weight On Bit (klbs): 60.00, Flow Rate (gpm): 700.00, Strokes Per Minute: 242, Toolface: 150, Toolface Type: gravity
Rotary Drill	1	01-09	19:55	21:25	01-09	14057.00	14112.00	Pressure On (psi): 4200.00, Pressure Off (psi): 3800.00, Weight On Bit (klbs): 48.00, Surface RPM: 50, Surface Torque (ft lbf): 20000.00, Flow Rate (gpm): 700.00, Strokes Per Minute: 243.00
Survey	46	01-09	21:25	21:30	01-09	14112.00	14112.00	Inclination (°): 91.520, Azimuth (°): 0.720, TVD (ft): 11272.85, Dogleg (°/100 ft): 2.24, Sensor Depth (ft): 14049.00, Bit To Sensor (ft): 63.00
Slide Drill	2	01-09	21:30	23:00	01-09	14112.00	14152.00	Toolface: 150, Toolface Type: gravity
Rotary Drill	1	01-09	23:00	00:00	01-10	14152.00	14202.00	Pressure On (psi): 4200.00, Pressure Off (psi): 3800.00, Weight On Bit (klbs): 48.00, Surface RPM: 50, Surface Torque (ft lbf): 20000.00, Flow Rate (gpm): 700.00, Strokes Per Minute: 243.00

MWD Activities



Job Number WT-21-181	Operator Advance Energy Partners	Rig Name Nabors X50
Start Date 2021-11-22	Well Name Anderson Fed Com 552H	Legal Well Name AFE Anderson Fed Com 552H
Play Delaware Basin	State/Province and Country New Mexico, US	County Lea
		Company Man

Monday, Jan 10 00:00 - 23:59 (Day 11 of 17)

Billing: \$9,500.00 (\$156,865.75 total)

Drilling Summary				Drilling Parameters			
Start Depth (ft)	14202.00	Downhole Hours	24.00	Rotating WOB (klbs)	48.00 - 48.00		
Bit Depth (ft)	15542.00	Drilling Hours	22.17	Sliding WOB (klbs)	50.00 - 50.00		
Bottom Hole Depth (ft)	15542.00	Hours Circulating	0.00	Rotating SPM	243.00 - 243.00		
Total Distance (ft)	1355.00	Hours Sliding	4.92	Sliding SPM	240.00 - 240.00		
Distance Rotated (ft)	1225.00	Hours Rotating	17.25	Motor RPM	150.00 - 175.00		
Distance Slid (ft)	130.00			Surface RPM	50.00 - 50.00		
Inclination In	90.46			Flow Rate (gpm)	700.00 - 700.00		
Inclination Out	88.97			On Bottom Pressure (psi)	4200.00 - 4600.00		
Azimuth In	2.56	% Hours Rotating	78%	Off Bottom Pressure (psi)	3800.00 - 3800.00		
Azimuth Out	357.12	% Hours Sliding	22%				
AVG Total ROP (ft/h)	61.40	% Distance Sliding	10%				
AVG Rotating ROP (ft/h)	70.25	% Distance Rotating	90%				
AVG Sliding ROP (ft/h)	26.44						

Personnel

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

BHA #7 - 8.75" LATERAL

Date In: Jan 8, 2022, 7:00 Date Out: Jan 15, 2022, 10:00

Bit Details		Motor Details		Directional Comments	
OD (in)	8.750	Size (in)	7.0	Bico 7" SSS100 7/8 6.1 1.75 BTB 300-700 GPM's, Rev.25, Max Diff = 1800, Max Torque =17100, Bit Runs = 0, Bit to Bend = 4.08	
Vendor	REED	Lobe/Stage	7/8, 6.1		
S/N	A283089	Bend Angle	1.75		
Nozzles	6x15's	Speed (rev/gal)	0.25	MWD Comments	
Total Flow Area (in ²)	1.035	Wear Pad OD (in)	7.230		
Drilling Hours for Day	22.17	Bit Distances			
Total Drilled for Day (ft)	1340.00	Survey: 63.00 ft, Gamma: 39.00 ft,		POOH Reason	
Drilling Hours for BHA	116.50	Resistivity: 50.00 ft		Total Depth/Casing Point	
Total Drilled for BHA (ft)	7603.00				

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, Type: PDC (Polycrystalline Diamond Compacts), Gauge Length (in): 4.00, Size (in): 8.75</i>	REED	A283089	4 1/2" Reg Pin			8.750		1.00	1.00
Mud Motor Description: <i>Bico 7" SSS100 Fixed @ 1.75 True Slick, Size (in): 7.00, Bend Angle (°): 1.75, Rotor Lobe: 7, Stator Lobe: 8, Stator Stage: 6.1</i>	Bico	BPB5700-0072	4 1/2" IF Box	4 1/2" Reg Box		7.000		30.22	31.22
Resistivity Description: <i>RESISTIVITY MWD</i>	Bench Tree	650-1009						31.43	62.65
Battery Description: <i>BATTERY</i>	Bench Tree	B6008X						17.27	79.92
Drill Collar Description: <i>NMDC, Material: Non-Magnetic, Type: Slick Drill</i>	GATOR	67-30-193	4 1/2" IF Box	4 1/2" IF Pin	3.250	6.750		29.44	109.36
Crossover Sub Description: <i>X-O SUB, Material: Steel</i>	BLACK DIAMOND	BD13750	EverDrlg54 Box	4 1/2" IF Pin	3.125	6.610		3.55	112.91
Drill Pipe Description: <i>22 STDS 5" DP, Type: Slick</i>	Rig		EverDrlg54 Box	EverDrlg54 Pin	2.500	5.000		1969.32	2082.23
Crossover Sub Description: <i>EverDRL54 Pin x 4 1/2 IF Box X-Over Sub, Material: Steel</i>	BLACK DIAMOND	BD22522	4 1/2" IF Box	EverDrlg54 Pin	3.000	6.750		3.44	2085.67
Agitator Description: <i>NOV AGITATOR w/1.85 Plate Size, Size (in): 6.75</i>	NOV	AGHF0675-0018	4 1/2" IF Box	4 1/2" IF Pin		6.750		24.71	2110.38
Crossover Sub Description: <i>4 1/2 IF (P) X EverDrlg 54 (B), Material: Steel</i>	BLACK DIAMOND	BD11961	EverDrlg54 Box	4 1/2" IF Pin	3.000	6.625		3.41	2113.79

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	01-09	23:00	00:00	01-10	14152.00	14202.00	Pressure On (psi): 4200.00, Pressure Off (psi): 3800.00, Weight On Bit (klbs): 48.00, Surface RPM: 50, Surface Torque (ft lbf): 20000.00, Flow Rate (gpm): 700.00, Strokes Per Minute: 243.00
Survey	46	01-10	00:00	00:05	01-10	14202.00	14202.00	Inclination (°): 90.460, Azimuth (°): 2.560, TVD (ft): 11271.29, Dogleg (°/100 ft): 2.36, Sensor Depth (ft): 14139.00, Bit To Sensor (ft): 63.00
Rotary Drill	1	01-10	00:05	00:10	01-10	14202.00	14207.00	Pressure On (psi): 4200.00, Pressure Off (psi): 3800.00, Weight On Bit (klbs): 48.00, Surface RPM: 50, Surface Torque (ft lbf): 20000.00, Flow Rate (gpm): 700.00, Strokes Per Minute: 243.00
Slide Drill	2	01-10	00:10	01:10	01-10	14207.00	14227.00	Toolface: 210, Toolface Type: gravity
Rotary Drill	1	01-10	01:10	03:00	01-10	14227.00	14291.00	Pressure On (psi): 4200.00, Pressure Off (psi): 3800.00, Weight On Bit (klbs): 48.00, Surface RPM: 50, Surface Torque (ft lbf): 20000.00, Flow Rate (gpm): 700.00, Strokes Per Minute: 243.00
Survey	46	01-10	03:00	03:05	01-10	14291.00	14291.00	Inclination (°): 87.690, Azimuth (°): 2.390, TVD (ft): 11272.73, Dogleg (°/100 ft): 3.12, Sensor Depth (ft): 14228.00, Bit To Sensor (ft): 63.00
Rotary Drill	1	01-10	03:05	05:00	01-10	14291.00	14381.00	Pressure On (psi): 4200.00, Pressure Off (psi): 3800.00, Weight On Bit (klbs): 48.00, Surface RPM: 50, Surface Torque (ft lbf): 20000.00, Flow Rate (gpm): 700.00, Strokes Per Minute: 243.00
Survey	46	01-10	05:00	05:05	01-10	14381.00	14381.00	Inclination (°): 88.310, Azimuth (°): 2.300, TVD (ft): 11275.87, Dogleg (°/100 ft): 0.70, Sensor Depth (ft): 14318.00, Bit To Sensor (ft): 63.00
Rotary Drill	1	01-10	05:05	06:40	01-10	14381.00	14470.00	Pressure On (psi): 4200.00, Pressure Off (psi): 3800.00, Weight On Bit (klbs): 48.00, Surface RPM: 50, Surface Torque (ft lbf): 20000.00, Flow Rate (gpm): 700.00, Strokes Per Minute: 243.00
Survey	46	01-10	06:40	06:45	01-10	14470.00	14470.00	Inclination (°): 87.340, Azimuth (°): 1.420, TVD (ft): 11279.25, Dogleg (°/100 ft): 1.47, Sensor Depth (ft): 14407.00, Bit To Sensor (ft): 63.00
Rotary Drill	1	01-10	06:45	07:00	01-10	15454.00	15469.00	Pressure On (psi): 4600.00, Pressure Off (psi): 3800.00, Weight On Bit (klbs): 48.00, Surface RPM: 50, Surface Torque (ft lbf): 22000.00, Flow Rate (gpm): 700.00, Strokes Per Minute: 243.00
Rotary Drill	1	01-10	07:00	07:25	01-10	14470.00	14560.00	Pressure On (psi): 4200.00, Pressure Off (psi): 3800.00, Weight On Bit (klbs): 48.00, Surface RPM: 50, Surface Torque (ft lbf): 20000.00, Flow Rate (gpm): 700.00, Strokes Per Minute: 243.00
Survey	46	01-10	07:25	07:30	01-10	14560.00	14560.00	Inclination (°): 86.590, Azimuth (°): 0.980, TVD (ft): 11284.01, Dogleg (°/100 ft): 0.97, Sensor Depth (ft): 14497.00, Bit To Sensor (ft): 63.00
Rotary Drill	1	01-10	07:30	07:35	01-10	14560.00	14565.00	Pressure On (psi): 4200.00, Pressure Off (psi): 3800.00, Weight On Bit (klbs): 48.00, Surface RPM: 50, Surface Torque (ft lbf): 20000.00, Flow Rate (gpm): 700.00, Strokes Per Minute: 243.00
Slide Drill	2	01-10	07:35	08:55	01-10	14565.00	14600.00	Toolface: 0, Toolface Type: gravity
Rotary Drill	1	01-10	08:55	09:50	01-10	14600.00	14649.00	Pressure On (psi): 4200.00, Pressure Off (psi): 3800.00, Weight On Bit (klbs): 48.00, Surface RPM: 50, Surface Torque (ft lbf): 20000.00, Flow Rate (gpm): 700.00, Strokes Per Minute: 243.00
Survey	46	01-10	09:50	09:55	01-10	14649.00	14649.00	Inclination (°): 88.620, Azimuth (°): 359.310, TVD (ft): 11287.73, Dogleg (°/100 ft): 2.95, Sensor Depth (ft): 14586.00, Bit To Sensor (ft): 63.00
Rotary Drill	1	01-10	09:55	11:40	01-10	14649.00	14739.00	Pressure On (psi): 4200.00, Pressure Off (psi): 3800.00, Weight On Bit (klbs): 48.00, Surface RPM: 50, Surface Torque (ft lbf): 20000.00, Flow Rate (gpm): 700.00, Strokes Per Minute: 243.00
Survey	46	01-10	11:40	11:45	01-10	14739.00	14739.00	Inclination (°): 89.710, Azimuth (°): 358.960, TVD (ft): 11289.04, Dogleg (°/100 ft): 1.27, Sensor Depth (ft): 14676.00, Bit To Sensor (ft): 63.00
Rotary Drill	1	01-10	11:45	12:50	01-10	14739.00	14828.00	Pressure On (psi): 4200.00, Pressure Off (psi): 3800.00, Weight On Bit (klbs): 48.00, Surface RPM: 50, Surface Torque (ft lbf): 20000.00, Flow Rate (gpm): 700.00, Strokes Per Minute: 243.00
Survey	46	01-10	12:50	12:55	01-10	14828.00	14828.00	Inclination (°): 92.000, Azimuth (°): 357.990, TVD (ft): 11287.71, Dogleg (°/100 ft): 2.79, Sensor Depth (ft): 14765.00, Bit To Sensor (ft): 63.00
Rotary Drill	1	01-10	12:55	13:35	01-10	14828.00	14850.00	Pressure On (psi): 4200.00, Pressure Off (psi): 3800.00, Weight On Bit (klbs): 48.00, Surface RPM: 50, Surface Torque (ft lbf): 20000.00, Flow Rate (gpm): 700.00, Strokes Per Minute: 243.00
Slide Drill	2	01-10	13:35	14:25	01-10	14850.00	14885.00	Pressure On (psi): 4200.00, Pressure Off (psi): 3800.00, Weight On Bit (klbs): 50.00, Flow Rate (gpm): 700.00, Strokes Per Minute: 240, Toolface: 160, Toolface Type: gravity
Rotary Drill	1	01-10	14:25	14:50	01-10	14885.00	14917.00	Pressure On (psi): 4600.00, Pressure Off (psi): 3800.00, Weight On Bit (klbs): 48.00, Surface RPM: 50, Surface Torque (ft lbf): 22000.00, Flow Rate (gpm): 700.00, Strokes Per Minute: 243.00
Survey	46	01-10	14:50	14:55	01-10	14917.00	14917.00	Inclination (°): 91.650, Azimuth (°): 359.400, TVD (ft): 11284.88, Dogleg (°/100 ft): 1.63, Sensor Depth (ft): 14854.00, Bit To Sensor (ft): 63.00

Rotary Drill	1	01-10	14:55	15:00	01-10	14917.00	14927.00	Pressure On (psi): 4600.00, Pressure Off (psi): 3800.00, Weight On Bit (kbs): 48.00, Surface RPM: 50, Surface Torque (ft lbf): 22000.00, Flow Rate (gpm): 700.00, Strokes Per Minute: 243.00
Slide Drill	2	01-10	15:00	15:30	01-10	14927.00	14947.00	Pressure On (psi): 4200.00, Pressure Off (psi): 3800.00, Weight On Bit (kbs): 50.00, Flow Rate (gpm): 700.00, Strokes Per Minute: 240, Toolface: 175, Toolface Type: gravity
Rotary Drill	1	01-10	15:30	16:05	01-10	14947.00	15007.00	Pressure On (psi): 4600.00, Pressure Off (psi): 3800.00, Weight On Bit (kbs): 48.00, Surface RPM: 50, Surface Torque (ft lbf): 22000.00, Flow Rate (gpm): 700.00, Strokes Per Minute: 243.00
Survey	46	01-10	16:05	16:10	01-10	15007.00	15007.00	Inclination (°): 88.000, Azimuth (°): 0.980, TVD (ft): 11285.15, Dogleg (°/100 ft): 4.42, Sensor Depth (ft): 14944.00, Bit To Sensor (ft): 63.00
Rotary Drill	1	01-10	16:10	17:15	01-10	15007.00	15096.00	Pressure On (psi): 4600.00, Pressure Off (psi): 3800.00, Weight On Bit (kbs): 48.00, Surface RPM: 50, Surface Torque (ft lbf): 22000.00, Flow Rate (gpm): 700.00, Strokes Per Minute: 243.00
Survey	46	01-10	17:15	17:20	01-10	15096.00	15096.00	Inclination (°): 87.960, Azimuth (°): 1.070, TVD (ft): 11288.29, Dogleg (°/100 ft): 0.11, Sensor Depth (ft): 15033.00, Bit To Sensor (ft): 63.00
Rotary Drill	1	01-10	17:20	18:05	01-10	15096.00	15185.00	Pressure On (psi): 4600.00, Pressure Off (psi): 3800.00, Weight On Bit (kbs): 48.00, Surface RPM: 50, Surface Torque (ft lbf): 22000.00, Flow Rate (gpm): 700.00, Strokes Per Minute: 243.00
Survey	46	01-10	18:05	18:10	01-10	15185.00	15185.00	Inclination (°): 87.160, Azimuth (°): 0.280, TVD (ft): 11292.08, Dogleg (°/100 ft): 1.26, Sensor Depth (ft): 15122.00, Bit To Sensor (ft): 63.00
Rotary Drill	1	01-10	18:10	18:55	01-10	15185.00	15275.00	Pressure On (psi): 4600.00, Pressure Off (psi): 3800.00, Weight On Bit (kbs): 48.00, Surface RPM: 50, Surface Torque (ft lbf): 22000.00, Flow Rate (gpm): 700.00, Strokes Per Minute: 243.00
Survey	46	01-10	18:55	19:00	01-10	15275.00	15275.00	Inclination (°): 86.590, Azimuth (°): 359.750, TVD (ft): 11296.99, Dogleg (°/100 ft): 0.86, Sensor Depth (ft): 15212.00, Bit To Sensor (ft): 63.00
Rotary Drill	1	01-10	19:00	19:55	01-10	15275.00	15364.00	Pressure On (psi): 4600.00, Pressure Off (psi): 3800.00, Weight On Bit (kbs): 48.00, Surface RPM: 50, Surface Torque (ft lbf): 22000.00, Flow Rate (gpm): 700.00, Strokes Per Minute: 243.00
Survey	46	01-10	19:55	20:00	01-10	15364.00	15364.00	Inclination (°): 87.910, Azimuth (°): 359.140, TVD (ft): 11301.26, Dogleg (°/100 ft): 1.63, Sensor Depth (ft): 15301.00, Bit To Sensor (ft): 63.00
Rotary Drill	1	01-10	20:00	21:15	01-10	15364.00	15454.00	Pressure On (psi): 4600.00, Pressure Off (psi): 3800.00, Weight On Bit (kbs): 48.00, Surface RPM: 50, Surface Torque (ft lbf): 22000.00, Flow Rate (gpm): 700.00, Strokes Per Minute: 243.00
Survey	46	01-10	21:15	21:20	01-10	15453.00	15453.00	Inclination (°): 86.460, Azimuth (°): 357.030, TVD (ft): 11305.63, Dogleg (°/100 ft): 2.87, Sensor Depth (ft): 15390.00, Bit To Sensor (ft): 63.00
Rotary Drill	1	01-10	21:20	21:25	01-10	15454.00	15469.00	Pressure On (psi): 4600.00, Pressure Off (psi): 3800.00, Weight On Bit (kbs): 48.00, Surface RPM: 50, Surface Torque (ft lbf): 22000.00, Flow Rate (gpm): 700.00, Strokes Per Minute: 243.00
Slide Drill	2	01-10	21:25	22:40	01-10	15469.00	15489.00	Toolface: 40, Toolface Type: gravity
Rotary Drill	1	01-10	22:40	23:25	01-10	15489.00	15542.00	Pressure On (psi): 4600.00, Pressure Off (psi): 3800.00, Weight On Bit (kbs): 48.00, Surface RPM: 50, Surface Torque (ft lbf): 22000.00, Flow Rate (gpm): 700.00, Strokes Per Minute: 243.00
Survey	46	01-10	23:25	23:30	01-10	15542.00	15542.00	Inclination (°): 88.970, Azimuth (°): 357.120, TVD (ft): 11309.18, Dogleg (°/100 ft): 2.82, Sensor Depth (ft): 15479.00, Bit To Sensor (ft): 63.00
Rotary Drill	1	01-10	23:30	00:40	01-11	15542.00	15631.00	Pressure On (psi): 4600.00, Pressure Off (psi): 3800.00, Weight On Bit (kbs): 48.00, Surface RPM: 50, Surface Torque (ft lbf): 22000.00, Flow Rate (gpm): 700.00, Strokes Per Minute: 243.00

MWD Activities

No Activities



Job Number WT-21-181	Operator Advance Energy Partners	Rig Name Nabors X50
Start Date 2021-11-22	Well Name Anderson Fed Com 552H	Legal Well Name AFE Anderson Fed Com 552H
Play Delaware Basin	State/Province and Country New Mexico, US	County Lea
		Company Man

Tuesday, Jan 11 00:00 - 23:59 (Day 12 of 17)

Billing: \$9,500.00 (\$156,865.75 total)

Drilling Summary				Drilling Parameters			
Start Depth (ft)	15542.00	Downhole Hours	24.00	Rotating WOB (klbs)	48.00 - 48.00		
Bit Depth (ft)	16705.00	Drilling Hours	22.67	Sliding WOB (klbs)	10.00 - 60.00		
Bottom Hole Depth (ft)	16705.00	Hours Circulating	0.50	Rotating SPM	243.00 - 243.00		
Total Distance (ft)	1163.00	Hours Sliding	10.67	Sliding SPM	240.00 - 240.00		
Distance Rotated (ft)	892.00	Hours Rotating	12.00	Motor RPM	150.00 - 175.00		
Distance Slid (ft)	271.00			Surface RPM	50.00 - 50.00		
Inclination In	88.84			Flow Rate (gpm)	700.00 - 700.00		
Inclination Out	86.20			On Bottom Pressure (psi)	4200.00 - 4600.00		
Azimuth In	356.32	% Hours Rotating	53%	Off Bottom Pressure (psi)	3800.00 - 4000.00		
Azimuth Out	1.42	% Hours Sliding	47%				
AVG Total ROP (ft/h)	52.39	% Distance Sliding	23%				
AVG Rotating ROP (ft/h)	74.11	% Distance Rotating	77%				
AVG Sliding ROP (ft/h)	25.41						

Personnel

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

BHA #7 - 8.75" LATERAL

Date In: Jan 8, 2022, 7:00 Date Out: Jan 15, 2022, 10:00

Bit Details		Motor Details		Directional Comments	
OD (in)	8.750	Size (in)	7.0	Bico 7" SSS100 7/8 6.1 1.75 BTB 300-700 GPM's, Rev.25, Max Diff = 1800, Max Torque =17100, Bit Runs = 0, Bit to Bend = 4.08	
Vendor	REED	Lobe/Stage	7/8, 6.1		
S/N	A283089	Bend Angle	1.75		
Nozzles	6x15's	Speed (rev/gal)	0.25	MWD Comments	
Total Flow Area (in ²)	1.035	Wear Pad OD (in)	7.230		
Drilling Hours for Day	22.67	Bit Distances			
Total Drilled for Day (ft)	1163.00	Survey: 63.00 ft, Gamma: 39.00 ft,		POOH Reason	
Drilling Hours for BHA	116.50	Resistivity: 50.00 ft		Total Depth/Casing Point	
Total Drilled for BHA (ft)	7603.00				

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: TKC76, Type: PDC (Polycrystalline Diamond Compacts), Gauge Length (in): 4.00, Size (in): 8.75	REED	A283089	4 1/2" Reg Pin			8.750		1.00	1.00
Mud Motor Description: Bico 7" SSS100 Fixed @ 1.75 True Slick, Size (in): 7.00, Bend Angle (°): 1.75, Rotor Lobe: 7, Stator Lobe: 8, Stator Stage: 6.1	Bico	BPB5700-0072	4 1/2" IF Box	4 1/2" Reg Box		7.000		30.22	31.22
Resistivity Description: RESISTIVITY MWD	Bench Tree	650-1009						31.43	62.65
Battery Description: BATTERY	Bench Tree	B6008X						17.27	79.92
Drill Collar Description: NMDC, Material: Non-Magnetic, Type: Slick Drill	GATOR	67-30-193	4 1/2" IF Box	4 1/2" IF Pin	3.250	6.750		29.44	109.36
Crossover Sub Description: X-O SUB, Material: Steel	BLACK DIAMOND	BD13750	EverDrlg54 Box	4 1/2" IF Pin	3.125	6.610		3.55	112.91
Drill Pipe Description: 22 STDS 5" DP, Type: Slick	Rig		EverDrlg54 Box	EverDrlg54 Pin	2.500	5.000		1969.32	2082.23
Crossover Sub Description: EverDRL54 Pin x 4 1/2 IF Box X-Over Sub, Material: Steel	BLACK DIAMOND	BD22522	4 1/2" IF Box	EverDrlg54 Pin	3.000	6.750		3.44	2085.67
Agitator Description: NOV AGITATOR w/1.85 Plate Size, Size (in): 6.75	NOV	AGHF0675-0018	4 1/2" IF Box	4 1/2" IF Pin		6.750		24.71	2110.38
Crossover Sub Description: 4 1/2 IF (P) X EverDrlg 54 (B), Material: Steel	BLACK DIAMOND	BD11961	EverDrlg54 Box	4 1/2" IF Pin	3.000	6.625		3.41	2113.79

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	01-10	23:30	00:40	01-11	15542.00	15631.00	Pressure On (psi): 4600.00, Pressure Off (psi): 3800.00, Weight On Bit (klbs): 48.00, Surface RPM: 50, Surface Torque (ft lbf): 22000.00, Flow Rate (gpm): 700.00, Strokes Per Minute: 243.00
Survey	46	01-11	00:40	00:45	01-11	15631.00	15631.00	Inclination (°): 88.840, Azimuth (°): 356.320, TVD (ft): 11310.88, Dogleg (°/100 ft): 0.91, Sensor Depth (ft): 15568.00, Bit To Sensor (ft): 63.00
Rotary Drill	1	01-11	00:45	01:55	01-11	15631.00	15720.00	Pressure On (psi): 4600.00, Pressure Off (psi): 3800.00, Weight On Bit (klbs): 48.00, Surface RPM: 50, Surface Torque (ft lbf): 22000.00, Flow Rate (gpm): 700.00, Strokes Per Minute: 243.00
Survey	46	01-11	01:55	02:00	01-11	15720.00	15720.00	Inclination (°): 88.480, Azimuth (°): 356.410, TVD (ft): 11312.96, Dogleg (°/100 ft): 0.42, Sensor Depth (ft): 15657.00, Bit To Sensor (ft): 63.00
Rotary Drill	1	01-11	02:00	02:15	01-11	15720.00	15725.00	Pressure On (psi): 4600.00, Pressure Off (psi): 3800.00, Weight On Bit (klbs): 48.00, Surface RPM: 50, Surface Torque (ft lbf): 22000.00, Flow Rate (gpm): 700.00, Strokes Per Minute: 243.00
Slide Drill	2	01-11	02:15	03:15	01-11	15725.00	15755.00	Toolface: 70, Toolface Type: gravity
Rotary Drill	1	01-11	03:15	03:45	01-11	15755.00	15810.00	Pressure On (psi): 4600.00, Pressure Off (psi): 3800.00, Weight On Bit (klbs): 48.00, Surface RPM: 50, Surface Torque (ft lbf): 22000.00, Flow Rate (gpm): 700.00, Strokes Per Minute: 243.00
Survey	46	01-11	03:45	03:50	01-11	15810.00	15810.00	Inclination (°): 89.490, Azimuth (°): 357.820, TVD (ft): 11314.55, Dogleg (°/100 ft): 1.93, Sensor Depth (ft): 15747.00, Bit To Sensor (ft): 63.00
Rotary Drill	1	01-11	03:50	04:45	01-11	15810.00	15899.00	Pressure On (psi): 4600.00, Pressure Off (psi): 3800.00, Weight On Bit (klbs): 48.00, Surface RPM: 50, Surface Torque (ft lbf): 22000.00, Flow Rate (gpm): 700.00, Strokes Per Minute: 243.00
Survey	46	01-11	04:45	04:50	01-11	15899.00	15899.00	Inclination (°): 90.990, Azimuth (°): 359.220, TVD (ft): 11314.18, Dogleg (°/100 ft): 2.31, Sensor Depth (ft): 15836.00, Bit To Sensor (ft): 63.00
Rotary Drill	1	01-11	04:50	05:10	01-11	15899.00	15916.00	Pressure On (psi): 4600.00, Pressure Off (psi): 3800.00, Weight On Bit (klbs): 48.00, Surface RPM: 50, Surface Torque (ft lbf): 22000.00, Flow Rate (gpm): 700.00, Strokes Per Minute: 243.00
Slide Drill	2	01-11	05:10	06:10	01-11	15916.00	15936.00	Pressure On (psi): 4300.00, Pressure Off (psi): 3800.00, Weight On Bit (klbs): 60.00, Flow Rate (gpm): 700.00, Strokes Per Minute: 240, Toolface: 150, Toolface Type: gravity
Rotary Drill	1	01-11	06:10	06:40	01-11	15936.00	15988.00	Pressure On (psi): 4600.00, Pressure Off (psi): 3800.00, Weight On Bit (klbs): 48.00, Surface RPM: 50, Surface Torque (ft lbf): 22000.00, Flow Rate (gpm): 700.00, Strokes Per Minute: 243.00
Survey	46	01-11	06:40	06:45	01-11	15988.00	15988.00	Inclination (°): 91.780, Azimuth (°): 359.840, TVD (ft): 11312.03, Dogleg (°/100 ft): 1.13, Sensor Depth (ft): 15925.00, Bit To Sensor (ft): 63.00
Rotary Drill	1	01-11	06:45	06:55	01-11	15988.00	16005.00	Pressure On (psi): 4600.00, Pressure Off (psi): 3800.00, Weight On Bit (klbs): 48.00, Surface RPM: 50, Surface Torque (ft lbf): 22000.00, Flow Rate (gpm): 700.00, Strokes Per Minute: 243.00
Slide Drill	2	01-11	06:55	07:45	01-11	16005.00	16036.00	Toolface: 150, Toolface Type: gravity
Rotary Drill	1	01-11	07:45	08:30	01-11	16036.00	16078.00	Pressure On (psi): 4600.00, Pressure Off (psi): 3800.00, Weight On Bit (klbs): 48.00, Surface RPM: 50, Surface Torque (ft lbf): 22000.00, Flow Rate (gpm): 700.00, Strokes Per Minute: 243.00
Survey	46	01-11	08:30	08:35	01-11	16078.00	16078.00	Inclination (°): 92.180, Azimuth (°): 1.690, TVD (ft): 11308.92, Dogleg (°/100 ft): 2.10, Sensor Depth (ft): 16015.00, Bit To Sensor (ft): 63.00
Rotary Drill	1	01-11	08:35	08:45	01-11	16078.00	16095.00	Pressure On (psi): 4600.00, Pressure Off (psi): 3800.00, Weight On Bit (klbs): 48.00, Surface RPM: 50, Surface Torque (ft lbf): 22000.00, Flow Rate (gpm): 700.00, Strokes Per Minute: 243.00
Slide Drill	2	01-11	08:45	09:40	01-11	16095.00	16127.00	Toolface: 170, Toolface Type: gravity
Rotary Drill	1	01-11	09:40	10:15	01-11	16127.00	16167.00	Pressure On (psi): 4600.00, Pressure Off (psi): 3800.00, Weight On Bit (klbs): 48.00, Surface RPM: 50, Surface Torque (ft lbf): 22000.00, Flow Rate (gpm): 700.00, Strokes Per Minute: 243.00
Survey	46	01-11	10:15	10:20	01-11	16167.00	16167.00	Inclination (°): 91.600, Azimuth (°): 3.000, TVD (ft): 11305.98, Dogleg (°/100 ft): 1.61, Sensor Depth (ft): 16104.00, Bit To Sensor (ft): 63.00
Slide Drill	2	01-11	10:20	12:05	01-11	16167.00	16210.00	Pressure On (psi): 4200.00, Pressure Off (psi): 4000.00, Weight On Bit (klbs): 10.00, Flow Rate (gpm): 700.00, Strokes Per Minute: 240, Toolface: 180, Toolface Type: gravity
Slide Drill	2	01-11	12:05	12:35	01-11	16210.00	16218.00	Not able to hold a TF Pressure On (psi): 4200.00, Pressure Off (psi): 4000.00, Weight On Bit (klbs): 10.00, Flow Rate (gpm): 700.00, Strokes Per Minute: 240, Toolface: 180, Toolface Type: gravity
Rotary Drill	1	01-11	12:35	13:00	01-11	16218.00	16248.00	Pressure On (psi): 4600.00, Pressure Off (psi): 3800.00, Weight On Bit (klbs): 48.00, Surface RPM: 50, Surface Torque (ft lbf): 22000.00, Flow Rate (gpm): 700.00, Strokes Per Minute: 243.00
Slide Drill	2	01-11	13:00	13:20	01-11	16248.00	16255.00	Pressure On (psi): 4200.00, Pressure Off (psi): 4000.00, Weight On Bit (klbs): 10.00, Flow Rate (gpm): 700.00, Strokes Per Minute: 240, Toolface: 200, Toolface Type: gravity

Rotary Drill	1	01-11	13:20	13:25	01-11	16255.00	16257.00	Pressure On (psi): 4600.00, Pressure Off (psi): 3800.00, Weight On Bit (klbs): 48.00, Surface RPM: 50, Surface Torque (ft lbf): 22000.00, Flow Rate (gpm): 700.00, Strokes Per Minute: 243.00
Survey	46	01-11	13:25	13:30	01-11	16257.00	16257.00	Inclination (°): 91.380, Azimuth (°): 2.390, TVD (ft): 11303.64, Dogleg (°/100 ft): 0.72, Sensor Depth (ft): 16194.00, Bit To Sensor (ft): 63.00
Slide Drill	2	01-11	13:30	15:00	01-11	16257.00	16297.00	Pressure On (psi): 4400.00, Pressure Off (psi): 4000.00, Weight On Bit (klbs): 60.00, Flow Rate (gpm): 700.00, Strokes Per Minute: 240, Toolface: 180, Toolface Type: gravity
Rotary Drill	1	01-11	15:00	15:50	01-11	16297.00	16346.00	Pressure On (psi): 4600.00, Pressure Off (psi): 3800.00, Weight On Bit (klbs): 48.00, Surface RPM: 50, Surface Torque (ft lbf): 22000.00, Flow Rate (gpm): 700.00, Strokes Per Minute: 243.00
Survey	46	01-11	15:50	15:55	01-11	16346.00	16346.00	Inclination (°): 86.990, Azimuth (°): 3.880, TVD (ft): 11304.91, Dogleg (°/100 ft): 5.21, Sensor Depth (ft): 16283.00, Bit To Sensor (ft): 63.00
Rotary Drill	1	01-11	15:55	16:50	01-11	16346.00	16436.00	Pressure On (psi): 4600.00, Pressure Off (psi): 3800.00, Weight On Bit (klbs): 48.00, Surface RPM: 50, Surface Torque (ft lbf): 22000.00, Flow Rate (gpm): 700.00, Strokes Per Minute: 243.00
Circulating	3	01-11	16:50	17:20	01-11			Rig Service
Survey	46	01-11	17:20	17:25	01-11	16436.00	16436.00	Inclination (°): 87.960, Azimuth (°): 4.150, TVD (ft): 11308.87, Dogleg (°/100 ft): 1.12, Sensor Depth (ft): 16373.00, Bit To Sensor (ft): 63.00
Slide Drill	2	01-11	17:25	19:00	01-11	16436.00	16466.00	Toolface: 230, Toolface Type: gravity
Rotary Drill	1	01-11	19:00	20:05	01-11	16466.00	16526.00	Pressure On (psi): 4600.00, Pressure Off (psi): 3800.00, Weight On Bit (klbs): 48.00, Surface RPM: 50, Surface Torque (ft lbf): 22000.00, Flow Rate (gpm): 700.00, Strokes Per Minute: 243.00
Survey	46	01-11	20:05	20:10	01-11	16526.00	16526.00	Inclination (°): 88.040, Azimuth (°): 2.120, TVD (ft): 11312.01, Dogleg (°/100 ft): 2.26, Sensor Depth (ft): 16463.00, Bit To Sensor (ft): 63.00
Rotary Drill	1	01-11	20:10	21:35	01-11	16526.00	16615.00	Pressure On (psi): 4600.00, Pressure Off (psi): 3800.00, Weight On Bit (klbs): 48.00, Surface RPM: 50, Surface Torque (ft lbf): 22000.00, Flow Rate (gpm): 700.00, Strokes Per Minute: 243.00
Survey	46	01-11	21:35	21:40	01-11	16615.00	16615.00	Inclination (°): 89.450, Azimuth (°): 1.510, TVD (ft): 11313.96, Dogleg (°/100 ft): 1.73, Sensor Depth (ft): 16552.00, Bit To Sensor (ft): 63.00
Rotary Drill	1	01-11	21:40	21:45	01-11	16615.00	16620.00	Pressure On (psi): 4600.00, Pressure Off (psi): 3800.00, Weight On Bit (klbs): 48.00, Surface RPM: 50, Surface Torque (ft lbf): 22000.00, Flow Rate (gpm): 700.00, Strokes Per Minute: 243.00
Slide Drill	2	01-11	21:45	23:00	01-11	16620.00	16650.00	Toolface: 160, Toolface Type: gravity
Rotary Drill	1	01-11	23:00	23:40	01-11	16650.00	16705.00	Pressure On (psi): 4600.00, Pressure Off (psi): 3800.00, Weight On Bit (klbs): 48.00, Surface RPM: 50, Surface Torque (ft lbf): 22000.00, Flow Rate (gpm): 700.00, Strokes Per Minute: 243.00
Survey	46	01-11	23:40	23:45	01-11	16705.00	16705.00	Inclination (°): 86.200, Azimuth (°): 1.420, TVD (ft): 11317.38, Dogleg (°/100 ft): 3.61, Sensor Depth (ft): 16642.00, Bit To Sensor (ft): 63.00
Rotary Drill	1	01-11	23:45	01:00	01-12	16705.00	16795.00	Pressure On (psi): 4600.00, Pressure Off (psi): 3800.00, Weight On Bit (klbs): 48.00, Surface RPM: 50, Surface Torque (ft lbf): 22000.00, Flow Rate (gpm): 700.00, Strokes Per Minute: 243.00

MWD Activities

No Activities



Job Number WT-21-181	Operator Advance Energy Partners	Rig Name Nabors X50
Start Date 2021-11-22	Well Name Anderson Fed Com 552H	Legal Well Name AFE Anderson Fed Com 552H
Play Delaware Basin	State/Province and Country New Mexico, US	County Lea
		Company Man

Wednesday, Jan 12 00:00 - 23:59 (Day 13 of 17)

Billing: \$9,500.00 (\$156,865.75 total)

Drilling Summary				Drilling Parameters			
Start Depth (ft)	16705.00	Downhole Hours	24.00	Rotating WOB (klbs)	48.00 - 48.00		
Bit Depth (ft)	17689.00	Drilling Hours	16.08	Sliding WOB (klbs)	40.00 - 40.00		
Bottom Hole Depth (ft)	17689.00	Hours Circulating	0.00	Rotating SPM	239.00 - 243.00		
Total Distance (ft)	984.00	Hours Sliding	5.25	Sliding SPM	139.00 - 139.00		
Distance Rotated (ft)	854.00	Hours Rotating	10.83	Motor RPM	150.00 - 175.00		
Distance Slid (ft)	130.00			Surface RPM	50.00 - 50.00		
Inclination In	86.55			Flow Rate (gpm)	696.00 - 700.00		
Inclination Out	90.55			On Bottom Pressure (psi)	4400.00 - 4600.00		
Azimuth In	1.69	% Hours Rotating	67%	Off Bottom Pressure (psi)	3800.00 - 3900.00		
Azimuth Out	356.68	% Hours Sliding	33%				
AVG Total ROP (ft/h)	61.18	% Distance Sliding	13%				
AVG Rotating ROP (ft/h)	78.83	% Distance Rotating	87%				
AVG Sliding ROP (ft/h)	24.76						

Personnel

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

BHA #7 - 8.75" LATERAL

Date In: Jan 8, 2022, 7:00 Date Out: Jan 15, 2022, 10:00

Bit Details		Motor Details		Directional Comments	
OD (in)	8.750	Size (in)	7.0	Bico 7" SSS100 7/8 6.1 1.75 BTB 300-700 GPM's, Rev.25, Max Diff = 1800, Max Torque =17100, Bit Runs = 0, Bit to Bend = 4.08	
Vendor	REED	Lobe/Stage	7/8, 6.1		
S/N	A283089	Bend Angle	1.75		
Nozzles	6x15's	Speed (rev/gal)	0.25	MWD Comments	
Total Flow Area (in ²)	1.035	Wear Pad OD (in)	7.230		
Drilling Hours for Day	16.08	Bit Distances			
Total Drilled for Day (ft)	984.00	Survey: 63.00 ft, Gamma: 39.00 ft,		POOH Reason	
Drilling Hours for BHA	116.50	Resistivity: 50.00 ft		Total Depth/Casing Point	
Total Drilled for BHA (ft)	7603.00				

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: TKC76, Type: PDC (Polycrystalline Diamond Compacts), Gauge Length (in): 4.00, Size (in): 8.75	REED	A283089	4 1/2" Reg Pin			8.750		1.00	1.00
Mud Motor Description: Bico 7" SSS100 Fixed @ 1.75 True Slick, Size (in): 7.00, Bend Angle (°): 1.75, Rotor Lobe: 7, Stator Lobe: 8, Stator Stage: 6.1	Bico	BPB5700-0072	4 1/2" IF Box	4 1/2" Reg Box		7.000		30.22	31.22
Resistivity Description: RESISTIVITY MWD	Bench Tree	650-1009						31.43	62.65
Battery Description: BATTERY	Bench Tree	B6008X						17.27	79.92
Drill Collar Description: NMDC, Material: Non-Magnetic, Type: Slick Drill	GATOR	67-30-193	4 1/2" IF Box	4 1/2" IF Pin	3.250	6.750		29.44	109.36
Crossover Sub Description: X-O SUB, Material: Steel	BLACK DIAMOND	BD13750	EverDrlg54 Box	4 1/2" IF Pin	3.125	6.610		3.55	112.91
Drill Pipe Description: 22 STDS 5" DP, Type: Slick	Rig		EverDrlg54 Box	EverDrlg54 Pin	2.500	5.000		1969.32	2082.23
Crossover Sub Description: EverDRL54 Pin x 4 1/2 IF Box X-Over Sub, Material: Steel	BLACK DIAMOND	BD22522	4 1/2" IF Box	EverDrlg54 Pin	3.000	6.750		3.44	2085.67
Agitator Description: NOV AGITATOR w/1.85 Plate Size, Size (in): 6.75	NOV	AGHF0675-0018	4 1/2" IF Box	4 1/2" IF Pin		6.750		24.71	2110.38
Crossover Sub Description: 4 1/2 IF (P) X EverDrlg 54 (B), Material: Steel	BLACK DIAMOND	BD11961	EverDrlg54 Box	4 1/2" IF Pin	3.000	6.625		3.41	2113.79

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	01-11	23:45	01:00	01-12	16705.00	16795.00	Pressure On (psi): 4600.00, Pressure Off (psi): 3800.00, Weight On Bit (klbs): 48.00, Surface RPM: 50, Surface Torque (ft lbf): 22000.00, Flow Rate (gpm): 700.00, Strokes Per Minute: 243.00
Survey	46	01-12	01:00	01:05	01-12	16795.00	16795.00	Inclination (°): 86.550, Azimuth (°): 1.690, TVD (ft): 11323.07, Dogleg (°/100 ft): 0.49, Sensor Depth (ft): 16732.00, Bit To Sensor (ft): 63.00
Rotary Drill	1	01-12	01:05	02:00	01-12	16795.00	16884.00	Pressure On (psi): 4600.00, Pressure Off (psi): 3800.00, Weight On Bit (klbs): 48.00, Surface RPM: 50, Surface Torque (ft lbf): 22000.00, Flow Rate (gpm): 700.00, Strokes Per Minute: 243.00
Survey	46	01-12	02:00	02:05	01-12	16884.00	16884.00	Inclination (°): 86.330, Azimuth (°): 0.980, TVD (ft): 11328.60, Dogleg (°/100 ft): 0.83, Sensor Depth (ft): 16821.00, Bit To Sensor (ft): 63.00
Rotary Drill	1	01-12	02:05	03:10	01-12	16884.00	16974.00	Pressure On (psi): 4600.00, Pressure Off (psi): 3800.00, Weight On Bit (klbs): 48.00, Surface RPM: 50, Surface Torque (ft lbf): 22000.00, Flow Rate (gpm): 700.00, Strokes Per Minute: 243.00
Survey	46	01-12	03:10	03:15	01-12	16974.00	16974.00	Inclination (°): 86.330, Azimuth (°): 359.400, TVD (ft): 11334.36, Dogleg (°/100 ft): 1.75, Sensor Depth (ft): 16911.00, Bit To Sensor (ft): 63.00
Rotary Drill	1	01-12	03:15	04:15	01-12	16974.00	17063.00	Pressure On (psi): 4600.00, Pressure Off (psi): 3800.00, Weight On Bit (klbs): 48.00, Surface RPM: 50, Surface Torque (ft lbf): 22000.00, Flow Rate (gpm): 700.00, Strokes Per Minute: 243.00
Survey	46	01-12	04:15	04:30	01-12	17063.00	17063.00	Inclination (°): 85.450, Azimuth (°): 358.260, TVD (ft): 11340.74, Dogleg (°/100 ft): 1.62, Sensor Depth (ft): 17000.00, Bit To Sensor (ft): 63.00
Slide Drill	2	01-12	04:30	04:50	01-12	17063.00	17075.00	Pressure On (psi): 4400.00, Pressure Off (psi): 3900.00, Weight On Bit (klbs): 40.00, Flow Rate (gpm): 696.00, Strokes Per Minute: 139, Toolface: 30, Toolface Type: gravity
Rotary Drill	1	01-12	04:50	06:00	01-12	17075.00	17153.00	Pressure On (psi): 4600.00, Pressure Off (psi): 3900.00, Weight On Bit (klbs): 48.00, Surface RPM: 50, Surface Torque (ft lbf): 23500.00, Flow Rate (gpm): 696.00, Strokes Per Minute: 239.00
Survey	46	01-12	06:00	06:05	01-12	17153.00	17153.00	Inclination (°): 86.810, Azimuth (°): 357.820, TVD (ft): 11346.81, Dogleg (°/100 ft): 1.59, Sensor Depth (ft): 17090.00, Bit To Sensor (ft): 63.00
Rotary Drill	1	01-12	06:05	06:15	01-12	17153.00	17165.00	Pressure On (psi): 4600.00, Pressure Off (psi): 3900.00, Weight On Bit (klbs): 48.00, Surface RPM: 50, Surface Torque (ft lbf): 23500.00, Flow Rate (gpm): 696.00, Strokes Per Minute: 239.00
Slide Drill	2	01-12	06:15	07:30	01-12	17165.00	17196.00	Pressure On (psi): 4400.00, Pressure Off (psi): 3900.00, Weight On Bit (klbs): 40.00, Flow Rate (gpm): 696.00, Strokes Per Minute: 139, Toolface: 50, Toolface Type: gravity
Rotary Drill	1	01-12	07:30	08:35	01-12	17196.00	17242.00	Pressure On (psi): 4600.00, Pressure Off (psi): 3900.00, Weight On Bit (klbs): 48.00, Surface RPM: 50, Surface Torque (ft lbf): 23500.00, Flow Rate (gpm): 696.00, Strokes Per Minute: 239.00
Survey	46	01-12	08:35	08:40	01-12	17242.00	17242.00	Inclination (°): 88.180, Azimuth (°): 358.350, TVD (ft): 11350.70, Dogleg (°/100 ft): 1.65, Sensor Depth (ft): 17179.00, Bit To Sensor (ft): 63.00
Rotary Drill	1	01-12	08:40	09:40	01-12	17242.00	17332.00	Pressure On (psi): 4600.00, Pressure Off (psi): 3900.00, Weight On Bit (klbs): 48.00, Surface RPM: 50, Surface Torque (ft lbf): 23500.00, Flow Rate (gpm): 696.00, Strokes Per Minute: 239.00
Survey	46	01-12	09:40	09:45	01-12	17332.00	17332.00	Inclination (°): 88.880, Azimuth (°): 357.640, TVD (ft): 11353.01, Dogleg (°/100 ft): 1.11, Sensor Depth (ft): 17269.00, Bit To Sensor (ft): 63.00
Rotary Drill	1	01-12	09:45	09:55	01-12	17332.00	17345.00	Pressure On (psi): 4600.00, Pressure Off (psi): 3900.00, Weight On Bit (klbs): 48.00, Surface RPM: 50, Surface Torque (ft lbf): 23500.00, Flow Rate (gpm): 696.00, Strokes Per Minute: 239.00
Slide Drill	2	01-12	09:55	10:50	01-12	17345.00	17365.00	Pressure On (psi): 4400.00, Pressure Off (psi): 3900.00, Weight On Bit (klbs): 40.00, Flow Rate (gpm): 696.00, Strokes Per Minute: 139, Toolface: 40, Toolface Type: gravity
Rotary Drill	1	01-12	10:50	11:30	01-12	17365.00	17421.00	Pressure On (psi): 4600.00, Pressure Off (psi): 3900.00, Weight On Bit (klbs): 48.00, Surface RPM: 50, Surface Torque (ft lbf): 23500.00, Flow Rate (gpm): 696.00, Strokes Per Minute: 239.00
Other	16	01-12	11:30	11:50	01-12			Downlinl Res/ MWD tool
Survey	46	01-12	11:50	11:55	01-12	17421.00	17421.00	Inclination (°): 89.410, Azimuth (°): 356.410, TVD (ft): 11354.34, Dogleg (°/100 ft): 1.50, Sensor Depth (ft): 17358.00, Bit To Sensor (ft): 63.00
Rotary Drill	1	01-12	11:55	12:05	01-12	17421.00	17435.00	Pressure On (psi): 4600.00, Pressure Off (psi): 3900.00, Weight On Bit (klbs): 48.00, Surface RPM: 50, Surface Torque (ft lbf): 23500.00, Flow Rate (gpm): 696.00, Strokes Per Minute: 239.00
Slide Drill	2	01-12	12:05	13:40	01-12	17435.00	17467.00	Pressure On (psi): 4400.00, Pressure Off (psi): 3900.00, Weight On Bit (klbs): 40.00, Flow Rate (gpm): 696.00, Strokes Per Minute: 139, Toolface: 115, Toolface Type: gravity
Rotary Drill	1	01-12	13:40	14:10	01-12	17467.00	17511.00	Pressure On (psi): 4600.00, Pressure Off (psi): 3900.00, Weight On Bit (klbs): 48.00, Surface RPM: 50, Surface Torque (ft lbf): 23500.00, Flow Rate (gpm): 696.00, Strokes Per Minute: 239.00
Survey	46	01-12	14:10	14:15	01-12	17511.00	17511.00	Inclination (°): 90.290, Azimuth (°): 356.590, TVD (ft): 11354.57, Dogleg (°/100 ft): 1.00, Sensor Depth (ft): 17448.00, Bit To Sensor (ft): 63.00

Rotary Drill	1	01-12	14:15	15:15	01-12	17511.00	17600.00	Pressure On (psi): 4600.00, Pressure Off (psi): 3900.00, Weight On Bit (klbs): 48.00, Surface RPM: 50, Surface Torque (ft lbf): 23500.00, Flow Rate (gpm): 696.00, Strokes Per Minute: 239.00
Survey	46	01-12	15:15	15:20	01-12	17600.00	17600.00	Inclination (°): 90.550, Azimuth (°): 356.680, TVD (ft): 11353.92, Dogleg (°/100 ft): 0.31, Sensor Depth (ft): 17537.00, Bit To Sensor (ft): 63.00
Rotary Drill	1	01-12	15:20	15:30	01-12	17600.00	17612.00	Pressure On (psi): 4600.00, Pressure Off (psi): 3900.00, Weight On Bit (klbs): 48.00, Surface RPM: 50, Surface Torque (ft lbf): 23500.00, Flow Rate (gpm): 696.00, Strokes Per Minute: 239.00
Slide Drill	2	01-12	15:30	16:40	01-12	17612.00	17647.00	Pressure On (psi): 4400.00, Pressure Off (psi): 3900.00, Weight On Bit (klbs): 40.00, Flow Rate (gpm): 696.00, Strokes Per Minute: 139, Toolface: 105, Toolface Type: gravity
Rotary Drill	1	01-12	16:40	17:10	01-12	17647.00	17689.00	Pressure On (psi): 4600.00, Pressure Off (psi): 3900.00, Weight On Bit (klbs): 48.00, Surface RPM: 50, Surface Torque (ft lbf): 23500.00, Flow Rate (gpm): 696.00, Strokes Per Minute: 239.00
Other	16	01-12	17:10	04:55	01-13			Work On Top Drive

MWD Activities

No Activities



Job Number WT-21-181	Operator Advance Energy Partners	Rig Name Nabors X50
Start Date 2021-11-22	Well Name Anderson Fed Com 552H	Legal Well Name AFE Anderson Fed Com 552H
Play Delaware Basin	State/Province and Country New Mexico, US	County Lea
Company Man		

Thursday, Jan 13 00:00 - 23:59 (Day 14 of 17)

Billing: \$9,500.00 (\$156,865.75 total)

Drilling Summary				Drilling Parameters	
Start Depth (ft)	17689.00	Downhole Hours	24.00	Rotating WOB (klbs)	48.00 - 48.00
Bit Depth (ft)	18853.00	Drilling Hours	17.00	Sliding WOB (klbs)	40.00 - 40.00
Bottom Hole Depth (ft)	18853.00	Hours Circulating	0.00	Rotating SPM	239.00 - 239.00
Total Distance (ft)	1164.00	Hours Sliding	6.25	Sliding SPM	139.00 - 139.00
Distance Rotated (ft)	971.00	Hours Rotating	10.75	Motor RPM	150.00 - 175.00
Distance Slid (ft)	193.00			Surface RPM	50.00 - 50.00
Inclination In	89.85			Flow Rate (gpm)	696.00 - 696.00
Inclination Out	89.01			On Bottom Pressure (psi)	4400.00 - 4600.00
Azimuth In	357.20	% Hours Rotating	63%	Off Bottom Pressure (psi)	3900.00 - 4000.00
Azimuth Out	359.66	% Hours Sliding	37%		
AVG Total ROP (ft/h)	68.71	% Distance Sliding	17%		
AVG Rotating ROP (ft/h)	88.42	% Distance Rotating	83%		
AVG Sliding ROP (ft/h)	30.88				

Personnel

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

BHA #7 - 8.75" LATERAL

Date In: Jan 8, 2022, 7:00 Date Out: Jan 15, 2022, 10:00

Bit Details		Motor Details		Directional Comments
OD (in)	8.750	Size (in)	7.0	Bico 7" SSS100 7/8 6.1 1.75 BTB 300-700 GPM's, Rev.25, Max Diff = 1800, Max Torque =17100, Bit Runs = 0, Bit to Bend = 4.08
Vendor	REED	Lobe/Stage	7/8, 6.1	
S/N	A283089	Bend Angle	1.75	
Nozzles	6x15's	Speed (rev/gal)	0.25	MWD Comments
Total Flow Area (in ²)	1.035	Wear Pad OD (in)	7.230	
Drilling Hours for Day	17.00	Bit Distances		
Total Drilled for Day (ft)	1164.00	Survey: 63.00 ft, Gamma: 39.00 ft,		
Drilling Hours for BHA	116.50	Resistivity: 50.00 ft		POOH Reason
Total Drilled for BHA (ft)	7603.00			Total Depth/Casing Point

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: TKC76, Type: PDC (Polycrystalline Diamond Compacts), Gauge Length (in): 4.00, Size (in): 8.75	REED	A283089	4 1/2" Reg Pin			8.750		1.00	1.00
Mud Motor Description: Bico 7" SSS100 Fixed @ 1.75 True Slick, Size (in): 7.00, Bend Angle (°): 1.75, Rotor Lobe: 7, Stator Lobe: 8, Stator Stage: 6.1	Bico	BPB5700-0072	4 1/2" IF Box	4 1/2" Reg Box		7.000		30.22	31.22
Resistivity Description: RESISTIVITY MWD	Bench Tree	650-1009						31.43	62.65
Battery Description: BATTERY	Bench Tree	B6008X						17.27	79.92
Drill Collar Description: NMDC, Material: Non-Magnetic, Type: Slick Drill	GATOR	67-30-193	4 1/2" IF Box	4 1/2" IF Pin	3.250	6.750		29.44	109.36
Crossover Sub Description: X-O SUB, Material: Steel	BLACK DIAMOND	BD13750	EverDrlg54 Box	4 1/2" IF Pin	3.125	6.610		3.55	112.91
Drill Pipe Description: 22 STDS 5" DP, Type: Slick	Rig		EverDrlg54 Box	EverDrlg54 Pin	2.500	5.000		1969.32	2082.23
Crossover Sub Description: EverDRL54 Pin x 4 1/2 IF Box X-Over Sub, Material: Steel	BLACK DIAMOND	BD22522	4 1/2" IF Box	EverDrlg54 Pin	3.000	6.750		3.44	2085.67
Agitator Description: NOV AGITATOR w/1.85 Plate Size, Size (in): 6.75	NOV	AGHF0675-0018	4 1/2" IF Box	4 1/2" IF Pin		6.750		24.71	2110.38
Crossover Sub Description: 4 1/2 IF (P) X EverDrlg 54 (B), Material: Steel	BLACK DIAMOND	BD11961	EverDrlg54 Box	4 1/2" IF Pin	3.000	6.625		3.41	2113.79

MWD Items

No Items

Directional Activities

Activity Type	Code	Start Date	Start Time	End Time	End Date	Start (ft)	End (ft)	Comments/Details
Other	16	01-12	17:10	04:55	01-13			Work On Top Drive
Survey	46	01-13	04:55	05:00	01-13	17689.00	17689.00	Inclination (°): 89.850, Azimuth (°): 357.200, TVD (ft): 11353.61, Dogleg (°/100 ft): 0.98, Sensor Depth (ft): 17626.00, Bit To Sensor (ft): 63.00
Rotary Drill	1	01-13	05:00	05:05	01-13	17689.00	17697.00	Pressure On (psi): 4600.00, Pressure Off (psi): 3900.00, Weight On Bit (klbs): 48.00, Surface RPM: 50, Surface Torque (ft lbf): 23500.00, Flow Rate (gpm): 696.00, Strokes Per Minute: 239.00
Slide Drill	2	01-13	05:05	06:05	01-13	17697.00	17732.00	Pressure On (psi): 4400.00, Pressure Off (psi): 3900.00, Weight On Bit (klbs): 40.00, Flow Rate (gpm): 696.00, Strokes Per Minute: 139, Toolface: 110, Toolface Type: gravity
Rotary Drill	1	01-13	06:05	06:30	01-13	17732.00	17779.00	Pressure On (psi): 4600.00, Pressure Off (psi): 3900.00, Weight On Bit (klbs): 48.00, Surface RPM: 50, Surface Torque (ft lbf): 23500.00, Flow Rate (gpm): 696.00, Strokes Per Minute: 239.00
Survey	46	01-13	06:30	06:35	01-13	17779.00	17779.00	Inclination (°): 89.800, Azimuth (°): 0.370, TVD (ft): 11353.88, Dogleg (°/100 ft): 3.52, Sensor Depth (ft): 17716.00, Bit To Sensor (ft): 63.00
Rotary Drill	1	01-13	06:35	07:20	01-13	17779.00	17868.00	Pressure On (psi): 4600.00, Pressure Off (psi): 3900.00, Weight On Bit (klbs): 48.00, Surface RPM: 50, Surface Torque (ft lbf): 23500.00, Flow Rate (gpm): 696.00, Strokes Per Minute: 239.00
Survey	46	01-13	07:20	07:25	01-13	17868.00	17868.00	Inclination (°): 89.930, Azimuth (°): 0.540, TVD (ft): 11354.09, Dogleg (°/100 ft): 0.24, Sensor Depth (ft): 17805.00, Bit To Sensor (ft): 63.00
Rotary Drill	1	01-13	07:25	08:10	01-13	17868.00	17958.00	Pressure On (psi): 4600.00, Pressure Off (psi): 3900.00, Weight On Bit (klbs): 48.00, Surface RPM: 50, Surface Torque (ft lbf): 23500.00, Flow Rate (gpm): 696.00, Strokes Per Minute: 239.00
Survey	46	01-13	08:10	08:15	01-13	17958.00	17958.00	Inclination (°): 89.580, Azimuth (°): 359.400, TVD (ft): 11354.48, Dogleg (°/100 ft): 1.33, Sensor Depth (ft): 17895.00, Bit To Sensor (ft): 63.00
Rotary Drill	1	01-13	08:15	09:00	01-13	17958.00	18047.00	Pressure On (psi): 4600.00, Pressure Off (psi): 3900.00, Weight On Bit (klbs): 48.00, Surface RPM: 50, Surface Torque (ft lbf): 23500.00, Flow Rate (gpm): 696.00, Strokes Per Minute: 239.00
Survey	46	01-13	09:00	09:05	01-13	18047.00	18047.00	Inclination (°): 90.330, Azimuth (°): 357.640, TVD (ft): 11354.55, Dogleg (°/100 ft): 2.15, Sensor Depth (ft): 17984.00, Bit To Sensor (ft): 63.00
Rotary Drill	1	01-13	09:05	09:15	01-13	18047.00	18059.00	Pressure On (psi): 4600.00, Pressure Off (psi): 3900.00, Weight On Bit (klbs): 48.00, Surface RPM: 50, Surface Torque (ft lbf): 23500.00, Flow Rate (gpm): 696.00, Strokes Per Minute: 239.00
Other	16	01-13	09:15	09:45	01-13			Troubleshoot communication issue with MWD surface equip
Slide Drill	2	01-13	09:45	10:35	01-13	18059.00	18087.00	Pressure On (psi): 4400.00, Pressure Off (psi): 3900.00, Weight On Bit (klbs): 40.00, Flow Rate (gpm): 696.00, Strokes Per Minute: 139, Toolface: 140, Toolface Type: gravity
Rotary Drill	1	01-13	10:35	11:00	01-13	18087.00	18136.00	Pressure On (psi): 4600.00, Pressure Off (psi): 3900.00, Weight On Bit (klbs): 48.00, Surface RPM: 50, Surface Torque (ft lbf): 23500.00, Flow Rate (gpm): 696.00, Strokes Per Minute: 239.00
Survey	46	01-13	11:00	11:05	01-13	18136.00	18136.00	Inclination (°): 89.010, Azimuth (°): 358.080, TVD (ft): 11355.06, Dogleg (°/100 ft): 1.56, Sensor Depth (ft): 18073.00, Bit To Sensor (ft): 63.00
Rotary Drill	1	01-13	11:05	11:15	01-13	18136.00	18148.00	Pressure On (psi): 4600.00, Pressure Off (psi): 3900.00, Weight On Bit (klbs): 48.00, Surface RPM: 50, Surface Torque (ft lbf): 23500.00, Flow Rate (gpm): 696.00, Strokes Per Minute: 239.00
Slide Drill	2	01-13	11:15	12:05	01-13	18148.00	18183.00	Pressure On (psi): 4400.00, Pressure Off (psi): 3900.00, Weight On Bit (klbs): 40.00, Flow Rate (gpm): 696.00, Strokes Per Minute: 139, Toolface: 110, Toolface Type: gravity
Rotary Drill	1	01-13	12:05	12:50	01-13	18183.00	18226.00	Pressure On (psi): 4600.00, Pressure Off (psi): 3900.00, Weight On Bit (klbs): 48.00, Surface RPM: 50, Surface Torque (ft lbf): 23500.00, Flow Rate (gpm): 696.00, Strokes Per Minute: 239.00
Survey	46	01-13	12:50	12:55	01-13	18226.00	18226.00	Inclination (°): 91.210, Azimuth (°): 1.070, TVD (ft): 11354.89, Dogleg (°/100 ft): 4.12, Sensor Depth (ft): 18163.00, Bit To Sensor (ft): 63.00
Slide Drill	2	01-13	12:55	14:15	01-13	18226.00	18256.00	Pressure On (psi): 4400.00, Pressure Off (psi): 3900.00, Weight On Bit (klbs): 40.00, Flow Rate (gpm): 696.00, Strokes Per Minute: 139, Toolface: 150, Toolface Type: gravity
Rotary Drill	1	01-13	14:15	15:05	01-13	18256.00	18315.00	Pressure On (psi): 4600.00, Pressure Off (psi): 3900.00, Weight On Bit (klbs): 48.00, Surface RPM: 50, Surface Torque (ft lbf): 23500.00, Flow Rate (gpm): 696.00, Strokes Per Minute: 239.00
Survey	46	01-13	15:05	15:10	01-13	18315.00	18315.00	Inclination (°): 88.970, Azimuth (°): 2.740, TVD (ft): 11354.75, Dogleg (°/100 ft): 3.14, Sensor Depth (ft): 18252.00, Bit To Sensor (ft): 63.00
Rotary Drill	1	01-13	15:10	15:20	01-13	18315.00	18322.00	Pressure On (psi): 4600.00, Pressure Off (psi): 3900.00, Weight On Bit (klbs): 48.00, Surface RPM: 50, Surface Torque (ft lbf): 23500.00, Flow Rate (gpm): 696.00, Strokes Per Minute: 239.00
Slide Drill	2	01-13	15:20	16:05	01-13	18322.00	18342.00	Pressure On (psi): 4400.00, Pressure Off (psi): 3900.00, Weight On Bit (klbs): 40.00, Flow Rate (gpm): 696.00, Strokes Per Minute: 139, Toolface: 195, Toolface Type: gravity

Rotary Drill	1	01-13	16:05	16:35	01-13	18342.00	18405.00	Pressure On (psi): 4600.00, Pressure Off (psi): 3900.00, Weight On Bit (kbs): 48.00, Surface RPM: 50, Surface Torque (ft lbf): 23500.00, Flow Rate (gpm): 696.00, Strokes Per Minute: 239.00
Survey	46	01-13	16:35	16:40	01-13	18405.00	18405.00	Inclination (°): 86.640, Azimuth (°): 2.300, TVD (ft): 11358.20, Dogleg (°/100 ft): 2.63, Sensor Depth (ft): 18342.00, Bit To Sensor (ft): 63.00
Rotary Drill	1	01-13	16:40	17:25	01-13	18405.00	18495.00	Pressure On (psi): 4600.00, Pressure Off (psi): 4000.00, Weight On Bit (kbs): 48.00, Surface RPM: 50, Surface Torque (ft lbf): 25000.00, Flow Rate (gpm): 696.00, Strokes Per Minute: 239.00
Survey	46	01-13	17:25	17:30	01-13	18495.00	18495.00	Inclination (°): 87.430, Azimuth (°): 1.160, TVD (ft): 11362.85, Dogleg (°/100 ft): 1.54, Sensor Depth (ft): 18432.00, Bit To Sensor (ft): 63.00
Rotary Drill	1	01-13	17:30	18:25	01-13	18495.00	18584.00	Pressure On (psi): 4600.00, Pressure Off (psi): 4000.00, Weight On Bit (kbs): 48.00, Surface RPM: 50, Surface Torque (ft lbf): 25000.00, Flow Rate (gpm): 696.00, Strokes Per Minute: 239.00
Survey	46	01-13	18:25	18:30	01-13	18584.00	18584.00	Inclination (°): 85.980, Azimuth (°): 0.190, TVD (ft): 11367.97, Dogleg (°/100 ft): 1.96, Sensor Depth (ft): 18521.00, Bit To Sensor (ft): 63.00
Rotary Drill	1	01-13	18:30	19:50	01-13	18584.00	18674.00	Pressure On (psi): 4600.00, Pressure Off (psi): 4000.00, Weight On Bit (kbs): 48.00, Surface RPM: 50, Surface Torque (ft lbf): 25000.00, Flow Rate (gpm): 696.00, Strokes Per Minute: 239.00
Survey	46	01-13	19:50	19:55	01-13	18674.00	18674.00	Inclination (°): 85.450, Azimuth (°): 0.630, TVD (ft): 11374.69, Dogleg (°/100 ft): 0.76, Sensor Depth (ft): 18611.00, Bit To Sensor (ft): 63.00
Rotary Drill	1	01-13	19:55	20:05	01-13	18674.00	18684.00	Pressure On (psi): 4600.00, Pressure Off (psi): 4000.00, Weight On Bit (kbs): 48.00, Surface RPM: 50, Surface Torque (ft lbf): 25000.00, Flow Rate (gpm): 696.00, Strokes Per Minute: 239.00
Slide Drill	2	01-13	20:05	21:00	01-13	18684.00	18704.00	Pressure On (psi): 4400.00, Pressure Off (psi): 3900.00, Weight On Bit (kbs): 40.00, Flow Rate (gpm): 696.00, Strokes Per Minute: 139, Toolface: 0, Toolface Type: gravity
Rotary Drill	1	01-13	21:00	22:00	01-13	18704.00	18764.00	Pressure On (psi): 4600.00, Pressure Off (psi): 4000.00, Weight On Bit (kbs): 48.00, Surface RPM: 50, Surface Torque (ft lbf): 25000.00, Flow Rate (gpm): 696.00, Strokes Per Minute: 239.00
Survey	46	01-13	22:00	22:05	01-13	18764.00	18764.00	Inclination (°): 86.900, Azimuth (°): 359.930, TVD (ft): 11380.70, Dogleg (°/100 ft): 1.79, Sensor Depth (ft): 18701.00, Bit To Sensor (ft): 63.00
Rotary Drill	1	01-13	22:05	22:15	01-13	18764.00	18774.00	Pressure On (psi): 4600.00, Pressure Off (psi): 4000.00, Weight On Bit (kbs): 48.00, Surface RPM: 50, Surface Torque (ft lbf): 25000.00, Flow Rate (gpm): 696.00, Strokes Per Minute: 239.00
Slide Drill	2	01-13	22:15	22:50	01-13	18774.00	18799.00	Pressure On (psi): 4400.00, Pressure Off (psi): 3900.00, Weight On Bit (kbs): 40.00, Flow Rate (gpm): 696.00, Strokes Per Minute: 139, Toolface: 20, Toolface Type: gravity
Rotary Drill	1	01-13	22:50	23:30	01-13	18799.00	18853.00	Pressure On (psi): 4600.00, Pressure Off (psi): 4000.00, Weight On Bit (kbs): 48.00, Surface RPM: 50, Surface Torque (ft lbf): 25000.00, Flow Rate (gpm): 696.00, Strokes Per Minute: 239.00
Survey	46	01-13	23:30	23:35	01-13	18853.00	18853.00	Inclination (°): 89.010, Azimuth (°): 359.660, TVD (ft): 11383.87, Dogleg (°/100 ft): 2.39, Sensor Depth (ft): 18790.00, Bit To Sensor (ft): 63.00
Rotary Drill	1	01-13	23:35	00:50	01-14	18853.00	18943.00	Pressure On (psi): 4600.00, Pressure Off (psi): 4000.00, Weight On Bit (kbs): 48.00, Surface RPM: 50, Surface Torque (ft lbf): 25000.00, Flow Rate (gpm): 696.00, Strokes Per Minute: 239.00

MWD Activities

No Activities



Job Number WT-21-181	Operator Advance Energy Partners	Rig Name Nabors X50
Start Date 2021-11-22	Well Name Anderson Fed Com 552H	Legal Well Name AFE Anderson Fed Com 552H
Play Delaware Basin	State/Province and Country New Mexico, US	County Lea
		Company Man

Friday, Jan 14 00:00 - 23:59 (Day 15 of 17)

Billing: \$9,500.00 (\$156,865.75 total)

Drilling Summary

Drilling Summary		Drilling Parameters	
Start Depth (ft)	18853.00	Downhole Hours	24.00
Bit Depth (ft)	19330.00	Drilling Hours	7.00
Bottom Hole Depth (ft)	19330.00	Hours Circulating	5.67
Total Distance (ft)	477.00	Hours Sliding	0.50
Distance Rotated (ft)	459.00	Hours Rotating	6.50
Distance Slid (ft)	18.00		
Inclination In	89.67		
Inclination Out	91.91		
Azimuth In	358.61	% Hours Rotating	93%
Azimuth Out	355.45	% Hours Sliding	7%
AVG Total ROP (ft/h)	68.14	% Distance Sliding	4%
AVG Rotating ROP (ft/h)	70.62	% Distance Rotating	96%
AVG Sliding ROP (ft/h)	36.00		

Personnel

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

BHA #7 - 8.75" LATERAL

Date In: Jan 8, 2022, 7:00 Date Out: Jan 15, 2022, 10:00

Bit Details		Motor Details		Directional Comments
OD (in)	8.750	Size (in)	7.0	Bico 7" SSS100 7/8 6.1 1.75 BTB 300-700 GPM's, Rev.25, Max Diff = 1800, Max Torque =17100, Bit Runs = 0, Bit to Bend = 4.08
Vendor	REED	Lobe/Stage	7/8, 6.1	
S/N	A283089	Bend Angle	1.75	
Nozzles	6x15's	Speed (rev/gal)	0.25	MWD Comments
Total Flow Area (in ²)	1.035	Wear Pad OD (in)	7.230	
Drilling Hours for Day	7.00	Bit Distances		
Total Drilled for Day (ft)	477.00	Survey: 63.00 ft, Gamma: 39.00 ft,		
Drilling Hours for BHA	116.50	Resistivity: 50.00 ft		POOH Reason
Total Drilled for BHA (ft)	7603.00			Total Depth/Casing Point

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: TKC76, Type: PDC (Polycrystalline Diamond Compacts), Gauge Length (in): 4.00, Size (in): 8.75	REED	A283089	4 1/2" Reg Pin			8.750		1.00	1.00
Mud Motor Description: Bico 7" SSS100 Fixed @ 1.75 True Slick, Size (in): 7.00, Bend Angle (°): 1.75, Rotor Lobe: 7, Stator Lobe: 8, Stator Stage: 6.1	Bico	BPB5700-0072	4 1/2" IF Box	4 1/2" Reg Box		7.000		30.22	31.22
Resistivity Description: RESISTIVITY MWD	Bench Tree	650-1009						31.43	62.65
Battery Description: BATTERY	Bench Tree	B6008X						17.27	79.92
Drill Collar Description: NMDC, Material: Non-Magnetic, Type: Slick Drill	GATOR	67-30-193	4 1/2" IF Box	4 1/2" IF Pin	3.250	6.750		29.44	109.36
Crossover Sub Description: X-O SUB, Material: Steel	BLACK DIAMOND	BD13750	EverDrlg54 Box	4 1/2" IF Pin	3.125	6.610		3.55	112.91
Drill Pipe Description: 22 STDS 5" DP, Type: Slick	Rig		EverDrlg54 Box	EverDrlg54 Pin	2.500	5.000		1969.32	2082.23
Crossover Sub Description: EverDRL54 Pin x 4 1/2 IF Box X-Over Sub, Material: Steel	BLACK DIAMOND	BD22522	4 1/2" IF Box	EverDrlg54 Pin	3.000	6.750		3.44	2085.67
Agitator Description: NOV AGITATOR w/1.85 Plate Size, Size (in): 6.75	NOV	AGHF0675-0018	4 1/2" IF Box	4 1/2" IF Pin		6.750		24.71	2110.38
Crossover Sub Description: 4 1/2 IF (P) X EverDrlg 54 (B), Material: Steel	BLACK DIAMOND	BD11961	EverDrlg54 Box	4 1/2" IF Pin	3.000	6.625		3.41	2113.79

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	01-13	23:35	00:50	01-14	18853.00	18943.00	Pressure On (psi): 4600.00, Pressure Off (psi): 4000.00, Weight On Bit (klbs): 48.00, Surface RPM: 50, Surface Torque (ft lbf): 25000.00, Flow Rate (gpm): 696.00, Strokes Per Minute: 239.00
Survey	46	01-14	00:50	00:55	01-14	18943.00	18943.00	Inclination (°): 89.670, Azimuth (°): 358.610, TVD (ft): 11384.91, Dogleg (°/100 ft): 1.38, Sensor Depth (ft): 18880.00, Bit To Sensor (ft): 63.00
Rotary Drill	1	01-14	00:55	01:05	01-14	18943.00	18953.00	Pressure On (psi): 4600.00, Pressure Off (psi): 4000.00, Weight On Bit (klbs): 48.00, Surface RPM: 50, Surface Torque (ft lbf): 25000.00, Flow Rate (gpm): 696.00, Strokes Per Minute: 239.00
Slide Drill	2	01-14	01:05	01:35	01-14	18953.00	18971.00	Pressure On (psi): 4400.00, Pressure Off (psi): 3900.00, Weight On Bit (klbs): 40.00, Flow Rate (gpm): 696.00, Strokes Per Minute: 139, Toolface: 50, Toolface Type: gravity
Rotary Drill	1	01-14	01:35	02:30	01-14	18971.00	19032.00	Pressure On (psi): 4600.00, Pressure Off (psi): 4000.00, Weight On Bit (klbs): 48.00, Surface RPM: 50, Surface Torque (ft lbf): 25000.00, Flow Rate (gpm): 696.00, Strokes Per Minute: 239.00
Survey	46	01-14	02:30	02:35	01-14	19032.00	19032.00	Inclination (°): 90.150, Azimuth (°): 357.200, TVD (ft): 11385.05, Dogleg (°/100 ft): 1.67, Sensor Depth (ft): 18969.00, Bit To Sensor (ft): 63.00
Rotary Drill	1	01-14	02:35	03:50	01-14	19032.00	19122.00	Pressure On (psi): 4600.00, Pressure Off (psi): 4000.00, Weight On Bit (klbs): 48.00, Surface RPM: 50, Surface Torque (ft lbf): 25000.00, Flow Rate (gpm): 696.00, Strokes Per Minute: 239.00
Survey	46	01-14	03:50	03:55	01-14	19122.00	19122.00	Inclination (°): 90.770, Azimuth (°): 356.590, TVD (ft): 11384.33, Dogleg (°/100 ft): 0.97, Sensor Depth (ft): 19059.00, Bit To Sensor (ft): 63.00
Rotary Drill	1	01-14	03:55	05:20	01-14	19122.00	19212.00	Pressure On (psi): 4600.00, Pressure Off (psi): 4000.00, Weight On Bit (klbs): 48.00, Surface RPM: 50, Surface Torque (ft lbf): 25000.00, Flow Rate (gpm): 696.00, Strokes Per Minute: 239.00
Survey	46	01-14	05:20	05:25	01-14	19212.00	19212.00	Inclination (°): 90.680, Azimuth (°): 355.970, TVD (ft): 11383.19, Dogleg (°/100 ft): 0.70, Sensor Depth (ft): 19149.00, Bit To Sensor (ft): 63.00
Rotary Drill	1	01-14	05:25	06:35	01-14	19212.00	19301.00	Pressure On (psi): 4600.00, Pressure Off (psi): 4000.00, Weight On Bit (klbs): 48.00, Surface RPM: 50, Surface Torque (ft lbf): 25000.00, Flow Rate (gpm): 696.00, Strokes Per Minute: 239.00
Survey	46	01-14	06:35	06:40	01-14	19301.00	19301.00	Inclination (°): 92.040, Azimuth (°): 355.710, TVD (ft): 11381.07, Dogleg (°/100 ft): 1.56, Sensor Depth (ft): 19238.00, Bit To Sensor (ft): 63.00
Rotary Drill	1	01-14	06:40	07:00	01-14	19301.00	19330.00	Pressure On (psi): 4600.00, Pressure Off (psi): 4000.00, Weight On Bit (klbs): 48.00, Surface RPM: 50, Surface Torque (ft lbf): 25000.00, Flow Rate (gpm): 696.00, Strokes Per Minute: 239.00
Survey	46	01-14	07:00	07:05	01-14	19330.00	19330.00	Inclination (°): 91.910, Azimuth (°): 355.450, TVD (ft): 11380.07, Dogleg (°/100 ft): 1.00, Sensor Depth (ft): 19267.00, Bit To Sensor (ft): 63.00
Circulating	3	01-14	07:05	11:00	01-14			Circulate @ TD
Pooh	7	01-14	11:00	15:30	01-14			POOH - TD of well . Work thru Tight spots
Circulating	3	01-14	15:30	17:15	01-14			Circulate & Condition
Pooh	7	01-14	17:15	08:30	01-15			POOH To BHA
MWD Activities								
No Activities								



Job Number WT-21-181	Operator Advance Energy Partners	Rig Name Nabors X50
Start Date 2021-11-22	Well Name Anderson Fed Com 552H	Legal Well Name AFE Anderson Fed Com 552H
Play Delaware Basin	State/Province and Country New Mexico, US	County Lea
		Company Man

Saturday, Jan 15 00:00 - 23:59 (Day 16 of 17)

Billing: \$9,500.00 (\$156,865.75 total)

Drilling Summary			Drilling Parameters		
Start Depth (ft)	Downhole Hours	10.00	Rotating WOB (klbs)		
Bit Depth (ft)	Drilling Hours	0.00	Sliding WOB (klbs)		
Bottom Hole Depth (ft)	Hours Circulating	0.00	Rotating SPM		
Total Distance (ft)	0.00	Hours Sliding	0.00	Sliding SPM	
Distance Rotated (ft)	0.00	Hours Rotating	0.00	Motor RPM	150.00 - 175.00
Distance Slid (ft)	0.00			Surface RPM	
Inclination In				Flow Rate (gpm)	
Inclination Out				On Bottom Pressure (psi)	
Azimuth In	% Hours Rotating			Off Bottom Pressure (psi)	
Azimuth Out	% Hours Sliding				
AVG Total ROP (ft/h)	0.00	% Distance Sliding			
AVG Rotating ROP (ft/h)	0.00	% Distance Rotating			
AVG Sliding ROP (ft/h)	0.00				

Personnel

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

BHA #7 - 8.75" LATERAL

Date In: Jan 8, 2022, 7:00 Date Out: Jan 15, 2022, 10:00

Bit Details		Motor Details		Directional Comments
OD (in)	8.750	Size (in)	7.0	Bico 7" SSS100 7/8 6.1 1.75 BTB 300-700 GPM's, Rev.25, Max Diff = 1800, Max Torque =17100, Bit Runs = 0, Bit to Bend = 4.08
Vendor	REED	Lobe/Stage	7/8, 6.1	
S/N	A283089	Bend Angle	1.75	
Nozzles	6x15's	Speed (rev/gal)	0.25	
Total Flow Area (in ²)	1.035	Wear Pad OD (in)	7.230	MWD Comments
Drilling Hours for Day	0.00	Bit Distances		
Total Drilled for Day (ft)		Survey: 63.00 ft, Gamma: 39.00 ft, Resistivity: 50.00 ft		
Drilling Hours for BHA	116.50	POOH Reason		
Total Drilled for BHA (ft)	7603.00	Total Depth/Casing Point		

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: TKC76, Type: PDC (Polycrystalline Diamond Compacts), Gauge Length (in): 4.00, Size (in): 8.75	REED	A283089	4 1/2" Reg Pin			8.750		1.00	1.00
Mud Motor Description: Bico 7" SSS100 Fixed @ 1.75 True Slick, Size (in): 7.00, Bend Angle (°): 1.75, Rotor Lobe: 7, Stator Lobe: 8, Stator Stage: 6.1	Bico	BPB5700-0072	4 1/2" IF Box	4 1/2" Reg Box		7.000		30.22	31.22
Resistivity Description: RESISTIVITY MWD	Bench Tree	650-1009						31.43	62.65
Battery Description: BATTERY	Bench Tree	B6008X						17.27	79.92
Drill Collar Description: NMDC, Material: Non-Magnetic, Type: Slick Drill	GATOR	67-30-193	4 1/2" IF Box	4 1/2" IF Pin	3.250	6.750		29.44	109.36
Crossover Sub Description: X-O SUB, Material: Steel	BLACK DIAMOND	BD13750	EverDrlg54 Box	4 1/2" IF Pin	3.125	6.610		3.55	112.91
Drill Pipe Description: 22 STDS 5" DP, Type: Slick	Rig		EverDrlg54 Box	EverDrlg54 Pin	2.500	5.000		1969.32	2082.23
Crossover Sub Description: EverDRL54 Pin x 4 1/2 IF Box X-Over Sub, Material: Steel	BLACK DIAMOND	BD22522	4 1/2" IF Box	EverDrlg54 Pin	3.000	6.750		3.44	2085.67
Agitator Description: NOV AGITATOR w/1.85 Plate Size, Size (in): 6.75	NOV	AGHF0675-0018	4 1/2" IF Box	4 1/2" IF Pin		6.750		24.71	2110.38
Crossover Sub Description: 4 1/2 IF (P) X EverDrlg 54 (B), Material: Steel	BLACK DIAMOND	BD11961	EverDrlg54 Box	4 1/2" IF Pin	3.000	6.625		3.41	2113.79

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	01-14	17:15	08:30	01-15			POOH To BHA
Lay Down BHA	65	01-15	08:30	10:00	01-15			L/D BHA #7
Standby	15	01-15	10:00	23:00	01-16			Standby Run And Cement Production Casing, Rig Skid To 551 H

MWD Activities

No Activities



Job Number WT-21-181	Operator Advance Energy Partners	Rig Name Nabors X50
Start Date 2021-11-22	Well Name Anderson Fed Com 552H	Legal Well Name AFE Anderson Fed Com 552H
Play Delaware Basin	State/Province and Country New Mexico, US	County Lea
		Company Man

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

Billing: \$3,200.00 (\$156,865.75 total)

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

Personnel

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

No BHAs

Directional Activities

Activity Type	Code	Start Date	Start Time	End Time	End Date	Start (ft)	End (ft)	Comments/Details
Standby	15	01-15	10:00	23:00	01-16			Standby Run And Cement Production Casing, Rig Skid To 551 H

MWD Activities

No Activities



Surface Plat

Anderson Fed Com 552H (WT-21-181)

2021-11-22 to 2022-01-16

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

DISTRICT I
 1825 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

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

AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

API Number	Pool Code	Pool Name
Property Code	Property Name ANDERSON FED COM	Well Number 552H
OGRID No.	Operator Name ADVANCE ENERGY PARTNERS HAT MESA, LLC	Elevation 3690'

Surface Location

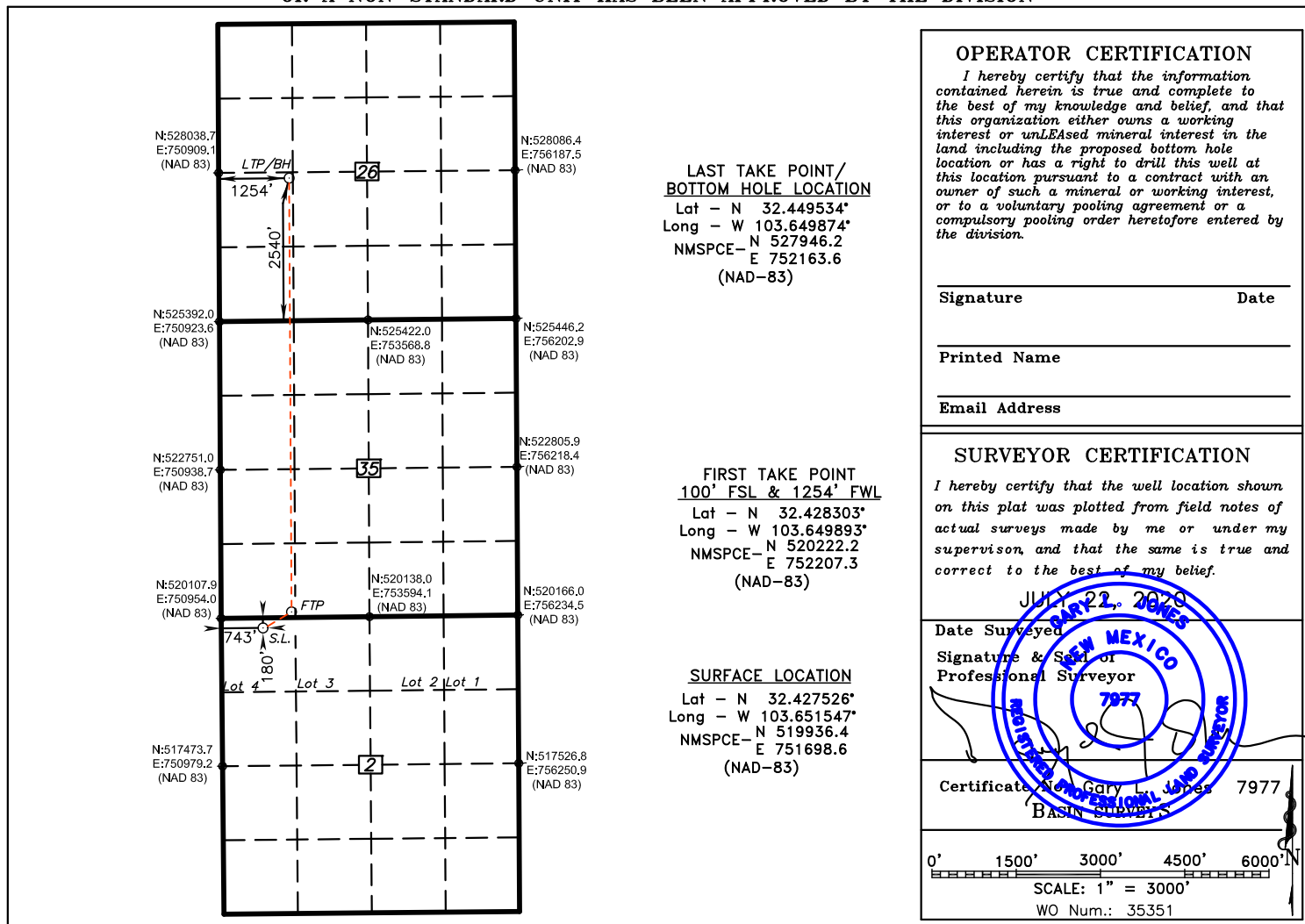
UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	SOUTH/South line	Feet from the	East/West line	County
LOT 4	2	22 S	32 E		180	NORTH	743	WEST	LEA

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	1254	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



OPERATOR CERTIFICATION

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

Signature _____ Date _____

Printed Name _____

Email Address _____

SURVEYOR CERTIFICATION

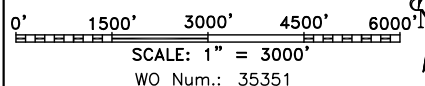
I hereby certify that the well location shown on this plat was plotted from field notes of actual surveys made by me or under my supervision, and that the same is true and correct to the best of my belief.

JULY 22, 2020

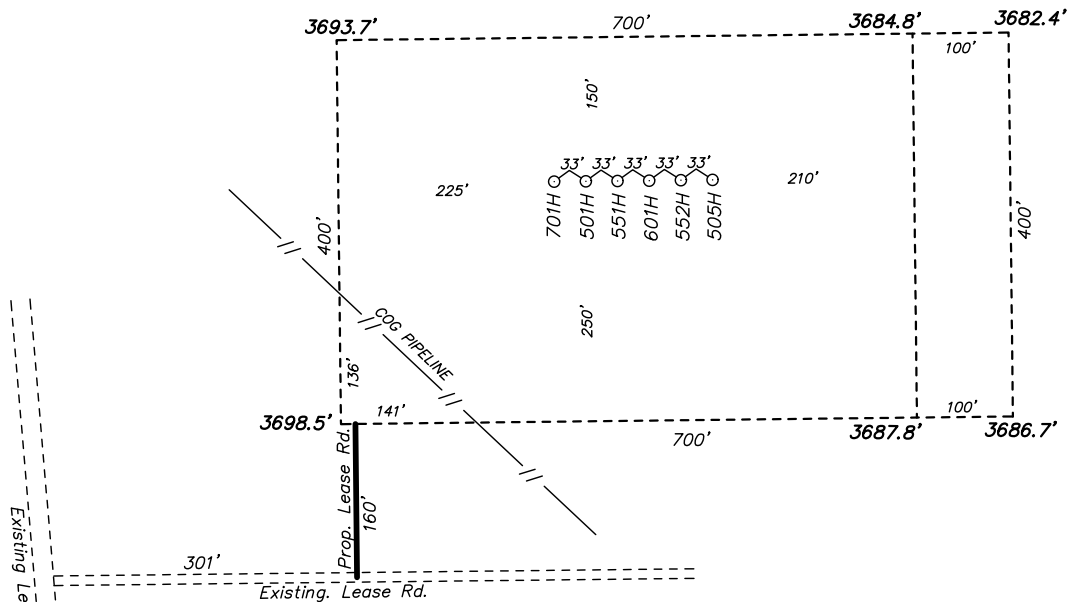
Date Surveyed _____

Signature & Seal of Professional Surveyor

Certificate No. Gary L. Jones 7977
 BASIN SURVEYOR

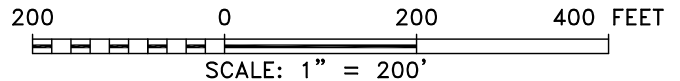


SECTION 2, TOWNSHIP 22 SOUTH, RANGE 32 EAST. N.M.P.M.,
LEA COUNTY, NEW MEXICO.



ADVANCE ENERGY PARTNERS HAT MESA, LLC
 ANDERSON FED COM 552H
 ELEV. - 3690'
 Lat - N 32.427526°
 Long - W 103.651547°
 NMSPCE - N 519936.4
 E 751698.6
 (NAD-83)

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

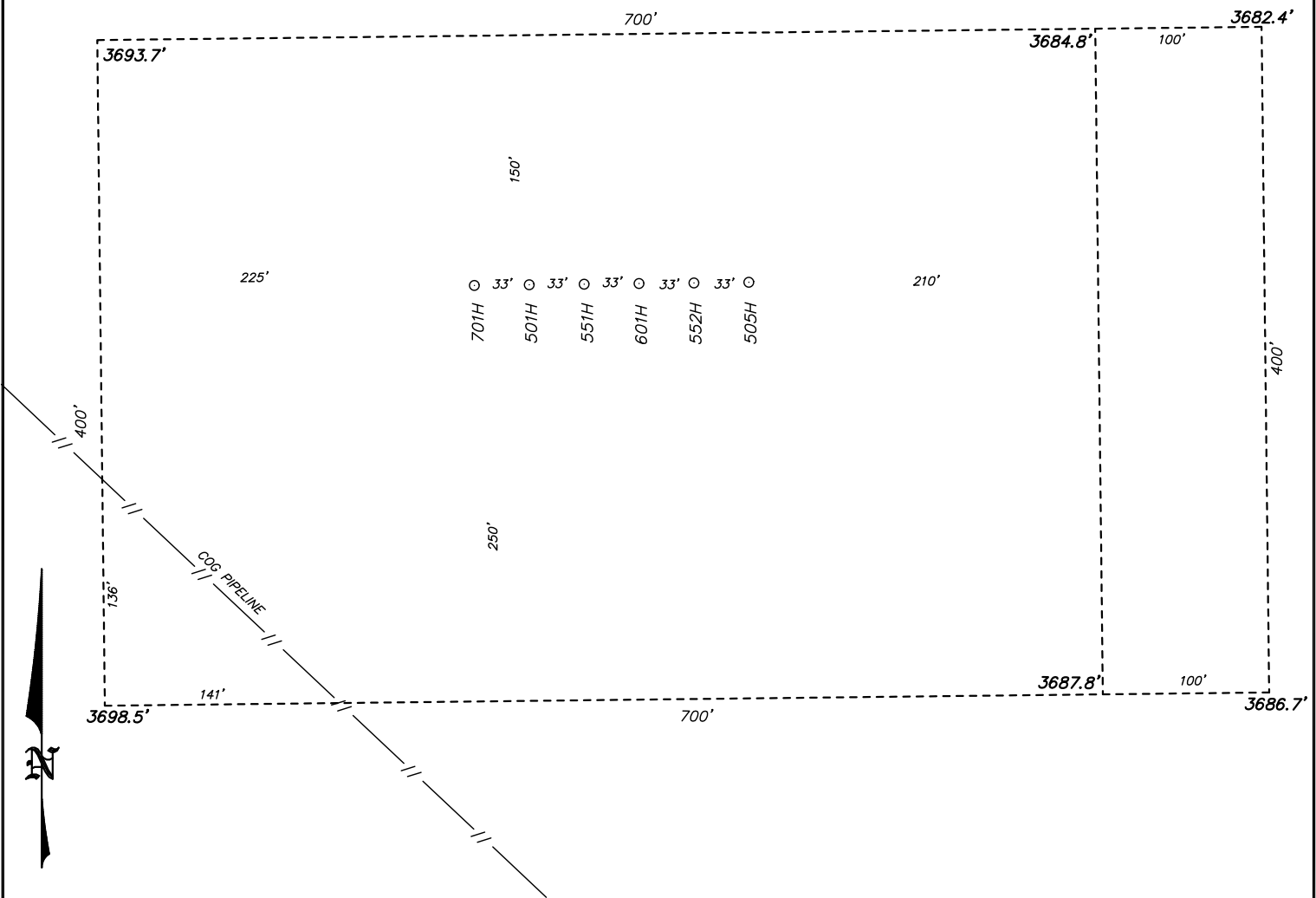


P.O. Box 1786 (575) 393-7316 - Office
 1120 N. West County Rd. (575) 392-2206 - Fax
 Hobbs, New Mexico 88241 basin-surveys.com

ADVANCE ENERGY PARTNERS HAT MESA, LLC
 REF: ANDERSON FED COM 552H / WELL PAD TOPO
 THE ANDERSON FED COM 552H LOCATED 180' FROM
 THE NORTH LINE AND 743' FROM THE WEST LINE OF
 SECTION 2, TOWNSHIP 22 SOUTH, RANGE 32 EAST.
 N.M.P.M., LEA COUNTY, NEW MEXICO.

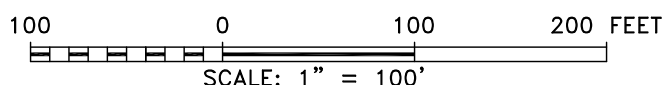
W.O. Number: 35351	Drawn By: K. GOAD	Date: 07-30-2020	Survey Date: 06-10-2021	Sheet 1 of 1 Sheets
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**SECTION 2, TOWNSHIP 22 SOUTH, RANGE 32 EAST. N.M.P.M.,
LEA COUNTY, NEW MEXICO.**



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in the oilfield

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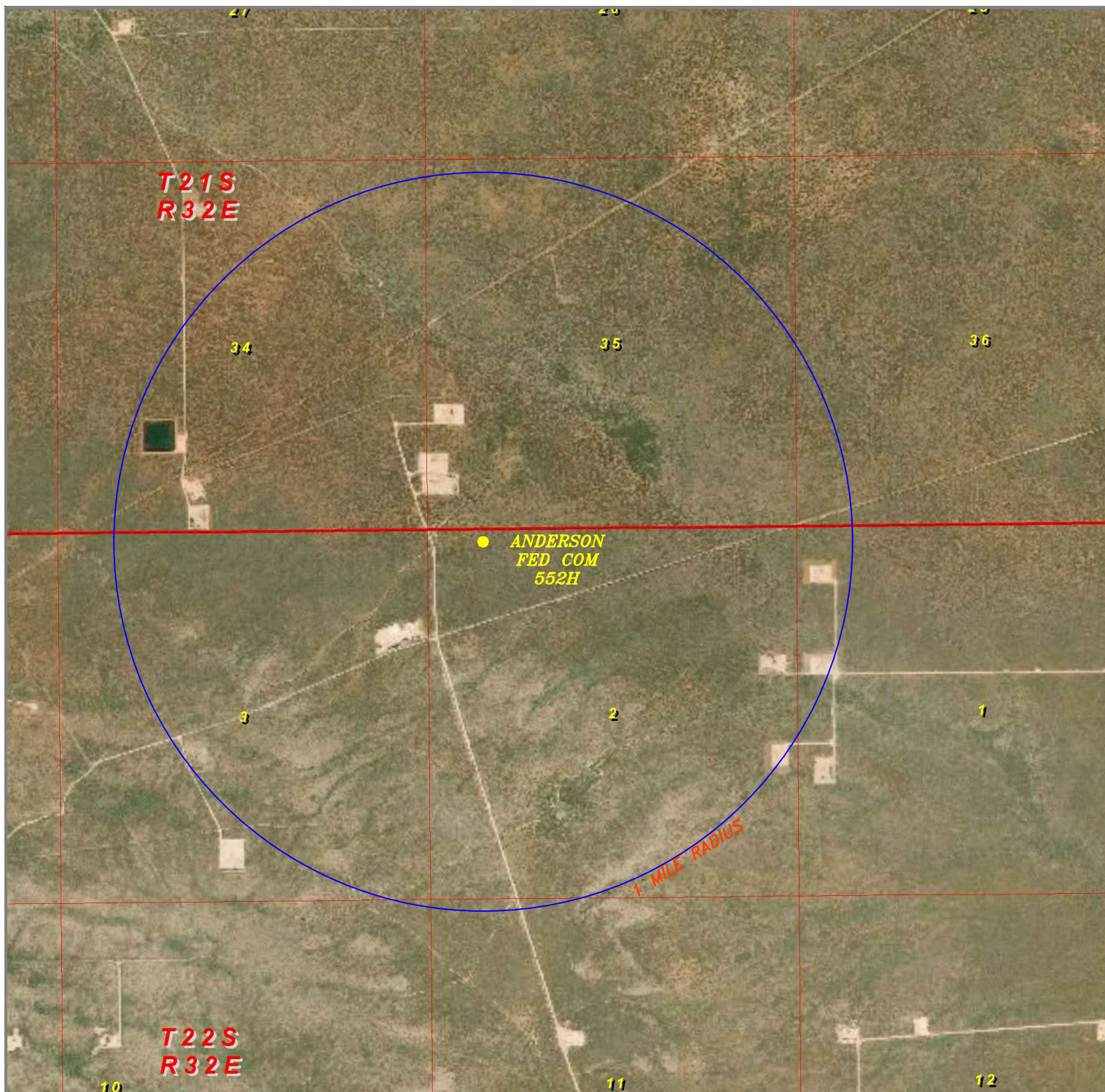


ADVANCE ENERGY PARTNERS HAT MESA, LLC

REF: ANDERSON FED COM 552H / WELL PAD TOPO

THE ANDERSON FED COM 552H LOCATED 180' FROM
THE NORTH LINE AND 743' FROM THE WEST LINE OF
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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
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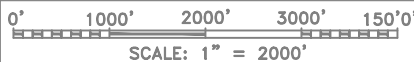


ANDERSON FED COM 552H

Located 180' FNL and 743' 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
basinsurveys.com



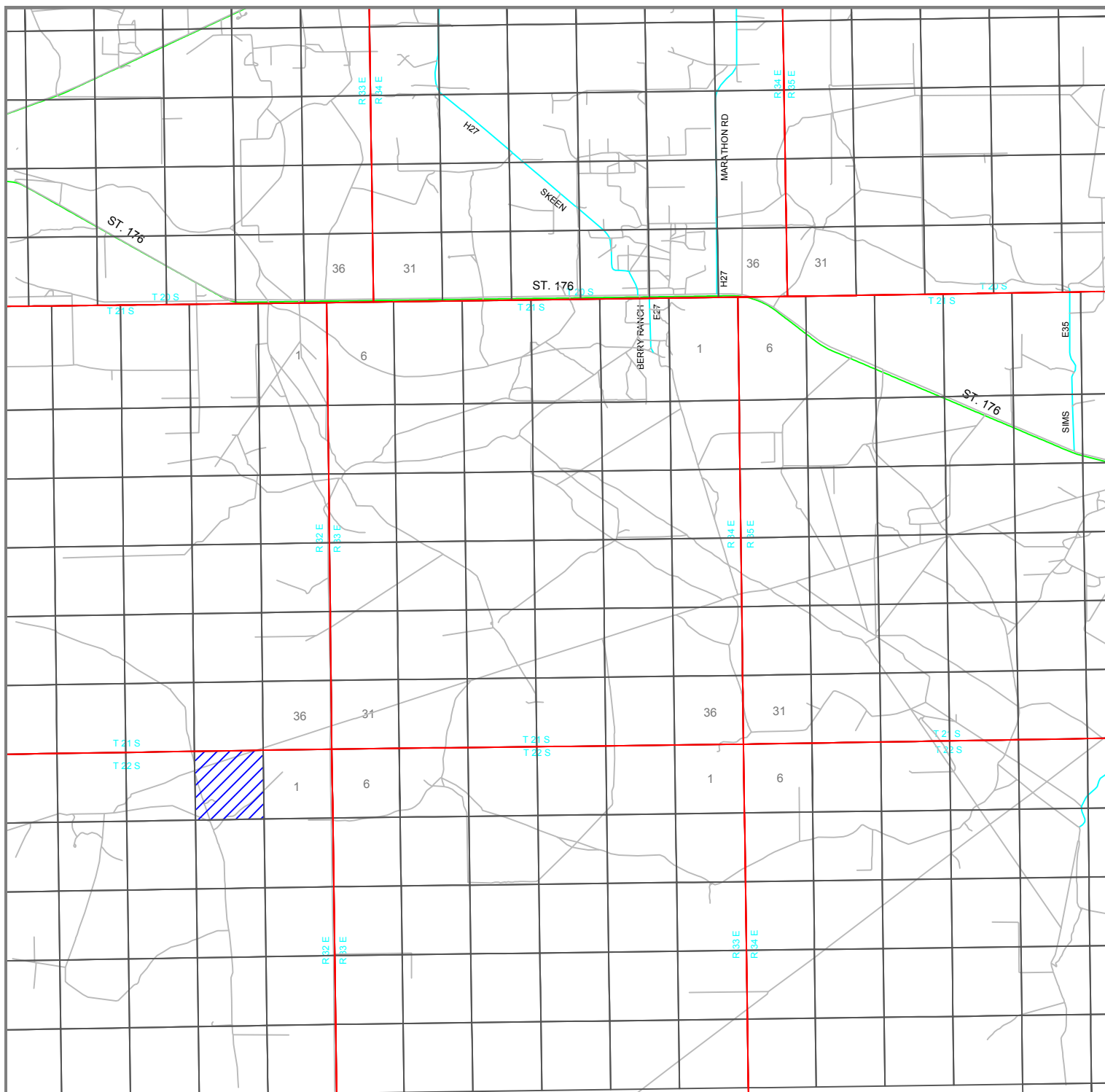
W.O. Number: KJG 35351

Survey Date: 06-10-2021

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



**ADVANCE
ENERGY
PARTNERS HAT
MESA, LLC**

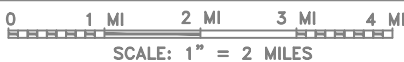


ANDERSON FED COM 552H

Located 180' FNL and 743' FWL
 Section 2, Township 22 South, Range 32 East,
 N.M.P.M., Lea County, New Mexico.



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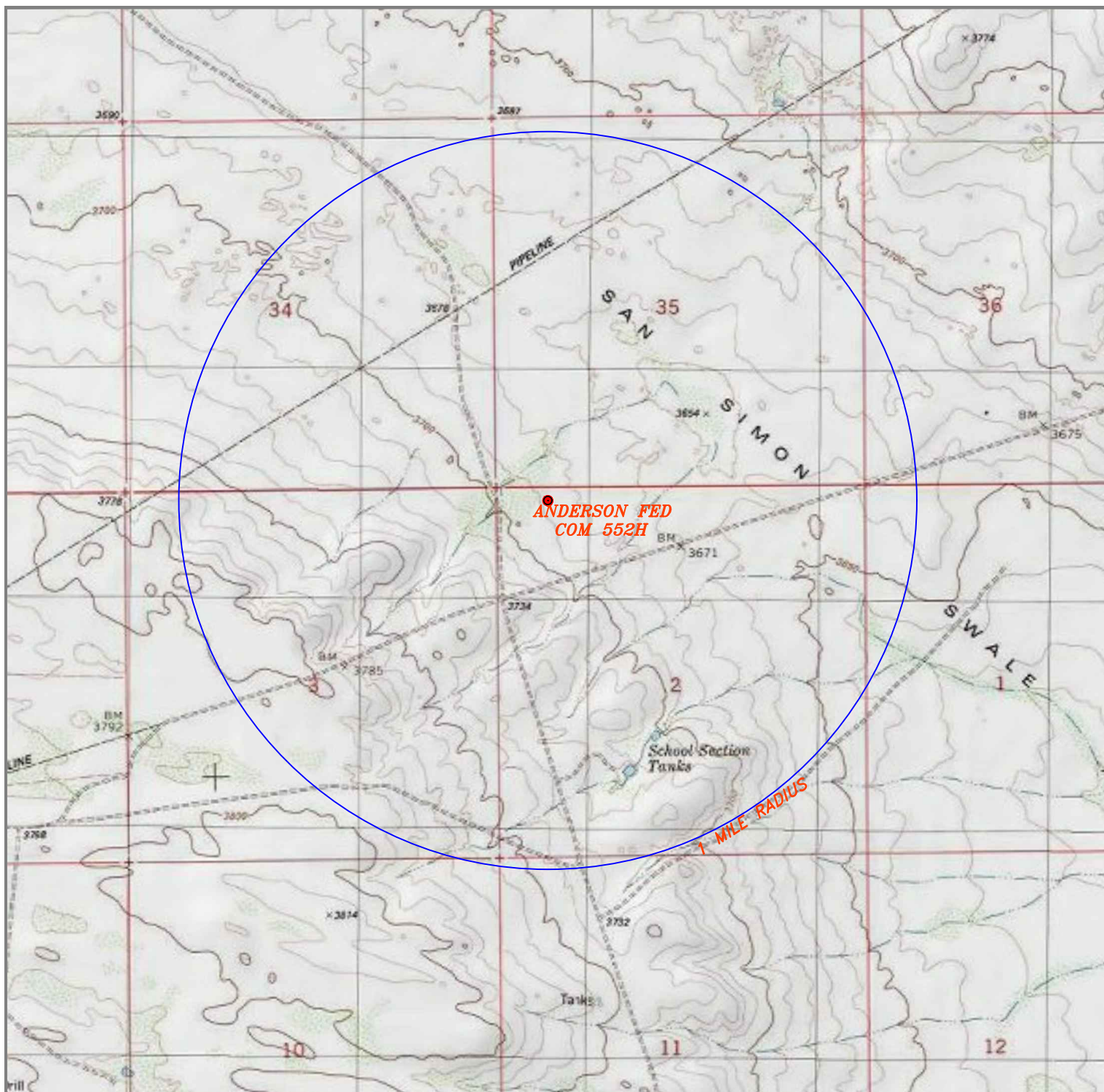
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**ADVANCE
 ENERGY
 PARTNERS HAT
 MESA, LLC**

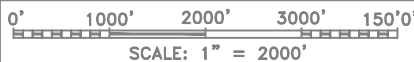


ANDERSON FED COM 552H

Located 180' FNL and 743' FWL
Section 2, Township 22 South, Range 32 East,
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W.O. Number: KJG 35351

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



**ADVANCE
ENERGY
PARTNERS HAT
MESA, LLC**

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 340548

ACKNOWLEDGMENTS

Operator: MATADOR PRODUCTION COMPANY One Lincoln Centre Dallas, TX 75240	OGRID: 228937
	Action Number: 340548
	Action Type: [C-105] Well (Re)Completion (C-105)

ACKNOWLEDGMENTS

<input checked="" type="checkbox"/>	I hereby certify that the required Water Use Report has been, or will be, submitted for this wells completion.
<input checked="" type="checkbox"/>	I hereby certify that the required FracFocus disclosure has been, or will be, submitted for this wells completion.
<input type="checkbox"/>	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.
<input type="checkbox"/>	I hereby certify that no additives containing PFAS chemicals were added to the fluid used in the completion or recompletion of this well.

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

General Information
Phone: (505) 629-6116

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

CONDITIONS

Action 340548

CONDITIONS

Operator: MATADOR PRODUCTION COMPANY One Lincoln Centre Dallas, TX 75240	OGRID: 228937
	Action Number: 340548
	Action Type: [C-105] Well (Re)Completion (C-105)

CONDITIONS

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