District I
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District IV
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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 276413

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

1. Operator Name and Address	2. OGRID Number
ADVANCE ENERGY PARTNERS HAT MESA, LLC 11490 Westheimer Rd., Ste 950 Houston, TX 77077	372417
	3. API Number 30-025-46701

4. Property Code	5. Property Name	6. Well No.
319603	MERCHANT STATE UNIT	302H

7. Surface Location

UL - Lot	Section	Township	Range	Lot Idn	Feet From	N/S Line	Feet From	E/W Line	County
C	35	21S	33E	C	200	N	1621	W	Lea

8. Proposed Bottom Hole Location

UL - Lot	Section	Township	Range	Lot Idn	Feet From	N/S Line	Feet From	E/W Line	County
N	2	22S	33E	N	100	S	2310	W	Lea

9. Pool Information

WC-025 G-06 S213326D;BONE SPRING	97929

Additional Well Information

11. Work Type	12. Well Type	13. Cable/Rotary	14. Lease Type	15. Ground Level Elevation
New Well	OIL		State	3686
16. Multiple	**17. Proposed Depth**	**18. Formation**	**19. Contractor**	**20. Spud Date**
N	22133	Bone Spring		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	12.5	9.625	40	4000	330	4000
Prod	8.5	5.5	20	22133	2300	0

Casing/Cement Program: Additional Comments

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.

Signature:

OIL CONSERVATION DIVISION

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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State of New Mexico
Energy, Minerals and Natural Resources Department

OIL CONSERVATION DIVISION

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

Form C-102
Revised August 4, 2011

Submit one copy to appropriate District Office

☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

API Number	Pool Code	Pool Name
	97929	WC-025 G-06 S213326D; BONE SPRING

Property Code	Property Name	Well Number
319603	MERCHANT STATE UNIT	302H
OGRID No. 372417	**Operator Name** ADVANCE ENERGY PARTNERS HAT MESA	**Elevation** 3686'

Surface Location

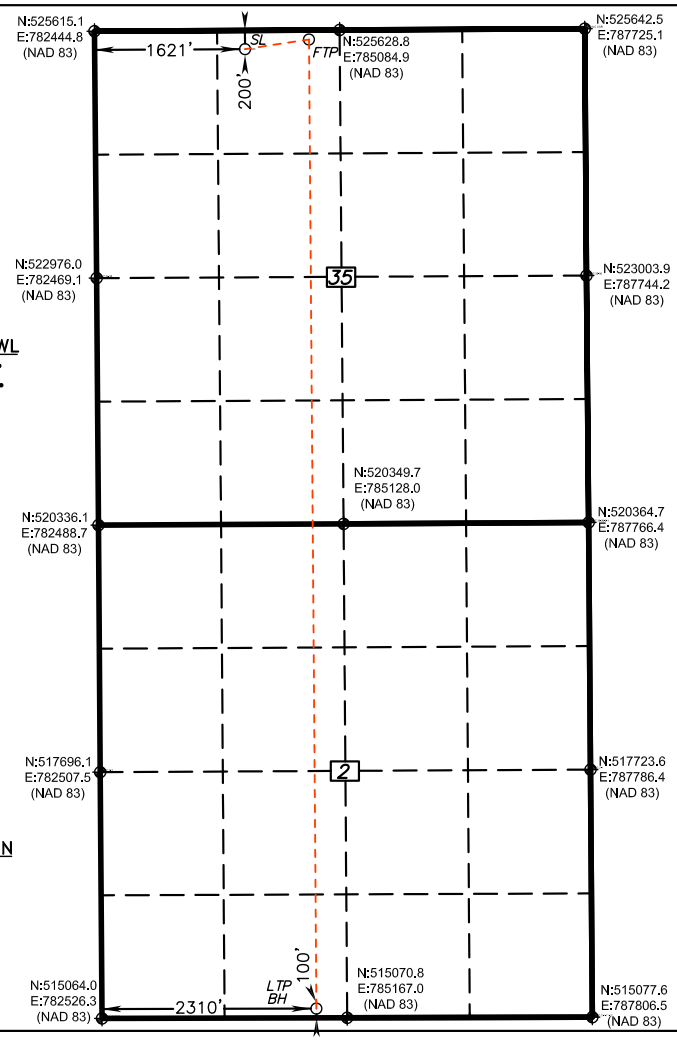
UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	SOUTH/South line	Feet from the	East/West line	County
C	35	21 S	33 E		200	NORTH	1621	WEST	LEA

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	2310	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



SURFACE LOCATION
Lat – N 32.441997°
Long – W 103.546516°
NMSPCE– N 525423.6
E 784067.3
(NAD–83)

FIRST TAKE POINT
100' FNL & 2310' FWL
Lat – N 32.442267°
Long – W 103.544283°
NMSPCE– N 525527.1
E 784755.7
(NAD–83)

BOTTOM HOLE LOCATION
Lat – N 32.413797°
Long – W 103.544272°
NMSPCE– N 515169.9
E 784835.6
(NAD–83)

OPERATOR CERTIFICATION

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

Signature Date

Printed Name

Email Address

SURVEYOR CERTIFICATION

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

Date Surveyed: DECEMBER 11, 2019

Signature & Seal of Professional Surveyor

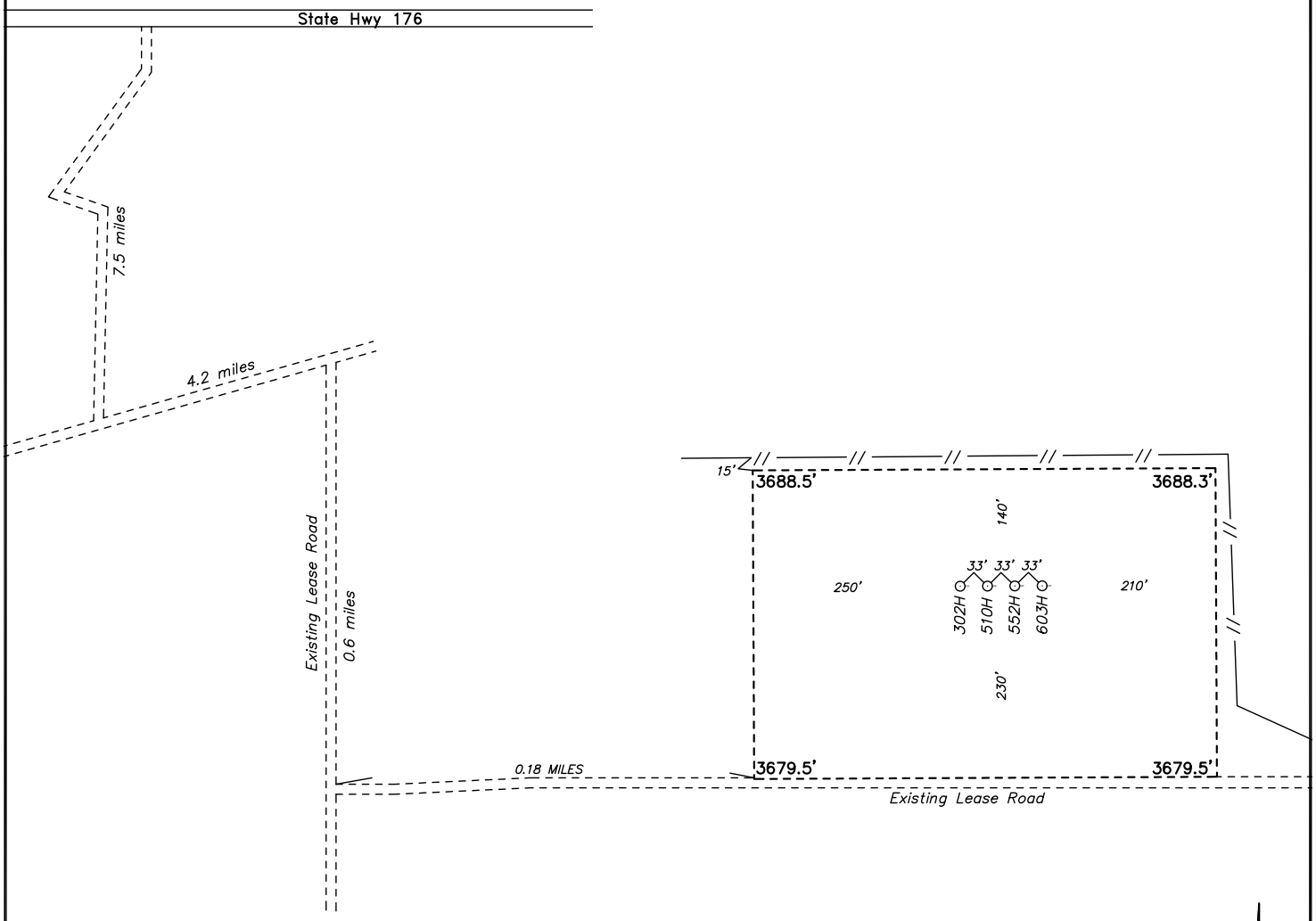
GARY L. JONES
NEW MEXICO
7977
REGISTERED PROFESSIONAL LAND SURVEYOR

Certificate No. Gary L. Jones 7977
BASIN SURVEYS

0' 1000' 2000' 3000' 4000'
SCALE: 1" = 2000'
WO Num.: 34993

SECTION 35, TOWNSHIP 21 SOUTH, RANGE 33 EAST. N.M.P.M.,

LEA COUNTY, NEW MEXICO.



ADVANCE ENERGY PARTNERS HAT MESA
MERCHANT STATE UNIT 302H
ELEV. – 3686'
Lat – N 32.441997°
Long – W 103.546516°
NMSPCE– N 525423.6
E 784067.3
(NAD–83)

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

200 0 200 400 FEET

SCALE: 1" = 200'

ADVANCE ENERGY PARTNERS HAT MESA

REF: MERCHANT STATE UNIT 302H / WELL PAD TOPO

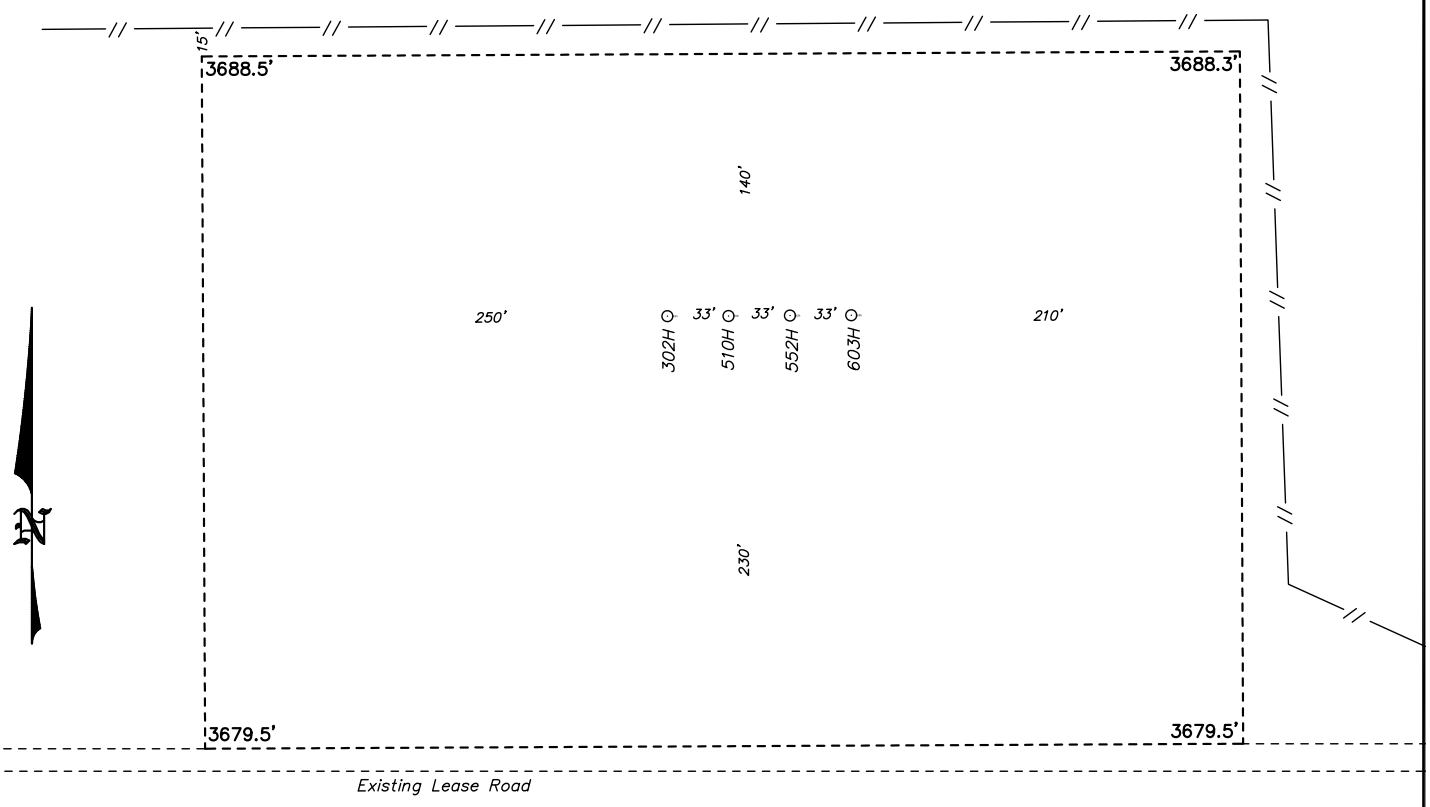
THE MERCHANT STATE UNIT 302H LOCATED 200' FROM THE NORTH LINE AND 1621' FROM THE WEST LINE OF SECTION 35, TOWNSHIP 21 SOUTH, RANGE 33 EAST. N.M.P.M., LEA COUNTY, NEW MEXICO.

basin surveys
focused on excellence in the oilfield
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: 34993	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.



100 0 100 200 FEET

SCALE: 1" = 100'

ADVANCE ENERGY PARTNERS HAT MESA

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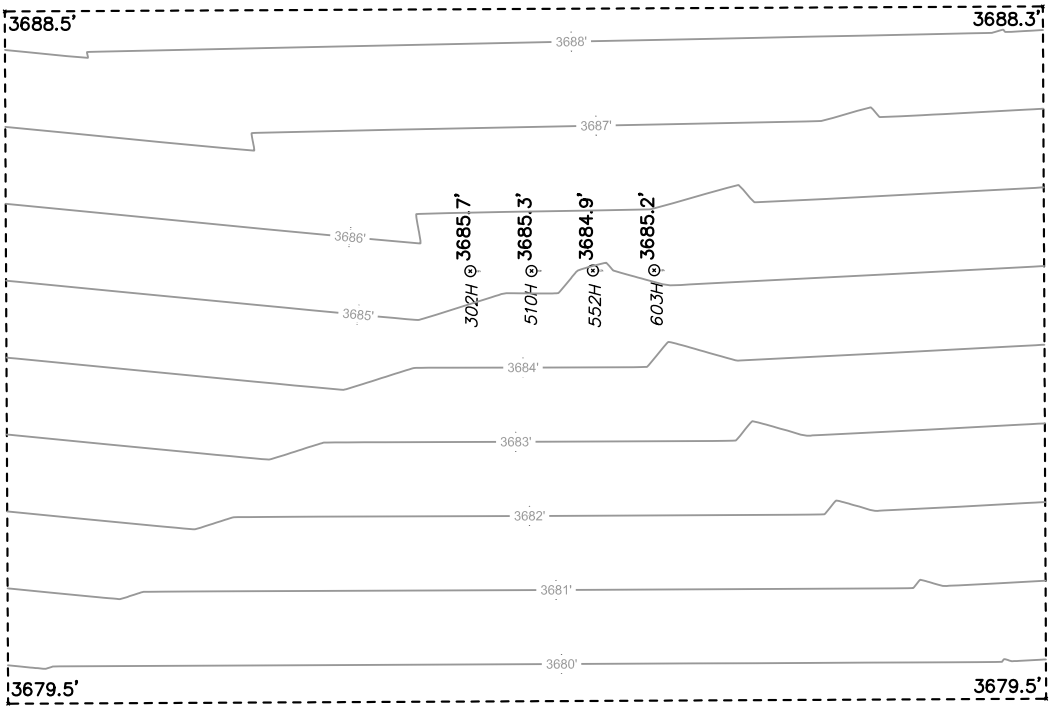
LEA COUNTY, NEW MEXICO.



100 0 100 200 FEET

SCALE: 1" = 100'

ADVANCE ENERGY PARTNERS HAT MESA

REF: MERCHANT STATE UNIT 302,510,552&603H / CUT&FILL

THE MERCHANT STATE UNIT 302,510,552&603HLOCATED 200' FROM SECTION 35, TOWNSHIP 21 SOUTH, RANGE 33 EAST. N.M.P.M., LEA COUNTY, NEW MEXICO.

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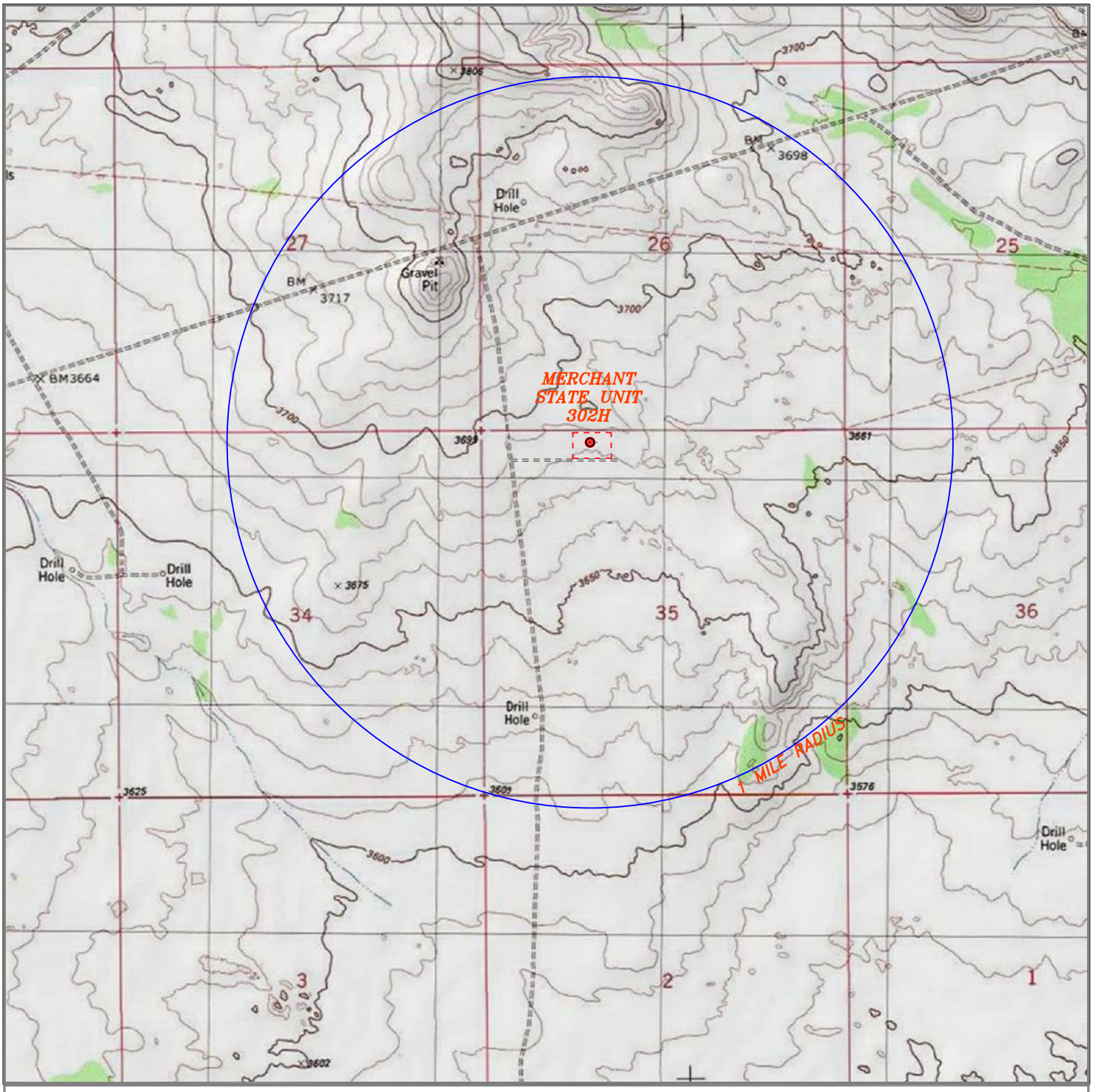

MERCHANT STATE UNIT 302H

Located 200' FNL and 1621' 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' 150'0'
SCALE: 1" = 2000'

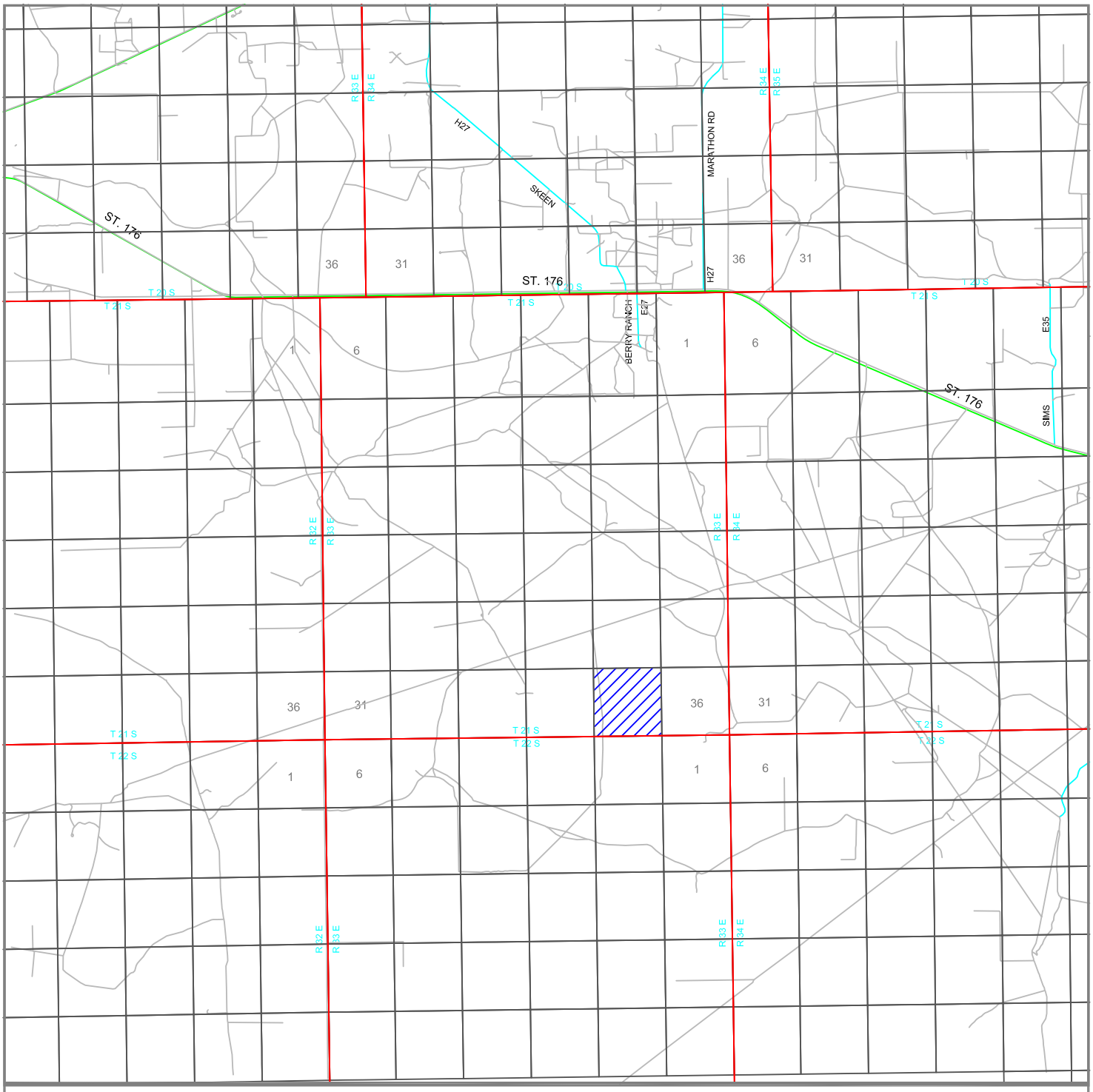
W.O. Number: JG 34993

Survey Date: 12-11-2019

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

N

ADVANCE ENERGY PARTNERS HAT MESA



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

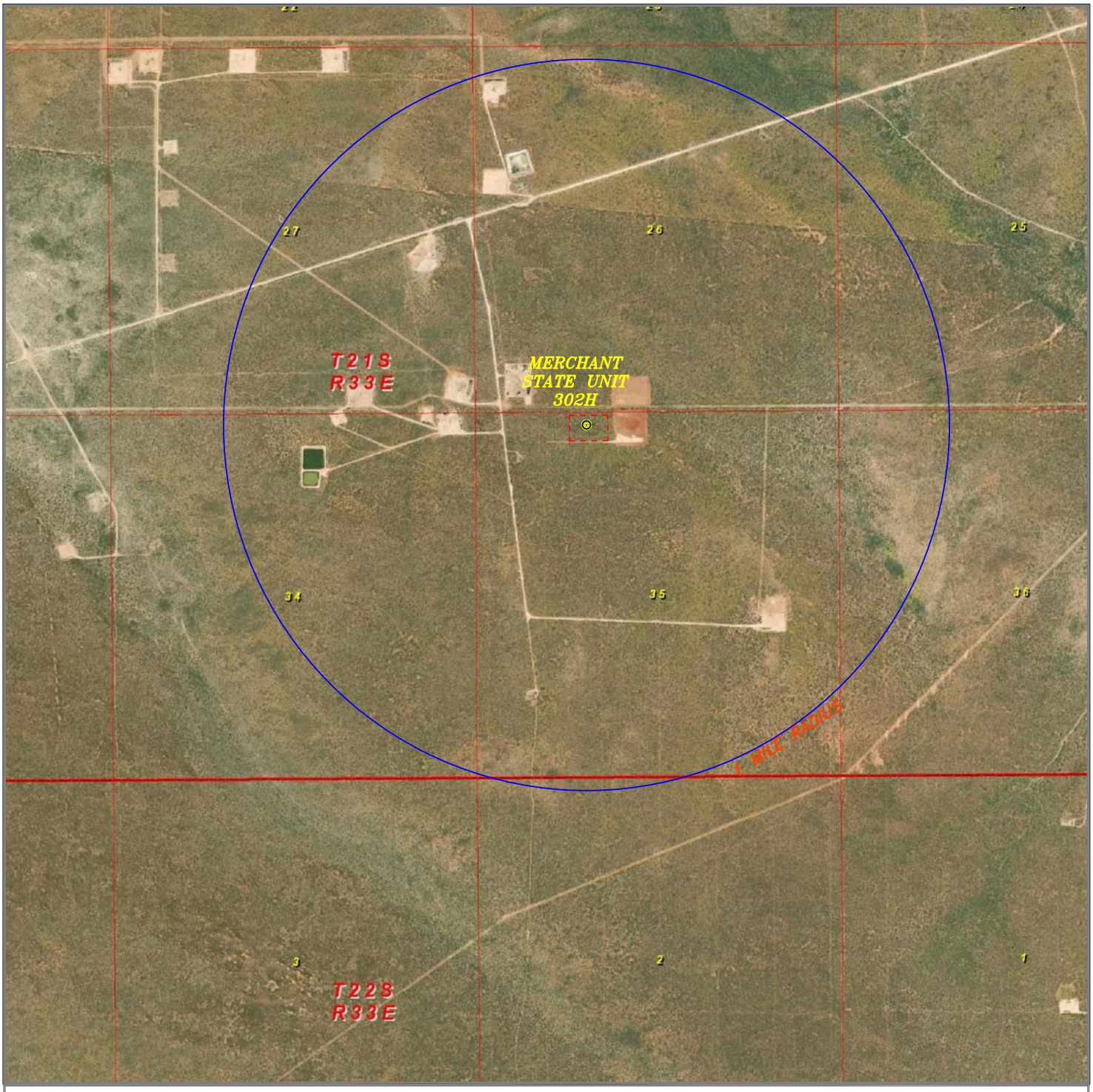
W.O. Number: JG 34993

Survey Date: 12-11-2019

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

N

ADVANCE ENERGY PARTNERS HAT MESA



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0' 1000' 2000' 3000' 150'0'
SCALE: 1" = 2000'

W.O. Number: JG 34993

Survey Date: 12-11-2019

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

N

ADVANCE ENERGY PARTNERS HAT MESA

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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

GAS CAPTURE PLAN

Date: 1/10/2020

☒ Original
☐ Amended - Reason for Amendment:

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

This Gas Capture Plan outlines actions to be taken by the Operator to reduce well/production facility flaring/venting for new completion (new drill, recomplete 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 #302H	30-025-46701	C-35-21S-33E	0200N 1621W	1500	Flared	Flared during inital 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. 35, 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 276413

PERMIT COMMENTS

Operator Name and Address:	API Number:
ADVANCE ENERGY PARTNERS HAT MESA, LLC [372417] 11490 Westheimer Rd., Ste 950 Houston, TX 77077	30-025-46701
	Well: MERCHANT STATE UNIT #302H

Created By	Comment	Comment Date

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

Permit 276413

PERMIT CONDITIONS OF APPROVAL

Operator Name and Address:	API Number:
ADVANCE ENERGY PARTNERS HAT MESA, LLC [372417] 11490 Westheimer Rd., Ste 950 Houston, TX 77077	30-025-46701
	Well: MERCHANT STATE UNIT #302H

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 NMOCD 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.

ADVANCE ENERGY PARTNERS

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 302H
Unit C, Section 35-T21S-R33E
Lea County, New Mexico

Dear Mr. Kautz,

I am providing answers to you 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,

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 #302H

OWB
Plan 0.1

Anticollision Report

03 January, 2020

Microsoft
Anticollision Report

Company:	Advance Energy Partners	**Local Co-ordinate Reference:**	Well Merchant State Unit #302H
Project:	Lea County, NM (NAD 83 NME)	**TVD Reference:**	KB @ 3711.5usft (H&P 466)
Reference Site:	(Merchant State)Sec35_T-21-S_R-33-E	**MD Reference:**	KB @ 3711.5usft (H&P 466)
Site Error:	0.0 usft	**North Reference:**	Grid
Reference Well:	Merchant State Unit #302H	**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	**Error Model:**	ISCWSA
Depth Range:	Unlimited	**Scan Method:**	Closest Approach 3D
Results Limited by:	Maximum center-center distance of 2,000.0 usft	**Error Surface:**	Pedal Curve
Warning Levels Evaluated at:	2.00 **Sigma**	**Casing Method:**	Not applied

Survey Tool Program **Date** 01/02/2020

From (usft)	To (usft)	Survey (Wellbore)	Tool Name	Description
0.0	20,695.7	Plan 0.1 (OWB)	MWD	OWSG MWD - Standard

Summary

Site Name Offset Well - Wellbore - Design	Reference Measured Depth (usft)	Offset Measured Depth (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Separation Factor	Warning
(Merchant State)Sec35_T-21-S_R-33-E						
Merchant State Unit #510H - OWB - Plan 0.1	5,846.3	5,844.1	22.3	-19.1	0.539	Level 1, CC, ES, SF
Merchant State Unit #552H - OWB - Plan 0.1	5,888.2	5,885.0	54.7	13.1	1.314	Level 3, CC
Merchant State Unit #552H - OWB - Plan 0.1	5,900.0	5,896.7	54.7	13.0	1.312	Level 3, ES, SF
Merchant State Unit #603H - OWB - Plan 0.1	6,887.5	6,873.7	34.3	-14.5	0.703	Level 1, CC
Merchant State Unit #603H - OWB - Plan 0.1	6,900.0	6,886.2	34.3	-14.5	0.703	Level 1, ES, SF

Offset Design: (Merchant State)Sec35_T-21-S_R-33-E - Merchant State Unit #510H - OWB - Plan 0.1 **Offset Site Error:** 0.0 usft

Survey Program: 0-MWD **Rule Assigned:** **Offset Well Error:** 0.0 usft

Reference Measured Depth (usft)	Reference Vertical Depth (usft)	Offset Measured Depth (usft)	Offset Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
0.0	0.0	0.0	0.0	0.0	0.0	89.83	0.1	33.0	33.0				
100.0	100.0	99.0	99.0	0.1	0.1	89.83	0.1	33.0	33.0	32.7	0.27	124.188	
200.0	200.0	199.0	199.0	0.5	0.5	89.83	0.1	33.0	33.0	32.0	0.98	33.659	
300.0	300.0	299.0	299.0	0.9	0.8	89.83	0.1	33.0	33.0	31.3	1.70	19.442	
400.0	400.0	399.0	399.0	1.2	1.2	89.83	0.1	33.0	33.0	30.6	2.41	13.669	
500.0	500.0	499.0	499.0	1.6	1.6	89.83	0.1	33.0	33.0	29.9	3.13	10.539	
600.0	600.0	599.0	599.0	1.9	1.9	89.83	0.1	33.0	33.0	29.2	3.85	8.575	
700.0	700.0	699.0	699.0	2.3	2.3	89.83	0.1	33.0	33.0	28.4	4.57	7.229	
800.0	800.0	799.0	799.0	2.6	2.6	89.83	0.1	33.0	33.0	27.7	5.28	6.248	
900.0	900.0	899.0	899.0	3.0	3.0	89.83	0.1	33.0	33.0	27.0	6.00	5.501	
1,000.0	1,000.0	999.0	999.0	3.4	3.4	89.83	0.1	33.0	33.0	26.3	6.72	4.914	
1,100.0	1,100.0	1,099.0	1,099.0	3.7	3.7	89.83	0.1	33.0	33.0	25.6	7.43	4.440	
1,200.0	1,200.0	1,199.0	1,199.0	4.1	4.1	89.83	0.1	33.0	33.0	24.9	8.15	4.049	
1,300.0	1,300.0	1,299.0	1,299.0	4.4	4.4	89.83	0.1	33.0	33.0	24.1	8.87	3.722	
1,400.0	1,400.0	1,399.0	1,399.0	4.8	4.8	89.83	0.1	33.0	33.0	23.4	9.58	3.443	
1,500.0	1,500.0	1,499.0	1,499.0	5.2	5.1	89.83	0.1	33.0	33.0	22.7	10.30	3.204	
1,600.0	1,600.0	1,599.0	1,599.0	5.5	5.5	89.83	0.1	33.0	33.0	22.0	11.02	2.995	
1,700.0	1,700.0	1,699.0	1,699.0	5.9	5.9	89.83	0.1	33.0	33.0	21.3	11.73	2.812	
1,800.0	1,800.0	1,799.0	1,799.0	6.2	6.2	89.83	0.1	33.0	33.0	20.5	12.45	2.650	
1,900.0	1,900.0	1,899.0	1,899.0	6.6	6.6	89.83	0.1	33.0	33.0	19.8	13.17	2.506	
2,000.0	2,000.0	1,999.0	1,999.0	6.9	6.9	89.83	0.1	33.0	33.0	19.1	13.89	2.377	
2,100.0	2,100.0	2,099.0	2,099.0	7.3	7.3	89.83	0.1	33.0	33.0	18.4	14.60	2.260	

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 #302H
Project:	Lea County, NM (NAD 83 NME)	**TVD Reference:**	KB @ 3711.5usft (H&P 466)
Reference Site:	(Merchant State)Sec35_T-21-S_R-33-E	**MD Reference:**	KB @ 3711.5usft (H&P 466)
Site Error:	0.0 usft	**North Reference:**	Grid
Reference Well:	Merchant State Unit #302H	**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 #510H - OWB - Plan 0.1 — **Offset Site Error:** 0.0 usft

Survey Program: 0-MWD — **Rule Assigned:** — **Offset Well Error:** 0.0 usft

Reference Measured Depth (usft)	Reference Vertical Depth (usft)	Offset Measured Depth (usft)	Offset Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
2,200.0	2,200.0	2,199.0	2,199.0	7.7	7.7	89.83	0.1	33.0	33.0	17.7	15.32	2.154	
2,300.0	2,300.0	2,299.0	2,299.0	8.0	8.0	89.83	0.1	33.0	33.0	17.0	16.04	2.058	
2,400.0	2,400.0	2,399.0	2,399.0	8.4	8.4	89.83	0.1	33.0	33.0	16.2	16.75	1.970	
2,500.0	2,500.0	2,499.0	2,499.0	8.7	8.7	89.83	0.1	33.0	33.0	15.5	17.47	1.889	
2,600.0	2,600.0	2,599.0	2,599.0	9.1	9.1	89.83	0.1	33.0	33.0	14.8	18.19	1.814	
2,700.0	2,700.0	2,699.0	2,699.0	9.5	9.5	89.83	0.1	33.0	33.0	14.1	18.90	1.746	
2,800.0	2,800.0	2,799.0	2,799.0	9.8	9.8	89.83	0.1	33.0	33.0	13.4	19.62	1.682	
2,900.0	2,900.0	2,899.0	2,899.0	10.2	10.2	89.83	0.1	33.0	33.0	12.7	20.34	1.623	
3,000.0	3,000.0	2,999.0	2,999.0	10.5	10.5	89.83	0.1	33.0	33.0	11.9	21.05	1.567	
3,100.0	3,100.0	3,099.0	3,099.0	10.9	10.9	89.83	0.1	33.0	33.0	11.2	21.77	1.516	
3,200.0	3,200.0	3,199.0	3,199.0	11.2	11.2	89.83	0.1	33.0	33.0	10.5	22.49	1.467	Level 3
3,300.0	3,300.0	3,299.0	3,299.0	11.6	11.6	89.83	0.1	33.0	33.0	9.8	23.21	1.422	Level 3
3,400.0	3,400.0	3,399.0	3,399.0	12.0	12.0	89.83	0.1	33.0	33.0	9.1	23.92	1.379	Level 3
3,500.0	3,500.0	3,499.0	3,499.0	12.3	12.3	89.83	0.1	33.0	33.0	8.4	24.64	1.339	Level 3
3,600.0	3,600.0	3,599.0	3,599.0	12.7	12.7	89.83	0.1	33.0	33.0	7.6	25.36	1.301	Level 3
3,700.0	3,700.0	3,699.0	3,699.0	13.0	13.0	89.83	0.1	33.0	33.0	6.9	26.07	1.266	Level 3
3,800.0	3,800.0	3,799.0	3,799.0	13.4	13.4	89.83	0.1	33.0	33.0	6.2	26.79	1.232	Level 2
3,900.0	3,900.0	3,899.0	3,899.0	13.8	13.8	89.83	0.1	33.0	33.0	5.5	27.51	1.200	Level 2
4,000.0	4,000.0	3,999.0	3,999.0	14.1	14.1	89.83	0.1	33.0	33.0	4.8	28.22	1.169	Level 2
4,100.0	4,100.0	4,099.0	4,099.0	14.5	14.5	89.83	0.1	33.0	33.0	4.1	28.94	1.140	Level 2
4,200.0	4,200.0	4,199.0	4,199.0	14.8	14.8	89.83	0.1	33.0	33.0	3.3	29.66	1.113	Level 2
4,300.0	4,300.0	4,299.0	4,299.0	15.2	15.2	89.83	0.1	33.0	33.0	2.6	30.38	1.086	Level 2
4,400.0	4,400.0	4,399.0	4,399.0	15.5	15.5	89.83	0.1	33.0	33.0	1.9	31.09	1.061	Level 2
4,500.0	4,500.0	4,499.0	4,499.0	15.9	15.9	89.83	0.1	33.0	33.0	1.2	31.81	1.037	Level 2
4,600.0	4,600.0	4,599.0	4,599.0	16.3	16.3	89.83	0.1	33.0	33.0	0.5	32.53	1.015	Level 2
4,700.0	4,700.0	4,699.0	4,699.0	16.6	16.6	89.83	0.1	33.0	33.0	-0.2	33.24	0.993	Level 1
4,800.0	4,800.0	4,799.0	4,799.0	17.0	17.0	89.83	0.1	33.0	33.0	-1.0	33.96	0.972	Level 1
4,900.0	4,900.0	4,899.0	4,899.0	17.3	17.3	89.83	0.1	33.0	33.0	-1.7	34.68	0.952	Level 1
5,000.0	5,000.0	4,999.0	4,999.0	17.7	17.7	89.83	0.1	33.0	33.0	-2.4	35.39	0.932	Level 1
5,100.0	5,100.0	5,099.0	5,099.0	18.1	18.1	89.83	0.1	33.0	33.0	-3.1	36.11	0.914	Level 1
5,200.0	5,200.0	5,199.0	5,199.0	18.4	18.4	89.83	0.1	33.0	33.0	-3.8	36.83	0.896	Level 1
5,300.0	5,300.0	5,299.0	5,299.0	18.8	18.8	89.83	0.1	33.0	33.0	-4.5	37.54	0.879	Level 1
5,400.0	5,400.0	5,399.0	5,399.0	19.1	19.1	89.83	0.1	33.0	33.0	-5.3	38.26	0.862	Level 1
5,500.0	5,500.0	5,499.0	5,499.0	19.5	19.5	5.28	1.0	33.0	32.1	-6.9	38.97	0.824	Level 1
5,600.0	5,600.0	5,598.9	5,598.9	19.8	19.8	0.35	3.8	32.8	29.6	-10.1	39.67	0.746	Level 1
5,700.0	5,699.9	5,698.7	5,698.5	20.2	20.2	-9.87	8.4	32.7	26.0	-14.4	40.37	0.643	Level 1
5,800.0	5,799.7	5,798.1	5,797.7	20.5	20.6	-28.60	14.9	32.4	22.8	-18.3	41.04	0.555	Level 1
5,846.3	5,845.9	5,844.1	5,843.5	20.7	20.7	-40.65	18.5	32.2	22.3	-19.1	41.34	0.539	Level 1, CC, ES, SF
5,900.0	5,899.4	5,897.2	5,896.5	20.9	20.9	-56.06	23.2	32.0	23.1	-18.5	41.66	0.555	Level 1
6,000.0	5,998.9	5,996.0	5,994.8	21.2	21.3	-81.61	33.2	31.6	29.6	-12.7	42.29	0.700	Level 1
6,100.0	6,098.3	6,094.9	6,093.1	21.6	21.6	-98.54	43.7	31.2	40.3	-2.7	43.00	0.938	Level 1
6,200.0	6,197.4	6,193.6	6,191.2	21.9	22.0	-109.62	54.1	30.7	53.7	9.9	43.72	1.228	Level 2
6,300.0	6,296.3	6,292.1	6,289.2	22.3	22.3	-117.40	64.5	30.3	69.0	24.5	44.44	1.552	
6,400.0	6,394.9	6,390.3	6,386.8	22.6	22.7	-123.24	74.9	29.9	86.1	40.9	45.15	1.906	
6,500.0	6,493.3	6,488.9	6,484.9	23.0	23.0	-127.97	85.1	29.4	104.6	58.7	45.89	2.279	
6,600.0	6,591.2	6,588.1	6,583.8	23.4	23.4	-132.41	93.8	29.1	123.7	77.1	46.63	2.653	
6,700.0	6,689.1	6,687.4	6,682.8	23.7	23.8	-136.60	100.6	28.8	142.9	95.5	47.36	3.017	
6,800.0	6,786.9	6,786.9	6,782.1	24.1	24.1	-140.33	105.6	28.6	161.6	113.5	48.08	3.360	
6,900.0	6,884.7	6,886.4	6,881.6	24.5	24.5	-143.79	108.7	28.5	179.8	131.0	48.80	3.685	
7,000.0	6,982.5	6,985.9	6,981.2	24.9	24.8	-147.08	110.0	28.4	197.7	148.2	49.50	3.994	
7,100.0	7,080.3	7,084.1	7,079.3	25.3	25.2	-150.07	110.0	28.4	215.6	165.4	50.20	4.295	
7,200.0	7,178.1	7,181.9	7,177.1	25.7	25.5	-152.60	110.0	28.4	234.0	183.1	50.89	4.597	

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 #302H
Project:	Lea County, NM (NAD 83 NME)	**TVD Reference:**	KB @ 3711.5usft (H&P 466)
Reference Site:	(Merchant State)Sec35_T-21-S_R-33-E	**MD Reference:**	KB @ 3711.5usft (H&P 466)
Site Error:	0.0 usft	**North Reference:**	Grid
Reference Well:	Merchant State Unit #302H	**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 #510H - OWB - Plan 0.1

Offset Site Error: 0.0 usft

Survey Program: 0-MWD

Offset Well Error: 0.0 usft

Reference Measured Depth (usft)	Reference Vertical Depth (usft)	Offset Measured Depth (usft)	Offset Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Rule Assigned: Distance Between Centres (usft)	Distance Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
7,300.0	7,275.9	7,279.7	7,274.9	26.1	25.9	-154.77	110.0	28.4	252.7	201.1	51.59	4.899	
7,400.0	7,373.7	7,377.5	7,372.7	26.5	26.2	-156.63	110.0	28.4	271.7	219.5	52.28	5.198	
7,500.0	7,471.5	7,475.3	7,470.5	26.9	26.6	-158.25	110.0	28.4	291.0	238.1	52.98	5.493	
7,600.0	7,569.3	7,573.1	7,568.3	27.3	26.9	-159.67	110.0	28.4	310.5	256.8	53.68	5.785	
7,700.0	7,667.2	7,670.9	7,666.2	27.7	27.3	-160.92	110.0	28.4	330.2	275.8	54.37	6.072	
7,800.0	7,765.0	7,768.7	7,764.0	28.1	27.6	-162.04	110.0	28.4	349.9	294.9	55.07	6.354	
7,900.0	7,862.8	7,866.5	7,861.8	28.5	28.0	-163.03	110.0	28.4	369.8	314.1	55.78	6.631	
8,000.0	7,960.6	7,964.4	7,959.6	29.0	28.3	-163.92	110.0	28.4	389.8	333.4	56.48	6.902	
8,100.0	8,058.4	8,062.2	8,057.4	29.4	28.7	-164.72	110.0	28.4	409.9	352.7	57.18	7.169	
8,200.0	8,156.2	8,160.0	8,155.2	29.8	29.0	-165.45	110.0	28.4	430.0	372.2	57.88	7.430	
8,300.0	8,254.0	8,257.8	8,253.0	30.2	29.4	-166.12	110.0	28.4	450.3	391.7	58.59	7.685	
8,400.0	8,351.8	8,355.6	8,350.8	30.6	29.7	-166.73	110.0	28.4	470.5	411.2	59.29	7.936	
8,500.0	8,449.6	8,453.4	8,448.6	31.1	30.1	-167.28	110.0	28.4	490.8	430.8	60.00	8.181	
8,600.0	8,547.4	8,551.2	8,546.4	31.5	30.4	-167.80	110.0	28.4	511.2	450.5	60.70	8.421	
8,700.0	8,645.2	8,649.0	8,644.2	31.9	30.8	-168.27	110.0	28.4	531.5	470.1	61.41	8.656	
8,800.0	8,743.1	8,746.9	8,742.1	32.4	31.1	-168.73	110.0	28.4	551.5	489.4	62.12	8.879	
8,900.0	8,841.4	8,845.1	8,840.4	32.8	31.5	-169.13	110.0	28.4	570.0	507.1	62.83	9.072	
9,000.0	8,939.9	8,943.7	8,938.9	33.2	31.8	-169.48	110.0	28.4	586.7	523.2	63.54	9.234	
9,100.0	9,038.7	9,042.5	9,037.7	33.6	32.2	-169.77	110.0	28.4	601.8	537.5	64.25	9.366	
9,200.0	9,137.8	9,141.6	9,136.8	34.0	32.5	-170.02	110.0	28.4	615.2	550.2	64.97	9.469	
9,300.0	9,237.1	9,240.9	9,236.1	34.4	32.9	-170.23	110.0	28.4	626.9	561.2	65.68	9.544	
9,400.0	9,336.6	9,340.3	9,335.6	34.8	33.3	-170.40	110.0	28.4	636.9	570.5	66.39	9.592	
9,500.0	9,436.2	9,440.0	9,435.2	35.2	33.6	-170.54	110.0	28.4	645.1	578.0	67.11	9.614	
9,600.0	9,536.0	9,539.8	9,535.0	35.6	34.0	-170.64	110.0	28.4	651.7	583.9	67.82	9.609	
9,700.0	9,635.9	9,639.6	9,634.9	35.9	34.3	-170.72	110.0	28.4	656.5	588.0	68.53	9.580	
9,800.0	9,735.8	9,739.6	9,734.8	36.3	34.7	-170.77	110.0	28.4	659.6	590.4	69.24	9.527	
9,900.0	9,835.8	9,839.6	9,834.8	36.6	35.0	-170.79	110.0	28.4	661.0	591.1	69.95	9.451	
10,000.0	9,935.8	9,939.6	9,934.8	36.9	35.4	-87.70	110.0	28.4	661.1	590.5	70.65	9.357	
10,000.4	9,936.2	9,940.0	9,935.2	36.9	35.4	92.74	110.0	28.4	661.1	590.5	70.66	9.357	
10,100.0	10,035.6	10,039.4	10,034.6	37.3	35.8	93.07	110.0	28.4	661.3	590.0	71.35	9.269	
10,200.0	10,133.4	10,143.9	10,138.9	37.6	36.1	94.45	105.5	28.4	662.4	590.4	72.02	9.197	
10,300.0	10,226.1	10,254.2	10,246.4	37.8	36.4	95.82	81.2	28.6	663.9	591.2	72.65	9.138	
10,400.0	10,310.9	10,368.2	10,350.4	38.1	36.7	97.02	35.0	29.0	665.4	592.2	73.21	9.089	
10,500.0	10,385.2	10,485.6	10,445.8	38.3	37.1	97.99	-33.1	29.5	666.9	593.2	73.70	9.049	
10,600.0	10,446.9	10,605.7	10,526.9	38.5	37.4	98.68	-121.3	30.2	668.0	593.9	74.16	9.008	
10,700.0	10,493.9	10,727.6	10,588.7	38.6	37.7	99.05	-226.1	31.0	668.7	594.0	74.68	8.954	
10,800.0	10,525.0	10,850.2	10,627.1	38.9	38.0	99.07	-342.3	31.9	668.7	593.4	75.31	8.879	
10,900.0	10,539.1	10,972.3	10,640.0	39.1	38.4	98.75	-463.4	32.8	668.2	592.1	76.10	8.780	
10,998.9	10,541.8	11,071.1	10,640.0	39.5	38.8	98.54	-562.2	33.6	667.8	590.9	76.86	8.688	
11,000.0	10,540.0	11,072.2	10,640.0	39.5	38.8	98.70	-563.3	33.6	668.0	591.2	76.85	8.693	
11,100.0	10,540.0	11,172.2	10,640.0	39.9	39.2	98.70	-663.3	34.4	668.0	590.3	77.72	8.596	
11,200.0	10,540.0	11,272.2	10,640.0	40.3	39.7	98.70	-763.3	35.1	668.0	589.3	78.71	8.487	
11,300.0	10,540.0	11,372.2	10,640.0	40.9	40.3	98.70	-863.3	35.9	668.0	588.2	79.83	8.368	
11,400.0	10,540.0	11,472.2	10,640.0	41.5	40.9	98.70	-963.3	36.7	668.0	586.9	81.07	8.240	
11,500.0	10,540.0	11,572.2	10,640.0	42.1	41.6	98.70	-1,063.3	37.4	668.0	585.6	82.42	8.105	
11,600.0	10,540.0	11,672.2	10,640.0	42.9	42.3	98.70	-1,163.3	38.2	668.0	584.1	83.87	7.965	
11,700.0	10,540.0	11,772.2	10,640.0	43.6	43.1	98.70	-1,263.3	39.0	668.0	582.6	85.43	7.819	
11,800.0	10,540.0	11,872.2	10,640.0	44.4	43.9	98.70	-1,363.3	39.8	668.0	580.9	87.08	7.671	
11,900.0	10,540.0	11,972.2	10,640.0	45.3	44.8	98.70	-1,463.3	40.5	668.0	579.2	88.83	7.520	
12,000.0	10,540.0	12,072.2	10,640.0	46.2	45.7	98.70	-1,563.3	41.3	668.0	577.3	90.65	7.369	
12,100.0	10,540.0	12,172.2	10,640.0	47.2	46.6	98.70	-1,663.3	42.1	668.0	575.4	92.56	7.217	
12,200.0	10,540.0	12,272.2	10,640.0	48.1	47.6	98.70	-1,763.3	42.8	668.0	573.4	94.55	7.065	

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 #302H
Project:	Lea County, NM (NAD 83 NME)	**TVD Reference:**	KB @ 3711.5usft (H&P 466)
Reference Site:	(Merchant State)Sec35_T-21-S_R-33-E	**MD Reference:**	KB @ 3711.5usft (H&P 466)
Site Error:	0.0 usft	**North Reference:**	Grid
Reference Well:	Merchant State Unit #302H	**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 #510H - OWB - Plan 0.1 — **Offset Site Error:** 0.0 usft

Survey Program: 0-MWD — **Rule Assigned:** — **Offset Well Error:** 0.0 usft

Reference Measured Depth (usft)	Reference Vertical Depth (usft)	Offset Measured Depth (usft)	Offset Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
12,300.0	10,540.0	12,372.2	10,640.0	49.2	48.7	98.70	-1,863.3	43.6	668.0	571.4	96.60	6.915	
12,400.0	10,540.0	12,472.2	10,640.0	50.2	49.7	98.70	-1,963.3	44.4	668.0	569.3	98.73	6.766	
12,500.0	10,540.0	12,572.2	10,640.0	51.3	50.8	98.70	-2,063.3	45.2	668.0	567.1	100.91	6.619	
12,600.0	10,540.0	12,672.2	10,640.0	52.4	52.0	98.70	-2,163.3	45.9	668.0	564.8	103.15	6.476	
12,700.0	10,540.0	12,772.2	10,640.0	53.6	53.1	98.70	-2,263.3	46.7	668.0	562.5	105.45	6.334	
12,800.0	10,540.0	12,872.2	10,640.0	54.7	54.3	98.70	-2,363.3	47.5	668.0	560.2	107.80	6.196	
12,900.0	10,540.0	12,972.2	10,640.0	55.9	55.5	98.70	-2,463.3	48.2	668.0	557.8	110.20	6.062	
13,000.0	10,540.0	13,072.2	10,640.0	57.2	56.7	98.70	-2,563.3	49.0	668.0	555.3	112.64	5.930	
13,100.0	10,540.0	13,172.2	10,640.0	58.4	58.0	98.70	-2,663.3	49.8	668.0	552.8	115.12	5.802	
13,200.0	10,540.0	13,272.2	10,640.0	59.7	59.2	98.70	-2,763.3	50.5	668.0	550.3	117.64	5.678	
13,300.0	10,540.0	13,372.2	10,640.0	60.9	60.5	98.70	-2,863.3	51.3	667.9	547.7	120.20	5.557	
13,400.0	10,540.0	13,472.2	10,640.0	62.2	61.8	98.70	-2,963.3	52.1	667.9	545.1	122.79	5.440	
13,500.0	10,540.0	13,572.2	10,640.0	63.5	63.2	98.70	-3,063.3	52.9	667.9	542.5	125.42	5.326	
13,600.0	10,540.0	13,672.2	10,640.0	64.9	64.5	98.70	-3,163.3	53.6	667.9	539.9	128.08	5.215	
13,700.0	10,540.0	13,772.2	10,640.0	66.2	65.9	98.70	-3,263.3	54.4	667.9	537.2	130.76	5.108	
13,800.0	10,540.0	13,872.2	10,640.0	67.6	67.2	98.70	-3,363.3	55.2	667.9	534.5	133.47	5.004	
13,900.0	10,540.0	13,972.2	10,640.0	69.0	68.6	98.70	-3,463.3	55.9	667.9	531.7	136.21	4.904	
14,000.0	10,540.0	14,072.2	10,640.0	70.3	70.0	98.70	-3,563.2	56.7	667.9	529.0	138.97	4.806	
14,100.0	10,540.0	14,172.2	10,640.0	71.7	71.4	98.70	-3,663.2	57.5	667.9	526.2	141.75	4.712	
14,200.0	10,540.0	14,272.2	10,640.0	73.1	72.8	98.70	-3,763.2	58.3	667.9	523.4	144.56	4.620	
14,300.0	10,540.0	14,372.2	10,640.0	74.6	74.2	98.70	-3,863.2	59.0	667.9	520.5	147.38	4.532	
14,400.0	10,540.0	14,472.2	10,640.0	76.0	75.7	98.70	-3,963.2	59.8	667.9	517.7	150.22	4.446	
14,500.0	10,540.0	14,572.2	10,640.0	77.4	77.1	98.70	-4,063.2	60.6	667.9	514.8	153.08	4.363	
14,600.0	10,540.0	14,672.2	10,640.0	78.9	78.5	98.70	-4,163.2	61.3	667.9	511.9	155.96	4.283	
14,700.0	10,540.0	14,772.2	10,640.0	80.3	80.0	98.70	-4,263.2	62.1	667.9	509.0	158.85	4.205	
14,800.0	10,540.0	14,872.2	10,640.0	81.8	81.5	98.70	-4,363.2	62.9	667.9	506.1	161.76	4.129	
14,900.0	10,540.0	14,972.2	10,640.0	83.2	82.9	98.70	-4,463.2	63.7	667.9	503.2	164.68	4.056	
15,000.0	10,540.0	15,072.2	10,640.0	84.7	84.4	98.70	-4,563.2	64.4	667.9	500.3	167.61	3.985	
15,100.0	10,540.0	15,172.2	10,640.0	86.2	85.9	98.70	-4,663.2	65.2	667.9	497.3	170.56	3.916	
15,200.0	10,540.0	15,272.2	10,640.0	87.7	87.4	98.70	-4,763.2	66.0	667.9	494.4	173.52	3.849	
15,300.0	10,540.0	15,372.2	10,640.0	89.2	88.9	98.70	-4,863.2	66.7	667.9	491.4	176.49	3.784	
15,400.0	10,540.0	15,472.2	10,640.0	90.7	90.4	98.70	-4,963.2	67.5	667.9	488.4	179.47	3.721	
15,500.0	10,540.0	15,572.2	10,640.0	92.2	91.9	98.70	-5,063.2	68.3	667.9	485.4	182.47	3.660	
15,600.0	10,540.0	15,672.2	10,640.0	93.7	93.4	98.70	-5,163.2	69.0	667.9	482.4	185.47	3.601	
15,700.0	10,540.0	15,772.2	10,640.0	95.2	94.9	98.70	-5,263.2	69.8	667.9	479.4	188.48	3.543	
15,800.0	10,540.0	15,872.2	10,640.0	96.7	96.5	98.70	-5,363.2	70.6	667.9	476.4	191.50	3.487	
15,900.0	10,540.0	15,972.2	10,640.0	98.2	98.0	98.70	-5,463.2	71.4	667.9	473.3	194.53	3.433	
16,000.0	10,540.0	16,072.2	10,640.0	99.8	99.5	98.70	-5,563.2	72.1	667.8	470.3	197.57	3.380	
16,100.0	10,540.0	16,172.2	10,640.0	101.3	101.1	98.70	-5,663.2	72.9	667.8	467.2	200.61	3.329	
16,200.0	10,540.0	16,272.2	10,640.0	102.8	102.6	98.70	-5,763.2	73.7	667.8	464.2	203.66	3.279	
16,300.0	10,540.0	16,372.2	10,640.0	104.4	104.1	98.70	-5,863.2	74.4	667.8	461.1	206.72	3.231	
16,400.0	10,540.0	16,472.2	10,640.0	105.9	105.7	98.70	-5,963.2	75.2	667.8	458.0	209.79	3.183	
16,500.0	10,540.0	16,572.2	10,640.0	107.5	107.2	98.70	-6,063.2	76.0	667.8	455.0	212.86	3.137	
16,600.0	10,540.0	16,672.2	10,640.0	109.0	108.8	98.70	-6,163.2	76.8	667.8	451.9	215.94	3.093	
16,700.0	10,540.0	16,772.2	10,640.0	110.6	110.3	98.70	-6,263.2	77.5	667.8	448.8	219.03	3.049	
16,800.0	10,540.0	16,872.2	10,640.0	112.1	111.9	98.70	-6,363.2	78.3	667.8	445.7	222.12	3.007	
16,900.0	10,540.0	16,972.2	10,640.0	113.7	113.5	98.70	-6,463.2	79.1	667.8	442.6	225.21	2.965	
17,000.0	10,540.0	17,072.2	10,640.0	115.2	115.0	98.70	-6,563.2	79.8	667.8	439.5	228.31	2.925	
17,100.0	10,540.0	17,172.2	10,640.0	116.8	116.6	98.70	-6,663.2	80.6	667.8	436.4	231.42	2.886	
17,200.0	10,540.0	17,272.2	10,640.0	118.4	118.2	98.70	-6,763.2	81.4	667.8	433.3	234.53	2.847	
17,300.0	10,540.0	17,372.2	10,640.0	119.9	119.7	98.70	-6,863.1	82.2	667.8	430.2	237.65	2.810	
17,400.0	10,540.0	17,472.2	10,640.0	121.5	121.3	98.70	-6,963.1	82.9	667.8	427.0	240.77	2.774	

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 #302H
Project:	Lea County, NM (NAD 83 NME)	**TVD Reference:**	KB @ 3711.5usft (H&P 466)
Reference Site:	(Merchant State)Sec35_T-21-S_R-33-E	**MD Reference:**	KB @ 3711.5usft (H&P 466)
Site Error:	0.0 usft	**North Reference:**	Grid
Reference Well:	Merchant State Unit #302H	**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 #510H - OWB - Plan 0.1 — **Offset Site Error:** 0.0 usft

Survey Program: 0-MWD — **Rule Assigned:** — **Offset Well Error:** 0.0 usft

Reference Measured Depth (usft)	Reference Vertical Depth (usft)	Offset Measured Depth (usft)	Offset Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
17,500.0	10,540.0	17,572.2	10,640.0	123.1	122.9	98.70	-7,063.1	83.7	667.8	423.9	243.89	2.738	
17,600.0	10,540.0	17,672.2	10,640.0	124.7	124.5	98.70	-7,163.1	84.5	667.8	420.8	247.02	2.703	
17,700.0	10,540.0	17,772.2	10,640.0	126.2	126.0	98.70	-7,263.1	85.2	667.8	417.6	250.15	2.669	
17,800.0	10,540.0	17,872.2	10,640.0	127.8	127.6	98.70	-7,363.1	86.0	667.8	414.5	253.29	2.636	
17,900.0	10,540.0	17,972.2	10,640.0	129.4	129.2	98.70	-7,463.1	86.8	667.8	411.3	256.43	2.604	
18,000.0	10,540.0	18,072.2	10,640.0	131.0	130.8	98.70	-7,563.1	87.5	667.8	408.2	259.57	2.573	
18,100.0	10,540.0	18,172.2	10,640.0	132.6	132.4	98.70	-7,663.1	88.3	667.8	405.0	262.72	2.542	
18,200.0	10,540.0	18,272.2	10,640.0	134.1	134.0	98.70	-7,763.1	89.1	667.8	401.9	265.87	2.512	
18,300.0	10,540.0	18,372.2	10,640.0	135.7	135.6	98.70	-7,863.1	89.9	667.8	398.7	269.03	2.482	
18,400.0	10,540.0	18,472.2	10,640.0	137.3	137.1	98.70	-7,963.1	90.6	667.8	395.6	272.18	2.453	
18,500.0	10,540.0	18,572.2	10,640.0	138.9	138.7	98.70	-8,063.1	91.4	667.8	392.4	275.34	2.425	
18,600.0	10,540.0	18,672.2	10,640.0	140.5	140.3	98.70	-8,163.1	92.2	667.8	389.2	278.50	2.398	
18,700.0	10,540.0	18,772.2	10,640.0	142.1	141.9	98.70	-8,263.1	92.9	667.7	386.1	281.67	2.371	
18,800.0	10,540.0	18,872.2	10,640.0	143.7	143.5	98.70	-8,363.1	93.7	667.7	382.9	284.84	2.344	
18,900.0	10,540.0	18,972.2	10,640.0	145.3	145.1	98.70	-8,463.1	94.5	667.7	379.7	288.01	2.318	
19,000.0	10,540.0	19,072.2	10,640.0	146.9	146.7	98.70	-8,563.1	95.3	667.7	376.6	291.18	2.293	
19,100.0	10,540.0	19,172.2	10,640.0	148.5	148.3	98.70	-8,663.1	96.0	667.7	373.4	294.36	2.268	
19,200.0	10,540.0	19,272.2	10,640.0	150.1	149.9	98.70	-8,763.1	96.8	667.7	370.2	297.54	2.244	
19,300.0	10,540.0	19,372.2	10,640.0	151.7	151.5	98.70	-8,863.1	97.6	667.7	367.0	300.72	2.220	
19,400.0	10,540.0	19,472.2	10,640.0	153.3	153.1	98.70	-8,963.1	98.3	667.7	363.8	303.90	2.197	
19,500.0	10,540.0	19,572.2	10,640.0	154.9	154.7	98.70	-9,063.1	99.1	667.7	360.6	307.08	2.174	
19,600.0	10,540.0	19,672.2	10,640.0	156.5	156.4	98.70	-9,163.1	99.9	667.7	357.4	310.27	2.152	
19,700.0	10,540.0	19,772.2	10,640.0	158.1	158.0	98.70	-9,263.1	100.7	667.7	354.3	313.46	2.130	
19,800.0	10,540.0	19,872.2	10,640.0	159.7	159.6	98.70	-9,363.1	101.4	667.7	351.1	316.65	2.109	
19,900.0	10,540.0	19,972.2	10,640.0	161.3	161.2	98.70	-9,463.1	102.2	667.7	347.9	319.84	2.088	
20,000.0	10,540.0	20,072.2	10,640.0	162.9	162.8	98.70	-9,563.1	103.0	667.7	344.7	323.03	2.067	
20,100.0	10,540.0	20,172.2	10,640.0	164.6	164.4	98.70	-9,663.1	103.7	667.7	341.5	326.23	2.047	
20,200.0	10,540.0	20,272.2	10,640.0	166.2	166.0	98.70	-9,763.1	104.5	667.7	338.3	329.43	2.027	
20,300.0	10,540.0	20,372.2	10,640.0	167.8	167.6	98.70	-9,863.1	105.3	667.7	335.1	332.63	2.007	
20,400.0	10,540.0	20,472.2	10,640.0	169.4	169.2	98.70	-9,963.1	106.0	667.7	331.9	335.83	1.988	
20,500.0	10,540.0	20,572.2	10,640.0	171.0	170.9	98.70	-10,063.1	106.8	667.7	328.7	339.03	1.969	
20,600.0	10,540.0	20,672.2	10,640.0	172.6	172.5	98.70	-10,163.1	107.6	667.7	325.4	342.23	1.951	
20,692.0	10,540.0	20,764.1	10,640.0	174.1	174.0	98.70	-10,255.0	108.3	667.7	322.5	345.18	1.934	
20,695.7	10,540.0	20,765.0	10,640.0	174.2	174.0	98.70	-10,255.9	108.3	667.7	322.5	345.21	1.934	

Microsoft
Anticollision Report

Company:	Advance Energy Partners	**Local Co-ordinate Reference:**	Well Merchant State Unit #302H
Project:	Lea County, NM (NAD 83 NME)	**TVD Reference:**	KB @ 3711.5usft (H&P 466)
Reference Site:	(Merchant State)Sec35_T-21-S_R-33-E	**MD Reference:**	KB @ 3711.5usft (H&P 466)
Site Error:	0.0 usft	**North Reference:**	Grid
Reference Well:	Merchant State Unit #302H	**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 — **Rule Assigned:** — **Offset Well Error:** 0.0 usft

Reference Measured Depth (usft)	Reference Vertical Depth (usft)	Offset Measured Depth (usft)	Offset Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Distance Between Centres (usft)	Distance 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	99.0	99.0	0.1	0.1	89.74	0.3	66.0	66.0	65.7	0.27	248.378	
200.0	200.0	199.0	199.0	0.5	0.5	89.74	0.3	66.0	66.0	65.0	0.98	67.319	
300.0	300.0	299.0	299.0	0.9	0.8	89.74	0.3	66.0	66.0	64.3	1.70	38.884	
400.0	400.0	399.0	399.0	1.2	1.2	89.74	0.3	66.0	66.0	63.6	2.41	27.337	
500.0	500.0	499.0	499.0	1.6	1.6	89.74	0.3	66.0	66.0	62.9	3.13	21.078	
600.0	600.0	599.0	599.0	1.9	1.9	89.74	0.3	66.0	66.0	62.2	3.85	17.151	
700.0	700.0	699.0	699.0	2.3	2.3	89.74	0.3	66.0	66.0	61.4	4.57	14.458	
800.0	800.0	799.0	799.0	2.6	2.6	89.74	0.3	66.0	66.0	60.7	5.28	12.495	
900.0	900.0	899.0	899.0	3.0	3.0	89.74	0.3	66.0	66.0	60.0	6.00	11.002	
1,000.0	1,000.0	999.0	999.0	3.4	3.4	89.74	0.3	66.0	66.0	59.3	6.72	9.827	
1,100.0	1,100.0	1,099.0	1,099.0	3.7	3.7	89.74	0.3	66.0	66.0	58.6	7.43	8.880	
1,200.0	1,200.0	1,199.0	1,199.0	4.1	4.1	89.74	0.3	66.0	66.0	57.9	8.15	8.098	
1,300.0	1,300.0	1,299.0	1,299.0	4.4	4.4	89.74	0.3	66.0	66.0	57.1	8.87	7.444	
1,400.0	1,400.0	1,399.0	1,399.0	4.8	4.8	89.74	0.3	66.0	66.0	56.4	9.58	6.887	
1,500.0	1,500.0	1,499.0	1,499.0	5.2	5.1	89.74	0.3	66.0	66.0	55.7	10.30	6.407	
1,600.0	1,600.0	1,599.0	1,599.0	5.5	5.5	89.74	0.3	66.0	66.0	55.0	11.02	5.990	
1,700.0	1,700.0	1,699.0	1,699.0	5.9	5.9	89.74	0.3	66.0	66.0	54.3	11.73	5.624	
1,800.0	1,800.0	1,799.0	1,799.0	6.2	6.2	89.74	0.3	66.0	66.0	53.5	12.45	5.301	
1,900.0	1,900.0	1,899.0	1,899.0	6.6	6.6	89.74	0.3	66.0	66.0	52.8	13.17	5.012	
2,000.0	2,000.0	1,999.0	1,999.0	6.9	6.9	89.74	0.3	66.0	66.0	52.1	13.89	4.753	
2,100.0	2,100.0	2,099.0	2,099.0	7.3	7.3	89.74	0.3	66.0	66.0	51.4	14.60	4.520	
2,200.0	2,200.0	2,199.0	2,199.0	7.7	7.7	89.74	0.3	66.0	66.0	50.7	15.32	4.308	
2,300.0	2,300.0	2,299.0	2,299.0	8.0	8.0	89.74	0.3	66.0	66.0	50.0	16.04	4.116	
2,400.0	2,400.0	2,399.0	2,399.0	8.4	8.4	89.74	0.3	66.0	66.0	49.2	16.75	3.940	
2,500.0	2,500.0	2,499.0	2,499.0	8.7	8.7	89.74	0.3	66.0	66.0	48.5	17.47	3.778	
2,600.0	2,600.0	2,599.0	2,599.0	9.1	9.1	89.74	0.3	66.0	66.0	47.8	18.19	3.629	
2,700.0	2,700.0	2,699.0	2,699.0	9.5	9.5	89.74	0.3	66.0	66.0	47.1	18.90	3.491	
2,800.0	2,800.0	2,799.0	2,799.0	9.8	9.8	89.74	0.3	66.0	66.0	46.4	19.62	3.364	
2,900.0	2,900.0	2,899.0	2,899.0	10.2	10.2	89.74	0.3	66.0	66.0	45.7	20.34	3.245	
3,000.0	3,000.0	2,999.0	2,999.0	10.5	10.5	89.74	0.3	66.0	66.0	44.9	21.05	3.135	
3,100.0	3,100.0	3,099.0	3,099.0	10.9	10.9	89.74	0.3	66.0	66.0	44.2	21.77	3.031	
3,200.0	3,200.0	3,199.0	3,199.0	11.2	11.2	89.74	0.3	66.0	66.0	43.5	22.49	2.935	
3,300.0	3,300.0	3,299.0	3,299.0	11.6	11.6	89.74	0.3	66.0	66.0	42.8	23.21	2.844	
3,400.0	3,400.0	3,399.0	3,399.0	12.0	12.0	89.74	0.3	66.0	66.0	42.1	23.92	2.759	
3,500.0	3,500.0	3,499.0	3,499.0	12.3	12.3	89.74	0.3	66.0	66.0	41.4	24.64	2.679	
3,600.0	3,600.0	3,599.0	3,599.0	12.7	12.7	89.74	0.3	66.0	66.0	40.6	25.36	2.603	
3,700.0	3,700.0	3,699.0	3,699.0	13.0	13.0	89.74	0.3	66.0	66.0	39.9	26.07	2.531	
3,800.0	3,800.0	3,799.0	3,799.0	13.4	13.4	89.74	0.3	66.0	66.0	39.2	26.79	2.464	
3,900.0	3,900.0	3,899.0	3,899.0	13.8	13.8	89.74	0.3	66.0	66.0	38.5	27.51	2.399	
4,000.0	4,000.0	3,999.0	3,999.0	14.1	14.1	89.74	0.3	66.0	66.0	37.8	28.22	2.338	
4,100.0	4,100.0	4,099.0	4,099.0	14.5	14.5	89.74	0.3	66.0	66.0	37.1	28.94	2.281	
4,200.0	4,200.0	4,199.0	4,199.0	14.8	14.8	89.74	0.3	66.0	66.0	36.3	29.66	2.225	
4,300.0	4,300.0	4,299.0	4,299.0	15.2	15.2	89.74	0.3	66.0	66.0	35.6	30.38	2.173	
4,400.0	4,400.0	4,399.0	4,399.0	15.5	15.5	89.74	0.3	66.0	66.0	34.9	31.09	2.123	
4,500.0	4,500.0	4,499.0	4,499.0	15.9	15.9	89.74	0.3	66.0	66.0	34.2	31.81	2.075	
4,600.0	4,600.0	4,599.0	4,599.0	16.3	16.3	89.74	0.3	66.0	66.0	33.5	32.53	2.029	
4,700.0	4,700.0	4,699.0	4,699.0	16.6	16.6	89.74	0.3	66.0	66.0	32.8	33.24	1.985	
4,800.0	4,800.0	4,799.0	4,799.0	17.0	17.0	89.74	0.3	66.0	66.0	32.0	33.96	1.943	
4,900.0	4,900.0	4,899.0	4,899.0	17.3	17.3	89.74	0.3	66.0	66.0	31.3	34.68	1.903	
5,000.0	5,000.0	4,999.0	4,999.0	17.7	17.7	89.74	0.3	66.0	66.0	30.6	35.39	1.865	
5,100.0	5,100.0	5,099.0	5,099.0	18.1	18.1	89.74	0.3	66.0	66.0	29.9	36.11	1.828	

Microsoft
Anticollision Report

Company:	Advance Energy Partners	**Local Co-ordinate Reference:**	Well Merchant State Unit #302H
Project:	Lea County, NM (NAD 83 NME)	**TVD Reference:**	KB @ 3711.5usft (H&P 466)
Reference Site:	(Merchant State)Sec35_T-21-S_R-33-E	**MD Reference:**	KB @ 3711.5usft (H&P 466)
Site Error:	0.0 usft	**North Reference:**	Grid
Reference Well:	Merchant State Unit #302H	**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 — **Rule Assigned:** — **Offset Well Error:** 0.0 usft

Reference Measured Depth (usft)	Reference Vertical Depth (usft)	Offset Measured Depth (usft)	Offset Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
5,200.0	5,200.0	5,199.1	5,199.1	18.4	18.4	89.56	0.5	66.0	66.0	29.1	36.83	1.791	
5,300.0	5,300.0	5,299.4	5,299.3	18.8	18.8	88.08	2.2	65.6	65.6	28.0	37.54	1.747	
5,400.0	5,400.0	5,399.5	5,399.4	19.1	19.1	85.07	5.6	64.8	65.0	26.7	38.26	1.699	
5,500.0	5,500.0	5,499.5	5,499.2	19.5	19.5	-2.66	10.7	63.6	63.6	24.6	38.97	1.632	
5,600.0	5,600.0	5,599.2	5,598.7	19.8	19.8	-9.31	17.4	62.0	60.9	21.3	39.67	1.536	
5,700.0	5,699.9	5,698.5	5,697.7	20.2	20.2	-18.59	25.8	60.0	57.8	17.5	40.36	1.433	Level 3
5,800.0	5,799.7	5,797.6	5,796.3	20.5	20.6	-30.83	35.6	57.7	55.5	14.5	41.04	1.352	Level 3
5,888.2	5,887.6	5,885.0	5,883.2	20.8	20.9	-43.13	44.4	55.6	54.7	13.1	41.62	1.314	Level 3, CC
5,900.0	5,899.4	5,896.7	5,894.8	20.9	20.9	-44.85	45.6	55.3	54.7	13.0	41.70	1.312	Level 3, ES, SF
6,000.0	5,998.9	5,995.6	5,993.2	21.2	21.3	-59.89	55.5	53.0	56.3	14.0	42.36	1.330	Level 3
6,100.0	6,098.3	6,094.3	6,091.4	21.6	21.6	-74.73	65.4	50.7	61.1	18.1	43.03	1.420	Level 3
6,200.0	6,197.4	6,192.8	6,189.3	21.9	22.0	-88.12	75.3	48.3	69.3	25.6	43.71	1.586	
6,300.0	6,296.3	6,291.0	6,287.0	22.3	22.3	-99.44	85.1	46.0	80.8	36.4	44.40	1.819	
6,400.0	6,394.9	6,388.9	6,384.4	22.6	22.7	-108.67	95.0	43.7	95.2	50.0	45.11	2.109	
6,500.0	6,493.3	6,486.5	6,481.5	23.0	23.0	-116.12	104.8	41.4	112.2	66.3	45.82	2.448	
6,600.0	6,591.2	6,583.7	6,578.2	23.4	23.4	-122.15	114.5	39.1	131.5	85.0	46.53	2.826	
6,700.0	6,689.1	6,680.8	6,674.7	23.7	23.8	-127.02	124.3	36.8	152.5	105.3	47.24	3.228	
6,800.0	6,786.9	6,778.8	6,772.2	24.1	24.1	-130.76	134.0	34.5	174.2	126.2	47.97	3.632	
6,900.0	6,884.7	6,878.6	6,871.6	24.5	24.5	-133.97	142.5	32.5	195.4	146.7	48.72	4.010	
7,000.0	6,982.5	6,978.7	6,971.5	24.9	24.8	-136.85	149.4	30.9	215.7	166.3	49.47	4.361	
7,100.0	7,080.3	7,079.2	7,071.8	25.3	25.2	-139.54	154.6	29.7	235.3	185.1	50.21	4.686	
7,200.0	7,178.1	7,179.9	7,172.4	25.7	25.6	-142.10	158.0	28.9	254.0	203.1	50.93	4.988	
7,300.0	7,275.9	7,280.7	7,273.3	26.1	25.9	-144.58	159.8	28.5	272.1	220.4	51.65	5.267	
7,400.0	7,373.7	7,380.1	7,372.7	26.5	26.3	-146.96	160.0	28.4	289.5	237.2	52.36	5.530	
7,500.0	7,471.5	7,478.0	7,470.5	26.9	26.6	-149.06	160.0	28.4	307.3	254.2	53.06	5.792	
7,600.0	7,569.3	7,575.8	7,568.3	27.3	27.0	-150.94	160.0	28.4	325.4	271.7	53.76	6.054	
7,700.0	7,667.2	7,673.6	7,666.2	27.7	27.3	-152.61	160.0	28.4	343.9	289.4	54.46	6.314	
7,800.0	7,765.0	7,771.4	7,764.0	28.1	27.7	-154.12	160.0	28.4	362.6	307.4	55.16	6.573	
7,900.0	7,862.8	7,869.2	7,861.8	28.5	28.0	-155.48	160.0	28.4	381.5	325.6	55.86	6.829	
8,000.0	7,960.6	7,967.0	7,959.6	29.0	28.4	-156.71	160.0	28.4	400.6	344.0	56.56	7.082	
8,100.0	8,058.4	8,064.8	8,057.4	29.4	28.7	-157.83	160.0	28.4	419.8	362.6	57.26	7.332	
8,200.0	8,156.2	8,162.6	8,155.2	29.8	29.1	-158.85	160.0	28.4	439.2	381.3	57.97	7.578	
8,300.0	8,254.0	8,260.4	8,253.0	30.2	29.4	-159.79	160.0	28.4	458.8	400.1	58.67	7.820	
8,400.0	8,351.8	8,358.2	8,350.8	30.6	29.8	-160.65	160.0	28.4	478.4	419.0	59.37	8.058	
8,500.0	8,449.6	8,456.1	8,448.6	31.1	30.1	-161.44	160.0	28.4	498.1	438.1	60.08	8.292	
8,600.0	8,547.4	8,553.9	8,546.4	31.5	30.5	-162.17	160.0	28.4	518.0	457.2	60.78	8.521	
8,700.0	8,645.2	8,651.7	8,644.2	31.9	30.8	-162.85	160.0	28.4	537.8	476.4	61.49	8.747	
8,800.0	8,743.1	8,749.6	8,742.1	32.4	31.2	-163.51	160.0	28.4	557.4	495.2	62.20	8.962	
8,900.0	8,841.4	8,847.8	8,840.4	32.8	31.5	-164.09	160.0	28.4	575.4	512.5	62.90	9.148	
9,000.0	8,939.9	8,946.3	8,938.9	33.2	31.9	-164.58	160.0	28.4	591.9	528.3	63.61	9.304	
9,100.0	9,038.7	9,045.1	9,037.7	33.6	32.2	-165.01	160.0	28.4	606.7	542.3	64.33	9.431	
9,200.0	9,137.8	9,144.2	9,136.8	34.0	32.6	-165.36	160.0	28.4	619.8	554.8	65.04	9.530	
9,300.0	9,237.1	9,243.5	9,236.1	34.4	32.9	-165.66	160.0	28.4	631.3	565.5	65.75	9.601	
9,400.0	9,336.6	9,343.0	9,335.6	34.8	33.3	-165.91	160.0	28.4	641.1	574.7	66.46	9.646	
9,500.0	9,436.2	9,442.6	9,435.2	35.2	33.7	-166.11	160.0	28.4	649.3	582.1	67.17	9.665	
9,600.0	9,536.0	9,542.4	9,535.0	35.6	34.0	-166.27	160.0	28.4	655.7	587.8	67.89	9.659	
9,700.0	9,635.9	9,642.3	9,634.9	35.9	34.4	-166.38	160.0	28.4	660.5	591.9	68.60	9.629	
9,800.0	9,735.8	9,742.2	9,734.8	36.3	34.7	-166.45	160.0	28.4	663.6	594.3	69.30	9.575	
9,900.0	9,835.8	9,842.2	9,834.8	36.6	35.1	-166.48	160.0	28.4	664.9	594.9	70.01	9.498	
10,000.0	9,935.8	9,942.2	9,934.8	36.9	35.4	-83.39	160.0	28.4	665.0	594.3	70.72	9.404	
10,100.0	10,035.6	10,042.1	10,034.6	37.3	35.8	97.35	160.0	28.4	665.5	594.1	71.41	9.320	
10,200.0	10,133.4	10,139.8	10,132.4	37.6	36.1	98.76	160.0	28.4	668.5	596.4	72.08	9.274	

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 #302H
Project:	Lea County, NM (NAD 83 NME)	**TVD Reference:**	KB @ 3711.5usft (H&P 466)
Reference Site:	(Merchant State)Sec35_T-21-S_R-33-E	**MD Reference:**	KB @ 3711.5usft (H&P 466)
Site Error:	0.0 usft	**North Reference:**	Grid
Reference Well:	Merchant State Unit #302H	**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 — **Rule Assigned:** — **Offset Well Error:** 0.0 usft

Reference Measured Depth (usft)	Reference Vertical Depth (usft)	Offset Measured Depth (usft)	Offset Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
10,300.0	10,226.1	10,232.5	10,225.1	37.8	36.5	100.97	160.0	28.4	675.4	602.7	72.72	9.288	
10,400.0	10,310.9	10,317.3	10,309.9	38.1	36.8	103.38	160.0	28.4	688.5	615.2	73.31	9.392	
10,500.0	10,385.2	10,391.6	10,384.2	38.3	37.0	105.23	160.0	28.4	710.4	636.6	73.85	9.620	
10,600.0	10,446.9	10,453.3	10,445.9	38.5	37.3	105.78	160.0	28.4	743.1	668.8	74.30	10.001	
10,700.0	10,493.9	10,500.4	10,492.9	38.6	37.4	104.34	160.0	28.4	787.5	712.8	74.65	10.549	
10,800.0	10,525.0	10,531.4	10,524.0	38.9	37.5	100.22	160.0	28.4	843.0	768.1	74.88	11.258	
10,900.0	10,539.1	10,545.5	10,538.1	39.1	37.6	92.94	160.0	28.4	907.8	832.8	74.99	12.106	
11,000.0	10,540.0	10,546.4	10,539.0	39.5	37.6	90.00	160.0	28.4	979.2	904.2	75.01	13.054	
11,100.0	10,540.0	11,924.8	11,340.0	39.9	41.7	140.51	-663.3	34.7	1,037.9	974.6	63.27	16.403	
11,200.0	10,540.0	12,024.8	11,340.0	40.3	42.2	140.51	-763.3	35.5	1,037.9	973.9	64.01	16.213	
11,300.0	10,540.0	12,124.8	11,340.0	40.9	42.7	140.51	-863.3	36.3	1,037.9	973.0	64.84	16.007	
11,400.0	10,540.0	12,224.8	11,340.0	41.5	43.3	140.51	-963.3	37.0	1,037.9	972.1	65.74	15.787	
11,500.0	10,540.0	12,324.8	11,340.0	42.1	43.9	140.51	-1,063.3	37.8	1,037.9	971.2	66.73	15.554	
11,600.0	10,540.0	12,424.8	11,340.0	42.9	44.6	140.51	-1,163.3	38.6	1,037.9	970.1	67.78	15.313	
11,700.0	10,540.0	12,524.8	11,340.0	43.6	45.4	140.51	-1,263.3	39.3	1,037.9	969.0	68.90	15.063	
11,800.0	10,540.0	12,624.8	11,340.0	44.4	46.2	140.51	-1,363.3	40.1	1,037.9	967.8	70.09	14.807	
11,900.0	10,540.0	12,724.8	11,340.0	45.3	47.0	140.51	-1,463.3	40.9	1,037.9	966.5	71.35	14.547	
12,000.0	10,540.0	12,824.8	11,340.0	46.2	47.9	140.51	-1,563.3	41.6	1,037.9	965.2	72.66	14.285	
12,100.0	10,540.0	12,924.8	11,340.0	47.2	48.8	140.51	-1,663.3	42.4	1,037.9	963.9	74.03	14.020	
12,200.0	10,540.0	13,024.8	11,340.0	48.1	49.8	140.51	-1,763.3	43.2	1,037.9	962.4	75.45	13.756	
12,300.0	10,540.0	13,124.8	11,340.0	49.2	50.8	140.51	-1,863.3	43.9	1,037.9	961.0	76.92	13.493	
12,400.0	10,540.0	13,224.8	11,340.0	50.2	51.8	140.51	-1,963.3	44.7	1,037.9	959.4	78.44	13.231	
12,500.0	10,540.0	13,324.8	11,340.0	51.3	52.8	140.51	-2,063.3	45.5	1,037.9	957.9	80.01	12.972	
12,600.0	10,540.0	13,424.8	11,340.0	52.4	53.9	140.51	-2,163.3	46.2	1,037.9	956.3	81.62	12.717	
12,700.0	10,540.0	13,524.8	11,340.0	53.6	55.1	140.51	-2,263.3	47.0	1,037.9	954.6	83.26	12.465	
12,800.0	10,540.0	13,624.8	11,340.0	54.7	56.2	140.51	-2,363.3	47.8	1,037.9	952.9	84.95	12.218	
12,900.0	10,540.0	13,724.8	11,340.0	55.9	57.4	140.51	-2,463.3	48.5	1,037.9	951.2	86.67	11.975	
13,000.0	10,540.0	13,824.8	11,340.0	57.2	58.6	140.51	-2,563.2	49.3	1,037.9	949.5	88.42	11.738	
13,100.0	10,540.0	13,924.8	11,340.0	58.4	59.8	140.51	-2,663.2	50.1	1,037.9	947.7	90.21	11.505	
13,200.0	10,540.0	14,024.8	11,340.0	59.7	61.0	140.51	-2,763.2	50.8	1,037.9	945.9	92.02	11.278	
13,300.0	10,540.0	14,124.8	11,340.0	60.9	62.3	140.51	-2,863.2	51.6	1,037.9	944.0	93.87	11.057	
13,400.0	10,540.0	14,224.8	11,340.0	62.2	63.6	140.51	-2,963.2	52.4	1,037.9	942.1	95.74	10.841	
13,500.0	10,540.0	14,324.8	11,340.0	63.5	64.8	140.51	-3,063.2	53.1	1,037.9	940.2	97.63	10.631	
13,600.0	10,540.0	14,424.8	11,340.0	64.9	66.2	140.51	-3,163.2	53.9	1,037.9	938.3	99.55	10.426	
13,700.0	10,540.0	14,524.8	11,340.0	66.2	67.5	140.51	-3,263.2	54.7	1,037.9	936.4	101.49	10.227	
13,800.0	10,540.0	14,624.8	11,340.0	67.6	68.8	140.51	-3,363.2	55.4	1,037.9	934.4	103.45	10.033	
13,900.0	10,540.0	14,724.8	11,340.0	69.0	70.2	140.51	-3,463.2	56.2	1,037.9	932.5	105.43	9.845	
14,000.0	10,540.0	14,824.8	11,340.0	70.3	71.5	140.51	-3,563.2	57.0	1,037.9	930.5	107.43	9.661	
14,100.0	10,540.0	14,924.8	11,340.0	71.7	72.9	140.51	-3,663.2	57.7	1,037.9	928.4	109.44	9.483	
14,200.0	10,540.0	15,024.8	11,340.0	73.1	74.3	140.51	-3,763.2	58.5	1,037.9	926.4	111.47	9.311	
14,300.0	10,540.0	15,124.8	11,340.0	74.6	75.7	140.51	-3,863.2	59.3	1,037.9	924.4	113.52	9.143	
14,400.0	10,540.0	15,224.8	11,340.0	76.0	77.1	140.51	-3,963.2	60.0	1,037.9	922.3	115.58	8.979	
14,500.0	10,540.0	15,324.8	11,340.0	77.4	78.5	140.51	-4,063.2	60.8	1,037.9	920.2	117.66	8.821	
14,600.0	10,540.0	15,424.8	11,340.0	78.9	79.9	140.51	-4,163.2	61.6	1,037.9	918.1	119.75	8.667	
14,700.0	10,540.0	15,524.8	11,340.0	80.3	81.4	140.51	-4,263.2	62.3	1,037.9	916.0	121.85	8.517	
14,800.0	10,540.0	15,624.8	11,340.0	81.8	82.8	140.51	-4,363.2	63.1	1,037.9	913.9	123.97	8.372	
14,900.0	10,540.0	15,724.8	11,340.0	83.2	84.3	140.51	-4,463.2	63.9	1,037.9	911.8	126.10	8.231	
15,000.0	10,540.0	15,824.8	11,340.0	84.7	85.7	140.51	-4,563.2	64.6	1,037.9	909.6	128.23	8.094	
15,100.0	10,540.0	15,924.8	11,340.0	86.2	87.2	140.51	-4,663.2	65.4	1,037.9	907.5	130.38	7.960	
15,200.0	10,540.0	16,024.8	11,340.0	87.7	88.7	140.51	-4,763.2	66.2	1,037.9	905.3	132.54	7.831	
15,300.0	10,540.0	16,124.8	11,340.0	89.2	90.2	140.51	-4,863.2	66.9	1,037.9	903.2	134.70	7.705	
15,400.0	10,540.0	16,224.8	11,340.0	90.7	91.6	140.51	-4,963.2	67.7	1,037.9	901.0	136.88	7.582	

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 #302H
Project:	Lea County, NM (NAD 83 NME)	**TVD Reference:**	KB @ 3711.5usft (H&P 466)
Reference Site:	(Merchant State)Sec35_T-21-S_R-33-E	**MD Reference:**	KB @ 3711.5usft (H&P 466)
Site Error:	0.0 usft	**North Reference:**	Grid
Reference Well:	Merchant State Unit #302H	**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 — **Rule Assigned:** — **Offset Well Error:** 0.0 usft

Reference Measured Depth (usft)	Reference Vertical Depth (usft)	Offset Measured Depth (usft)	Offset Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
15,500.0	10,540.0	16,324.8	11,340.0	92.2	93.1	140.51	-5,063.2	68.5	1,037.9	898.8	139.06	7.463	
15,600.0	10,540.0	16,424.8	11,340.0	93.7	94.6	140.51	-5,163.2	69.2	1,037.9	896.6	141.26	7.348	
15,700.0	10,540.0	16,524.8	11,340.0	95.2	96.1	140.51	-5,263.2	70.0	1,037.9	894.4	143.46	7.235	
15,800.0	10,540.0	16,624.8	11,340.0	96.7	97.6	140.51	-5,363.2	70.8	1,037.9	892.2	145.66	7.125	
15,900.0	10,540.0	16,724.8	11,340.0	98.2	99.2	140.51	-5,463.2	71.5	1,037.9	890.0	147.88	7.019	
16,000.0	10,540.0	16,824.8	11,340.0	99.8	100.7	140.51	-5,563.2	72.3	1,037.9	887.8	150.10	6.915	
16,100.0	10,540.0	16,924.8	11,340.0	101.3	102.2	140.51	-5,663.2	73.1	1,037.9	885.6	152.33	6.814	
16,200.0	10,540.0	17,024.8	11,340.0	102.8	103.7	140.51	-5,763.2	73.8	1,037.9	883.3	154.56	6.715	
16,300.0	10,540.0	17,124.8	11,340.0	104.4	105.3	140.51	-5,863.2	74.6	1,037.9	881.1	156.80	6.619	
16,400.0	10,540.0	17,224.8	11,340.0	105.9	106.8	140.51	-5,963.1	75.4	1,037.9	878.8	159.04	6.526	
16,500.0	10,540.0	17,324.8	11,340.0	107.5	108.3	140.51	-6,063.1	76.1	1,037.9	876.6	161.29	6.435	
16,600.0	10,540.0	17,424.8	11,340.0	109.0	109.9	140.51	-6,163.1	76.9	1,037.9	874.3	163.55	6.346	
16,700.0	10,540.0	17,524.8	11,340.0	110.6	111.4	140.51	-6,263.1	77.7	1,037.9	872.1	165.81	6.259	
16,800.0	10,540.0	17,624.8	11,340.0	112.1	112.9	140.51	-6,363.1	78.4	1,037.9	869.8	168.07	6.175	
16,900.0	10,540.0	17,724.8	11,340.0	113.7	114.5	140.51	-6,463.1	79.2	1,037.9	867.5	170.34	6.093	
17,000.0	10,540.0	17,824.8	11,340.0	115.2	116.1	140.51	-6,563.1	80.0	1,037.9	865.3	172.62	6.013	
17,100.0	10,540.0	17,924.8	11,340.0	116.8	117.6	140.51	-6,663.1	80.7	1,037.9	863.0	174.90	5.934	
17,200.0	10,540.0	18,024.8	11,340.0	118.4	119.2	140.51	-6,763.1	81.5	1,037.9	860.7	177.18	5.858	
17,300.0	10,540.0	18,124.8	11,340.0	119.9	120.7	140.51	-6,863.1	82.3	1,037.9	858.4	179.47	5.783	
17,400.0	10,540.0	18,224.8	11,340.0	121.5	122.3	140.51	-6,963.1	83.0	1,037.9	856.1	181.76	5.710	
17,500.0	10,540.0	18,324.8	11,340.0	123.1	123.9	140.51	-7,063.1	83.8	1,037.9	853.8	184.05	5.639	
17,600.0	10,540.0	18,424.8	11,340.0	124.7	125.4	140.51	-7,163.1	84.6	1,037.9	851.5	186.35	5.570	
17,700.0	10,540.0	18,524.8	11,340.0	126.2	127.0	140.51	-7,263.1	85.3	1,037.9	849.2	188.65	5.502	
17,800.0	10,540.0	18,624.8	11,340.0	127.8	128.6	140.51	-7,363.1	86.1	1,037.9	846.9	190.95	5.435	
17,900.0	10,540.0	18,724.8	11,340.0	129.4	130.1	140.51	-7,463.1	86.9	1,037.9	844.6	193.26	5.370	
18,000.0	10,540.0	18,824.8	11,340.0	131.0	131.7	140.51	-7,563.1	87.6	1,037.9	842.3	195.57	5.307	
18,100.0	10,540.0	18,924.8	11,340.0	132.6	133.3	140.51	-7,663.1	88.4	1,037.9	840.0	197.88	5.245	
18,200.0	10,540.0	19,024.8	11,340.0	134.1	134.9	140.51	-7,763.1	89.2	1,037.9	837.7	200.20	5.184	
18,300.0	10,540.0	19,124.8	11,340.0	135.7	136.5	140.51	-7,863.1	89.9	1,037.9	835.4	202.52	5.125	
18,400.0	10,540.0	19,224.8	11,340.0	137.3	138.0	140.51	-7,963.1	90.7	1,037.9	833.0	204.84	5.067	
18,500.0	10,540.0	19,324.8	11,340.0	138.9	139.6	140.51	-8,063.1	91.5	1,037.9	830.7	207.16	5.010	
18,600.0	10,540.0	19,424.8	11,340.0	140.5	141.2	140.51	-8,163.1	92.2	1,037.9	828.4	209.49	4.954	
18,700.0	10,540.0	19,524.8	11,340.0	142.1	142.8	140.51	-8,263.1	93.0	1,037.9	826.1	211.82	4.900	
18,800.0	10,540.0	19,624.8	11,340.0	143.7	144.4	140.51	-8,363.1	93.8	1,037.9	823.7	214.15	4.847	
18,900.0	10,540.0	19,724.8	11,340.0	145.3	146.0	140.51	-8,463.1	94.6	1,037.9	821.4	216.48	4.794	
19,000.0	10,540.0	19,824.8	11,340.0	146.9	147.6	140.51	-8,563.1	95.3	1,037.9	819.1	218.81	4.743	
19,100.0	10,540.0	19,924.8	11,340.0	148.5	149.2	140.51	-8,663.1	96.1	1,037.9	816.7	221.15	4.693	
19,200.0	10,540.0	20,024.8	11,340.0	150.1	150.8	140.51	-8,763.1	96.9	1,037.9	814.4	223.49	4.644	
19,300.0	10,540.0	20,124.8	11,340.0	151.7	152.4	140.51	-8,863.1	97.6	1,037.9	812.0	225.83	4.596	
19,400.0	10,540.0	20,224.8	11,340.0	153.3	154.0	140.51	-8,963.1	98.4	1,037.9	809.7	228.18	4.549	
19,500.0	10,540.0	20,324.8	11,340.0	154.9	155.6	140.51	-9,063.1	99.2	1,037.9	807.4	230.52	4.502	
19,600.0	10,540.0	20,424.8	11,340.0	156.5	157.2	140.51	-9,163.1	99.9	1,037.9	805.0	232.87	4.457	
19,700.0	10,540.0	20,524.8	11,340.0	158.1	158.8	140.51	-9,263.0	100.7	1,037.9	802.7	235.21	4.412	
19,800.0	10,540.0	20,624.8	11,340.0	159.7	160.4	140.51	-9,363.0	101.5	1,037.9	800.3	237.56	4.369	
19,900.0	10,540.0	20,724.8	11,340.0	161.3	162.0	140.51	-9,463.0	102.2	1,037.9	798.0	239.92	4.326	
20,000.0	10,540.0	20,824.8	11,340.0	162.9	163.6	140.51	-9,563.0	103.0	1,037.9	795.6	242.27	4.284	
20,100.0	10,540.0	20,924.8	11,340.0	164.6	165.2	140.51	-9,663.0	103.8	1,037.9	793.3	244.62	4.243	
20,200.0	10,540.0	21,024.8	11,340.0	166.2	166.8	140.51	-9,763.0	104.5	1,037.9	790.9	246.98	4.202	
20,300.0	10,540.0	21,124.8	11,340.0	167.8	168.4	140.51	-9,863.0	105.3	1,037.9	788.5	249.34	4.163	
20,400.0	10,540.0	21,224.8	11,340.0	169.4	170.0	140.51	-9,963.0	106.1	1,037.9	786.2	251.70	4.124	
20,500.0	10,540.0	21,324.8	11,340.0	171.0	171.6	140.51	-10,063.0	106.8	1,037.9	783.8	254.06	4.085	
20,600.0	10,540.0	21,424.8	11,340.0	172.6	173.2	140.51	-10,163.0	107.6	1,037.9	781.5	256.42	4.048	

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 #302H
Project:	Lea County, NM (NAD 83 NME)	**TVD Reference:**	KB @ 3711.5usft (H&P 466)
Reference Site:	(Merchant State)Sec35_T-21-S_R-33-E	**MD Reference:**	KB @ 3711.5usft (H&P 466)
Site Error:	0.0 usft	**North Reference:**	Grid
Reference Well:	Merchant State Unit #302H	**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

Rule Assigned:

Offset Well Error: 0.0 usft

Reference Measured Depth (usft)	Reference Vertical Depth (usft)	Offset Measured Depth (usft)	Offset Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
20,691.4	10,540.0	21,516.2	11,340.0	174.1	174.7	140.51	-10,254.4	108.3	1,037.9	779.3	258.54	4.014	
20,695.7	10,540.0	21,517.2	11,340.0	174.2	174.7	140.51	-10,255.4	108.3	1,037.9	779.3	258.57	4.014	

Microsoft
Anticollision Report

Company:	Advance Energy Partners	**Local Co-ordinate Reference:**	Well Merchant State Unit #302H
Project:	Lea County, NM (NAD 83 NME)	**TVD Reference:**	KB @ 3711.5usft (H&P 466)
Reference Site:	(Merchant State)Sec35_T-21-S_R-33-E	**MD Reference:**	KB @ 3711.5usft (H&P 466)
Site Error:	0.0 usft	**North Reference:**	Grid
Reference Well:	Merchant State Unit #302H	**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 — **Rule Assigned:** — **Offset Well Error:** 0.0 usft

Reference Measured Depth (usft)	Reference Vertical Depth (usft)	Offset Measured Depth (usft)	Offset Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
0.0	0.0	0.0	0.0	0.0	0.0	89.77	0.4	99.0	99.0				
100.0	100.0	99.0	99.0	0.1	0.1	89.77	0.4	99.0	99.0	98.7	0.27	372.567	
200.0	200.0	199.0	199.0	0.5	0.5	89.77	0.4	99.0	99.0	98.0	0.98	100.978	
300.0	300.0	299.0	299.0	0.9	0.8	89.77	0.4	99.0	99.0	97.3	1.70	58.326	
400.0	400.0	399.0	399.0	1.2	1.2	89.77	0.4	99.0	99.0	96.6	2.41	41.006	
500.0	500.0	499.0	499.0	1.6	1.6	89.77	0.4	99.0	99.0	95.9	3.13	31.617	
600.0	600.0	599.0	599.0	1.9	1.9	89.77	0.4	99.0	99.0	95.2	3.85	25.727	
700.0	700.0	699.0	699.0	2.3	2.3	89.77	0.4	99.0	99.0	94.4	4.57	21.686	
800.0	800.0	799.0	799.0	2.6	2.6	89.77	0.4	99.0	99.0	93.7	5.28	18.743	
900.0	900.0	899.0	899.0	3.0	3.0	89.77	0.4	99.0	99.0	93.0	6.00	16.503	
1,000.0	1,000.0	999.0	999.0	3.4	3.4	89.77	0.4	99.0	99.0	92.3	6.72	14.741	
1,100.0	1,100.0	1,099.0	1,099.0	3.7	3.7	89.77	0.4	99.0	99.0	91.6	7.43	13.319	
1,200.0	1,200.0	1,199.0	1,199.0	4.1	4.1	89.77	0.4	99.0	99.0	90.9	8.15	12.148	
1,300.0	1,300.0	1,299.0	1,299.0	4.4	4.4	89.77	0.4	99.0	99.0	90.1	8.87	11.165	
1,400.0	1,400.0	1,399.0	1,399.0	4.8	4.8	89.77	0.4	99.0	99.0	89.4	9.58	10.330	
1,500.0	1,500.0	1,499.0	1,499.0	5.2	5.1	89.77	0.4	99.0	99.0	88.7	10.30	9.611	
1,600.0	1,600.0	1,599.0	1,599.0	5.5	5.5	89.77	0.4	99.0	99.0	88.0	11.02	8.986	
1,700.0	1,700.0	1,699.0	1,699.0	5.9	5.9	89.77	0.4	99.0	99.0	87.3	11.73	8.437	
1,800.0	1,800.0	1,799.0	1,799.0	6.2	6.2	89.77	0.4	99.0	99.0	86.5	12.45	7.951	
1,900.0	1,900.0	1,899.0	1,899.0	6.6	6.6	89.77	0.4	99.0	99.0	85.8	13.17	7.518	
2,000.0	2,000.0	1,999.0	1,999.0	6.9	6.9	89.77	0.4	99.0	99.0	85.1	13.89	7.130	
2,100.0	2,100.0	2,099.0	2,099.0	7.3	7.3	89.77	0.4	99.0	99.0	84.4	14.60	6.780	
2,200.0	2,200.0	2,199.0	2,199.0	7.7	7.7	89.77	0.4	99.0	99.0	83.7	15.32	6.462	
2,300.0	2,300.0	2,299.0	2,299.0	8.0	8.0	89.77	0.4	99.0	99.0	83.0	16.04	6.174	
2,400.0	2,400.0	2,399.0	2,399.0	8.4	8.4	89.77	0.4	99.0	99.0	82.2	16.75	5.909	
2,500.0	2,500.0	2,499.0	2,499.0	8.7	8.7	89.77	0.4	99.0	99.0	81.5	17.47	5.667	
2,600.0	2,600.0	2,599.0	2,599.0	9.1	9.1	89.77	0.4	99.0	99.0	80.8	18.19	5.443	
2,700.0	2,700.0	2,699.0	2,699.0	9.5	9.5	89.77	0.4	99.0	99.0	80.1	18.90	5.237	
2,800.0	2,800.0	2,799.0	2,799.0	9.8	9.8	89.77	0.4	99.0	99.0	79.4	19.62	5.046	
2,900.0	2,900.0	2,899.0	2,899.0	10.2	10.2	89.77	0.4	99.0	99.0	78.7	20.34	4.868	
3,000.0	3,000.0	2,999.0	2,999.0	10.5	10.5	89.77	0.4	99.0	99.0	77.9	21.05	4.702	
3,100.0	3,100.0	3,099.0	3,099.0	10.9	10.9	89.77	0.4	99.0	99.0	77.2	21.77	4.547	
3,200.0	3,200.0	3,199.0	3,199.0	11.2	11.2	89.77	0.4	99.0	99.0	76.5	22.49	4.402	
3,300.0	3,300.0	3,299.0	3,299.0	11.6	11.6	89.77	0.4	99.0	99.0	75.8	23.21	4.266	
3,400.0	3,400.0	3,399.0	3,399.0	12.0	12.0	89.77	0.4	99.0	99.0	75.1	23.92	4.138	
3,500.0	3,500.0	3,499.0	3,499.0	12.3	12.3	89.77	0.4	99.0	99.0	74.4	24.64	4.018	
3,600.0	3,600.0	3,599.0	3,599.0	12.7	12.7	89.77	0.4	99.0	99.0	73.6	25.36	3.904	
3,700.0	3,700.0	3,699.0	3,699.0	13.0	13.0	89.77	0.4	99.0	99.0	72.9	26.07	3.797	
3,800.0	3,800.0	3,799.0	3,799.0	13.4	13.4	89.77	0.4	99.0	99.0	72.2	26.79	3.695	
3,900.0	3,900.0	3,899.0	3,899.0	13.8	13.8	89.77	0.4	99.0	99.0	71.5	27.51	3.599	
4,000.0	4,000.0	3,999.0	3,999.0	14.1	14.1	89.77	0.4	99.0	99.0	70.8	28.22	3.508	
4,100.0	4,100.0	4,099.0	4,099.0	14.5	14.5	89.77	0.4	99.0	99.0	70.1	28.94	3.421	
4,200.0	4,200.0	4,199.0	4,199.0	14.8	14.8	89.77	0.4	99.0	99.0	69.3	29.66	3.338	
4,300.0	4,300.0	4,299.0	4,299.0	15.2	15.2	89.77	0.4	99.0	99.0	68.6	30.38	3.259	
4,400.0	4,400.0	4,399.0	4,399.0	15.5	15.5	89.77	0.4	99.0	99.0	67.9	31.09	3.184	
4,500.0	4,500.0	4,499.0	4,499.0	15.9	15.9	89.77	0.4	99.0	99.0	67.2	31.81	3.112	
4,600.0	4,600.0	4,599.0	4,599.0	16.3	16.3	89.77	0.4	99.0	99.0	66.5	32.53	3.044	
4,700.0	4,700.0	4,699.0	4,699.0	16.6	16.6	89.77	0.4	99.0	99.0	65.8	33.24	2.978	
4,800.0	4,800.0	4,799.0	4,799.0	17.0	17.0	89.77	0.4	99.0	99.0	65.0	33.96	2.915	
4,900.0	4,900.0	4,899.0	4,899.0	17.3	17.3	89.77	0.4	99.0	99.0	64.3	34.68	2.855	
5,000.0	5,000.0	4,999.0	4,999.0	17.7	17.7	89.77	0.4	99.0	99.0	63.6	35.39	2.797	
5,100.0	5,100.0	5,099.0	5,099.0	18.1	18.1	89.77	0.4	99.0	99.0	62.9	36.11	2.742	

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 #302H
Project:	Lea County, NM (NAD 83 NME)	**TVD Reference:**	KB @ 3711.5usft (H&P 466)
Reference Site:	(Merchant State)Sec35_T-21-S_R-33-E	**MD Reference:**	KB @ 3711.5usft (H&P 466)
Site Error:	0.0 usft	**North Reference:**	Grid
Reference Well:	Merchant State Unit #302H	**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 — **Rule Assigned:** — **Offset Well Error:** 0.0 usft

Reference Measured Depth (usft)	Reference Vertical Depth (usft)	Offset Measured Depth (usft)	Offset Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
5,200.0	5,200.0	5,199.0	5,199.0	18.4	18.4	89.77	0.4	99.0	99.0	62.2	36.83	2.688	
5,300.0	5,300.0	5,299.0	5,299.0	18.8	18.8	89.77	0.4	99.0	99.0	61.5	37.54	2.637	
5,400.0	5,400.0	5,399.0	5,399.0	19.1	19.1	89.77	0.4	99.0	99.0	60.7	38.26	2.587	
5,500.0	5,500.0	5,497.6	5,497.6	19.5	19.5	6.48	0.8	99.7	98.9	59.9	38.96	2.537	
5,600.0	5,600.0	5,596.1	5,596.1	19.8	19.8	5.89	2.2	101.8	98.4	58.8	39.63	2.484	
5,700.0	5,699.9	5,694.6	5,694.5	20.2	20.2	4.88	4.4	105.4	97.8	57.5	40.30	2.426	
5,800.0	5,799.7	5,793.1	5,792.8	20.5	20.5	3.44	7.5	110.4	96.9	56.0	40.96	2.367	
5,900.0	5,899.4	5,891.6	5,891.0	20.9	20.9	1.56	11.5	116.9	96.0	54.3	41.61	2.306	
6,000.0	5,998.9	5,991.5	5,990.5	21.2	21.2	-0.62	16.1	124.2	94.1	51.8	42.30	2.225	
6,100.0	6,098.3	6,091.4	6,090.0	21.6	21.6	-2.94	20.6	131.5	90.7	47.7	42.99	2.110	
6,200.0	6,197.4	6,191.2	6,189.4	21.9	21.9	-5.54	25.1	138.8	85.7	42.0	43.68	1.962	
6,300.0	6,296.3	6,290.8	6,288.8	22.3	22.3	-8.66	29.7	146.0	79.2	34.8	44.38	1.785	
6,400.0	6,394.9	6,390.4	6,387.9	22.6	22.6	-12.62	34.2	153.3	71.2	26.2	45.07	1.581	
6,500.0	6,493.3	6,489.8	6,487.0	23.0	23.0	-18.03	38.7	160.6	62.1	16.3	45.77	1.356	Level 3
6,600.0	6,591.2	6,589.0	6,585.8	23.4	23.3	-26.03	43.2	167.8	52.0	5.5	46.48	1.119	Level 2
6,700.0	6,689.1	6,688.0	6,684.5	23.7	23.7	-38.14	47.7	175.0	42.7	-4.5	47.22	0.905	Level 1
6,800.0	6,786.9	6,787.1	6,783.2	24.1	24.1	-55.55	52.2	182.3	36.3	-11.7	48.03	0.756	Level 1
6,887.5	6,872.4	6,873.7	6,869.5	24.5	24.4	-74.52	56.2	188.6	34.3	-14.5	48.77	0.703	Level 1, CC
6,900.0	6,884.7	6,886.2	6,881.9	24.5	24.4	-77.34	56.7	189.5	34.3	-14.5	48.87	0.703	Level 1, ES, SF
7,000.0	6,982.5	6,985.2	6,980.6	24.9	24.8	-98.38	61.2	196.8	37.6	-12.1	49.65	0.757	Level 1
7,100.0	7,080.3	7,084.3	7,079.3	25.3	25.1	-114.39	65.7	204.0	44.9	-5.5	50.35	0.891	Level 1
7,200.0	7,178.1	7,183.4	7,178.0	25.7	25.5	-125.37	70.2	211.2	54.6	3.6	51.01	1.071	Level 2
7,300.0	7,275.9	7,282.4	7,276.7	26.1	25.9	-132.86	74.7	218.5	65.8	14.1	51.68	1.273	Level 3
7,400.0	7,373.7	7,381.5	7,375.4	26.5	26.2	-138.12	79.2	225.7	77.7	25.4	52.36	1.484	Level 3
7,500.0	7,471.5	7,480.6	7,474.1	26.9	26.6	-141.96	83.7	232.9	90.1	37.1	53.05	1.699	
7,600.0	7,569.3	7,579.7	7,572.8	27.3	26.9	-144.87	88.2	240.2	102.9	49.1	53.74	1.914	
7,700.0	7,667.2	7,678.7	7,671.5	27.7	27.3	-147.13	92.7	247.4	115.8	61.3	54.44	2.127	
7,800.0	7,765.0	7,777.8	7,770.2	28.1	27.7	-148.94	97.2	254.6	128.8	73.7	55.14	2.336	
7,900.0	7,862.8	7,876.9	7,868.9	28.5	28.0	-150.42	101.7	261.9	142.0	86.1	55.85	2.543	
8,000.0	7,960.6	7,975.9	7,967.6	29.0	28.4	-151.64	106.2	269.1	155.2	98.7	56.55	2.745	
8,100.0	8,058.4	8,075.0	8,066.3	29.4	28.7	-152.67	110.7	276.3	168.5	111.3	57.26	2.943	
8,200.0	8,156.2	8,174.1	8,165.0	29.8	29.1	-153.55	115.2	283.6	181.9	123.9	57.98	3.137	
8,300.0	8,254.0	8,273.1	8,263.7	30.2	29.5	-154.31	119.7	290.8	195.3	136.6	58.69	3.327	
8,400.0	8,351.8	8,372.2	8,362.4	30.6	29.8	-154.97	124.2	298.0	208.7	149.3	59.41	3.512	
8,500.0	8,449.6	8,471.3	8,461.1	31.1	30.2	-155.55	128.7	305.3	222.1	162.0	60.13	3.694	
8,600.0	8,547.4	8,570.4	8,559.8	31.5	30.6	-156.07	133.2	312.5	235.6	174.7	60.85	3.871	
8,700.0	8,645.2	8,669.4	8,658.5	31.9	30.9	-156.53	137.7	319.7	249.0	187.5	61.57	4.045	
8,800.0	8,743.1	8,768.5	8,757.3	32.4	31.3	-156.94	142.2	327.0	262.1	199.8	62.29	4.208	
8,900.0	8,841.4	8,867.9	8,856.2	32.8	31.7	-157.19	146.8	334.2	273.7	210.7	63.02	4.343	
9,000.0	8,939.9	8,966.9	8,954.9	33.2	32.0	-157.28	151.2	341.4	283.7	219.9	63.75	4.450	
9,100.0	9,038.7	9,063.2	9,050.9	33.6	32.4	-157.39	155.1	347.6	292.8	228.3	64.47	4.542	
9,200.0	9,137.8	9,159.4	9,147.0	34.0	32.7	-157.59	158.0	352.3	301.4	236.3	65.17	4.625	
9,300.0	9,237.1	9,255.6	9,243.1	34.4	33.1	-157.89	160.1	355.7	309.6	243.7	65.87	4.700	
9,400.0	9,336.6	9,351.7	9,339.1	34.8	33.4	-158.26	161.4	357.7	317.3	250.8	66.55	4.768	
9,500.0	9,436.2	9,447.8	9,435.2	35.2	33.8	-158.72	161.8	358.4	324.6	257.4	67.22	4.828	
9,600.0	9,536.0	9,547.5	9,535.0	35.6	34.1	-159.16	161.8	358.4	330.8	262.9	67.92	4.870	
9,700.0	9,635.9	9,647.4	9,634.9	35.9	34.5	-159.47	161.8	358.4	335.4	266.7	68.62	4.887	
9,800.0	9,735.8	9,747.4	9,734.8	36.3	34.8	-159.67	161.8	358.4	338.3	269.0	69.33	4.880	
9,900.0	9,835.8	9,847.4	9,834.8	36.6	35.2	-159.76	161.8	358.4	339.7	269.6	70.03	4.850	
10,000.0	9,935.8	9,947.4	9,934.8	36.9	35.5	-76.68	161.8	358.4	339.7	269.0	70.73	4.803	
10,100.0	10,035.6	10,047.2	10,034.6	37.3	35.9	104.34	161.8	358.4	340.8	269.3	71.43	4.770	
10,200.0	10,133.4	10,144.9	10,132.4	37.6	36.2	107.01	161.8	358.4	346.5	274.3	72.15	4.802	

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 #302H
Project:	Lea County, NM (NAD 83 NME)	**TVD Reference:**	KB @ 3711.5usft (H&P 466)
Reference Site:	(Merchant State)Sec35_T-21-S_R-33-E	**MD Reference:**	KB @ 3711.5usft (H&P 466)
Site Error:	0.0 usft	**North Reference:**	Grid
Reference Well:	Merchant State Unit #302H	**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

Reference Measured Depth (usft)	Reference Vertical Depth (usft)	Offset Measured Depth (usft)	Offset Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
10,300.0	10,226.1	10,237.6	10,225.1	37.8	36.6	111.10	161.8	358.4	359.5	286.7	72.88	4.933	
10,400.0	10,310.9	10,322.4	10,309.9	38.1	36.9	115.35	161.8	358.4	383.5	310.0	73.59	5.212	
10,500.0	10,385.2	10,396.8	10,384.2	38.3	37.1	118.50	161.8	358.4	421.5	347.2	74.23	5.678	
10,600.0	10,446.9	10,458.4	10,445.9	38.5	37.3	119.43	161.8	358.4	474.3	399.6	74.75	6.346	
10,700.0	10,493.9	10,505.5	10,492.9	38.6	37.5	117.03	161.8	358.4	541.1	466.0	75.12	7.203	
10,800.0	10,525.0	10,536.6	10,524.0	38.9	37.6	109.81	161.8	358.4	619.0	543.7	75.35	8.216	
10,900.0	10,539.1	10,550.7	10,538.1	39.1	37.7	95.86	161.8	358.4	704.7	629.2	75.44	9.340	
11,000.0	10,540.0	10,551.5	10,539.0	39.5	37.7	90.00	161.8	358.4	794.4	718.9	75.45	10.528	
11,100.0	10,540.0	10,551.5	10,539.0	39.9	37.7	90.00	161.8	358.4	886.3	810.9	75.45	11.746	
11,200.0	10,540.0	10,551.5	10,539.0	40.3	37.7	90.00	161.8	358.4	979.8	904.4	75.46	12.986	
11,300.0	10,540.0	10,551.5	10,539.0	40.9	37.7	90.00	161.8	358.4	1,074.5	999.1	75.46	14.240	
11,400.0	10,540.0	10,551.5	10,539.0	41.5	37.7	90.00	161.8	358.4	1,170.1	1,094.6	75.46	15.506	
11,500.0	10,540.0	10,551.5	10,539.0	42.1	37.7	90.00	161.8	358.4	1,266.3	1,190.9	75.47	16.781	
11,600.0	10,540.0	10,551.5	10,539.0	42.9	37.7	90.00	161.8	358.4	1,363.1	1,287.7	75.47	18.062	
11,700.0	10,540.0	13,139.2	11,950.0	43.6	47.3	166.84	-1,260.8	369.3	1,449.1	1,394.4	54.66	26.509	
11,800.0	10,540.0	13,239.2	11,950.0	44.4	48.0	166.84	-1,360.7	370.1	1,449.1	1,393.6	55.44	26.138	
11,900.0	10,540.0	13,339.2	11,950.0	45.3	48.8	166.84	-1,460.7	370.8	1,449.1	1,392.8	56.26	25.759	
12,000.0	10,540.0	13,439.2	11,950.0	46.2	49.7	166.84	-1,560.7	371.6	1,449.1	1,392.0	57.11	25.373	
12,100.0	10,540.0	13,539.2	11,950.0	47.2	50.6	166.84	-1,660.7	372.4	1,449.1	1,391.1	58.00	24.982	
12,200.0	10,540.0	13,639.2	11,950.0	48.1	51.5	166.84	-1,760.7	373.1	1,449.1	1,390.1	58.93	24.588	
12,300.0	10,540.0	13,739.2	11,950.0	49.2	52.5	166.84	-1,860.7	373.9	1,449.1	1,389.2	59.90	24.193	
12,400.0	10,540.0	13,839.2	11,950.0	50.2	53.5	166.84	-1,960.7	374.7	1,449.1	1,388.2	60.89	23.798	
12,500.0	10,540.0	13,939.2	11,950.0	51.3	54.5	166.84	-2,060.7	375.4	1,449.1	1,387.2	61.92	23.403	
12,600.0	10,540.0	14,039.2	11,950.0	52.4	55.5	166.84	-2,160.7	376.2	1,449.1	1,386.1	62.97	23.011	
12,700.0	10,540.0	14,139.2	11,950.0	53.6	56.6	166.84	-2,260.7	377.0	1,449.1	1,385.0	64.06	22.622	
12,800.0	10,540.0	14,239.2	11,950.0	54.7	57.7	166.84	-2,360.7	377.7	1,449.1	1,383.9	65.17	22.237	
12,900.0	10,540.0	14,339.2	11,950.0	55.9	58.9	166.84	-2,460.7	378.5	1,449.1	1,382.8	66.30	21.856	
13,000.0	10,540.0	14,439.2	11,950.0	57.2	60.0	166.84	-2,560.7	379.3	1,449.1	1,381.6	67.46	21.480	
13,100.0	10,540.0	14,539.2	11,950.0	58.4	61.2	166.84	-2,660.7	380.1	1,449.1	1,380.4	68.64	21.111	
13,200.0	10,540.0	14,639.2	11,950.0	59.7	62.4	166.84	-2,760.7	380.8	1,449.1	1,379.2	69.84	20.747	
13,300.0	10,540.0	14,739.2	11,950.0	60.9	63.7	166.84	-2,860.7	381.6	1,449.1	1,378.0	71.07	20.390	
13,400.0	10,540.0	14,839.2	11,950.0	62.2	64.9	166.84	-2,960.7	382.4	1,449.1	1,376.8	72.31	20.039	
13,500.0	10,540.0	14,939.2	11,950.0	63.5	66.2	166.84	-3,060.7	383.1	1,449.1	1,375.5	73.57	19.696	
13,600.0	10,540.0	15,039.2	11,950.0	64.9	67.5	166.84	-3,160.7	383.9	1,449.1	1,374.2	74.85	19.359	
13,700.0	10,540.0	15,139.2	11,950.0	66.2	68.8	166.84	-3,260.7	384.7	1,449.1	1,372.9	76.15	19.030	
13,800.0	10,540.0	15,239.2	11,950.0	67.6	70.1	166.84	-3,360.7	385.4	1,449.1	1,371.6	77.46	18.708	
13,900.0	10,540.0	15,339.2	11,950.0	69.0	71.4	166.84	-3,460.7	386.2	1,449.1	1,370.3	78.78	18.393	
14,000.0	10,540.0	15,439.2	11,950.0	70.3	72.7	166.84	-3,560.7	387.0	1,449.1	1,368.9	80.13	18.085	
14,100.0	10,540.0	15,539.2	11,950.0	71.7	74.1	166.84	-3,660.7	387.7	1,449.1	1,367.6	81.48	17.785	
14,200.0	10,540.0	15,639.2	11,950.0	73.1	75.5	166.84	-3,760.7	388.5	1,449.1	1,366.2	82.85	17.491	
14,300.0	10,540.0	15,739.2	11,950.0	74.6	76.8	166.84	-3,860.7	389.3	1,449.1	1,364.8	84.23	17.205	
14,400.0	10,540.0	15,839.2	11,950.0	76.0	78.2	166.84	-3,960.7	390.0	1,449.1	1,363.5	85.62	16.925	
14,500.0	10,540.0	15,939.2	11,950.0	77.4	79.6	166.84	-4,060.7	390.8	1,449.1	1,362.1	87.02	16.653	
14,600.0	10,540.0	16,039.2	11,950.0	78.9	81.0	166.84	-4,160.7	391.6	1,449.1	1,360.6	88.43	16.386	
14,700.0	10,540.0	16,139.2	11,950.0	80.3	82.4	166.84	-4,260.7	392.3	1,449.1	1,359.2	89.85	16.127	
14,800.0	10,540.0	16,239.2	11,950.0	81.8	83.9	166.84	-4,360.7	393.1	1,449.1	1,357.8	91.29	15.874	
14,900.0	10,540.0	16,339.2	11,950.0	83.2	85.3	166.84	-4,460.7	393.9	1,449.1	1,356.3	92.73	15.627	
15,000.0	10,540.0	16,439.2	11,950.0	84.7	86.8	166.84	-4,560.7	394.6	1,449.1	1,354.9	94.18	15.387	
15,100.0	10,540.0	16,539.2	11,950.0	86.2	88.2	166.84	-4,660.7	395.4	1,449.1	1,353.4	95.64	15.152	
15,200.0	10,540.0	16,639.2	11,950.0	87.7	89.7	166.84	-4,760.6	396.2	1,449.1	1,352.0	97.10	14.923	
15,300.0	10,540.0	16,739.2	11,950.0	89.2	91.1	166.84	-4,860.6	396.9	1,449.1	1,350.5	98.58	14.700	
15,400.0	10,540.0	16,839.2	11,950.0	90.7	92.6	166.84	-4,960.6	397.7	1,449.1	1,349.0	100.06	14.482	

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 #302H
Project:	Lea County, NM (NAD 83 NME)	**TVD Reference:**	KB @ 3711.5usft (H&P 466)
Reference Site:	(Merchant State)Sec35_T-21-S_R-33-E	**MD Reference:**	KB @ 3711.5usft (H&P 466)
Site Error:	0.0 usft	**North Reference:**	Grid
Reference Well:	Merchant State Unit #302H	**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 — **Rule Assigned:** — **Offset Well Error:** 0.0 usft

Reference Measured Depth (usft)	Reference Vertical Depth (usft)	Offset Measured Depth (usft)	Offset Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
15,500.0	10,540.0	16,939.2	11,950.0	92.2	94.1	166.84	-5,060.6	398.5	1,449.1	1,347.5	101.55	14.270	
15,600.0	10,540.0	17,039.2	11,950.0	93.7	95.5	166.84	-5,160.6	399.2	1,449.1	1,346.0	103.04	14.063	
15,700.0	10,540.0	17,139.2	11,950.0	95.2	97.0	166.84	-5,260.6	400.0	1,449.1	1,344.5	104.55	13.861	
15,800.0	10,540.0	17,239.2	11,950.0	96.7	98.5	166.84	-5,360.6	400.8	1,449.1	1,343.0	106.05	13.664	
15,900.0	10,540.0	17,339.2	11,950.0	98.2	100.0	166.84	-5,460.6	401.5	1,449.1	1,341.5	107.57	13.471	
16,000.0	10,540.0	17,439.2	11,950.0	99.8	101.5	166.84	-5,560.6	402.3	1,449.1	1,340.0	109.09	13.284	
16,100.0	10,540.0	17,539.2	11,950.0	101.3	103.0	166.84	-5,660.6	403.1	1,449.1	1,338.5	110.61	13.101	
16,200.0	10,540.0	17,639.2	11,950.0	102.8	104.6	166.84	-5,760.6	403.8	1,449.1	1,336.9	112.14	12.922	
16,300.0	10,540.0	17,739.2	11,950.0	104.4	106.1	166.84	-5,860.6	404.6	1,449.1	1,335.4	113.68	12.747	
16,400.0	10,540.0	17,839.2	11,950.0	105.9	107.6	166.84	-5,960.6	405.4	1,449.1	1,333.9	115.22	12.577	
16,500.0	10,540.0	17,939.2	11,950.0	107.5	109.1	166.84	-6,060.6	406.1	1,449.1	1,332.3	116.76	12.411	
16,600.0	10,540.0	18,039.2	11,950.0	109.0	110.6	166.84	-6,160.6	406.9	1,449.1	1,330.8	118.31	12.248	
16,700.0	10,540.0	18,139.2	11,950.0	110.6	112.2	166.84	-6,260.6	407.7	1,449.1	1,329.2	119.86	12.090	
16,800.0	10,540.0	18,239.2	11,950.0	112.1	113.7	166.84	-6,360.6	408.4	1,449.1	1,327.7	121.42	11.935	
16,900.0	10,540.0	18,339.2	11,950.0	113.7	115.3	166.84	-6,460.6	409.2	1,449.1	1,326.1	122.98	11.783	
17,000.0	10,540.0	18,439.2	11,950.0	115.2	116.8	166.84	-6,560.6	410.0	1,449.1	1,324.5	124.54	11.635	
17,100.0	10,540.0	18,539.2	11,950.0	116.8	118.3	166.84	-6,660.6	410.7	1,449.1	1,323.0	126.11	11.490	
17,200.0	10,540.0	18,639.2	11,950.0	118.4	119.9	166.84	-6,760.6	411.5	1,449.1	1,321.4	127.68	11.349	
17,300.0	10,540.0	18,739.2	11,950.0	119.9	121.4	166.84	-6,860.6	412.3	1,449.1	1,319.8	129.26	11.211	
17,400.0	10,540.0	18,839.2	11,950.0	121.5	123.0	166.84	-6,960.6	413.0	1,449.1	1,318.2	130.84	11.075	
17,500.0	10,540.0	18,939.2	11,950.0	123.1	124.5	166.84	-7,060.6	413.8	1,449.1	1,316.7	132.42	10.943	
17,600.0	10,540.0	19,039.2	11,950.0	124.7	126.1	166.84	-7,160.6	414.6	1,449.1	1,315.1	134.00	10.814	
17,700.0	10,540.0	19,139.2	11,950.0	126.2	127.7	166.84	-7,260.6	415.3	1,449.1	1,313.5	135.59	10.687	
17,800.0	10,540.0	19,239.2	11,950.0	127.8	129.2	166.84	-7,360.6	416.1	1,449.1	1,311.9	137.18	10.563	
17,900.0	10,540.0	19,339.2	11,950.0	129.4	130.8	166.84	-7,460.6	416.9	1,449.1	1,310.3	138.78	10.442	
18,000.0	10,540.0	19,439.2	11,950.0	131.0	132.4	166.84	-7,560.6	417.6	1,449.1	1,308.7	140.37	10.323	
18,100.0	10,540.0	19,539.2	11,950.0	132.6	133.9	166.84	-7,660.6	418.4	1,449.1	1,307.1	141.97	10.207	
18,200.0	10,540.0	19,639.2	11,950.0	134.1	135.5	166.84	-7,760.6	419.2	1,449.1	1,305.5	143.57	10.093	
18,300.0	10,540.0	19,739.2	11,950.0	135.7	137.1	166.84	-7,860.6	419.9	1,449.1	1,303.9	145.17	9.982	
18,400.0	10,540.0	19,839.2	11,950.0	137.3	138.7	166.84	-7,960.6	420.7	1,449.1	1,302.3	146.78	9.873	
18,500.0	10,540.0	19,939.2	11,950.0	138.9	140.2	166.84	-8,060.6	421.5	1,449.1	1,300.7	148.39	9.766	
18,600.0	10,540.0	20,039.2	11,950.0	140.5	141.8	166.84	-8,160.5	422.2	1,449.1	1,299.1	150.00	9.661	
18,700.0	10,540.0	20,139.2	11,950.0	142.1	143.4	166.84	-8,260.5	423.0	1,449.1	1,297.5	151.61	9.558	
18,800.0	10,540.0	20,239.2	11,950.0	143.7	145.0	166.84	-8,360.5	423.8	1,449.1	1,295.9	153.22	9.457	
18,900.0	10,540.0	20,339.2	11,950.0	145.3	146.6	166.84	-8,460.5	424.5	1,449.1	1,294.2	154.84	9.359	
19,000.0	10,540.0	20,439.2	11,950.0	146.9	148.2	166.84	-8,560.5	425.3	1,449.1	1,292.6	156.45	9.262	
19,100.0	10,540.0	20,539.2	11,950.0	148.5	149.7	166.84	-8,660.5	426.1	1,449.1	1,291.0	158.07	9.167	
19,200.0	10,540.0	20,639.2	11,950.0	150.1	151.3	166.84	-8,760.5	426.8	1,449.1	1,289.4	159.70	9.074	
19,300.0	10,540.0	20,739.2	11,950.0	151.7	152.9	166.84	-8,860.5	427.6	1,449.1	1,287.8	161.32	8.983	
19,400.0	10,540.0	20,839.2	11,950.0	153.3	154.5	166.84	-8,960.5	428.4	1,449.1	1,286.1	162.94	8.893	
19,500.0	10,540.0	20,939.2	11,950.0	154.9	156.1	166.84	-9,060.5	429.1	1,449.1	1,284.5	164.57	8.805	
19,600.0	10,540.0	21,039.2	11,950.0	156.5	157.7	166.84	-9,160.5	429.9	1,449.1	1,282.9	166.20	8.719	
19,700.0	10,540.0	21,139.2	11,950.0	158.1	159.3	166.84	-9,260.5	430.7	1,449.1	1,281.2	167.83	8.634	
19,800.0	10,540.0	21,239.2	11,950.0	159.7	160.9	166.84	-9,360.5	431.4	1,449.1	1,279.6	169.46	8.551	
19,900.0	10,540.0	21,339.2	11,950.0	161.3	162.5	166.84	-9,460.5	432.2	1,449.1	1,278.0	171.09	8.470	
20,000.0	10,540.0	21,439.2	11,950.0	162.9	164.1	166.84	-9,560.5	433.0	1,449.1	1,276.4	172.72	8.390	
20,100.0	10,540.0	21,539.2	11,950.0	164.6	165.7	166.84	-9,660.5	433.7	1,449.1	1,274.7	174.36	8.311	
20,200.0	10,540.0	21,639.2	11,950.0	166.2	167.3	166.84	-9,760.5	434.5	1,449.1	1,273.1	176.00	8.234	
20,300.0	10,540.0	21,739.2	11,950.0	167.8	168.9	166.84	-9,860.5	435.3	1,449.1	1,271.4	177.63	8.158	
20,400.0	10,540.0	21,839.2	11,950.0	169.4	170.5	166.84	-9,960.5	436.0	1,449.1	1,269.8	179.27	8.083	
20,500.0	10,540.0	21,939.2	11,950.0	171.0	172.1	166.84	-10,060.5	436.8	1,449.1	1,268.2	180.91	8.010	
20,600.0	10,540.0	22,039.2	11,950.0	172.6	173.7	166.84	-10,160.5	437.6	1,449.1	1,266.5	182.55	7.938	

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 #302H
Project:	Lea County, NM (NAD 83 NME)	**TVD Reference:**	KB @ 3711.5usft (H&P 466)
Reference Site:	(Merchant State)Sec35_T-21-S_R-33-E	**MD Reference:**	KB @ 3711.5usft (H&P 466)
Site Error:	0.0 usft	**North Reference:**	Grid
Reference Well:	Merchant State Unit #302H	**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

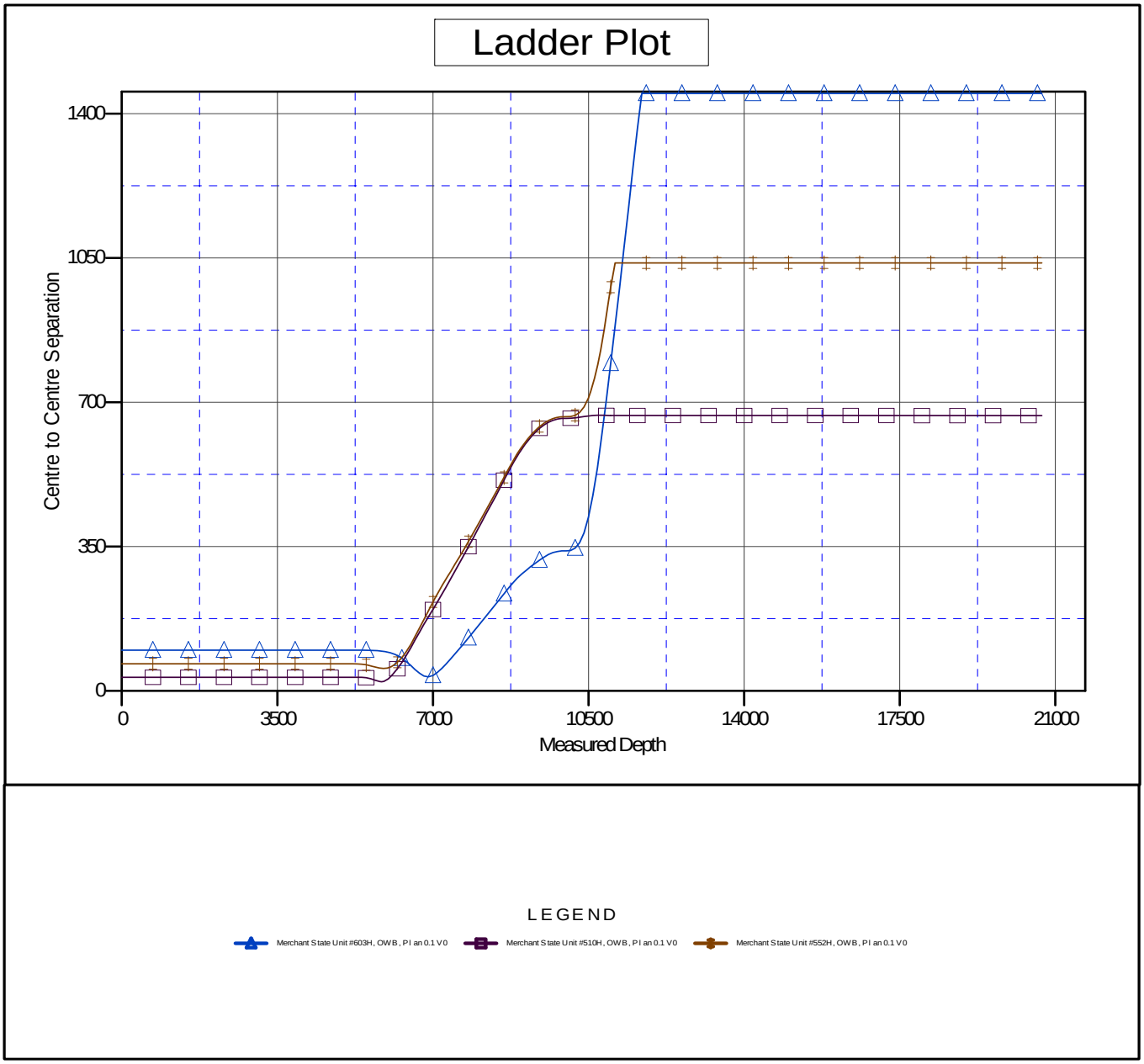
Survey Program: 0-MWD — **Rule Assigned:** — **Offset Well Error:** 0.0 usft

Reference Measured Depth (usft)	Reference Vertical Depth (usft)	Offset Measured Depth (usft)	Offset Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
20,610.2	10,540.0	22,049.4	11,950.0	172.8	173.9	166.84	-10,170.7	437.7	1,449.1	1,266.4	182.72	7.931	
20,695.7	10,540.0	22,133.6	11,950.0	174.2	175.2	166.84	-10,254.9	438.3	1,449.1	1,265.0	184.10	7.871	

Microsoft
Anticollision Report

Company:	Advance Energy Partners	**Local Co-ordinate Reference:**	Well Merchant State Unit #302H
Project:	Lea County, NM (NAD 83 NME)	**TVD Reference:**	KB @ 3711.5usft (H&P 466)
Reference Site:	(Merchant State)Sec35_T-21-S_R-33-E	**MD Reference:**	KB @ 3711.5usft (H&P 466)
Site Error:	0.0 usft	**North Reference:**	Grid
Reference Well:	Merchant State Unit #302H	**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

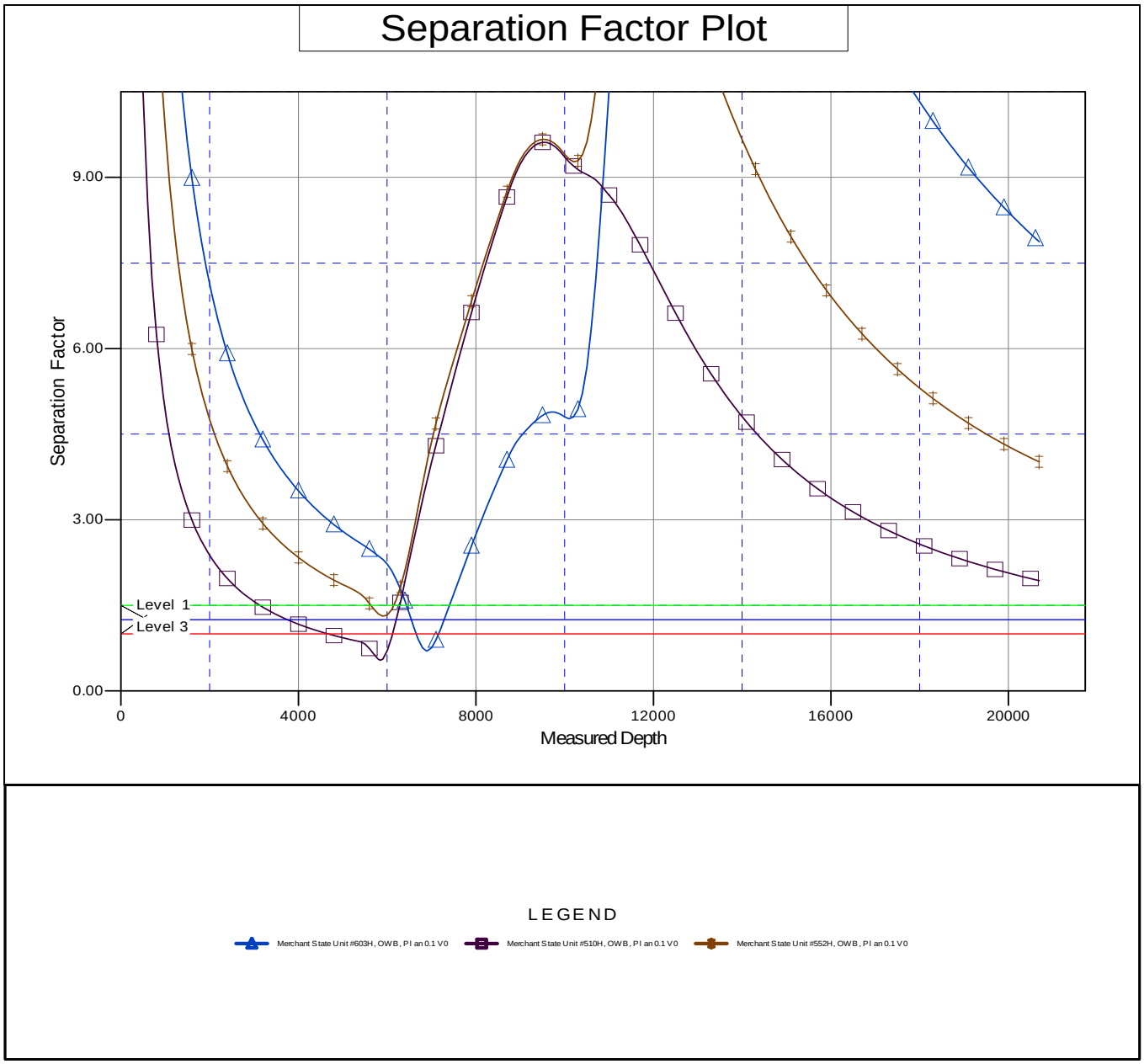
Reference Depths are relative to KB @ 3711.5usft (H&P 466)	Coordinates are relative to: Merchant State Unit #302H
Offset Depths are relative to Offset Datum	Coordinate System is US State Plane 1983, New Mexico Eastern Zone
Central Meridian is 104° 20' 0.000 W	Grid Convergence at Surface is: 0.42°



Microsoft
Anticollision Report

Company:	Advance Energy Partners	**Local Co-ordinate Reference:**	Well Merchant State Unit #302H
Project:	Lea County, NM (NAD 83 NME)	**TVD Reference:**	KB @ 3711.5usft (H&P 466)
Reference Site:	(Merchant State)Sec35_T-21-S_R-33-E	**MD Reference:**	KB @ 3711.5usft (H&P 466)
Site Error:	0.0 usft	**North Reference:**	Grid
Reference Well:	Merchant State Unit #302H	**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 @ 3711.5usft (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 #302H
Coordinate System is US State Plane 1983, New Mexico Eastern Zone
Grid Convergence at Surface is: 0.42°



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