

Well Name: ANDERSON FED COM	Well Location: T22S / R32E / SEC 2 / LOT 2 /	County or Parish/State:
Well Number: 603H	Type of Well: OIL WELL	Allottee or Tribe Name:
Lease Number: NMNM120905	Unit or CA Name:	Unit or CA Number:
US Well Number: 3002549003	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: 08/05/2021	Time Sundry Submitted: 12:46
Date proposed operation will begin: 08/13/2021	

Procedure Description: Request to move Surface Hole Location from 180' FNL & 2347' FEL, Section 2, T-22-S, R-32-E, Lot 2 to 180' FNL & 2314' FEL, Section 2, T-22-S, R-32-E, Lot 2 and Bottom Hole Location from 1220' FSL & 2310' FEL, Section 26, T-21-S, R-32-E, SWSE to 1220' FSL & 1254' FEL, Section 26, T-21-S, R-32-E, SWSE. 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_603H_SHL_BHL_etc_Sundry_Attachment_v2_20210805124441.pdf

Well Name: ANDERSON FED COM	Well Location: T22S / R32E / SEC 2 / LOT 2 /	County or Parish/State:
Well Number: 603H	Type of Well: OIL WELL	Allottee or Tribe Name:
Lease Number: NMNM120905	Unit or CA Name:	Unit or CA Number:
US Well Number: 3002549003	Well Status: Approved Application for Permit to Drill	Operator: ADVANCE ENERGY PARTNERS HAT MESA LLC

Conditions of Approval

Additional Reviews

Anderson_Fed_Com_603H_Dr_COA_Sundry_ID_2627404_20210806102857.pdf

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 05, 2021 12:44 PM
Name: ADVANCE ENERGY PARTNERS HAT MESA LLC	
Title: President	
Street Address: 37 VERANO LOOP	
City: SANTA FE	State: NM
Phone: (505) 466-8120	
Email address: AFMSS@PERMITSWEST.COM	

Field Representative

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

BLM Point of Contact

BLM POC Name: CHRISTOPHER WALLS	BLM POC Title: Petroleum Engineer
BLM POC Phone: 5752342234	BLM POC Email Address: cwalls@blm.gov
Disposition: Approved	Disposition Date: 08/06/2021
Signature: Chris Walls	

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

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

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

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

State of New Mexico
Energy, Minerals and Natural Resources Department

Form C-102
Revised August 4, 2011

Submit one copy to appropriate
District Office

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

☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

API Number 30-025-49003	Pool Code 51683	Pool Name Red Tank; Bone Spring
Property Code	Property Name ANDERSON FED COM	Well Number 603H
OGRID No. 372417	Operator Name ADVANCE ENERGY PARTNERS HAT MESA, LLC	Elevation 3666'

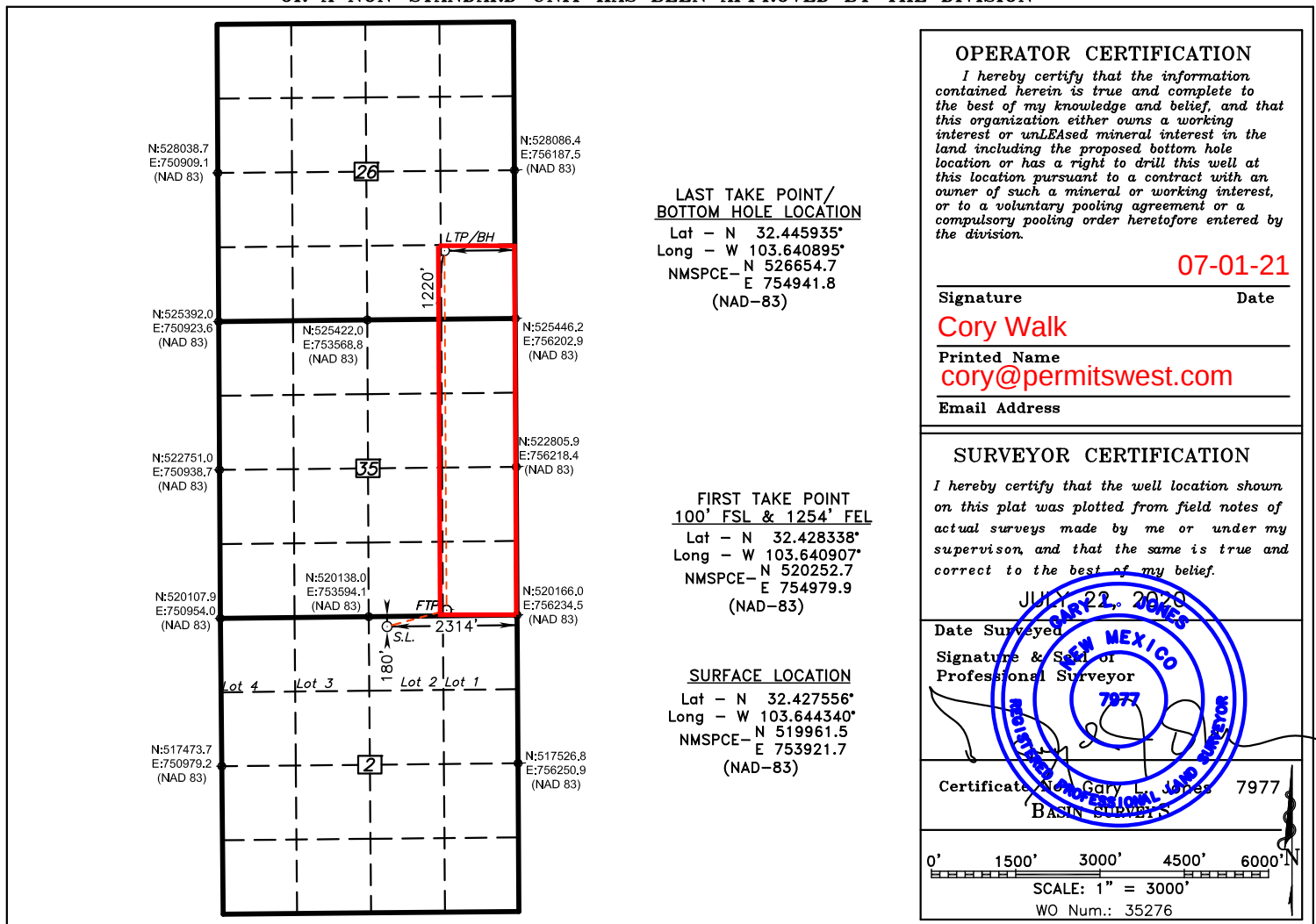
Surface Location

UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	SOUTH/South line	Feet from the	East/West line	County
LOT 2	2	22 S	32 E		180	NORTH	2314	EAST	LEA

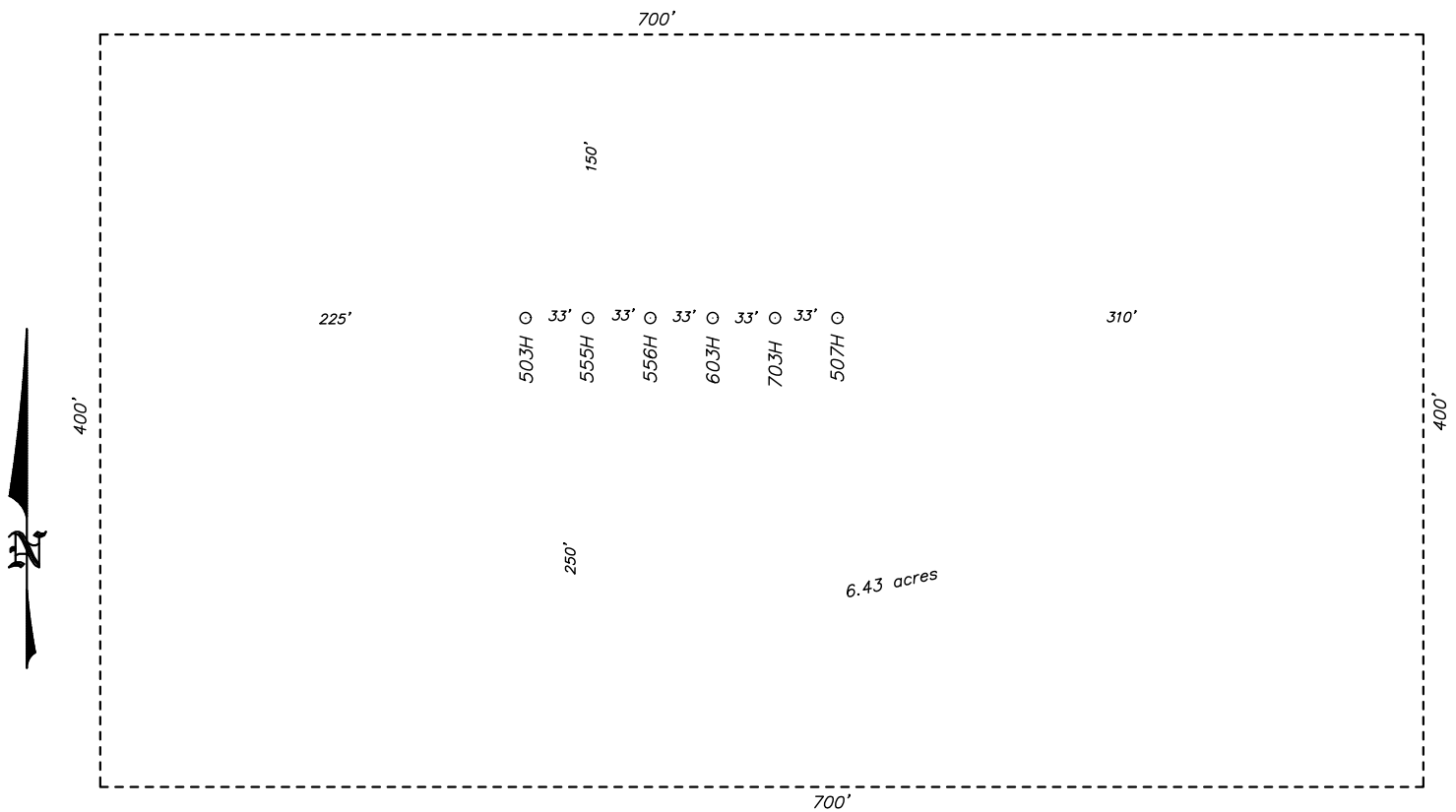
Bottom Hole Location If Different From Surface

UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	SOUTH/South line	Feet from the	East/West line	County
P	26	21 S	32 E		1220	SOUTH	1254	EAST	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 603H / WELL PAD TOPO

THE ANDERSON FED COM 603H LOCATED 180' FROM
THE NORTH LINE AND 2314' FROM THE EAST LINE OF
SECTION 2, TOWNSHIP 22 SOUTH, RANGE 32 EAST.

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

W.O. Number: 35276	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 Surface Hole Location

From: 180' FNL & 2347' FEL, Section 2, T-22-S, R-32-E, Lot 2

To: 180' FNL & 2314' FEL, Section 2, T-22-S, R-32-E, Lot 2

Move First Take Point

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

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

Move Bottom Hole Location

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

To: 1220' FSL & 1254' FEL, Section 26, T-21-S, R-32-E, SESE

Producing Formation

From: Third Bone Spring

To: Second Bone Spring

Please see attached drill plan, directional plan, and plats for information regarding changes to casing, cement, and mud programs.

Advance Energy Partners Hat Mesa, LLC
 Anderson Fed Com 603H
 SHL 180' FNL & 2314' FEL Sec. 2, T. 22 S., R. 32 E.
 BHL 1220' FSL & 1254' FEL Sec. 26, T 21 S., R. 32 E.
 Lea County, NM

DRILL PLAN PAGE 1

"Anderson Fed Com pad B"

Drilling Program

1. ESTIMATED TOPS

Formation	TVD	MD	Bearing
Quaternary caliche	000'	000'	water
Rustler anhydrite (surf csg set @ 1218')	1193'	1193'	N/A
Top salt	1401'	1401'	N/A
Tansil limestone (int csg set @ 4721')	3280'	3280'	N/A
Bell Canyon limestone	4771'	4771'	hydrocarbons
Cherry Canyon sandstone	5682'	5682'	hydrocarbons
Lower Brushy Canyon sandstone	8419'	8421'	hydrocarbons
Avalon shale	8938'	8941'	hydrocarbons
(KOP	9764'	9780'	hydrocarbons)
1 st Bone Spring sandstone	9805'	9809'	hydrocarbons
2 nd Bone Spring sandstone	10403'	10407'	hydrocarbons
TD	10475'	17477'	hydrocarbons

2. NOTABLE ZONES

Second Bone sandstone is the goal. Closest water well (CP 01701 POD 1) is 0.64-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
 Anderson Fed Com 603H
 SHL 180' FNL & 2314' FEL Sec. 2, T. 22 S., R. 32 E.
 BHL 1220' FSL & 1254' FEL Sec. 26, T 21 S., R. 32 E.
 Lea County, NM

DRILL PLAN PAGE 2

"Anderson Fed Com pad B"

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 OD	Weight (lb/ft)	Grade	Joint	Collapse	Burst	Tension
17.5"	0' - 1218'	0' - 1218'	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' - 4721'	4000' - 4721'	Intermed. 9.625"	40	HCL-80	LTC	1.125	1.125	1.6
8.5"	0' - 17465'	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 allow presetting the surface casing, then the primary rig will drill all of the well.

Advance Energy Partners Hat Mesa, LLC
 Anderson Fed Com 603H
 SHL 180' FNL & 2314' FEL Sec. 2, T. 22 S., R. 32 E.
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 Lea County, NM

DRILL PLAN PAGE 3

"Anderson Fed Com pad B"

Name	Type	Top MD	Sacks	Yield	Cu. Ft	Weight	Excess	Cement	Additives
Surface	Lead	0	505	1.9	960	12.8	50%	B Poz + C	6% Gel + 5% SALT + 0.25PPS Pol-E-Flake + 0.005GPS NoFoam V1A
	Tail	918	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	727%	B Poz + C	2% Gel + 5% SALT + 0.15% R-1300 + 0.25PPS Pol-E-Flake + 0.005GPS NoFoam V1A
	Tail	3776	310	1.21	375	15.6	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	925	3.39	3136	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	10222	1650	1.22	2013	14.5	20%	B Poz + H	5% SALT + 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
Anderson Fed Com 603H
SHL 180' FNL & 2314' FEL Sec. 2, T. 22 S., R. 32 E.
BHL 1220' FSL & 1254' FEL Sec. 26, T 21 S., R. 32 E.
Lea County, NM

DRILL PLAN PAGE 4

"Anderson Fed Com pad B"

Type	Interval (MD)	lb/gal	Viscosity	Fluid Loss ml/30 mins
fresh water	0' - 1218'	8.4 - 10.0	28 - 36	N/C
Brine	1218' - 4721'	10.0 - 10.5	28 - 32	N/C
Cut Brine	4721' - 11075'	9.2 - 9.5	28 - 30	N/C
OBM	11075' - 17465'	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 ≈ 5782 psi. Expected bottom hole temperature is $\approx 242^\circ$ 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 603H**

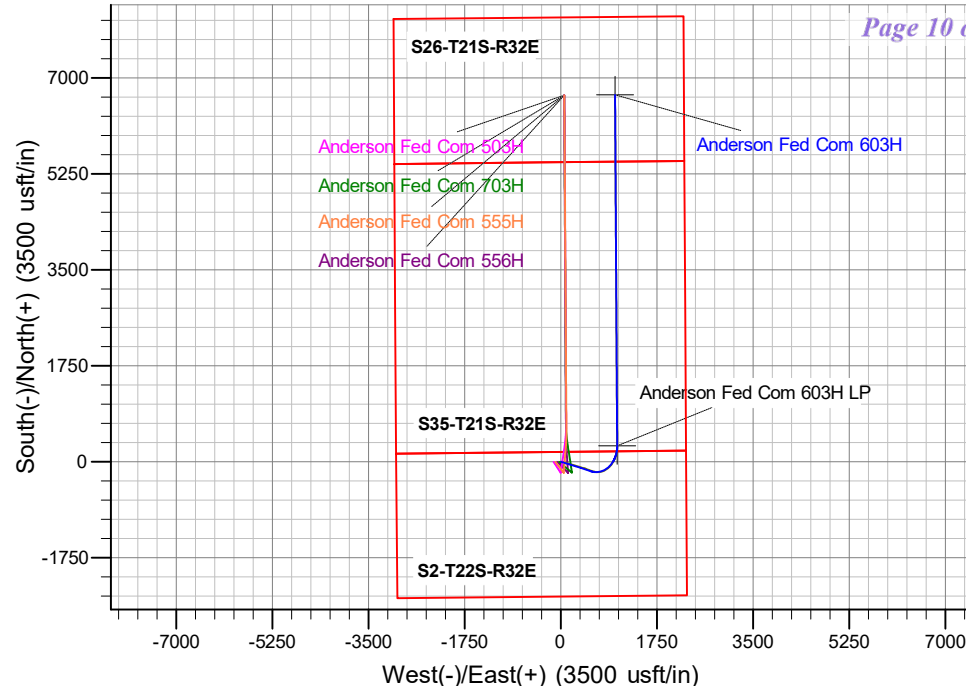
Ground Elev: 3667.0 KB: 3699.5

+N/-S	+E/-W	Northing	Easting	Latitude	Longitude
0.0	0.0	519962.01	753954.75	32° 25' 39.205 N	103° 38' 39.246 W

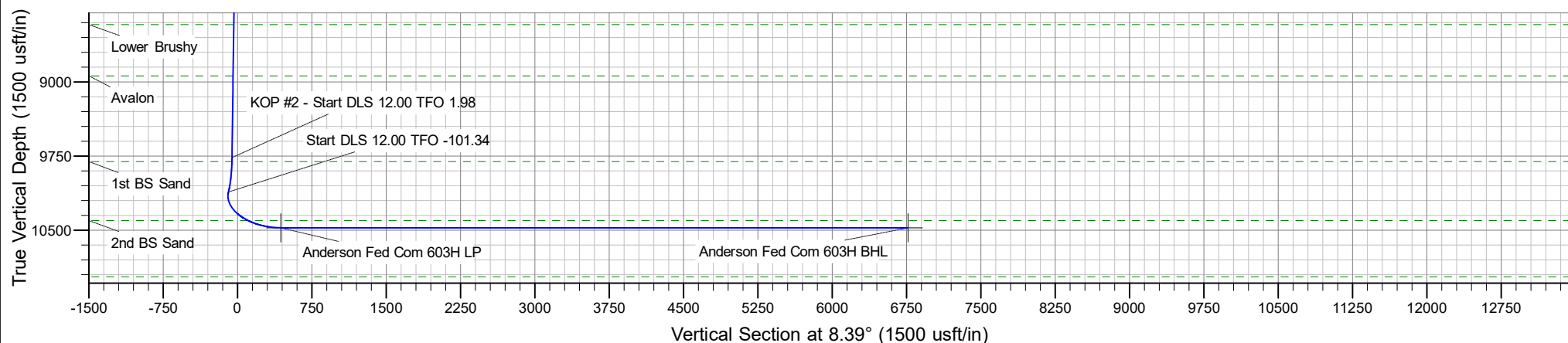
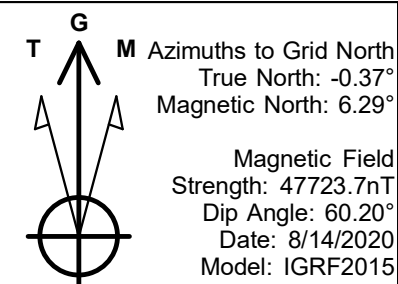
PROJECT DETAILS: Hat Mesa

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	5300.0	0.00	0.00	5300.0	0.0	0.0	0.00	0.00	0.0	KOP - Start Build 1.00
3	5800.0	5.00	107.00	5799.4	-6.4	20.9	1.00	107.00	-3.3	Start 3979.8 hold at 5800.0 MD
4	9779.8	5.00	107.00	9764.0	-107.8	352.6	0.00	0.00	-55.2	KOP #2 - Start DLS 12.00 TFO 1.98
5	10194.8	54.80	108.85	10112.5	-171.9	542.4	12.00	1.98	-90.9	Start DLS 12.00 TFO -101.34
6	11074.6	90.00	359.66	10475.0	290.8	1025.0	12.00	-101.34	437.2	LP - Start 6402.0 hold at 11074.6 MD
7	17476.6	90.00	359.66	10475.0	6692.7	987.2	0.00	0.00	6765.1	TD at 17476.6





Advance Energy Partners

Hat Mesa

Anderson Fed Com - Pad B

Anderson Fed Com 603H

Anderson Fed Com 603H

Plan: Anderson Fed Com 603H - Prelim 1

Standard Planning Report

17 June, 2021



Planning Report

Database:	EDM 5000.16 Single User Db	Local Co-ordinate Reference:	Well Anderson Fed Com 603H
Company:	Advance Energy Partners	TVD Reference:	WELL @ 3699.0usft (Original Well Elev)
Project:	Hat Mesa	MD Reference:	WELL @ 3699.0usft (Original Well Elev)
Site:	Anderson Fed Com - Pad B	North Reference:	Grid
Well:	Anderson Fed Com 603H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Anderson Fed Com 603H		
Design:	Anderson Fed Com 603H - Prelim 1		

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

Site		Anderson Fed Com - Pad B			
Site Position:		Northing:	519,961.99 usft	Latitude:	32° 25' 39.205 N
From:	Lat/Long	Easting:	753,954.75 usft	Longitude:	103° 38' 39.246 W
Position Uncertainty:	0.0 usft	Slot Radius:	13-3/16 "		

Well	Anderson Fed Com 603H					
Well Position	+N/-S	0.0 usft	Northing:	519,962.01 usft	Latitude:	32° 25' 39.205 N
	+E/-W	0.0 usft	Easting:	753,954.75 usft	Longitude:	103° 38' 39.246 W
Position Uncertainty		0.0 usft	Wellhead Elevation:	usft	Ground Level:	3,667.0 usft
Grid Convergence:		0.37 °				

Wellbore	Anderson Fed Com 603H				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2015	8/14/2020	6.66	60.20	47,723.74460328

Design	Anderson Fed Com 603H - Prelim 1			
Audit Notes:				
Version:	Phase:	PROTOTYPE	Tie On Depth:	0.0
Vertical Section:	Depth From (TVD) (usft)	+N/-S (usft)	+E/-W (usft)	Direction (°)
	0.0	0.0	0.0	8.39

Plan Survey Tool Program	Date	6/17/2021		
Depth From (usft)	Depth To (usft)	Survey (Wellbore)	Tool Name	Remarks
1	0.0	17,476.1	Anderson Fed Com 603H - Prelim	MWD+HRGM
				OWSG MWD + HRGM

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	
5,300.0	0.00	0.00	5,300.0	0.0	0.0	0.00	0.00	0.00	0.00	
5,800.0	5.00	107.00	5,799.4	-6.4	20.9	1.00	1.00	0.00	107.00	
9,779.8	5.00	107.00	9,764.0	-107.8	352.6	0.00	0.00	0.00	0.00	
10,194.8	54.80	108.85	10,112.5	-171.9	542.4	12.00	12.00	0.45	1.98	
11,074.6	90.00	359.66	10,475.0	290.8	1,025.0	12.00	4.00	-12.41	-101.34	Anderson Fed Com 603H
17,476.6	90.00	359.66	10,475.0	6,692.7	987.2	0.00	0.00	0.00	0.00	Anderson Fed Com 603H



Planning Report

Database:	EDM 5000.16 Single User Db	Local Co-ordinate Reference:	Well Anderson Fed Com 603H
Company:	Advance Energy Partners	TVD Reference:	WELL @ 3699.0usft (Original Well Elev)
Project:	Hat Mesa	MD Reference:	WELL @ 3699.0usft (Original Well Elev)
Site:	Anderson Fed Com - Pad B	North Reference:	Grid
Well:	Anderson Fed Com 603H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Anderson Fed Com 603H		
Design:	Anderson Fed Com 603H - Prelim 1		

Planned Survey									
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
0.0	0.00	0.00	0.0	0.0	0.0	0.0	0.00	0.00	0.00
100.0	0.00	0.00	100.0	0.0	0.0	0.0	0.00	0.00	0.00
200.0	0.00	0.00	200.0	0.0	0.0	0.0	0.00	0.00	0.00
300.0	0.00	0.00	300.0	0.0	0.0	0.0	0.00	0.00	0.00
400.0	0.00	0.00	400.0	0.0	0.0	0.0	0.00	0.00	0.00
500.0	0.00	0.00	500.0	0.0	0.0	0.0	0.00	0.00	0.00
600.0	0.00	0.00	600.0	0.0	0.0	0.0	0.00	0.00	0.00
700.0	0.00	0.00	700.0	0.0	0.0	0.0	0.00	0.00	0.00
800.0	0.00	0.00	800.0	0.0	0.0	0.0	0.00	0.00	0.00
900.0	0.00	0.00	900.0	0.0	0.0	0.0	0.00	0.00	0.00
1,000.0	0.00	0.00	1,000.0	0.0	0.0	0.0	0.00	0.00	0.00
1,100.0	0.00	0.00	1,100.0	0.0	0.0	0.0	0.00	0.00	0.00
1,193.0	0.00	0.00	1,193.0	0.0	0.0	0.0	0.00	0.00	0.00
Rustler									
1,200.0	0.00	0.00	1,200.0	0.0	0.0	0.0	0.00	0.00	0.00
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
4,771.0	0.00	0.00	4,771.0	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



Planning Report

Database:	EDM 5000.16 Single User Db	Local Co-ordinate Reference:	Well Anderson Fed Com 603H
Company:	Advance Energy Partners	TVD Reference:	WELL @ 3699.0usft (Original Well Elev)
Project:	Hat Mesa	MD Reference:	WELL @ 3699.0usft (Original Well Elev)
Site:	Anderson Fed Com - Pad B	North Reference:	Grid
Well:	Anderson Fed Com 603H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Anderson Fed Com 603H		
Design:	Anderson Fed Com 603H - Prelim 1		

Planned Survey									
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
4,900.0	0.00	0.00	4,900.0	0.0	0.0	0.0	0.00	0.00	0.00
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
5,300.0	0.00	0.00	5,300.0	0.0	0.0	0.0	0.00	0.00	0.00
KOP - Start Build 1.00									
5,400.0	1.00	107.00	5,400.0	-0.3	0.8	-0.1	1.00	1.00	0.00
5,500.0	2.00	107.00	5,500.0	-1.0	3.3	-0.5	1.00	1.00	0.00
5,600.0	3.00	107.00	5,599.9	-2.3	7.5	-1.2	1.00	1.00	0.00
5,700.0	4.00	107.00	5,699.7	-4.1	13.3	-2.1	1.00	1.00	0.00
5,800.0	5.00	107.00	5,799.4	-6.4	20.9	-3.3	1.00	1.00	0.00
Start 3979.8 hold at 5800.0 MD									
5,900.0	5.00	107.00	5,899.0	-8.9	29.2	-4.6	0.00	0.00	0.00
6,000.0	5.00	107.00	5,998.6	-11.5	37.5	-5.9	0.00	0.00	0.00
6,100.0	5.00	107.00	6,098.2	-14.0	45.9	-7.2	0.00	0.00	0.00
6,200.0	5.00	107.00	6,197.8	-16.6	54.2	-8.5	0.00	0.00	0.00
6,300.0	5.00	107.00	6,297.5	-19.1	62.5	-9.8	0.00	0.00	0.00
6,400.0	5.00	107.00	6,397.1	-21.7	70.9	-11.1	0.00	0.00	0.00
6,500.0	5.00	107.00	6,496.7	-24.2	79.2	-12.4	0.00	0.00	0.00
6,600.0	5.00	107.00	6,596.3	-26.8	87.5	-13.7	0.00	0.00	0.00
6,700.0	5.00	107.00	6,695.9	-29.3	95.9	-15.0	0.00	0.00	0.00
6,800.0	5.00	107.00	6,795.6	-31.9	104.2	-16.3	0.00	0.00	0.00
6,900.0	5.00	107.00	6,895.2	-34.4	112.5	-17.6	0.00	0.00	0.00
7,000.0	5.00	107.00	6,994.8	-37.0	120.9	-18.9	0.00	0.00	0.00
7,100.0	5.00	107.00	7,094.4	-39.5	129.2	-20.2	0.00	0.00	0.00
7,200.0	5.00	107.00	7,194.0	-42.0	137.5	-21.5	0.00	0.00	0.00
7,300.0	5.00	107.00	7,293.7	-44.6	145.9	-22.8	0.00	0.00	0.00
7,400.0	5.00	107.00	7,393.3	-47.1	154.2	-24.1	0.00	0.00	0.00
7,500.0	5.00	107.00	7,492.9	-49.7	162.5	-25.4	0.00	0.00	0.00
7,600.0	5.00	107.00	7,592.5	-52.2	170.9	-26.7	0.00	0.00	0.00
7,700.0	5.00	107.00	7,692.1	-54.8	179.2	-28.1	0.00	0.00	0.00
7,800.0	5.00	107.00	7,791.8	-57.3	187.5	-29.4	0.00	0.00	0.00
7,900.0	5.00	107.00	7,891.4	-59.9	195.9	-30.7	0.00	0.00	0.00
8,000.0	5.00	107.00	7,991.0	-62.4	204.2	-32.0	0.00	0.00	0.00
8,100.0	5.00	107.00	8,090.6	-65.0	212.5	-33.3	0.00	0.00	0.00
8,200.0	5.00	107.00	8,190.2	-67.5	220.9	-34.6	0.00	0.00	0.00
8,300.0	5.00	107.00	8,289.9	-70.1	229.2	-35.9	0.00	0.00	0.00
8,400.0	5.00	107.00	8,389.5	-72.6	237.6	-37.2	0.00	0.00	0.00
8,429.6	5.00	107.00	8,419.0	-73.4	240.0	-37.6	0.00	0.00	0.00
Lower Brushy									
8,500.0	5.00	107.00	8,489.1	-75.2	245.9	-38.5	0.00	0.00	0.00
8,600.0	5.00	107.00	8,588.7	-77.7	254.2	-39.8	0.00	0.00	0.00
8,700.0	5.00	107.00	8,688.3	-80.3	262.6	-41.1	0.00	0.00	0.00
8,800.0	5.00	107.00	8,787.9	-82.8	270.9	-42.4	0.00	0.00	0.00
8,900.0	5.00	107.00	8,887.6	-85.4	279.2	-43.7	0.00	0.00	0.00
8,950.6	5.00	107.00	8,938.0	-86.7	283.4	-44.4	0.00	0.00	0.00
Avalon									
9,000.0	5.00	107.00	8,987.2	-87.9	287.6	-45.0	0.00	0.00	0.00
9,100.0	5.00	107.00	9,086.8	-90.5	295.9	-46.3	0.00	0.00	0.00
9,200.0	5.00	107.00	9,186.4	-93.0	304.2	-47.6	0.00	0.00	0.00
9,300.0	5.00	107.00	9,286.0	-95.6	312.6	-48.9	0.00	0.00	0.00
9,400.0	5.00	107.00	9,385.7	-98.1	320.9	-50.2	0.00	0.00	0.00
9,500.0	5.00	107.00	9,485.3	-100.7	329.2	-51.5	0.00	0.00	0.00



Planning Report

Database:	EDM 5000.16 Single User Db	Local Co-ordinate Reference:	Well Anderson Fed Com 603H
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Project:	Hat Mesa	MD Reference:	WELL @ 3699.0usft (Original Well Elev)
Site:	Anderson Fed Com - Pad B	North Reference:	Grid
Well:	Anderson Fed Com 603H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Anderson Fed Com 603H		
Design:	Anderson Fed Com 603H - Prelim 1		

Planned Survey									
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
9,600.0	5.00	107.00	9,584.9	-103.2	337.6	-52.8	0.00	0.00	0.00
9,700.0	5.00	107.00	9,684.5	-105.8	345.9	-54.1	0.00	0.00	0.00
9,779.8	5.00	107.00	9,764.0	-107.8	352.6	-55.2	0.00	0.00	0.00
KOP #2 - Start DLS 12.00 TFO 1.98									
9,800.0	7.43	107.65	9,784.1	-108.4	354.6	-55.5	12.00	12.00	3.20
9,821.1	9.96	107.99	9,805.0	-109.4	357.7	-56.1	12.00	12.00	1.61
1st BS Sand									
9,900.0	19.43	108.48	9,881.2	-115.7	376.7	-59.5	12.00	12.00	0.62
10,000.0	31.43	108.69	9,971.3	-129.4	417.3	-67.1	12.00	12.00	0.21
10,100.0	43.43	108.79	10,050.6	-148.9	474.7	-78.0	12.00	12.00	0.10
10,194.8	54.80	108.85	10,112.5	-171.9	542.4	-90.9	12.00	12.00	0.06
Start DLS 12.00 TFO -101.34									
10,200.0	54.68	108.10	10,115.6	-173.3	546.5	-91.7	12.00	-2.32	-14.42
10,300.0	53.30	93.34	10,174.6	-188.4	625.6	-95.1	12.00	-1.38	-14.75
10,400.0	53.78	78.42	10,234.2	-182.6	705.4	-77.7	12.00	0.47	-14.92
10,500.0	56.05	64.01	10,291.9	-156.2	782.5	-40.4	12.00	2.27	-14.41
10,600.0	59.90	50.58	10,345.1	-110.4	853.4	15.3	12.00	3.85	-13.42
10,700.0	64.99	38.32	10,391.5	-47.2	915.2	86.9	12.00	5.09	-12.27
10,728.1	66.60	35.07	10,403.0	-26.6	930.5	109.5	12.00	5.73	-11.56
2nd BS Sand									
10,800.0	71.00	27.11	10,429.0	30.8	965.0	171.3	12.00	6.12	-11.07
10,900.0	77.64	16.72	10,456.1	120.0	1,000.7	264.7	12.00	6.64	-10.39
11,000.0	84.66	6.86	10,471.5	216.5	1,020.8	363.2	12.00	7.01	-9.86
11,074.6	90.00	359.66	10,475.0	290.8	1,025.0	437.2	12.00	7.16	-9.64
LP - Start 6402.0 hold at 11074.6 MD - Anderson Fed Com 603H LP									
11,100.0	90.00	359.66	10,475.0	316.2	1,024.9	462.3	0.00	0.00	0.00
11,200.0	90.00	359.66	10,475.0	416.2	1,024.3	561.2	0.00	0.00	0.00
11,300.0	90.00	359.66	10,475.0	516.2	1,023.7	660.0	0.00	0.00	0.00
11,400.0	90.00	359.66	10,475.0	616.2	1,023.1	758.9	0.00	0.00	0.00
11,500.0	90.00	359.66	10,475.0	716.2	1,022.5	857.7	0.00	0.00	0.00
11,600.0	90.00	359.66	10,475.0	816.2	1,021.9	956.5	0.00	0.00	0.00
11,700.0	90.00	359.66	10,475.0	916.1	1,021.3	1,055.4	0.00	0.00	0.00
11,800.0	90.00	359.66	10,475.0	1,016.1	1,020.7	1,154.2	0.00	0.00	0.00
11,900.0	90.00	359.66	10,475.0	1,116.1	1,020.1	1,253.1	0.00	0.00	0.00
12,000.0	90.00	359.66	10,475.0	1,216.1	1,019.6	1,351.9	0.00	0.00	0.00
12,100.0	90.00	359.66	10,475.0	1,316.1	1,019.0	1,450.7	0.00	0.00	0.00
12,200.0	90.00	359.66	10,475.0	1,416.1	1,018.4	1,549.6	0.00	0.00	0.00
12,300.0	90.00	359.66	10,475.0	1,516.1	1,017.8	1,648.4	0.00	0.00	0.00
12,400.0	90.00	359.66	10,475.0	1,616.1	1,017.2	1,747.3	0.00	0.00	0.00
12,500.0	90.00	359.66	10,475.0	1,716.1	1,016.6	1,846.1	0.00	0.00	0.00
12,600.0	90.00	359.66	10,475.0	1,816.1	1,016.0	1,945.0	0.00	0.00	0.00
12,700.0	90.00	359.66	10,475.0	1,916.1	1,015.4	2,043.8	0.00	0.00	0.00
12,800.0	90.00	359.66	10,475.0	2,016.1	1,014.8	2,142.6	0.00	0.00	0.00
12,900.0	90.00	359.66	10,475.0	2,116.1	1,014.2	2,241.5	0.00	0.00	0.00
13,000.0	90.00	359.66	10,475.0	2,216.1	1,013.6	2,340.3	0.00	0.00	0.00
13,100.0	90.00	359.66	10,475.0	2,316.1	1,013.1	2,439.2	0.00	0.00	0.00
13,200.0	90.00	359.66	10,475.0	2,416.1	1,012.5	2,538.0	0.00	0.00	0.00
13,300.0	90.00	359.66	10,475.0	2,516.1	1,011.9	2,636.8	0.00	0.00	0.00
13,400.0	90.00	359.66	10,475.0	2,616.1	1,011.3	2,735.7	0.00	0.00	0.00
13,500.0	90.00	359.66	10,475.0	2,716.1	1,010.7	2,834.5	0.00	0.00	0.00
13,600.0	90.00	359.66	10,475.0	2,816.1	1,010.1	2,933.4	0.00	0.00	0.00
13,700.0	90.00	359.66	10,475.0	2,916.1	1,009.5	3,032.2	0.00	0.00	0.00
13,800.0	90.00	359.66	10,475.0	3,016.1	1,008.9	3,131.1	0.00	0.00	0.00
13,900.0	90.00	359.66	10,475.0	3,116.1	1,008.3	3,229.9	0.00	0.00	0.00



Planning Report

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Site:	Anderson Fed Com - Pad B	North Reference:	Grid
Well:	Anderson Fed Com 603H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Anderson Fed Com 603H		
Design:	Anderson Fed Com 603H - Prelim 1		

Planned Survey										
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)	
14,000.0	90.00	359.66	10,475.0	3,216.1	1,007.7	3,328.7	0.00	0.00	0.00	
14,100.0	90.00	359.66	10,475.0	3,316.1	1,007.2	3,427.6	0.00	0.00	0.00	
14,200.0	90.00	359.66	10,475.0	3,416.1	1,006.6	3,526.4	0.00	0.00	0.00	
14,300.0	90.00	359.66	10,475.0	3,516.1	1,006.0	3,625.3	0.00	0.00	0.00	
14,400.0	90.00	359.66	10,475.0	3,616.1	1,005.4	3,724.1	0.00	0.00	0.00	
14,500.0	90.00	359.66	10,475.0	3,716.1	1,004.8	3,822.9	0.00	0.00	0.00	
14,600.0	90.00	359.66	10,475.0	3,816.1	1,004.2	3,921.8	0.00	0.00	0.00	
14,700.0	90.00	359.66	10,475.0	3,916.1	1,003.6	4,020.6	0.00	0.00	0.00	
14,800.0	90.00	359.66	10,475.0	4,016.1	1,003.0	4,119.5	0.00	0.00	0.00	
14,900.0	90.00	359.66	10,475.0	4,116.1	1,002.4	4,218.3	0.00	0.00	0.00	
15,000.0	90.00	359.66	10,475.0	4,216.1	1,001.8	4,317.2	0.00	0.00	0.00	
15,100.0	90.00	359.66	10,475.0	4,316.1	1,001.2	4,416.0	0.00	0.00	0.00	
15,200.0	90.00	359.66	10,475.0	4,416.1	1,000.7	4,514.8	0.00	0.00	0.00	
15,300.0	90.00	359.66	10,475.0	4,516.1	1,000.1	4,613.7	0.00	0.00	0.00	
15,400.0	90.00	359.66	10,475.0	4,616.1	999.5	4,712.5	0.00	0.00	0.00	
15,500.0	90.00	359.66	10,475.0	4,716.1	998.9	4,811.4	0.00	0.00	0.00	
15,600.0	90.00	359.66	10,475.0	4,816.1	998.3	4,910.2	0.00	0.00	0.00	
15,700.0	90.00	359.66	10,475.0	4,916.1	997.7	5,009.0	0.00	0.00	0.00	
15,800.0	90.00	359.66	10,475.0	5,016.1	997.1	5,107.9	0.00	0.00	0.00	
15,900.0	90.00	359.66	10,475.0	5,116.1	996.5	5,206.7	0.00	0.00	0.00	
16,000.0	90.00	359.66	10,475.0	5,216.1	995.9	5,305.6	0.00	0.00	0.00	
16,100.0	90.00	359.66	10,475.0	5,316.1	995.3	5,404.4	0.00	0.00	0.00	
16,200.0	90.00	359.66	10,475.0	5,416.1	994.8	5,503.3	0.00	0.00	0.00	
16,300.0	90.00	359.66	10,475.0	5,516.1	994.2	5,602.1	0.00	0.00	0.00	
16,400.0	90.00	359.66	10,475.0	5,616.1	993.6	5,700.9	0.00	0.00	0.00	
16,500.0	90.00	359.66	10,475.0	5,716.1	993.0	5,799.8	0.00	0.00	0.00	
16,600.0	90.00	359.66	10,475.0	5,816.1	992.4	5,898.6	0.00	0.00	0.00	
16,700.0	90.00	359.66	10,475.0	5,916.1	991.8	5,997.5	0.00	0.00	0.00	
16,800.0	90.00	359.66	10,475.0	6,016.1	991.2	6,096.3	0.00	0.00	0.00	
16,900.0	90.00	359.66	10,475.0	6,116.1	990.6	6,195.1	0.00	0.00	0.00	
17,000.0	90.00	359.66	10,475.0	6,216.1	990.0	6,294.0	0.00	0.00	0.00	
17,100.0	90.00	359.66	10,475.0	6,316.1	989.4	6,392.8	0.00	0.00	0.00	
17,200.0	90.00	359.66	10,475.0	6,416.1	988.8	6,491.7	0.00	0.00	0.00	
17,300.0	90.00	359.66	10,475.0	6,516.1	988.3	6,590.5	0.00	0.00	0.00	
17,400.0	90.00	359.66	10,475.0	6,616.1	987.7	6,689.4	0.00	0.00	0.00	
17,476.6	90.00	359.66	10,475.0	6,692.7	987.2	6,765.1	0.00	0.00	0.00	
TD at 17476.6 - Anderson Fed Com 603H BHL										

Design Targets										
Target Name	Dip Angle (°)	Dip Dir. (°)	TVD (usft)	+N/-S (usft)	+E/-W (usft)	Northing (usft)	Easting (usft)	Latitude	Longitude	
- hit/miss target										
- Shape										
Anderson Fed Com 603I - plan hits target center - Point	0.00	0.00	10,475.0	6,692.7	987.2	526,654.68	754,941.97	32° 26' 45.366 N	103° 38' 27.222 W	
Anderson Fed Com 603I - plan hits target center - Point	0.00	0.00	10,475.0	290.8	1,025.0	520,252.78	754,979.77	32° 25' 42.017 N	103° 38' 27.265 W	



Planning Report

Database:	EDM 5000.16 Single User Db	Local Co-ordinate Reference:	Well Anderson Fed Com 603H
Company:	Advance Energy Partners	TVD Reference:	WELL @ 3699.0usft (Original Well Elev)
Project:	Hat Mesa	MD Reference:	WELL @ 3699.0usft (Original Well Elev)
Site:	Anderson Fed Com - Pad B	North Reference:	Grid
Well:	Anderson Fed Com 603H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Anderson Fed Com 603H		
Design:	Anderson Fed Com 603H - Prelim 1		

Casing Points					
Measured Depth (usft)	Vertical Depth (usft)	Name	Casing Diameter (")	Hole Diameter (")	
11,074.6	10,475.0	LP	5-1/2	5-1/2	

Formations					
Measured Depth (usft)	Vertical Depth (usft)	Name	Lithology	Dip (°)	Dip Direction (°)
1,193.0	1,193.0	Rustler		0.00	
4,771.0	4,771.0	Base of Limestone		0.00	
8,429.6	8,419.0	Lower Brushy		0.00	
8,950.6	8,938.0	Avalon		0.00	
9,821.1	9,805.0	1st BS Sand		0.00	
10,728.1	10,403.0	2nd BS Sand		0.00	

Plan Annotations					
Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates			
		+N/-S (usft)	+E/-W (usft)	Comment	
5,300.0	5,300.0	0.0	0.0	KOP - Start Build 1.00	
5,800.0	5,799.4	-6.4	20.9	Start 3979.8 hold at 5800.0 MD	
9,779.8	9,764.0	-107.8	352.6	KOP #2 - Start DLS 12.00 TFO 1.98	
10,194.8	10,112.5	-171.9	542.4	Start DLS 12.00 TFO -101.34	
11,074.6	10,475.0	290.8	1,025.0	LP - Start 6402.0 hold at 11074.6 MD	
17,476.6	10,475.0	6,692.7	987.2	TD at 17476.6	



Advance Energy Partners

Hat Mesa

Anderson Fed Com - Pad B

Anderson Fed Com 603H

Anderson Fed Com 603H

Anderson Fed Com 603H - Prelim 1

Anticollision Report

17 June, 2021



Anticollision Report

Company:	Advance Energy Partners	Local Co-ordinate Reference:	Well Anderson Fed Com 603H
Project:	Hat Mesa	TVD Reference:	WELL @ 3699.0usft (Original Well Elev)
Reference Site:	Anderson Fed Com - Pad B	MD Reference:	WELL @ 3699.0usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	Anderson Fed Com 603H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.79 sigma
Reference Wellbore	Anderson Fed Com 603H	Database:	EDM 5000.16 Single User Db
Reference Design:	Anderson Fed Com 603H - Prelim 1	Offset TVD Reference:	Offset Datum

Reference	Anderson Fed Com 603H - Prelim 1		
Filter type:	NO GLOBAL FILTER: Using user defined selection & filtering criteria		
Interpolation Method:	Stations	Error Model:	ISCWSA
Depth Range:	Unlimited	Scan Method:	Closest Approach 3D
Results Limited by:	Maximum centre distance of 1,000.0usft	Error Surface:	Pedal Curve
Warning Levels Evaluated at:	2.79 Sigma	Casing Method:	Not applied

Survey Tool Program	Date 6/17/2021				
From (usft)	To (usft)	Survey (Wellbore)	Tool Name	Description	
0.0	17,476.1	Anderson Fed Com 603H - Prelim 1 (Ande	MWD+HRGM	OWSG MWD + HRGM	

Summary						
Site Name	Reference Measured Depth (usft)	Offset Measured Depth (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Separation Factor	Warning
Offset Well - Wellbore - Design						
Anderson Fed Com - Pad B						
Anderson Fed Com 503H - Anderson Fed Com 503H - A	5,451.1	5,453.4	126.0	99.0	4.658	CC, ES
Anderson Fed Com 503H - Anderson Fed Com 503H - A	17,476.6	16,893.7	964.0	700.7	3.662	SF
Anderson Fed Com 507H - Anderson Fed Com 507H - A	5,000.0	4,995.5	33.0	6.9	1.264	Level 3, CC, ES, SF
Anderson Fed Com 555H - Anderson Fed Com 555H - A	5,447.7	5,449.1	96.9	69.6	3.554	CC, ES
Anderson Fed Com 555H - Anderson Fed Com 555H - A	5,500.0	5,501.9	97.0	69.6	3.546	SF
Anderson Fed Com 556H - Anderson Fed Com 556H - A	5,300.0	5,299.0	65.4	38.4	2.417	CC, ES, SF
Anderson Fed Com 703H - Anderson Fed Com 703H - A	5,300.0	5,299.0	32.4	5.3	1.197	Level 3, CC, ES, SF

Offset Design:	Anderson Fed Com - Pad B - Anderson Fed Com 503H - Anderson Fed Com 503H - Anderson Fed Com 503H - Prelim 1											Offset Site Error:	0.0 usft
Survey Program:	0-MWD+HRGM											Offset Well Error:	0.0 usft
Reference	Vertical Depth (usft)	Offset	Vertical Depth (usft)	Semi Major Axis Reference	Semi Major Axis Offset	Highside Toolface (°)	Offset Wellbore Centre		Distance		Minimum Separation (usft)	Separation Factor	Warning
Measured Depth (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	-90.69	-1.6	-132.1	132.1				
100.0	100.0	99.0	99.0	0.5	0.5	-90.69	-1.6	-132.1	132.1	131.0	1.06	124.139	
200.0	200.0	199.0	199.0	1.7	1.7	-90.69	-1.6	-132.1	132.1	128.6	3.42	38.657	
300.0	300.0	299.0	299.0	2.4	2.4	-90.69	-1.6	-132.1	132.1	127.2	4.82	27.404	
400.0	400.0	399.0	399.0	3.0	2.9	-90.69	-1.6	-132.1	132.1	126.2	5.91	22.364	
500.0	500.0	499.0	499.0	3.4	3.4	-90.69	-1.6	-132.1	132.1	125.2	6.83	19.342	
600.0	600.0	599.0	599.0	3.8	3.8	-90.69	-1.6	-132.1	132.1	124.4	7.65	17.271	
700.0	700.0	699.0	699.0	4.2	4.2	-90.69	-1.6	-132.1	132.1	123.7	8.39	15.737	
800.0	800.0	799.0	799.0	4.5	4.5	-90.69	-1.6	-132.1	132.1	123.0	9.08	14.541	
900.0	900.0	899.0	899.0	4.9	4.9	-90.69	-1.6	-132.1	132.1	122.3	9.73	13.575	
1,000.0	1,000.0	999.0	999.0	5.2	5.2	-90.69	-1.6	-132.1	132.1	121.7	10.34	12.772	
1,100.0	1,100.0	1,099.0	1,099.0	5.5	5.5	-90.69	-1.6	-132.1	132.1	121.1	10.92	12.092	
1,200.0	1,200.0	1,199.0	1,199.0	5.7	5.7	-90.69	-1.6	-132.1	132.1	120.6	11.48	11.505	
1,300.0	1,300.0	1,299.0	1,299.0	6.0	6.0	-90.69	-1.6	-132.1	132.1	120.1	12.01	10.993	
1,400.0	1,400.0	1,399.0	1,399.0	6.3	6.3	-90.69	-1.6	-132.1	132.1	119.5	12.53	10.540	
1,500.0	1,500.0	1,499.0	1,499.0	6.5	6.5	-90.69	-1.6	-132.1	132.1	119.0	13.03	10.135	
1,600.0	1,600.0	1,599.0	1,599.0	6.8	6.8	-90.69	-1.6	-132.1	132.1	118.5	13.52	9.771	
1,700.0	1,700.0	1,699.0	1,699.0	7.0	7.0	-90.69	-1.6	-132.1	132.1	118.1	13.99	9.441	
1,800.0	1,800.0	1,799.0	1,799.0	7.2	7.2	-90.69	-1.6	-132.1	132.1	117.6	14.45	9.140	
1,900.0	1,900.0	1,899.0	1,899.0	7.5	7.4	-90.69	-1.6	-132.1	132.1	117.2	14.90	8.864	
2,000.0	2,000.0	1,999.0	1,999.0	7.7	7.7	-90.69	-1.6	-132.1	132.1	116.7	15.34	8.610	

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 603H
Project:	Hat Mesa	TVD Reference:	WELL @ 3699.0usft (Original Well Elev)
Reference Site:	Anderson Fed Com - Pad B	MD Reference:	WELL @ 3699.0usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	Anderson Fed Com 603H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.79 sigma
Reference Wellbore	Anderson Fed Com 603H	Database:	EDM 5000.16 Single User Db
Reference Design:	Anderson Fed Com 603H - Prelim 1	Offset TVD Reference:	Offset Datum

Offset Design: Anderson Fed Com - Pad B - Anderson Fed Com 503H - Anderson Fed Com 503H - Anderson Fed Com 503H - Prelim 1													Offset Site Error: 0.0 usft
Survey Program: 0-MWD+HRGM													Offset Well Error: 0.0 usft
Reference		Offset		Semi Major Axis			Offset Wellbore Centre		Distance				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	
2,100.0	2,100.0	2,099.0	2,099.0	7.9	7.9	-90.69	-1.6	-132.1	132.1	116.3	15.77	8.375	
2,200.0	2,200.0	2,199.0	2,199.0	8.1	8.1	-90.69	-1.6	-132.1	132.1	115.9	16.19	8.156	
2,300.0	2,300.0	2,299.0	2,299.0	8.3	8.3	-90.69	-1.6	-132.1	132.1	115.5	16.61	7.952	
2,400.0	2,400.0	2,399.0	2,399.0	8.5	8.5	-90.69	-1.6	-132.1	132.1	115.0	17.01	7.762	
2,500.0	2,500.0	2,499.0	2,499.0	8.7	8.7	-90.69	-1.6	-132.1	132.1	114.6	17.42	7.583	
2,600.0	2,600.0	2,599.0	2,599.0	8.9	8.9	-90.69	-1.6	-132.1	132.1	114.3	17.81	7.415	
2,700.0	2,700.0	2,699.0	2,699.0	9.1	9.1	-90.69	-1.6	-132.1	132.1	113.9	18.20	7.256	
2,800.0	2,800.0	2,799.0	2,799.0	9.3	9.3	-90.69	-1.6	-132.1	132.1	113.5	18.58	7.106	
2,900.0	2,900.0	2,899.0	2,899.0	9.5	9.5	-90.69	-1.6	-132.1	132.1	113.1	18.96	6.964	
3,000.0	3,000.0	2,999.0	2,999.0	9.7	9.7	-90.69	-1.6	-132.1	132.1	112.7	19.34	6.829	
3,100.0	3,100.0	3,099.0	3,099.0	9.9	9.9	-90.69	-1.6	-132.1	132.1	112.4	19.71	6.701	
3,200.0	3,200.0	3,199.0	3,199.0	10.0	10.0	-90.69	-1.6	-132.1	132.1	112.0	20.07	6.579	
3,300.0	3,300.0	3,299.0	3,299.0	10.2	10.2	-90.69	-1.6	-132.1	132.1	111.6	20.44	6.463	
3,400.0	3,400.0	3,399.0	3,399.0	10.4	10.4	-90.69	-1.6	-132.1	132.1	111.3	20.79	6.351	
3,500.0	3,500.0	3,499.0	3,499.0	10.6	10.6	-90.69	-1.6	-132.1	132.1	110.9	21.15	6.245	
3,600.0	3,600.0	3,599.0	3,599.0	10.7	10.7	-90.69	-1.6	-132.1	132.1	110.6	21.50	6.143	
3,700.0	3,700.0	3,699.0	3,699.0	10.9	10.9	-90.69	-1.6	-132.1	132.1	110.2	21.85	6.045	
3,800.0	3,800.0	3,799.0	3,799.0	11.1	11.1	-90.69	-1.6	-132.1	132.1	109.9	22.19	5.952	
3,900.0	3,900.0	3,899.0	3,899.0	11.3	11.3	-90.69	-1.6	-132.1	132.1	109.5	22.53	5.861	
4,000.0	4,000.0	3,999.0	3,999.0	11.4	11.4	-90.69	-1.6	-132.1	132.1	109.2	22.87	5.775	
4,100.0	4,100.0	4,099.0	4,099.0	11.6	11.6	-90.69	-1.6	-132.1	132.1	108.9	23.21	5.691	
4,200.0	4,200.0	4,199.0	4,199.0	11.8	11.8	-90.69	-1.6	-132.1	132.1	108.5	23.54	5.610	
4,300.0	4,300.0	4,299.0	4,299.0	11.9	11.9	-90.69	-1.6	-132.1	132.1	108.2	23.87	5.533	
4,400.0	4,400.0	4,399.0	4,399.0	12.1	12.1	-90.69	-1.6	-132.1	132.1	107.9	24.20	5.458	
4,500.0	4,500.0	4,499.0	4,499.0	12.3	12.3	-90.69	-1.6	-132.1	132.1	107.5	24.52	5.385	
4,600.0	4,600.0	4,599.0	4,599.0	12.4	12.4	-90.69	-1.6	-132.1	132.1	107.2	24.85	5.315	
4,700.0	4,700.0	4,699.0	4,699.0	12.6	12.6	-90.69	-1.6	-132.1	132.1	106.9	25.17	5.247	
4,800.0	4,800.0	4,799.0	4,799.0	12.7	12.7	-90.69	-1.6	-132.1	132.1	106.6	25.49	5.181	
4,900.0	4,900.0	4,899.0	4,899.0	12.9	12.9	-90.69	-1.6	-132.1	132.1	106.3	25.81	5.117	
5,000.0	5,000.0	4,999.0	4,999.0	13.1	13.1	-90.69	-1.6	-132.1	132.1	105.9	26.12	5.055	
5,100.0	5,100.0	5,100.2	5,100.2	13.2	13.2	-91.01	-2.3	-131.6	131.6	105.2	26.37	4.991	
5,200.0	5,200.0	5,201.4	5,201.4	13.4	13.2	-92.00	-4.5	-130.1	130.2	103.6	26.59	4.897	
5,300.0	5,300.0	5,302.5	5,302.3	13.5	13.3	-93.71	-8.3	-127.7	128.0	101.2	26.82	4.773	
5,400.0	5,400.0	5,402.4	5,402.1	13.6	13.4	157.30	-12.8	-124.8	126.3	99.3	26.97	4.682	
5,451.1	5,451.0	5,453.4	5,453.1	13.7	13.5	156.37	-15.1	-123.2	126.0	99.0	27.06	4.658 CC, ES	
5,500.0	5,500.0	5,502.4	5,501.9	13.7	13.5	155.57	-17.4	-121.8	126.2	99.1	27.14	4.651	
5,600.0	5,599.9	5,602.3	5,601.7	13.9	13.7	154.17	-21.9	-118.8	127.9	100.6	27.33	4.679	
5,700.0	5,699.7	5,702.2	5,701.5	14.0	13.8	153.16	-26.5	-115.9	131.2	103.6	27.54	4.763	
5,800.0	5,799.4	5,802.1	5,801.2	14.1	14.0	152.53	-31.0	-112.9	136.1	108.3	27.77	4.899	
5,900.0	5,899.0	5,901.9	5,900.9	14.3	14.2	152.13	-35.5	-110.0	141.7	113.7	28.02	5.058	
6,000.0	5,998.6	6,001.8	6,000.6	14.5	14.4	151.76	-40.1	-107.0	147.4	119.1	28.29	5.210	
6,100.0	6,098.2	6,101.6	6,100.3	14.7	14.6	151.42	-44.6	-104.1	153.1	124.5	28.57	5.358	
6,200.0	6,197.8	6,201.4	6,200.0	14.9	14.8	151.10	-49.2	-101.1	158.7	129.9	28.86	5.500	
6,300.0	6,297.5	6,301.3	6,299.6	15.2	15.1	150.80	-53.7	-98.2	164.4	135.2	29.17	5.636	
6,400.0	6,397.1	6,401.1	6,399.3	15.4	15.3	150.53	-58.3	-95.2	170.1	140.6	29.50	5.767	
6,500.0	6,496.7	6,500.9	6,499.0	15.7	15.6	150.27	-62.8	-92.3	175.8	145.9	29.83	5.892	
6,600.0	6,596.3	6,600.8	6,598.7	16.0	15.9	150.03	-67.3	-89.3	181.5	151.3	30.18	6.013	
6,700.0	6,695.9	6,700.6	6,698.4	16.3	16.2	149.80	-71.9	-86.4	187.2	156.6	30.54	6.128	
6,800.0	6,795.6	6,800.4	6,798.1	16.6	16.5	149.59	-76.4	-83.4	192.9	161.9	30.91	6.238	
6,900.0	6,895.2	6,900.3	6,897.8	16.9	16.8	149.38	-81.0	-80.5	198.6	167.3	31.30	6.344	
7,000.0	6,994.8	7,000.1	6,997.5	17.3	17.1	149.19	-85.5	-77.5	204.3	172.6	31.69	6.445	
7,100.0	7,094.4	7,099.9	7,097.1	17.6	17.4	149.01	-90.1	-74.5	210.0	177.9	32.09	6.542	

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 603H
Project:	Hat Mesa	TVD Reference:	WELL @ 3699.0usft (Original Well Elev)
Reference Site:	Anderson Fed Com - Pad B	MD Reference:	WELL @ 3699.0usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	Anderson Fed Com 603H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.79 sigma
Reference Wellbore	Anderson Fed Com 603H	Database:	EDM 5000.16 Single User Db
Reference Design:	Anderson Fed Com 603H - Prelim 1	Offset TVD Reference:	Offset Datum

Offset Design: Anderson Fed Com - Pad B - Anderson Fed Com 503H - Anderson Fed Com 503H - Anderson Fed Com 503H - Prelim 1													Offset Site Error: 0.0 usft
Survey Program: 0-MWD+HRGM													Offset Well Error: 0.0 usft
Reference	Offset	Rule Assigned:											Warning
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre		Distance		Minimum Separation (usft)	Separation Factor	
							+N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)			
7,200.0	7,194.0	7,199.8	7,196.8	18.0	17.7	148.84	-94.6	-71.6	215.7	183.2	32.50	6.635	
7,300.0	7,293.7	7,299.6	7,296.5	18.3	18.0	148.68	-99.1	-68.6	221.4	188.4	32.92	6.724	
7,400.0	7,393.3	7,399.4	7,396.2	18.7	18.4	148.53	-103.7	-65.7	227.1	193.7	33.35	6.809	
7,500.0	7,492.9	7,499.3	7,495.9	19.1	18.7	148.38	-108.2	-62.7	232.8	199.0	33.79	6.890	
7,600.0	7,592.5	7,599.1	7,595.6	19.5	19.1	148.24	-112.8	-59.8	238.5	204.3	34.23	6.967	
7,700.0	7,692.1	7,698.9	7,695.3	19.9	19.4	148.11	-117.3	-56.8	244.2	209.5	34.68	7.041	
7,800.0	7,791.8	7,798.8	7,795.0	20.3	19.8	147.98	-121.9	-53.9	249.9	214.8	35.14	7.112	
7,900.0	7,891.4	7,898.6	7,894.7	20.7	20.2	147.86	-126.4	-50.9	255.6	220.0	35.60	7.180	
8,000.0	7,991.0	7,998.5	7,994.3	21.1	20.5	147.75	-130.9	-48.0	261.4	225.3	36.07	7.245	
8,100.0	8,090.6	8,098.3	8,094.0	21.5	20.9	147.64	-135.5	-45.0	267.1	230.5	36.55	7.307	
8,200.0	8,190.2	8,198.1	8,193.7	21.9	21.3	147.53	-140.0	-42.1	272.8	235.8	37.03	7.367	
8,300.0	8,289.9	8,298.0	8,293.4	22.4	21.7	147.43	-144.6	-39.1	278.5	241.0	37.52	7.424	
8,400.0	8,389.5	8,397.8	8,393.1	22.8	22.1	147.33	-149.1	-36.2	284.2	246.2	38.01	7.478	
8,500.0	8,489.1	8,497.6	8,492.8	23.2	22.5	147.24	-153.7	-33.2	290.0	251.5	38.50	7.530	
8,600.0	8,588.7	8,597.5	8,592.5	23.7	22.9	147.15	-158.2	-30.3	295.7	256.7	39.01	7.580	
8,700.0	8,688.3	8,697.3	8,692.2	24.1	23.3	147.06	-162.7	-27.3	301.4	261.9	39.51	7.628	
8,800.0	8,787.9	8,797.1	8,791.8	24.6	23.7	146.98	-167.3	-24.3	307.1	267.1	40.02	7.674	
8,900.0	8,887.6	8,897.0	8,891.5	25.0	24.1	146.90	-171.8	-21.4	312.8	272.3	40.53	7.718	
9,000.0	8,987.2	8,996.8	8,991.2	25.5	24.5	146.82	-176.4	-18.4	318.6	277.5	41.05	7.760	
9,100.0	9,086.8	9,096.6	9,090.9	25.9	24.9	146.75	-180.9	-15.5	324.3	282.7	41.57	7.801	
9,200.0	9,186.4	9,196.5	9,190.6	26.4	25.3	146.67	-185.5	-12.5	330.0	287.9	42.10	7.840	
9,300.0	9,286.0	9,296.3	9,290.3	26.9	25.7	146.60	-190.0	-9.6	335.7	293.1	42.62	7.877	
9,400.0	9,385.7	9,396.1	9,390.0	27.3	26.1	146.54	-194.5	-6.6	341.5	298.3	43.15	7.914	
9,500.0	9,485.3	9,494.3	9,488.0	27.8	26.5	146.61	-198.3	-4.2	347.4	303.8	43.69	7.953	
9,600.0	9,584.9	9,592.3	9,586.0	28.3	26.9	146.94	-200.6	-2.7	353.9	309.6	44.30	7.990	
9,700.0	9,684.5	9,690.2	9,683.8	28.8	27.1	147.51	-201.6	-2.1	360.9	316.0	44.94	8.032	
9,779.8	9,764.0	9,786.5	9,780.0	29.1	27.0	148.71	-198.1	-1.6	365.9	320.2	45.65	8.014	
9,800.0	9,784.1	9,814.5	9,807.7	29.2	26.9	148.87	-194.0	-1.0	366.6	320.6	46.00	7.969	
9,825.0	9,808.8	9,847.9	9,840.4	29.4	26.8	149.84	-187.0	0.1	368.0	321.4	46.54	7.906	
9,850.0	9,833.3	9,879.7	9,870.9	29.6	26.7	151.28	-178.2	1.3	370.1	322.9	47.18	7.843	
9,875.0	9,857.4	9,909.5	9,898.9	29.7	26.6	153.00	-168.2	2.8	373.1	325.2	47.88	7.791	
9,900.0	9,881.2	9,937.2	9,924.3	29.9	26.5	154.84	-157.3	4.4	377.2	328.6	48.61	7.759	
9,925.0	9,904.5	9,962.6	9,947.1	30.1	26.4	156.70	-146.1	6.0	382.6	333.3	49.35	7.753	
9,950.0	9,927.4	9,985.8	9,967.3	30.3	26.4	158.51	-134.8	7.6	389.5	339.4	50.06	7.780	
9,975.0	9,949.7	10,006.8	9,985.1	30.4	26.3	160.21	-123.7	9.2	397.9	347.2	50.73	7.843	
10,000.0	9,971.3	10,025.8	10,000.7	30.6	26.3	161.77	-113.1	10.8	407.9	356.6	51.36	7.944	
10,025.0	9,992.3	10,042.7	10,014.3	30.8	26.2	163.17	-103.1	12.2	419.7	367.7	51.92	8.083	
10,050.0	10,012.6	10,057.8	10,026.1	31.0	26.2	164.40	-93.8	13.6	433.0	380.6	52.42	8.260	
10,075.0	10,032.0	10,071.2	10,036.3	31.1	26.1	165.45	-85.2	14.8	447.9	395.0	52.86	8.473	
10,100.0	10,050.6	10,083.1	10,045.2	31.3	26.1	166.32	-77.4	16.0	464.3	411.1	53.25	8.720	
10,125.0	10,068.3	10,093.5	10,052.8	31.5	26.1	167.02	-70.3	17.0	482.1	428.5	53.58	8.997	
10,150.0	10,085.1	10,102.6	10,059.3	31.6	26.0	167.54	-64.1	17.9	501.1	447.2	53.86	9.303	
10,175.0	10,100.8	10,110.4	10,064.8	31.8	26.0	167.86	-58.5	18.7	521.2	467.1	54.11	9.633	
10,194.8	10,112.5	10,115.9	10,068.5	31.9	26.0	167.96	-54.7	19.3	537.9	483.6	54.27	9.911	
10,200.0	10,115.6	10,117.2	10,069.5	31.9	26.0	169.66	-53.7	19.4	542.3	488.0	54.31	9.986	
10,225.0	10,130.1	10,125.0	10,074.8	32.0	26.0	178.09	-48.1	20.2	563.9	509.4	54.49	10.348	
10,250.0	10,144.8	10,131.5	10,079.1	32.1	26.0	-173.73	-43.3	20.9	585.5	530.9	54.62	10.719	
10,275.0	10,159.6	10,139.6	10,084.4	32.2	26.0	-165.57	-37.3	21.8	607.1	552.4	54.75	11.089	
10,300.0	10,174.6	10,150.0	10,091.2	32.4	25.9	-157.55	-29.4	22.9	628.7	573.8	54.88	11.455	
10,325.0	10,189.5	10,157.3	10,095.7	32.5	25.9	-150.31	-23.8	23.7	650.0	595.1	54.95	11.829	
10,350.0	10,204.5	10,166.9	10,101.6	32.6	25.9	-143.39	-16.3	24.8	671.2	616.1	55.04	12.195	
10,375.0	10,219.4	10,175.0	10,106.5	32.7	25.9	-137.07	-9.9	25.8	692.0	636.9	55.09	12.562	

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 603H
Project:	Hat Mesa	TVD Reference:	WELL @ 3699.0usft (Original Well Elev)
Reference Site:	Anderson Fed Com - Pad B	MD Reference:	WELL @ 3699.0usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	Anderson Fed Com 603H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.79 sigma
Reference Wellbore	Anderson Fed Com 603H	Database:	EDM 5000.16 Single User Db
Reference Design:	Anderson Fed Com 603H - Prelim 1	Offset TVD Reference:	Offset Datum

Offset Design: Anderson Fed Com - Pad B - Anderson Fed Com 503H - Anderson Fed Com 503H - Anderson Fed Com 503H - Prelim 1													Offset Site Error:	0.0 usft	
Survey Program: 0-MWD+HRGM				Rule Assigned:										Offset Well Error:	0.0 usft
Reference		Offset		Semi Major Axis			Offset Wellbore Centre		Distance				Warning		
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	+N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor			
10,400.0	10,234.2	10,187.5	10,113.8	32.8	25.9	-131.07	0.2	27.2	712.4	657.3	55.18	12.912			
10,425.0	10,248.9	10,200.0	10,120.9	33.0	25.9	-125.59	10.4	28.7	732.5	677.2	55.25	13.257			
10,450.0	10,263.5	10,210.0	10,126.3	33.1	25.9	-120.65	18.7	29.9	752.0	696.7	55.28	13.603			
10,475.0	10,277.8	10,225.0	10,134.1	33.2	25.8	-116.00	31.4	31.8	771.0	715.7	55.37	13.926			
10,500.0	10,291.9	10,234.1	10,138.6	33.3	25.8	-111.85	39.2	32.9	789.5	734.1	55.37	14.259			
10,525.0	10,305.7	10,250.0	10,146.2	33.4	25.8	-107.93	53.0	34.9	807.3	751.9	55.44	14.561			
10,550.0	10,319.2	10,259.8	10,150.6	33.6	25.8	-104.41	61.6	36.1	824.5	769.0	55.43	14.874			
10,575.0	10,332.3	10,275.0	10,157.1	33.7	25.8	-101.11	75.3	38.1	840.9	785.5	55.48	15.158			
10,600.0	10,345.1	10,286.8	10,161.9	33.8	25.8	-98.10	86.0	39.7	856.7	801.2	55.48	15.442			
10,625.0	10,357.4	10,300.0	10,166.9	34.0	25.8	-95.33	98.0	41.4	871.7	816.2	55.49	15.710			
10,650.0	10,369.3	10,315.2	10,172.2	34.1	25.8	-92.77	112.1	43.5	885.9	830.4	55.52	15.958			
10,675.0	10,380.6	10,329.8	10,176.9	34.3	25.8	-90.42	125.8	45.5	899.3	843.8	55.53	16.195			
10,700.0	10,391.5	10,344.6	10,181.2	34.4	25.9	-88.26	139.8	47.5	911.9	856.4	55.54	16.418			
10,725.0	10,401.8	10,359.7	10,185.2	34.6	25.9	-86.29	154.2	49.6	923.6	868.1	55.56	16.625			
10,750.0	10,411.5	10,375.0	10,188.7	34.8	25.9	-84.48	169.0	51.7	934.5	878.9	55.56	16.818			
10,775.0	10,420.6	10,390.3	10,191.8	34.9	25.9	-82.84	183.8	53.9	944.4	888.8	55.57	16.995			
10,800.0	10,429.0	10,405.9	10,194.4	35.1	26.0	-81.35	199.0	56.1	953.4	897.8	55.57	17.156			
10,825.0	10,436.8	10,425.0	10,197.0	35.3	26.0	-79.97	217.7	58.8	961.5	905.9	55.63	17.285			
10,850.0	10,444.0	10,437.3	10,198.2	35.5	26.0	-78.78	229.9	60.6	968.6	913.0	55.57	17.430			
10,875.0	10,450.4	10,450.0	10,199.1	35.6	26.1	-77.73	242.4	62.4	974.8	919.3	55.52	17.559			
10,900.0	10,456.1	10,468.9	10,199.9	35.8	26.1	-76.75	261.1	65.1	980.0	924.5	55.56	17.639			
10,925.0	10,461.1	10,487.9	10,200.0	36.0	26.2	-75.88	279.9	67.8	984.2	928.6	55.60	17.703			
10,950.0	10,465.3	10,500.0	10,200.0	36.1	26.3	-75.22	291.9	69.5	987.4	931.9	55.52	17.783			
10,975.0	10,468.8	10,525.1	10,200.0	36.3	26.4	-74.61	316.8	72.9	989.5	933.8	55.71	17.761			
11,000.0	10,471.5	10,543.8	10,200.0	36.5	26.5	-74.19	335.2	75.3	990.5	934.8	55.78	17.758			
11,025.0	10,473.4	10,562.5	10,200.0	36.6	26.6	-73.92	353.8	77.6	990.5	934.7	55.85	17.735			
11,050.0	10,474.6	10,581.2	10,200.0	36.8	26.6	-73.78	372.4	79.7	989.4	933.5	55.92	17.692			
11,074.6	10,475.0	10,600.0	10,200.0	36.9	26.7	-73.79	391.1	81.8	987.3	931.3	56.01	17.628			
11,100.0	10,475.0	10,618.5	10,200.0	37.1	26.9	-73.76	409.5	83.7	984.7	928.6	56.13	17.544			
11,200.0	10,475.0	10,700.0	10,200.0	37.7	27.4	-73.64	490.7	90.5	976.0	919.1	56.83	17.172			
11,300.0	10,475.0	10,768.7	10,200.0	38.4	27.9	-73.56	559.3	94.6	969.6	912.2	57.41	16.889			
11,400.0	10,475.0	10,844.2	10,200.0	39.1	28.6	-73.52	634.7	97.1	965.9	907.6	58.29	16.572			
11,500.0	10,475.0	10,920.3	10,200.0	39.9	29.2	-73.50	710.8	97.6	964.7	905.4	59.27	16.275			
11,600.0	10,475.0	11,020.3	10,200.0	40.8	30.1	-73.50	810.8	97.0	964.7	903.7	61.00	15.815			
11,700.0	10,475.0	11,120.3	10,200.0	41.7	31.1	-73.50	910.8	96.4	964.6	901.7	62.91	15.334			
11,800.0	10,475.0	11,220.3	10,200.0	42.7	32.3	-73.50	1,010.8	95.8	964.6	899.6	65.00	14.840			
11,900.0	10,475.0	11,320.3	10,200.0	43.7	33.5	-73.50	1,110.8	95.3	964.6	897.4	67.26	14.343			
12,000.0	10,475.0	11,420.3	10,200.0	44.8	34.8	-73.50	1,210.8	94.7	964.6	895.0	69.65	13.849			
12,100.0	10,475.0	11,520.3	10,200.0	45.9	36.2	-73.50	1,310.8	94.1	964.6	892.4	72.18	13.364			
12,200.0	10,475.0	11,620.3	10,200.0	47.1	37.7	-73.50	1,410.8	93.5	964.6	889.8	74.82	12.892			
12,300.0	10,475.0	11,720.3	10,200.0	48.4	39.2	-73.50	1,510.8	93.0	964.6	887.0	77.57	12.435			
12,400.0	10,475.0	11,820.3	10,200.0	49.7	40.8	-73.50	1,610.8	92.4	964.6	884.2	80.41	11.996			
12,500.0	10,475.0	11,920.3	10,200.0	51.0	42.4	-73.50	1,710.8	91.8	964.6	881.2	83.34	11.574			
12,600.0	10,475.0	12,020.3	10,200.0	52.4	44.1	-73.50	1,810.8	91.2	964.5	878.2	86.34	11.172			
12,700.0	10,475.0	12,120.3	10,200.0	53.8	45.8	-73.50	1,910.8	90.6	964.5	875.1	89.41	10.788			
12,800.0	10,475.0	12,220.3	10,200.0	55.2	47.5	-73.50	2,010.8	90.1	964.5	872.0	92.55	10.422			
12,900.0	10,475.0	12,320.3	10,200.0	56.7	49.2	-73.50	2,110.8	89.5	964.5	868.8	95.74	10.075			
13,000.0	10,475.0	12,420.3	10,200.0	58.2	51.0	-73.50	2,210.8	88.9	964.5	865.5	98.98	9.745			
13,100.0	10,475.0	12,520.3	10,200.0	59.8	52.8	-73.50	2,310.8	88.3	964.5	862.2	102.27	9.431			
13,200.0	10,475.0	12,620.3	10,200.0	61.3	54.6	-73.50	2,410.8	87.7	964.5	858.9	105.59	9.134			
13,300.0	10,475.0	12,720.3	10,200.0	62.9	56.4	-73.50	2,510.8	87.2	964.5	855.5	108.96	8.851			
13,400.0	10,475.0	12,820.3	10,200.0	64.6	58.3	-73.50	2,610.8	86.6	964.5	852.1	112.37	8.583			

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 603H
Project:	Hat Mesa	TVD Reference:	WELL @ 3699.0usft (Original Well Elev)
Reference Site:	Anderson Fed Com - Pad B	MD Reference:	WELL @ 3699.0usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	Anderson Fed Com 603H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.79 sigma
Reference Wellbore	Anderson Fed Com 603H	Database:	EDM 5000.16 Single User Db
Reference Design:	Anderson Fed Com 603H - Prelim 1	Offset TVD Reference:	Offset Datum

Offset Design: Anderson Fed Com - Pad B - Anderson Fed Com 503H - Anderson Fed Com 503H - Anderson Fed Com 503H - Prelim 1													Offset Site Error:	0.0 usft
Survey Program: 0-MWD+HRGM				Rule Assigned:									Offset Well Error:	0.0 usft
Reference		Offset		Semi Major Axis			Offset Wellbore Centre			Distance		Warning		
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	+N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)		Separation Factor	
13,500.0	10,475.0	12,920.3	10,200.0	66.2	60.1	-73.49	2,710.8	86.0	964.4	848.6	115.80	8.329		
13,600.0	10,475.0	13,020.3	10,200.0	67.9	62.0	-73.49	2,810.8	85.4	964.4	845.2	119.26	8.087		
13,700.0	10,475.0	13,120.3	10,200.0	69.5	63.9	-73.49	2,910.8	84.8	964.4	841.7	122.75	7.857		
13,800.0	10,475.0	13,220.3	10,200.0	71.2	65.7	-73.49	3,010.8	84.3	964.4	838.1	126.27	7.638		
13,900.0	10,475.0	13,320.3	10,200.0	72.9	67.6	-73.49	3,110.8	83.7	964.4	834.6	129.81	7.430		
14,000.0	10,475.0	13,420.3	10,200.0	74.7	69.5	-73.49	3,210.8	83.1	964.4	831.0	133.37	7.231		
14,100.0	10,475.0	13,520.3	10,200.0	76.4	71.4	-73.49	3,310.8	82.5	964.4	827.4	136.94	7.042		
14,200.0	10,475.0	13,620.3	10,200.0	78.2	73.3	-73.49	3,410.8	82.0	964.4	823.8	140.54	6.862		
14,300.0	10,475.0	13,720.3	10,200.0	79.9	75.3	-73.49	3,510.8	81.4	964.4	820.2	144.15	6.690		
14,400.0	10,475.0	13,820.3	10,200.0	81.7	77.2	-73.49	3,610.8	80.8	964.3	816.6	147.78	6.526		
14,500.0	10,475.0	13,920.3	10,200.0	83.5	79.1	-73.49	3,710.7	80.2	964.3	812.9	151.42	6.369		
14,600.0	10,475.0	14,020.3	10,200.0	85.3	81.0	-73.49	3,810.7	79.6	964.3	809.3	155.07	6.219		
14,700.0	10,475.0	14,120.3	10,200.0	87.1	83.0	-73.49	3,910.7	79.1	964.3	805.6	158.74	6.075		
14,800.0	10,475.0	14,220.3	10,200.0	88.9	84.9	-73.49	4,010.7	78.5	964.3	801.9	162.42	5.937		
14,900.0	10,475.0	14,320.3	10,200.0	90.8	86.9	-73.49	4,110.7	77.9	964.3	798.2	166.11	5.805		
15,000.0	10,475.0	14,420.3	10,200.0	92.6	88.8	-73.49	4,210.7	77.3	964.3	794.5	169.80	5.679		
15,100.0	10,475.0	14,520.3	10,200.0	94.4	90.8	-73.49	4,310.7	76.7	964.3	790.8	173.51	5.557		
15,200.0	10,475.0	14,620.3	10,200.0	96.3	92.7	-73.49	4,410.7	76.2	964.3	787.0	177.23	5.441		
15,300.0	10,475.0	14,720.3	10,200.0	98.2	94.7	-73.49	4,510.7	75.6	964.2	783.3	180.95	5.329		
15,400.0	10,475.0	14,820.3	10,200.0	100.0	96.6	-73.49	4,610.7	75.0	964.2	779.5	184.69	5.221		
15,500.0	10,475.0	14,920.3	10,200.0	101.9	98.6	-73.49	4,710.7	74.4	964.2	775.8	188.43	5.117		
15,600.0	10,475.0	15,020.3	10,200.0	103.8	100.5	-73.49	4,810.7	73.8	964.2	772.0	192.17	5.017		
15,700.0	10,475.0	15,120.3	10,200.0	105.6	102.5	-73.49	4,910.7	73.3	964.2	768.3	195.93	4.921		
15,800.0	10,475.0	15,220.3	10,200.0	107.5	104.5	-73.49	5,010.7	72.7	964.2	764.5	199.69	4.828		
15,900.0	10,475.0	15,320.3	10,200.0	109.4	106.4	-73.49	5,110.7	72.1	964.2	760.7	203.45	4.739		
16,000.0	10,475.0	15,420.3	10,200.0	111.3	108.4	-73.49	5,210.7	71.5	964.2	756.9	207.22	4.653		
16,100.0	10,475.0	15,520.3	10,200.0	113.2	110.4	-73.49	5,310.7	71.0	964.2	753.2	211.00	4.569		
16,200.0	10,475.0	15,620.3	10,200.0	115.1	112.4	-73.49	5,410.7	70.4	964.1	749.4	214.78	4.489		
16,300.0	10,475.0	15,720.3	10,200.0	117.0	114.3	-73.49	5,510.7	69.8	964.1	745.6	218.57	4.411		
16,400.0	10,475.0	15,820.3	10,200.0	118.9	116.3	-73.49	5,610.7	69.2	964.1	741.8	222.36	4.336		
16,500.0	10,475.0	15,920.3	10,200.0	120.8	118.3	-73.49	5,710.7	68.6	964.1	738.0	226.15	4.263		
16,600.0	10,475.0	16,020.3	10,200.0	122.8	120.3	-73.49	5,810.7	68.1	964.1	734.2	229.95	4.193		
16,700.0	10,475.0	16,120.3	10,200.0	124.7	122.3	-73.49	5,910.7	67.5	964.1	730.3	233.75	4.124		
16,800.0	10,475.0	16,220.3	10,200.0	126.6	124.2	-73.49	6,010.7	66.9	964.1	726.5	237.56	4.058		
16,900.0	10,475.0	16,320.3	10,200.0	128.5	126.2	-73.49	6,110.7	66.3	964.1	722.7	241.37	3.994		
17,000.0	10,475.0	16,420.3	10,200.0	130.5	128.2	-73.49	6,210.7	65.7	964.1	718.9	245.18	3.932		
17,100.0	10,475.0	16,520.3	10,200.0	132.4	130.2	-73.49	6,310.7	65.2	964.0	715.1	248.99	3.872		
17,200.0	10,475.0	16,620.3	10,200.0	134.3	132.2	-73.49	6,410.7	64.6	964.0	711.2	252.81	3.813		
17,300.0	10,475.0	16,720.3	10,200.0	136.3	134.2	-73.49	6,510.7	64.0	964.0	707.4	256.63	3.756		
17,400.0	10,475.0	16,820.3	10,200.0	138.2	136.1	-73.49	6,610.7	63.4	964.0	703.6	260.46	3.701		
17,473.9	10,475.0	16,893.7	10,200.0	139.6	137.6	-73.49	6,684.1	63.0	964.0	700.7	263.27	3.662		
17,476.6	10,475.0	16,893.7	10,200.0	139.7	137.6	-73.49	6,684.1	63.0	964.0	700.7	263.28	3.662 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 603H
Project:	Hat Mesa	TVD Reference:	WELL @ 3699.0usft (Original Well Elev)
Reference Site:	Anderson Fed Com - Pad B	MD Reference:	WELL @ 3699.0usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	Anderson Fed Com 603H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.79 sigma
Reference Wellbore	Anderson Fed Com 603H	Database:	EDM 5000.16 Single User Db
Reference Design:	Anderson Fed Com 603H - Prelim 1	Offset TVD Reference:	Offset Datum

Offset Design: Anderson Fed Com - Pad B - Anderson Fed Com 507H - Anderson Fed Com 507H - Anderson Fed Com 507H - Prelim 1													Offset Site Error: 0.0 usft	
Survey Program: 0-MWD+HRGM				Rule Assigned:									Offset Well Error: 0.0 usft	
Reference		Offset		Semi Major Axis		Highside Toolface (°)	Offset Wellbore Centre		Distance		Minimum Separation (usft)	Separation Factor	Warning	
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)		+N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)				
0.0	0.0	0.0	0.0	0.0	0.0	89.63	0.2	33.0	33.3					
100.0	100.0	95.5	95.5	0.5	0.5	89.63	0.2	33.0	33.0	32.0	1.04	31.719		
200.0	200.0	195.5	195.5	1.7	1.7	89.63	0.2	33.0	33.0	29.6	3.37	9.789		
300.0	300.0	295.5	295.5	2.4	2.4	89.63	0.2	33.0	33.0	28.2	4.79	6.888		
400.0	400.0	395.5	395.5	3.0	2.9	89.63	0.2	33.0	33.0	27.1	5.88	5.610		
500.0	500.0	495.5	495.5	3.4	3.4	89.63	0.2	33.0	33.0	26.2	6.81	4.848		
600.0	600.0	595.5	595.5	3.8	3.8	89.63	0.2	33.0	33.0	25.4	7.63	4.326		
700.0	700.0	695.5	695.5	4.2	4.2	89.63	0.2	33.0	33.0	24.6	8.38	3.941		
800.0	800.0	795.5	795.5	4.5	4.5	89.63	0.2	33.0	33.0	23.9	9.07	3.640		
900.0	900.0	895.5	895.5	4.9	4.9	89.63	0.2	33.0	33.0	23.3	9.72	3.398		
1,000.0	1,000.0	995.5	995.5	5.2	5.2	89.63	0.2	33.0	33.0	22.7	10.33	3.197		
1,100.0	1,100.0	1,095.5	1,095.5	5.5	5.4	89.63	0.2	33.0	33.0	22.1	10.91	3.026		
1,200.0	1,200.0	1,195.5	1,195.5	5.7	5.7	89.63	0.2	33.0	33.0	21.5	11.47	2.879		
1,300.0	1,300.0	1,295.5	1,295.5	6.0	6.0	89.63	0.2	33.0	33.0	21.0	12.00	2.750		
1,400.0	1,400.0	1,395.5	1,395.5	6.3	6.3	89.63	0.2	33.0	33.0	20.5	12.52	2.637		
1,500.0	1,500.0	1,495.5	1,495.5	6.5	6.5	89.63	0.2	33.0	33.0	20.0	13.02	2.536		
1,600.0	1,600.0	1,595.5	1,595.5	6.8	6.7	89.63	0.2	33.0	33.0	19.5	13.51	2.444		
1,700.0	1,700.0	1,695.5	1,695.5	7.0	7.0	89.63	0.2	33.0	33.0	19.0	13.98	2.362		
1,800.0	1,800.0	1,795.5	1,795.5	7.2	7.2	89.63	0.2	33.0	33.0	18.6	14.44	2.286		
1,900.0	1,900.0	1,895.5	1,895.5	7.5	7.4	89.63	0.2	33.0	33.0	18.1	14.89	2.217		
2,000.0	2,000.0	1,995.5	1,995.5	7.7	7.7	89.63	0.2	33.0	33.0	17.7	15.33	2.154		
2,100.0	2,100.0	2,095.5	2,095.5	7.9	7.9	89.63	0.2	33.0	33.0	17.3	15.76	2.095		
2,200.0	2,200.0	2,195.5	2,195.5	8.1	8.1	89.63	0.2	33.0	33.0	16.8	16.18	2.040		
2,300.0	2,300.0	2,295.5	2,295.5	8.3	8.3	89.63	0.2	33.0	33.0	16.4	16.60	1.989		
2,400.0	2,400.0	2,395.5	2,395.5	8.5	8.5	89.63	0.2	33.0	33.0	16.0	17.01	1.941		
2,500.0	2,500.0	2,495.5	2,495.5	8.7	8.7	89.63	0.2	33.0	33.0	15.6	17.41	1.897		
2,600.0	2,600.0	2,595.5	2,595.5	8.9	8.9	89.63	0.2	33.0	33.0	15.2	17.80	1.854		
2,700.0	2,700.0	2,695.5	2,695.5	9.1	9.1	89.63	0.2	33.0	33.0	14.8	18.19	1.815		
2,800.0	2,800.0	2,795.5	2,795.5	9.3	9.3	89.63	0.2	33.0	33.0	14.4	18.58	1.777		
2,900.0	2,900.0	2,895.5	2,895.5	9.5	9.5	89.63	0.2	33.0	33.0	14.1	18.96	1.742		
3,000.0	3,000.0	2,995.5	2,995.5	9.7	9.7	89.63	0.2	33.0	33.0	13.7	19.33	1.708		
3,100.0	3,100.0	3,095.5	3,095.5	9.9	9.8	89.63	0.2	33.0	33.0	13.3	19.70	1.676		
3,200.0	3,200.0	3,195.5	3,195.5	10.0	10.0	89.63	0.2	33.0	33.0	12.9	20.07	1.645		
3,300.0	3,300.0	3,295.5	3,295.5	10.2	10.2	89.63	0.2	33.0	33.0	12.6	20.43	1.616		
3,400.0	3,400.0	3,395.5	3,395.5	10.4	10.4	89.63	0.2	33.0	33.0	12.2	20.79	1.588		
3,500.0	3,500.0	3,495.5	3,495.5	10.6	10.6	89.63	0.2	33.0	33.0	11.9	21.14	1.562		
3,600.0	3,600.0	3,595.5	3,595.5	10.7	10.7	89.63	0.2	33.0	33.0	11.5	21.49	1.536		
3,700.0	3,700.0	3,695.5	3,695.5	10.9	10.9	89.63	0.2	33.0	33.0	11.2	21.84	1.512		
3,800.0	3,800.0	3,795.5	3,795.5	11.1	11.1	89.63	0.2	33.0	33.0	10.8	22.18	1.488 Level 3		
3,900.0	3,900.0	3,895.5	3,895.5	11.3	11.3	89.63	0.2	33.0	33.0	10.5	22.53	1.466 Level 3		
4,000.0	4,000.0	3,995.5	3,995.5	11.4	11.4	89.63	0.2	33.0	33.0	10.2	22.86	1.444 Level 3		
4,100.0	4,100.0	4,095.5	4,095.5	11.6	11.6	89.63	0.2	33.0	33.0	9.8	23.20	1.423 Level 3		
4,200.0	4,200.0	4,195.5	4,195.5	11.8	11.8	89.63	0.2	33.0	33.0	9.5	23.53	1.403 Level 3		
4,300.0	4,300.0	4,295.5	4,295.5	11.9	11.9	89.63	0.2	33.0	33.0	9.2	23.86	1.383 Level 3		
4,400.0	4,400.0	4,395.5	4,395.5	12.1	12.1	89.63	0.2	33.0	33.0	8.8	24.19	1.365 Level 3		
4,500.0	4,500.0	4,495.5	4,495.5	12.3	12.3	89.63	0.2	33.0	33.0	8.5	24.52	1.347 Level 3		
4,600.0	4,600.0	4,595.5	4,595.5	12.4	12.4	89.63	0.2	33.0	33.0	8.2	24.84	1.329 Level 3		
4,700.0	4,700.0	4,695.5	4,695.5	12.6	12.6	89.63	0.2	33.0	33.0	7.9	25.16	1.312 Level 3		
4,800.0	4,800.0	4,795.5	4,795.5	12.7	12.7	89.63	0.2	33.0	33.0	7.5	25.48	1.296 Level 3		
4,900.0	4,900.0	4,895.5	4,895.5	12.9	12.9	89.63	0.2	33.0	33.0	7.2	25.80	1.280 Level 3		
5,000.0	5,000.0	4,995.5	4,995.5	13.1	13.1	89.63	0.2	33.0	33.0	6.9	26.12	1.264 Level 3, CC, ES, SF		
5,100.0	5,100.0	5,095.0	5,095.0	13.2	13.2	90.03	0.0	33.8	33.8	7.4	26.38	1.280 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 603H
Project:	Hat Mesa	TVD Reference:	WELL @ 3699.0usft (Original Well Elev)
Reference Site:	Anderson Fed Com - Pad B	MD Reference:	WELL @ 3699.0usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	Anderson Fed Com 603H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.79 sigma
Reference Wellbore	Anderson Fed Com 603H	Database:	EDM 5000.16 Single User Db
Reference Design:	Anderson Fed Com 603H - Prelim 1	Offset TVD Reference:	Offset Datum

Offset Design: Anderson Fed Com - Pad B - Anderson Fed Com 507H - Anderson Fed Com 507H - Anderson Fed Com 507H - Prelim 1													Offset Site Error: 0.0 usft
Survey Program: 0-MWD+HRGM													Offset Well Error: 0.0 usft
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference	Offset	Highside Toolface (°)	Offset Wellbore Centre		Distance		Minimum Separation (usft)	Separation Factor	Warning
				(usft)	(usft)	(°)	+N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)			
5,200.0	5,200.0	5,194.4	5,194.3	13.4	13.3	91.19	-0.8	36.2	36.2	9.6	26.64	1.359	Level 3
5,300.0	5,300.0	5,293.6	5,293.5	13.5	13.4	92.83	-2.0	40.2	40.3	13.4	26.91	1.498	Level 3
5,400.0	5,400.0	5,392.8	5,392.5	13.6	13.5	-12.59	-3.7	45.9	45.3	18.1	27.14	1.669	
5,500.0	5,500.0	5,491.8	5,491.2	13.7	13.7	-11.32	-6.0	53.2	50.3	22.9	27.38	1.836	
5,600.0	5,599.9	5,590.8	5,589.8	13.9	13.9	-10.29	-8.7	62.1	55.3	27.6	27.66	1.998	
5,700.0	5,699.7	5,690.6	5,689.0	14.0	14.1	-9.53	-11.7	72.1	59.6	31.6	27.99	2.128	
5,800.0	5,799.4	5,790.6	5,788.5	14.1	14.3	-9.13	-14.8	82.1	62.1	33.8	28.36	2.191	
5,900.0	5,899.0	5,890.6	5,887.9	14.3	14.5	-8.88	-17.8	92.1	63.9	35.1	28.78	2.219	
6,000.0	5,998.6	5,990.6	5,987.3	14.5	14.8	-8.64	-20.9	102.1	65.6	36.4	29.22	2.244	
6,100.0	6,098.2	6,090.5	6,086.8	14.7	15.1	-8.42	-24.0	112.1	67.3	37.6	29.71	2.266	
6,200.0	6,197.8	6,190.5	6,186.2	14.9	15.3	-8.21	-27.0	122.1	69.0	38.8	30.22	2.284	
6,300.0	6,297.5	6,290.5	6,285.6	15.2	15.7	-8.01	-30.1	132.1	70.8	40.0	30.77	2.300	
6,400.0	6,397.1	6,390.5	6,385.1	15.4	16.0	-7.81	-33.1	142.1	72.5	41.1	31.35	2.313	
6,500.0	6,496.7	6,490.5	6,484.5	15.7	16.3	-7.63	-36.2	152.0	74.2	42.3	31.96	2.323	
6,600.0	6,596.3	6,590.5	6,583.9	16.0	16.7	-7.46	-39.2	162.0	76.0	43.4	32.59	2.331	
6,700.0	6,695.9	6,690.5	6,683.4	16.3	17.0	-7.29	-42.3	172.0	77.7	44.4	33.24	2.337	
6,800.0	6,795.6	6,790.4	6,782.8	16.6	17.4	-7.13	-45.3	182.0	79.4	45.5	33.93	2.341	
6,900.0	6,895.2	6,890.4	6,882.3	16.9	17.8	-6.98	-48.4	192.0	81.2	46.5	34.63	2.343	
7,000.0	6,994.8	6,990.4	6,981.7	17.3	18.1	-6.83	-51.5	202.0	82.9	47.5	35.35	2.345	
7,100.0	7,094.4	7,090.4	7,081.1	17.6	18.5	-6.69	-54.5	212.0	84.6	48.5	36.10	2.344	
7,200.0	7,194.0	7,190.4	7,180.6	18.0	19.0	-6.56	-57.6	222.0	86.4	49.5	36.86	2.343	
7,300.0	7,293.7	7,290.4	7,280.0	18.3	19.4	-6.43	-60.6	232.0	88.1	50.4	37.64	2.340	
7,400.0	7,393.3	7,390.3	7,379.4	18.7	19.8	-6.30	-63.7	242.0	89.8	51.4	38.43	2.337	
7,500.0	7,492.9	7,490.3	7,478.9	19.1	20.2	-6.18	-66.7	252.0	91.6	52.3	39.24	2.333	
7,600.0	7,592.5	7,590.3	7,578.3	19.5	20.7	-6.07	-69.8	262.0	93.3	53.2	40.07	2.328	
7,700.0	7,692.1	7,690.3	7,677.8	19.9	21.1	-5.95	-72.8	272.0	95.0	54.1	40.91	2.323	
7,800.0	7,791.8	7,790.3	7,777.2	20.3	21.5	-5.85	-75.9	282.0	96.8	55.0	41.76	2.317	
7,900.0	7,891.4	7,890.3	7,876.6	20.7	22.0	-5.74	-79.0	292.0	98.5	55.9	42.63	2.311	
8,000.0	7,991.0	7,990.3	7,976.1	21.1	22.5	-5.64	-82.0	302.0	100.2	56.7	43.50	2.304	
8,100.0	8,090.6	8,090.2	8,075.5	21.5	22.9	-5.55	-85.1	312.0	102.0	57.6	44.39	2.297	
8,200.0	8,190.2	8,190.2	8,174.9	21.9	23.4	-5.45	-88.1	322.0	103.7	58.4	45.28	2.290	
8,300.0	8,289.9	8,290.2	8,274.4	22.4	23.9	-5.36	-91.2	331.9	105.4	59.3	46.19	2.283	
8,400.0	8,389.5	8,390.2	8,373.8	22.8	24.3	-5.28	-94.2	341.9	107.2	60.1	47.10	2.276	
8,500.0	8,489.1	8,490.2	8,473.3	23.2	24.8	-5.19	-97.3	351.9	108.9	60.9	48.03	2.268	
8,600.0	8,588.7	8,590.2	8,572.7	23.7	25.3	-5.11	-100.3	361.9	110.7	61.7	48.96	2.260	
8,700.0	8,688.3	8,690.2	8,672.1	24.1	25.8	-5.03	-103.4	371.9	112.4	62.5	49.89	2.253	
8,800.0	8,787.9	8,790.1	8,771.6	24.6	26.3	-4.95	-106.5	381.9	114.1	63.3	50.84	2.245	
8,900.0	8,887.6	8,890.1	8,871.0	25.0	26.8	-4.88	-109.5	391.9	115.9	64.1	51.79	2.237	
9,000.0	8,987.2	8,990.1	8,970.4	25.5	27.3	-4.81	-112.6	401.9	117.6	64.9	52.75	2.230	
9,100.0	9,086.8	9,090.1	9,069.9	25.9	27.8	-4.74	-115.6	411.9	119.4	65.6	53.71	2.222	
9,200.0	9,186.4	9,190.1	9,169.3	26.4	28.3	-4.67	-118.7	421.9	121.1	66.4	54.69	2.214	
9,300.0	9,286.0	9,275.0	9,253.0	26.9	28.8	-4.34	-122.9	435.1	128.7	73.1	55.57	2.316	
9,400.0	9,385.7	9,350.0	9,323.9	27.3	29.3	-3.52	-130.7	457.9	152.0	95.9	56.11	2.709	
9,500.0	9,485.3	9,416.2	9,382.7	27.8	29.8	-2.66	-140.5	486.6	189.6	133.4	56.25	3.371	
9,600.0	9,584.9	9,475.0	9,431.0	28.3	30.2	-1.92	-151.5	518.3	239.4	183.1	56.22	4.257	
9,700.0	9,684.5	9,525.0	9,468.5	28.8	30.5	-1.36	-162.3	549.4	298.9	242.8	56.11	5.327	
9,779.8	9,764.0	9,563.0	9,494.6	29.1	30.7	-0.99	-171.3	575.5	352.0	295.8	56.13	6.270	
9,800.0	9,784.1	9,571.8	9,500.4	29.2	30.8	-1.44	-173.5	581.8	365.8	309.6	56.12	6.517	
9,825.0	9,808.8	9,594.0	9,514.8	29.4	30.9	-1.65	-178.6	597.9	382.0	325.6	56.48	6.765	
9,850.0	9,833.3	9,617.6	9,530.2	29.6	31.0	-1.92	-182.9	615.2	397.1	340.3	56.86	6.985	
9,875.0	9,857.4	9,642.1	9,546.5	29.7	31.2	-2.32	-186.1	633.3	410.9	353.7	57.25	7.178	
9,900.0	9,881.2	9,667.5	9,563.4	29.9	31.3	-2.88	-188.1	652.2	423.4	365.8	57.64	7.346	

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 603H
Project:	Hat Mesa	TVD Reference:	WELL @ 3699.0usft (Original Well Elev)
Reference Site:	Anderson Fed Com - Pad B	MD Reference:	WELL @ 3699.0usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	Anderson Fed Com 603H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.79 sigma
Reference Wellbore	Anderson Fed Com 603H	Database:	EDM 5000.16 Single User Db
Reference Design:	Anderson Fed Com 603H - Prelim 1	Offset TVD Reference:	Offset Datum

Offset Design: Anderson Fed Com - Pad B - Anderson Fed Com 507H - Anderson Fed Com 507H - Anderson Fed Com 507H - Prelim 1													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)	Distance Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning		
9,925.0	9,904.5	9,693.5	9,580.7	30.1	31.4	-3.57	-188.7	671.5	434.6	376.6	58.04	7.489			
9,950.0	9,927.4	9,719.6	9,598.1	30.3	31.6	-4.41	-188.0	690.9	444.5	386.1	58.41	7.610			
9,975.0	9,949.7	9,745.6	9,615.4	30.4	31.7	-5.37	-185.8	710.2	453.1	394.3	58.76	7.711			
10,000.0	9,971.3	9,771.3	9,632.4	30.6	31.8	-6.45	-182.2	729.2	460.3	401.3	59.06	7.795			
10,025.0	9,992.3	9,796.3	9,648.8	30.8	32.0	-7.62	-177.5	747.4	466.4	407.1	59.32	7.863			
10,050.0	10,012.6	9,820.4	9,664.4	31.0	32.1	-8.88	-171.7	764.9	471.3	411.8	59.51	7.919			
10,075.0	10,032.0	9,843.5	9,679.2	31.1	32.2	-10.19	-165.0	781.3	475.1	415.4	59.65	7.965			
10,100.0	10,050.6	9,865.3	9,693.0	31.3	32.3	-11.55	-157.8	796.6	477.9	418.2	59.72	8.003			
10,125.0	10,068.3	9,885.9	9,705.7	31.5	32.4	-12.93	-150.1	810.8	479.8	420.1	59.73	8.034			
10,150.0	10,085.1	9,905.1	9,717.4	31.6	32.5	-14.33	-142.1	823.8	481.0	421.3	59.66	8.061			
10,175.0	10,100.8	9,923.0	9,728.1	31.8	32.6	-15.72	-134.2	835.7	481.4	421.8	59.54	8.084			
10,194.8	10,112.5	9,936.1	9,735.8	31.9	32.7	-16.82	-127.9	844.3	481.2	421.8	59.40	8.102			
10,200.0	10,115.6	9,939.5	9,737.8	31.9	32.7	-16.65	-126.2	846.4	481.2	421.8	59.35	8.108			
10,211.3	10,122.1	9,946.7	9,741.9	31.9	32.7	-16.30	-122.6	851.1	481.1	421.9	59.25	8.120			
10,225.0	10,130.1	9,955.4	9,746.9	32.0	32.8	-15.86	-118.1	856.6	481.2	422.1	59.12	8.139			
10,250.0	10,144.8	9,971.1	9,755.8	32.1	32.8	-15.04	-109.7	866.5	481.8	422.9	58.88	8.182			
10,275.0	10,159.6	9,986.7	9,764.4	32.2	32.9	-14.20	-100.9	876.0	482.8	424.2	58.65	8.233			
10,300.0	10,174.6	10,000.0	9,771.6	32.4	33.0	-13.19	-93.0	884.0	484.4	426.0	58.39	8.295			
10,325.0	10,189.5	10,017.3	9,780.7	32.5	33.1	-12.48	-82.4	894.1	486.4	428.2	58.19	8.358			
10,350.0	10,204.5	10,032.4	9,788.5	32.6	33.2	-11.62	-72.7	902.7	488.7	430.7	57.97	8.430			
10,375.0	10,219.4	10,050.0	9,797.3	32.7	33.3	-10.95	-61.0	912.5	491.4	433.6	57.79	8.503			
10,400.0	10,234.2	10,062.2	9,803.2	32.8	33.3	-9.92	-52.5	919.0	494.4	436.8	57.60	8.584			
10,425.0	10,248.9	10,075.0	9,809.3	33.0	33.4	-8.97	-43.5	925.7	497.7	440.3	57.42	8.667			
10,450.0	10,263.5	10,091.7	9,816.9	33.1	33.5	-8.30	-31.3	934.2	501.2	443.9	57.29	8.747			
10,475.0	10,277.8	10,106.3	9,823.4	33.2	33.6	-7.54	-20.3	941.3	504.8	447.7	57.17	8.830			
10,500.0	10,291.9	10,120.8	9,829.6	33.3	33.7	-6.81	-9.1	948.2	508.6	451.6	57.07	8.912			
10,525.0	10,305.7	10,135.3	9,835.5	33.4	33.8	-6.12	2.3	954.7	512.5	455.6	56.99	8.993			
10,550.0	10,319.2	10,150.0	9,841.3	33.6	33.8	-5.49	14.2	961.1	516.5	459.6	56.93	9.073			
10,575.0	10,332.3	10,164.0	9,846.6	33.7	33.9	-4.87	25.8	967.0	520.5	463.7	56.88	9.151			
10,600.0	10,345.1	10,175.0	9,850.6	33.8	34.0	-4.16	35.1	971.4	524.6	467.7	56.85	9.228			
10,625.0	10,357.4	10,192.6	9,856.7	34.0	34.1	-3.78	50.1	978.1	528.5	471.7	56.84	9.298			
10,650.0	10,369.3	10,206.8	9,861.3	34.1	34.2	-3.30	62.5	983.2	532.5	475.6	56.84	9.367			
10,675.0	10,380.6	10,225.0	9,866.9	34.3	34.3	-3.01	78.7	989.4	536.3	479.5	56.87	9.431			
10,700.0	10,391.5	10,235.1	9,869.8	34.4	34.4	-2.46	87.9	992.6	540.0	483.1	56.89	9.493			
10,725.0	10,401.8	10,250.0	9,873.9	34.6	34.5	-2.13	101.5	997.0	543.6	486.7	56.93	9.549			
10,750.0	10,411.5	10,263.3	9,877.3	34.8	34.6	-1.78	113.7	1,000.8	547.1	490.1	56.99	9.600			
10,775.0	10,420.6	10,275.0	9,880.1	34.9	34.6	-1.43	124.7	1,003.8	550.3	493.3	57.05	9.646			
10,800.0	10,429.0	10,291.3	9,883.8	35.1	34.7	-1.23	140.2	1,007.8	553.4	496.2	57.13	9.686			
10,825.0	10,436.8	10,305.3	9,886.6	35.3	34.8	-1.00	153.5	1,010.8	556.2	499.0	57.23	9.720			
10,850.0	10,444.0	10,319.3	9,889.1	35.5	34.9	-0.79	167.0	1,013.6	558.9	501.5	57.33	9.747			
10,875.0	10,450.4	10,333.3	9,891.4	35.6	35.0	-0.62	180.6	1,016.1	561.2	503.8	57.45	9.768			
10,900.0	10,456.1	10,350.0	9,893.8	35.8	35.1	-0.51	196.9	1,018.6	563.4	505.8	57.59	9.783			
10,925.0	10,461.1	10,361.2	9,895.2	36.0	35.2	-0.34	207.9	1,020.1	565.2	507.5	57.74	9.789			
10,950.0	10,465.3	10,375.0	9,896.6	36.1	35.3	-0.23	221.5	1,021.7	566.8	508.9	57.91	9.787			
10,975.0	10,468.8	10,389.1	9,897.9	36.3	35.4	-0.15	235.5	1,023.0	568.1	510.0	58.10	9.778			
11,000.0	10,471.5	10,400.0	9,898.6	36.5	35.4	-0.06	246.4	1,023.7	569.2	510.9	58.32	9.759			
11,025.0	10,473.4	10,416.9	9,899.5	36.6	35.5	-0.03	263.2	1,024.6	569.9	511.4	58.55	9.734			
11,050.0	10,474.6	10,430.8	9,899.9	36.8	35.6	-0.01	277.1	1,025.0	570.3	511.5	58.80	9.700			
11,074.6	10,475.0	10,444.5	9,900.0	36.9	35.7	0.00	290.8	1,025.0	570.5	511.4	59.07	9.657			
11,100.0	10,475.0	10,469.9	9,900.0	37.1	35.8	0.00	316.2	1,024.9	570.5	511.2	59.30	9.620			
11,200.0	10,475.0	10,569.9	9,900.0	37.7	36.5	0.00	416.2	1,024.3	570.5	510.3	60.23	9.473			
11,300.0	10,475.0	10,669.9	9,900.0	38.4	37.2	0.00	516.2	1,023.7	570.5	509.3	61.22	9.319			

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 603H
Project:	Hat Mesa	TVD Reference:	WELL @ 3699.0usft (Original Well Elev)
Reference Site:	Anderson Fed Com - Pad B	MD Reference:	WELL @ 3699.0usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	Anderson Fed Com 603H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.79 sigma
Reference Wellbore	Anderson Fed Com 603H	Database:	EDM 5000.16 Single User Db
Reference Design:	Anderson Fed Com 603H - Prelim 1	Offset TVD Reference:	Offset Datum

Offset Design: Anderson Fed Com - Pad B - Anderson Fed Com 507H - Anderson Fed Com 507H - Anderson Fed Com 507H - Prelim 1												Offset Site Error:	0.0 usft
Survey Program: 0-MWD+HRGM												Offset Well Error:	0.0 usft
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference	Offset	Highside Toolface (°)	Offset Wellbore Centre		Distance		Minimum Separation (usft)	Separation Factor	Warning
				(usft)	(usft)		+N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)			
11,400.0	10,475.0	10,769.9	9,900.0	39.1	37.9	0.00	616.2	1,023.1	570.5	508.2	62.27	9.162	
11,500.0	10,475.0	10,869.9	9,900.0	39.9	38.8	0.00	716.2	1,022.5	570.5	507.1	63.38	9.001	
11,600.0	10,475.0	10,969.9	9,900.0	40.8	39.7	0.00	816.2	1,021.9	570.5	506.0	64.55	8.838	
11,700.0	10,475.0	11,069.9	9,900.0	41.7	40.6	0.00	916.1	1,021.3	570.5	504.7	65.77	8.674	
11,800.0	10,475.0	11,169.9	9,900.0	42.7	41.6	0.00	1,016.1	1,020.7	570.5	503.5	67.04	8.510	
11,900.0	10,475.0	11,269.9	9,900.0	43.7	42.7	0.00	1,116.1	1,020.1	570.5	502.1	68.35	8.346	
12,000.0	10,475.0	11,369.9	9,900.0	44.8	43.8	0.00	1,216.1	1,019.5	570.5	500.8	69.71	8.184	
12,100.0	10,475.0	11,469.9	9,900.0	45.9	45.0	0.00	1,316.1	1,018.9	570.5	499.4	71.11	8.023	
12,200.0	10,475.0	11,569.9	9,900.0	47.1	46.2	0.00	1,416.1	1,018.3	570.5	497.9	72.55	7.863	
12,300.0	10,475.0	11,669.9	9,900.0	48.4	47.5	0.00	1,516.1	1,017.7	570.5	496.5	74.03	7.707	
12,400.0	10,475.0	11,769.9	9,900.0	49.7	48.8	0.00	1,616.1	1,017.1	570.5	495.0	75.54	7.552	
12,500.0	10,475.0	11,869.9	9,900.0	51.0	50.2	0.00	1,716.1	1,016.6	570.5	493.4	77.08	7.401	
12,600.0	10,475.0	11,969.9	9,900.0	52.4	51.6	0.00	1,816.1	1,016.0	570.5	491.8	78.66	7.253	
12,700.0	10,475.0	12,069.9	9,900.0	53.8	53.1	0.00	1,916.1	1,015.4	570.5	490.2	80.26	7.108	
12,800.0	10,475.0	12,169.9	9,900.0	55.2	54.5	-0.01	2,016.1	1,014.8	570.5	488.6	81.89	6.967	
12,900.0	10,475.0	12,269.9	9,900.0	56.7	56.0	-0.01	2,116.1	1,014.2	570.5	487.0	83.55	6.829	
13,000.0	10,475.0	12,369.9	9,900.0	58.2	57.6	-0.01	2,216.1	1,013.6	570.5	485.3	85.23	6.694	
13,100.0	10,475.0	12,469.9	9,900.0	59.8	59.1	-0.01	2,316.1	1,013.0	570.5	483.6	86.93	6.563	
13,200.0	10,475.0	12,569.9	9,900.0	61.3	60.7	-0.01	2,416.1	1,012.4	570.5	481.8	88.65	6.435	
13,300.0	10,475.0	12,669.9	9,900.0	62.9	62.4	-0.01	2,516.1	1,011.8	570.5	480.1	90.40	6.311	
13,400.0	10,475.0	12,769.9	9,900.0	64.6	64.0	-0.01	2,616.1	1,011.2	570.5	478.3	92.16	6.190	
13,500.0	10,475.0	12,869.9	9,900.0	66.2	65.6	-0.01	2,716.1	1,010.6	570.5	476.6	93.94	6.073	
13,600.0	10,475.0	12,969.9	9,900.0	67.9	67.3	-0.01	2,816.1	1,010.0	570.5	474.8	95.74	5.959	
13,700.0	10,475.0	13,069.9	9,900.0	69.5	69.0	-0.01	2,916.1	1,009.4	570.5	472.9	97.55	5.848	
13,800.0	10,475.0	13,169.9	9,900.0	71.2	70.7	-0.01	3,016.1	1,008.8	570.5	471.1	99.38	5.741	
13,900.0	10,475.0	13,269.9	9,900.0	72.9	72.5	-0.01	3,116.1	1,008.2	570.5	469.3	101.22	5.636	
14,000.0	10,475.0	13,369.9	9,900.0	74.7	74.2	-0.01	3,216.1	1,007.7	570.5	467.4	103.08	5.535	
14,100.0	10,475.0	13,469.9	9,900.0	76.4	76.0	-0.01	3,316.1	1,007.1	570.5	465.6	104.95	5.436	
14,200.0	10,475.0	13,569.9	9,900.0	78.2	77.7	-0.01	3,416.1	1,006.5	570.5	463.7	106.83	5.340	
14,300.0	10,475.0	13,669.9	9,900.0	79.9	79.5	-0.01	3,516.1	1,005.9	570.5	461.8	108.72	5.247	
14,400.0	10,475.0	13,769.9	9,900.0	81.7	81.3	-0.01	3,616.1	1,005.3	570.5	459.9	110.63	5.157	
14,500.0	10,475.0	13,869.9	9,900.0	83.5	83.1	-0.01	3,716.1	1,004.7	570.5	458.0	112.54	5.069	
14,600.0	10,475.0	13,969.9	9,900.0	85.3	84.9	-0.01	3,816.1	1,004.1	570.5	456.0	114.47	4.984	
14,700.0	10,475.0	14,069.9	9,900.0	87.1	86.7	-0.01	3,916.1	1,003.5	570.5	454.1	116.40	4.901	
14,800.0	10,475.0	14,169.9	9,900.0	88.9	88.6	-0.01	4,016.1	1,002.9	570.5	452.2	118.34	4.821	
14,900.0	10,475.0	14,269.9	9,900.0	90.8	90.4	-0.01	4,116.1	1,002.3	570.5	450.2	120.29	4.743	
15,000.0	10,475.0	14,369.9	9,900.0	92.6	92.3	-0.01	4,216.1	1,001.7	570.5	448.2	122.25	4.667	
15,100.0	10,475.0	14,469.9	9,900.0	94.4	94.1	-0.01	4,316.1	1,001.1	570.5	446.3	124.22	4.593	
15,200.0	10,475.0	14,569.9	9,900.0	96.3	96.0	-0.01	4,416.1	1,000.5	570.5	444.3	126.19	4.521	
15,300.0	10,475.0	14,669.9	9,900.0	98.2	97.8	-0.01	4,516.1	999.9	570.5	442.3	128.17	4.451	
15,400.0	10,475.0	14,769.9	9,900.0	100.0	99.7	-0.01	4,616.1	999.3	570.5	440.3	130.16	4.383	
15,500.0	10,475.0	14,869.9	9,900.0	101.9	101.6	-0.01	4,716.1	998.8	570.5	438.3	132.16	4.317	
15,600.0	10,475.0	14,969.9	9,900.0	103.8	103.5	-0.01	4,816.1	998.2	570.5	436.3	134.16	4.252	
15,700.0	10,475.0	15,069.9	9,900.0	105.6	105.4	-0.01	4,916.1	997.6	570.5	434.3	136.16	4.190	
15,800.0	10,475.0	15,169.9	9,900.0	107.5	107.3	-0.01	5,016.1	997.0	570.5	432.3	138.17	4.129	
15,900.0	10,475.0	15,269.9	9,900.0	109.4	109.2	-0.01	5,116.1	996.4	570.5	430.3	140.19	4.069	
16,000.0	10,475.0	15,369.9	9,900.0	111.3	111.1	-0.01	5,216.1	995.8	570.5	428.3	142.21	4.012	
16,100.0	10,475.0	15,469.9	9,900.0	113.2	113.0	-0.02	5,316.1	995.2	570.5	426.3	144.24	3.955	
16,200.0	10,475.0	15,569.9	9,900.0	115.1	114.9	-0.02	5,416.1	994.6	570.5	424.2	146.27	3.900	
16,300.0	10,475.0	15,669.9	9,900.0	117.0	116.8	-0.02	5,516.1	994.0	570.5	422.2	148.31	3.847	
16,400.0	10,475.0	15,769.9	9,900.0	118.9	118.7	-0.02	5,616.1	993.4	570.5	420.2	150.35	3.795	
16,500.0	10,475.0	15,869.9	9,900.0	120.8	120.6	-0.02	5,716.1	992.8	570.5	418.1	152.39	3.744	

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 603H
Project:	Hat Mesa	TVD Reference:	WELL @ 3699.0usft (Original Well Elev)
Reference Site:	Anderson Fed Com - Pad B	MD Reference:	WELL @ 3699.0usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	Anderson Fed Com 603H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.79 sigma
Reference Wellbore	Anderson Fed Com 603H	Database:	EDM 5000.16 Single User Db
Reference Design:	Anderson Fed Com 603H - Prelim 1	Offset TVD Reference:	Offset Datum

Offset Design: Anderson Fed Com - Pad B - Anderson Fed Com 507H - Anderson Fed Com 507H - Anderson Fed Com 507H - Prelim 1													Offset Site Error: 0.0 usft
Survey Program: 0-MWD+HRGM													Offset Well Error: 0.0 usft
Reference		Offset		Semi Major Axis		Highside Toolface (°)	Offset Wellbore Centre		Rule Assigned:				Warning
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)		+N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	
16,600.0	10,475.0	15,969.9	9,900.0	122.8	122.5	-0.02	5,816.1	992.2	570.5	416.1	154.44	3.694	
16,700.0	10,475.0	16,069.9	9,900.0	124.7	124.5	-0.02	5,916.1	991.6	570.5	414.0	156.49	3.646	
16,800.0	10,475.0	16,169.9	9,900.0	126.6	126.4	-0.02	6,016.1	991.0	570.5	412.0	158.55	3.598	
16,900.0	10,475.0	16,269.9	9,900.0	128.5	128.3	-0.02	6,116.1	990.4	570.5	409.9	160.61	3.552	
17,000.0	10,475.0	16,369.9	9,900.0	130.5	130.3	-0.02	6,216.1	989.9	570.5	407.8	162.67	3.507	
17,100.0	10,475.0	16,469.9	9,900.0	132.4	132.2	-0.02	6,316.1	989.3	570.5	405.8	164.74	3.463	
17,200.0	10,475.0	16,569.9	9,900.0	134.3	134.1	-0.02	6,416.1	988.7	570.5	403.7	166.81	3.420	
17,300.0	10,475.0	16,669.9	9,900.0	136.3	136.1	-0.02	6,516.1	988.1	570.5	401.6	168.88	3.378	
17,400.0	10,475.0	16,769.9	9,900.0	138.2	138.0	-0.02	6,616.0	987.5	570.5	399.5	170.95	3.337	
17,476.6	10,475.0	16,846.5	9,900.0	139.7	139.5	0.00	6,692.7	987.2	570.5	397.9	172.56	3.306	

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 603H
Project:	Hat Mesa	TVD Reference:	WELL @ 3699.0usft (Original Well Elev)
Reference Site:	Anderson Fed Com - Pad B	MD Reference:	WELL @ 3699.0usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	Anderson Fed Com 603H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.79 sigma
Reference Wellbore	Anderson Fed Com 603H	Database:	EDM 5000.16 Single User Db
Reference Design:	Anderson Fed Com 603H - Prelim 1	Offset TVD Reference:	Offset Datum

Offset Design: Anderson Fed Com - Pad B - Anderson Fed Com 555H - Anderson Fed Com 555H - Anderson Fed Com 555H - Prelim 1												Offset Site Error:	0.0 usft
Survey Program: 0-MWD+HRGM												Offset Well Error:	0.0 usft
Reference	Offset	Semi Major Axis		Distance		Rule Assigned:		Warning					
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	+N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	
0.0	0.0	0.0	0.0	0.0	0.0	-90.79	-1.4	-98.1	98.1				
100.0	100.0	99.0	99.0	0.5	0.5	-90.79	-1.4	-98.1	98.1	97.1	1.06	92.235	
200.0	200.0	199.0	199.0	1.7	1.7	-90.79	-1.4	-98.1	98.1	94.7	3.42	28.722	
300.0	300.0	299.0	299.0	2.4	2.4	-90.79	-1.4	-98.1	98.1	93.3	4.82	20.361	
400.0	400.0	399.0	399.0	3.0	2.9	-90.79	-1.4	-98.1	98.1	92.2	5.91	16.616	
500.0	500.0	499.0	499.0	3.4	3.4	-90.79	-1.4	-98.1	98.1	91.3	6.83	14.371	
600.0	600.0	599.0	599.0	3.8	3.8	-90.79	-1.4	-98.1	98.1	90.5	7.65	12.832	
700.0	700.0	699.0	699.0	4.2	4.2	-90.79	-1.4	-98.1	98.1	89.7	8.39	11.692	
800.0	800.0	799.0	799.0	4.5	4.5	-90.79	-1.4	-98.1	98.1	89.0	9.08	10.804	
900.0	900.0	899.0	899.0	4.9	4.9	-90.79	-1.4	-98.1	98.1	88.4	9.73	10.086	
1,000.0	1,000.0	999.0	999.0	5.2	5.2	-90.79	-1.4	-98.1	98.1	87.8	10.34	9.490	
1,100.0	1,100.0	1,099.0	1,099.0	5.5	5.5	-90.79	-1.4	-98.1	98.1	87.2	10.92	8.984	
1,200.0	1,200.0	1,199.0	1,199.0	5.7	5.7	-90.79	-1.4	-98.1	98.1	86.6	11.48	8.549	
1,300.0	1,300.0	1,299.0	1,299.0	6.0	6.0	-90.79	-1.4	-98.1	98.1	86.1	12.01	8.168	
1,400.0	1,400.0	1,399.0	1,399.0	6.3	6.3	-90.79	-1.4	-98.1	98.1	85.6	12.53	7.831	
1,500.0	1,500.0	1,499.0	1,499.0	6.5	6.5	-90.79	-1.4	-98.1	98.1	85.1	13.03	7.530	
1,600.0	1,600.0	1,599.0	1,599.0	6.8	6.8	-90.79	-1.4	-98.1	98.1	84.6	13.52	7.260	
1,700.0	1,700.0	1,699.0	1,699.0	7.0	7.0	-90.79	-1.4	-98.1	98.1	84.1	13.99	7.015	
1,800.0	1,800.0	1,799.0	1,799.0	7.2	7.2	-90.79	-1.4	-98.1	98.1	83.7	14.45	6.791	
1,900.0	1,900.0	1,899.0	1,899.0	7.5	7.4	-90.79	-1.4	-98.1	98.1	83.2	14.90	6.586	
2,000.0	2,000.0	1,999.0	1,999.0	7.7	7.7	-90.79	-1.4	-98.1	98.1	82.8	15.34	6.397	
2,100.0	2,100.0	2,099.0	2,099.0	7.9	7.9	-90.79	-1.4	-98.1	98.1	82.4	15.77	6.223	
2,200.0	2,200.0	2,199.0	2,199.0	8.1	8.1	-90.79	-1.4	-98.1	98.1	81.9	16.19	6.060	
2,300.0	2,300.0	2,299.0	2,299.0	8.3	8.3	-90.79	-1.4	-98.1	98.1	81.5	16.61	5.909	
2,400.0	2,400.0	2,399.0	2,399.0	8.5	8.5	-90.79	-1.4	-98.1	98.1	81.1	17.01	5.767	
2,500.0	2,500.0	2,499.0	2,499.0	8.7	8.7	-90.79	-1.4	-98.1	98.1	80.7	17.42	5.634	
2,600.0	2,600.0	2,599.0	2,599.0	8.9	8.9	-90.79	-1.4	-98.1	98.1	80.3	17.81	5.509	
2,700.0	2,700.0	2,699.0	2,699.0	9.1	9.1	-90.79	-1.4	-98.1	98.1	79.9	18.20	5.391	
2,800.0	2,800.0	2,799.0	2,799.0	9.3	9.3	-90.79	-1.4	-98.1	98.1	79.5	18.58	5.280	
2,900.0	2,900.0	2,899.0	2,899.0	9.5	9.5	-90.79	-1.4	-98.1	98.1	79.2	18.96	5.174	
3,000.0	3,000.0	2,999.0	2,999.0	9.7	9.7	-90.79	-1.4	-98.1	98.1	78.8	19.34	5.074	
3,100.0	3,100.0	3,099.0	3,099.0	9.9	9.9	-90.79	-1.4	-98.1	98.1	78.4	19.71	4.979	
3,200.0	3,200.0	3,199.0	3,199.0	10.0	10.0	-90.79	-1.4	-98.1	98.1	78.1	20.07	4.888	
3,300.0	3,300.0	3,299.0	3,299.0	10.2	10.2	-90.79	-1.4	-98.1	98.1	77.7	20.44	4.802	
3,400.0	3,400.0	3,399.0	3,399.0	10.4	10.4	-90.79	-1.4	-98.1	98.1	77.3	20.79	4.719	
3,500.0	3,500.0	3,499.0	3,499.0	10.6	10.6	-90.79	-1.4	-98.1	98.1	77.0	21.15	4.640	
3,600.0	3,600.0	3,599.0	3,599.0	10.7	10.7	-90.79	-1.4	-98.1	98.1	76.6	21.50	4.564	
3,700.0	3,700.0	3,699.0	3,699.0	10.9	10.9	-90.79	-1.4	-98.1	98.1	76.3	21.85	4.492	
3,800.0	3,800.0	3,799.0	3,799.0	11.1	11.1	-90.79	-1.4	-98.1	98.1	75.9	22.19	4.422	
3,900.0	3,900.0	3,899.0	3,899.0	11.3	11.3	-90.79	-1.4	-98.1	98.1	75.6	22.53	4.355	
4,000.0	4,000.0	3,999.0	3,999.0	11.4	11.4	-90.79	-1.4	-98.1	98.1	75.3	22.87	4.290	
4,100.0	4,100.0	4,099.0	4,099.0	11.6	11.6	-90.79	-1.4	-98.1	98.1	74.9	23.21	4.228	
4,200.0	4,200.0	4,199.0	4,199.0	11.8	11.8	-90.79	-1.4	-98.1	98.1	74.6	23.54	4.169	
4,300.0	4,300.0	4,299.0	4,299.0	11.9	11.9	-90.79	-1.4	-98.1	98.1	74.3	23.87	4.111	
4,400.0	4,400.0	4,399.0	4,399.0	12.1	12.1	-90.79	-1.4	-98.1	98.1	73.9	24.20	4.055	
4,500.0	4,500.0	4,499.0	4,499.0	12.3	12.3	-90.79	-1.4	-98.1	98.1	73.6	24.52	4.001	
4,600.0	4,600.0	4,599.0	4,599.0	12.4	12.4	-90.79	-1.4	-98.1	98.1	73.3	24.85	3.949	
4,700.0	4,700.0	4,699.0	4,699.0	12.6	12.6	-90.79	-1.4	-98.1	98.1	73.0	25.17	3.898	
4,800.0	4,800.0	4,799.0	4,799.0	12.7	12.7	-90.79	-1.4	-98.1	98.1	72.6	25.49	3.849	
4,900.0	4,900.0	4,899.0	4,899.0	12.9	12.9	-90.79	-1.4	-98.1	98.1	72.3	25.81	3.802	
5,000.0	5,000.0	4,999.0	4,999.0	13.1	13.1	-90.79	-1.4	-98.1	98.1	72.0	26.12	3.756	
5,100.0	5,100.0	5,099.0	5,099.0	13.2	13.2	-90.79	-1.4	-98.1	98.1	71.7	26.44	3.711	

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 603H
Project:	Hat Mesa	TVD Reference:	WELL @ 3699.0usft (Original Well Elev)
Reference Site:	Anderson Fed Com - Pad B	MD Reference:	WELL @ 3699.0usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	Anderson Fed Com 603H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.79 sigma
Reference Wellbore	Anderson Fed Com 603H	Database:	EDM 5000.16 Single User Db
Reference Design:	Anderson Fed Com 603H - Prelim 1	Offset TVD Reference:	Offset Datum

Offset Design: Anderson Fed Com - Pad B - Anderson Fed Com 555H - Anderson Fed Com 555H - Anderson Fed Com 555H - Prelim 1													Offset Site Error: 0.0 usft
Survey Program: 0-MWD+HRGM													Offset Well Error: 0.0 usft
Reference		Offset		Semi Major Axis			Offset Wellbore Centre		Distance				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	5,199.0	5,199.0	13.4	13.4	-90.79	-1.4	-98.1	98.1	71.4	26.75	3.668	
5,300.0	5,300.0	5,300.0	5,300.0	13.5	13.5	-91.21	-2.1	-97.6	97.6	70.6	26.99	3.616	
5,400.0	5,400.0	5,401.0	5,400.9	13.6	13.5	160.68	-4.2	-96.0	96.9	69.8	27.17	3.568	
5,447.7	5,447.6	5,449.1	5,449.0	13.7	13.6	159.97	-5.7	-94.9	96.9	69.6	27.25	3.554 CC, ES	
5,500.0	5,500.0	5,501.9	5,501.7	13.7	13.6	159.04	-7.7	-93.3	97.0	69.6	27.34	3.546 SF	
5,600.0	5,599.9	5,601.8	5,601.5	13.9	13.7	157.38	-11.9	-90.2	98.2	70.7	27.53	3.568	
5,700.0	5,699.7	5,701.8	5,701.3	14.0	13.9	156.15	-16.1	-87.0	101.1	73.4	27.74	3.647	
5,800.0	5,799.4	5,801.6	5,801.1	14.1	14.0	155.38	-20.3	-83.9	105.7	77.7	27.96	3.780	
5,900.0	5,899.0	5,901.5	5,900.8	14.3	14.2	154.89	-24.5	-80.7	111.1	82.8	28.21	3.936	
6,000.0	5,998.6	6,001.3	6,000.5	14.5	14.3	154.44	-28.7	-77.6	116.4	87.9	28.48	4.088	
6,100.0	6,098.2	6,101.2	6,100.2	14.7	14.5	154.03	-32.9	-74.4	121.8	93.0	28.77	4.234	
6,200.0	6,197.8	6,201.0	6,199.9	14.9	14.7	153.66	-37.1	-71.3	127.2	98.1	29.07	4.376	
6,300.0	6,297.5	6,300.9	6,299.7	15.2	14.9	153.32	-41.3	-68.1	132.6	103.2	29.39	4.512	
6,400.0	6,397.1	6,400.8	6,399.4	15.4	15.1	153.00	-45.5	-65.0	138.0	108.2	29.72	4.643	
6,500.0	6,496.7	6,500.6	6,499.1	15.7	15.4	152.71	-49.7	-61.8	143.4	113.3	30.06	4.769	
6,600.0	6,596.3	6,600.5	6,598.8	16.0	15.6	152.44	-53.9	-58.7	148.8	118.3	30.42	4.890	
6,700.0	6,695.9	6,700.3	6,698.5	16.3	15.9	152.19	-58.1	-55.5	154.2	123.4	30.80	5.006	
6,800.0	6,795.6	6,800.2	6,798.2	16.6	16.1	151.95	-62.3	-52.4	159.6	128.4	31.18	5.117	
6,900.0	6,895.2	6,900.0	6,897.9	16.9	16.4	151.73	-66.5	-49.2	165.0	133.4	31.58	5.224	
7,000.0	6,994.8	6,999.9	6,997.7	17.3	16.7	151.53	-70.7	-46.1	170.4	138.4	31.99	5.327	
7,100.0	7,094.4	7,099.7	7,097.4	17.6	17.0	151.33	-74.9	-42.9	175.8	143.4	32.40	5.425	
7,200.0	7,194.0	7,199.6	7,197.1	18.0	17.3	151.15	-79.1	-39.8	181.2	148.4	32.83	5.519	
7,300.0	7,293.7	7,299.4	7,296.8	18.3	17.6	150.98	-83.3	-36.6	186.6	153.4	33.27	5.609	
7,400.0	7,393.3	7,399.3	7,396.5	18.7	17.9	150.82	-87.5	-33.5	192.0	158.3	33.72	5.696	
7,500.0	7,492.9	7,499.1	7,496.2	19.1	18.3	150.67	-91.7	-30.3	197.5	163.3	34.17	5.778	
7,600.0	7,592.5	7,599.0	7,595.9	19.5	18.6	150.52	-95.9	-27.2	202.9	168.2	34.64	5.857	
7,700.0	7,692.1	7,698.8	7,695.6	19.9	18.9	150.39	-100.1	-24.0	208.3	173.2	35.11	5.933	
7,800.0	7,791.8	7,798.7	7,795.4	20.3	19.3	150.26	-104.3	-20.9	213.7	178.1	35.59	6.006	
7,900.0	7,891.4	7,898.5	7,895.1	20.7	19.6	150.13	-108.5	-17.7	219.1	183.1	36.07	6.075	
8,000.0	7,991.0	7,998.4	7,994.8	21.1	20.0	150.02	-112.7	-14.6	224.6	188.0	36.56	6.142	
8,100.0	8,090.6	8,098.2	8,094.5	21.5	20.3	149.90	-116.9	-11.4	230.0	192.9	37.06	6.205	
8,200.0	8,190.2	8,198.1	8,194.2	21.9	20.7	149.80	-121.1	-8.3	235.4	197.8	37.57	6.266	
8,300.0	8,289.9	8,297.9	8,293.9	22.4	21.1	149.69	-125.3	-5.1	240.8	202.8	38.08	6.325	
8,400.0	8,389.5	8,397.8	8,393.6	22.8	21.4	149.60	-129.5	-2.0	246.3	207.7	38.59	6.381	
8,500.0	8,489.1	8,497.6	8,493.4	23.2	21.8	149.50	-133.7	1.2	251.7	212.6	39.12	6.434	
8,600.0	8,588.7	8,597.5	8,593.1	23.7	22.2	149.41	-137.9	4.3	257.1	217.5	39.64	6.486	
8,700.0	8,688.3	8,697.3	8,692.8	24.1	22.6	149.33	-142.1	7.5	262.5	222.4	40.17	6.535	
8,800.0	8,787.9	8,797.2	8,792.5	24.6	23.0	149.25	-146.3	10.6	268.0	227.3	40.71	6.582	
8,900.0	8,887.6	8,897.0	8,892.2	25.0	23.4	149.17	-150.5	13.8	273.4	232.2	41.25	6.628	
9,000.0	8,987.2	8,996.9	8,991.9	25.5	23.8	149.09	-154.7	16.9	278.8	237.0	41.80	6.671	
9,100.0	9,086.8	9,096.7	9,091.6	25.9	24.2	149.02	-158.9	20.1	284.3	241.9	42.34	6.713	
9,200.0	9,186.4	9,196.6	9,191.4	26.4	24.6	148.95	-163.1	23.2	289.7	246.8	42.90	6.753	
9,300.0	9,286.0	9,296.5	9,291.1	26.9	25.0	148.88	-167.3	26.4	295.1	251.7	43.45	6.792	
9,400.0	9,385.7	9,396.3	9,390.8	27.3	25.4	148.82	-171.5	29.5	300.6	256.5	44.01	6.829	
9,500.0	9,485.3	9,496.2	9,490.5	27.8	25.8	148.75	-175.7	32.7	306.0	261.4	44.58	6.864	
9,600.0	9,584.9	9,596.0	9,590.2	28.3	26.2	148.69	-179.9	35.8	311.4	266.3	45.14	6.898	
9,700.0	9,684.5	9,695.9	9,689.9	28.8	26.6	148.63	-184.1	39.0	316.9	271.1	45.71	6.931	
9,779.8	9,764.0	9,775.5	9,769.5	29.1	26.9	148.59	-187.5	41.5	321.2	275.0	46.16	6.958	
9,800.0	9,784.1	9,795.7	9,789.6	29.2	27.0	147.88	-188.3	42.1	322.7	276.4	46.29	6.971	
9,825.0	9,808.8	9,820.5	9,814.4	29.4	27.1	147.46	-189.4	42.9	325.4	278.9	46.50	6.999	
9,850.0	9,833.3	9,845.2	9,839.0	29.6	27.2	147.27	-190.4	43.7	329.3	282.6	46.75	7.043	
9,875.0	9,857.4	9,869.6	9,863.4	29.7	27.3	147.20	-191.4	44.4	334.3	287.2	47.05	7.104	

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 603H
Project:	Hat Mesa	TVD Reference:	WELL @ 3699.0usft (Original Well Elev)
Reference Site:	Anderson Fed Com - Pad B	MD Reference:	WELL @ 3699.0usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	Anderson Fed Com 603H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.79 sigma
Reference Wellbore	Anderson Fed Com 603H	Database:	EDM 5000.16 Single User Db
Reference Design:	Anderson Fed Com 603H - Prelim 1	Offset TVD Reference:	Offset Datum

Offset Design: Anderson Fed Com - Pad B - Anderson Fed Com 555H - Anderson Fed Com 555H - Anderson Fed Com 555H - Prelim 1											Offset Site Error:	0.0 usft
Survey Program: 0-MWD+HRGM											Offset Well Error:	0.0 usft
Reference	Offset	Semi Major Axis		Highside		Offset Wellbore Centre		Distance		Minimum	Separation	Warning
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Toolface (°)	+N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Separation (usft)	
9,900.0	9,881.2	9,893.6	9,887.4	29.9	27.4	147.20	-192.4	45.2	340.3	292.9	47.39	7.182
9,925.0	9,904.5	9,917.3	9,911.1	30.1	27.5	147.24	-193.4	45.9	347.4	299.7	47.75	7.277
9,950.0	9,927.4	9,940.6	9,934.3	30.3	27.6	147.31	-194.4	46.7	355.6	307.5	48.13	7.389
9,975.0	9,949.7	9,963.1	9,956.8	30.4	27.7	147.38	-195.4	47.4	364.9	316.4	48.54	7.518
10,000.0	9,971.3	9,984.7	9,978.3	30.6	27.8	147.43	-196.2	48.0	375.3	326.4	48.97	7.664
10,025.0	9,992.3	10,005.5	9,999.1	30.8	27.9	147.46	-197.0	48.6	386.8	337.4	49.42	7.828
10,050.0	10,012.6	10,025.6	10,019.2	31.0	28.0	147.44	-197.6	49.1	399.4	349.5	49.88	8.008
10,075.0	10,032.0	10,044.9	10,038.5	31.1	28.0	147.35	-198.2	49.5	413.1	362.7	50.35	8.205
10,100.0	10,050.6	10,063.3	10,056.9	31.3	28.1	147.18	-198.8	49.9	427.8	377.0	50.81	8.419
10,125.0	10,068.3	10,080.7	10,074.3	31.5	28.2	146.90	-199.2	50.3	443.5	392.2	51.27	8.649
10,150.0	10,085.1	10,097.2	10,090.8	31.6	28.2	146.49	-199.6	50.6	460.1	408.4	51.72	8.896
10,175.0	10,100.8	10,112.7	10,106.3	31.8	28.3	145.91	-199.9	50.8	477.7	425.6	52.16	9.159
10,194.8	10,112.5	10,124.3	10,117.8	31.9	28.3	145.31	-200.1	51.0	492.3	439.8	52.49	9.379
10,200.0	10,115.6	10,127.2	10,120.8	31.9	28.3	146.63	-200.2	51.0	496.2	443.7	52.58	9.438
10,225.0	10,130.1	10,141.4	10,135.0	32.0	28.4	153.03	-200.4	51.2	515.3	462.3	52.94	9.733
10,250.0	10,144.8	10,155.6	10,149.2	32.1	28.4	159.50	-200.7	51.4	534.7	481.4	53.25	10.040
10,275.0	10,159.6	10,169.9	10,163.5	32.2	28.5	165.98	-200.8	51.5	554.3	500.8	53.51	10.359
10,300.0	10,174.6	10,184.2	10,177.8	32.4	28.5	172.40	-201.0	51.6	574.1	520.4	53.72	10.686
10,325.0	10,189.5	10,200.0	10,193.6	32.5	28.6	178.70	-201.1	51.7	594.0	540.1	53.91	11.019
10,350.0	10,204.5	10,212.6	10,206.2	32.6	28.6	-175.16	-201.2	51.8	614.0	559.9	54.02	11.366
10,375.0	10,219.4	10,226.7	10,220.3	32.7	28.6	-169.23	-201.3	51.8	633.9	579.8	54.10	11.717
10,400.0	10,234.2	10,240.7	10,234.2	32.8	28.6	-163.52	-201.3	51.9	653.8	599.6	54.15	12.073
10,425.0	10,248.9	10,254.5	10,248.0	33.0	28.6	-158.08	-201.4	51.9	673.6	619.4	54.17	12.434
10,450.0	10,263.5	10,268.9	10,262.5	33.1	28.7	-152.93	-201.4	51.9	693.2	639.1	54.16	12.800
10,475.0	10,277.8	10,283.2	10,276.8	33.2	28.7	-148.07	-201.4	51.9	712.7	658.6	54.12	13.169
10,500.0	10,291.9	10,297.3	10,290.9	33.3	28.7	-143.49	-201.4	51.9	732.0	677.9	54.05	13.542
10,525.0	10,305.7	10,311.1	10,304.7	33.4	28.7	-139.18	-201.4	51.9	751.0	697.1	53.96	13.917
10,550.0	10,319.2	10,324.6	10,318.2	33.6	28.7	-135.13	-201.4	51.9	769.8	716.0	53.85	14.296
10,575.0	10,332.3	10,337.8	10,331.3	33.7	28.7	-131.32	-201.4	51.9	788.4	734.7	53.72	14.677
10,600.0	10,345.1	10,350.5	10,344.1	33.8	28.7	-127.74	-201.4	51.9	806.7	753.1	53.56	15.061
10,625.0	10,357.4	10,362.8	10,356.4	34.0	28.7	-124.39	-201.4	51.9	824.7	771.3	53.38	15.448
10,650.0	10,369.3	10,378.5	10,372.0	34.1	28.7	-121.50	-201.3	51.9	842.4	789.2	53.21	15.831
10,675.0	10,380.6	10,391.1	10,392.6	34.3	28.6	-119.16	-200.4	52.0	859.7	806.6	53.07	16.200
10,700.0	10,391.5	10,421.6	10,415.1	34.4	28.6	-117.12	-198.5	52.1	876.5	823.6	52.95	16.556
10,725.0	10,401.8	10,446.6	10,439.8	34.6	28.5	-115.38	-195.1	52.4	892.9	840.0	52.85	16.893
10,750.0	10,411.5	10,474.6	10,467.3	34.8	28.4	-113.97	-189.8	52.8	908.7	855.9	52.81	17.207
10,775.0	10,420.6	10,495.6	10,487.6	34.9	28.4	-112.28	-184.6	53.3	923.8	871.1	52.71	17.528
10,800.0	10,429.0	10,543.9	10,533.6	35.1	28.2	-112.17	-169.8	54.5	938.3	885.3	52.95	17.719
10,825.0	10,436.8	10,587.9	10,573.9	35.3	28.1	-111.80	-152.2	56.0	951.8	898.6	53.22	17.886
10,850.0	10,444.0	10,640.6	10,619.8	35.5	27.9	-111.80	-126.4	58.1	964.4	910.7	53.69	17.962
10,875.0	10,450.4	10,704.6	10,671.2	35.6	27.7	-112.09	-88.6	61.2	975.8	921.3	54.47	17.912
10,900.0	10,456.1	10,767.5	10,716.3	35.8	27.5	-112.21	-44.9	64.9	985.5	930.1	55.36	17.802
10,925.0	10,461.1	10,874.8	10,778.9	36.0	27.4	-112.99	41.6	72.0	993.3	935.9	57.35	17.320
10,950.0	10,465.3	10,966.5	10,815.7	36.1	27.3	-112.92	125.2	79.0	998.6	939.5	59.15	16.883
11,074.6	10,475.0	11,200.0	10,840.0	36.9	28.0	-111.53	355.3	97.1	999.6	936.3	63.30	15.791
11,100.0	10,475.0	11,200.0	10,840.0	37.1	28.0	-111.53	355.3	97.1	998.1	935.1	63.04	15.832
11,200.0	10,475.0	11,285.7	10,840.0	37.7	28.4	-111.62	440.9	100.7	993.8	929.5	64.31	15.453
11,300.0	10,475.0	11,361.3	10,840.0	38.4	28.9	-111.65	516.5	101.7	992.0	926.6	65.39	15.171
11,324.9	10,475.0	11,380.4	10,840.0	38.5	29.0	-111.65	535.6	101.6	991.9	926.2	65.67	15.103
11,400.0	10,475.0	11,455.2	10,840.0	39.1	29.5	-111.65	610.4	101.2	991.9	924.9	67.05	14.795
11,500.0	10,475.0	11,555.2	10,840.0	39.9	30.2	-111.65	710.4	100.5	992.0	922.9	69.03	14.369
11,600.0	10,475.0	11,655.2	10,840.0	40.8	31.1	-111.65	810.4	99.9	992.0	920.8	71.18	13.937

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 603H
Project:	Hat Mesa	TVD Reference:	WELL @ 3699.0usft (Original Well Elev)
Reference Site:	Anderson Fed Com - Pad B	MD Reference:	WELL @ 3699.0usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	Anderson Fed Com 603H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.79 sigma
Reference Wellbore	Anderson Fed Com 603H	Database:	EDM 5000.16 Single User Db
Reference Design:	Anderson Fed Com 603H - Prelim 1	Offset TVD Reference:	Offset Datum

Offset Design: Anderson Fed Com - Pad B - Anderson Fed Com 555H - Anderson Fed Com 555H - Anderson Fed Com 555H - Prelim 1													Offset Site Error: 0.0 usft		
Survey Program: 0-MWD+HRGM				Rule Assigned:										Offset Well Error: 0.0 usft	
Reference		Offset		Semi Major Axis			Offset Wellbore Centre			Distance					
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		
11,700.0	10,475.0	11,755.2	10,840.0	41.7	32.1	-111.65	910.4	99.3	992.0	918.6	73.46	13.505			
11,800.0	10,475.0	11,855.2	10,840.0	42.7	33.2	-111.65	1,010.4	98.7	992.1	916.2	75.86	13.077			
11,900.0	10,475.0	11,955.2	10,840.0	43.7	34.3	-111.65	1,110.4	98.0	992.1	913.7	78.38	12.657			
12,000.0	10,475.0	12,055.2	10,840.0	44.8	35.6	-111.65	1,210.3	97.4	992.1	911.1	81.00	12.248			
12,100.0	10,475.0	12,155.2	10,840.0	45.9	37.0	-111.65	1,310.3	96.8	992.2	908.5	83.72	11.851			
12,200.0	10,475.0	12,255.2	10,840.0	47.1	38.4	-111.65	1,410.3	96.1	992.2	905.7	86.52	11.469			
12,300.0	10,475.0	12,355.2	10,840.0	48.4	39.9	-111.65	1,510.3	95.5	992.3	902.9	89.39	11.100			
12,400.0	10,475.0	12,455.2	10,840.0	49.7	41.5	-111.64	1,610.3	94.9	992.3	900.0	92.33	10.747			
12,500.0	10,475.0	12,555.2	10,840.0	51.0	43.1	-111.64	1,710.3	94.3	992.3	897.0	95.34	10.408			
12,600.0	10,475.0	12,655.2	10,840.0	52.4	44.7	-111.64	1,810.3	93.6	992.4	894.0	98.40	10.085			
12,700.0	10,475.0	12,755.2	10,840.0	53.8	46.4	-111.64	1,910.3	93.0	992.4	890.9	101.52	9.776			
12,800.0	10,475.0	12,855.2	10,840.0	55.2	48.1	-111.64	2,010.3	92.4	992.4	887.8	104.68	9.481			
12,900.0	10,475.0	12,955.2	10,840.0	56.7	49.8	-111.64	2,110.3	91.7	992.5	884.6	107.88	9.200			
13,000.0	10,475.0	13,055.2	10,840.0	58.2	51.6	-111.64	2,210.3	91.1	992.5	881.4	111.13	8.931			
13,100.0	10,475.0	13,155.2	10,840.0	59.8	53.3	-111.64	2,310.3	90.5	992.5	878.1	114.41	8.676			
13,200.0	10,475.0	13,255.2	10,840.0	61.3	55.1	-111.64	2,410.3	89.9	992.6	874.9	117.72	8.432			
13,300.0	10,475.0	13,355.2	10,840.0	62.9	56.9	-111.64	2,510.3	89.2	992.6	871.5	121.06	8.199			
13,400.0	10,475.0	13,455.2	10,840.0	64.6	58.8	-111.64	2,610.3	88.6	992.6	868.2	124.43	7.977			
13,500.0	10,475.0	13,555.2	10,840.0	66.2	60.6	-111.64	2,710.3	88.0	992.7	864.8	127.83	7.766			
13,600.0	10,475.0	13,655.2	10,840.0	67.9	62.5	-111.63	2,810.3	87.3	992.7	861.5	131.25	7.564			
13,700.0	10,475.0	13,755.2	10,840.0	69.5	64.3	-111.63	2,910.3	86.7	992.7	858.1	134.69	7.371			
13,800.0	10,475.0	13,855.2	10,840.0	71.2	66.2	-111.63	3,010.3	86.1	992.8	854.6	138.15	7.186			
13,900.0	10,475.0	13,955.2	10,840.0	72.9	68.1	-111.63	3,110.3	85.5	992.8	851.2	141.64	7.010			
14,000.0	10,475.0	14,055.2	10,840.0	74.7	70.0	-111.63	3,210.3	84.8	992.9	847.7	145.13	6.841			
14,100.0	10,475.0	14,155.2	10,840.0	76.4	71.9	-111.63	3,310.3	84.2	992.9	844.2	148.65	6.679			
14,200.0	10,475.0	14,255.2	10,840.0	78.2	73.8	-111.63	3,410.3	83.6	992.9	840.7	152.18	6.525			
14,300.0	10,475.0	14,355.2	10,840.0	79.9	75.7	-111.63	3,510.3	82.9	993.0	837.2	155.73	6.376			
14,400.0	10,475.0	14,455.2	10,840.0	81.7	77.6	-111.63	3,610.3	82.3	993.0	833.7	159.28	6.234			
14,500.0	10,475.0	14,555.2	10,840.0	83.5	79.5	-111.63	3,710.3	81.7	993.0	830.2	162.86	6.098			
14,600.0	10,475.0	14,655.2	10,840.0	85.3	81.4	-111.63	3,810.3	81.1	993.1	826.6	166.44	5.967			
14,700.0	10,475.0	14,755.2	10,840.0	87.1	83.4	-111.63	3,910.3	80.4	993.1	823.1	170.03	5.841			
14,800.0	10,475.0	14,855.2	10,840.0	88.9	85.3	-111.62	4,010.3	79.8	993.1	819.5	173.63	5.720			
14,900.0	10,475.0	14,955.2	10,840.0	90.8	87.2	-111.62	4,110.3	79.2	993.2	815.9	177.25	5.603			
15,000.0	10,475.0	15,055.2	10,840.0	92.6	89.2	-111.62	4,210.3	78.5	993.2	812.3	180.87	5.491			
15,100.0	10,475.0	15,155.2	10,840.0	94.4	91.1	-111.62	4,310.3	77.9	993.2	808.7	184.50	5.383			
15,200.0	10,475.0	15,255.2	10,840.0	96.3	93.1	-111.62	4,410.3	77.3	993.3	805.1	188.14	5.279			
15,300.0	10,475.0	15,355.2	10,840.0	98.2	95.0	-111.62	4,510.3	76.7	993.3	801.5	191.78	5.179			
15,400.0	10,475.0	15,455.2	10,840.0	100.0	97.0	-111.62	4,610.3	76.0	993.3	797.9	195.44	5.083			
15,500.0	10,475.0	15,555.2	10,840.0	101.9	98.9	-111.62	4,710.3	75.4	993.4	794.3	199.10	4.989			
15,600.0	10,475.0	15,655.2	10,840.0	103.8	100.9	-111.62	4,810.3	74.8	993.4	790.7	202.76	4.899			
15,700.0	10,475.0	15,755.2	10,840.0	105.6	102.8	-111.62	4,910.3	74.1	993.5	787.0	206.44	4.812			
15,800.0	10,475.0	15,855.2	10,840.0	107.5	104.8	-111.62	5,010.3	73.5	993.5	783.4	210.12	4.728			
15,900.0	10,475.0	15,955.2	10,840.0	109.4	106.8	-111.62	5,110.3	72.9	993.5	779.7	213.80	4.647			
16,000.0	10,475.0	16,055.2	10,840.0	111.3	108.7	-111.62	5,210.3	72.3	993.6	776.1	217.49	4.568			
16,100.0	10,475.0	16,155.2	10,840.0	113.2	110.7	-111.61	5,310.3	71.6	993.6	772.4	221.18	4.492			
16,200.0	10,475.0	16,255.2	10,840.0	115.1	112.7	-111.61	5,410.3	71.0	993.6	768.7	224.88	4.418			
16,300.0	10,475.0	16,355.2	10,840.0	117.0	114.6	-111.61	5,510.3	70.4	993.7	765.1	228.58	4.347			
16,400.0	10,475.0	16,455.2	10,840.0	118.9	116.6	-111.61	5,610.3	69.8	993.7	761.4	232.29	4.278			
16,500.0	10,475.0	16,555.2	10,840.0	120.8	118.6	-111.61	5,710.3	69.1	993.7	757.7	236.00	4.211			
16,600.0	10,475.0	16,655.2	10,840.0	122.8	120.6	-111.61	5,810.3	68.5	993.8	754.1	239.72	4.146			
16,700.0	10,475.0	16,755.2	10,840.0	124.7	122.6	-111.61	5,910.3	67.9	993.8	750.4	243.44	4.082			
16,800.0	10,475.0	16,855.2	10,840.0	126.6	124.5	-111.61	6,010.3	67.2	993.8	746.7	247.16	4.021			

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 603H
Project:	Hat Mesa	TVD Reference:	WELL @ 3699.0usft (Original Well Elev)
Reference Site:	Anderson Fed Com - Pad B	MD Reference:	WELL @ 3699.0usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	Anderson Fed Com 603H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.79 sigma
Reference Wellbore	Anderson Fed Com 603H	Database:	EDM 5000.16 Single User Db
Reference Design:	Anderson Fed Com 603H - Prelim 1	Offset TVD Reference:	Offset Datum

Offset Design: Anderson Fed Com - Pad B - Anderson Fed Com 555H - Anderson Fed Com 555H - Anderson Fed Com 555H - Prelim 1													Offset Site Error:	0.0 usft
Survey Program: 0-MWD+HRGM													Offset Well Error:	0.0 usft
Reference	Offset	Semi Major Axis		Offset Wellbore Centre		Distance			Rule Assigned:					Warning
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	+N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor		
16,900.0	10,475.0	16,955.2	10,840.0	128.5	126.5	-111.61	6,110.3	66.6	993.9	743.0	250.89	3.961		
17,000.0	10,475.0	17,055.2	10,840.0	130.5	128.5	-111.61	6,210.3	66.0	993.9	739.3	254.61	3.904		
17,100.0	10,475.0	17,155.2	10,840.0	132.4	130.5	-111.61	6,310.2	65.4	993.9	735.6	258.35	3.847		
17,200.0	10,475.0	17,255.2	10,840.0	134.3	132.5	-111.61	6,410.2	64.7	994.0	731.9	262.08	3.793		
17,300.0	10,475.0	17,355.2	10,840.0	136.3	134.4	-111.60	6,510.2	64.1	994.0	728.2	265.82	3.739		
17,400.0	10,475.0	17,455.2	10,840.0	138.2	136.4	-111.60	6,610.2	63.5	994.1	724.5	269.56	3.688		
17,401.7	10,475.0	17,456.9	10,840.0	138.2	136.5	-111.60	6,611.9	63.5	994.1	724.4	269.63	3.687		
17,476.6	10,475.0	17,529.1	10,840.0	139.7	137.9	-111.60	6,684.1	63.0	994.1	721.8	272.31	3.651		

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 603H
Project:	Hat Mesa	TVD Reference:	WELL @ 3699.0usft (Original Well Elev)
Reference Site:	Anderson Fed Com - Pad B	MD Reference:	WELL @ 3699.0usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	Anderson Fed Com 603H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.79 sigma
Reference Wellbore	Anderson Fed Com 603H	Database:	EDM 5000.16 Single User Db
Reference Design:	Anderson Fed Com 603H - Prelim 1	Offset TVD Reference:	Offset Datum

Offset Design: Anderson Fed Com - Pad B - Anderson Fed Com 556H - Anderson Fed Com 556H - Anderson Fed Com 556H - Prelim 1												Offset Site Error:	0.0 usft
Survey Program: 0-MWD+HRGM												Offset Well Error:	0.0 usft
Reference	Offset	Semi Major Axis		Offset Wellbore Centre		Distance		Rule Assigned:		Warning			
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	+N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	
0.0	0.0	0.0	0.0	0.0	0.0	-90.69	-0.8	-65.4	65.4				
100.0	100.0	99.0	99.0	0.5	0.5	-90.69	-0.8	-65.4	65.4	64.4	1.06	61.489	
200.0	200.0	199.0	199.0	1.7	1.7	-90.69	-0.8	-65.4	65.4	62.0	3.42	19.148	
300.0	300.0	299.0	299.0	2.4	2.4	-90.69	-0.8	-65.4	65.4	60.6	4.82	13.574	
400.0	400.0	399.0	399.0	3.0	2.9	-90.69	-0.8	-65.4	65.4	59.5	5.91	11.077	
500.0	500.0	499.0	499.0	3.4	3.4	-90.69	-0.8	-65.4	65.4	58.6	6.83	9.581	
600.0	600.0	599.0	599.0	3.8	3.8	-90.69	-0.8	-65.4	65.4	57.8	7.65	8.555	
700.0	700.0	699.0	699.0	4.2	4.2	-90.69	-0.8	-65.4	65.4	57.0	8.39	7.795	
800.0	800.0	799.0	799.0	4.5	4.5	-90.69	-0.8	-65.4	65.4	56.3	9.08	7.203	
900.0	900.0	899.0	899.0	4.9	4.9	-90.69	-0.8	-65.4	65.4	55.7	9.73	6.724	
1,000.0	1,000.0	999.0	999.0	5.2	5.2	-90.69	-0.8	-65.4	65.4	55.1	10.34	6.327	
1,100.0	1,100.0	1,099.0	1,099.0	5.5	5.5	-90.69	-0.8	-65.4	65.4	54.5	10.92	5.990	
1,200.0	1,200.0	1,199.0	1,199.0	5.7	5.7	-90.69	-0.8	-65.4	65.4	53.9	11.48	5.699	
1,300.0	1,300.0	1,299.0	1,299.0	6.0	6.0	-90.69	-0.8	-65.4	65.4	53.4	12.01	5.445	
1,400.0	1,400.0	1,399.0	1,399.0	6.3	6.3	-90.69	-0.8	-65.4	65.4	52.9	12.53	5.221	
1,500.0	1,500.0	1,499.0	1,499.0	6.5	6.5	-90.69	-0.8	-65.4	65.4	52.4	13.03	5.020	
1,600.0	1,600.0	1,599.0	1,599.0	6.8	6.8	-90.69	-0.8	-65.4	65.4	51.9	13.52	4.840	
1,700.0	1,700.0	1,699.0	1,699.0	7.0	7.0	-90.69	-0.8	-65.4	65.4	51.4	13.99	4.676	
1,800.0	1,800.0	1,799.0	1,799.0	7.2	7.2	-90.69	-0.8	-65.4	65.4	51.0	14.45	4.527	
1,900.0	1,900.0	1,899.0	1,899.0	7.5	7.4	-90.69	-0.8	-65.4	65.4	50.5	14.90	4.391	
2,000.0	2,000.0	1,999.0	1,999.0	7.7	7.7	-90.69	-0.8	-65.4	65.4	50.1	15.34	4.265	
2,100.0	2,100.0	2,099.0	2,099.0	7.9	7.9	-90.69	-0.8	-65.4	65.4	49.6	15.77	4.148	
2,200.0	2,200.0	2,199.0	2,199.0	8.1	8.1	-90.69	-0.8	-65.4	65.4	49.2	16.19	4.040	
2,300.0	2,300.0	2,299.0	2,299.0	8.3	8.3	-90.69	-0.8	-65.4	65.4	48.8	16.61	3.939	
2,400.0	2,400.0	2,399.0	2,399.0	8.5	8.5	-90.69	-0.8	-65.4	65.4	48.4	17.01	3.845	
2,500.0	2,500.0	2,499.0	2,499.0	8.7	8.7	-90.69	-0.8	-65.4	65.4	48.0	17.42	3.756	
2,600.0	2,600.0	2,599.0	2,599.0	8.9	8.9	-90.69	-0.8	-65.4	65.4	47.6	17.81	3.673	
2,700.0	2,700.0	2,699.0	2,699.0	9.1	9.1	-90.69	-0.8	-65.4	65.4	47.2	18.20	3.594	
2,800.0	2,800.0	2,799.0	2,799.0	9.3	9.3	-90.69	-0.8	-65.4	65.4	46.8	18.58	3.520	
2,900.0	2,900.0	2,899.0	2,899.0	9.5	9.5	-90.69	-0.8	-65.4	65.4	46.5	18.96	3.449	
3,000.0	3,000.0	2,999.0	2,999.0	9.7	9.7	-90.69	-0.8	-65.4	65.4	46.1	19.34	3.383	
3,100.0	3,100.0	3,099.0	3,099.0	9.9	9.9	-90.69	-0.8	-65.4	65.4	45.7	19.71	3.319	
3,200.0	3,200.0	3,199.0	3,199.0	10.0	10.0	-90.69	-0.8	-65.4	65.4	45.3	20.07	3.259	
3,300.0	3,300.0	3,299.0	3,299.0	10.2	10.2	-90.69	-0.8	-65.4	65.4	45.0	20.44	3.201	
3,400.0	3,400.0	3,399.0	3,399.0	10.4	10.4	-90.69	-0.8	-65.4	65.4	44.6	20.79	3.146	
3,500.0	3,500.0	3,499.0	3,499.0	10.6	10.6	-90.69	-0.8	-65.4	65.4	44.3	21.15	3.093	
3,600.0	3,600.0	3,599.0	3,599.0	10.7	10.7	-90.69	-0.8	-65.4	65.4	43.9	21.50	3.043	
3,700.0	3,700.0	3,699.0	3,699.0	10.9	10.9	-90.69	-0.8	-65.4	65.4	43.6	21.85	2.994	
3,800.0	3,800.0	3,799.0	3,799.0	11.1	11.1	-90.69	-0.8	-65.4	65.4	43.2	22.19	2.948	
3,900.0	3,900.0	3,899.0	3,899.0	11.3	11.3	-90.69	-0.8	-65.4	65.4	42.9	22.53	2.903	
4,000.0	4,000.0	3,999.0	3,999.0	11.4	11.4	-90.69	-0.8	-65.4	65.4	42.5	22.87	2.860	
4,100.0	4,100.0	4,099.0	4,099.0	11.6	11.6	-90.69	-0.8	-65.4	65.4	42.2	23.21	2.819	
4,200.0	4,200.0	4,199.0	4,199.0	11.8	11.8	-90.69	-0.8	-65.4	65.4	41.9	23.54	2.779	
4,300.0	4,300.0	4,299.0	4,299.0	11.9	11.9	-90.69	-0.8	-65.4	65.4	41.5	23.87	2.740	
4,400.0	4,400.0	4,399.0	4,399.0	12.1	12.1	-90.69	-0.8	-65.4	65.4	41.2	24.20	2.703	
4,500.0	4,500.0	4,499.0	4,499.0	12.3	12.3	-90.69	-0.8	-65.4	65.4	40.9	24.52	2.667	
4,600.0	4,600.0	4,599.0	4,599.0	12.4	12.4	-90.69	-0.8	-65.4	65.4	40.6	24.85	2.633	
4,700.0	4,700.0	4,699.0	4,699.0	12.6	12.6	-90.69	-0.8	-65.4	65.4	40.2	25.17	2.599	
4,800.0	4,800.0	4,799.0	4,799.0	12.7	12.7	-90.69	-0.8	-65.4	65.4	39.9	25.49	2.566	
4,900.0	4,900.0	4,899.0	4,899.0	12.9	12.9	-90.69	-0.8	-65.4	65.4	39.6	25.81	2.535	
5,000.0	5,000.0	4,999.0	4,999.0	13.1	13.1	-90.69	-0.8	-65.4	65.4	39.3	26.12	2.504	
5,100.0	5,100.0	5,099.0	5,099.0	13.2	13.2	-90.69	-0.8	-65.4	65.4	39.0	26.44	2.474	

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 603H
Project:	Hat Mesa	TVD Reference:	WELL @ 3699.0usft (Original Well Elev)
Reference Site:	Anderson Fed Com - Pad B	MD Reference:	WELL @ 3699.0usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	Anderson Fed Com 603H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.79 sigma
Reference Wellbore	Anderson Fed Com 603H	Database:	EDM 5000.16 Single User Db
Reference Design:	Anderson Fed Com 603H - Prelim 1	Offset TVD Reference:	Offset Datum

Offset Design: Anderson Fed Com - Pad B - Anderson Fed Com 556H - Anderson Fed Com 556H - Anderson Fed Com 556H - Prelim 1												Offset Site Error:	0.0 usft
Survey Program: 0-MWD+HRGM												Offset Well Error:	0.0 usft
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference	Offset	Highside Toolface (°)	Offset Wellbore Centre		Distance		Minimum Separation (usft)	Separation Factor	Warning
				(usft)	(usft)	(°)	+N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)			
5,200.0	5,200.0	5,199.0	5,199.0	13.4	13.4	-90.69	-0.8	-65.4	65.4	38.7	26.75	2.445	
5,300.0	5,300.0	5,299.0	5,299.0	13.5	13.5	-90.69	-0.8	-65.4	65.4	38.4	27.06	2.417	CC, ES, SF
5,400.0	5,400.0	5,399.0	5,399.0	13.6	13.7	162.54	-0.8	-65.4	66.2	38.9	27.32	2.425	
5,500.0	5,500.0	5,499.8	5,499.8	13.7	13.8	162.67	-1.4	-64.8	68.1	40.6	27.51	2.477	
5,600.0	5,599.9	5,600.6	5,600.6	13.9	13.9	162.18	-3.3	-63.0	70.5	42.8	27.69	2.545	
5,700.0	5,699.7	5,701.4	5,701.3	14.0	13.9	161.14	-6.5	-59.9	73.3	45.4	27.90	2.628	
5,800.0	5,799.4	5,801.8	5,801.5	14.1	14.0	159.72	-10.8	-55.7	76.7	48.7	28.07	2.733	
5,900.0	5,899.0	5,901.8	5,901.2	14.3	14.1	158.50	-15.3	-51.3	80.8	52.5	28.32	2.854	
6,000.0	5,998.6	6,001.7	6,000.9	14.5	14.3	157.40	-19.7	-46.9	84.9	56.3	28.59	2.970	
6,100.0	6,098.2	6,101.6	6,100.6	14.7	14.4	156.40	-24.2	-42.5	89.1	60.2	28.88	3.083	
6,200.0	6,197.8	6,201.5	6,200.4	14.9	14.6	155.49	-28.7	-38.2	93.2	64.0	29.19	3.193	
6,300.0	6,297.5	6,301.4	6,300.1	15.2	14.8	154.66	-33.2	-33.8	97.4	67.9	29.52	3.300	
6,400.0	6,397.1	6,401.3	6,399.8	15.4	15.0	153.90	-37.7	-29.4	101.6	71.7	29.86	3.403	
6,500.0	6,496.7	6,501.2	6,499.5	15.7	15.2	153.20	-42.2	-25.0	105.8	75.6	30.22	3.502	
6,600.0	6,596.3	6,601.1	6,599.2	16.0	15.5	152.55	-46.7	-20.7	110.1	79.5	30.58	3.599	
6,700.0	6,695.9	6,701.0	6,698.9	16.3	15.7	151.95	-51.2	-16.3	114.3	83.4	30.96	3.692	
6,800.0	6,795.6	6,800.9	6,798.6	16.6	16.0	151.39	-55.7	-11.9	118.6	87.2	31.35	3.782	
6,900.0	6,895.2	6,900.8	6,898.3	16.9	16.2	150.88	-60.2	-7.5	122.8	91.1	31.76	3.869	
7,000.0	6,994.8	7,000.7	6,998.0	17.3	16.5	150.39	-64.7	-3.1	127.1	95.0	32.17	3.952	
7,100.0	7,094.4	7,100.6	7,097.7	17.6	16.8	149.94	-69.1	1.2	131.4	98.8	32.59	4.033	
7,200.0	7,194.0	7,200.5	7,197.4	18.0	17.1	149.52	-73.6	5.6	135.7	102.7	33.02	4.111	
7,300.0	7,293.7	7,300.4	7,297.1	18.3	17.4	149.12	-78.1	10.0	140.0	106.6	33.45	4.185	
7,400.0	7,393.3	7,400.3	7,396.8	18.7	17.7	148.75	-82.6	14.4	144.3	110.4	33.90	4.258	
7,500.0	7,492.9	7,500.2	7,496.5	19.1	18.0	148.40	-87.1	18.8	148.6	114.3	34.35	4.327	
7,600.0	7,592.5	7,600.1	7,596.2	19.5	18.4	148.06	-91.6	23.1	153.0	118.2	34.81	4.394	
7,700.0	7,692.1	7,700.0	7,695.9	19.9	18.7	147.75	-96.1	27.5	157.3	122.0	35.28	4.458	
7,800.0	7,791.8	7,799.9	7,795.6	20.3	19.1	147.45	-100.6	31.9	161.6	125.9	35.75	4.521	
7,900.0	7,891.4	7,899.8	7,895.3	20.7	19.4	147.17	-105.1	36.3	166.0	129.7	36.23	4.580	
8,000.0	7,991.0	7,999.7	7,995.1	21.1	19.8	146.90	-109.6	40.7	170.3	133.6	36.72	4.638	
8,100.0	8,090.6	8,099.6	8,094.8	21.5	20.1	146.65	-114.1	45.0	174.6	137.4	37.21	4.694	
8,200.0	8,190.2	8,199.5	8,194.5	21.9	20.5	146.41	-118.6	49.4	179.0	141.3	37.70	4.747	
8,300.0	8,289.9	8,299.4	8,294.2	22.4	20.9	146.18	-123.0	53.8	183.3	145.1	38.20	4.799	
8,400.0	8,389.5	8,399.3	8,393.9	22.8	21.3	145.96	-127.5	58.2	187.7	149.0	38.71	4.848	
8,500.0	8,489.1	8,499.2	8,493.6	23.2	21.7	145.75	-132.0	62.6	192.0	152.8	39.22	4.896	
8,600.0	8,588.7	8,599.1	8,593.3	23.7	22.1	145.55	-136.5	66.9	196.4	156.7	39.73	4.943	
8,700.0	8,688.3	8,699.0	8,693.0	24.1	22.5	145.36	-141.0	71.3	200.7	160.5	40.25	4.987	
8,800.0	8,787.9	8,798.9	8,792.7	24.6	22.9	145.18	-145.5	75.7	205.1	164.3	40.77	5.030	
8,900.0	8,887.6	8,898.8	8,892.4	25.0	23.3	145.00	-150.0	80.1	209.5	168.2	41.30	5.072	
9,000.0	8,987.2	8,998.7	8,992.1	25.5	23.7	144.83	-154.5	84.4	213.8	172.0	41.83	5.112	
9,100.0	9,086.8	9,098.6	9,091.8	25.9	24.1	144.67	-159.0	88.8	218.2	175.8	42.36	5.151	
9,200.0	9,186.4	9,198.5	9,191.5	26.4	24.5	144.51	-163.5	93.2	222.6	179.7	42.90	5.188	
9,300.0	9,286.0	9,298.4	9,291.2	26.9	24.9	144.36	-168.0	97.6	226.9	183.5	43.44	5.224	
9,400.0	9,385.7	9,398.3	9,390.9	27.3	25.3	144.22	-172.5	102.0	231.3	187.3	43.98	5.259	
9,500.0	9,485.3	9,498.3	9,490.6	27.8	25.8	144.08	-176.9	106.3	235.7	191.1	44.53	5.293	
9,600.0	9,584.9	9,598.2	9,590.3	28.3	26.2	143.95	-181.4	110.7	240.0	195.0	45.08	5.325	
9,700.0	9,684.5	9,698.1	9,690.1	28.8	26.6	143.82	-185.9	115.1	244.4	198.8	45.63	5.357	
9,779.8	9,764.0	9,777.8	9,769.6	29.1	27.0	143.72	-189.5	118.6	247.9	201.9	46.06	5.382	
9,800.0	9,784.1	9,797.9	9,789.7	29.2	27.1	143.02	-190.4	119.5	249.1	202.9	46.19	5.394	
9,825.0	9,808.8	9,822.8	9,814.5	29.4	27.2	142.67	-191.5	120.6	251.6	205.2	46.41	5.421	
9,850.0	9,833.3	9,847.5	9,839.2	29.6	27.3	142.59	-192.6	121.7	255.0	208.3	46.69	5.462	
9,875.0	9,857.4	9,871.5	9,863.2	29.7	27.4	142.67	-193.7	122.7	259.6	212.5	47.03	5.519	
9,900.0	9,881.2	9,895.2	9,886.8	29.9	27.4	142.88	-194.7	123.6	265.2	217.7	47.43	5.590	

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 603H
Project:	Hat Mesa	TVD Reference:	WELL @ 3699.0usft (Original Well Elev)
Reference Site:	Anderson Fed Com - Pad B	MD Reference:	WELL @ 3699.0usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	Anderson Fed Com 603H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.79 sigma
Reference Wellbore	Anderson Fed Com 603H	Database:	EDM 5000.16 Single User Db
Reference Design:	Anderson Fed Com 603H - Prelim 1	Offset TVD Reference:	Offset Datum

Offset Design: Anderson Fed Com - Pad B - Anderson Fed Com 556H - Anderson Fed Com 556H - Anderson Fed Com 556H - Prelim 1													Offset Site Error: 0.0 usft
Survey Program: 0-MWD+HRGM													Offset Well Error: 0.0 usft
Reference		Offset		Semi Major Axis			Offset Wellbore Centre		Distance				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	
9,925.0	9,904.5	9,918.4	9,910.0	30.1	27.5	143.17	-195.5	124.5	271.9	224.0	47.89	5.677	
9,950.0	9,927.4	9,941.1	9,932.7	30.3	27.6	143.52	-196.3	125.2	279.7	231.3	48.39	5.780	
9,975.0	9,949.7	9,963.3	9,954.8	30.4	27.7	143.90	-197.0	125.9	288.6	239.7	48.92	5.900	
10,000.0	9,971.3	9,984.8	9,976.4	30.6	27.8	144.28	-197.7	126.5	298.7	249.2	49.49	6.036	
10,025.0	9,992.3	10,005.7	9,997.2	30.8	27.9	144.62	-198.2	127.1	309.9	259.8	50.06	6.190	
10,050.0	10,012.6	10,025.7	10,017.2	31.0	28.0	144.92	-198.7	127.6	322.2	271.6	50.64	6.362	
10,075.0	10,032.0	10,045.0	10,036.5	31.1	28.0	145.14	-199.1	128.0	335.6	284.4	51.22	6.552	
10,100.0	10,050.6	10,063.3	10,054.8	31.3	28.1	145.26	-199.5	128.3	350.1	298.3	51.79	6.760	
10,125.0	10,068.3	10,080.8	10,072.2	31.5	28.2	145.25	-199.8	128.6	365.7	313.3	52.35	6.985	
10,150.0	10,085.1	10,097.2	10,088.7	31.6	28.2	145.09	-200.0	128.8	382.2	329.3	52.89	7.227	
10,175.0	10,100.8	10,112.6	10,104.1	31.8	28.3	144.74	-200.2	129.0	399.8	346.4	53.39	7.488	
10,194.8	10,112.5	10,124.0	10,115.5	31.9	28.3	144.32	-200.3	129.2	414.3	360.5	53.76	7.706	
10,200.0	10,115.6	10,127.0	10,118.4	31.9	28.3	145.69	-200.4	129.2	418.2	364.3	53.86	7.765	
10,225.0	10,130.1	10,141.1	10,132.5	32.0	28.3	152.28	-200.5	129.3	437.2	383.0	54.26	8.058	
10,250.0	10,144.8	10,155.2	10,146.7	32.1	28.3	158.92	-200.6	129.4	456.6	402.0	54.59	8.365	
10,275.0	10,159.6	10,169.4	10,160.8	32.2	28.4	165.54	-200.7	129.5	476.3	421.4	54.86	8.682	
10,300.0	10,174.6	10,183.6	10,175.0	32.4	28.4	172.07	-200.7	129.6	496.2	441.1	55.08	9.008	
10,325.0	10,189.5	10,197.7	10,189.2	32.5	28.4	178.46	-200.8	129.6	516.1	460.9	55.25	9.342	
10,350.0	10,204.5	10,212.0	10,203.5	32.6	28.4	-175.35	-200.8	129.6	536.2	480.8	55.38	9.682	
10,375.0	10,219.4	10,226.9	10,218.4	32.7	28.4	-169.41	-200.8	129.6	556.2	500.7	55.46	10.028	
10,400.0	10,234.2	10,241.7	10,233.2	32.8	28.5	-163.76	-200.8	129.6	576.1	520.6	55.51	10.379	
10,425.0	10,248.9	10,256.4	10,247.9	33.0	28.5	-158.39	-200.8	129.6	595.9	540.4	55.52	10.733	
10,450.0	10,263.5	10,271.0	10,262.5	33.1	28.5	-153.31	-200.8	129.6	615.6	560.1	55.50	11.091	
10,475.0	10,277.8	10,285.3	10,276.8	33.2	28.5	-148.51	-200.8	129.6	635.1	579.6	55.46	11.451	
10,500.0	10,291.9	10,299.4	10,290.9	33.3	28.5	-144.00	-200.8	129.6	654.4	599.0	55.38	11.816	
10,525.0	10,305.7	10,313.2	10,304.7	33.4	28.5	-139.74	-200.8	129.6	673.5	618.2	55.28	12.183	
10,550.0	10,319.2	10,326.7	10,318.2	33.6	28.5	-135.74	-200.8	129.6	692.4	637.2	55.16	12.553	
10,575.0	10,332.3	10,339.9	10,331.3	33.7	28.5	-131.97	-200.8	129.6	711.1	656.0	55.01	12.926	
10,600.0	10,345.1	10,352.6	10,344.1	33.8	28.5	-128.43	-200.8	129.6	729.5	674.6	54.84	13.302	
10,625.0	10,357.4	10,364.9	10,356.4	34.0	28.5	-125.10	-200.8	129.6	747.6	693.0	54.64	13.681	
10,650.0	10,369.3	10,376.8	10,368.3	34.1	28.5	-121.97	-200.8	129.6	765.5	711.1	54.43	14.064	
10,675.0	10,380.6	10,388.2	10,379.6	34.3	28.5	-119.02	-200.8	129.6	783.1	728.9	54.19	14.450	
10,700.0	10,391.5	10,399.0	10,390.5	34.4	28.5	-116.24	-200.8	129.6	800.5	746.5	53.94	14.840	
10,725.0	10,401.8	10,409.3	10,400.8	34.6	28.6	-113.63	-200.8	129.6	817.5	763.8	53.67	15.232	
10,750.0	10,411.5	10,419.0	10,410.5	34.8	28.6	-111.17	-200.8	129.6	834.3	780.9	53.38	15.628	
10,775.0	10,420.6	10,428.1	10,419.6	34.9	28.6	-108.85	-200.8	129.6	850.7	797.7	53.08	16.027	
10,800.0	10,429.0	10,436.6	10,428.0	35.1	28.6	-106.66	-200.8	129.6	866.9	814.1	52.77	16.429	
10,825.0	10,436.8	10,444.4	10,435.8	35.3	28.6	-104.61	-200.8	129.6	882.7	830.3	52.44	16.833	
10,850.0	10,444.0	10,451.5	10,443.0	35.5	28.6	-102.67	-200.8	129.6	898.3	846.1	52.10	17.240	
10,875.0	10,450.4	10,457.9	10,449.4	35.6	28.6	-100.85	-200.8	129.6	913.4	861.7	51.76	17.649	
10,900.0	10,456.1	10,463.6	10,455.1	35.8	28.6	-99.14	-200.8	129.6	928.3	876.9	51.40	18.059	
10,925.0	10,461.1	10,468.6	10,460.1	36.0	28.6	-97.53	-200.8	129.6	942.8	891.7	51.05	18.469	
10,950.0	10,465.3	10,472.9	10,464.3	36.1	28.6	-96.03	-200.8	129.6	956.9	906.2	50.68	18.880	
10,975.0	10,468.8	10,476.3	10,467.8	36.3	28.6	-94.63	-200.8	129.6	970.7	920.4	50.32	19.289	
11,000.0	10,471.5	10,479.0	10,470.5	36.5	28.6	-93.32	-200.8	129.6	984.0	934.1	49.96	19.696	
11,025.0	10,473.4	10,481.0	10,472.4	36.6	28.6	-92.12	-200.8	129.6	997.0	947.4	49.60	20.099	

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 603H
Project:	Hat Mesa	TVD Reference:	WELL @ 3699.0usft (Original Well Elev)
Reference Site:	Anderson Fed Com - Pad B	MD Reference:	WELL @ 3699.0usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	Anderson Fed Com 603H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.79 sigma
Reference Wellbore	Anderson Fed Com 603H	Database:	EDM 5000.16 Single User Db
Reference Design:	Anderson Fed Com 603H - Prelim 1	Offset TVD Reference:	Offset Datum

Offset Design: Anderson Fed Com - Pad B - Anderson Fed Com 703H - Anderson Fed Com 703H - Anderson Fed Com 703H - Prelim 1												Offset Site Error:	0.0 usft
Survey Program: 0-MWD+HRGM												Offset Well Error:	0.0 usft
Reference	Offset	Semi Major Axis		Highside		Offset Wellbore Centre		Distance		Minimum	Separation	Warning	
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Toolface (°)	+N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Separation (usft)		
0.0	0.0	0.0	0.0	0.0	0.0	-91.01	-0.6	-32.4	32.4				
100.0	100.0	99.0	99.0	0.5	0.5	-91.01	-0.6	-32.4	32.4	31.3	1.06	30.456	
200.0	200.0	199.0	199.0	1.7	1.7	-91.01	-0.6	-32.4	32.4	29.0	3.42	9.484	
300.0	300.0	299.0	299.0	2.4	2.4	-91.01	-0.6	-32.4	32.4	27.6	4.82	6.723	
400.0	400.0	399.0	399.0	3.0	2.9	-91.01	-0.6	-32.4	32.4	26.5	5.91	5.487	
500.0	500.0	499.0	499.0	3.4	3.4	-91.01	-0.6	-32.4	32.4	25.6	6.83	4.745	
600.0	600.0	599.0	599.0	3.8	3.8	-91.01	-0.6	-32.4	32.4	24.8	7.65	4.237	
700.0	700.0	699.0	699.0	4.2	4.2	-91.01	-0.6	-32.4	32.4	24.0	8.39	3.861	
800.0	800.0	799.0	799.0	4.5	4.5	-91.01	-0.6	-32.4	32.4	23.3	9.08	3.567	
900.0	900.0	899.0	899.0	4.9	4.9	-91.01	-0.6	-32.4	32.4	22.7	9.73	3.330	
1,000.0	1,000.0	999.0	999.0	5.2	5.2	-91.01	-0.6	-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	-91.01	-0.6	-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	-91.01	-0.6	-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	-91.01	-0.6	-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	-91.01	-0.6	-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	-91.01	-0.6	-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	-91.01	-0.6	-32.4	32.4	18.9	13.52	2.397	
1,700.0	1,700.0	1,699.0	1,699.0	7.0	7.0	-91.01	-0.6	-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	-91.01	-0.6	-32.4	32.4	18.0	14.45	2.242	
1,900.0	1,900.0	1,899.0	1,899.0	7.5	7.4	-91.01	-0.6	-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	-91.01	-0.6	-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	-91.01	-0.6	-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	-91.01	-0.6	-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	-91.01	-0.6	-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	-91.01	-0.6	-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	-91.01	-0.6	-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	-91.01	-0.6	-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	-91.01	-0.6	-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	-91.01	-0.6	-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	-91.01	-0.6	-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	-91.01	-0.6	-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	-91.01	-0.6	-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	-91.01	-0.6	-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	-91.01	-0.6	-32.4	32.4	12.0	20.44	1.586	
3,400.0	3,400.0	3,399.0	3,399.0	10.4	10.4	-91.01	-0.6	-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	-91.01	-0.6	-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	-91.01	-0.6	-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	-91.01	-0.6	-32.4	32.4	10.6	21.85	1.483 Level 3	
3,800.0	3,800.0	3,799.0	3,799.0	11.1	11.1	-91.01	-0.6	-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	-91.01	-0.6	-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	-91.01	-0.6	-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	-91.01	-0.6	-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	-91.01	-0.6	-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	-91.01	-0.6	-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	-91.01	-0.6	-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	-91.01	-0.6	-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	-91.01	-0.6	-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	-91.01	-0.6	-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	-91.01	-0.6	-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	-91.01	-0.6	-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	-91.01	-0.6	-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	-91.01	-0.6	-32.4	32.4	6.0	26.44	1.226 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 603H
Project:	Hat Mesa	TVD Reference:	WELL @ 3699.0usft (Original Well Elev)
Reference Site:	Anderson Fed Com - Pad B	MD Reference:	WELL @ 3699.0usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	Anderson Fed Com 603H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.79 sigma
Reference Wellbore	Anderson Fed Com 603H	Database:	EDM 5000.16 Single User Db
Reference Design:	Anderson Fed Com 603H - Prelim 1	Offset TVD Reference:	Offset Datum

Offset Design: Anderson Fed Com - Pad B - Anderson Fed Com 703H - Anderson Fed Com 703H - Anderson Fed Com 703H - Prelim 1													Offset Site Error: 0.0 usft
Survey Program: 0-MWD+HRGM													Offset Well Error: 0.0 usft
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference	Offset	Highside Toolface (°)	Offset Wellbore Centre		Distance		Minimum Separation (usft)	Separation Factor	Warning
				(usft)	(usft)	(°)	+N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)			
5,200.0	5,200.0	5,199.0	5,199.0	13.4	13.4	-91.01	-0.6	-32.4	32.4	5.6	26.75	1.211	Level 3
5,300.0	5,300.0	5,299.0	5,299.0	13.5	13.5	-91.01	-0.6	-32.4	32.4	5.3	27.06	1.197	Level 3, CC, ES, SF
5,400.0	5,400.0	5,399.0	5,399.0	13.6	13.7	162.45	-0.6	-32.4	33.2	5.9	27.32	1.216	Level 3
5,500.0	5,500.0	5,499.0	5,499.0	13.7	13.8	163.71	-0.6	-32.4	35.7	8.2	27.58	1.296	Level 3
5,600.0	5,599.9	5,598.9	5,598.9	13.9	14.0	165.45	-0.6	-32.4	39.9	12.1	27.84	1.435	Level 3
5,700.0	5,699.7	5,699.3	5,699.3	14.0	14.1	166.73	-1.1	-31.7	45.2	17.1	28.06	1.610	
5,800.0	5,799.4	5,799.8	5,799.8	14.1	14.2	166.99	-2.8	-29.7	50.7	22.4	28.29	1.794	
5,900.0	5,899.0	5,900.5	5,900.3	14.3	14.3	166.34	-5.7	-26.4	55.7	27.2	28.53	1.953	
6,000.0	5,998.6	6,000.5	6,000.2	14.5	14.3	165.11	-9.3	-22.2	59.8	31.0	28.77	2.078	
6,100.0	6,098.2	6,100.4	6,100.0	14.7	14.4	164.03	-12.9	-17.9	63.9	34.8	29.06	2.197	
6,200.0	6,197.8	6,200.3	6,199.7	14.9	14.6	163.07	-16.5	-13.7	67.9	38.6	29.39	2.312	
6,300.0	6,297.5	6,300.2	6,299.5	15.2	14.7	162.22	-20.1	-9.5	72.1	42.3	29.73	2.423	
6,400.0	6,397.1	6,400.2	6,399.2	15.4	14.9	161.47	-23.7	-5.2	76.2	46.1	30.10	2.531	
6,500.0	6,496.7	6,500.1	6,499.0	15.7	15.1	160.79	-27.3	-1.0	80.3	49.8	30.48	2.635	
6,600.0	6,596.3	6,600.0	6,598.8	16.0	15.3	160.18	-30.9	3.3	84.4	53.6	30.88	2.735	
6,700.0	6,695.9	6,699.9	6,698.5	16.3	15.5	159.62	-34.5	7.5	88.6	57.3	31.29	2.831	
6,800.0	6,795.6	6,799.8	6,798.3	16.6	15.7	159.12	-38.1	11.7	92.8	61.0	31.72	2.924	
6,900.0	6,895.2	6,899.7	6,898.0	16.9	16.0	158.66	-41.7	16.0	96.9	64.7	32.17	3.013	
7,000.0	6,994.8	6,999.6	6,997.8	17.3	16.2	158.23	-45.3	20.2	101.1	68.5	32.63	3.098	
7,100.0	7,094.4	7,099.5	7,097.5	17.6	16.5	157.84	-49.0	24.4	105.3	72.2	33.10	3.180	
7,200.0	7,194.0	7,199.4	7,197.3	18.0	16.7	157.48	-52.6	28.7	109.4	75.8	33.59	3.258	
7,300.0	7,293.7	7,299.3	7,297.0	18.3	17.0	157.15	-56.2	32.9	113.6	79.5	34.09	3.333	
7,400.0	7,393.3	7,399.3	7,396.8	18.7	17.3	156.84	-59.8	37.2	117.8	83.2	34.60	3.405	
7,500.0	7,492.9	7,499.2	7,496.5	19.1	17.6	156.55	-63.4	41.4	122.0	86.9	35.12	3.474	
7,600.0	7,592.5	7,599.1	7,596.3	19.5	17.9	156.28	-67.0	45.6	126.2	90.5	35.65	3.540	
7,700.0	7,692.1	7,699.0	7,696.1	19.9	18.2	156.03	-70.6	49.9	130.4	94.2	36.19	3.603	
7,800.0	7,791.8	7,798.9	7,795.8	20.3	18.5	155.79	-74.2	54.1	134.6	97.8	36.74	3.663	
7,900.0	7,891.4	7,898.8	7,895.6	20.7	18.8	155.57	-77.8	58.4	138.8	101.5	37.29	3.721	
8,000.0	7,991.0	7,998.7	7,995.3	21.1	19.2	155.36	-81.4	62.6	143.0	105.1	37.86	3.777	
8,100.0	8,090.6	8,098.6	8,095.1	21.5	19.5	155.16	-85.0	66.8	147.2	108.8	38.43	3.829	
8,200.0	8,190.2	8,198.5	8,194.8	21.9	19.9	154.98	-88.6	71.1	151.4	112.4	39.02	3.880	
8,300.0	8,289.9	8,298.5	8,294.6	22.4	20.2	154.80	-92.2	75.3	155.6	116.0	39.61	3.929	
8,400.0	8,389.5	8,398.4	8,394.3	22.8	20.6	154.63	-95.8	79.6	159.8	119.6	40.20	3.975	
8,500.0	8,489.1	8,498.3	8,494.1	23.2	20.9	154.48	-99.5	83.8	164.0	123.2	40.80	4.020	
8,600.0	8,588.7	8,598.2	8,593.9	23.7	21.3	154.33	-103.1	88.0	168.2	126.8	41.41	4.062	
8,700.0	8,688.3	8,698.1	8,693.6	24.1	21.7	154.18	-106.7	92.3	172.4	130.4	42.03	4.103	
8,800.0	8,787.9	8,798.0	8,793.4	24.6	22.0	154.05	-110.3	96.5	176.6	134.0	42.65	4.142	
8,900.0	8,887.6	8,897.9	8,893.1	25.0	22.4	153.92	-113.9	100.7	180.9	137.6	43.28	4.179	
9,000.0	8,987.2	8,997.8	8,992.9	25.5	22.8	153.79	-117.5	105.0	185.1	141.2	43.91	4.215	
9,100.0	9,086.8	9,097.7	9,092.6	25.9	23.2	153.67	-121.1	109.2	189.3	144.7	44.54	4.250	
9,200.0	9,186.4	9,197.6	9,192.4	26.4	23.6	153.56	-124.7	113.5	193.5	148.3	45.19	4.283	
9,300.0	9,286.0	9,297.6	9,292.1	26.9	24.0	153.45	-128.3	117.7	197.7	151.9	45.83	4.314	
9,400.0	9,385.7	9,397.5	9,391.9	27.3	24.4	153.35	-131.9	121.9	201.9	155.5	46.48	4.345	
9,500.0	9,485.3	9,497.4	9,491.7	27.8	24.8	153.25	-135.5	126.2	206.2	159.0	47.14	4.374	
9,600.0	9,584.9	9,597.3	9,591.4	28.3	25.2	153.15	-139.1	130.4	210.4	162.6	47.79	4.402	
9,700.0	9,684.5	9,697.2	9,691.2	28.8	25.6	153.06	-142.7	134.7	214.6	166.1	48.46	4.429	
9,779.8	9,764.0	9,776.9	9,770.7	29.1	25.9	152.99	-145.6	138.0	218.0	169.0	48.98	4.450	
9,800.0	9,784.1	9,797.1	9,790.9	29.2	26.0	152.31	-146.4	138.9	219.2	170.1	49.13	4.462	
9,825.0	9,808.8	9,821.9	9,815.7	29.4	26.1	151.97	-147.2	139.9	221.7	172.4	49.37	4.491	
9,850.0	9,833.3	9,846.6	9,840.4	29.6	26.2	151.90	-148.1	141.0	225.4	175.8	49.67	4.538	
9,875.0	9,857.4	9,871.1	9,864.8	29.7	26.3	151.98	-149.0	142.0	230.3	180.2	50.02	4.603	
9,900.0	9,881.2	9,895.2	9,888.9	29.9	26.4	152.16	-149.9	143.1	236.2	185.8	50.41	4.687	

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 603H
Project:	Hat Mesa	TVD Reference:	WELL @ 3699.0usft (Original Well Elev)
Reference Site:	Anderson Fed Com - Pad B	MD Reference:	WELL @ 3699.0usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	Anderson Fed Com 603H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.79 sigma
Reference Wellbore	Anderson Fed Com 603H	Database:	EDM 5000.16 Single User Db
Reference Design:	Anderson Fed Com 603H - Prelim 1	Offset TVD Reference:	Offset Datum

Offset Design: Anderson Fed Com - Pad B - Anderson Fed Com 703H - Anderson Fed Com 703H - Anderson Fed Com 703H - Prelim 1													Offset Site Error: 0.0 usft
Survey Program: 0-MWD+HRGM													Offset Well Error: 0.0 usft
Reference		Offset		Semi Major Axis			Offset Wellbore Centre		Distance				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	
9,925.0	9,904.5	9,919.0	9,912.6	30.1	26.5	152.41	-150.8	144.1	243.4	192.5	50.83	4.788	
9,950.0	9,927.4	9,942.3	9,935.9	30.3	26.6	152.71	-151.6	145.1	251.6	200.4	51.27	4.908	
9,975.0	9,949.7	9,965.2	9,958.7	30.4	26.7	153.03	-152.4	146.0	261.0	209.3	51.73	5.046	
10,000.0	9,971.3	9,987.4	9,981.0	30.6	26.8	153.34	-153.2	147.0	271.6	219.4	52.21	5.202	
10,025.0	9,992.3	10,009.1	10,002.6	30.8	26.9	153.64	-154.0	147.9	283.2	230.5	52.68	5.376	
10,050.0	10,012.6	10,030.1	10,023.5	31.0	27.0	153.89	-154.8	148.8	295.9	242.8	53.16	5.567	
10,075.0	10,032.0	10,050.3	10,043.7	31.1	27.0	154.09	-155.5	149.6	309.8	256.1	53.63	5.776	
10,100.0	10,050.6	10,069.7	10,063.1	31.3	27.1	154.21	-156.2	150.5	324.6	270.5	54.08	6.002	
10,125.0	10,068.3	10,088.3	10,081.7	31.5	27.2	154.25	-156.9	151.2	340.5	286.0	54.52	6.245	
10,150.0	10,085.1	10,106.0	10,099.3	31.6	27.3	154.17	-157.5	152.0	357.3	302.4	54.95	6.503	
10,175.0	10,100.8	10,122.7	10,116.0	31.8	27.3	153.96	-158.1	152.7	375.1	319.8	55.35	6.777	
10,194.8	10,112.5	10,135.3	10,128.6	31.9	27.4	153.69	-158.6	153.2	389.8	334.1	55.65	7.004	
10,200.0	10,115.6	10,138.5	10,131.8	31.9	27.4	155.06	-158.7	153.4	393.7	338.0	55.73	7.065	
10,225.0	10,130.1	10,154.1	10,147.3	32.0	27.5	161.56	-159.2	154.0	412.8	356.8	56.05	7.365	
10,250.0	10,144.8	10,169.7	10,163.0	32.1	27.5	167.91	-159.8	154.7	432.1	375.8	56.32	7.672	
10,275.0	10,159.6	10,185.5	10,178.7	32.2	27.6	174.07	-160.4	155.4	451.4	394.9	56.54	7.983	
10,300.0	10,174.6	10,201.3	10,194.5	32.4	27.7	180.00	-160.9	156.0	470.8	414.1	56.73	8.299	
10,325.0	10,189.5	10,217.1	10,210.3	32.5	27.7	-174.33	-161.5	156.7	490.1	433.2	56.88	8.617	
10,350.0	10,204.5	10,232.9	10,226.0	32.6	27.8	-168.92	-162.1	157.4	509.4	452.4	57.00	8.937	
10,375.0	10,219.4	10,248.5	10,241.6	32.7	27.9	-163.78	-162.7	158.0	528.5	471.5	57.08	9.259	
10,400.0	10,234.2	10,264.0	10,257.1	32.8	27.9	-158.90	-163.2	158.7	547.6	490.4	57.14	9.583	
10,425.0	10,248.9	10,279.4	10,272.5	33.0	28.0	-154.27	-163.8	159.4	566.4	509.2	57.16	9.909	
10,450.0	10,263.5	10,294.5	10,287.6	33.1	28.1	-149.89	-164.3	160.0	585.1	527.9	57.16	10.236	
10,475.0	10,277.8	10,309.4	10,302.4	33.2	28.1	-145.74	-164.8	160.6	603.6	546.4	57.13	10.565	
10,500.0	10,291.9	10,324.0	10,316.9	33.3	28.2	-141.82	-165.4	161.2	621.8	564.8	57.07	10.896	
10,525.0	10,305.7	10,338.2	10,331.2	33.4	28.3	-138.10	-165.9	161.9	639.9	582.9	56.99	11.229	
10,550.0	10,319.2	10,352.0	10,345.0	33.6	28.3	-134.59	-166.4	162.4	657.7	600.9	56.88	11.564	
10,575.0	10,332.3	10,365.5	10,358.4	33.7	28.4	-131.26	-166.9	163.0	675.4	618.6	56.74	11.903	
10,600.0	10,345.1	10,378.4	10,371.3	33.8	28.4	-128.11	-167.3	163.6	692.8	636.2	56.57	12.245	
10,625.0	10,357.4	10,390.9	10,383.8	34.0	28.5	-125.12	-167.8	164.1	709.9	653.5	56.38	12.591	
10,650.0	10,369.3	10,402.9	10,395.7	34.1	28.5	-122.29	-168.2	164.6	726.8	670.7	56.17	12.940	
10,675.0	10,380.6	10,414.3	10,407.1	34.3	28.6	-119.60	-168.6	165.1	743.5	687.6	55.93	13.294	
10,700.0	10,391.5	10,425.1	10,417.9	34.4	28.6	-117.05	-169.0	165.5	760.0	704.3	55.67	13.652	
10,725.0	10,401.8	10,435.3	10,428.1	34.6	28.7	-114.63	-169.4	166.0	776.2	720.8	55.38	14.014	
10,750.0	10,411.5	10,444.8	10,437.6	34.8	28.7	-112.33	-169.7	166.4	792.1	737.0	55.08	14.382	
10,775.0	10,420.6	10,453.7	10,446.5	34.9	28.7	-110.15	-170.1	166.8	807.8	753.1	54.75	14.754	
10,800.0	10,429.0	10,461.9	10,454.6	35.1	28.8	-108.07	-170.4	167.1	823.3	768.9	54.41	15.131	
10,825.0	10,436.8	10,469.3	10,462.1	35.3	28.8	-106.09	-170.6	167.4	838.5	784.4	54.05	15.513	
10,850.0	10,444.0	10,476.0	10,468.8	35.5	28.8	-104.21	-170.9	167.7	853.4	799.7	53.67	15.899	
10,875.0	10,450.4	10,482.0	10,474.8	35.6	28.9	-102.42	-171.1	168.0	868.0	814.7	53.29	16.289	
10,900.0	10,456.1	10,487.2	10,479.9	35.8	28.9	-100.73	-171.3	168.2	882.3	829.5	52.89	16.683	
10,925.0	10,461.1	10,491.6	10,484.3	36.0	28.9	-99.12	-171.4	168.4	896.4	843.9	52.48	17.080	
10,950.0	10,465.3	10,495.2	10,487.9	36.1	28.9	-97.60	-171.6	168.5	910.1	858.1	52.07	17.480	
10,975.0	10,468.8	10,498.0	10,490.7	36.3	28.9	-96.17	-171.7	168.6	923.5	871.9	51.65	17.881	
11,000.0	10,471.5	10,499.9	10,492.7	36.5	28.9	-94.82	-171.7	168.7	936.6	885.4	51.23	18.282	
11,025.0	10,473.4	10,501.1	10,493.8	36.6	29.0	-93.56	-171.8	168.8	949.3	898.5	50.81	18.683	
11,050.0	10,474.6	10,501.4	10,494.1	36.8	29.0	-92.38	-171.8	168.8	961.7	911.3	50.39	19.083	
11,074.6	10,475.0	10,500.9	10,493.7	36.9	28.9	-91.31	-171.8	168.8	973.4	923.4	49.99	19.472	
11,100.0	10,475.0	10,500.0	10,492.7	37.1	28.9	-91.25	-171.7	168.7	985.6	936.0	49.58	19.879	

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

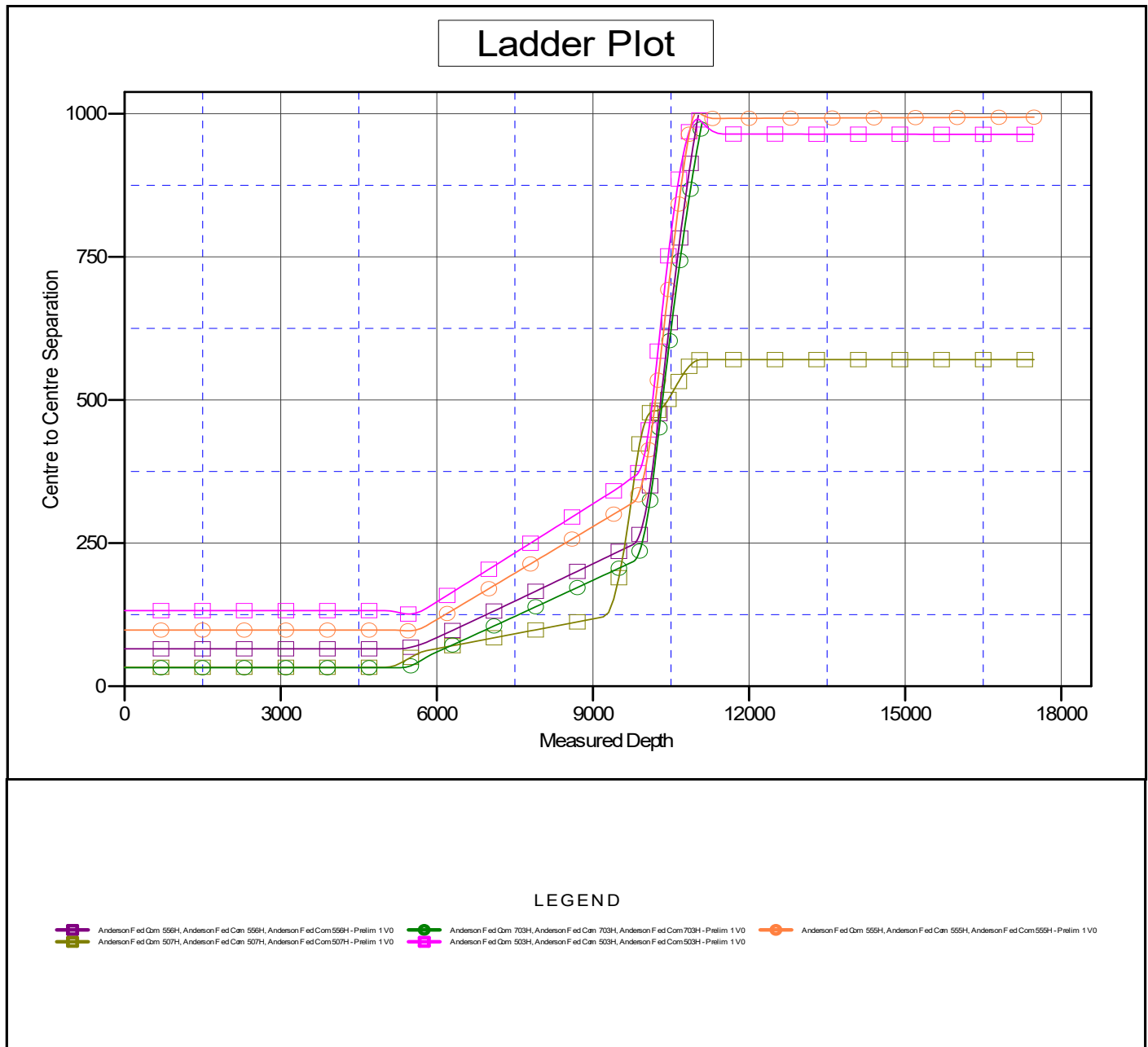


Anticollision Report

Company:	Advance Energy Partners	Local Co-ordinate Reference:	Well Anderson Fed Com 603H
Project:	Hat Mesa	TVD Reference:	WELL @ 3699.0usft (Original Well Elev)
Reference Site:	Anderson Fed Com - Pad B	MD Reference:	WELL @ 3699.0usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	Anderson Fed Com 603H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.79 sigma
Reference Wellbore	Anderson Fed Com 603H	Database:	EDM 5000.16 Single User Db
Reference Design:	Anderson Fed Com 603H - Prelim 1	Offset TVD Reference:	Offset Datum

Reference Depths are relative to WELL @ 3699.0usft (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 603H
 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

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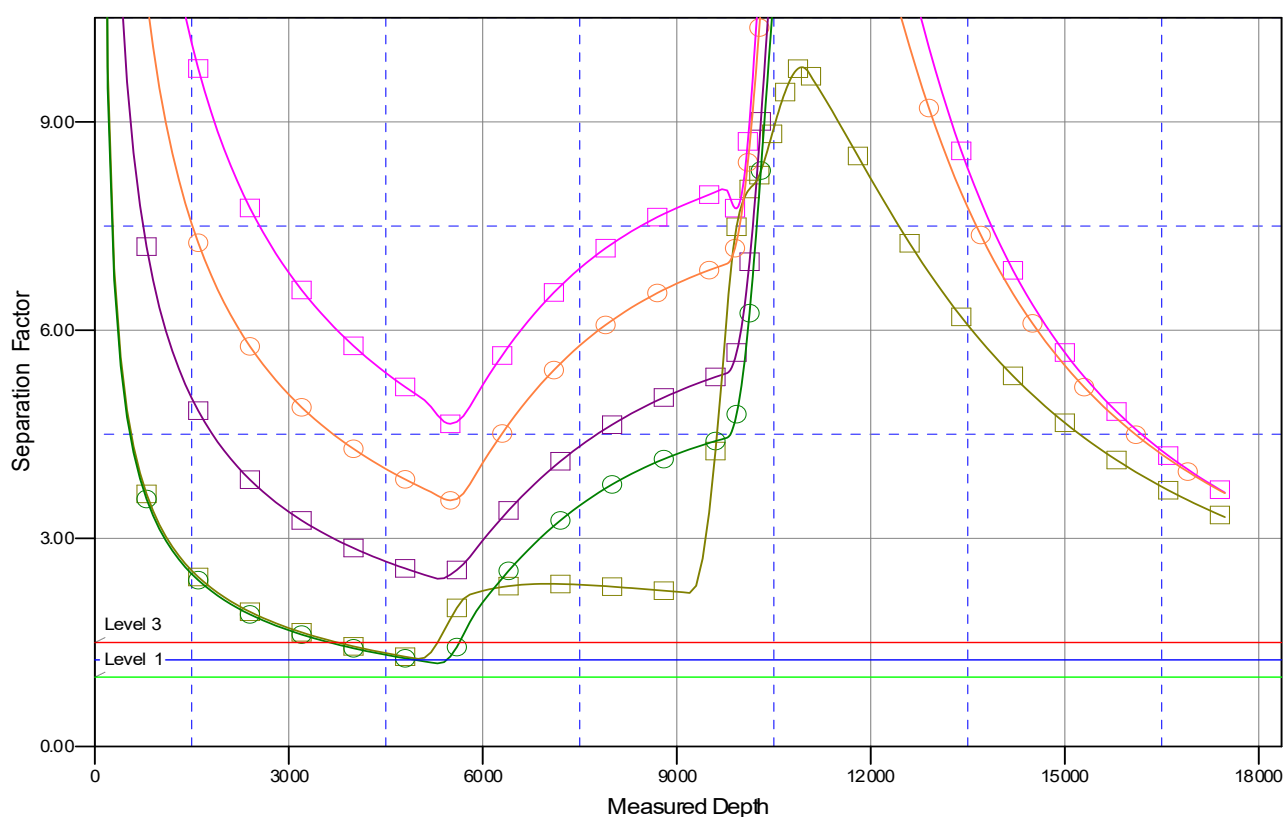
Central Meridian is 104° 20' 0.000 W

Coordinates are relative to: Anderson Fed Com 603H

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 556H, Anderson Fed Com 556H, Anderson Fed Com 556H - Prelim 1 V0
 ■ Anderson Fed Com 703H, Anderson Fed Com 703H, Anderson Fed Com 703H - Prelim 1 V0
 ■ Anderson Fed Com 559H, Anderson Fed Com 559H, Anderson Fed Com 559H - Prelim 1 V0

■ Anderson Fed Com 507H, Anderson Fed Com 507H, Anderson Fed Com 507H - Prelim 1 V0
 ■ Anderson Fed Com 503H, Anderson Fed Com 503H, Anderson Fed Com 503H - Prelim 1 V0

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

State of New Mexico
Energy, Minerals and Natural Resources Department

Submit Electronically
Via E-permitting

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

NATURAL GAS MANAGEMENT PLAN

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

Section 1 – Plan Description

Effective May 25, 2021

I. Operator: Advance Energy Partners Hat Mesa, LLC **OGRID:** 372417 **Date:** 8/9/21

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

If Other, please describe: _____

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

Well Name	API	ULSTR	Footages	Anticipated Oil BBL/D	Anticipated Gas MCF/D	Anticipated Produced Water BBL/D
Anderson Fed Com 503H	30-025-48994	B-2-22S-32E	180 FNL & 2413 FEL	1280	1500	3200
Anderson Fed Com 555H	30-025-48999	B-2-22S-32E	180 FNL & 2380 FEL	1280	1500	3200
Anderson Fed Com 556H	30-025-49000	B-2-22S-32E	180 FNL & 2347 FEL	1280	1500	3200
Anderson Fed Com 603H	30-025-49003	B-2-22S-32E	180 FNL & 2314 FEL	1280	1500	3200

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

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

Well Name	API	Spud Date	TD Reached Date	Completion Commencement Date	Initial Flow Back Date	First Production Date
Anderson Fed Com 503H	30-025-48994	8/20/21	9/29/21	12/30/21	2/5/22	4/1/22
Anderson Fed Com 555H	30-025-48999	8/17/21	9/20/21	12/30/21	2/5/22	4/1/22
Anderson Fed Com 556H	30-025-49000	8/17/21	9/02/21	12/30/21	2/5/22	4/1/22
Anderson Fed Com 603H	30-025-49003	8/11/21	9/11/21	12/30/21	2/5/222	4/1/22

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

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

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

Section 2 – Enhanced Plan

EFFECTIVE APRIL 1, 2022

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

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

IX. Anticipated Natural Gas Production:

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

X. Natural Gas Gathering System (NGGS):

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

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

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

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

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

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

Section 3 - Certifications

Effective May 25, 2021

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

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

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

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

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

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

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

Section 4 - Notices

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

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

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

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

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

Signature: <i>Cory Walk</i>
Printed Name: Cory Walk
Title: Consultant
E-mail Address: cory@permitswest.com
Date: 8/9/2021
Phone: (505) 466-8120

OIL CONSERVATION DIVISION
(Only applicable when submitted as a standalone form)

Approved By:
Title:
Approval Date:
Conditions of Approval:

Natural Gas Management Plan - Attachment

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

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

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

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

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

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

District IV
1220 S. St Francis Dr., Santa Fe, NM 87505
Phone:(505) 476-3470 Fax:(505) 476-3462

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

CONDITIONS

Action 54944

CONDITIONS

Operator: ADVANCE ENERGY PARTNERS HAT MESA, LLC 11490 Westheimer Rd., Ste 950 Houston, TX 77077	OGRID: 372417
	Action Number: 54944
	Action Type: [C-103] NOI Change of Plans (C-103A)

CONDITIONS

Created By	Condition	Condition Date
pkautz	None	10/12/2021