

District I1625 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

Form C-101
August 1, 2011

Permit 276481

APPLICATION FOR PERMIT TO DRILL, RE-ENTER, DEEPEN, PLUGBACK, OR ADD A ZONE

1. Operator Name and Address ADVANCE ENERGY PARTNERS HAT MESA, LLC 11490 Westheimer Rd., Ste 950 Houston, TX 77077		2. OGRID Number 372417
4. Property Code 319603		3. API Number 30-025-46702
5. Property Name MERCHANT STATE UNIT		6. Well No. 510H

7. Surface Location

UL - Lot C	Section 35	Township 21S	Range 33E	Lot Idn C	Feet From 200	N/S Line N	Feet From 1654	E/W Line W	County Lea
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8. Proposed Bottom Hole Location

UL - Lot N	Section 2	Township 22S	Range 33E	Lot Idn N	Feet From 100	N/S Line S	Feet From 1650	E/W Line W	County Lea
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9. Pool Information

WC-025 G-06 S213326D;BONE SPRING	97929
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Additional Well Information

11. Work Type New Well	12. Well Type OIL	13. Cable/Rotary	14. Lease Type State	15. Ground Level Elevation 3685
16. Multiple N	17. Proposed Depth 22132	18. Formation Bone Spring	19. Contractor	20. Spud Date 1/6/2020
Depth to Ground water		Distance from nearest fresh water well		Distance to nearest surface water

☒ We will be using a closed-loop system in lieu of lined pits**21. Proposed Casing and Cement Program**

Type	Hole Size	Casing Size	Casing Weight/ft	Setting Depth	Sacks of Cement	Estimated TOC
Surf	17.5	13.375	54.5	1600	500	0
Int1	12.25	9.625	40	4000	950	0
Int1	12.25	9.625	40	4000	330	4000
Prod	8.5	5.5	20	22132	2300	0

Casing/Cement Program: Additional Comments

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22. Proposed Blowout Prevention Program

Type	Working Pressure	Test Pressure	Manufacturer
Double Ram	5000	5000	

23. I hereby certify that the information given above is true and complete to the best of my knowledge and belief. I further certify I have complied with 19.15.14.9 (A) NMAC ☒ and/or 19.15.14.9 (B) NMAC ☒ if applicable.	OIL CONSERVATION DIVISION	
Signature:		
Printed Name: Electronically filed by David C Harwell	Approved By: Paul F Kautz	
Title: VP Engineering	Title: Geologist	
Email Address: dharwell@advanceenergypartners.com	Approved Date: 1/10/2020	Expiration Date: 1/10/2022
Date: 1/4/2020	Phone: 832-672-4604	Conditions of Approval Attached

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DISTRICT IV

1220 S. St. Francis Dr., Santa Fe, NM 87505
Phone (505) 476-3480 Fax: (505) 476-3482State of New Mexico
Energy, Minerals and Natural Resources Department

OIL CONSERVATION DIVISION

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

Form C-102

Revised August 4, 2011

Submit one copy to appropriate
District Office

WELL LOCATION AND ACREAGE DEDICATION PLAT

☐ AMENDED REPORT

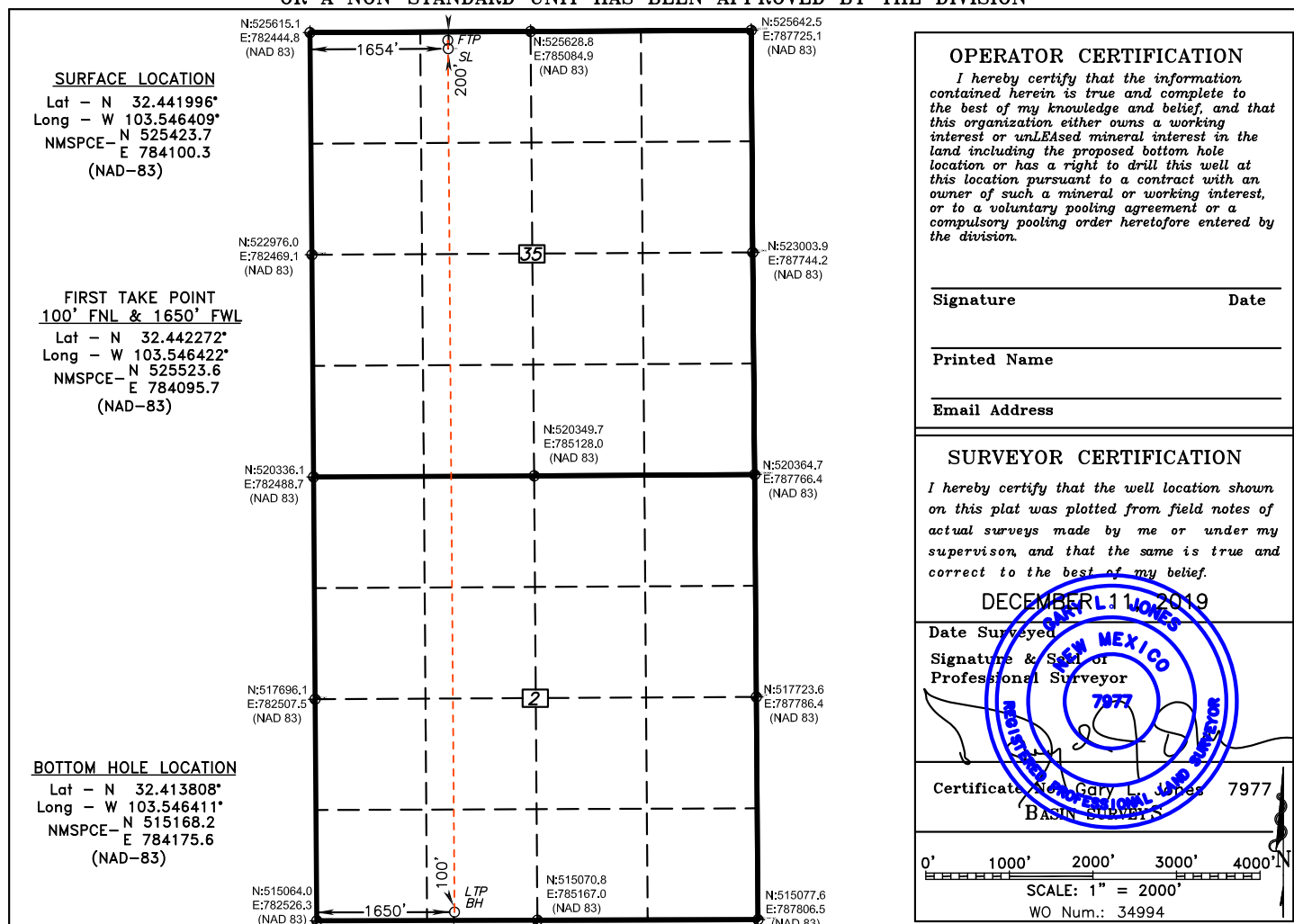
API Number	97929	Pool Code	WC-025 G-06 S213326D; BONE SPRING
Property Code	319603	Property Name	MERCHANT STATE UNIT
Well Number	510H	OGRID No.	372417
Operator Name	ADVANCE ENERGY PARTNERS HAT MESA	Elevation	3685'

Surface Location

UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	SOUTH/South line	Feet from the	East/West line	County
C	35	21 S	33 E		200	NORTH	1654	WEST	LEA

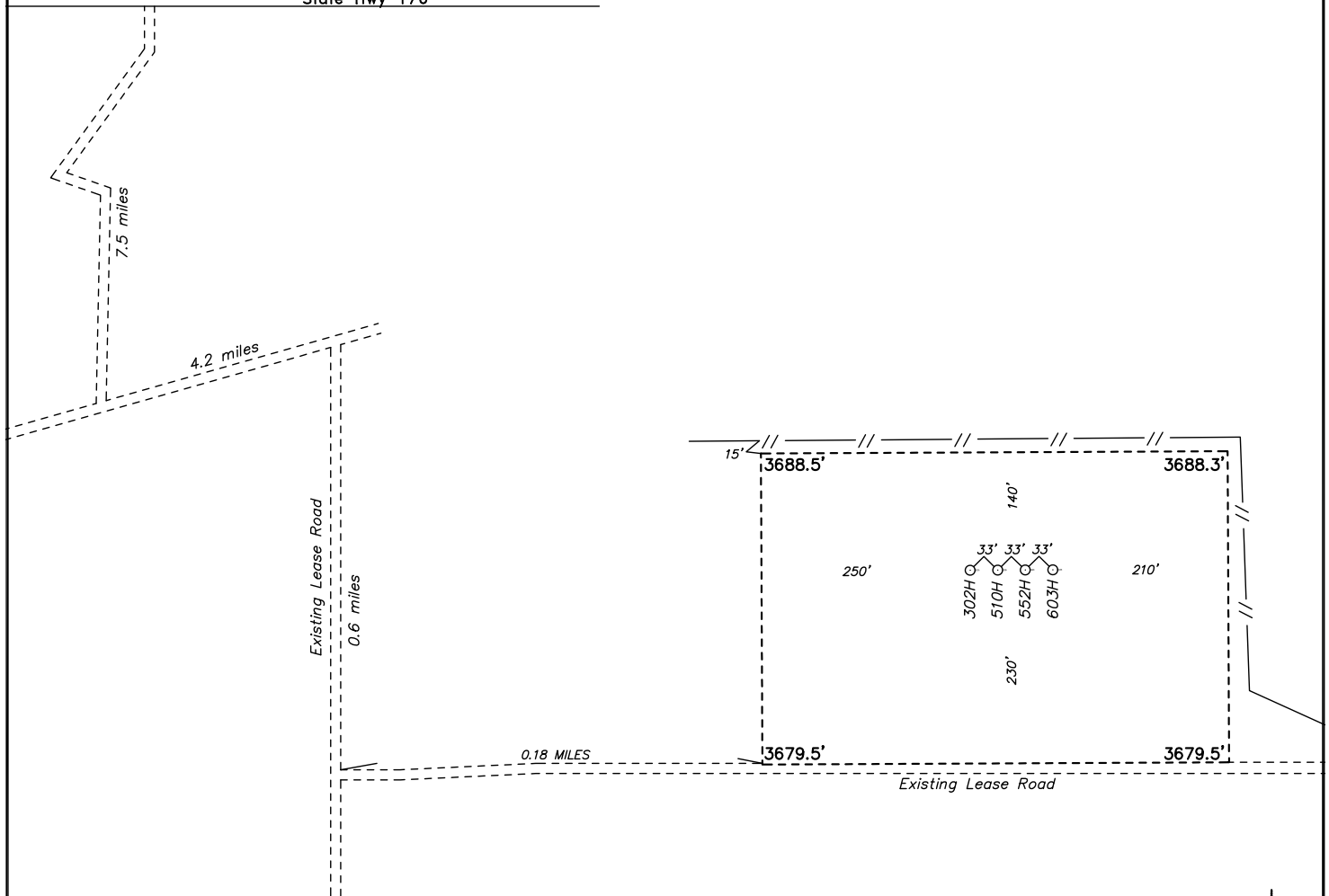
Bottom Hole Location If Different From Surface

UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	SOUTH/South line	Feet from the	East/West line	County
N	2	22 S	33 E		100	SOUTH	1650	WEST	LEA
Dedicated Acres	Joint or Infill	Consolidation Code	Order No.						

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

**SECTION 35, TOWNSHIP 21 SOUTH, RANGE 33 EAST. N.M.P.M.,
LEA COUNTY,
NEW MEXICO.**

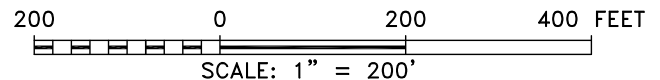
State Hwy 176



**ADVANCE ENERGY PARTNERS HAT MESA
MERCHANT STATE UNIT 510H
ELEV. - 3685'**

Lat - N 32.441996°
Long - W 103.546409°
NMSPC - N 525423.7
E 784100.3
(NAD-83)

EUNICE, NM IS ±22 MILES TO THE EAST OF LOCATION.



ADVANCE ENERGY PARTNERS HAT MESA

REF: MERCHANT STATE UNIT 510H / WELL PAD TOPO

THE MERCHANT STATE UNIT 510H LOCATED 200' FROM
THE NORTH LINE AND 1654' FROM THE WEST LINE OF
SECTION 35, TOWNSHIP 21 SOUTH, RANGE 33 EAST.

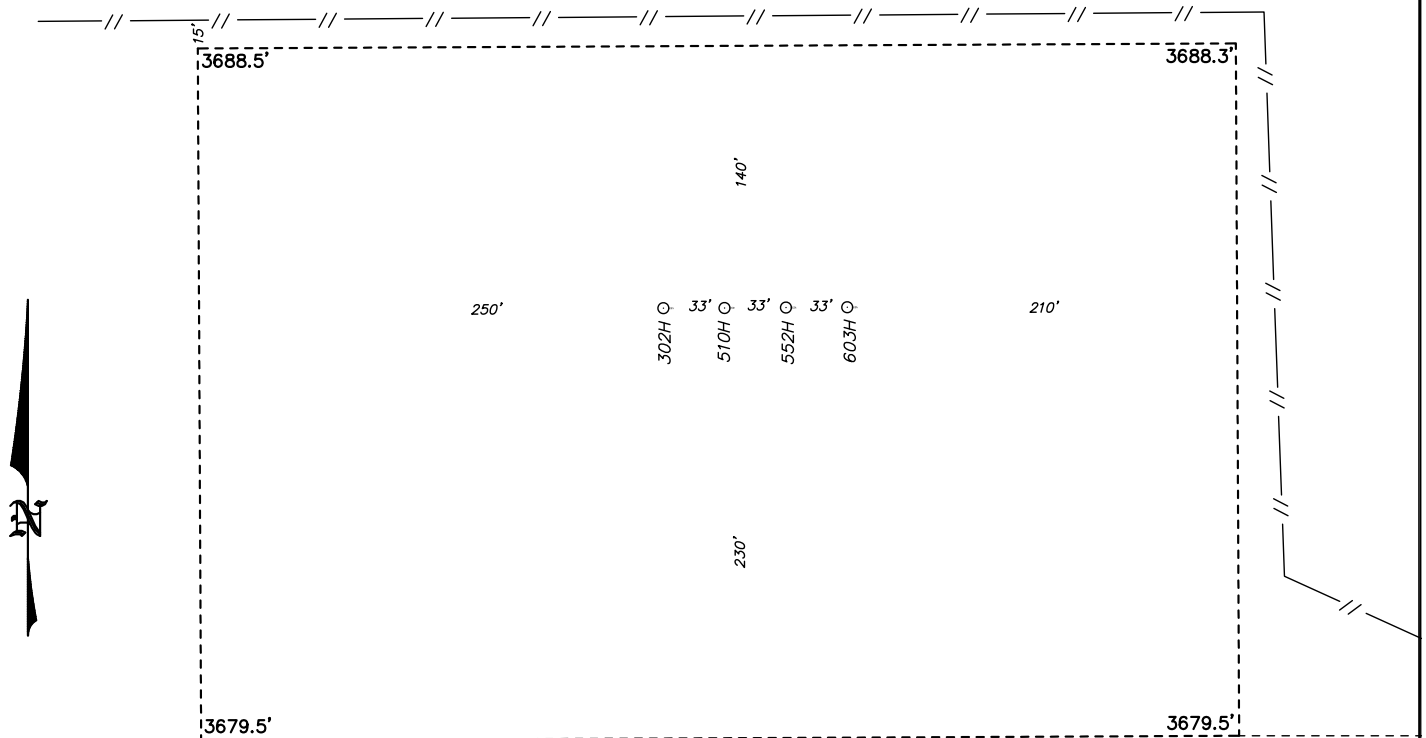
N.M.P.M., LEA COUNTY, NEW MEXICO.

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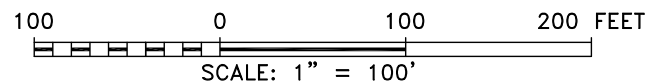
P.O. Box 1786
1120 N. West County Rd.
Hobbs, New Mexico 88241
(575) 393-7316 - Office
(575) 392-2206 - Fax
basinsurveys.com

W.O. Number: 34994 Drawn By: J. GOAD Date: 12-30-2019 Survey Date: 12-11-2019 Sheet 1 of 1 Sheets

**SECTION 35, TOWNSHIP 21 SOUTH, RANGE 33 EAST. N.M.P.M.,
LEA COUNTY, NEW MEXICO.**



Existing Lease Road



ADVANCE ENERGY PARTNERS HAT MESA

REF: MERCHANT STATE UNIT 510H / WELL PAD TOPO

THE MERCHANT STATE UNIT 510H LOCATED 200' FROM
THE NORTH LINE AND 1654' FROM THE WEST LINE OF
SECTION 35, TOWNSHIP 21 SOUTH, RANGE 33 EAST.

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

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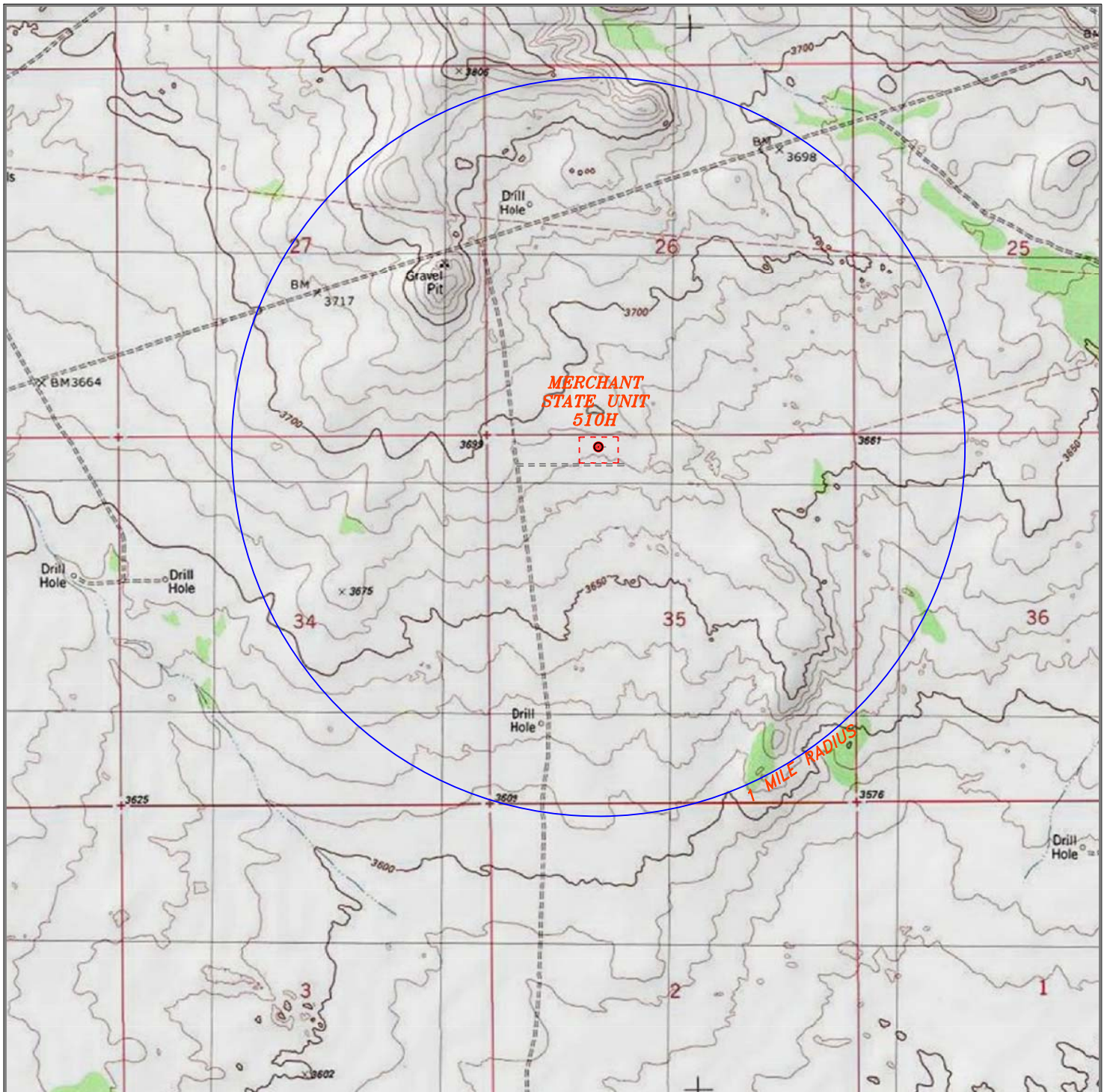
W.O. Number: 34994

Drawn By: J. GOAD

Date: 12-30-2019

Survey Date: 12-11-2019

Sheet 1 of 1 Sheets



MERCHANT STATE UNIT 510H

Located 200' FNL and 1654' FWL
 Section 35, Township 21 South, Range 33 East,
 N.M.P.M., Lea County, New Mexico.



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0' 1000' 2000' 3000' 1500'
 SCALE: 1" = 2000'

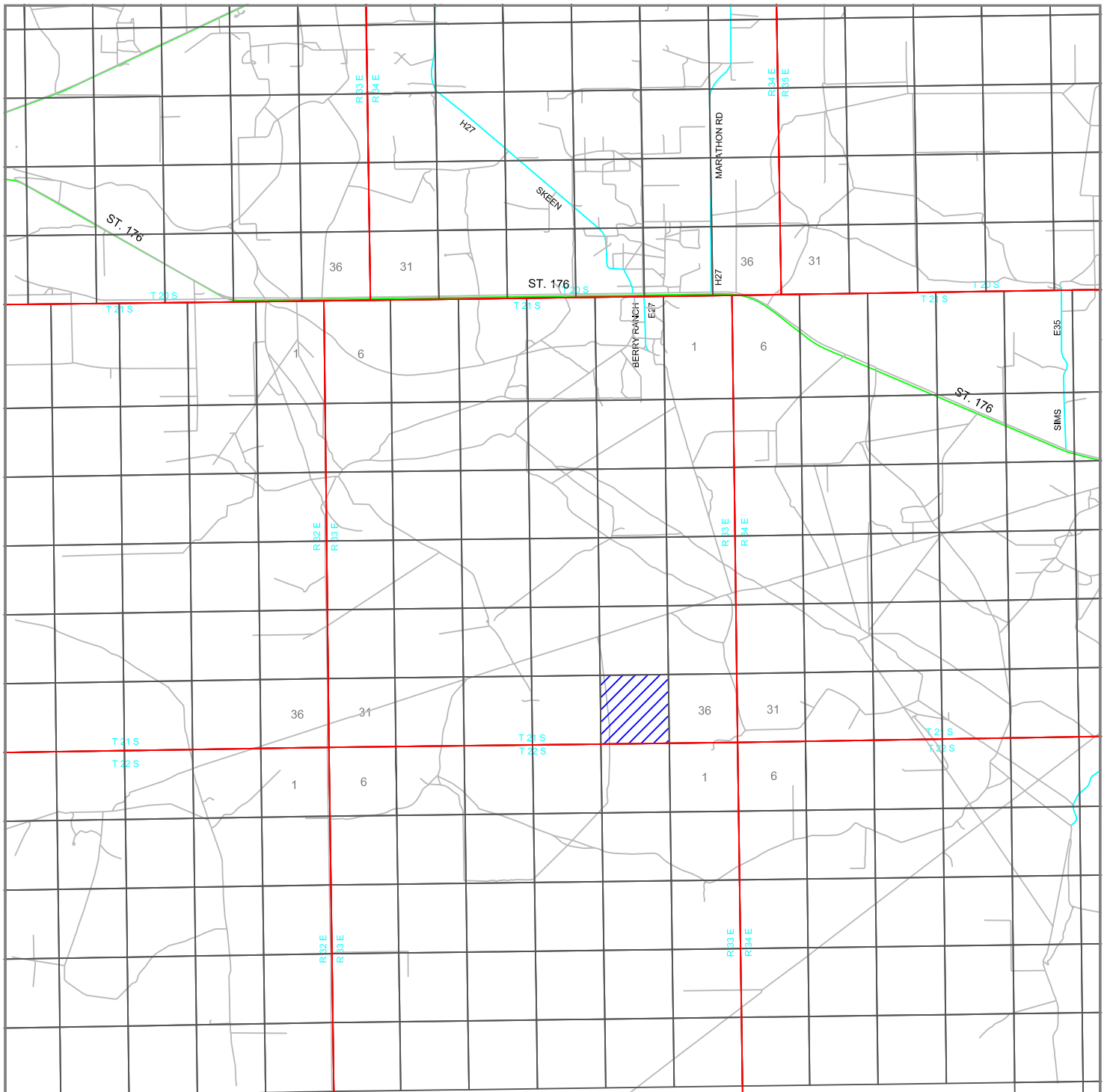
W.O. Number: JG 34994

Survey Date: 12-11-2019

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



**ADVANCE
 ENERGY
 PARTNERS
 HAT MESA**



MERCHANT STATE UNIT 510H

Located 200' FNL and 1654' FWL
 Section 35, Township 21 South, Range 33 East,
 N.M.P.M., Lea County, New Mexico.



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0 1 MI 2 MI 3 MI 4 MI
 SCALE: 1" = 2 MILES

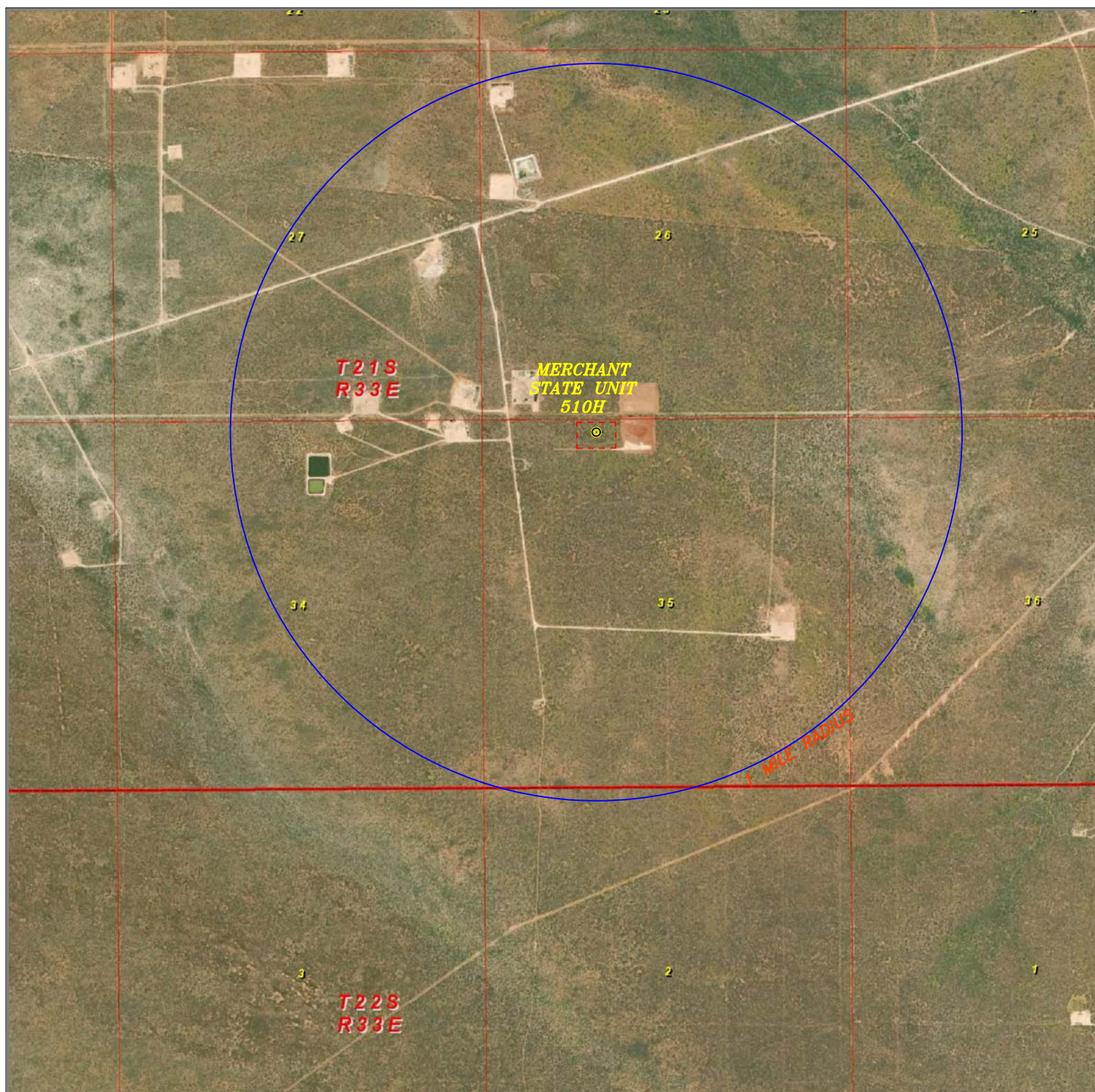
W.O. Number: JG 34994

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**ADVANCE
 ENERGY
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 HAT MESA**



MERCHANT STATE UNIT 510H

Located 200' FNL and 1654' FWL
Section 35, Township 21 South, Range 33 East,
N.M.P.M., Lea County, New Mexico.



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0' 1000' 2000' 3000' 1500'
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**ADVANCE
ENERGY
PARTNERS
HAT MESA**

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Energy, Minerals and Natural Resources
Oil Conservation Division
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Santa Fe, NM 87505

GAS CAPTURE PLAN

Date: 1/10/2020

☒ Original

Operator & OGRID No.: [372417] ADVANCE ENERGY PARTNERS HAT MESA, LLC

☐ Amended - Reason for
Amendment: _____

This Gas Capture Plan outlines actions to be taken by the Operator to reduce well/production facility flaring/venting for new completion (new drill, recomple to new zone, re-frac) activity.

Note: Form C-129 must be submitted and approved prior to exceeding 60 days allowed by Rule (Subsection A of 19.15.18.12 NMAC).

Well(s)/Production Facility – Name of facility

The well(s) that will be located at the production facility are shown in the table below.

Well Name	API	Well Location (ULSTR)	Footages	Expected MCF/D	Flared or Vented	Comments
MERCHANT STATE UNIT #510H	30-025-46702	C-35-21S-33E	0200N 1654W	1500	Flared	Flared during initial testing and cleanup.

Gathering System and Pipeline Notification

Well(s) will be connected to a production facility after flowback operations are complete, if gas transporter system is in place. The gas produced from production facility is dedicated to TARGA MIDSTREAM SERVICES LLC and will be connected to TARGA MIDSTREAM SERVICES LLC Low Pressure gathering system located in Lea County, New Mexico. It will require 200' of pipeline to connect the facility to Low Pressure gathering system. ADVANCE ENERGY PARTNERS HAT MESA, LLC provides (periodically) to TARGA MIDSTREAM SERVICES LLC a drilling, completion and estimated first production date for wells that are scheduled to be drilled in the foreseeable future. In addition, ADVANCE ENERGY PARTNERS HAT MESA, LLC and TARGA MIDSTREAM SERVICES LLC have periodic conference calls to discuss changes to drilling and completion schedules. Gas from these wells will be processed at TARGA MIDSTREAM SERVICES LLC Processing Plant located in Sec. 36, Twn. 19S, Rng. 36E, Lea County, New Mexico. The actual flow of the gas will be based on compression operating parameters and gathering system pressures.

Flowback Strategy

After the fracture treatment/completion operations, well(s) will be produced to temporary production tanks and gas will be flared or vented. During flowback, the fluids and sand content will be monitored. When the produced fluids contain minimal sand, the wells will be turned to production facilities. Gas sales should start as soon as the wells start flowing through the production facilities, unless there are operational issues on TARGA MIDSTREAM SERVICES LLC system at that time. Based on current information, it is ADVANCE ENERGY PARTNERS HAT MESA, LLC's belief the system can take this gas upon completion of the well(s).

Safety requirements during cleanout operations from the use of underbalanced air cleanout systems may necessitate that sand and non-pipeline quality gas be vented and/or flared rather than sold on a temporary basis.

Alternatives to Reduce Flaring

Below are alternatives considered from a conceptual standpoint to reduce the amount of gas flared.

- Power Generation – On lease
 - Only a portion of gas is consumed operating the generator, remainder of gas will be flared
- Compressed Natural Gas – On lease
 - Gas flared would be minimal, but might be uneconomical to operate when gas volume declines
- NGL Removal – On lease
 - Plants are expensive, residue gas is still flared, and uneconomical to operate when gas volume declines

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

Form APD Comments

Permit 276481

PERMIT COMMENTS

Operator Name and Address: ADVANCE ENERGY PARTNERS HAT MESA, LLC [372417] 11490 Westheimer Rd., Ste 950 Houston, TX 77077		API Number: 30-025-46702
		Well: MERCHANT STATE UNIT #510H
Created By	Comment	Comment Date

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

Form APD Conditions

Permit 276481

PERMIT CONDITIONS OF APPROVAL

Operator Name and Address: ADVANCE ENERGY PARTNERS HAT MESA, LLC [372417] 11490 Westheimer Rd., Ste 950 Houston, TX 77077	API Number: 30-025-46702
	Well: MERCHANT STATE UNIT #510H

OCD Reviewer	Condition
pkautz	Will require a directional survey with the C-104
pkautz	Potash Area - Three String Casing Program - In accordance with R-111-P all strings shall be cemented to surface. Salt Protection String - If the cement fails to reach the surface or the bottom of the cellar, where required, the top of the cement shall be located by a temperature or other survey and additional cementing shall be done until the cement is brought to the surface.
pkautz	If cement does not circulate to surface, must run temperature survey or other log to determine top of cement
pkautz	Surface casing must be set 25' below top of Rustler Anhydrite in order to seal off protectable water
pkautz	1)- The Operator is to notify NMOCDD by sundry (Form C-103) within ten (10) days of the well being spud 2)- Drilling Sundries Form C-103 (Casing and Cement test are to be submitted within 10 days 3)- Completion Reports & Logs are to be submitted within 45 days 4)- Deviation / Directional Drill Survey are to be filed with or prior to C-104
pkautz	It is the operator's responsibility to monitor cancellation dates of approved APDs. APD's are good for 2 years and may be extended for one year. Only one 1 year extension will be granted if submitted by C-103 before expiration date. After expiration date or after a 1 year extension must submit new APD. If an APD expires and if site construction has occurred, site remediation is required.
pkautz	Stage Tool 1) Must notify OCD Hobbs Office prior to running Stage Tool at 5753703186 2) If using Stage Tool on Surface casing, Stage Tool must be set greater than 350' from surface and a minimum of 200 feet above surface shoe. 3) When using a Stage Tool on Intermediate or Production Casing Stage must be a minimum of 50 feet below previous casing shoe.



11490 Westheimer Road, Suite 950, Houston, Texas 77077 • Phone 832-672-4700 • Fax 832-672-4609

January 2, 2020

Oil Conservation Division
Energy Minerals and Natural Resources Department
1625 N. French Dr.
Hobbs, New Mexico 88240

Attn: Mr. Paul Kautz

**Re: Application for Merchant State Unit 510H
Unit C, Section 35-T21S-R33E
Lea County, New Mexico**

Dear Mr. Kautz,

I am providing answers to your questions and requests for additional information about any potash leases within 1 mile of the referenced Section 35.

This letter is to confirm there are no potash leases within 1 mile of Section 35, Township 21 South, Range 33 East, Lea County, NM.

Sincerely,

A handwritten signature in black ink that reads "Paul J. Burdick". The signature is written in a cursive, flowing style.

Paul J. Burdick
Land Advisor
Advance Energy Partners Hat Mesa, LLC
Email: PBurdick@Advanceenergypartners.com
Office Telephone: 832-672-4623
Cell Telephone: 713-228-7320



Advance Energy Partners

**Lea County, NM (NAD 83 NME)
(Merchant State)Sec35_T-21-S_R-33-E
Merchant State Unit #510H**

**OWB
Plan 0.1**

Anticollision Report

03 January, 2020





Microsoft Anticollision Report



Company:	Advance Energy Partners	Local Co-ordinate Reference:	Well Merchant State Unit #510H
Project:	Lea County, NM (NAD 83 NME)	TVD Reference:	Kb @ 3710.5usft (H&P 466)
Reference Site:	(Merchant State)Sec35_T-21-S_R-33-E	MD Reference:	Kb @ 3710.5usft (H&P 466)
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	Merchant State Unit #510H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	OWB	Database:	EDM 10_13
Reference Design:	Plan 0.1	Offset TVD Reference:	Offset Datum

Reference	Plan 0.1
Filter type:	NO GLOBAL FILTER: Using user defined selection & filtering criteria
Interpolation Method:	MD Interval 100.0usft
Depth Range:	Unlimited
Results Limited by:	Maximum center-center distance of 2,000.0 usft
Warning Levels Evaluated at:	2.00 Sigma
Error Model:	ISCWSA
Scan Method:	Closest Approach 3D
Error Surface:	Pedal Curve
Casing Method:	Not applied

Survey Tool Program		Date	01/03/2020		
From (usft)	To (usft)	Survey (Wellbore)	Tool Name	Description	
0.0	20,764.5	Plan 0.1 (OWB)	MWD	OWSG MWD - Standard	

Summary							
Site Name Offset Well - Wellbore - Design	Reference	Offset	Distance		Separation	Warning	
	Measured Depth (usft)	Measured Depth (usft)	Between Centres (usft)	Between Ellipses (usft)			
(Merchant State)Sec35_T-21-S_R-33-E							
Merchant State Unit #302H - OWB - Plan 0.1	5,844.1	5,846.3	22.3	-19.1	0.539	Level 1, CC, ES, SF	
Merchant State Unit #552H - OWB - Plan 0.1	6,525.9	6,525.3	23.1	-23.2	0.499	Level 1, CC, ES, SF	
Merchant State Unit #603H - OWB - Plan 0.1	5,400.0	5,400.0	66.0	27.7	1.725	CC, ES	
Merchant State Unit #603H - OWB - Plan 0.1	5,500.0	5,499.0	66.8	27.8	1.713	SF	

Offset Design:(Merchant State)Sec35_T-21-S_R-33-E - Merchant State Unit #302H - OWB - Plan 0.1												Offset Site Error:	0.0 usft		
Survey Program: Reference		0-MWD		Offset		Semi Major Axis		Offset Wellbore Centre		Rule Assigned:			Distance	Offset Well Error:	0.0 usft
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	+N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning		
0.0	0.0	1.0	1.0	0.0	0.0	-90.17	-0.1	-33.0	33.0						
100.0	100.0	101.0	101.0	0.1	0.1	-90.17	-0.1	-33.0	33.0	32.7	0.27	121.931			
200.0	200.0	201.0	201.0	0.5	0.5	-90.17	-0.1	-33.0	33.0	32.0	0.99	33.415			
300.0	300.0	301.0	301.0	0.9	0.9	-90.17	-0.1	-33.0	33.0	31.3	1.70	19.360			
400.0	400.0	401.0	401.0	1.2	1.2	-90.17	-0.1	-33.0	33.0	30.6	2.42	13.628			
500.0	500.0	501.0	501.0	1.6	1.6	-90.17	-0.1	-33.0	33.0	29.9	3.14	10.515			
600.0	600.0	601.0	601.0	1.9	1.9	-90.17	-0.1	-33.0	33.0	29.1	3.86	8.560			
700.0	700.0	701.0	701.0	2.3	2.3	-90.17	-0.1	-33.0	33.0	28.4	4.57	7.217			
800.0	800.0	801.0	801.0	2.6	2.6	-90.17	-0.1	-33.0	33.0	27.7	5.29	6.239			
900.0	900.0	901.0	901.0	3.0	3.0	-90.17	-0.1	-33.0	33.0	27.0	6.01	5.494			
1,000.0	1,000.0	1,001.0	1,001.0	3.4	3.4	-90.17	-0.1	-33.0	33.0	26.3	6.72	4.908			
1,100.0	1,100.0	1,101.0	1,101.0	3.7	3.7	-90.17	-0.1	-33.0	33.0	25.6	7.44	4.435			
1,200.0	1,200.0	1,201.0	1,201.0	4.1	4.1	-90.17	-0.1	-33.0	33.0	24.8	8.16	4.046			
1,300.0	1,300.0	1,301.0	1,301.0	4.4	4.4	-90.17	-0.1	-33.0	33.0	24.1	8.87	3.719			
1,400.0	1,400.0	1,401.0	1,401.0	4.8	4.8	-90.17	-0.1	-33.0	33.0	23.4	9.59	3.441			
1,500.0	1,500.0	1,501.0	1,501.0	5.2	5.2	-90.17	-0.1	-33.0	33.0	22.7	10.31	3.201			
1,600.0	1,600.0	1,601.0	1,601.0	5.5	5.5	-90.17	-0.1	-33.0	33.0	22.0	11.02	2.993			
1,700.0	1,700.0	1,701.0	1,701.0	5.9	5.9	-90.17	-0.1	-33.0	33.0	21.3	11.74	2.811			
1,800.0	1,800.0	1,801.0	1,801.0	6.2	6.2	-90.17	-0.1	-33.0	33.0	20.5	12.46	2.649			
1,900.0	1,900.0	1,901.0	1,901.0	6.6	6.6	-90.17	-0.1	-33.0	33.0	19.8	13.18	2.505			
2,000.0	2,000.0	2,001.0	2,001.0	6.9	6.9	-90.17	-0.1	-33.0	33.0	19.1	13.89	2.375			
2,100.0	2,100.0	2,101.0	2,101.0	7.3	7.3	-90.17	-0.1	-33.0	33.0	18.4	14.61	2.259			
2,200.0	2,200.0	2,201.0	2,201.0	7.7	7.7	-90.17	-0.1	-33.0	33.0	17.7	15.33	2.153			

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



Microsoft Anticollision Report



Company:	Advance Energy Partners	Local Co-ordinate Reference:	Well Merchant State Unit #510H
Project:	Lea County, NM (NAD 83 NME)	TVD Reference:	Kb @ 3710.5usft (H&P 466)
Reference Site:	(Merchant State)Sec35_T-21-S_R-33-E	MD Reference:	Kb @ 3710.5usft (H&P 466)
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	Merchant State Unit #510H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	OWB	Database:	EDM 10_13
Reference Design:	Plan 0.1	Offset TVD Reference:	Offset Datum

Offset Design:(Merchant State)Sec35_T-21-S_R-33-E - Merchant State Unit #302H - OWB - Plan 0.1														Offset Site Error:	0.0 usft
Survey Program: 0-MWD														Offset Well Error:	0.0 usft
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference	Offset	Highside Toolface (°)	+N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning		
2,300.0	2,300.0	2,301.0	2,301.0	8.0	8.0	-90.17	-0.1	-33.0	33.0	17.0	16.04	2.057			
2,400.0	2,400.0	2,401.0	2,401.0	8.4	8.4	-90.17	-0.1	-33.0	33.0	16.2	16.76	1.969			
2,500.0	2,500.0	2,501.0	2,501.0	8.7	8.7	-90.17	-0.1	-33.0	33.0	15.5	17.48	1.888			
2,600.0	2,600.0	2,601.0	2,601.0	9.1	9.1	-90.17	-0.1	-33.0	33.0	14.8	18.19	1.814			
2,700.0	2,700.0	2,701.0	2,701.0	9.5	9.5	-90.17	-0.1	-33.0	33.0	14.1	18.91	1.745			
2,800.0	2,800.0	2,801.0	2,801.0	9.8	9.8	-90.17	-0.1	-33.0	33.0	13.4	19.63	1.681			
2,900.0	2,900.0	2,901.0	2,901.0	10.2	10.2	-90.17	-0.1	-33.0	33.0	12.7	20.35	1.622			
3,000.0	3,000.0	3,001.0	3,001.0	10.5	10.5	-90.17	-0.1	-33.0	33.0	11.9	21.06	1.567			
3,100.0	3,100.0	3,101.0	3,101.0	10.9	10.9	-90.17	-0.1	-33.0	33.0	11.2	21.78	1.515			
3,200.0	3,200.0	3,201.0	3,201.0	11.2	11.2	-90.17	-0.1	-33.0	33.0	10.5	22.50	1.467 Level 3			
3,300.0	3,300.0	3,301.0	3,301.0	11.6	11.6	-90.17	-0.1	-33.0	33.0	9.8	23.21	1.422 Level 3			
3,400.0	3,400.0	3,401.0	3,401.0	12.0	12.0	-90.17	-0.1	-33.0	33.0	9.1	23.93	1.379 Level 3			
3,500.0	3,500.0	3,501.0	3,501.0	12.3	12.3	-90.17	-0.1	-33.0	33.0	8.4	24.65	1.339 Level 3			
3,600.0	3,600.0	3,601.0	3,601.0	12.7	12.7	-90.17	-0.1	-33.0	33.0	7.6	25.36	1.301 Level 3			
3,700.0	3,700.0	3,701.0	3,701.0	13.0	13.0	-90.17	-0.1	-33.0	33.0	6.9	26.08	1.265 Level 3			
3,800.0	3,800.0	3,801.0	3,801.0	13.4	13.4	-90.17	-0.1	-33.0	33.0	6.2	26.80	1.231 Level 2			
3,900.0	3,900.0	3,901.0	3,901.0	13.8	13.8	-90.17	-0.1	-33.0	33.0	5.5	27.51	1.199 Level 2			
4,000.0	4,000.0	4,001.0	4,001.0	14.1	14.1	-90.17	-0.1	-33.0	33.0	4.8	28.23	1.169 Level 2			
4,100.0	4,100.0	4,101.0	4,101.0	14.5	14.5	-90.17	-0.1	-33.0	33.0	4.1	28.95	1.140 Level 2			
4,200.0	4,200.0	4,201.0	4,201.0	14.8	14.8	-90.17	-0.1	-33.0	33.0	3.3	29.67	1.112 Level 2			
4,300.0	4,300.0	4,301.0	4,301.0	15.2	15.2	-90.17	-0.1	-33.0	33.0	2.6	30.38	1.086 Level 2			
4,400.0	4,400.0	4,401.0	4,401.0	15.5	15.6	-90.17	-0.1	-33.0	33.0	1.9	31.10	1.061 Level 2			
4,500.0	4,500.0	4,501.0	4,501.0	15.9	15.9	-90.17	-0.1	-33.0	33.0	1.2	31.82	1.037 Level 2			
4,600.0	4,600.0	4,601.0	4,601.0	16.3	16.3	-90.17	-0.1	-33.0	33.0	0.5	32.53	1.014 Level 2			
4,700.0	4,700.0	4,701.0	4,701.0	16.6	16.6	-90.17	-0.1	-33.0	33.0	-0.2	33.25	0.992 Level 1			
4,800.0	4,800.0	4,801.0	4,801.0	17.0	17.0	-90.17	-0.1	-33.0	33.0	-1.0	33.97	0.972 Level 1			
4,900.0	4,900.0	4,901.0	4,901.0	17.3	17.3	-90.17	-0.1	-33.0	33.0	-1.7	34.68	0.951 Level 1			
5,000.0	5,000.0	5,001.0	5,001.0	17.7	17.7	-90.17	-0.1	-33.0	33.0	-2.4	35.40	0.932 Level 1			
5,100.0	5,100.0	5,101.0	5,101.0	18.1	18.1	-90.17	-0.1	-33.0	33.0	-3.1	36.12	0.914 Level 1			
5,200.0	5,200.0	5,201.0	5,201.0	18.4	18.4	-90.17	-0.1	-33.0	33.0	-3.8	36.83	0.896 Level 1			
5,300.0	5,300.0	5,301.0	5,301.0	18.8	18.8	-90.17	-0.1	-33.0	33.0	-4.6	37.55	0.879 Level 1			
5,400.0	5,400.0	5,401.0	5,401.0	19.1	19.1	-90.17	-0.1	-33.0	33.0	-5.3	38.27	0.862 Level 1			
5,500.0	5,500.0	5,501.6	5,501.6	19.5	19.5	-89.28	0.0	-32.1	32.1	-6.9	38.97	0.823 Level 1			
5,600.0	5,600.0	5,602.0	5,602.0	19.8	19.8	-94.31	0.3	-29.5	29.5	-10.1	39.66	0.744 Level 1			
5,700.0	5,699.8	5,702.3	5,702.2	20.2	20.2	-104.72	0.9	-25.1	25.9	-14.4	40.34	0.642 Level 1			
5,800.0	5,799.6	5,802.4	5,802.0	20.6	20.5	-123.78	1.6	-19.0	22.7	-18.3	41.02	0.554 Level 1			
5,844.1	5,843.5	5,846.3	5,845.9	20.7	20.7	-135.35	2.0	-15.8	22.3	-19.1	41.34	0.539 Level 1, CC, ES, SF			
5,900.0	5,899.3	5,902.0	5,901.4	20.9	20.9	-151.50	2.5	-11.2	23.2	-18.6	41.75	0.556 Level 1			
6,000.0	5,998.8	6,001.3	6,000.2	21.3	21.2	-177.00	3.7	-1.7	29.8	-12.7	42.49	0.702 Level 1			
6,100.0	6,098.2	6,100.1	6,098.4	21.6	21.6	166.22	5.0	9.4	40.7	-2.5	43.19	0.942 Level 1			
6,200.0	6,197.6	6,198.6	6,196.0	22.0	21.9	155.21	6.6	22.2	54.0	10.2	43.85	1.232 Level 2			
6,300.0	6,297.1	6,296.7	6,293.0	22.4	22.3	147.45	8.3	36.5	69.4	24.9	44.49	1.559			
6,400.0	6,396.5	6,394.2	6,389.2	22.7	22.6	141.61	10.3	52.4	86.4	41.3	45.12	1.915			
6,500.0	6,496.0	6,491.2	6,484.6	23.1	23.0	136.94	12.4	69.8	104.8	59.1	45.73	2.292			
6,600.0	6,595.6	6,587.8	6,579.3	23.4	23.3	132.62	14.7	88.8	123.7	77.3	46.31	2.670			
6,700.0	6,695.4	6,685.3	6,674.6	23.8	23.7	128.59	17.1	108.9	142.7	95.7	46.95	3.039			
6,800.0	6,795.3	6,783.0	6,770.3	24.2	24.1	124.99	19.5	129.1	161.2	113.6	47.60	3.387			
6,900.0	6,895.2	6,880.8	6,865.9	24.5	24.4	121.67	22.0	149.3	179.3	131.0	48.25	3.716			
7,000.0	6,995.2	6,978.7	6,961.6	24.9	24.8	118.53	24.4	169.5	197.0	148.1	48.91	4.029			
7,100.0	7,095.2	7,076.5	7,057.3	25.2	25.2	113.13	26.9	189.8	214.9	165.3	49.57	4.335			
7,200.0	7,195.2	7,174.3	7,153.0	25.6	25.6	110.58	29.3	210.0	233.2	183.0	50.24	4.643			
7,300.0	7,295.2	7,272.1	7,248.6	26.0	26.0	108.40	31.8	230.2	252.0	201.1	50.91	4.949			

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



Microsoft Anticollision Report



Company:	Advance Energy Partners	Local Co-ordinate Reference:	Well Merchant State Unit #510H
Project:	Lea County, NM (NAD 83 NME)	TVD Reference:	Kb @ 3710.5usft (H&P 466)
Reference Site:	(Merchant State)Sec35_T-21-S_R-33-E	MD Reference:	Kb @ 3710.5usft (H&P 466)
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	Merchant State Unit #510H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	OWB	Database:	EDM 10_13
Reference Design:	Plan 0.1	Offset TVD Reference:	Offset Datum

Offset Design:(Merchant State)Sec35_T-21-S_R-33-E - Merchant State Unit #302H - OWB - Plan 0.1													Offset Site Error:	0.0 usft
Survey Program: 0-MWD													Offset Well Error:	0.0 usft
Measured Depth (usft)	Vertical Reference Depth (usft)	Measured Depth (usft)	Vertical Offset Depth (usft)	Reference	Semi Major Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Distance Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning	
7,400.0	7,395.2	7,369.9	7,344.3	26.3	26.4	106.53	34.2	250.4	271.0	219.4	51.59	5.253		
7,500.0	7,495.2	7,467.7	7,440.0	26.7	26.8	104.90	36.7	270.6	290.3	238.0	52.28	5.553		
7,600.0	7,595.2	7,565.5	7,535.6	27.0	27.2	103.47	39.1	290.8	309.8	256.8	52.96	5.849		
7,700.0	7,695.2	7,663.3	7,631.3	27.4	27.6	102.21	41.6	311.0	329.4	275.7	53.65	6.139		
7,800.0	7,795.2	7,761.1	7,727.0	27.7	28.0	101.09	44.0	331.2	349.2	294.8	54.35	6.425		
7,900.0	7,895.2	7,859.0	7,822.6	28.1	28.4	100.10	46.5	351.5	369.1	314.0	55.04	6.705		
8,000.0	7,995.2	7,956.8	7,918.3	28.5	28.8	99.20	48.9	371.7	389.1	333.3	55.74	6.980		
8,100.0	8,095.2	8,054.6	8,014.0	28.8	29.2	98.39	51.4	391.9	409.1	352.7	56.44	7.249		
8,200.0	8,195.2	8,152.4	8,109.6	29.2	29.6	97.66	53.8	412.1	429.3	372.1	57.14	7.513		
8,300.0	8,295.2	8,250.2	8,205.3	29.5	30.0	97.00	56.3	432.3	449.5	391.6	57.84	7.771		
8,400.0	8,395.2	8,348.0	8,301.0	29.9	30.4	96.39	58.7	452.5	469.7	411.2	58.55	8.023		
8,500.0	8,495.2	8,445.8	8,396.6	30.2	30.8	95.83	61.2	472.7	490.0	430.8	59.25	8.271		
8,600.0	8,595.2	8,543.6	8,492.3	30.6	31.3	95.31	63.6	492.9	510.4	450.4	59.96	8.513		
8,700.0	8,695.2	8,641.4	8,588.0	31.0	31.7	94.84	66.1	513.2	530.8	470.1	60.66	8.750		
8,800.0	8,795.2	8,740.2	8,684.6	31.3	32.1	94.39	68.6	533.6	551.2	489.8	61.39	8.978		
8,900.0	8,895.2	8,848.7	8,790.9	31.7	32.6	93.96	71.1	554.8	570.5	508.2	62.28	9.161		
9,000.0	8,995.2	8,958.0	8,898.4	32.0	33.0	93.60	73.5	574.1	588.1	524.9	63.16	9.311		
9,100.0	9,095.2	9,067.9	9,007.0	32.4	33.5	93.29	75.6	591.6	603.8	539.7	64.03	9.430		
9,200.0	9,195.2	9,178.5	9,116.5	32.8	33.9	93.04	77.5	607.0	617.6	552.7	64.88	9.519		
9,300.0	9,295.2	9,289.7	9,226.9	33.1	34.4	92.82	79.1	620.4	629.6	563.9	65.72	9.579		
9,400.0	9,395.2	9,401.4	9,338.0	33.5	34.8	92.65	80.5	631.7	639.6	573.1	66.55	9.612		
9,500.0	9,495.2	9,513.5	9,449.7	33.8	35.2	92.51	81.6	640.9	647.8	580.4	67.35	9.618		
9,600.0	9,595.2	9,625.9	9,561.8	34.2	35.6	92.41	82.4	647.9	654.0	585.9	68.14	9.598		
9,700.0	9,695.2	9,738.5	9,674.4	34.5	36.0	92.34	83.0	652.8	658.3	589.4	68.90	9.554		
9,800.0	9,795.2	9,851.3	9,787.1	34.9	36.4	92.30	83.3	655.4	660.6	591.0	69.65	9.485		
9,900.0	9,895.2	9,960.4	9,896.2	35.3	36.8	92.30	83.4	656.0	661.1	590.8	70.37	9.395		
9,903.1	9,898.3	9,963.5	9,899.3	35.3	36.8	92.30	83.4	656.0	661.1	590.7	70.40	9.392		
10,000.0	9,995.2	10,058.9	9,994.7	35.6	37.1	92.36	82.7	656.0	661.2	590.1	71.08	9.302		
10,100.0	10,095.2	10,152.0	10,086.9	36.0	37.4	-86.19	70.7	656.1	661.9	590.1	71.74	9.226		
10,200.0	10,194.2	10,242.5	10,173.6	36.3	37.7	-84.87	44.9	656.3	663.1	590.8	72.33	9.167		
10,300.0	10,289.2	10,331.3	10,253.6	36.6	37.9	-83.71	6.6	656.6	664.4	591.6	72.85	9.121		
10,400.0	10,377.6	10,418.6	10,325.5	36.8	38.1	-82.72	-42.6	657.0	665.8	592.5	73.30	9.083		
10,500.0	10,456.5	10,504.7	10,388.4	37.1	38.3	-81.93	-101.4	657.4	667.0	593.3	73.71	9.049		
10,600.0	10,523.5	10,590.0	10,441.3	37.3	38.4	-81.36	-168.1	657.9	668.0	593.9	74.11	9.013		
10,700.0	10,576.7	10,674.7	10,483.5	37.6	38.6	-81.01	-241.5	658.5	668.6	594.0	74.54	8.970		
10,800.0	10,614.4	10,759.1	10,514.3	37.9	38.8	-80.90	-320.1	659.1	668.8	593.8	75.03	8.913		
10,900.0	10,635.5	10,843.6	10,533.3	38.2	39.0	-81.02	-402.3	659.7	668.6	592.9	75.62	8.841		
11,000.0	10,640.0	10,928.3	10,540.0	38.5	39.2	-81.30	-486.7	660.4	668.0	591.7	76.30	8.756		
11,037.2	10,640.0	10,965.0	10,540.0	38.7	39.3	-81.30	-523.4	660.7	668.0	591.5	76.58	8.723		
11,100.0	10,640.0	11,027.8	10,540.0	38.9	39.6	-81.30	-586.2	661.1	668.0	591.0	77.08	8.667		
11,200.0	10,640.0	11,127.8	10,540.0	39.4	40.0	-81.30	-686.2	661.9	668.0	590.0	77.98	8.566		
11,300.0	10,640.0	11,227.8	10,540.0	39.9	40.5	-81.30	-786.2	662.7	668.0	589.0	79.01	8.455		
11,400.0	10,640.0	11,327.8	10,540.0	40.4	41.0	-81.30	-886.2	663.4	668.0	587.9	80.16	8.333		
11,500.0	10,640.0	11,427.8	10,540.0	41.1	41.7	-81.30	-986.2	664.2	668.0	586.6	81.43	8.203		
11,600.0	10,640.0	11,527.8	10,540.0	41.8	42.3	-81.30	-1,086.2	665.0	668.0	585.2	82.81	8.067		
11,700.0	10,640.0	11,627.8	10,540.0	42.5	43.1	-81.30	-1,186.2	665.7	668.0	583.7	84.29	7.925		
11,800.0	10,640.0	11,727.8	10,540.0	43.3	43.9	-81.30	-1,286.2	666.5	668.0	582.1	85.88	7.778		
11,900.0	10,640.0	11,827.8	10,540.0	44.1	44.7	-81.30	-1,386.2	667.3	668.0	580.4	87.56	7.629		
12,000.0	10,640.0	11,927.8	10,540.0	45.0	45.6	-81.30	-1,486.2	668.0	668.0	578.7	89.33	7.478		
12,100.0	10,640.0	12,027.8	10,540.0	46.0	46.5	-81.30	-1,586.2	668.8	668.0	576.8	91.18	7.326		
12,200.0	10,640.0	12,127.8	10,540.0	46.9	47.4	-81.30	-1,686.2	669.6	668.0	574.9	93.11	7.174		
12,300.0	10,640.0	12,227.8	10,540.0	47.9	48.4	-81.30	-1,786.2	670.3	668.0	572.9	95.11	7.023		

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



Microsoft Anticollision Report



Company:	Advance Energy Partners	Local Co-ordinate Reference:	Well Merchant State Unit #510H
Project:	Lea County, NM (NAD 83 NME)	TVD Reference:	Kb @ 3710.5usft (H&P 466)
Reference Site:	(Merchant State)Sec35_T-21-S_R-33-E	MD Reference:	Kb @ 3710.5usft (H&P 466)
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	Merchant State Unit #510H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	OWB	Database:	EDM 10_13
Reference Design:	Plan 0.1	Offset TVD Reference:	Offset Datum

Offset Design:(Merchant State)Sec35_T-21-S_R-33-E - Merchant State Unit #302H - OWB - Plan 0.1													Offset Site Error:	0.0 usft
Survey Program: 0-MWD													Offset Well Error:	0.0 usft
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Semi Major Axis Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Distance Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning	
12,400.0	10,640.0	12,327.8	10,540.0	49.0	49.5	-81.30	-1,886.2	671.1	668.0	570.8	97.19	6.873		
12,500.0	10,640.0	12,427.8	10,540.0	50.0	50.5	-81.30	-1,986.2	671.9	668.0	568.7	99.33	6.725		
12,600.0	10,640.0	12,527.8	10,540.0	51.1	51.6	-81.30	-2,086.1	672.6	668.0	566.4	101.53	6.579		
12,700.0	10,640.0	12,627.8	10,540.0	52.3	52.7	-81.30	-2,186.1	673.4	668.0	564.2	103.79	6.436		
12,800.0	10,640.0	12,727.8	10,540.0	53.4	53.9	-81.30	-2,286.1	674.2	668.0	561.9	106.10	6.296		
12,900.0	10,640.0	12,827.8	10,540.0	54.6	55.1	-81.30	-2,386.1	674.9	668.0	559.5	108.46	6.159		
13,000.0	10,640.0	12,927.8	10,540.0	55.8	56.3	-81.30	-2,486.1	675.7	668.0	557.1	110.87	6.025		
13,100.0	10,640.0	13,027.8	10,540.0	57.1	57.5	-81.30	-2,586.1	676.5	668.0	554.6	113.32	5.894		
13,200.0	10,640.0	13,127.8	10,540.0	58.3	58.7	-81.30	-2,686.1	677.2	668.0	552.1	115.82	5.767		
13,300.0	10,640.0	13,227.8	10,540.0	59.6	60.0	-81.30	-2,786.1	678.0	668.0	549.6	118.35	5.644		
13,400.0	10,640.0	13,327.8	10,540.0	60.9	61.3	-81.30	-2,886.1	678.8	667.9	547.0	120.92	5.524		
13,500.0	10,640.0	13,427.8	10,540.0	62.2	62.6	-81.30	-2,986.1	679.5	667.9	544.4	123.52	5.408		
13,600.0	10,640.0	13,527.8	10,540.0	63.5	63.9	-81.30	-3,086.1	680.3	667.9	541.8	126.16	5.295		
13,700.0	10,640.0	13,627.8	10,540.0	64.9	65.3	-81.30	-3,186.1	681.1	667.9	539.1	128.82	5.185		
13,800.0	10,640.0	13,727.8	10,540.0	66.2	66.6	-81.30	-3,286.1	681.8	667.9	536.4	131.51	5.079		
13,900.0	10,640.0	13,827.8	10,540.0	67.6	68.0	-81.30	-3,386.1	682.6	667.9	533.7	134.23	4.976		
14,000.0	10,640.0	13,927.8	10,540.0	69.0	69.3	-81.30	-3,486.1	683.4	667.9	531.0	136.97	4.876		
14,100.0	10,640.0	14,027.8	10,540.0	70.4	70.7	-81.30	-3,586.1	684.1	667.9	528.2	139.74	4.780		
14,200.0	10,640.0	14,127.8	10,540.0	71.8	72.1	-81.30	-3,686.1	684.9	667.9	525.4	142.53	4.686		
14,300.0	10,640.0	14,227.8	10,540.0	73.2	73.5	-81.30	-3,786.1	685.7	667.9	522.6	145.34	4.596		
14,400.0	10,640.0	14,327.8	10,540.0	74.6	75.0	-81.30	-3,886.1	686.5	667.9	519.7	148.17	4.508		
14,500.0	10,640.0	14,427.8	10,540.0	76.1	76.4	-81.30	-3,986.1	687.2	667.9	516.9	151.02	4.423		
14,600.0	10,640.0	14,527.8	10,540.0	77.5	77.8	-81.30	-4,086.1	688.0	667.9	514.0	153.88	4.340		
14,700.0	10,640.0	14,627.8	10,540.0	78.9	79.3	-81.30	-4,186.1	688.8	667.9	511.1	156.76	4.261		
14,800.0	10,640.0	14,727.8	10,540.0	80.4	80.7	-81.30	-4,286.1	689.5	667.9	508.2	159.66	4.183		
14,900.0	10,640.0	14,827.8	10,540.0	81.9	82.2	-81.30	-4,386.1	690.3	667.9	505.3	162.57	4.108		
15,000.0	10,640.0	14,927.8	10,540.0	83.3	83.6	-81.30	-4,486.1	691.1	667.9	502.4	165.49	4.036		
15,100.0	10,640.0	15,027.8	10,540.0	84.8	85.1	-81.30	-4,586.1	691.8	667.9	499.5	168.43	3.965		
15,200.0	10,640.0	15,127.8	10,540.0	86.3	86.6	-81.30	-4,686.1	692.6	667.9	496.5	171.38	3.897		
15,300.0	10,640.0	15,227.8	10,540.0	87.8	88.1	-81.30	-4,786.1	693.4	667.9	493.5	174.35	3.831		
15,400.0	10,640.0	15,327.8	10,540.0	89.3	89.6	-81.30	-4,886.1	694.1	667.9	490.6	177.32	3.766		
15,500.0	10,640.0	15,427.8	10,540.0	90.8	91.1	-81.30	-4,986.1	694.9	667.9	487.6	180.31	3.704		
15,600.0	10,640.0	15,527.8	10,540.0	92.3	92.6	-81.30	-5,086.1	695.7	667.9	484.6	183.30	3.644		
15,700.0	10,640.0	15,627.8	10,540.0	93.8	94.1	-81.30	-5,186.1	696.4	667.9	481.6	186.31	3.585		
15,800.0	10,640.0	15,727.8	10,540.0	95.4	95.6	-81.30	-5,286.1	697.2	667.9	478.5	189.32	3.528		
15,900.0	10,640.0	15,827.8	10,540.0	96.9	97.1	-81.30	-5,386.1	698.0	667.9	475.5	192.34	3.472		
16,000.0	10,640.0	15,927.8	10,540.0	98.4	98.7	-81.30	-5,486.0	698.7	667.9	472.5	195.37	3.418		
16,100.0	10,640.0	16,027.8	10,540.0	99.9	100.2	-81.30	-5,586.0	699.5	667.8	469.4	198.41	3.366		
16,200.0	10,640.0	16,127.8	10,540.0	101.5	101.7	-81.30	-5,686.0	700.3	667.8	466.4	201.46	3.315		
16,300.0	10,640.0	16,227.8	10,540.0	103.0	103.3	-81.30	-5,786.0	701.0	667.8	463.3	204.52	3.265		
16,400.0	10,640.0	16,327.8	10,540.0	104.6	104.8	-81.30	-5,886.0	701.8	667.8	460.3	207.58	3.217		
16,500.0	10,640.0	16,427.8	10,540.0	106.1	106.3	-81.30	-5,986.0	702.6	667.8	457.2	210.64	3.170		
16,600.0	10,640.0	16,527.8	10,540.0	107.7	107.9	-81.30	-6,086.0	703.3	667.8	454.1	213.72	3.125		
16,700.0	10,640.0	16,627.8	10,540.0	109.2	109.4	-81.30	-6,186.0	704.1	667.8	451.0	216.80	3.080		
16,800.0	10,640.0	16,727.8	10,540.0	110.8	111.0	-81.30	-6,286.0	704.9	667.8	447.9	219.89	3.037		
16,900.0	10,640.0	16,827.8	10,540.0	112.3	112.6	-81.30	-6,386.0	705.6	667.8	444.8	222.98	2.995		
17,000.0	10,640.0	16,927.8	10,540.0	113.9	114.1	-81.30	-6,486.0	706.4	667.8	441.7	226.08	2.954		
17,100.0	10,640.0	17,027.8	10,540.0	115.5	115.7	-81.30	-6,586.0	707.2	667.8	438.6	229.18	2.914		
17,200.0	10,640.0	17,127.8	10,540.0	117.0	117.2	-81.30	-6,686.0	707.9	667.8	435.5	232.29	2.875		
17,300.0	10,640.0	17,227.8	10,540.0	118.6	118.8	-81.30	-6,786.0	708.7	667.8	432.4	235.40	2.837		
17,400.0	10,640.0	17,327.8	10,540.0	120.2	120.4	-81.30	-6,886.0	709.5	667.8	429.3	238.52	2.800		
17,500.0	10,640.0	17,427.8	10,540.0	121.7	121.9	-81.30	-6,986.0	710.2	667.8	426.2	241.64	2.764		

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



Microsoft Anticollision Report



Company:	Advance Energy Partners	Local Co-ordinate Reference:	Well Merchant State Unit #510H
Project:	Lea County, NM (NAD 83 NME)	TVD Reference:	Kb @ 3710.5usft (H&P 466)
Reference Site:	(Merchant State)Sec35_T-21-S_R-33-E	MD Reference:	Kb @ 3710.5usft (H&P 466)
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	Merchant State Unit #510H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	OWB	Database:	EDM 10_13
Reference Design:	Plan 0.1	Offset TVD Reference:	Offset Datum

Offset Design:(Merchant State)Sec35_T-21-S_R-33-E - Merchant State Unit #302H - OWB - Plan 0.1														Offset Site Error:	0.0 usft
Survey Program: 0-MWD														Offset Well Error:	0.0 usft
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference	Offset	Highside Toolface (°)	+N/-S (usft)	+E/-W (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning		
17,600.0	10,640.0	17,527.8	10,540.0	123.3	123.5	-81.30	-7,086.0	711.0	667.8	423.0	244.76	2.728			
17,700.0	10,640.0	17,627.8	10,540.0	124.9	125.1	-81.30	-7,186.0	711.8	667.8	419.9	247.89	2.694			
17,800.0	10,640.0	17,727.8	10,540.0	126.5	126.7	-81.30	-7,286.0	712.5	667.8	416.8	251.03	2.660			
17,900.0	10,640.0	17,827.8	10,540.0	128.1	128.3	-81.30	-7,386.0	713.3	667.8	413.6	254.16	2.627			
18,000.0	10,640.0	17,927.8	10,540.0	129.6	129.8	-81.30	-7,486.0	714.1	667.8	410.5	257.31	2.595			
18,100.0	10,640.0	18,027.8	10,540.0	131.2	131.4	-81.30	-7,586.0	714.8	667.8	407.3	260.45	2.564			
18,200.0	10,640.0	18,127.8	10,540.0	132.8	133.0	-81.30	-7,686.0	715.6	667.8	404.2	263.60	2.533			
18,300.0	10,640.0	18,227.8	10,540.0	134.4	134.6	-81.30	-7,786.0	716.4	667.8	401.0	266.75	2.503			
18,400.0	10,640.0	18,327.8	10,540.0	136.0	136.2	-81.30	-7,886.0	717.1	667.8	397.9	269.90	2.474			
18,500.0	10,640.0	18,427.8	10,540.0	137.6	137.8	-81.30	-7,986.0	717.9	667.8	394.7	273.06	2.445			
18,600.0	10,640.0	18,527.8	10,540.0	139.2	139.4	-81.30	-8,086.0	718.7	667.8	391.5	276.22	2.417			
18,700.0	10,640.0	18,627.8	10,540.0	140.8	141.0	-81.30	-8,186.0	719.4	667.8	388.4	279.39	2.390			
18,800.0	10,640.0	18,727.8	10,540.0	142.4	142.5	-81.30	-8,286.0	720.2	667.7	385.2	282.55	2.363			
18,900.0	10,640.0	18,827.8	10,540.0	144.0	144.1	-81.30	-8,386.0	721.0	667.7	382.0	285.72	2.337			
19,000.0	10,640.0	18,927.8	10,540.0	145.6	145.7	-81.30	-8,486.0	721.7	667.7	378.9	288.89	2.311			
19,100.0	10,640.0	19,027.8	10,540.0	147.2	147.3	-81.30	-8,586.0	722.5	667.7	375.7	292.07	2.286			
19,200.0	10,640.0	19,127.8	10,540.0	148.8	148.9	-81.30	-8,686.0	723.3	667.7	372.5	295.24	2.262			
19,300.0	10,640.0	19,227.8	10,540.0	150.4	150.5	-81.30	-8,786.0	724.0	667.7	369.3	298.42	2.238			
19,400.0	10,640.0	19,327.8	10,540.0	152.0	152.1	-81.30	-8,885.9	724.8	667.7	366.1	301.60	2.214			
19,500.0	10,640.0	19,427.8	10,540.0	153.6	153.7	-81.30	-8,985.9	725.6	667.7	362.9	304.78	2.191			
19,600.0	10,640.0	19,527.8	10,540.0	155.2	155.4	-81.30	-9,085.9	726.3	667.7	359.8	307.97	2.168			
19,700.0	10,640.0	19,627.8	10,540.0	156.8	157.0	-81.30	-9,185.9	727.1	667.7	356.6	311.16	2.146			
19,800.0	10,640.0	19,727.8	10,540.0	158.4	158.6	-81.30	-9,285.9	727.9	667.7	353.4	314.34	2.124			
19,900.0	10,640.0	19,827.8	10,540.0	160.0	160.2	-81.30	-9,385.9	728.6	667.7	350.2	317.54	2.103			
20,000.0	10,640.0	19,927.8	10,540.0	161.6	161.8	-81.30	-9,485.9	729.4	667.7	347.0	320.73	2.082			
20,100.0	10,640.0	20,027.8	10,540.0	163.2	163.4	-81.30	-9,585.9	730.2	667.7	343.8	323.92	2.061			
20,200.0	10,640.0	20,127.8	10,540.0	164.8	165.0	-81.30	-9,685.9	730.9	667.7	340.6	327.12	2.041			
20,300.0	10,640.0	20,227.8	10,540.0	166.5	166.6	-81.30	-9,785.9	731.7	667.7	337.4	330.32	2.021			
20,400.0	10,640.0	20,327.8	10,540.0	168.1	168.2	-81.30	-9,885.9	732.5	667.7	334.2	333.52	2.002			
20,500.0	10,640.0	20,427.8	10,540.0	169.7	169.8	-81.30	-9,985.9	733.2	667.7	331.0	336.72	1.983			
20,600.0	10,640.0	20,527.8	10,540.0	171.3	171.5	-81.30	-10,085.9	734.0	667.7	327.8	339.92	1.964			
20,700.0	10,640.0	20,627.8	10,540.0	172.9	173.1	-81.30	-10,185.9	734.8	667.7	324.6	343.13	1.946			
20,765.0	10,640.0	20,692.9	10,540.0	174.0	174.1	-81.30	-10,250.9	735.3	667.7	322.5	345.21	1.934			



Microsoft Anticollision Report



Company:	Advance Energy Partners	Local Co-ordinate Reference:	Well Merchant State Unit #510H
Project:	Lea County, NM (NAD 83 NME)	TVD Reference:	Kb @ 3710.5usft (H&P 466)
Reference Site:	(Merchant State)Sec35_T-21-S_R-33-E	MD Reference:	Kb @ 3710.5usft (H&P 466)
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	Merchant State Unit #510H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	OWB	Database:	EDM 10_13
Reference Design:	Plan 0.1	Offset TVD Reference:	Offset Datum

Offset Design:(Merchant State)Sec35_T-21-S_R-33-E - Merchant State Unit #552H - OWB - Plan 0.1														Offset Site Error:	0.0 usft
Survey Program: 0-MWD														Offset Well Error:	0.0 usft
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference	Offset	Highside Toolface (°)	+N/-S (usft)	+E/-W (usft)	Distance Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning		
0.0	0.0	0.0	0.0	0.0	0.0	89.65	0.2	33.0	33.0						
100.0	100.0	100.0	100.0	0.1	0.1	89.65	0.2	33.0	33.0	32.7	0.27	123.569			
200.0	200.0	200.0	200.0	0.5	0.5	89.65	0.2	33.0	33.0	32.0	0.98	33.537			
300.0	300.0	300.0	300.0	0.9	0.9	89.65	0.2	33.0	33.0	31.3	1.70	19.401			
400.0	400.0	400.0	400.0	1.2	1.2	89.65	0.2	33.0	33.0	30.6	2.42	13.649			
500.0	500.0	500.0	500.0	1.6	1.6	89.65	0.2	33.0	33.0	29.9	3.13	10.527			
600.0	600.0	600.0	600.0	1.9	1.9	89.65	0.2	33.0	33.0	29.1	3.85	8.568			
700.0	700.0	700.0	700.0	2.3	2.3	89.65	0.2	33.0	33.0	28.4	4.57	7.223			
800.0	800.0	800.0	800.0	2.6	2.6	89.65	0.2	33.0	33.0	27.7	5.29	6.243			
900.0	900.0	900.0	900.0	3.0	3.0	89.65	0.2	33.0	33.0	27.0	6.00	5.498			
1,000.0	1,000.0	1,000.0	1,000.0	3.4	3.4	89.65	0.2	33.0	33.0	26.3	6.72	4.911			
1,100.0	1,100.0	1,100.0	1,100.0	3.7	3.7	89.65	0.2	33.0	33.0	25.6	7.44	4.438			
1,200.0	1,200.0	1,200.0	1,200.0	4.1	4.1	89.65	0.2	33.0	33.0	24.8	8.15	4.047			
1,300.0	1,300.0	1,300.0	1,300.0	4.4	4.4	89.65	0.2	33.0	33.0	24.1	8.87	3.720			
1,400.0	1,400.0	1,400.0	1,400.0	4.8	4.8	89.65	0.2	33.0	33.0	23.4	9.59	3.442			
1,500.0	1,500.0	1,500.0	1,500.0	5.2	5.2	89.65	0.2	33.0	33.0	22.7	10.30	3.203			
1,600.0	1,600.0	1,600.0	1,600.0	5.5	5.5	89.65	0.2	33.0	33.0	22.0	11.02	2.994			
1,700.0	1,700.0	1,700.0	1,700.0	5.9	5.9	89.65	0.2	33.0	33.0	21.3	11.74	2.811			
1,800.0	1,800.0	1,800.0	1,800.0	6.2	6.2	89.65	0.2	33.0	33.0	20.5	12.46	2.650			
1,900.0	1,900.0	1,900.0	1,900.0	6.6	6.6	89.65	0.2	33.0	33.0	19.8	13.17	2.505			
2,000.0	2,000.0	2,000.0	2,000.0	6.9	6.9	89.65	0.2	33.0	33.0	19.1	13.89	2.376			
2,100.0	2,100.0	2,100.0	2,100.0	7.3	7.3	89.65	0.2	33.0	33.0	18.4	14.61	2.259			
2,200.0	2,200.0	2,200.0	2,200.0	7.7	7.7	89.65	0.2	33.0	33.0	17.7	15.32	2.154			
2,300.0	2,300.0	2,300.0	2,300.0	8.0	8.0	89.65	0.2	33.0	33.0	17.0	16.04	2.057			
2,400.0	2,400.0	2,400.0	2,400.0	8.4	8.4	89.65	0.2	33.0	33.0	16.2	16.76	1.969			
2,500.0	2,500.0	2,500.0	2,500.0	8.7	8.7	89.65	0.2	33.0	33.0	15.5	17.47	1.889			
2,600.0	2,600.0	2,600.0	2,600.0	9.1	9.1	89.65	0.2	33.0	33.0	14.8	18.19	1.814			
2,700.0	2,700.0	2,700.0	2,700.0	9.5	9.5	89.65	0.2	33.0	33.0	14.1	18.91	1.745			
2,800.0	2,800.0	2,800.0	2,800.0	9.8	9.8	89.65	0.2	33.0	33.0	13.4	19.62	1.682			
2,900.0	2,900.0	2,900.0	2,900.0	10.2	10.2	89.65	0.2	33.0	33.0	12.7	20.34	1.622			
3,000.0	3,000.0	3,000.0	3,000.0	10.5	10.5	89.65	0.2	33.0	33.0	11.9	21.06	1.567			
3,100.0	3,100.0	3,100.0	3,100.0	10.9	10.9	89.65	0.2	33.0	33.0	11.2	21.78	1.516			
3,200.0	3,200.0	3,200.0	3,200.0	11.2	11.2	89.65	0.2	33.0	33.0	10.5	22.49	1.467 Level 3			
3,300.0	3,300.0	3,300.0	3,300.0	11.6	11.6	89.65	0.2	33.0	33.0	9.8	23.21	1.422 Level 3			
3,400.0	3,400.0	3,400.0	3,400.0	12.0	12.0	89.65	0.2	33.0	33.0	9.1	23.93	1.379 Level 3			
3,500.0	3,500.0	3,500.0	3,500.0	12.3	12.3	89.65	0.2	33.0	33.0	8.4	24.64	1.339 Level 3			
3,600.0	3,600.0	3,600.0	3,600.0	12.7	12.7	89.65	0.2	33.0	33.0	7.6	25.36	1.301 Level 3			
3,700.0	3,700.0	3,700.0	3,700.0	13.0	13.0	89.65	0.2	33.0	33.0	6.9	26.08	1.266 Level 3			
3,800.0	3,800.0	3,800.0	3,800.0	13.4	13.4	89.65	0.2	33.0	33.0	6.2	26.79	1.232 Level 2			
3,900.0	3,900.0	3,900.0	3,900.0	13.8	13.8	89.65	0.2	33.0	33.0	5.5	27.51	1.200 Level 2			
4,000.0	4,000.0	4,000.0	4,000.0	14.1	14.1	89.65	0.2	33.0	33.0	4.8	28.23	1.169 Level 2			
4,100.0	4,100.0	4,100.0	4,100.0	14.5	14.5	89.65	0.2	33.0	33.0	4.1	28.94	1.140 Level 2			
4,200.0	4,200.0	4,200.0	4,200.0	14.8	14.8	89.65	0.2	33.0	33.0	3.3	29.66	1.113 Level 2			
4,300.0	4,300.0	4,300.0	4,300.0	15.2	15.2	89.65	0.2	33.0	33.0	2.6	30.38	1.086 Level 2			
4,400.0	4,400.0	4,400.0	4,400.0	15.5	15.5	89.65	0.2	33.0	33.0	1.9	31.10	1.061 Level 2			
4,500.0	4,500.0	4,500.0	4,500.0	15.9	15.9	89.65	0.2	33.0	33.0	1.2	31.81	1.037 Level 2			
4,600.0	4,600.0	4,600.0	4,600.0	16.3	16.3	89.65	0.2	33.0	33.0	0.5	32.53	1.014 Level 2			
4,700.0	4,700.0	4,700.0	4,700.0	16.6	16.6	89.65	0.2	33.0	33.0	-0.2	33.25	0.993 Level 1			
4,800.0	4,800.0	4,800.0	4,800.0	17.0	17.0	89.65	0.2	33.0	33.0	-1.0	33.96	0.972 Level 1			
4,900.0	4,900.0	4,900.0	4,900.0	17.3	17.3	89.65	0.2	33.0	33.0	-1.7	34.68	0.952 Level 1			
5,000.0	5,000.0	5,000.0	5,000.0	17.7	17.7	89.65	0.2	33.0	33.0	-2.4	35.40	0.932 Level 1			
5,100.0	5,100.0	5,100.0	5,100.0	18.1	18.1	89.65	0.2	33.0	33.0	-3.1	36.11	0.914 Level 1			

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



Microsoft Anticollision Report



Company:	Advance Energy Partners	Local Co-ordinate Reference:	Well Merchant State Unit #510H
Project:	Lea County, NM (NAD 83 NME)	TVD Reference:	Kb @ 3710.5usft (H&P 466)
Reference Site:	(Merchant State)Sec35_T-21-S_R-33-E	MD Reference:	Kb @ 3710.5usft (H&P 466)
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	Merchant State Unit #510H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	OWB	Database:	EDM 10_13
Reference Design:	Plan 0.1	Offset TVD Reference:	Offset Datum

Offset Design:(Merchant State)Sec35_T-21-S_R-33-E - Merchant State Unit #552H - OWB - Plan 0.1														Offset Site Error:	0.0 usft
Survey Program: 0-MWD														Offset Well Error:	0.0 usft
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference Offset (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	+N/-S (usft)	+E/-W (usft)	Distance Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning		
5,200.0	5,200.0	5,200.1	5,200.1	18.4	18.4	89.28	0.4	32.9	33.0	-3.9	36.83	0.895 Level 1			
5,300.0	5,300.0	5,300.2	5,300.1	18.8	18.8	86.28	2.1	32.5	32.6	-4.9	37.55	0.869 Level 1			
5,400.0	5,400.0	5,400.2	5,400.1	19.1	19.1	80.15	5.5	31.7	32.2	-6.0	38.26	0.842 Level 1			
5,500.0	5,500.0	5,500.1	5,499.8	19.5	19.5	74.85	10.6	30.5	32.1	-6.9	38.98	0.823 Level 1			
5,514.5	5,514.5	5,514.5	5,514.3	19.5	19.5	73.74	11.5	30.3	32.1	-7.0	39.08	0.821 Level 1			
5,600.0	5,600.0	5,599.9	5,599.4	19.8	19.8	67.26	17.4	29.0	32.2	-7.5	39.69	0.810 Level 1			
5,700.0	5,699.8	5,699.7	5,698.8	20.2	20.2	59.80	25.8	27.0	32.4	-8.0	40.39	0.803 Level 1			
5,800.0	5,799.6	5,799.5	5,798.1	20.6	20.6	52.90	35.7	24.6	32.7	-8.4	41.09	0.797 Level 1			
5,900.0	5,899.3	5,899.5	5,897.6	20.9	20.9	48.39	45.7	22.3	32.3	-9.5	41.79	0.774 Level 1			
6,000.0	5,998.8	5,999.4	5,997.0	21.3	21.3	46.07	55.8	19.9	30.9	-11.6	42.50	0.726 Level 1			
6,100.0	6,098.2	6,099.4	6,096.5	21.6	21.6	44.09	65.8	17.6	29.2	-14.1	43.22	0.675 Level 1			
6,200.0	6,197.6	6,199.4	6,195.9	22.0	22.0	41.86	75.9	15.2	27.5	-16.4	43.93	0.626 Level 1			
6,300.0	6,297.1	6,299.4	6,295.4	22.4	22.4	39.36	85.9	12.8	25.9	-18.8	44.64	0.580 Level 1			
6,400.0	6,396.5	6,399.4	6,394.8	22.7	22.7	36.53	95.9	10.5	24.3	-21.1	45.36	0.536 Level 1			
6,500.0	6,496.0	6,499.3	6,494.2	23.1	23.1	32.81	106.0	8.1	23.1	-23.0	46.07	0.502 Level 1			
6,525.9	6,521.8	6,525.3	6,520.0	23.2	23.2	31.43	108.6	7.5	23.1	-23.2	46.25	0.499 Level 1, CC, ES, SF			
6,600.0	6,595.6	6,599.3	6,593.7	23.4	23.5	26.68	116.0	5.7	23.6	-23.2	46.77	0.504 Level 1			
6,700.0	6,695.4	6,699.2	6,693.1	23.8	23.8	19.39	126.0	3.4	26.0	-21.4	47.46	0.549 Level 1			
6,800.0	6,795.3	6,799.3	6,792.7	24.2	24.2	12.85	135.8	1.1	30.4	-17.8	48.19	0.631 Level 1			
6,900.0	6,895.2	6,899.7	6,892.7	24.5	24.6	8.40	144.0	-0.9	35.4	-13.5	48.94	0.724 Level 1			
7,000.0	6,995.2	7,000.2	6,993.0	24.9	24.9	5.51	150.5	-2.4	40.8	-8.9	49.68	0.820 Level 1			
7,100.0	7,095.2	7,100.8	7,093.4	25.2	25.3	1.35	155.3	-3.5	45.5	-4.9	50.42	0.902 Level 1			
7,200.0	7,195.2	7,201.6	7,194.1	25.6	25.6	0.40	158.4	-4.3	48.6	-2.6	51.15	0.949 Level 1			
7,300.0	7,295.2	7,302.4	7,295.0	26.0	26.0	0.02	159.8	-4.6	49.9	-1.9	51.87	0.963 Level 1			
7,400.0	7,395.2	7,402.6	7,395.2	26.3	26.4	0.00	159.9	-4.6	50.0	-2.6	52.58	0.951 Level 1			
7,500.0	7,495.2	7,502.6	7,495.2	26.7	26.7	0.00	159.9	-4.6	50.0	-3.3	53.30	0.938 Level 1			
7,600.0	7,595.2	7,602.6	7,595.2	27.0	27.1	0.00	159.9	-4.6	50.0	-4.0	54.01	0.926 Level 1			
7,700.0	7,695.2	7,702.6	7,695.2	27.4	27.4	0.00	159.9	-4.6	50.0	-4.7	54.73	0.914 Level 1			
7,800.0	7,795.2	7,802.6	7,795.2	27.7	27.8	0.00	159.9	-4.6	50.0	-5.4	55.44	0.902 Level 1			
7,900.0	7,895.2	7,902.6	7,895.2	28.1	28.2	0.00	159.9	-4.6	50.0	-6.2	56.16	0.890 Level 1			
8,000.0	7,995.2	8,002.6	7,995.2	28.5	28.5	0.00	159.9	-4.6	50.0	-6.9	56.88	0.879 Level 1			
8,100.0	8,095.2	8,102.6	8,095.2	28.8	28.9	0.00	159.9	-4.6	50.0	-7.6	57.59	0.868 Level 1			
8,200.0	8,195.2	8,202.6	8,195.2	29.2	29.2	0.00	159.9	-4.6	50.0	-8.3	58.31	0.858 Level 1			
8,300.0	8,295.2	8,302.6	8,295.2	29.5	29.6	0.00	159.9	-4.6	50.0	-9.0	59.03	0.847 Level 1			
8,400.0	8,395.2	8,402.6	8,395.2	29.9	29.9	0.00	159.9	-4.6	50.0	-9.7	59.74	0.837 Level 1			
8,500.0	8,495.2	8,502.6	8,495.2	30.2	30.3	0.00	159.9	-4.6	50.0	-10.5	60.46	0.827 Level 1			
8,600.0	8,595.2	8,602.6	8,595.2	30.6	30.7	0.00	159.9	-4.6	50.0	-11.2	61.17	0.817 Level 1			
8,700.0	8,695.2	8,702.6	8,695.2	31.0	31.0	0.00	159.9	-4.6	50.0	-11.9	61.89	0.808 Level 1			
8,800.0	8,795.2	8,802.6	8,795.2	31.3	31.4	0.00	159.9	-4.6	50.0	-12.6	62.61	0.799 Level 1			
8,900.0	8,895.2	8,902.6	8,895.2	31.7	31.7	0.00	159.9	-4.6	50.0	-13.3	63.32	0.790 Level 1			
9,000.0	8,995.2	9,002.6	8,995.2	32.0	32.1	0.00	159.9	-4.6	50.0	-14.0	64.04	0.781 Level 1			
9,100.0	9,095.2	9,102.6	9,095.2	32.4	32.4	0.00	159.9	-4.6	50.0	-14.8	64.76	0.772 Level 1			
9,200.0	9,195.2	9,202.6	9,195.2	32.8	32.8	0.00	159.9	-4.6	50.0	-15.5	65.47	0.764 Level 1			
9,300.0	9,295.2	9,302.6	9,295.2	33.1	33.2	0.00	159.9	-4.6	50.0	-16.2	66.19	0.755 Level 1			
9,400.0	9,395.2	9,402.6	9,395.2	33.5	33.5	0.00	159.9	-4.6	50.0	-16.9	66.91	0.747 Level 1			
9,500.0	9,495.2	9,502.6	9,495.2	33.8	33.9	0.00	159.9	-4.6	50.0	-17.6	67.62	0.739 Level 1			
9,600.0	9,595.2	9,602.6	9,595.2	34.2	34.2	0.00	159.9	-4.6	50.0	-18.3	68.34	0.732 Level 1			
9,700.0	9,695.2	9,702.6	9,695.2	34.5	34.6	0.00	159.9	-4.6	50.0	-19.1	69.05	0.724 Level 1			
9,800.0	9,795.2	9,802.6	9,795.2	34.9	34.9	0.00	159.9	-4.6	50.0	-19.8	69.77	0.717 Level 1			
9,900.0	9,895.2	9,902.6	9,895.2	35.3	35.3	0.00	159.9	-4.6	50.0	-20.5	70.49	0.709 Level 1			
10,000.0	9,995.2	10,002.6	9,995.2	35.6	35.7	0.00	159.9	-4.6	50.0	-21.2	71.20	0.702 Level 1			
10,000.0	9,995.2	10,002.7	9,995.2	35.6	35.7	0.00	159.9	-4.6	50.0	-21.2	71.20	0.702 Level 1			

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



Microsoft Anticollision Report



Company:	Advance Energy Partners	Local Co-ordinate Reference:	Well Merchant State Unit #510H
Project:	Lea County, NM (NAD 83 NME)	TVD Reference:	Kb @ 3710.5usft (H&P 466)
Reference Site:	(Merchant State)Sec35_T-21-S_R-33-E	MD Reference:	Kb @ 3710.5usft (H&P 466)
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	Merchant State Unit #510H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	OWB	Database:	EDM 10_13
Reference Design:	Plan 0.1	Offset TVD Reference:	Offset Datum

Offset Design:(Merchant State)Sec35_T-21-S_R-33-E - Merchant State Unit #552H - OWB - Plan 0.1													Offset Site Error:	0.0 usft
Survey Program: 0-MWD													Offset Well Error:	0.0 usft
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference Offset (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Distance Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning	
10,100.0	10,095.2	10,102.6	10,095.2	36.0	36.0	-179.56	159.9	-4.6	50.7	-21.2	71.92	0.705	Level 1	
10,200.0	10,194.2	10,201.6	10,194.2	36.3	36.4	-179.65	159.9	-4.6	64.3	-8.3	72.58	0.886	Level 1	
10,300.0	10,289.2	10,296.7	10,289.2	36.6	36.7	-179.75	159.9	-4.6	94.9	21.6	73.22	1.295	Level 3	
10,400.0	10,377.6	10,385.0	10,377.6	36.8	37.0	-179.81	159.9	-4.6	141.5	67.7	73.79	1.917		
10,500.0	10,456.5	10,463.9	10,456.5	37.1	37.3	-179.85	159.9	-4.6	202.7	128.4	74.29	2.729		
10,600.0	10,523.5	10,530.9	10,523.5	37.3	37.5	-179.87	159.9	-4.6	276.7	202.0	74.70	3.705		
10,700.0	10,576.7	10,584.1	10,576.7	37.6	37.7	-179.87	159.9	-4.6	361.3	286.3	75.00	4.817		
10,800.0	10,614.4	10,621.8	10,614.4	37.9	37.9	-179.84	159.9	-4.6	453.7	378.5	75.21	6.033		
10,900.0	10,635.5	10,642.9	10,635.5	38.2	37.9	-179.68	159.9	-4.6	551.4	476.1	75.31	7.321		
11,000.0	10,640.0	10,647.4	10,640.0	38.5	38.0	-90.42	159.9	-4.6	651.2	575.8	75.34	8.643		
11,100.0	10,640.0	11,852.6	11,340.0	38.9	41.4	-179.97	-591.3	1.2	700.0	654.9	45.07	15.531		
11,200.0	10,640.0	11,952.6	11,340.0	39.4	41.8	-179.97	-691.3	1.9	700.0	654.6	45.43	15.407		
11,300.0	10,640.0	12,052.6	11,340.0	39.9	42.3	-179.97	-791.2	2.7	700.0	654.2	45.85	15.268		
11,400.0	10,640.0	12,152.6	11,340.0	40.4	42.9	-179.97	-891.2	3.5	700.0	653.7	46.31	15.116		
11,500.0	10,640.0	12,252.6	11,340.0	41.1	43.5	-179.97	-991.2	4.2	700.0	653.2	46.82	14.951		
11,600.0	10,640.0	12,352.6	11,340.0	41.8	44.1	-179.97	-1,091.2	5.0	700.0	652.6	47.38	14.775		
11,700.0	10,640.0	12,452.6	11,340.0	42.5	44.8	-179.97	-1,191.2	5.8	700.0	652.0	47.98	14.589		
11,800.0	10,640.0	12,552.6	11,340.0	43.3	45.6	-179.97	-1,291.2	6.5	700.0	651.4	48.63	14.395		
11,900.0	10,640.0	12,652.6	11,340.0	44.1	46.4	-179.97	-1,391.2	7.3	700.0	650.7	49.32	14.194		
12,000.0	10,640.0	12,752.6	11,340.0	45.0	47.2	-179.97	-1,491.2	8.1	700.0	650.0	50.04	13.988		
12,100.0	10,640.0	12,852.6	11,340.0	46.0	48.1	-179.97	-1,591.2	8.8	700.0	649.2	50.81	13.777		
12,200.0	10,640.0	12,952.6	11,340.0	46.9	49.1	-179.97	-1,691.2	9.6	700.0	648.4	51.61	13.563		
12,300.0	10,640.0	13,052.6	11,340.0	47.9	50.0	-179.97	-1,791.2	10.4	700.0	647.6	52.45	13.347		
12,400.0	10,640.0	13,152.6	11,340.0	49.0	51.0	-179.97	-1,891.2	11.1	700.0	646.7	53.32	13.129		
12,500.0	10,640.0	13,252.6	11,340.0	50.0	52.1	-179.97	-1,991.2	11.9	700.0	645.8	54.22	12.911		
12,600.0	10,640.0	13,352.6	11,340.0	51.1	53.2	-179.98	-2,091.2	12.7	700.0	644.8	55.15	12.693		
12,700.0	10,640.0	13,452.6	11,340.0	52.3	54.2	-179.98	-2,191.2	13.4	700.0	643.9	56.11	12.475		
12,800.0	10,640.0	13,552.6	11,340.0	53.4	55.4	-179.98	-2,291.2	14.2	700.0	642.9	57.10	12.260		
12,900.0	10,640.0	13,652.6	11,340.0	54.6	56.5	-179.98	-2,391.2	15.0	700.0	641.9	58.11	12.046		
13,000.0	10,640.0	13,752.6	11,340.0	55.8	57.7	-179.98	-2,491.2	15.7	700.0	640.9	59.15	11.835		
13,100.0	10,640.0	13,852.6	11,340.0	57.1	58.9	-179.98	-2,591.2	16.5	700.0	639.8	60.21	11.627		
13,200.0	10,640.0	13,952.6	11,340.0	58.3	60.1	-179.98	-2,691.2	17.3	700.0	638.7	61.29	11.421		
13,300.0	10,640.0	14,052.6	11,340.0	59.6	61.4	-179.98	-2,791.2	18.0	700.0	637.6	62.39	11.220		
13,400.0	10,640.0	14,152.6	11,340.0	60.9	62.6	-179.98	-2,891.2	18.8	700.0	636.5	63.51	11.021		
13,500.0	10,640.0	14,252.6	11,340.0	62.2	63.9	-179.98	-2,991.2	19.6	700.0	635.3	64.65	10.827		
13,600.0	10,640.0	14,352.6	11,340.0	63.5	65.2	-179.98	-3,091.2	20.3	700.0	634.2	65.81	10.636		
13,700.0	10,640.0	14,452.6	11,340.0	64.9	66.5	-179.98	-3,191.2	21.1	700.0	633.0	66.99	10.450		
13,800.0	10,640.0	14,552.6	11,340.0	66.2	67.8	-179.98	-3,291.2	21.9	700.0	631.8	68.18	10.267		
13,900.0	10,640.0	14,652.6	11,340.0	67.6	69.2	-179.98	-3,391.2	22.6	700.0	630.6	69.38	10.089		
14,000.0	10,640.0	14,752.6	11,340.0	69.0	70.5	-179.98	-3,491.2	23.4	700.0	629.4	70.60	9.914		
14,100.0	10,640.0	14,852.6	11,340.0	70.4	71.9	-179.98	-3,591.2	24.2	700.0	628.2	71.84	9.744		
14,200.0	10,640.0	14,952.6	11,340.0	71.8	73.3	-179.98	-3,691.2	24.9	700.0	626.9	73.08	9.578		
14,300.0	10,640.0	15,052.6	11,340.0	73.2	74.7	-179.98	-3,791.2	25.7	700.0	625.7	74.34	9.416		
14,400.0	10,640.0	15,152.6	11,340.0	74.6	76.1	-179.98	-3,891.2	26.5	700.0	624.4	75.61	9.258		
14,500.0	10,640.0	15,252.6	11,340.0	76.1	77.5	-179.98	-3,991.2	27.2	700.0	623.1	76.90	9.103		
14,600.0	10,640.0	15,352.6	11,340.0	77.5	78.9	-179.98	-4,091.2	28.0	700.0	621.8	78.19	8.953		
14,700.0	10,640.0	15,452.6	11,340.0	78.9	80.3	-179.98	-4,191.1	28.8	700.0	620.5	79.49	8.806		
14,800.0	10,640.0	15,552.6	11,340.0	80.4	81.8	-179.98	-4,291.1	29.5	700.0	619.2	80.80	8.663		
14,900.0	10,640.0	15,652.6	11,340.0	81.9	83.2	-179.98	-4,391.1	30.3	700.0	617.9	82.12	8.524		
15,000.0	10,640.0	15,752.6	11,340.0	83.3	84.7	-179.98	-4,491.1	31.1	700.0	616.5	83.45	8.388		
15,100.0	10,640.0	15,852.6	11,340.0	84.8	86.1	-179.98	-4,591.1	31.8	700.0	615.2	84.79	8.256		
15,200.0	10,640.0	15,952.6	11,340.0	86.3	87.6	-179.98	-4,691.1	32.6	700.0	613.9	86.13	8.127		

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



Microsoft Anticollision Report



Company:	Advance Energy Partners	Local Co-ordinate Reference:	Well Merchant State Unit #510H
Project:	Lea County, NM (NAD 83 NME)	TVD Reference:	Kb @ 3710.5usft (H&P 466)
Reference Site:	(Merchant State)Sec35_T-21-S_R-33-E	MD Reference:	Kb @ 3710.5usft (H&P 466)
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	Merchant State Unit #510H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	OWB	Database:	EDM 10_13
Reference Design:	Plan 0.1	Offset TVD Reference:	Offset Datum

Offset Design:(Merchant State)Sec35_T-21-S_R-33-E - Merchant State Unit #552H - OWB - Plan 0.1														Offset Site Error:	0.0 usft
Survey Program: 0-MWD														Offset Well Error:	0.0 usft
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference	Offset	Highside Toolface (°)	+N/-S (usft)	+E/-W (usft)	Distance Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning		
15,300.0	10,640.0	16,052.6	11,340.0	87.8	89.1	-179.98	-4,791.1	33.4	700.0	612.5	87.49	8.001			
15,400.0	10,640.0	16,152.6	11,340.0	89.3	90.6	-179.98	-4,891.1	34.1	700.0	611.2	88.85	7.879			
15,500.0	10,640.0	16,252.6	11,340.0	90.8	92.1	-179.98	-4,991.1	34.9	700.0	609.8	90.21	7.759			
15,600.0	10,640.0	16,352.6	11,340.0	92.3	93.6	-179.98	-5,091.1	35.7	700.0	608.4	91.59	7.643			
15,700.0	10,640.0	16,452.6	11,340.0	93.8	95.1	-179.98	-5,191.1	36.4	700.0	607.0	92.96	7.530			
15,800.0	10,640.0	16,552.6	11,340.0	95.4	96.6	-179.98	-5,291.1	37.2	700.0	605.7	94.35	7.419			
15,900.0	10,640.0	16,652.6	11,340.0	96.9	98.1	-179.99	-5,391.1	38.0	700.0	604.3	95.74	7.311			
16,000.0	10,640.0	16,752.6	11,340.0	98.4	99.6	-179.99	-5,491.1	38.8	700.0	602.9	97.14	7.206			
16,100.0	10,640.0	16,852.6	11,340.0	99.9	101.1	-179.99	-5,591.1	39.5	700.0	601.5	98.54	7.104			
16,200.0	10,640.0	16,952.6	11,340.0	101.5	102.6	-179.99	-5,691.1	40.3	700.0	600.1	99.95	7.004			
16,300.0	10,640.0	17,052.6	11,340.0	103.0	104.1	-179.99	-5,791.1	41.1	700.0	598.6	101.36	6.906			
16,400.0	10,640.0	17,152.6	11,340.0	104.6	105.7	-179.99	-5,891.1	41.8	700.0	597.2	102.77	6.811			
16,500.0	10,640.0	17,252.6	11,340.0	106.1	107.2	-179.99	-5,991.1	42.6	700.0	595.8	104.19	6.718			
16,600.0	10,640.0	17,352.6	11,340.0	107.7	108.7	-179.99	-6,091.1	43.4	700.0	594.4	105.62	6.628			
16,700.0	10,640.0	17,452.6	11,340.0	109.2	110.3	-179.99	-6,191.1	44.1	700.0	593.0	107.05	6.539			
16,800.0	10,640.0	17,552.6	11,340.0	110.8	111.8	-179.99	-6,291.1	44.9	700.0	591.5	108.48	6.453			
16,900.0	10,640.0	17,652.6	11,340.0	112.3	113.4	-179.99	-6,391.1	45.7	700.0	590.1	109.91	6.369			
17,000.0	10,640.0	17,752.6	11,340.0	113.9	114.9	-179.99	-6,491.1	46.4	700.0	588.6	111.35	6.286			
17,100.0	10,640.0	17,852.6	11,340.0	115.5	116.5	-179.99	-6,591.1	47.2	700.0	587.2	112.80	6.206			
17,200.0	10,640.0	17,952.6	11,340.0	117.0	118.0	-179.99	-6,691.1	48.0	700.0	585.8	114.24	6.127			
17,300.0	10,640.0	18,052.6	11,340.0	118.6	119.6	-179.99	-6,791.1	48.7	700.0	584.3	115.69	6.050			
17,400.0	10,640.0	18,152.6	11,340.0	120.2	121.2	-179.99	-6,891.1	49.5	700.0	582.9	117.15	5.975			
17,500.0	10,640.0	18,252.6	11,340.0	121.7	122.7	-179.99	-6,991.1	50.3	700.0	581.4	118.60	5.902			
17,600.0	10,640.0	18,352.6	11,340.0	123.3	124.3	-179.99	-7,091.1	51.0	700.0	579.9	120.06	5.830			
17,700.0	10,640.0	18,452.6	11,340.0	124.9	125.9	-179.99	-7,191.1	51.8	700.0	578.5	121.52	5.760			
17,800.0	10,640.0	18,552.6	11,340.0	126.5	127.4	-179.99	-7,291.1	52.6	700.0	577.0	122.99	5.692			
17,900.0	10,640.0	18,652.6	11,340.0	128.1	129.0	-179.99	-7,391.1	53.3	700.0	575.5	124.45	5.625			
18,000.0	10,640.0	18,752.6	11,340.0	129.6	130.6	-179.99	-7,491.1	54.1	700.0	574.1	125.92	5.559			
18,100.0	10,640.0	18,852.6	11,340.0	131.2	132.2	-179.99	-7,591.0	54.9	700.0	572.6	127.40	5.495			
18,200.0	10,640.0	18,952.6	11,340.0	132.8	133.7	-179.99	-7,691.0	55.6	700.0	571.1	128.87	5.432			
18,300.0	10,640.0	19,052.6	11,340.0	134.4	135.3	-179.99	-7,791.0	56.4	700.0	569.7	130.35	5.370			
18,400.0	10,640.0	19,152.6	11,340.0	136.0	136.9	-179.99	-7,891.0	57.2	700.0	568.2	131.82	5.310			
18,500.0	10,640.0	19,252.6	11,340.0	137.6	138.5	-179.99	-7,991.0	57.9	700.0	566.7	133.30	5.251			
18,600.0	10,640.0	19,352.6	11,340.0	139.2	140.1	-179.99	-8,091.0	58.7	700.0	565.2	134.79	5.193			
18,700.0	10,640.0	19,452.6	11,340.0	140.8	141.7	-179.99	-8,191.0	59.5	700.0	563.7	136.27	5.137			
18,800.0	10,640.0	19,552.6	11,340.0	142.4	143.2	-179.99	-8,291.0	60.2	700.0	562.2	137.76	5.081			
18,900.0	10,640.0	19,652.6	11,340.0	144.0	144.8	-179.99	-8,391.0	61.0	700.0	560.8	139.24	5.027			
19,000.0	10,640.0	19,752.6	11,340.0	145.6	146.4	-179.99	-8,491.0	61.8	700.0	559.3	140.73	4.974			
19,100.0	10,640.0	19,852.6	11,340.0	147.2	148.0	-179.99	-8,591.0	62.5	700.0	557.8	142.23	4.922			
19,200.0	10,640.0	19,952.6	11,340.0	148.8	149.6	-180.00	-8,691.0	63.3	700.0	556.3	143.72	4.871			
19,300.0	10,640.0	20,052.6	11,340.0	150.4	151.2	-180.00	-8,791.0	64.1	700.0	554.8	145.21	4.820			
19,400.0	10,640.0	20,152.6	11,340.0	152.0	152.8	-180.00	-8,891.0	64.8	700.0	553.3	146.71	4.771			
19,500.0	10,640.0	20,252.6	11,340.0	153.6	154.4	-180.00	-8,991.0	65.6	700.0	551.8	148.21	4.723			
19,600.0	10,640.0	20,352.6	11,340.0	155.2	156.0	-180.00	-9,091.0	66.4	700.0	550.3	149.71	4.676			
19,700.0	10,640.0	20,452.6	11,340.0	156.8	157.6	-180.00	-9,191.0	67.1	700.0	548.8	151.21	4.629			
19,800.0	10,640.0	20,552.6	11,340.0	158.4	159.2	-180.00	-9,291.0	67.9	700.0	547.3	152.71	4.584			
19,900.0	10,640.0	20,652.6	11,340.0	160.0	160.8	-180.00	-9,391.0	68.7	700.0	545.8	154.21	4.539			
20,000.0	10,640.0	20,752.6	11,340.0	161.6	162.4	-180.00	-9,491.0	69.4	700.0	544.3	155.72	4.495			
20,100.0	10,640.0	20,852.6	11,340.0	163.2	164.0	-180.00	-9,591.0	70.2	700.0	542.8	157.22	4.452			
20,200.0	10,640.0	20,952.6	11,340.0	164.8	165.6	-180.00	-9,691.0	71.0	700.0	541.3	158.73	4.410			
20,300.0	10,640.0	21,052.6	11,340.0	166.5	167.2	-180.00	-9,791.0	71.7	700.0	539.8	160.24	4.368			
20,400.0	10,640.0	21,152.6	11,340.0	168.1	168.9	-180.00	-9,891.0	72.5	700.0	538.2	161.75	4.328			

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



Microsoft
Anticollision Report



Company:	Advance Energy Partners	Local Co-ordinate Reference:	Well Merchant State Unit #510H
Project:	Lea County, NM (NAD 83 NME)	TVD Reference:	Kb @ 3710.5usft (H&P 466)
Reference Site:	(Merchant State)Sec35_T-21-S_R-33-E	MD Reference:	Kb @ 3710.5usft (H&P 466)
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	Merchant State Unit #510H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	OWB	Database:	EDM 10_13
Reference Design:	Plan 0.1	Offset TVD Reference:	Offset Datum

Offset Design: (Merchant State)Sec35_T-21-S_R-33-E - Merchant State Unit #552H - OWB - Plan 0.1													Offset Site Error:	0.0 usft
Survey Program: 0-MWD													Offset Well Error:	0.0 usft
Reference	Offset	Semi Major Axis	Rule Assigned:											
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Distance Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning	
20,500.0	10,640.0	21,252.6	11,340.0	169.7	170.5	-180.00	-9,991.0	73.3	700.0	536.7	163.26	4.288		
20,600.0	10,640.0	21,352.6	11,340.0	171.3	172.1	-180.00	-10,091.0	74.0	700.0	535.2	164.77	4.248		
20,700.0	10,640.0	21,452.6	11,340.0	172.9	173.7	-180.00	-10,191.0	74.8	700.0	533.7	166.29	4.210		
20,762.7	10,640.0	21,515.3	11,340.0	173.9	174.7	-180.00	-10,253.7	75.3	700.0	532.8	167.18	4.187		
20,765.0	10,640.0	21,517.2	11,340.0	174.0	174.7	180.00	-10,255.5	75.3	700.0	532.8	167.20	4.187		



Microsoft Anticollision Report



Company:	Advance Energy Partners	Local Co-ordinate Reference:	Well Merchant State Unit #510H
Project:	Lea County, NM (NAD 83 NME)	TVD Reference:	Kb @ 3710.5usft (H&P 466)
Reference Site:	(Merchant State)Sec35_T-21-S_R-33-E	MD Reference:	Kb @ 3710.5usft (H&P 466)
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	Merchant State Unit #510H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	OWB	Database:	EDM 10_13
Reference Design:	Plan 0.1	Offset TVD Reference:	Offset Datum

Offset Design:(Merchant State)Sec35_T-21-S_R-33-E - Merchant State Unit #603H - OWB - Plan 0.1														Offset Site Error:	0.0 usft
Survey Program: 0-MWD														Offset Well Error:	0.0 usft
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference	Offset	Highside Toolface (°)	+N/-S (usft)	+E/-W (usft)	Distance Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning		
0.0	0.0	0.0	0.0	0.0	0.0	89.74	0.3	66.0	66.0						
100.0	100.0	100.0	100.0	0.1	0.1	89.74	0.3	66.0	66.0	65.7	0.27	247.137			
200.0	200.0	200.0	200.0	0.5	0.5	89.74	0.3	66.0	66.0	65.0	0.98	67.074			
300.0	300.0	300.0	300.0	0.9	0.9	89.74	0.3	66.0	66.0	64.3	1.70	38.802			
400.0	400.0	400.0	400.0	1.2	1.2	89.74	0.3	66.0	66.0	63.6	2.42	27.297			
500.0	500.0	500.0	500.0	1.6	1.6	89.74	0.3	66.0	66.0	62.9	3.13	21.054			
600.0	600.0	600.0	600.0	1.9	1.9	89.74	0.3	66.0	66.0	62.1	3.85	17.135			
700.0	700.0	700.0	700.0	2.3	2.3	89.74	0.3	66.0	66.0	61.4	4.57	14.446			
800.0	800.0	800.0	800.0	2.6	2.6	89.74	0.3	66.0	66.0	60.7	5.29	12.487			
900.0	900.0	900.0	900.0	3.0	3.0	89.74	0.3	66.0	66.0	60.0	6.00	10.995			
1,000.0	1,000.0	1,000.0	1,000.0	3.4	3.4	89.74	0.3	66.0	66.0	59.3	6.72	9.822			
1,100.0	1,100.0	1,100.0	1,100.0	3.7	3.7	89.74	0.3	66.0	66.0	58.6	7.44	8.875			
1,200.0	1,200.0	1,200.0	1,200.0	4.1	4.1	89.74	0.3	66.0	66.0	57.8	8.15	8.095			
1,300.0	1,300.0	1,300.0	1,300.0	4.4	4.4	89.74	0.3	66.0	66.0	57.1	8.87	7.441			
1,400.0	1,400.0	1,400.0	1,400.0	4.8	4.8	89.74	0.3	66.0	66.0	56.4	9.59	6.884			
1,500.0	1,500.0	1,500.0	1,500.0	5.2	5.2	89.74	0.3	66.0	66.0	55.7	10.30	6.405			
1,600.0	1,600.0	1,600.0	1,600.0	5.5	5.5	89.74	0.3	66.0	66.0	55.0	11.02	5.989			
1,700.0	1,700.0	1,700.0	1,700.0	5.9	5.9	89.74	0.3	66.0	66.0	54.3	11.74	5.623			
1,800.0	1,800.0	1,800.0	1,800.0	6.2	6.2	89.74	0.3	66.0	66.0	53.5	12.46	5.299			
1,900.0	1,900.0	1,900.0	1,900.0	6.6	6.6	89.74	0.3	66.0	66.0	52.8	13.17	5.011			
2,000.0	2,000.0	2,000.0	2,000.0	6.9	6.9	89.74	0.3	66.0	66.0	52.1	13.89	4.752			
2,100.0	2,100.0	2,100.0	2,100.0	7.3	7.3	89.74	0.3	66.0	66.0	51.4	14.61	4.519			
2,200.0	2,200.0	2,200.0	2,200.0	7.7	7.7	89.74	0.3	66.0	66.0	50.7	15.32	4.307			
2,300.0	2,300.0	2,300.0	2,300.0	8.0	8.0	89.74	0.3	66.0	66.0	50.0	16.04	4.115			
2,400.0	2,400.0	2,400.0	2,400.0	8.4	8.4	89.74	0.3	66.0	66.0	49.2	16.76	3.939			
2,500.0	2,500.0	2,500.0	2,500.0	8.7	8.7	89.74	0.3	66.0	66.0	48.5	17.47	3.777			
2,600.0	2,600.0	2,600.0	2,600.0	9.1	9.1	89.74	0.3	66.0	66.0	47.8	18.19	3.628			
2,700.0	2,700.0	2,700.0	2,700.0	9.5	9.5	89.74	0.3	66.0	66.0	47.1	18.91	3.491			
2,800.0	2,800.0	2,800.0	2,800.0	9.8	9.8	89.74	0.3	66.0	66.0	46.4	19.62	3.363			
2,900.0	2,900.0	2,900.0	2,900.0	10.2	10.2	89.74	0.3	66.0	66.0	45.7	20.34	3.245			
3,000.0	3,000.0	3,000.0	3,000.0	10.5	10.5	89.74	0.3	66.0	66.0	44.9	21.06	3.134			
3,100.0	3,100.0	3,100.0	3,100.0	10.9	10.9	89.74	0.3	66.0	66.0	44.2	21.78	3.031			
3,200.0	3,200.0	3,200.0	3,200.0	11.2	11.2	89.74	0.3	66.0	66.0	43.5	22.49	2.934			
3,300.0	3,300.0	3,300.0	3,300.0	11.6	11.6	89.74	0.3	66.0	66.0	42.8	23.21	2.844			
3,400.0	3,400.0	3,400.0	3,400.0	12.0	12.0	89.74	0.3	66.0	66.0	42.1	23.93	2.759			
3,500.0	3,500.0	3,500.0	3,500.0	12.3	12.3	89.74	0.3	66.0	66.0	41.4	24.64	2.678			
3,600.0	3,600.0	3,600.0	3,600.0	12.7	12.7	89.74	0.3	66.0	66.0	40.6	25.36	2.603			
3,700.0	3,700.0	3,700.0	3,700.0	13.0	13.0	89.74	0.3	66.0	66.0	39.9	26.08	2.531			
3,800.0	3,800.0	3,800.0	3,800.0	13.4	13.4	89.74	0.3	66.0	66.0	39.2	26.79	2.463			
3,900.0	3,900.0	3,900.0	3,900.0	13.8	13.8	89.74	0.3	66.0	66.0	38.5	27.51	2.399			
4,000.0	4,000.0	4,000.0	4,000.0	14.1	14.1	89.74	0.3	66.0	66.0	37.8	28.23	2.338			
4,100.0	4,100.0	4,100.0	4,100.0	14.5	14.5	89.74	0.3	66.0	66.0	37.1	28.94	2.280			
4,200.0	4,200.0	4,200.0	4,200.0	14.8	14.8	89.74	0.3	66.0	66.0	36.3	29.66	2.225			
4,300.0	4,300.0	4,300.0	4,300.0	15.2	15.2	89.74	0.3	66.0	66.0	35.6	30.38	2.173			
4,400.0	4,400.0	4,400.0	4,400.0	15.5	15.5	89.74	0.3	66.0	66.0	34.9	31.10	2.123			
4,500.0	4,500.0	4,500.0	4,500.0	15.9	15.9	89.74	0.3	66.0	66.0	34.2	31.81	2.075			
4,600.0	4,600.0	4,600.0	4,600.0	16.3	16.3	89.74	0.3	66.0	66.0	33.5	32.53	2.029			
4,700.0	4,700.0	4,700.0	4,700.0	16.6	16.6	89.74	0.3	66.0	66.0	32.8	33.25	1.985			
4,800.0	4,800.0	4,800.0	4,800.0	17.0	17.0	89.74	0.3	66.0	66.0	32.0	33.96	1.943			
4,900.0	4,900.0	4,900.0	4,900.0	17.3	17.3	89.74	0.3	66.0	66.0	31.3	34.68	1.903			
5,000.0	5,000.0	5,000.0	5,000.0	17.7	17.7	89.74	0.3	66.0	66.0	30.6	35.40	1.865			
5,100.0	5,100.0	5,100.0	5,100.0	18.1	18.1	89.74	0.3	66.0	66.0	29.9	36.11	1.828			

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



Microsoft Anticollision Report



Company:	Advance Energy Partners	Local Co-ordinate Reference:	Well Merchant State Unit #510H
Project:	Lea County, NM (NAD 83 NME)	TVD Reference:	Kb @ 3710.5usft (H&P 466)
Reference Site:	(Merchant State)Sec35_T-21-S_R-33-E	MD Reference:	Kb @ 3710.5usft (H&P 466)
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	Merchant State Unit #510H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	OWB	Database:	EDM 10_13
Reference Design:	Plan 0.1	Offset TVD Reference:	Offset Datum

Offset Design:(Merchant State)Sec35_T-21-S_R-33-E - Merchant State Unit #603H - OWB - Plan 0.1														Offset Site Error:	0.0 usft
Survey Program: 0-MWD														Offset Well Error:	0.0 usft
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference Offset (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Distance Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning		
5,200.0	5,200.0	5,200.0	5,200.0	18.4	18.4	89.74	0.3	66.0	66.0	29.2	36.83	1.792			
5,300.0	5,300.0	5,300.0	5,300.0	18.8	18.8	89.74	0.3	66.0	66.0	28.5	37.55	1.758			
5,400.0	5,400.0	5,400.0	5,400.0	19.1	19.1	89.74	0.3	66.0	66.0	27.7	38.27	1.725 CC, ES			
5,500.0	5,500.0	5,499.0	5,499.0	19.5	19.5	92.54	0.8	66.7	66.8	27.8	38.97	1.713 SF			
5,600.0	5,600.0	5,598.0	5,598.0	19.8	19.8	93.69	2.1	68.9	69.1	29.4	39.66	1.742			
5,700.0	5,699.8	5,696.9	5,696.7	20.2	20.2	95.43	4.4	72.5	73.1	32.7	40.35	1.811			
5,800.0	5,799.6	5,795.6	5,795.3	20.6	20.5	97.57	7.5	77.6	78.7	37.7	41.03	1.918			
5,900.0	5,899.3	5,894.2	5,893.6	20.9	20.9	99.90	11.6	84.1	86.1	44.4	41.71	2.063			
6,000.0	5,998.8	5,993.7	5,992.7	21.3	21.2	102.60	16.1	91.4	94.6	52.2	42.42	2.229			
6,100.0	6,098.2	6,093.2	6,091.9	21.6	21.6	105.13	20.6	98.6	103.4	60.2	43.13	2.397			
6,200.0	6,197.6	6,192.8	6,191.0	22.0	21.9	107.26	25.1	105.9	112.3	68.5	43.84	2.562			
6,300.0	6,297.1	6,292.3	6,290.2	22.4	22.3	109.07	29.6	113.2	121.4	76.9	44.56	2.725			
6,400.0	6,396.5	6,391.8	6,389.3	22.7	22.6	110.63	34.2	120.4	130.6	85.4	45.27	2.886			
6,500.0	6,496.0	6,491.3	6,488.5	23.1	23.0	111.90	38.7	127.7	139.8	93.8	45.99	3.040			
6,600.0	6,595.6	6,591.0	6,587.8	23.4	23.4	112.42	43.2	135.0	148.3	101.6	46.70	3.176			
6,700.0	6,695.4	6,690.7	6,687.1	23.8	23.7	112.26	47.7	142.2	156.2	108.7	47.42	3.293			
6,800.0	6,795.3	6,790.4	6,786.4	24.2	24.1	111.50	52.3	149.5	163.3	115.2	48.13	3.393			
6,900.0	6,895.2	6,890.1	6,885.8	24.5	24.4	110.22	56.8	156.8	169.8	121.0	48.84	3.477			
7,000.0	6,995.2	6,989.7	6,985.1	24.9	24.8	108.46	61.3	164.1	175.8	126.3	49.55	3.548			
7,100.0	7,095.2	7,089.4	7,084.3	25.2	25.2	104.05	65.9	171.4	181.7	131.5	50.26	3.616			
7,200.0	7,195.2	7,189.0	7,183.6	25.6	25.5	102.17	70.4	178.6	187.8	136.8	50.96	3.685			
7,300.0	7,295.2	7,288.6	7,282.9	26.0	25.9	100.41	74.9	185.9	194.1	142.4	51.67	3.756			
7,400.0	7,395.2	7,388.3	7,382.1	26.3	26.2	98.76	79.4	193.2	200.5	148.2	52.38	3.829			
7,500.0	7,495.2	7,487.9	7,481.4	26.7	26.6	97.21	84.0	200.5	207.2	154.1	53.09	3.902			
7,600.0	7,595.2	7,587.5	7,580.6	27.0	27.0	95.76	88.5	207.7	213.9	160.1	53.80	3.976			
7,700.0	7,695.2	7,687.2	7,679.9	27.4	27.3	94.40	93.0	215.0	220.8	166.3	54.51	4.051			
7,800.0	7,795.2	7,786.8	7,779.2	27.7	27.7	93.12	97.5	222.3	227.8	172.6	55.21	4.125			
7,900.0	7,895.2	7,886.4	7,878.4	28.1	28.1	91.92	102.1	229.6	234.9	179.0	55.92	4.200			
8,000.0	7,995.2	7,986.0	7,977.7	28.5	28.4	90.79	106.6	236.8	242.1	185.5	56.63	4.275			
8,100.0	8,095.2	8,085.7	8,076.9	28.8	28.8	89.72	111.1	244.1	249.4	192.0	57.34	4.349			
8,200.0	8,195.2	8,185.3	8,176.2	29.2	29.2	88.71	115.6	251.4	256.7	198.7	58.05	4.423			
8,300.0	8,295.2	8,284.9	8,275.5	29.5	29.5	87.77	120.2	258.7	264.2	205.4	58.77	4.496			
8,400.0	8,395.2	8,384.6	8,374.7	29.9	29.9	86.87	124.7	265.9	271.7	212.2	59.48	4.568			
8,500.0	8,495.2	8,484.2	8,474.0	30.2	30.2	86.02	129.2	273.2	279.3	219.1	60.19	4.640			
8,600.0	8,595.2	8,583.8	8,573.2	30.6	30.6	85.22	133.7	280.5	286.9	226.0	60.90	4.711			
8,700.0	8,695.2	8,683.4	8,672.5	31.0	31.0	84.46	138.3	287.8	294.6	233.0	61.61	4.782			
8,800.0	8,795.2	8,783.1	8,771.8	31.3	31.4	83.73	142.8	295.0	302.3	240.0	62.32	4.851			
8,900.0	8,895.2	8,882.7	8,871.0	31.7	31.7	83.05	147.3	302.3	310.1	247.1	63.04	4.920			
9,000.0	8,995.2	8,983.9	8,971.9	32.0	32.1	82.39	151.9	309.6	317.9	254.1	63.77	4.985			
9,100.0	9,095.2	9,089.1	9,076.8	32.4	32.5	81.84	155.8	316.0	324.4	259.8	64.54	5.026			
9,200.0	9,195.2	9,194.4	9,182.0	32.8	32.9	81.45	158.8	320.7	329.2	263.9	65.30	5.042			
9,300.0	9,295.2	9,300.0	9,287.5	33.1	33.2	81.20	160.7	323.8	332.4	266.4	66.05	5.033			
9,400.0	9,395.2	9,405.6	9,393.1	33.5	33.6	81.09	161.6	325.3	333.9	267.1	66.79	5.000			
9,500.0	9,495.2	9,507.8	9,495.2	33.8	34.0	81.08	161.7	325.4	334.0	266.5	67.50	4.948			
9,600.0	9,595.2	9,607.8	9,595.2	34.2	34.3	81.08	161.7	325.4	334.0	265.8	68.22	4.897			
9,700.0	9,695.2	9,707.8	9,695.2	34.5	34.7	81.08	161.7	325.4	334.0	265.1	68.93	4.846			
9,800.0	9,795.2	9,807.8	9,795.2	34.9	35.0	81.08	161.7	325.4	334.0	264.4	69.64	4.796			
9,900.0	9,895.2	9,907.8	9,895.2	35.3	35.4	81.08	161.7	325.4	334.0	263.7	70.36	4.748			
10,000.0	9,995.2	10,007.8	9,995.2	35.6	35.7	81.08	161.7	325.4	334.0	263.0	71.07	4.700			
10,000.1	9,995.4	10,007.9	9,995.4	35.6	35.7	81.08	161.7	325.4	334.0	263.0	71.07	4.700			
10,100.0	10,095.2	10,107.8	10,095.2	36.0	36.1	-98.59	161.7	325.4	334.1	262.4	71.78	4.655			
10,200.0	10,194.2	10,206.7	10,194.2	36.3	36.5	-100.62	161.7	325.4	336.4	264.0	72.43	4.645			

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



Microsoft Anticollision Report



Company:	Advance Energy Partners	Local Co-ordinate Reference:	Well Merchant State Unit #510H
Project:	Lea County, NM (NAD 83 NME)	TVD Reference:	Kb @ 3710.5usft (H&P 466)
Reference Site:	(Merchant State)Sec35_T-21-S_R-33-E	MD Reference:	Kb @ 3710.5usft (H&P 466)
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	Merchant State Unit #510H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	OWB	Database:	EDM 10_13
Reference Design:	Plan 0.1	Offset TVD Reference:	Offset Datum

Offset Design:(Merchant State)Sec35_T-21-S_R-33-E - Merchant State Unit #603H - OWB - Plan 0.1													Offset Site Error:	0.0 usft
Survey Program: 0-MWD													Offset Well Error:	0.0 usft
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference Offset (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	+N/-S (usft)	+E/-W (usft)	Distance Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning	
10,300.0	10,289.2	10,301.8	10,289.2	36.6	36.8	-104.71	161.7	325.4	343.5	270.5	73.05	4.703		
10,400.0	10,377.6	10,390.1	10,377.6	36.8	37.1	-109.69	161.7	325.4	359.1	285.5	73.63	4.877		
10,500.0	10,456.5	10,469.0	10,456.5	37.1	37.4	-114.15	161.7	325.4	387.2	313.1	74.16	5.221		
10,600.0	10,523.5	10,536.1	10,523.5	37.3	37.6	-116.78	161.7	325.4	430.5	355.9	74.63	5.768		
10,700.0	10,576.7	10,589.3	10,576.7	37.6	37.8	-116.49	161.7	325.4	489.0	414.0	75.02	6.519		
10,800.0	10,614.4	10,627.0	10,614.4	37.9	37.9	-112.04	161.7	325.4	560.7	485.4	75.29	7.447		
10,900.0	10,635.5	10,648.0	10,635.5	38.2	38.0	-101.76	161.7	325.4	642.1	566.7	75.45	8.511		
11,000.0	10,640.0	10,652.5	10,640.0	38.5	38.0	-90.00	161.7	325.4	729.5	654.0	75.52	9.661		
11,100.0	10,640.0	10,652.5	10,640.0	38.9	38.0	-90.00	161.7	325.4	819.9	744.4	75.55	10.852		
11,200.0	10,640.0	10,652.5	10,640.0	39.4	38.0	-90.00	161.7	325.4	912.4	836.8	75.59	12.070		
11,300.0	10,640.0	10,652.5	10,640.0	39.9	38.0	-90.00	161.7	325.4	1,006.2	930.6	75.62	13.306		
11,400.0	10,640.0	10,652.5	10,640.0	40.4	38.0	-90.00	161.7	325.4	1,101.2	1,025.5	75.65	14.557		
11,500.0	10,640.0	10,652.5	10,640.0	41.1	38.0	-90.00	161.7	325.4	1,196.9	1,121.3	75.67	15.817		
11,600.0	10,640.0	10,652.5	10,640.0	41.8	38.0	-90.00	161.7	325.4	1,293.3	1,217.6	75.70	17.085		
11,700.0	10,640.0	13,067.0	11,950.0	42.5	46.7	-165.85	-1,188.7	335.8	1,351.0	1,298.2	52.85	25.561		
11,800.0	10,640.0	13,167.0	11,950.0	43.3	47.5	-165.85	-1,288.7	336.5	1,351.0	1,297.5	53.55	25.229		
11,900.0	10,640.0	13,267.0	11,950.0	44.1	48.3	-165.85	-1,388.7	337.3	1,351.0	1,296.7	54.29	24.885		
12,000.0	10,640.0	13,367.0	11,950.0	45.0	49.1	-165.85	-1,488.7	338.1	1,351.0	1,295.9	55.08	24.530		
12,100.0	10,640.0	13,467.0	11,950.0	46.0	49.9	-165.85	-1,588.7	338.8	1,351.0	1,295.1	55.90	24.167		
12,200.0	10,640.0	13,567.0	11,950.0	46.9	50.8	-165.85	-1,688.7	339.6	1,351.0	1,294.2	56.77	23.797		
12,300.0	10,640.0	13,667.0	11,950.0	47.9	51.8	-165.85	-1,788.7	340.4	1,351.0	1,293.3	57.68	23.424		
12,400.0	10,640.0	13,767.0	11,950.0	49.0	52.7	-165.85	-1,888.7	341.1	1,351.0	1,292.4	58.62	23.047		
12,500.0	10,640.0	13,867.0	11,950.0	50.0	53.7	-165.85	-1,988.7	341.9	1,351.0	1,291.4	59.60	22.669		
12,600.0	10,640.0	13,967.0	11,950.0	51.1	54.8	-165.85	-2,088.7	342.7	1,351.0	1,290.4	60.61	22.291		
12,700.0	10,640.0	14,067.0	11,950.0	52.3	55.8	-165.85	-2,188.7	343.4	1,351.0	1,289.3	61.65	21.914		
12,800.0	10,640.0	14,167.0	11,950.0	53.4	56.9	-165.85	-2,288.7	344.2	1,351.0	1,288.3	62.72	21.539		
12,900.0	10,640.0	14,267.0	11,950.0	54.6	58.1	-165.85	-2,388.7	345.0	1,351.0	1,287.2	63.82	21.167		
13,000.0	10,640.0	14,367.0	11,950.0	55.8	59.2	-165.85	-2,488.7	345.7	1,351.0	1,286.0	64.95	20.800		
13,100.0	10,640.0	14,467.0	11,950.0	57.1	60.4	-165.85	-2,588.7	346.5	1,351.0	1,284.9	66.11	20.437		
13,200.0	10,640.0	14,567.0	11,950.0	58.3	61.6	-165.85	-2,688.7	347.3	1,351.0	1,283.7	67.28	20.079		
13,300.0	10,640.0	14,667.0	11,950.0	59.6	62.8	-165.85	-2,788.7	348.0	1,351.0	1,282.5	68.48	19.727		
13,400.0	10,640.0	14,767.0	11,950.0	60.9	64.0	-165.85	-2,888.7	348.8	1,351.0	1,281.3	69.71	19.381		
13,500.0	10,640.0	14,867.0	11,950.0	62.2	65.3	-165.85	-2,988.6	349.6	1,351.0	1,280.0	70.95	19.042		
13,600.0	10,640.0	14,967.0	11,950.0	63.5	66.5	-165.85	-3,088.6	350.3	1,351.0	1,278.8	72.21	18.709		
13,700.0	10,640.0	15,067.0	11,950.0	64.9	67.8	-165.85	-3,188.6	351.1	1,351.0	1,277.5	73.49	18.382		
13,800.0	10,640.0	15,167.0	11,950.0	66.2	69.1	-165.85	-3,288.6	351.9	1,351.0	1,276.2	74.79	18.063		
13,900.0	10,640.0	15,267.0	11,950.0	67.6	70.4	-165.85	-3,388.6	352.6	1,351.0	1,274.9	76.11	17.751		
14,000.0	10,640.0	15,367.0	11,950.0	69.0	71.8	-165.85	-3,488.6	353.4	1,351.0	1,273.5	77.44	17.445		
14,100.0	10,640.0	15,467.0	11,950.0	70.4	73.1	-165.85	-3,588.6	354.2	1,351.0	1,272.2	78.79	17.147		
14,200.0	10,640.0	15,567.0	11,950.0	71.8	74.5	-165.85	-3,688.6	354.9	1,351.0	1,270.8	80.15	16.856		
14,300.0	10,640.0	15,667.0	11,950.0	73.2	75.8	-165.85	-3,788.6	355.7	1,351.0	1,269.5	81.52	16.572		
14,400.0	10,640.0	15,767.0	11,950.0	74.6	77.2	-165.85	-3,888.6	356.5	1,351.0	1,268.1	82.91	16.294		
14,500.0	10,640.0	15,867.0	11,950.0	76.1	78.6	-165.85	-3,988.6	357.2	1,351.0	1,266.7	84.31	16.024		
14,600.0	10,640.0	15,967.0	11,950.0	77.5	80.0	-165.85	-4,088.6	358.0	1,351.0	1,265.3	85.72	15.760		
14,700.0	10,640.0	16,067.0	11,950.0	78.9	81.4	-165.85	-4,188.6	358.8	1,351.0	1,263.8	87.15	15.502		
14,800.0	10,640.0	16,167.0	11,950.0	80.4	82.8	-165.85	-4,288.6	359.5	1,351.0	1,262.4	88.58	15.251		
14,900.0	10,640.0	16,267.0	11,950.0	81.9	84.3	-165.85	-4,388.6	360.3	1,351.0	1,261.0	90.02	15.007		
15,000.0	10,640.0	16,367.0	11,950.0	83.3	85.7	-165.85	-4,488.6	361.1	1,351.0	1,259.5	91.48	14.768		
15,100.0	10,640.0	16,467.0	11,950.0	84.8	87.2	-165.85	-4,588.6	361.8	1,351.0	1,258.0	92.94	14.536		
15,200.0	10,640.0	16,567.0	11,950.0	86.3	88.6	-165.85	-4,688.6	362.6	1,351.0	1,256.6	94.41	14.309		
15,300.0	10,640.0	16,667.0	11,950.0	87.8	90.1	-165.85	-4,788.6	363.4	1,351.0	1,255.1	95.89	14.089		
15,400.0	10,640.0	16,767.0	11,950.0	89.3	91.5	-165.85	-4,888.6	364.1	1,351.0	1,253.6	97.38	13.873		

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



Microsoft Anticollision Report



Company:	Advance Energy Partners	Local Co-ordinate Reference:	Well Merchant State Unit #510H
Project:	Lea County, NM (NAD 83 NME)	TVD Reference:	Kb @ 3710.5usft (H&P 466)
Reference Site:	(Merchant State)Sec35_T-21-S_R-33-E	MD Reference:	Kb @ 3710.5usft (H&P 466)
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	Merchant State Unit #510H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	OWB	Database:	EDM 10_13
Reference Design:	Plan 0.1	Offset TVD Reference:	Offset Datum

Offset Design:(Merchant State)Sec35_T-21-S_R-33-E - Merchant State Unit #603H - OWB - Plan 0.1													Offset Site Error:	0.0 usft
Survey Program: 0-MWD													Offset Well Error:	0.0 usft
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference	Offset	Highside Toolface (°)	+N/-S (usft)	+E/-W (usft)	Distance Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning	
15,500.0	10,640.0	16,867.0	11,950.0	90.8	93.0	-165.85	-4,988.6	364.9	1,351.0	1,252.1	98.87	13.664		
15,600.0	10,640.0	16,967.0	11,950.0	92.3	94.5	-165.85	-5,088.6	365.7	1,351.0	1,250.6	100.38	13.459		
15,700.0	10,640.0	17,067.0	11,950.0	93.8	96.0	-165.85	-5,188.6	366.4	1,351.0	1,249.1	101.89	13.260		
15,800.0	10,640.0	17,167.0	11,950.0	95.4	97.5	-165.85	-5,288.6	367.2	1,351.0	1,247.6	103.40	13.065		
15,900.0	10,640.0	17,267.0	11,950.0	96.9	98.9	-165.85	-5,388.6	368.0	1,351.0	1,246.0	104.92	12.876		
16,000.0	10,640.0	17,367.0	11,950.0	98.4	100.4	-165.85	-5,488.6	368.7	1,351.0	1,244.5	106.45	12.691		
16,100.0	10,640.0	17,467.0	11,950.0	99.9	102.0	-165.85	-5,588.6	369.5	1,351.0	1,243.0	107.99	12.510		
16,200.0	10,640.0	17,567.0	11,950.0	101.5	103.5	-165.85	-5,688.6	370.3	1,351.0	1,241.4	109.53	12.335		
16,300.0	10,640.0	17,667.0	11,950.0	103.0	105.0	-165.85	-5,788.6	371.0	1,351.0	1,239.9	111.07	12.163		
16,400.0	10,640.0	17,767.0	11,950.0	104.6	106.5	-165.85	-5,888.6	371.8	1,351.0	1,238.3	112.62	11.995		
16,500.0	10,640.0	17,867.0	11,950.0	106.1	108.0	-165.85	-5,988.6	372.6	1,351.0	1,236.8	114.18	11.832		
16,600.0	10,640.0	17,967.0	11,950.0	107.7	109.5	-165.85	-6,088.6	373.3	1,351.0	1,235.2	115.74	11.673		
16,700.0	10,640.0	18,067.0	11,950.0	109.2	111.1	-165.85	-6,188.6	374.1	1,351.0	1,233.7	117.30	11.517		
16,800.0	10,640.0	18,167.0	11,950.0	110.8	112.6	-165.85	-6,288.6	374.9	1,351.0	1,232.1	118.87	11.365		
16,900.0	10,640.0	18,267.0	11,950.0	112.3	114.1	-165.86	-6,388.5	375.6	1,351.0	1,230.5	120.45	11.216		
17,000.0	10,640.0	18,367.0	11,950.0	113.9	115.7	-165.86	-6,488.5	376.4	1,351.0	1,228.9	122.02	11.071		
17,100.0	10,640.0	18,467.0	11,950.0	115.5	117.2	-165.86	-6,588.5	377.2	1,351.0	1,227.4	123.60	10.930		
17,200.0	10,640.0	18,567.0	11,950.0	117.0	118.8	-165.86	-6,688.5	377.9	1,351.0	1,225.8	125.19	10.791		
17,300.0	10,640.0	18,667.0	11,950.0	118.6	120.3	-165.86	-6,788.5	378.7	1,351.0	1,224.2	126.78	10.656		
17,400.0	10,640.0	18,767.0	11,950.0	120.2	121.9	-165.86	-6,888.5	379.5	1,351.0	1,222.6	128.37	10.524		
17,500.0	10,640.0	18,867.0	11,950.0	121.7	123.4	-165.86	-6,988.5	380.2	1,351.0	1,221.0	129.96	10.395		
17,600.0	10,640.0	18,967.0	11,950.0	123.3	125.0	-165.86	-7,088.5	381.0	1,351.0	1,219.4	131.56	10.269		
17,700.0	10,640.0	19,067.0	11,950.0	124.9	126.5	-165.86	-7,188.5	381.8	1,351.0	1,217.8	133.16	10.145		
17,800.0	10,640.0	19,167.0	11,950.0	126.5	128.1	-165.86	-7,288.5	382.5	1,351.0	1,216.2	134.77	10.024		
17,900.0	10,640.0	19,267.0	11,950.0	128.1	129.7	-165.86	-7,388.5	383.3	1,351.0	1,214.6	136.38	9.906		
18,000.0	10,640.0	19,367.0	11,950.0	129.6	131.2	-165.86	-7,488.5	384.1	1,351.0	1,213.0	137.99	9.790		
18,100.0	10,640.0	19,467.0	11,950.0	131.2	132.8	-165.86	-7,588.5	384.8	1,350.9	1,211.4	139.60	9.677		
18,200.0	10,640.0	19,567.0	11,950.0	132.8	134.4	-165.86	-7,688.5	385.6	1,350.9	1,209.7	141.21	9.567		
18,300.0	10,640.0	19,667.0	11,950.0	134.4	135.9	-165.86	-7,788.5	386.4	1,350.9	1,208.1	142.83	9.458		
18,400.0	10,640.0	19,767.0	11,950.0	136.0	137.5	-165.86	-7,888.5	387.2	1,350.9	1,206.5	144.45	9.352		
18,500.0	10,640.0	19,867.0	11,950.0	137.6	139.1	-165.86	-7,988.5	387.9	1,350.9	1,204.9	146.08	9.248		
18,600.0	10,640.0	19,967.0	11,950.0	139.2	140.7	-165.86	-8,088.5	388.7	1,350.9	1,203.2	147.70	9.147		
18,700.0	10,640.0	20,067.0	11,950.0	140.8	142.3	-165.86	-8,188.5	389.5	1,350.9	1,201.6	149.33	9.047		
18,800.0	10,640.0	20,167.0	11,950.0	142.4	143.8	-165.86	-8,288.5	390.2	1,350.9	1,200.0	150.96	8.949		
18,900.0	10,640.0	20,267.0	11,950.0	144.0	145.4	-165.86	-8,388.5	391.0	1,350.9	1,198.4	152.59	8.854		
19,000.0	10,640.0	20,367.0	11,950.0	145.6	147.0	-165.86	-8,488.5	391.8	1,350.9	1,196.7	154.22	8.760		
19,100.0	10,640.0	20,467.0	11,950.0	147.2	148.6	-165.86	-8,588.5	392.5	1,350.9	1,195.1	155.86	8.668		
19,200.0	10,640.0	20,567.0	11,950.0	148.8	150.2	-165.86	-8,688.5	393.3	1,350.9	1,193.4	157.49	8.578		
19,300.0	10,640.0	20,667.0	11,950.0	150.4	151.8	-165.86	-8,788.5	394.1	1,350.9	1,191.8	159.13	8.489		
19,400.0	10,640.0	20,767.0	11,950.0	152.0	153.4	-165.86	-8,888.5	394.8	1,350.9	1,190.2	160.77	8.403		
19,500.0	10,640.0	20,867.0	11,950.0	153.6	155.0	-165.86	-8,988.5	395.6	1,350.9	1,188.5	162.42	8.318		
19,600.0	10,640.0	20,967.0	11,950.0	155.2	156.6	-165.86	-9,088.5	396.4	1,350.9	1,186.9	164.06	8.234		
19,700.0	10,640.0	21,067.0	11,950.0	156.8	158.2	-165.86	-9,188.5	397.1	1,350.9	1,185.2	165.70	8.153		
19,800.0	10,640.0	21,167.0	11,950.0	158.4	159.7	-165.86	-9,288.5	397.9	1,350.9	1,183.6	167.35	8.072		
19,900.0	10,640.0	21,267.0	11,950.0	160.0	161.3	-165.86	-9,388.5	398.7	1,350.9	1,181.9	169.00	7.994		
20,000.0	10,640.0	21,367.0	11,950.0	161.6	162.9	-165.86	-9,488.5	399.4	1,350.9	1,180.3	170.65	7.916		
20,100.0	10,640.0	21,467.0	11,950.0	163.2	164.5	-165.86	-9,588.5	400.2	1,350.9	1,178.6	172.30	7.840		
20,200.0	10,640.0	21,567.0	11,950.0	164.8	166.1	-165.86	-9,688.5	401.0	1,350.9	1,177.0	173.95	7.766		
20,300.0	10,640.0	21,667.0	11,950.0	166.5	167.7	-165.86	-9,788.4	401.7	1,350.9	1,175.3	175.61	7.693		
20,400.0	10,640.0	21,767.0	11,950.0	168.1	169.4	-165.86	-9,888.4	402.5	1,350.9	1,173.7	177.26	7.621		
20,500.0	10,640.0	21,867.0	11,950.0	169.7	171.0	-165.86	-9,988.4	403.3	1,350.9	1,172.0	178.92	7.550		
20,600.0	10,640.0	21,967.0	11,950.0	171.3	172.6	-165.86	-10,088.4	404.0	1,350.9	1,170.3	180.58	7.481		

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



Microsoft
Anticollision Report



Company:	Advance Energy Partners	Local Co-ordinate Reference:	Well Merchant State Unit #510H
Project:	Lea County, NM (NAD 83 NME)	TVD Reference:	Kb @ 3710.5usft (H&P 466)
Reference Site:	(Merchant State)Sec35_T-21-S_R-33-E	MD Reference:	Kb @ 3710.5usft (H&P 466)
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	Merchant State Unit #510H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	OWB	Database:	EDM 10_13
Reference Design:	Plan 0.1	Offset TVD Reference:	Offset Datum

Offset Design: (Merchant State)Sec35_T-21-S_R-33-E - Merchant State Unit #603H - OWB - Plan 0.1													Offset Site Error:	0.0 usft
Survey Program:		0-MWD		Offset		Semi Major Axis		Offset Wellbore Centre		Rule Assigned:		Offset Well Error:		0.0 usft
Measured Depth	Vertical Depth	Measured Depth	Vertical Depth	Reference	Offset	Highside Toolface		+N/-S	+E/-W	Between Centres	Between Ellipses	Minimum Separation	Separation Factor	Warning
(usft)	(usft)	(usft)	(usft)	(usft)	(usft)	(°)		(usft)	(usft)	(usft)	(usft)	(usft)		
20,700.0	10,640.0	22,067.0	11,950.0	172.9	174.2	-165.86		-10,188.4	404.8	1,350.9	1,168.7	182.24	7.413	
20,765.0	10,640.0	22,132.0	11,950.0	174.0	175.2	-165.86		-10,253.4	405.3	1,350.9	1,167.6	183.32	7.369	



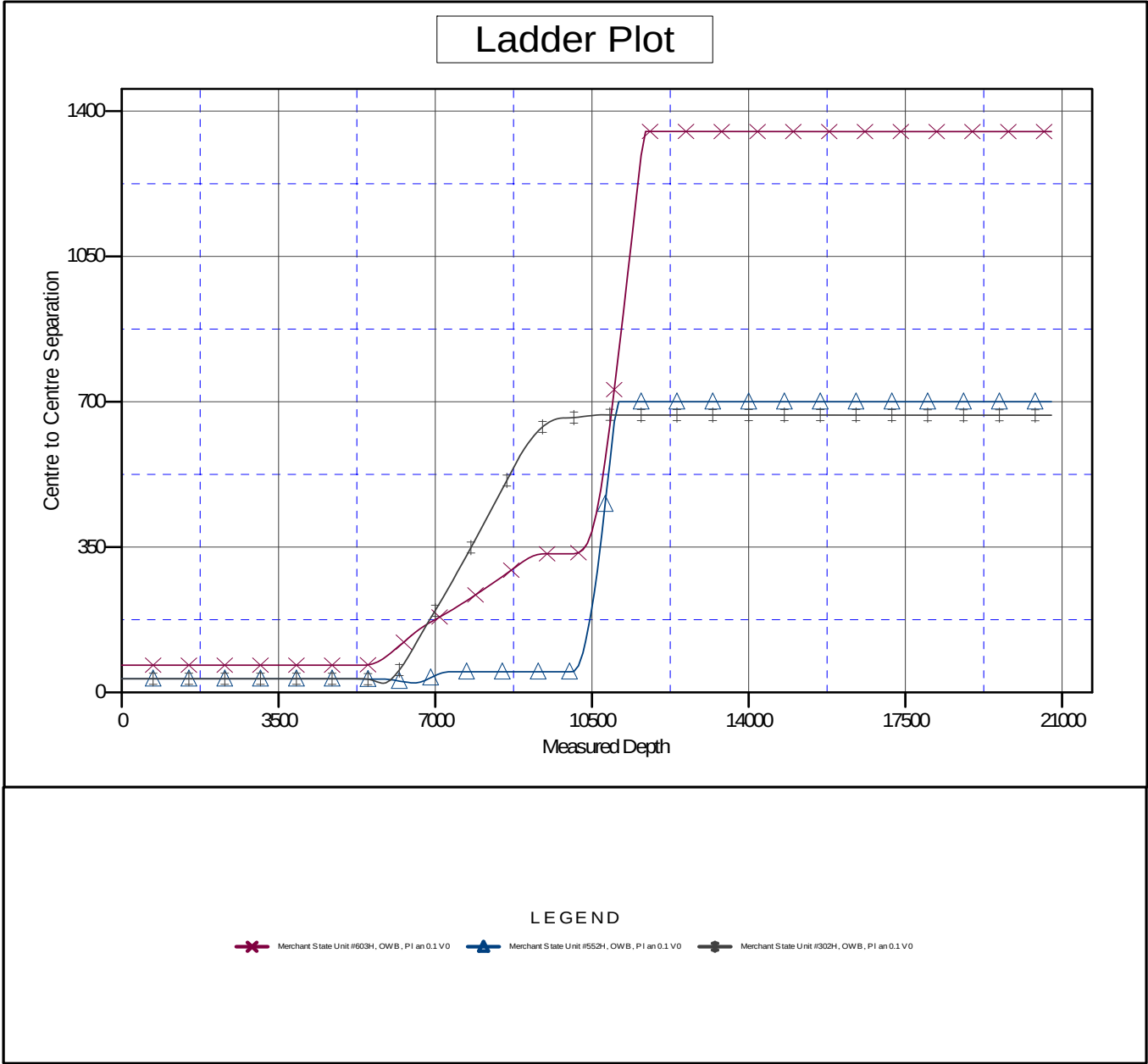
Microsoft
Anticollision Report



Company:	Advance Energy Partners	Local Co-ordinate Reference:	Well Merchant State Unit #510H
Project:	Lea County, NM (NAD 83 NME)	TVD Reference:	Kb @ 3710.5usft (H&P 466)
Reference Site:	(Merchant State)Sec35_T-21-S_R-33-E	MD Reference:	Kb @ 3710.5usft (H&P 466)
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	Merchant State Unit #510H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	OWB	Database:	EDM 10_13
Reference Design:	Plan 0.1	Offset TVD Reference:	Offset Datum

Reference Depths are relative to Kb @ 3710.5usft (H&P 466)
Offset Depths are relative to Offset Datum
Central Meridian is 104° 20' 0.000 W

Coordinates are relative to: Merchant State Unit #510H
Coordinate System is US State Plane 1983, New Mexico Eastern Zone
Grid Convergence at Surface is: 0.42°





Microsoft
Anticollision Report

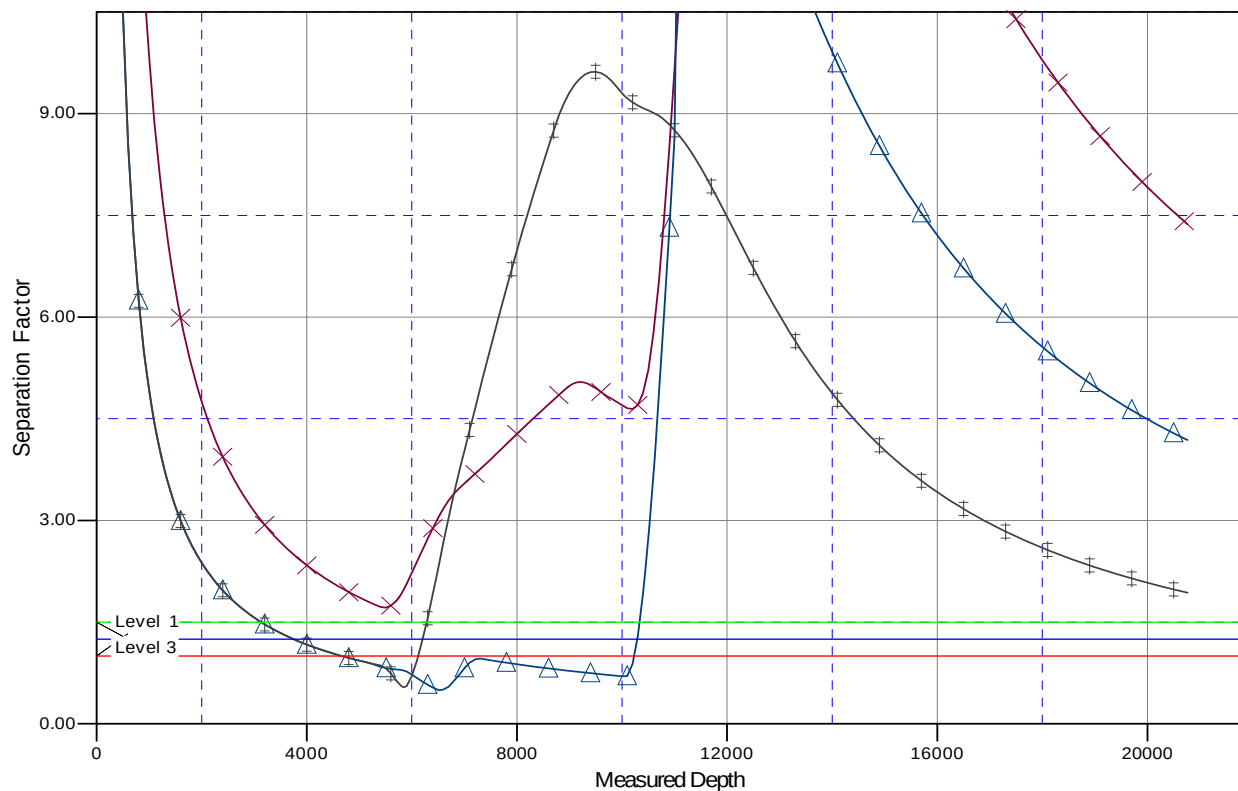


Company:	Advance Energy Partners	Local Co-ordinate Reference:	Well Merchant State Unit #510H
Project:	Lea County, NM (NAD 83 NME)	TVD Reference:	Kb @ 3710.5usft (H&P 466)
Reference Site:	(Merchant State)Sec35_T-21-S_R-33-E	MD Reference:	Kb @ 3710.5usft (H&P 466)
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	Merchant State Unit #510H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	OWB	Database:	EDM 10_13
Reference Design:	Plan 0.1	Offset TVD Reference:	Offset Datum

Reference Depths are relative to Kb @ 3710.5usft (H&P 466)
Offset Depths are relative to Offset Datum
Central Meridian is 104° 20' 0.000 W

Coordinates are relative to: Merchant State Unit #510H
Coordinate System is US State Plane 1983, New Mexico Eastern Zone
Grid Convergence at Surface is: 0.42°

Separation Factor Plot



LEGEND

x Merchant State Unit #603H, OWB, PI an 0.1 V0
 △ Merchant State Unit #552H, OWB, PI an 0.1 V0
 ● Merchant State Unit #302H, OWB, PI an 0.1 V0