

Well Name: ANDERSON FED COM	Well Location: T22S / R32E / SEC 2 / LOT 3 /	County or Parish/State:
Well Number: 502H	Type of Well: OIL WELL	Allottee or Tribe Name:
Lease Number: NMNM120905	Unit or CA Name:	Unit or CA Number:
US Well Number:	Well Status: Approved Application for Permit to Drill	Operator: ADVANCE ENERGY PARTNERS HAT MESA LLC

Notice of Intent

Type of Submission: Notice of Intent	Type of Action Other
Date Sundry Submitted: 08/06/2021	Time Sundry Submitted: 11:44
Date proposed operation will begin: 08/13/2021	

Procedure Description: Request to move Bottom Hole Location from 1220' FSL & 2310' FWL, Section 26, T-21-S, R-32-E, SESW to 1220' FSL & 2178' FWL, Section 26, T-21-S, R-32-E, SESW. 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_502H_BHL_etc_Sundry_Attachments_20210806114345.pdf

Well Name: ANDERSON FED COM	Well Location: T22S / R32E / SEC 2 / LOT 3 /	County or Parish/State:
Well Number: 502H	Type of Well: OIL WELL	Allottee or Tribe Name:
Lease Number: NMNM120905	Unit or CA Name:	Unit or CA Number:
US Well Number:	Well Status: Approved Application for Permit to Drill	Operator: ADVANCE ENERGY PARTNERS HAT MESA LLC

Operator Certification

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

Operator Electronic Signature: BRIAN WOOD
Signed on: AUG 06, 2021 11:43 AM
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 Phone: 5752342234
Disposition: Approved
Signature: Chris Walls
BLM POC Title: Petroleum Engineer
BLM POC Email Address: cwalls@blm.gov
Disposition Date: 08/09/2021

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

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

Form C-102

Revised August 4, 2011

Submit one copy to appropriate
District Office

WELL LOCATION AND ACREAGE DEDICATION PLAT

☐ AMENDED REPORT

API Number 30-025-48993	Pool Code 51683	Pool Name Red Tank; Bone Spring
Property Code 326484	Property Name ANDERSON FED COM	Well Number 502H
OGRID No. 372417	Operator Name ADVANCE ENERGY PARTNERS HAT MESA, LLC	Elevation 3671'

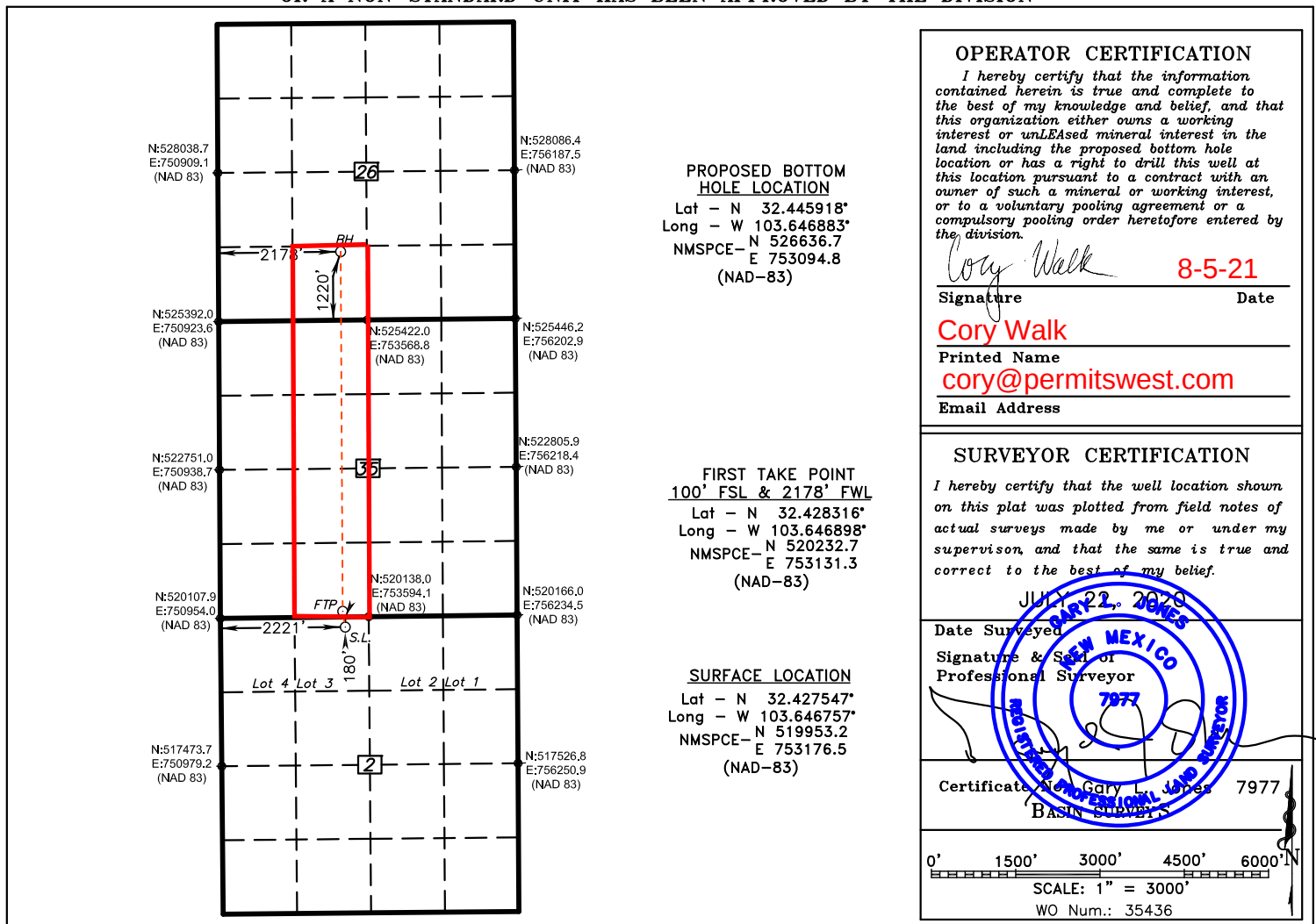
Surface Location

UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	SOUTH/South line	Feet from the	East/West line	County
LOT 3	2	22 S	32 E		180	NORTH	2221	WEST	LEA

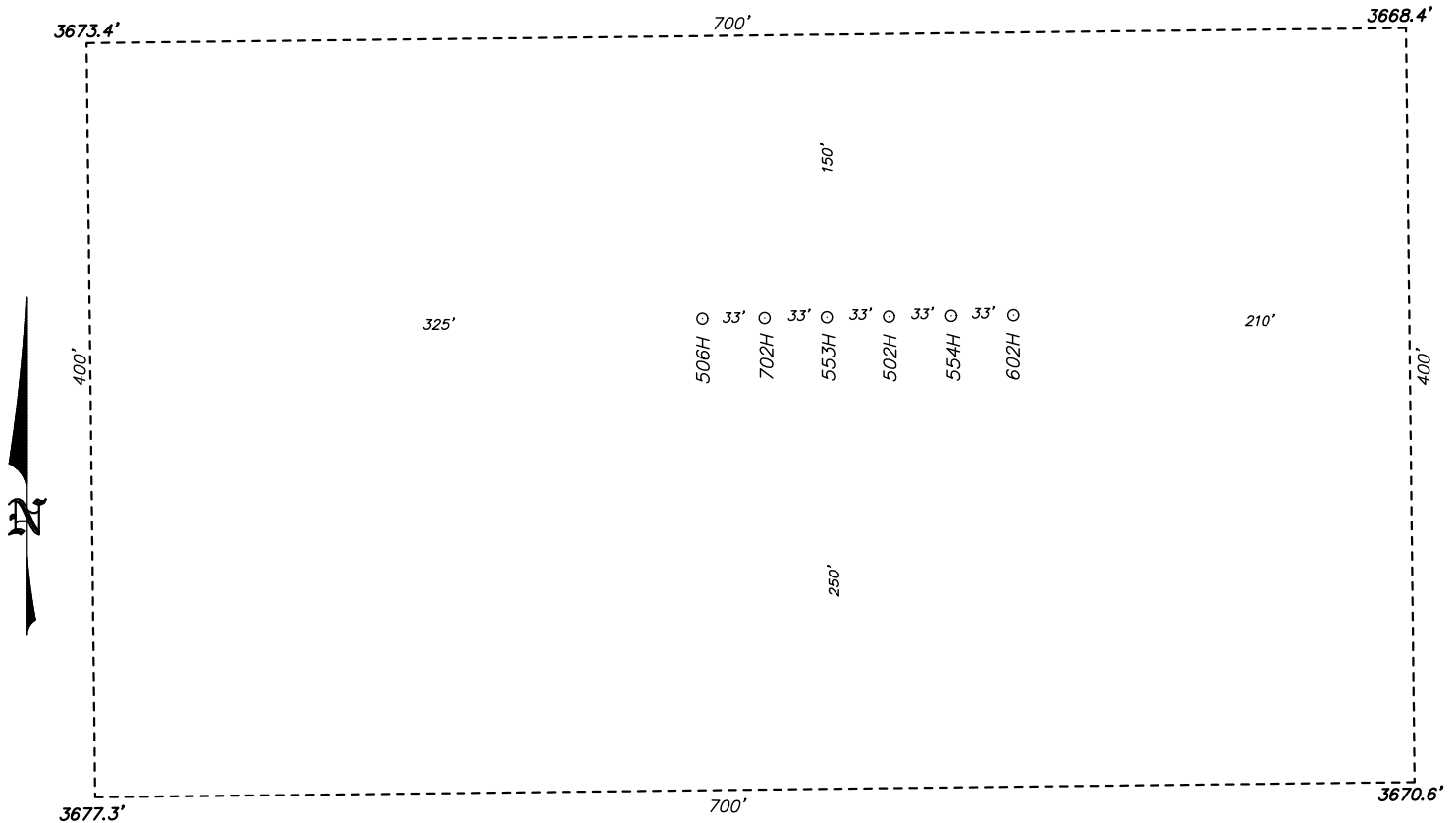
Bottom Hole Location If Different From Surface

UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	SOUTH/South line	Feet from the	East/West line	County
N	26	21 S	32 E		1220	SOUTH	2178	WEST	LEA
Dedicated Acres 200	Joint or Infill	Consolidation Code C	Order No.						

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



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



basin
surveys
focused on excellence
in the oilfield

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

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

ADVANCE ENERGY PARTNERS HAT MESA, LLC

REF: ANDERSON FED COM 502H / WELL PAD TOPO

THE ANDERSON FED COM 502H LOCATED 180' FROM
THE NORTH LINE AND 2221' FROM THE WEST LINE OF
SECTION 2, TOWNSHIP 22 SOUTH, RANGE 32 EAST.

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

W.O. Number: 35436	Drawn By: K. GOAD	Date: 07-23-2020	Survey Date: 07-22-2020	Sheet 1 of 1 Sheets
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CHANGE TO PLANS

Move First Take Point

From: 100' FSL & 2310' FWL, Section 35, T-21-S, R-32-E, SESW

To: 100' FSL & 2178' FWL, Section 35, T-21-S, R-32-E, SESW

Move Bottom Hole Location

From: 1220' FSL & 2310' FWL, Section 26, T-21-S, R-32-E, SESW

To: 1220' FSL & 2178' FWL, Section 26, T-21-S, R-32-E, SESW

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

Advance Energy Partners Hat Mesa, LLC
 Anderson Fed Com 502H
 SHL 180' FNL & 2221' FWL Sec. 2, T. 22 S., R. 32 E.
 BHL 1220' FSL & 2178' 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 (surf. casing set @ 1232' MD)	1207'	1207'	N/A
Top salt	1401'	1401'	N/A
Tansil limestone (int. casing set @ 4735' MD)	3297'	3297'	hydrocarbons
Bell Canyon limestone	4785'	4785'	hydrocarbons
Cherry Canyon sandstone	5681'	5685'	hydrocarbons
Lower Brushy Canyon sandstone	8432'	8435'	hydrocarbons
Avalon shale	8952'	8956'	hydrocarbons
1 st Bone Spring sandstone	9819'	9824'	hydrocarbons
(KOP	9998'	10002'	hydrocarbons)
2 nd Bone Spring sandstone	10407'	10494'	
TD	10475'	17159'	hydrocarbons

2. NOTABLE ZONES

Second Bone is the goal. Closest water well (CP 01701 POD 1) is 0.53-mile northwest. 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.

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

Advance Energy Partners Hat Mesa, LLC

DRILL PLAN PAGE 2

Anderson Fed Com 502H

SHL 180' FNL & 2221' FWL Sec. 2, T. 22 S., R. 32 E.

BHL 1220' FSL & 2178' FWL Sec. 26, T 21 S., R. 32 E.

Lea County, NM

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' - 1232'	0' - 1232'	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' - 4735'	4000' - 4735'	Intermed. 9.625"	40	HCL-80	LTC	1.125	1.125	1.6
8.5"	0' - 17159'	0' - 10475'	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 502H

SHL 180' FNL & 2221' FWL Sec. 2, T. 22 S., R. 32 E.

BHL 1220' FSL & 2178' 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	510	1.9	969	12.8	50%	B Poz + C	6% Gel + 5% SALT + 0.25PPS Pol-E-Flake + 0.005GPS NoFoam V1A
	Tail	932	215	1.35	290	14.8	20%	C	2% CaCl ₂ + 0.005GPS NoFoam V1A
1st Intermediate (stage 1)	Lead	2800	1380	1.84	2539	12.8	662%	B Poz + C	2% Gel + 5% SALT + 0.15% R-1300 + 0.25PPS Pol-E-Flake + 0.005GPS NoFoam V1A
	Tail	3860	280	1.37	384	14.8	20%	C	5% SALT + 0.005GPS NoFoam V1A
1st Intermediate (stage 2)	Lead	0	460	3.00	1380	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	0.005GPS NoFoam V1A
Production	Lead	0	900	3.39	3051	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	10002	1630	1.22	1989	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 will be on site at all times. Mud program may change due to hole conditions. A closed loop system will be used.

Advance Energy Partners Hat Mesa, LLC

DRILL PLAN PAGE 4

Anderson Fed Com 502H

SHL 180' FNL & 2221' FWL Sec. 2, T. 22 S., R. 32 E.

BHL 1220' FSL & 2178' FWL Sec. 26, T 21 S., R. 32 E.

Lea County, NM

Type	Interval (MD)	lb/gal	Viscosity	Fluid Loss ml/30 mins
fresh water	0' - 1232'	8.4 - 10.0	28 - 36	N/C
Brine	1232' - 4735'	10.0 - 10.5	28 - 32	N/C
Cut Brine	4735' - 10002'	9.2 - 9.5	28 - 30	N/C
OBM	10002' - 17159'	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 ≈ 5312 psi. Expected bottom hole temperature is $\approx 223^{\circ}$ 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 502H**

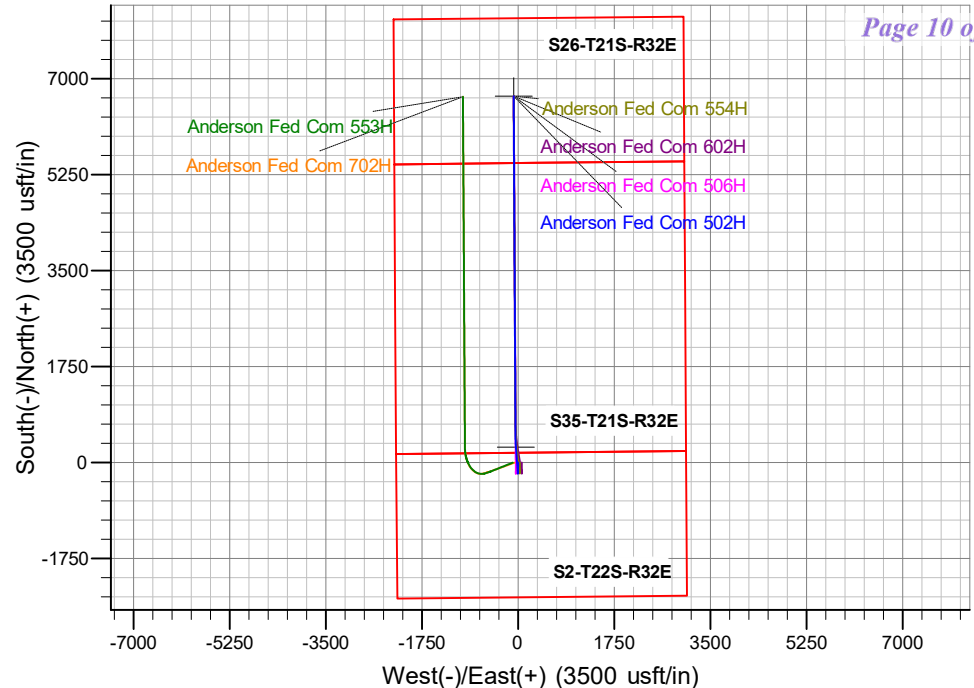
Ground Elev: 3672.0 KB: 3704.5

+N/-S	+E/-W	Northing	Easting	Latitude	Longitude
0.0	0.0	519953.36	753176.61	32° 25' 39.169 N	103° 38' 48.325 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

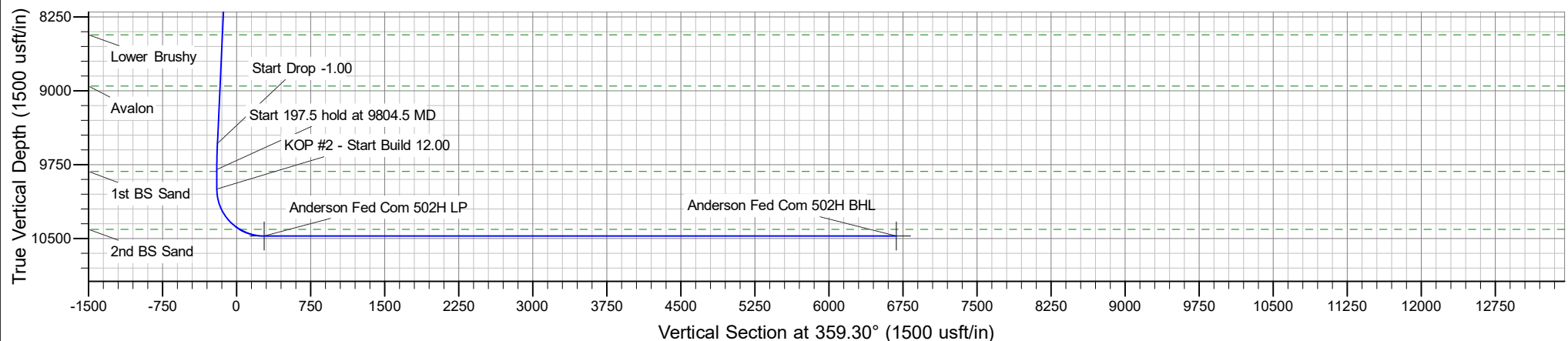
**SECTION DETAILS**

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	5200.0	0.00	0.00	5200.0	0.0	0.0	0.00	0.00	0.0	KOP - Start Build 1.00
3	5464.2	2.64	181.72	5464.1	-6.1	-0.2	1.00	181.72	-6.1	Start 4076.1 hold at 5464.2 MD
4	9540.3	2.64	181.72	9535.9	-193.9	-5.8	0.00	0.00	-193.8	Start Drop -1.00
5	9804.5	0.00	0.00	9800.0	-200.0	-6.0	1.00	180.00	-199.9	Start 197.5 hold at 9804.5 MD
6	10002.1	0.00	0.00	9997.5	-200.0	-6.0	0.00	0.00	-199.9	KOP #2 - Start Build 12.00
7	10752.1	90.00	355.83	10475.0	276.2	-40.7	12.00	355.83	276.7	LP - Start 3.6 hold at 10752.1 MD
8	10755.6	90.00	355.83	10475.0	279.8	-41.0	0.00	0.00	280.2	Start DLS 2.00 TFO 90.00
9	10948.9	90.00	359.69	10475.0	472.9	-48.6	2.00	90.00	473.4	Start 6210.4 hold at 10948.9 MD
10	17159.3	90.00	359.69	10475.0	6683.2	-81.8	0.00	0.00	6683.7	TD at 17159.3



Azimuths to Grid North
 True North: -0.37°
 Magnetic North: 6.29°

Magnetic Field
 Strength: 47722.6nT
 Dip Angle: 60.19°
 Date: 8/17/2020
 Model: IGRF2015





Advance Energy Partners

Hat Mesa

Anderson Fed Com - Pad C

Anderson Fed Com 502H

Anderson Fed Com 502H

Plan: Anderson Fed Com 502H - Prelim 2

Standard Planning Report

28 July, 2021



Planning Report

Database:	EDM 5000.16 Single User Db	Local Co-ordinate Reference:	Well Anderson Fed Com 502H
Company:	Advance Energy Partners	TVD Reference:	WELL @ 3704.5usft (Original Well Elev)
Project:	Hat Mesa	MD Reference:	WELL @ 3704.5usft (Original Well Elev)
Site:	Anderson Fed Com - Pad C	North Reference:	Grid
Well:	Anderson Fed Com 502H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Anderson Fed Com 502H		
Design:	Anderson Fed Com 502H - Prelim 2		

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 C			
Site Position:		Northing:	519,952.78 usft	Latitude:	32° 25' 39.166 N
From:	Lat/Long	Easting:	753,142.98 usft	Longitude:	103° 38' 48.718 W
Position Uncertainty:	0.0 usft	Slot Radius:	13-3/16 "		

Well	Anderson Fed Com 502H					
Well Position	+N/-S	0.0 usft	Northing:	519,953.36 usft	Latitude:	32° 25' 39.169 N
	+E/-W	0.0 usft	Easting:	753,176.61 usft	Longitude:	103° 38' 48.325 W
Position Uncertainty		0.0 usft	Wellhead Elevation:	usft	Ground Level:	3,672.0 usft
Grid Convergence:		0.37 °				

Wellbore	Anderson Fed Com 502H				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2015	8/17/2020	6.66	60.19	47,722.59376525

Design	Anderson Fed Com 502H - Prelim 2				
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	359.30	

Plan Survey Tool Program	Date	7/28/2021			
Depth From (usft)	Depth To (usft)	Survey (Wellbore)	Tool Name	Remarks	
1	0.0	17,158.4	Anderson Fed Com 502H - Prelim	MWD+HRGM	
			OWSG MWD + HRGM		



Planning Report

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Company:	Advance Energy Partners	TVD Reference:	WELL @ 3704.5usft (Original Well Elev)
Project:	Hat Mesa	MD Reference:	WELL @ 3704.5usft (Original Well Elev)
Site:	Anderson Fed Com - Pad C	North Reference:	Grid
Well:	Anderson Fed Com 502H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Anderson Fed Com 502H		
Design:	Anderson Fed Com 502H - Prelim 2		

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	
5,200.0	0.00	0.00	5,200.0	0.0	0.0	0.00	0.00	0.00	0.00	
5,464.2	2.64	181.72	5,464.1	-6.1	-0.2	1.00	1.00	0.00	181.72	
9,540.3	2.64	181.72	9,535.9	-193.9	-5.8	0.00	0.00	0.00	0.00	
9,804.5	0.00	0.00	9,800.0	-200.0	-6.0	1.00	-1.00	0.00	180.00	
10,002.1	0.00	0.00	9,997.5	-200.0	-6.0	0.00	0.00	0.00	0.00	
10,752.1	90.00	355.83	10,475.0	276.2	-40.7	12.00	12.00	0.00	355.83	
10,755.6	90.00	355.83	10,475.0	279.8	-41.0	0.00	0.00	0.00	0.00	Anderson Fed Com 502H
10,948.9	90.00	359.69	10,475.0	472.9	-48.6	2.00	0.00	2.00	90.00	
17,159.3	90.00	359.69	10,475.0	6,683.2	-81.8	0.00	0.00	0.00	0.00	Anderson Fed Com 502H



Planning Report

Database:	EDM 5000.16 Single User Db	Local Co-ordinate Reference:	Well Anderson Fed Com 502H
Company:	Advance Energy Partners	TVD Reference:	WELL @ 3704.5usft (Original Well Elev)
Project:	Hat Mesa	MD Reference:	WELL @ 3704.5usft (Original Well Elev)
Site:	Anderson Fed Com - Pad C	North Reference:	Grid
Well:	Anderson Fed Com 502H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Anderson Fed Com 502H		
Design:	Anderson Fed Com 502H - Prelim 2		

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
1,207.0	0.00	0.00	1,207.0	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
4,785.0	0.00	0.00	4,785.0	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 502H
Company:	Advance Energy Partners	TVD Reference:	WELL @ 3704.5usft (Original Well Elev)
Project:	Hat Mesa	MD Reference:	WELL @ 3704.5usft (Original Well Elev)
Site:	Anderson Fed Com - Pad C	North Reference:	Grid
Well:	Anderson Fed Com 502H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Anderson Fed Com 502H		
Design:	Anderson Fed Com 502H - Prelim 2		

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
5,100.0	0.00	0.00	5,100.0	0.0	0.0	0.0	0.00	0.00	0.00
5,200.0	0.00	0.00	5,200.0	0.0	0.0	0.0	0.00	0.00	0.00
KOP - Start Build 1.00									
5,300.0	1.00	181.72	5,300.0	-0.9	0.0	-0.9	1.00	1.00	0.00
5,400.0	2.00	181.72	5,400.0	-3.5	-0.1	-3.5	1.00	1.00	0.00
5,464.2	2.64	181.72	5,464.1	-6.1	-0.2	-6.1	1.00	1.00	0.00
Start 4076.1 hold at 5464.2 MD									
5,500.0	2.64	181.72	5,499.9	-7.7	-0.2	-7.7	0.00	0.00	0.00
5,600.0	2.64	181.72	5,599.8	-12.3	-0.4	-12.3	0.00	0.00	0.00
5,700.0	2.64	181.72	5,699.7	-17.0	-0.5	-16.9	0.00	0.00	0.00
5,800.0	2.64	181.72	5,799.5	-21.6	-0.6	-21.6	0.00	0.00	0.00
5,900.0	2.64	181.72	5,899.4	-26.2	-0.8	-26.2	0.00	0.00	0.00
6,000.0	2.64	181.72	5,999.3	-30.8	-0.9	-30.8	0.00	0.00	0.00
6,100.0	2.64	181.72	6,099.2	-35.4	-1.1	-35.4	0.00	0.00	0.00
6,200.0	2.64	181.72	6,199.1	-40.0	-1.2	-40.0	0.00	0.00	0.00
6,300.0	2.64	181.72	6,299.0	-44.6	-1.3	-44.6	0.00	0.00	0.00
6,400.0	2.64	181.72	6,398.9	-49.2	-1.5	-49.2	0.00	0.00	0.00
6,500.0	2.64	181.72	6,498.8	-53.8	-1.6	-53.8	0.00	0.00	0.00
6,600.0	2.64	181.72	6,598.7	-58.4	-1.8	-58.4	0.00	0.00	0.00
6,700.0	2.64	181.72	6,698.6	-63.0	-1.9	-63.0	0.00	0.00	0.00
6,800.0	2.64	181.72	6,798.5	-67.6	-2.0	-67.6	0.00	0.00	0.00
6,900.0	2.64	181.72	6,898.4	-72.2	-2.2	-72.2	0.00	0.00	0.00
7,000.0	2.64	181.72	6,998.3	-76.9	-2.3	-76.8	0.00	0.00	0.00
7,100.0	2.64	181.72	7,098.2	-81.5	-2.4	-81.4	0.00	0.00	0.00
7,200.0	2.64	181.72	7,198.1	-86.1	-2.6	-86.0	0.00	0.00	0.00
7,300.0	2.64	181.72	7,298.0	-90.7	-2.7	-90.6	0.00	0.00	0.00
7,400.0	2.64	181.72	7,397.8	-95.3	-2.9	-95.2	0.00	0.00	0.00
7,500.0	2.64	181.72	7,497.7	-99.9	-3.0	-99.9	0.00	0.00	0.00
7,600.0	2.64	181.72	7,597.6	-104.5	-3.1	-104.5	0.00	0.00	0.00
7,700.0	2.64	181.72	7,697.5	-109.1	-3.3	-109.1	0.00	0.00	0.00
7,800.0	2.64	181.72	7,797.4	-113.7	-3.4	-113.7	0.00	0.00	0.00
7,900.0	2.64	181.72	7,897.3	-118.3	-3.5	-118.3	0.00	0.00	0.00
8,000.0	2.64	181.72	7,997.2	-122.9	-3.7	-122.9	0.00	0.00	0.00
8,100.0	2.64	181.72	8,097.1	-127.5	-3.8	-127.5	0.00	0.00	0.00
8,200.0	2.64	181.72	8,197.0	-132.2	-4.0	-132.1	0.00	0.00	0.00
8,300.0	2.64	181.72	8,296.9	-136.8	-4.1	-136.7	0.00	0.00	0.00
8,400.0	2.64	181.72	8,396.8	-141.4	-4.2	-141.3	0.00	0.00	0.00
8,435.3	2.64	181.72	8,432.0	-143.0	-4.3	-142.9	0.00	0.00	0.00
Lower Brushy									
8,500.0	2.64	181.72	8,496.7	-146.0	-4.4	-145.9	0.00	0.00	0.00
8,600.0	2.64	181.72	8,596.6	-150.6	-4.5	-150.5	0.00	0.00	0.00
8,700.0	2.64	181.72	8,696.5	-155.2	-4.7	-155.1	0.00	0.00	0.00
8,800.0	2.64	181.72	8,796.4	-159.8	-4.8	-159.7	0.00	0.00	0.00
8,900.0	2.64	181.72	8,896.3	-164.4	-4.9	-164.3	0.00	0.00	0.00
8,955.8	2.64	181.72	8,952.0	-167.0	-5.0	-166.9	0.00	0.00	0.00
Avalon									
9,000.0	2.64	181.72	8,996.1	-169.0	-5.1	-168.9	0.00	0.00	0.00
9,100.0	2.64	181.72	9,096.0	-173.6	-5.2	-173.5	0.00	0.00	0.00
9,200.0	2.64	181.72	9,195.9	-178.2	-5.3	-178.2	0.00	0.00	0.00
9,300.0	2.64	181.72	9,295.8	-182.8	-5.5	-182.8	0.00	0.00	0.00
9,400.0	2.64	181.72	9,395.7	-187.4	-5.6	-187.4	0.00	0.00	0.00
9,500.0	2.64	181.72	9,495.6	-192.1	-5.8	-192.0	0.00	0.00	0.00



Planning Report

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Company:	Advance Energy Partners	TVD Reference:	WELL @ 3704.5usft (Original Well Elev)
Project:	Hat Mesa	MD Reference:	WELL @ 3704.5usft (Original Well Elev)
Site:	Anderson Fed Com - Pad C	North Reference:	Grid
Well:	Anderson Fed Com 502H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Anderson Fed Com 502H		
Design:	Anderson Fed Com 502H - Prelim 2		

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)
9,540.3	2.64	181.72	9,535.9	-193.9	-5.8	-193.8	0.00	0.00	0.00
Start Drop -1.00									
9,600.0	2.05	181.72	9,595.5	-196.4	-5.9	-196.3	1.00	-1.00	0.00
9,700.0	1.05	181.72	9,695.5	-199.0	-6.0	-199.0	1.00	-1.00	0.00
9,800.0	0.05	181.72	9,795.5	-200.0	-6.0	-199.9	1.00	-1.00	0.00
9,804.5	0.00	0.00	9,800.0	-200.0	-6.0	-199.9	1.00	-1.00	0.00
Start 197.5 hold at 9804.5 MD									
9,823.5	0.00	0.00	9,819.0	-200.0	-6.0	-199.9	0.00	0.00	0.00
1st BS Sand									
9,900.0	0.00	0.00	9,895.5	-200.0	-6.0	-199.9	0.00	0.00	0.00
10,000.0	0.00	0.00	9,995.5	-200.0	-6.0	-199.9	0.00	0.00	0.00
10,002.1	0.00	0.00	9,997.5	-200.0	-6.0	-199.9	0.00	0.00	0.00
KOP #2 - Start Build 12.00									
10,100.0	11.75	355.83	10,094.8	-190.0	-6.7	-189.9	12.00	12.00	0.00
10,200.0	23.75	355.83	10,189.9	-159.7	-8.9	-159.5	12.00	12.00	0.00
10,300.0	35.75	355.83	10,276.5	-110.3	-12.5	-110.1	12.00	12.00	0.00
10,400.0	47.75	355.83	10,351.0	-44.0	-17.4	-43.7	12.00	12.00	0.00
10,494.1	59.05	355.83	10,407.0	31.3	-22.9	31.5	12.00	12.00	0.00
2nd BS Sand									
10,500.0	59.75	355.83	10,410.0	36.3	-23.2	36.6	12.00	12.00	0.00
10,600.0	71.75	355.83	10,451.0	127.1	-29.9	127.5	12.00	12.00	0.00
10,700.0	83.75	355.83	10,472.2	224.4	-37.0	224.8	12.00	12.00	0.00
10,752.1	90.00	355.83	10,475.0	276.2	-40.7	276.7	12.00	12.00	0.00
LP - Start 3.6 hold at 10752.1 MD									
10,755.6	90.00	355.83	10,475.0	279.8	-41.0	280.2	0.00	0.00	0.00
Start DLS 2.00 TFO 90.00 - Anderson Fed Com 502H LP									
10,800.0	90.00	356.71	10,475.0	324.0	-43.9	324.6	2.00	0.00	2.00
10,900.0	90.00	358.71	10,475.0	424.0	-47.9	424.5	2.00	0.00	2.00
10,948.9	90.00	359.69	10,475.0	472.9	-48.6	473.4	2.00	0.00	2.00
Start 6210.4 hold at 10948.9 MD									
11,000.0	90.00	359.69	10,475.0	523.9	-48.8	524.5	0.00	0.00	0.00
11,100.0	90.00	359.69	10,475.0	623.9	-49.4	624.5	0.00	0.00	0.00
11,200.0	90.00	359.69	10,475.0	723.9	-49.9	724.5	0.00	0.00	0.00
11,300.0	90.00	359.69	10,475.0	823.9	-50.4	824.5	0.00	0.00	0.00
11,400.0	90.00	359.69	10,475.0	923.9	-51.0	924.5	0.00	0.00	0.00
11,500.0	90.00	359.69	10,475.0	1,023.9	-51.5	1,024.5	0.00	0.00	0.00
11,600.0	90.00	359.69	10,475.0	1,123.9	-52.0	1,124.5	0.00	0.00	0.00
11,700.0	90.00	359.69	10,475.0	1,223.9	-52.6	1,224.5	0.00	0.00	0.00
11,800.0	90.00	359.69	10,475.0	1,323.9	-53.1	1,324.5	0.00	0.00	0.00
11,900.0	90.00	359.69	10,475.0	1,423.9	-53.6	1,424.5	0.00	0.00	0.00
12,000.0	90.00	359.69	10,475.0	1,523.9	-54.2	1,524.5	0.00	0.00	0.00
12,100.0	90.00	359.69	10,475.0	1,623.9	-54.7	1,624.5	0.00	0.00	0.00
12,200.0	90.00	359.69	10,475.0	1,723.9	-55.3	1,724.5	0.00	0.00	0.00
12,300.0	90.00	359.69	10,475.0	1,823.9	-55.8	1,824.5	0.00	0.00	0.00
12,400.0	90.00	359.69	10,475.0	1,923.9	-56.3	1,924.5	0.00	0.00	0.00
12,500.0	90.00	359.69	10,475.0	2,023.9	-56.9	2,024.5	0.00	0.00	0.00
12,600.0	90.00	359.69	10,475.0	2,123.9	-57.4	2,124.5	0.00	0.00	0.00
12,700.0	90.00	359.69	10,475.0	2,223.9	-57.9	2,224.5	0.00	0.00	0.00
12,800.0	90.00	359.69	10,475.0	2,323.9	-58.5	2,324.5	0.00	0.00	0.00
12,900.0	90.00	359.69	10,475.0	2,423.9	-59.0	2,424.5	0.00	0.00	0.00
13,000.0	90.00	359.69	10,475.0	2,523.9	-59.5	2,524.5	0.00	0.00	0.00
13,100.0	90.00	359.69	10,475.0	2,623.9	-60.1	2,624.5	0.00	0.00	0.00
13,200.0	90.00	359.69	10,475.0	2,723.9	-60.6	2,724.5	0.00	0.00	0.00



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Planned Survey										
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)	
13,300.0	90.00	359.69	10,475.0	2,823.9	-61.1	2,824.5	0.00	0.00	0.00	
13,400.0	90.00	359.69	10,475.0	2,923.9	-61.7	2,924.5	0.00	0.00	0.00	
13,500.0	90.00	359.69	10,475.0	3,023.9	-62.2	3,024.4	0.00	0.00	0.00	
13,600.0	90.00	359.69	10,475.0	3,123.9	-62.8	3,124.4	0.00	0.00	0.00	
13,700.0	90.00	359.69	10,475.0	3,223.9	-63.3	3,224.4	0.00	0.00	0.00	
13,800.0	90.00	359.69	10,475.0	3,323.9	-63.8	3,324.4	0.00	0.00	0.00	
13,900.0	90.00	359.69	10,475.0	3,423.9	-64.4	3,424.4	0.00	0.00	0.00	
14,000.0	90.00	359.69	10,475.0	3,523.9	-64.9	3,524.4	0.00	0.00	0.00	
14,100.0	90.00	359.69	10,475.0	3,623.9	-65.4	3,624.4	0.00	0.00	0.00	
14,200.0	90.00	359.69	10,475.0	3,723.9	-66.0	3,724.4	0.00	0.00	0.00	
14,300.0	90.00	359.69	10,475.0	3,823.9	-66.5	3,824.4	0.00	0.00	0.00	
14,400.0	90.00	359.69	10,475.0	3,923.9	-67.0	3,924.4	0.00	0.00	0.00	
14,500.0	90.00	359.69	10,475.0	4,023.9	-67.6	4,024.4	0.00	0.00	0.00	
14,600.0	90.00	359.69	10,475.0	4,123.9	-68.1	4,124.4	0.00	0.00	0.00	
14,700.0	90.00	359.69	10,475.0	4,223.9	-68.7	4,224.4	0.00	0.00	0.00	
14,800.0	90.00	359.69	10,475.0	4,323.9	-69.2	4,324.4	0.00	0.00	0.00	
14,900.0	90.00	359.69	10,475.0	4,423.9	-69.7	4,424.4	0.00	0.00	0.00	
15,000.0	90.00	359.69	10,475.0	4,523.9	-70.3	4,524.4	0.00	0.00	0.00	
15,100.0	90.00	359.69	10,475.0	4,623.9	-70.8	4,624.4	0.00	0.00	0.00	
15,200.0	90.00	359.69	10,475.0	4,723.9	-71.3	4,724.4	0.00	0.00	0.00	
15,300.0	90.00	359.69	10,475.0	4,823.9	-71.9	4,824.4	0.00	0.00	0.00	
15,400.0	90.00	359.69	10,475.0	4,923.9	-72.4	4,924.4	0.00	0.00	0.00	
15,500.0	90.00	359.69	10,475.0	5,023.9	-72.9	5,024.4	0.00	0.00	0.00	
15,600.0	90.00	359.69	10,475.0	5,123.9	-73.5	5,124.4	0.00	0.00	0.00	
15,700.0	90.00	359.69	10,475.0	5,223.9	-74.0	5,224.4	0.00	0.00	0.00	
15,800.0	90.00	359.69	10,475.0	5,323.9	-74.5	5,324.4	0.00	0.00	0.00	
15,900.0	90.00	359.69	10,475.0	5,423.9	-75.1	5,424.4	0.00	0.00	0.00	
16,000.0	90.00	359.69	10,475.0	5,523.9	-75.6	5,524.4	0.00	0.00	0.00	
16,100.0	90.00	359.69	10,475.0	5,623.9	-76.2	5,624.4	0.00	0.00	0.00	
16,200.0	90.00	359.69	10,475.0	5,723.9	-76.7	5,724.4	0.00	0.00	0.00	
16,300.0	90.00	359.69	10,475.0	5,823.9	-77.2	5,824.4	0.00	0.00	0.00	
16,400.0	90.00	359.69	10,475.0	5,923.9	-77.8	5,924.4	0.00	0.00	0.00	
16,500.0	90.00	359.69	10,475.0	6,023.9	-78.3	6,024.4	0.00	0.00	0.00	
16,600.0	90.00	359.69	10,475.0	6,123.9	-78.8	6,124.4	0.00	0.00	0.00	
16,700.0	90.00	359.69	10,475.0	6,223.9	-79.4	6,224.4	0.00	0.00	0.00	
16,800.0	90.00	359.69	10,475.0	6,323.9	-79.9	6,324.4	0.00	0.00	0.00	
16,900.0	90.00	359.69	10,475.0	6,423.9	-80.4	6,424.4	0.00	0.00	0.00	
17,000.0	90.00	359.69	10,475.0	6,523.9	-81.0	6,524.4	0.00	0.00	0.00	
17,100.0	90.00	359.69	10,475.0	6,623.9	-81.5	6,624.4	0.00	0.00	0.00	
17,159.3	90.00	359.69	10,475.0	6,683.2	-81.8	6,683.7	0.00	0.00	0.00	
TD at 17159.3 - Anderson Fed Com 502H BHL										



Planning Report

Database:	EDM 5000.16 Single User Db	Local Co-ordinate Reference:	Well Anderson Fed Com 502H
Company:	Advance Energy Partners	TVD Reference:	WELL @ 3704.5usft (Original Well Elev)
Project:	Hat Mesa	MD Reference:	WELL @ 3704.5usft (Original Well Elev)
Site:	Anderson Fed Com - Pad C	North Reference:	Grid
Well:	Anderson Fed Com 502H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Anderson Fed Com 502H		
Design:	Anderson Fed Com 502H - Prelim 2		

Design Targets									
Target Name	Dip Angle	Dip Dir.	TVD	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude
- hit/miss target	(°)	(°)	(usft)	(usft)	(usft)	(usft)	(usft)		
- Shape									
Anderson Fed Com 502H - plan hits target center - Point	0.00	0.00	10,475.0	6,683.2	-81.8	526,636.57	753,094.78	32° 26' 45.305 N	103° 38' 48.779 W
Anderson Fed Com 502H - plan hits target center - Point	0.00	0.00	10,475.0	279.8	-41.0	520,233.13	753,135.61	32° 25' 41.940 N	103° 38' 48.783 W

Casing Points				
Measured Depth	Vertical Depth	Name	Casing Diameter	Hole Diameter
(usft)	(usft)		(")	(")
10,840.0	LP		5-1/2	5-1/2

Formations					
Measured Depth	Vertical Depth	Name	Lithology	Dip	Dip Direction
(usft)	(usft)			(°)	(°)
1,207.0	1,207.0	Rustler		0.00	
4,785.0	4,785.0	Base of Limestone		0.00	
8,435.3	8,432.0	Lower Brushy		0.00	
8,955.8	8,952.0	Avalon		0.00	
9,823.5	9,819.0	1st BS Sand		0.00	
10,494.1	10,407.0	2nd BS Sand		0.00	

Plan Annotations				
Measured Depth	Vertical Depth	Local Coordinates		Comment
(usft)	(usft)	+N/-S (usft)	+E/-W (usft)	
5,200.0	5,200.0	0.0	0.0	KOP - Start Build 1.00
5,464.2	5,464.1	-6.1	-0.2	Start 4076.1 hold at 5464.2 MD
9,540.3	9,535.9	-193.9	-5.8	Start Drop -1.00
9,804.5	9,800.0	-200.0	-6.0	Start 197.5 hold at 9804.5 MD
10,002.1	9,997.5	-200.0	-6.0	KOP #2 - Start Build 12.00
10,752.1	10,475.0	276.2	-40.7	LP - Start 3.6 hold at 10752.1 MD
10,755.6	10,475.0	279.8	-41.0	Start DLS 2.00 TFO 90.00
10,948.9	10,475.0	472.9	-48.6	Start 6210.4 hold at 10948.9 MD
17,159.3	10,475.0	6,683.2	-81.8	TD at 17159.3



Advance Energy Partners

Hat Mesa

Anderson Fed Com - Pad C

Anderson Fed Com 502H

Anderson Fed Com 502H

Anderson Fed Com 502H - Prelim 2

Anticollision Report

28 July, 2021



Anticollision Report

Company:	Advance Energy Partners	Local Co-ordinate Reference:	Well Anderson Fed Com 502H
Project:	Hat Mesa	TVD Reference:	WELL @ 3704.5usft (Original Well Elev)
Reference Site:	Anderson Fed Com - Pad C	MD Reference:	WELL @ 3704.5usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	Anderson Fed Com 502H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.79 sigma
Reference Wellbore	Anderson Fed Com 502H	Database:	EDM 5000.16 Single User Db
Reference Design:	Anderson Fed Com 502H - Prelim 2	Offset TVD Reference:	Offset Datum

Reference	Anderson Fed Com 502H - Prelim 2		
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	7/28/2021			
From (usft)	To (usft)	Survey (Wellbore)	Tool Name	Description	
0.0	17,158.4	Anderson Fed Com 502H - Prelim 2 (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 C						
Anderson Fed Com 506H - Anderson Fed Com 506H - A	5,000.0	4,999.0	33.0	6.9	1.264	Level 3, CC
Anderson Fed Com 506H - Anderson Fed Com 506H - A	9,400.0	9,399.6	39.6	3.7	1.104	Level 3, ES, SF
Anderson Fed Com 553H - Anderson Fed Com 553H - A	5,000.0	5,000.0	99.1	73.0	3.795	CC, ES
Anderson Fed Com 553H - Anderson Fed Com 553H - A	5,100.0	5,098.4	99.9	73.5	3.788	SF
Anderson Fed Com 554H - Anderson Fed Com 554H - A	5,200.0	5,199.0	32.4	5.6	1.211	Level 3, CC
Anderson Fed Com 554H - Anderson Fed Com 554H - A	10,025.0	10,023.9	38.5	0.9	1.024	Level 3, ES, SF
Anderson Fed Com 602H - Anderson Fed Com 602H - A	5,200.0	5,200.0	66.0	39.3	2.468	CC
Anderson Fed Com 602H - Anderson Fed Com 602H - A	5,400.0	5,400.0	66.3	39.1	2.436	ES
Anderson Fed Com 602H - Anderson Fed Com 602H - A	10,050.0	10,049.8	79.1	41.3	2.093	SF
Anderson Fed Com 702H - Anderson Fed Com 702H - A	5,378.1	5,373.1	66.0	38.8	2.431	CC
Anderson Fed Com 702H - Anderson Fed Com 702H - A	5,400.0	5,395.0	66.0	38.8	2.427	ES, SF

Offset Design:	Anderson Fed Com - Pad C - Anderson Fed Com 506H - Anderson Fed Com 506H - Anderson Fed Com 506H - Prelim 2												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	-91.00	-0.6	-33.0	33.0					
100.0	100.0	99.0	99.0	0.5	0.5	-91.00	-0.6	-33.0	33.0	32.0	1.06	31.296		
200.0	200.0	199.0	199.0	1.7	1.7	-91.00	-0.6	-33.0	33.0	29.6	3.41	9.678		
300.0	300.0	299.0	299.0	2.4	2.4	-91.00	-0.6	-33.0	33.0	28.2	4.82	6.856		
400.0	400.0	399.0	399.0	3.0	2.9	-91.00	-0.6	-33.0	33.0	27.1	5.90	5.594		
500.0	500.0	499.0	499.0	3.4	3.4	-91.00	-0.6	-33.0	33.0	26.2	6.83	4.837		
600.0	600.0	599.0	599.0	3.8	3.8	-91.00	-0.6	-33.0	33.0	25.4	7.64	4.319		
700.0	700.0	699.0	699.0	4.2	4.2	-91.00	-0.6	-33.0	33.0	24.6	8.39	3.935		
800.0	800.0	799.0	799.0	4.5	4.5	-91.00	-0.6	-33.0	33.0	23.9	9.08	3.636		
900.0	900.0	899.0	899.0	4.9	4.9	-91.00	-0.6	-33.0	33.0	23.3	9.73	3.394		
1,000.0	1,000.0	999.0	999.0	5.2	5.2	-91.00	-0.6	-33.0	33.0	22.7	10.34	3.194		
1,100.0	1,100.0	1,099.0	1,099.0	5.5	5.5	-91.00	-0.6	-33.0	33.0	22.1	10.92	3.024		
1,200.0	1,200.0	1,199.0	1,199.0	5.7	5.7	-91.00	-0.6	-33.0	33.0	21.5	11.48	2.877		
1,300.0	1,300.0	1,299.0	1,299.0	6.0	6.0	-91.00	-0.6	-33.0	33.0	21.0	12.01	2.749		
1,400.0	1,400.0	1,399.0	1,399.0	6.3	6.3	-91.00	-0.6	-33.0	33.0	20.5	12.53	2.635		
1,500.0	1,500.0	1,499.0	1,499.0	6.5	6.5	-91.00	-0.6	-33.0	33.0	20.0	13.03	2.534		

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 502H
Project:	Hat Mesa	TVD Reference:	WELL @ 3704.5usft (Original Well Elev)
Reference Site:	Anderson Fed Com - Pad C	MD Reference:	WELL @ 3704.5usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	Anderson Fed Com 502H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.79 sigma
Reference Wellbore	Anderson Fed Com 502H	Database:	EDM 5000.16 Single User Db
Reference Design:	Anderson Fed Com 502H - Prelim 2	Offset TVD Reference:	Offset Datum

Offset Design: Anderson Fed Com - Pad C - Anderson Fed Com 506H - Anderson Fed Com 506H - Anderson Fed Com 506H - Prelim 2													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			
1,600.0	1,600.0	1,599.0	1,599.0	6.8	6.8	-91.00	-0.6	-33.0	33.0	19.5	13.51	2.443			
1,700.0	1,700.0	1,699.0	1,699.0	7.0	7.0	-91.00	-0.6	-33.0	33.0	19.0	13.99	2.361			
1,800.0	1,800.0	1,799.0	1,799.0	7.2	7.2	-91.00	-0.6	-33.0	33.0	18.6	14.45	2.285			
1,900.0	1,900.0	1,899.0	1,899.0	7.4	7.4	-91.00	-0.6	-33.0	33.0	18.1	14.90	2.216			
2,000.0	2,000.0	1,999.0	1,999.0	7.7	7.7	-91.00	-0.6	-33.0	33.0	17.7	15.34	2.153			
2,100.0	2,100.0	2,099.0	2,099.0	7.9	7.9	-91.00	-0.6	-33.0	33.0	17.2	15.77	2.094			
2,200.0	2,200.0	2,199.0	2,199.0	8.1	8.1	-91.00	-0.6	-33.0	33.0	16.8	16.19	2.039			
2,300.0	2,300.0	2,299.0	2,299.0	8.3	8.3	-91.00	-0.6	-33.0	33.0	16.4	16.61	1.988			
2,400.0	2,400.0	2,399.0	2,399.0	8.5	8.5	-91.00	-0.6	-33.0	33.0	16.0	17.01	1.941			
2,500.0	2,500.0	2,499.0	2,499.0	8.7	8.7	-91.00	-0.6	-33.0	33.0	15.6	17.42	1.896			
2,600.0	2,600.0	2,599.0	2,599.0	8.9	8.9	-91.00	-0.6	-33.0	33.0	15.2	17.81	1.854			
2,700.0	2,700.0	2,699.0	2,699.0	9.1	9.1	-91.00	-0.6	-33.0	33.0	14.8	18.20	1.814			
2,800.0	2,800.0	2,799.0	2,799.0	9.3	9.3	-91.00	-0.6	-33.0	33.0	14.4	18.58	1.777			
2,900.0	2,900.0	2,899.0	2,899.0	9.5	9.5	-91.00	-0.6	-33.0	33.0	14.1	18.96	1.741			
3,000.0	3,000.0	2,999.0	2,999.0	9.7	9.7	-91.00	-0.6	-33.0	33.0	13.7	19.34	1.707			
3,100.0	3,100.0	3,099.0	3,099.0	9.9	9.9	-91.00	-0.6	-33.0	33.0	13.3	19.71	1.675			
3,200.0	3,200.0	3,199.0	3,199.0	10.0	10.0	-91.00	-0.6	-33.0	33.0	12.9	20.07	1.645			
3,300.0	3,300.0	3,299.0	3,299.0	10.2	10.2	-91.00	-0.6	-33.0	33.0	12.6	20.43	1.616			
3,400.0	3,400.0	3,399.0	3,399.0	10.4	10.4	-91.00	-0.6	-33.0	33.0	12.2	20.79	1.588			
3,500.0	3,500.0	3,499.0	3,499.0	10.6	10.6	-91.00	-0.6	-33.0	33.0	11.9	21.15	1.561			
3,600.0	3,600.0	3,599.0	3,599.0	10.7	10.7	-91.00	-0.6	-33.0	33.0	11.5	21.50	1.536			
3,700.0	3,700.0	3,699.0	3,699.0	10.9	10.9	-91.00	-0.6	-33.0	33.0	11.2	21.84	1.511			
3,800.0	3,800.0	3,799.0	3,799.0	11.1	11.1	-91.00	-0.6	-33.0	33.0	10.8	22.19	1.488 Level 3			
3,900.0	3,900.0	3,899.0	3,899.0	11.3	11.3	-91.00	-0.6	-33.0	33.0	10.5	22.53	1.465 Level 3			
4,000.0	4,000.0	3,999.0	3,999.0	11.4	11.4	-91.00	-0.6	-33.0	33.0	10.1	22.87	1.444 Level 3			
4,100.0	4,100.0	4,099.0	4,099.0	11.6	11.6	-91.00	-0.6	-33.0	33.0	9.8	23.21	1.423 Level 3			
4,200.0	4,200.0	4,199.0	4,199.0	11.8	11.8	-91.00	-0.6	-33.0	33.0	9.5	23.54	1.403 Level 3			
4,300.0	4,300.0	4,299.0	4,299.0	11.9	11.9	-91.00	-0.6	-33.0	33.0	9.1	23.87	1.383 Level 3			
4,400.0	4,400.0	4,399.0	4,399.0	12.1	12.1	-91.00	-0.6	-33.0	33.0	8.8	24.20	1.364 Level 3			
4,500.0	4,500.0	4,499.0	4,499.0	12.3	12.3	-91.00	-0.6	-33.0	33.0	8.5	24.52	1.346 Level 3			
4,600.0	4,600.0	4,599.0	4,599.0	12.4	12.4	-91.00	-0.6	-33.0	33.0	8.2	24.85	1.329 Level 3			
4,700.0	4,700.0	4,699.0	4,699.0	12.6	12.6	-91.00	-0.6	-33.0	33.0	7.8	25.17	1.312 Level 3			
4,800.0	4,800.0	4,799.0	4,799.0	12.7	12.7	-91.00	-0.6	-33.0	33.0	7.5	25.49	1.295 Level 3			
4,900.0	4,900.0	4,899.0	4,899.0	12.9	12.9	-91.00	-0.6	-33.0	33.0	7.2	25.81	1.279 Level 3			
5,000.0	5,000.0	4,999.0	4,999.0	13.1	13.1	-91.00	-0.6	-33.0	33.0	6.9	26.12	1.264 Level 3, CC			
5,100.0	5,100.0	5,099.0	5,098.9	13.2	13.1	-92.48	-1.4	-33.1	33.1	6.7	26.36	1.255 Level 3			
5,200.0	5,200.0	5,198.8	5,198.8	13.4	13.2	-96.91	-4.0	-33.2	33.4	6.9	26.58	1.258 Level 3			
5,300.0	5,300.0	5,298.7	5,298.5	13.5	13.3	75.67	-8.3	-33.4	34.2	7.5	26.69	1.282 Level 3			
5,400.0	5,400.0	5,398.6	5,398.4	13.5	13.4	71.94	-13.3	-33.6	35.0	8.2	26.79	1.305 Level 3			
5,464.2	5,464.1	5,462.9	5,462.5	13.5	13.4	71.05	-16.5	-33.8	35.2	8.4	26.84	1.312 Level 3			
5,500.0	5,499.9	5,498.6	5,498.3	13.6	13.5	70.86	-18.3	-33.9	35.3	8.4	26.86	1.314 Level 3			
5,600.0	5,599.8	5,598.6	5,598.1	13.6	13.6	70.35	-23.3	-34.1	35.5	8.5	26.98	1.316 Level 3			
5,700.0	5,699.7	5,698.6	5,698.0	13.8	13.8	69.84	-28.2	-34.4	35.7	8.6	27.12	1.317 Level 3			
5,800.0	5,799.5	5,798.6	5,797.9	13.9	13.9	69.34	-33.2	-34.6	35.9	8.7	27.27	1.318 Level 3			
5,900.0	5,899.4	5,898.6	5,897.8	14.0	14.1	68.84	-38.2	-34.9	36.2	8.7	27.43	1.319 Level 3			
6,000.0	5,999.3	5,998.6	5,997.6	14.2	14.3	68.35	-43.2	-35.1	36.4	8.8	27.60	1.319 Level 3			
6,100.0	6,099.2	6,098.6	6,097.5	14.3	14.5	67.87	-48.1	-35.4	36.6	8.9	27.77	1.319 Level 3			
6,200.0	6,199.1	6,198.6	6,197.4	14.5	14.7	67.40	-53.1	-35.6	36.9	8.9	27.96	1.318 Level 3			
6,300.0	6,299.0	6,298.6	6,297.3	14.7	14.9	66.92	-58.1	-35.9	37.1	8.9	28.15	1.318 Level 3			
6,400.0	6,398.9	6,398.6	6,397.1	14.9	15.2	66.46	-63.1	-36.1	37.3	9.0	28.36	1.316 Level 3			
6,500.0	6,498.8	6,498.6	6,497.0	15.2	15.4	66.00	-68.0	-36.4	37.6	9.0	28.58	1.315 Level 3			
6,600.0	6,598.7	6,598.6	6,596.9	15.4	15.7	65.55	-73.0	-36.6	37.8	9.0	28.81	1.313 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 502H
Project:	Hat Mesa	TVD Reference:	WELL @ 3704.5usft (Original Well Elev)
Reference Site:	Anderson Fed Com - Pad C	MD Reference:	WELL @ 3704.5usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	Anderson Fed Com 502H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.79 sigma
Reference Wellbore	Anderson Fed Com 502H	Database:	EDM 5000.16 Single User Db
Reference Design:	Anderson Fed Com 502H - Prelim 2	Offset TVD Reference:	Offset Datum

Offset Design: Anderson Fed Com - Pad C - Anderson Fed Com 506H - Anderson Fed Com 506H - Anderson Fed Com 506H - Prelim 2													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				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	
6,700.0	6,698.6	6,698.6	6,696.8	15.6	16.0	65.10	-78.0	-36.9	38.1	9.0	29.05	1.311	Level 3
6,800.0	6,798.5	6,798.6	6,796.6	15.9	16.3	64.66	-83.0	-37.1	38.3	9.0	29.30	1.308	Level 3
6,900.0	6,898.4	6,898.6	6,896.5	16.1	16.5	64.22	-87.9	-37.4	38.6	9.0	29.56	1.305	Level 3
7,000.0	6,998.3	6,998.6	6,996.4	16.4	16.8	63.79	-92.9	-37.6	38.8	9.0	29.83	1.301	Level 3
7,100.0	7,098.2	7,098.6	7,096.3	16.7	17.1	63.37	-97.9	-37.9	39.1	9.0	30.12	1.297	Level 3
7,200.0	7,198.1	7,198.6	7,196.1	17.0	17.5	62.95	-102.9	-38.1	39.3	8.9	30.42	1.293	Level 3
7,300.0	7,298.0	7,298.6	7,296.0	17.3	17.8	62.54	-107.9	-38.4	39.6	8.9	30.73	1.288	Level 3
7,400.0	7,397.8	7,398.6	7,395.9	17.6	18.1	62.13	-112.8	-38.6	39.8	8.8	31.05	1.283	Level 3
7,500.0	7,497.7	7,498.6	7,495.8	17.9	18.4	61.73	-117.8	-38.9	40.1	8.7	31.38	1.278	Level 3
7,600.0	7,597.6	7,598.6	7,595.6	18.2	18.8	61.33	-122.8	-39.1	40.4	8.6	31.73	1.273	Level 3
7,700.0	7,697.5	7,698.6	7,695.5	18.5	19.1	60.94	-127.8	-39.4	40.6	8.6	32.08	1.267	Level 3
7,800.0	7,797.4	7,798.6	7,795.4	18.8	19.5	60.55	-132.7	-39.6	40.9	8.5	32.45	1.260	Level 3
7,900.0	7,897.3	7,898.6	7,895.3	19.2	19.8	60.17	-137.7	-39.9	41.2	8.3	32.84	1.254	Level 3
8,000.0	7,997.2	7,998.6	7,995.1	19.5	20.2	59.79	-142.7	-40.1	41.5	8.2	33.23	1.247	Level 3
8,100.0	8,097.1	8,098.6	8,095.0	19.8	20.6	59.42	-147.7	-40.4	41.7	8.1	33.63	1.241	Level 3
8,200.0	8,197.0	8,198.6	8,194.9	20.2	20.9	59.05	-152.6	-40.6	42.0	7.9	34.05	1.233	Level 3
8,300.0	8,296.9	8,298.6	8,294.8	20.6	21.3	58.69	-157.6	-40.9	42.3	7.8	34.48	1.226	Level 3
8,400.0	8,396.8	8,398.6	8,394.6	20.9	21.7	58.33	-162.6	-41.1	42.6	7.6	34.92	1.219	Level 3
8,500.0	8,496.7	8,498.6	8,494.5	21.3	22.1	57.98	-167.6	-41.4	42.8	7.5	35.37	1.211	Level 3
8,600.0	8,596.6	8,598.6	8,594.4	21.6	22.5	57.63	-172.5	-41.6	43.1	7.3	35.83	1.203	Level 3
8,700.0	8,696.5	8,698.6	8,694.3	22.0	22.8	57.28	-177.5	-41.9	43.4	7.1	36.30	1.196	Level 3
8,800.0	8,796.4	8,798.6	8,794.1	22.4	23.2	56.94	-182.5	-42.1	43.7	6.9	36.79	1.188	Level 3
8,900.0	8,896.3	8,898.6	8,894.0	22.8	23.6	56.61	-187.5	-42.4	44.0	6.7	37.28	1.180	Level 3
9,000.0	8,996.1	8,998.6	8,993.9	23.1	24.0	56.28	-192.4	-42.6	44.3	6.5	37.79	1.171	Level 3
9,100.0	9,096.0	9,099.0	9,094.1	23.5	24.4	56.54	-196.9	-42.8	44.2	6.1	38.11	1.161	Level 3
9,200.0	9,195.9	9,199.4	9,194.5	23.9	24.7	56.68	-199.6	-43.0	43.3	5.3	37.93	1.141	Level 3
9,300.0	9,295.8	9,299.7	9,294.8	24.3	24.9	63.01	-200.6	-43.0	41.5	4.4	37.09	1.119	Level 3
9,400.0	9,395.7	9,399.6	9,394.7	24.7	25.0	68.95	-200.6	-43.0	39.6	3.7	35.89	1.104	Level 3, ES, SF
9,500.0	9,495.6	9,500.2	9,495.0	25.1	24.8	83.74	-195.0	-43.0	37.4	3.8	33.60	1.113	Level 3
9,514.5	9,510.1	9,514.4	9,509.1	25.1	24.8	88.36	-192.7	-43.1	37.3	3.9	33.34	1.118	Level 3
9,540.3	9,535.9	9,539.2	9,533.3	25.2	24.7	97.85	-187.6	-43.1	37.8	4.2	33.68	1.124	Level 3
9,600.0	9,595.5	9,593.8	9,585.6	25.4	24.5	121.19	-171.9	-43.2	45.5	6.7	38.83	1.171	Level 3
9,700.0	9,695.5	9,675.0	9,659.2	25.8	24.2	146.58	-137.8	-43.4	80.0	33.8	46.15	1.733	
9,804.5	9,800.0	9,746.4	9,718.3	26.0	23.9	-20.22	-97.9	-43.6	135.4	87.0	48.44	2.796	
9,900.0	9,895.5	9,800.0	9,758.4	26.0	23.7	-15.36	-62.4	-43.8	197.1	147.8	49.31	3.998	
10,002.1	9,997.5	9,850.0	9,792.1	26.1	23.6	-12.28	-25.5	-44.0	271.5	221.5	49.96	5.435	
10,025.0	10,020.5	9,855.7	9,795.7	26.1	23.6	-7.42	-21.0	-44.0	288.7	238.6	50.14	5.759	
10,050.0	10,045.4	9,866.1	9,802.1	26.0	23.5	-6.60	-12.8	-44.1	307.1	256.8	50.26	6.110	
10,075.0	10,070.2	9,875.0	9,807.4	25.9	23.5	-5.96	-5.7	-44.1	324.9	274.5	50.40	6.447	
10,100.0	10,094.8	9,887.1	9,814.4	25.8	23.5	-5.32	4.2	-44.2	342.3	291.8	50.51	6.776	
10,125.0	10,119.1	9,900.0	9,821.7	25.7	23.4	-4.76	14.8	-44.2	359.1	308.4	50.61	7.095	
10,150.0	10,143.1	9,908.5	9,826.2	25.7	23.4	-4.37	21.9	-44.3	375.3	324.5	50.77	7.392	
10,175.0	10,166.7	9,919.2	9,831.9	25.6	23.4	-3.98	31.1	-44.3	390.9	340.0	50.91	7.679	
10,200.0	10,189.9	9,925.0	9,834.8	25.5	23.4	-3.72	36.1	-44.3	406.1	355.0	51.12	7.943	
10,225.0	10,212.5	9,941.0	9,842.6	25.4	23.3	-3.34	50.0	-44.4	420.5	369.3	51.21	8.212	
10,250.0	10,234.5	9,950.0	9,846.9	25.3	23.3	-3.09	58.0	-44.5	434.4	383.0	51.39	8.453	
10,275.0	10,255.9	9,962.9	9,852.6	25.2	23.3	-2.82	69.5	-44.5	447.7	396.2	51.53	8.688	
10,300.0	10,276.5	9,975.0	9,857.7	25.1	23.3	-2.59	80.5	-44.6	460.4	408.7	51.69	8.906	
10,325.0	10,296.4	9,985.0	9,861.7	25.0	23.2	-2.40	89.6	-44.6	472.4	420.5	51.89	9.104	
10,350.0	10,315.5	10,000.0	9,867.4	24.9	23.2	-2.18	103.5	-44.7	483.8	431.8	52.03	9.300	
10,375.0	10,333.7	10,007.2	9,870.0	24.8	23.2	-2.05	110.2	-44.8	494.6	442.3	52.28	9.460	
10,400.0	10,351.0	10,018.3	9,873.7	24.7	23.2	-1.90	120.7	-44.8	504.7	452.2	52.49	9.615	

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 502H
Project:	Hat Mesa	TVD Reference:	WELL @ 3704.5usft (Original Well Elev)
Reference Site:	Anderson Fed Com - Pad C	MD Reference:	WELL @ 3704.5usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	Anderson Fed Com 502H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.79 sigma
Reference Wellbore	Anderson Fed Com 502H	Database:	EDM 5000.16 Single User Db
Reference Design:	Anderson Fed Com 502H - Prelim 2	Offset TVD Reference:	Offset Datum

Offset Design: Anderson Fed Com - Pad C - Anderson Fed Com 506H - Anderson Fed Com 506H - Anderson Fed Com 506H - Prelim 2												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 +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
10,425.0	10,367.3	10,025.0	9,875.9	24.6	23.2	-1.80	127.1	-44.9	514.1	461.4	52.76	9.744	
10,450.0	10,382.6	10,040.7	9,880.6	24.6	23.2	-1.62	142.0	-44.9	522.9	469.9	52.93	9.879	
10,475.0	10,396.8	10,050.0	9,883.1	24.5	23.1	-1.52	151.0	-45.0	531.0	477.8	53.18	9.984	
10,500.0	10,410.0	10,063.1	9,886.4	24.4	23.1	-1.39	163.7	-45.1	538.3	485.0	53.39	10.083	
10,525.0	10,422.0	10,075.0	9,889.1	24.4	23.1	-1.27	175.3	-45.1	545.1	491.4	53.63	10.164	
10,550.0	10,432.9	10,085.7	9,891.2	24.3	23.1	-1.18	185.7	-45.2	551.1	497.2	53.89	10.227	
10,575.0	10,442.5	10,100.0	9,893.7	24.3	23.1	-1.06	199.8	-45.3	556.4	502.3	54.11	10.284	
10,600.0	10,451.0	10,108.2	9,895.0	24.2	23.1	-0.99	208.0	-45.3	561.1	506.7	54.40	10.313	
10,625.0	10,458.2	10,125.0	9,897.1	24.2	23.1	-0.86	224.6	-45.4	565.1	510.4	54.61	10.347	
10,650.0	10,464.1	10,125.0	9,897.1	24.2	23.1	-0.86	224.6	-45.4	568.3	513.3	55.00	10.332	
10,675.0	10,468.8	10,142.2	9,898.7	24.1	23.1	-0.73	241.7	-45.5	570.7	515.5	55.21	10.337	
10,700.0	10,472.2	10,150.0	9,899.2	24.1	23.1	-0.68	249.5	-45.6	572.6	517.0	55.53	10.312	
10,725.0	10,474.2	10,164.8	9,899.8	24.1	23.1	-0.57	264.3	-45.6	573.6	517.9	55.78	10.285	
10,752.1	10,475.0	10,177.4	9,900.0	24.1	23.1	-0.49	276.9	-45.7	574.0	517.9	56.09	10.235	
10,755.6	10,475.0	10,180.3	9,900.0	24.1	23.1	-0.47	279.7	-45.7	574.0	517.9	56.11	10.230	
10,800.0	10,475.0	10,224.6	9,900.0	24.1	23.1	-0.21	324.0	-46.0	574.0	517.7	56.32	10.191	
10,848.2	10,475.0	10,272.7	9,900.0	24.2	23.1	0.00	372.2	-46.2	574.0	517.4	56.57	10.147	
10,900.0	10,475.0	10,324.5	9,900.0	24.2	23.1	0.13	424.0	-46.5	574.0	517.2	56.85	10.098	
10,948.9	10,475.0	10,373.4	9,900.0	24.2	23.1	0.17	472.9	-46.8	574.0	516.9	57.13	10.047	
11,000.0	10,475.0	10,424.5	9,900.0	24.2	23.1	0.17	524.0	-47.1	574.0	516.6	57.45	9.991	
11,100.0	10,475.0	10,524.5	9,900.0	24.3	23.2	0.17	624.0	-47.7	574.0	515.9	58.14	9.873	
11,200.0	10,475.0	10,624.5	9,900.0	24.5	23.5	0.17	724.0	-48.2	574.0	515.1	58.90	9.745	
11,300.0	10,475.0	10,724.5	9,900.0	25.4	24.7	0.16	824.0	-48.8	574.0	514.3	59.74	9.609	
11,400.0	10,475.0	10,824.5	9,900.0	26.8	26.2	0.16	924.0	-49.4	574.0	513.4	60.64	9.466	
11,500.0	10,475.0	10,924.5	9,900.0	28.3	27.7	0.16	1,024.0	-49.9	574.0	512.4	61.61	9.317	
11,600.0	10,475.0	11,024.5	9,900.0	29.9	29.4	0.16	1,123.9	-50.5	574.0	511.4	62.64	9.164	
11,700.0	10,475.0	11,124.5	9,900.0	31.5	31.1	0.15	1,223.9	-51.0	574.0	510.3	63.73	9.007	
11,800.0	10,475.0	11,224.5	9,900.0	33.3	32.8	0.15	1,323.9	-51.6	574.0	509.1	64.87	8.849	
11,900.0	10,475.0	11,324.5	9,900.0	35.0	34.6	0.15	1,423.9	-52.2	574.0	507.9	66.07	8.688	
12,000.0	10,475.0	11,424.5	9,900.0	36.8	36.3	0.14	1,523.9	-52.7	574.0	506.7	67.31	8.527	
12,100.0	10,475.0	11,524.5	9,900.0	38.6	38.1	0.14	1,623.9	-53.3	574.0	505.4	68.61	8.367	
12,200.0	10,475.0	11,624.5	9,900.0	40.4	40.0	0.14	1,723.9	-53.9	574.0	504.1	69.94	8.207	
12,300.0	10,475.0	11,724.5	9,900.0	42.2	41.8	0.14	1,823.9	-54.4	574.0	502.7	71.32	8.048	
12,400.0	10,475.0	11,824.5	9,900.0	44.0	43.7	0.13	1,923.9	-55.0	574.0	501.3	72.74	7.891	
12,500.0	10,475.0	11,924.5	9,900.0	45.9	45.6	0.13	2,023.9	-55.6	574.0	499.8	74.20	7.736	
12,600.0	10,475.0	12,024.5	9,900.0	47.8	47.4	0.13	2,123.9	-56.1	574.0	498.3	75.69	7.583	
12,700.0	10,475.0	12,124.5	9,900.0	49.7	49.3	0.12	2,223.9	-56.7	574.0	496.8	77.22	7.433	
12,800.0	10,475.0	12,224.5	9,900.0	51.6	51.2	0.12	2,323.9	-57.2	574.0	495.2	78.78	7.286	
12,900.0	10,475.0	12,324.5	9,900.0	53.5	53.2	0.12	2,423.9	-57.8	574.0	493.6	80.36	7.142	
13,000.0	10,475.0	12,424.5	9,900.0	55.4	55.1	0.12	2,523.9	-58.4	574.0	492.0	81.98	7.002	
13,100.0	10,475.0	12,524.5	9,900.0	57.3	57.0	0.11	2,623.9	-58.9	574.0	490.4	83.62	6.864	
13,200.0	10,475.0	12,624.5	9,900.0	59.2	58.9	0.11	2,723.9	-59.5	574.0	488.7	85.28	6.730	
13,300.0	10,475.0	12,724.5	9,900.0	61.2	60.9	0.11	2,823.9	-60.1	574.0	487.0	86.97	6.600	
13,400.0	10,475.0	12,824.5	9,900.0	63.1	62.8	0.11	2,923.9	-60.6	574.0	485.3	88.68	6.472	
13,500.0	10,475.0	12,924.5	9,900.0	65.0	64.8	0.10	3,023.9	-61.2	574.0	483.6	90.41	6.349	
13,600.0	10,475.0	13,024.5	9,900.0	67.0	66.7	0.10	3,123.9	-61.8	574.0	481.8	92.16	6.228	
13,700.0	10,475.0	13,124.5	9,900.0	68.9	68.7	0.10	3,223.9	-62.3	574.0	480.1	93.93	6.111	
13,800.0	10,475.0	13,224.5	9,900.0	70.9	70.6	0.09	3,323.9	-62.9	574.0	478.3	95.72	5.997	
13,900.0	10,475.0	13,324.5	9,900.0	72.9	72.6	0.09	3,423.9	-63.4	574.0	476.5	97.52	5.886	
14,000.0	10,475.0	13,424.5	9,900.0	74.8	74.6	0.09	3,523.9	-64.0	574.0	474.7	99.34	5.778	
14,100.0	10,475.0	13,524.5	9,900.0	76.8	76.5	0.09	3,623.9	-64.6	574.0	472.8	101.17	5.673	
14,200.0	10,475.0	13,624.5	9,900.0	78.7	78.5	0.08	3,723.9	-65.1	574.0	471.0	103.02	5.572	

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 502H
Project:	Hat Mesa	TVD Reference:	WELL @ 3704.5usft (Original Well Elev)
Reference Site:	Anderson Fed Com - Pad C	MD Reference:	WELL @ 3704.5usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	Anderson Fed Com 502H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.79 sigma
Reference Wellbore	Anderson Fed Com 502H	Database:	EDM 5000.16 Single User Db
Reference Design:	Anderson Fed Com 502H - Prelim 2	Offset TVD Reference:	Offset Datum

Offset Design: Anderson Fed Com - Pad C - Anderson Fed Com 506H - Anderson Fed Com 506H - Anderson Fed Com 506H - Prelim 2												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 +N/-S (usft)	+E/-W (usft)	Distance Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
14,300.0	10,475.0	13,724.5	9,900.0	80.7	80.5	0.08	3,823.9	-65.7	574.0	469.1	104.88	5.473	
14,400.0	10,475.0	13,824.5	9,900.0	82.7	82.4	0.08	3,923.9	-66.3	574.0	467.2	106.75	5.377	
14,500.0	10,475.0	13,924.5	9,900.0	84.7	84.4	0.07	4,023.9	-66.8	574.0	465.4	108.64	5.284	
14,600.0	10,475.0	14,024.5	9,900.0	86.6	86.4	0.07	4,123.9	-67.4	574.0	463.5	110.53	5.193	
14,700.0	10,475.0	14,124.5	9,900.0	88.6	88.4	0.07	4,223.9	-68.0	574.0	461.6	112.44	5.105	
14,800.0	10,475.0	14,224.5	9,900.0	90.6	90.4	0.07	4,323.9	-68.5	574.0	459.6	114.36	5.019	
14,900.0	10,475.0	14,324.5	9,900.0	92.6	92.3	0.06	4,423.9	-69.1	574.0	457.7	116.28	4.936	
15,000.0	10,475.0	14,424.5	9,900.0	94.5	94.3	0.06	4,523.9	-69.7	574.0	455.8	118.22	4.855	
15,100.0	10,475.0	14,524.5	9,900.0	96.5	96.3	0.06	4,623.9	-70.2	574.0	453.8	120.16	4.777	
15,200.0	10,475.0	14,624.5	9,900.0	98.5	98.3	0.05	4,723.9	-70.8	574.0	451.9	122.11	4.701	
15,300.0	10,475.0	14,724.5	9,900.0	100.5	100.3	0.05	4,823.9	-71.3	574.0	449.9	124.07	4.626	
15,400.0	10,475.0	14,824.5	9,900.0	102.5	102.3	0.05	4,923.9	-71.9	574.0	448.0	126.04	4.554	
15,500.0	10,475.0	14,924.5	9,900.0	104.5	104.3	0.05	5,023.9	-72.5	574.0	446.0	128.02	4.484	
15,600.0	10,475.0	15,024.5	9,900.0	106.5	106.3	0.04	5,123.9	-73.0	574.0	444.0	130.00	4.415	
15,700.0	10,475.0	15,124.5	9,900.0	108.4	108.3	0.04	5,223.9	-73.6	574.0	442.0	131.99	4.349	
15,800.0	10,475.0	15,224.5	9,900.0	110.4	110.2	0.04	5,323.9	-74.2	574.0	440.0	133.98	4.284	
15,900.0	10,475.0	15,324.5	9,900.0	112.4	112.2	0.04	5,423.9	-74.7	574.0	438.0	135.98	4.221	
16,000.0	10,475.0	15,424.5	9,900.0	114.4	114.2	0.03	5,523.9	-75.3	574.0	436.0	137.99	4.160	
16,100.0	10,475.0	15,524.5	9,900.0	116.4	116.2	0.03	5,623.9	-75.9	574.0	434.0	140.00	4.100	
16,200.0	10,475.0	15,624.5	9,900.0	118.4	118.2	0.03	5,723.9	-76.4	574.0	432.0	142.02	4.042	
16,300.0	10,475.0	15,724.5	9,900.0	120.4	120.2	0.02	5,823.9	-77.0	574.0	430.0	144.04	3.985	
16,400.0	10,475.0	15,824.5	9,900.0	122.4	122.2	0.02	5,923.9	-77.5	574.0	427.9	146.07	3.930	
16,500.0	10,475.0	15,924.5	9,900.0	124.4	124.2	0.02	6,023.9	-78.1	574.0	425.9	148.10	3.876	
16,600.0	10,475.0	16,024.5	9,900.0	126.4	126.2	0.02	6,123.9	-78.7	574.0	423.9	150.13	3.823	
16,700.0	10,475.0	16,124.5	9,900.0	128.4	128.2	0.01	6,223.9	-79.2	574.0	421.8	152.17	3.772	
16,800.0	10,475.0	16,224.5	9,900.0	130.4	130.2	0.01	6,323.9	-79.8	574.0	419.8	154.22	3.722	
16,900.0	10,475.0	16,324.5	9,900.0	132.4	132.2	0.01	6,423.9	-80.4	574.0	417.7	156.27	3.673	
17,000.0	10,475.0	16,424.5	9,900.0	134.4	134.2	0.00	6,523.9	-80.9	574.0	415.7	158.32	3.626	
17,100.0	10,475.0	16,524.5	9,900.0	136.4	136.2	0.00	6,623.9	-81.5	574.0	413.6	160.37	3.579	
17,159.3	10,475.0	16,583.8	9,900.0	137.6	137.4	0.00	6,683.2	-81.8	574.0	412.4	161.59	3.552	



Anticollision Report

Company:	Advance Energy Partners	Local Co-ordinate Reference:	Well Anderson Fed Com 502H
Project:	Hat Mesa	TVD Reference:	WELL @ 3704.5usft (Original Well Elev)
Reference Site:	Anderson Fed Com - Pad C	MD Reference:	WELL @ 3704.5usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	Anderson Fed Com 502H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.79 sigma
Reference Wellbore	Anderson Fed Com 502H	Database:	EDM 5000.16 Single User Db
Reference Design:	Anderson Fed Com 502H - Prelim 2	Offset TVD Reference:	Offset Datum

Offset Design: Anderson Fed Com - Pad C - Anderson Fed Com 553H - Anderson Fed Com 553H - Anderson Fed Com 553H - Prelim 2												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	-90.50	-0.9	-99.1	99.1				
100.0	100.0	100.0	100.0	0.5	0.5	-90.50	-0.9	-99.1	99.1	98.1	1.06	93.495	
200.0	200.0	200.0	200.0	1.7	1.7	-90.50	-0.9	-99.1	99.1	95.7	3.42	28.956	
300.0	300.0	300.0	300.0	2.4	2.4	-90.50	-0.9	-99.1	99.1	94.3	4.82	20.555	
400.0	400.0	400.0	400.0	3.0	3.0	-90.50	-0.9	-99.1	99.1	93.2	5.91	16.780	
500.0	500.0	500.0	500.0	3.4	3.4	-90.50	-0.9	-99.1	99.1	92.3	6.83	14.514	
600.0	600.0	600.0	600.0	3.8	3.8	-90.50	-0.9	-99.1	99.1	91.5	7.65	12.961	
700.0	700.0	700.0	700.0	4.2	4.2	-90.50	-0.9	-99.1	99.1	90.7	8.39	11.810	
800.0	800.0	800.0	800.0	4.5	4.5	-90.50	-0.9	-99.1	99.1	90.0	9.08	10.913	
900.0	900.0	900.0	900.0	4.9	4.9	-90.50	-0.9	-99.1	99.1	89.4	9.73	10.188	
1,000.0	1,000.0	1,000.0	1,000.0	5.2	5.2	-90.50	-0.9	-99.1	99.1	88.8	10.34	9.586	
1,100.0	1,100.0	1,100.0	1,100.0	5.5	5.5	-90.50	-0.9	-99.1	99.1	88.2	10.92	9.076	
1,200.0	1,200.0	1,200.0	1,200.0	5.7	5.7	-90.50	-0.9	-99.1	99.1	87.7	11.48	8.636	
1,300.0	1,300.0	1,300.0	1,300.0	6.0	6.0	-90.50	-0.9	-99.1	99.1	87.1	12.01	8.251	
1,400.0	1,400.0	1,400.0	1,400.0	6.3	6.3	-90.50	-0.9	-99.1	99.1	86.6	12.53	7.911	
1,500.0	1,500.0	1,500.0	1,500.0	6.5	6.5	-90.50	-0.9	-99.1	99.1	86.1	13.03	7.607	
1,600.0	1,600.0	1,600.0	1,600.0	6.8	6.8	-90.50	-0.9	-99.1	99.1	85.6	13.52	7.334	
1,700.0	1,700.0	1,700.0	1,700.0	7.0	7.0	-90.50	-0.9	-99.1	99.1	85.1	13.99	7.086	
1,800.0	1,800.0	1,800.0	1,800.0	7.2	7.2	-90.50	-0.9	-99.1	99.1	84.7	14.45	6.861	
1,900.0	1,900.0	1,900.0	1,900.0	7.4	7.4	-90.50	-0.9	-99.1	99.1	84.2	14.90	6.654	
2,000.0	2,000.0	2,000.0	2,000.0	7.7	7.7	-90.50	-0.9	-99.1	99.1	83.8	15.34	6.463	
2,100.0	2,100.0	2,100.0	2,100.0	7.9	7.9	-90.50	-0.9	-99.1	99.1	83.4	15.77	6.286	
2,200.0	2,200.0	2,200.0	2,200.0	8.1	8.1	-90.50	-0.9	-99.1	99.1	82.9	16.19	6.122	
2,300.0	2,300.0	2,300.0	2,300.0	8.3	8.3	-90.50	-0.9	-99.1	99.1	82.5	16.61	5.969	
2,400.0	2,400.0	2,400.0	2,400.0	8.5	8.5	-90.50	-0.9	-99.1	99.1	82.1	17.02	5.826	
2,500.0	2,500.0	2,500.0	2,500.0	8.7	8.7	-90.50	-0.9	-99.1	99.1	81.7	17.42	5.692	
2,600.0	2,600.0	2,600.0	2,600.0	8.9	8.9	-90.50	-0.9	-99.1	99.1	81.3	17.81	5.565	
2,700.0	2,700.0	2,700.0	2,700.0	9.1	9.1	-90.50	-0.9	-99.1	99.1	80.9	18.20	5.446	
2,800.0	2,800.0	2,800.0	2,800.0	9.3	9.3	-90.50	-0.9	-99.1	99.1	80.5	18.59	5.334	
2,900.0	2,900.0	2,900.0	2,900.0	9.5	9.5	-90.50	-0.9	-99.1	99.1	80.2	18.96	5.227	
3,000.0	3,000.0	3,000.0	3,000.0	9.7	9.7	-90.50	-0.9	-99.1	99.1	79.8	19.34	5.126	
3,100.0	3,100.0	3,100.0	3,100.0	9.9	9.9	-90.50	-0.9	-99.1	99.1	79.4	19.71	5.030	
3,200.0	3,200.0	3,200.0	3,200.0	10.0	10.0	-90.50	-0.9	-99.1	99.1	79.1	20.07	4.938	
3,300.0	3,300.0	3,300.0	3,300.0	10.2	10.2	-90.50	-0.9	-99.1	99.1	78.7	20.44	4.851	
3,400.0	3,400.0	3,400.0	3,400.0	10.4	10.4	-90.50	-0.9	-99.1	99.1	78.3	20.79	4.767	
3,500.0	3,500.0	3,500.0	3,500.0	10.6	10.6	-90.50	-0.9	-99.1	99.1	78.0	21.15	4.688	
3,600.0	3,600.0	3,600.0	3,600.0	10.7	10.7	-90.50	-0.9	-99.1	99.1	77.6	21.50	4.611	
3,700.0	3,700.0	3,700.0	3,700.0	10.9	10.9	-90.50	-0.9	-99.1	99.1	77.3	21.85	4.538	
3,800.0	3,800.0	3,800.0	3,800.0	11.1	11.1	-90.50	-0.9	-99.1	99.1	76.9	22.19	4.467	
3,900.0	3,900.0	3,900.0	3,900.0	11.3	11.3	-90.50	-0.9	-99.1	99.1	76.6	22.53	4.400	
4,000.0	4,000.0	4,000.0	4,000.0	11.4	11.4	-90.50	-0.9	-99.1	99.1	76.3	22.87	4.334	
4,100.0	4,100.0	4,100.0	4,100.0	11.6	11.6	-90.50	-0.9	-99.1	99.1	75.9	23.21	4.272	
4,200.0	4,200.0	4,200.0	4,200.0	11.8	11.8	-90.50	-0.9	-99.1	99.1	75.6	23.54	4.211	
4,300.0	4,300.0	4,300.0	4,300.0	11.9	11.9	-90.50	-0.9	-99.1	99.1	75.3	23.87	4.153	
4,400.0	4,400.0	4,400.0	4,400.0	12.1	12.1	-90.50	-0.9	-99.1	99.1	74.9	24.20	4.097	
4,500.0	4,500.0	4,500.0	4,500.0	12.3	12.3	-90.50	-0.9	-99.1	99.1	74.6	24.53	4.042	
4,600.0	4,600.0	4,600.0	4,600.0	12.4	12.4	-90.50	-0.9	-99.1	99.1	74.3	24.85	3.989	
4,700.0	4,700.0	4,700.0	4,700.0	12.6	12.6	-90.50	-0.9	-99.1	99.1	74.0	25.17	3.938	
4,800.0	4,800.0	4,800.0	4,800.0	12.7	12.7	-90.50	-0.9	-99.1	99.1	73.6	25.49	3.889	
4,900.0	4,900.0	4,900.0	4,900.0	12.9	12.9	-90.50	-0.9	-99.1	99.1	73.3	25.81	3.841	
4,966.7	4,966.7	4,966.7	4,966.7	13.0	13.0	-90.50	-0.9	-99.1	99.1	73.1	26.02	3.810	
5,000.0	5,000.0	5,000.0	5,000.0	13.1	13.1	-90.50	-0.9	-99.1	99.1	73.0	26.12	3.795 CC, ES	

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 502H
Project:	Hat Mesa	TVD Reference:	WELL @ 3704.5usft (Original Well Elev)
Reference Site:	Anderson Fed Com - Pad C	MD Reference:	WELL @ 3704.5usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	Anderson Fed Com 502H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.79 sigma
Reference Wellbore	Anderson Fed Com 502H	Database:	EDM 5000.16 Single User Db
Reference Design:	Anderson Fed Com 502H - Prelim 2	Offset TVD Reference:	Offset Datum

Offset Design: Anderson Fed Com - Pad C - Anderson Fed Com 553H - Anderson Fed Com 553H - Anderson Fed Com 553H - Prelim 2													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)			
5,100.0	5,100.0	5,098.4	5,098.4	13.2	13.2	-90.68	-1.2	-99.9	99.9	73.5	26.38	3.788 SF	
5,200.0	5,200.0	5,196.8	5,196.7	13.4	13.3	-91.19	-2.1	-102.3	102.3	75.7	26.63	3.842	
5,300.0	5,300.0	5,295.0	5,294.9	13.5	13.4	86.70	-3.7	-106.2	106.3	79.5	26.82	3.964	
5,400.0	5,400.0	5,393.1	5,392.8	13.5	13.5	86.91	-5.9	-111.6	111.8	84.8	26.99	4.142	
5,464.2	5,464.1	5,456.0	5,455.5	13.5	13.6	87.31	-7.7	-115.9	116.1	89.0	27.08	4.287	
5,500.0	5,499.9	5,491.0	5,490.4	13.6	13.7	87.59	-8.7	-118.6	118.8	91.7	27.12	4.379	
5,600.0	5,599.8	5,590.5	5,589.5	13.6	13.8	88.23	-12.0	-126.7	126.7	99.4	27.33	4.637	
5,700.0	5,699.7	5,690.2	5,688.8	13.8	14.0	88.80	-15.2	-134.7	134.7	107.1	27.56	4.885	
5,800.0	5,799.5	5,789.9	5,788.1	13.9	14.2	89.31	-18.5	-142.8	142.6	114.8	27.82	5.127	
5,900.0	5,899.4	5,889.5	5,887.4	14.0	14.5	89.76	-21.7	-150.8	150.6	122.5	28.08	5.362	
6,000.0	5,999.3	5,989.2	5,986.7	14.2	14.7	90.16	-25.0	-158.9	158.6	130.2	28.37	5.590	
6,100.0	6,099.2	6,088.9	6,086.0	14.3	15.0	90.53	-28.3	-166.9	166.5	137.9	28.67	5.810	
6,200.0	6,199.1	6,188.6	6,185.3	14.5	15.2	90.86	-31.5	-175.0	174.5	145.6	28.98	6.024	
6,300.0	6,299.0	6,288.2	6,284.6	14.7	15.5	91.17	-34.8	-183.0	182.5	153.2	29.30	6.230	
6,400.0	6,398.9	6,387.9	6,383.9	14.9	15.8	91.45	-38.0	-191.1	190.5	160.9	29.64	6.430	
6,500.0	6,498.8	6,487.6	6,483.2	15.2	16.1	91.70	-41.3	-199.2	198.5	168.6	29.98	6.622	
6,600.0	6,598.7	6,587.3	6,582.5	15.4	16.5	91.94	-44.5	-207.2	206.6	176.2	30.34	6.808	
6,700.0	6,698.6	6,686.9	6,681.8	15.6	16.8	92.16	-47.8	-215.3	214.6	183.9	30.71	6.987	
6,800.0	6,798.5	6,786.6	6,781.1	15.9	17.2	92.36	-51.0	-223.3	222.6	191.5	31.09	7.160	
6,900.0	6,898.4	6,886.3	6,880.4	16.1	17.5	92.55	-54.3	-231.4	230.6	199.1	31.48	7.326	
7,000.0	6,998.3	6,986.0	6,979.7	16.4	17.9	92.73	-57.5	-239.4	238.6	206.8	31.87	7.487	
7,100.0	7,098.2	7,085.6	7,079.0	16.7	18.3	92.89	-60.8	-247.5	246.7	214.4	32.28	7.641	
7,200.0	7,198.1	7,185.3	7,178.3	17.0	18.6	93.05	-64.1	-255.5	254.7	222.0	32.69	7.790	
7,300.0	7,298.0	7,285.0	7,277.6	17.3	19.0	93.19	-67.3	-263.6	262.7	229.6	33.12	7.933	
7,400.0	7,397.8	7,384.7	7,376.9	17.6	19.4	93.33	-70.6	-271.6	270.7	237.2	33.54	8.071	
7,500.0	7,497.7	7,484.3	7,476.2	17.9	19.8	93.46	-73.8	-279.7	278.8	244.8	33.98	8.204	
7,600.0	7,597.6	7,584.0	7,575.4	18.2	20.2	93.58	-77.1	-287.8	286.8	252.4	34.42	8.331	
7,700.0	7,697.5	7,683.7	7,674.7	18.5	20.7	93.69	-80.3	-295.8	294.8	260.0	34.87	8.454	
7,800.0	7,797.4	7,783.4	7,774.0	18.8	21.1	93.80	-83.6	-303.9	302.9	267.5	35.33	8.573	
7,900.0	7,897.3	7,883.0	7,873.3	19.2	21.5	93.90	-86.8	-311.9	310.9	275.1	35.79	8.687	
8,000.0	7,997.2	7,982.7	7,972.6	19.5	21.9	94.00	-90.1	-320.0	318.9	282.7	36.26	8.797	
8,100.0	8,097.1	8,082.4	8,071.9	19.8	22.4	94.10	-93.3	-328.0	327.0	290.2	36.73	8.903	
8,200.0	8,197.0	8,182.1	8,171.2	20.2	22.8	94.18	-96.6	-336.1	335.0	297.8	37.20	9.005	
8,300.0	8,296.9	8,281.7	8,270.5	20.6	23.3	94.27	-99.9	-344.1	343.0	305.4	37.69	9.103	
8,400.0	8,396.8	8,381.4	8,369.8	20.9	23.7	94.35	-103.1	-352.2	351.1	312.9	38.17	9.197	
8,500.0	8,496.7	8,481.1	8,469.1	21.3	24.2	94.43	-106.4	-360.2	359.1	320.5	38.66	9.289	
8,600.0	8,596.6	8,580.8	8,568.4	21.6	24.6	94.50	-109.6	-368.3	367.2	328.0	39.16	9.377	
8,700.0	8,696.5	8,680.4	8,667.7	22.0	25.1	94.57	-112.9	-376.4	375.2	335.5	39.66	9.461	
8,800.0	8,796.4	8,780.1	8,767.0	22.4	25.5	94.64	-116.1	-384.4	383.2	343.1	40.16	9.543	
8,900.0	8,896.3	8,879.8	8,866.3	22.8	26.0	94.70	-119.4	-392.5	391.3	350.6	40.67	9.622	
9,000.0	8,996.1	8,979.5	8,965.6	23.1	26.5	94.76	-122.6	-400.5	399.3	358.2	41.18	9.698	
9,100.0	9,096.0	9,079.1	9,064.9	23.5	27.0	94.82	-125.9	-408.6	407.4	365.7	41.69	9.771	
9,200.0	9,195.9	9,178.8	9,164.2	23.9	27.4	94.88	-129.1	-416.6	415.4	373.2	42.21	9.842	
9,300.0	9,295.8	9,278.5	9,263.5	24.3	27.9	94.94	-132.4	-424.7	423.5	380.7	42.73	9.911	
9,400.0	9,395.7	9,378.2	9,362.8	24.7	28.4	94.99	-135.6	-432.7	431.5	388.3	43.25	9.977	
9,500.0	9,495.6	9,477.8	9,462.1	25.1	28.9	95.04	-138.9	-440.8	439.5	395.8	43.78	10.041	
9,540.3	9,535.9	9,518.0	9,502.1	25.2	29.1	95.06	-140.2	-444.0	442.8	398.8	43.97	10.071	
9,600.0	9,595.5	9,577.5	9,561.4	25.4	29.4	95.10	-142.2	-448.8	447.6	403.3	44.26	10.112	
9,700.0	9,695.5	9,677.2	9,660.7	25.8	29.8	94.98	-145.4	-456.9	455.4	410.6	44.80	10.166	
9,804.5	9,800.0	9,781.3	9,764.4	26.0	30.3	-83.64	-148.8	-465.3	463.5	418.2	45.38	10.215	
9,900.0	9,895.5	9,876.5	9,859.2	26.0	30.8	-84.12	-151.9	-473.0	470.9	424.9	45.93	10.252	
10,002.1	9,997.5	9,978.1	9,960.5	26.1	31.3	-84.62	-155.2	-481.2	478.8	432.2	46.53	10.290	

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 502H
Project:	Hat Mesa	TVD Reference:	WELL @ 3704.5usft (Original Well Elev)
Reference Site:	Anderson Fed Com - Pad C	MD Reference:	WELL @ 3704.5usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	Anderson Fed Com 502H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.79 sigma
Reference Wellbore	Anderson Fed Com 502H	Database:	EDM 5000.16 Single User Db
Reference Design:	Anderson Fed Com 502H - Prelim 2	Offset TVD Reference:	Offset Datum

Offset Design: Anderson Fed Com - Pad C - Anderson Fed Com 553H - Anderson Fed Com 553H - Anderson Fed Com 553H - Prelim 2												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
10,025.0	10,020.5	10,001.0	9,983.2	26.1	31.4	-80.42	-156.0	-483.1	480.4	433.8	46.65	10.298	
10,050.0	10,045.4	10,025.7	10,007.9	26.0	31.5	-80.56	-156.8	-485.1	482.1	435.3	46.80	10.300	
10,075.0	10,070.2	10,050.4	10,032.4	25.9	31.7	-80.87	-157.6	-487.1	483.5	436.6	46.97	10.294	
10,100.0	10,094.8	10,074.7	10,056.7	25.8	31.8	-81.33	-158.4	-489.0	484.8	437.7	47.15	10.282	
10,125.0	10,119.1	10,098.8	10,080.7	25.7	31.9	-81.94	-159.2	-491.0	486.0	438.6	47.35	10.263	
10,150.0	10,143.1	10,122.6	10,104.3	25.7	32.0	-82.69	-160.0	-492.9	487.1	439.5	47.57	10.241	
10,175.0	10,166.7	10,145.3	10,127.0	25.6	32.1	-83.52	-160.7	-494.7	488.2	440.4	47.80	10.214	
10,200.0	10,189.9	10,157.1	10,138.7	25.5	32.2	-83.93	-161.1	-495.8	489.6	441.5	48.06	10.186	
10,225.0	10,212.5	10,168.2	10,149.8	25.4	32.2	-84.29	-161.6	-497.1	491.6	443.2	48.36	10.165	
10,250.0	10,234.5	10,175.0	10,156.5	25.3	32.3	-84.37	-161.9	-498.0	494.2	445.5	48.70	10.149	
10,275.0	10,255.9	10,189.1	10,170.4	25.2	32.4	-84.88	-162.7	-500.2	497.6	448.5	49.06	10.142	
10,300.0	10,276.5	10,200.0	10,181.1	25.1	32.4	-85.16	-163.4	-502.1	501.6	452.2	49.44	10.145	
10,325.0	10,296.4	10,207.9	10,188.8	25.0	32.5	-85.18	-164.0	-503.7	506.4	456.5	49.86	10.156	
10,350.0	10,315.5	10,216.5	10,197.2	24.9	32.6	-85.18	-164.6	-505.5	511.9	461.6	50.28	10.181	
10,375.0	10,333.7	10,225.0	10,205.4	24.8	32.6	-85.12	-165.3	-507.4	518.2	467.5	50.71	10.219	
10,400.0	10,351.0	10,231.9	10,212.1	24.7	32.7	-84.84	-165.9	-509.1	525.3	474.2	51.15	10.270	
10,425.0	10,367.3	10,238.8	10,218.7	24.6	32.7	-84.47	-166.5	-510.9	533.2	481.6	51.58	10.336	
10,450.0	10,382.6	10,250.0	10,229.5	24.6	32.8	-84.44	-167.5	-514.0	541.8	489.8	51.98	10.423	
10,475.0	10,396.8	10,250.0	10,229.5	24.5	32.8	-83.24	-167.5	-514.0	551.1	498.7	52.41	10.516	
10,500.0	10,410.0	10,250.0	10,229.5	24.4	32.8	-81.93	-167.5	-514.0	561.2	508.4	52.81	10.628	
10,525.0	10,422.0	10,260.1	10,239.0	24.4	32.9	-81.53	-168.5	-516.9	571.9	518.7	53.15	10.760	
10,550.0	10,432.9	10,263.9	10,242.6	24.3	32.9	-80.41	-168.9	-518.1	583.3	529.8	53.48	10.906	
10,575.0	10,442.5	10,267.1	10,245.7	24.3	32.9	-79.14	-169.3	-519.1	595.2	541.5	53.78	11.067	
10,600.0	10,451.0	10,275.0	10,253.1	24.2	33.0	-78.27	-170.2	-521.7	607.8	553.8	54.04	11.247	
10,625.0	10,458.2	10,275.0	10,253.1	24.2	33.0	-76.49	-170.2	-521.7	620.8	566.5	54.29	11.435	
10,650.0	10,464.1	10,275.0	10,253.1	24.2	33.0	-74.64	-170.2	-521.7	634.2	579.7	54.50	11.637	
10,675.0	10,468.8	10,275.0	10,253.1	24.1	33.0	-72.72	-170.2	-521.7	648.1	593.4	54.68	11.853	
10,700.0	10,472.2	10,275.0	10,253.1	24.1	33.0	-70.76	-170.2	-521.7	662.3	607.5	54.83	12.079	
10,725.0	10,474.2	10,275.0	10,253.1	24.1	33.0	-68.76	-170.2	-521.7	676.8	621.8	54.95	12.316	
10,752.1	10,475.0	10,275.0	10,253.1	24.1	33.0	-66.57	-170.2	-521.7	692.7	637.6	55.05	12.583	
10,755.6	10,475.0	10,275.0	10,253.1	24.1	33.0	-66.57	-170.2	-521.7	694.8	639.7	55.05	12.620	
10,800.0	10,475.0	10,275.0	10,253.1	24.1	33.0	-66.29	-170.2	-521.7	722.3	667.2	55.16	13.095	
10,900.0	10,475.0	10,275.0	10,253.1	24.2	33.0	-65.50	-170.2	-521.7	791.7	736.4	55.29	14.318	
10,948.9	10,475.0	10,266.0	10,244.7	24.2	32.9	-64.07	-169.2	-518.8	828.5	773.2	55.29	14.983	
11,000.0	10,475.0	10,263.8	10,242.6	24.2	32.9	-63.83	-168.9	-518.1	868.5	813.3	55.25	15.720	
11,100.0	10,475.0	10,259.7	10,238.7	24.3	32.9	-63.39	-168.5	-516.8	949.9	894.8	55.12	17.235	
11,200.0	10,475.0	11,739.7	10,840.0	24.5	41.8	-111.60	718.7	-971.9	991.7	932.1	59.57	16.647	
11,300.0	10,475.0	11,839.7	10,840.0	25.4	42.7	-111.60	818.7	-972.5	991.7	930.3	61.43	16.142	
11,400.0	10,475.0	11,939.7	10,840.0	26.8	43.6	-111.60	918.7	-973.1	991.7	928.3	63.46	15.626	
11,500.0	10,475.0	12,039.7	10,840.0	28.3	44.7	-111.59	1,018.7	-973.6	991.7	926.1	65.65	15.107	
11,600.0	10,475.0	12,139.7	10,840.0	29.9	45.7	-111.59	1,118.7	-974.2	991.8	923.8	67.97	14.592	
11,700.0	10,475.0	12,239.7	10,840.0	31.5	46.9	-111.59	1,218.7	-974.8	991.8	921.4	70.42	14.085	
11,800.0	10,475.0	12,339.7	10,840.0	33.3	48.1	-111.59	1,318.7	-975.3	991.8	918.9	72.97	13.592	
11,900.0	10,475.0	12,439.7	10,840.0	35.0	49.3	-111.59	1,418.7	-975.9	991.9	916.2	75.64	13.114	
12,000.0	10,475.0	12,539.7	10,840.0	36.8	50.6	-111.59	1,518.7	-976.5	991.9	913.5	78.39	12.654	
12,100.0	10,475.0	12,639.7	10,840.0	38.6	51.9	-111.59	1,618.7	-977.0	991.9	910.7	81.22	12.212	
12,200.0	10,475.0	12,739.7	10,840.0	40.4	53.2	-111.59	1,718.7	-977.6	992.0	907.8	84.14	11.790	
12,300.0	10,475.0	12,839.7	10,840.0	42.2	54.6	-111.59	1,818.7	-978.2	992.0	904.9	87.11	11.387	
12,400.0	10,475.0	12,939.7	10,840.0	44.0	56.0	-111.59	1,918.7	-978.7	992.0	901.9	90.16	11.003	
12,500.0	10,475.0	13,039.7	10,840.0	45.9	57.5	-111.59	2,018.7	-979.3	992.0	898.8	93.25	10.638	
12,600.0	10,475.0	13,139.7	10,840.0	47.8	59.0	-111.59	2,118.7	-979.9	992.1	895.7	96.40	10.291	
12,700.0	10,475.0	13,239.7	10,840.0	49.7	60.5	-111.59	2,218.7	-980.4	992.1	892.5	99.60	9.961	

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 502H
Project:	Hat Mesa	TVD Reference:	WELL @ 3704.5usft (Original Well Elev)
Reference Site:	Anderson Fed Com - Pad C	MD Reference:	WELL @ 3704.5usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	Anderson Fed Com 502H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.79 sigma
Reference Wellbore	Anderson Fed Com 502H	Database:	EDM 5000.16 Single User Db
Reference Design:	Anderson Fed Com 502H - Prelim 2	Offset TVD Reference:	Offset Datum

Offset Design: Anderson Fed Com - Pad C - Anderson Fed Com 553H - Anderson Fed Com 553H - Anderson Fed Com 553H - Prelim 2												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			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	
12,800.0	10,475.0	13,339.7	10,840.0	51.6	62.0	-111.59	2,318.7	-981.0	992.1	889.3	102.83	9.648	
12,900.0	10,475.0	13,439.7	10,840.0	53.5	63.6	-111.59	2,418.7	-981.6	992.2	886.1	106.11	9.350	
13,000.0	10,475.0	13,539.7	10,840.0	55.4	65.2	-111.58	2,518.7	-982.1	992.2	882.8	109.42	9.068	
13,100.0	10,475.0	13,639.7	10,840.0	57.3	66.8	-111.58	2,618.7	-982.7	992.2	879.5	112.76	8.799	
13,200.0	10,475.0	13,739.7	10,840.0	59.2	68.5	-111.58	2,718.7	-983.3	992.3	876.1	116.14	8.544	
13,300.0	10,475.0	13,839.7	10,840.0	61.2	70.1	-111.58	2,818.7	-983.8	992.3	872.7	119.54	8.301	
13,400.0	10,475.0	13,939.7	10,840.0	63.1	71.8	-111.58	2,918.7	-984.4	992.3	869.3	122.96	8.070	
13,500.0	10,475.0	14,039.7	10,840.0	65.0	73.5	-111.58	3,018.7	-985.0	992.3	865.9	126.41	7.850	
13,600.0	10,475.0	14,139.7	10,840.0	67.0	75.2	-111.58	3,118.7	-985.5	992.4	862.5	129.88	7.641	
13,700.0	10,475.0	14,239.7	10,840.0	68.9	76.9	-111.58	3,218.7	-986.1	992.4	859.0	133.37	7.441	
13,800.0	10,475.0	14,339.7	10,840.0	70.9	78.6	-111.58	3,318.7	-986.7	992.4	855.6	136.88	7.251	
13,900.0	10,475.0	14,439.7	10,840.0	72.9	80.4	-111.58	3,418.7	-987.3	992.5	852.1	140.40	7.069	
14,000.0	10,475.0	14,539.7	10,840.0	74.8	82.2	-111.58	3,518.7	-987.8	992.5	848.5	143.94	6.895	
14,100.0	10,475.0	14,639.7	10,840.0	76.8	83.9	-111.58	3,618.7	-988.4	992.5	845.0	147.50	6.729	
14,200.0	10,475.0	14,739.7	10,840.0	78.7	85.7	-111.58	3,718.7	-989.0	992.5	841.5	151.06	6.570	
14,300.0	10,475.0	14,839.7	10,840.0	80.7	87.5	-111.58	3,818.7	-989.5	992.6	837.9	154.65	6.418	
14,400.0	10,475.0	14,939.7	10,840.0	82.7	89.3	-111.58	3,918.7	-990.1	992.6	834.4	158.24	6.273	
14,500.0	10,475.0	15,039.7	10,840.0	84.7	91.1	-111.57	4,018.7	-990.7	992.6	830.8	161.84	6.133	
14,600.0	10,475.0	15,139.7	10,840.0	86.6	92.9	-111.57	4,118.7	-991.2	992.7	827.2	165.46	6.000	
14,700.0	10,475.0	15,239.7	10,840.0	88.6	94.8	-111.57	4,218.7	-991.8	992.7	823.6	169.08	5.871	
14,800.0	10,475.0	15,339.7	10,840.0	90.6	96.6	-111.57	4,318.7	-992.4	992.7	820.0	172.71	5.748	
14,900.0	10,475.0	15,439.7	10,840.0	92.6	98.4	-111.57	4,418.7	-992.9	992.8	816.4	176.36	5.629	
15,000.0	10,475.0	15,539.7	10,840.0	94.5	100.3	-111.57	4,518.7	-993.5	992.8	812.8	180.01	5.515	
15,100.0	10,475.0	15,639.7	10,840.0	96.5	102.2	-111.57	4,618.6	-994.1	992.8	809.1	183.66	5.406	
15,200.0	10,475.0	15,739.7	10,840.0	98.5	104.0	-111.57	4,718.6	-994.6	992.8	805.5	187.33	5.300	
15,300.0	10,475.0	15,839.7	10,840.0	100.5	105.9	-111.57	4,818.6	-995.2	992.9	801.9	191.00	5.198	
15,400.0	10,475.0	15,939.7	10,840.0	102.5	107.8	-111.57	4,918.6	-995.8	992.9	798.2	194.68	5.100	
15,500.0	10,475.0	16,039.7	10,840.0	104.5	109.6	-111.57	5,018.6	-996.3	992.9	794.6	198.36	5.006	
15,600.0	10,475.0	16,139.7	10,840.0	106.5	111.5	-111.57	5,118.6	-996.9	993.0	790.9	202.05	4.914	
15,700.0	10,475.0	16,239.7	10,840.0	108.4	113.4	-111.57	5,218.6	-997.5	993.0	787.2	205.74	4.826	
15,800.0	10,475.0	16,339.7	10,840.0	110.4	115.3	-111.57	5,318.6	-998.0	993.0	783.6	209.44	4.741	
15,900.0	10,475.0	16,439.7	10,840.0	112.4	117.2	-111.56	5,418.6	-998.6	993.0	779.9	213.15	4.659	
16,000.0	10,475.0	16,539.7	10,840.0	114.4	119.1	-111.56	5,518.6	-999.2	993.1	776.2	216.85	4.579	
16,100.0	10,475.0	16,639.7	10,840.0	116.4	121.0	-111.56	5,618.6	-999.7	993.1	772.5	220.57	4.503	
16,200.0	10,475.0	16,739.7	10,840.0	118.4	122.9	-111.56	5,718.6	-1,000.3	993.1	768.9	224.28	4.428	
16,300.0	10,475.0	16,839.7	10,840.0	120.4	124.8	-111.56	5,818.6	-1,000.9	993.2	765.2	228.01	4.356	
16,400.0	10,475.0	16,939.7	10,840.0	122.4	126.7	-111.56	5,918.6	-1,001.4	993.2	761.5	231.73	4.286	
16,500.0	10,475.0	17,039.7	10,840.0	124.4	128.7	-111.56	6,018.6	-1,002.0	993.2	757.8	235.46	4.218	
16,600.0	10,475.0	17,139.7	10,840.0	126.4	130.6	-111.56	6,118.6	-1,002.6	993.3	754.1	239.19	4.153	
16,700.0	10,475.0	17,239.7	10,840.0	128.4	132.5	-111.56	6,218.6	-1,003.1	993.3	750.4	242.93	4.089	
16,800.0	10,475.0	17,339.7	10,840.0	130.4	134.4	-111.56	6,318.6	-1,003.7	993.3	746.6	246.67	4.027	
16,900.0	10,475.0	17,439.7	10,840.0	132.4	136.4	-111.56	6,418.6	-1,004.3	993.3	742.9	250.41	3.967	
17,000.0	10,475.0	17,539.7	10,840.0	134.4	138.3	-111.56	6,518.6	-1,004.8	993.4	739.2	254.15	3.909	
17,100.0	10,475.0	17,639.7	10,840.0	136.4	140.2	-111.56	6,618.6	-1,005.4	993.4	735.5	257.90	3.852	
17,102.7	10,475.0	17,642.3	10,840.0	136.4	140.3	-111.56	6,621.3	-1,005.4	993.4	735.4	258.00	3.850	
17,159.3	10,475.0	17,694.7	10,840.0	137.6	141.3	-111.56	6,673.6	-1,005.7	993.4	733.4	260.07	3.820	

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 502H
Project:	Hat Mesa	TVD Reference:	WELL @ 3704.5usft (Original Well Elev)
Reference Site:	Anderson Fed Com - Pad C	MD Reference:	WELL @ 3704.5usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	Anderson Fed Com 502H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.79 sigma
Reference Wellbore	Anderson Fed Com 502H	Database:	EDM 5000.16 Single User Db
Reference Design:	Anderson Fed Com 502H - Prelim 2	Offset TVD Reference:	Offset Datum

Offset Design: Anderson Fed Com - Pad C - Anderson Fed Com 554H - Anderson Fed Com 554H - Anderson Fed Com 554H - Prelim 2												Offset Site Error:	0.0 usft		
Survey Program: 0-MWD+HRGM				Offset		Semi Major Axis		Offset Wellbore Centre		Rule Assigned:				Offset Well Error:	0.0 usft
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	Warning		
0.0	0.0	0.0	0.0	0.0	0.0	89.63	0.2	32.4	32.4						
100.0	100.0	99.0	99.0	0.5	0.5	89.63	0.2	32.4	32.4	31.3	1.06	30.709			
200.0	200.0	199.0	199.0	1.7	1.7	89.63	0.2	32.4	32.4	29.0	3.41	9.496			
300.0	300.0	299.0	299.0	2.4	2.4	89.63	0.2	32.4	32.4	27.6	4.82	6.727			
400.0	400.0	399.0	399.0	3.0	2.9	89.63	0.2	32.4	32.4	26.5	5.90	5.489			
500.0	500.0	499.0	499.0	3.4	3.4	89.63	0.2	32.4	32.4	25.6	6.83	4.747			
600.0	600.0	599.0	599.0	3.8	3.8	89.63	0.2	32.4	32.4	24.8	7.64	4.238			
700.0	700.0	699.0	699.0	4.2	4.2	89.63	0.2	32.4	32.4	24.0	8.39	3.861			
800.0	800.0	799.0	799.0	4.5	4.5	89.63	0.2	32.4	32.4	23.3	9.08	3.568			
900.0	900.0	899.0	899.0	4.9	4.9	89.63	0.2	32.4	32.4	22.7	9.73	3.331			
1,000.0	1,000.0	999.0	999.0	5.2	5.2	89.63	0.2	32.4	32.4	22.1	10.34	3.134			
1,100.0	1,100.0	1,099.0	1,099.0	5.5	5.5	89.63	0.2	32.4	32.4	21.5	10.92	2.967			
1,200.0	1,200.0	1,199.0	1,199.0	5.7	5.7	89.63	0.2	32.4	32.4	20.9	11.48	2.823			
1,300.0	1,300.0	1,299.0	1,299.0	6.0	6.0	89.63	0.2	32.4	32.4	20.4	12.01	2.697			
1,400.0	1,400.0	1,399.0	1,399.0	6.3	6.3	89.63	0.2	32.4	32.4	19.9	12.53	2.586			
1,500.0	1,500.0	1,499.0	1,499.0	6.5	6.5	89.63	0.2	32.4	32.4	19.4	13.03	2.487			
1,600.0	1,600.0	1,599.0	1,599.0	6.8	6.8	89.63	0.2	32.4	32.4	18.9	13.51	2.397			
1,700.0	1,700.0	1,699.0	1,699.0	7.0	7.0	89.63	0.2	32.4	32.4	18.4	13.99	2.316			
1,800.0	1,800.0	1,799.0	1,799.0	7.2	7.2	89.63	0.2	32.4	32.4	18.0	14.45	2.243			
1,900.0	1,900.0	1,899.0	1,899.0	7.4	7.4	89.63	0.2	32.4	32.4	17.5	14.90	2.175			
2,000.0	2,000.0	1,999.0	1,999.0	7.7	7.7	89.63	0.2	32.4	32.4	17.1	15.34	2.112			
2,100.0	2,100.0	2,099.0	2,099.0	7.9	7.9	89.63	0.2	32.4	32.4	16.6	15.77	2.055			
2,200.0	2,200.0	2,199.0	2,199.0	8.1	8.1	89.63	0.2	32.4	32.4	16.2	16.19	2.001			
2,300.0	2,300.0	2,299.0	2,299.0	8.3	8.3	89.63	0.2	32.4	32.4	15.8	16.61	1.951			
2,400.0	2,400.0	2,399.0	2,399.0	8.5	8.5	89.63	0.2	32.4	32.4	15.4	17.01	1.904			
2,500.0	2,500.0	2,499.0	2,499.0	8.7	8.7	89.63	0.2	32.4	32.4	15.0	17.42	1.860			
2,600.0	2,600.0	2,599.0	2,599.0	8.9	8.9	89.63	0.2	32.4	32.4	14.6	17.81	1.819			
2,700.0	2,700.0	2,699.0	2,699.0	9.1	9.1	89.63	0.2	32.4	32.4	14.2	18.20	1.780			
2,800.0	2,800.0	2,799.0	2,799.0	9.3	9.3	89.63	0.2	32.4	32.4	13.8	18.58	1.743			
2,900.0	2,900.0	2,899.0	2,899.0	9.5	9.5	89.63	0.2	32.4	32.4	13.4	18.96	1.709			
3,000.0	3,000.0	2,999.0	2,999.0	9.7	9.7	89.63	0.2	32.4	32.4	13.1	19.34	1.675			
3,100.0	3,100.0	3,099.0	3,099.0	9.9	9.9	89.63	0.2	32.4	32.4	12.7	19.71	1.644			
3,200.0	3,200.0	3,199.0	3,199.0	10.0	10.0	89.63	0.2	32.4	32.4	12.3	20.07	1.614			
3,300.0	3,300.0	3,299.0	3,299.0	10.2	10.2	89.63	0.2	32.4	32.4	12.0	20.43	1.585			
3,400.0	3,400.0	3,399.0	3,399.0	10.4	10.4	89.63	0.2	32.4	32.4	11.6	20.79	1.558			
3,500.0	3,500.0	3,499.0	3,499.0	10.6	10.6	89.63	0.2	32.4	32.4	11.3	21.15	1.532			
3,600.0	3,600.0	3,599.0	3,599.0	10.7	10.7	89.63	0.2	32.4	32.4	10.9	21.50	1.507			
3,700.0	3,700.0	3,699.0	3,699.0	10.9	10.9	89.63	0.2	32.4	32.4	10.6	21.84	1.483	Level 3		
3,800.0	3,800.0	3,799.0	3,799.0	11.1	11.1	89.63	0.2	32.4	32.4	10.2	22.19	1.460	Level 3		
3,900.0	3,900.0	3,899.0	3,899.0	11.3	11.3	89.63	0.2	32.4	32.4	9.9	22.53	1.438	Level 3		
4,000.0	4,000.0	3,999.0	3,999.0	11.4	11.4	89.63	0.2	32.4	32.4	9.5	22.87	1.417	Level 3		
4,100.0	4,100.0	4,099.0	4,099.0	11.6	11.6	89.63	0.2	32.4	32.4	9.2	23.21	1.396	Level 3		
4,200.0	4,200.0	4,199.0	4,199.0	11.8	11.8	89.63	0.2	32.4	32.4	8.9	23.54	1.376	Level 3		
4,300.0	4,300.0	4,299.0	4,299.0	11.9	11.9	89.63	0.2	32.4	32.4	8.5	23.87	1.357	Level 3		
4,400.0	4,400.0	4,399.0	4,399.0	12.1	12.1	89.63	0.2	32.4	32.4	8.2	24.20	1.339	Level 3		
4,500.0	4,500.0	4,499.0	4,499.0	12.3	12.3	89.63	0.2	32.4	32.4	7.9	24.52	1.321	Level 3		
4,600.0	4,600.0	4,599.0	4,599.0	12.4	12.4	89.63	0.2	32.4	32.4	7.6	24.85	1.304	Level 3		
4,700.0	4,700.0	4,699.0	4,699.0	12.6	12.6	89.63	0.2	32.4	32.4	7.2	25.17	1.287	Level 3		
4,800.0	4,800.0	4,799.0	4,799.0	12.7	12.7	89.63	0.2	32.4	32.4	6.9	25.49	1.271	Level 3		
4,900.0	4,900.0	4,899.0	4,899.0	12.9	12.9	89.63	0.2	32.4	32.4	6.6	25.81	1.255	Level 3		
5,000.0	5,000.0	4,999.0	4,999.0	13.1	13.1	89.63	0.2	32.4	32.4	6.3	26.12	1.240	Level 3		
5,100.0	5,100.0	5,099.0	5,099.0	13.2	13.2	89.63	0.2	32.4	32.4	6.0	26.44	1.225	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 502H
Project:	Hat Mesa	TVD Reference:	WELL @ 3704.5usft (Original Well Elev)
Reference Site:	Anderson Fed Com - Pad C	MD Reference:	WELL @ 3704.5usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	Anderson Fed Com 502H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.79 sigma
Reference Wellbore	Anderson Fed Com 502H	Database:	EDM 5000.16 Single User Db
Reference Design:	Anderson Fed Com 502H - Prelim 2	Offset TVD Reference:	Offset Datum

Offset Design: Anderson Fed Com - Pad C - Anderson Fed Com 554H - Anderson Fed Com 554H - Anderson Fed Com 554H - Prelim 2													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
5,200.0	5,200.0	5,199.0	5,199.0	13.4	13.4	89.63	0.2	32.4	32.4	5.6	26.75	1.211	Level 3, CC
5,300.0	5,300.0	5,299.0	5,299.0	13.5	13.5	-93.63	0.2	32.4	32.4	5.5	26.98	1.202	Level 3
5,400.0	5,400.0	5,399.0	5,399.0	13.5	13.7	-98.20	0.2	32.4	32.7	5.5	27.19	1.203	Level 3
5,464.2	5,464.1	5,463.2	5,463.2	13.5	13.7	-102.06	-0.1	32.4	33.1	5.9	27.25	1.215	Level 3
5,500.0	5,499.9	5,499.0	5,499.0	13.6	13.8	-103.98	-0.6	32.4	33.4	6.1	27.27	1.224	Level 3
5,600.0	5,599.8	5,599.1	5,599.1	13.6	13.8	-107.26	-3.3	32.3	34.0	6.6	27.37	1.241	Level 3
5,700.0	5,699.7	5,699.2	5,699.1	13.8	13.9	-108.22	-7.2	32.3	34.2	6.8	27.43	1.247	Level 3
5,800.0	5,799.5	5,799.2	5,799.0	13.9	13.9	-108.98	-11.4	32.2	34.4	6.9	27.55	1.249	Level 3
5,900.0	5,899.4	5,899.2	5,898.9	14.0	14.0	-109.73	-15.5	32.2	34.6	7.0	27.68	1.252	Level 3
6,000.0	5,999.3	5,999.2	5,998.8	14.2	14.2	-110.48	-19.6	32.1	34.9	7.1	27.82	1.254	Level 3
6,100.0	6,099.2	6,099.2	6,098.7	14.3	14.3	-111.21	-23.7	32.0	35.1	7.1	27.97	1.255	Level 3
6,200.0	6,199.1	6,199.2	6,198.6	14.5	14.4	-111.93	-27.8	32.0	35.4	7.2	28.13	1.257	Level 3
6,300.0	6,299.0	6,299.2	6,298.6	14.7	14.6	-112.65	-31.9	31.9	35.6	7.3	28.30	1.258	Level 3
6,400.0	6,398.9	6,399.2	6,398.5	14.9	14.8	-113.35	-36.0	31.9	35.9	7.4	28.47	1.259	Level 3
6,500.0	6,498.8	6,499.2	6,498.4	15.2	15.0	-114.04	-40.1	31.8	36.1	7.5	28.66	1.260	Level 3
6,600.0	6,598.7	6,599.2	6,598.3	15.4	15.2	-114.73	-44.2	31.7	36.4	7.5	28.87	1.260	Level 3
6,700.0	6,698.6	6,699.2	6,698.2	15.6	15.4	-115.40	-48.3	31.7	36.6	7.6	29.08	1.260	Level 3
6,800.0	6,798.5	6,799.2	6,798.1	15.9	15.6	-116.06	-52.4	31.6	36.9	7.6	29.30	1.260	Level 3
6,900.0	6,898.4	6,899.2	6,898.0	16.1	15.8	-116.72	-56.5	31.5	37.2	7.7	29.54	1.259	Level 3
7,000.0	6,998.3	6,999.2	6,998.0	16.4	16.0	-117.36	-60.6	31.5	37.5	7.7	29.79	1.258	Level 3
7,100.0	7,098.2	7,099.2	7,097.9	16.7	16.3	-117.99	-64.8	31.4	37.8	7.7	30.06	1.257	Level 3
7,200.0	7,198.1	7,199.2	7,197.8	17.0	16.5	-118.62	-68.9	31.4	38.1	7.7	30.34	1.255	Level 3
7,300.0	7,298.0	7,299.2	7,297.7	17.3	16.8	-119.23	-73.0	31.3	38.4	7.7	30.63	1.252	Level 3
7,400.0	7,397.8	7,399.2	7,397.6	17.6	17.1	-119.84	-77.1	31.2	38.7	7.7	30.94	1.250	Level 3
7,500.0	7,497.7	7,499.2	7,497.5	17.9	17.3	-120.43	-81.2	31.2	39.0	7.7	31.26	1.247	Level 3
7,600.0	7,597.6	7,599.2	7,597.4	18.2	17.6	-121.02	-85.3	31.1	39.3	7.7	31.59	1.243	Level 3
7,700.0	7,697.5	7,699.2	7,697.4	18.5	17.9	-121.60	-89.4	31.1	39.6	7.6	31.95	1.239	Level 3
7,800.0	7,797.4	7,799.2	7,797.3	18.8	18.2	-122.17	-93.5	31.0	39.9	7.6	32.31	1.235	Level 3
7,900.0	7,897.3	7,899.2	7,897.2	19.2	18.5	-122.73	-97.6	30.9	40.2	7.5	32.69	1.231	Level 3
8,000.0	7,997.2	7,999.2	7,997.1	19.5	18.8	-123.28	-101.7	30.9	40.6	7.5	33.09	1.226	Level 3
8,100.0	8,097.1	8,099.2	8,097.0	19.8	19.2	-123.82	-105.8	30.8	40.9	7.4	33.49	1.221	Level 3
8,200.0	8,197.0	8,199.2	8,196.9	20.2	19.5	-124.35	-109.9	30.7	41.2	7.3	33.92	1.215	Level 3
8,300.0	8,296.9	8,299.2	8,296.8	20.6	19.8	-124.87	-114.1	30.7	41.6	7.2	34.36	1.209	Level 3
8,400.0	8,396.8	8,399.2	8,396.8	20.9	20.1	-125.39	-118.2	30.6	41.9	7.1	34.81	1.204	Level 3
8,500.0	8,496.7	8,499.2	8,496.7	21.3	20.5	-125.90	-122.3	30.6	42.2	7.0	35.27	1.197	Level 3
8,600.0	8,596.6	8,599.2	8,596.6	21.6	20.8	-126.40	-126.4	30.5	42.6	6.8	35.75	1.191	Level 3
8,700.0	8,696.5	8,699.2	8,696.5	22.0	21.2	-126.89	-130.5	30.4	42.9	6.7	36.25	1.184	Level 3
8,800.0	8,796.4	8,799.2	8,796.4	22.4	21.5	-127.37	-134.6	30.4	43.3	6.5	36.75	1.178	Level 3
8,900.0	8,896.3	8,899.2	8,896.3	22.8	21.9	-127.85	-138.7	30.3	43.6	6.4	37.27	1.171	Level 3
9,000.0	8,996.1	8,999.2	8,996.2	23.1	22.2	-128.31	-142.8	30.3	44.0	6.2	37.80	1.164	Level 3
9,100.0	9,096.0	9,099.2	9,096.2	23.5	22.6	-128.77	-146.9	30.2	44.4	6.0	38.35	1.157	Level 3
9,200.0	9,195.9	9,199.2	9,196.1	23.9	22.9	-129.23	-151.0	30.1	44.7	5.8	38.91	1.150	Level 3
9,300.0	9,295.8	9,299.1	9,296.0	24.3	23.3	-129.67	-155.1	30.1	45.1	5.6	39.47	1.142	Level 3
9,400.0	9,395.7	9,399.1	9,395.9	24.7	23.7	-130.11	-159.2	30.0	45.5	5.4	40.05	1.135	Level 3
9,500.0	9,495.6	9,499.1	9,495.8	25.1	24.1	-130.54	-163.3	29.9	45.8	5.2	40.64	1.128	Level 3
9,540.3	9,535.9	9,539.4	9,536.1	25.2	24.2	-130.71	-165.0	29.9	46.0	5.1	40.87	1.125	Level 3
9,600.0	9,595.5	9,599.1	9,595.7	25.4	24.4	-130.67	-167.5	29.9	46.0	4.9	41.12	1.119	Level 3
9,700.0	9,695.5	9,699.1	9,695.6	25.8	24.8	-129.25	-171.6	29.8	45.1	4.0	41.15	1.097	Level 3
9,804.5	9,800.0	9,803.6	9,800.0	26.0	25.2	55.97	-175.9	29.8	43.2	2.7	40.47	1.067	Level 3
9,900.0	9,895.5	9,899.0	9,895.3	26.0	25.6	60.46	-179.8	29.7	41.0	1.7	39.38	1.042	Level 3
10,002.1	9,997.5	10,001.0	9,997.2	26.1	26.0	65.77	-184.0	29.6	39.1	1.0	38.13	1.025	Level 3
10,025.0	10,020.5	10,023.9	10,020.1	26.1	26.1	72.04	-184.9	29.6	38.5	0.9	37.61	1.024	Level 3, 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 502H
Project:	Hat Mesa	TVD Reference:	WELL @ 3704.5usft (Original Well Elev)
Reference Site:	Anderson Fed Com - Pad C	MD Reference:	WELL @ 3704.5usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	Anderson Fed Com 502H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.79 sigma
Reference Wellbore	Anderson Fed Com 502H	Database:	EDM 5000.16 Single User Db
Reference Design:	Anderson Fed Com 502H - Prelim 2	Offset TVD Reference:	Offset Datum

Offset Design: Anderson Fed Com - Pad C - Anderson Fed Com 554H - Anderson Fed Com 554H - Anderson Fed Com 554H - Prelim 2													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
10,050.0	10,045.4	10,048.7	10,044.9	26.0	26.1	76.24	-185.9	29.6	37.6	1.0	36.62	1.028	Level 3
10,075.0	10,070.2	10,073.3	10,069.5	25.9	26.2	82.54	-186.9	29.6	36.8	1.4	35.37	1.040	Level 3
10,099.8	10,094.6	10,097.6	10,093.7	25.8	26.3	90.85	-187.9	29.6	36.4	2.0	34.39	1.057	Level 3
10,100.0	10,094.8	10,097.7	10,093.9	25.8	26.3	90.91	-187.9	29.6	36.4	2.0	34.39	1.057	Level 3
10,125.0	10,119.1	10,121.8	10,118.0	25.7	26.4	100.92	-188.9	29.6	37.0	2.5	34.49	1.073	Level 3
10,150.0	10,143.1	10,145.5	10,141.6	25.7	26.5	111.66	-189.9	29.5	39.3	3.0	36.23	1.084	Level 3
10,175.0	10,166.7	10,168.7	10,164.9	25.6	26.6	121.99	-190.9	29.5	43.6	4.5	39.12	1.115	Level 3
10,200.0	10,189.9	10,191.5	10,187.6	25.5	26.7	131.05	-191.8	29.5	50.1	8.0	42.16	1.189	Level 3
10,225.0	10,212.5	10,213.6	10,209.7	25.4	26.8	138.51	-192.7	29.5	58.7	14.0	44.69	1.314	Level 3
10,250.0	10,234.5	10,235.1	10,231.2	25.3	26.9	144.45	-193.6	29.5	69.2	22.6	46.57	1.486	Level 3
10,275.0	10,255.9	10,256.0	10,252.0	25.2	26.9	149.10	-194.4	29.5	81.3	33.4	47.91	1.697	
10,300.0	10,276.5	10,276.1	10,272.2	25.1	27.0	152.74	-195.3	29.5	94.9	46.0	48.85	1.942	
10,325.0	10,296.4	10,295.8	10,291.8	25.0	27.1	155.60	-196.0	29.5	109.7	60.2	49.50	2.217	
10,350.0	10,315.5	10,314.6	10,310.6	24.9	27.2	157.83	-196.7	29.4	125.7	75.8	49.97	2.516	
10,375.0	10,333.7	10,332.7	10,328.7	24.8	27.2	159.55	-197.2	29.4	142.8	92.5	50.31	2.838	
10,400.0	10,351.0	10,349.9	10,345.9	24.7	27.3	160.87	-197.7	29.4	160.8	110.2	50.56	3.180	
10,425.0	10,367.3	10,366.2	10,362.2	24.6	27.3	161.85	-198.1	29.4	179.7	128.9	50.74	3.541	
10,450.0	10,382.6	10,381.5	10,377.5	24.6	27.4	162.55	-198.5	29.4	199.4	148.6	50.88	3.920	
10,475.0	10,396.8	10,395.9	10,391.8	24.5	27.4	162.97	-198.8	29.4	220.0	169.0	50.99	4.314	
10,500.0	10,410.0	10,409.2	10,405.1	24.4	27.5	163.14	-199.0	29.4	241.2	190.1	51.06	4.724	
10,525.0	10,422.0	10,421.4	10,417.3	24.4	27.5	163.05	-199.2	29.4	263.1	212.0	51.10	5.148	
10,550.0	10,432.9	10,432.4	10,428.4	24.3	27.5	162.65	-199.3	29.4	285.5	234.4	51.13	5.584	
10,575.0	10,442.5	10,442.3	10,438.3	24.3	27.5	161.88	-199.5	29.4	308.5	257.4	51.16	6.031	
10,600.0	10,451.0	10,451.0	10,447.0	24.2	27.5	160.62	-199.5	29.4	332.0	280.8	51.18	6.487	
10,625.0	10,458.2	10,458.5	10,454.4	24.2	27.6	158.66	-199.6	29.4	355.9	304.7	51.20	6.951	
10,650.0	10,464.1	10,464.6	10,460.6	24.2	27.6	155.56	-199.7	29.4	380.1	328.9	51.21	7.422	
10,675.0	10,468.8	10,469.4	10,465.4	24.1	27.6	150.48	-199.7	29.4	404.6	353.3	51.23	7.897	
10,700.0	10,472.2	10,472.9	10,468.9	24.1	27.6	141.41	-199.7	29.4	429.3	378.0	51.24	8.377	
10,725.0	10,474.2	10,475.0	10,471.0	24.1	27.6	123.49	-199.7	29.4	454.1	402.8	51.26	8.858	
10,752.1	10,475.0	10,475.7	10,471.7	24.1	27.6	86.20	-199.7	29.4	481.1	429.8	51.28	9.380	
10,755.6	10,475.0	10,475.7	10,471.6	24.1	27.6	86.16	-199.7	29.4	484.6	433.3	51.29	9.449	
10,800.0	10,475.0	10,475.4	10,471.4	24.1	27.6	86.54	-199.7	29.4	528.9	477.5	51.33	10.304	
10,900.0	10,475.0	10,474.9	10,470.8	24.2	27.6	87.13	-199.7	29.4	628.4	577.0	51.42	12.222	
10,948.9	10,475.0	11,626.1	11,150.0	24.2	25.8	179.61	473.1	-44.0	676.0	613.5	62.53	10.812	
11,000.0	10,475.0	11,677.1	11,150.0	24.2	25.8	179.77	524.0	-46.1	676.0	613.2	62.82	10.762	
11,100.0	10,475.0	11,777.0	11,150.0	24.3	25.9	179.86	624.0	-47.7	676.0	612.6	63.43	10.657	
11,200.0	10,475.0	11,877.0	11,150.0	24.5	26.1	179.86	724.0	-48.3	676.0	611.9	64.13	10.541	
11,300.0	10,475.0	11,977.0	11,150.0	25.4	26.6	179.87	824.0	-48.9	676.0	611.1	64.90	10.416	
11,400.0	10,475.0	12,077.0	11,150.0	26.8	27.7	179.87	924.0	-49.4	676.0	610.3	65.73	10.284	
11,500.0	10,475.0	12,177.0	11,150.0	28.3	29.1	179.87	1,024.0	-50.0	676.0	609.4	66.63	10.146	
11,600.0	10,475.0	12,277.0	11,150.0	29.9	30.6	179.87	1,123.9	-50.5	676.0	608.4	67.58	10.003	
11,700.0	10,475.0	12,377.0	11,150.0	31.5	32.3	179.88	1,223.9	-51.1	676.0	607.4	68.59	9.856	
11,800.0	10,475.0	12,477.0	11,150.0	33.3	33.9	179.88	1,323.9	-51.7	676.0	606.3	69.66	9.705	
11,900.0	10,475.0	12,577.0	11,150.0	35.0	35.6	179.88	1,423.9	-52.2	676.0	605.2	70.77	9.552	
12,000.0	10,475.0	12,677.0	11,150.0	36.8	37.4	179.88	1,523.9	-52.8	676.0	604.1	71.94	9.397	
12,100.0	10,475.0	12,777.0	11,150.0	38.6	39.1	179.88	1,623.9	-53.4	676.0	602.9	73.15	9.241	
12,200.0	10,475.0	12,877.0	11,150.0	40.4	40.9	179.89	1,723.9	-53.9	676.0	601.6	74.41	9.085	
12,300.0	10,475.0	12,977.0	11,150.0	42.2	42.7	179.89	1,823.9	-54.5	676.0	600.3	75.71	8.929	
12,400.0	10,475.0	13,077.0	11,150.0	44.0	44.6	179.89	1,923.9	-55.0	676.0	599.0	77.05	8.774	
12,500.0	10,475.0	13,177.0	11,150.0	45.9	46.4	179.89	2,023.9	-55.6	676.0	597.6	78.42	8.620	
12,600.0	10,475.0	13,277.0	11,150.0	47.8	48.3	179.90	2,123.9	-56.2	676.0	596.2	79.84	8.467	
12,700.0	10,475.0	13,377.0	11,150.0	49.7	50.2	179.90	2,223.9	-56.7	676.0	594.7	81.29	8.316	

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 502H
Project:	Hat Mesa	TVD Reference:	WELL @ 3704.5usft (Original Well Elev)
Reference Site:	Anderson Fed Com - Pad C	MD Reference:	WELL @ 3704.5usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	Anderson Fed Com 502H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.79 sigma
Reference Wellbore	Anderson Fed Com 502H	Database:	EDM 5000.16 Single User Db
Reference Design:	Anderson Fed Com 502H - Prelim 2	Offset TVD Reference:	Offset Datum

Offset Design: Anderson Fed Com - Pad C - Anderson Fed Com 554H - Anderson Fed Com 554H - Anderson Fed Com 554H - Prelim 2													Offset Site Error:	0.0 usft	
Survey Program:		0-MWD+HRGM		Offset		Semi Major Axis		Offset Wellbore Centre		Rule Assigned:				Offset Well Error:	0.0 usft
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	Warning		
12,800.0	10,475.0	13,477.0	11,150.0	51.6	52.0	179.90	2,323.9	-57.3	676.0	593.2	82.77	8.167			
12,900.0	10,475.0	13,577.0	11,150.0	53.5	53.9	179.90	2,423.9	-57.9	676.0	591.7	84.28	8.021			
13,000.0	10,475.0	13,677.0	11,150.0	55.4	55.8	179.91	2,523.9	-58.4	676.0	590.2	85.82	7.877			
13,100.0	10,475.0	13,777.0	11,150.0	57.3	57.7	179.91	2,623.9	-59.0	676.0	588.6	87.39	7.735			
13,200.0	10,475.0	13,877.0	11,150.0	59.2	59.7	179.91	2,723.9	-59.5	676.0	587.0	88.98	7.597			
13,300.0	10,475.0	13,977.0	11,150.0	61.2	61.6	179.91	2,823.9	-60.1	676.0	585.4	90.60	7.461			
13,400.0	10,475.0	14,077.0	11,150.0	63.1	63.5	179.91	2,923.9	-60.7	676.0	583.8	92.25	7.328			
13,500.0	10,475.0	14,177.0	11,150.0	65.0	65.4	179.92	3,023.9	-61.2	676.0	582.1	93.91	7.198			
13,600.0	10,475.0	14,277.0	11,150.0	67.0	67.4	179.92	3,123.9	-61.8	676.0	580.4	95.60	7.071			
13,700.0	10,475.0	14,377.0	11,150.0	68.9	69.3	179.92	3,223.9	-62.4	676.0	578.7	97.31	6.947			
13,800.0	10,475.0	14,477.0	11,150.0	70.9	71.3	179.92	3,323.9	-62.9	676.0	577.0	99.03	6.826			
13,900.0	10,475.0	14,577.0	11,150.0	72.9	73.2	179.93	3,423.9	-63.5	676.0	575.2	100.78	6.708			
14,000.0	10,475.0	14,677.0	11,150.0	74.8	75.2	179.93	3,523.9	-64.0	676.0	573.5	102.54	6.593			
14,100.0	10,475.0	14,777.0	11,150.0	76.8	77.1	179.93	3,623.9	-64.6	676.0	571.7	104.31	6.480			
14,200.0	10,475.0	14,877.0	11,150.0	78.7	79.1	179.93	3,723.9	-65.2	676.0	569.9	106.11	6.371			
14,300.0	10,475.0	14,977.0	11,150.0	80.7	81.1	179.93	3,823.9	-65.7	676.0	568.1	107.91	6.264			
14,400.0	10,475.0	15,077.0	11,150.0	82.7	83.0	179.94	3,923.9	-66.3	676.0	566.3	109.73	6.160			
14,500.0	10,475.0	15,177.0	11,150.0	84.7	85.0	179.94	4,023.9	-66.9	676.0	564.4	111.57	6.059			
14,600.0	10,475.0	15,277.0	11,150.0	86.6	87.0	179.94	4,123.9	-67.4	676.0	562.6	113.41	5.960			
14,700.0	10,475.0	15,377.0	11,150.0	88.6	88.9	179.94	4,223.9	-68.0	676.0	560.7	115.27	5.864			
14,800.0	10,475.0	15,477.0	11,150.0	90.6	90.9	179.95	4,323.9	-68.6	676.0	558.9	117.14	5.771			
14,900.0	10,475.0	15,577.0	11,150.0	92.6	92.9	179.95	4,423.9	-69.1	676.0	557.0	119.02	5.680			
15,000.0	10,475.0	15,677.0	11,150.0	94.5	94.9	179.95	4,523.9	-69.7	676.0	555.1	120.92	5.591			
15,100.0	10,475.0	15,777.0	11,150.0	96.5	96.8	179.95	4,623.9	-70.2	676.0	553.2	122.82	5.504			
15,200.0	10,475.0	15,877.0	11,150.0	98.5	98.8	179.96	4,723.9	-70.8	676.0	551.3	124.73	5.420			
15,300.0	10,475.0	15,977.0	11,150.0	100.5	100.8	179.96	4,823.9	-71.4	676.0	549.4	126.65	5.338			
15,400.0	10,475.0	16,077.0	11,150.0	102.5	102.8	179.96	4,923.9	-71.9	676.0	547.4	128.58	5.258			
15,500.0	10,475.0	16,177.0	11,150.0	104.5	104.8	179.96	5,023.9	-72.5	676.0	545.5	130.51	5.180			
15,600.0	10,475.0	16,277.0	11,150.0	106.5	106.8	179.96	5,123.9	-73.1	676.0	543.5	132.46	5.104			
15,700.0	10,475.0	16,377.0	11,150.0	108.4	108.7	179.97	5,223.9	-73.6	676.0	541.6	134.41	5.029			
15,800.0	10,475.0	16,477.0	11,150.0	110.4	110.7	179.97	5,323.9	-74.2	676.0	539.6	136.37	4.957			
15,900.0	10,475.0	16,577.0	11,150.0	112.4	112.7	179.97	5,423.9	-74.7	676.0	537.7	138.33	4.887			
16,000.0	10,475.0	16,677.0	11,150.0	114.4	114.7	179.97	5,523.9	-75.3	676.0	535.7	140.31	4.818			
16,100.0	10,475.0	16,777.0	11,150.0	116.4	116.7	179.98	5,623.9	-75.9	676.0	533.7	142.28	4.751			
16,200.0	10,475.0	16,877.0	11,150.0	118.4	118.7	179.98	5,723.9	-76.4	676.0	531.7	144.27	4.686			
16,300.0	10,475.0	16,977.0	11,150.0	120.4	120.7	179.98	5,823.9	-77.0	676.0	529.7	146.26	4.622			
16,400.0	10,475.0	17,077.0	11,150.0	122.4	122.7	179.98	5,923.9	-77.6	676.0	527.7	148.26	4.560			
16,500.0	10,475.0	17,177.0	11,150.0	124.4	124.7	179.98	6,023.9	-78.1	676.0	525.7	150.26	4.499			
16,600.0	10,475.0	17,277.0	11,150.0	126.4	126.7	179.99	6,123.9	-78.7	676.0	523.7	152.27	4.440			
16,700.0	10,475.0	17,377.0	11,150.0	128.4	128.7	179.99	6,223.9	-79.2	676.0	521.7	154.28	4.382			
16,800.0	10,475.0	17,477.0	11,150.0	130.4	130.7	179.99	6,323.9	-79.8	676.0	519.7	156.30	4.325			
16,900.0	10,475.0	17,577.0	11,150.0	132.4	132.7	179.99	6,423.9	-80.4	676.0	517.7	158.32	4.270			
17,000.0	10,475.0	17,677.0	11,150.0	134.4	134.7	180.00	6,523.9	-80.9	676.0	515.7	160.34	4.216			
17,100.0	10,475.0	17,777.0	11,150.0	136.4	136.6	180.00	6,623.9	-81.5	676.0	513.6	162.37	4.163			
17,159.3	10,475.0	17,836.4	11,150.0	137.6	137.8	180.00	6,683.2	-81.8	676.0	512.4	163.58	4.133			

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 502H
Project:	Hat Mesa	TVD Reference:	WELL @ 3704.5usft (Original Well Elev)
Reference Site:	Anderson Fed Com - Pad C	MD Reference:	WELL @ 3704.5usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	Anderson Fed Com 502H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.79 sigma
Reference Wellbore	Anderson Fed Com 502H	Database:	EDM 5000.16 Single User Db
Reference Design:	Anderson Fed Com 502H - Prelim 2	Offset TVD Reference:	Offset Datum

Offset Design: Anderson Fed Com - Pad C - Anderson Fed Com 602H - Anderson Fed Com 602H - Anderson Fed Com 602H - Prelim 2											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	0.0	0.0	0.0	0.0	89.63	0.4	66.0	66.0			
100.0	100.0	100.0	100.0	0.5	0.5	89.63	0.4	66.0	66.0	65.0	1.06	62.276
200.0	200.0	200.0	200.0	1.7	1.7	89.63	0.4	66.0	66.0	62.6	3.42	19.287
300.0	300.0	300.0	300.0	2.4	2.4	89.63	0.4	66.0	66.0	61.2	4.82	13.691
400.0	400.0	400.0	400.0	3.0	3.0	89.63	0.4	66.0	66.0	60.1	5.91	11.177
500.0	500.0	500.0	500.0	3.4	3.4	89.63	0.4	66.0	66.0	59.2	6.83	9.668
600.0	600.0	600.0	600.0	3.8	3.8	89.63	0.4	66.0	66.0	58.4	7.65	8.633
700.0	700.0	700.0	700.0	4.2	4.2	89.63	0.4	66.0	66.0	57.6	8.39	7.867
800.0	800.0	800.0	800.0	4.5	4.5	89.63	0.4	66.0	66.0	56.9	9.08	7.269
900.0	900.0	900.0	900.0	4.9	4.9	89.63	0.4	66.0	66.0	56.3	9.73	6.786
1,000.0	1,000.0	1,000.0	1,000.0	5.2	5.2	89.63	0.4	66.0	66.0	55.7	10.34	6.385
1,100.0	1,100.0	1,100.0	1,100.0	5.5	5.5	89.63	0.4	66.0	66.0	55.1	10.92	6.045
1,200.0	1,200.0	1,200.0	1,200.0	5.7	5.7	89.63	0.4	66.0	66.0	54.6	11.48	5.752
1,300.0	1,300.0	1,300.0	1,300.0	6.0	6.0	89.63	0.4	66.0	66.0	54.0	12.01	5.496
1,400.0	1,400.0	1,400.0	1,400.0	6.3	6.3	89.63	0.4	66.0	66.0	53.5	12.53	5.269
1,500.0	1,500.0	1,500.0	1,500.0	6.5	6.5	89.63	0.4	66.0	66.0	53.0	13.03	5.067
1,600.0	1,600.0	1,600.0	1,600.0	6.8	6.8	89.63	0.4	66.0	66.0	52.5	13.52	4.885
1,700.0	1,700.0	1,700.0	1,700.0	7.0	7.0	89.63	0.4	66.0	66.0	52.0	13.99	4.720
1,800.0	1,800.0	1,800.0	1,800.0	7.2	7.2	89.63	0.4	66.0	66.0	51.6	14.45	4.570
1,900.0	1,900.0	1,900.0	1,900.0	7.4	7.4	89.63	0.4	66.0	66.0	51.1	14.90	4.432
2,000.0	2,000.0	2,000.0	2,000.0	7.7	7.7	89.63	0.4	66.0	66.0	50.7	15.34	4.305
2,100.0	2,100.0	2,100.0	2,100.0	7.9	7.9	89.63	0.4	66.0	66.0	50.3	15.77	4.187
2,200.0	2,200.0	2,200.0	2,200.0	8.1	8.1	89.63	0.4	66.0	66.0	49.8	16.19	4.078
2,300.0	2,300.0	2,300.0	2,300.0	8.3	8.3	89.63	0.4	66.0	66.0	49.4	16.61	3.976
2,400.0	2,400.0	2,400.0	2,400.0	8.5	8.5	89.63	0.4	66.0	66.0	49.0	17.02	3.881
2,500.0	2,500.0	2,500.0	2,500.0	8.7	8.7	89.63	0.4	66.0	66.0	48.6	17.42	3.791
2,600.0	2,600.0	2,600.0	2,600.0	8.9	8.9	89.63	0.4	66.0	66.0	48.2	17.81	3.707
2,700.0	2,700.0	2,700.0	2,700.0	9.1	9.1	89.63	0.4	66.0	66.0	47.8	18.20	3.628
2,800.0	2,800.0	2,800.0	2,800.0	9.3	9.3	89.63	0.4	66.0	66.0	47.4	18.59	3.553
2,900.0	2,900.0	2,900.0	2,900.0	9.5	9.5	89.63	0.4	66.0	66.0	47.1	18.96	3.482
3,000.0	3,000.0	3,000.0	3,000.0	9.7	9.7	89.63	0.4	66.0	66.0	46.7	19.34	3.414
3,100.0	3,100.0	3,100.0	3,100.0	9.9	9.9	89.63	0.4	66.0	66.0	46.3	19.71	3.350
3,200.0	3,200.0	3,200.0	3,200.0	10.0	10.0	89.63	0.4	66.0	66.0	46.0	20.07	3.289
3,300.0	3,300.0	3,300.0	3,300.0	10.2	10.2	89.63	0.4	66.0	66.0	45.6	20.44	3.231
3,400.0	3,400.0	3,400.0	3,400.0	10.4	10.4	89.63	0.4	66.0	66.0	45.2	20.79	3.175
3,500.0	3,500.0	3,500.0	3,500.0	10.6	10.6	89.63	0.4	66.0	66.0	44.9	21.15	3.122
3,600.0	3,600.0	3,600.0	3,600.0	10.7	10.7	89.63	0.4	66.0	66.0	44.5	21.50	3.071
3,700.0	3,700.0	3,700.0	3,700.0	10.9	10.9	89.63	0.4	66.0	66.0	44.2	21.85	3.023
3,800.0	3,800.0	3,800.0	3,800.0	11.1	11.1	89.63	0.4	66.0	66.0	43.8	22.19	2.976
3,900.0	3,900.0	3,900.0	3,900.0	11.3	11.3	89.63	0.4	66.0	66.0	43.5	22.53	2.931
4,000.0	4,000.0	4,000.0	4,000.0	11.4	11.4	89.63	0.4	66.0	66.0	43.2	22.87	2.887
4,100.0	4,100.0	4,100.0	4,100.0	11.6	11.6	89.63	0.4	66.0	66.0	42.8	23.21	2.845
4,200.0	4,200.0	4,200.0	4,200.0	11.8	11.8	89.63	0.4	66.0	66.0	42.5	23.54	2.805
4,300.0	4,300.0	4,300.0	4,300.0	11.9	11.9	89.63	0.4	66.0	66.0	42.2	23.87	2.766
4,400.0	4,400.0	4,400.0	4,400.0	12.1	12.1	89.63	0.4	66.0	66.0	41.8	24.20	2.729
4,500.0	4,500.0	4,500.0	4,500.0	12.3	12.3	89.63	0.4	66.0	66.0	41.5	24.53	2.692
4,600.0	4,600.0	4,600.0	4,600.0	12.4	12.4	89.63	0.4	66.0	66.0	41.2	24.85	2.657
4,700.0	4,700.0	4,700.0	4,700.0	12.6	12.6	89.63	0.4	66.0	66.0	40.9	25.17	2.623
4,800.0	4,800.0	4,800.0	4,800.0	12.7	12.7	89.63	0.4	66.0	66.0	40.5	25.49	2.590
4,900.0	4,900.0	4,900.0	4,900.0	12.9	12.9	89.63	0.4	66.0	66.0	40.2	25.81	2.558
5,000.0	5,000.0	5,000.0	5,000.0	13.1	13.1	89.63	0.4	66.0	66.0	39.9	26.12	2.528
5,100.0	5,100.0	5,100.0	5,100.0	13.2	13.2	89.63	0.4	66.0	66.0	39.6	26.44	2.497

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 502H
Project:	Hat Mesa	TVD Reference:	WELL @ 3704.5usft (Original Well Elev)
Reference Site:	Anderson Fed Com - Pad C	MD Reference:	WELL @ 3704.5usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	Anderson Fed Com 502H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.79 sigma
Reference Wellbore	Anderson Fed Com 502H	Database:	EDM 5000.16 Single User Db
Reference Design:	Anderson Fed Com 502H - Prelim 2	Offset TVD Reference:	Offset Datum

Offset Design: Anderson Fed Com - Pad C - Anderson Fed Com 602H - Anderson Fed Com 602H - Anderson Fed Com 602H - Prelim 2													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	
5,200.0	5,200.0	5,200.0	5,200.0	13.4	13.4	89.63	0.4	66.0	66.0	39.3	26.75	2.468	CC
5,300.0	5,300.0	5,300.0	5,300.0	13.5	13.5	-92.84	0.4	66.0	66.1	39.1	26.99	2.448	
5,400.0	5,400.0	5,400.0	5,400.0	13.5	13.7	-95.10	0.4	66.0	66.3	39.1	27.19	2.436	ES
5,464.2	5,464.1	5,464.1	5,464.1	13.5	13.8	-97.33	0.4	66.0	66.5	39.2	27.30	2.437	
5,500.0	5,499.9	5,499.9	5,499.9	13.6	13.8	-98.73	0.4	66.0	66.8	39.4	27.35	2.441	
5,600.0	5,599.8	5,599.8	5,599.8	13.6	14.0	-102.59	0.4	66.0	67.6	40.1	27.55	2.455	
5,700.0	5,699.7	5,699.9	5,699.9	13.8	14.1	-105.64	-0.4	66.0	68.6	40.9	27.69	2.476	
5,800.0	5,799.5	5,800.2	5,800.2	13.9	14.1	-107.22	-3.1	66.0	69.2	41.4	27.80	2.489	
5,900.0	5,899.4	5,900.3	5,900.2	14.0	14.2	-107.84	-6.9	66.0	69.6	41.7	27.88	2.495	
6,000.0	5,999.3	6,000.3	6,000.1	14.2	14.2	-108.43	-10.7	66.0	69.9	41.9	28.00	2.497	
6,100.0	6,099.2	6,100.3	6,100.0	14.3	14.3	-109.01	-14.5	66.0	70.3	42.1	28.13	2.498	
6,200.0	6,199.1	6,200.3	6,200.0	14.5	14.5	-109.59	-18.3	66.0	70.6	42.4	28.27	2.498	
6,300.0	6,299.0	6,300.3	6,299.9	14.7	14.6	-110.16	-22.1	66.0	71.0	42.6	28.42	2.499	
6,400.0	6,398.9	6,400.3	6,399.8	14.9	14.7	-110.73	-26.0	66.0	71.4	42.8	28.58	2.498	
6,500.0	6,498.8	6,500.3	6,499.7	15.2	14.9	-111.28	-29.8	66.0	71.8	43.0	28.74	2.498	
6,600.0	6,598.7	6,600.3	6,599.6	15.4	15.0	-111.84	-33.6	66.0	72.2	43.3	28.92	2.496	
6,700.0	6,698.6	6,700.3	6,699.6	15.6	15.2	-112.38	-37.4	66.0	72.6	43.5	29.10	2.495	
6,800.0	6,798.5	6,800.3	6,799.5	15.9	15.4	-112.92	-41.3	66.0	73.0	43.7	29.29	2.492	
6,900.0	6,898.4	6,900.3	6,899.4	16.1	15.6	-113.46	-45.1	66.0	73.4	43.9	29.49	2.489	
7,000.0	6,998.3	7,000.3	6,999.3	16.4	15.8	-113.99	-48.9	66.0	73.8	44.1	29.71	2.486	
7,100.0	7,098.2	7,100.3	7,099.3	16.7	16.0	-114.51	-52.7	66.0	74.3	44.3	29.93	2.482	
7,200.0	7,198.1	7,200.3	7,199.2	17.0	16.2	-115.02	-56.5	66.0	74.7	44.5	30.16	2.477	
7,300.0	7,298.0	7,300.2	7,299.1	17.3	16.5	-115.53	-60.4	66.0	75.2	44.7	30.41	2.472	
7,400.0	7,397.8	7,400.2	7,399.0	17.6	16.7	-116.04	-64.2	66.0	75.6	44.9	30.66	2.466	
7,500.0	7,497.7	7,500.2	7,499.0	17.9	17.0	-116.54	-68.0	66.0	76.1	45.1	30.93	2.459	
7,600.0	7,597.6	7,600.2	7,598.9	18.2	17.2	-117.03	-71.8	66.0	76.5	45.3	31.21	2.452	
7,700.0	7,697.5	7,700.2	7,698.8	18.5	17.5	-117.52	-75.6	66.0	77.0	45.5	31.50	2.444	
7,800.0	7,797.4	7,800.2	7,798.7	18.8	17.8	-118.00	-79.5	66.0	77.4	45.6	31.80	2.435	
7,900.0	7,897.3	7,900.2	7,898.7	19.2	18.1	-118.47	-83.3	66.0	77.9	45.8	32.12	2.426	
8,000.0	7,997.2	8,000.2	7,998.6	19.5	18.3	-118.94	-87.1	66.0	78.4	46.0	32.44	2.417	
8,100.0	8,097.1	8,100.2	8,098.5	19.8	18.6	-119.40	-90.9	66.0	78.9	46.1	32.78	2.406	
8,200.0	8,197.0	8,200.2	8,198.4	20.2	18.9	-119.86	-94.7	66.0	79.4	46.2	33.13	2.396	
8,300.0	8,296.9	8,300.2	8,298.4	20.6	19.2	-120.31	-98.6	66.0	79.9	46.4	33.50	2.385	
8,400.0	8,396.8	8,400.2	8,398.3	20.9	19.6	-120.76	-102.4	66.0	80.4	46.5	33.87	2.373	
8,500.0	8,496.7	8,500.2	8,498.2	21.3	19.9	-121.20	-106.2	66.0	80.9	46.6	34.26	2.361	
8,600.0	8,596.6	8,600.2	8,598.1	21.6	20.2	-121.63	-110.0	66.0	81.4	46.7	34.66	2.348	
8,700.0	8,696.5	8,700.2	8,698.0	22.0	20.5	-122.06	-113.8	66.0	81.9	46.8	35.07	2.335	
8,800.0	8,796.4	8,800.2	8,798.0	22.4	20.8	-122.49	-117.7	66.0	82.4	46.9	35.50	2.322	
8,900.0	8,896.3	8,900.2	8,897.9	22.8	21.2	-122.91	-121.5	66.0	83.0	47.0	35.93	2.309	
9,000.0	8,996.1	9,000.2	8,997.8	23.1	21.5	-123.32	-125.3	66.0	83.5	47.1	36.38	2.295	
9,100.0	9,096.0	9,100.2	9,097.7	23.5	21.9	-123.73	-129.1	66.0	84.0	47.2	36.84	2.281	
9,200.0	9,195.9	9,200.2	9,197.7	23.9	22.2	-124.13	-132.9	66.0	84.6	47.2	37.31	2.266	
9,300.0	9,295.8	9,300.2	9,297.6	24.3	22.6	-124.53	-136.8	66.0	85.1	47.3	37.79	2.252	
9,400.0	9,395.7	9,400.2	9,397.5	24.7	22.9	-124.92	-140.6	66.0	85.6	47.4	38.28	2.237	
9,500.0	9,495.6	9,500.2	9,497.4	25.1	23.3	-125.31	-144.4	66.0	86.2	47.4	38.79	2.222	
9,540.3	9,535.9	9,540.5	9,537.7	25.2	23.4	-125.46	-145.9	66.0	86.4	47.4	38.97	2.217	
9,600.0	9,595.5	9,600.2	9,597.4	25.4	23.6	-125.53	-148.2	66.0	86.6	47.3	39.21	2.207	
9,700.0	9,695.5	9,700.2	9,697.3	25.8	24.0	-124.87	-152.0	66.0	86.0	46.6	39.42	2.182	
9,804.5	9,800.0	9,804.6	9,801.7	26.0	24.4	58.60	-156.0	66.0	84.4	45.2	39.25	2.151	
9,900.0	9,895.5	9,900.1	9,897.0	26.0	24.7	60.76	-159.7	66.0	82.6	43.7	38.88	2.123	
10,002.1	9,997.5	10,002.0	9,998.9	26.1	25.1	63.18	-163.6	66.0	80.7	42.3	38.47	2.099	
10,025.0	10,020.5	10,024.9	10,021.8	26.1	25.2	68.34	-164.5	66.0	80.1	41.9	38.25	2.095	

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 502H
Project:	Hat Mesa	TVD Reference:	WELL @ 3704.5usft (Original Well Elev)
Reference Site:	Anderson Fed Com - Pad C	MD Reference:	WELL @ 3704.5usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	Anderson Fed Com 502H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.79 sigma
Reference Wellbore	Anderson Fed Com 502H	Database:	EDM 5000.16 Single User Db
Reference Design:	Anderson Fed Com 502H - Prelim 2	Offset TVD Reference:	Offset Datum

Offset Design: Anderson Fed Com - Pad C - Anderson Fed Com 602H - Anderson Fed Com 602H - Anderson Fed Com 602H - Prelim 2												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
10,050.0	10,045.4	10,049.8	10,046.6	26.0	25.3	70.31	-165.4	66.0	79.1	41.3	37.78	2.093 SF	
10,075.0	10,070.2	10,074.4	10,071.3	25.9	25.4	73.26	-166.3	66.0	77.7	40.6	37.10	2.095	
10,100.0	10,094.8	10,098.8	10,095.7	25.8	25.4	77.21	-167.3	66.0	76.2	40.0	36.24	2.103	
10,125.0	10,119.1	10,122.9	10,119.7	25.7	25.5	82.15	-168.2	66.0	74.9	39.6	35.33	2.121	
10,150.0	10,143.1	10,146.7	10,143.4	25.7	25.6	87.98	-169.1	66.0	74.1	39.6	34.56	2.145	
10,159.6	10,152.3	10,155.7	10,152.5	25.6	25.7	90.44	-169.4	66.0	74.1	39.7	34.37	2.155	
10,175.0	10,166.7	10,169.9	10,166.7	25.6	25.7	94.53	-170.0	66.0	74.3	40.1	34.23	2.170	
10,200.0	10,189.9	10,192.7	10,189.4	25.5	25.8	101.50	-170.9	66.0	75.8	41.2	34.60	2.191	
10,225.0	10,212.5	10,214.9	10,211.6	25.4	25.9	108.50	-171.7	66.0	79.1	43.3	35.77	2.210	
10,250.0	10,234.5	10,236.4	10,233.1	25.3	26.0	115.20	-172.5	66.0	84.4	46.8	37.55	2.247	
10,275.0	10,255.9	10,257.3	10,254.0	25.2	26.0	121.30	-173.3	66.0	91.8	52.2	39.59	2.318	
10,300.0	10,276.5	10,277.4	10,274.1	25.1	26.1	126.67	-174.1	66.0	101.3	59.7	41.56	2.436	
10,325.0	10,296.4	10,296.7	10,293.4	25.0	26.2	131.24	-174.8	66.0	112.7	69.4	43.30	2.603	
10,350.0	10,315.5	10,315.1	10,311.8	24.9	26.3	135.04	-175.5	66.0	125.9	81.2	44.73	2.815	
10,375.0	10,333.7	10,332.7	10,329.3	24.8	26.3	138.13	-176.2	66.0	140.7	94.9	45.88	3.068	
10,400.0	10,351.0	10,349.3	10,345.9	24.7	26.4	140.57	-176.8	66.0	157.0	110.2	46.79	3.355	
10,425.0	10,367.3	10,364.8	10,361.5	24.6	26.4	142.43	-177.4	66.0	174.5	127.0	47.49	3.673	
10,450.0	10,382.6	10,379.4	10,376.0	24.6	26.5	143.76	-178.0	66.0	193.1	145.0	48.05	4.018	
10,475.0	10,396.8	10,392.8	10,389.4	24.5	26.6	144.57	-178.5	66.0	212.7	164.2	48.49	4.387	
10,500.0	10,410.0	10,405.2	10,401.8	24.4	26.6	144.88	-179.0	66.0	233.2	184.4	48.84	4.775	
10,525.0	10,422.0	10,416.3	10,412.9	24.4	26.6	144.66	-179.4	66.0	254.5	205.4	49.12	5.182	
10,550.0	10,432.9	10,426.3	10,422.9	24.3	26.7	143.85	-179.8	66.0	276.5	227.2	49.35	5.604	
10,575.0	10,442.5	10,435.1	10,431.7	24.3	26.7	142.33	-180.1	66.0	299.2	249.6	49.54	6.039	
10,600.0	10,451.0	10,442.7	10,439.2	24.2	26.7	139.91	-180.4	66.0	322.3	272.6	49.69	6.486	
10,625.0	10,458.2	10,448.9	10,445.5	24.2	26.8	136.29	-180.7	66.0	345.9	296.1	49.82	6.943	
10,650.0	10,464.1	10,454.0	10,450.5	24.2	26.8	130.95	-180.8	66.0	369.9	320.0	49.93	7.408	
10,675.0	10,468.8	10,457.7	10,454.2	24.1	26.8	123.15	-181.0	66.0	394.2	344.1	50.03	7.878	
10,700.0	10,472.2	10,460.1	10,456.7	24.1	26.8	111.88	-181.1	66.0	418.6	368.5	50.11	8.353	
10,725.0	10,474.2	10,461.2	10,457.8	24.1	26.8	96.48	-181.1	66.0	443.2	393.0	50.19	8.831	
10,752.1	10,475.0	10,461.0	10,457.5	24.1	26.8	76.57	-181.1	66.0	469.9	419.7	50.26	9.350	
10,755.6	10,475.0	10,460.8	10,457.4	24.1	26.8	76.47	-181.1	66.0	473.5	423.2	50.27	9.418	
10,800.0	10,475.0	10,459.1	10,455.7	24.1	26.8	76.56	-181.0	66.0	517.3	466.9	50.38	10.268	
10,900.0	10,475.0	10,455.3	10,451.9	24.2	26.8	77.02	-180.9	66.0	615.9	565.3	50.59	12.176	
10,948.9	10,475.0	10,453.4	10,450.0	24.2	26.8	77.32	-180.8	66.0	664.1	613.4	50.67	13.106	
11,000.0	10,475.0	10,451.5	10,448.1	24.2	26.8	76.37	-180.7	66.0	714.5	663.7	50.75	14.078	
11,100.0	10,475.0	10,447.7	10,444.2	24.3	26.8	74.52	-180.6	66.0	813.4	762.5	50.89	15.983	
11,200.0	10,475.0	10,443.9	10,440.4	24.5	26.7	72.71	-180.5	66.0	912.5	861.5	51.00	17.892	

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 502H
Project:	Hat Mesa	TVD Reference:	WELL @ 3704.5usft (Original Well Elev)
Reference Site:	Anderson Fed Com - Pad C	MD Reference:	WELL @ 3704.5usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	Anderson Fed Com 502H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.79 sigma
Reference Wellbore	Anderson Fed Com 502H	Database:	EDM 5000.16 Single User Db
Reference Design:	Anderson Fed Com 502H - Prelim 2	Offset TVD Reference:	Offset Datum

Offset Design: Anderson Fed Com - Pad C - Anderson Fed Com 702H - Anderson Fed Com 702H - Anderson Fed Com 702H - Prelim 2												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	0.0	0.0	0.0	0.0	-90.68	-0.8	-66.0	66.2				
100.0	100.0	95.0	95.0	0.5	0.5	-90.68	-0.8	-66.0	66.0	65.0	1.03	63.873	
200.0	200.0	195.0	195.0	1.7	1.7	-90.68	-0.8	-66.0	66.0	62.7	3.36	19.626	
300.0	300.0	295.0	295.0	2.4	2.4	-90.68	-0.8	-66.0	66.0	61.2	4.79	13.791	
400.0	400.0	395.0	395.0	3.0	2.9	-90.68	-0.8	-66.0	66.0	60.2	5.88	11.228	
500.0	500.0	495.0	495.0	3.4	3.4	-90.68	-0.8	-66.0	66.0	59.2	6.81	9.700	
600.0	600.0	595.0	595.0	3.8	3.8	-90.68	-0.8	-66.0	66.0	58.4	7.63	8.656	
700.0	700.0	695.0	695.0	4.2	4.2	-90.68	-0.8	-66.0	66.0	57.7	8.38	7.884	
800.0	800.0	795.0	795.0	4.5	4.5	-90.68	-0.8	-66.0	66.0	57.0	9.07	7.283	
900.0	900.0	895.0	895.0	4.9	4.8	-90.68	-0.8	-66.0	66.0	56.3	9.71	6.798	
1,000.0	1,000.0	995.0	995.0	5.2	5.2	-90.68	-0.8	-66.0	66.0	55.7	10.33	6.395	
1,100.0	1,100.0	1,095.0	1,095.0	5.5	5.4	-90.68	-0.8	-66.0	66.0	55.1	10.91	6.053	
1,200.0	1,200.0	1,195.0	1,195.0	5.7	5.7	-90.68	-0.8	-66.0	66.0	54.6	11.47	5.759	
1,300.0	1,300.0	1,295.0	1,295.0	6.0	6.0	-90.68	-0.8	-66.0	66.0	54.0	12.00	5.502	
1,400.0	1,400.0	1,395.0	1,395.0	6.3	6.3	-90.68	-0.8	-66.0	66.0	53.5	12.52	5.275	
1,500.0	1,500.0	1,495.0	1,495.0	6.5	6.5	-90.68	-0.8	-66.0	66.0	53.0	13.02	5.072	
1,600.0	1,600.0	1,595.0	1,595.0	6.8	6.7	-90.68	-0.8	-66.0	66.0	52.5	13.50	4.889	
1,700.0	1,700.0	1,695.0	1,695.0	7.0	7.0	-90.68	-0.8	-66.0	66.0	52.1	13.98	4.724	
1,800.0	1,800.0	1,795.0	1,795.0	7.2	7.2	-90.68	-0.8	-66.0	66.0	51.6	14.44	4.573	
1,900.0	1,900.0	1,895.0	1,895.0	7.4	7.4	-90.68	-0.8	-66.0	66.0	51.1	14.89	4.435	
2,000.0	2,000.0	1,995.0	1,995.0	7.7	7.7	-90.68	-0.8	-66.0	66.0	50.7	15.33	4.308	
2,100.0	2,100.0	2,095.0	2,095.0	7.9	7.9	-90.68	-0.8	-66.0	66.0	50.3	15.76	4.190	
2,200.0	2,200.0	2,195.0	2,195.0	8.1	8.1	-90.68	-0.8	-66.0	66.0	49.8	16.18	4.081	
2,300.0	2,300.0	2,295.0	2,295.0	8.3	8.3	-90.68	-0.8	-66.0	66.0	49.4	16.60	3.978	
2,400.0	2,400.0	2,395.0	2,395.0	8.5	8.5	-90.68	-0.8	-66.0	66.0	49.0	17.01	3.883	
2,500.0	2,500.0	2,495.0	2,495.0	8.7	8.7	-90.68	-0.8	-66.0	66.0	48.6	17.41	3.793	
2,600.0	2,600.0	2,595.0	2,595.0	8.9	8.9	-90.68	-0.8	-66.0	66.0	48.2	17.80	3.709	
2,700.0	2,700.0	2,695.0	2,695.0	9.1	9.1	-90.68	-0.8	-66.0	66.0	47.8	18.19	3.630	
2,800.0	2,800.0	2,795.0	2,795.0	9.3	9.3	-90.68	-0.8	-66.0	66.0	47.5	18.58	3.555	
2,900.0	2,900.0	2,895.0	2,895.0	9.5	9.5	-90.68	-0.8	-66.0	66.0	47.1	18.96	3.484	
3,000.0	3,000.0	2,995.0	2,995.0	9.7	9.7	-90.68	-0.8	-66.0	66.0	46.7	19.33	3.416	
3,100.0	3,100.0	3,095.0	3,095.0	9.9	9.8	-90.68	-0.8	-66.0	66.0	46.3	19.70	3.352	
3,200.0	3,200.0	3,195.0	3,195.0	10.0	10.0	-90.68	-0.8	-66.0	66.0	46.0	20.07	3.291	
3,300.0	3,300.0	3,295.0	3,295.0	10.2	10.2	-90.68	-0.8	-66.0	66.0	45.6	20.43	3.233	
3,400.0	3,400.0	3,395.0	3,395.0	10.4	10.4	-90.68	-0.8	-66.0	66.0	45.2	20.79	3.177	
3,500.0	3,500.0	3,495.0	3,495.0	10.6	10.6	-90.68	-0.8	-66.0	66.0	44.9	21.14	3.124	
3,600.0	3,600.0	3,595.0	3,595.0	10.7	10.7	-90.68	-0.8	-66.0	66.0	44.5	21.49	3.073	
3,700.0	3,700.0	3,695.0	3,695.0	10.9	10.9	-90.68	-0.8	-66.0	66.0	44.2	21.84	3.024	
3,800.0	3,800.0	3,795.0	3,795.0	11.1	11.1	-90.68	-0.8	-66.0	66.0	43.8	22.18	2.977	
3,900.0	3,900.0	3,895.0	3,895.0	11.3	11.3	-90.68	-0.8	-66.0	66.0	43.5	22.52	2.932	
4,000.0	4,000.0	3,995.0	3,995.0	11.4	11.4	-90.68	-0.8	-66.0	66.0	43.2	22.86	2.888	
4,100.0	4,100.0	4,095.0	4,095.0	11.6	11.6	-90.68	-0.8	-66.0	66.0	42.8	23.20	2.846	
4,200.0	4,200.0	4,195.0	4,195.0	11.8	11.8	-90.68	-0.8	-66.0	66.0	42.5	23.53	2.806	
4,300.0	4,300.0	4,295.0	4,295.0	11.9	11.9	-90.68	-0.8	-66.0	66.0	42.2	23.86	2.767	
4,400.0	4,400.0	4,395.0	4,395.0	12.1	12.1	-90.68	-0.8	-66.0	66.0	41.8	24.19	2.730	
4,500.0	4,500.0	4,495.0	4,495.0	12.3	12.3	-90.68	-0.8	-66.0	66.0	41.5	24.52	2.693	
4,600.0	4,600.0	4,595.0	4,595.0	12.4	12.4	-90.68	-0.8	-66.0	66.0	41.2	24.84	2.658	
4,700.0	4,700.0	4,695.0	4,695.0	12.6	12.6	-90.68	-0.8	-66.0	66.0	40.9	25.16	2.624	
4,800.0	4,800.0	4,795.0	4,795.0	12.7	12.7	-90.68	-0.8	-66.0	66.0	40.5	25.48	2.591	
4,900.0	4,900.0	4,895.0	4,895.0	12.9	12.9	-90.68	-0.8	-66.0	66.0	40.2	25.80	2.559	
5,000.0	5,000.0	4,995.0	4,995.0	13.1	13.1	-90.68	-0.8	-66.0	66.0	39.9	26.12	2.528	
5,100.0	5,100.0	5,095.0	5,095.0	13.2	13.2	-90.68	-0.8	-66.0	66.0	39.6	26.43	2.498	

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 502H
Project:	Hat Mesa	TVD Reference:	WELL @ 3704.5usft (Original Well Elev)
Reference Site:	Anderson Fed Com - Pad C	MD Reference:	WELL @ 3704.5usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	Anderson Fed Com 502H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.79 sigma
Reference Wellbore	Anderson Fed Com 502H	Database:	EDM 5000.16 Single User Db
Reference Design:	Anderson Fed Com 502H - Prelim 2	Offset TVD Reference:	Offset Datum

Offset Design: Anderson Fed Com - Pad C - Anderson Fed Com 702H - Anderson Fed Com 702H - Anderson Fed Com 702H - Prelim 2													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	
5,200.0	5,200.0	5,195.0	5,195.0	13.4	13.4	-90.68	-0.8	-66.0	66.0	39.3	26.74	2.469	
5,300.0	5,300.0	5,295.0	5,295.0	13.5	13.5	88.35	-0.8	-66.0	66.0	39.0	26.98	2.447	
5,378.1	5,378.1	5,373.1	5,373.1	13.5	13.6	90.00	-0.8	-66.0	66.0	38.8	27.14	2.431 CC	
5,400.0	5,400.0	5,395.0	5,395.0	13.5	13.7	90.63	-0.8	-66.0	66.0	38.8	27.19	2.427 ES, SF	
5,464.2	5,464.1	5,458.5	5,458.5	13.5	13.7	92.75	-0.9	-66.3	66.3	39.1	27.26	2.433	
5,500.0	5,499.9	5,493.9	5,493.9	13.6	13.8	93.98	-1.1	-66.8	66.9	39.6	27.29	2.450	
5,600.0	5,599.8	5,592.7	5,592.7	13.6	13.9	96.84	-1.9	-69.1	69.5	42.1	27.42	2.535	
5,700.0	5,699.7	5,691.5	5,691.4	13.8	14.0	98.81	-3.3	-73.0	73.8	46.2	27.58	2.677	
5,800.0	5,799.5	5,790.2	5,789.9	13.9	14.1	99.89	-5.3	-78.5	79.7	51.9	27.75	2.871	
5,900.0	5,899.4	5,888.8	5,888.2	14.0	14.3	100.23	-7.9	-85.6	87.0	59.0	27.94	3.113	
6,000.0	5,999.3	5,988.3	5,987.3	14.2	14.4	100.18	-10.9	-93.7	95.2	67.0	28.15	3.381	
6,100.0	6,099.2	6,087.9	6,086.6	14.3	14.6	100.13	-13.8	-101.9	103.4	75.0	28.38	3.644	
6,200.0	6,199.1	6,187.6	6,185.9	14.5	14.8	100.10	-16.8	-110.1	111.6	83.0	28.62	3.899	
6,300.0	6,299.0	6,287.3	6,285.2	14.7	15.0	100.06	-19.8	-118.2	119.8	90.9	28.88	4.149	
6,400.0	6,398.9	6,386.9	6,384.4	14.9	15.3	100.03	-22.8	-126.4	128.0	98.9	29.16	4.392	
6,500.0	6,498.8	6,486.6	6,483.7	15.2	15.5	100.01	-25.7	-134.6	136.3	106.8	29.44	4.628	
6,600.0	6,598.7	6,586.2	6,583.0	15.4	15.8	99.98	-28.7	-142.7	144.5	114.7	29.74	4.857	
6,700.0	6,698.6	6,685.9	6,682.3	15.6	16.1	99.96	-31.7	-150.9	152.7	122.6	30.06	5.080	
6,800.0	6,798.5	6,785.6	6,781.6	15.9	16.4	99.95	-34.6	-159.0	160.9	130.5	30.38	5.296	
6,900.0	6,898.4	6,885.2	6,880.8	16.1	16.7	99.93	-37.6	-167.2	169.1	138.4	30.72	5.505	
7,000.0	6,998.3	6,984.9	6,980.1	16.4	17.0	99.91	-40.6	-175.4	177.3	146.2	31.07	5.707	
7,100.0	7,098.2	7,084.6	7,079.4	16.7	17.3	99.90	-43.6	-183.5	185.5	154.1	31.43	5.903	
7,200.0	7,198.1	7,184.2	7,178.7	17.0	17.6	99.89	-46.5	-191.7	193.7	161.9	31.80	6.093	
7,300.0	7,298.0	7,283.9	7,278.0	17.3	18.0	99.88	-49.5	-199.9	201.9	169.8	32.18	6.276	
7,400.0	7,397.8	7,383.5	7,377.3	17.6	18.3	99.87	-52.5	-208.0	210.2	177.6	32.57	6.453	
7,500.0	7,497.7	7,483.2	7,476.5	17.9	18.7	99.86	-55.4	-216.2	218.4	185.4	32.96	6.625	
7,600.0	7,597.6	7,582.9	7,575.8	18.2	19.1	99.85	-58.4	-224.3	226.6	193.2	33.37	6.790	
7,700.0	7,697.5	7,682.5	7,675.1	18.5	19.5	99.84	-61.4	-232.5	234.8	201.0	33.79	6.950	
7,800.0	7,797.4	7,782.2	7,774.4	18.8	19.8	99.83	-64.4	-240.7	243.0	208.8	34.21	7.104	
7,900.0	7,897.3	7,881.9	7,873.7	19.2	20.2	99.82	-67.3	-248.8	251.2	216.6	34.64	7.252	
8,000.0	7,997.2	7,981.5	7,973.0	19.5	20.6	99.82	-70.3	-257.0	259.4	224.4	35.08	7.396	
8,100.0	8,097.1	8,081.2	8,072.2	19.8	21.1	99.81	-73.3	-265.2	267.6	232.1	35.52	7.535	
8,200.0	8,197.0	8,180.8	8,171.5	20.2	21.5	99.81	-76.2	-273.3	275.9	239.9	35.97	7.668	
8,300.0	8,296.9	8,280.5	8,270.8	20.6	21.9	99.80	-79.2	-281.5	284.1	247.6	36.43	7.798	
8,400.0	8,396.8	8,380.2	8,370.1	20.9	22.3	99.79	-82.2	-289.6	292.3	255.4	36.89	7.922	
8,500.0	8,496.7	8,479.8	8,469.4	21.3	22.7	99.79	-85.1	-297.8	300.5	263.1	37.36	8.043	
8,600.0	8,596.6	8,579.5	8,568.7	21.6	23.2	99.78	-88.1	-306.0	308.7	270.9	37.84	8.159	
8,700.0	8,696.5	8,679.2	8,667.9	22.0	23.6	99.78	-91.1	-314.1	316.9	278.6	38.32	8.271	
8,800.0	8,796.4	8,778.8	8,767.2	22.4	24.1	99.78	-94.1	-322.3	325.1	286.3	38.80	8.379	
8,900.0	8,896.3	8,878.5	8,866.5	22.8	24.5	99.77	-97.0	-330.5	333.3	294.0	39.29	8.484	
9,000.0	8,996.1	8,978.1	8,965.8	23.1	25.0	99.77	-100.0	-338.6	341.6	301.8	39.79	8.585	
9,100.0	9,096.0	9,077.8	9,065.1	23.5	25.4	99.76	-103.0	-346.8	349.8	309.5	40.28	8.682	
9,200.0	9,195.9	9,177.5	9,164.4	23.9	25.9	99.76	-105.9	-354.9	358.0	317.2	40.79	8.777	
9,300.0	9,295.8	9,277.1	9,263.6	24.3	26.3	99.76	-108.9	-363.1	366.2	324.9	41.29	8.868	
9,400.0	9,395.7	9,376.8	9,362.9	24.7	26.8	99.75	-111.9	-371.3	374.4	332.6	41.80	8.956	
9,500.0	9,495.6	9,476.4	9,462.2	25.1	27.3	99.75	-114.9	-379.4	382.6	340.3	42.32	9.041	
9,540.3	9,535.9	9,516.6	9,502.2	25.2	27.4	99.75	-116.1	-382.7	385.9	343.4	42.51	9.079	
9,600.0	9,595.5	9,576.1	9,561.5	25.4	27.7	99.75	-117.8	-387.6	390.8	348.0	42.79	9.132	
9,700.0	9,695.5	9,675.8	9,660.8	25.8	28.2	99.55	-120.8	-395.8	398.7	355.4	43.31	9.204	
9,804.5	9,800.0	9,779.9	9,764.5	26.0	28.7	-79.18	-123.9	-404.3	406.6	362.8	43.86	9.271	
9,900.0	9,895.5	9,875.0	9,859.3	26.0	29.1	-79.77	-126.7	-412.1	413.8	369.4	44.38	9.324	
10,002.1	9,997.5	9,976.7	9,960.6	26.1	29.6	-80.38	-129.8	-420.4	421.5	376.6	44.95	9.378	

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 502H
Project:	Hat Mesa	TVD Reference:	WELL @ 3704.5usft (Original Well Elev)
Reference Site:	Anderson Fed Com - Pad C	MD Reference:	WELL @ 3704.5usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	Anderson Fed Com 502H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.79 sigma
Reference Wellbore	Anderson Fed Com 502H	Database:	EDM 5000.16 Single User Db
Reference Design:	Anderson Fed Com 502H - Prelim 2	Offset TVD Reference:	Offset Datum

Offset Design: Anderson Fed Com - Pad C - Anderson Fed Com 702H - Anderson Fed Com 702H - Anderson Fed Com 702H - Prelim 2												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
10,025.0	10,020.5	9,999.6	9,983.3	26.1	29.7	-76.23	-130.4	-422.3	423.1	378.1	45.06	9.390	
10,050.0	10,045.4	10,024.3	10,008.0	26.0	29.9	-76.44	-131.2	-424.3	424.6	379.4	45.20	9.394	
10,075.0	10,070.2	10,049.0	10,032.5	25.9	30.0	-76.85	-131.9	-426.3	425.8	380.4	45.35	9.389	
10,100.0	10,094.8	10,073.4	10,056.9	25.8	30.1	-77.44	-132.6	-428.3	426.7	381.2	45.51	9.377	
10,125.0	10,119.1	10,097.5	10,080.9	25.7	30.2	-78.20	-133.4	-430.3	427.5	381.8	45.69	9.357	
10,150.0	10,143.1	10,121.2	10,104.5	25.7	30.3	-79.12	-134.1	-432.2	428.1	382.2	45.88	9.330	
10,175.0	10,166.7	10,144.5	10,127.7	25.6	30.4	-80.19	-134.8	-434.1	428.6	382.5	46.10	9.298	
10,200.0	10,189.9	10,167.3	10,150.5	25.5	30.6	-81.37	-135.5	-436.0	429.1	382.8	46.33	9.263	
10,225.0	10,212.5	10,189.6	10,172.7	25.4	30.7	-82.65	-136.1	-437.8	429.7	383.1	46.58	9.225	
10,250.0	10,234.5	10,211.3	10,194.2	25.3	30.8	-84.00	-136.8	-439.6	430.5	383.6	46.86	9.186	
10,275.0	10,255.9	10,232.2	10,215.1	25.2	30.9	-85.39	-137.4	-441.3	431.5	384.3	47.16	9.149	
10,300.0	10,276.5	10,252.5	10,235.3	25.1	31.0	-86.80	-138.0	-443.0	432.8	385.4	47.48	9.116	
10,325.0	10,296.4	10,272.0	10,254.7	25.0	31.1	-88.19	-138.6	-444.6	434.7	386.8	47.83	9.088	
10,350.0	10,315.5	10,290.6	10,273.2	24.9	31.2	-89.54	-139.1	-446.1	437.0	388.8	48.19	9.070	
10,375.0	10,333.7	10,308.3	10,290.9	24.8	31.2	-90.80	-139.7	-447.6	440.0	391.5	48.56	9.062	
10,400.0	10,351.0	10,325.1	10,307.6	24.7	31.3	-91.96	-140.2	-448.9	443.8	394.9	48.95	9.067	
10,425.0	10,367.3	10,340.9	10,323.4	24.6	31.4	-92.99	-140.6	-450.2	448.4	399.0	49.33	9.089	
10,450.0	10,382.6	10,355.7	10,338.1	24.6	31.5	-93.85	-141.1	-451.4	453.8	404.1	49.72	9.128	
10,475.0	10,396.8	10,369.4	10,351.7	24.5	31.5	-94.52	-141.5	-452.6	460.2	410.1	50.09	9.187	
10,500.0	10,410.0	10,382.0	10,364.3	24.4	31.6	-94.99	-141.8	-453.6	467.5	417.1	50.45	9.268	
10,525.0	10,422.0	10,393.4	10,375.7	24.4	31.7	-95.21	-142.2	-454.5	475.9	425.1	50.78	9.371	
10,550.0	10,432.9	10,403.7	10,385.9	24.3	31.7	-95.19	-142.5	-455.4	485.3	434.2	51.09	9.499	
10,575.0	10,442.5	10,412.8	10,395.0	24.3	31.8	-94.90	-142.8	-456.1	495.7	444.3	51.37	9.650	
10,600.0	10,451.0	10,420.7	10,402.8	24.2	31.8	-94.32	-143.0	-456.8	507.0	455.4	51.61	9.824	
10,625.0	10,458.2	10,427.3	10,409.4	24.2	31.8	-93.43	-143.2	-457.3	519.3	467.5	51.81	10.022	
10,650.0	10,464.1	10,432.6	10,414.7	24.2	31.9	-92.24	-143.4	-457.7	532.5	480.5	51.99	10.242	
10,675.0	10,468.8	10,436.7	10,418.8	24.1	31.9	-90.72	-143.5	-458.1	546.5	494.4	52.13	10.484	
10,700.0	10,472.2	10,439.4	10,421.5	24.1	31.9	-88.87	-143.6	-458.3	561.2	509.0	52.23	10.745	
10,725.0	10,474.2	10,440.9	10,423.0	24.1	31.9	-86.71	-143.6	-458.4	576.7	524.4	52.31	11.024	
10,752.1	10,475.0	10,441.0	10,423.1	24.1	31.9	-84.01	-143.6	-458.4	594.1	541.7	52.37	11.344	
10,755.6	10,475.0	10,440.9	10,423.0	24.1	31.9	-84.00	-143.6	-458.4	596.4	544.0	52.37	11.387	
10,800.0	10,475.0	10,439.8	10,421.9	24.1	31.9	-83.77	-143.6	-458.3	626.7	574.3	52.42	11.956	
10,900.0	10,475.0	10,437.2	10,419.3	24.2	31.9	-83.16	-143.5	-458.1	702.0	649.6	52.40	13.397	
10,948.9	10,475.0	10,435.8	10,417.9	24.2	31.9	-82.81	-143.5	-458.0	741.7	689.4	52.34	14.172	
11,000.0	10,475.0	10,434.3	10,416.4	24.2	31.9	-82.60	-143.4	-457.9	784.6	732.3	52.25	15.017	
11,100.0	10,475.0	10,431.4	10,413.5	24.3	31.8	-82.20	-143.3	-457.6	871.0	818.9	52.04	16.736	
11,200.0	10,475.0	10,428.4	10,410.6	24.5	31.8	-81.79	-143.2	-457.4	960.0	908.2	51.84	18.519	

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

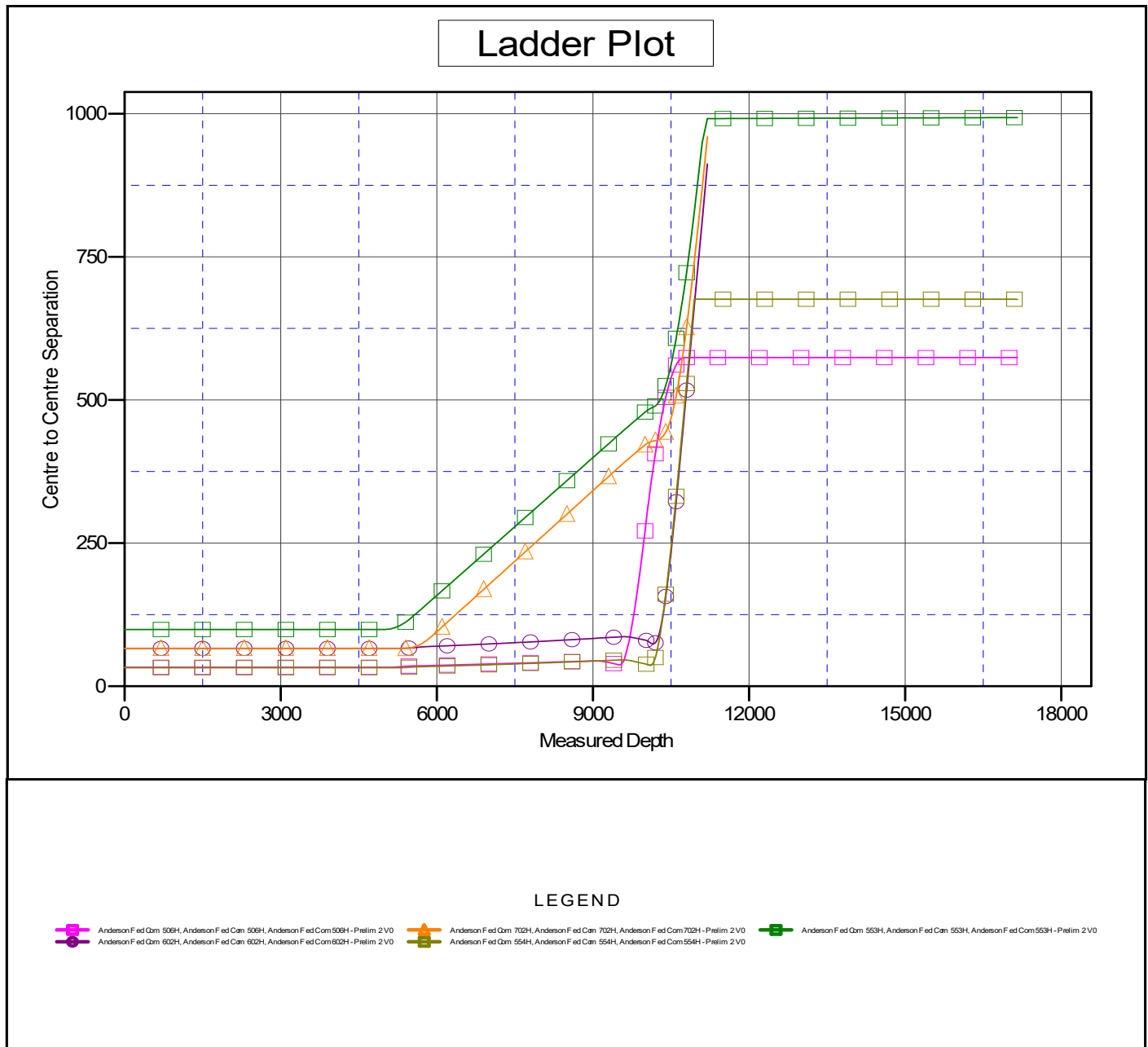


Anticollision Report

Company:	Advance Energy Partners	Local Co-ordinate Reference:	Well Anderson Fed Com 502H
Project:	Hat Mesa	TVD Reference:	WELL @ 3704.5usft (Original Well Elev)
Reference Site:	Anderson Fed Com - Pad C	MD Reference:	WELL @ 3704.5usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	Anderson Fed Com 502H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.79 sigma
Reference Wellbore	Anderson Fed Com 502H	Database:	EDM 5000.16 Single User Db
Reference Design:	Anderson Fed Com 502H - Prelim 2	Offset TVD Reference:	Offset Datum

Reference Depths are relative to WELL @ 3704.5usft (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 502H
 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



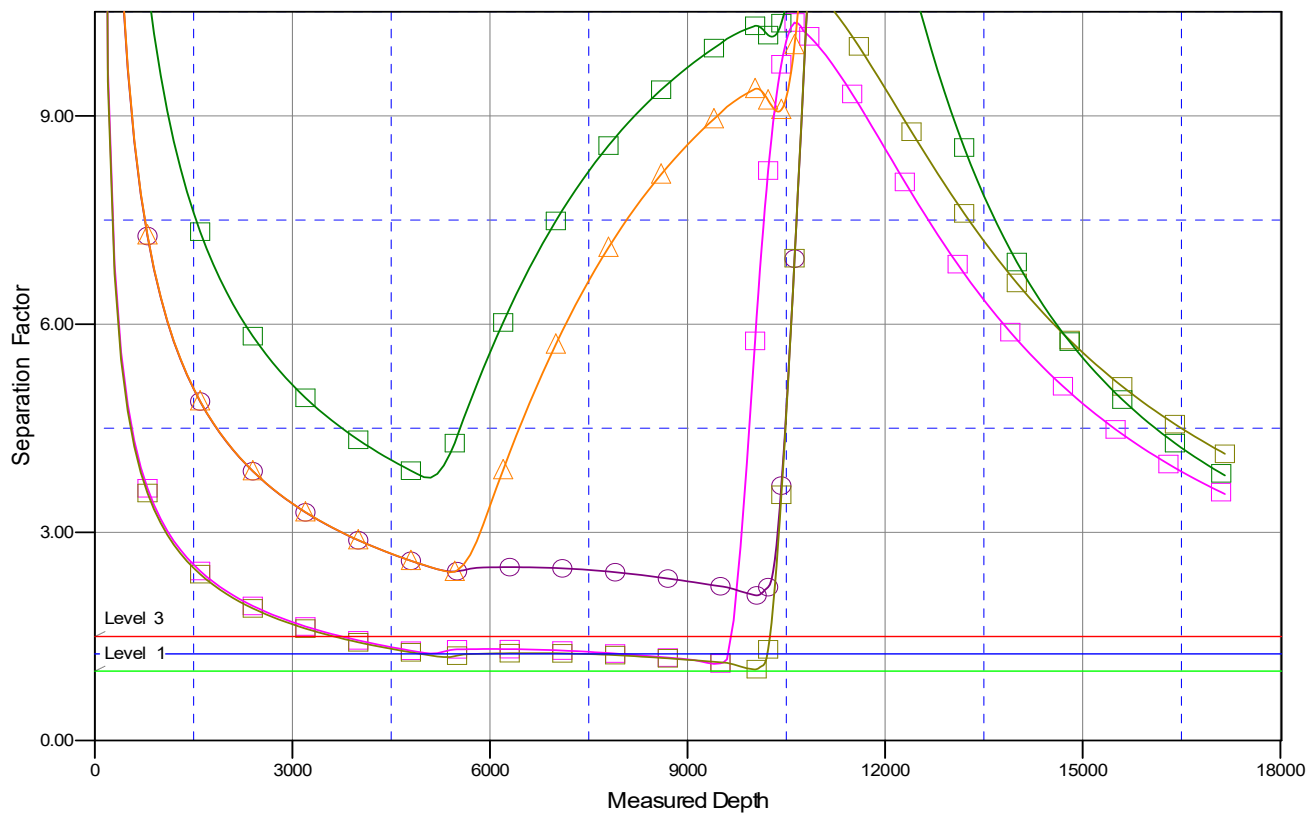
Anticollision Report

Company:	Advance Energy Partners	Local Co-ordinate Reference:	Well Anderson Fed Com 502H
Project:	Hat Mesa	TVD Reference:	WELL @ 3704.5usft (Original Well Elev)
Reference Site:	Anderson Fed Com - Pad C	MD Reference:	WELL @ 3704.5usft (Original Well Elev)
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Reference Well:	Anderson Fed Com 502H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.79 sigma
Reference Wellbore	Anderson Fed Com 502H	Database:	EDM 5000.16 Single User Db
Reference Design:	Anderson Fed Com 502H - Prelim 2	Offset TVD Reference:	Offset Datum

Reference Depths are relative to WELL @ 3704.5usft (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 502H
 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 506H, Anderson Fed Com 506H, Anderson Fed Com 506H - Prelim 2 V/O
 ▲ Anderson Fed Com 702H, Anderson Fed Com 702H, Anderson Fed Com 702H - Prelim 2 V/O
 ■ Anderson Fed Com 553H, Anderson Fed Com 553H, Anderson Fed Com 553H - Prelim 2 V/O
● Anderson Fed Com 602H, Anderson Fed Com 602H, Anderson Fed Com 602H - Prelim 2 V/O
 ■ Anderson Fed Com 554H, Anderson Fed Com 554H, Anderson Fed Com 554H - Prelim 2 V/O

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

CONDITIONS

Action 41604

CONDITIONS

Operator: ADVANCE ENERGY PARTNERS HAT MESA, LLC 11490 Westheimer Rd., Ste 950 Houston, TX 77077	OGRID: 372417
	Action Number: 41604
	Action Type: [C-103] NOI Change of Plans (C-103A)

CONDITIONS

Created By	Condition	Condition Date
pkautz	None	8/12/2021