

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

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

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

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

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

Form C-101  
August 1, 2011  
Permit 273605

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

|                                                                                                                             |  |                               |
|-----------------------------------------------------------------------------------------------------------------------------|--|-------------------------------|
| 1. Operator Name and Address<br>ADVANCE ENERGY PARTNERS HAT MESA, LLC<br>11490 Westheimer Rd., Ste 950<br>Houston, TX 77077 |  | 2. OGRID Number<br>372417     |
| 4. Property Code<br>325948                                                                                                  |  | 3. API Number<br>30-025-46469 |
| 5. Property Name<br>WOOL HEAD 20 STATE COM                                                                                  |  | 6. Well No.<br>508H           |

**7. Surface Location**

|          |         |          |       |         |           |          |           |          |        |
|----------|---------|----------|-------|---------|-----------|----------|-----------|----------|--------|
| UL - Lot | Section | Township | Range | Lot Idn | Feet From | N/S Line | Feet From | E/W Line | County |
| O        | 20      | 21S      | 33E   | O       | 350       | S        | 2046      | E        | Lea    |

**8. Proposed Bottom Hole Location**

|          |         |          |       |         |           |          |           |          |        |
|----------|---------|----------|-------|---------|-----------|----------|-----------|----------|--------|
| UL - Lot | Section | Township | Range | Lot Idn | Feet From | N/S Line | Feet From | E/W Line | County |
| J        | 17      | 21S      | 33E   | J       | 2540      | S        | 2010      | E        | Lea    |

**9. Pool Information**

|                                  |       |
|----------------------------------|-------|
| WC-025 G-08 S213304D;BONE SPRING | 97895 |
|----------------------------------|-------|

**Additional Well Information**

|                           |                             |                                        |                         |                                    |
|---------------------------|-----------------------------|----------------------------------------|-------------------------|------------------------------------|
| 11. Work Type<br>New Well | 12. Well Type<br>OIL        | 13. Cable/Rotary                       | 14. Lease Type<br>State | 15. Ground Level Elevation<br>3722 |
| 16. Multiple<br>N         | 17. Proposed Depth<br>19270 | 18. Formation<br>Bone Spring           | 19. Contractor          | 20. Spud Date<br>10/21/2019        |
| Depth to Ground water     |                             | Distance from nearest fresh water well |                         | Distance to nearest surface water  |

☒ We will be using a closed-loop system in lieu of lined pits

**21. Proposed Casing and Cement Program**

| Type | Hole Size | Casing Size | Casing Weight/ft | Setting Depth | Sacks of Cement | Estimated TOC |
|------|-----------|-------------|------------------|---------------|-----------------|---------------|
| Surf | 17.5      | 13.375      | 54.5             | 1600          | 500             | 0             |
| Int1 | 12.25     | 9.625       | 40               | 4000          | 950             | 0             |
| Int1 | 12.25     | 9.625       | 40               | 5300          | 330             | 4000          |
| Prod | 8.5       | 5.5         | 20               | 19270         | 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.<br><b>I further certify I have complied with 19.15.14.9 (A) NMAC <input checked="" type="checkbox"/> and/or 19.15.14.9 (B) NMAC <input checked="" type="checkbox"/> if applicable.</b><br><br>Signature: | <b>OIL CONSERVATION DIVISION</b>                           |
| 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: 10/28/2019      Expiration Date: 10/28/2021 |
| Date: 10/21/2019      Phone: 832-672-4604                                                                                                                                                                                                                                                                                   | Conditions of Approval Attached                            |

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State of New Mexico  
Energy, Minerals and Natural Resources Department

Form C-102  
Revised August 4, 2011

Submit one copy to appropriate  
District Office

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

WELL LOCATION AND ACREAGE DEDICATION PLAT

☐ AMENDED REPORT

|               |                                  |                                   |
|---------------|----------------------------------|-----------------------------------|
| API Number    | Pool Code                        | Pool Name                         |
|               | 97895                            | WC-025 G-08 S213304D; BONE SPRING |
| Property Code | Property Name                    | Well Number                       |
| 325948        | WOOL HEAD 20 STATE COM           | 508H                              |
| OGRID No.     | Operator Name                    | Elevation                         |
| 372417        | ADVANCE ENERGY PARTNERS HAT MESA | 3722'                             |

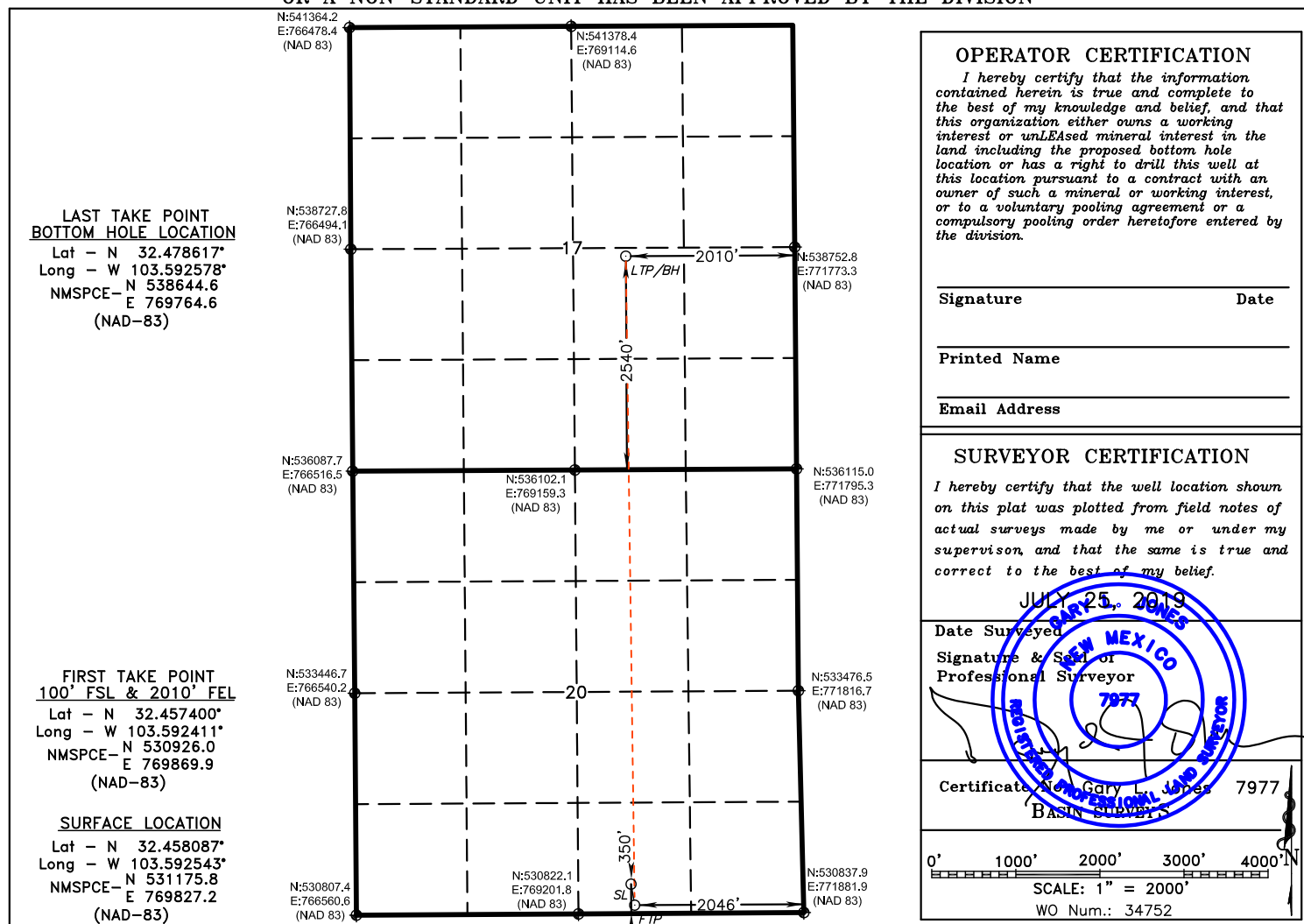
Surface Location

|               |         |          |       |         |               |                  |               |                |        |
|---------------|---------|----------|-------|---------|---------------|------------------|---------------|----------------|--------|
| UL or lot No. | Section | Township | Range | Lot Idn | Feet from the | SOUTH/South line | Feet from the | East/West line | County |
| 0             | 20      | 21 S     | 33 E  |         | 350           | SOUTH            | 2046          | EAST           | LEA    |

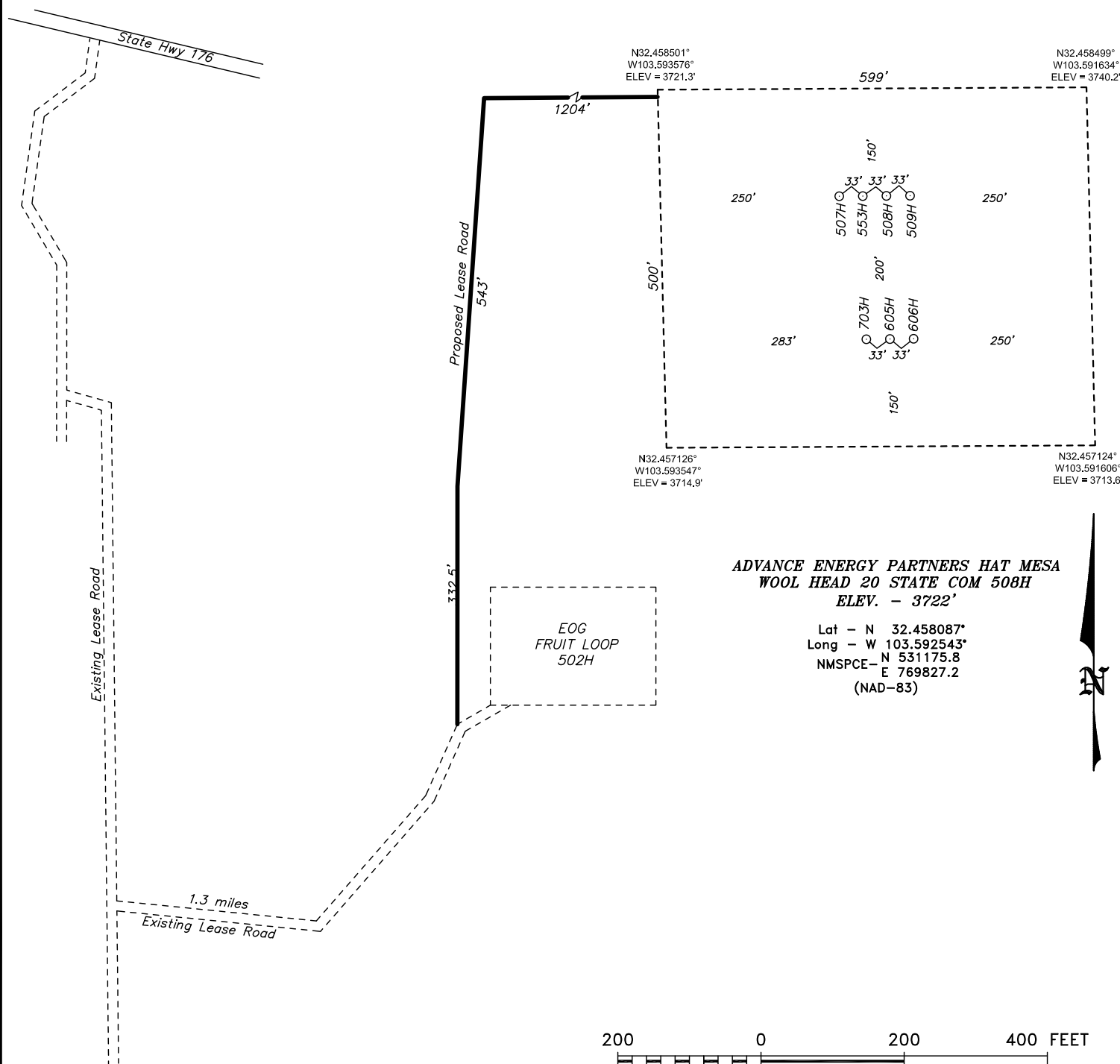
Bottom Hole Location If Different From Surface

|                 |                 |                    |           |         |               |                  |               |                |        |
|-----------------|-----------------|--------------------|-----------|---------|---------------|------------------|---------------|----------------|--------|
| UL or lot No.   | Section         | Township           | Range     | Lot Idn | Feet from the | SOUTH/South line | Feet from the | East/West line | County |
| J               | 17              | 21 S               | 33 E      |         | 2540          | SOUTH            | 2010          | EAST           | LEA    |
| Dedicated Acres | Joint or Infill | Consolidation Code | Order No. |         |               |                  |               |                |        |

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



**SECTION 20, TOWNSHIP 21 SOUTH, RANGE 33 EAST. N.M.P.M.,  
LEA COUNTY, NEW MEXICO.**



**DIRECTIONS TO LOCATION:**  
FROM THE JUNCTION OF STATE 176 AND US  
HWY 62/180, EAST FOR ±7 MILES TO LEASE  
ROAD. THEN SOUTH ON LEASE ROAD FOR ±4.5  
MILES. THEN EASTERLY ON LEASE ROAD FOR 1.5  
MILES TO PROPOSED LEASE ROAD.

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in the oilfield

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

**ADVANCE ENERGY PARTNERS HAT MESA**

REF: WOOL HEAD 20 STATE COM 508H / WELL PAD TOPO

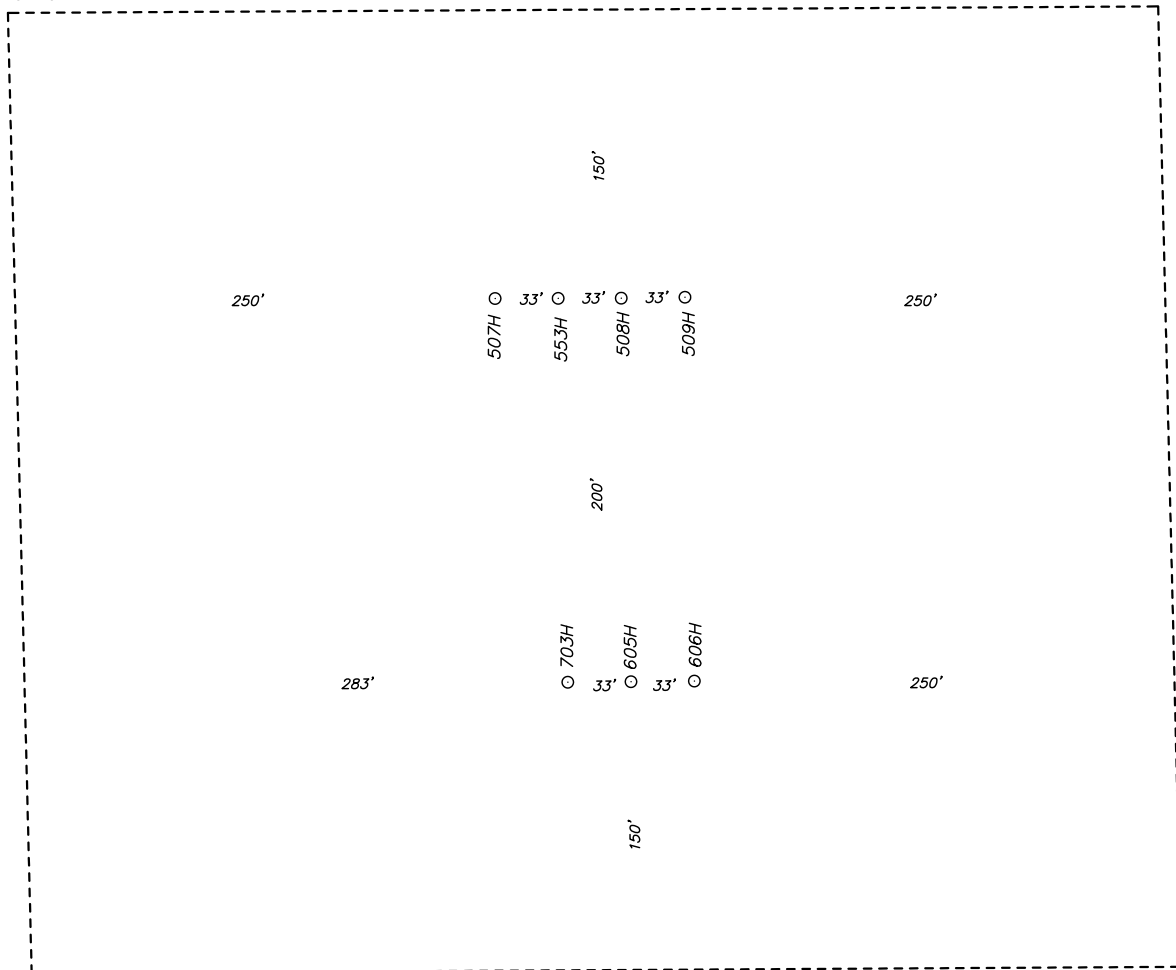
THE WOOL HEAD 20 STATE COM 508H LOCATED 350' FROM  
THE SOUTH LINE AND 2046' FROM THE EAST LINE OF  
SECTION 20, TOWNSHIP 21 SOUTH, RANGE 33 EAST.

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

**SECTION 20, TOWNSHIP 21 SOUTH, RANGE 33 EAST. N.M.P.M.,  
LEA COUNTY, NEW MEXICO.**

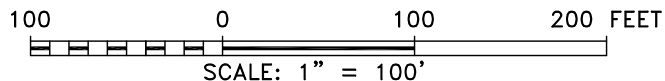
N32.458501°  
W103.593576°  
ELEV = 3721.3'

N32.458499°  
W103.591634°  
ELEV = 3740.2'



N32.457126°  
W103.593547°  
ELEV = 3714.9'

N32.457124°  
W103.591606°  
ELEV = 3713.6'



**ADVANCE ENERGY PARTNERS HAT MESA**

REF: WOOL HEAD 20 STATE COM 508H / WELL PAD TOPO

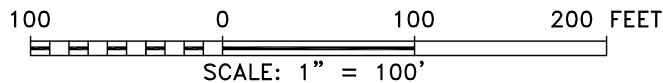
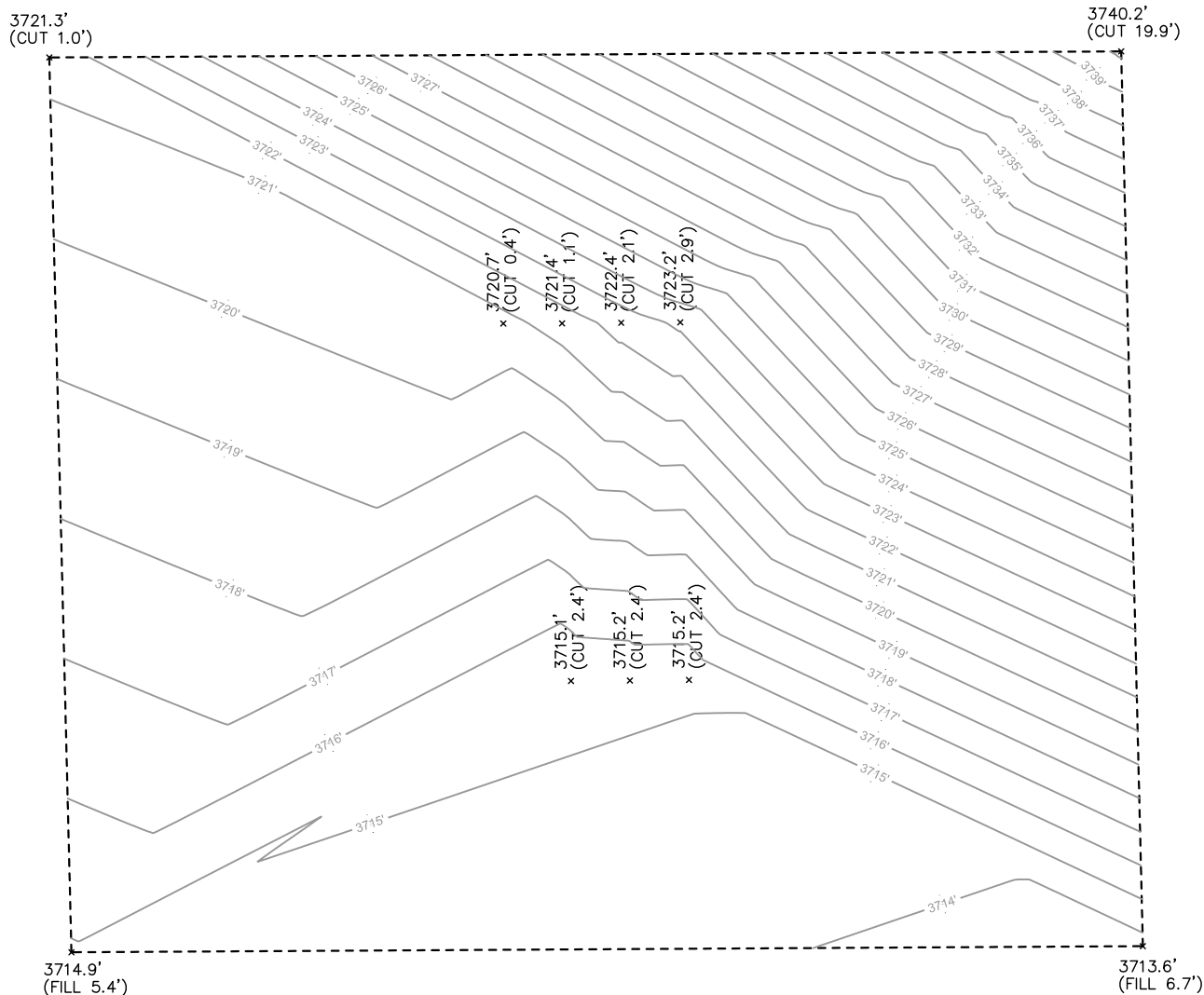
THE WOOL HEAD 20 STATE COM 508H LOCATED 350' FROM  
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**SECTION 20, TOWNSHIP 21 SOUTH, RANGE 33 EAST. N.M.P.M.,  
LEA COUNTY, NEW MEXICO.**



**ADVANCE ENERGY PARTNERS HAT MESA**

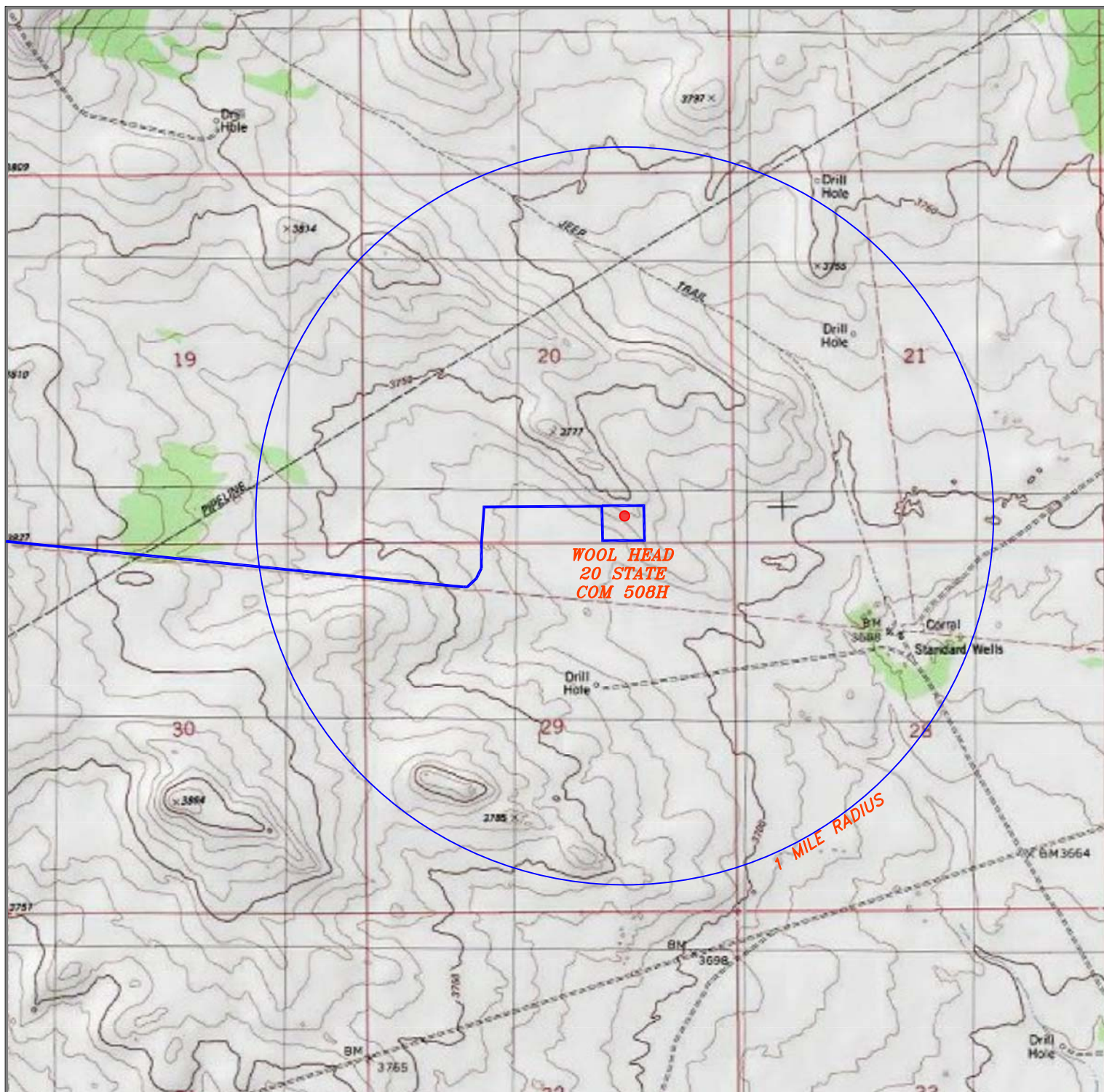
REF: WOOL HEAD 20 STATE COM WELL PAD B / CUT & FILL

THE WOOL HEAD 20 STATE COM WELL PAD  
SECTION 20, TOWNSHIP 21 SOUTH, RANGE 33 EAST.  
N.M.P.M., LEA COUNTY, NEW MEXICO.



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## WOOL HEAD 20 STATE COM 508H

Located 350' FSL and 2046' FEL  
Section 20, Township 21 South, Range 33 East,  
N.M.P.M., Lea County, New Mexico.



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0' 1000' 2000' 3000' 4000'

SCALE: 1" = 2000'

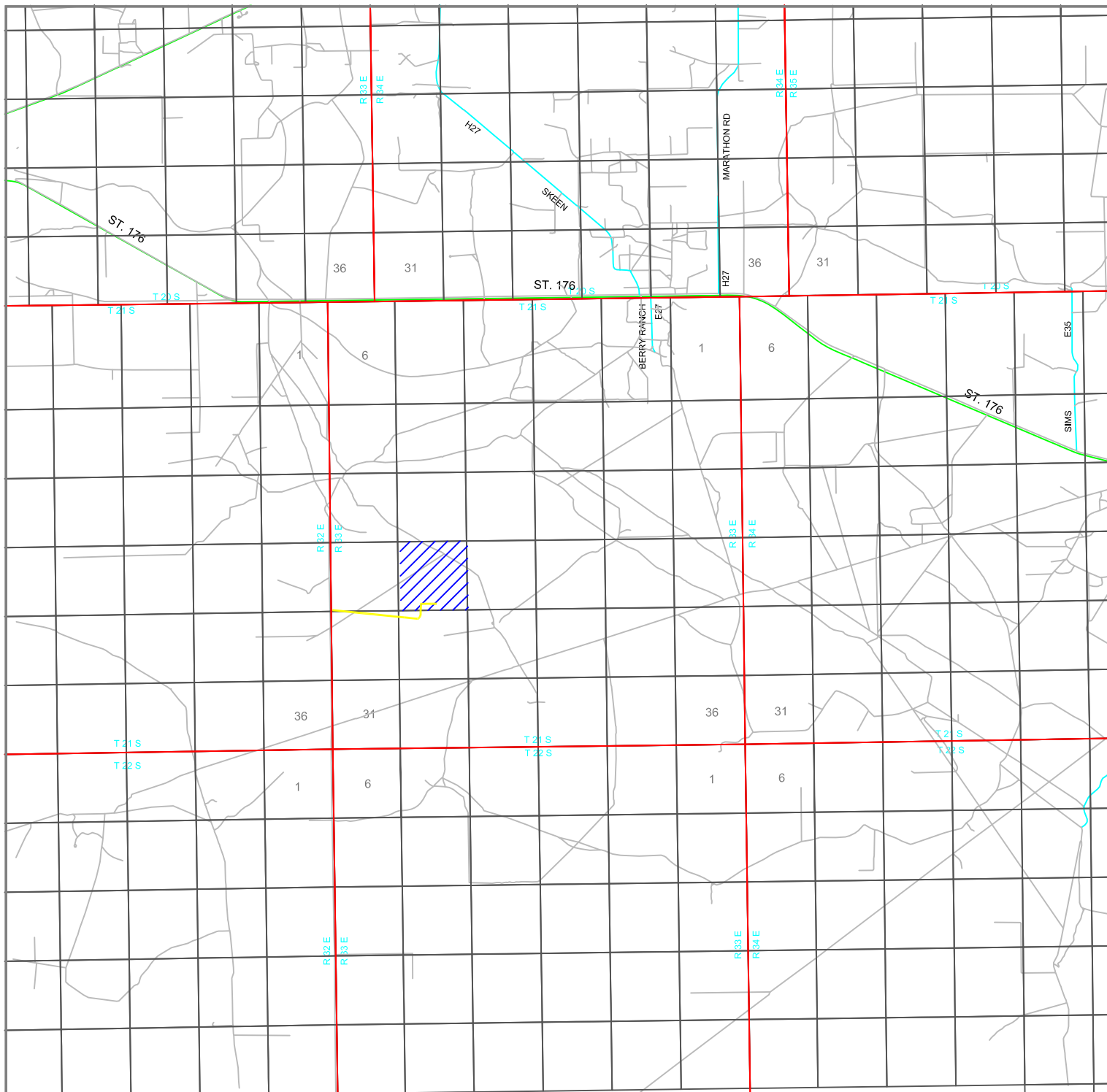
W.O. Number: KJG 34752

Survey Date: 07-26-2019

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



**ADVANCE  
ENERGY  
PARTNERS  
HAT MESA**



## WOOL HEAD 20 STATE COM 508H

Located 350' FSL and 2046' FEL  
 Section 20, Township 21 South, Range 33 East,  
 N.M.P.M., Lea County, New Mexico.



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 basinsurveys.com

0 1 MI 2 MI 3 MI 4 MI

SCALE: 1" = 2 MILES

W.O. Number: KJG 34752

Survey Date: 07-26-2019

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



**ADVANCE  
 ENERGY  
 PARTNERS  
 HAT MESA**



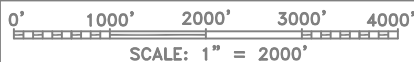


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**State of New Mexico**  
**Energy, Minerals and Natural Resources**  
**Oil Conservation Division**  
**1220 S. St Francis Dr.**  
**Santa Fe, NM 87505**

**GAS CAPTURE PLAN**

Date: 10/28/2019

☒ Original

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

☐ Amended - Reason for  
Amendment: \_\_\_\_\_

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

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

**Well(s)/Production Facility – Name of facility**

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

| Well Name                    | API          | Well Location<br>(ULSTR) | Footages    | Expected<br>MCF/D | Flared or<br>Vented | Comments                                 |
|------------------------------|--------------|--------------------------|-------------|-------------------|---------------------|------------------------------------------|
| WOOL HEAD 20 STATE COM #508H | 30-025-46469 | O-20-21S-33E             | 0350S 2046E | 1000              | Flared              | Flare during initial testing and cleanup |

**Gathering System and Pipeline Notification**

Well(s) will be connected to a production facility after flowback operations are complete, if gas transporter system is in place. The gas produced from production facility is dedicated to TARGA MIDSTREAM SERVICES LLC and will be connected to TARGA MIDSTREAM SERVICES LLC Low Pressure gathering system located in Lea County, New Mexico. It will require 1500' of pipeline to connect the facility to Low Pressure gathering system. ADVANCE ENERGY PARTNERS HAT MESA, LLC provides (periodically) to TARGA MIDSTREAM SERVICES LLC a drilling, completion and estimated first production date for wells that are scheduled to be drilled in the foreseeable future. In addition, ADVANCE ENERGY PARTNERS HAT MESA, LLC and TARGA MIDSTREAM SERVICES LLC have periodic conference calls to discuss changes to drilling and completion schedules. Gas from these wells will be processed at TARGA MIDSTREAM SERVICES LLC Processing Plant located in Sec. 36, Twn. 19S, Rng. 36E, Lea County, New Mexico. The actual flow of the gas will be based on compression operating parameters and gathering system pressures.

**Flowback Strategy**

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

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

**Alternatives to Reduce Flaring**

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

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

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State of New Mexico

Energy, Minerals and Natural Resources

Oil Conservation Division

1220 S. St Francis Dr.

Santa Fe, NM 87505

Form APD Comments

Permit 273605

PERMIT COMMENTS

|                                                                                                                                    |                                       |
|------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------|
| Operator Name and Address:<br>ADVANCE ENERGY PARTNERS HAT MESA, LLC [372417]<br>11490 Westheimer Rd., Ste 950<br>Houston, TX 77077 | API Number:<br>30-025-46469           |
|                                                                                                                                    | Well:<br>WOOL HEAD 20 STATE COM #508H |

| Created By | Comment                                                                                                                                           | Comment Date |
|------------|---------------------------------------------------------------------------------------------------------------------------------------------------|--------------|
| pkautz     | Sent email sent to Debbie Moughon with Advance Energy requesting info on potash leases within 1 mile. Sent on 10/23/2019                          | 10/23/2019   |
| pkautz     | Letters of inquiry were sent to James Rutley with the BLM and Niranjan Khalsa with SLO concerning Potash LMR and Buffer Zone. Sent on 10/23/2019. | 10/23/2019   |
| pkautz     | Received 10/23/2019 from James Rutley with BLM well is not in a LMR and not in a Buffer Zone                                                      | 10/23/2019   |
| pkautz     | Received 10/23/2019 from Niranjan Khalsa with SLO well is not in a LMR and not in a Buffer Zone                                                   | 10/23/2019   |

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Form APD Conditions

Permit 273605

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

**PERMIT CONDITIONS OF APPROVAL**

|                                                                                                                                    |                                       |
|------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------|
| Operator Name and Address:<br>ADVANCE ENERGY PARTNERS HAT MESA, LLC [372417]<br>11490 Westheimer Rd., Ste 950<br>Houston, TX 77077 | API Number:<br>30-025-46469           |
|                                                                                                                                    | Well:<br>WOOL HEAD 20 STATE COM #508H |

| OCD<br>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 NMOC 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, LLC



Wool Head 20 State Com 508H  
Lea County, New Mexico  
H&P 620  
Plan 0.1



Azimuths to Grid North  
True North:  $-0.40^\circ$   
Magnetic North:  $6.22^\circ$

Magnetic Field  
Strength: 48078.5nT  
Dip Angle:  $60.24^\circ$   
Date: 10/18/2019  
Model: MVHD

Magnetic North:  $6.22^\circ$  to Grid North

## SITE DETAILS: Wool Head 20 State Com 508H

Site Centre Northing: 531175.80  
Easting: 769827.20

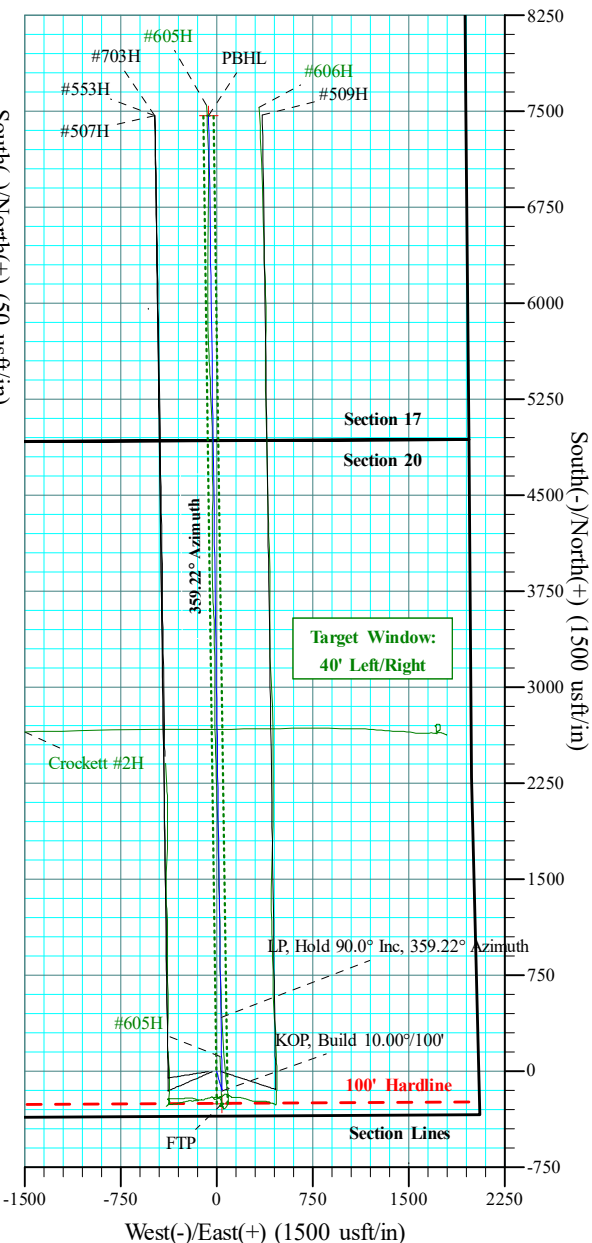
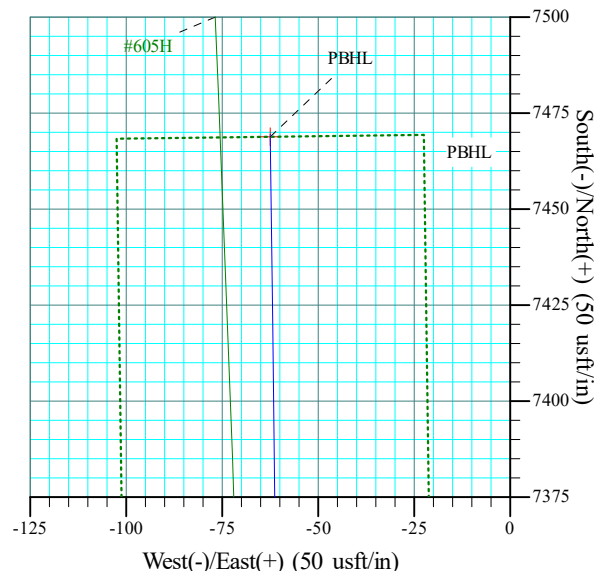
Positional Uncertainty: 0.00  
Convergence: 0.40  
Local North: Grid

## PROJECT DETAILS: Lea County, New Mexico

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

System Datum: Mean Sea Level

Depth Reference:  
3722'GL+26.5'KB @ 3748.50usft (H&P 620)

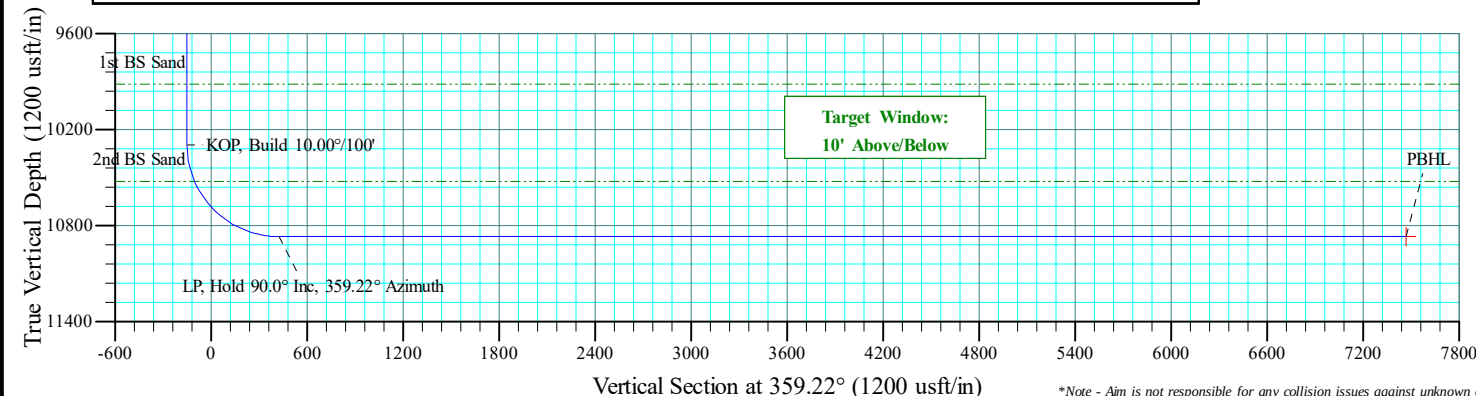


## SECTION DETAILS

| Sec | MD       | Inc   | Azi    | TVD      | +N/-S   | +E/-W  | Dleg  | TFace  | VSec    | Annotation                          |
|-----|----------|-------|--------|----------|---------|--------|-------|--------|---------|-------------------------------------|
| 1   | 0.00     | 0.00  | 0.00   | 0.00     | 0.00    | 0.00   | 0.00  | 0.00   | 0.00    |                                     |
| 2   | 2900.00  | 0.00  | 0.00   | 2900.00  | 0.00    | 0.00   | 0.00  | 0.00   | 0.00    | Build 1.00°/100'                    |
| 3   | 3400.00  | 5.00  | 164.71 | 3399.37  | -21.03  | 5.75   | 1.00  | 164.71 | -21.11  | Hold 5.0° Inc, 164.71° Azimuth      |
| 4   | 4683.87  | 5.00  | 164.71 | 4678.35  | -128.97 | 35.25  | 0.00  | 0.00   | -129.44 | Drop 1.00°/100'                     |
| 5   | 5183.87  | 0.00  | 0.00   | 5177.72  | -150.00 | 41.00  | 1.00  | 180.00 | -150.54 | Hold Vertical                       |
| 6   | 10303.19 | 0.00  | 0.00   | 10297.04 | -150.00 | 41.00  | 0.00  | 0.00   | -150.54 | KOP, Build 10.00°/100'              |
| 7   | 11203.19 | 90.00 | 359.22 | 10870.00 | 422.90  | 33.21  | 10.00 | 359.22 | 422.41  | LP, Hold 90.0° Inc, 359.22° Azimuth |
| 8   | 18249.74 | 90.00 | 359.22 | 10870.00 | 7468.80 | -62.60 | 0.00  | 0.00   | 7468.96 | PBHL                                |

## DESIGN TARGET DETAILS

| Name          | TVD      | +N/-S   | +E/-W  | Northing  | Easting   | Latitude         | Longitude         |
|---------------|----------|---------|--------|-----------|-----------|------------------|-------------------|
| FTP (WH508H)  | 0.00     | -249.80 | 42.70  | 530926.00 | 769869.90 | 32° 27' 26.639 N | 103° 35' 32.678 W |
| PBHL (WH508H) | 10870.00 | 7468.80 | -62.60 | 538644.60 | 769764.60 | 32° 28' 43.021 N | 103° 35' 33.282 W |



\*Note - Aim is not responsible for any collision issues against unknown offset wells.

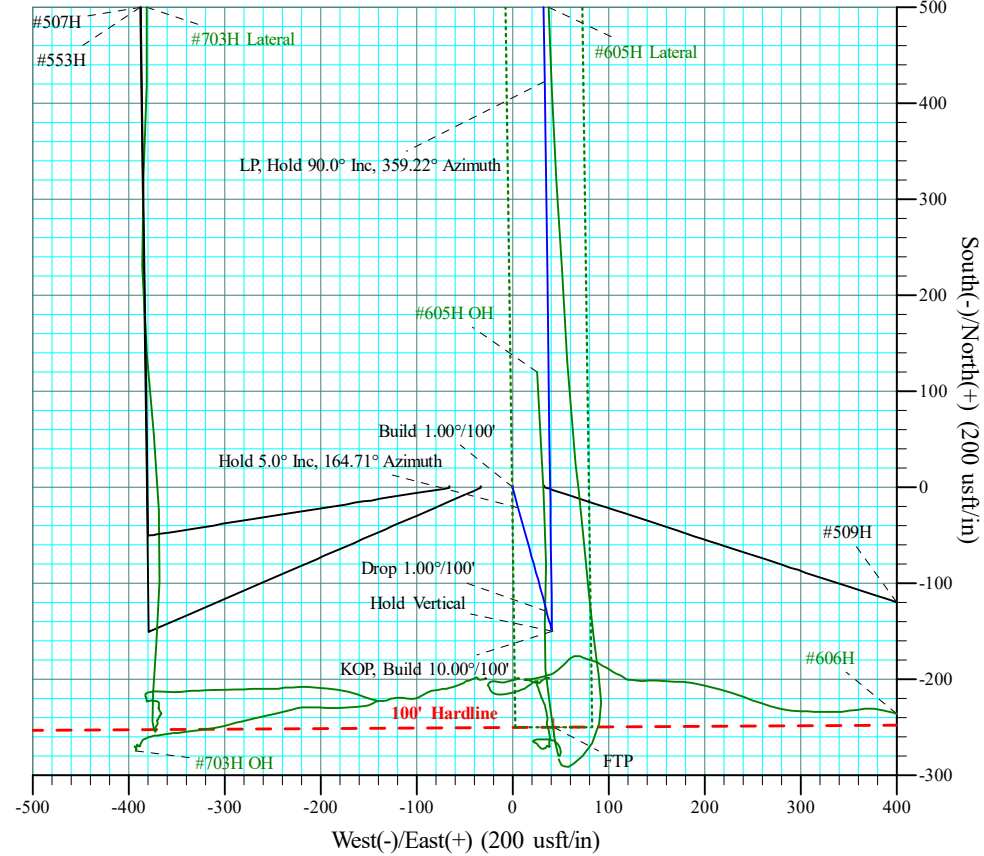
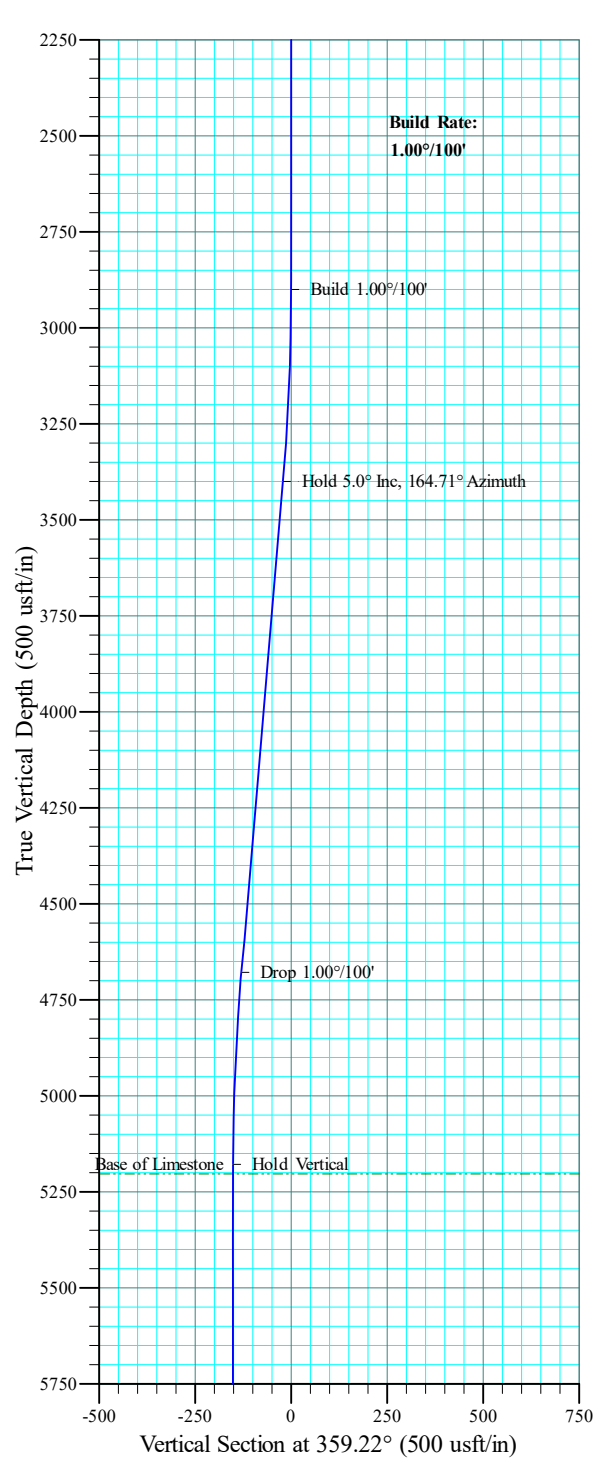
Drawn By: IG  
Date Created: 10/19/2019  
Date Revised: 10/19/2019  
File: Advance Energy - Wool Head 20 State Com 508H Plan 0.1.wpd



# Advance Energy Partners, LLC



Wool Head 20 State Com 508H  
Lea County, New Mexico  
H&P 620  
Plan 0.1



Azimuths to Grid North  
True North: -0.40°  
Magnetic North: 6.22°  
  
Magnetic Field  
Strength: 48078.5nT  
Dip Angle: 60.24°  
Date: 10/18/2019  
Model: MVHD

Magnetic North: 6.22° to Grid North

| SLOTS       |         |         |
|-------------|---------|---------|
| Slot Name   | +N/-S   | +E/-W   |
| 507H        | 0.32    | -65.80  |
| 508H        | 0.72    | 0.00    |
| 509H        | 1.02    | 33.10   |
| 553H        | 0.42    | -33.00  |
| 605H        | -199.28 | 4.90    |
| 606H        | -198.88 | 37.90   |
| 703H        | -199.58 | -28.00  |
| Crockett 2H | 2629.16 | 1796.79 |

| SITE DETAILS: Wool Head 20 State Com 508H |           |
|-------------------------------------------|-----------|
| Site Centre Northing:                     | 531175.80 |
| Easting:                                  | 769827.20 |
| Positional Uncertainty:                   | 0.00      |
| Convergence:                              | 0.40      |
| Local North:                              | Grid      |
| Depth Reference:                          |           |
| 3722'GL+26.5'KB @ 3748.50usft (H&P 620)   |           |

| PROJECT DETAILS: Lea County, New Mexico |  |  |  |
|-----------------------------------------|--|--|--|
| Geodetic System: US State Plane 1983    |  |  |  |
| Datum: North American Datum 1983        |  |  |  |
| Ellipsoid: GRS 1980                     |  |  |  |
| Zone: New Mexico Eastern Zone           |  |  |  |
| System Datum: Mean Sea Level            |  |  |  |

\*Note - Aim is not responsible for collision issues against any unknown offset wells.

## DESIGN TARGET DETAILS

| Name          | TVD      | +N/-S   | +E/-W  | Northing  | Easting   | Latitude         | Longitude         |
|---------------|----------|---------|--------|-----------|-----------|------------------|-------------------|
| FTP (WH508H)  | 0.00     | -249.80 | 42.70  | 530926.00 | 769869.90 | 32° 27' 26.639 N | 103° 35' 32.678 W |
| PBHL (WH508H) | 10870.00 | 7468.80 | -62.60 | 538644.60 | 769764.60 | 32° 28' 43.021 N | 103° 35' 33.282 W |

Drawn By: IG  
Date Created: 10/19/2019  
Date Revised: 10/19/2019

File: Advance Energy - Wool Head 20 State Com 508H Plan 0.1 Surface.wpc

## SECTION DETAILS

| Sec | MD       | Inc   | Azi    | TVD      | +N/-S   | +E/-W  | Dleg  | TFace  | Vsect   | Annotation                          |
|-----|----------|-------|--------|----------|---------|--------|-------|--------|---------|-------------------------------------|
| 1   | 0.00     | 0.00  | 0.00   | 0.00     | 0.00    | 0.00   | 0.00  | 0.00   | 0.00    |                                     |
| 2   | 2900.00  | 0.00  | 0.00   | 2900.00  | 0.00    | 0.00   | 0.00  | 0.00   | 0.00    | Build 1.00°/100'                    |
| 3   | 3400.00  | 5.00  | 164.71 | 3399.37  | -21.03  | 5.75   | 1.00  | 164.71 | -21.11  | Hold 5.0° Inc, 164.71° Azimuth      |
| 4   | 4683.87  | 5.00  | 164.71 | 4678.35  | -128.97 | 35.25  | 0.00  | 0.00   | 0.00    | Drop 1.00°/100'                     |
| 5   | 5183.87  | 0.00  | 0.00   | 5177.72  | -150.00 | 41.00  | 1.00  | 180.00 | -150.54 | Hold Vertical                       |
| 6   | 10303.19 | 0.00  | 0.00   | 10297.04 | -150.00 | 41.00  | 0.00  | 0.00   | -150.54 | KOP, Build 10.00°/100'              |
| 7   | 11203.19 | 90.00 | 359.22 | 10870.00 | 422.90  | 33.21  | 10.00 | 359.22 | 422.41  | LP, Hold 90.0° Inc, 359.22° Azimuth |
| 8   | 18249.74 | 90.00 | 359.22 | 10870.00 | 7468.80 | -62.60 | 0.00  | 0.00   | 7468.96 | PBHL                                |

# Aim Directional Services, LLC

## Survey Report

|                  |                              |                                     |                                         |
|------------------|------------------------------|-------------------------------------|-----------------------------------------|
| <b>Company:</b>  | Advance Energy Partners, LLC | <b>Local Co-ordinate Reference:</b> | Site Wool Head 20 State Com 508H        |
| <b>Project:</b>  | Lea County, New Mexico       | <b>TVD Reference:</b>               | 3722'GL+26.5'KB @ 3748.50usft (H&P 620) |
| <b>Site:</b>     | Wool Head 20 State Com 508H  | <b>MD Reference:</b>                | 3722'GL+26.5'KB @ 3748.50usft (H&P 620) |
| <b>Well:</b>     | #508H                        | <b>North Reference:</b>             | Grid                                    |
| <b>Wellbore:</b> | Lateral 1r0                  | <b>Survey Calculation Method:</b>   | Minimum Curvature                       |
| <b>Design:</b>   | Plan 0.1                     | <b>Database:</b>                    | EDM 5000.1 Aim Database                 |

|                    |                           |                      |                |
|--------------------|---------------------------|----------------------|----------------|
| <b>Project</b>     | Lea County, New Mexico    |                      |                |
| <b>Map System:</b> | US State Plane 1983       | <b>System Datum:</b> | Mean Sea Level |
| <b>Geo Datum:</b>  | North American Datum 1983 |                      |                |
| <b>Map Zone:</b>   | New Mexico Eastern Zone   |                      |                |

|                       |           |                             |                 |                   |                   |
|-----------------------|-----------|-----------------------------|-----------------|-------------------|-------------------|
| Site                  |           | Wool Head 20 State Com 508H |                 |                   |                   |
| Site Position:        |           | Northing:                   | 531,175.80 usft | Latitude:         | 32° 27' 29.114 N  |
| From:                 | Map       | Easting:                    | 769,827.20 usft | Longitude:        | 103° 35' 33.156 W |
| Position Uncertainty: | 0.00 usft | Slot Radius:                | 13-3/16 "       | Grid Convergence: | 0.40 °            |

|                      |       |           |                     |                 |               |                   |
|----------------------|-------|-----------|---------------------|-----------------|---------------|-------------------|
| Well                 | #508H |           |                     |                 |               |                   |
| Well Position        | +N/-S | 0.00 usft | Northing:           | 531,175.80 usft | Latitude:     | 32° 27' 29.114 N  |
|                      | +E/-W | 0.00 usft | Easting:            | 769,827.20 usft | Longitude:    | 103° 35' 33.156 W |
| Position Uncertainty |       | 0.00 usft | Wellhead Elevation: | usft            | Ground Level: | 3,722.00 usft     |

|                  |                   |                    |                        |                      |                            |
|------------------|-------------------|--------------------|------------------------|----------------------|----------------------------|
| <b>Wellbore</b>  | Lateral 1r0       |                    |                        |                      |                            |
| <b>Magnetics</b> | <b>Model Name</b> | <b>Sample Date</b> | <b>Declination (°)</b> | <b>Dip Angle (°)</b> | <b>Field Strength (nT)</b> |
|                  | MVHD              | 10/18/2019         | 6.61                   | 60.24                | 48,078.45641671            |

|                          |                                |                     |                      |                      |  |
|--------------------------|--------------------------------|---------------------|----------------------|----------------------|--|
| <b>Design</b>            | Plan 0.1                       |                     |                      |                      |  |
| <b>Audit Notes:</b>      |                                |                     |                      |                      |  |
| <b>Version:</b>          | <b>Phase:</b>                  | PROTOTYPE           | <b>Tie On Depth:</b> | 0.00                 |  |
| <b>Vertical Section:</b> | <b>Depth From (TVD) (usft)</b> | <b>+N/-S (usft)</b> | <b>+E/-W (usft)</b>  | <b>Direction (°)</b> |  |
|                          | 0.00                           | 0.00                | 0.00                 | 359.22               |  |

|                            |                  |                          |                  |                    |  |
|----------------------------|------------------|--------------------------|------------------|--------------------|--|
| <b>Survey Tool Program</b> | <b>Date</b>      | 10/20/2019               |                  |                    |  |
| <b>From (usft)</b>         | <b>To (usft)</b> | <b>Survey (Wellbore)</b> | <b>Tool Name</b> | <b>Description</b> |  |
| 0.00                       | 18,249.74        | Plan 0.1 (Lateral 1r0)   | B001Mb_MWD+HRGM  | OWSG MWD + HRGM    |  |

|                              |                        |                    |                              |                     |                     |                                |                                |                               |                              |
|------------------------------|------------------------|--------------------|------------------------------|---------------------|---------------------|--------------------------------|--------------------------------|-------------------------------|------------------------------|
| <b>Planned Survey</b>        |                        |                    |                              |                     |                     |                                |                                |                               |                              |
| <b>Measured Depth (usft)</b> | <b>Inclination (°)</b> | <b>Azimuth (°)</b> | <b>Vertical Depth (usft)</b> | <b>+N/-S (usft)</b> | <b>+E/-W (usft)</b> | <b>Vertical Section (usft)</b> | <b>Dogleg Rate (°/100usft)</b> | <b>Build Rate (°/100usft)</b> | <b>Turn Rate (°/100usft)</b> |
| 0.00                         | 0.00                   | 0.00               | 0.00                         | 0.00                | 0.00                | 0.00                           | 0.00                           | 0.00                          | 0.00                         |
| <b>FTP (WH508H)</b>          |                        |                    |                              |                     |                     |                                |                                |                               |                              |
| 100.00                       | 0.00                   | 0.00               | 100.00                       | 0.00                | 0.00                | 0.00                           | 0.00                           | 0.00                          | 0.00                         |
| 200.00                       | 0.00                   | 0.00               | 200.00                       | 0.00                | 0.00                | 0.00                           | 0.00                           | 0.00                          | 0.00                         |
| 300.00                       | 0.00                   | 0.00               | 300.00                       | 0.00                | 0.00                | 0.00                           | 0.00                           | 0.00                          | 0.00                         |
| 400.00                       | 0.00                   | 0.00               | 400.00                       | 0.00                | 0.00                | 0.00                           | 0.00                           | 0.00                          | 0.00                         |
| 500.00                       | 0.00                   | 0.00               | 500.00                       | 0.00                | 0.00                | 0.00                           | 0.00                           | 0.00                          | 0.00                         |
| 600.00                       | 0.00                   | 0.00               | 600.00                       | 0.00                | 0.00                | 0.00                           | 0.00                           | 0.00                          | 0.00                         |
| 700.00                       | 0.00                   | 0.00               | 700.00                       | 0.00                | 0.00                | 0.00                           | 0.00                           | 0.00                          | 0.00                         |
| 800.00                       | 0.00                   | 0.00               | 800.00                       | 0.00                | 0.00                | 0.00                           | 0.00                           | 0.00                          | 0.00                         |
| 900.00                       | 0.00                   | 0.00               | 900.00                       | 0.00                | 0.00                | 0.00                           | 0.00                           | 0.00                          | 0.00                         |

# Aim Directional Services, LLC

## Survey Report

|                  |                              |                                     |                                         |
|------------------|------------------------------|-------------------------------------|-----------------------------------------|
| <b>Company:</b>  | Advance Energy Partners, LLC | <b>Local Co-ordinate Reference:</b> | Site Wool Head 20 State Com 508H        |
| <b>Project:</b>  | Lea County, New Mexico       | <b>TVD Reference:</b>               | 3722'GL+26.5'KB @ 3748.50usft (H&P 620) |
| <b>Site:</b>     | Wool Head 20 State Com 508H  | <b>MD Reference:</b>                | 3722'GL+26.5'KB @ 3748.50usft (H&P 620) |
| <b>Well:</b>     | #508H                        | <b>North Reference:</b>             | Grid                                    |
| <b>Wellbore:</b> | Lateral 1r0                  | <b>Survey Calculation Method:</b>   | Minimum Curvature                       |
| <b>Design:</b>   | Plan 0.1                     | <b>Database:</b>                    | EDM 5000.1 Aim Database                 |

### Planned Survey

| Measured Depth (usft)                 | Inclination (°) | Azimuth (°) | Vertical Depth (usft) | +N/-S (usft) | +E/-W (usft) | Vertical Section (usft) | Dogleg Rate (°/100usft) | Build Rate (°/100usft) | Turn Rate (°/100usft) |
|---------------------------------------|-----------------|-------------|-----------------------|--------------|--------------|-------------------------|-------------------------|------------------------|-----------------------|
| 1,000.00                              | 0.00            | 0.00        | 1,000.00              | 0.00         | 0.00         | 0.00                    | 0.00                    | 0.00                   | 0.00                  |
| 1,100.00                              | 0.00            | 0.00        | 1,100.00              | 0.00         | 0.00         | 0.00                    | 0.00                    | 0.00                   | 0.00                  |
| 1,200.00                              | 0.00            | 0.00        | 1,200.00              | 0.00         | 0.00         | 0.00                    | 0.00                    | 0.00                   | 0.00                  |
| 1,300.00                              | 0.00            | 0.00        | 1,300.00              | 0.00         | 0.00         | 0.00                    | 0.00                    | 0.00                   | 0.00                  |
| 1,400.00                              | 0.00            | 0.00        | 1,400.00              | 0.00         | 0.00         | 0.00                    | 0.00                    | 0.00                   | 0.00                  |
| 1,500.00                              | 0.00            | 0.00        | 1,500.00              | 0.00         | 0.00         | 0.00                    | 0.00                    | 0.00                   | 0.00                  |
| 1,600.00                              | 0.00            | 0.00        | 1,600.00              | 0.00         | 0.00         | 0.00                    | 0.00                    | 0.00                   | 0.00                  |
| 1,700.00                              | 0.00            | 0.00        | 1,700.00              | 0.00         | 0.00         | 0.00                    | 0.00                    | 0.00                   | 0.00                  |
| 1,800.00                              | 0.00            | 0.00        | 1,800.00              | 0.00         | 0.00         | 0.00                    | 0.00                    | 0.00                   | 0.00                  |
| <b>Rustler</b>                        |                 |             |                       |              |              |                         |                         |                        |                       |
| 1,900.00                              | 0.00            | 0.00        | 1,900.00              | 0.00         | 0.00         | 0.00                    | 0.00                    | 0.00                   | 0.00                  |
| 2,000.00                              | 0.00            | 0.00        | 2,000.00              | 0.00         | 0.00         | 0.00                    | 0.00                    | 0.00                   | 0.00                  |
| 2,100.00                              | 0.00            | 0.00        | 2,100.00              | 0.00         | 0.00         | 0.00                    | 0.00                    | 0.00                   | 0.00                  |
| 2,200.00                              | 0.00            | 0.00        | 2,200.00              | 0.00         | 0.00         | 0.00                    | 0.00                    | 0.00                   | 0.00                  |
| 2,300.00                              | 0.00            | 0.00        | 2,300.00              | 0.00         | 0.00         | 0.00                    | 0.00                    | 0.00                   | 0.00                  |
| 2,400.00                              | 0.00            | 0.00        | 2,400.00              | 0.00         | 0.00         | 0.00                    | 0.00                    | 0.00                   | 0.00                  |
| 2,500.00                              | 0.00            | 0.00        | 2,500.00              | 0.00         | 0.00         | 0.00                    | 0.00                    | 0.00                   | 0.00                  |
| 2,600.00                              | 0.00            | 0.00        | 2,600.00              | 0.00         | 0.00         | 0.00                    | 0.00                    | 0.00                   | 0.00                  |
| 2,700.00                              | 0.00            | 0.00        | 2,700.00              | 0.00         | 0.00         | 0.00                    | 0.00                    | 0.00                   | 0.00                  |
| 2,800.00                              | 0.00            | 0.00        | 2,800.00              | 0.00         | 0.00         | 0.00                    | 0.00                    | 0.00                   | 0.00                  |
| 2,900.00                              | 0.00            | 0.00        | 2,900.00              | 0.00         | 0.00         | 0.00                    | 0.00                    | 0.00                   | 0.00                  |
| <b>Build 1.00°/100'</b>               |                 |             |                       |              |              |                         |                         |                        |                       |
| 3,000.00                              | 1.00            | 164.71      | 2,999.99              | -0.84        | 0.23         | -0.84                   | 1.00                    | 1.00                   | 0.00                  |
| 3,100.00                              | 2.00            | 164.71      | 3,099.96              | -3.37        | 0.92         | -3.38                   | 1.00                    | 1.00                   | 0.00                  |
| 3,200.00                              | 3.00            | 164.71      | 3,199.86              | -7.57        | 2.07         | -7.60                   | 1.00                    | 1.00                   | 0.00                  |
| 3,300.00                              | 4.00            | 164.71      | 3,299.68              | -13.46       | 3.68         | -13.51                  | 1.00                    | 1.00                   | 0.00                  |
| 3,400.00                              | 5.00            | 164.71      | 3,399.37              | -21.03       | 5.75         | -21.11                  | 1.00                    | 1.00                   | 0.00                  |
| <b>Hold 5.0° Inc, 164.71° Azimuth</b> |                 |             |                       |              |              |                         |                         |                        |                       |
| 3,500.00                              | 5.00            | 164.71      | 3,498.99              | -29.44       | 8.05         | -29.55                  | 0.00                    | 0.00                   | 0.00                  |
| 3,600.00                              | 5.00            | 164.71      | 3,598.60              | -37.85       | 10.34        | -37.98                  | 0.00                    | 0.00                   | 0.00                  |
| 3,700.00                              | 5.00            | 164.71      | 3,698.22              | -46.25       | 12.64        | -46.42                  | 0.00                    | 0.00                   | 0.00                  |
| 3,800.00                              | 5.00            | 164.71      | 3,797.84              | -54.66       | 14.94        | -54.86                  | 0.00                    | 0.00                   | 0.00                  |
| 3,900.00                              | 5.00            | 164.71      | 3,897.46              | -63.07       | 17.24        | -63.30                  | 0.00                    | 0.00                   | 0.00                  |
| 4,000.00                              | 5.00            | 164.71      | 3,997.08              | -71.47       | 19.54        | -71.73                  | 0.00                    | 0.00                   | 0.00                  |
| 4,100.00                              | 5.00            | 164.71      | 4,096.70              | -79.88       | 21.83        | -80.17                  | 0.00                    | 0.00                   | 0.00                  |
| 4,200.00                              | 5.00            | 164.71      | 4,196.32              | -88.29       | 24.13        | -88.61                  | 0.00                    | 0.00                   | 0.00                  |
| 4,300.00                              | 5.00            | 164.71      | 4,295.94              | -96.70       | 26.43        | -97.05                  | 0.00                    | 0.00                   | 0.00                  |
| 4,400.00                              | 5.00            | 164.71      | 4,395.56              | -105.10      | 28.73        | -105.48                 | 0.00                    | 0.00                   | 0.00                  |
| 4,500.00                              | 5.00            | 164.71      | 4,495.18              | -113.51      | 31.03        | -113.92                 | 0.00                    | 0.00                   | 0.00                  |
| 4,600.00                              | 5.00            | 164.71      | 4,594.80              | -121.92      | 33.32        | -122.36                 | 0.00                    | 0.00                   | 0.00                  |
| 4,683.87                              | 5.00            | 164.71      | 4,678.35              | -128.97      | 35.25        | -129.44                 | 0.00                    | 0.00                   | 0.00                  |
| <b>Drop 1.00°/100'</b>                |                 |             |                       |              |              |                         |                         |                        |                       |
| 4,700.00                              | 4.84            | 164.71      | 4,694.42              | -130.30      | 35.62        | -130.78                 | 1.00                    | -1.00                  | 0.00                  |
| 4,800.00                              | 3.84            | 164.71      | 4,794.13              | -137.60      | 37.61        | -138.10                 | 1.00                    | -1.00                  | 0.00                  |

# Aim Directional Services, LLC

## Survey Report

|                  |                              |                                     |                                         |
|------------------|------------------------------|-------------------------------------|-----------------------------------------|
| <b>Company:</b>  | Advance Energy Partners, LLC | <b>Local Co-ordinate Reference:</b> | Site Wool Head 20 State Com 508H        |
| <b>Project:</b>  | Lea County, New Mexico       | <b>TVD Reference:</b>               | 3722'GL+26.5'KB @ 3748.50usft (H&P 620) |
| <b>Site:</b>     | Wool Head 20 State Com 508H  | <b>MD Reference:</b>                | 3722'GL+26.5'KB @ 3748.50usft (H&P 620) |
| <b>Well:</b>     | #508H                        | <b>North Reference:</b>             | Grid                                    |
| <b>Wellbore:</b> | Lateral 1r0                  | <b>Survey Calculation Method:</b>   | Minimum Curvature                       |
| <b>Design:</b>   | Plan 0.1                     | <b>Database:</b>                    | EDM 5000.1 Aim Database                 |

### Planned Survey

| Measured Depth (usft)    | Inclination (°) | Azimuth (°) | Vertical Depth (usft) | +N/-S (usft) | +E/-W (usft) | Vertical Section (usft) | Dogleg Rate (°/100usft) | Build Rate (°/100usft) | Turn Rate (°/100usft) |
|--------------------------|-----------------|-------------|-----------------------|--------------|--------------|-------------------------|-------------------------|------------------------|-----------------------|
| 4,900.00                 | 2.84            | 164.71      | 4,893.96              | -143.22      | 39.15        | -143.74                 | 1.00                    | -1.00                  | 0.00                  |
| 5,000.00                 | 1.84            | 164.71      | 4,993.88              | -147.15      | 40.22        | -147.69                 | 1.00                    | -1.00                  | 0.00                  |
| 5,100.00                 | 0.84            | 164.71      | 5,093.85              | -149.41      | 40.84        | -149.95                 | 1.00                    | -1.00                  | 0.00                  |
| 5,183.87                 | 0.00            | 0.00        | 5,177.72              | -150.00      | 41.00        | -150.54                 | 1.00                    | -1.00                  | 0.00                  |
| <b>Hold Vertical</b>     |                 |             |                       |              |              |                         |                         |                        |                       |
| 5,200.00                 | 0.00            | 0.00        | 5,193.85              | -150.00      | 41.00        | -150.54                 | 0.00                    | 0.00                   | 0.00                  |
| 5,209.15                 | 0.00            | 0.00        | 5,203.00              | -150.00      | 41.00        | -150.54                 | 0.00                    | 0.00                   | 0.00                  |
| <b>Base of Limestone</b> |                 |             |                       |              |              |                         |                         |                        |                       |
| 5,300.00                 | 0.00            | 0.00        | 5,293.85              | -150.00      | 41.00        | -150.54                 | 0.00                    | 0.00                   | 0.00                  |
| 5,400.00                 | 0.00            | 0.00        | 5,393.85              | -150.00      | 41.00        | -150.54                 | 0.00                    | 0.00                   | 0.00                  |
| 5,500.00                 | 0.00            | 0.00        | 5,493.85              | -150.00      | 41.00        | -150.54                 | 0.00                    | 0.00                   | 0.00                  |
| 5,600.00                 | 0.00            | 0.00        | 5,593.85              | -150.00      | 41.00        | -150.54                 | 0.00                    | 0.00                   | 0.00                  |
| 5,700.00                 | 0.00            | 0.00        | 5,693.85              | -150.00      | 41.00        | -150.54                 | 0.00                    | 0.00                   | 0.00                  |
| 5,800.00                 | 0.00            | 0.00        | 5,793.85              | -150.00      | 41.00        | -150.54                 | 0.00                    | 0.00                   | 0.00                  |
| 5,900.00                 | 0.00            | 0.00        | 5,893.85              | -150.00      | 41.00        | -150.54                 | 0.00                    | 0.00                   | 0.00                  |
| 6,000.00                 | 0.00            | 0.00        | 5,993.85              | -150.00      | 41.00        | -150.54                 | 0.00                    | 0.00                   | 0.00                  |
| 6,100.00                 | 0.00            | 0.00        | 6,093.85              | -150.00      | 41.00        | -150.54                 | 0.00                    | 0.00                   | 0.00                  |
| 6,200.00                 | 0.00            | 0.00        | 6,193.85              | -150.00      | 41.00        | -150.54                 | 0.00                    | 0.00                   | 0.00                  |
| 6,300.00                 | 0.00            | 0.00        | 6,293.85              | -150.00      | 41.00        | -150.54                 | 0.00                    | 0.00                   | 0.00                  |
| 6,400.00                 | 0.00            | 0.00        | 6,393.85              | -150.00      | 41.00        | -150.54                 | 0.00                    | 0.00                   | 0.00                  |
| 6,500.00                 | 0.00            | 0.00        | 6,493.85              | -150.00      | 41.00        | -150.54                 | 0.00                    | 0.00                   | 0.00                  |
| 6,600.00                 | 0.00            | 0.00        | 6,593.85              | -150.00      | 41.00        | -150.54                 | 0.00                    | 0.00                   | 0.00                  |
| 6,700.00                 | 0.00            | 0.00        | 6,693.85              | -150.00      | 41.00        | -150.54                 | 0.00                    | 0.00                   | 0.00                  |
| 6,800.00                 | 0.00            | 0.00        | 6,793.85              | -150.00      | 41.00        | -150.54                 | 0.00                    | 0.00                   | 0.00                  |
| 6,900.00                 | 0.00            | 0.00        | 6,893.85              | -150.00      | 41.00        | -150.54                 | 0.00                    | 0.00                   | 0.00                  |
| 7,000.00                 | 0.00            | 0.00        | 6,993.85              | -150.00      | 41.00        | -150.54                 | 0.00                    | 0.00                   | 0.00                  |
| 7,100.00                 | 0.00            | 0.00        | 7,093.85              | -150.00      | 41.00        | -150.54                 | 0.00                    | 0.00                   | 0.00                  |
| 7,200.00                 | 0.00            | 0.00        | 7,193.85              | -150.00      | 41.00        | -150.54                 | 0.00                    | 0.00                   | 0.00                  |
| 7,300.00                 | 0.00            | 0.00        | 7,293.85              | -150.00      | 41.00        | -150.54                 | 0.00                    | 0.00                   | 0.00                  |
| 7,400.00                 | 0.00            | 0.00        | 7,393.85              | -150.00      | 41.00        | -150.54                 | 0.00                    | 0.00                   | 0.00                  |
| 7,500.00                 | 0.00            | 0.00        | 7,493.85              | -150.00      | 41.00        | -150.54                 | 0.00                    | 0.00                   | 0.00                  |
| 7,600.00                 | 0.00            | 0.00        | 7,593.85              | -150.00      | 41.00        | -150.54                 | 0.00                    | 0.00                   | 0.00                  |
| 7,700.00                 | 0.00            | 0.00        | 7,693.85              | -150.00      | 41.00        | -150.54                 | 0.00                    | 0.00                   | 0.00                  |
| 7,800.00                 | 0.00            | 0.00        | 7,793.85              | -150.00      | 41.00        | -150.54                 | 0.00                    | 0.00                   | 0.00                  |
| 7,900.00                 | 0.00            | 0.00        | 7,893.85              | -150.00      | 41.00        | -150.54                 | 0.00                    | 0.00                   | 0.00                  |
| 8,000.00                 | 0.00            | 0.00        | 7,993.85              | -150.00      | 41.00        | -150.54                 | 0.00                    | 0.00                   | 0.00                  |
| 8,100.00                 | 0.00            | 0.00        | 8,093.85              | -150.00      | 41.00        | -150.54                 | 0.00                    | 0.00                   | 0.00                  |
| 8,200.00                 | 0.00            | 0.00        | 8,193.85              | -150.00      | 41.00        | -150.54                 | 0.00                    | 0.00                   | 0.00                  |
| 8,300.00                 | 0.00            | 0.00        | 8,293.85              | -150.00      | 41.00        | -150.54                 | 0.00                    | 0.00                   | 0.00                  |
| 8,400.00                 | 0.00            | 0.00        | 8,393.85              | -150.00      | 41.00        | -150.54                 | 0.00                    | 0.00                   | 0.00                  |
| 8,432.15                 | 0.00            | 0.00        | 8,426.00              | -150.00      | 41.00        | -150.54                 | 0.00                    | 0.00                   | 0.00                  |
| <b>Lower Brushy</b>      |                 |             |                       |              |              |                         |                         |                        |                       |
| 8,500.00                 | 0.00            | 0.00        | 8,493.85              | -150.00      | 41.00        | -150.54                 | 0.00                    | 0.00                   | 0.00                  |

# Aim Directional Services, LLC

## Survey Report

|                  |                              |                                     |                                         |
|------------------|------------------------------|-------------------------------------|-----------------------------------------|
| <b>Company:</b>  | Advance Energy Partners, LLC | <b>Local Co-ordinate Reference:</b> | Site Wool Head 20 State Com 508H        |
| <b>Project:</b>  | Lea County, New Mexico       | <b>TVD Reference:</b>               | 3722'GL+26.5'KB @ 3748.50usft (H&P 620) |
| <b>Site:</b>     | Wool Head 20 State Com 508H  | <b>MD Reference:</b>                | 3722'GL+26.5'KB @ 3748.50usft (H&P 620) |
| <b>Well:</b>     | #508H                        | <b>North Reference:</b>             | Grid                                    |
| <b>Wellbore:</b> | Lateral 1r0                  | <b>Survey Calculation Method:</b>   | Minimum Curvature                       |
| <b>Design:</b>   | Plan 0.1                     | <b>Database:</b>                    | EDM 5000.1 Aim Database                 |

### Planned Survey

| Measured Depth (usft)                      | Inclination (°) | Azimuth (°) | Vertical Depth (usft) | +N/-S (usft) | +E/-W (usft) | Vertical Section (usft) | Dogleg Rate (°/100usft) | Build Rate (°/100usft) | Turn Rate (°/100usft) |
|--------------------------------------------|-----------------|-------------|-----------------------|--------------|--------------|-------------------------|-------------------------|------------------------|-----------------------|
| 8,600.00                                   | 0.00            | 0.00        | 8,593.85              | -150.00      | 41.00        | -150.54                 | 0.00                    | 0.00                   | 0.00                  |
| 8,700.00                                   | 0.00            | 0.00        | 8,693.85              | -150.00      | 41.00        | -150.54                 | 0.00                    | 0.00                   | 0.00                  |
| 8,800.00                                   | 0.00            | 0.00        | 8,793.85              | -150.00      | 41.00        | -150.54                 | 0.00                    | 0.00                   | 0.00                  |
| 8,900.00                                   | 0.00            | 0.00        | 8,893.85              | -150.00      | 41.00        | -150.54                 | 0.00                    | 0.00                   | 0.00                  |
| 8,902.15                                   | 0.00            | 0.00        | 8,896.00              | -150.00      | 41.00        | -150.54                 | 0.00                    | 0.00                   | 0.00                  |
| <b>Avalon</b>                              |                 |             |                       |              |              |                         |                         |                        |                       |
| 9,000.00                                   | 0.00            | 0.00        | 8,993.85              | -150.00      | 41.00        | -150.54                 | 0.00                    | 0.00                   | 0.00                  |
| 9,100.00                                   | 0.00            | 0.00        | 9,093.85              | -150.00      | 41.00        | -150.54                 | 0.00                    | 0.00                   | 0.00                  |
| 9,200.00                                   | 0.00            | 0.00        | 9,193.85              | -150.00      | 41.00        | -150.54                 | 0.00                    | 0.00                   | 0.00                  |
| 9,300.00                                   | 0.00            | 0.00        | 9,293.85              | -150.00      | 41.00        | -150.54                 | 0.00                    | 0.00                   | 0.00                  |
| 9,400.00                                   | 0.00            | 0.00        | 9,393.85              | -150.00      | 41.00        | -150.54                 | 0.00                    | 0.00                   | 0.00                  |
| 9,500.00                                   | 0.00            | 0.00        | 9,493.85              | -150.00      | 41.00        | -150.54                 | 0.00                    | 0.00                   | 0.00                  |
| 9,600.00                                   | 0.00            | 0.00        | 9,593.85              | -150.00      | 41.00        | -150.54                 | 0.00                    | 0.00                   | 0.00                  |
| 9,700.00                                   | 0.00            | 0.00        | 9,693.85              | -150.00      | 41.00        | -150.54                 | 0.00                    | 0.00                   | 0.00                  |
| 9,800.00                                   | 0.00            | 0.00        | 9,793.85              | -150.00      | 41.00        | -150.54                 | 0.00                    | 0.00                   | 0.00                  |
| 9,900.00                                   | 0.00            | 0.00        | 9,893.85              | -150.00      | 41.00        | -150.54                 | 0.00                    | 0.00                   | 0.00                  |
| 9,925.15                                   | 0.00            | 0.00        | 9,919.00              | -150.00      | 41.00        | -150.54                 | 0.00                    | 0.00                   | 0.00                  |
| <b>1st BS Sand</b>                         |                 |             |                       |              |              |                         |                         |                        |                       |
| 10,000.00                                  | 0.00            | 0.00        | 9,993.85              | -150.00      | 41.00        | -150.54                 | 0.00                    | 0.00                   | 0.00                  |
| 10,100.00                                  | 0.00            | 0.00        | 10,093.85             | -150.00      | 41.00        | -150.54                 | 0.00                    | 0.00                   | 0.00                  |
| 10,200.00                                  | 0.00            | 0.00        | 10,193.85             | -150.00      | 41.00        | -150.54                 | 0.00                    | 0.00                   | 0.00                  |
| 10,303.19                                  | 0.00            | 0.00        | 10,297.04             | -150.00      | 41.00        | -150.54                 | 0.00                    | 0.00                   | 0.00                  |
| <b>KOP, Build 10.00°/100'</b>              |                 |             |                       |              |              |                         |                         |                        |                       |
| 10,350.00                                  | 4.68            | 359.22      | 10,343.79             | -148.09      | 40.97        | -148.63                 | 10.00                   | 10.00                  | 0.00                  |
| 10,400.00                                  | 9.68            | 359.22      | 10,393.39             | -141.84      | 40.89        | -142.39                 | 10.00                   | 10.00                  | 0.00                  |
| 10,450.00                                  | 14.68           | 359.22      | 10,442.24             | -131.30      | 40.75        | -131.84                 | 10.00                   | 10.00                  | 0.00                  |
| 10,500.00                                  | 19.68           | 359.22      | 10,490.00             | -116.53      | 40.54        | -117.07                 | 10.00                   | 10.00                  | 0.00                  |
| 10,537.64                                  | 23.44           | 359.22      | 10,525.00             | -102.70      | 40.36        | -103.24                 | 10.00                   | 10.00                  | 0.00                  |
| <b>2nd BS Sand</b>                         |                 |             |                       |              |              |                         |                         |                        |                       |
| 10,550.00                                  | 24.68           | 359.22      | 10,536.28             | -97.67       | 40.29        | -98.20                  | 10.00                   | 10.00                  | 0.00                  |
| 10,600.00                                  | 29.68           | 359.22      | 10,580.75             | -74.83       | 39.98        | -75.37                  | 10.00                   | 10.00                  | 0.00                  |
| 10,650.00                                  | 34.68           | 359.22      | 10,623.05             | -48.22       | 39.62        | -48.75                  | 10.00                   | 10.00                  | 0.00                  |
| 10,700.00                                  | 39.68           | 359.22      | 10,662.88             | -18.01       | 39.21        | -18.54                  | 10.00                   | 10.00                  | 0.00                  |
| 10,750.00                                  | 44.68           | 359.22      | 10,699.92             | 15.55        | 38.75        | 15.02                   | 10.00                   | 10.00                  | 0.00                  |
| 10,800.00                                  | 49.68           | 359.22      | 10,733.89             | 52.21        | 38.25        | 51.68                   | 10.00                   | 10.00                  | 0.00                  |
| 10,850.00                                  | 54.68           | 359.22      | 10,764.54             | 91.69        | 37.71        | 91.17                   | 10.00                   | 10.00                  | 0.00                  |
| 10,900.00                                  | 59.68           | 359.22      | 10,791.63             | 133.69       | 37.14        | 133.17                  | 10.00                   | 10.00                  | 0.00                  |
| 10,950.00                                  | 64.68           | 359.22      | 10,814.96             | 177.89       | 36.54        | 177.38                  | 10.00                   | 10.00                  | 0.00                  |
| 11,000.00                                  | 69.68           | 359.22      | 10,834.34             | 223.96       | 35.91        | 223.45                  | 10.00                   | 10.00                  | 0.00                  |
| 11,050.00                                  | 74.68           | 359.22      | 10,849.64             | 271.54       | 35.27        | 271.04                  | 10.00                   | 10.00                  | 0.00                  |
| 11,100.00                                  | 79.68           | 359.22      | 10,860.73             | 320.28       | 34.61        | 319.78                  | 10.00                   | 10.00                  | 0.00                  |
| 11,150.00                                  | 84.68           | 359.22      | 10,867.53             | 369.79       | 33.93        | 369.30                  | 10.00                   | 10.00                  | 0.00                  |
| 11,203.19                                  | 90.00           | 359.22      | 10,870.00             | 422.90       | 33.21        | 422.41                  | 10.00                   | 10.00                  | 0.00                  |
| <b>LP, Hold 90.0° Inc, 359.22° Azimuth</b> |                 |             |                       |              |              |                         |                         |                        |                       |
| 11,300.00                                  | 90.00           | 359.22      | 10,870.00             | 519.70       | 31.89        | 519.22                  | 0.00                    | 0.00                   | 0.00                  |



# Aim Directional Services, LLC

## Survey Report

|                  |                              |                                     |                                         |
|------------------|------------------------------|-------------------------------------|-----------------------------------------|
| <b>Company:</b>  | Advance Energy Partners, LLC | <b>Local Co-ordinate Reference:</b> | Site Wool Head 20 State Com 508H        |
| <b>Project:</b>  | Lea County, New Mexico       | <b>TVD Reference:</b>               | 3722'GL+26.5'KB @ 3748.50usft (H&P 620) |
| <b>Site:</b>     | Wool Head 20 State Com 508H  | <b>MD Reference:</b>                | 3722'GL+26.5'KB @ 3748.50usft (H&P 620) |
| <b>Well:</b>     | #508H                        | <b>North Reference:</b>             | Grid                                    |
| <b>Wellbore:</b> | Lateral 1r0                  | <b>Survey Calculation Method:</b>   | Minimum Curvature                       |
| <b>Design:</b>   | Plan 0.1                     | <b>Database:</b>                    | EDM 5000.1 Aim Database                 |

### Planned Survey

| Measured Depth (usft) | Inclination (°) | Azimuth (°) | Vertical Depth (usft) | +N/-S (usft) | +E/-W (usft) | Vertical Section (usft) | Dogleg Rate (°/100usft) | Build Rate (°/100usft) | Turn Rate (°/100usft) |
|-----------------------|-----------------|-------------|-----------------------|--------------|--------------|-------------------------|-------------------------|------------------------|-----------------------|
| 11,400.00             | 90.00           | 359.22      | 10,870.00             | 619.69       | 30.53        | 619.22                  | 0.00                    | 0.00                   | 0.00                  |
| 11,500.00             | 90.00           | 359.22      | 10,870.00             | 719.68       | 29.17        | 719.22                  | 0.00                    | 0.00                   | 0.00                  |
| 11,600.00             | 90.00           | 359.22      | 10,870.00             | 819.67       | 27.81        | 819.22                  | 0.00                    | 0.00                   | 0.00                  |
| 11,700.00             | 90.00           | 359.22      | 10,870.00             | 919.66       | 26.45        | 919.22                  | 0.00                    | 0.00                   | 0.00                  |
| 11,800.00             | 90.00           | 359.22      | 10,870.00             | 1,019.66     | 25.10        | 1,019.22                | 0.00                    | 0.00                   | 0.00                  |
| 11,900.00             | 90.00           | 359.22      | 10,870.00             | 1,119.65     | 23.74        | 1,119.22                | 0.00                    | 0.00                   | 0.00                  |
| 12,000.00             | 90.00           | 359.22      | 10,870.00             | 1,219.64     | 22.38        | 1,219.22                | 0.00                    | 0.00                   | 0.00                  |
| 12,100.00             | 90.00           | 359.22      | 10,870.00             | 1,319.63     | 21.02        | 1,319.22                | 0.00                    | 0.00                   | 0.00                  |
| 12,200.00             | 90.00           | 359.22      | 10,870.00             | 1,419.62     | 19.66        | 1,419.22                | 0.00                    | 0.00                   | 0.00                  |
| 12,300.00             | 90.00           | 359.22      | 10,870.00             | 1,519.61     | 18.30        | 1,519.22                | 0.00                    | 0.00                   | 0.00                  |
| 12,400.00             | 90.00           | 359.22      | 10,870.00             | 1,619.60     | 16.94        | 1,619.22                | 0.00                    | 0.00                   | 0.00                  |
| 12,500.00             | 90.00           | 359.22      | 10,870.00             | 1,719.59     | 15.58        | 1,719.22                | 0.00                    | 0.00                   | 0.00                  |
| 12,600.00             | 90.00           | 359.22      | 10,870.00             | 1,819.58     | 14.22        | 1,819.22                | 0.00                    | 0.00                   | 0.00                  |
| 12,700.00             | 90.00           | 359.22      | 10,870.00             | 1,919.57     | 12.86        | 1,919.22                | 0.00                    | 0.00                   | 0.00                  |
| 12,800.00             | 90.00           | 359.22      | 10,870.00             | 2,019.56     | 11.50        | 2,019.22                | 0.00                    | 0.00                   | 0.00                  |
| 12,900.00             | 90.00           | 359.22      | 10,870.00             | 2,119.55     | 10.14        | 2,119.22                | 0.00                    | 0.00                   | 0.00                  |
| 13,000.00             | 90.00           | 359.22      | 10,870.00             | 2,219.54     | 8.78         | 2,219.22                | 0.00                    | 0.00                   | 0.00                  |
| 13,100.00             | 90.00           | 359.22      | 10,870.00             | 2,319.54     | 7.42         | 2,319.22                | 0.00                    | 0.00                   | 0.00                  |
| 13,200.00             | 90.00           | 359.22      | 10,870.00             | 2,419.53     | 6.06         | 2,419.22                | 0.00                    | 0.00                   | 0.00                  |
| 13,300.00             | 90.00           | 359.22      | 10,870.00             | 2,519.52     | 4.70         | 2,519.22                | 0.00                    | 0.00                   | 0.00                  |
| 13,400.00             | 90.00           | 359.22      | 10,870.00             | 2,619.51     | 3.34         | 2,619.22                | 0.00                    | 0.00                   | 0.00                  |
| 13,500.00             | 90.00           | 359.22      | 10,870.00             | 2,719.50     | 1.98         | 2,719.22                | 0.00                    | 0.00                   | 0.00                  |
| 13,600.00             | 90.00           | 359.22      | 10,870.00             | 2,819.49     | 0.62         | 2,819.22                | 0.00                    | 0.00                   | 0.00                  |
| 13,700.00             | 90.00           | 359.22      | 10,870.00             | 2,919.48     | -0.74        | 2,919.22                | 0.00                    | 0.00                   | 0.00                  |
| 13,800.00             | 90.00           | 359.22      | 10,870.00             | 3,019.47     | -2.10        | 3,019.22                | 0.00                    | 0.00                   | 0.00                  |
| 13,900.00             | 90.00           | 359.22      | 10,870.00             | 3,119.46     | -3.46        | 3,119.22                | 0.00                    | 0.00                   | 0.00                  |
| 14,000.00             | 90.00           | 359.22      | 10,870.00             | 3,219.45     | -4.82        | 3,219.22                | 0.00                    | 0.00                   | 0.00                  |
| 14,100.00             | 90.00           | 359.22      | 10,870.00             | 3,319.44     | -6.18        | 3,319.22                | 0.00                    | 0.00                   | 0.00                  |
| 14,200.00             | 90.00           | 359.22      | 10,870.00             | 3,419.43     | -7.54        | 3,419.22                | 0.00                    | 0.00                   | 0.00                  |
| 14,300.00             | 90.00           | 359.22      | 10,870.00             | 3,519.42     | -8.90        | 3,519.22                | 0.00                    | 0.00                   | 0.00                  |
| 14,400.00             | 90.00           | 359.22      | 10,870.00             | 3,619.42     | -10.26       | 3,619.22                | 0.00                    | 0.00                   | 0.00                  |
| 14,500.00             | 90.00           | 359.22      | 10,870.00             | 3,719.41     | -11.62       | 3,719.22                | 0.00                    | 0.00                   | 0.00                  |
| 14,600.00             | 90.00           | 359.22      | 10,870.00             | 3,819.40     | -12.98       | 3,819.22                | 0.00                    | 0.00                   | 0.00                  |
| 14,700.00             | 90.00           | 359.22      | 10,870.00             | 3,919.39     | -14.34       | 3,919.22                | 0.00                    | 0.00                   | 0.00                  |
| 14,800.00             | 90.00           | 359.22      | 10,870.00             | 4,019.38     | -15.69       | 4,019.22                | 0.00                    | 0.00                   | 0.00                  |
| 14,900.00             | 90.00           | 359.22      | 10,870.00             | 4,119.37     | -17.05       | 4,119.22                | 0.00                    | 0.00                   | 0.00                  |
| 15,000.00             | 90.00           | 359.22      | 10,870.00             | 4,219.36     | -18.41       | 4,219.22                | 0.00                    | 0.00                   | 0.00                  |
| 15,100.00             | 90.00           | 359.22      | 10,870.00             | 4,319.35     | -19.77       | 4,319.22                | 0.00                    | 0.00                   | 0.00                  |
| 15,200.00             | 90.00           | 359.22      | 10,870.00             | 4,419.34     | -21.13       | 4,419.22                | 0.00                    | 0.00                   | 0.00                  |
| 15,300.00             | 90.00           | 359.22      | 10,870.00             | 4,519.33     | -22.49       | 4,519.22                | 0.00                    | 0.00                   | 0.00                  |
| 15,400.00             | 90.00           | 359.22      | 10,870.00             | 4,619.32     | -23.85       | 4,619.22                | 0.00                    | 0.00                   | 0.00                  |
| 15,500.00             | 90.00           | 359.22      | 10,870.00             | 4,719.31     | -25.21       | 4,719.22                | 0.00                    | 0.00                   | 0.00                  |
| 15,600.00             | 90.00           | 359.22      | 10,870.00             | 4,819.30     | -26.57       | 4,819.22                | 0.00                    | 0.00                   | 0.00                  |

# Aim Directional Services, LLC

## Survey Report

|                  |                              |                                     |                                         |
|------------------|------------------------------|-------------------------------------|-----------------------------------------|
| <b>Company:</b>  | Advance Energy Partners, LLC | <b>Local Co-ordinate Reference:</b> | Site Wool Head 20 State Com 508H        |
| <b>Project:</b>  | Lea County, New Mexico       | <b>TVD Reference:</b>               | 3722'GL+26.5'KB @ 3748.50usft (H&P 620) |
| <b>Site:</b>     | Wool Head 20 State Com 508H  | <b>MD Reference:</b>                | 3722'GL+26.5'KB @ 3748.50usft (H&P 620) |
| <b>Well:</b>     | #508H                        | <b>North Reference:</b>             | Grid                                    |
| <b>Wellbore:</b> | Lateral 1r0                  | <b>Survey Calculation Method:</b>   | Minimum Curvature                       |
| <b>Design:</b>   | Plan 0.1                     | <b>Database:</b>                    | EDM 5000.1 Aim Database                 |

### Planned Survey

| Measured Depth (usft) | Inclination (°) | Azimuth (°) | Vertical Depth (usft) | +N/-S (usft) | +E/-W (usft) | Vertical Section (usft) | Dogleg Rate (°/100usft) | Build Rate (°/100usft) | Turn Rate (°/100usft) |
|-----------------------|-----------------|-------------|-----------------------|--------------|--------------|-------------------------|-------------------------|------------------------|-----------------------|
| 15,700.00             | 90.00           | 359.22      | 10,870.00             | 4,919.29     | -27.93       | 4,919.22                | 0.00                    | 0.00                   | 0.00                  |
| 15,800.00             | 90.00           | 359.22      | 10,870.00             | 5,019.29     | -29.29       | 5,019.22                | 0.00                    | 0.00                   | 0.00                  |
| 15,900.00             | 90.00           | 359.22      | 10,870.00             | 5,119.28     | -30.65       | 5,119.22                | 0.00                    | 0.00                   | 0.00                  |
| 16,000.00             | 90.00           | 359.22      | 10,870.00             | 5,219.27     | -32.01       | 5,219.22                | 0.00                    | 0.00                   | 0.00                  |
| 16,100.00             | 90.00           | 359.22      | 10,870.00             | 5,319.26     | -33.37       | 5,319.22                | 0.00                    | 0.00                   | 0.00                  |
| 16,200.00             | 90.00           | 359.22      | 10,870.00             | 5,419.25     | -34.73       | 5,419.22                | 0.00                    | 0.00                   | 0.00                  |
| 16,300.00             | 90.00           | 359.22      | 10,870.00             | 5,519.24     | -36.09       | 5,519.22                | 0.00                    | 0.00                   | 0.00                  |
| 16,400.00             | 90.00           | 359.22      | 10,870.00             | 5,619.23     | -37.45       | 5,619.22                | 0.00                    | 0.00                   | 0.00                  |
| 16,500.00             | 90.00           | 359.22      | 10,870.00             | 5,719.22     | -38.81       | 5,719.22                | 0.00                    | 0.00                   | 0.00                  |
| 16,600.00             | 90.00           | 359.22      | 10,870.00             | 5,819.21     | -40.17       | 5,819.22                | 0.00                    | 0.00                   | 0.00                  |
| 16,700.00             | 90.00           | 359.22      | 10,870.00             | 5,919.20     | -41.53       | 5,919.22                | 0.00                    | 0.00                   | 0.00                  |
| 16,800.00             | 90.00           | 359.22      | 10,870.00             | 6,019.19     | -42.89       | 6,019.22                | 0.00                    | 0.00                   | 0.00                  |
| 16,900.00             | 90.00           | 359.22      | 10,870.00             | 6,119.18     | -44.25       | 6,119.22                | 0.00                    | 0.00                   | 0.00                  |
| 17,000.00             | 90.00           | 359.22      | 10,870.00             | 6,219.17     | -45.61       | 6,219.22                | 0.00                    | 0.00                   | 0.00                  |
| 17,100.00             | 90.00           | 359.22      | 10,870.00             | 6,319.17     | -46.97       | 6,319.22                | 0.00                    | 0.00                   | 0.00                  |
| 17,200.00             | 90.00           | 359.22      | 10,870.00             | 6,419.16     | -48.33       | 6,419.22                | 0.00                    | 0.00                   | 0.00                  |
| 17,300.00             | 90.00           | 359.22      | 10,870.00             | 6,519.15     | -49.69       | 6,519.22                | 0.00                    | 0.00                   | 0.00                  |
| 17,400.00             | 90.00           | 359.22      | 10,870.00             | 6,619.14     | -51.05       | 6,619.22                | 0.00                    | 0.00                   | 0.00                  |
| 17,500.00             | 90.00           | 359.22      | 10,870.00             | 6,719.13     | -52.41       | 6,719.22                | 0.00                    | 0.00                   | 0.00                  |
| 17,600.00             | 90.00           | 359.22      | 10,870.00             | 6,819.12     | -53.77       | 6,819.22                | 0.00                    | 0.00                   | 0.00                  |
| 17,700.00             | 90.00           | 359.22      | 10,870.00             | 6,919.11     | -55.13       | 6,919.22                | 0.00                    | 0.00                   | 0.00                  |
| 17,800.00             | 90.00           | 359.22      | 10,870.00             | 7,019.10     | -56.49       | 7,019.22                | 0.00                    | 0.00                   | 0.00                  |
| 17,900.00             | 90.00           | 359.22      | 10,870.00             | 7,119.09     | -57.84       | 7,119.22                | 0.00                    | 0.00                   | 0.00                  |
| 18,000.00             | 90.00           | 359.22      | 10,870.00             | 7,219.08     | -59.20       | 7,219.22                | 0.00                    | 0.00                   | 0.00                  |
| 18,100.00             | 90.00           | 359.22      | 10,870.00             | 7,319.07     | -60.56       | 7,319.22                | 0.00                    | 0.00                   | 0.00                  |
| 18,200.00             | 90.00           | 359.22      | 10,870.00             | 7,419.06     | -61.92       | 7,419.22                | 0.00                    | 0.00                   | 0.00                  |
| 18,249.74             | 90.00           | 359.22      | 10,870.00             | 7,468.80     | -62.60       | 7,468.96                | 0.00                    | 0.00                   | 0.00                  |
| PBHL - PBHL (WH508H)  |                 |             |                       |              |              |                         |                         |                        |                       |

### Design Targets

| Target Name                                                                         | Dip Angle (°) | Dip Dir. (°) | TVD (usft) | +N/-S (usft) | +E/-W (usft) | Northing (usft) | Easting (usft) | Latitude         | Longitude         |
|-------------------------------------------------------------------------------------|---------------|--------------|------------|--------------|--------------|-----------------|----------------|------------------|-------------------|
| FTP (WH508H)                                                                        | 0.00          | 0.00         | 0.00       | -249.80      | 42.70        | 530,926.00      | 769,869.90     | 32° 27' 26.639 N | 103° 35' 32.678 W |
| - hit/miss target                                                                   |               |              |            |              |              |                 |                |                  |                   |
| - Shape                                                                             |               |              |            |              |              |                 |                |                  |                   |
| - plan misses target center by 253.42usft at 0.00usft MD (0.00 TVD, 0.00 N, 0.00 E) |               |              |            |              |              |                 |                |                  |                   |
| - Point                                                                             |               |              |            |              |              |                 |                |                  |                   |
| PBHL (WH508H)                                                                       | 0.00          | 0.00         | 10,870.00  | 7,468.80     | -62.60       | 538,644.60      | 769,764.60     | 32° 28' 43.021 N | 103° 35' 33.282 W |
| - plan hits target center                                                           |               |              |            |              |              |                 |                |                  |                   |
| - Point                                                                             |               |              |            |              |              |                 |                |                  |                   |

# Aim Directional Services, LLC

## Survey Report

|                  |                              |                                     |                                         |
|------------------|------------------------------|-------------------------------------|-----------------------------------------|
| <b>Company:</b>  | Advance Energy Partners, LLC | <b>Local Co-ordinate Reference:</b> | Site Wool Head 20 State Com 508H        |
| <b>Project:</b>  | Lea County, New Mexico       | <b>TVD Reference:</b>               | 3722'GL+26.5'KB @ 3748.50usft (H&P 620) |
| <b>Site:</b>     | Wool Head 20 State Com 508H  | <b>MD Reference:</b>                | 3722'GL+26.5'KB @ 3748.50usft (H&P 620) |
| <b>Well:</b>     | #508H                        | <b>North Reference:</b>             | Grid                                    |
| <b>Wellbore:</b> | Lateral 1r0                  | <b>Survey Calculation Method:</b>   | Minimum Curvature                       |
| <b>Design:</b>   | Plan 0.1                     | <b>Database:</b>                    | EDM 5000.1 Aim Database                 |

| Formations            |                       |                   |           |         |                   |
|-----------------------|-----------------------|-------------------|-----------|---------|-------------------|
| Measured Depth (usft) | Vertical Depth (usft) | Name              | Lithology | Dip (°) | Dip Direction (°) |
| 1,800.00              | 1,800.00              | Rustler           |           | 0.00    |                   |
| 5,209.15              | 5,203.00              | Base of Limestone |           | 0.00    |                   |
| 8,432.15              | 8,426.00              | Lower Brushy      |           | 0.00    |                   |
| 8,902.15              | 8,896.00              | Avalon            |           | 0.00    |                   |
| 9,925.15              | 9,919.00              | 1st BS Sand       |           | 0.00    |                   |
| 10,537.64             | 10,525.00             | 2nd BS Sand       |           | 0.00    |                   |

| Plan Annotations      |                       |                   |              |                                     |  |
|-----------------------|-----------------------|-------------------|--------------|-------------------------------------|--|
| Measured Depth (usft) | Vertical Depth (usft) | Local Coordinates |              | Comment                             |  |
|                       |                       | +N/-S (usft)      | +E/-W (usft) |                                     |  |
| 2900                  | 2900                  | 0                 | 0            | Build 1.00°/100'                    |  |
| 3400                  | 3399                  | -21               | 6            | Hold 5.0° Inc, 164.71° Azimuth      |  |
| 4684                  | 4678                  | -129              | 35           | Drop 1.00°/100'                     |  |
| 5184                  | 5178                  | -150              | 41           | Hold Vertical                       |  |
| 10,303                | 10,297                | -150              | 41           | KOP, Build 10.00°/100'              |  |
| 11,203                | 10,870                | 423               | 33           | LP, Hold 90.0° Inc, 359.22° Azimuth |  |
| 18,250                | 10,870                | 7469              | -63          | PBHL                                |  |