

Well Name: ANDERSON FED COM	Well Location: T22S / R32E / SEC 2 / LOT 4 /	County or Parish/State:
Well Number: 552H	Type of Well: OIL WELL	Allottee or Tribe Name:
Lease Number: NMNM120905	Unit or CA Name:	Unit or CA Number:
US Well Number: 3002548996	Well Status: Approved Application for Permit to Drill	Operator: ADVANCE ENERGY PARTNERS HAT MESA LLC

Notice of Intent

Sundry ID: 2631588

Type of Submission: Notice of Intent	Type of Action: Other
Date Sundry Submitted: 08/31/2021	Time Sundry Submitted: 12:24
Date proposed operation will begin: 09/06/2021	

Procedure Description: Request to move the Bottom Hole Location from 2540' FSL & 990' FWL, Section 26, T-21-S, R-32-E, NWSW to 2540' FSL & 1254' FWL, Section 26, T-21-S, R-32-E, NWSW. Please see attached drill plan, directional plan, and plats for detailed information regarding changes to casing, cement, and mud programs.

Surface Disturbance

Is any additional surface disturbance proposed?: No

NOI Attachments

Procedure Description

Anderson_552H_BHL_etc_Sundry_Attachments_20210831122328.pdf

Well Name: ANDERSON FED COM	Well Location: T22S / R32E / SEC 2 / LOT 4 /	County or Parish/State:
Well Number: 552H	Type of Well: OIL WELL	Allottee or Tribe Name:
Lease Number: NMNM120905	Unit or CA Name:	Unit or CA Number:
US Well Number: 3002548996	Well Status: Approved Application for Permit to Drill	Operator: ADVANCE ENERGY PARTNERS HAT MESA LLC

Operator Certification

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

Operator Electronic Signature: BRIAN WOOD	Signed on: AUG 31, 2021 12:23 PM
Name: ADVANCE ENERGY PARTNERS HAT MESA LLC	
Title: President	
Street Address: 37 VERANO LOOP	
City: SANTA FE	State: NM
Phone: (505) 466-8120	
Email address: AFMSS@PERMITSWEST.COM	

Field Representative

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

BLM Point of Contact

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

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

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

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

DISTRICT IV
1220 S. St. Francis Dr., Santa Fe, NM 87505
Phone (505) 476-3460 Fax: (505) 476-3462

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 30-025-48996	Pool Code 51683	Pool Name RED TANK; BONE SPRING
Property Code	Property Name ANDERSON FED 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		2540	SOUTH	1254	WEST	LEA
Dedicated Acres 240.00	Joint or Infill	Consolidation Code C	Order No.						

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

**LAST TAKE POINT/
BOTTOM HOLE LOCATION**
Lat - N 32.449534°
Long - W 103.649874°
NMSPC - N 527946.2
E 752163.6
(NAD-83)

**FIRST TAKE POINT
100' FSL & 1254' FWL**
Lat - N 32.428303°
Long - W 103.649893°
NMSPC - N 520222.2
E 752207.3
(NAD-83)

SURFACE LOCATION
Lat - N 32.427526°
Long - W 103.651547°
NMSPC - N 519936.4
E 751698.6
(NAD-83)

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.

Cory Walk **08-30-21**
Signature Date

Cory Walk
Printed Name

cory@permitswest.com
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

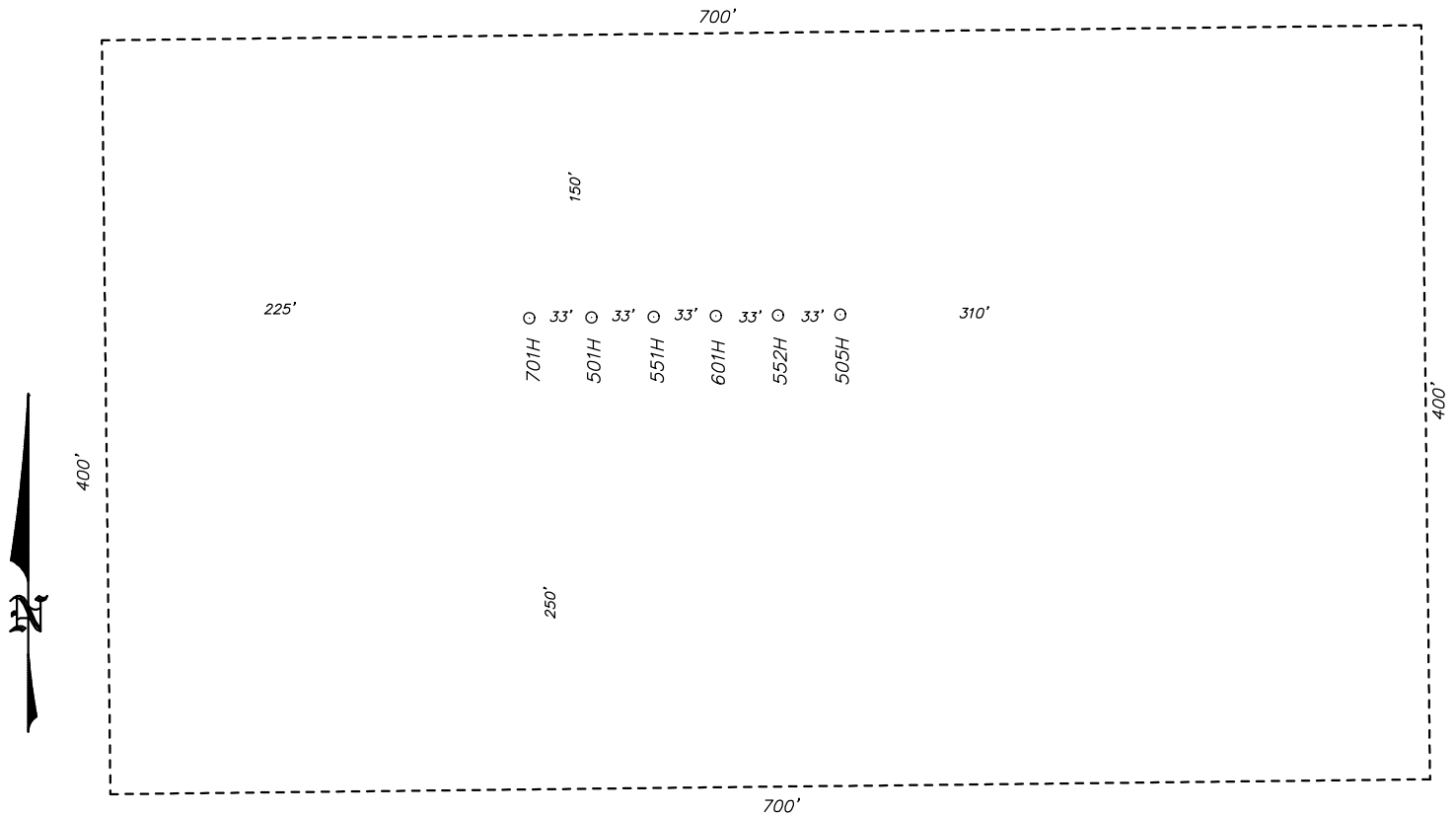
[Signature]
Signature & Seal of Professional Surveyor

7977
Certificate No. Gary L. Jones

7977
BASIN SURVEYOR

0' 1500' 3000' 4500' 6000'
SCALE: 1" = 3000'
WO Num.: 35351

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



basin
surveys
focused on excellence
in the oilfield

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

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

ADVANCE ENERGY PARTNERS HAT MESA, LLC

REF: ANDERSON FED COM 601H / WELL PAD TOPO

THE ANDERSON FED COM 501H LOCATED 180' FROM
THE NORTH LINE AND 644' 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
--------------------	-------------------	------------------	-------------------------	---------------------

CHANGE TO PLANS

Move First Take Point

From: 1420' FSL & 990' FWL, Section 35, T-21-S, R-32-E, NWSW

To: 100' FSL & 1254' FWL, Section 35, T-21-S, R-32-E, SWSW

Move Bottom Hole Location

From: 2540' FSL & 990' FWL, Section 26, T-21-S, R-32-E, NWSW

To: 2540' FSL & 1254' FWL, Section 26, T-21-S, R-32-E, NWSW

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

Advance Energy Partners Hat Mesa, LLC
 Anderson Fed Com 552H
 SHL 180' FNL & 743' FWL Sec. 2, T. 22 S., R. 32 E.
 BHL 2540' FSL & 1254' FWL Sec. 26, T 21 S., R. 32 E.
 Lea County, NM

DRILL PLAN PAGE 1

Drilling Program

1. ESTIMATED TOPS

Formation	TVD	MD	Bearing
Quaternary caliche	000'	000'	water
Rustler anhydrite (surface csg set @ 1242')	1217'	1217'	N/A
Top salt	1424'	1424'	N/A
Tansil limestone (intermediate csg set @ 4745')	3321'	3321'	N/A
Bell Canyon limestone	4795'	4795'	hydrocarbons
Cherry Canyon sandstone	5704'	5704'	hydrocarbons
Lower Brushy Canyon sandstone	8442'	8448'	hydrocarbons
Avalon shale	8962'	8969'	hydrocarbons
1 st Bone Spring sandstone	9829'	9837'	hydrocarbons
2 nd Bone Spring sandstone	10397'	10406'	hydrocarbons
(KOP	10923'	10943'	hydrocarbons)
3 rd Bone Spring carbonate	10965'	10975'	hydrocarbons
TD	11400'	19420'	hydrocarbons

2. NOTABLE ZONES

Third Bone is the goal. Closest water well (CP 01701 POD 1) is 0.41-mile north. Water bearing strata were reported at 560' in this 840' deep well.

3. PRESSURE CONTROL

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

Advance Energy Partners Hat Mesa, LLC

DRILL PLAN PAGE 2

Anderson Fed Com 552H

SHL 180' FNL & 743' FWL Sec. 2, T. 22 S., R. 32 E.

BHL 2540' FSL & 1254' FWL Sec. 26, T 21 S., R. 32 E.

Lea County, NM

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

Variance is requested to use a speed head (aka, multi-bowl wellhead). Diagram is attached.

4. CASING & CEMENT

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

Hole OD	Set MD	Set TVD	Casing O. D.	Weight (lb/ft)	Grade	Joint	Collapse	Burst	Tension
17.5"	0' - 1242'	0' - 1242'	Surface 13.375"	54.5	J-55	BTC	1.125	1.125	1.6
12.25"	0' - 4000'	0' - 4000'	Intermed. 9.625"	40	J-55	LTC	1.125	1.125	1.6
12.25"	4000' - 4815'	4000' - 4815'	Intermed. 9.625"	40	HCL-80	LTC	1.125	1.125	1.6
8.5"	0' - 19420'	0' - 11400'	Product. 5.5"	20	HCP-110	CDC-HTQ	1.125	1.125	1.6

Single bow centralizer will be installed on every fourth joint of the surface and intermediate casing strings.

Single bow centralizers will be installed from 200' above the KOP up to 600' inside the previous casing shoe. Double bows will be installed from 200' above the KOP to 200' past the EOC. Solid bodies will be installed one per joint from 200' past EOC to TD.

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

Advance Energy Partners Hat Mesa, LLC

DRILL PLAN PAGE 3

Anderson Fed Com 552H

SHL 180' FNL & 743' FWL Sec. 2, T. 22 S., R. 32 E.

BHL 2540' FSL & 1254' FWL Sec. 26, T 21 S., R. 32 E.

Lea County, NM

Name	Type	Top MD	Sacks	Yield	Cu. Ft	Weight	Excess	Cement	Additives
Surface	Lead	0	515	1.9	979	12.8	50%	B Poz + C	6% Gel + 5% SALT + 0.25PPS Pol-E-Flake + 0.005GPS NoFoam V1A
	Tail	942	215	1.35	290	14.8	20%	C	2% CaCl2 + 0.005GPS NoFoam V1A
1st Intermediate (stage 1)	Lead	2800	1380	1.84	2539	12.8	709%	B Poz + C	2% Gel + 5% SALT + 0.2% R-1300 + 0.25PPS Pol-E-Flake + 0.005GPS NoFoam V1A
	Tail	3798	310	1.22	378	15.6	20%	H	5% SALT + 0.2% SMS + 0.35% C-20 + 0.005GPS NoFoam V1A
1st Intermediate (stage 2)	Lead	0	455	3	1365	11	153%	ProLite	5PPS Plexcrete STE + 2% SMS + 0.05% SuspendaCem 6302 + 0.5% C-47B + 3PPS Gilsonite + 0.005GPS NoFoam V1A
	Tail	2395	100	1.33	133	14.8	0%	C	0.05% C-20 + 0.005GPS NoFoam V1A
Production	Lead	0	995	3.39	3373	10.7	50%	ProLite	5PPS Plexcrete STE + 2% SMS + 0.05% SuspendaCem 6302 + 0.4% R-1300 + 0.5% C-47B + 3PPS Gilsonite + 0.005GPS NoFoam V1A
	Tail	10943	1925	1.22	2349	14.5	20%	B Poz + H	5% SALT + 0.05% SuspendaCem 6302 + 0.65% C-20 + 0.5% C-47B + 0.005GPS NoFoam V1A

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

5. MUD PROGRAM

An electronic pit volume totalizer (PVT) will be used to monitor volume, flow rate, pump pressure, and stroke rate. All necessary additives (e. g., barite, bentonite, LCM) to maintain mud properties and meet minimum lost circulation and weight increase needs

Advance Energy Partners Hat Mesa, LLC

DRILL PLAN PAGE 4

Anderson Fed Com 552H

SHL 180' FNL & 743' FWL Sec. 2, T. 22 S., R. 32 E.

BHL 2540' FSL & 1254' FWL Sec. 26, T 21 S., R. 32 E.

Lea County, NM

will be on site at all times. Mud program may change due to hole conditions. A closed loop system will be used.

Type	Interval (MD)	lb/gal	Viscosity	Fluid Loss ml/30 mins
fresh water	0' - 1242'	8.4 - 10.0	28 - 36	N/C
Brine	1242' - 4745'	10.0 - 10.5	28 - 32	N/C
Cut Brine	4745' - 11693'	9.2 - 9.5	28 - 30	N/C
OBM	11693' - 19420'	9.5 - 9.8	55 - 65	<8

6. CORES, TESTS, & LOGS

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

7. DOWN HOLE CONDITIONS

No abnormal pressure or temperature is expected. Maximum expected bottom hole pressure is ≈ 5586 psi. Expected bottom hole temperature is $\approx 236^{\circ}$ F.

H2S monitors and detectors will be used from surface casing point to TD.

8. OTHER INFORMATION

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

**WELL DETAILS: Anderson Fed Com 552H**

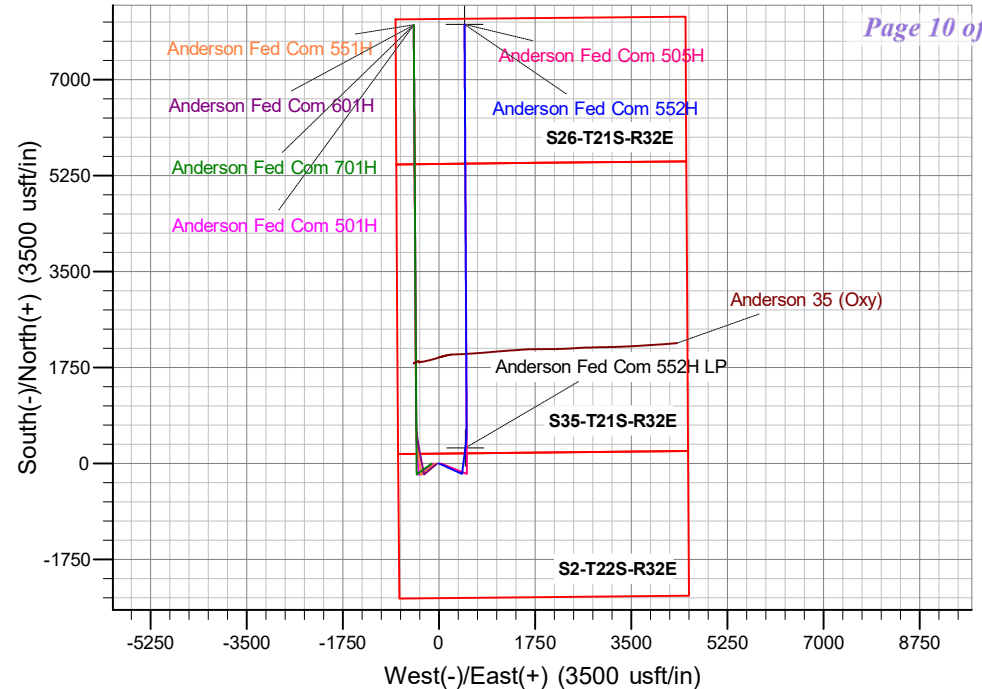
Ground Elev: 3690.0 KB: 3722.5

+N/-S	+E/-W	Northing	Easting	Latitude	Longitude
0.0	0.0	519936.26	751698.70	32° 25' 39.094 N	103° 39' 5.569 W

PROJECT DETAILS: Hat Mesa

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

System Datum: Mean Sea Level

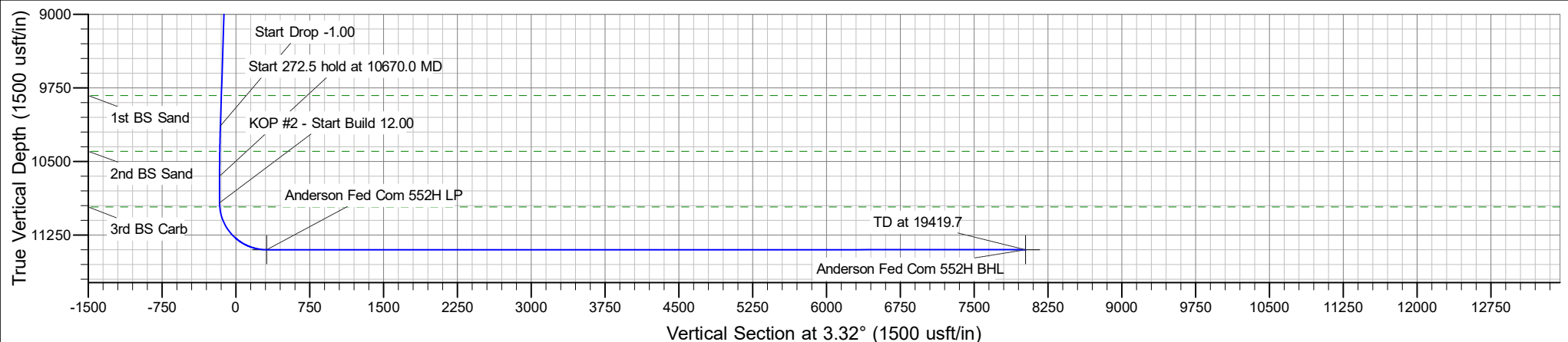
**SECTION DETAILS**

Sec	MD	Inc	Azi	TVD	+N/-S	+E/-W	Dleg	TFace	Vsect	Annotation
1	0.0	0.00	0.00	0.0	0.0	0.0	0.00	0.00	0.0	
2	5000.0	0.00	0.00	5000.0	0.0	0.0	0.00	0.00	0.0	KOP - Start Build 1.00
3	5512.8	5.13	114.34	5512.1	-9.5	20.9	1.00	114.34	-8.2	Start 4644.4 hold at 5512.8 MD
4	10157.2	5.13	114.34	10137.9	-180.5	399.1	0.00	0.00	-157.1	Start Drop -1.00
5	10670.0	0.00	0.00	10650.0	-190.0	420.0	1.00	180.00	-165.3	Start 272.5 hold at 10670.0 MD
6	10942.5	0.00	0.00	10922.5	-190.0	420.0	0.00	0.00	-165.3	KOP #2 - Start Build 12.00
7	11692.5	90.00	7.19	11400.0	283.7	479.7	12.00	7.19	311.0	LP - Start 2.2 hold at 11692.5 MD
8	11694.7	90.00	7.19	11400.0	285.9	480.0	0.00	0.00	313.3	Start DLS 2.00 TFO -90.00
9	12068.6	90.00	359.71	11400.0	658.9	502.5	2.00	-90.00	686.9	Start 7351.1 hold at 12068.6 MD
10	19419.7	90.00	359.71	11400.0	8009.9	465.0	0.00	0.00	8023.4	TD at 19419.7



Azimuths to Grid North
 True North: -0.37°
 Magnetic North: 6.30°

Magnetic Field
 Strength: 47722.0nT
 Dip Angle: 60.19°
 Date: 8/17/2020
 Model: IGRF2015





Advance Energy Partners

Hat Mesa

Anderson Fed Com - Pad D

Anderson Fed Com 552H

Anderson Fed Com 552H

Plan: Anderson Fed Com 552H - Prelim 1

Standard Planning Report

19 August, 2021



Planning Report

Database:	EDM 5000.16 Single User Db	Local Co-ordinate Reference:	Well Anderson Fed Com 552H
Company:	Advance Energy Partners	TVD Reference:	WELL @ 3722.5usft (Original Well Elev)
Project:	Hat Mesa	MD Reference:	WELL @ 3722.5usft (Original Well Elev)
Site:	Anderson Fed Com - Pad D	North Reference:	Grid
Well:	Anderson Fed Com 552H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Anderson Fed Com 552H		
Design:	Anderson Fed Com 552H - Prelim 1		

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° 25' 39.090 N
From:	Lat/Long	Easting:	751,632.67 usft	Longitude:	103° 39' 6.340 W
Position Uncertainty:	0.0 usft	Slot Radius:	13-3/16 "		

Well	Anderson Fed Com 552H					
Well Position	+N/-S	0.0 usft	Northing:	519,936.26 usft	Latitude:	32° 25' 39.094 N
	+E/-W	0.0 usft	Easting:	751,698.70 usft	Longitude:	103° 39' 5.569 W
Position Uncertainty		0.0 usft	Wellhead Elevation:	usft	Ground Level:	3,690.0 usft
Grid Convergence:		0.37 °				

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	Anderson Fed Com 552H - Prelim 1				
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	3.32	

Plan Survey Tool Program	Date	8/19/2021			
Depth From (usft)	Depth To (usft)	Survey (Wellbore)	Tool Name	Remarks	
1	0.0	19,419.7	Anderson Fed Com 552H - Prelim	MWD+HRGM	
			OWSG MWD + HRGM		



Planning Report

Database:	EDM 5000.16 Single User Db	Local Co-ordinate Reference:	Well Anderson Fed Com 552H
Company:	Advance Energy Partners	TVD Reference:	WELL @ 3722.5usft (Original Well Elev)
Project:	Hat Mesa	MD Reference:	WELL @ 3722.5usft (Original Well Elev)
Site:	Anderson Fed Com - Pad D	North Reference:	Grid
Well:	Anderson Fed Com 552H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Anderson Fed Com 552H		
Design:	Anderson Fed Com 552H - Prelim 1		

Plan Sections										
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)	TFO (°)	Target
0.0	0.00	0.00	0.0	0.0	0.0	0.00	0.00	0.00	0.00	
5,000.0	0.00	0.00	5,000.0	0.0	0.0	0.00	0.00	0.00	0.00	
5,512.8	5.13	114.34	5,512.1	-9.5	20.9	1.00	1.00	0.00	114.34	
10,157.2	5.13	114.34	10,137.9	-180.5	399.1	0.00	0.00	0.00	0.00	
10,670.0	0.00	0.00	10,650.0	-190.0	420.0	1.00	-1.00	0.00	180.00	
10,942.5	0.00	0.00	10,922.5	-190.0	420.0	0.00	0.00	0.00	0.00	
11,692.5	90.00	7.19	11,400.0	283.7	479.7	12.00	12.00	0.00	7.19	
11,694.7	90.00	7.19	11,400.0	285.9	480.0	0.00	0.00	0.00	0.00	Anderson Fed Com 5
12,068.6	90.00	359.71	11,400.0	658.9	502.5	2.00	0.00	-2.00	-90.00	
19,419.7	90.00	359.71	11,400.0	8,009.9	465.0	0.00	0.00	0.00	0.00	Anderson Fed Com 5



Planning Report

Database:	EDM 5000.16 Single User Db	Local Co-ordinate Reference:	Well Anderson Fed Com 552H
Company:	Advance Energy Partners	TVD Reference:	WELL @ 3722.5usft (Original Well Elev)
Project:	Hat Mesa	MD Reference:	WELL @ 3722.5usft (Original Well Elev)
Site:	Anderson Fed Com - Pad D	North Reference:	Grid
Well:	Anderson Fed Com 552H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Anderson Fed Com 552H		
Design:	Anderson Fed Com 552H - Prelim 1		

Planned Survey									
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
0.0	0.00	0.00	0.0	0.0	0.0	0.0	0.00	0.00	0.00
100.0	0.00	0.00	100.0	0.0	0.0	0.0	0.00	0.00	0.00
200.0	0.00	0.00	200.0	0.0	0.0	0.0	0.00	0.00	0.00
300.0	0.00	0.00	300.0	0.0	0.0	0.0	0.00	0.00	0.00
400.0	0.00	0.00	400.0	0.0	0.0	0.0	0.00	0.00	0.00
500.0	0.00	0.00	500.0	0.0	0.0	0.0	0.00	0.00	0.00
600.0	0.00	0.00	600.0	0.0	0.0	0.0	0.00	0.00	0.00
700.0	0.00	0.00	700.0	0.0	0.0	0.0	0.00	0.00	0.00
800.0	0.00	0.00	800.0	0.0	0.0	0.0	0.00	0.00	0.00
900.0	0.00	0.00	900.0	0.0	0.0	0.0	0.00	0.00	0.00
1,000.0	0.00	0.00	1,000.0	0.0	0.0	0.0	0.00	0.00	0.00
1,100.0	0.00	0.00	1,100.0	0.0	0.0	0.0	0.00	0.00	0.00
1,200.0	0.00	0.00	1,200.0	0.0	0.0	0.0	0.00	0.00	0.00
1,217.0	0.00	0.00	1,217.0	0.0	0.0	0.0	0.00	0.00	0.00
Rustler									
1,300.0	0.00	0.00	1,300.0	0.0	0.0	0.0	0.00	0.00	0.00
1,400.0	0.00	0.00	1,400.0	0.0	0.0	0.0	0.00	0.00	0.00
1,500.0	0.00	0.00	1,500.0	0.0	0.0	0.0	0.00	0.00	0.00
1,600.0	0.00	0.00	1,600.0	0.0	0.0	0.0	0.00	0.00	0.00
1,700.0	0.00	0.00	1,700.0	0.0	0.0	0.0	0.00	0.00	0.00
1,800.0	0.00	0.00	1,800.0	0.0	0.0	0.0	0.00	0.00	0.00
1,900.0	0.00	0.00	1,900.0	0.0	0.0	0.0	0.00	0.00	0.00
2,000.0	0.00	0.00	2,000.0	0.0	0.0	0.0	0.00	0.00	0.00
2,100.0	0.00	0.00	2,100.0	0.0	0.0	0.0	0.00	0.00	0.00
2,200.0	0.00	0.00	2,200.0	0.0	0.0	0.0	0.00	0.00	0.00
2,300.0	0.00	0.00	2,300.0	0.0	0.0	0.0	0.00	0.00	0.00
2,400.0	0.00	0.00	2,400.0	0.0	0.0	0.0	0.00	0.00	0.00
2,500.0	0.00	0.00	2,500.0	0.0	0.0	0.0	0.00	0.00	0.00
2,600.0	0.00	0.00	2,600.0	0.0	0.0	0.0	0.00	0.00	0.00
2,700.0	0.00	0.00	2,700.0	0.0	0.0	0.0	0.00	0.00	0.00
2,800.0	0.00	0.00	2,800.0	0.0	0.0	0.0	0.00	0.00	0.00
2,900.0	0.00	0.00	2,900.0	0.0	0.0	0.0	0.00	0.00	0.00
3,000.0	0.00	0.00	3,000.0	0.0	0.0	0.0	0.00	0.00	0.00
3,100.0	0.00	0.00	3,100.0	0.0	0.0	0.0	0.00	0.00	0.00
3,200.0	0.00	0.00	3,200.0	0.0	0.0	0.0	0.00	0.00	0.00
3,300.0	0.00	0.00	3,300.0	0.0	0.0	0.0	0.00	0.00	0.00
3,400.0	0.00	0.00	3,400.0	0.0	0.0	0.0	0.00	0.00	0.00
3,500.0	0.00	0.00	3,500.0	0.0	0.0	0.0	0.00	0.00	0.00
3,600.0	0.00	0.00	3,600.0	0.0	0.0	0.0	0.00	0.00	0.00
3,700.0	0.00	0.00	3,700.0	0.0	0.0	0.0	0.00	0.00	0.00
3,800.0	0.00	0.00	3,800.0	0.0	0.0	0.0	0.00	0.00	0.00
3,900.0	0.00	0.00	3,900.0	0.0	0.0	0.0	0.00	0.00	0.00
4,000.0	0.00	0.00	4,000.0	0.0	0.0	0.0	0.00	0.00	0.00
4,100.0	0.00	0.00	4,100.0	0.0	0.0	0.0	0.00	0.00	0.00
4,200.0	0.00	0.00	4,200.0	0.0	0.0	0.0	0.00	0.00	0.00
4,300.0	0.00	0.00	4,300.0	0.0	0.0	0.0	0.00	0.00	0.00
4,400.0	0.00	0.00	4,400.0	0.0	0.0	0.0	0.00	0.00	0.00
4,500.0	0.00	0.00	4,500.0	0.0	0.0	0.0	0.00	0.00	0.00
4,600.0	0.00	0.00	4,600.0	0.0	0.0	0.0	0.00	0.00	0.00
4,700.0	0.00	0.00	4,700.0	0.0	0.0	0.0	0.00	0.00	0.00
4,795.0	0.00	0.00	4,795.0	0.0	0.0	0.0	0.00	0.00	0.00
Base of Limestone									
4,800.0	0.00	0.00	4,800.0	0.0	0.0	0.0	0.00	0.00	0.00
4,900.0	0.00	0.00	4,900.0	0.0	0.0	0.0	0.00	0.00	0.00



Planning Report

Database:	EDM 5000.16 Single User Db	Local Co-ordinate Reference:	Well Anderson Fed Com 552H
Company:	Advance Energy Partners	TVD Reference:	WELL @ 3722.5usft (Original Well Elev)
Project:	Hat Mesa	MD Reference:	WELL @ 3722.5usft (Original Well Elev)
Site:	Anderson Fed Com - Pad D	North Reference:	Grid
Well:	Anderson Fed Com 552H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Anderson Fed Com 552H		
Design:	Anderson Fed Com 552H - Prelim 1		

Planned Survey										
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)	
5,000.0	0.00	0.00	5,000.0	0.0	0.0	0.0	0.00	0.00	0.00	
KOP - Start Build 1.00										
5,100.0	1.00	114.34	5,100.0	-0.4	0.8	-0.3	1.00	1.00	0.00	
5,200.0	2.00	114.34	5,200.0	-1.4	3.2	-1.3	1.00	1.00	0.00	
5,300.0	3.00	114.34	5,299.9	-3.2	7.2	-2.8	1.00	1.00	0.00	
5,400.0	4.00	114.34	5,399.7	-5.8	12.7	-5.0	1.00	1.00	0.00	
5,500.0	5.00	114.34	5,499.4	-9.0	19.9	-7.8	1.00	1.00	0.00	
5,512.8	5.13	114.34	5,512.1	-9.5	20.9	-8.2	1.00	1.00	0.00	
Start 4644.4 hold at 5512.8 MD										
5,600.0	5.13	114.34	5,599.0	-12.7	28.0	-11.0	0.00	0.00	0.00	
5,700.0	5.13	114.34	5,698.6	-16.3	36.1	-14.2	0.00	0.00	0.00	
5,800.0	5.13	114.34	5,798.2	-20.0	44.3	-17.4	0.00	0.00	0.00	
5,900.0	5.13	114.34	5,897.8	-23.7	52.4	-20.6	0.00	0.00	0.00	
6,000.0	5.13	114.34	5,997.4	-27.4	60.6	-23.8	0.00	0.00	0.00	
6,100.0	5.13	114.34	6,097.0	-31.1	68.7	-27.0	0.00	0.00	0.00	
6,200.0	5.13	114.34	6,196.6	-34.8	76.9	-30.3	0.00	0.00	0.00	
6,300.0	5.13	114.34	6,296.2	-38.5	85.0	-33.5	0.00	0.00	0.00	
6,400.0	5.13	114.34	6,395.8	-42.1	93.1	-36.7	0.00	0.00	0.00	
6,500.0	5.13	114.34	6,495.4	-45.8	101.3	-39.9	0.00	0.00	0.00	
6,600.0	5.13	114.34	6,595.0	-49.5	109.4	-43.1	0.00	0.00	0.00	
6,700.0	5.13	114.34	6,694.6	-53.2	117.6	-46.3	0.00	0.00	0.00	
6,800.0	5.13	114.34	6,794.2	-56.9	125.7	-49.5	0.00	0.00	0.00	
6,900.0	5.13	114.34	6,893.8	-60.6	133.9	-52.7	0.00	0.00	0.00	
7,000.0	5.13	114.34	6,993.4	-64.2	142.0	-55.9	0.00	0.00	0.00	
7,100.0	5.13	114.34	7,093.0	-67.9	150.1	-59.1	0.00	0.00	0.00	
7,200.0	5.13	114.34	7,192.6	-71.6	158.3	-62.3	0.00	0.00	0.00	
7,300.0	5.13	114.34	7,292.2	-75.3	166.4	-65.5	0.00	0.00	0.00	
7,400.0	5.13	114.34	7,391.8	-79.0	174.6	-68.7	0.00	0.00	0.00	
7,500.0	5.13	114.34	7,491.4	-82.7	182.7	-71.9	0.00	0.00	0.00	
7,600.0	5.13	114.34	7,591.0	-86.3	190.9	-75.1	0.00	0.00	0.00	
7,700.0	5.13	114.34	7,690.6	-90.0	199.0	-78.3	0.00	0.00	0.00	
7,800.0	5.13	114.34	7,790.2	-93.7	207.2	-81.5	0.00	0.00	0.00	
7,900.0	5.13	114.34	7,889.8	-97.4	215.3	-84.8	0.00	0.00	0.00	
8,000.0	5.13	114.34	7,989.4	-101.1	223.4	-88.0	0.00	0.00	0.00	
8,100.0	5.13	114.34	8,089.0	-104.8	231.6	-91.2	0.00	0.00	0.00	
8,200.0	5.13	114.34	8,188.6	-108.4	239.7	-94.4	0.00	0.00	0.00	
8,300.0	5.13	114.34	8,288.2	-112.1	247.9	-97.6	0.00	0.00	0.00	
8,400.0	5.13	114.34	8,387.8	-115.8	256.0	-100.8	0.00	0.00	0.00	
8,454.5	5.13	114.34	8,442.0	-117.8	260.4	-102.5	0.00	0.00	0.00	
Lower Brushy										
8,500.0	5.13	114.34	8,487.4	-119.5	264.2	-104.0	0.00	0.00	0.00	
8,600.0	5.13	114.34	8,587.0	-123.2	272.3	-107.2	0.00	0.00	0.00	
8,700.0	5.13	114.34	8,686.6	-126.9	280.4	-110.4	0.00	0.00	0.00	
8,800.0	5.13	114.34	8,786.2	-130.6	288.6	-113.6	0.00	0.00	0.00	
8,900.0	5.13	114.34	8,885.8	-134.2	296.7	-116.8	0.00	0.00	0.00	
8,976.5	5.13	114.34	8,962.0	-137.1	303.0	-119.3	0.00	0.00	0.00	
Avalon										
9,000.0	5.13	114.34	8,985.4	-137.9	304.9	-120.0	0.00	0.00	0.00	
9,100.0	5.13	114.34	9,085.0	-141.6	313.0	-123.2	0.00	0.00	0.00	
9,200.0	5.13	114.34	9,184.6	-145.3	321.2	-126.4	0.00	0.00	0.00	
9,300.0	5.13	114.34	9,284.2	-149.0	329.3	-129.6	0.00	0.00	0.00	
9,400.0	5.13	114.34	9,383.8	-152.7	337.4	-132.8	0.00	0.00	0.00	
9,500.0	5.13	114.34	9,483.4	-156.3	345.6	-136.0	0.00	0.00	0.00	



Planning Report

Database:	EDM 5000.16 Single User Db	Local Co-ordinate Reference:	Well Anderson Fed Com 552H
Company:	Advance Energy Partners	TVD Reference:	WELL @ 3722.5usft (Original Well Elev)
Project:	Hat Mesa	MD Reference:	WELL @ 3722.5usft (Original Well Elev)
Site:	Anderson Fed Com - Pad D	North Reference:	Grid
Well:	Anderson Fed Com 552H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Anderson Fed Com 552H		
Design:	Anderson Fed Com 552H - Prelim 1		

Planned Survey										
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)	
9,600.0	5.13	114.34	9,583.0	-160.0	353.7	-139.3	0.00	0.00	0.00	
9,700.0	5.13	114.34	9,682.6	-163.7	361.9	-142.5	0.00	0.00	0.00	
9,800.0	5.13	114.34	9,782.2	-167.4	370.0	-145.7	0.00	0.00	0.00	
9,847.0	5.13	114.34	9,829.0	-169.1	373.9	-147.2	0.00	0.00	0.00	
1st BS Sand										
9,900.0	5.13	114.34	9,881.8	-171.1	378.2	-148.9	0.00	0.00	0.00	
10,000.0	5.13	114.34	9,981.4	-174.8	386.3	-152.1	0.00	0.00	0.00	
10,100.0	5.13	114.34	10,081.0	-178.4	394.5	-155.3	0.00	0.00	0.00	
10,157.2	5.13	114.34	10,137.9	-180.5	399.1	-157.1	0.00	0.00	0.00	
Start Drop -1.00										
10,200.0	4.70	114.34	10,180.6	-182.1	402.4	-158.4	1.00	-1.00	0.00	
10,300.0	3.70	114.34	10,280.3	-185.1	409.1	-161.1	1.00	-1.00	0.00	
10,400.0	2.70	114.34	10,380.1	-187.4	414.2	-163.1	1.00	-1.00	0.00	
10,416.9	2.53	114.34	10,397.0	-187.7	414.9	-163.3	1.00	-1.00	0.00	
2nd BS Sand										
10,500.0	1.70	114.34	10,480.1	-189.0	417.7	-164.4	1.00	-1.00	0.00	
10,600.0	0.70	114.34	10,580.0	-189.8	419.6	-165.2	1.00	-1.00	0.00	
10,670.0	0.00	0.00	10,650.0	-190.0	420.0	-165.3	1.00	-1.00	0.00	
Start 272.5 hold at 10670.0 MD										
10,700.0	0.00	0.00	10,680.0	-190.0	420.0	-165.3	0.00	0.00	0.00	
10,800.0	0.00	0.00	10,780.0	-190.0	420.0	-165.3	0.00	0.00	0.00	
10,900.0	0.00	0.00	10,880.0	-190.0	420.0	-165.3	0.00	0.00	0.00	
10,942.5	0.00	0.00	10,922.5	-190.0	420.0	-165.3	0.00	0.00	0.00	
KOP #2 - Start Build 12.00										
10,985.0	5.10	7.19	10,965.0	-188.1	420.2	-163.5	12.00	12.00	0.00	
3rd BS Carb										
11,000.0	6.90	7.19	10,979.9	-186.6	420.4	-161.9	12.00	12.00	0.00	
11,100.0	18.90	7.19	11,077.2	-164.5	423.2	-139.7	12.00	12.00	0.00	
11,200.0	30.90	7.19	11,167.7	-122.8	428.5	-97.7	12.00	12.00	0.00	
11,300.0	42.90	7.19	11,247.6	-63.3	436.0	-37.9	12.00	12.00	0.00	
11,400.0	54.90	7.19	11,313.2	11.3	445.4	37.1	12.00	12.00	0.00	
11,500.0	66.90	7.19	11,361.7	97.9	456.3	124.1	12.00	12.00	0.00	
11,600.0	78.90	7.19	11,391.1	192.5	468.2	219.3	12.00	12.00	0.00	
11,692.5	90.00	7.19	11,400.0	283.7	479.7	311.0	12.00	12.00	0.00	
LP - Start 2.2 hold at 11692.5 MD										
11,694.7	90.00	7.19	11,400.0	285.9	480.0	313.3	0.00	0.00	0.00	
Start DLS 2.00 TFO -90.00 - Anderson Fed Com 552H LP										
11,700.0	90.00	7.08	11,400.0	291.2	480.7	318.5	2.00	0.00	-2.00	
11,800.0	90.00	5.08	11,400.0	390.6	491.2	418.4	2.00	0.00	-2.00	
11,900.0	90.00	3.08	11,400.0	490.3	498.4	518.4	2.00	0.00	-2.00	
12,000.0	90.00	1.08	11,400.0	590.3	502.0	618.4	2.00	0.00	-2.00	
12,068.6	90.00	359.71	11,400.0	658.9	502.5	686.9	2.00	0.00	-2.00	
Start 7351.1 hold at 12068.6 MD										
12,100.0	90.00	359.71	11,400.0	690.3	502.3	718.2	0.00	0.00	0.00	
12,200.0	90.00	359.71	11,400.0	790.3	501.8	818.0	0.00	0.00	0.00	
12,300.0	90.00	359.71	11,400.0	890.3	501.3	917.8	0.00	0.00	0.00	
12,400.0	90.00	359.71	11,400.0	990.3	500.8	1,017.6	0.00	0.00	0.00	
12,500.0	90.00	359.71	11,400.0	1,090.3	500.3	1,117.4	0.00	0.00	0.00	
12,600.0	90.00	359.71	11,400.0	1,190.3	499.8	1,217.2	0.00	0.00	0.00	
12,700.0	90.00	359.71	11,400.0	1,290.3	499.2	1,317.0	0.00	0.00	0.00	
12,800.0	90.00	359.71	11,400.0	1,390.3	498.7	1,416.8	0.00	0.00	0.00	
12,900.0	90.00	359.71	11,400.0	1,490.3	498.2	1,516.6	0.00	0.00	0.00	
13,000.0	90.00	359.71	11,400.0	1,590.3	497.7	1,616.4	0.00	0.00	0.00	



Planning Report

Database:	EDM 5000.16 Single User Db	Local Co-ordinate Reference:	Well Anderson Fed Com 552H
Company:	Advance Energy Partners	TVD Reference:	WELL @ 3722.5usft (Original Well Elev)
Project:	Hat Mesa	MD Reference:	WELL @ 3722.5usft (Original Well Elev)
Site:	Anderson Fed Com - Pad D	North Reference:	Grid
Well:	Anderson Fed Com 552H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Anderson Fed Com 552H		
Design:	Anderson Fed Com 552H - Prelim 1		

Planned Survey										
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)	
13,100.0	90.00	359.71	11,400.0	1,690.3	497.2	1,716.2	0.00	0.00	0.00	
13,200.0	90.00	359.71	11,400.0	1,790.2	496.7	1,816.0	0.00	0.00	0.00	
13,300.0	90.00	359.71	11,400.0	1,890.2	496.2	1,915.8	0.00	0.00	0.00	
13,400.0	90.00	359.71	11,400.0	1,990.2	495.7	2,015.6	0.00	0.00	0.00	
13,500.0	90.00	359.71	11,400.0	2,090.2	495.2	2,115.4	0.00	0.00	0.00	
13,600.0	90.00	359.71	11,400.0	2,190.2	494.7	2,215.2	0.00	0.00	0.00	
13,700.0	90.00	359.71	11,400.0	2,290.2	494.1	2,315.0	0.00	0.00	0.00	
13,800.0	90.00	359.71	11,400.0	2,390.2	493.6	2,414.8	0.00	0.00	0.00	
13,900.0	90.00	359.71	11,400.0	2,490.2	493.1	2,514.6	0.00	0.00	0.00	
14,000.0	90.00	359.71	11,400.0	2,590.2	492.6	2,614.4	0.00	0.00	0.00	
14,100.0	90.00	359.71	11,400.0	2,690.2	492.1	2,714.2	0.00	0.00	0.00	
14,200.0	90.00	359.71	11,400.0	2,790.2	491.6	2,814.0	0.00	0.00	0.00	
14,300.0	90.00	359.71	11,400.0	2,890.2	491.1	2,913.8	0.00	0.00	0.00	
14,400.0	90.00	359.71	11,400.0	2,990.2	490.6	3,013.6	0.00	0.00	0.00	
14,500.0	90.00	359.71	11,400.0	3,090.2	490.1	3,113.4	0.00	0.00	0.00	
14,600.0	90.00	359.71	11,400.0	3,190.2	489.6	3,213.2	0.00	0.00	0.00	
14,700.0	90.00	359.71	11,400.0	3,290.2	489.0	3,313.0	0.00	0.00	0.00	
14,800.0	90.00	359.71	11,400.0	3,390.2	488.5	3,412.8	0.00	0.00	0.00	
14,900.0	90.00	359.71	11,400.0	3,490.2	488.0	3,512.6	0.00	0.00	0.00	
15,000.0	90.00	359.71	11,400.0	3,590.2	487.5	3,612.4	0.00	0.00	0.00	
15,100.0	90.00	359.71	11,400.0	3,690.2	487.0	3,712.2	0.00	0.00	0.00	
15,200.0	90.00	359.71	11,400.0	3,790.2	486.5	3,812.0	0.00	0.00	0.00	
15,300.0	90.00	359.71	11,400.0	3,890.2	486.0	3,911.8	0.00	0.00	0.00	
15,400.0	90.00	359.71	11,400.0	3,990.2	485.5	4,011.6	0.00	0.00	0.00	
15,500.0	90.00	359.71	11,400.0	4,090.2	485.0	4,111.5	0.00	0.00	0.00	
15,600.0	90.00	359.71	11,400.0	4,190.2	484.5	4,211.3	0.00	0.00	0.00	
15,700.0	90.00	359.71	11,400.0	4,290.2	483.9	4,311.1	0.00	0.00	0.00	
15,800.0	90.00	359.71	11,400.0	4,390.2	483.4	4,410.9	0.00	0.00	0.00	
15,900.0	90.00	359.71	11,400.0	4,490.2	482.9	4,510.7	0.00	0.00	0.00	
16,000.0	90.00	359.71	11,400.0	4,590.2	482.4	4,610.5	0.00	0.00	0.00	
16,100.0	90.00	359.71	11,400.0	4,690.2	481.9	4,710.3	0.00	0.00	0.00	
16,200.0	90.00	359.71	11,400.0	4,790.2	481.4	4,810.1	0.00	0.00	0.00	
16,300.0	90.00	359.71	11,400.0	4,890.2	480.9	4,909.9	0.00	0.00	0.00	
16,400.0	90.00	359.71	11,400.0	4,990.2	480.4	5,009.7	0.00	0.00	0.00	
16,500.0	90.00	359.71	11,400.0	5,090.2	479.9	5,109.5	0.00	0.00	0.00	
16,600.0	90.00	359.71	11,400.0	5,190.2	479.4	5,209.3	0.00	0.00	0.00	
16,700.0	90.00	359.71	11,400.0	5,290.2	478.8	5,309.1	0.00	0.00	0.00	
16,800.0	90.00	359.71	11,400.0	5,390.2	478.3	5,408.9	0.00	0.00	0.00	
16,900.0	90.00	359.71	11,400.0	5,490.2	477.8	5,508.7	0.00	0.00	0.00	
17,000.0	90.00	359.71	11,400.0	5,590.2	477.3	5,608.5	0.00	0.00	0.00	
17,100.0	90.00	359.71	11,400.0	5,690.2	476.8	5,708.3	0.00	0.00	0.00	
17,200.0	90.00	359.71	11,400.0	5,790.2	476.3	5,808.1	0.00	0.00	0.00	
17,300.0	90.00	359.71	11,400.0	5,890.2	475.8	5,907.9	0.00	0.00	0.00	
17,400.0	90.00	359.71	11,400.0	5,990.2	475.3	6,007.7	0.00	0.00	0.00	
17,500.0	90.00	359.71	11,400.0	6,090.2	474.8	6,107.5	0.00	0.00	0.00	
17,600.0	90.00	359.71	11,400.0	6,190.2	474.3	6,207.3	0.00	0.00	0.00	
17,700.0	90.00	359.71	11,400.0	6,290.2	473.7	6,307.1	0.00	0.00	0.00	
17,800.0	90.00	359.71	11,400.0	6,390.2	473.2	6,406.9	0.00	0.00	0.00	
17,900.0	90.00	359.71	11,400.0	6,490.2	472.7	6,506.7	0.00	0.00	0.00	
18,000.0	90.00	359.71	11,400.0	6,590.2	472.2	6,606.5	0.00	0.00	0.00	
18,100.0	90.00	359.71	11,400.0	6,690.2	471.7	6,706.3	0.00	0.00	0.00	
18,200.0	90.00	359.71	11,400.0	6,790.2	471.2	6,806.1	0.00	0.00	0.00	
18,300.0	90.00	359.71	11,400.0	6,890.2	470.7	6,905.9	0.00	0.00	0.00	
18,400.0	90.00	359.71	11,400.0	6,990.2	470.2	7,005.7	0.00	0.00	0.00	



Planning Report

Database:	EDM 5000.16 Single User Db	Local Co-ordinate Reference:	Well Anderson Fed Com 552H
Company:	Advance Energy Partners	TVD Reference:	WELL @ 3722.5usft (Original Well Elev)
Project:	Hat Mesa	MD Reference:	WELL @ 3722.5usft (Original Well Elev)
Site:	Anderson Fed Com - Pad D	North Reference:	Grid
Well:	Anderson Fed Com 552H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Anderson Fed Com 552H		
Design:	Anderson Fed Com 552H - Prelim 1		

Planned Survey										
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)	
18,500.0	90.00	359.71	11,400.0	7,090.2	469.7	7,105.5	0.00	0.00	0.00	
18,600.0	90.00	359.71	11,400.0	7,190.2	469.2	7,205.3	0.00	0.00	0.00	
18,700.0	90.00	359.71	11,400.0	7,290.2	468.6	7,305.1	0.00	0.00	0.00	
18,800.0	90.00	359.71	11,400.0	7,390.2	468.1	7,404.9	0.00	0.00	0.00	
18,900.0	90.00	359.71	11,400.0	7,490.2	467.6	7,504.7	0.00	0.00	0.00	
19,000.0	90.00	359.71	11,400.0	7,590.2	467.1	7,604.5	0.00	0.00	0.00	
19,100.0	90.00	359.71	11,400.0	7,690.2	466.6	7,704.3	0.00	0.00	0.00	
19,200.0	90.00	359.71	11,400.0	7,790.2	466.1	7,804.1	0.00	0.00	0.00	
19,300.0	90.00	359.71	11,400.0	7,890.2	465.6	7,903.9	0.00	0.00	0.00	
19,400.0	90.00	359.71	11,400.0	7,990.2	465.1	8,003.7	0.00	0.00	0.00	
19,419.7	90.00	359.71	11,400.0	8,009.9	465.0	8,023.4	0.00	0.00	0.00	
TD at 19419.7 - Anderson Fed Com 552H BHL										

Design Targets										
Target Name	Dip Angle (°)	Dip Dir. (°)	TVD (usft)	+N/-S (usft)	+E/-W (usft)	Northing (usft)	Easting (usft)	Latitude	Longitude	
- hit/miss target										
- Shape										
Anderson Fed Com 552I	0.00	0.00	11,400.0	285.9	480.0	520,222.20	752,178.70	32° 25' 41.893 N	103° 38' 59.948 W	
- plan hits target center										
- Point										
Anderson Fed Com 552I	0.00	0.01	11,400.0	8,009.9	465.0	527,946.17	752,163.67	32° 26' 58.322 N	103° 38' 59.546 W	
- plan hits target center										
- Point										

Casing Points					
Measured Depth (usft)	Vertical Depth (usft)	Name	Casing Diameter (")	Hole Diameter (")	
11,692.5	11,400.0	LP	5-1/2	5-1/2	

Formations						
Measured Depth (usft)	Vertical Depth (usft)	Name	Lithology	Dip (°)	Dip Direction (°)	
1,217.0	1,217.0	Rustler		0.00		
4,795.0	4,795.0	Base of Limestone		0.00		
8,454.5	8,442.0	Lower Brushy		0.00		
8,976.5	8,962.0	Avalon		0.00		
9,847.0	9,829.0	1st BS Sand		0.00		
10,416.9	10,397.0	2nd BS Sand		0.00		
10,985.0	10,965.0	3rd BS Carb		0.00		



Planning Report

Database:	EDM 5000.16 Single User Db	Local Co-ordinate Reference:	Well Anderson Fed Com 552H
Company:	Advance Energy Partners	TVD Reference:	WELL @ 3722.5usft (Original Well Elev)
Project:	Hat Mesa	MD Reference:	WELL @ 3722.5usft (Original Well Elev)
Site:	Anderson Fed Com - Pad D	North Reference:	Grid
Well:	Anderson Fed Com 552H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Anderson Fed Com 552H		
Design:	Anderson Fed Com 552H - Prelim 1		

Plan Annotations				
Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates		Comment
		+N/-S (usft)	+E/-W (usft)	
5,000.0	5,000.0	0.0	0.0	KOP - Start Build 1.00
5,512.8	5,512.1	-9.5	20.9	Start 4644.4 hold at 5512.8 MD
10,157.2	10,137.9	-180.5	399.1	Start Drop -1.00
10,670.0	10,650.0	-190.0	420.0	Start 272.5 hold at 10670.0 MD
10,942.5	10,922.5	-190.0	420.0	KOP #2 - Start Build 12.00
11,692.5	11,400.0	283.7	479.7	LP - Start 2.2 hold at 11692.5 MD
11,694.7	11,400.0	285.9	480.0	Start DLS 2.00 TFO -90.00
12,068.6	11,400.0	658.9	502.5	Start 7351.1 hold at 12068.6 MD
19,419.7	11,400.0	8,009.9	465.0	TD at 19419.7



Advance Energy Partners

Hat Mesa

Anderson Fed Com - Pad D

Anderson Fed Com 552H

Anderson Fed Com 552H

Anderson Fed Com 552H - Prelim 1

Anticollision Report

19 August, 2021



Anticollision Report

Company:	Advance Energy Partners	Local Co-ordinate Reference:	Well Anderson Fed Com 552H
Project:	Hat Mesa	TVD Reference:	WELL @ 3722.5usft (Original Well Elev)
Reference Site:	Anderson Fed Com - Pad D	MD Reference:	WELL @ 3722.5usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	Anderson Fed Com 552H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.79 sigma
Reference Wellbore	Anderson Fed Com 552H	Database:	EDM 5000.16 Single User Db
Reference Design:	Anderson Fed Com 552H - Prelim 1	Offset TVD Reference:	Offset Datum

Reference	Anderson Fed Com 552H - Prelim 1		
Filter type:	NO GLOBAL FILTER: Using user defined selection & filtering criteria		
Interpolation Method:	Stations	Error Model:	ISCWSA
Depth Range:	Unlimited	Scan Method:	Closest Approach 3D
Results Limited by:	Maximum centre distance of 1,000.0usft	Error Surface:	Pedal Curve
Warning Levels Evaluated at:	2.79 Sigma	Casing Method:	Not applied

Survey Tool Program	Date	8/19/2021			
From (usft)	To (usft)	Survey (Wellbore)	Tool Name	Description	
0.0	19,419.7	Anderson Fed Com 552H - Prelim 1 (Ande	MWD+HRGM	OWSG MWD + HRGM	

Summary						
Site Name	Reference Measured Depth (usft)	Offset Measured Depth (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Separation Factor	Warning
Offset Well - Wellbore - Design						
Anderson Fed Com - Pad A						
Anderson 35 (Oxy) - Anderson 35 - Anderson 35	13,409.6	11,254.5	687.6	613.8	9.318	CC, ES
Anderson 35 (Oxy) - Anderson 35 - Anderson 35	13,500.0	11,264.0	693.6	617.7	9.137	SF
Anderson Fed Com - Pad D						
Anderson Fed Com 501H - Anderson Fed Com 501H - A	5,000.0	5,002.0	99.0	72.9	3.791	CC, ES
Anderson Fed Com 501H - Anderson Fed Com 501H - A	5,100.0	5,102.0	99.8	73.4	3.783	SF
Anderson Fed Com 505H - Anderson Fed Com 505H - A	5,328.3	5,321.6	32.9	6.1	1.227	Level 3, CC
Anderson Fed Com 505H - Anderson Fed Com 505H - A	5,512.8	5,505.1	32.9	5.7	1.207	Level 3, ES, SF
Anderson Fed Com 551H - Anderson Fed Com 551H - A	5,000.0	5,002.0	66.0	39.9	2.527	CC, ES, SF
Anderson Fed Com 601H - Anderson Fed Com 601H - A	5,000.0	5,001.0	33.0	6.9	1.264	Level 3, CC, ES, SF
Anderson Fed Com 701H - Anderson Fed Com 701H - A	4,916.0	4,918.0	132.1	106.2	5.106	CC
Anderson Fed Com 701H - Anderson Fed Com 701H - A	5,000.0	5,002.0	132.1	105.9	5.055	ES, SF

Offset Design:	Anderson Fed Com - Pad A - Anderson 35 (Oxy) - Anderson 35 - Anderson 35										Offset Site Error:	0.0 usft
Survey Program:	109-MWD+HRGM										Offset Well Error:	0.0 usft
Reference	Vertical	Offset	Semi Major Axis	Offset	Highside	Offset Wellbore Centre	Distance	Rule Assigned:	Minimum	Separation	Warning	
Measured Depth (usft)	Depth (usft)	Depth (usft)	Reference (usft)	Offset (usft)	Toolface (°)	+N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Separation (usft)		
12,700.0	11,400.0	11,221.5	10,692.1	43.7	39.2	-1.29	1,997.9	480.1	987.4	926.4	61.09	16.165
12,800.0	11,400.0	11,225.7	10,692.3	45.0	39.3	-0.94	1,998.2	484.4	918.4	856.4	61.99	14.815
12,900.0	11,400.0	11,230.1	10,692.4	46.3	39.3	-0.57	1,998.4	488.7	855.5	792.3	63.21	13.534
13,000.0	11,400.0	11,234.6	10,692.5	47.6	39.3	-0.20	1,998.7	493.2	800.1	735.3	64.77	12.352
13,100.0	11,400.0	11,239.3	10,692.7	49.0	39.4	0.19	1,999.0	497.9	754.0	687.3	66.68	11.307
13,200.0	11,400.0	11,244.0	10,692.8	50.4	39.4	0.58	1,999.3	502.6	718.8	649.9	68.87	10.437
13,300.0	11,400.0	11,248.9	10,692.9	51.9	39.5	0.99	1,999.6	507.5	696.3	625.1	71.23	9.776
13,400.0	11,400.0	11,254.0	10,693.1	53.4	39.5	1.41	1,999.9	512.5	687.7	614.1	73.58	9.347
13,409.6	11,400.0	11,254.5	10,693.1	53.5	39.5	1.45	2,000.0	513.0	687.6	613.8	73.80	9.318 CC, ES
13,500.0	11,400.0	11,264.0	10,693.3	54.9	39.6	2.24	2,000.6	522.5	693.6	617.7	75.91	9.137 SF
13,600.0	11,400.0	11,264.7	10,693.3	56.5	39.6	2.30	2,000.6	523.2	713.4	635.9	77.54	9.201
13,700.0	11,400.0	11,271.4	10,693.5	58.1	39.7	2.86	2,001.1	529.9	746.3	667.3	78.96	9.452
13,800.0	11,400.0	11,278.0	10,693.6	59.7	39.8	3.41	2,001.5	536.5	790.4	710.5	79.93	9.888
13,900.0	11,400.0	11,284.6	10,693.8	61.4	39.8	3.95	2,001.9	543.0	844.1	763.6	80.53	10.481
14,000.0	11,400.0	11,291.1	10,694.0	63.0	39.9	4.49	2,002.4	549.5	905.6	824.8	80.84	11.202
14,100.0	11,400.0	11,297.5	10,694.2	64.7	40.0	5.03	2,002.8	556.0	973.5	892.6	80.95	12.026

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



Anticollision Report

Company:	Advance Energy Partners	Local Co-ordinate Reference:	Well Anderson Fed Com 552H
Project:	Hat Mesa	TVD Reference:	WELL @ 3722.5usft (Original Well Elev)
Reference Site:	Anderson Fed Com - Pad D	MD Reference:	WELL @ 3722.5usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	Anderson Fed Com 552H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.79 sigma
Reference Wellbore	Anderson Fed Com 552H	Database:	EDM 5000.16 Single User Db
Reference Design:	Anderson Fed Com 552H - Prelim 1	Offset TVD Reference:	Offset Datum



Anticollision Report

Company:	Advance Energy Partners	Local Co-ordinate Reference:	Well Anderson Fed Com 552H
Project:	Hat Mesa	TVD Reference:	WELL @ 3722.5usft (Original Well Elev)
Reference Site:	Anderson Fed Com - Pad D	MD Reference:	WELL @ 3722.5usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	Anderson Fed Com 552H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.79 sigma
Reference Wellbore	Anderson Fed Com 552H	Database:	EDM 5000.16 Single User Db
Reference Design:	Anderson Fed Com 552H - Prelim 1	Offset TVD Reference:	Offset Datum

Offset Design: Anderson Fed Com - Pad D - Anderson Fed Com 501H - Anderson Fed Com 501H - Anderson Fed Com 501H - Prelim 1												Offset Site Error:	0.0 usft
Survey Program: 0-MWD+HRGM												Offset Well Error:	0.0 usft
Reference	Offset	Semi Major Axis		Distance		Rule Assigned:		Warning					
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	+N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	
0.0	0.0	2.0	2.0	0.0	0.0	-90.58	-1.0	-99.0	99.0				
100.0	100.0	102.0	102.0	0.5	0.6	-90.58	-1.0	-99.0	99.0	98.0	1.08	91.377	
200.0	200.0	202.0	202.0	1.7	1.7	-90.58	-1.0	-99.0	99.0	95.6	3.44	28.813	
300.0	300.0	302.0	302.0	2.4	2.4	-90.58	-1.0	-99.0	99.0	94.2	4.83	20.491	
400.0	400.0	402.0	402.0	3.0	3.0	-90.58	-1.0	-99.0	99.0	93.1	5.92	16.739	
500.0	500.0	502.0	502.0	3.4	3.4	-90.58	-1.0	-99.0	99.0	92.2	6.84	14.484	
600.0	600.0	602.0	602.0	3.8	3.8	-90.58	-1.0	-99.0	99.0	91.4	7.66	12.937	
700.0	700.0	702.0	702.0	4.2	4.2	-90.58	-1.0	-99.0	99.0	90.6	8.40	11.790	
800.0	800.0	802.0	802.0	4.5	4.5	-90.58	-1.0	-99.0	99.0	90.0	9.09	10.896	
900.0	900.0	902.0	902.0	4.9	4.9	-90.58	-1.0	-99.0	99.0	89.3	9.74	10.173	
1,000.0	1,000.0	1,002.0	1,002.0	5.2	5.2	-90.58	-1.0	-99.0	99.0	88.7	10.35	9.572	
1,100.0	1,100.0	1,102.0	1,102.0	5.5	5.5	-90.58	-1.0	-99.0	99.0	88.1	10.93	9.063	
1,200.0	1,200.0	1,202.0	1,202.0	5.7	5.7	-90.58	-1.0	-99.0	99.0	87.6	11.49	8.624	
1,300.0	1,300.0	1,302.0	1,302.0	6.0	6.0	-90.58	-1.0	-99.0	99.0	87.0	12.02	8.240	
1,400.0	1,400.0	1,402.0	1,402.0	6.3	6.3	-90.58	-1.0	-99.0	99.0	86.5	12.54	7.901	
1,500.0	1,500.0	1,502.0	1,502.0	6.5	6.5	-90.58	-1.0	-99.0	99.0	86.0	13.04	7.598	
1,600.0	1,600.0	1,602.0	1,602.0	6.8	6.8	-90.58	-1.0	-99.0	99.0	85.5	13.52	7.325	
1,700.0	1,700.0	1,702.0	1,702.0	7.0	7.0	-90.58	-1.0	-99.0	99.0	85.1	13.99	7.078	
1,800.0	1,800.0	1,802.0	1,802.0	7.2	7.2	-90.58	-1.0	-99.0	99.0	84.6	14.45	6.852	
1,900.0	1,900.0	1,902.0	1,902.0	7.4	7.5	-90.58	-1.0	-99.0	99.0	84.1	14.90	6.646	
2,000.0	2,000.0	2,002.0	2,002.0	7.7	7.7	-90.58	-1.0	-99.0	99.0	83.7	15.34	6.455	
2,100.0	2,100.0	2,102.0	2,102.0	7.9	7.9	-90.58	-1.0	-99.0	99.0	83.3	15.77	6.279	
2,200.0	2,200.0	2,202.0	2,202.0	8.1	8.1	-90.58	-1.0	-99.0	99.0	82.9	16.20	6.115	
2,300.0	2,300.0	2,302.0	2,302.0	8.3	8.3	-90.58	-1.0	-99.0	99.0	82.4	16.61	5.962	
2,400.0	2,400.0	2,402.0	2,402.0	8.5	8.5	-90.58	-1.0	-99.0	99.0	82.0	17.02	5.820	
2,500.0	2,500.0	2,502.0	2,502.0	8.7	8.7	-90.58	-1.0	-99.0	99.0	81.6	17.42	5.686	
2,600.0	2,600.0	2,602.0	2,602.0	8.9	8.9	-90.58	-1.0	-99.0	99.0	81.2	17.82	5.559	
2,700.0	2,700.0	2,702.0	2,702.0	9.1	9.1	-90.58	-1.0	-99.0	99.0	80.8	18.21	5.440	
2,800.0	2,800.0	2,802.0	2,802.0	9.3	9.3	-90.58	-1.0	-99.0	99.0	80.5	18.59	5.328	
2,900.0	2,900.0	2,902.0	2,902.0	9.5	9.5	-90.58	-1.0	-99.0	99.0	80.1	18.97	5.222	
3,000.0	3,000.0	3,002.0	3,002.0	9.7	9.7	-90.58	-1.0	-99.0	99.0	79.7	19.34	5.121	
3,100.0	3,100.0	3,102.0	3,102.0	9.9	9.9	-90.58	-1.0	-99.0	99.0	79.3	19.71	5.025	
3,200.0	3,200.0	3,202.0	3,202.0	10.0	10.0	-90.58	-1.0	-99.0	99.0	79.0	20.08	4.933	
3,300.0	3,300.0	3,302.0	3,302.0	10.2	10.2	-90.58	-1.0	-99.0	99.0	78.6	20.44	4.846	
3,400.0	3,400.0	3,402.0	3,402.0	10.4	10.4	-90.58	-1.0	-99.0	99.0	78.2	20.80	4.762	
3,500.0	3,500.0	3,502.0	3,502.0	10.6	10.6	-90.58	-1.0	-99.0	99.0	77.9	21.15	4.683	
3,600.0	3,600.0	3,602.0	3,602.0	10.7	10.8	-90.58	-1.0	-99.0	99.0	77.5	21.50	4.606	
3,700.0	3,700.0	3,702.0	3,702.0	10.9	10.9	-90.58	-1.0	-99.0	99.0	77.2	21.85	4.533	
3,800.0	3,800.0	3,802.0	3,802.0	11.1	11.1	-90.58	-1.0	-99.0	99.0	76.9	22.19	4.463	
3,900.0	3,900.0	3,902.0	3,902.0	11.3	11.3	-90.58	-1.0	-99.0	99.0	76.5	22.54	4.395	
4,000.0	4,000.0	4,002.0	4,002.0	11.4	11.4	-90.58	-1.0	-99.0	99.0	76.2	22.87	4.330	
4,100.0	4,100.0	4,102.0	4,102.0	11.6	11.6	-90.58	-1.0	-99.0	99.0	75.8	23.21	4.267	
4,200.0	4,200.0	4,202.0	4,202.0	11.8	11.8	-90.58	-1.0	-99.0	99.0	75.5	23.54	4.207	
4,300.0	4,300.0	4,302.0	4,302.0	11.9	11.9	-90.58	-1.0	-99.0	99.0	75.2	23.87	4.149	
4,400.0	4,400.0	4,402.0	4,402.0	12.1	12.1	-90.58	-1.0	-99.0	99.0	74.8	24.20	4.092	
4,500.0	4,500.0	4,502.0	4,502.0	12.3	12.3	-90.58	-1.0	-99.0	99.0	74.5	24.53	4.038	
4,600.0	4,600.0	4,602.0	4,602.0	12.4	12.4	-90.58	-1.0	-99.0	99.0	74.2	24.85	3.985	
4,700.0	4,700.0	4,702.0	4,702.0	12.6	12.6	-90.58	-1.0	-99.0	99.0	73.9	25.17	3.934	
4,800.0	4,800.0	4,802.0	4,802.0	12.7	12.7	-90.58	-1.0	-99.0	99.0	73.6	25.49	3.885	
4,900.0	4,900.0	4,902.0	4,902.0	12.9	12.9	-90.58	-1.0	-99.0	99.0	73.2	25.81	3.837	
5,000.0	5,000.0	5,002.0	5,002.0	13.1	13.1	-90.58	-1.0	-99.0	99.0	72.9	26.13	3.791 CC, ES	
5,100.0	5,100.0	5,102.0	5,102.0	13.2	13.2	155.29	-1.0	-99.0	99.8	73.4	26.39	3.783 SF	

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



Anticollision Report

Company:	Advance Energy Partners	Local Co-ordinate Reference:	Well Anderson Fed Com 552H
Project:	Hat Mesa	TVD Reference:	WELL @ 3722.5usft (Original Well Elev)
Reference Site:	Anderson Fed Com - Pad D	MD Reference:	WELL @ 3722.5usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	Anderson Fed Com 552H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.79 sigma
Reference Wellbore	Anderson Fed Com 552H	Database:	EDM 5000.16 Single User Db
Reference Design:	Anderson Fed Com 552H - Prelim 1	Offset TVD Reference:	Offset Datum

Offset Design: Anderson Fed Com - Pad D - Anderson Fed Com 501H - Anderson Fed Com 501H - Anderson Fed Com 501H - Prelim 1													Offset Site Error: 0.0 usft
Survey Program: 0-MWD+HRGM													Offset Well Error: 0.0 usft
Reference	Offset	Rule Assigned:											Warning
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference	Offset	Highside Toolface (°)	Offset Wellbore Centre		Distance		Minimum Separation (usft)	Separation Factor	
				(usft)	(usft)		+N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)			
5,200.0	5,200.0	5,201.9	5,201.9	13.3	13.4	155.89	-1.0	-99.0	102.2	75.6	26.64	3.837	
5,300.0	5,299.9	5,300.0	5,300.0	13.4	13.5	156.53	-1.5	-99.7	106.9	80.1	26.84	3.983	
5,400.0	5,399.7	5,398.6	5,398.5	13.5	13.6	156.92	-3.1	-101.8	114.6	87.5	27.05	4.236	
5,500.0	5,499.4	5,496.4	5,496.3	13.7	13.7	157.06	-5.6	-105.2	125.2	97.9	27.28	4.589	
5,512.8	5,512.1	5,508.9	5,508.7	13.7	13.7	157.07	-6.0	-105.7	126.8	99.5	27.30	4.643	
5,600.0	5,599.0	5,593.8	5,593.5	13.8	13.8	156.95	-9.1	-109.9	138.1	110.6	27.50	5.022	
5,700.0	5,698.6	5,691.7	5,691.1	14.0	13.9	156.52	-13.5	-115.8	152.3	124.5	27.73	5.491	
5,800.0	5,798.2	5,790.7	5,789.8	14.2	14.0	156.09	-18.2	-122.0	166.7	138.6	28.04	5.943	
5,900.0	5,897.8	5,889.6	5,888.4	14.4	14.2	155.73	-22.8	-128.3	181.0	152.7	28.39	6.377	
6,000.0	5,997.4	5,988.6	5,987.1	14.7	14.4	155.43	-27.4	-134.5	195.4	166.7	28.77	6.794	
6,100.0	6,097.0	6,087.5	6,085.7	15.0	14.6	155.16	-32.1	-140.7	209.8	180.7	29.17	7.194	
6,200.0	6,196.6	6,186.5	6,184.4	15.2	14.8	154.93	-36.7	-146.9	224.2	194.6	29.59	7.577	
6,300.0	6,296.2	6,285.4	6,283.0	15.5	15.0	154.73	-41.4	-153.1	238.6	208.6	30.04	7.943	
6,400.0	6,395.8	6,384.4	6,381.7	15.8	15.3	154.55	-46.0	-159.4	253.1	222.5	30.52	8.292	
6,500.0	6,495.4	6,483.3	6,480.3	16.1	15.6	154.39	-50.7	-165.6	267.5	236.5	31.01	8.625	
6,600.0	6,595.0	6,582.3	6,579.0	16.5	15.8	154.25	-55.3	-171.8	281.9	250.3	31.53	8.941	
6,700.0	6,694.6	6,681.2	6,677.6	16.8	16.1	154.12	-59.9	-178.0	296.3	264.2	32.06	9.242	
6,800.0	6,794.2	6,780.2	6,776.3	17.2	16.4	154.00	-64.6	-184.2	310.7	278.1	32.61	9.527	
6,900.0	6,893.8	6,879.2	6,874.9	17.5	16.7	153.89	-69.2	-190.5	325.1	291.9	33.18	9.798	
7,000.0	6,993.4	6,978.1	6,973.6	17.9	17.1	153.79	-73.9	-196.7	339.5	305.8	33.77	10.055	
7,100.0	7,093.0	7,077.1	7,072.2	18.3	17.4	153.70	-78.5	-202.9	354.0	319.6	34.37	10.298	
7,200.0	7,192.6	7,176.0	7,170.8	18.7	17.7	153.62	-83.2	-209.1	368.4	333.4	34.99	10.528	
7,300.0	7,292.2	7,275.0	7,269.5	19.1	18.1	153.54	-87.8	-215.4	382.8	347.2	35.62	10.746	
7,400.0	7,391.8	7,373.9	7,368.1	19.5	18.4	153.47	-92.4	-221.6	397.2	360.9	36.27	10.953	
7,500.0	7,491.4	7,472.9	7,466.8	19.9	18.8	153.41	-97.1	-227.8	411.6	374.7	36.92	11.148	
7,600.0	7,591.0	7,571.8	7,565.4	20.3	19.2	153.35	-101.7	-234.0	426.0	388.5	37.59	11.333	
7,700.0	7,690.6	7,670.8	7,664.1	20.7	19.6	153.29	-106.4	-240.2	440.5	402.2	38.28	11.507	
7,800.0	7,790.2	7,769.7	7,762.7	21.1	20.0	153.23	-111.0	-246.5	454.9	415.9	38.97	11.673	
7,900.0	7,889.8	7,868.7	7,861.4	21.6	20.4	153.18	-115.6	-252.7	469.3	429.6	39.67	11.829	
8,000.0	7,989.4	7,967.6	7,960.0	22.0	20.8	153.14	-120.3	-258.9	483.7	443.3	40.39	11.977	
8,100.0	8,089.0	8,066.6	8,058.7	22.5	21.2	153.09	-124.9	-265.1	498.2	457.0	41.11	12.118	
8,200.0	8,188.6	8,165.6	8,157.3	22.9	21.6	153.05	-129.6	-271.3	512.6	470.7	41.84	12.251	
8,300.0	8,288.2	8,264.5	8,256.0	23.4	22.0	153.01	-134.2	-277.6	527.0	484.4	42.58	12.376	
8,400.0	8,387.8	8,363.5	8,354.6	23.8	22.4	152.97	-138.9	-283.8	541.4	498.1	43.33	12.496	
8,500.0	8,487.4	8,462.4	8,453.3	24.3	22.8	152.93	-143.5	-290.0	555.9	511.8	44.09	12.609	
8,600.0	8,587.0	8,561.4	8,551.9	24.7	23.3	152.90	-148.1	-296.2	570.3	525.4	44.85	12.716	
8,700.0	8,686.6	8,660.3	8,650.6	25.2	23.7	152.87	-152.8	-302.4	584.7	539.1	45.62	12.817	
8,800.0	8,786.2	8,759.3	8,749.2	25.7	24.1	152.84	-157.4	-308.7	599.1	552.7	46.39	12.914	
8,900.0	8,885.8	8,858.2	8,847.9	26.1	24.6	152.81	-162.1	-314.9	613.5	566.4	47.18	13.005	
9,000.0	8,985.4	8,957.2	8,946.5	26.6	25.0	152.78	-166.7	-321.1	628.0	580.0	47.97	13.092	
9,100.0	9,085.0	9,056.1	9,045.2	27.1	25.4	152.75	-171.4	-327.3	642.4	593.6	48.76	13.175	
9,200.0	9,184.6	9,155.1	9,143.8	27.6	25.9	152.73	-176.0	-333.6	656.8	607.3	49.56	13.253	
9,300.0	9,284.2	9,254.0	9,242.5	28.1	26.3	152.70	-180.6	-339.8	671.2	620.9	50.36	13.328	
9,400.0	9,383.8	9,353.0	9,341.1	28.5	26.8	152.68	-185.3	-346.0	685.7	634.5	51.17	13.399	
9,500.0	9,483.4	9,452.0	9,439.8	29.0	27.2	152.66	-189.9	-352.2	700.1	648.1	51.97	13.470	
9,600.0	9,583.0	9,551.1	9,548.6	29.5	27.7	152.67	-194.5	-358.4	713.9	661.1	52.81	13.519	
9,700.0	9,682.6	9,671.9	9,659.3	30.0	28.2	152.78	-198.0	-363.0	726.1	672.5	53.64	13.537	
9,800.0	9,782.2	9,783.0	9,770.4	30.5	28.6	152.98	-200.1	-365.9	736.7	682.3	54.44	13.533	
9,900.0	9,881.8	9,894.5	9,881.8	31.0	28.9	153.26	-201.0	-367.0	745.8	690.6	55.17	13.519	
10,000.0	9,981.4	9,996.0	9,983.4	31.5	29.0	153.57	-201.0	-367.0	753.8	698.1	55.67	13.540	
10,100.0	10,081.0	10,088.6	10,075.6	32.0	28.9	154.33	-194.6	-367.6	762.2	706.1	56.13	13.579	
10,157.2	10,137.9	10,138.3	10,124.1	32.3	28.8	155.27	-184.0	-368.4	767.7	711.3	56.37	13.619	

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



Anticollision Report

Company:	Advance Energy Partners	Local Co-ordinate Reference:	Well Anderson Fed Com 552H
Project:	Hat Mesa	TVD Reference:	WELL @ 3722.5usft (Original Well Elev)
Reference Site:	Anderson Fed Com - Pad D	MD Reference:	WELL @ 3722.5usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	Anderson Fed Com 552H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.79 sigma
Reference Wellbore	Anderson Fed Com 552H	Database:	EDM 5000.16 Single User Db
Reference Design:	Anderson Fed Com 552H - Prelim 1	Offset TVD Reference:	Offset Datum

Offset Design: Anderson Fed Com - Pad D - Anderson Fed Com 501H - Anderson Fed Com 501H - Anderson Fed Com 501H - Prelim 1													Offset Site Error: 0.0 usft
Survey Program: 0-MWD+HRGM													Offset Well Error: 0.0 usft
Reference		Offset		Semi Major Axis		Highside Toolface (°)	Offset Wellbore Centre		Distance		Rule Assigned:		Warning
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)		+N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	
10,200.0	10,180.6	10,175.0	10,159.1	32.5	28.7	156.21	-172.9	-369.3	772.1	715.6	56.53	13.658	
10,300.0	10,280.3	10,250.0	10,227.4	32.9	28.5	158.67	-142.2	-371.7	784.0	727.0	56.92	13.774	
10,400.0	10,380.1	10,311.6	10,279.3	33.4	28.4	161.18	-109.3	-374.4	799.1	741.8	57.28	13.951	
10,500.0	10,480.1	10,364.8	10,320.4	33.8	28.3	163.67	-75.7	-377.0	818.9	761.3	57.61	14.214	
10,600.0	10,580.0	10,409.0	10,351.6	34.2	28.2	165.92	-44.4	-379.5	844.3	786.4	57.93	14.576	
10,670.0	10,650.0	10,435.6	10,368.8	34.3	28.2	-78.31	-24.3	-381.1	865.7	807.7	58.06	14.912	
10,700.0	10,680.0	10,450.0	10,377.7	34.3	28.2	-77.55	-13.0	-382.0	875.9	817.8	58.07	15.083	
10,800.0	10,780.0	10,475.0	10,392.3	34.3	28.2	-76.21	7.3	-383.7	914.7	856.5	58.24	15.706	
10,900.0	10,880.0	10,500.0	10,405.8	34.4	28.2	-74.84	28.2	-385.3	960.7	902.2	58.47	16.430	
10,942.5	10,922.5	10,512.6	10,412.2	34.4	28.2	-74.14	39.0	-386.2	982.3	923.7	58.58	16.768	
10,950.0	10,930.0	10,514.3	10,413.0	34.4	28.2	-80.69	40.5	-386.3	986.2	927.6	58.60	16.830	
10,975.0	10,955.0	10,525.0	10,418.2	34.4	28.2	-78.28	49.9	-387.1	999.4	940.8	58.66	17.039	

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



Anticollision Report

Company:	Advance Energy Partners	Local Co-ordinate Reference:	Well Anderson Fed Com 552H
Project:	Hat Mesa	TVD Reference:	WELL @ 3722.5usft (Original Well Elev)
Reference Site:	Anderson Fed Com - Pad D	MD Reference:	WELL @ 3722.5usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	Anderson Fed Com 552H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.79 sigma
Reference Wellbore	Anderson Fed Com 552H	Database:	EDM 5000.16 Single User Db
Reference Design:	Anderson Fed Com 552H - Prelim 1	Offset TVD Reference:	Offset Datum

Offset Design: Anderson Fed Com - Pad D - Anderson Fed Com 505H - Anderson Fed Com 505H - Anderson Fed Com 505H - Prelim 1											Offset Site Error:	0.0 usft
Survey Program: 0-MWD+HRGM											Offset Well Error:	0.0 usft
Reference	Offset	Semi Major Axis		Offset Wellbore Centre		Distance		Rule Assigned:		Warning		
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	+N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor
0.0	0.0	0.0	0.0	0.0	0.0	89.00	0.6	33.0	33.4			
100.0	100.0	95.0	95.0	0.5	0.5	89.00	0.6	33.0	33.0	32.0	1.03	31.938
200.0	200.0	195.0	195.0	1.7	1.7	89.00	0.6	33.0	33.0	29.7	3.36	9.814
300.0	300.0	295.0	295.0	2.4	2.4	89.00	0.6	33.0	33.0	28.2	4.79	6.896
400.0	400.0	395.0	395.0	3.0	2.9	89.00	0.6	33.0	33.0	27.1	5.88	5.614
500.0	500.0	495.0	495.0	3.4	3.4	89.00	0.6	33.0	33.0	26.2	6.81	4.850
600.0	600.0	595.0	595.0	3.8	3.8	89.00	0.6	33.0	33.0	25.4	7.63	4.328
700.0	700.0	695.0	695.0	4.2	4.2	89.00	0.6	33.0	33.0	24.6	8.38	3.942
800.0	800.0	795.0	795.0	4.5	4.5	89.00	0.6	33.0	33.0	24.0	9.07	3.642
900.0	900.0	895.0	895.0	4.9	4.8	89.00	0.6	33.0	33.0	23.3	9.71	3.399
1,000.0	1,000.0	995.0	995.0	5.2	5.2	89.00	0.6	33.0	33.0	22.7	10.33	3.198
1,100.0	1,100.0	1,095.0	1,095.0	5.5	5.4	89.00	0.6	33.0	33.0	22.1	10.91	3.027
1,200.0	1,200.0	1,195.0	1,195.0	5.7	5.7	89.00	0.6	33.0	33.0	21.6	11.47	2.880
1,300.0	1,300.0	1,295.0	1,295.0	6.0	6.0	89.00	0.6	33.0	33.0	21.0	12.00	2.751
1,400.0	1,400.0	1,395.0	1,395.0	6.3	6.3	89.00	0.6	33.0	33.0	20.5	12.52	2.637
1,500.0	1,500.0	1,495.0	1,495.0	6.5	6.5	89.00	0.6	33.0	33.0	20.0	13.02	2.536
1,600.0	1,600.0	1,595.0	1,595.0	6.8	6.7	89.00	0.6	33.0	33.0	19.5	13.50	2.445
1,700.0	1,700.0	1,695.0	1,695.0	7.0	7.0	89.00	0.6	33.0	33.0	19.0	13.98	2.362
1,800.0	1,800.0	1,795.0	1,795.0	7.2	7.2	89.00	0.6	33.0	33.0	18.6	14.44	2.287
1,900.0	1,900.0	1,895.0	1,895.0	7.4	7.4	89.00	0.6	33.0	33.0	18.1	14.89	2.218
2,000.0	2,000.0	1,995.0	1,995.0	7.7	7.7	89.00	0.6	33.0	33.0	17.7	15.33	2.154
2,100.0	2,100.0	2,095.0	2,095.0	7.9	7.9	89.00	0.6	33.0	33.0	17.3	15.76	2.095
2,200.0	2,200.0	2,195.0	2,195.0	8.1	8.1	89.00	0.6	33.0	33.0	16.8	16.18	2.040
2,300.0	2,300.0	2,295.0	2,295.0	8.3	8.3	89.00	0.6	33.0	33.0	16.4	16.60	1.989
2,400.0	2,400.0	2,395.0	2,395.0	8.5	8.5	89.00	0.6	33.0	33.0	16.0	17.01	1.942
2,500.0	2,500.0	2,495.0	2,495.0	8.7	8.7	89.00	0.6	33.0	33.0	15.6	17.41	1.897
2,600.0	2,600.0	2,595.0	2,595.0	8.9	8.9	89.00	0.6	33.0	33.0	15.2	17.80	1.855
2,700.0	2,700.0	2,695.0	2,695.0	9.1	9.1	89.00	0.6	33.0	33.0	14.8	18.19	1.815
2,800.0	2,800.0	2,795.0	2,795.0	9.3	9.3	89.00	0.6	33.0	33.0	14.4	18.58	1.777
2,900.0	2,900.0	2,895.0	2,895.0	9.5	9.5	89.00	0.6	33.0	33.0	14.1	18.96	1.742
3,000.0	3,000.0	2,995.0	2,995.0	9.7	9.7	89.00	0.6	33.0	33.0	13.7	19.33	1.708
3,100.0	3,100.0	3,095.0	3,095.0	9.9	9.8	89.00	0.6	33.0	33.0	13.3	19.70	1.676
3,200.0	3,200.0	3,195.0	3,195.0	10.0	10.0	89.00	0.6	33.0	33.0	13.0	20.07	1.645
3,300.0	3,300.0	3,295.0	3,295.0	10.2	10.2	89.00	0.6	33.0	33.0	12.6	20.43	1.616
3,400.0	3,400.0	3,395.0	3,395.0	10.4	10.4	89.00	0.6	33.0	33.0	12.2	20.79	1.589
3,500.0	3,500.0	3,495.0	3,495.0	10.6	10.6	89.00	0.6	33.0	33.0	11.9	21.14	1.562
3,600.0	3,600.0	3,595.0	3,595.0	10.7	10.7	89.00	0.6	33.0	33.0	11.5	21.49	1.536
3,700.0	3,700.0	3,695.0	3,695.0	10.9	10.9	89.00	0.6	33.0	33.0	11.2	21.84	1.512
3,800.0	3,800.0	3,795.0	3,795.0	11.1	11.1	89.00	0.6	33.0	33.0	10.8	22.18	1.488 Level 3
3,900.0	3,900.0	3,895.0	3,895.0	11.3	11.3	89.00	0.6	33.0	33.0	10.5	22.52	1.466 Level 3
4,000.0	4,000.0	3,995.0	3,995.0	11.4	11.4	89.00	0.6	33.0	33.0	10.2	22.86	1.444 Level 3
4,100.0	4,100.0	4,095.0	4,095.0	11.6	11.6	89.00	0.6	33.0	33.0	9.8	23.20	1.423 Level 3
4,200.0	4,200.0	4,195.0	4,195.0	11.8	11.8	89.00	0.6	33.0	33.0	9.5	23.53	1.403 Level 3
4,300.0	4,300.0	4,295.0	4,295.0	11.9	11.9	89.00	0.6	33.0	33.0	9.2	23.86	1.384 Level 3
4,400.0	4,400.0	4,395.0	4,395.0	12.1	12.1	89.00	0.6	33.0	33.0	8.8	24.19	1.365 Level 3
4,500.0	4,500.0	4,495.0	4,495.0	12.3	12.3	89.00	0.6	33.0	33.0	8.5	24.52	1.347 Level 3
4,600.0	4,600.0	4,595.0	4,595.0	12.4	12.4	89.00	0.6	33.0	33.0	8.2	24.84	1.329 Level 3
4,700.0	4,700.0	4,695.0	4,695.0	12.6	12.6	89.00	0.6	33.0	33.0	7.9	25.16	1.312 Level 3
4,800.0	4,800.0	4,795.0	4,795.0	12.7	12.7	89.00	0.6	33.0	33.0	7.5	25.48	1.296 Level 3
4,900.0	4,900.0	4,895.0	4,895.0	12.9	12.9	89.00	0.6	33.0	33.0	7.2	25.80	1.280 Level 3
5,000.0	5,000.0	4,995.0	4,995.0	13.1	13.1	89.00	0.6	33.0	33.0	6.9	26.12	1.264 Level 3
5,100.0	5,100.0	5,094.5	5,094.5	13.2	13.2	-25.46	0.3	33.7	33.0	6.6	26.33	1.252 Level 3

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



Anticollision Report

Company:	Advance Energy Partners	Local Co-ordinate Reference:	Well Anderson Fed Com 552H
Project:	Hat Mesa	TVD Reference:	WELL @ 3722.5usft (Original Well Elev)
Reference Site:	Anderson Fed Com - Pad D	MD Reference:	WELL @ 3722.5usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	Anderson Fed Com 552H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.79 sigma
Reference Wellbore	Anderson Fed Com 552H	Database:	EDM 5000.16 Single User Db
Reference Design:	Anderson Fed Com 552H - Prelim 1	Offset TVD Reference:	Offset Datum

Offset Design: Anderson Fed Com - Pad D - Anderson Fed Com 505H - Anderson Fed Com 505H - Anderson Fed Com 505H - Prelim 1													Offset Site Error: 0.0 usft
Survey Program: 0-MWD+HRGM													Offset Well Error: 0.0 usft
Reference	Offset	Rule Assigned:											
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference	Offset	Highside Toolface (°)	Offset Wellbore Centre		Distance		Minimum Separation (usft)	Separation Factor	Warning
							+N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)			
5,200.0	5,200.0	5,194.0	5,193.9	13.3	13.3	-25.71	-0.6	36.1	32.9	6.4	26.52	1.241 Level 3	
5,300.0	5,299.9	5,293.4	5,293.3	13.4	13.4	-26.09	-2.2	40.0	32.9	6.2	26.73	1.230 Level 3	
5,328.3	5,328.1	5,321.6	5,321.5	13.4	13.4	-26.22	-2.8	41.4	32.9	6.1	26.80	1.227 Level 3, CC	
5,400.0	5,399.7	5,392.9	5,392.6	13.5	13.5	-26.60	-4.4	45.5	32.9	5.9	26.97	1.219 Level 3	
5,500.0	5,499.4	5,492.4	5,491.8	13.7	13.7	-27.23	-7.3	52.6	32.9	5.7	27.25	1.208 Level 3	
5,512.8	5,512.1	5,505.1	5,504.5	13.7	13.7	-27.32	-7.7	53.7	32.9	5.7	27.27	1.207 Level 3, ES, SF	
5,600.0	5,599.0	5,591.9	5,590.8	13.8	13.8	-27.46	-10.8	61.4	33.6	6.1	27.52	1.220 Level 3	
5,700.0	5,698.6	5,691.3	5,689.6	14.0	14.0	-26.52	-14.9	71.7	35.8	7.9	27.87	1.284 Level 3	
5,800.0	5,798.2	5,790.8	5,788.3	14.2	14.2	-24.75	-19.6	83.5	39.5	11.3	28.23	1.401 Level 3	
5,900.0	5,897.8	5,890.7	5,887.4	14.4	14.5	-23.10	-24.5	95.8	43.7	15.0	28.67	1.524	
6,000.0	5,997.4	5,990.6	5,986.4	14.7	14.7	-21.73	-29.4	108.0	47.9	18.7	29.18	1.641	
6,100.0	6,097.0	6,090.5	6,085.4	15.0	15.0	-20.59	-34.3	120.3	52.1	22.4	29.72	1.752	
6,200.0	6,196.6	6,190.5	6,184.5	15.2	15.3	-19.61	-39.2	132.5	56.3	26.0	30.29	1.859	
6,300.0	6,296.2	6,290.4	6,283.5	15.5	15.6	-18.77	-44.1	144.8	60.5	29.6	30.90	1.959	
6,400.0	6,395.8	6,390.3	6,382.5	15.8	16.0	-18.05	-49.0	157.0	64.8	33.2	31.53	2.054	
6,500.0	6,495.4	6,490.2	6,481.6	16.1	16.3	-17.41	-53.9	169.3	69.0	36.8	32.20	2.144	
6,600.0	6,595.0	6,590.1	6,580.6	16.5	16.7	-16.84	-58.8	181.5	73.3	40.4	32.89	2.229	
6,700.0	6,694.6	6,690.0	6,679.6	16.8	17.1	-16.34	-63.7	193.8	77.6	44.0	33.60	2.308	
6,800.0	6,794.2	6,789.9	6,778.6	17.2	17.5	-15.89	-68.6	206.0	81.8	47.5	34.34	2.383	
6,900.0	6,893.8	6,889.8	6,877.7	17.5	17.9	-15.48	-73.5	218.3	86.1	51.0	35.11	2.453	
7,000.0	6,993.4	6,989.7	6,976.7	17.9	18.3	-15.12	-78.4	230.5	90.4	54.5	35.89	2.519	
7,100.0	7,093.0	7,089.6	7,075.7	18.3	18.7	-14.78	-83.3	242.8	94.7	58.0	36.69	2.581	
7,200.0	7,192.6	7,189.5	7,174.8	18.7	19.1	-14.48	-88.2	255.0	99.0	61.5	37.51	2.639	
7,300.0	7,292.2	7,289.4	7,273.8	19.1	19.6	-14.20	-93.1	267.3	103.3	64.9	38.34	2.693	
7,400.0	7,391.8	7,389.3	7,372.8	19.5	20.0	-13.94	-98.0	279.5	107.6	68.4	39.19	2.744	
7,500.0	7,491.4	7,489.2	7,471.9	19.9	20.5	-13.71	-102.9	291.8	111.9	71.8	40.06	2.792	
7,600.0	7,591.0	7,589.1	7,570.9	20.3	20.9	-13.49	-107.8	304.0	116.2	75.2	40.94	2.837	
7,700.0	7,690.6	7,689.1	7,669.9	20.7	21.4	-13.28	-112.7	316.3	120.5	78.6	41.83	2.880	
7,800.0	7,790.2	7,789.0	7,769.0	21.1	21.9	-13.09	-117.6	328.5	124.8	82.0	42.73	2.919	
7,900.0	7,889.8	7,888.9	7,868.0	21.6	22.4	-12.91	-122.5	340.8	129.1	85.4	43.65	2.957	
8,000.0	7,989.4	7,988.8	7,967.0	22.0	22.9	-12.75	-127.4	353.0	133.4	88.8	44.58	2.992	
8,100.0	8,089.0	8,088.7	8,066.1	22.5	23.4	-12.59	-132.3	365.3	137.7	92.2	45.51	3.025	
8,200.0	8,188.6	8,188.6	8,165.1	22.9	23.9	-12.45	-137.2	377.5	142.0	95.5	46.46	3.056	
8,300.0	8,288.2	8,288.5	8,264.1	23.4	24.4	-12.31	-142.1	389.8	146.3	98.9	47.41	3.085	
8,400.0	8,387.8	8,388.4	8,363.2	23.8	24.9	-12.18	-147.0	402.0	150.6	102.2	48.37	3.113	
8,500.0	8,487.4	8,488.3	8,462.2	24.3	25.4	-12.06	-151.9	414.3	154.9	105.6	49.34	3.139	
8,600.0	8,587.0	8,588.2	8,561.2	24.7	25.9	-11.94	-156.8	426.5	159.2	108.9	50.32	3.164	
8,700.0	8,686.6	8,688.1	8,660.2	25.2	26.4	-11.83	-161.7	438.8	163.5	112.2	51.30	3.187	
8,800.0	8,786.2	8,788.0	8,759.3	25.7	26.9	-11.73	-166.6	451.0	167.8	115.5	52.29	3.209	
8,900.0	8,885.8	8,888.4	8,858.8	26.1	27.4	-11.63	-171.5	463.3	172.1	118.8	53.27	3.231	
9,000.0	8,985.4	8,991.4	8,961.1	26.6	28.0	-11.59	-176.2	474.8	175.3	121.0	54.26	3.230	
9,100.0	9,085.0	9,094.6	9,063.6	27.1	28.5	-11.65	-180.1	484.7	176.7	121.4	55.23	3.198	
9,200.0	9,184.6	9,197.7	9,166.4	27.6	29.0	-11.81	-183.3	492.8	176.3	120.1	56.17	3.138	
9,300.0	9,284.2	9,300.8	9,269.2	28.1	29.5	-12.07	-185.9	499.1	174.1	117.0	57.07	3.050	
9,400.0	9,383.8	9,403.7	9,372.1	28.5	29.9	-12.44	-187.7	503.8	170.1	112.2	57.92	2.938	
9,500.0	9,483.4	9,506.5	9,474.8	29.0	30.3	-12.94	-188.9	506.7	164.5	105.7	58.70	2.801	
9,600.0	9,583.0	9,609.1	9,577.3	29.5	30.6	-13.60	-189.4	508.0	157.0	97.6	59.37	2.645	
9,700.0	9,682.6	9,709.3	9,677.6	30.0	30.7	-14.41	-189.4	508.0	148.4	88.6	59.80	2.481	
9,800.0	9,782.2	9,811.3	9,779.5	30.5	30.6	-16.74	-186.0	508.0	139.2	79.4	59.89	2.325	
9,900.0	9,881.8	9,909.2	9,874.8	31.0	30.5	-27.30	-164.5	507.9	129.9	71.6	58.26	2.230	
9,945.0	9,926.6	9,949.2	9,912.1	31.2	30.4	-34.38	-150.2	507.8	128.3	71.7	56.61	2.267	
10,000.0	9,981.4	9,994.0	9,952.4	31.5	30.3	-43.84	-130.5	507.7	131.4	77.5	53.88	2.439	

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



Anticollision Report

Company:	Advance Energy Partners	Local Co-ordinate Reference:	Well Anderson Fed Com 552H
Project:	Hat Mesa	TVD Reference:	WELL @ 3722.5usft (Original Well Elev)
Reference Site:	Anderson Fed Com - Pad D	MD Reference:	WELL @ 3722.5usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	Anderson Fed Com 552H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.79 sigma
Reference Wellbore	Anderson Fed Com 552H	Database:	EDM 5000.16 Single User Db
Reference Design:	Anderson Fed Com 552H - Prelim 1	Offset TVD Reference:	Offset Datum

Offset Design: Anderson Fed Com - Pad D - Anderson Fed Com 505H - Anderson Fed Com 505H - Anderson Fed Com 505H - Prelim 1													Offset Site Error: 0.0 usft
Survey Program: 0-MWD+HRGM													Offset Well Error: 0.0 usft
Reference		Offset		Semi Major Axis		Highside Toolface (°)	Offset Wellbore Centre		Distance		Minimum Separation (usft)	Separation Factor	Warning
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)		+N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)			
10,100.0	10,081.0	10,064.1	10,011.1	32.0	30.2	-59.70	-92.4	507.5	156.2	106.7	49.53	3.154	
10,157.2	10,137.9	10,100.0	10,038.9	32.3	30.2	-67.24	-69.6	507.4	181.3	132.9	48.42	3.745	
10,200.0	10,180.6	10,120.7	10,054.1	32.5	30.2	-71.44	-55.6	507.3	204.4	155.8	48.54	4.210	
10,300.0	10,280.3	10,166.5	10,085.4	32.9	30.1	-79.68	-22.2	507.1	268.6	219.1	49.52	5.425	
10,400.0	10,380.1	10,200.0	10,106.3	33.4	30.1	-85.07	4.0	507.0	342.8	291.7	51.04	6.716	
10,500.0	10,480.1	10,234.7	10,125.9	33.8	30.2	-89.94	32.6	506.8	423.0	370.8	52.18	8.106	
10,600.0	10,580.0	10,260.5	10,139.1	34.2	30.2	-93.56	54.7	506.7	507.4	454.0	53.33	9.514	
10,670.0	10,650.0	10,275.0	10,146.0	34.3	30.2	18.60	67.5	506.7	568.2	514.1	54.08	10.506	
10,700.0	10,680.0	10,282.3	10,149.4	34.3	30.2	18.16	74.0	506.6	594.6	540.3	54.35	10.941	
10,800.0	10,780.0	10,300.0	10,157.0	34.3	30.2	17.18	90.0	506.5	684.0	628.7	55.28	12.373	
10,900.0	10,880.0	10,316.7	10,163.6	34.4	30.2	16.32	105.3	506.5	775.1	719.0	56.11	13.813	
10,942.5	10,922.5	10,325.0	10,166.7	34.4	30.3	15.92	113.0	506.4	814.2	757.8	56.42	14.430	
10,950.0	10,930.0	10,325.0	10,166.7	34.4	30.3	8.42	113.0	506.4	821.1	764.6	56.49	14.535	
10,975.0	10,955.0	10,325.0	10,166.7	34.4	30.3	7.51	113.0	506.4	843.9	787.1	56.73	14.875	
11,000.0	10,979.9	10,325.0	10,166.7	34.3	30.3	6.77	113.0	506.4	866.2	809.2	56.97	15.204	
11,025.0	11,004.6	10,335.7	10,170.6	34.3	30.3	5.88	123.0	506.4	887.8	830.7	57.12	15.544	
11,050.0	11,029.1	10,340.2	10,172.1	34.3	30.3	5.30	127.2	506.4	909.0	851.7	57.33	15.855	
11,075.0	11,053.3	10,350.0	10,175.3	34.3	30.3	4.71	136.5	506.3	929.7	872.2	57.51	16.166	
11,100.0	11,077.2	10,350.0	10,175.3	34.2	30.3	4.39	136.5	506.3	949.7	891.9	57.77	16.439	
11,125.0	11,100.6	10,350.0	10,175.3	34.2	30.3	4.12	136.5	506.3	969.1	911.1	58.03	16.701	
11,150.0	11,123.6	10,360.5	10,178.5	34.2	30.3	3.72	146.4	506.2	987.8	929.6	58.21	16.969	

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



Anticollision Report

Company:	Advance Energy Partners	Local Co-ordinate Reference:	Well Anderson Fed Com 552H
Project:	Hat Mesa	TVD Reference:	WELL @ 3722.5usft (Original Well Elev)
Reference Site:	Anderson Fed Com - Pad D	MD Reference:	WELL @ 3722.5usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	Anderson Fed Com 552H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.79 sigma
Reference Wellbore	Anderson Fed Com 552H	Database:	EDM 5000.16 Single User Db
Reference Design:	Anderson Fed Com 552H - Prelim 1	Offset TVD Reference:	Offset Datum

Offset Design: Anderson Fed Com - Pad D - Anderson Fed Com 551H - Anderson Fed Com 551H - Anderson Fed Com 551H - Prelim 1												Offset Site Error:	0.0 usft
Survey Program: 0-MWD+HRGM												Offset Well Error:	0.0 usft
Reference	Offset	Semi Major Axis		Distance		Rule Assigned:		Warning					
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	+N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	
0.0	0.0	2.0	2.0	0.0	0.0	-90.68	-0.8	-66.0	66.0				
100.0	100.0	102.0	102.0	0.5	0.6	-90.68	-0.8	-66.0	66.0	64.9	1.08	60.919	
200.0	200.0	202.0	202.0	1.7	1.7	-90.68	-0.8	-66.0	66.0	62.6	3.44	19.209	
300.0	300.0	302.0	302.0	2.4	2.4	-90.68	-0.8	-66.0	66.0	61.2	4.83	13.661	
400.0	400.0	402.0	402.0	3.0	3.0	-90.68	-0.8	-66.0	66.0	60.1	5.92	11.159	
500.0	500.0	502.0	502.0	3.4	3.4	-90.68	-0.8	-66.0	66.0	59.2	6.84	9.656	
600.0	600.0	602.0	602.0	3.8	3.8	-90.68	-0.8	-66.0	66.0	58.4	7.66	8.625	
700.0	700.0	702.0	702.0	4.2	4.2	-90.68	-0.8	-66.0	66.0	57.6	8.40	7.860	
800.0	800.0	802.0	802.0	4.5	4.5	-90.68	-0.8	-66.0	66.0	56.9	9.09	7.264	
900.0	900.0	902.0	902.0	4.9	4.9	-90.68	-0.8	-66.0	66.0	56.3	9.74	6.782	
1,000.0	1,000.0	1,002.0	1,002.0	5.2	5.2	-90.68	-0.8	-66.0	66.0	55.7	10.35	6.382	
1,100.0	1,100.0	1,102.0	1,102.0	5.5	5.5	-90.68	-0.8	-66.0	66.0	55.1	10.93	6.042	
1,200.0	1,200.0	1,202.0	1,202.0	5.7	5.7	-90.68	-0.8	-66.0	66.0	54.5	11.49	5.749	
1,300.0	1,300.0	1,302.0	1,302.0	6.0	6.0	-90.68	-0.8	-66.0	66.0	54.0	12.02	5.493	
1,400.0	1,400.0	1,402.0	1,402.0	6.3	6.3	-90.68	-0.8	-66.0	66.0	53.5	12.54	5.267	
1,500.0	1,500.0	1,502.0	1,502.0	6.5	6.5	-90.68	-0.8	-66.0	66.0	53.0	13.04	5.065	
1,600.0	1,600.0	1,602.0	1,602.0	6.8	6.8	-90.68	-0.8	-66.0	66.0	52.5	13.52	4.883	
1,700.0	1,700.0	1,702.0	1,702.0	7.0	7.0	-90.68	-0.8	-66.0	66.0	52.0	13.99	4.719	
1,800.0	1,800.0	1,802.0	1,802.0	7.2	7.2	-90.68	-0.8	-66.0	66.0	51.6	14.45	4.568	
1,900.0	1,900.0	1,902.0	1,902.0	7.4	7.5	-90.68	-0.8	-66.0	66.0	51.1	14.90	4.431	
2,000.0	2,000.0	2,002.0	2,002.0	7.7	7.7	-90.68	-0.8	-66.0	66.0	50.7	15.34	4.304	
2,100.0	2,100.0	2,102.0	2,102.0	7.9	7.9	-90.68	-0.8	-66.0	66.0	50.3	15.77	4.186	
2,200.0	2,200.0	2,202.0	2,202.0	8.1	8.1	-90.68	-0.8	-66.0	66.0	49.8	16.20	4.077	
2,300.0	2,300.0	2,302.0	2,302.0	8.3	8.3	-90.68	-0.8	-66.0	66.0	49.4	16.61	3.975	
2,400.0	2,400.0	2,402.0	2,402.0	8.5	8.5	-90.68	-0.8	-66.0	66.0	49.0	17.02	3.880	
2,500.0	2,500.0	2,502.0	2,502.0	8.7	8.7	-90.68	-0.8	-66.0	66.0	48.6	17.42	3.790	
2,600.0	2,600.0	2,602.0	2,602.0	8.9	8.9	-90.68	-0.8	-66.0	66.0	48.2	17.82	3.706	
2,700.0	2,700.0	2,702.0	2,702.0	9.1	9.1	-90.68	-0.8	-66.0	66.0	47.8	18.21	3.627	
2,800.0	2,800.0	2,802.0	2,802.0	9.3	9.3	-90.68	-0.8	-66.0	66.0	47.4	18.59	3.552	
2,900.0	2,900.0	2,902.0	2,902.0	9.5	9.5	-90.68	-0.8	-66.0	66.0	47.1	18.97	3.481	
3,000.0	3,000.0	3,002.0	3,002.0	9.7	9.7	-90.68	-0.8	-66.0	66.0	46.7	19.34	3.414	
3,100.0	3,100.0	3,102.0	3,102.0	9.9	9.9	-90.68	-0.8	-66.0	66.0	46.3	19.71	3.350	
3,200.0	3,200.0	3,202.0	3,202.0	10.0	10.0	-90.68	-0.8	-66.0	66.0	46.0	20.08	3.289	
3,300.0	3,300.0	3,302.0	3,302.0	10.2	10.2	-90.68	-0.8	-66.0	66.0	45.6	20.44	3.231	
3,400.0	3,400.0	3,402.0	3,402.0	10.4	10.4	-90.68	-0.8	-66.0	66.0	45.2	20.80	3.175	
3,500.0	3,500.0	3,502.0	3,502.0	10.6	10.6	-90.68	-0.8	-66.0	66.0	44.9	21.15	3.122	
3,600.0	3,600.0	3,602.0	3,602.0	10.7	10.8	-90.68	-0.8	-66.0	66.0	44.5	21.50	3.071	
3,700.0	3,700.0	3,702.0	3,702.0	10.9	10.9	-90.68	-0.8	-66.0	66.0	44.2	21.85	3.022	
3,800.0	3,800.0	3,802.0	3,802.0	11.1	11.1	-90.68	-0.8	-66.0	66.0	43.8	22.19	2.975	
3,900.0	3,900.0	3,902.0	3,902.0	11.3	11.3	-90.68	-0.8	-66.0	66.0	43.5	22.54	2.930	
4,000.0	4,000.0	4,002.0	4,002.0	11.4	11.4	-90.68	-0.8	-66.0	66.0	43.2	22.87	2.887	
4,100.0	4,100.0	4,102.0	4,102.0	11.6	11.6	-90.68	-0.8	-66.0	66.0	42.8	23.21	2.845	
4,200.0	4,200.0	4,202.0	4,202.0	11.8	11.8	-90.68	-0.8	-66.0	66.0	42.5	23.54	2.805	
4,300.0	4,300.0	4,302.0	4,302.0	11.9	11.9	-90.68	-0.8	-66.0	66.0	42.2	23.87	2.766	
4,400.0	4,400.0	4,402.0	4,402.0	12.1	12.1	-90.68	-0.8	-66.0	66.0	41.8	24.20	2.728	
4,500.0	4,500.0	4,502.0	4,502.0	12.3	12.3	-90.68	-0.8	-66.0	66.0	41.5	24.53	2.692	
4,600.0	4,600.0	4,602.0	4,602.0	12.4	12.4	-90.68	-0.8	-66.0	66.0	41.2	24.85	2.657	
4,700.0	4,700.0	4,702.0	4,702.0	12.6	12.6	-90.68	-0.8	-66.0	66.0	40.9	25.17	2.623	
4,800.0	4,800.0	4,802.0	4,802.0	12.7	12.7	-90.68	-0.8	-66.0	66.0	40.5	25.49	2.590	
4,900.0	4,900.0	4,902.0	4,902.0	12.9	12.9	-90.68	-0.8	-66.0	66.0	40.2	25.81	2.558	
5,000.0	5,000.0	5,002.0	5,002.0	13.1	13.1	-90.68	-0.8	-66.0	66.0	39.9	26.13	2.527 CC, ES, SF	
5,100.0	5,100.0	5,102.0	5,102.0	13.2	13.2	155.29	-0.8	-66.0	66.8	40.4	26.39	2.532	

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



Anticollision Report

Company:	Advance Energy Partners	Local Co-ordinate Reference:	Well Anderson Fed Com 552H
Project:	Hat Mesa	TVD Reference:	WELL @ 3722.5usft (Original Well Elev)
Reference Site:	Anderson Fed Com - Pad D	MD Reference:	WELL @ 3722.5usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	Anderson Fed Com 552H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.79 sigma
Reference Wellbore	Anderson Fed Com 552H	Database:	EDM 5000.16 Single User Db
Reference Design:	Anderson Fed Com 552H - Prelim 1	Offset TVD Reference:	Offset Datum

Offset Design: Anderson Fed Com - Pad D - Anderson Fed Com 551H - Anderson Fed Com 551H - Anderson Fed Com 551H - Prelim 1												Offset Site Error:	0.0 usft
Survey Program: 0-MWD+HRGM												Offset Well Error:	0.0 usft
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference	Offset	Highside Toolface (°)	Offset Wellbore Centre		Distance		Minimum Separation (usft)	Separation Factor	Warning
				(usft)	(usft)	(°)	+N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)			
5,200.0	5,200.0	5,202.0	5,202.0	13.3	13.4	156.19	-0.8	-66.0	69.2	42.6	26.64	2.598	
5,300.0	5,299.9	5,301.9	5,301.9	13.4	13.5	157.55	-0.8	-66.0	73.2	46.3	26.91	2.721	
5,400.0	5,399.7	5,401.7	5,401.7	13.5	13.7	159.22	-0.8	-66.0	78.9	51.7	27.19	2.902	
5,500.0	5,499.4	5,500.0	5,500.0	13.7	13.8	160.62	-1.3	-66.7	86.9	59.5	27.43	3.169	
5,512.8	5,512.1	5,512.9	5,512.8	13.7	13.8	160.76	-1.5	-66.9	88.2	60.7	27.45	3.212	
5,600.0	5,599.0	5,598.6	5,598.5	13.8	13.9	161.31	-2.9	-68.7	97.3	69.6	27.64	3.519	
5,700.0	5,698.6	5,696.6	5,696.5	14.0	14.0	161.24	-5.5	-72.1	108.8	80.9	27.90	3.901	
5,800.0	5,798.2	5,794.4	5,794.1	14.2	14.1	160.64	-9.2	-76.7	121.6	93.4	28.19	4.315	
5,900.0	5,897.8	5,893.3	5,892.7	14.4	14.2	159.86	-13.4	-82.2	135.2	106.7	28.50	4.742	
6,000.0	5,997.4	5,992.4	5,991.6	14.7	14.4	159.21	-17.7	-87.7	148.7	119.9	28.84	5.157	
6,100.0	6,097.0	6,091.4	6,090.4	15.0	14.5	158.68	-22.0	-93.1	162.3	133.1	29.21	5.557	
6,200.0	6,196.6	6,190.5	6,189.2	15.2	14.7	158.23	-26.3	-98.6	175.9	146.3	29.60	5.943	
6,300.0	6,296.2	6,289.6	6,288.0	15.5	14.9	157.84	-30.6	-104.1	189.5	159.5	30.02	6.314	
6,400.0	6,395.8	6,388.6	6,386.8	15.8	15.1	157.50	-34.9	-109.6	203.1	172.7	30.45	6.670	
6,500.0	6,495.4	6,487.7	6,485.6	16.1	15.3	157.21	-39.2	-115.1	216.8	185.9	30.91	7.012	
6,600.0	6,595.0	6,586.7	6,584.5	16.5	15.6	156.95	-43.5	-120.5	230.4	199.0	31.39	7.340	
6,700.0	6,694.6	6,685.8	6,683.3	16.8	15.8	156.72	-47.8	-126.0	244.0	212.1	31.89	7.653	
6,800.0	6,794.2	6,784.9	6,782.1	17.2	16.1	156.52	-52.1	-131.5	257.7	225.3	32.40	7.951	
6,900.0	6,893.8	6,883.9	6,880.9	17.5	16.4	156.33	-56.4	-137.0	271.3	238.4	32.94	8.237	
7,000.0	6,993.4	6,983.0	6,979.7	17.9	16.7	156.16	-60.7	-142.5	284.9	251.4	33.49	8.508	
7,100.0	7,093.0	7,082.0	7,078.6	18.3	16.9	156.01	-65.0	-148.0	298.6	264.5	34.05	8.767	
7,200.0	7,192.6	7,181.1	7,177.4	18.7	17.3	155.87	-69.3	-153.4	312.2	277.6	34.64	9.014	
7,300.0	7,292.2	7,280.2	7,276.2	19.1	17.6	155.75	-73.6	-158.9	325.9	290.6	35.23	9.249	
7,400.0	7,391.8	7,379.2	7,375.0	19.5	17.9	155.63	-77.9	-164.4	339.5	303.7	35.84	9.472	
7,500.0	7,491.4	7,478.3	7,473.8	19.9	18.2	155.52	-82.2	-169.9	353.1	316.7	36.47	9.684	
7,600.0	7,591.0	7,577.4	7,572.6	20.3	18.6	155.42	-86.5	-175.4	366.8	329.7	37.10	9.886	
7,700.0	7,690.6	7,676.4	7,671.5	20.7	18.9	155.33	-90.8	-180.8	380.4	342.7	37.75	10.078	
7,800.0	7,790.2	7,775.5	7,770.3	21.1	19.3	155.24	-95.1	-186.3	394.1	355.7	38.41	10.260	
7,900.0	7,889.8	7,874.5	7,869.1	21.6	19.6	155.16	-99.4	-191.8	407.7	368.7	39.08	10.434	
8,000.0	7,989.4	7,973.6	7,967.9	22.0	20.0	155.09	-103.7	-197.3	421.4	381.6	39.76	10.599	
8,100.0	8,089.0	8,072.7	8,066.7	22.5	20.4	155.02	-108.0	-202.8	435.0	394.6	40.45	10.755	
8,200.0	8,188.6	8,171.7	8,165.5	22.9	20.8	154.95	-112.3	-208.3	448.7	407.6	41.15	10.904	
8,300.0	8,288.2	8,270.8	8,264.4	23.4	21.2	154.89	-116.6	-213.7	462.4	420.5	41.86	11.046	
8,400.0	8,387.8	8,369.9	8,363.2	23.8	21.5	154.83	-120.9	-219.2	476.0	433.4	42.57	11.181	
8,500.0	8,487.4	8,468.9	8,462.0	24.3	21.9	154.78	-125.2	-224.7	489.7	446.4	43.30	11.309	
8,600.0	8,587.0	8,568.0	8,560.8	24.7	22.3	154.72	-129.5	-230.2	503.3	459.3	44.03	11.432	
8,700.0	8,686.6	8,667.0	8,659.6	25.2	22.8	154.67	-133.8	-235.7	517.0	472.2	44.77	11.548	
8,800.0	8,786.2	8,766.1	8,758.4	25.7	23.2	154.63	-138.1	-241.2	530.6	485.1	45.51	11.659	
8,900.0	8,885.8	8,865.2	8,857.3	26.1	23.6	154.58	-142.4	-246.6	544.3	498.0	46.27	11.764	
9,000.0	8,985.4	8,964.2	8,956.1	26.6	24.0	154.54	-146.7	-252.1	557.9	510.9	47.02	11.865	
9,100.0	9,085.0	9,063.3	9,054.9	27.1	24.4	154.50	-151.0	-257.6	571.6	523.8	47.79	11.961	
9,200.0	9,184.6	9,162.4	9,153.7	27.6	24.8	154.46	-155.3	-263.1	585.2	536.7	48.56	12.052	
9,300.0	9,284.2	9,261.4	9,252.5	28.1	25.3	154.42	-159.6	-268.6	598.9	549.6	49.33	12.140	
9,400.0	9,383.8	9,360.5	9,351.3	28.5	25.7	154.39	-163.9	-274.0	612.6	562.4	50.12	12.223	
9,500.0	9,483.4	9,459.5	9,450.2	29.0	26.1	154.35	-168.2	-279.5	626.2	575.3	50.90	12.303	
9,600.0	9,583.0	9,558.6	9,549.0	29.5	26.6	154.32	-172.5	-285.0	639.9	588.2	51.69	12.379	
9,700.0	9,682.6	9,657.7	9,647.8	30.0	27.0	154.29	-176.8	-290.5	653.5	601.0	52.49	12.451	
9,800.0	9,782.2	9,756.7	9,746.6	30.5	27.5	154.26	-181.1	-296.0	667.2	613.9	53.29	12.521	
9,900.0	9,881.8	9,855.8	9,845.4	31.0	27.9	154.23	-185.4	-301.5	680.8	626.8	54.09	12.588	
10,000.0	9,981.4	9,954.9	9,944.2	31.5	28.3	154.21	-189.7	-306.9	694.5	639.6	54.90	12.651	
10,100.0	10,081.0	10,059.0	10,048.1	32.0	28.8	154.19	-194.1	-312.5	708.0	652.3	55.73	12.704	
10,157.2	10,137.9	10,122.0	10,111.0	32.3	29.1	154.22	-196.3	-315.3	715.2	659.0	56.20	12.726	

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



Anticollision Report

Company:	Advance Energy Partners	Local Co-ordinate Reference:	Well Anderson Fed Com 552H
Project:	Hat Mesa	TVD Reference:	WELL @ 3722.5usft (Original Well Elev)
Reference Site:	Anderson Fed Com - Pad D	MD Reference:	WELL @ 3722.5usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	Anderson Fed Com 552H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.79 sigma
Reference Wellbore	Anderson Fed Com 552H	Database:	EDM 5000.16 Single User Db
Reference Design:	Anderson Fed Com 552H - Prelim 1	Offset TVD Reference:	Offset Datum

Offset Design: Anderson Fed Com - Pad D - Anderson Fed Com 551H - Anderson Fed Com 551H - Anderson Fed Com 551H - Prelim 1											Offset Site Error: 0.0 usft
Survey Program: 0-MWD+HRGM											Offset Well Error: 0.0 usft
Reference	Offset	Semi Major Axis		Offset Wellbore Centre		Distance		Minimum Separation	Separation Factor	Warning	
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	+N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	
10,200.0	10,180.6	10,169.3	10,158.3	32.5	29.3	154.27	-197.6	-317.0	720.0	663.5	56.54
10,300.0	10,280.3	10,280.0	10,269.0	32.9	29.7	154.42	-199.9	-319.8	729.2	671.9	57.31
10,400.0	10,380.1	10,391.2	10,380.1	33.4	30.0	154.59	-200.8	-321.0	735.3	677.3	57.99
10,500.0	10,480.1	10,493.1	10,482.1	33.8	30.1	154.73	-200.8	-321.0	738.8	680.4	58.44
10,600.0	10,580.0	10,593.1	10,582.0	34.2	30.2	154.81	-200.8	-321.0	740.7	681.9	58.83
10,670.0	10,650.0	10,663.1	10,652.0	34.3	30.2	-90.83	-200.8	-321.0	741.1	682.1	58.98
10,670.3	10,650.4	10,663.4	10,652.4	34.3	30.2	-90.83	-200.8	-321.0	741.1	682.1	58.98
10,700.0	10,680.0	10,691.6	10,680.5	34.3	30.2	-90.83	-200.7	-321.0	741.1	682.1	58.99
10,800.0	10,780.0	10,775.0	10,763.4	34.3	30.1	-90.17	-192.2	-322.2	742.5	683.4	59.06
10,900.0	10,880.0	10,850.0	10,835.6	34.4	29.9	-88.64	-172.4	-325.0	746.7	687.6	59.11
10,942.5	10,922.5	10,882.4	10,865.6	34.4	29.8	-87.73	-160.4	-326.7	749.6	690.5	59.12
10,950.0	10,930.0	10,887.6	10,870.4	34.4	29.8	-94.68	-158.3	-327.0	750.2	691.1	59.12
10,975.0	10,955.0	10,905.0	10,886.1	34.4	29.8	-93.90	-150.9	-328.1	752.5	693.4	59.13
11,000.0	10,979.9	10,925.0	10,903.8	34.3	29.7	-93.01	-141.6	-329.4	755.2	696.0	59.14
11,025.0	11,004.6	10,939.3	10,916.1	34.3	29.7	-92.27	-134.6	-330.3	758.2	699.0	59.16
11,050.0	11,029.1	10,966.2	10,930.5	34.3	29.7	-91.43	-125.8	-331.6	761.6	702.4	59.17
11,075.0	11,053.3	10,975.0	10,946.2	34.3	29.6	-90.54	-115.4	-333.0	765.3	706.1	59.19
11,100.0	11,077.2	10,989.6	10,958.0	34.2	29.6	-89.73	-107.0	-334.2	769.2	710.0	59.21
11,125.0	11,100.6	11,006.1	10,971.1	34.2	29.6	-88.87	-97.0	-335.6	773.5	714.3	59.24
11,150.0	11,123.6	11,025.0	10,985.6	34.2	29.5	-87.96	-85.0	-337.3	778.0	718.7	59.26
11,175.0	11,146.0	11,038.9	10,995.9	34.1	29.5	-87.14	-75.8	-338.6	782.7	723.4	59.31
11,200.0	11,167.7	11,055.1	11,007.6	34.1	29.5	-86.28	-64.8	-340.2	787.7	728.3	59.35
11,225.0	11,188.8	11,075.0	11,021.5	34.1	29.5	-85.37	-50.6	-342.2	792.8	733.5	59.38
11,250.0	11,209.2	11,087.2	11,029.8	34.0	29.4	-84.57	-41.7	-343.4	798.1	738.7	59.44
11,275.0	11,228.8	11,100.0	11,038.1	34.0	29.4	-83.76	-32.1	-344.8	803.6	744.1	59.50
11,300.0	11,247.6	11,119.0	11,050.1	34.0	29.4	-82.90	-17.5	-346.8	809.1	749.6	59.55
11,325.0	11,265.4	11,134.8	11,059.5	34.0	29.4	-82.09	-4.9	-348.6	814.8	755.2	59.61
11,350.0	11,282.3	11,150.0	11,068.2	34.0	29.4	-81.30	7.4	-350.3	820.5	760.9	59.68
11,375.0	11,298.3	11,166.2	11,077.1	34.0	29.4	-80.52	20.9	-352.2	826.4	766.6	59.75
11,400.0	11,313.2	11,181.8	11,085.1	34.0	29.4	-79.77	34.1	-354.1	832.2	772.4	59.82
11,425.0	11,327.0	11,200.0	11,094.0	34.0	29.4	-79.03	49.8	-356.3	838.1	778.2	59.90
11,450.0	11,339.7	11,212.9	11,099.9	34.0	29.4	-78.33	61.2	-357.9	844.0	784.0	59.98
11,475.0	11,351.3	11,225.0	11,105.1	34.0	29.5	-77.64	72.0	-359.4	849.9	789.8	60.06
11,500.0	11,361.7	11,243.9	11,112.8	34.1	29.5	-76.99	89.1	-361.8	855.8	795.6	60.14
11,525.0	11,370.9	11,259.3	11,118.5	34.1	29.5	-76.37	103.3	-363.8	861.6	801.4	60.23
11,550.0	11,378.9	11,275.0	11,123.9	34.2	29.5	-75.77	117.8	-365.9	867.4	807.1	60.32
11,575.0	11,385.6	11,290.2	11,128.6	34.3	29.6	-75.21	132.1	-367.9	873.1	812.7	60.41
11,600.0	11,391.1	11,305.6	11,132.9	34.3	29.6	-74.67	146.8	-369.9	878.8	818.3	60.51
11,625.0	11,395.2	11,325.0	11,137.7	34.4	29.7	-74.21	165.4	-372.6	884.4	823.8	60.62
11,650.0	11,398.1	11,336.4	11,140.1	34.5	29.7	-73.70	176.4	-374.1	889.8	829.1	60.70
11,675.0	11,399.7	11,350.0	11,142.7	34.6	29.7	-73.24	189.6	-376.0	895.2	834.4	60.79
11,692.5	11,400.0	11,362.6	11,144.7	34.7	29.8	-72.98	202.0	-377.7	898.9	838.0	60.88
11,694.7	11,400.0	11,364.0	11,144.9	34.7	29.8	-73.00	203.3	-377.9	899.4	838.5	60.89
11,700.0	11,400.0	11,367.3	11,145.4	34.7	29.8	-73.05	206.5	-378.3	900.5	839.6	60.91
11,800.0	11,400.0	11,430.3	11,150.0	35.3	30.1	-73.74	268.7	-387.1	921.9	860.4	61.46
11,900.0	11,400.0	11,567.7	11,150.0	36.0	30.9	-74.29	405.2	-403.3	940.1	877.0	63.08
12,000.0	11,400.0	11,713.5	11,150.0	36.8	32.1	-74.59	550.7	-413.3	950.2	885.0	65.14
12,068.6	11,400.0	11,814.4	11,150.0	37.4	33.1	-74.66	651.5	-415.9	952.3	885.7	66.63
12,100.0	11,400.0	11,847.8	11,150.0	37.6	33.4	-74.66	684.9	-416.1	952.4	885.2	67.16
12,200.0	11,400.0	11,947.8	11,150.0	38.5	34.3	-74.66	784.9	-416.7	952.4	883.5	68.91
12,300.0	11,400.0	12,047.8	11,150.0	39.4	35.3	-74.66	884.8	-417.3	952.5	881.7	70.83
12,400.0	11,400.0	12,147.8	11,150.0	40.4	36.3	-74.66	984.8	-417.9	952.6	879.7	72.92

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



Anticollision Report

Company:	Advance Energy Partners	Local Co-ordinate Reference:	Well Anderson Fed Com 552H
Project:	Hat Mesa	TVD Reference:	WELL @ 3722.5usft (Original Well Elev)
Reference Site:	Anderson Fed Com - Pad D	MD Reference:	WELL @ 3722.5usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	Anderson Fed Com 552H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.79 sigma
Reference Wellbore	Anderson Fed Com 552H	Database:	EDM 5000.16 Single User Db
Reference Design:	Anderson Fed Com 552H - Prelim 1	Offset TVD Reference:	Offset Datum

Offset Design: Anderson Fed Com - Pad D - Anderson Fed Com 551H - Anderson Fed Com 551H - Anderson Fed Com 551H - Prelim 1												Offset Site Error:	0.0 usft
Survey Program: 0-MWD+HRGM												Offset Well Error:	0.0 usft
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference	Offset	Highside Toolface (°)	+N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
12,500.0	11,400.0	12,247.8	11,150.0	41.4	37.5	-74.66	1,084.8	-418.4	952.7	877.5	75.15	12.677	
12,600.0	11,400.0	12,347.8	11,150.0	42.5	38.7	-74.66	1,184.8	-419.0	952.7	875.2	77.51	12.292	
12,700.0	11,400.0	12,447.8	11,150.0	43.7	40.0	-74.66	1,284.8	-419.6	952.8	872.8	79.99	11.911	
12,800.0	11,400.0	12,547.8	11,150.0	45.0	41.4	-74.67	1,384.8	-420.2	952.9	870.3	82.59	11.538	
12,900.0	11,400.0	12,647.8	11,150.0	46.3	42.8	-74.67	1,484.8	-420.8	953.0	867.7	85.29	11.173	
13,000.0	11,400.0	12,747.8	11,150.0	47.6	44.2	-74.67	1,584.8	-421.4	953.0	865.0	88.08	10.820	
13,100.0	11,400.0	12,847.8	11,150.0	49.0	45.7	-74.67	1,684.8	-422.0	953.1	862.2	90.95	10.479	
13,200.0	11,400.0	12,947.8	11,150.0	50.4	47.3	-74.67	1,784.8	-422.6	953.2	859.3	93.90	10.151	
13,300.0	11,400.0	13,047.8	11,150.0	51.9	48.9	-74.67	1,884.8	-423.2	953.3	856.3	96.92	9.835	
13,400.0	11,400.0	13,147.8	11,150.0	53.4	50.5	-74.67	1,984.8	-423.8	953.3	853.3	100.01	9.533	
13,500.0	11,400.0	13,247.8	11,150.0	54.9	52.1	-74.67	2,084.8	-424.3	953.4	850.3	103.15	9.243	
13,600.0	11,400.0	13,347.8	11,150.0	56.5	53.8	-74.68	2,184.8	-424.9	953.5	847.2	106.34	8.967	
13,700.0	11,400.0	13,447.8	11,150.0	58.1	55.5	-74.68	2,284.8	-425.5	953.6	844.0	109.58	8.702	
13,800.0	11,400.0	13,547.8	11,150.0	59.7	57.2	-74.68	2,384.8	-426.1	953.7	840.8	112.87	8.449	
13,900.0	11,400.0	13,647.8	11,150.0	61.4	59.0	-74.68	2,484.8	-426.7	953.7	837.5	116.19	8.208	
14,000.0	11,400.0	13,747.8	11,150.0	63.0	60.7	-74.68	2,584.8	-427.3	953.8	834.3	119.55	7.978	
14,100.0	11,400.0	13,847.8	11,150.0	64.7	62.5	-74.68	2,684.8	-427.9	953.9	830.9	122.95	7.758	
14,200.0	11,400.0	13,947.8	11,150.0	66.4	64.3	-74.68	2,784.8	-428.5	954.0	827.6	126.37	7.549	
14,300.0	11,400.0	14,047.8	11,150.0	68.1	66.1	-74.68	2,884.8	-429.1	954.0	824.2	129.83	7.348	
14,400.0	11,400.0	14,147.8	11,150.0	69.9	67.9	-74.69	2,984.8	-429.6	954.1	820.8	133.31	7.157	
14,500.0	11,400.0	14,247.8	11,150.0	71.6	69.7	-74.69	3,084.8	-430.2	954.2	817.4	136.82	6.974	
14,600.0	11,400.0	14,347.8	11,150.0	73.4	71.5	-74.69	3,184.8	-430.8	954.3	813.9	140.35	6.799	
14,700.0	11,400.0	14,447.8	11,150.0	75.2	73.4	-74.69	3,284.8	-431.4	954.3	810.4	143.90	6.632	
14,800.0	11,400.0	14,547.8	11,150.0	77.0	75.3	-74.69	3,384.8	-432.0	954.4	807.0	147.47	6.472	
14,900.0	11,400.0	14,647.8	11,150.0	78.8	77.1	-74.69	3,484.8	-432.6	954.5	803.4	151.05	6.319	
15,000.0	11,400.0	14,747.8	11,150.0	80.6	79.0	-74.69	3,584.8	-433.2	954.6	799.9	154.66	6.172	
15,100.0	11,400.0	14,847.8	11,150.0	82.4	80.9	-74.69	3,684.8	-433.8	954.6	796.4	158.28	6.031	
15,200.0	11,400.0	14,947.8	11,150.0	84.2	82.8	-74.70	3,784.8	-434.4	954.7	792.8	161.91	5.897	
15,300.0	11,400.0	15,047.8	11,150.0	86.1	84.6	-74.70	3,884.8	-434.9	954.8	789.2	165.56	5.767	
15,400.0	11,400.0	15,147.8	11,150.0	87.9	86.5	-74.70	3,984.8	-435.5	954.9	785.7	169.22	5.643	
15,500.0	11,400.0	15,247.8	11,150.0	89.8	88.4	-74.70	4,084.8	-436.1	955.0	782.1	172.89	5.523	
15,600.0	11,400.0	15,347.8	11,150.0	91.6	90.4	-74.70	4,184.8	-436.7	955.0	778.5	176.58	5.409	
15,700.0	11,400.0	15,447.8	11,150.0	93.5	92.3	-74.70	4,284.8	-437.3	955.1	774.8	180.27	5.298	
15,800.0	11,400.0	15,547.8	11,150.0	95.4	94.2	-74.70	4,384.8	-437.9	955.2	771.2	183.97	5.192	
15,900.0	11,400.0	15,647.8	11,150.0	97.2	96.1	-74.70	4,484.8	-438.5	955.3	767.6	187.69	5.090	
16,000.0	11,400.0	15,747.8	11,150.0	99.1	98.0	-74.71	4,584.8	-439.1	955.3	763.9	191.41	4.991	
16,100.0	11,400.0	15,847.8	11,150.0	101.0	100.0	-74.71	4,684.8	-439.7	955.4	760.3	195.14	4.896	
16,200.0	11,400.0	15,947.8	11,150.0	102.9	101.9	-74.71	4,784.8	-440.2	955.5	756.6	198.88	4.804	
16,300.0	11,400.0	16,047.8	11,150.0	104.8	103.8	-74.71	4,884.8	-440.8	955.6	752.9	202.62	4.716	
16,400.0	11,400.0	16,147.8	11,150.0	106.7	105.8	-74.71	4,984.8	-441.4	955.6	749.3	206.38	4.631	
16,500.0	11,400.0	16,247.8	11,150.0	108.6	107.7	-74.71	5,084.8	-442.0	955.7	745.6	210.13	4.548	
16,600.0	11,400.0	16,347.8	11,150.0	110.5	109.7	-74.71	5,184.8	-442.6	955.8	741.9	213.90	4.468	
16,700.0	11,400.0	16,447.8	11,150.0	112.4	111.6	-74.71	5,284.8	-443.2	955.9	738.2	217.67	4.391	
16,800.0	11,400.0	16,547.8	11,150.0	114.4	113.6	-74.72	5,384.8	-443.8	955.9	734.5	221.45	4.317	
16,900.0	11,400.0	16,647.8	11,150.0	116.3	115.5	-74.72	5,484.8	-444.4	956.0	730.8	225.23	4.245	
17,000.0	11,400.0	16,747.8	11,150.0	118.2	117.5	-74.72	5,584.8	-445.0	956.1	727.1	229.02	4.175	
17,100.0	11,400.0	16,847.8	11,150.0	120.1	119.4	-74.72	5,684.8	-445.6	956.2	723.4	232.81	4.107	
17,200.0	11,400.0	16,947.8	11,150.0	122.1	121.4	-74.72	5,784.8	-446.1	956.3	719.6	236.60	4.042	
17,300.0	11,400.0	17,047.8	11,150.0	124.0	123.3	-74.72	5,884.8	-446.7	956.3	715.9	240.41	3.978	
17,400.0	11,400.0	17,147.8	11,150.0	125.9	125.3	-74.72	5,984.8	-447.3	956.4	712.2	244.21	3.916	
17,500.0	11,400.0	17,247.8	11,150.0	127.9	127.3	-74.72	6,084.8	-447.9	956.5	708.5	248.02	3.856	
17,600.0	11,400.0	17,347.8	11,150.0	129.8	129.2	-74.73	6,184.8	-448.5	956.6	704.7	251.83	3.798	

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



Anticollision Report

Company:	Advance Energy Partners	Local Co-ordinate Reference:	Well Anderson Fed Com 552H
Project:	Hat Mesa	TVD Reference:	WELL @ 3722.5usft (Original Well Elev)
Reference Site:	Anderson Fed Com - Pad D	MD Reference:	WELL @ 3722.5usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	Anderson Fed Com 552H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.79 sigma
Reference Wellbore	Anderson Fed Com 552H	Database:	EDM 5000.16 Single User Db
Reference Design:	Anderson Fed Com 552H - Prelim 1	Offset TVD Reference:	Offset Datum

Offset Design: Anderson Fed Com - Pad D - Anderson Fed Com 551H - Anderson Fed Com 551H - Anderson Fed Com 551H - Prelim 1													Offset Site Error: 0.0 usft
Survey Program: 0-MWD+HRGM													Offset Well Error: 0.0 usft
Reference		Offset		Semi Major Axis		Highside Toolface (°)	Offset Wellbore Centre		Distance		Minimum Separation (usft)	Separation Factor	Warning
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)		+N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)			
17,700.0	11,400.0	17,447.8	11,150.0	131.8	131.2	-74.73	6,284.8	-449.1	956.6	701.0	255.65	3.742	
17,800.0	11,400.0	17,547.8	11,150.0	133.7	133.2	-74.73	6,384.8	-449.7	956.7	697.2	259.47	3.687	
17,900.0	11,400.0	17,647.8	11,150.0	135.7	135.1	-74.73	6,484.7	-450.3	956.8	693.5	263.29	3.634	
18,000.0	11,400.0	17,747.8	11,150.0	137.6	137.1	-74.73	6,584.7	-450.9	956.9	689.7	267.12	3.582	
18,100.0	11,400.0	17,847.8	11,150.0	139.6	139.1	-74.73	6,684.7	-451.4	956.9	686.0	270.95	3.532	
18,200.0	11,400.0	17,947.8	11,150.0	141.5	141.0	-74.73	6,784.7	-452.0	957.0	682.2	274.78	3.483	
18,300.0	11,400.0	18,047.8	11,150.0	143.5	143.0	-74.73	6,884.7	-452.6	957.1	678.5	278.61	3.435	
18,400.0	11,400.0	18,147.8	11,150.0	145.4	145.0	-74.74	6,984.7	-453.2	957.2	674.7	282.45	3.389	
18,500.0	11,400.0	18,247.8	11,150.0	147.4	147.0	-74.74	7,084.7	-453.8	957.2	671.0	286.29	3.344	
18,600.0	11,400.0	18,347.8	11,150.0	149.3	149.0	-74.74	7,184.7	-454.4	957.3	667.2	290.14	3.300	
18,700.0	11,400.0	18,447.8	11,150.0	151.3	150.9	-74.74	7,284.7	-455.0	957.4	663.4	293.98	3.257	
18,800.0	11,400.0	18,547.8	11,150.0	153.3	152.9	-74.74	7,384.7	-455.6	957.5	659.6	297.83	3.215	
18,900.0	11,400.0	18,647.8	11,150.0	155.2	154.9	-74.74	7,484.7	-456.2	957.6	655.9	301.68	3.174	
19,000.0	11,400.0	18,747.8	11,150.0	157.2	156.9	-74.74	7,584.7	-456.7	957.6	652.1	305.53	3.134	
19,100.0	11,400.0	18,847.8	11,150.0	159.2	158.9	-74.74	7,684.7	-457.3	957.7	648.3	309.38	3.096	
19,200.0	11,400.0	18,947.8	11,150.0	161.1	160.8	-74.75	7,784.7	-457.9	957.8	644.5	313.24	3.058	
19,300.0	11,400.0	19,047.8	11,150.0	163.1	162.8	-74.75	7,884.7	-458.5	957.9	640.8	317.10	3.021	
19,400.0	11,400.0	19,147.8	11,150.0	165.1	164.8	-74.75	7,984.7	-459.1	957.9	637.0	320.96	2.985	
19,419.7	11,400.0	19,163.3	11,150.0	165.5	165.1	-74.75	8,000.3	-459.2	958.0	636.3	321.64	2.978	

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



Anticollision Report

Company:	Advance Energy Partners	Local Co-ordinate Reference:	Well Anderson Fed Com 552H
Project:	Hat Mesa	TVD Reference:	WELL @ 3722.5usft (Original Well Elev)
Reference Site:	Anderson Fed Com - Pad D	MD Reference:	WELL @ 3722.5usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	Anderson Fed Com 552H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.79 sigma
Reference Wellbore	Anderson Fed Com 552H	Database:	EDM 5000.16 Single User Db
Reference Design:	Anderson Fed Com 552H - Prelim 1	Offset TVD Reference:	Offset Datum

Offset Design: Anderson Fed Com - Pad D - Anderson Fed Com 601H - Anderson Fed Com 601H - Anderson Fed Com 601H - Prelim 1												Offset Site Error:	0.0 usft
Survey Program: 0-MWD+HRGM												Offset Well Error:	0.0 usft
Reference	Offset	Semi Major Axis		Offset Wellbore Centre		Distance		Rule Assigned:		Warning			
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	+N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	
0.0	0.0	1.0	1.0	0.0	0.0	-90.37	-0.2	-33.0	33.0				
100.0	100.0	101.0	101.0	0.5	0.5	-90.37	-0.2	-33.0	33.0	31.9	1.07	30.795	
200.0	200.0	201.0	201.0	1.7	1.7	-90.37	-0.2	-33.0	33.0	29.6	3.43	9.624	
300.0	300.0	301.0	301.0	2.4	2.4	-90.37	-0.2	-33.0	33.0	28.2	4.83	6.838	
400.0	400.0	401.0	401.0	3.0	3.0	-90.37	-0.2	-33.0	33.0	27.1	5.91	5.584	
500.0	500.0	501.0	501.0	3.4	3.4	-90.37	-0.2	-33.0	33.0	26.2	6.83	4.831	
600.0	600.0	601.0	601.0	3.8	3.8	-90.37	-0.2	-33.0	33.0	25.4	7.65	4.314	
700.0	700.0	701.0	701.0	4.2	4.2	-90.37	-0.2	-33.0	33.0	24.6	8.40	3.932	
800.0	800.0	801.0	801.0	4.5	4.5	-90.37	-0.2	-33.0	33.0	23.9	9.09	3.633	
900.0	900.0	901.0	901.0	4.9	4.9	-90.37	-0.2	-33.0	33.0	23.3	9.73	3.392	
1,000.0	1,000.0	1,001.0	1,001.0	5.2	5.2	-90.37	-0.2	-33.0	33.0	22.7	10.34	3.192	
1,100.0	1,100.0	1,101.0	1,101.0	5.5	5.5	-90.37	-0.2	-33.0	33.0	22.1	10.93	3.022	
1,200.0	1,200.0	1,201.0	1,201.0	5.7	5.7	-90.37	-0.2	-33.0	33.0	21.5	11.48	2.875	
1,300.0	1,300.0	1,301.0	1,301.0	6.0	6.0	-90.37	-0.2	-33.0	33.0	21.0	12.02	2.747	
1,400.0	1,400.0	1,401.0	1,401.0	6.3	6.3	-90.37	-0.2	-33.0	33.0	20.5	12.53	2.634	
1,500.0	1,500.0	1,501.0	1,501.0	6.5	6.5	-90.37	-0.2	-33.0	33.0	20.0	13.03	2.533	
1,600.0	1,600.0	1,601.0	1,601.0	6.8	6.8	-90.37	-0.2	-33.0	33.0	19.5	13.52	2.442	
1,700.0	1,700.0	1,701.0	1,701.0	7.0	7.0	-90.37	-0.2	-33.0	33.0	19.0	13.99	2.360	
1,800.0	1,800.0	1,801.0	1,801.0	7.2	7.2	-90.37	-0.2	-33.0	33.0	18.6	14.45	2.285	
1,900.0	1,900.0	1,901.0	1,901.0	7.4	7.5	-90.37	-0.2	-33.0	33.0	18.1	14.90	2.216	
2,000.0	2,000.0	2,001.0	2,001.0	7.7	7.7	-90.37	-0.2	-33.0	33.0	17.7	15.34	2.152	
2,100.0	2,100.0	2,101.0	2,101.0	7.9	7.9	-90.37	-0.2	-33.0	33.0	17.2	15.77	2.093	
2,200.0	2,200.0	2,201.0	2,201.0	8.1	8.1	-90.37	-0.2	-33.0	33.0	16.8	16.19	2.039	
2,300.0	2,300.0	2,301.0	2,301.0	8.3	8.3	-90.37	-0.2	-33.0	33.0	16.4	16.61	1.988	
2,400.0	2,400.0	2,401.0	2,401.0	8.5	8.5	-90.37	-0.2	-33.0	33.0	16.0	17.02	1.940	
2,500.0	2,500.0	2,501.0	2,501.0	8.7	8.7	-90.37	-0.2	-33.0	33.0	15.6	17.42	1.895	
2,600.0	2,600.0	2,601.0	2,601.0	8.9	8.9	-90.37	-0.2	-33.0	33.0	15.2	17.81	1.853	
2,700.0	2,700.0	2,701.0	2,701.0	9.1	9.1	-90.37	-0.2	-33.0	33.0	14.8	18.20	1.814	
2,800.0	2,800.0	2,801.0	2,801.0	9.3	9.3	-90.37	-0.2	-33.0	33.0	14.4	18.59	1.776	
2,900.0	2,900.0	2,901.0	2,901.0	9.5	9.5	-90.37	-0.2	-33.0	33.0	14.0	18.97	1.741	
3,000.0	3,000.0	3,001.0	3,001.0	9.7	9.7	-90.37	-0.2	-33.0	33.0	13.7	19.34	1.707	
3,100.0	3,100.0	3,101.0	3,101.0	9.9	9.9	-90.37	-0.2	-33.0	33.0	13.3	19.71	1.675	
3,200.0	3,200.0	3,201.0	3,201.0	10.0	10.0	-90.37	-0.2	-33.0	33.0	12.9	20.08	1.644	
3,300.0	3,300.0	3,301.0	3,301.0	10.2	10.2	-90.37	-0.2	-33.0	33.0	12.6	20.44	1.615	
3,400.0	3,400.0	3,401.0	3,401.0	10.4	10.4	-90.37	-0.2	-33.0	33.0	12.2	20.80	1.588	
3,500.0	3,500.0	3,501.0	3,501.0	10.6	10.6	-90.37	-0.2	-33.0	33.0	11.9	21.15	1.561	
3,600.0	3,600.0	3,601.0	3,601.0	10.7	10.8	-90.37	-0.2	-33.0	33.0	11.5	21.50	1.536	
3,700.0	3,700.0	3,701.0	3,701.0	10.9	10.9	-90.37	-0.2	-33.0	33.0	11.2	21.85	1.511	
3,800.0	3,800.0	3,801.0	3,801.0	11.1	11.1	-90.37	-0.2	-33.0	33.0	10.8	22.19	1.488 Level 3	
3,900.0	3,900.0	3,901.0	3,901.0	11.3	11.3	-90.37	-0.2	-33.0	33.0	10.5	22.53	1.465 Level 3	
4,000.0	4,000.0	4,001.0	4,001.0	11.4	11.4	-90.37	-0.2	-33.0	33.0	10.1	22.87	1.443 Level 3	
4,100.0	4,100.0	4,101.0	4,101.0	11.6	11.6	-90.37	-0.2	-33.0	33.0	9.8	23.21	1.423 Level 3	
4,200.0	4,200.0	4,201.0	4,201.0	11.8	11.8	-90.37	-0.2	-33.0	33.0	9.5	23.54	1.402 Level 3	
4,300.0	4,300.0	4,301.0	4,301.0	11.9	11.9	-90.37	-0.2	-33.0	33.0	9.1	23.87	1.383 Level 3	
4,400.0	4,400.0	4,401.0	4,401.0	12.1	12.1	-90.37	-0.2	-33.0	33.0	8.8	24.20	1.364 Level 3	
4,500.0	4,500.0	4,501.0	4,501.0	12.3	12.3	-90.37	-0.2	-33.0	33.0	8.5	24.53	1.346 Level 3	
4,600.0	4,600.0	4,601.0	4,601.0	12.4	12.4	-90.37	-0.2	-33.0	33.0	8.2	24.85	1.329 Level 3	
4,700.0	4,700.0	4,701.0	4,701.0	12.6	12.6	-90.37	-0.2	-33.0	33.0	7.8	25.17	1.312 Level 3	
4,800.0	4,800.0	4,801.0	4,801.0	12.7	12.7	-90.37	-0.2	-33.0	33.0	7.5	25.49	1.295 Level 3	
4,900.0	4,900.0	4,901.0	4,901.0	12.9	12.9	-90.37	-0.2	-33.0	33.0	7.2	25.81	1.279 Level 3	
5,000.0	5,000.0	5,001.0	5,001.0	13.1	13.1	-90.37	-0.2	-33.0	33.0	6.9	26.13	1.264 Level 3, CC, ES, SF	
5,100.0	5,100.0	5,101.0	5,101.0	13.2	13.2	155.91	-0.2	-33.0	33.8	7.4	26.39	1.281 Level 3	

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



Anticollision Report

Company:	Advance Energy Partners	Local Co-ordinate Reference:	Well Anderson Fed Com 552H
Project:	Hat Mesa	TVD Reference:	WELL @ 3722.5usft (Original Well Elev)
Reference Site:	Anderson Fed Com - Pad D	MD Reference:	WELL @ 3722.5usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	Anderson Fed Com 552H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.79 sigma
Reference Wellbore	Anderson Fed Com 552H	Database:	EDM 5000.16 Single User Db
Reference Design:	Anderson Fed Com 552H - Prelim 1	Offset TVD Reference:	Offset Datum

Offset Design: Anderson Fed Com - Pad D - Anderson Fed Com 601H - Anderson Fed Com 601H - Anderson Fed Com 601H - Prelim 1													Offset Site Error: 0.0 usft	
Survey Program: 0-MWD+HRGM							Rule Assigned:						Offset Well Error: 0.0 usft	
Reference		Offset		Semi Major Axis		Highside Toolface (°)	Offset Wellbore Centre		Distance		Minimum Separation (usft)	Separation Factor	Warning	
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)		+N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)				
5,200.0	5,200.0	5,201.0	5,201.0	13.3	13.4	157.59	-0.2	-33.0	36.2	9.6	26.64	1.359	Level 3	
5,300.0	5,299.9	5,300.9	5,300.9	13.4	13.5	159.94	-0.2	-33.0	40.3	13.4	26.91	1.497	Level 3	
5,400.0	5,399.7	5,400.7	5,400.7	13.5	13.7	162.53	-0.2	-33.0	46.1	18.9	27.19	1.694		
5,500.0	5,499.4	5,500.4	5,500.4	13.7	13.8	165.03	-0.2	-33.0	53.6	26.1	27.50	1.949		
5,512.8	5,512.1	5,513.1	5,513.1	13.7	13.9	165.33	-0.2	-33.0	54.7	27.2	27.53	1.987		
5,600.0	5,599.0	5,600.0	5,600.0	13.8	14.0	167.15	-0.2	-33.0	62.3	34.5	27.79	2.241		
5,700.0	5,698.6	5,698.8	5,698.8	14.0	14.1	168.19	-0.8	-33.7	71.5	43.5	28.07	2.549		
5,800.0	5,798.2	5,797.5	5,797.4	14.2	14.2	168.04	-2.4	-35.6	81.9	53.5	28.34	2.888		
5,900.0	5,897.8	5,895.9	5,895.8	14.4	14.3	167.10	-5.1	-38.9	93.2	64.6	28.64	3.256		
6,000.0	5,997.4	5,994.5	5,994.2	14.7	14.3	165.70	-8.8	-43.3	105.6	76.7	28.90	3.655		
6,100.0	6,097.0	6,093.6	6,093.1	15.0	14.4	164.48	-12.7	-48.0	118.3	89.1	29.23	4.047		
6,200.0	6,196.6	6,192.8	6,192.1	15.2	14.6	163.49	-16.7	-52.8	131.0	101.4	29.59	4.427		
6,300.0	6,296.2	6,292.0	6,291.1	15.5	14.7	162.68	-20.6	-57.5	143.7	113.7	29.97	4.795		
6,400.0	6,395.8	6,391.1	6,390.1	15.8	14.9	162.00	-24.5	-62.2	156.5	126.1	30.38	5.151		
6,500.0	6,495.4	6,490.3	6,489.1	16.1	15.1	161.42	-28.4	-66.9	169.2	138.4	30.80	5.494		
6,600.0	6,595.0	6,589.5	6,588.0	16.5	15.3	160.93	-32.4	-71.6	182.0	150.8	31.25	5.825		
6,700.0	6,694.6	6,688.6	6,687.0	16.8	15.5	160.50	-36.3	-76.3	194.8	163.1	31.71	6.143		
6,800.0	6,794.2	6,787.8	6,786.0	17.2	15.7	160.12	-40.2	-81.0	207.6	175.4	32.19	6.449		
6,900.0	6,893.8	6,887.0	6,885.0	17.5	16.0	159.79	-44.1	-85.7	220.4	187.7	32.69	6.742		
7,000.0	6,993.4	6,986.1	6,983.9	17.9	16.2	159.49	-48.0	-90.4	233.2	200.0	33.21	7.023		
7,100.0	7,093.0	7,085.3	7,082.9	18.3	16.5	159.22	-52.0	-95.1	246.0	212.3	33.74	7.293		
7,200.0	7,192.6	7,184.5	7,181.9	18.7	16.7	158.98	-55.9	-99.8	258.9	224.6	34.28	7.551		
7,300.0	7,292.2	7,283.7	7,280.9	19.1	17.0	158.77	-59.8	-104.5	271.7	236.8	34.85	7.797		
7,400.0	7,391.8	7,382.8	7,379.9	19.5	17.3	158.57	-63.7	-109.2	284.5	249.1	35.42	8.033		
7,500.0	7,491.4	7,482.0	7,478.8	19.9	17.6	158.39	-67.7	-114.0	297.4	261.4	36.01	8.258		
7,600.0	7,591.0	7,581.2	7,577.8	20.3	17.9	158.22	-71.6	-118.7	310.2	273.6	36.61	8.473		
7,700.0	7,690.6	7,680.3	7,676.8	20.7	18.2	158.07	-75.5	-123.4	323.0	285.8	37.22	8.679		
7,800.0	7,790.2	7,779.5	7,775.8	21.1	18.6	157.93	-79.4	-128.1	335.9	298.0	37.84	8.875		
7,900.0	7,889.8	7,878.7	7,874.8	21.6	18.9	157.80	-83.4	-132.8	348.7	310.3	38.48	9.063		
8,000.0	7,989.4	7,977.8	7,973.7	22.0	19.2	157.68	-87.3	-137.5	361.6	322.5	39.12	9.242		
8,100.0	8,089.0	8,077.0	8,072.7	22.5	19.6	157.57	-91.2	-142.2	374.4	334.6	39.78	9.413		
8,200.0	8,188.6	8,176.2	8,171.7	22.9	19.9	157.46	-95.1	-146.9	387.3	346.8	40.44	9.576		
8,300.0	8,288.2	8,275.3	8,270.7	23.4	20.3	157.36	-99.0	-151.6	400.1	359.0	41.12	9.731		
8,400.0	8,387.8	8,374.5	8,369.7	23.8	20.7	157.27	-103.0	-156.3	413.0	371.2	41.80	9.880		
8,500.0	8,487.4	8,473.7	8,468.6	24.3	21.0	157.18	-106.9	-161.0	425.8	383.3	42.49	10.022		
8,600.0	8,587.0	8,572.8	8,567.6	24.7	21.4	157.10	-110.8	-165.7	438.7	395.5	43.19	10.158		
8,700.0	8,686.6	8,672.0	8,666.6	25.2	21.8	157.02	-114.7	-170.5	451.5	407.7	43.89	10.287		
8,800.0	8,786.2	8,771.2	8,765.6	25.7	22.2	156.95	-118.7	-175.2	464.4	419.8	44.61	10.411		
8,900.0	8,885.8	8,870.3	8,864.6	26.1	22.5	156.88	-122.6	-179.9	477.3	431.9	45.32	10.530		
9,000.0	8,985.4	8,969.5	8,963.5	26.6	22.9	156.82	-126.5	-184.6	490.1	444.1	46.05	10.643		
9,100.0	9,085.0	9,068.7	9,062.5	27.1	23.3	156.75	-130.4	-189.3	503.0	456.2	46.78	10.751		
9,200.0	9,184.6	9,167.9	9,161.5	27.6	23.7	156.70	-134.4	-194.0	515.8	468.3	47.52	10.855		
9,300.0	9,284.2	9,267.0	9,260.5	28.1	24.1	156.64	-138.3	-198.7	528.7	480.4	48.26	10.954		
9,400.0	9,383.8	9,366.2	9,359.4	28.5	24.5	156.59	-142.2	-203.4	541.5	492.5	49.01	11.049		
9,500.0	9,483.4	9,465.4	9,458.4	29.0	25.0	156.54	-146.1	-208.1	554.4	504.6	49.77	11.140		
9,600.0	9,583.0	9,564.5	9,557.4	29.5	25.4	156.49	-150.1	-212.8	567.3	516.7	50.52	11.228		
9,700.0	9,682.6	9,663.7	9,656.4	30.0	25.8	156.44	-154.0	-217.5	580.1	528.8	51.29	11.311		
9,800.0	9,782.2	9,762.9	9,755.4	30.5	26.2	156.40	-157.9	-222.2	593.0	540.9	52.06	11.391		
9,900.0	9,881.8	9,862.0	9,854.3	31.0	26.6	156.35	-161.8	-226.9	605.9	553.0	52.83	11.468		
10,000.0	9,981.4	9,961.2	9,953.3	31.5	27.1	156.31	-165.7	-231.7	618.7	565.1	53.61	11.542		
10,100.0	10,081.0	10,060.4	10,052.3	32.0	27.5	156.27	-169.7	-236.4	631.6	577.2	54.39	11.613		
10,157.2	10,137.9	10,117.1	10,108.9	32.3	27.7	156.25	-171.9	-239.1	638.9	584.1	54.82	11.655		

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



Anticollision Report

Company:	Advance Energy Partners	Local Co-ordinate Reference:	Well Anderson Fed Com 552H
Project:	Hat Mesa	TVD Reference:	WELL @ 3722.5usft (Original Well Elev)
Reference Site:	Anderson Fed Com - Pad D	MD Reference:	WELL @ 3722.5usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	Anderson Fed Com 552H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.79 sigma
Reference Wellbore	Anderson Fed Com 552H	Database:	EDM 5000.16 Single User Db
Reference Design:	Anderson Fed Com 552H - Prelim 1	Offset TVD Reference:	Offset Datum

Offset Design: Anderson Fed Com - Pad D - Anderson Fed Com 601H - Anderson Fed Com 601H - Anderson Fed Com 601H - Prelim 1													Offset Site Error:	0.0 usft
Survey Program: 0-MWD+HRGM				Rule Assigned:									Offset Well Error:	0.0 usft
Reference		Offset		Semi Major Axis		Offset Wellbore Centre			Distance				Warning	
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	+N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor		
10,200.0	10,180.6	10,159.6	10,151.3	32.5	27.9	156.25	-173.6	-241.1	644.3	589.1	55.14	11.684		
10,300.0	10,280.3	10,258.9	10,250.4	32.9	28.3	156.21	-177.5	-245.8	655.7	599.8	55.91	11.728		
10,400.0	10,380.1	10,358.4	10,349.8	33.4	28.8	156.09	-181.5	-250.5	665.5	608.8	56.65	11.746		
10,500.0	10,480.1	10,458.0	10,449.2	33.8	29.2	155.92	-185.4	-255.2	673.7	616.3	57.37	11.743		
10,600.0	10,580.0	10,557.8	10,548.7	34.2	29.6	155.68	-189.3	-260.0	680.4	622.3	58.05	11.721		
10,670.0	10,650.0	10,627.6	10,618.4	34.3	30.0	-90.18	-192.1	-263.3	684.1	625.7	58.39	11.715		
10,700.0	10,680.0	10,657.8	10,648.6	34.3	30.1	-90.28	-193.3	-264.7	685.5	627.0	58.50	11.719		
10,800.0	10,780.0	10,767.9	10,758.5	34.3	30.5	-90.58	-197.0	-269.1	689.5	630.6	58.90	11.705		
10,900.0	10,880.0	10,878.2	10,868.7	34.4	30.9	-90.77	-199.2	-271.9	692.0	632.7	59.30	11.670		
10,942.5	10,922.5	10,925.0	10,915.6	34.4	31.1	-90.81	-199.8	-272.5	692.7	633.2	59.42	11.657		
10,950.0	10,930.0	10,933.3	10,923.9	34.4	31.1	-98.00	-199.9	-272.6	692.7	633.3	59.44	11.655		
10,975.0	10,955.0	10,960.9	10,951.4	34.4	31.1	-98.07	-200.1	-272.9	693.1	633.6	59.50	11.648		
11,000.0	10,979.9	10,988.3	10,978.9	34.3	31.2	-98.23	-200.2	-273.0	693.6	634.0	59.57	11.642		
11,025.0	11,004.6	11,015.1	11,005.6	34.3	31.2	-98.48	-200.2	-273.0	694.1	634.5	59.64	11.638		
11,050.0	11,029.1	11,039.6	11,030.1	34.3	31.3	-98.79	-200.2	-273.0	694.9	635.2	59.69	11.642		
11,075.0	11,053.3	11,063.8	11,054.3	34.3	31.3	-99.16	-200.2	-273.0	695.9	636.1	59.73	11.650		
11,100.0	11,077.2	11,087.6	11,078.2	34.2	31.3	-99.59	-200.2	-273.0	697.2	637.4	59.78	11.661		
11,125.0	11,100.6	11,111.1	11,101.6	34.2	31.3	-100.06	-200.2	-273.0	698.7	638.9	59.83	11.678		
11,150.0	11,123.6	11,134.0	11,124.6	34.2	31.3	-100.57	-200.2	-273.0	700.7	640.8	59.89	11.700		
11,175.0	11,146.0	11,156.4	11,147.0	34.1	31.3	-101.10	-200.2	-273.0	703.0	643.1	59.93	11.729		
11,200.0	11,167.7	11,178.2	11,168.7	34.1	31.3	-101.63	-200.2	-273.0	705.8	645.8	59.98	11.766		
11,225.0	11,188.8	11,199.3	11,189.8	34.1	31.3	-102.15	-200.2	-273.0	709.0	649.0	60.02	11.812		
11,250.0	11,209.2	11,219.7	11,210.2	34.0	31.4	-102.64	-200.2	-273.0	712.8	652.7	60.06	11.868		
11,275.0	11,228.8	11,239.2	11,229.8	34.0	31.4	-103.09	-200.2	-273.0	717.1	657.0	60.09	11.935		
11,300.0	11,247.6	11,258.0	11,248.6	34.0	31.4	-103.48	-200.2	-273.0	722.1	662.0	60.10	12.014		
11,325.0	11,265.4	11,275.9	11,266.4	34.0	31.4	-103.79	-200.2	-273.0	727.7	667.6	60.11	12.107		
11,350.0	11,282.3	11,292.8	11,283.3	34.0	31.4	-104.01	-200.2	-273.0	734.0	673.9	60.10	12.213		
11,375.0	11,298.3	11,308.7	11,299.3	34.0	31.4	-104.11	-200.2	-273.0	741.1	681.0	60.08	12.336		
11,400.0	11,313.2	11,323.6	11,314.2	34.0	31.4	-104.10	-200.2	-273.0	748.9	688.9	60.03	12.474		
11,425.0	11,327.0	11,338.8	11,329.3	34.0	31.4	-104.02	-200.2	-273.0	757.5	697.5	59.98	12.629		
11,450.0	11,339.7	11,355.8	11,346.3	34.0	31.4	-103.99	-199.6	-273.1	766.8	706.8	59.91	12.798		
11,475.0	11,351.3	11,373.3	11,363.8	34.0	31.4	-103.89	-198.5	-273.4	776.7	716.9	59.83	12.982		
11,500.0	11,361.7	11,391.3	11,381.7	34.1	31.3	-103.73	-196.6	-273.7	787.4	727.6	59.75	13.179		
11,525.0	11,370.9	11,410.0	11,400.2	34.1	31.3	-103.51	-194.0	-274.2	798.7	739.0	59.66	13.388		
11,550.0	11,378.9	11,429.4	11,419.3	34.2	31.3	-103.26	-190.5	-274.9	810.5	751.0	59.57	13.607		
11,575.0	11,385.6	11,449.9	11,439.2	34.3	31.2	-102.98	-186.0	-275.7	823.0	763.5	59.48	13.836		
11,600.0	11,391.1	11,471.5	11,460.1	34.3	31.2	-102.69	-180.3	-276.8	835.9	776.5	59.40	14.072		
11,625.0	11,395.2	11,494.8	11,482.3	34.4	31.1	-102.41	-173.2	-278.2	849.3	790.0	59.35	14.311		
11,650.0	11,398.1	11,520.3	11,506.0	34.5	31.1	-102.18	-164.2	-279.9	863.2	803.9	59.32	14.552		
11,675.0	11,399.7	11,548.6	11,531.8	34.6	31.0	-102.05	-152.8	-282.1	877.4	818.1	59.34	14.788		
11,692.5	11,400.0	11,570.7	11,551.4	34.7	30.9	-102.05	-142.8	-284.0	887.6	828.2	59.38	14.947		
11,694.7	11,400.0	11,573.7	11,554.1	34.7	30.9	-102.25	-141.4	-284.3	888.9	829.5	59.39	14.967		
11,700.0	11,400.0	11,568.6	11,549.6	34.7	30.9	-101.90	-143.7	-283.8	892.0	832.7	59.30	15.041		
11,800.0	11,400.0	11,852.9	11,746.1	35.3	30.7	-113.88	52.2	-321.3	945.4	883.5	61.88	15.277		
11,900.0	11,400.0	12,159.8	11,800.0	36.0	31.8	-114.74	345.3	-376.5	972.4	907.3	65.09	14.940		
12,000.0	11,400.0	12,303.0	11,800.0	36.8	32.9	-114.00	487.2	-396.4	988.4	921.5	66.90	14.775		
12,068.6	11,400.0	12,402.9	11,800.0	37.4	33.8	-113.70	586.6	-406.1	994.9	926.6	68.33	14.561		
12,100.0	11,400.0	12,448.9	11,800.0	37.6	34.2	-113.63	632.4	-409.3	996.8	927.8	69.02	14.442		
12,200.0	11,400.0	12,595.8	11,800.0	38.5	35.7	-113.52	779.2	-414.9	999.8	928.5	71.33	14.016		
12,300.0	11,400.0	12,701.2	11,800.0	39.4	36.7	-113.52	884.6	-415.6	999.9	926.7	73.24	13.653		

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



Anticollision Report

Company:	Advance Energy Partners	Local Co-ordinate Reference:	Well Anderson Fed Com 552H
Project:	Hat Mesa	TVD Reference:	WELL @ 3722.5usft (Original Well Elev)
Reference Site:	Anderson Fed Com - Pad D	MD Reference:	WELL @ 3722.5usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	Anderson Fed Com 552H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.79 sigma
Reference Wellbore	Anderson Fed Com 552H	Database:	EDM 5000.16 Single User Db
Reference Design:	Anderson Fed Com 552H - Prelim 1	Offset TVD Reference:	Offset Datum

Offset Design: Anderson Fed Com - Pad D - Anderson Fed Com 701H - Anderson Fed Com 701H - Anderson Fed Com 701H - Prelim 1												Offset Site Error:	0.0 usft
Survey Program: 0-MWD+HRGM												Offset Well Error:	0.0 usft
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference	Offset	Highside Toolface (°)	Offset Wellbore Centre		Distance		Minimum Separation (usft)	Separation Factor	Warning
				(usft)	(usft)	(°)	+N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)			
0.0	0.0	2.0	2.0	0.0	0.0	-90.68	-1.6	-132.1	132.1				
100.0	100.0	102.0	102.0	0.5	0.6	-90.68	-1.6	-132.1	132.1	131.0	1.08	121.837	
200.0	200.0	202.0	202.0	1.7	1.7	-90.68	-1.6	-132.1	132.1	128.6	3.44	38.418	
300.0	300.0	302.0	302.0	2.4	2.4	-90.68	-1.6	-132.1	132.1	127.2	4.83	27.321	
400.0	400.0	402.0	402.0	3.0	3.0	-90.68	-1.6	-132.1	132.1	126.1	5.92	22.319	
500.0	500.0	502.0	502.0	3.4	3.4	-90.68	-1.6	-132.1	132.1	125.2	6.84	19.312	
600.0	600.0	602.0	602.0	3.8	3.8	-90.68	-1.6	-132.1	132.1	124.4	7.66	17.249	
700.0	700.0	702.0	702.0	4.2	4.2	-90.68	-1.6	-132.1	132.1	123.7	8.40	15.720	
800.0	800.0	802.0	802.0	4.5	4.5	-90.68	-1.6	-132.1	132.1	123.0	9.09	14.528	
900.0	900.0	902.0	902.0	4.9	4.9	-90.68	-1.6	-132.1	132.1	122.3	9.74	13.564	
1,000.0	1,000.0	1,002.0	1,002.0	5.2	5.2	-90.68	-1.6	-132.1	132.1	121.7	10.35	12.763	
1,100.0	1,100.0	1,102.0	1,102.0	5.5	5.5	-90.68	-1.6	-132.1	132.1	121.1	10.93	12.084	
1,200.0	1,200.0	1,202.0	1,202.0	5.7	5.7	-90.68	-1.6	-132.1	132.1	120.6	11.49	11.499	
1,300.0	1,300.0	1,302.0	1,302.0	6.0	6.0	-90.68	-1.6	-132.1	132.1	120.0	12.02	10.987	
1,400.0	1,400.0	1,402.0	1,402.0	6.3	6.3	-90.68	-1.6	-132.1	132.1	119.5	12.54	10.534	
1,500.0	1,500.0	1,502.0	1,502.0	6.5	6.5	-90.68	-1.6	-132.1	132.1	119.0	13.04	10.130	
1,600.0	1,600.0	1,602.0	1,602.0	6.8	6.8	-90.68	-1.6	-132.1	132.1	118.5	13.52	9.767	
1,700.0	1,700.0	1,702.0	1,702.0	7.0	7.0	-90.68	-1.6	-132.1	132.1	118.1	13.99	9.437	
1,800.0	1,800.0	1,802.0	1,802.0	7.2	7.2	-90.68	-1.6	-132.1	132.1	117.6	14.45	9.137	
1,900.0	1,900.0	1,902.0	1,902.0	7.4	7.5	-90.68	-1.6	-132.1	132.1	117.2	14.90	8.861	
2,000.0	2,000.0	2,002.0	2,002.0	7.7	7.7	-90.68	-1.6	-132.1	132.1	116.7	15.34	8.607	
2,100.0	2,100.0	2,102.0	2,102.0	7.9	7.9	-90.68	-1.6	-132.1	132.1	116.3	15.77	8.372	
2,200.0	2,200.0	2,202.0	2,202.0	8.1	8.1	-90.68	-1.6	-132.1	132.1	115.9	16.20	8.154	
2,300.0	2,300.0	2,302.0	2,302.0	8.3	8.3	-90.68	-1.6	-132.1	132.1	115.5	16.61	7.950	
2,400.0	2,400.0	2,402.0	2,402.0	8.5	8.5	-90.68	-1.6	-132.1	132.1	115.0	17.02	7.759	
2,500.0	2,500.0	2,502.0	2,502.0	8.7	8.7	-90.68	-1.6	-132.1	132.1	114.6	17.42	7.581	
2,600.0	2,600.0	2,602.0	2,602.0	8.9	8.9	-90.68	-1.6	-132.1	132.1	114.2	17.82	7.413	
2,700.0	2,700.0	2,702.0	2,702.0	9.1	9.1	-90.68	-1.6	-132.1	132.1	113.9	18.21	7.254	
2,800.0	2,800.0	2,802.0	2,802.0	9.3	9.3	-90.68	-1.6	-132.1	132.1	113.5	18.59	7.104	
2,900.0	2,900.0	2,902.0	2,902.0	9.5	9.5	-90.68	-1.6	-132.1	132.1	113.1	18.97	6.962	
3,000.0	3,000.0	3,002.0	3,002.0	9.7	9.7	-90.68	-1.6	-132.1	132.1	112.7	19.34	6.828	
3,100.0	3,100.0	3,102.0	3,102.0	9.9	9.9	-90.68	-1.6	-132.1	132.1	112.4	19.71	6.699	
3,200.0	3,200.0	3,202.0	3,202.0	10.0	10.0	-90.68	-1.6	-132.1	132.1	112.0	20.08	6.577	
3,300.0	3,300.0	3,302.0	3,302.0	10.2	10.2	-90.68	-1.6	-132.1	132.1	111.6	20.44	6.461	
3,400.0	3,400.0	3,402.0	3,402.0	10.4	10.4	-90.68	-1.6	-132.1	132.1	111.3	20.80	6.350	
3,500.0	3,500.0	3,502.0	3,502.0	10.6	10.6	-90.68	-1.6	-132.1	132.1	110.9	21.15	6.244	
3,600.0	3,600.0	3,602.0	3,602.0	10.7	10.8	-90.68	-1.6	-132.1	132.1	110.6	21.50	6.142	
3,700.0	3,700.0	3,702.0	3,702.0	10.9	10.9	-90.68	-1.6	-132.1	132.1	110.2	21.85	6.044	
3,800.0	3,800.0	3,802.0	3,802.0	11.1	11.1	-90.68	-1.6	-132.1	132.1	109.9	22.19	5.950	
3,900.0	3,900.0	3,902.0	3,902.0	11.3	11.3	-90.68	-1.6	-132.1	132.1	109.5	22.54	5.860	
4,000.0	4,000.0	4,002.0	4,002.0	11.4	11.4	-90.68	-1.6	-132.1	132.1	109.2	22.87	5.773	
4,100.0	4,100.0	4,102.0	4,102.0	11.6	11.6	-90.68	-1.6	-132.1	132.1	108.9	23.21	5.690	
4,200.0	4,200.0	4,202.0	4,202.0	11.8	11.8	-90.68	-1.6	-132.1	132.1	108.5	23.54	5.609	
4,300.0	4,300.0	4,302.0	4,302.0	11.9	11.9	-90.68	-1.6	-132.1	132.1	108.2	23.87	5.532	
4,400.0	4,400.0	4,402.0	4,402.0	12.1	12.1	-90.68	-1.6	-132.1	132.1	107.9	24.20	5.457	
4,500.0	4,500.0	4,502.0	4,502.0	12.3	12.3	-90.68	-1.6	-132.1	132.1	107.5	24.53	5.384	
4,600.0	4,600.0	4,602.0	4,602.0	12.4	12.4	-90.68	-1.6	-132.1	132.1	107.2	24.85	5.314	
4,700.0	4,700.0	4,702.0	4,702.0	12.6	12.6	-90.68	-1.6	-132.1	132.1	106.9	25.17	5.246	
4,800.0	4,800.0	4,802.0	4,802.0	12.7	12.7	-90.68	-1.6	-132.1	132.1	106.6	25.49	5.180	
4,900.0	4,900.0	4,902.0	4,902.0	12.9	12.9	-90.68	-1.6	-132.1	132.1	106.3	25.81	5.116	
4,916.0	4,916.0	4,918.0	4,918.0	12.9	12.9	-90.68	-1.6	-132.1	132.1	106.2	25.86	5.106 CC	
5,000.0	5,000.0	5,002.0	5,002.0	13.1	13.1	-90.68	-1.6	-132.1	132.1	105.9	26.13	5.055 ES, SF	

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



Anticollision Report

Company:	Advance Energy Partners	Local Co-ordinate Reference:	Well Anderson Fed Com 552H
Project:	Hat Mesa	TVD Reference:	WELL @ 3722.5usft (Original Well Elev)
Reference Site:	Anderson Fed Com - Pad D	MD Reference:	WELL @ 3722.5usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	Anderson Fed Com 552H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.79 sigma
Reference Wellbore	Anderson Fed Com 552H	Database:	EDM 5000.16 Single User Db
Reference Design:	Anderson Fed Com 552H - Prelim 1	Offset TVD Reference:	Offset Datum

Offset Design: Anderson Fed Com - Pad D - Anderson Fed Com 701H - Anderson Fed Com 701H - Anderson Fed Com 701H - Prelim 1													Offset Site Error: 0.0 usft
Survey Program: 0-MWD+HRGM													Offset Well Error: 0.0 usft
Reference	Offset	Rule Assigned:											
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference	Offset	Highside Toolface (°)	Offset Wellbore Centre		Distance		Minimum Separation (usft)	Separation Factor	Warning
				(usft)	(usft)		+N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)			
5,100.0	5,100.0	5,100.0	5,100.0	13.2	13.2	154.91	-2.1	-132.8	133.6	107.3	26.33	5.074	
5,200.0	5,200.0	5,198.1	5,198.1	13.3	13.2	154.73	-3.6	-134.8	138.1	111.6	26.50	5.209	
5,300.0	5,299.9	5,295.8	5,295.7	13.4	13.4	154.46	-6.1	-138.2	145.5	118.8	26.70	5.450	
5,400.0	5,399.7	5,393.2	5,392.9	13.5	13.5	154.13	-9.5	-143.0	156.0	129.0	26.93	5.792	
5,500.0	5,499.4	5,490.0	5,489.4	13.7	13.6	153.75	-13.9	-149.0	169.3	142.2	27.19	6.229	
5,512.8	5,512.1	5,502.4	5,501.7	13.7	13.6	153.70	-14.5	-149.9	171.3	144.1	27.21	6.295	
5,600.0	5,599.0	5,588.3	5,587.3	13.8	13.7	153.42	-19.0	-156.1	184.7	157.3	27.41	6.738	
5,700.0	5,698.6	5,687.1	5,685.7	14.0	13.9	153.13	-24.2	-163.2	200.1	172.3	27.73	7.215	
5,800.0	5,798.2	5,785.9	5,784.1	14.2	14.1	152.89	-29.4	-170.4	215.4	187.4	28.09	7.671	
5,900.0	5,897.8	5,884.7	5,882.5	14.4	14.3	152.67	-34.6	-177.5	230.8	202.4	28.47	8.107	
6,000.0	5,997.4	5,983.5	5,980.9	14.7	14.6	152.49	-39.8	-184.6	246.2	217.3	28.88	8.524	
6,100.0	6,097.0	6,082.3	6,079.3	15.0	14.8	152.32	-45.0	-191.8	261.6	232.3	29.32	8.922	
6,200.0	6,196.6	6,181.1	6,177.7	15.2	15.1	152.18	-50.2	-198.9	277.0	247.2	29.79	9.300	
6,300.0	6,296.2	6,279.9	6,276.1	15.5	15.4	152.05	-55.4	-206.1	292.4	262.1	30.27	9.659	
6,400.0	6,395.8	6,378.7	6,374.5	15.8	15.7	151.93	-60.6	-213.2	307.8	277.0	30.78	9.999	
6,500.0	6,495.4	6,477.5	6,472.9	16.1	16.0	151.82	-65.8	-220.4	323.2	291.9	31.31	10.322	
6,600.0	6,595.0	6,576.3	6,571.4	16.5	16.3	151.73	-71.0	-227.5	338.6	306.8	31.86	10.627	
6,700.0	6,694.6	6,675.1	6,669.8	16.8	16.6	151.64	-76.2	-234.7	354.0	321.6	32.43	10.915	
6,800.0	6,794.2	6,773.9	6,768.2	17.2	17.0	151.56	-81.4	-241.8	369.4	336.4	33.02	11.187	
6,900.0	6,893.8	6,872.7	6,866.6	17.5	17.3	151.48	-86.6	-249.0	384.8	351.2	33.63	11.443	
7,000.0	6,993.4	6,971.5	6,965.0	17.9	17.7	151.42	-91.8	-256.1	400.2	366.0	34.25	11.685	
7,100.0	7,093.0	7,070.3	7,063.4	18.3	18.0	151.35	-97.0	-263.3	415.6	380.7	34.89	11.913	
7,200.0	7,192.6	7,169.1	7,161.8	18.7	18.4	151.29	-102.2	-270.4	431.0	395.5	35.54	12.128	
7,300.0	7,292.2	7,267.9	7,260.2	19.1	18.8	151.24	-107.4	-277.6	446.4	410.2	36.21	12.330	
7,400.0	7,391.8	7,366.7	7,358.6	19.5	19.2	151.19	-112.6	-284.7	461.9	425.0	36.89	12.521	
7,500.0	7,491.4	7,465.6	7,457.0	19.9	19.6	151.14	-117.8	-291.9	477.3	439.7	37.58	12.700	
7,600.0	7,591.0	7,564.4	7,555.4	20.3	20.0	151.09	-123.0	-299.0	492.7	454.4	38.28	12.869	
7,700.0	7,690.6	7,663.2	7,653.9	20.7	20.4	151.05	-128.2	-306.1	508.1	469.1	39.00	13.028	
7,800.0	7,790.2	7,762.0	7,752.3	21.1	20.8	151.01	-133.4	-313.3	523.5	483.8	39.72	13.178	
7,900.0	7,889.8	7,860.8	7,850.7	21.6	21.3	150.98	-138.6	-320.4	538.9	498.4	40.46	13.319	
8,000.0	7,989.4	7,959.6	7,949.1	22.0	21.7	150.94	-143.8	-327.6	554.3	513.1	41.20	13.453	
8,100.0	8,089.0	8,058.4	8,047.5	22.5	22.1	150.91	-149.0	-334.7	569.7	527.7	41.96	13.578	
8,200.0	8,188.6	8,157.2	8,145.9	22.9	22.6	150.88	-154.2	-341.9	585.1	542.4	42.72	13.697	
8,300.0	8,288.2	8,256.0	8,244.3	23.4	23.0	150.84	-159.4	-349.0	600.5	557.0	43.49	13.808	
8,400.0	8,387.8	8,354.8	8,342.7	23.8	23.4	150.82	-164.6	-356.2	615.9	571.7	44.27	13.914	
8,500.0	8,487.4	8,453.6	8,441.1	24.3	23.9	150.79	-169.8	-363.3	631.3	586.3	45.05	14.013	
8,600.0	8,587.0	8,552.4	8,539.5	24.7	24.3	150.76	-175.0	-370.5	646.7	600.9	45.85	14.107	
8,700.0	8,686.6	8,651.2	8,638.0	25.2	24.8	150.74	-180.2	-377.6	662.2	615.5	46.64	14.196	
8,800.0	8,786.2	8,750.0	8,736.4	25.7	25.3	150.72	-185.4	-384.8	677.6	630.1	47.45	14.280	
8,900.0	8,885.8	8,854.3	8,840.2	26.1	25.8	150.70	-190.7	-392.1	692.8	644.5	48.28	14.349	
9,000.0	8,985.4	8,964.9	8,950.5	26.6	26.2	150.77	-195.3	-398.4	706.6	657.5	49.13	14.382	
9,100.0	9,085.0	9,075.9	9,061.4	27.1	26.7	150.92	-198.6	-403.0	718.8	668.8	49.95	14.390	
9,200.0	9,184.6	9,187.3	9,172.8	27.6	27.1	151.15	-200.7	-405.9	729.3	678.6	50.74	14.375	
9,300.0	9,284.2	9,299.0	9,284.5	28.1	27.5	151.47	-201.6	-407.0	738.2	686.8	51.45	14.349	
9,400.0	9,383.8	9,400.3	9,385.8	28.5	27.5	151.80	-201.6	-407.1	746.1	694.2	51.93	14.367	
9,500.0	9,483.4	9,505.3	9,490.5	29.0	27.4	152.51	-196.7	-407.1	753.8	701.4	52.36	14.395	
9,600.0	9,583.0	9,605.7	9,587.6	29.5	27.2	154.67	-172.1	-407.2	761.1	708.3	52.75	14.428	
9,700.0	9,682.6	9,691.4	9,665.0	30.0	27.0	157.63	-135.4	-407.5	770.1	717.0	53.12	14.497	
9,800.0	9,782.2	9,761.2	9,722.3	30.5	26.8	160.72	-95.7	-407.7	783.5	730.0	53.50	14.646	
9,900.0	9,881.8	9,816.9	9,763.6	31.0	26.7	163.54	-58.3	-408.0	803.2	749.3	53.88	14.907	
10,000.0	9,981.4	9,861.3	9,793.1	31.5	26.6	165.97	-25.2	-408.2	830.5	776.2	54.28	15.301	
10,100.0	10,081.0	9,900.0	9,816.3	32.0	26.6	168.20	5.8	-408.4	865.8	811.1	54.69	15.832	

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



Anticollision Report

Company:	Advance Energy Partners	Local Co-ordinate Reference:	Well Anderson Fed Com 552H
Project:	Hat Mesa	TVD Reference:	WELL @ 3722.5usft (Original Well Elev)
Reference Site:	Anderson Fed Com - Pad D	MD Reference:	WELL @ 3722.5usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	Anderson Fed Com 552H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.79 sigma
Reference Wellbore	Anderson Fed Com 552H	Database:	EDM 5000.16 Single User Db
Reference Design:	Anderson Fed Com 552H - Prelim 1	Offset TVD Reference:	Offset Datum

Offset Design: Anderson Fed Com - Pad D - Anderson Fed Com 701H - Anderson Fed Com 701H - Anderson Fed Com 701H - Prelim 1													Offset Site Error:	0.0 usft
Survey Program: 0-MWD+HRGM													Offset Well Error:	0.0 usft
Reference	Offset	Semi Major Axis		Offset Wellbore Centre		Rule Assigned:				Warning				
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	+N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor		
10,157.2	10,137.9	9,914.1	9,824.1	32.3	26.6	169.03	17.5	-408.4	889.5	834.5	54.92	16.196		
10,200.0	10,180.6	9,925.0	9,829.9	32.5	26.6	169.71	26.8	-408.5	908.7	853.6	55.08	16.496		
10,300.0	10,280.3	9,950.0	9,842.3	32.9	26.6	171.29	48.4	-408.6	957.5	902.0	55.49	17.257		

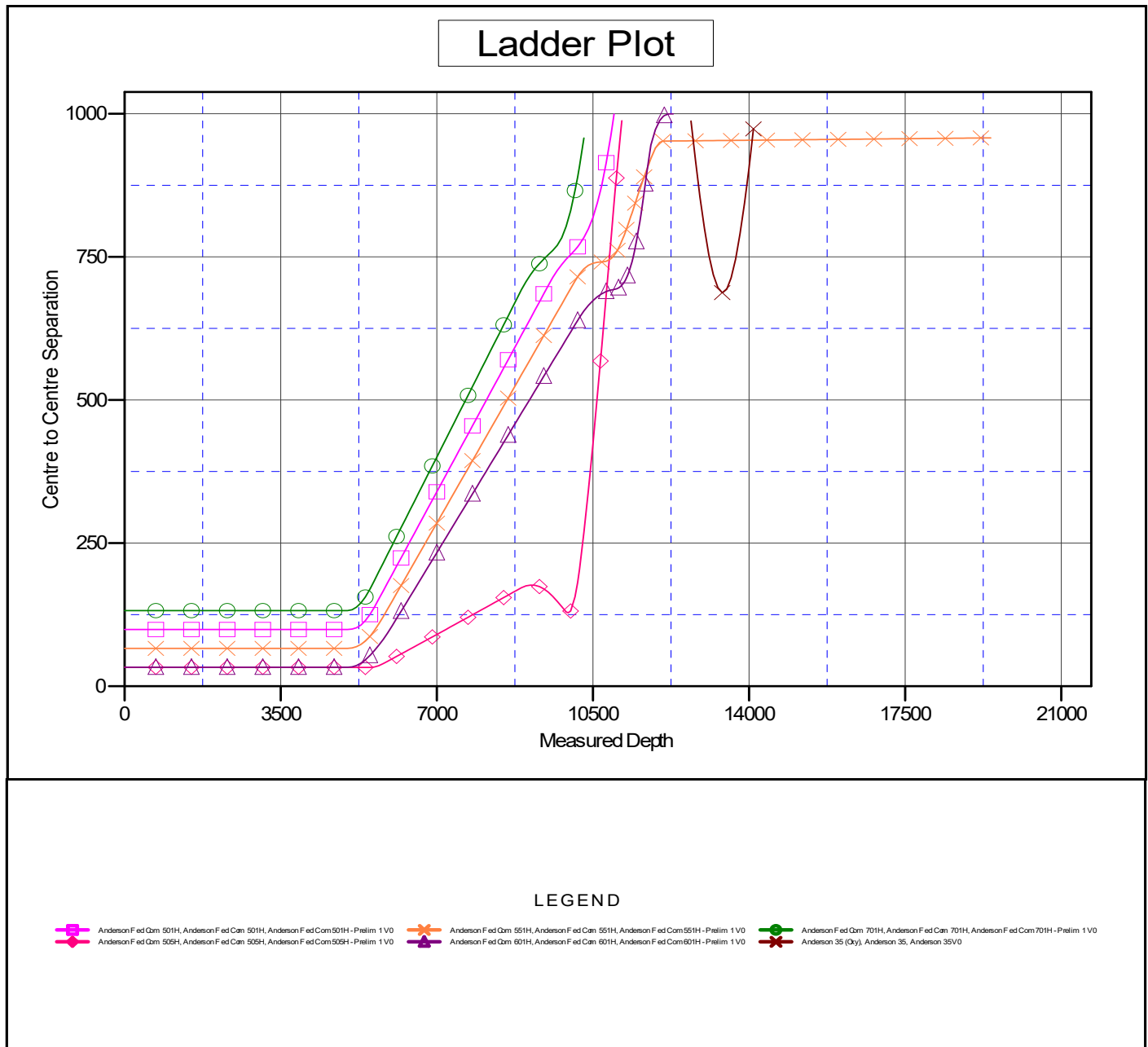


Anticollision Report

Company:	Advance Energy Partners	Local Co-ordinate Reference:	Well Anderson Fed Com 552H
Project:	Hat Mesa	TVD Reference:	WELL @ 3722.5usft (Original Well Elev)
Reference Site:	Anderson Fed Com - Pad D	MD Reference:	WELL @ 3722.5usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	Anderson Fed Com 552H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.79 sigma
Reference Wellbore	Anderson Fed Com 552H	Database:	EDM 5000.16 Single User Db
Reference Design:	Anderson Fed Com 552H - Prelim 1	Offset TVD Reference:	Offset Datum

Reference Depths are relative to WELL @ 3722.5usft (Original Well Ele)
 Offset Depths are relative to Offset Datum
 Central Meridian is 104° 20' 0.000 W

Coordinates are relative to: Anderson Fed Com 552H
 Coordinate System is US State Plane 1983, New Mexico Eastern Zone
 Grid Convergence at Surface is: 0.37°



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



Anticollision Report

Company:	Advance Energy Partners	Local Co-ordinate Reference:	Well Anderson Fed Com 552H
Project:	Hat Mesa	TVD Reference:	WELL @ 3722.5usft (Original Well Elev)
Reference Site:	Anderson Fed Com - Pad D	MD Reference:	WELL @ 3722.5usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	Anderson Fed Com 552H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.79 sigma
Reference Wellbore	Anderson Fed Com 552H	Database:	EDM 5000.16 Single User Db
Reference Design:	Anderson Fed Com 552H - Prelim 1	Offset TVD Reference:	Offset Datum

Reference Depths are relative to WELL @ 3722.5usft (Original Well Ele

Offset Depths are relative to Offset Datum

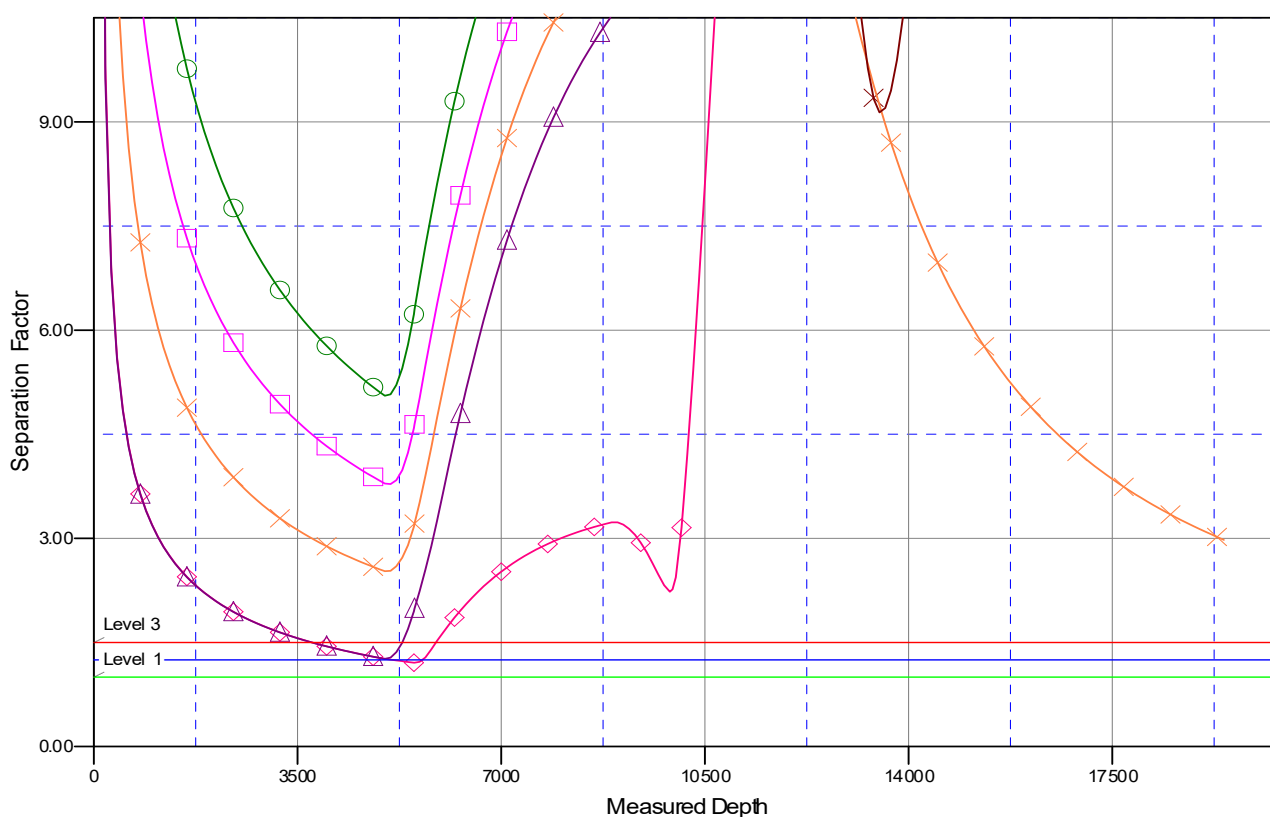
Central Meridian is 104° 20' 0.000 W

Coordinates are relative to: Anderson Fed Com 552H

Coordinate System is US State Plane 1983, New Mexico Eastern Zone

Grid Convergence at Surface is: 0.37°

Separation Factor Plot



LEGEND

■ Anderson Fed Com 501H, Anderson Fed Com 501H, Anderson Fed Com 501H - Prelim 1 V0
 ✕ Anderson Fed Com 551H, Anderson Fed Com 551H, Anderson Fed Com 551H - Prelim 1 V0
 ● Anderson Fed Com 701H, Anderson Fed Com 701H, Anderson Fed Com 701H - Prelim 1 V0
◆ Anderson Fed Com 509H, Anderson Fed Com 509H, Anderson Fed Com 509H - Prelim 1 V0
 ▲ Anderson Fed Com 601H, Anderson Fed Com 601H, Anderson Fed Com 601H - Prelim 1 V0
 ✕ Anderson 35 (Qty), Anderson 35, Anderson 35 V0

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

State of New Mexico
Energy, Minerals and Natural Resources Department

Submit Electronically
Via E-permitting

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

NATURAL GAS MANAGEMENT PLAN

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

Section 1 – Plan Description

Effective May 25, 2021

I. Operator: Advance Energy Partners Hat Mesa, LLC **OGRID:** 372417 **Date:** October 14, 2021

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

If Other, please describe: _____

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

Well Name	API	ULSTR	Footages	Anticipated Oil BBL/D	Anticipated Gas MCF/D	Anticipated Produced Water BBL/D
Anderson Fed Com 501H		Lot 4-Sec 2 22S 32E	180 FNL & 644 FWL	1280	1500	3200
Anderson Fed Com 505H		Lot 4-Sec 2 22S-32E	180 FNL & 776 FWL	1280	1500	3200
Anderson Fed Com 552H		Lot 4-Sec 2 22S 32E	180 FNL & 743 FWL	1280	1500	3200
Anderson Fed Com 601H		Lot 4-Sec 2 22S 32E	180 FNL & 710 FWL	1280	1500	3200
Anderson Fed Com 701H		Lot 4-Sec 2 22S-32E	180 FNL & 776 FWL	1280	1500	3200

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

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

Well Name	API	Spud Date	TD Reached Date	Completion Commencement Date	Initial Flow Back Date	First Production Date
Anderson Fed Com 501H		11/17/21	01/26/22	03/03/22	04/01/22	06/01/22
Anderson Fed Com 505H		11/17/21	1/24/22	02/28/22	04/01/22	06/01/22
Anderson Fed Com 552H		11/19/21	01/19/2022	02/28/22		
Anderson Fed Com 601H		11/20/21	01/22/22	02/28/22	04/01/22	06/01/22
Anderson Fed Com 701H		11/18.21	1/15/22	02/28/22	04/01/22	06/01/22

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

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

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

Section 2 – Enhanced Plan **EFFECTIVE APRIL 1, 2022**

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

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

IX. Anticipated Natural Gas Production:

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

X. Natural Gas Gathering System (NGGS):

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

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

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

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

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

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

Section 3 - Certifications

Effective May 25, 2021

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

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

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

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

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

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

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

Section 4 - Notices

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

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

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

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

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

Signature: 
Printed Name: Cory Walk
Title: Consultant
E-mail Address: cory@permitswest.com
Date: 10/14/21
Phone: (505) 466-8120
OIL CONSERVATION DIVISION (Only applicable when submitted as a standalone form)
Approved By:
Title:
Approval Date:
Conditions of Approval:

Natural Gas Management Plan - Attachment

- VI. Separation equipment will be sized by construction engineering staff based on stated manufacturer daily throughput capacities and anticipated daily production rates to ensure adequate capacity. Closed vent system piping, compression needs, and VRUs will be sized utilizing ProMax modelling software to ensure adequate capacity for anticipated production volumes and conditions.
- VII. Advance Energy Partners Hat Mesa, LLC (AEP) will take the following actions to comply with the regulations listed in 19.15.27.8:
- A. AEP will maximize the recovery of natural gas by minimizing the waste, as defined by 19.15.2 NMAC, of natural gas through venting and flaring. AEP will ensure that well(s) will be connected to a natural gas gathering system with sufficient capacity to transport natural gas. If there is no adequate takeaway for the gas, well(s) will be shut in until the natural gas gathering system is available.
 - B. All drilling operations will be equipped with a rig flare located at least 100' from the nearest surface hole. Rig flare will be utilized to combust any natural gas that is brought to surface during normal drilling operations. In the case of emergency venting or flaring the volumes will be estimated and reported appropriately.
 - C. During completion operations any natural gas brought to surface will be flared. Immediately following the finish of completion operations, all well flowback will be directed to permanent separation equipment. Produced natural gas from separation equipment will be sent to sales. It is not anticipated that gas will not meet pipeline standards. However, if natural gas does not meet gathering pipeline quality specifications, AEP will flare the natural gas for 60 days or until the natural gas meets the pipeline quality specifications, whichever is sooner. AEP will ensure that the flare is sized properly and is equipped with automatic igniter or continuous pilot. The gas sample will be analyzed twice per week and the gas will be routed into a gathering system as soon as pipeline specifications are met.
 - D. Natural gas will not be flared with the exceptions and provisions listed in the 19.15.27.8 D.(1) through (4). If there is no adequate takeaway for the separator gas, well(s) will be shut in until the natural gas gathering system is available with exception of emergency or malfunction situations. Venting and/or flaring volumes will be estimated and reported appropriately.
 - E. AEP will comply with the performance standards requirements and provisions listed in 19.15.27.8 E.(1) through (8). All equipment will be designed and sized to handle maximum anticipated pressures and throughputs to minimize the waste. Production storage tanks constructed after May 25, 2021, will be equipped with automatic gauging system. Flares constructed after May 25, 2021, will be equipped with automatic igniter or continuous pilot. Flares will be located at least 100' from the well and storage tanks unless otherwise approved by the division. AEP will conduct AVO inspections as described in 19.15.27.8 E (5) (a) with frequencies specified in 19.15.27.8 E (5) (b) and (c). All emergencies will be resolved as quickly and safely as feasible to minimize waste.
 - F. The volume of natural gas that is vented or flared as the result of malfunction or emergency during drilling and completions operations will be estimated. The volume of natural gas that is vented, flared, or beneficially used during production operations, will be measured, or estimated. AEP will install equipment to measure

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

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

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

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

CONDITIONS

Action 56054

CONDITIONS

Operator: ADVANCE ENERGY PARTNERS HAT MESA, LLC 11490 Westheimer Rd., Ste 950 Houston, TX 77077	OGRID: 372417
	Action Number: 56054
	Action Type: [C-103] NOI Change of Plans (C-103A)

CONDITIONS

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