

I. REQUEST FOR ALLOWABLE AND AUTHORIZATION TO TRANSPORT

|                                                                                                                                  |                                                    |                                                           |                                  |
|----------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------|-----------------------------------------------------------|----------------------------------|
| <sup>1</sup> Operator name and Address<br>Advance Energy Partners Hat Mesa, LLC<br>11490 Westheimer RD, Suite 950<br>Houston, TX |                                                    | <sup>2</sup> OGRID Number<br>372417                       |                                  |
| <sup>4</sup> API Number<br>30-025-48005                                                                                          | <sup>5</sup> Pool Name<br>RED TANK;BONE SPRING     | <sup>3</sup> Reason for Filing Code/ Effective Date<br>NW |                                  |
| <sup>7</sup> Property Code<br>326484                                                                                             | <sup>8</sup> Property Name<br>ANDERSON FEDERAL COM | <sup>6</sup> Pool Code<br>51683                           | <sup>9</sup> Well Number<br>504H |

II. Surface Location

|                        |              |                 |              |         |                      |                           |                      |                        |               |
|------------------------|--------------|-----------------|--------------|---------|----------------------|---------------------------|----------------------|------------------------|---------------|
| UL or lot no.<br>Lot 1 | Section<br>2 | Township<br>22S | Range<br>32E | Lot Idn | Feet from the<br>630 | North/South Line<br>NORTH | Feet from the<br>958 | East/West line<br>EAST | County<br>Lea |
|------------------------|--------------|-----------------|--------------|---------|----------------------|---------------------------|----------------------|------------------------|---------------|

11 Bottom Hole Location

|                        |                                        |                                      |                                   |                                    |                                     |                           |                      |                        |               |
|------------------------|----------------------------------------|--------------------------------------|-----------------------------------|------------------------------------|-------------------------------------|---------------------------|----------------------|------------------------|---------------|
| UL or lot no.<br>P     | Section<br>26                          | Township<br>21S                      | Range<br>32E                      | Lot Idn                            | Feet from the<br>1298               | North/South line<br>SOUTH | Feet from the<br>353 | East/West line<br>EAST | County<br>Lea |
| <sup>12</sup> Lse Code | <sup>13</sup> Producing Method<br>Code | <sup>14</sup> Gas Connection<br>Date | <sup>15</sup> C-129 Permit Number | <sup>16</sup> C-129 Effective Date | <sup>17</sup> C-129 Expiration Date |                           |                      |                        |               |

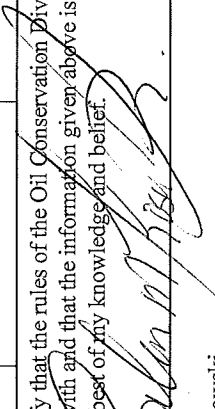
III. Oil and Gas Transporters

|                                    |                                                                                    |  |  |  |                     |
|------------------------------------|------------------------------------------------------------------------------------|--|--|--|---------------------|
| <sup>18</sup> Transporter<br>OGRID | <sup>19</sup> Transporter Name<br>and Address                                      |  |  |  | <sup>20</sup> O/G/W |
| 214984                             | Plains Marketing, L.P.<br>10 Desta Drive, Suite 200E<br>Midland, TX 79705          |  |  |  | O                   |
| 330291                             | 3 Bear Energy-Cottonwood, LLC<br>1512 Larimer Street Suite 540<br>Denver, CO 80202 |  |  |  | G                   |
|                                    |                                                                                    |  |  |  |                     |
|                                    |                                                                                    |  |  |  |                     |
|                                    |                                                                                    |  |  |  |                     |
|                                    |                                                                                    |  |  |  |                     |

IV. Well Completion Data

|                                    |                                     |                             |                              |                                                 |                       |
|------------------------------------|-------------------------------------|-----------------------------|------------------------------|-------------------------------------------------|-----------------------|
| <sup>21</sup> Spud Date<br>12/6/20 | <sup>22</sup> Ready Date<br>3/24/21 | <sup>23</sup> TD<br>17,747' | <sup>24</sup> PBTd<br>17,655 | <sup>25</sup> Perforations<br>11,250' – 17,641' | <sup>26</sup> DHC, MC |
| <sup>27</sup> Hole Size            | <sup>28</sup> Casing & Tubing Size  |                             | <sup>29</sup> Depth Set      |                                                 |                       |
| 17.5"                              | 13.375"                             |                             | 1,295'                       |                                                 |                       |
| 12.25"                             | 9.625"                              |                             | 3,637'/4,929'                |                                                 |                       |
| 8.5"                               | 5.5"                                |                             | 17,732'                      |                                                 |                       |
|                                    |                                     |                             | 2500                         |                                                 |                       |
|                                    |                                     |                             |                              |                                                 |                       |
|                                    |                                     |                             |                              |                                                 |                       |
|                                    |                                     |                             |                              |                                                 |                       |

V. Well Test Data

|                                                                                                                                                                                                          |                                            |                                    |                                     |                                      |                                    |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------|------------------------------------|-------------------------------------|--------------------------------------|------------------------------------|
| <sup>31</sup> Date New Oil<br>4/13/21                                                                                                                                                                    | <sup>32</sup> Gas Delivery Date<br>4/12/21 | <sup>33</sup> Test Date<br>4/21/21 | <sup>34</sup> Test Length<br>24 hrs | <sup>35</sup> Tbg. Pressure<br>N/A   | <sup>36</sup> Csg. Pressure<br>746 |
| <sup>37</sup> Choke Size<br>60/64                                                                                                                                                                        | <sup>38</sup> Oil<br>1094                  | <sup>39</sup> Water<br>4837        | <sup>40</sup> Gas<br>1117           | <sup>41</sup> Test Method<br>Flowing |                                    |
| <sup>42</sup> I hereby certify that the rules of the Oil Conservation Division have been complied with and that the information given above is true and complete to the best of my knowledge and belief. |                                            |                                    |                                     |                                      |                                    |
| Signature:                                                                                                           |                                            |                                    |                                     |                                      |                                    |
| Printed name:<br>Eileen M. Kosakowski                                                                                                                                                                    |                                            |                                    |                                     |                                      |                                    |
| Title:<br>Sr. Eng. Tech                                                                                                                                                                                  |                                            |                                    |                                     |                                      |                                    |
| E-mail Address:<br>ekosakowski@advanceenergypartners.com                                                                                                                                                 |                                            |                                    |                                     |                                      |                                    |
| Date: 8/1/22                                                                                                                                                                                             |                                            | Phone:<br>832-672-4604             |                                     |                                      |                                    |

## DISTRICT I

1625 N. French Dr., Hobbs, NM 88240  
Phone (505) 393-6161 Fax: (505) 393-0720

## DISTRICT II

811 S. First St., Artesia, NM 88210  
Phone (505) 748-1283 Fax: (505) 748-9720

## DISTRICT III

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

## DISTRICT IV

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

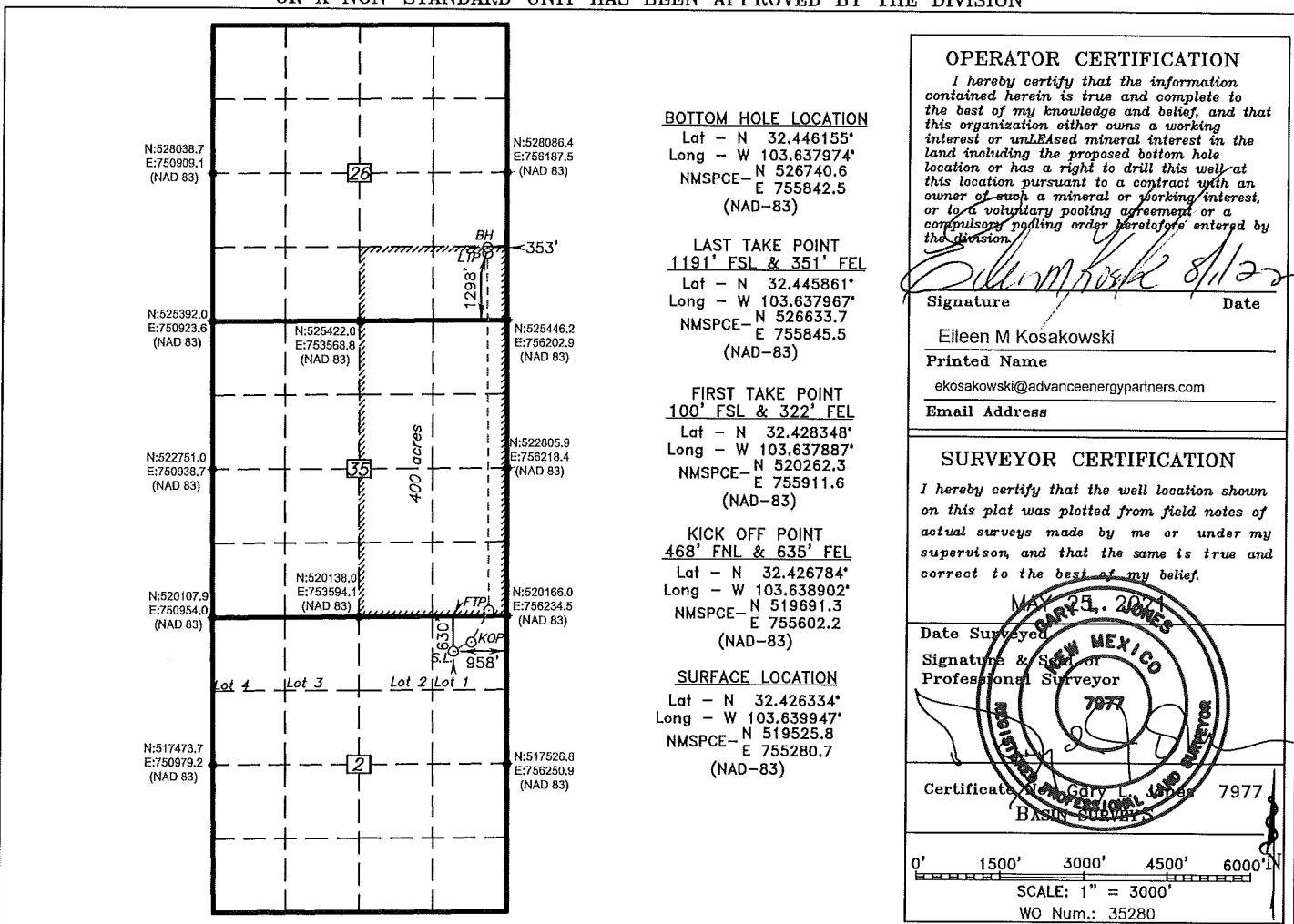
|                            |                                                        |                                    |
|----------------------------|--------------------------------------------------------|------------------------------------|
| API Number<br>30-025-48005 | Pool Code<br>51683                                     | Pool Name<br>RED TANK; BONE SPRING |
| Property Code<br>326484    | Property Name<br>ANDERSON FED COM                      | Well Number<br>504H                |
| OGRID No.<br>372417        | Operator Name<br>ADVANCE ENERGY PARTNERS HAT MESA, LLC | Elevation<br>3658'                 |

## Surface Location

| UL or lot No. | Section | Township | Range | Lot Idn | Feet from the | SOUTH/South line | Feet from the | East/West line | County |
|---------------|---------|----------|-------|---------|---------------|------------------|---------------|----------------|--------|
| LOT 1         | 2       | 22 S     | 32 E  |         | 630           | NORTH            | 958           | EAST           | LEA    |

## Bottom Hole Location If Different From Surface

| UL or lot No.          | Section         | Township           | Range     | Lot Idn | Feet from the | SOUTH/South line | Feet from the | East/West line | County |
|------------------------|-----------------|--------------------|-----------|---------|---------------|------------------|---------------|----------------|--------|
| P                      | 26              | 21 S               | 32 E      |         | 1298          | SOUTH            | 353           | EAST           | LEA    |
| Dedicated Acres<br>220 | 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



## End of Well Report

# Advance Energy Partners, LLC Anderson Fed Com, Well No. 504H Lea County, New Mexico

**Rig: Pioneer #80**  
**Job No.: WT-20-071**

Start Date: 12/4/2020

End Date: 01/18/2021

Directional Drillers:

**Advance Directional**

Office Support:

**Javier Alvarez**

Directional Coordinator

E-mail: [Javier.Alvarez@aimdir.com](mailto:Javier.Alvarez@aimdir.com)

**Ivonne Gonzalez**

Well Planner

E-mail: [Ivonne.Gonzalez@aimdir.com](mailto:Ivonne.Gonzalez@aimdir.com)

**Allison Reinert**

Executive VP

E-mail: [Allison.Reinert@aimdir.com](mailto:Allison.Reinert@aimdir.com)

**Thomas Rinald**

President

E-mail: [Thomas.Rinald@aimdir.com](mailto:Thomas.Rinald@aimdir.com)

P.O. Box 181015 • Corpus Christi, Texas 78480

Phone: 361-653-6500 • Fax: 361-653-6599

[www.aimdir.com](http://www.aimdir.com)





# Proposed vs. As Drilled

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## **Anderson Fed Com 504H (WT-20-071)**

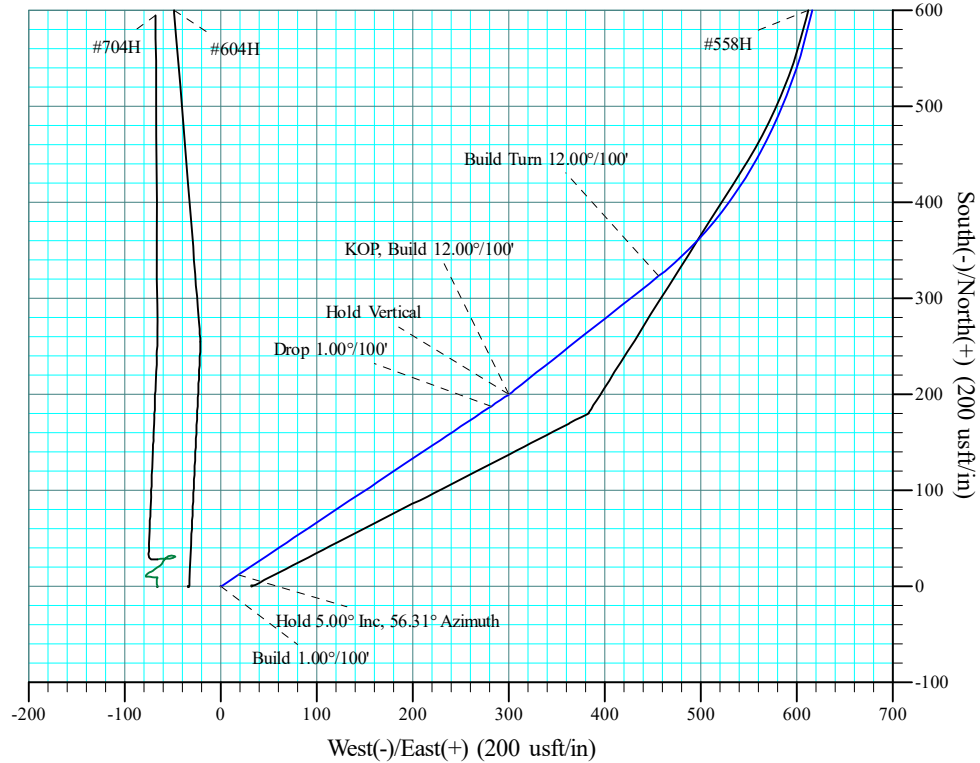
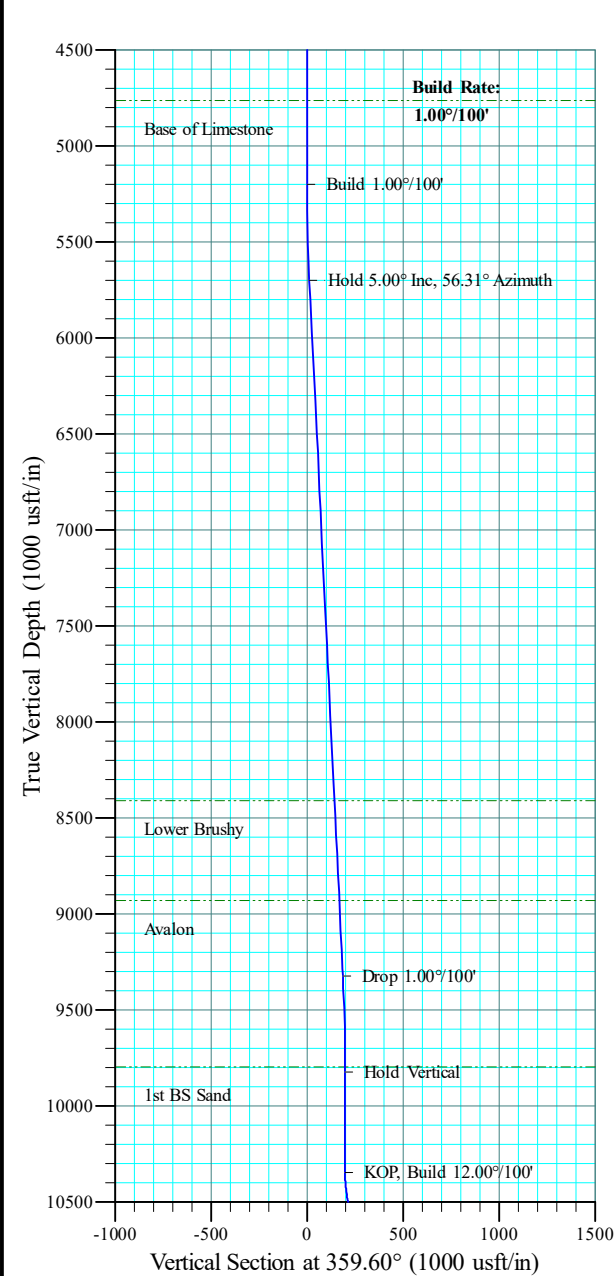
2020-12-04 to 2021-01-18

Lea, New Mexico, US (32.43, -103.64)

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Anderson Fed Com 504H  
Lea County, New Mexico  
WT-20-071  
Pioneer 80  
Plan 1.0



Azinuths to Grid North  
True North: -0.37°  
Magnetic North: 6.16°

Magnetic Field  
Strength: 47952.4nT  
Dip Angle: 60.15°  
Date: 11/9/2020  
Model: MVHD

Magnetic North: 6.16° to Grid North

SITE DETAILS: Anderson Fed Com 504H

Site Centre Northing: 519525.80  
Easting: 755280.70

Positional Uncertainty: 0.00  
Convergence: 0.37  
Local North: Grid

Depth Reference:  
3658'GL+25.5'KB @ 3683.50usft (Pioneer 80)

#### SLOTS

| Slot Name | +N/-S | +E/-W  |
|-----------|-------|--------|
| 504H      | 0.00  | 0.00   |
| 558H      | 0.30  | 33.00  |
| 604H      | -0.20 | -33.00 |
| 704H      | -0.50 | -65.90 |

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 (Anderson504H)  | 0.00     | 736.70  | 623.20 | 520262.50 | 755903.90 | 32° 25' 42.054 N | 103° 38' 16.483 W |
| PBHL (Anderson504H) | 10715.00 | 7137.40 | 585.10 | 526663.20 | 755865.80 | 32° 26' 45.391 N | 103° 38' 16.441 W |
| WP1 (Anderson504H)  | 10899.00 | 3542.00 | 610.42 | 523067.80 | 755891.12 | 32° 26' 9.813 N  | 103° 38' 16.419 W |
| WP2 (Anderson504H)  | 10846.00 | 4557.00 | 603.27 | 524082.80 | 755883.97 | 32° 26' 19.857 N | 103° 38' 16.425 W |
| WP3 (Anderson504H)  | 10788.00 | 5717.00 | 595.10 | 525242.80 | 755875.80 | 32° 26' 31.335 N | 103° 38' 16.432 W |

Drawn By: IG  
Date Created: 11/9/2020  
Date Revised: 11/9/2020  
File: Advance Energy - Anderson Fed Com 504H Plan 1.0 Surface.wpc

#### SECTION DETAILS

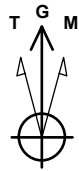
| Sec | MD       | Inc   | Azi    | TVD      | +N/-S   | +E/-W  | Dleg  | TFace  | VSect   | Annotation                           |
|-----|----------|-------|--------|----------|---------|--------|-------|--------|---------|--------------------------------------|
| 1   | 0.00     | 0.00  | 0.00   | 0.00     | 0.00    | 0.00   | 0.00  | 0.00   | 0.00    |                                      |
| 2   | 5200.00  | 0.00  | 0.00   | 5200.00  | 0.00    | 0.00   | 0.00  | 0.00   | 0.00    | Build 1.00°/100'                     |
| 3   | 5700.00  | 5.00  | 56.31  | 5699.37  | 12.09   | 18.14  | 1.00  | 56.31  | 11.97   | Hold 5.00° Inc, 56.31° Azimuth       |
| 4   | 9336.59  | 5.00  | 56.31  | 9322.12  | 187.91  | 281.86 | 0.00  | 0.00   | 185.93  | Drop 1.00°/100'                      |
| 5   | 9836.59  | 0.00  | 0.00   | 9821.48  | 200.00  | 300.00 | 1.00  | 180.00 | 197.90  | Hold Vertical                        |
| 6   | 10362.11 | 0.00  | 0.00   | 10347.00 | 200.00  | 300.00 | 0.00  | 0.00   | 197.90  | KOP, Build 12.00°/100'               |
| 7   | 10814.94 | 54.34 | 51.70  | 10734.94 | 323.41  | 456.26 | 12.00 | 51.70  | 320.21  | Build Turn 12.00°/100'               |
| 8   | 11315.11 | 89.94 | 359.60 | 10896.00 | 738.05  | 630.16 | 12.00 | -65.64 | 733.64  | LP, Hold 89.94° Inc, 359.60° Azimuth |
| 9   | 14119.13 | 89.94 | 359.60 | 10899.00 | 3542.00 | 610.42 | 0.00  | 0.00   | 3537.65 | Build 2.00°/100'                     |
| 10  | 14285.19 | 93.26 | 359.60 | 10894.36 | 3707.97 | 609.25 | 2.00  | 0.00   | 3703.62 | Hold 93.26° Inc, 359.60° Azimuth     |
| 11  | 15135.62 | 93.26 | 359.60 | 10846.00 | 4557.00 | 603.27 | 0.00  | 0.00   | 4552.68 | Drop 2.00°/100'                      |
| 12  | 15155.67 | 92.86 | 359.60 | 10844.93 | 4577.02 | 603.13 | 2.00  | 180.00 | 4572.70 | Hold 92.86° Inc, 359.60° Azimuth     |
| 13  | 16297.10 | 92.86 | 359.60 | 10788.00 | 5717.00 | 595.10 | 0.00  | 0.00   | 5712.71 | Build 2.00°/100'                     |
| 14  | 17719.41 | 92.94 | 359.60 | 10787.79 | 5721.15 | 595.07 | 2.00  | 0.00   | 5716.86 | Hold 92.94° Inc, 359.60° Azimuth     |
| 15  | 17719.41 | 92.94 | 359.60 | 10715.00 | 7137.40 | 585.10 | 0.00  | 0.00   | 7133.14 | PBHL                                 |

# Advance Energy Partners, LLC

Anderson Fed Com 504H  
Lea County, New Mexico  
WT-20-071  
Pioneer 80  
Plan 1.0



Received to Imaging: 10/2/2025 9:48:06 AM



Azimuths to Grid North  
True North: -0.37°  
Magnetic North: 6.16°  
  
Magnetic Field  
Strength: 47952.4nT  
Dip Angle: 60.15°  
Date: 11/9/2020  
Model: MVHD

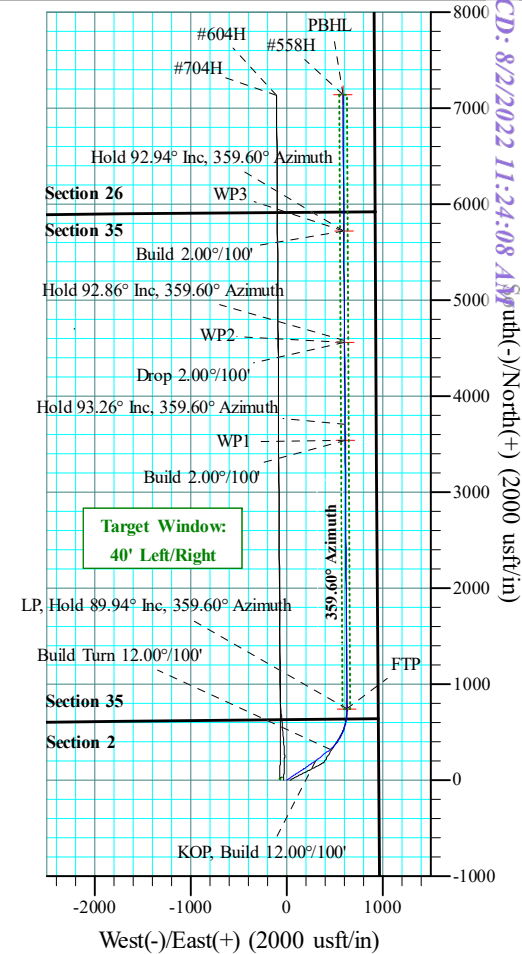
Magnetic North: 6.16° to Grid North

| SITE DETAILS: Anderson Fed Com 504H |           |
|-------------------------------------|-----------|
| Site Centre Northing:               | 519525.80 |
| Easting:                            | 755280.70 |
| Positional Uncertainty:             | 0.00      |
| Convergence:                        | 0.37      |
| 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:                        | 3658'GL+25.5'KB @ 3683.50usft (Pioneer 80) |

| 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               | 5200.00  | 0.00  | 0.00   | 5200.00  | 0.00    | 0.00   | 0.00  | 0.00   | 0.00    | Build 1.00°/100'                     |
| 3               | 5700.00  | 5.00  | 56.31  | 5699.37  | 12.09   | 18.14  | 1.00  | 56.31  | 11.97   | Hold 5.00° Inc, 56.31° Azimuth       |
| 4               | 9336.59  | 5.00  | 56.31  | 9322.12  | 187.91  | 281.86 | 0.00  | 0.00   | 185.93  | Drop 1.00°/100'                      |
| 5               | 9836.59  | 0.00  | 0.00   | 9821.48  | 200.00  | 300.00 | 1.00  | 180.00 | 197.90  | Hold Vertical                        |
| 6               | 10362.11 | 0.00  | 0.00   | 10347.00 | 200.00  | 300.00 | 0.00  | 0.00   | 197.90  | KOP, Build 12.00°/100'               |
| 7               | 10814.94 | 54.34 | 51.70  | 10734.94 | 323.41  | 456.26 | 12.00 | 51.70  | 320.21  | Build Turn 12.00°/100'               |
| 8               | 11315.11 | 89.94 | 359.60 | 10896.00 | 738.05  | 630.16 | 12.00 | -65.64 | 733.64  | LP, Hold 89.94° Inc, 359.60° Azimuth |
| 9               | 14119.13 | 89.94 | 359.60 | 10899.00 | 3542.00 | 610.42 | 0.00  | 0.00   | 3537.65 | Build 2.00°/100'                     |
| 10              | 14285.19 | 93.26 | 359.60 | 10894.36 | 3707.97 | 609.25 | 2.00  | 0.00   | 3703.62 | Hold 93.26° Inc, 359.60° Azimuth     |
| 11              | 15135.62 | 93.26 | 359.60 | 10846.00 | 4557.00 | 603.27 | 0.00  | 0.00   | 4552.68 | Drop 2.00°/100'                      |
| 12              | 15155.67 | 92.86 | 359.60 | 10844.93 | 4577.02 | 603.13 | 2.00  | 180.00 | 4572.70 | Hold 92.86° Inc, 359.60° Azimuth     |
| 13              | 16297.10 | 92.86 | 359.60 | 10788.00 | 5717.00 | 595.10 | 0.00  | 0.00   | 5712.71 | Build 2.00°/100'                     |
| 14              | 16301.26 | 92.94 | 359.60 | 10787.79 | 5721.15 | 595.07 | 2.00  | 0.00   | 5716.86 | Hold 92.94° Inc, 359.60° Azimuth     |
| 15              | 17719.41 | 92.94 | 359.60 | 10715.00 | 7137.40 | 585.10 | 0.00  | 0.00   | 7133.14 | PBHL                                 |

| DESIGN TARGET DETAILS |          |         |        |           |           |                  |
|-----------------------|----------|---------|--------|-----------|-----------|------------------|
| Name                  | TVD      | +N/-S   | +E/-W  | Northing  | Easting   | Latitude         |
| FTP (Anderson504H)    | 0.00     | 736.70  | 623.20 | 520262.50 | 755903.90 | 32° 25' 42.054 N |
| PBHL (Anderson504H)   | 10715.00 | 7137.40 | 585.10 | 526663.20 | 755865.80 | 32° 26' 45.391 N |
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| WP3 (Anderson504H)    | 10788.00 | 5717.00 | 595.10 | 525242.80 | 755875.80 | 32° 26' 31.335 N |

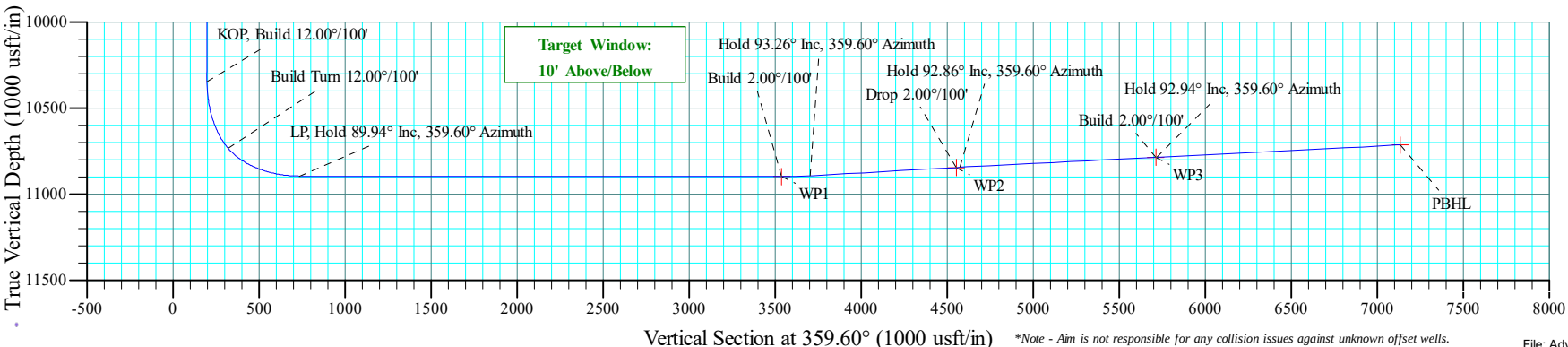


Received by OGD: 8/2/2022 11:24:08 AM

Page 6 of 10

Drawn: IG  
Date Created: 11/9/2020  
Date Revised: 11/9/2020

File: Advance Energy - Anderson Fed Com 504H Plan 1.0.wpc



Vertical Section at 359.60° (1000 usft/in)

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

## Aim Directional Services, LLC

## Survey Report

|                  |                              |                                     |                                            |
|------------------|------------------------------|-------------------------------------|--------------------------------------------|
| <b>Company:</b>  | Advance Energy Partners, LLC | <b>Local Co-ordinate Reference:</b> | Site Anderson Fed Com 504H                 |
| <b>Project:</b>  | Lea County, New Mexico       | <b>TVD Reference:</b>               | 3658'GL+25.5'KB @ 3683.50usft (Pioneer 80) |
| <b>Site:</b>     | Anderson Fed Com 504H        | <b>MD Reference:</b>                | 3658'GL+25.5'KB @ 3683.50usft (Pioneer 80) |
| <b>Well:</b>     | Anderson #504H               | <b>North Reference:</b>             | Grid                                       |
| <b>Wellbore:</b> | Lateral 1r0                  | <b>Survey Calculation Method:</b>   | Minimum Curvature                          |
| <b>Design:</b>   | Plan 1.0                     | <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                  |           | Anderson Fed Com 504H |                 |                   |                   |
| Site Position:        |           | Northing:             | 519,525.80 usft | Latitude:         | 32° 25' 34.804 N  |
| From:                 | Map       | Easting:              | 755,280.70 usft | Longitude:        | 103° 38' 23.809 W |
| Position Uncertainty: | 0.00 usft | Slot Radius:          | 13-3/16 "       | Grid Convergence: | 0.37 °            |

| Well                 | Anderson #504H - Slot 504H |           |                     |                 |               |                   |
|----------------------|----------------------------|-----------|---------------------|-----------------|---------------|-------------------|
| Well Position        | +N/-S                      | 0.00 usft | Northing:           | 519,525.80 usft | Latitude:     | 32° 25' 34.804 N  |
|                      | +E/-W                      | 0.00 usft | Easting:            | 755,280.70 usft | Longitude:    | 103° 38' 23.809 W |
| Position Uncertainty |                            | 0.00 usft | Wellhead Elevation: | usft            | Ground Level: | 3,658.00 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              | 11/9/2020          | 6.53                   | 60.15                | 47,952.39403659            |

|                          |                                |                     |                      |                      |  |
|--------------------------|--------------------------------|---------------------|----------------------|----------------------|--|
| <b>Design</b>            | Plan 1.0                       |                     |                      |                      |  |
| <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                 | 359.60               |  |

|                            |                  |                          |                  |                    |  |
|----------------------------|------------------|--------------------------|------------------|--------------------|--|
| <b>Survey Tool Program</b> | <b>Date</b>      | 11/10/2020               |                  |                    |  |
| <b>From (usft)</b>         | <b>To (usft)</b> | <b>Survey (Wellbore)</b> | <b>Tool Name</b> | <b>Description</b> |  |
| 0.00                       | 17,719.41        | Plan 1.0 (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                         |  |
| 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 Anderson Fed Com 504H                 |
| <b>Project:</b>  | Lea County, New Mexico       | <b>TVD Reference:</b>               | 3658'GL+25.5'KB @ 3683.50usft (Pioneer 80) |
| <b>Site:</b>     | Anderson Fed Com 504H        | <b>MD Reference:</b>                | 3658'GL+25.5'KB @ 3683.50usft (Pioneer 80) |
| <b>Well:</b>     | Anderson #504H               | <b>North Reference:</b>             | Grid                                       |
| <b>Wellbore:</b> | Lateral 1r0                  | <b>Survey Calculation Method:</b>   | Minimum Curvature                          |
| <b>Design:</b>   | Plan 1.0                     | <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                  |
| 1,186.50              | 0.00            | 0.00        | 1,186.50              | 0.00         | 0.00         | 0.00                    | 0.00                    | 0.00                   | 0.00                  |
| Rustler               |                 |             |                       |              |              |                         |                         |                        |                       |
| 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                  |
| 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                  |
| 3,000.00              | 0.00            | 0.00        | 3,000.00              | 0.00         | 0.00         | 0.00                    | 0.00                    | 0.00                   | 0.00                  |
| 3,100.00              | 0.00            | 0.00        | 3,100.00              | 0.00         | 0.00         | 0.00                    | 0.00                    | 0.00                   | 0.00                  |
| 3,200.00              | 0.00            | 0.00        | 3,200.00              | 0.00         | 0.00         | 0.00                    | 0.00                    | 0.00                   | 0.00                  |
| 3,300.00              | 0.00            | 0.00        | 3,300.00              | 0.00         | 0.00         | 0.00                    | 0.00                    | 0.00                   | 0.00                  |
| 3,400.00              | 0.00            | 0.00        | 3,400.00              | 0.00         | 0.00         | 0.00                    | 0.00                    | 0.00                   | 0.00                  |
| 3,500.00              | 0.00            | 0.00        | 3,500.00              | 0.00         | 0.00         | 0.00                    | 0.00                    | 0.00                   | 0.00                  |
| 3,600.00              | 0.00            | 0.00        | 3,600.00              | 0.00         | 0.00         | 0.00                    | 0.00                    | 0.00                   | 0.00                  |
| 3,700.00              | 0.00            | 0.00        | 3,700.00              | 0.00         | 0.00         | 0.00                    | 0.00                    | 0.00                   | 0.00                  |
| 3,800.00              | 0.00            | 0.00        | 3,800.00              | 0.00         | 0.00         | 0.00                    | 0.00                    | 0.00                   | 0.00                  |
| 3,900.00              | 0.00            | 0.00        | 3,900.00              | 0.00         | 0.00         | 0.00                    | 0.00                    | 0.00                   | 0.00                  |
| 4,000.00              | 0.00            | 0.00        | 4,000.00              | 0.00         | 0.00         | 0.00                    | 0.00                    | 0.00                   | 0.00                  |
| 4,100.00              | 0.00            | 0.00        | 4,100.00              | 0.00         | 0.00         | 0.00                    | 0.00                    | 0.00                   | 0.00                  |
| 4,200.00              | 0.00            | 0.00        | 4,200.00              | 0.00         | 0.00         | 0.00                    | 0.00                    | 0.00                   | 0.00                  |
| 4,300.00              | 0.00            | 0.00        | 4,300.00              | 0.00         | 0.00         | 0.00                    | 0.00                    | 0.00                   | 0.00                  |
| 4,400.00              | 0.00            | 0.00        | 4,400.00              | 0.00         | 0.00         | 0.00                    | 0.00                    | 0.00                   | 0.00                  |
| 4,500.00              | 0.00            | 0.00        | 4,500.00              | 0.00         | 0.00         | 0.00                    | 0.00                    | 0.00                   | 0.00                  |
| 4,600.00              | 0.00            | 0.00        | 4,600.00              | 0.00         | 0.00         | 0.00                    | 0.00                    | 0.00                   | 0.00                  |
| 4,700.00              | 0.00            | 0.00        | 4,700.00              | 0.00         | 0.00         | 0.00                    | 0.00                    | 0.00                   | 0.00                  |
| 4,763.50              | 0.00            | 0.00        | 4,763.50              | 0.00         | 0.00         | 0.00                    | 0.00                    | 0.00                   | 0.00                  |
| Base of Limestone     |                 |             |                       |              |              |                         |                         |                        |                       |
| 4,800.00              | 0.00            | 0.00        | 4,800.00              | 0.00         | 0.00         | 0.00                    | 0.00                    | 0.00                   | 0.00                  |
| 4,900.00              | 0.00            | 0.00        | 4,900.00              | 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 Anderson Fed Com 504H                 |
| <b>Project:</b>  | Lea County, New Mexico       | <b>TVD Reference:</b>               | 3658'GL+25.5'KB @ 3683.50usft (Pioneer 80) |
| <b>Site:</b>     | Anderson Fed Com 504H        | <b>MD Reference:</b>                | 3658'GL+25.5'KB @ 3683.50usft (Pioneer 80) |
| <b>Well:</b>     | Anderson #504H               | <b>North Reference:</b>             | Grid                                       |
| <b>Wellbore:</b> | Lateral 1r0                  | <b>Survey Calculation Method:</b>   | Minimum Curvature                          |
| <b>Design:</b>   | Plan 1.0                     | <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) |
|---------------------------------------|-----------------|-------------|-----------------------|--------------|--------------|-------------------------|-------------------------|------------------------|-----------------------|
| 5,000.00                              | 0.00            | 0.00        | 5,000.00              | 0.00         | 0.00         | 0.00                    | 0.00                    | 0.00                   | 0.00                  |
| 5,100.00                              | 0.00            | 0.00        | 5,100.00              | 0.00         | 0.00         | 0.00                    | 0.00                    | 0.00                   | 0.00                  |
| 5,200.00                              | 0.00            | 0.00        | 5,200.00              | 0.00         | 0.00         | 0.00                    | 0.00                    | 0.00                   | 0.00                  |
| <b>Build 1.00°/100'</b>               |                 |             |                       |              |              |                         |                         |                        |                       |
| 5,300.00                              | 1.00            | 56.31       | 5,300.00              | 0.48         | 0.73         | 0.48                    | 1.00                    | 1.00                   | 0.00                  |
| 5,400.00                              | 2.00            | 56.31       | 5,399.96              | 1.94         | 2.90         | 1.92                    | 1.00                    | 1.00                   | 0.00                  |
| 5,500.00                              | 3.00            | 56.31       | 5,499.86              | 4.36         | 6.53         | 4.31                    | 1.00                    | 1.00                   | 0.00                  |
| 5,600.00                              | 4.00            | 56.31       | 5,599.68              | 7.74         | 11.61        | 7.66                    | 1.00                    | 1.00                   | 0.00                  |
| 5,700.00                              | 5.00            | 56.31       | 5,699.37              | 12.09        | 18.14        | 11.97                   | 1.00                    | 1.00                   | 0.00                  |
| <b>Hold 5.00° Inc, 56.31° Azimuth</b> |                 |             |                       |              |              |                         |                         |                        |                       |
| 5,800.00                              | 5.00            | 56.31       | 5,798.99              | 16.93        | 25.39        | 16.75                   | 0.00                    | 0.00                   | 0.00                  |
| 5,900.00                              | 5.00            | 56.31       | 5,898.60              | 21.76        | 32.64        | 21.53                   | 0.00                    | 0.00                   | 0.00                  |
| 6,000.00                              | 5.00            | 56.31       | 5,998.22              | 26.60        | 39.90        | 26.32                   | 0.00                    | 0.00                   | 0.00                  |
| 6,100.00                              | 5.00            | 56.31       | 6,097.84              | 31.43        | 47.15        | 31.10                   | 0.00                    | 0.00                   | 0.00                  |
| 6,200.00                              | 5.00            | 56.31       | 6,197.46              | 36.27        | 54.40        | 35.89                   | 0.00                    | 0.00                   | 0.00                  |
| 6,300.00                              | 5.00            | 56.31       | 6,297.08              | 41.10        | 61.65        | 40.67                   | 0.00                    | 0.00                   | 0.00                  |
| 6,400.00                              | 5.00            | 56.31       | 6,396.70              | 45.94        | 68.90        | 45.45                   | 0.00                    | 0.00                   | 0.00                  |
| 6,500.00                              | 5.00            | 56.31       | 6,496.32              | 50.77        | 76.16        | 50.24                   | 0.00                    | 0.00                   | 0.00                  |
| 6,600.00                              | 5.00            | 56.31       | 6,595.94              | 55.60        | 83.41        | 55.02                   | 0.00                    | 0.00                   | 0.00                  |
| 6,700.00                              | 5.00            | 56.31       | 6,695.56              | 60.44        | 90.66        | 59.80                   | 0.00                    | 0.00                   | 0.00                  |
| 6,800.00                              | 5.00            | 56.31       | 6,795.18              | 65.27        | 97.91        | 64.59                   | 0.00                    | 0.00                   | 0.00                  |
| 6,900.00                              | 5.00            | 56.31       | 6,894.80              | 70.11        | 105.16       | 69.37                   | 0.00                    | 0.00                   | 0.00                  |
| 7,000.00                              | 5.00            | 56.31       | 6,994.42              | 74.94        | 112.41       | 74.16                   | 0.00                    | 0.00                   | 0.00                  |
| 7,100.00                              | 5.00            | 56.31       | 7,094.04              | 79.78        | 119.67       | 78.94                   | 0.00                    | 0.00                   | 0.00                  |
| 7,200.00                              | 5.00            | 56.31       | 7,193.66              | 84.61        | 126.92       | 83.72                   | 0.00                    | 0.00                   | 0.00                  |
| 7,300.00                              | 5.00            | 56.31       | 7,293.28              | 89.45        | 134.17       | 88.51                   | 0.00                    | 0.00                   | 0.00                  |
| 7,400.00                              | 5.00            | 56.31       | 7,392.90              | 94.28        | 141.42       | 93.29                   | 0.00                    | 0.00                   | 0.00                  |
| 7,500.00                              | 5.00            | 56.31       | 7,492.52              | 99.12        | 148.67       | 98.08                   | 0.00                    | 0.00                   | 0.00                  |
| 7,600.00                              | 5.00            | 56.31       | 7,592.14              | 103.95       | 155.93       | 102.86                  | 0.00                    | 0.00                   | 0.00                  |
| 7,700.00                              | 5.00            | 56.31       | 7,691.76              | 108.78       | 163.18       | 107.64                  | 0.00                    | 0.00                   | 0.00                  |
| 7,800.00                              | 5.00            | 56.31       | 7,791.37              | 113.62       | 170.43       | 112.43                  | 0.00                    | 0.00                   | 0.00                  |
| 7,900.00                              | 5.00            | 56.31       | 7,890.99              | 118.45       | 177.68       | 117.21                  | 0.00                    | 0.00                   | 0.00                  |
| 8,000.00                              | 5.00            | 56.31       | 7,990.61              | 123.29       | 184.93       | 121.99                  | 0.00                    | 0.00                   | 0.00                  |
| 8,100.00                              | 5.00            | 56.31       | 8,090.23              | 128.12       | 192.18       | 126.78                  | 0.00                    | 0.00                   | 0.00                  |
| 8,200.00                              | 5.00            | 56.31       | 8,189.85              | 132.96       | 199.44       | 131.56                  | 0.00                    | 0.00                   | 0.00                  |
| 8,300.00                              | 5.00            | 56.31       | 8,289.47              | 137.79       | 206.69       | 136.35                  | 0.00                    | 0.00                   | 0.00                  |
| 8,400.00                              | 5.00            | 56.31       | 8,389.09              | 142.63       | 213.94       | 141.13                  | 0.00                    | 0.00                   | 0.00                  |
| 8,421.49                              | 5.00            | 56.31       | 8,410.50              | 143.67       | 215.50       | 142.16                  | 0.00                    | 0.00                   | 0.00                  |
| <b>Lower Brushy</b>                   |                 |             |                       |              |              |                         |                         |                        |                       |
| 8,500.00                              | 5.00            | 56.31       | 8,488.71              | 147.46       | 221.19       | 145.91                  | 0.00                    | 0.00                   | 0.00                  |
| 8,600.00                              | 5.00            | 56.31       | 8,588.33              | 152.30       | 228.44       | 150.70                  | 0.00                    | 0.00                   | 0.00                  |
| 8,700.00                              | 5.00            | 56.31       | 8,687.95              | 157.13       | 235.69       | 155.48                  | 0.00                    | 0.00                   | 0.00                  |
| 8,800.00                              | 5.00            | 56.31       | 8,787.57              | 161.96       | 242.95       | 160.26                  | 0.00                    | 0.00                   | 0.00                  |
| 8,900.00                              | 5.00            | 56.31       | 8,887.19              | 166.80       | 250.20       | 165.05                  | 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 Anderson Fed Com 504H                 |
| <b>Project:</b>  | Lea County, New Mexico       | <b>TVD Reference:</b>               | 3658'GL+25.5'KB @ 3683.50usft (Pioneer 80) |
| <b>Site:</b>     | Anderson Fed Com 504H        | <b>MD Reference:</b>                | 3658'GL+25.5'KB @ 3683.50usft (Pioneer 80) |
| <b>Well:</b>     | Anderson #504H               | <b>North Reference:</b>             | Grid                                       |
| <b>Wellbore:</b> | Lateral 1r0                  | <b>Survey Calculation Method:</b>   | Minimum Curvature                          |
| <b>Design:</b>   | Plan 1.0                     | <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) |  |
| 8,943.48               | 5.00            | 56.31       | 8,930.50              | 168.90       | 253.35       | 167.13                  | 0.00                    | 0.00                   | 0.00                  |  |
| Avalon                 |                 |             |                       |              |              |                         |                         |                        |                       |  |
| 9,000.00               | 5.00            | 56.31       | 8,986.81              | 171.63       | 257.45       | 169.83                  | 0.00                    | 0.00                   | 0.00                  |  |
| 9,100.00               | 5.00            | 56.31       | 9,086.43              | 176.47       | 264.70       | 174.62                  | 0.00                    | 0.00                   | 0.00                  |  |
| 9,200.00               | 5.00            | 56.31       | 9,186.05              | 181.30       | 271.95       | 179.40                  | 0.00                    | 0.00                   | 0.00                  |  |
| 9,300.00               | 5.00            | 56.31       | 9,285.67              | 186.14       | 279.21       | 184.18                  | 0.00                    | 0.00                   | 0.00                  |  |
| 9,336.59               | 5.00            | 56.31       | 9,322.12              | 187.91       | 281.86       | 185.93                  | 0.00                    | 0.00                   | 0.00                  |  |
| Drop 1.00°/100'        |                 |             |                       |              |              |                         |                         |                        |                       |  |
| 9,400.00               | 4.37            | 56.31       | 9,385.32              | 190.78       | 286.17       | 188.78                  | 1.00                    | -1.00                  | 0.00                  |  |
| 9,500.00               | 3.37            | 56.31       | 9,485.09              | 194.52       | 291.78       | 192.48                  | 1.00                    | -1.00                  | 0.00                  |  |
| 9,600.00               | 2.37            | 56.31       | 9,584.96              | 197.29       | 295.94       | 195.22                  | 1.00                    | -1.00                  | 0.00                  |  |
| 9,700.00               | 1.37            | 56.31       | 9,684.91              | 199.10       | 298.65       | 197.01                  | 1.00                    | -1.00                  | 0.00                  |  |
| 9,800.00               | 0.37            | 56.31       | 9,784.89              | 199.94       | 299.90       | 197.84                  | 1.00                    | -1.00                  | 0.00                  |  |
| 9,812.61               | 0.24            | 56.31       | 9,797.50              | 199.97       | 299.96       | 197.87                  | 1.00                    | -1.00                  | 0.00                  |  |
| 1st BS Sand            |                 |             |                       |              |              |                         |                         |                        |                       |  |
| 9,836.59               | 0.00            | 0.00        | 9,821.48              | 200.00       | 300.00       | 197.90                  | 1.00                    | -1.00                  | 0.00                  |  |
| Hold Vertical          |                 |             |                       |              |              |                         |                         |                        |                       |  |
| 9,900.00               | 0.00            | 0.00        | 9,884.89              | 200.00       | 300.00       | 197.90                  | 0.00                    | 0.00                   | 0.00                  |  |
| 10,000.00              | 0.00            | 0.00        | 9,984.89              | 200.00       | 300.00       | 197.90                  | 0.00                    | 0.00                   | 0.00                  |  |
| 10,100.00              | 0.00            | 0.00        | 10,084.89             | 200.00       | 300.00       | 197.90                  | 0.00                    | 0.00                   | 0.00                  |  |
| 10,200.00              | 0.00            | 0.00        | 10,184.89             | 200.00       | 300.00       | 197.90                  | 0.00                    | 0.00                   | 0.00                  |  |
| 10,300.00              | 0.00            | 0.00        | 10,284.89             | 200.00       | 300.00       | 197.90                  | 0.00                    | 0.00                   | 0.00                  |  |
| 10,362.11              | 0.00            | 0.00        | 10,347.00             | 200.00       | 300.00       | 197.90                  | 0.00                    | 0.00                   | 0.00                  |  |
| KOP, Build 12.00°/100' |                 |             |                       |              |              |                         |                         |                        |                       |  |
| 10,375.00              | 1.55            | 51.70       | 10,359.89             | 200.11       | 300.14       | 198.01                  | 12.00                   | 12.00                  | 0.00                  |  |
| 10,400.00              | 4.55            | 51.70       | 10,384.85             | 200.93       | 301.18       | 198.82                  | 12.00                   | 12.00                  | 0.00                  |  |
| 10,425.00              | 7.55            | 51.70       | 10,409.71             | 202.56       | 303.25       | 200.44                  | 12.00                   | 12.00                  | 0.00                  |  |
| 10,450.00              | 10.55           | 51.70       | 10,434.40             | 205.00       | 306.33       | 202.86                  | 12.00                   | 12.00                  | 0.00                  |  |
| 10,475.00              | 13.55           | 51.70       | 10,458.84             | 208.23       | 310.43       | 206.06                  | 12.00                   | 12.00                  | 0.00                  |  |
| 10,500.00              | 16.55           | 51.70       | 10,482.98             | 212.26       | 315.52       | 210.05                  | 12.00                   | 12.00                  | 0.00                  |  |
| 10,525.00              | 19.55           | 51.70       | 10,506.75             | 217.06       | 321.60       | 214.80                  | 12.00                   | 12.00                  | 0.00                  |  |
| 10,550.00              | 22.55           | 51.70       | 10,530.08             | 222.62       | 328.64       | 220.32                  | 12.00                   | 12.00                  | 0.00                  |  |
| 10,575.00              | 25.55           | 51.70       | 10,552.91             | 228.93       | 336.63       | 226.58                  | 12.00                   | 12.00                  | 0.00                  |  |
| 10,600.00              | 28.55           | 51.70       | 10,575.17             | 235.98       | 345.55       | 233.56                  | 12.00                   | 12.00                  | 0.00                  |  |
| 10,625.00              | 31.55           | 51.70       | 10,596.81             | 243.73       | 355.38       | 241.25                  | 12.00                   | 12.00                  | 0.00                  |  |
| 10,650.00              | 34.55           | 51.70       | 10,617.76             | 252.18       | 366.08       | 249.62                  | 12.00                   | 12.00                  | 0.00                  |  |
| 10,675.00              | 37.55           | 51.70       | 10,637.97             | 261.30       | 377.62       | 258.66                  | 12.00                   | 12.00                  | 0.00                  |  |
| 10,700.00              | 40.55           | 51.70       | 10,657.39             | 271.06       | 389.98       | 268.33                  | 12.00                   | 12.00                  | 0.00                  |  |
| 10,725.00              | 43.55           | 51.70       | 10,675.95             | 281.44       | 403.12       | 278.61                  | 12.00                   | 12.00                  | 0.00                  |  |
| 10,750.00              | 46.55           | 51.70       | 10,693.61             | 292.40       | 417.00       | 289.48                  | 12.00                   | 12.00                  | 0.00                  |  |
| 10,775.00              | 49.55           | 51.70       | 10,710.32             | 303.92       | 431.59       | 300.90                  | 12.00                   | 12.00                  | 0.00                  |  |
| 10,800.00              | 52.55           | 51.70       | 10,726.04             | 315.97       | 446.84       | 312.84                  | 12.00                   | 12.00                  | 0.00                  |  |
| 10,814.94              | 54.34           | 51.70       | 10,734.94             | 323.41       | 456.26       | 320.21                  | 12.00                   | 12.00                  | 0.00                  |  |
| Build Turn 12.00°/100' |                 |             |                       |              |              |                         |                         |                        |                       |  |

## Aim Directional Services, LLC

## Survey Report

|                  |                              |                                     |                                            |
|------------------|------------------------------|-------------------------------------|--------------------------------------------|
| <b>Company:</b>  | Advance Energy Partners, LLC | <b>Local Co-ordinate Reference:</b> | Site Anderson Fed Com 504H                 |
| <b>Project:</b>  | Lea County, New Mexico       | <b>TVD Reference:</b>               | 3658'GL+25.5'KB @ 3683.50usft (Pioneer 80) |
| <b>Site:</b>     | Anderson Fed Com 504H        | <b>MD Reference:</b>                | 3658'GL+25.5'KB @ 3683.50usft (Pioneer 80) |
| <b>Well:</b>     | Anderson #504H               | <b>North Reference:</b>             | Grid                                       |
| <b>Wellbore:</b> | Lateral 1r0                  | <b>Survey Calculation Method:</b>   | Minimum Curvature                          |
| <b>Design:</b>   | Plan 1.0                     | <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) |
| 10,825.00                            | 54.85           | 50.35       | 10,740.76             | 328.56       | 462.63       | 325.33                  | 12.00                   | 5.02                   | -13.37                |
| 10,850.00                            | 56.16           | 47.08       | 10,754.93             | 342.16       | 478.11       | 338.81                  | 12.00                   | 5.27                   | -13.08                |
| 10,875.00                            | 57.57           | 43.92       | 10,768.59             | 356.83       | 493.04       | 353.38                  | 12.00                   | 5.61                   | -12.67                |
| 10,900.00                            | 59.04           | 40.85       | 10,781.73             | 372.54       | 507.37       | 368.99                  | 12.00                   | 5.92                   | -12.27                |
| 10,925.00                            | 60.59           | 37.88       | 10,794.30             | 389.25       | 521.07       | 385.60                  | 12.00                   | 6.20                   | -11.89                |
| 10,950.00                            | 62.21           | 35.00       | 10,806.27             | 406.91       | 534.10       | 403.17                  | 12.00                   | 6.45                   | -11.53                |
| 10,975.00                            | 63.88           | 32.20       | 10,817.60             | 425.47       | 546.43       | 421.64                  | 12.00                   | 6.68                   | -11.18                |
| 11,000.00                            | 65.60           | 29.48       | 10,828.27             | 444.88       | 558.01       | 440.97                  | 12.00                   | 6.89                   | -10.86                |
| 11,025.00                            | 67.37           | 26.84       | 10,838.25             | 465.09       | 568.83       | 461.10                  | 12.00                   | 7.08                   | -10.57                |
| 11,050.00                            | 69.18           | 24.27       | 10,847.50             | 486.04       | 578.84       | 481.99                  | 12.00                   | 7.25                   | -10.29                |
| 11,075.00                            | 71.03           | 21.76       | 10,856.01             | 507.67       | 588.03       | 503.56                  | 12.00                   | 7.40                   | -10.05                |
| 11,100.00                            | 72.92           | 19.30       | 10,863.75             | 529.93       | 596.36       | 525.76                  | 12.00                   | 7.53                   | -9.82                 |
| 11,125.00                            | 74.83           | 16.90       | 10,870.69             | 552.76       | 603.82       | 548.53                  | 12.00                   | 7.65                   | -9.63                 |
| 11,150.00                            | 76.77           | 14.53       | 10,876.82             | 576.09       | 610.38       | 571.81                  | 12.00                   | 7.75                   | -9.45                 |
| 11,175.00                            | 78.72           | 12.21       | 10,882.13             | 599.85       | 616.03       | 595.54                  | 12.00                   | 7.83                   | -9.30                 |
| 11,200.00                            | 80.70           | 9.91        | 10,886.60             | 623.99       | 620.74       | 619.64                  | 12.00                   | 7.91                   | -9.18                 |
| 11,225.00                            | 82.69           | 7.64        | 10,890.21             | 648.44       | 624.52       | 644.06                  | 12.00                   | 7.96                   | -9.07                 |
| 11,250.00                            | 84.69           | 5.40        | 10,892.95             | 673.12       | 627.34       | 668.73                  | 12.00                   | 8.01                   | -8.99                 |
| 11,275.00                            | 86.70           | 3.16        | 10,894.83             | 697.98       | 629.20       | 693.57                  | 12.00                   | 8.04                   | -8.93                 |
| 11,300.00                            | 88.72           | 0.94        | 10,895.83             | 722.94       | 630.09       | 718.53                  | 12.00                   | 8.06                   | -8.90                 |
| 11,315.11                            | 89.94           | 359.60      | 10,896.00             | 738.05       | 630.16       | 733.64                  | 12.00                   | 8.07                   | -8.88                 |
| LP, Hold 89.94° Inc, 359.60° Azimuth |                 |             |                       |              |              |                         |                         |                        |                       |
| 11,400.00                            | 89.94           | 359.60      | 10,896.09             | 822.94       | 629.57       | 818.52                  | 0.00                    | 0.00                   | 0.00                  |
| 11,500.00                            | 89.94           | 359.60      | 10,896.20             | 922.94       | 628.86       | 918.52                  | 0.00                    | 0.00                   | 0.00                  |
| 11,600.00                            | 89.94           | 359.60      | 10,896.31             | 1,022.93     | 628.16       | 1,018.52                | 0.00                    | 0.00                   | 0.00                  |
| 11,700.00                            | 89.94           | 359.60      | 10,896.41             | 1,122.93     | 627.45       | 1,118.52                | 0.00                    | 0.00                   | 0.00                  |
| 11,800.00                            | 89.94           | 359.60      | 10,896.52             | 1,222.93     | 626.75       | 1,218.52                | 0.00                    | 0.00                   | 0.00                  |
| 11,900.00                            | 89.94           | 359.60      | 10,896.63             | 1,322.92     | 626.04       | 1,318.52                | 0.00                    | 0.00                   | 0.00                  |
| 12,000.00                            | 89.94           | 359.60      | 10,896.73             | 1,422.92     | 625.34       | 1,418.52                | 0.00                    | 0.00                   | 0.00                  |
| 12,100.00                            | 89.94           | 359.60      | 10,896.84             | 1,522.92     | 624.64       | 1,518.52                | 0.00                    | 0.00                   | 0.00                  |
| 12,200.00                            | 89.94           | 359.60      | 10,896.95             | 1,622.92     | 623.93       | 1,618.52                | 0.00                    | 0.00                   | 0.00                  |
| 12,300.00                            | 89.94           | 359.60      | 10,897.06             | 1,722.91     | 623.23       | 1,718.52                | 0.00                    | 0.00                   | 0.00                  |
| 12,400.00                            | 89.94           | 359.60      | 10,897.16             | 1,822.91     | 622.52       | 1,818.52                | 0.00                    | 0.00                   | 0.00                  |
| 12,500.00                            | 89.94           | 359.60      | 10,897.27             | 1,922.91     | 621.82       | 1,918.52                | 0.00                    | 0.00                   | 0.00                  |
| 12,600.00                            | 89.94           | 359.60      | 10,897.38             | 2,022.91     | 621.12       | 2,018.52                | 0.00                    | 0.00                   | 0.00                  |
| 12,700.00                            | 89.94           | 359.60      | 10,897.48             | 2,122.90     | 620.41       | 2,118.52                | 0.00                    | 0.00                   | 0.00                  |
| 12,800.00                            | 89.94           | 359.60      | 10,897.59             | 2,222.90     | 619.71       | 2,218.52                | 0.00                    | 0.00                   | 0.00                  |
| 12,900.00                            | 89.94           | 359.60      | 10,897.70             | 2,322.90     | 619.00       | 2,318.52                | 0.00                    | 0.00                   | 0.00                  |
| 13,000.00                            | 89.94           | 359.60      | 10,897.80             | 2,422.90     | 618.30       | 2,418.52                | 0.00                    | 0.00                   | 0.00                  |
| 13,100.00                            | 89.94           | 359.60      | 10,897.91             | 2,522.89     | 617.59       | 2,518.52                | 0.00                    | 0.00                   | 0.00                  |
| 13,200.00                            | 89.94           | 359.60      | 10,898.02             | 2,622.89     | 616.89       | 2,618.52                | 0.00                    | 0.00                   | 0.00                  |
| 13,300.00                            | 89.94           | 359.60      | 10,898.12             | 2,722.89     | 616.19       | 2,718.52                | 0.00                    | 0.00                   | 0.00                  |
| 13,400.00                            | 89.94           | 359.60      | 10,898.23             | 2,822.89     | 615.48       | 2,818.52                | 0.00                    | 0.00                   | 0.00                  |
| 13,500.00                            | 89.94           | 359.60      | 10,898.34             | 2,922.88     | 614.78       | 2,918.52                | 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 Anderson Fed Com 504H                 |
| <b>Project:</b>  | Lea County, New Mexico       | <b>TVD Reference:</b>               | 3658'GL+25.5'KB @ 3683.50usft (Pioneer 80) |
| <b>Site:</b>     | Anderson Fed Com 504H        | <b>MD Reference:</b>                | 3658'GL+25.5'KB @ 3683.50usft (Pioneer 80) |
| <b>Well:</b>     | Anderson #504H               | <b>North Reference:</b>             | Grid                                       |
| <b>Wellbore:</b> | Lateral 1r0                  | <b>Survey Calculation Method:</b>   | Minimum Curvature                          |
| <b>Design:</b>   | Plan 1.0                     | <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) |
| 13,600.00                               | 89.94           | 359.60      | 10,898.44             | 3,022.88     | 614.07       | 3,018.52                | 0.00                    | 0.00                   | 0.00                  |
| 13,700.00                               | 89.94           | 359.60      | 10,898.55             | 3,122.88     | 613.37       | 3,118.52                | 0.00                    | 0.00                   | 0.00                  |
| 13,800.00                               | 89.94           | 359.60      | 10,898.66             | 3,222.88     | 612.67       | 3,218.52                | 0.00                    | 0.00                   | 0.00                  |
| 13,900.00                               | 89.94           | 359.60      | 10,898.76             | 3,322.87     | 611.96       | 3,318.52                | 0.00                    | 0.00                   | 0.00                  |
| 14,000.00                               | 89.94           | 359.60      | 10,898.87             | 3,422.87     | 611.26       | 3,418.52                | 0.00                    | 0.00                   | 0.00                  |
| 14,100.00                               | 89.94           | 359.60      | 10,898.98             | 3,522.87     | 610.55       | 3,518.52                | 0.00                    | 0.00                   | 0.00                  |
| 14,119.13                               | 89.94           | 359.60      | 10,899.00             | 3,542.00     | 610.42       | 3,537.65                | 0.00                    | 0.00                   | 0.00                  |
| <b>Build 2.00°/100'</b>                 |                 |             |                       |              |              |                         |                         |                        |                       |
| 14,200.00                               | 91.56           | 359.60      | 10,897.94             | 3,622.86     | 609.85       | 3,618.51                | 2.00                    | 2.00                   | 0.00                  |
| 14,285.19                               | 93.26           | 359.60      | 10,894.36             | 3,707.97     | 609.25       | 3,703.62                | 2.00                    | 2.00                   | 0.00                  |
| <b>Hold 93.26° Inc, 359.60° Azimuth</b> |                 |             |                       |              |              |                         |                         |                        |                       |
| 14,300.00                               | 93.26           | 359.60      | 10,893.52             | 3,722.75     | 609.15       | 3,718.41                | 0.00                    | 0.00                   | 0.00                  |
| 14,400.00                               | 93.26           | 359.60      | 10,887.84             | 3,822.59     | 608.44       | 3,818.25                | 0.00                    | 0.00                   | 0.00                  |
| 14,500.00                               | 93.26           | 359.60      | 10,882.15             | 3,922.42     | 607.74       | 3,918.09                | 0.00                    | 0.00                   | 0.00                  |
| 14,600.00                               | 93.26           | 359.60      | 10,876.46             | 4,022.26     | 607.04       | 4,017.92                | 0.00                    | 0.00                   | 0.00                  |
| 14,700.00                               | 93.26           | 359.60      | 10,870.78             | 4,122.10     | 606.33       | 4,117.76                | 0.00                    | 0.00                   | 0.00                  |
| 14,800.00                               | 93.26           | 359.60      | 10,865.09             | 4,221.93     | 605.63       | 4,217.60                | 0.00                    | 0.00                   | 0.00                  |
| 14,900.00                               | 93.26           | 359.60      | 10,859.40             | 4,321.77     | 604.93       | 4,317.44                | 0.00                    | 0.00                   | 0.00                  |
| 15,000.00                               | 93.26           | 359.60      | 10,853.72             | 4,421.60     | 604.22       | 4,417.28                | 0.00                    | 0.00                   | 0.00                  |
| 15,100.00                               | 93.26           | 359.60      | 10,848.03             | 4,521.44     | 603.52       | 4,517.11                | 0.00                    | 0.00                   | 0.00                  |
| 15,135.62                               | 93.26           | 359.60      | 10,846.00             | 4,557.00     | 603.27       | 4,552.68                | 0.00                    | 0.00                   | 0.00                  |
| <b>Drop 2.00°/100'</b>                  |                 |             |                       |              |              |                         |                         |                        |                       |
| 15,155.67                               | 92.86           | 359.60      | 10,844.93             | 4,577.02     | 603.13       | 4,572.70                | 2.00                    | -2.00                  | 0.00                  |
| <b>Hold 92.86° Inc, 359.60° Azimuth</b> |                 |             |                       |              |              |                         |                         |                        |                       |
| 15,200.00                               | 92.86           | 359.60      | 10,842.72             | 4,621.29     | 602.82       | 4,616.97                | 0.00                    | 0.00                   | 0.00                  |
| 15,300.00                               | 92.86           | 359.60      | 10,837.73             | 4,721.17     | 602.11       | 4,716.85                | 0.00                    | 0.00                   | 0.00                  |
| 15,400.00                               | 92.86           | 359.60      | 10,832.75             | 4,821.04     | 601.41       | 4,816.72                | 0.00                    | 0.00                   | 0.00                  |
| 15,500.00                               | 92.86           | 359.60      | 10,827.76             | 4,920.91     | 600.71       | 4,916.60                | 0.00                    | 0.00                   | 0.00                  |
| 15,600.00                               | 92.86           | 359.60      | 10,822.77             | 5,020.79     | 600.00       | 5,016.48                | 0.00                    | 0.00                   | 0.00                  |
| 15,700.00                               | 92.86           | 359.60      | 10,817.78             | 5,120.66     | 599.30       | 5,116.35                | 0.00                    | 0.00                   | 0.00                  |
| 15,800.00                               | 92.86           | 359.60      | 10,812.79             | 5,220.53     | 598.60       | 5,216.23                | 0.00                    | 0.00                   | 0.00                  |
| 15,900.00                               | 92.86           | 359.60      | 10,807.81             | 5,320.41     | 597.89       | 5,316.10                | 0.00                    | 0.00                   | 0.00                  |
| 16,000.00                               | 92.86           | 359.60      | 10,802.82             | 5,420.28     | 597.19       | 5,415.98                | 0.00                    | 0.00                   | 0.00                  |
| 16,100.00                               | 92.86           | 359.60      | 10,797.83             | 5,520.15     | 596.49       | 5,515.85                | 0.00                    | 0.00                   | 0.00                  |
| 16,200.00                               | 92.86           | 359.60      | 10,792.84             | 5,620.02     | 595.79       | 5,615.73                | 0.00                    | 0.00                   | 0.00                  |
| 16,297.10                               | 92.86           | 359.60      | 10,788.00             | 5,717.00     | 595.10       | 5,712.71                | 0.00                    | 0.00                   | 0.00                  |
| <b>Build 2.00°/100'</b>                 |                 |             |                       |              |              |                         |                         |                        |                       |
| 16,301.26                               | 92.94           | 359.60      | 10,787.79             | 5,721.15     | 595.07       | 5,716.86                | 2.00                    | 2.00                   | 0.00                  |
| <b>Hold 92.94° Inc, 359.60° Azimuth</b> |                 |             |                       |              |              |                         |                         |                        |                       |
| 16,400.00                               | 92.94           | 359.60      | 10,782.72             | 5,819.76     | 594.38       | 5,815.47                | 0.00                    | 0.00                   | 0.00                  |
| 16,500.00                               | 92.94           | 359.60      | 10,777.59             | 5,919.63     | 593.68       | 5,915.34                | 0.00                    | 0.00                   | 0.00                  |
| 16,600.00                               | 92.94           | 359.60      | 10,772.46             | 6,019.49     | 592.97       | 6,015.21                | 0.00                    | 0.00                   | 0.00                  |
| 16,700.00                               | 92.94           | 359.60      | 10,767.32             | 6,119.36     | 592.27       | 6,115.08                | 0.00                    | 0.00                   | 0.00                  |
| 16,800.00                               | 92.94           | 359.60      | 10,762.19             | 6,219.23     | 591.57       | 6,214.94                | 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 Anderson Fed Com 504H                 |
| <b>Project:</b>  | Lea County, New Mexico       | <b>TVD Reference:</b>               | 3658'GL+25.5'KB @ 3683.50usft (Pioneer 80) |
| <b>Site:</b>     | Anderson Fed Com 504H        | <b>MD Reference:</b>                | 3658'GL+25.5'KB @ 3683.50usft (Pioneer 80) |
| <b>Well:</b>     | Anderson #504H               | <b>North Reference:</b>             | Grid                                       |
| <b>Wellbore:</b> | Lateral 1r0                  | <b>Survey Calculation Method:</b>   | Minimum Curvature                          |
| <b>Design:</b>   | Plan 1.0                     | <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) |  |
| 16,900.00             | 92.94           | 359.60      | 10,757.06             | 6,319.09     | 590.86       | 6,314.81                | 0.00                    | 0.00                   | 0.00                  |  |
| 17,000.00             | 92.94           | 359.60      | 10,751.93             | 6,418.96     | 590.16       | 6,414.68                | 0.00                    | 0.00                   | 0.00                  |  |
| 17,100.00             | 92.94           | 359.60      | 10,746.79             | 6,518.82     | 589.46       | 6,514.55                | 0.00                    | 0.00                   | 0.00                  |  |
| 17,200.00             | 92.94           | 359.60      | 10,741.66             | 6,618.69     | 588.75       | 6,614.42                | 0.00                    | 0.00                   | 0.00                  |  |
| 17,300.00             | 92.94           | 359.60      | 10,736.53             | 6,718.55     | 588.05       | 6,714.29                | 0.00                    | 0.00                   | 0.00                  |  |
| 17,400.00             | 92.94           | 359.60      | 10,731.39             | 6,818.42     | 587.35       | 6,814.15                | 0.00                    | 0.00                   | 0.00                  |  |
| 17,500.00             | 92.94           | 359.60      | 10,726.26             | 6,918.29     | 586.64       | 6,914.02                | 0.00                    | 0.00                   | 0.00                  |  |
| 17,600.00             | 92.94           | 359.60      | 10,721.13             | 7,018.15     | 585.94       | 7,013.89                | 0.00                    | 0.00                   | 0.00                  |  |
| 17,700.00             | 92.94           | 359.60      | 10,716.00             | 7,118.02     | 585.24       | 7,113.76                | 0.00                    | 0.00                   | 0.00                  |  |
| 17,719.41             | 92.94           | 359.60      | 10,715.00             | 7,137.40     | 585.10       | 7,133.14                | 0.00                    | 0.00                   | 0.00                  |  |
| PBHL                  |                 |             |                       |              |              |                         |                         |                        |                       |  |

| Design Targets                                                                                                       |               |              |            |              |              |                 |                |                  |                   |  |
|----------------------------------------------------------------------------------------------------------------------|---------------|--------------|------------|--------------|--------------|-----------------|----------------|------------------|-------------------|--|
| Target Name<br>- hit/miss target<br>- Shape                                                                          | Dip Angle (°) | Dip Dir. (°) | TVD (usft) | +N/-S (usft) | +E/-W (usft) | Northing (usft) | Easting (usft) | Latitude         | Longitude         |  |
| FTP (Anderson504H)<br>- plan misses target center by 964.94usft at 0.00usft MD (0.00 TVD, 0.00 N, 0.00 E)<br>- Point | 0.00          | 0.00         | 0.00       | 736.70       | 623.20       | 520,262.50      | 755,903.90     | 32° 25' 42.054 N | 103° 38' 16.483 W |  |
| PBHL (Anderson504H)<br>- plan hits target center<br>- Point                                                          | 0.00          | 0.00         | 10,715.00  | 7,137.40     | 585.10       | 526,663.20      | 755,865.80     | 32° 26' 45.391 N | 103° 38' 16.441 W |  |
| WP3 (Anderson504H)<br>- plan hits target center<br>- Point                                                           | 0.00          | 0.00         | 10,788.00  | 5,717.00     | 595.10       | 525,242.80      | 755,875.80     | 32° 26' 31.335 N | 103° 38' 16.432 W |  |
| WP2 (Anderson504H)<br>- plan hits target center<br>- Point                                                           | 0.00          | 0.00         | 10,846.00  | 4,557.00     | 603.27       | 524,082.80      | 755,883.97     | 32° 26' 19.857 N | 103° 38' 16.425 W |  |
| WP1 (Anderson504H)<br>- plan hits target center<br>- Point                                                           | 0.00          | 0.00         | 10,899.00  | 3,542.00     | 610.42       | 523,067.80      | 755,891.11     | 32° 26' 9.813 N  | 103° 38' 16.419 W |  |

| Formations            |                       |                   |           |         |                   |  |
|-----------------------|-----------------------|-------------------|-----------|---------|-------------------|--|
| Measured Depth (usft) | Vertical Depth (usft) | Name              | Lithology | Dip (°) | Dip Direction (°) |  |
| 1,186.50              | 1,186.50              | Rustler           |           | 0.00    |                   |  |
| 4,763.50              | 4,763.50              | Base of Limestone |           |         |                   |  |
| 8,421.49              | 8,410.50              | Lower Brushy      |           |         |                   |  |
| 8,943.48              | 8,930.50              | Avalon            |           |         |                   |  |
| 9,812.61              | 9,797.50              | 1st BS Sand       |           |         |                   |  |

## Aim Directional Services, LLC

## Survey Report

|                  |                              |                                     |                                            |
|------------------|------------------------------|-------------------------------------|--------------------------------------------|
| <b>Company:</b>  | Advance Energy Partners, LLC | <b>Local Co-ordinate Reference:</b> | Site Anderson Fed Com 504H                 |
| <b>Project:</b>  | Lea County, New Mexico       | <b>TVD Reference:</b>               | 3658'GL+25.5'KB @ 3683.50usft (Pioneer 80) |
| <b>Site:</b>     | Anderson Fed Com 504H        | <b>MD Reference:</b>                | 3658'GL+25.5'KB @ 3683.50usft (Pioneer 80) |
| <b>Well:</b>     | Anderson #504H               | <b>North Reference:</b>             | Grid                                       |
| <b>Wellbore:</b> | Lateral 1r0                  | <b>Survey Calculation Method:</b>   | Minimum Curvature                          |
| <b>Design:</b>   | Plan 1.0                     | <b>Database:</b>                    | EDM 5000.1 Aim Database                    |

| Plan Annotations            |                             |                   |                 |                                      |
|-----------------------------|-----------------------------|-------------------|-----------------|--------------------------------------|
| Measured<br>Depth<br>(usft) | Vertical<br>Depth<br>(usft) | Local Coordinates |                 | Comment                              |
|                             |                             | +N/-S<br>(usft)   | +E/-W<br>(usft) |                                      |
| 5200                        | 5200                        | 0                 | 0               | Build 1.00°/100'                     |
| 5700                        | 5699                        | 12                | 18              | Hold 5.00° Inc, 56.31° Azimuth       |
| 9337                        | 9322                        | 188               | 282             | Drop 1.00°/100'                      |
| 9837                        | 9821                        | 200               | 300             | Hold Vertical                        |
| 10,362                      | 10,347                      | 200               | 300             | KOP, Build 12.00°/100'               |
| 10,815                      | 10,735                      | 323               | 456             | Build Turn 12.00°/100'               |
| 11,315                      | 10,896                      | 738               | 630             | LP, Hold 89.94° Inc, 359.60° Azimuth |
| 14,119                      | 10,899                      | 3542              | 610             | Build 2.00°/100'                     |
| 14,285                      | 10,894                      | 3708              | 609             | Hold 93.26° Inc, 359.60° Azimuth     |
| 15,136                      | 10,846                      | 4557              | 603             | Drop 2.00°/100'                      |
| 15,156                      | 10,845                      | 4577              | 603             | Hold 92.86° Inc, 359.60° Azimuth     |
| 16,297                      | 10,788                      | 5717              | 595             | Build 2.00°/100'                     |
| 16,301                      | 10,788                      | 5721              | 595             | Hold 92.94° Inc, 359.60° Azimuth     |
| 17,719                      | 10,715                      | 7137              | 585             | PBHL                                 |

Referred to Imaging: 10/2/2025 9:48:06 AM



# Advance Energy Partners, LLC

Anderson Fed Com 504H  
Lea County, New Mexico  
WT-20-071  
Pioneer 80  
Plan 3.0 Final PVA



Received by OCD: 8/2/2022 11:24:08 AM

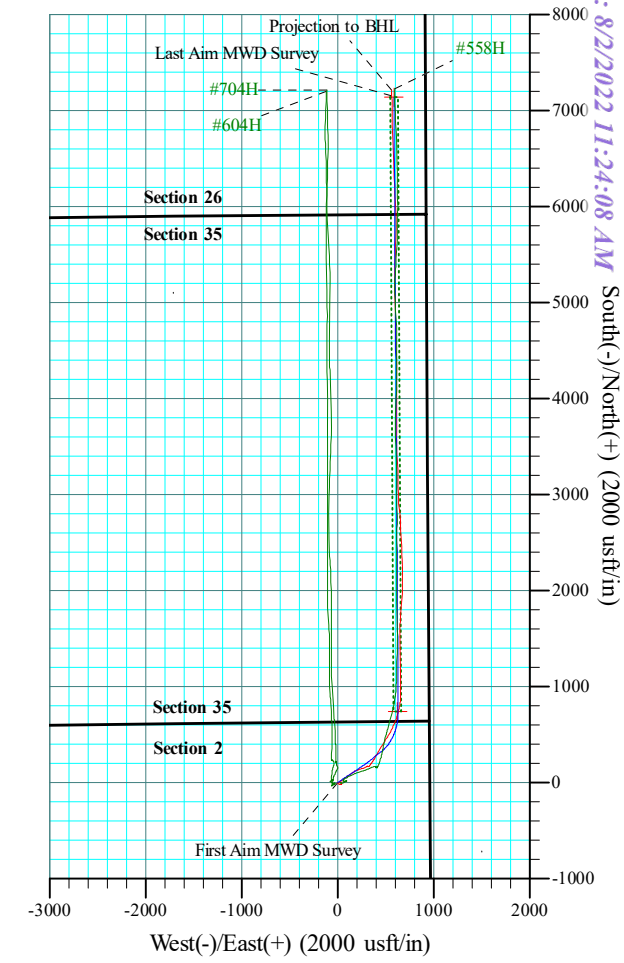
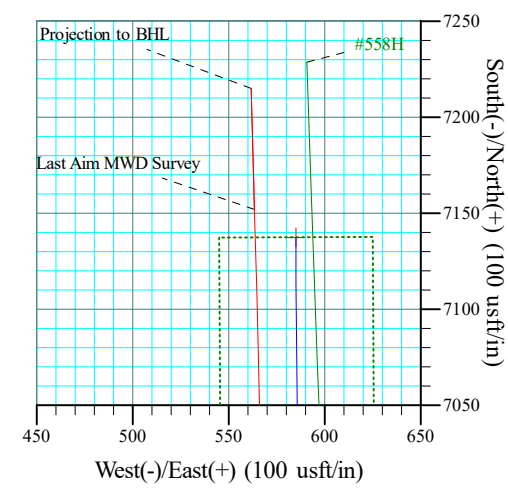


Azimuths to Grid North  
True North: -0.37°  
Magnetic North: 6.14°  
  
Magnetic Field  
Strength: 47933.4nT  
Dip Angle: 60.15°  
Date: 1/13/2021  
Model: MVHD

Magnetic North: 6.14° to Grid North

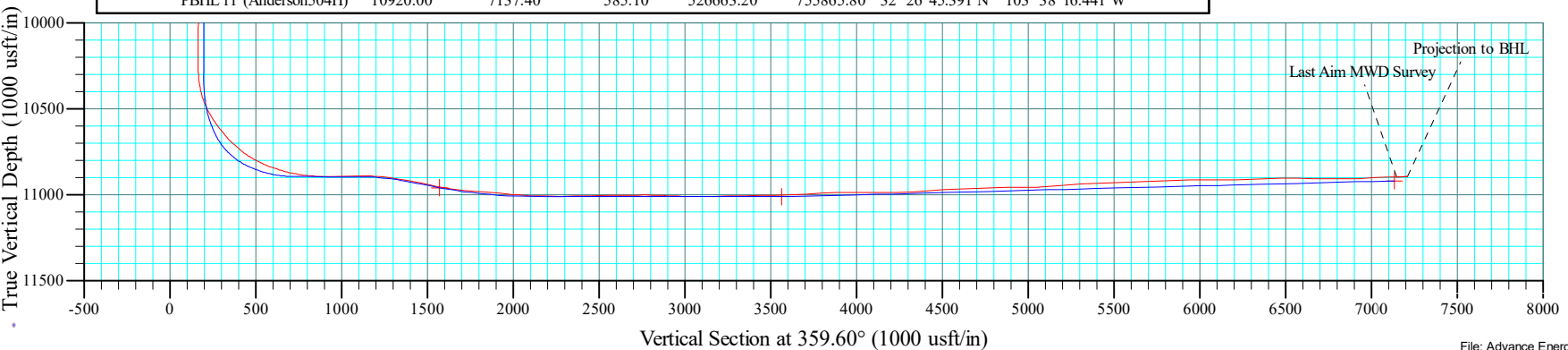
| SITE DETAILS: Anderson Fed Com 504H |           |
|-------------------------------------|-----------|
| Site Centre Northing:               | 519525.80 |
| Easting:                            | 755280.70 |
| Positional Uncertainty:             | 0.00      |
| Convergence:                        | 0.37      |
| 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:                        | 3658'GL+25.5'KB @ 3683.50usft (Pioneer 80) |



| SECTION DETAILS |          |       |        |          |         |        |      |       |         |                     |
|-----------------|----------|-------|--------|----------|---------|--------|------|-------|---------|---------------------|
| Sec             | MD       | Inc   | Azi    | TVD      | +N/-S   | +E/-W  | Dleg | TFace | Vsect   | Annotation          |
| 1               | 17684.00 | 92.13 | 358.41 | 10897.38 | 7151.88 | 563.49 | 0.00 | 0.00  | 7147.77 | Last Aim MWD Survey |
| 2               | 17747.00 | 92.13 | 358.41 | 10895.03 | 7214.82 | 561.75 | 0.00 | 0.00  | 7210.72 | Projection to BHL   |

| DESIGN TARGET DETAILS  |          |         |        |           |           |                  |                   |  |  |  |
|------------------------|----------|---------|--------|-----------|-----------|------------------|-------------------|--|--|--|
| Name                   | TVD      | +N/-S   | +E/-W  | Northing  | Easting   | Latitude         | Longitude         |  |  |  |
| FTP (Anderson504H)     | 0.00     | 736.70  | 623.20 | 520262.50 | 755903.90 | 32° 25' 42.054 N | 103° 38' 16.483 W |  |  |  |
| PBHL r1 (Anderson504H) | 10920.00 | 7137.40 | 585.10 | 526663.20 | 755865.80 | 32° 26' 45.391 N | 103° 38' 16.441 W |  |  |  |



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# Survey Reports

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## **Anderson Fed Com 504H (WT-20-071)**

2020-12-04 to 2021-01-18

Lea, New Mexico, US (32.43, -103.64)

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## Aim Directional Services, LLC

## Survey Report

|                  |                              |                                     |                                            |
|------------------|------------------------------|-------------------------------------|--------------------------------------------|
| <b>Company:</b>  | Advance Energy Partners, LLC | <b>Local Co-ordinate Reference:</b> | Site Anderson Fed Com 504H                 |
| <b>Project:</b>  | Lea County, New Mexico       | <b>TVD Reference:</b>               | 3658'GL+25.5'KB @ 3683.50usft (Pioneer 80) |
| <b>Site:</b>     | Anderson Fed Com 504H        | <b>MD Reference:</b>                | 3658'GL+25.5'KB @ 3683.50usft (Pioneer 80) |
| <b>Well:</b>     | Anderson #504H               | <b>North Reference:</b>             | Grid                                       |
| <b>Wellbore:</b> | Aim MWD Surveys              | <b>Survey Calculation Method:</b>   | Minimum Curvature                          |
| <b>Design:</b>   | Aim MWD Surveys              | <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   |                      |                |

|                              |                       |                          |                   |
|------------------------------|-----------------------|--------------------------|-------------------|
| <b>Site</b>                  | Anderson Fed Com 504H |                          |                   |
| <b>Site Position:</b>        |                       | <b>Northing:</b>         | 519,525.80 usft   |
| <b>From:</b>                 | Map                   | <b>Easting:</b>          | 755,280.70 usft   |
| <b>Position Uncertainty:</b> | 0.00 usft             | <b>Slot Radius:</b>      | 13-3/16 "         |
|                              |                       | <b>Latitude:</b>         | 32° 25' 34.804 N  |
|                              |                       | <b>Longitude:</b>        | 103° 38' 23.809 W |
|                              |                       | <b>Grid Convergence:</b> | 0.37 °            |

|                             |                            |                            |                                  |
|-----------------------------|----------------------------|----------------------------|----------------------------------|
| <b>Well</b>                 | Anderson #504H - Slot 504H |                            |                                  |
| <b>Well Position</b>        | <b>+N/-S</b>               | 0.00 usft                  | <b>Northing:</b> 519,525.80 usft |
|                             | <b>+E/-W</b>               | 0.00 usft                  | <b>Easting:</b> 755,280.70 usft  |
| <b>Position Uncertainty</b> | 0.00 usft                  | <b>Wellhead Elevation:</b> | usft                             |
|                             |                            | <b>Latitude:</b>           | 32° 25' 34.804 N                 |
|                             |                            | <b>Longitude:</b>          | 103° 38' 23.809 W                |
|                             |                            | <b>Ground Level:</b>       | 3,658.00 usft                    |

|                  |                   |                    |                        |                      |                            |
|------------------|-------------------|--------------------|------------------------|----------------------|----------------------------|
| <b>Wellbore</b>  | Aim MWD Surveys   |                    |                        |                      |                            |
| <b>Magnetics</b> | <b>Model Name</b> | <b>Sample Date</b> | <b>Declination (°)</b> | <b>Dip Angle (°)</b> | <b>Field Strength (nT)</b> |
|                  | MVHD              | 12/6/2020          | 6.52                   | 60.15                | 47,944.49766590            |

|                          |                                |                     |                     |                      |      |
|--------------------------|--------------------------------|---------------------|---------------------|----------------------|------|
| <b>Design</b>            | Aim MWD Surveys                |                     |                     |                      |      |
| <b>Audit Notes:</b>      |                                |                     |                     |                      |      |
| <b>Version:</b>          | 1.0                            | <b>Phase:</b>       | ACTUAL              | <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                | 359.60               |      |

|                       |                  |                                   |                  |                    |  |
|-----------------------|------------------|-----------------------------------|------------------|--------------------|--|
| <b>Survey Program</b> | <b>Date</b>      | 1/18/2021                         |                  |                    |  |
| <b>From (usft)</b>    | <b>To (usft)</b> | <b>Survey (Wellbore)</b>          | <b>Tool Name</b> | <b>Description</b> |  |
| 200.00                | 17,747.00        | Aim MWD Surveys (Aim MWD Surveys) | B001Mb_MWD+HRGM  | OWSG MWD + HRGM    |  |

|                              |                        |                    |                              |                     |                     |                                |                                |                               |                              |
|------------------------------|------------------------|--------------------|------------------------------|---------------------|---------------------|--------------------------------|--------------------------------|-------------------------------|------------------------------|
| <b>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                         |
| 200.00                       | 0.62                   | 178.95             | 200.00                       | -1.08               | 0.02                | -1.08                          | 0.31                           | 0.31                          | 0.00                         |
| <b>First Aim MWD Survey</b>  |                        |                    |                              |                     |                     |                                |                                |                               |                              |
| 325.00                       | 0.88                   | 172.36             | 324.99                       | -2.71               | 0.16                | -2.71                          | 0.22                           | 0.21                          | -5.27                        |
| 419.00                       | 1.32                   | 169.64             | 418.97                       | -4.49               | 0.45                | -4.49                          | 0.47                           | 0.47                          | -2.89                        |
| 512.00                       | 1.19                   | 154.43             | 511.95                       | -6.41               | 1.06                | -6.42                          | 0.38                           | -0.14                         | -16.35                       |
| 700.00                       | 2.42                   | 129.03             | 699.85                       | -10.68              | 4.99                | -10.71                         | 0.77                           | 0.65                          | -13.51                       |
| 793.00                       | 2.20                   | 122.44             | 792.78                       | -12.87              | 8.02                | -12.93                         | 0.37                           | -0.24                         | -7.09                        |
| 887.00                       | 2.68                   | 114.27             | 886.69                       | -14.74              | 11.54               | -14.82                         | 0.63                           | 0.51                          | -8.69                        |
| 980.00                       | 1.93                   | 109.52             | 979.61                       | -16.16              | 15.00               | -16.26                         | 0.83                           | -0.81                         | -5.11                        |
| 1,074.00                     | 1.93                   | 102.49             | 1,073.56                     | -17.03              | 18.04               | -17.15                         | 0.25                           | 0.00                          | -7.48                        |

## Aim Directional Services, LLC

## Survey Report

|                  |                              |                                     |                                            |
|------------------|------------------------------|-------------------------------------|--------------------------------------------|
| <b>Company:</b>  | Advance Energy Partners, LLC | <b>Local Co-ordinate Reference:</b> | Site Anderson Fed Com 504H                 |
| <b>Project:</b>  | Lea County, New Mexico       | <b>TVD Reference:</b>               | 3658'GL+25.5'KB @ 3683.50usft (Pioneer 80) |
| <b>Site:</b>     | Anderson Fed Com 504H        | <b>MD Reference:</b>                | 3658'GL+25.5'KB @ 3683.50usft (Pioneer 80) |
| <b>Well:</b>     | Anderson #504H               | <b>North Reference:</b>             | Grid                                       |
| <b>Wellbore:</b> | Aim MWD Surveys              | <b>Survey Calculation Method:</b>   | Minimum Curvature                          |
| <b>Design:</b>   | Aim MWD Surveys              | <b>Database:</b>                    | EDM 5000.1 Aim Database                    |

| 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) |
| 1,167.00              | 2.73            | 96.78       | 1,166.48              | -17.63       | 21.77        | -17.78                  | 0.89                    | 0.86                   | -6.14                 |
| 1,250.00              | 3.25            | 101.35      | 1,249.37              | -18.33       | 26.04        | -18.51                  | 0.69                    | 0.63                   | 5.51                  |
| 1,350.00              | 3.16            | 107.32      | 1,349.21              | -19.70       | 31.45        | -19.92                  | 0.35                    | -0.09                  | 5.97                  |
| 1,440.00              | 1.58            | 94.05       | 1,439.14              | -20.53       | 35.05        | -20.77                  | 1.85                    | -1.76                  | -14.74                |
| 1,529.00              | 1.10            | 35.69       | 1,528.11              | -19.92       | 36.78        | -20.18                  | 1.54                    | -0.54                  | -65.57                |
| 1,619.00              | 1.05            | 34.46       | 1,618.10              | -18.54       | 37.75        | -18.80                  | 0.06                    | -0.06                  | -1.37                 |
| 1,708.00              | 1.05            | 45.80       | 1,707.08              | -17.30       | 38.79        | -17.57                  | 0.23                    | 0.00                   | 12.74                 |
| 1,798.00              | 1.01            | 17.06       | 1,797.07              | -15.97       | 39.62        | -16.24                  | 0.57                    | -0.04                  | -31.93                |
| 1,888.00              | 1.36            | 354.91      | 1,887.05              | -14.14       | 39.75        | -14.42                  | 0.63                    | 0.39                   | -24.61                |
| 1,978.00              | 1.23            | 356.93      | 1,977.03              | -12.12       | 39.61        | -12.39                  | 0.15                    | -0.14                  | 2.24                  |
| 2,067.00              | 1.10            | 8.71        | 2,066.01              | -10.32       | 39.69        | -10.60                  | 0.31                    | -0.15                  | 13.24                 |
| 2,157.00              | 1.10            | 13.45       | 2,155.99              | -8.62        | 40.02        | -8.90                   | 0.10                    | 0.00                   | 5.27                  |
| 2,247.00              | 0.57            | 295.76      | 2,245.99              | -7.59        | 39.82        | -7.87                   | 1.25                    | -0.59                  | -86.32                |
| 2,336.00              | 1.19            | 242.06      | 2,334.98              | -7.83        | 38.60        | -8.10                   | 1.09                    | 0.70                   | -60.34                |
| 2,426.00              | 0.75            | 233.88      | 2,424.96              | -8.62        | 37.30        | -8.88                   | 0.51                    | -0.49                  | -9.09                 |
| 2,516.00              | 0.31            | 191.52      | 2,514.96              | -9.20        | 36.77        | -9.46                   | 0.62                    | -0.49                  | -47.07                |
| 2,605.00              | 0.40            | 118.48      | 2,603.96              | -9.58        | 37.00        | -9.84                   | 0.48                    | 0.10                   | -82.07                |
| 2,695.00              | 0.31            | 344.36      | 2,693.96              | -9.50        | 37.21        | -9.76                   | 0.73                    | -0.10                  | -149.02               |
| 2,784.00              | 0.62            | 345.33      | 2,782.95              | -8.80        | 37.02        | -9.06                   | 0.35                    | 0.35                   | 1.09                  |
| 2,874.00              | 0.88            | 7.92        | 2,872.95              | -7.65        | 37.00        | -7.91                   | 0.43                    | 0.29                   | 25.10                 |
| 2,963.00              | 1.19            | 30.77       | 2,961.93              | -6.18        | 37.56        | -6.44                   | 0.57                    | 0.35                   | 25.67                 |
| 3,053.00              | 0.92            | 356.49      | 3,051.92              | -4.65        | 38.00        | -4.92                   | 0.75                    | -0.30                  | -38.09                |
| 3,143.00              | 1.10            | 317.91      | 3,141.90              | -3.29        | 37.37        | -3.55                   | 0.77                    | 0.20                   | -42.87                |
| 3,232.00              | 0.70            | 342.43      | 3,230.89              | -2.14        | 36.64        | -2.39                   | 0.61                    | -0.45                  | 27.55                 |
| 3,411.00              | 1.01            | 100.91      | 3,409.88              | -1.39        | 37.86        | -1.66                   | 0.83                    | 0.17                   | 66.19                 |
| 3,501.00              | 0.35            | 237.58      | 3,499.88              | -1.69        | 38.40        | -1.96                   | 1.43                    | -0.73                  | 151.86                |
| 3,590.00              | 1.63            | 277.48      | 3,588.86              | -1.67        | 36.92        | -1.93                   | 1.55                    | 1.44                   | 44.83                 |
| 3,680.00              | 2.07            | 279.24      | 3,678.82              | -1.24        | 34.04        | -1.48                   | 0.49                    | 0.49                   | 1.96                  |
| 3,770.00              | 2.24            | 276.78      | 3,768.75              | -0.78        | 30.69        | -0.99                   | 0.22                    | 0.19                   | -2.73                 |
| 3,859.00              | 1.45            | 274.75      | 3,857.71              | -0.48        | 27.84        | -0.67                   | 0.89                    | -0.89                  | -2.28                 |
| 3,949.00              | 1.10            | 273.79      | 3,947.68              | -0.33        | 25.85        | -0.51                   | 0.39                    | -0.39                  | -1.07                 |
| 4,039.00              | 1.49            | 270.62      | 4,037.66              | -0.26        | 23.81        | -0.42                   | 0.44                    | 0.43                   | -3.52                 |
| 4,129.00              | 1.67            | 270.36      | 4,127.63              | -0.23        | 21.33        | -0.38                   | 0.20                    | 0.20                   | -0.29                 |
| 4,219.00              | 1.85            | 267.90      | 4,217.58              | -0.28        | 18.57        | -0.41                   | 0.22                    | 0.20                   | -2.73                 |
| 4,308.00              | 1.19            | 259.72      | 4,306.55              | -0.50        | 16.23        | -0.61                   | 0.78                    | -0.74                  | -9.19                 |
| 4,398.00              | 0.84            | 240.83      | 4,396.54              | -0.99        | 14.73        | -1.09                   | 0.53                    | -0.39                  | -20.99                |
| 4,577.00              | 0.40            | 262.45      | 4,575.53              | -1.71        | 12.96        | -1.80                   | 0.27                    | -0.25                  | 12.08                 |
| 4,667.00              | 0.53            | 259.64      | 4,665.53              | -1.82        | 12.24        | -1.91                   | 0.15                    | 0.14                   | -3.12                 |
| 4,757.00              | 0.44            | 241.09      | 4,755.52              | -2.07        | 11.53        | -2.15                   | 0.20                    | -0.10                  | -20.61                |
| 4,875.00              | 0.26            | 236.08      | 4,873.52              | -2.43        | 10.91        | -2.51                   | 0.15                    | -0.15                  | -4.25                 |
| 5,027.00              | 0.40            | 58.98       | 5,025.52              | -2.35        | 11.08        | -2.43                   | 0.43                    | 0.09                   | -116.51               |
| 5,206.00              | 0.44            | 52.04       | 5,204.51              | -1.61        | 12.16        | -1.69                   | 0.04                    | 0.02                   | -3.88                 |
| 5,295.00              | 1.80            | 62.50       | 5,293.50              | -0.75        | 13.67        | -0.85                   | 1.54                    | 1.53                   | 11.75                 |

## Aim Directional Services, LLC

## Survey Report

|                  |                              |                                     |                                            |
|------------------|------------------------------|-------------------------------------|--------------------------------------------|
| <b>Company:</b>  | Advance Energy Partners, LLC | <b>Local Co-ordinate Reference:</b> | Site Anderson Fed Com 504H                 |
| <b>Project:</b>  | Lea County, New Mexico       | <b>TVD Reference:</b>               | 3658'GL+25.5'KB @ 3683.50usft (Pioneer 80) |
| <b>Site:</b>     | Anderson Fed Com 504H        | <b>MD Reference:</b>                | 3658'GL+25.5'KB @ 3683.50usft (Pioneer 80) |
| <b>Well:</b>     | Anderson #504H               | <b>North Reference:</b>             | Grid                                       |
| <b>Wellbore:</b> | Aim MWD Surveys              | <b>Survey Calculation Method:</b>   | Minimum Curvature                          |
| <b>Design:</b>   | Aim MWD Surveys              | <b>Database:</b>                    | EDM 5000.1 Aim Database                    |

| Survey                |                 |             |                       |              |              |                         |                         |                        |                       |  |
|-----------------------|-----------------|-------------|-----------------------|--------------|--------------|-------------------------|-------------------------|------------------------|-----------------------|--|
| Measured Depth (usft) | Inclination (°) | Azimuth (°) | Vertical Depth (usft) | +N/-S (usft) | +E/-W (usft) | Vertical Section (usft) | Dogleg Rate (°/100usft) | Build Rate (°/100usft) | Turn Rate (°/100usft) |  |
| 5,385.00              | 3.34            | 60.12       | 5,383.40              | 1.21         | 17.20        | 1.09                    | 1.71                    | 1.71                   | -2.64                 |  |
| 5,474.00              | 3.91            | 58.28       | 5,472.22              | 4.09         | 22.02        | 3.94                    | 0.65                    | 0.64                   | -2.07                 |  |
| 5,564.00              | 3.47            | 52.57       | 5,562.04              | 7.36         | 26.80        | 7.17                    | 0.64                    | -0.49                  | -6.34                 |  |
| 5,654.00              | 3.25            | 48.26       | 5,651.88              | 10.72        | 30.86        | 10.50                   | 0.37                    | -0.24                  | -4.79                 |  |
| 5,743.00              | 3.91            | 48.26       | 5,740.71              | 14.42        | 35.01        | 14.17                   | 0.74                    | 0.74                   | 0.00                  |  |
| 5,833.00              | 5.19            | 53.18       | 5,830.42              | 18.90        | 40.56        | 18.61                   | 1.49                    | 1.42                   | 5.47                  |  |
| 5,923.00              | 6.15            | 55.82       | 5,919.98              | 24.05        | 47.81        | 23.71                   | 1.11                    | 1.07                   | 2.93                  |  |
| 6,013.00              | 5.63            | 55.12       | 6,009.51              | 29.28        | 55.42        | 28.89                   | 0.58                    | -0.58                  | -0.78                 |  |
| 6,102.00              | 5.54            | 54.24       | 6,098.08              | 34.29        | 62.48        | 33.85                   | 0.14                    | -0.10                  | -0.99                 |  |
| 6,192.00              | 5.54            | 51.07       | 6,187.66              | 39.56        | 69.39        | 39.07                   | 0.34                    | 0.00                   | -3.52                 |  |
| 6,281.00              | 5.58            | 50.54       | 6,276.25              | 45.00        | 76.07        | 44.47                   | 0.07                    | 0.04                   | -0.60                 |  |
| 6,371.00              | 5.45            | 51.60       | 6,365.83              | 50.44        | 82.80        | 49.86                   | 0.18                    | -0.14                  | 1.18                  |  |
| 6,461.00              | 5.01            | 51.86       | 6,455.45              | 55.52        | 89.24        | 54.90                   | 0.49                    | -0.49                  | 0.29                  |  |
| 6,550.00              | 4.70            | 51.42       | 6,544.13              | 60.20        | 95.15        | 59.53                   | 0.35                    | -0.35                  | -0.49                 |  |
| 6,640.00              | 4.40            | 50.63       | 6,633.85              | 64.69        | 100.70       | 63.98                   | 0.34                    | -0.33                  | -0.88                 |  |
| 6,730.00              | 5.10            | 53.01       | 6,723.54              | 69.28        | 106.56       | 68.54                   | 0.81                    | 0.78                   | 2.64                  |  |
| 6,820.00              | 5.85            | 56.26       | 6,813.13              | 74.24        | 113.57       | 73.44                   | 0.90                    | 0.83                   | 3.61                  |  |
| 6,909.00              | 5.10            | 57.84       | 6,901.72              | 78.86        | 120.69       | 78.02                   | 0.86                    | -0.84                  | 1.78                  |  |
| 6,999.00              | 4.48            | 58.72       | 6,991.41              | 82.82        | 127.08       | 81.93                   | 0.69                    | -0.69                  | 0.98                  |  |
| 7,088.00              | 4.22            | 57.31       | 7,080.15              | 86.39        | 132.81       | 85.46                   | 0.32                    | -0.29                  | -1.58                 |  |
| 7,178.00              | 4.48            | 50.72       | 7,169.89              | 90.40        | 138.32       | 89.44                   | 0.63                    | 0.29                   | -7.32                 |  |
| 7,268.00              | 4.97            | 46.59       | 7,259.59              | 95.31        | 143.87       | 94.30                   | 0.66                    | 0.54                   | -4.59                 |  |
| 7,358.00              | 5.63            | 53.53       | 7,349.20              | 100.61       | 150.25       | 99.56                   | 1.02                    | 0.73                   | 7.71                  |  |
| 7,447.00              | 5.54            | 56.52       | 7,437.78              | 105.58       | 157.35       | 104.47                  | 0.34                    | -0.10                  | 3.36                  |  |
| 7,537.00              | 4.92            | 59.33       | 7,527.41              | 109.94       | 164.29       | 108.79                  | 0.75                    | -0.69                  | 3.12                  |  |
| 7,627.00              | 4.44            | 59.95       | 7,617.11              | 113.65       | 170.62       | 112.46                  | 0.54                    | -0.53                  | 0.69                  |  |
| 7,717.00              | 5.05            | 63.99       | 7,706.80              | 117.14       | 177.20       | 115.90                  | 0.77                    | 0.68                   | 4.49                  |  |
| 7,807.00              | 6.29            | 67.77       | 7,796.36              | 120.74       | 185.32       | 119.44                  | 1.44                    | 1.38                   | 4.20                  |  |
| 7,896.00              | 6.68            | 67.68       | 7,884.79              | 124.55       | 194.63       | 123.19                  | 0.44                    | 0.44                   | -0.10                 |  |
| 7,986.00              | 6.68            | 65.66       | 7,974.17              | 128.69       | 204.24       | 127.27                  | 0.26                    | 0.00                   | -2.24                 |  |
| 8,076.00              | 6.81            | 65.31       | 8,063.55              | 133.08       | 213.85       | 131.58                  | 0.15                    | 0.14                   | -0.39                 |  |
| 8,166.00              | 5.89            | 69.27       | 8,153.00              | 136.94       | 223.02       | 135.38                  | 1.13                    | -1.02                  | 4.40                  |  |
| 8,255.00              | 5.80            | 72.52       | 8,241.54              | 139.91       | 231.58       | 138.29                  | 0.39                    | -0.10                  | 3.65                  |  |
| 8,345.00              | 5.76            | 72.96       | 8,331.08              | 142.60       | 240.24       | 140.92                  | 0.07                    | -0.04                  | 0.49                  |  |
| 8,435.00              | 5.45            | 75.15       | 8,420.65              | 145.02       | 248.69       | 143.28                  | 0.42                    | -0.34                  | 2.43                  |  |
| 8,524.00              | 5.14            | 78.14       | 8,509.27              | 146.92       | 256.67       | 145.13                  | 0.47                    | -0.35                  | 3.36                  |  |
| 8,614.00              | 5.71            | 72.34       | 8,598.87              | 149.11       | 264.89       | 147.26                  | 0.88                    | 0.63                   | -6.44                 |  |
| 8,704.00              | 5.49            | 70.58       | 8,688.44              | 151.90       | 273.21       | 149.99                  | 0.31                    | -0.24                  | -1.96                 |  |
| 8,794.00              | 4.44            | 61.53       | 8,778.10              | 154.99       | 280.34       | 153.03                  | 1.45                    | -1.17                  | -10.06                |  |
| 8,884.00              | 3.82            | 70.76       | 8,867.87              | 157.64       | 286.23       | 155.64                  | 1.01                    | -0.69                  | 10.26                 |  |
| 8,973.00              | 3.60            | 75.33       | 8,956.68              | 159.32       | 291.73       | 157.28                  | 0.41                    | -0.25                  | 5.13                  |  |
| 9,063.00              | 2.55            | 53.01       | 9,046.55              | 161.24       | 296.06       | 159.17                  | 1.75                    | -1.17                  | -24.80                |  |
| 9,153.00              | 2.95            | 41.93       | 9,136.45              | 164.17       | 299.21       | 162.08                  | 0.74                    | 0.44                   | -12.31                |  |

## Aim Directional Services, LLC

## Survey Report

|                  |                              |                                     |                                            |
|------------------|------------------------------|-------------------------------------|--------------------------------------------|
| <b>Company:</b>  | Advance Energy Partners, LLC | <b>Local Co-ordinate Reference:</b> | Site Anderson Fed Com 504H                 |
| <b>Project:</b>  | Lea County, New Mexico       | <b>TVD Reference:</b>               | 3658'GL+25.5'KB @ 3683.50usft (Pioneer 80) |
| <b>Site:</b>     | Anderson Fed Com 504H        | <b>MD Reference:</b>                | 3658'GL+25.5'KB @ 3683.50usft (Pioneer 80) |
| <b>Well:</b>     | Anderson #504H               | <b>North Reference:</b>             | Grid                                       |
| <b>Wellbore:</b> | Aim MWD Surveys              | <b>Survey Calculation Method:</b>   | Minimum Curvature                          |
| <b>Design:</b>   | Aim MWD Surveys              | <b>Database:</b>                    | EDM 5000.1 Aim Database                    |

| Survey                |                 |             |                       |              |              |                         |                         |                        |                       |
|-----------------------|-----------------|-------------|-----------------------|--------------|--------------|-------------------------|-------------------------|------------------------|-----------------------|
| Measured Depth (usft) | Inclination (°) | Azimuth (°) | Vertical Depth (usft) | +N/-S (usft) | +E/-W (usft) | Vertical Section (usft) | Dogleg Rate (°/100usft) | Build Rate (°/100usft) | Turn Rate (°/100usft) |
| 9,243.00              | 3.56            | 37.36       | 9,226.30              | 168.12       | 302.45       | 166.00                  | 0.74                    | 0.68                   | -5.08                 |
| 9,332.00              | 2.33            | 62.50       | 9,315.19              | 171.15       | 305.74       | 169.01                  | 1.97                    | -1.38                  | 28.25                 |
| 9,422.00              | 1.49            | 47.56       | 9,405.14              | 172.78       | 308.22       | 170.63                  | 1.08                    | -0.93                  | -16.60                |
| 9,512.00              | 0.84            | 143.01      | 9,495.12              | 173.04       | 309.48       | 170.88                  | 1.98                    | -0.72                  | 106.06                |
| 9,601.00              | 3.52            | 163.84      | 9,584.05              | 169.90       | 310.64       | 167.73                  | 3.09                    | 3.01                   | 23.40                 |
| 9,691.00              | 1.76            | 107.50      | 9,673.97              | 166.83       | 312.72       | 164.64                  | 3.26                    | -1.96                  | -62.60                |
| 9,781.00              | 1.19            | 19.34       | 9,763.95              | 167.30       | 314.35       | 165.10                  | 2.33                    | -0.63                  | -97.96                |
| 9,871.00              | 0.97            | 113.47      | 9,853.94              | 167.87       | 315.36       | 165.67                  | 1.76                    | -0.24                  | 104.59                |
| 9,960.00              | 0.88            | 115.41      | 9,942.92              | 167.28       | 316.67       | 165.07                  | 0.11                    | -0.10                  | 2.18                  |
| 10,050.00             | 0.70            | 129.65      | 10,032.91             | 166.63       | 317.71       | 164.41                  | 0.29                    | -0.20                  | 15.82                 |
| 10,139.00             | 1.05            | 118.66      | 10,121.90             | 165.90       | 318.85       | 163.67                  | 0.43                    | 0.39                   | -12.35                |
| 10,192.00             | 1.14            | 112.07      | 10,174.89             | 165.46       | 319.76       | 163.23                  | 0.29                    | 0.17                   | -12.43                |
| 10,265.00             | 1.67            | 73.66       | 10,247.87             | 165.49       | 321.46       | 163.24                  | 1.44                    | 0.73                   | -52.62                |
| 10,354.00             | 9.71            | 43.87       | 10,336.37             | 171.28       | 327.91       | 168.98                  | 9.33                    | 9.03                   | -33.47                |
| 10,444.00             | 19.74           | 36.92       | 10,423.31             | 188.95       | 342.34       | 186.55                  | 11.30                   | 11.14                  | -7.72                 |
| 10,533.00             | 30.73           | 33.93       | 10,503.70             | 219.92       | 364.13       | 217.38                  | 12.43                   | 12.35                  | -3.36                 |
| 10,623.00             | 37.93           | 27.17       | 10,578.00             | 263.69       | 389.64       | 260.96                  | 9.04                    | 8.00                   | -7.51                 |
| 10,713.00             | 44.79           | 30.68       | 10,645.52             | 315.63       | 418.49       | 312.70                  | 8.04                    | 7.62                   | 3.90                  |
| 10,802.00             | 51.87           | 32.26       | 10,704.65             | 372.27       | 453.21       | 369.09                  | 8.06                    | 7.96                   | 1.78                  |
| 10,892.00             | 57.67           | 32.86       | 10,756.55             | 434.19       | 492.77       | 430.74                  | 6.47                    | 6.44                   | 0.67                  |
| 10,981.00             | 65.05           | 30.13       | 10,799.18             | 500.78       | 533.49       | 497.04                  | 8.72                    | 8.29                   | -3.07                 |
| 11,071.00             | 70.59           | 25.56       | 10,833.16             | 574.45       | 572.33       | 570.44                  | 7.74                    | 6.16                   | -5.08                 |
| 11,160.00             | 74.55           | 20.47       | 10,859.83             | 652.57       | 605.47       | 648.33                  | 7.04                    | 4.45                   | -5.72                 |
| 11,205.00             | 77.45           | 16.69       | 10,870.72             | 693.95       | 619.37       | 689.61                  | 10.39                   | 6.44                   | -8.40                 |
| 11,250.00             | 79.34           | 13.52       | 10,879.78             | 736.50       | 630.85       | 732.08                  | 8.08                    | 4.20                   | -7.04                 |
| 11,340.00             | 85.36           | 9.57        | 10,891.76             | 823.84       | 648.67       | 819.29                  | 7.98                    | 6.69                   | -4.39                 |
| 11,390.00             | 88.00           | 4.38        | 10,894.65             | 873.36       | 654.73       | 868.77                  | 11.63                   | 5.28                   | -10.38                |
| 11,429.00             | 88.88           | 0.69        | 10,895.72             | 912.30       | 656.45       | 907.70                  | 9.72                    | 2.26                   | -9.46                 |
| 11,519.00             | 91.43           | 358.58      | 10,895.47             | 1,002.29     | 655.88       | 997.69                  | 3.68                    | 2.83                   | -2.34                 |
| 11,550.00             | 92.57           | 358.67      | 10,894.39             | 1,033.26     | 655.13       | 1,028.66                | 3.69                    | 3.68                   | 0.29                  |
| 11,640.00             | 90.42           | 358.85      | 10,892.04             | 1,123.20     | 653.19       | 1,118.62                | 2.40                    | -2.39                  | 0.20                  |
| 11,729.00             | 86.29           | 359.28      | 10,894.60             | 1,212.14     | 651.73       | 1,207.56                | 4.67                    | -4.64                  | 0.48                  |
| 11,818.00             | 82.20           | 358.85      | 10,903.52             | 1,300.66     | 650.29       | 1,296.09                | 4.62                    | -4.60                  | -0.48                 |
| 11,908.00             | 78.90           | 359.46      | 10,918.29             | 1,389.41     | 648.98       | 1,384.85                | 3.73                    | -3.67                  | 0.68                  |
| 11,998.00             | 78.68           | 359.02      | 10,935.79             | 1,477.69     | 647.81       | 1,473.13                | 0.54                    | -0.24                  | -0.49                 |
| 12,087.00             | 78.77           | 0.34        | 10,953.19             | 1,564.97     | 647.32       | 1,560.41                | 1.46                    | 0.10                   | 1.48                  |
| 12,177.00             | 81.45           | 2.45        | 10,968.65             | 1,653.59     | 649.49       | 1,649.02                | 3.77                    | 2.98                   | 2.34                  |
| 12,267.00             | 85.49           | 3.94        | 10,978.88             | 1,742.85     | 654.47       | 1,738.23                | 4.78                    | 4.49                   | 1.66                  |
| 12,356.00             | 85.93           | 4.38        | 10,985.54             | 1,831.36     | 660.91       | 1,826.70                | 0.70                    | 0.49                   | 0.49                  |
| 12,446.00             | 85.19           | 5.70        | 10,992.51             | 1,920.74     | 668.79       | 1,916.03                | 1.68                    | -0.82                  | 1.47                  |
| 12,535.00             | 84.75           | 1.83        | 11,000.32             | 2,009.19     | 674.61       | 2,004.43                | 4.36                    | -0.49                  | -4.35                 |
| 12,625.00             | 86.90           | 359.81      | 11,006.87             | 2,098.93     | 675.90       | 2,094.16                | 3.27                    | 2.39                   | -2.24                 |
| 12,715.00             | 89.27           | 359.90      | 11,009.88             | 2,188.88     | 675.67       | 2,184.11                | 2.64                    | 2.63                   | 0.10                  |
| 12,804.00             | 90.11           | 357.88      | 11,010.36             | 2,277.85     | 673.95       | 2,273.09                | 2.46                    | 0.94                   | -2.27                 |

## Aim Directional Services, LLC

## Survey Report

|                  |                              |                                     |                                            |
|------------------|------------------------------|-------------------------------------|--------------------------------------------|
| <b>Company:</b>  | Advance Energy Partners, LLC | <b>Local Co-ordinate Reference:</b> | Site Anderson Fed Com 504H                 |
| <b>Project:</b>  | Lea County, New Mexico       | <b>TVD Reference:</b>               | 3658'GL+25.5'KB @ 3683.50usft (Pioneer 80) |
| <b>Site:</b>     | Anderson Fed Com 504H        | <b>MD Reference:</b>                | 3658'GL+25.5'KB @ 3683.50usft (Pioneer 80) |
| <b>Well:</b>     | Anderson #504H               | <b>North Reference:</b>             | Grid                                       |
| <b>Wellbore:</b> | Aim MWD Surveys              | <b>Survey Calculation Method:</b>   | Minimum Curvature                          |
| <b>Design:</b>   | Aim MWD Surveys              | <b>Database:</b>                    | EDM 5000.1 Aim Database                    |

| 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) |
| 12,894.00             | 90.46           | 357.09      | 11,009.91             | 2,367.76     | 670.00       | 2,363.03                | 0.96                    | 0.39                   | -0.88                 |
| 12,983.00             | 91.21           | 356.91      | 11,008.61             | 2,456.63     | 665.34       | 2,451.93                | 0.87                    | 0.84                   | -0.20                 |
| 13,073.00             | 92.31           | 357.26      | 11,005.85             | 2,546.47     | 660.76       | 2,541.80                | 1.28                    | 1.22                   | 0.39                  |
| 13,163.00             | 90.29           | 356.38      | 11,003.81             | 2,636.30     | 655.77       | 2,631.66                | 2.45                    | -2.24                  | -0.98                 |
| 13,252.00             | 90.55           | 356.65      | 11,003.15             | 2,725.14     | 650.36       | 2,720.53                | 0.42                    | 0.29                   | 0.30                  |
| 13,342.00             | 89.14           | 355.94      | 11,003.40             | 2,814.95     | 644.55       | 2,810.38                | 1.75                    | -1.57                  | -0.79                 |
| 13,431.00             | 86.51           | 355.59      | 11,006.78             | 2,903.63     | 637.98       | 2,899.11                | 2.98                    | -2.96                  | -0.39                 |
| 13,521.00             | 88.97           | 357.18      | 11,010.32             | 2,993.37     | 632.31       | 2,988.88                | 3.25                    | 2.73                   | 1.77                  |
| 13,610.00             | 89.45           | 358.49      | 11,011.55             | 3,082.30     | 628.95       | 3,077.83                | 1.57                    | 0.54                   | 1.47                  |
| 13,700.00             | 91.43           | 358.58      | 11,010.86             | 3,172.26     | 626.65       | 3,167.81                | 2.20                    | 2.20                   | 0.10                  |
| 13,790.00             | 91.60           | 358.05      | 11,008.48             | 3,262.19     | 624.00       | 3,257.75                | 0.62                    | 0.19                   | -0.59                 |
| 13,879.00             | 90.81           | 357.79      | 11,006.61             | 3,351.11     | 620.77       | 3,346.70                | 0.93                    | -0.89                  | -0.29                 |
| 13,969.00             | 90.64           | 358.41      | 11,005.47             | 3,441.05     | 617.79       | 3,436.66                | 0.71                    | -0.19                  | 0.69                  |
| 14,059.00             | 91.25           | 358.76      | 11,003.99             | 3,531.01     | 615.57       | 3,526.63                | 0.78                    | 0.68                   | 0.39                  |
| 14,148.00             | 93.05           | 359.46      | 11,000.65             | 3,619.94     | 614.19       | 3,615.56                | 2.17                    | 2.02                   | 0.79                  |
| 14,238.00             | 91.96           | 359.55      | 10,996.71             | 3,709.85     | 613.41       | 3,705.47                | 1.22                    | -1.21                  | 0.10                  |
| 14,328.00             | 94.02           | 359.81      | 10,992.02             | 3,799.72     | 612.91       | 3,795.35                | 2.31                    | 2.29                   | 0.29                  |
| 14,417.00             | 89.80           | 0.34        | 10,989.05             | 3,888.65     | 613.03       | 3,884.27                | 4.78                    | -4.74                  | 0.60                  |
| 14,507.00             | 89.58           | 0.08        | 10,989.54             | 3,978.65     | 613.35       | 3,974.27                | 0.38                    | -0.24                  | -0.29                 |
| 14,596.00             | 89.93           | 0.08        | 10,989.92             | 4,067.64     | 613.48       | 4,063.26                | 0.39                    | 0.39                   | 0.00                  |
| 14,686.00             | 90.51           | 0.51        | 10,989.58             | 4,157.64     | 613.94       | 4,153.25                | 0.80                    | 0.64                   | 0.48                  |
| 14,775.00             | 92.22           | 359.81      | 10,987.46             | 4,246.61     | 614.19       | 4,242.22                | 2.08                    | 1.92                   | -0.79                 |
| 14,865.00             | 92.62           | 359.02      | 10,983.66             | 4,336.53     | 613.27       | 4,332.14                | 0.98                    | 0.44                   | -0.88                 |
| 14,955.00             | 93.71           | 358.49      | 10,978.69             | 4,426.37     | 611.32       | 4,421.99                | 1.35                    | 1.21                   | -0.59                 |
| 15,044.00             | 94.29           | 358.41      | 10,972.48             | 4,515.12     | 608.92       | 4,510.76                | 0.66                    | 0.65                   | -0.09                 |
| 15,134.00             | 91.96           | 358.41      | 10,967.57             | 4,604.94     | 606.43       | 4,600.60                | 2.59                    | -2.59                  | 0.00                  |
| 15,224.00             | 91.69           | 357.53      | 10,964.71             | 4,694.84     | 603.24       | 4,690.51                | 1.02                    | -0.30                  | -0.98                 |
| 15,313.00             | 92.04           | 359.72      | 10,961.81             | 4,783.76     | 601.11       | 4,779.45                | 2.49                    | 0.39                   | 2.46                  |
| 15,403.00             | 93.41           | 359.46      | 10,957.53             | 4,873.65     | 600.46       | 4,869.34                | 1.55                    | 1.52                   | -0.29                 |
| 15,492.00             | 87.47           | 357.61      | 10,956.85             | 4,962.58     | 598.19       | 4,958.28                | 6.99                    | -6.67                  | -2.08                 |
| 15,582.00             | 92.62           | 357.70      | 10,956.78             | 5,052.47     | 594.51       | 5,048.20                | 5.72                    | 5.72                   | 0.10                  |
| 15,671.00             | 94.95           | 358.93      | 10,950.90             | 5,141.23     | 591.89       | 5,136.98                | 2.96                    | 2.62                   | 1.38                  |
| 15,760.00             | 93.41           | 1.22        | 10,944.41             | 5,229.99     | 592.01       | 5,225.73                | 3.09                    | -1.73                  | 2.57                  |
| 15,849.00             | 93.01           | 1.39        | 10,939.43             | 5,318.82     | 594.04       | 5,314.55                | 0.49                    | -0.45                  | 0.19                  |
| 15,939.00             | 92.70           | 1.66        | 10,934.95             | 5,408.68     | 596.43       | 5,404.38                | 0.46                    | -0.34                  | 0.30                  |
| 16,028.00             | 92.35           | 1.66        | 10,931.03             | 5,497.56     | 599.00       | 5,493.24                | 0.39                    | -0.39                  | 0.00                  |
| 16,117.00             | 92.18           | 2.18        | 10,927.51             | 5,586.44     | 601.98       | 5,582.10                | 0.61                    | -0.19                  | 0.58                  |
| 16,207.00             | 92.62           | 1.22        | 10,923.74             | 5,676.32     | 604.65       | 5,671.96                | 1.17                    | 0.49                   | -1.07                 |
| 16,296.00             | 92.13           | 1.22        | 10,920.05             | 5,765.22     | 606.54       | 5,760.85                | 0.55                    | -0.55                  | 0.00                  |
| 16,386.00             | 91.12           | 359.55      | 10,917.50             | 5,855.18     | 607.15       | 5,850.80                | 2.17                    | -1.12                  | -1.86                 |
| 16,476.00             | 91.34           | 358.58      | 10,915.57             | 5,945.14     | 605.68       | 5,940.77                | 1.10                    | 0.24                   | -1.08                 |
| 16,565.00             | 89.80           | 357.26      | 10,914.68             | 6,034.08     | 602.45       | 6,029.72                | 2.28                    | -1.73                  | -1.48                 |
| 16,655.00             | 90.46           | 356.91      | 10,914.48             | 6,123.96     | 597.87       | 6,119.64                | 0.83                    | 0.73                   | -0.39                 |

## Aim Directional Services, LLC

## Survey Report

|                  |                              |                                     |                                            |
|------------------|------------------------------|-------------------------------------|--------------------------------------------|
| <b>Company:</b>  | Advance Energy Partners, LLC | <b>Local Co-ordinate Reference:</b> | Site Anderson Fed Com 504H                 |
| <b>Project:</b>  | Lea County, New Mexico       | <b>TVD Reference:</b>               | 3658'GL+25.5'KB @ 3683.50usft (Pioneer 80) |
| <b>Site:</b>     | Anderson Fed Com 504H        | <b>MD Reference:</b>                | 3658'GL+25.5'KB @ 3683.50usft (Pioneer 80) |
| <b>Well:</b>     | Anderson #504H               | <b>North Reference:</b>             | Grid                                       |
| <b>Wellbore:</b> | Aim MWD Surveys              | <b>Survey Calculation Method:</b>   | Minimum Curvature                          |
| <b>Design:</b>   | Aim MWD Surveys              | <b>Database:</b>                    | EDM 5000.1 Aim Database                    |

| 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) |  |
| 16,744.00             | 91.30           | 356.21      | 10,913.11             | 6,212.79     | 592.53       | 6,208.50                | 1.23                    | 0.94                   | -0.79                 |  |
| 16,834.00             | 91.91           | 358.05      | 10,910.59             | 6,302.63     | 588.03       | 6,298.38                | 2.15                    | 0.68                   | 2.04                  |  |
| 16,923.00             | 92.88           | 358.93      | 10,906.87             | 6,391.52     | 585.69       | 6,387.28                | 1.47                    | 1.09                   | 0.99                  |  |
| 17,013.00             | 89.67           | 357.88      | 10,904.87             | 6,481.45     | 583.18       | 6,477.22                | 3.75                    | -3.57                  | -1.17                 |  |
| 17,103.00             | 89.10           | 357.70      | 10,905.83             | 6,571.38     | 579.71       | 6,567.17                | 0.66                    | -0.63                  | -0.20                 |  |
| 17,192.00             | 89.10           | 356.65      | 10,907.23             | 6,660.26     | 575.32       | 6,656.08                | 1.18                    | 0.00                   | -1.18                 |  |
| 17,282.00             | 89.63           | 358.58      | 10,908.23             | 6,750.17     | 571.58       | 6,746.02                | 2.22                    | 0.59                   | 2.14                  |  |
| 17,372.00             | 90.46           | 358.58      | 10,908.16             | 6,840.14     | 569.35       | 6,836.00                | 0.92                    | 0.92                   | 0.00                  |  |
| 17,461.00             | 92.22           | 359.55      | 10,906.08             | 6,929.10     | 567.90       | 6,924.97                | 2.26                    | 1.98                   | 1.09                  |  |
| 17,551.00             | 92.35           | 359.11      | 10,902.49             | 7,019.03     | 566.85       | 7,014.90                | 0.51                    | 0.14                   | -0.49                 |  |
| 17,640.00             | 92.13           | 358.23      | 10,899.01             | 7,107.93     | 564.78       | 7,103.82                | 1.02                    | -0.25                  | -0.99                 |  |
| 17,684.00             | 92.13           | 358.41      | 10,897.38             | 7,151.88     | 563.49       | 7,147.77                | 0.41                    | 0.00                   | 0.41                  |  |
| Last Aim MWD Survey   |                 |             |                       |              |              |                         |                         |                        |                       |  |
| 17,747.00             | 92.13           | 358.41      | 10,895.03             | 7,214.82     | 561.75       | 7,210.72                | 0.00                    | 0.00                   | 0.00                  |  |
| Projection to BHL     |                 |             |                       |              |              |                         |                         |                        |                       |  |

| Design Annotations    |                       |                   |              |                      |  |
|-----------------------|-----------------------|-------------------|--------------|----------------------|--|
| Measured Depth (usft) | Vertical Depth (usft) | Local Coordinates |              |                      |  |
|                       |                       | +N/-S (usft)      | +E/-W (usft) | Comment              |  |
| 200.00                | 200.00                | -1.08             | 0.02         | First Aim MWD Survey |  |
| 17,684.00             | 10,897.38             | 7,151.88          | 563.49       | Last Aim MWD Survey  |  |
| 17,747.00             | 10,895.03             | 7,214.82          | 561.75       | Projection to BHL    |  |



# Daily Reports

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## **Anderson Fed Com 504H (WT-20-071)**

2020-12-04 to 2021-01-18

Lea, New Mexico, US (32.43, -103.64)

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|                                 |                                                     |                                                       |
|---------------------------------|-----------------------------------------------------|-------------------------------------------------------|
| <b>Job Number</b><br>WT-20-071  | <b>Operator</b><br>Advance Energy Partners          | <b>Rig Name</b><br>Pioneer #80                        |
| <b>Start Date</b><br>2020-12-04 | <b>Well Name</b><br>Anderson Fed Com 504H           | <b>Legal Well Name   AFE</b><br>Anderson Fed Com 504H |
| <b>Play</b><br>Delaware Basin   | <b>State/Province and Country</b><br>New Mexico, US | <b>County</b><br>Lea                                  |
|                                 |                                                     | <b>Company Man</b>                                    |

Friday, Dec 04 00:00 - 23:59 (Day 1 of 19)

Billing: \$11,100.00 (\$130,925.38 total)

**Drilling Summary**

|                                |      |
|--------------------------------|------|
| <b>Start Depth (ft)</b>        |      |
| <b>Bit Depth (ft)</b>          |      |
| <b>Bottom Hole Depth (ft)</b>  |      |
| <b>Total Distance (ft)</b>     | 0.00 |
| <b>Distance Rotated (ft)</b>   | 0.00 |
| <b>Distance Slid (ft)</b>      | 0.00 |
| <b>Inclination In</b>          |      |
| <b>Inclination Out</b>         |      |
| <b>Azimuth In</b>              |      |
| <b>Azimuth Out</b>             |      |
| <b>AVG Total ROP (ft/h)</b>    | 0.00 |
| <b>AVG Rotating ROP (ft/h)</b> | 0.00 |
| <b>AVG Sliding ROP (ft/h)</b>  | 0.00 |

|                            |      |
|----------------------------|------|
| <b>Downhole Hours</b>      | 0.00 |
| <b>Drilling Hours</b>      | 0.00 |
| <b>Hours Circulating</b>   | 0.00 |
| <b>Hours Sliding</b>       | 0.00 |
| <b>Hours Rotating</b>      | 0.00 |
| <b>% Hours Rotating</b>    |      |
| <b>% Hours Sliding</b>     |      |
| <b>% Distance Sliding</b>  |      |
| <b>% Distance Rotating</b> |      |

| Drilling Parameters       |   |
|---------------------------|---|
| Rotating WOB (klbs)       |   |
| Sliding WOB (klbs)        |   |
| Rotating SPM              |   |
| Sliding SPM               |   |
| Motor RPM                 | - |
| Surface RPM               |   |
| Flow Rate (gpm)           |   |
| On Bottom Pressure (psi)  |   |
| Off Bottom Pressure (psi) |   |
|                           |   |
|                           |   |
|                           |   |

**Personnel**

| Name                | Position            |
|---------------------|---------------------|
| Robert Olivarez     | MWD Engineer        |
| Kyle Kusak          | MWD Engineer        |
| Advance Directional | Directional Driller |

**No BHAs****Directional Activities**

| Activity Type | Code | Start Date | Start Time | End Time | End Date | Start (ft) | End (ft) | Comments/Details                                                        |
|---------------|------|------------|------------|----------|----------|------------|----------|-------------------------------------------------------------------------|
| Standby       | 15   | 12-04      | 00:00      | 18:00    | 12-04    |            |          | Wait on casing & cement on 604H - Nipple Down & prepare to Skid to 504H |
| Standby       | 15   | 12-04      | 18:00      | 00:00    | 12-05    |            |          | Skid from 604H and begin rigging up.                                    |

**MWD Activities**

No Activities



|                                 |                                                     |                                                       |
|---------------------------------|-----------------------------------------------------|-------------------------------------------------------|
| <b>Job Number</b><br>WT-20-071  | <b>Operator</b><br>Advance Energy Partners          | <b>Rig Name</b><br>Pioneer #80                        |
| <b>Start Date</b><br>2020-12-04 | <b>Well Name</b><br>Anderson Fed Com 504H           | <b>Legal Well Name   AFE</b><br>Anderson Fed Com 504H |
| <b>Play</b><br>Delaware Basin   | <b>State/Province and Country</b><br>New Mexico, US | <b>County</b><br>Lea                                  |
|                                 |                                                     | <b>Company Man</b>                                    |

Saturday, Dec 05 00:00 - 23:59 (Day 2 of 19)

Billing: \$4,200.00 (\$130,925.38 total)

| Drilling Summary        |         |                     |       | Drilling Parameters       |                  |
|-------------------------|---------|---------------------|-------|---------------------------|------------------|
| Start Depth (ft)        | 0.00    | Downhole Hours      | 22.75 | Rotating WOB (klbs)       | 10.00 - 30.00    |
| Bit Depth (ft)          | 1310.00 | Drilling Hours      | 8.58  | Sliding WOB (klbs)        | 30.00 - 30.00    |
| Bottom Hole Depth (ft)  | 1310.00 | Hours Circulating   | 1.25  | Rotating SPM              | 108.00 - 130.00  |
| Total Distance (ft)     | 1310.00 | Hours Sliding       | 1.17  | Sliding SPM               | 108.00 - 108.00  |
| Distance Rotated (ft)   | 1215.00 | Hours Rotating      | 7.42  | Motor RPM                 | 121.00 - 202.00  |
| Distance Slid (ft)      | 95.00   |                     |       | Surface RPM               | 60.00 - 70.00    |
| Inclination In          | 0.62    |                     |       | Flow Rate (gpm)           | 500.00 - 800.00  |
| Inclination Out         | 3.25    |                     |       | On Bottom Pressure (psi)  | 900.00 - 2200.00 |
| Azimuth In              | 178.95  | % Hours Rotating    | 86%   | Off Bottom Pressure (psi) | 600.00 - 1500.00 |
| Azimuth Out             | 101.35  | % Hours Sliding     | 14%   |                           |                  |
| AVG Total ROP (ft/h)    | 152.62  | % Distance Sliding  | 7%    |                           |                  |
| AVG Rotating ROP (ft/h) | 163.82  | % Distance Rotating | 93%   |                           |                  |
| AVG Sliding ROP (ft/h)  | 81.43   |                     |       |                           |                  |

**Personnel**

| Name                | Position            |
|---------------------|---------------------|
| Robert Olivarez     | MWD Engineer        |
| Kyle Kusak          | MWD Engineer        |
| Advance Directional | Directional Driller |

**BHA #1 - Surface 17.5"**

Date In: Dec 5, 2020, 1:00 Date Out: Dec 5, 2020, 23:45

| Bit Details                |         | Motor Details                    |          | Directional Comments                                                                                                                                            |
|----------------------------|---------|----------------------------------|----------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------|
| OD (in)                    | 17.500  | Size (in)                        | 8.0      | 1.5° FBH 7/8 4.0 Stg Mtr.w/12" Stab.; Flow Range: 400-900 gpm; Max Diff: 900 psi; Max TQ: 14930 ft/lbs; Bit: Baker Type: T606KS, Jets: 9x12, TFA: 0.994 Runs: 4 |
| Vendor                     | Baker   | Lobe/Stage                       | 7/8, 4.0 |                                                                                                                                                                 |
| S/N                        | 5309285 | Bend Angle                       | 1.5      |                                                                                                                                                                 |
| Nozzles                    | 9x12    | Speed (rev/gal)                  | 0.17     |                                                                                                                                                                 |
| Total Flow Area (in²)      | 0.994   | Wear Pad OD (in)                 | 8.250    | MWD Comments                                                                                                                                                    |
| Drilling Hours for Day     | 8.58    | Bit Distances                    |          |                                                                                                                                                                 |
| Total Drilled for Day (ft) | 1310.00 | Survey (Bit to Survey): 60.00 ft |          |                                                                                                                                                                 |
| Drilling Hours for BHA     | 8.58    |                                  |          |                                                                                                                                                                 |
| Total Drilled for BHA (ft) | 1310.00 |                                  |          |                                                                                                                                                                 |
|                            |         |                                  |          | POOH Reason                                                                                                                                                     |
|                            |         |                                  |          | Total Depth/Casing Point: TD Surface at 1310' MD                                                                                                                |

**Directional Items**

| Description                                                                                                                                                 | Vendor        | SN#           | Top Conn       | Btm Conn       | ID (in) | OD (in) | Fn Len. (ft) | Len (ft) | Aggr. Len (ft) |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------|---------------|----------------|----------------|---------|---------|--------------|----------|----------------|
| <b>Bit (Fixed Cutter)</b><br>Description: T606KS, Gauge Length (in): 5.00, Size (in): 17.50, Type: PDC (Polycrystalline Diamond Compacts)                   | Baker         | 5309285       | 6 5/8" Reg Pin |                |         | 17.500  |              | 1.50     | 1.50           |
| <b>Mud Motor</b><br>Description: 1.5 FBH 7/8 4.0 Stg Mtr. w/ 12" Stab, Size (in): 8.00, Bend Angle (°): 1.5, Rotor Lobe: 7, Stator Lobe: 8, Stator Stage: 4 | AIM           | 800-002       | 6 5/8" Reg Box | 6 5/8" Reg Box |         | 8.000   |              | 29.34    | 30.84          |
| <b>Stabilizer</b><br>Description: 12" Stabilizer                                                                                                            | BLACK DIAMOND | 12476         | 6 5/8" Reg Box | 6 5/8" Reg Pin | 2.813   | 8.000   |              | 7.40     | 38.24          |
| <b>UBHO Sub</b><br>Description: UBHO Sub, Material: Non-Magnetic                                                                                            | AIM           | 800-609       | 6 5/8" Reg Box | 6 5/8" Reg Pin | 3.250   | 8.000   |              | 3.00     | 41.24          |
| <b>Drill Collar</b><br>Description: NMDC (MWD Tool), Material: Non-Magnetic, Type: Slick Drill                                                              | AIM           | AIM 800-01011 | 6 5/8" Reg Box | 6 5/8" Reg Pin | 3.250   | 8.000   |              | 30.28    | 71.52          |
| <b>Drill Collar</b><br>Description: NMDC (Spacer), Material: Non-Magnetic, Type: Slick Drill                                                                | AIM           | DY80011       | 6 5/8" Reg Box | 6 5/8" Reg Pin | 3.250   | 8.000   |              | 30.03    | 101.55         |
| <b>Crossover Sub</b><br>Description: X-O SUB, Material: Steel                                                                                               | BLACK DIAMOND | BD15080       | EverDrig54 Box | 6 5/8" Reg Pin | 2.813   | 8.000   |              | 3.41     | 104.96         |

**MWD Items**

No Items

**Directional Activities**

| Activity Type | Code | Start Date | Start Time | End Time | End Date | Start (ft) | End (ft) | Comments/Details                                   |
|---------------|------|------------|------------|----------|----------|------------|----------|----------------------------------------------------|
| Standby       | 15   | 12-04      | 18:00      | 00:00    | 12-05    |            |          | Skid from 604H and begin rigging up.               |
| Standby       | 15   | 12-05      | 00:00      | 01:00    | 12-05    |            |          | Standby while Rig finishes rigging up after skid   |
| Change BHA    | 6    | 12-05      | 01:00      | 02:00    | 12-05    |            |          | P/U BHA #1 / Latch onto BHA / torque new 17.5" bit |
| Rig Repair    | 14   | 12-05      | 02:00      | 10:00    | 12-05    |            |          | Trouble shooting Flow line                         |

|              |    |       |       |       |       |         |         |                                                                                                                                                                                               |
|--------------|----|-------|-------|-------|-------|---------|---------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Rotary Drill | 1  | 12-05 | 10:00 | 11:05 | 12-05 | 0.00    | 260.00  | Pressure On (psi): 900.00, Pressure Off (psi): 600.00, Weight On Bit (klbs): 10.00, Surface RPM: 60, Surface Torque (ft lbf): 15000.00, Flow Rate (gpm): 500.00, Strokes Per Minute: 130.00   |
| Survey       | 46 | 12-05 | 11:05 | 11:10 | 12-05 | 260.00  | 260.00  | Inclination (°): 0.620, Azimuth (°): 178.950, TVD (ft): 200.00, Dogleg (°/100 ft): 0.31, Sensor Depth (ft): 200.00, Bit To Sensor (ft): 60.00                                                 |
| Rotary Drill | 1  | 12-05 | 11:10 | 12:20 | 12-05 | 260.00  | 385.00  | Pressure On (psi): 900.00, Pressure Off (psi): 600.00, Weight On Bit (klbs): 10.00, Surface RPM: 60, Surface Torque (ft lbf): 15000.00, Flow Rate (gpm): 500.00, Strokes Per Minute: 130.00   |
| Survey       | 46 | 12-05 | 12:20 | 12:25 | 12-05 | 385.00  | 385.00  | Inclination (°): 0.880, Azimuth (°): 172.360, TVD (ft): 324.99, Dogleg (°/100 ft): 0.22, Sensor Depth (ft): 325.00, Bit To Sensor (ft): 60.00                                                 |
| Rotary Drill | 1  | 12-05 | 12:25 | 12:50 | 12-05 | 385.00  | 479.00  | Pressure On (psi): 900.00, Pressure Off (psi): 600.00, Weight On Bit (klbs): 10.00, Surface RPM: 70, Surface Torque (ft lbf): 15000.00, Flow Rate (gpm): 500.00, Strokes Per Minute: 130.00   |
| Survey       | 46 | 12-05 | 12:50 | 12:55 | 12-05 | 479.00  | 479.00  | Inclination (°): 1.320, Azimuth (°): 169.640, TVD (ft): 418.97, Dogleg (°/100 ft): 0.47, Sensor Depth (ft): 419.00, Bit To Sensor (ft): 60.00                                                 |
| Rotary Drill | 1  | 12-05 | 12:55 | 13:10 | 12-05 | 479.00  | 495.00  | Pressure On (psi): 900.00, Pressure Off (psi): 600.00, Weight On Bit (klbs): 10.00, Surface RPM: 70, Surface Torque (ft lbf): 15000.00, Flow Rate (gpm): 500.00, Strokes Per Minute: 130.00   |
| Slide Drill  | 2  | 12-05 | 13:10 | 13:25 | 12-05 | 495.00  | 510.00  | Pressure On (psi): 2000.00, Pressure Off (psi): 1400.00, Weight On Bit (klbs): 30.00, Flow Rate (gpm): 800.00, Strokes Per Minute: 108, Toolface: 340, Toolface Type: magnetic                |
| Rotary Drill | 1  | 12-05 | 13:25 | 13:40 | 12-05 | 510.00  | 572.00  | Pressure On (psi): 2200.00, Pressure Off (psi): 1500.00, Weight On Bit (klbs): 30.00, Surface RPM: 70, Surface Torque (ft lbf): 18000.00, Flow Rate (gpm): 800.00, Strokes Per Minute: 108.00 |
| Survey       | 46 | 12-05 | 13:40 | 13:45 | 12-05 | 572.00  | 572.00  | Inclination (°): 1.190, Azimuth (°): 154.430, TVD (ft): 511.95, Dogleg (°/100 ft): 0.38, Sensor Depth (ft): 512.00, Bit To Sensor (ft): 60.00                                                 |
| Rotary Drill | 1  | 12-05 | 13:45 | 14:50 | 12-05 | 572.00  | 760.00  | Pressure On (psi): 2200.00, Pressure Off (psi): 1500.00, Weight On Bit (klbs): 30.00, Surface RPM: 70, Surface Torque (ft lbf): 18000.00, Flow Rate (gpm): 800.00, Strokes Per Minute: 108.00 |
| Survey       | 46 | 12-05 | 14:50 | 14:55 | 12-05 | 760.00  | 760.00  | Inclination (°): 2.420, Azimuth (°): 129.030, TVD (ft): 699.85, Dogleg (°/100 ft): 0.77, Sensor Depth (ft): 700.00, Bit To Sensor (ft): 60.00                                                 |
| Rotary Drill | 1  | 12-05 | 14:55 | 15:00 | 12-05 | 760.00  | 770.00  | Pressure On (psi): 2200.00, Pressure Off (psi): 1500.00, Weight On Bit (klbs): 30.00, Surface RPM: 70, Surface Torque (ft lbf): 18000.00, Flow Rate (gpm): 800.00, Strokes Per Minute: 108.00 |
| Slide Drill  | 2  | 12-05 | 15:00 | 15:35 | 12-05 | 770.00  | 805.00  | Pressure On (psi): 2000.00, Pressure Off (psi): 1400.00, Weight On Bit (klbs): 30.00, Flow Rate (gpm): 800.00, Strokes Per Minute: 108, Toolface: 315, Toolface Type: magnetic                |
| Rotary Drill | 1  | 12-05 | 15:35 | 15:55 | 12-05 | 805.00  | 853.00  | Pressure On (psi): 2200.00, Pressure Off (psi): 1500.00, Weight On Bit (klbs): 30.00, Surface RPM: 70, Surface Torque (ft lbf): 18000.00, Flow Rate (gpm): 800.00, Strokes Per Minute: 108.00 |
| Survey       | 46 | 12-05 | 15:55 | 16:00 | 12-05 | 853.00  | 853.00  | Inclination (°): 2.200, Azimuth (°): 122.440, TVD (ft): 792.78, Dogleg (°/100 ft): 0.37, Sensor Depth (ft): 793.00, Bit To Sensor (ft): 60.00                                                 |
| Rotary Drill | 1  | 12-05 | 16:00 | 16:20 | 12-05 | 853.00  | 947.00  | Pressure On (psi): 2200.00, Pressure Off (psi): 1500.00, Weight On Bit (klbs): 30.00, Surface RPM: 70, Surface Torque (ft lbf): 18000.00, Flow Rate (gpm): 800.00, Strokes Per Minute: 108.00 |
| Survey       | 46 | 12-05 | 16:20 | 16:25 | 12-05 | 947.00  | 947.00  | Inclination (°): 2.680, Azimuth (°): 114.270, TVD (ft): 886.69, Dogleg (°/100 ft): 0.63, Sensor Depth (ft): 887.00, Bit To Sensor (ft): 60.00                                                 |
| Rotary Drill | 1  | 12-05 | 16:25 | 16:35 | 12-05 | 947.00  | 956.00  | Pressure On (psi): 2200.00, Pressure Off (psi): 1500.00, Weight On Bit (klbs): 30.00, Surface RPM: 70, Surface Torque (ft lbf): 18000.00, Flow Rate (gpm): 800.00, Strokes Per Minute: 108.00 |
| Slide Drill  | 2  | 12-05 | 16:35 | 16:55 | 12-05 | 956.00  | 1001.00 | Pressure On (psi): 2000.00, Pressure Off (psi): 1400.00, Weight On Bit (klbs): 30.00, Flow Rate (gpm): 800.00, Strokes Per Minute: 108, Toolface: 300, Toolface Type: magnetic                |
| Rotary Drill | 1  | 12-05 | 16:55 | 17:05 | 12-05 | 1001.00 | 1040.00 | Pressure On (psi): 2200.00, Pressure Off (psi): 1500.00, Weight On Bit (klbs): 30.00, Surface RPM: 70, Surface Torque (ft lbf): 18000.00, Flow Rate (gpm): 800.00, Strokes Per Minute: 108.00 |
| Survey       | 46 | 12-05 | 17:05 | 17:10 | 12-05 | 1040.00 | 1040.00 | Inclination (°): 1.930, Azimuth (°): 109.520, TVD (ft): 979.61, Dogleg (°/100 ft): 0.83, Sensor Depth (ft): 980.00, Bit To Sensor (ft): 60.00                                                 |
| Rotary Drill | 1  | 12-05 | 17:10 | 17:50 | 12-05 | 1040.00 | 1134.00 | Pressure On (psi): 2200.00, Pressure Off (psi): 1500.00, Weight On Bit (klbs): 30.00, Surface RPM: 70, Surface Torque (ft lbf): 18000.00, Flow Rate (gpm): 800.00, Strokes Per Minute: 108.00 |
| Survey       | 46 | 12-05 | 17:50 | 17:55 | 12-05 | 1134.00 | 1134.00 | Inclination (°): 1.930, Azimuth (°): 102.490, TVD (ft): 1073.56, Dogleg (°/100 ft): 0.25, Sensor Depth (ft): 1074.00, Bit To Sensor (ft): 60.00                                               |
| Rotary Drill | 1  | 12-05 | 17:55 | 18:45 | 12-05 | 1134.00 | 1227.00 | Pressure On (psi): 2200.00, Pressure Off (psi): 1500.00, Weight On Bit (klbs): 30.00, Surface RPM: 70, Surface Torque (ft lbf): 18000.00, Flow Rate (gpm): 800.00, Strokes Per Minute: 108.00 |

|              |    |       |       |       |       |         |         |                                                                                                                                                                                               |
|--------------|----|-------|-------|-------|-------|---------|---------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Survey       | 46 | 12-05 | 18:45 | 18:50 | 12-05 | 1227.00 | 1227.00 | Inclination (°): 2.730, Azimuth (°): 96.780, TVD (ft): 1166.48, Dogleg (%/100 ft): 0.89, Sensor Depth (ft): 1167.00, Bit To Sensor (ft): 60.00                                                |
| Rotary Drill | 1  | 12-05 | 18:50 | 19:25 | 12-05 | 1227.00 | 1310.00 | Pressure On (psi): 2200.00, Pressure Off (psi): 1500.00, Weight On Bit (klbs): 30.00, Surface RPM: 70, Surface Torque (ft lbf): 18000.00, Flow Rate (gpm): 800.00, Strokes Per Minute: 108.00 |
| Survey       | 46 | 12-05 | 19:25 | 19:30 | 12-05 | 1310.00 | 1310.00 | Inclination (°): 3.250, Azimuth (°): 101.350, TVD (ft): 1249.37, Dogleg (%/100 ft): 0.69, Sensor Depth (ft): 1250.00, Bit To Sensor (ft): 60.00                                               |
| Circulating  | 3  | 12-05 | 19:30 | 20:45 | 12-05 |         |         | Circulate hole clean after reaching Casing point.                                                                                                                                             |
| Pooh         | 7  | 12-05 | 20:45 | 23:45 | 12-05 |         |         | POOH to run casing / Pull MWD tool, break off bit and Rack back BHA.                                                                                                                          |
| Standby      | 15 | 12-05 | 23:45 | 00:00 | 12-06 |         |         | Standby while rig runs surface casing and skids to the 558H                                                                                                                                   |

**MWD Activities**

No Activities



|                                 |                                                     |                                                       |
|---------------------------------|-----------------------------------------------------|-------------------------------------------------------|
| <b>Job Number</b><br>WT-20-071  | <b>Operator</b><br>Advance Energy Partners          | <b>Rig Name</b><br>Pioneer #80                        |
| <b>Start Date</b><br>2020-12-04 | <b>Well Name</b><br>Anderson Fed Com 504H           | <b>Legal Well Name   AFE</b><br>Anderson Fed Com 504H |
| <b>Play</b><br>Delaware Basin   | <b>State/Province and Country</b><br>New Mexico, US | <b>County</b><br>Lea                                  |
| <b>Company Man</b>              |                                                     |                                                       |

Sunday, Dec 06 00:00 - 23:59 (Day 3 of 19)

Billing: N/A (\$130,925.38 total)

| Drilling Summary        |      |                     |      | Drilling Parameters       |   |
|-------------------------|------|---------------------|------|---------------------------|---|
| Start Depth (ft)        |      | Downhole Hours      | 0.00 | Rotating WOB (klbs)       |   |
| Bit Depth (ft)          |      | Drilling Hours      | 0.00 | Sliding WOB (klbs)        |   |
| Bottom Hole Depth (ft)  |      | Hours Circulating   | 0.00 | Rotating SPM              |   |
| Total Distance (ft)     | 0.00 | Hours Sliding       | 0.00 | Sliding SPM               |   |
| Distance Rotated (ft)   | 0.00 | Hours Rotating      | 0.00 | Motor RPM                 | - |
| Distance Slid (ft)      | 0.00 |                     |      | Surface RPM               |   |
| Inclination In          |      |                     |      | Flow Rate (gpm)           |   |
| Inclination Out         |      |                     |      | On Bottom Pressure (psi)  |   |
| Azimuth In              |      | % Hours Rotating    |      | Off Bottom Pressure (psi) |   |
| Azimuth Out             |      | % Hours Sliding     |      |                           |   |
| AVG Total ROP (ft/h)    | 0.00 | % Distance Sliding  |      |                           |   |
| AVG Rotating ROP (ft/h) | 0.00 | % Distance Rotating |      |                           |   |
| AVG Sliding ROP (ft/h)  | 0.00 |                     |      |                           |   |

**Personnel**

| Name                | Position            |
|---------------------|---------------------|
| Robert Olivarez     | MWD Engineer        |
| Kyle Kusak          | MWD Engineer        |
| Advance Directional | Directional Driller |

**No BHAs****Directional Activities**

| Activity Type | Code | Start Date | Start Time | End Time | End Date | Start (ft) | End (ft) | Comments/Details                                            |
|---------------|------|------------|------------|----------|----------|------------|----------|-------------------------------------------------------------|
| Standby       | 15   | 12-05      | 23:45      | 00:00    | 12-06    |            |          | Standby while rig runs surface casing and skids to the 558H |
| Standby       | 15   | 12-06      | 00:00      | 06:00    | 12-06    |            |          | Standby while rig runs surface casing and skids to the 558H |

**MWD Activities**

No Activities



|                                 |                                                     |                                                       |
|---------------------------------|-----------------------------------------------------|-------------------------------------------------------|
| <b>Job Number</b><br>WT-20-071  | <b>Operator</b><br>Advance Energy Partners          | <b>Rig Name</b><br>Pioneer #80                        |
| <b>Start Date</b><br>2020-12-04 | <b>Well Name</b><br>Anderson Fed Com 504H           | <b>Legal Well Name   AFE</b><br>Anderson Fed Com 504H |
| <b>Play</b><br>Delaware Basin   | <b>State/Province and Country</b><br>New Mexico, US | <b>County</b><br>Lea                                  |
| <b>Company Man</b>              |                                                     |                                                       |

Friday, Dec 11 00:00 - 23:59 (Day 4 of 19)

Billing: \$4,700.00 (\$130,925.38 total)

| Drilling Summary        |         |                     |       | Drilling Parameters       |                   |
|-------------------------|---------|---------------------|-------|---------------------------|-------------------|
| Start Depth (ft)        | 1310.00 | Downhole Hours      | 17.00 | Rotating WOB (klbs)       | 30.00 - 47.00     |
| Bit Depth (ft)          | 3659.00 | Drilling Hours      | 10.33 | Sliding WOB (klbs)        | 30.00 - 30.00     |
| Bottom Hole Depth (ft)  | 3659.00 | Hours Circulating   | 2.17  | Rotating SPM              | 108.00 - 208.00   |
| Total Distance (ft)     | 2349.00 | Hours Sliding       | 1.42  | Sliding SPM               | 108.00 - 108.00   |
| Distance Rotated (ft)   | 2224.00 | Hours Rotating      | 8.92  | Motor RPM                 | 85.00 - 136.00    |
| Distance Slid (ft)      | 125.00  |                     |       | Surface RPM               | 40.00 - 60.00     |
| Inclination In          | 3.16    |                     |       | Flow Rate (gpm)           | 550.00 - 800.00   |
| Inclination Out         | 1.63    |                     |       | On Bottom Pressure (psi)  | 2000.00 - 2750.00 |
| Azimuth In              | 107.32  | % Hours Rotating    | 86%   | Off Bottom Pressure (psi) | 1400.00 - 1950.00 |
| Azimuth Out             | 277.48  | % Hours Sliding     | 14%   |                           |                   |
| AVG Total ROP (ft/h)    | 223.42  | % Distance Sliding  | 5%    |                           |                   |
| AVG Rotating ROP (ft/h) | 243.58  | % Distance Rotating | 95%   |                           |                   |
| AVG Sliding ROP (ft/h)  | 88.24   |                     |       |                           |                   |

## Personnel

| Name                | Position            |
|---------------------|---------------------|
| Robert Olivarez     | MWD Engineer        |
| Kyle Kusak          | MWD Engineer        |
| Advance Directional | Directional Driller |

## BHA #2 - Intermediate 12.25"

Date In: Dec 11, 2020, 7:00 Date Out: Dec 12, 2020, 13:00

| Bit Details                |         | Motor Details                    |          | Directional Comments                                                                                                                                           |
|----------------------------|---------|----------------------------------|----------|----------------------------------------------------------------------------------------------------------------------------------------------------------------|
| OD (in)                    | 12.250  | Size (in)                        | 8.0      | Directional: 1.5° FBH 7/8 5.9 Stg Mtr.w/12" Stab.; Flow Range: 400-900 gpm; Max Diff: 1390 psi; Max TQ: 21,870 ft/lbs; Bit: , Jets: 6x14's , TFA: .902 Runs: 2 |
| Vendor                     | REED    | Lobe/Stage                       | 7/8, 5.9 |                                                                                                                                                                |
| S/N                        | A260948 | Bend Angle                       | 1.5      |                                                                                                                                                                |
| Nozzles                    | 6x14's  | Speed (rev/gal)                  | 0.17     |                                                                                                                                                                |
| Total Flow Area (in²)      | 0.902   | Wear Pad OD (in)                 | 8.400    | MWD Comments                                                                                                                                                   |
| Drilling Hours for Day     | 10.33   | Bit Distances                    |          |                                                                                                                                                                |
| Total Drilled for Day (ft) | 2349.00 | Bend (BIT TO BEND): 6.20 ft,     |          | POOH Reason                                                                                                                                                    |
| Drilling Hours for BHA     | 18.25   | Survey (BIT TO SURVEY): 69.00 ft |          |                                                                                                                                                                |
| Total Drilled for BHA (ft) | 3634.00 |                                  |          |                                                                                                                                                                |
|                            |         |                                  |          | Total Depth/Casing Point                                                                                                                                       |

## Directional Items

| Description                                                                                                                                                      | Vendor        | SN#           | Top Conn       | Btm Conn       | ID (in) | OD (in) | Fn Len. (ft) | Len (ft) | Aggr. Len (ft) |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------|---------------|----------------|----------------|---------|---------|--------------|----------|----------------|
| <b>Bit (Fixed Cutter)</b><br>Description: TK66, Gauge Length (in): 6.00, Size (in): 12.25, Type: PDC (Polycrystalline Diamond Compacts)                          | REED          | A260948       | 6 5/8" Reg Pin |                |         | 12.250  |              | 1.50     | 1.50           |
| <b>Mud Motor</b><br>Description: 1.5 FBH 7/8 5.9 Stg Mtr. w/ 12" NB Stab, Size (in): 8.00, Bend Angle (°): 1.5, Rotor Lobe: 7, Stator Lobe: 8, Stator Stage: 5.9 | AIM           | 800-40-007    | 6 5/8" Reg Box | 6 5/8" Reg Box |         | 8.000   |              | 38.14    | 39.64          |
| <b>Stabilizer</b><br>Description: 12" Stabilizer                                                                                                                 | BLACK DIAMOND | 12476         | 6 5/8" Reg Box | 6 5/8" Reg Pin | 2.813   | 8.000   |              | 7.40     | 47.04          |
| <b>UBHO Sub</b><br>Description: UBHO Sub, Material: Non-Magnetic                                                                                                 | AIM           | 800-609       | 6 5/8" Reg Box | 6 5/8" Reg Pin | 3.250   | 8.000   |              | 3.00     | 50.04          |
| <b>Drill Collar</b><br>Description: NMDC (MWD Tool), Material: Non-Magnetic, Type: Slick Drill                                                                   | AIM           | AIM 800-01011 | 6 5/8" Reg Box | 6 5/8" Reg Pin | 3.250   | 8.000   |              | 30.28    | 80.32          |
| <b>Drill Collar</b><br>Description: NMDC (Spacer), Material: Non-Magnetic, Type: Slick Drill                                                                     | AIM           | DY80011       | 6 5/8" Reg Box | 6 5/8" Reg Pin | 3.250   | 8.000   |              | 30.03    | 110.35         |
| <b>Crossover Sub</b><br>Description: X-O SUB, Material: Steel                                                                                                    | BLACK DIAMOND | BD15080       | EverDrlg54 Box | 6 5/8" Reg Pin | 2.813   | 8.000   |              | 3.41     | 113.76         |
| <b>HWDP</b><br>Description: 13 STANDS of HWDP, Type: Slick                                                                                                       | BLACK DIAMOND |               | EverDrlg54 Box | EverDrlg54 Pin | 3.750   | 5.500   |              | 1216.55  | 1330.31        |

## MWD Items

No Items

## Directional Activities

| Activity Type | Code | Start Date | Start Time | End Time | End Date | Start (ft) | End (ft) | Comments/Details                                       |
|---------------|------|------------|------------|----------|----------|------------|----------|--------------------------------------------------------|
| Standby       | 15   | 12-11      | 00:00      | 07:00    | 12-11    |            |          | Standby. SKID FROM 604H, N/U BOPs & TEST, CONT. RIG UP |

|                 |    |       |       |       |       |         |         |                                                                                                                                                                                               |
|-----------------|----|-------|-------|-------|-------|---------|---------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Pick Up BHA     | 64 | 12-11 | 07:00 | 08:00 | 12-11 |         |         | P/U BHA 2                                                                                                                                                                                     |
| TIH             | 8  | 12-11 | 08:00 | 08:45 | 12-11 |         |         | TIH W/ BHA #2                                                                                                                                                                                 |
| Drilling Cement | 17 | 12-11 | 08:45 | 10:55 | 12-11 | 1239.00 | 1310.00 | Drilling Cement and Float Equipment                                                                                                                                                           |
| Rotary Drill    | 1  | 12-11 | 10:55 | 11:00 | 12-11 | 1310.00 | 1315.00 | Pressure On (psi): 2200.00, Pressure Off (psi): 1500.00, Weight On Bit (klbs): 30.00, Surface RPM: 40, Surface Torque (ft lbf): 18000.00, Flow Rate (gpm): 800.00, Strokes Per Minute: 108.00 |
| Rotary Drill    | 1  | 12-11 | 11:00 | 12:15 | 12-11 | 1315.00 | 1419.00 | Pressure On (psi): 2200.00, Pressure Off (psi): 1700.00, Weight On Bit (klbs): 30.00, Surface RPM: 40, Surface Torque (ft lbf): 18000.00, Flow Rate (gpm): 550.00, Strokes Per Minute: 208.00 |
| Survey          | 46 | 12-11 | 12:15 | 12:30 | 12-11 | 1419.00 | 1419.00 | Inclination (°): 3.160, Azimuth (°): 107.320, TVD (ft): 1349.21, Dogleg (%/100 ft): 0.35, Sensor Depth (ft): 1350.00, Bit To Sensor (ft): 69.00                                               |
| Rotary Drill    | 1  | 12-11 | 12:30 | 12:35 | 12-11 | 1419.00 | 1430.00 | Pressure On (psi): 2200.00, Pressure Off (psi): 1700.00, Weight On Bit (klbs): 30.00, Surface RPM: 50, Surface Torque (ft lbf): 18000.00, Flow Rate (gpm): 550.00, Strokes Per Minute: 208.00 |
| Slide Drill     | 2  | 12-11 | 12:35 | 12:50 | 12-11 | 1430.00 | 1455.00 | Pressure On (psi): 2000.00, Pressure Off (psi): 1400.00, Weight On Bit (klbs): 30.00, Flow Rate (gpm): 800.00, Strokes Per Minute: 108, Toolface: 300, Toolface Type: magnetic                |
| Rotary Drill    | 1  | 12-11 | 12:50 | 13:00 | 12-11 | 1455.00 | 1509.00 | Pressure On (psi): 2200.00, Pressure Off (psi): 1700.00, Weight On Bit (klbs): 30.00, Surface RPM: 50, Surface Torque (ft lbf): 18000.00, Flow Rate (gpm): 550.00, Strokes Per Minute: 208.00 |
| Survey          | 46 | 12-11 | 13:00 | 13:05 | 12-11 | 1509.00 | 1509.00 | Inclination (°): 1.580, Azimuth (°): 94.050, TVD (ft): 1439.14, Dogleg (%/100 ft): 1.85, Sensor Depth (ft): 1440.00, Bit To Sensor (ft): 69.00                                                |
| Rotary Drill    | 1  | 12-11 | 13:05 | 13:25 | 12-11 | 1509.00 | 1598.00 | Pressure On (psi): 2200.00, Pressure Off (psi): 1700.00, Weight On Bit (klbs): 30.00, Surface RPM: 50, Surface Torque (ft lbf): 18000.00, Flow Rate (gpm): 800.00, Strokes Per Minute: 208.00 |
| Survey          | 46 | 12-11 | 13:25 | 13:30 | 12-11 | 1598.00 | 1598.00 | Inclination (°): 1.100, Azimuth (°): 35.690, TVD (ft): 1528.11, Dogleg (%/100 ft): 1.54, Sensor Depth (ft): 1529.00, Bit To Sensor (ft): 69.00                                                |
| Rotary Drill    | 1  | 12-11 | 13:30 | 13:50 | 12-11 | 1598.00 | 1688.00 | Pressure On (psi): 2200.00, Pressure Off (psi): 1700.00, Weight On Bit (klbs): 30.00, Surface RPM: 50, Surface Torque (ft lbf): 18000.00, Flow Rate (gpm): 800.00, Strokes Per Minute: 208.00 |
| Survey          | 46 | 12-11 | 13:50 | 13:55 | 12-11 | 1688.00 | 1688.00 | Inclination (°): 1.050, Azimuth (°): 34.460, TVD (ft): 1618.10, Dogleg (%/100 ft): 0.06, Sensor Depth (ft): 1619.00, Bit To Sensor (ft): 69.00                                                |
| Rotary Drill    | 1  | 12-11 | 13:55 | 14:15 | 12-11 | 1688.00 | 1777.00 | Pressure On (psi): 2200.00, Pressure Off (psi): 1700.00, Weight On Bit (klbs): 30.00, Surface RPM: 50, Surface Torque (ft lbf): 18000.00, Flow Rate (gpm): 800.00, Strokes Per Minute: 208.00 |
| Survey          | 46 | 12-11 | 14:15 | 14:20 | 12-11 | 1777.00 | 1777.00 | Inclination (°): 1.050, Azimuth (°): 45.800, TVD (ft): 1707.08, Dogleg (%/100 ft): 0.23, Sensor Depth (ft): 1708.00, Bit To Sensor (ft): 69.00                                                |
| Rotary Drill    | 1  | 12-11 | 14:20 | 14:25 | 12-11 | 1777.00 | 1795.00 | Pressure On (psi): 2200.00, Pressure Off (psi): 1700.00, Weight On Bit (klbs): 30.00, Surface RPM: 50, Surface Torque (ft lbf): 18000.00, Flow Rate (gpm): 800.00, Strokes Per Minute: 208.00 |
| Slide Drill     | 2  | 12-11 | 14:25 | 14:30 | 12-11 | 1795.00 | 1810.00 | Pressure On (psi): 2000.00, Pressure Off (psi): 1400.00, Weight On Bit (klbs): 30.00, Flow Rate (gpm): 800.00, Strokes Per Minute: 108, Toolface: 290, Toolface Type: magnetic                |
| Rotary Drill    | 1  | 12-11 | 14:30 | 14:40 | 12-11 | 1810.00 | 1867.00 | Pressure On (psi): 2200.00, Pressure Off (psi): 1700.00, Weight On Bit (klbs): 30.00, Surface RPM: 50, Surface Torque (ft lbf): 18000.00, Flow Rate (gpm): 800.00, Strokes Per Minute: 208.00 |
| Survey          | 46 | 12-11 | 14:40 | 14:45 | 12-11 | 1867.00 | 1867.00 | Inclination (°): 1.010, Azimuth (°): 17.060, TVD (ft): 1797.07, Dogleg (%/100 ft): 0.57, Sensor Depth (ft): 1798.00, Bit To Sensor (ft): 69.00                                                |
| Rotary Drill    | 1  | 12-11 | 14:45 | 15:00 | 12-11 | 1867.00 | 1957.00 | Pressure On (psi): 2200.00, Pressure Off (psi): 1700.00, Weight On Bit (klbs): 30.00, Surface RPM: 50, Surface Torque (ft lbf): 18000.00, Flow Rate (gpm): 800.00, Strokes Per Minute: 208.00 |
| Survey          | 46 | 12-11 | 15:00 | 15:05 | 12-11 | 1957.00 | 1957.00 | Inclination (°): 1.360, Azimuth (°): 354.910, TVD (ft): 1887.05, Dogleg (%/100 ft): 0.63, Sensor Depth (ft): 1888.00, Bit To Sensor (ft): 69.00                                               |
| Rotary Drill    | 1  | 12-11 | 15:05 | 15:20 | 12-11 | 1957.00 | 2047.00 | Pressure On (psi): 2200.00, Pressure Off (psi): 1700.00, Weight On Bit (klbs): 30.00, Surface RPM: 50, Surface Torque (ft lbf): 18000.00, Flow Rate (gpm): 800.00, Strokes Per Minute: 208.00 |
| Survey          | 46 | 12-11 | 15:20 | 15:25 | 12-11 | 2047.00 | 2047.00 | Inclination (°): 1.230, Azimuth (°): 356.930, TVD (ft): 1977.03, Dogleg (%/100 ft): 0.15, Sensor Depth (ft): 1978.00, Bit To Sensor (ft): 69.00                                               |
| Rotary Drill    | 1  | 12-11 | 15:25 | 15:45 | 12-11 | 2047.00 | 2136.00 | Pressure On (psi): 2200.00, Pressure Off (psi): 1700.00, Weight On Bit (klbs): 30.00, Surface RPM: 50, Surface Torque (ft lbf): 18000.00, Flow Rate (gpm): 800.00, Strokes Per Minute: 208.00 |
| Survey          | 46 | 12-11 | 15:45 | 15:50 | 12-11 | 2136.00 | 2136.00 | Inclination (°): 1.100, Azimuth (°): 8.710, TVD (ft): 2066.01, Dogleg (%/100 ft): 0.31, Sensor Depth (ft): 2067.00, Bit To Sensor (ft): 69.00                                                 |
| Rotary Drill    | 1  | 12-11 | 15:50 | 16:05 | 12-11 | 2136.00 | 2226.00 | Pressure On (psi): 2200.00, Pressure Off (psi): 1700.00, Weight On Bit (klbs): 30.00, Surface RPM: 50, Surface Torque (ft lbf): 18000.00, Flow Rate (gpm): 800.00, Strokes Per Minute: 208.00 |
| Survey          | 46 | 12-11 | 16:05 | 16:10 | 12-11 | 2226.00 | 2226.00 | Inclination (°): 1.100, Azimuth (°): 13.450, TVD (ft): 2155.99, Dogleg (%/100 ft): 0.10, Sensor Depth (ft): 2157.00, Bit To Sensor (ft): 69.00                                                |
| Rotary Drill    | 1  | 12-11 | 16:10 | 16:15 | 12-11 | 2226.00 | 2235.00 | Pressure On (psi): 2200.00, Pressure Off (psi): 1700.00, Weight On Bit (klbs): 30.00, Surface RPM: 50, Surface Torque (ft lbf): 18000.00, Flow Rate (gpm): 800.00, Strokes Per Minute: 208.00 |
| Slide Drill     | 2  | 12-11 | 16:15 | 16:25 | 12-11 | 2235.00 | 2260.00 | Pressure On (psi): 2000.00, Pressure Off (psi): 1400.00, Weight On Bit (klbs): 30.00, Flow Rate (gpm): 800.00, Strokes Per Minute: 108, Toolface: 215, Toolface Type: magnetic                |
| Rotary Drill    | 1  | 12-11 | 16:25 | 16:35 | 12-11 | 2260.00 | 2316.00 | Pressure On (psi): 2200.00, Pressure Off (psi): 1700.00, Weight On Bit (klbs): 30.00, Surface RPM: 50, Surface Torque (ft lbf): 18000.00, Flow Rate (gpm): 800.00, Strokes Per Minute: 208.00 |

|                       |    |       |       |       |       |         |         |                                                                                                                                                                                               |
|-----------------------|----|-------|-------|-------|-------|---------|---------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Survey                | 46 | 12-11 | 16:35 | 16:40 | 12-11 | 2316.00 | 2316.00 | Inclination (°): 0.570, Azimuth (°): 295.760, TVD (ft): 2245.99, Dogleg (%/100 ft): 1.25, Sensor Depth (ft): 2247.00, Bit To Sensor (ft): 69.00                                               |
| Rotary Drill          | 1  | 12-11 | 16:40 | 16:55 | 12-11 | 2316.00 | 2405.00 | Pressure On (psi): 2500.00, Pressure Off (psi): 1700.00, Weight On Bit (klbs): 45.00, Surface RPM: 60, Surface Torque (ft lbf): 18000.00, Flow Rate (gpm): 800.00, Strokes Per Minute: 208.00 |
| Survey                | 46 | 12-11 | 16:55 | 17:00 | 12-11 | 2405.00 | 2405.00 | Inclination (°): 1.190, Azimuth (°): 242.060, TVD (ft): 2334.98, Dogleg (%/100 ft): 1.09, Sensor Depth (ft): 2336.00, Bit To Sensor (ft): 69.00                                               |
| Rotary Drill          | 1  | 12-11 | 17:00 | 17:15 | 12-11 | 2405.00 | 2495.00 | Pressure On (psi): 2500.00, Pressure Off (psi): 1700.00, Weight On Bit (klbs): 45.00, Surface RPM: 60, Surface Torque (ft lbf): 18000.00, Flow Rate (gpm): 800.00, Strokes Per Minute: 208.00 |
| Survey                | 46 | 12-11 | 17:15 | 17:20 | 12-11 | 2495.00 | 2495.00 | Inclination (°): 0.750, Azimuth (°): 233.880, TVD (ft): 2424.96, Dogleg (%/100 ft): 0.51, Sensor Depth (ft): 2426.00, Bit To Sensor (ft): 69.00                                               |
| Rotary Drill          | 1  | 12-11 | 17:20 | 17:35 | 12-11 | 2495.00 | 2585.00 | Pressure On (psi): 2500.00, Pressure Off (psi): 1700.00, Weight On Bit (klbs): 45.00, Surface RPM: 60, Surface Torque (ft lbf): 18000.00, Flow Rate (gpm): 800.00, Strokes Per Minute: 208.00 |
| Rig Service - In Hole | 19 | 12-11 | 17:35 | 17:50 | 12-11 |         |         | Rig Service                                                                                                                                                                                   |
| Survey                | 46 | 12-11 | 17:50 | 17:55 | 12-11 | 2585.00 | 2585.00 | Inclination (°): 0.310, Azimuth (°): 191.520, TVD (ft): 2514.96, Dogleg (%/100 ft): 0.62, Sensor Depth (ft): 2516.00, Bit To Sensor (ft): 69.00                                               |
| Rotary Drill          | 1  | 12-11 | 17:55 | 18:10 | 12-11 | 2585.00 | 2674.00 | Pressure On (psi): 2500.00, Pressure Off (psi): 1700.00, Weight On Bit (klbs): 45.00, Surface RPM: 60, Surface Torque (ft lbf): 18000.00, Flow Rate (gpm): 800.00, Strokes Per Minute: 208.00 |
| Survey                | 46 | 12-11 | 18:10 | 18:15 | 12-11 | 2674.00 | 2674.00 | Inclination (°): 0.400, Azimuth (°): 118.480, TVD (ft): 2603.96, Dogleg (%/100 ft): 0.48, Sensor Depth (ft): 2605.00, Bit To Sensor (ft): 69.00                                               |
| Rotary Drill          | 1  | 12-11 | 18:15 | 18:20 | 12-11 | 2674.00 | 2685.00 | Pressure On (psi): 2500.00, Pressure Off (psi): 1700.00, Weight On Bit (klbs): 45.00, Surface RPM: 60, Surface Torque (ft lbf): 18000.00, Flow Rate (gpm): 800.00, Strokes Per Minute: 208.00 |
| Slide Drill           | 2  | 12-11 | 18:20 | 18:35 | 12-11 | 2685.00 | 2700.00 | Pressure On (psi): 2000.00, Pressure Off (psi): 1400.00, Weight On Bit (klbs): 30.00, Flow Rate (gpm): 800.00, Strokes Per Minute: 108, Toolface: 270, Toolface Type: magnetic                |
| Rotary Drill          | 1  | 12-11 | 18:35 | 18:55 | 12-11 | 2700.00 | 2764.00 | Pressure On (psi): 2500.00, Pressure Off (psi): 1700.00, Weight On Bit (klbs): 45.00, Surface RPM: 60, Surface Torque (ft lbf): 18000.00, Flow Rate (gpm): 800.00, Strokes Per Minute: 208.00 |
| Survey                | 46 | 12-11 | 18:55 | 19:00 | 12-11 | 2764.00 | 2764.00 | Inclination (°): 0.310, Azimuth (°): 344.360, TVD (ft): 2693.96, Dogleg (%/100 ft): 0.73, Sensor Depth (ft): 2695.00, Bit To Sensor (ft): 69.00                                               |
| Rotary Drill          | 1  | 12-11 | 19:00 | 19:15 | 12-11 | 2764.00 | 2853.00 | Pressure On (psi): 2500.00, Pressure Off (psi): 1700.00, Weight On Bit (klbs): 45.00, Surface RPM: 60, Surface Torque (ft lbf): 18000.00, Flow Rate (gpm): 800.00, Strokes Per Minute: 208.00 |
| Survey                | 46 | 12-11 | 19:15 | 19:20 | 12-11 | 2853.00 | 2853.00 | Inclination (°): 0.620, Azimuth (°): 345.330, TVD (ft): 2782.95, Dogleg (%/100 ft): 0.35, Sensor Depth (ft): 2784.00, Bit To Sensor (ft): 69.00                                               |
| Rotary Drill          | 1  | 12-11 | 19:20 | 19:35 | 12-11 | 2853.00 | 2943.00 | Pressure On (psi): 2500.00, Pressure Off (psi): 1700.00, Weight On Bit (klbs): 45.00, Surface RPM: 60, Surface Torque (ft lbf): 18000.00, Flow Rate (gpm): 800.00, Strokes Per Minute: 208.00 |
| Survey                | 46 | 12-11 | 19:35 | 19:40 | 12-11 | 2943.00 | 2943.00 | Inclination (°): 0.880, Azimuth (°): 7.920, TVD (ft): 2872.95, Dogleg (%/100 ft): 0.43, Sensor Depth (ft): 2874.00, Bit To Sensor (ft): 69.00                                                 |
| Rotary Drill          | 1  | 12-11 | 19:40 | 20:00 | 12-11 | 2943.00 | 3032.00 | Pressure On (psi): 2500.00, Pressure Off (psi): 1700.00, Weight On Bit (klbs): 45.00, Surface RPM: 60, Surface Torque (ft lbf): 18000.00, Flow Rate (gpm): 800.00, Strokes Per Minute: 208.00 |
| Survey                | 46 | 12-11 | 20:00 | 20:05 | 12-11 | 3032.00 | 3032.00 | Inclination (°): 1.190, Azimuth (°): 30.770, TVD (ft): 2961.93, Dogleg (%/100 ft): 0.57, Sensor Depth (ft): 2963.00, Bit To Sensor (ft): 69.00                                                |
| Rotary Drill          | 1  | 12-11 | 20:05 | 20:10 | 12-11 | 3032.00 | 3042.00 | Pressure On (psi): 2500.00, Pressure Off (psi): 1700.00, Weight On Bit (klbs): 45.00, Surface RPM: 60, Surface Torque (ft lbf): 18000.00, Flow Rate (gpm): 800.00, Strokes Per Minute: 208.00 |
| Slide Drill           | 2  | 12-11 | 20:10 | 20:25 | 12-11 | 3042.00 | 3067.00 | Pressure On (psi): 2000.00, Pressure Off (psi): 1400.00, Weight On Bit (klbs): 30.00, Flow Rate (gpm): 800.00, Strokes Per Minute: 108, Toolface: 250, Toolface Type: magnetic                |
| Rotary Drill          | 1  | 12-11 | 20:25 | 20:35 | 12-11 | 3067.00 | 3122.00 | Pressure On (psi): 2500.00, Pressure Off (psi): 1700.00, Weight On Bit (klbs): 45.00, Surface RPM: 60, Surface Torque (ft lbf): 18000.00, Flow Rate (gpm): 800.00, Strokes Per Minute: 208.00 |
| Survey                | 46 | 12-11 | 20:35 | 20:40 | 12-11 | 3122.00 | 3122.00 | Inclination (°): 0.920, Azimuth (°): 356.490, TVD (ft): 3051.92, Dogleg (%/100 ft): 0.75, Sensor Depth (ft): 3053.00, Bit To Sensor (ft): 69.00                                               |
| Rotary Drill          | 1  | 12-11 | 20:40 | 21:00 | 12-11 | 3122.00 | 3212.00 | Pressure On (psi): 2500.00, Pressure Off (psi): 1700.00, Weight On Bit (klbs): 45.00, Surface RPM: 60, Surface Torque (ft lbf): 18000.00, Flow Rate (gpm): 800.00, Strokes Per Minute: 208.00 |
| Survey                | 46 | 12-11 | 21:00 | 21:05 | 12-11 | 3212.00 | 3212.00 | Inclination (°): 1.100, Azimuth (°): 317.910, TVD (ft): 3141.90, Dogleg (%/100 ft): 0.77, Sensor Depth (ft): 3143.00, Bit To Sensor (ft): 69.00                                               |
| Rotary Drill          | 1  | 12-11 | 21:05 | 21:25 | 12-11 | 3212.00 | 3301.00 | Pressure On (psi): 2500.00, Pressure Off (psi): 1700.00, Weight On Bit (klbs): 45.00, Surface RPM: 60, Surface Torque (ft lbf): 18000.00, Flow Rate (gpm): 800.00, Strokes Per Minute: 208.00 |
| Survey                | 46 | 12-11 | 21:25 | 21:30 | 12-11 | 3301.00 | 3301.00 | Inclination (°): 0.700, Azimuth (°): 342.430, TVD (ft): 3230.89, Dogleg (%/100 ft): 0.61, Sensor Depth (ft): 3232.00, Bit To Sensor (ft): 69.00                                               |
| Rotary Drill          | 1  | 12-11 | 21:30 | 22:15 | 12-11 | 3301.00 | 3480.00 | Pressure On (psi): 2500.00, Pressure Off (psi): 1700.00, Weight On Bit (klbs): 45.00, Surface RPM: 60, Surface Torque (ft lbf): 18000.00, Flow Rate (gpm): 800.00, Strokes Per Minute: 208.00 |
| Survey                | 46 | 12-11 | 22:15 | 22:20 | 12-11 | 3480.00 | 3480.00 | Inclination (°): 1.010, Azimuth (°): 100.910, TVD (ft): 3409.88, Dogleg (%/100 ft): 0.83, Sensor Depth (ft): 3411.00, Bit To Sensor (ft): 69.00                                               |

|              |    |       |       |       |       |         |         |                                                                                                                                                                                               |
|--------------|----|-------|-------|-------|-------|---------|---------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Rotary Drill | 1  | 12-11 | 22:20 | 22:25 | 12-11 | 3480.00 | 3490.00 | Pressure On (psi): 2750.00, Pressure Off (psi): 1950.00, Weight On Bit (klbs): 47.00, Surface RPM: 60, Surface Torque (ft lbf): 19000.00, Flow Rate (gpm): 800.00, Strokes Per Minute: 208.00 |
| Slide Drill  | 2  | 12-11 | 22:25 | 22:50 | 12-11 | 3490.00 | 3510.00 | Pressure On (psi): 2300.00, Pressure Off (psi): 1950.00, Weight On Bit (klbs): 30.00, Flow Rate (gpm): 800.00, Strokes Per Minute: 108, Toolface: 270, Toolface Type: magnetic                |
| Rotary Drill | 1  | 12-11 | 22:50 | 23:10 | 12-11 | 3510.00 | 3570.00 | Pressure On (psi): 2750.00, Pressure Off (psi): 1950.00, Weight On Bit (klbs): 47.00, Surface RPM: 60, Surface Torque (ft lbf): 19000.00, Flow Rate (gpm): 800.00, Strokes Per Minute: 208.00 |
| Survey       | 46 | 12-11 | 23:10 | 23:15 | 12-11 | 3570.00 | 3570.00 | Inclination (°): 0.350, Azimuth (°): 237.580, TVD (ft): 3499.88, Dogleg (°/100 ft): 1.43, Sensor Depth (ft): 3501.00, Bit To Sensor (ft): 69.00                                               |
| Rotary Drill | 1  | 12-11 | 23:15 | 23:40 | 12-11 | 3570.00 | 3659.00 | Pressure On (psi): 2750.00, Pressure Off (psi): 1950.00, Weight On Bit (klbs): 47.00, Surface RPM: 60, Surface Torque (ft lbf): 19000.00, Flow Rate (gpm): 800.00, Strokes Per Minute: 208.00 |
| Survey       | 46 | 12-11 | 23:40 | 23:45 | 12-11 | 3659.00 | 3659.00 | Inclination (°): 1.630, Azimuth (°): 277.480, TVD (ft): 3588.86, Dogleg (°/100 ft): 1.55, Sensor Depth (ft): 3590.00, Bit To Sensor (ft): 69.00                                               |
| Rotary Drill | 1  | 12-11 | 23:45 | 00:20 | 12-12 | 3659.00 | 3749.00 | Pressure On (psi): 2750.00, Pressure Off (psi): 1950.00, Weight On Bit (klbs): 47.00, Surface RPM: 60, Surface Torque (ft lbf): 19000.00, Flow Rate (gpm): 800.00, Strokes Per Minute: 208.00 |

**MWD Activities**

No Activities



|                                 |                                                     |                                                       |
|---------------------------------|-----------------------------------------------------|-------------------------------------------------------|
| <b>Job Number</b><br>WT-20-071  | <b>Operator</b><br>Advance Energy Partners          | <b>Rig Name</b><br>Pioneer #80                        |
| <b>Start Date</b><br>2020-12-04 | <b>Well Name</b><br>Anderson Fed Com 504H           | <b>Legal Well Name   AFE</b><br>Anderson Fed Com 504H |
| <b>Play</b><br>Delaware Basin   | <b>State/Province and Country</b><br>New Mexico, US | <b>County</b><br>Lea                                  |
| <b>Company Man</b>              |                                                     |                                                       |

Saturday, Dec 12 00:00 - 23:59 (Day 5 of 19)

Billing: \$4,700.00 (\$130,925.38 total)

| Drilling Summary        |         |                     |       | Drilling Parameters       |                   |
|-------------------------|---------|---------------------|-------|---------------------------|-------------------|
| Start Depth (ft)        | 3659.00 | Downhole Hours      | 13.00 | Rotating WOB (klbs)       | 47.00 - 47.00     |
| Bit Depth (ft)          | 4944.00 | Drilling Hours      | 7.92  | Sliding WOB (klbs)        | 30.00 - 30.00     |
| Bottom Hole Depth (ft)  | 4944.00 | Hours Circulating   | 0.92  | Rotating SPM              | 208.00 - 208.00   |
| Total Distance (ft)     | 1285.00 | Hours Sliding       | 0.75  | Sliding SPM               | 108.00 - 108.00   |
| Distance Rotated (ft)   | 1255.00 | Hours Rotating      | 7.17  | Motor RPM                 | 85.00 - 136.00    |
| Distance Slid (ft)      | 30.00   |                     |       | Surface RPM               | 60.00 - 60.00     |
| Inclination In          | 2.07    |                     |       | Flow Rate (gpm)           | 800.00 - 800.00   |
| Inclination Out         | 0.26    |                     |       | On Bottom Pressure (psi)  | 2300.00 - 2750.00 |
| Azimuth In              | 279.24  | % Hours Rotating    | 91%   | Off Bottom Pressure (psi) | 1950.00 - 1950.00 |
| Azimuth Out             | 236.08  | % Hours Sliding     | 9%    |                           |                   |
| AVG Total ROP (ft/h)    | 162.32  | % Distance Sliding  | 2%    |                           |                   |
| AVG Rotating ROP (ft/h) | 175.12  | % Distance Rotating | 98%   |                           |                   |
| AVG Sliding ROP (ft/h)  | 40.00   |                     |       |                           |                   |

## Personnel

| Name                | Position            |
|---------------------|---------------------|
| Robert Olivarez     | MWD Engineer        |
| Kyle Kusak          | MWD Engineer        |
| Advance Directional | Directional Driller |

## BHA #2 - Intermediate 12.25"

Date In: Dec 11, 2020, 7:00 Date Out: Dec 12, 2020, 13:00

| Bit Details                |         | Motor Details                    |          | Directional Comments                                                                                                                                           |
|----------------------------|---------|----------------------------------|----------|----------------------------------------------------------------------------------------------------------------------------------------------------------------|
| OD (in)                    | 12.250  | Size (in)                        | 8.0      | Directional: 1.5° FBH 7/8 5.9 Stg Mtr.w/12" Stab.; Flow Range: 400-900 gpm; Max Diff: 1390 psi; Max TQ: 21,870 ft/lbs; Bit: , Jets: 6x14's , TFA: .902 Runs: 2 |
| Vendor                     | REED    | Lobe/Stage                       | 7/8, 5.9 |                                                                                                                                                                |
| S/N                        | A260948 | Bend Angle                       | 1.5      |                                                                                                                                                                |
| Nozzles                    | 6x14's  | Speed (rev/gal)                  | 0.17     |                                                                                                                                                                |
| Total Flow Area (in²)      | 0.902   | Wear Pad OD (in)                 | 8.400    | MWD Comments                                                                                                                                                   |
| Drilling Hours for Day     | 7.92    | Bit Distances                    |          |                                                                                                                                                                |
| Total Drilled for Day (ft) | 1285.00 | Bend (BIT TO BEND): 6.20 ft,     |          | POOH Reason                                                                                                                                                    |
| Drilling Hours for BHA     | 18.25   | Survey (BIT TO SURVEY): 69.00 ft |          |                                                                                                                                                                |
| Total Drilled for BHA (ft) | 3634.00 |                                  |          |                                                                                                                                                                |
|                            |         |                                  |          | Total Depth/Casing Point                                                                                                                                       |

## Directional Items

| Description                                                                                                                                                      | Vendor        | SN#           | Top Conn       | Btm Conn       | ID (in) | OD (in) | Fn Len. (ft) | Len (ft) | Aggr. Len (ft) |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------|---------------|----------------|----------------|---------|---------|--------------|----------|----------------|
| <b>Bit (Fixed Cutter)</b><br>Description: TK66, Gauge Length (in): 6.00, Size (in): 12.25, Type: PDC (Polycrystalline Diamond Compacts)                          | REED          | A260948       | 6 5/8" Reg Pin |                |         | 12.250  |              | 1.50     | 1.50           |
| <b>Mud Motor</b><br>Description: 1.5 FBH 7/8 5.9 Stg Mtr. w/ 12" NB Stab, Size (in): 8.00, Bend Angle (°): 1.5, Rotor Lobe: 7, Stator Lobe: 8, Stator Stage: 5.9 | AIM           | 800-40-007    | 6 5/8" Reg Box | 6 5/8" Reg Box |         | 8.000   |              | 38.14    | 39.64          |
| <b>Stabilizer</b><br>Description: 12" Stabilizer                                                                                                                 | BLACK DIAMOND | 12476         | 6 5/8" Reg Box | 6 5/8" Reg Pin | 2.813   | 8.000   |              | 7.40     | 47.04          |
| <b>UBHO Sub</b><br>Description: UBHO Sub, Material: Non-Magnetic                                                                                                 | AIM           | 800-609       | 6 5/8" Reg Box | 6 5/8" Reg Pin | 3.250   | 8.000   |              | 3.00     | 50.04          |
| <b>Drill Collar</b><br>Description: NMDC (MWD Tool), Material: Non-Magnetic, Type: Slick Drill                                                                   | AIM           | AIM 800-01011 | 6 5/8" Reg Box | 6 5/8" Reg Pin | 3.250   | 8.000   |              | 30.28    | 80.32          |
| <b>Drill Collar</b><br>Description: NMDC (Spacer), Material: Non-Magnetic, Type: Slick Drill                                                                     | AIM           | DY80011       | 6 5/8" Reg Box | 6 5/8" Reg Pin | 3.250   | 8.000   |              | 30.03    | 110.35         |
| <b>Crossover Sub</b><br>Description: X-O SUB, Material: Steel                                                                                                    | BLACK DIAMOND | BD15080       | EverDrlg54 Box | 6 5/8" Reg Pin | 2.813   | 8.000   |              | 3.41     | 113.76         |
| <b>HWDP</b><br>Description: 13 STANDS of HWDP, Type: Slick                                                                                                       | BLACK DIAMOND |               | EverDrlg54 Box | EverDrlg54 Pin | 3.750   | 5.500   |              | 1216.55  | 1330.31        |

## MWD Items

No Items

## Directional Activities

| Activity Type | Code | Start Date | Start Time | End Time | End Date | Start (ft) | End (ft) | Comments/Details |
|---------------|------|------------|------------|----------|----------|------------|----------|------------------|
|---------------|------|------------|------------|----------|----------|------------|----------|------------------|

|              |    |       |       |       |       |         |         |                                                                                                                                                                                               |
|--------------|----|-------|-------|-------|-------|---------|---------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Rotary Drill | 1  | 12-11 | 23:45 | 00:20 | 12-12 | 3659.00 | 3749.00 | Pressure On (psi): 2750.00, Pressure Off (psi): 1950.00, Weight On Bit (klbs): 47.00, Surface RPM: 60, Surface Torque (ft lbf): 19000.00, Flow Rate (gpm): 800.00, Strokes Per Minute: 208.00 |
| Survey       | 46 | 12-12 | 00:20 | 00:25 | 12-12 | 3749.00 | 3749.00 | Inclination (°): 2.070, Azimuth (°): 279.240, TVD (ft): 3678.82, Dogleg (°/100 ft): 0.49, Sensor Depth (ft): 3680.00, Bit To Sensor (ft): 69.00                                               |
| Rotary Drill | 1  | 12-12 | 00:25 | 01:00 | 12-12 | 3749.00 | 3839.00 | Pressure On (psi): 2750.00, Pressure Off (psi): 1950.00, Weight On Bit (klbs): 47.00, Surface RPM: 60, Surface Torque (ft lbf): 19000.00, Flow Rate (gpm): 800.00, Strokes Per Minute: 208.00 |
| Survey       | 46 | 12-12 | 01:00 | 01:05 | 12-12 | 3839.00 | 3839.00 | Inclination (°): 2.240, Azimuth (°): 276.780, TVD (ft): 3768.75, Dogleg (°/100 ft): 0.21, Sensor Depth (ft): 3770.00, Bit To Sensor (ft): 69.00                                               |
| Rotary Drill | 1  | 12-12 | 01:05 | 01:10 | 12-12 | 3839.00 | 3849.00 | Pressure On (psi): 2750.00, Pressure Off (psi): 1950.00, Weight On Bit (klbs): 47.00, Surface RPM: 60, Surface Torque (ft lbf): 19000.00, Flow Rate (gpm): 800.00, Strokes Per Minute: 208.00 |
| Slide Drill  | 2  | 12-12 | 01:10 | 01:35 | 12-12 | 3849.00 | 3864.00 | Pressure On (psi): 2300.00, Pressure Off (psi): 1950.00, Weight On Bit (klbs): 30.00, Flow Rate (gpm): 800.00, Strokes Per Minute: 108, Toolface: 90, Toolface Type: magnetic                 |
| Rotary Drill | 1  | 12-12 | 01:35 | 02:00 | 12-12 | 3864.00 | 3928.00 | Pressure On (psi): 2750.00, Pressure Off (psi): 1950.00, Weight On Bit (klbs): 47.00, Surface RPM: 60, Surface Torque (ft lbf): 19000.00, Flow Rate (gpm): 800.00, Strokes Per Minute: 208.00 |
| Survey       | 46 | 12-12 | 02:00 | 02:05 | 12-12 | 3928.00 | 3928.00 | Inclination (°): 1.450, Azimuth (°): 274.750, TVD (ft): 3857.71, Dogleg (°/100 ft): 0.89, Sensor Depth (ft): 3859.00, Bit To Sensor (ft): 69.00                                               |
| Rotary Drill | 1  | 12-12 | 02:05 | 02:40 | 12-12 | 3928.00 | 4018.00 | Pressure On (psi): 2750.00, Pressure Off (psi): 1950.00, Weight On Bit (klbs): 47.00, Surface RPM: 60, Surface Torque (ft lbf): 19000.00, Flow Rate (gpm): 800.00, Strokes Per Minute: 208.00 |
| Survey       | 46 | 12-12 | 02:40 | 02:45 | 12-12 | 4018.00 | 4018.00 | Inclination (°): 1.100, Azimuth (°): 273.790, TVD (ft): 3947.68, Dogleg (°/100 ft): 0.39, Sensor Depth (ft): 3949.00, Bit To Sensor (ft): 69.00                                               |
| Rotary Drill | 1  | 12-12 | 02:45 | 03:20 | 12-12 | 4018.00 | 4108.00 | Pressure On (psi): 2750.00, Pressure Off (psi): 1950.00, Weight On Bit (klbs): 47.00, Surface RPM: 60, Surface Torque (ft lbf): 19000.00, Flow Rate (gpm): 800.00, Strokes Per Minute: 208.00 |
| Survey       | 46 | 12-12 | 03:20 | 03:25 | 12-12 | 4108.00 | 4108.00 | Inclination (°): 1.490, Azimuth (°): 270.620, TVD (ft): 4037.66, Dogleg (°/100 ft): 0.44, Sensor Depth (ft): 4039.00, Bit To Sensor (ft): 69.00                                               |
| Rotary Drill | 1  | 12-12 | 03:25 | 04:05 | 12-12 | 4108.00 | 4198.00 | Pressure On (psi): 2750.00, Pressure Off (psi): 1950.00, Weight On Bit (klbs): 47.00, Surface RPM: 60, Surface Torque (ft lbf): 19000.00, Flow Rate (gpm): 800.00, Strokes Per Minute: 208.00 |
| Survey       | 46 | 12-12 | 04:05 | 04:10 | 12-12 | 4198.00 | 4198.00 | Inclination (°): 1.670, Azimuth (°): 270.360, TVD (ft): 4127.63, Dogleg (°/100 ft): 0.20, Sensor Depth (ft): 4129.00, Bit To Sensor (ft): 69.00                                               |
| Rotary Drill | 1  | 12-12 | 04:10 | 04:50 | 12-12 | 4198.00 | 4288.00 | Pressure On (psi): 2750.00, Pressure Off (psi): 1950.00, Weight On Bit (klbs): 47.00, Surface RPM: 60, Surface Torque (ft lbf): 19000.00, Flow Rate (gpm): 800.00, Strokes Per Minute: 208.00 |
| Survey       | 46 | 12-12 | 04:50 | 04:55 | 12-12 | 4288.00 | 4288.00 | Inclination (°): 1.850, Azimuth (°): 267.900, TVD (ft): 4217.58, Dogleg (°/100 ft): 0.22, Sensor Depth (ft): 4219.00, Bit To Sensor (ft): 69.00                                               |
| Rotary Drill | 1  | 12-12 | 04:55 | 05:05 | 12-12 | 4288.00 | 4302.00 | Pressure On (psi): 2750.00, Pressure Off (psi): 1950.00, Weight On Bit (klbs): 47.00, Surface RPM: 60, Surface Torque (ft lbf): 19000.00, Flow Rate (gpm): 800.00, Strokes Per Minute: 208.00 |
| Slide Drill  | 2  | 12-12 | 05:05 | 05:25 | 12-12 | 4302.00 | 4317.00 | Pressure On (psi): 2300.00, Pressure Off (psi): 1950.00, Weight On Bit (klbs): 30.00, Flow Rate (gpm): 800.00, Strokes Per Minute: 108, Toolface: 90, Toolface Type: magnetic                 |
| Rotary Drill | 1  | 12-12 | 05:25 | 05:55 | 12-12 | 4317.00 | 4377.00 | Pressure On (psi): 2750.00, Pressure Off (psi): 1950.00, Weight On Bit (klbs): 47.00, Surface RPM: 60, Surface Torque (ft lbf): 19000.00, Flow Rate (gpm): 800.00, Strokes Per Minute: 208.00 |
| Survey       | 46 | 12-12 | 05:55 | 06:00 | 12-12 | 4377.00 | 4377.00 | Inclination (°): 1.190, Azimuth (°): 259.720, TVD (ft): 4306.55, Dogleg (°/100 ft): 0.78, Sensor Depth (ft): 4308.00, Bit To Sensor (ft): 69.00                                               |
| Rotary Drill | 1  | 12-12 | 06:00 | 06:20 | 12-12 | 4377.00 | 4467.00 | Pressure On (psi): 2750.00, Pressure Off (psi): 1950.00, Weight On Bit (klbs): 47.00, Surface RPM: 60, Surface Torque (ft lbf): 19000.00, Flow Rate (gpm): 800.00, Strokes Per Minute: 208.00 |
| Survey       | 46 | 12-12 | 06:20 | 06:25 | 12-12 | 4467.00 | 4467.00 | Inclination (°): 0.840, Azimuth (°): 240.830, TVD (ft): 4396.54, Dogleg (°/100 ft): 0.53, Sensor Depth (ft): 4398.00, Bit To Sensor (ft): 69.00                                               |
| Rotary Drill | 1  | 12-12 | 06:25 | 07:10 | 12-12 | 4467.00 | 4646.00 | Pressure On (psi): 2750.00, Pressure Off (psi): 1950.00, Weight On Bit (klbs): 47.00, Surface RPM: 60, Surface Torque (ft lbf): 19000.00, Flow Rate (gpm): 800.00, Strokes Per Minute: 208.00 |
| Survey       | 46 | 12-12 | 07:10 | 07:15 | 12-12 | 4646.00 | 4646.00 | Inclination (°): 0.400, Azimuth (°): 262.450, TVD (ft): 4575.53, Dogleg (°/100 ft): 0.27, Sensor Depth (ft): 4577.00, Bit To Sensor (ft): 69.00                                               |
| Rotary Drill | 1  | 12-12 | 07:15 | 07:30 | 12-12 | 4646.00 | 4736.00 | Pressure On (psi): 2750.00, Pressure Off (psi): 1950.00, Weight On Bit (klbs): 47.00, Surface RPM: 60, Surface Torque (ft lbf): 19000.00, Flow Rate (gpm): 800.00, Strokes Per Minute: 208.00 |

|              |    |       |       |       |       |         |         |                                                                                                                                                                                               |
|--------------|----|-------|-------|-------|-------|---------|---------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Survey       | 46 | 12-12 | 07:30 | 07:35 | 12-12 | 4736.00 | 4736.00 | Inclination (°): 0.530, Azimuth (°): 259.640, TVD (ft): 4665.53, Dogleg (°/100 ft): 0.15, Sensor Depth (ft): 4667.00, Bit To Sensor (ft): 69.00                                               |
| Rotary Drill | 1  | 12-12 | 07:35 | 08:05 | 12-12 | 4736.00 | 4826.00 | Pressure On (psi): 2750.00, Pressure Off (psi): 1950.00, Weight On Bit (klbs): 47.00, Surface RPM: 60, Surface Torque (ft lbf): 19000.00, Flow Rate (gpm): 800.00, Strokes Per Minute: 208.00 |
| Survey       | 46 | 12-12 | 08:05 | 08:10 | 12-12 | 4826.00 | 4826.00 | Inclination (°): 0.440, Azimuth (°): 241.090, TVD (ft): 4755.52, Dogleg (°/100 ft): 0.20, Sensor Depth (ft): 4757.00, Bit To Sensor (ft): 69.00                                               |
| Rotary Drill | 1  | 12-12 | 08:10 | 08:40 | 12-12 | 4826.00 | 4944.00 | Pressure On (psi): 2750.00, Pressure Off (psi): 1950.00, Weight On Bit (klbs): 47.00, Surface RPM: 60, Surface Torque (ft lbf): 19000.00, Flow Rate (gpm): 800.00, Strokes Per Minute: 208.00 |
| Survey       | 46 | 12-12 | 08:40 | 08:45 | 12-12 | 4944.00 | 4944.00 | Inclination (°): 0.260, Azimuth (°): 236.080, TVD (ft): 4873.52, Dogleg (°/100 ft): 0.15, Sensor Depth (ft): 4875.00, Bit To Sensor (ft): 69.00                                               |
| Circulating  | 3  | 12-12 | 08:45 | 09:40 | 12-12 |         |         |                                                                                                                                                                                               |
| Pooh         | 7  | 12-12 | 09:40 | 13:00 | 12-12 |         |         | POOH                                                                                                                                                                                          |
| Other        | 16 | 12-12 | 13:00 | 13:40 | 12-12 |         |         | Rack Back BHA in Derrick                                                                                                                                                                      |
| Standby      | 15 | 12-12 | 13:40 | 23:00 | 12-12 |         |         | Standby - Casing Ops                                                                                                                                                                          |
| Standby      | 15 | 12-12 | 23:00 | 00:00 | 12-13 |         |         | Standby - N/D BOPs & Skid to 558H                                                                                                                                                             |

**MWD Activities**

No Activities



|                                 |                                                     |                                                       |
|---------------------------------|-----------------------------------------------------|-------------------------------------------------------|
| <b>Job Number</b><br>WT-20-071  | <b>Operator</b><br>Advance Energy Partners          | <b>Rig Name</b><br>Pioneer #80                        |
| <b>Start Date</b><br>2020-12-04 | <b>Well Name</b><br>Anderson Fed Com 504H           | <b>Legal Well Name   AFE</b><br>Anderson Fed Com 504H |
| <b>Play</b><br>Delaware Basin   | <b>State/Province and Country</b><br>New Mexico, US | <b>County</b><br>Lea                                  |
| <b>Company Man</b>              |                                                     |                                                       |

Sunday, Dec 13 00:00 - 23:59 (Day 6 of 19)

Billing: N/A (\$130,925.38 total)

| Drilling Summary        |      |  | Drilling Parameters |      |                           |
|-------------------------|------|--|---------------------|------|---------------------------|
| Start Depth (ft)        |      |  | Downhole Hours      | 0.00 | Rotating WOB (klbs)       |
| Bit Depth (ft)          |      |  | Drilling Hours      |      | Sliding WOB (klbs)        |
| Bottom Hole Depth (ft)  |      |  | Hours Circulating   |      | Rotating SPM              |
| Total Distance (ft)     |      |  | Hours Sliding       |      | Sliding SPM               |
| Distance Rotated (ft)   |      |  | Hours Rotating      |      | Motor RPM                 |
| Distance Slid (ft)      |      |  |                     |      | Surface RPM               |
| Inclination In          |      |  |                     |      | Flow Rate (gpm)           |
| Inclination Out         |      |  |                     |      | On Bottom Pressure (psi)  |
| Azimuth In              |      |  | % Hours Rotating    |      | Off Bottom Pressure (psi) |
| Azimuth Out             |      |  | % Hours Sliding     |      |                           |
| AVG Total ROP (ft/h)    | 0.00 |  | % Distance Sliding  |      |                           |
| AVG Rotating ROP (ft/h) | 0.00 |  | % Distance Rotating |      |                           |
| AVG Sliding ROP (ft/h)  | 0.00 |  |                     |      |                           |

**Personnel**

| Name                | Position            |
|---------------------|---------------------|
| Robert Olivarez     | MWD Engineer        |
| Kyle Kusak          | MWD Engineer        |
| Advance Directional | Directional Driller |

**No BHAs****Directional Activities**

| Activity Type | Code | Start Date | Start Time | End Time | End Date | Start (ft) | End (ft) | Comments/Details                  |
|---------------|------|------------|------------|----------|----------|------------|----------|-----------------------------------|
| Standby       | 15   | 12-12      | 23:00      | 00:00    | 12-13    |            |          | Standby - N/D BOPs & Skid to 558H |

**MWD Activities**

No Activities



|                                 |                                                     |                                                       |
|---------------------------------|-----------------------------------------------------|-------------------------------------------------------|
| <b>Job Number</b><br>WT-20-071  | <b>Operator</b><br>Advance Energy Partners          | <b>Rig Name</b><br>Pioneer #80                        |
| <b>Start Date</b><br>2020-12-04 | <b>Well Name</b><br>Anderson Fed Com 504H           | <b>Legal Well Name   AFE</b><br>Anderson Fed Com 504H |
| <b>Play</b><br>Delaware Basin   | <b>State/Province and Country</b><br>New Mexico, US | <b>County</b><br>Lea                                  |
|                                 |                                                     | <b>Company Man</b>                                    |

Sunday, Dec 20 00:00 - 23:59 (Day 7 of 19)

Billing: \$5,800.00 (\$130,925.38 total)

**Drilling Summary**

|                                |         |                            |      |                                  |                   |
|--------------------------------|---------|----------------------------|------|----------------------------------|-------------------|
| <b>Start Depth (ft)</b>        | 4944.00 | <b>Downhole Hours</b>      | 6.00 | <b>Rotating WOB (klbs)</b>       | 30.00 - 30.00     |
| <b>Bit Depth (ft)</b>          | 5275.00 | <b>Drilling Hours</b>      | 0.83 | <b>Sliding WOB (klbs)</b>        |                   |
| <b>Bottom Hole Depth (ft)</b>  | 5275.00 | <b>Hours Circulating</b>   | 0.58 | <b>Rotating SPM</b>              | 176.00 - 176.00   |
| <b>Total Distance (ft)</b>     | 331.00  | <b>Hours Sliding</b>       | 0.00 | <b>Sliding SPM</b>               |                   |
| <b>Distance Rotated (ft)</b>   | 331.00  | <b>Hours Rotating</b>      | 0.83 | <b>Motor RPM</b>                 | 130.00 - 176.00   |
| <b>Distance Slid (ft)</b>      | 0.00    |                            |      | <b>Surface RPM</b>               | 30.00 - 30.00     |
| <b>Inclination In</b>          | 0.40    |                            |      | <b>Flow Rate (gpm)</b>           | 675.00 - 675.00   |
| <b>Inclination Out</b>         | 0.44    |                            |      | <b>On Bottom Pressure (psi)</b>  | 2750.00 - 2800.00 |
| <b>Azimuth In</b>              | 58.98   | <b>% Hours Rotating</b>    | 100% | <b>Off Bottom Pressure (psi)</b> | 1950.00 - 1950.00 |
| <b>Azimuth Out</b>             | 52.04   | <b>% Hours Sliding</b>     | 0%   |                                  |                   |
| <b>AVG Total ROP (ft/h)</b>    | 284.80  | <b>% Distance Sliding</b>  | 0%   |                                  |                   |
| <b>AVG Rotating ROP (ft/h)</b> | 397.20  | <b>% Distance Rotating</b> | 100% |                                  |                   |
| <b>AVG Sliding ROP (ft/h)</b>  | 60.00   |                            |      |                                  |                   |

**Personnel**

| Name                | Position            |
|---------------------|---------------------|
| Robert Olivarez     | MWD Engineer        |
| Kyle Kusak          | MWD Engineer        |
| Advance Directional | Directional Driller |
| Carlos Jensen       | MWD Engineer        |

**BHA #3 - 8.75" Intermediate**

Date In: Dec 20, 2020, 18:00 Date Out: Dec 22, 2020, 1:45

| Bit Details                |         | Motor Details                                    |          | Directional Comments                                                           |  |
|----------------------------|---------|--------------------------------------------------|----------|--------------------------------------------------------------------------------|--|
| OD (in)                    | 8.750   | Size (in)                                        | 7.0      | Flow Rate: 500-700, Max Diff: 1910 psi, Max Torque: 18,710 ft-lbs, BIT Runs: 2 |  |
| Vendor                     | REED    | Lobe/Stage                                       | 7/8, 8.5 |                                                                                |  |
| S/N                        | A270855 | Bend Angle                                       | 1.5      |                                                                                |  |
| Nozzles                    | 6-15's  | Speed (rev/gal)                                  | 0.26     | MWD Comments                                                                   |  |
| Total Flow Area (in²)      | 1.035   | Wear Pad OD (in)                                 | 7.300    | POOH Reason<br>Penetration Rate                                                |  |
| Drilling Hours for Day     | 0.83    | Bit Distances                                    |          |                                                                                |  |
| Total Drilled for Day (ft) | 331.00  | Bend: 5.30 ft, Gamma: 54.00 ft, Survey: 69.00 ft |          |                                                                                |  |
| Drilling Hours for BHA     | 18.25   |                                                  |          |                                                                                |  |
| Total Drilled for BHA (ft) | 4316.00 |                                                  |          |                                                                                |  |

**Directional Items**

| Description                                                                                                                                                | Vendor        | SN#          | Top Conn       | Btm Conn       | ID (in) | OD (in) | Fn Len. (ft) | Len (ft) | Aggr. Len (ft) |
|------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------|--------------|----------------|----------------|---------|---------|--------------|----------|----------------|
| <b>Bit (Fixed Cutter)</b><br>Description: <i>TKC66</i> , Gauge Length (in): 4.00, Size (in): 8.75, Type: <i>PDC (Polycrystalline Diamond Compacts)</i>     | REED          | A270855      | 4 1/2" Reg Pin |                |         | 8.750   |              | 1.00     | 1.00           |
| <b>Mud Motor</b><br>Description: 7" 7/8 8.5 FXD 1.5° w/ 8.25" STAB, Size (in): 7.00, Bend Angle (°): 1.5, Rotor Lobe: 7, Stator Lobe: 8, Stator Stage: 8.5 | AIM           | 700-40-006   | 4 1/2" IF Box  | 4 1/2" Reg Box |         | 7.000   |              | 37.73    | 38.73          |
| <b>Stabilizer</b><br>Description: 8.25" STABILIZER                                                                                                         | JAO           | 86947        | 4 1/2" IF Box  | 4 1/2" IF Pin  | 2.375   | 6.750   |              | 6.73     | 45.46          |
| <b>UBHO Sub</b><br>Description: <i>NM DAO UBHO</i> , Material: <i>Non-Magnetic</i>                                                                         | AIM           | 67502NM      | 4 1/2" IF Box  | 4 1/2" IF Pin  | 3.250   | 6.780   |              | 5.00     | 50.46          |
| <b>Drill Collar</b><br>Description: <i>MWD NMDC</i> , Material: <i>Non-Magnetic</i> , Type: <i>Slick Drill</i>                                             | AIM           | GT 67-30-315 | 4 1/2" IF Box  | 4 1/2" IF Pin  | 3.250   | 6.870   |              | 30.93    | 81.39          |
| <b>Drill Collar</b><br>Description: <i>NMDC</i> , Material: <i>Non-Magnetic</i> , Type: <i>Slick Drill</i>                                                 | AIM           | GT 67-30-193 | 4 1/2" IF Box  | 4 1/2" IF Pin  | 3.250   | 6.850   |              | 29.70    | 111.09         |
| <b>Crossover Sub</b><br>Description: <i>X-O SUB</i> , Material: <i>Steel</i>                                                                               | BLACK DIAMOND | BD11664      | EverDrlg54 Box | 4 1/2" IF Pin  | 3.000   | 6.700   |              | 3.52     | 114.61         |
| <b>HWDP</b><br>Description: (13 Stands) 5.5" HWDP, Type: <i>Slick</i>                                                                                      | BLACK DIAMOND |              | EverDrlg54 Box | EverDrlg54 Pin | 3.750   | 5.500   |              | 1216.55  | 1331.16        |

**MWD Items**

No Items

**Directional Activities**

| Activity Type | Code | Start Date | Start Time | End Time | End Date | Start (ft) | End (ft) | Comments/Details            |
|---------------|------|------------|------------|----------|----------|------------|----------|-----------------------------|
| Standby       | 15   | 12-20      | 00:00      | 13:00    | 12-20    |            |          | Standby while               |
| N/U BOP's     | 25   | 12-20      | 13:00      | 16:15    | 12-20    |            |          | N/U & TEST BOP's AND RIG UP |

|              |    |       |       |       |       |         |         |                                                                                                                                                                                               |
|--------------|----|-------|-------|-------|-------|---------|---------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Pick Up BHA  | 64 | 12-20 | 16:15 | 18:00 | 12-20 |         |         | P/U BHA #3                                                                                                                                                                                    |
| Other        | 16 | 12-20 | 18:00 | 18:15 | 12-20 |         |         | TEST MWD TOOL                                                                                                                                                                                 |
| TIH          | 8  | 12-20 | 18:15 | 19:25 | 12-20 |         |         | TIH W/ BHA #3                                                                                                                                                                                 |
| Other        | 16 | 12-20 | 19:25 | 20:40 | 12-20 |         |         | SLIP & CUT DRILL LINE                                                                                                                                                                         |
| TIH          | 8  | 12-20 | 20:40 | 21:45 | 12-20 |         |         | TIH W/ BHA #3                                                                                                                                                                                 |
| Circulating  | 3  | 12-20 | 21:45 | 22:20 | 12-20 |         |         | DRILL CEMENT FLOAT EQUIPMENT                                                                                                                                                                  |
| Rotary Drill | 1  | 12-20 | 22:20 | 22:30 | 12-20 | 4944.00 | 4950.00 | Pressure On (psi): 2750.00, Pressure Off (psi): 1950.00, Weight On Bit (klbs): 30.00, Surface RPM: 30, Surface Torque (ft lbf): 14000.00, Flow Rate (gpm): 675.00, Strokes Per Minute: 176.00 |
| Other        | 16 | 12-20 | 22:30 | 22:55 | 12-20 |         |         | F.I.T.                                                                                                                                                                                        |
| Rotary Drill | 1  | 12-20 | 22:55 | 23:15 | 12-20 | 4950.00 | 5096.00 | Pressure On (psi): 2800.00, Pressure Off (psi): 1950.00, Weight On Bit (klbs): 30.00, Surface RPM: 30, Surface Torque (ft lbf): 14000.00, Flow Rate (gpm): 675.00, Strokes Per Minute: 176.00 |
| Survey       | 46 | 12-20 | 23:15 | 23:20 | 12-20 | 5096.00 | 5096.00 | Inclination (°): 0.400, Azimuth (°): 58.980, TVD (ft): 5025.52, Dogleg (°/100 ft): 0.43, Sensor Depth (ft): 5027.00, Bit To Sensor (ft): 69.00                                                |
| Rotary Drill | 1  | 12-20 | 23:20 | 23:40 | 12-20 | 5096.00 | 5275.00 | Pressure On (psi): 2800.00, Pressure Off (psi): 1950.00, Weight On Bit (klbs): 30.00, Surface RPM: 30, Surface Torque (ft lbf): 14000.00, Flow Rate (gpm): 675.00, Strokes Per Minute: 176.00 |
| Survey       | 46 | 12-20 | 23:40 | 23:45 | 12-20 | 5275.00 | 5275.00 | Inclination (°): 0.440, Azimuth (°): 52.040, TVD (ft): 5204.51, Dogleg (°/100 ft): 0.04, Sensor Depth (ft): 5206.00, Bit To Sensor (ft): 69.00                                                |
| Slide Drill  | 2  | 12-20 | 23:45 | 00:10 | 12-21 | 5275.00 | 5300.00 | Pressure On (psi): 2000.00, Pressure Off (psi): 1750.00, Weight On Bit (klbs): 20.00, Flow Rate (gpm): 675.00, Strokes Per Minute: 176, Toolface: 55, Toolface Type: magnetic                 |

**MWD Activities**

No Activities



|                                 |                                                     |                                                       |
|---------------------------------|-----------------------------------------------------|-------------------------------------------------------|
| <b>Job Number</b><br>WT-20-071  | <b>Operator</b><br>Advance Energy Partners          | <b>Rig Name</b><br>Pioneer #80                        |
| <b>Start Date</b><br>2020-12-04 | <b>Well Name</b><br>Anderson Fed Com 504H           | <b>Legal Well Name   AFE</b><br>Anderson Fed Com 504H |
| <b>Play</b><br>Delaware Basin   | <b>State/Province and Country</b><br>New Mexico, US | <b>County</b><br>Lea                                  |
| <b>Company Man</b>              |                                                     |                                                       |

Monday, Dec 21 00:00 - 23:59 (Day 8 of 19)

Billing: \$9,000.00 (\$130,925.38 total)

**Drilling Summary**

|                                |         |                            |       |                                  |                   |
|--------------------------------|---------|----------------------------|-------|----------------------------------|-------------------|
| <b>Start Depth (ft)</b>        | 5275.00 | <b>Downhole Hours</b>      | 24.00 | <b>Rotating WOB (klbs)</b>       | 30.00 - 40.00     |
| <b>Bit Depth (ft)</b>          | 9260.00 | <b>Drilling Hours</b>      | 17.42 | <b>Sliding WOB (klbs)</b>        | 20.00 - 20.00     |
| <b>Bottom Hole Depth (ft)</b>  | 9260.00 | <b>Hours Circulating</b>   | 1.17  | <b>Rotating SPM</b>              | 176.00 - 176.00   |
| <b>Total Distance (ft)</b>     | 3985.00 | <b>Hours Sliding</b>       | 7.25  | <b>Sliding SPM</b>               | 176.00 - 176.00   |
| <b>Distance Rotated (ft)</b>   | 3605.00 | <b>Hours Rotating</b>      | 10.17 | <b>Motor RPM</b>                 | 130.00 - 176.00   |
| <b>Distance Slid (ft)</b>      | 380.00  |                            |       | <b>Surface RPM</b>               | 30.00 - 60.00     |
| <b>Inclination In</b>          | 1.80    |                            |       | <b>Flow Rate (gpm)</b>           | 675.00 - 675.00   |
| <b>Inclination Out</b>         | 2.95    |                            |       | <b>On Bottom Pressure (psi)</b>  | 2000.00 - 2800.00 |
| <b>Azimuth In</b>              | 62.50   | <b>% Hours Rotating</b>    | 58%   | <b>Off Bottom Pressure (psi)</b> | 1750.00 - 1950.00 |
| <b>Azimuth Out</b>             | 41.93   | <b>% Hours Sliding</b>     | 42%   |                                  |                   |
| <b>AVG Total ROP (ft/h)</b>    | 228.80  | <b>% Distance Sliding</b>  | 10%   |                                  |                   |
| <b>AVG Rotating ROP (ft/h)</b> | 354.59  | <b>% Distance Rotating</b> | 90%   |                                  |                   |
| <b>AVG Sliding ROP (ft/h)</b>  | 52.41   |                            |       |                                  |                   |

**Personnel**

| Name                | Position            |
|---------------------|---------------------|
| Robert Olivarez     | MWD Engineer        |
| Carlos Jensen       | MWD Engineer        |
| Kyle Kusak          | MWD Engineer        |
| Advance Directional | Directional Driller |

**BHA #3 - 8.75" Intermediate**

Date In: Dec 20, 2020, 18:00 Date Out: Dec 22, 2020, 1:45

| Bit Details                |         | Motor Details                                    |          | Directional Comments                                                           |  |
|----------------------------|---------|--------------------------------------------------|----------|--------------------------------------------------------------------------------|--|
| OD (in)                    | 8.750   | Size (in)                                        | 7.0      | Flow Rate: 500-700, Max Diff: 1910 psi, Max Torque: 18,710 ft-lbs, BIT Runs: 2 |  |
| Vendor                     | REED    | Lobe/Stage                                       | 7/8, 8.5 |                                                                                |  |
| S/N                        | A270855 | Bend Angle                                       | 1.5      |                                                                                |  |
| Nozzles                    | 6-15's  | Speed (rev/gal)                                  | 0.26     | MWD Comments                                                                   |  |
| Total Flow Area (in²)      | 1.035   | Wear Pad OD (in)                                 | 7.300    |                                                                                |  |
| Drilling Hours for Day     | 17.42   | Bit Distances                                    |          | POOH Reason<br>Penetration Rate                                                |  |
| Total Drilled for Day (ft) | 3985.00 | Bend: 5.30 ft, Gamma: 54.00 ft, Survey: 69.00 ft |          |                                                                                |  |
| Drilling Hours for BHA     | 18.25   |                                                  |          |                                                                                |  |
| Total Drilled for BHA (ft) | 4316.00 |                                                  |          |                                                                                |  |

**Directional Items**

| Description                                                                                                                                                | Vendor        | SN#          | Top Conn       | Btm Conn       | ID (in) | OD (in) | Fn Len. (ft) | Len (ft) | Aggr. Len (ft) |
|------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------|--------------|----------------|----------------|---------|---------|--------------|----------|----------------|
| <b>Bit (Fixed Cutter)</b><br>Description: <i>TKC66</i> , Gauge Length (in): 4.00, Size (in): 8.75, Type: <i>PDC (Polycrystalline Diamond Compacts)</i>     | REED          | A270855      | 4 1/2" Reg Pin |                |         | 8.750   |              | 1.00     | 1.00           |
| <b>Mud Motor</b><br>Description: 7" 7/8 8.5 FXD 1.5° w/ 8.25" STAB, Size (in): 7.00, Bend Angle (°): 1.5, Rotor Lobe: 7, Stator Lobe: 8, Stator Stage: 8.5 | AIM           | 700-40-006   | 4 1/2" IF Box  | 4 1/2" Reg Box |         | 7.000   |              | 37.73    | 38.73          |
| <b>Stabilizer</b><br>Description: 8.25" STABILIZER                                                                                                         | JAO           | 86947        | 4 1/2" IF Box  | 4 1/2" IF Pin  | 2.375   | 6.750   |              | 6.73     | 45.46          |
| <b>UBHO Sub</b><br>Description: <i>NM DAO UBHO</i> , Material: <i>Non-Magnetic</i>                                                                         | AIM           | 67502NM      | 4 1/2" IF Box  | 4 1/2" IF Pin  | 3.250   | 6.780   |              | 5.00     | 50.46          |
| <b>Drill Collar</b><br>Description: <i>MWD NMDC</i> , Material: <i>Non-Magnetic</i> , Type: <i>Slick Drill</i>                                             | AIM           | GT 67-30-315 | 4 1/2" IF Box  | 4 1/2" IF Pin  | 3.250   | 6.870   |              | 30.93    | 81.39          |
| <b>Drill Collar</b><br>Description: <i>NMDC</i> , Material: <i>Non-Magnetic</i> , Type: <i>Slick Drill</i>                                                 | AIM           | GT 67-30-193 | 4 1/2" IF Box  | 4 1/2" IF Pin  | 3.250   | 6.850   |              | 29.70    | 111.09         |
| <b>Crossover Sub</b><br>Description: <i>X-O SUB</i> , Material: <i>Steel</i>                                                                               | BLACK DIAMOND | BD11664      | EverDrlg54 Box | 4 1/2" IF Pin  | 3.000   | 6.700   |              | 3.52     | 114.61         |
| <b>HWDP</b><br>Description: (13 Stands) 5.5" HWDP, Type: <i>Slick</i>                                                                                      | BLACK DIAMOND |              | EverDrlg54 Box | EverDrlg54 Pin | 3.750   | 5.500   |              | 1216.55  | 1331.16        |

**MWD Items**

No Items

**Directional Activities**

| Activity Type | Code | Start Date | Start Time | End Time | End Date | Start (ft) | End (ft) | Comments/Details |
|---------------|------|------------|------------|----------|----------|------------|----------|------------------|
|---------------|------|------------|------------|----------|----------|------------|----------|------------------|

|              |    |       |       |       |       |         |         |                                                                                                                                                                                               |
|--------------|----|-------|-------|-------|-------|---------|---------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Slide Drill  | 2  | 12-20 | 23:45 | 00:10 | 12-21 | 5275.00 | 5300.00 | Pressure On (psi): 2000.00, Pressure Off (psi): 1750.00, Weight On Bit (klbs): 20.00, Flow Rate (gpm): 675.00, Strokes Per Minute: 176, Toolface: 55, Toolface Type: magnetic                 |
| Rotary Drill | 1  | 12-21 | 00:10 | 00:15 | 12-21 | 5300.00 | 5364.00 | Pressure On (psi): 2800.00, Pressure Off (psi): 1950.00, Weight On Bit (klbs): 30.00, Surface RPM: 30, Surface Torque (ft lbf): 14000.00, Flow Rate (gpm): 675.00, Strokes Per Minute: 176.00 |
| Survey       | 46 | 12-21 | 00:15 | 00:20 | 12-21 | 5364.00 | 5364.00 | Inclination (°): 1.800, Azimuth (°): 62.500, TVD (ft): 5293.50, Dogleg (°/100 ft): 1.54, Sensor Depth (ft): 5295.00, Bit To Sensor (ft): 69.00                                                |
| Slide Drill  | 2  | 12-21 | 00:20 | 00:35 | 12-21 | 5364.00 | 5384.00 | Pressure On (psi): 2000.00, Pressure Off (psi): 1750.00, Weight On Bit (klbs): 20.00, Flow Rate (gpm): 675.00, Strokes Per Minute: 176, Toolface: 55, Toolface Type: magnetic                 |
| Rotary Drill | 1  | 12-21 | 00:35 | 00:50 | 12-21 | 5384.00 | 5454.00 | Pressure On (psi): 2800.00, Pressure Off (psi): 1950.00, Weight On Bit (klbs): 30.00, Surface RPM: 30, Surface Torque (ft lbf): 14000.00, Flow Rate (gpm): 675.00, Strokes Per Minute: 176.00 |
| Survey       | 46 | 12-21 | 00:50 | 00:55 | 12-21 | 5454.00 | 5454.00 | Inclination (°): 3.340, Azimuth (°): 60.120, TVD (ft): 5383.40, Dogleg (°/100 ft): 1.71, Sensor Depth (ft): 5385.00, Bit To Sensor (ft): 69.00                                                |
| Rotary Drill | 1  | 12-21 | 00:55 | 01:00 | 12-21 | 5454.00 | 5543.00 | Pressure On (psi): 2800.00, Pressure Off (psi): 1950.00, Weight On Bit (klbs): 30.00, Surface RPM: 30, Surface Torque (ft lbf): 14000.00, Flow Rate (gpm): 675.00, Strokes Per Minute: 176.00 |
| Survey       | 46 | 12-21 | 01:00 | 01:05 | 12-21 | 5543.00 | 5543.00 | Inclination (°): 3.910, Azimuth (°): 58.280, TVD (ft): 5472.22, Dogleg (°/100 ft): 0.65, Sensor Depth (ft): 5474.00, Bit To Sensor (ft): 69.00                                                |
| Rotary Drill | 1  | 12-21 | 01:05 | 01:15 | 12-21 | 5543.00 | 5633.00 | Pressure On (psi): 2800.00, Pressure Off (psi): 1950.00, Weight On Bit (klbs): 30.00, Surface RPM: 30, Surface Torque (ft lbf): 14000.00, Flow Rate (gpm): 675.00, Strokes Per Minute: 176.00 |
| Survey       | 46 | 12-21 | 01:15 | 01:20 | 12-21 | 5633.00 | 5633.00 | Inclination (°): 3.470, Azimuth (°): 52.570, TVD (ft): 5562.04, Dogleg (°/100 ft): 0.64, Sensor Depth (ft): 5564.00, Bit To Sensor (ft): 69.00                                                |
| Rotary Drill | 1  | 12-21 | 01:20 | 01:30 | 12-21 | 5633.00 | 5723.00 | Pressure On (psi): 2800.00, Pressure Off (psi): 1950.00, Weight On Bit (klbs): 30.00, Surface RPM: 30, Surface Torque (ft lbf): 14000.00, Flow Rate (gpm): 675.00, Strokes Per Minute: 176.00 |
| Survey       | 46 | 12-21 | 01:30 | 01:35 | 12-21 | 5723.00 | 5723.00 | Inclination (°): 3.250, Azimuth (°): 48.260, TVD (ft): 5651.88, Dogleg (°/100 ft): 0.37, Sensor Depth (ft): 5654.00, Bit To Sensor (ft): 69.00                                                |
| Slide Drill  | 2  | 12-21 | 01:35 | 02:00 | 12-21 | 5723.00 | 5748.00 | Pressure On (psi): 2000.00, Pressure Off (psi): 1750.00, Weight On Bit (klbs): 20.00, Flow Rate (gpm): 675.00, Strokes Per Minute: 176, Toolface: 70, Toolface Type: magnetic                 |
| Rotary Drill | 1  | 12-21 | 02:00 | 02:10 | 12-21 | 5748.00 | 5812.00 | Pressure On (psi): 2800.00, Pressure Off (psi): 1950.00, Weight On Bit (klbs): 40.00, Surface RPM: 60, Surface Torque (ft lbf): 14000.00, Flow Rate (gpm): 675.00, Strokes Per Minute: 176.00 |
| Survey       | 46 | 12-21 | 02:10 | 02:15 | 12-21 | 5812.00 | 5812.00 | Inclination (°): 3.910, Azimuth (°): 48.260, TVD (ft): 5740.71, Dogleg (°/100 ft): 0.74, Sensor Depth (ft): 5743.00, Bit To Sensor (ft): 69.00                                                |
| Rotary Drill | 1  | 12-21 | 02:15 | 02:20 | 12-21 | 5812.00 | 5822.00 | Pressure On (psi): 2800.00, Pressure Off (psi): 1950.00, Weight On Bit (klbs): 40.00, Surface RPM: 60, Surface Torque (ft lbf): 14000.00, Flow Rate (gpm): 675.00, Strokes Per Minute: 176.00 |
| Slide Drill  | 2  | 12-21 | 02:20 | 02:45 | 12-21 | 5822.00 | 5852.00 | Pressure On (psi): 2000.00, Pressure Off (psi): 1750.00, Weight On Bit (klbs): 20.00, Flow Rate (gpm): 675.00, Strokes Per Minute: 176, Toolface: 70, Toolface Type: magnetic                 |
| Rotary Drill | 1  | 12-21 | 02:45 | 02:50 | 12-21 | 5852.00 | 5902.00 | Pressure On (psi): 2800.00, Pressure Off (psi): 1950.00, Weight On Bit (klbs): 40.00, Surface RPM: 60, Surface Torque (ft lbf): 17000.00, Flow Rate (gpm): 675.00, Strokes Per Minute: 176.00 |
| Survey       | 46 | 12-21 | 02:50 | 02:55 | 12-21 | 5902.00 | 5902.00 | Inclination (°): 5.190, Azimuth (°): 53.180, TVD (ft): 5830.42, Dogleg (°/100 ft): 1.49, Sensor Depth (ft): 5833.00, Bit To Sensor (ft): 69.00                                                |
| Rotary Drill | 1  | 12-21 | 02:55 | 03:05 | 12-21 | 5902.00 | 5992.00 | Pressure On (psi): 2800.00, Pressure Off (psi): 1950.00, Weight On Bit (klbs): 40.00, Surface RPM: 60, Surface Torque (ft lbf): 17000.00, Flow Rate (gpm): 675.00, Strokes Per Minute: 176.00 |
| Survey       | 46 | 12-21 | 03:05 | 03:10 | 12-21 | 5992.00 | 5992.00 | Inclination (°): 6.150, Azimuth (°): 55.820, TVD (ft): 5919.98, Dogleg (°/100 ft): 1.11, Sensor Depth (ft): 5923.00, Bit To Sensor (ft): 69.00                                                |
| Rotary Drill | 1  | 12-21 | 03:10 | 03:20 | 12-21 | 5992.00 | 6082.00 | Pressure On (psi): 2800.00, Pressure Off (psi): 1950.00, Weight On Bit (klbs): 40.00, Surface RPM: 60, Surface Torque (ft lbf): 17000.00, Flow Rate (gpm): 675.00, Strokes Per Minute: 176.00 |
| Survey       | 46 | 12-21 | 03:20 | 03:25 | 12-21 | 6082.00 | 6082.00 | Inclination (°): 5.630, Azimuth (°): 55.120, TVD (ft): 6009.51, Dogleg (°/100 ft): 0.58, Sensor Depth (ft): 6013.00, Bit To Sensor (ft): 69.00                                                |
| Rotary Drill | 1  | 12-21 | 03:25 | 03:30 | 12-21 | 6082.00 | 6128.00 | Pressure On (psi): 2800.00, Pressure Off (psi): 1950.00, Weight On Bit (klbs): 40.00, Surface RPM: 60, Surface Torque (ft lbf): 17000.00, Flow Rate (gpm): 675.00, Strokes Per Minute: 176.00 |
| Circulating  | 3  | 12-21 | 03:30 | 03:40 | 12-21 |         |         | Circulate while Clean Screen on Mud Pump                                                                                                                                                      |
| Rotary Drill | 1  | 12-21 | 03:40 | 03:45 | 12-21 | 6128.00 | 6171.00 | Pressure On (psi): 2800.00, Pressure Off (psi): 1950.00, Weight On Bit (klbs): 40.00, Surface RPM: 60, Surface Torque (ft lbf): 17000.00, Flow Rate (gpm): 675.00, Strokes Per Minute: 176.00 |

|              |    |       |       |       |       |         |         |                                                                                                                                                                                               |
|--------------|----|-------|-------|-------|-------|---------|---------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Survey       | 46 | 12-21 | 03:45 | 03:50 | 12-21 | 6171.00 | 6171.00 | Inclination (°): 5.540, Azimuth (°): 54.240, TVD (ft): 6098.08, Dogleg (%/100 ft): 0.14, Sensor Depth (ft): 6102.00, Bit To Sensor (ft): 69.00                                                |
| Rotary Drill | 1  | 12-21 | 03:50 | 04:00 | 12-21 | 6171.00 | 6261.00 | Pressure On (psi): 2800.00, Pressure Off (psi): 1950.00, Weight On Bit (klbs): 40.00, Surface RPM: 60, Surface Torque (ft lbf): 17000.00, Flow Rate (gpm): 675.00, Strokes Per Minute: 176.00 |
| Survey       | 46 | 12-21 | 04:00 | 04:05 | 12-21 | 6261.00 | 6261.00 | Inclination (°): 5.540, Azimuth (°): 51.070, TVD (ft): 6187.66, Dogleg (%/100 ft): 0.34, Sensor Depth (ft): 6192.00, Bit To Sensor (ft): 69.00                                                |
| Rotary Drill | 1  | 12-21 | 04:05 | 04:10 | 12-21 | 6261.00 | 6350.00 | Pressure On (psi): 2800.00, Pressure Off (psi): 1950.00, Weight On Bit (klbs): 40.00, Surface RPM: 60, Surface Torque (ft lbf): 17000.00, Flow Rate (gpm): 675.00, Strokes Per Minute: 176.00 |
| Survey       | 46 | 12-21 | 04:10 | 04:15 | 12-21 | 6350.00 | 6350.00 | Inclination (°): 5.580, Azimuth (°): 50.540, TVD (ft): 6276.25, Dogleg (%/100 ft): 0.07, Sensor Depth (ft): 6281.00, Bit To Sensor (ft): 69.00                                                |
| Rotary Drill | 1  | 12-21 | 04:15 | 04:25 | 12-21 | 6350.00 | 6440.00 | Pressure On (psi): 2800.00, Pressure Off (psi): 1950.00, Weight On Bit (klbs): 40.00, Surface RPM: 60, Surface Torque (ft lbf): 17000.00, Flow Rate (gpm): 675.00, Strokes Per Minute: 176.00 |
| Survey       | 46 | 12-21 | 04:25 | 04:30 | 12-21 | 6440.00 | 6440.00 | Inclination (°): 5.450, Azimuth (°): 51.600, TVD (ft): 6365.83, Dogleg (%/100 ft): 0.18, Sensor Depth (ft): 6371.00, Bit To Sensor (ft): 69.00                                                |
| Rotary Drill | 1  | 12-21 | 04:30 | 04:40 | 12-21 | 6440.00 | 6530.00 | Pressure On (psi): 2800.00, Pressure Off (psi): 1950.00, Weight On Bit (klbs): 40.00, Surface RPM: 60, Surface Torque (ft lbf): 17000.00, Flow Rate (gpm): 675.00, Strokes Per Minute: 176.00 |
| Survey       | 46 | 12-21 | 04:40 | 04:45 | 12-21 | 6530.00 | 6530.00 | Inclination (°): 5.010, Azimuth (°): 51.860, TVD (ft): 6455.45, Dogleg (%/100 ft): 0.49, Sensor Depth (ft): 6461.00, Bit To Sensor (ft): 69.00                                                |
| Rotary Drill | 1  | 12-21 | 04:45 | 04:55 | 12-21 | 6530.00 | 6619.00 | Pressure On (psi): 2800.00, Pressure Off (psi): 1950.00, Weight On Bit (klbs): 40.00, Surface RPM: 60, Surface Torque (ft lbf): 20000.00, Flow Rate (gpm): 675.00, Strokes Per Minute: 176.00 |
| Survey       | 46 | 12-21 | 04:55 | 05:00 | 12-21 | 6619.00 | 6619.00 | Inclination (°): 4.700, Azimuth (°): 51.420, TVD (ft): 6544.13, Dogleg (%/100 ft): 0.35, Sensor Depth (ft): 6550.00, Bit To Sensor (ft): 69.00                                                |
| Rotary Drill | 1  | 12-21 | 05:00 | 05:10 | 12-21 | 6619.00 | 6709.00 | Pressure On (psi): 2800.00, Pressure Off (psi): 1950.00, Weight On Bit (klbs): 40.00, Surface RPM: 60, Surface Torque (ft lbf): 20000.00, Flow Rate (gpm): 675.00, Strokes Per Minute: 176.00 |
| Survey       | 46 | 12-21 | 05:10 | 05:15 | 12-21 | 6709.00 | 6709.00 | Inclination (°): 4.400, Azimuth (°): 50.630, TVD (ft): 6633.85, Dogleg (%/100 ft): 0.34, Sensor Depth (ft): 6640.00, Bit To Sensor (ft): 69.00                                                |
| Rotary Drill | 1  | 12-21 | 05:15 | 05:20 | 12-21 | 6709.00 | 6727.00 | Pressure On (psi): 2800.00, Pressure Off (psi): 1950.00, Weight On Bit (klbs): 40.00, Surface RPM: 60, Surface Torque (ft lbf): 20000.00, Flow Rate (gpm): 675.00, Strokes Per Minute: 176.00 |
| Slide Drill  | 2  | 12-21 | 05:20 | 05:35 | 12-21 | 6727.00 | 6752.00 | Pressure On (psi): 2350.00, Pressure Off (psi): 1950.00, Weight On Bit (klbs): 20.00, Flow Rate (gpm): 675.00, Strokes Per Minute: 176, Toolface: 80, Toolface Type: magnetic                 |
| Rotary Drill | 1  | 12-21 | 05:35 | 05:45 | 12-21 | 6752.00 | 6799.00 | Pressure On (psi): 2800.00, Pressure Off (psi): 1950.00, Weight On Bit (klbs): 40.00, Surface RPM: 60, Surface Torque (ft lbf): 20000.00, Flow Rate (gpm): 675.00, Strokes Per Minute: 176.00 |
| Survey       | 46 | 12-21 | 05:45 | 05:50 | 12-21 | 6799.00 | 6799.00 | Inclination (°): 5.100, Azimuth (°): 53.010, TVD (ft): 6723.54, Dogleg (%/100 ft): 0.81, Sensor Depth (ft): 6730.00, Bit To Sensor (ft): 69.00                                                |
| Rotary Drill | 1  | 12-21 | 05:50 | 06:00 | 12-21 | 6799.00 | 6889.00 | Pressure On (psi): 2800.00, Pressure Off (psi): 1950.00, Weight On Bit (klbs): 40.00, Surface RPM: 60, Surface Torque (ft lbf): 20000.00, Flow Rate (gpm): 675.00, Strokes Per Minute: 176.00 |
| Survey       | 46 | 12-21 | 06:00 | 06:05 | 12-21 | 6889.00 | 6889.00 | Inclination (°): 5.850, Azimuth (°): 56.260, TVD (ft): 6813.13, Dogleg (%/100 ft): 0.90, Sensor Depth (ft): 6820.00, Bit To Sensor (ft): 69.00                                                |
| Rotary Drill | 1  | 12-21 | 06:05 | 06:20 | 12-21 | 6889.00 | 6978.00 | Pressure On (psi): 2800.00, Pressure Off (psi): 1950.00, Weight On Bit (klbs): 40.00, Surface RPM: 60, Surface Torque (ft lbf): 20000.00, Flow Rate (gpm): 675.00, Strokes Per Minute: 176.00 |
| Survey       | 46 | 12-21 | 06:20 | 06:25 | 12-21 | 6978.00 | 6978.00 | Inclination (°): 5.100, Azimuth (°): 57.840, TVD (ft): 6901.72, Dogleg (%/100 ft): 0.86, Sensor Depth (ft): 6909.00, Bit To Sensor (ft): 69.00                                                |
| Rotary Drill | 1  | 12-21 | 06:25 | 06:35 | 12-21 | 6978.00 | 7068.00 | Pressure On (psi): 2800.00, Pressure Off (psi): 1950.00, Weight On Bit (klbs): 40.00, Surface RPM: 60, Surface Torque (ft lbf): 20000.00, Flow Rate (gpm): 675.00, Strokes Per Minute: 176.00 |
| Survey       | 46 | 12-21 | 06:35 | 06:40 | 12-21 | 7068.00 | 7068.00 | Inclination (°): 4.480, Azimuth (°): 58.720, TVD (ft): 6991.41, Dogleg (%/100 ft): 0.69, Sensor Depth (ft): 6999.00, Bit To Sensor (ft): 69.00                                                |
| Rotary Drill | 1  | 12-21 | 06:40 | 06:55 | 12-21 | 7068.00 | 7157.00 | Pressure On (psi): 2800.00, Pressure Off (psi): 1950.00, Weight On Bit (klbs): 40.00, Surface RPM: 60, Surface Torque (ft lbf): 20000.00, Flow Rate (gpm): 675.00, Strokes Per Minute: 176.00 |
| Survey       | 46 | 12-21 | 06:55 | 07:05 | 12-21 | 7157.00 | 7157.00 | Inclination (°): 4.220, Azimuth (°): 57.310, TVD (ft): 7080.15, Dogleg (%/100 ft): 0.32, Sensor Depth (ft): 7088.00, Bit To Sensor (ft): 69.00                                                |
| Slide Drill  | 2  | 12-21 | 07:05 | 07:30 | 12-21 | 7157.00 | 7187.00 | Pressure On (psi): 2350.00, Pressure Off (psi): 1950.00, Weight On Bit (klbs): 20.00, Flow Rate (gpm): 675.00, Strokes Per Minute: 176, Toolface: 50, Toolface Type: magnetic                 |

|              |    |       |       |       |       |         |         |                                                                                                                                                                                               |
|--------------|----|-------|-------|-------|-------|---------|---------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Rotary Drill | 1  | 12-21 | 07:30 | 07:40 | 12-21 | 7187.00 | 7247.00 | Pressure On (psi): 2800.00, Pressure Off (psi): 1950.00, Weight On Bit (klbs): 40.00, Surface RPM: 60, Surface Torque (ft lbf): 20000.00, Flow Rate (gpm): 675.00, Strokes Per Minute: 176.00 |
| Survey       | 46 | 12-21 | 07:40 | 07:45 | 12-21 | 7247.00 | 7247.00 | Inclination (°): 4.480, Azimuth (°): 50.720, TVD (ft): 7169.89, Dogleg (%/100 ft): 0.63, Sensor Depth (ft): 7178.00, Bit To Sensor (ft): 69.00                                                |
| Rotary Drill | 1  | 12-21 | 07:45 | 08:00 | 12-21 | 7247.00 | 7337.00 | Pressure On (psi): 2800.00, Pressure Off (psi): 1950.00, Weight On Bit (klbs): 40.00, Surface RPM: 60, Surface Torque (ft lbf): 20000.00, Flow Rate (gpm): 675.00, Strokes Per Minute: 176.00 |
| Survey       | 46 | 12-21 | 08:00 | 08:05 | 12-21 | 7337.00 | 7337.00 | Inclination (°): 4.970, Azimuth (°): 46.590, TVD (ft): 7259.59, Dogleg (%/100 ft): 0.66, Sensor Depth (ft): 7268.00, Bit To Sensor (ft): 69.00                                                |
| Slide Drill  | 2  | 12-21 | 08:05 | 08:25 | 12-21 | 7337.00 | 7367.00 | Pressure On (psi): 2350.00, Pressure Off (psi): 1950.00, Weight On Bit (klbs): 20.00, Flow Rate (gpm): 675.00, Strokes Per Minute: 176, Toolface: 60, Toolface Type: magnetic                 |
| Rotary Drill | 1  | 12-21 | 08:25 | 08:40 | 12-21 | 7367.00 | 7427.00 | Pressure On (psi): 2800.00, Pressure Off (psi): 1950.00, Weight On Bit (klbs): 40.00, Surface RPM: 60, Surface Torque (ft lbf): 20000.00, Flow Rate (gpm): 675.00, Strokes Per Minute: 176.00 |
| Survey       | 46 | 12-21 | 08:40 | 08:45 | 12-21 | 7427.00 | 7427.00 | Inclination (°): 5.630, Azimuth (°): 53.530, TVD (ft): 7349.20, Dogleg (%/100 ft): 1.02, Sensor Depth (ft): 7358.00, Bit To Sensor (ft): 69.00                                                |
| Rotary Drill | 1  | 12-21 | 08:45 | 09:00 | 12-21 | 7427.00 | 7516.00 | Pressure On (psi): 2800.00, Pressure Off (psi): 1950.00, Weight On Bit (klbs): 40.00, Surface RPM: 60, Surface Torque (ft lbf): 20000.00, Flow Rate (gpm): 675.00, Strokes Per Minute: 176.00 |
| Survey       | 46 | 12-21 | 09:00 | 09:05 | 12-21 | 7516.00 | 7516.00 | Inclination (°): 5.540, Azimuth (°): 56.520, TVD (ft): 7437.78, Dogleg (%/100 ft): 0.34, Sensor Depth (ft): 7447.00, Bit To Sensor (ft): 69.00                                                |
| Rotary Drill | 1  | 12-21 | 09:05 | 09:20 | 12-21 | 7516.00 | 7606.00 | Pressure On (psi): 2800.00, Pressure Off (psi): 1950.00, Weight On Bit (klbs): 40.00, Surface RPM: 60, Surface Torque (ft lbf): 20000.00, Flow Rate (gpm): 675.00, Strokes Per Minute: 176.00 |
| Survey       | 46 | 12-21 | 09:20 | 09:25 | 12-21 | 7606.00 | 7606.00 | Inclination (°): 4.920, Azimuth (°): 59.330, TVD (ft): 7527.41, Dogleg (%/100 ft): 0.75, Sensor Depth (ft): 7537.00, Bit To Sensor (ft): 69.00                                                |
| Rotary Drill | 1  | 12-21 | 09:25 | 09:40 | 12-21 | 7606.00 | 7696.00 | Pressure On (psi): 2800.00, Pressure Off (psi): 1950.00, Weight On Bit (klbs): 40.00, Surface RPM: 60, Surface Torque (ft lbf): 20000.00, Flow Rate (gpm): 675.00, Strokes Per Minute: 176.00 |
| Survey       | 46 | 12-21 | 09:40 | 09:45 | 12-21 | 7696.00 | 7696.00 | Inclination (°): 4.440, Azimuth (°): 59.950, TVD (ft): 7617.11, Dogleg (%/100 ft): 0.54, Sensor Depth (ft): 7627.00, Bit To Sensor (ft): 69.00                                                |
| Slide Drill  | 2  | 12-21 | 09:45 | 10:15 | 12-21 | 7696.00 | 7726.00 | Pressure On (psi): 2350.00, Pressure Off (psi): 1950.00, Weight On Bit (klbs): 20.00, Flow Rate (gpm): 675.00, Strokes Per Minute: 176, Toolface: 55, Toolface Type: magnetic                 |
| Rotary Drill | 1  | 12-21 | 10:15 | 10:25 | 12-21 | 7726.00 | 7786.00 | Pressure On (psi): 2800.00, Pressure Off (psi): 1950.00, Weight On Bit (klbs): 40.00, Surface RPM: 60, Surface Torque (ft lbf): 20000.00, Flow Rate (gpm): 675.00, Strokes Per Minute: 176.00 |
| Survey       | 46 | 12-21 | 10:25 | 10:30 | 12-21 | 7786.00 | 7786.00 | Inclination (°): 5.050, Azimuth (°): 63.990, TVD (ft): 7706.80, Dogleg (%/100 ft): 0.77, Sensor Depth (ft): 7717.00, Bit To Sensor (ft): 69.00                                                |
| Slide Drill  | 2  | 12-21 | 10:30 | 11:05 | 12-21 | 7786.00 | 7816.00 | Pressure On (psi): 2350.00, Pressure Off (psi): 1950.00, Weight On Bit (klbs): 20.00, Flow Rate (gpm): 675.00, Strokes Per Minute: 176, Toolface: 50, Toolface Type: magnetic                 |
| Rotary Drill | 1  | 12-21 | 11:05 | 11:15 | 12-21 | 7816.00 | 7876.00 | Pressure On (psi): 2800.00, Pressure Off (psi): 1950.00, Weight On Bit (klbs): 40.00, Surface RPM: 60, Surface Torque (ft lbf): 20000.00, Flow Rate (gpm): 675.00, Strokes Per Minute: 176.00 |
| Survey       | 46 | 12-21 | 11:15 | 11:20 | 12-21 | 7876.00 | 7876.00 | Inclination (°): 6.290, Azimuth (°): 67.770, TVD (ft): 7796.36, Dogleg (%/100 ft): 1.44, Sensor Depth (ft): 7807.00, Bit To Sensor (ft): 69.00                                                |
| Rotary Drill | 1  | 12-21 | 11:20 | 11:35 | 12-21 | 7876.00 | 7965.00 | Pressure On (psi): 2800.00, Pressure Off (psi): 1950.00, Weight On Bit (klbs): 40.00, Surface RPM: 60, Surface Torque (ft lbf): 20000.00, Flow Rate (gpm): 675.00, Strokes Per Minute: 176.00 |
| Survey       | 46 | 12-21 | 11:35 | 11:45 | 12-21 | 7965.00 | 7965.00 | Inclination (°): 6.680, Azimuth (°): 67.680, TVD (ft): 7884.79, Dogleg (%/100 ft): 0.44, Sensor Depth (ft): 7896.00, Bit To Sensor (ft): 69.00                                                |
| Slide Drill  | 2  | 12-21 | 11:45 | 12:05 | 12-21 | 7965.00 | 7980.00 | Pressure On (psi): 2350.00, Pressure Off (psi): 1950.00, Weight On Bit (klbs): 20.00, Flow Rate (gpm): 675.00, Strokes Per Minute: 176, Toolface: 30, Toolface Type: magnetic                 |
| Rotary Drill | 1  | 12-21 | 12:05 | 12:25 | 12-21 | 7980.00 | 8055.00 | Pressure On (psi): 2800.00, Pressure Off (psi): 1950.00, Weight On Bit (klbs): 40.00, Surface RPM: 60, Surface Torque (ft lbf): 20000.00, Flow Rate (gpm): 675.00, Strokes Per Minute: 176.00 |
| Survey       | 46 | 12-21 | 12:25 | 12:30 | 12-21 | 8055.00 | 8055.00 | Inclination (°): 6.680, Azimuth (°): 65.660, TVD (ft): 7974.17, Dogleg (%/100 ft): 0.26, Sensor Depth (ft): 7986.00, Bit To Sensor (ft): 69.00                                                |
| Rotary Drill | 1  | 12-21 | 12:30 | 12:40 | 12-21 | 8055.00 | 8145.00 | Pressure On (psi): 2800.00, Pressure Off (psi): 1950.00, Weight On Bit (klbs): 40.00, Surface RPM: 60, Surface Torque (ft lbf): 20000.00, Flow Rate (gpm): 675.00, Strokes Per Minute: 176.00 |
| Survey       | 46 | 12-21 | 12:40 | 12:45 | 12-21 | 8145.00 | 8145.00 | Inclination (°): 6.810, Azimuth (°): 65.310, TVD (ft): 8063.55, Dogleg (%/100 ft): 0.15, Sensor Depth (ft): 8076.00, Bit To Sensor (ft): 69.00                                                |

|              |    |       |       |       |       |         |         |                                                                                                                                                                                               |
|--------------|----|-------|-------|-------|-------|---------|---------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Rotary Drill | 1  | 12-21 | 12:45 | 13:05 | 12-21 | 8145.00 | 8235.00 | Pressure On (psi): 2800.00, Pressure Off (psi): 1950.00, Weight On Bit (klbs): 40.00, Surface RPM: 60, Surface Torque (ft lbf): 20000.00, Flow Rate (gpm): 675.00, Strokes Per Minute: 176.00 |
| Survey       | 46 | 12-21 | 13:05 | 13:10 | 12-21 | 8235.00 | 8235.00 | Inclination (°): 5.890, Azimuth (°): 69.270, TVD (ft): 8153.00, Dogleg (%/100 ft): 1.13, Sensor Depth (ft): 8166.00, Bit To Sensor (ft): 69.00                                                |
| Rotary Drill | 1  | 12-21 | 13:10 | 13:25 | 12-21 | 8235.00 | 8324.00 | Pressure On (psi): 2800.00, Pressure Off (psi): 1950.00, Weight On Bit (klbs): 40.00, Surface RPM: 60, Surface Torque (ft lbf): 20000.00, Flow Rate (gpm): 675.00, Strokes Per Minute: 176.00 |
| Survey       | 46 | 12-21 | 13:25 | 13:30 | 12-21 | 8324.00 | 8324.00 | Inclination (°): 5.800, Azimuth (°): 72.520, TVD (ft): 8241.54, Dogleg (%/100 ft): 0.39, Sensor Depth (ft): 8255.00, Bit To Sensor (ft): 69.00                                                |
| Rotary Drill | 1  | 12-21 | 13:30 | 13:45 | 12-21 | 8324.00 | 8414.00 | Pressure On (psi): 2800.00, Pressure Off (psi): 1950.00, Weight On Bit (klbs): 40.00, Surface RPM: 60, Surface Torque (ft lbf): 20000.00, Flow Rate (gpm): 675.00, Strokes Per Minute: 176.00 |
| Survey       | 46 | 12-21 | 13:45 | 13:50 | 12-21 | 8414.00 | 8414.00 | Inclination (°): 5.760, Azimuth (°): 72.960, TVD (ft): 8331.08, Dogleg (%/100 ft): 0.07, Sensor Depth (ft): 8345.00, Bit To Sensor (ft): 69.00                                                |
| Rotary Drill | 1  | 12-21 | 13:50 | 14:05 | 12-21 | 8414.00 | 8504.00 | Pressure On (psi): 2800.00, Pressure Off (psi): 1950.00, Weight On Bit (klbs): 40.00, Surface RPM: 60, Surface Torque (ft lbf): 20000.00, Flow Rate (gpm): 675.00, Strokes Per Minute: 176.00 |
| Survey       | 46 | 12-21 | 14:05 | 14:10 | 12-21 | 8504.00 | 8504.00 | Inclination (°): 5.450, Azimuth (°): 75.150, TVD (ft): 8420.65, Dogleg (%/100 ft): 0.42, Sensor Depth (ft): 8435.00, Bit To Sensor (ft): 69.00                                                |
| Rotary Drill | 1  | 12-21 | 14:10 | 14:30 | 12-21 | 8504.00 | 8593.00 | Pressure On (psi): 2800.00, Pressure Off (psi): 1950.00, Weight On Bit (klbs): 40.00, Surface RPM: 60, Surface Torque (ft lbf): 20000.00, Flow Rate (gpm): 675.00, Strokes Per Minute: 176.00 |
| Survey       | 46 | 12-21 | 14:30 | 14:40 | 12-21 | 8593.00 | 8593.00 | Inclination (°): 5.140, Azimuth (°): 78.140, TVD (ft): 8509.27, Dogleg (%/100 ft): 0.47, Sensor Depth (ft): 8524.00, Bit To Sensor (ft): 69.00                                                |
| Slide Drill  | 2  | 12-21 | 14:40 | 15:20 | 12-21 | 8593.00 | 8623.00 | Pressure On (psi): 2350.00, Pressure Off (psi): 1950.00, Weight On Bit (klbs): 20.00, Flow Rate (gpm): 675.00, Strokes Per Minute: 176, Toolface: 30, Toolface Type: magnetic                 |
| Rotary Drill | 1  | 12-21 | 15:20 | 15:35 | 12-21 | 8623.00 | 8683.00 | Pressure On (psi): 2800.00, Pressure Off (psi): 1950.00, Weight On Bit (klbs): 40.00, Surface RPM: 60, Surface Torque (ft lbf): 20000.00, Flow Rate (gpm): 675.00, Strokes Per Minute: 176.00 |
| Survey       | 46 | 12-21 | 15:35 | 15:40 | 12-21 | 8683.00 | 8683.00 | Inclination (°): 5.710, Azimuth (°): 72.340, TVD (ft): 8598.87, Dogleg (%/100 ft): 0.88, Sensor Depth (ft): 8614.00, Bit To Sensor (ft): 69.00                                                |
| Rotary Drill | 1  | 12-21 | 15:40 | 16:05 | 12-21 | 8683.00 | 8773.00 | Pressure On (psi): 2800.00, Pressure Off (psi): 1950.00, Weight On Bit (klbs): 40.00, Surface RPM: 60, Surface Torque (ft lbf): 20000.00, Flow Rate (gpm): 675.00, Strokes Per Minute: 176.00 |
| Survey       | 46 | 12-21 | 16:05 | 16:15 | 12-21 | 8773.00 | 8773.00 | Inclination (°): 5.490, Azimuth (°): 70.580, TVD (ft): 8688.44, Dogleg (%/100 ft): 0.31, Sensor Depth (ft): 8704.00, Bit To Sensor (ft): 69.00                                                |
| Slide Drill  | 2  | 12-21 | 16:15 | 16:55 | 12-21 | 8773.00 | 8803.00 | Pressure On (psi): 2350.00, Pressure Off (psi): 1950.00, Weight On Bit (klbs): 20.00, Flow Rate (gpm): 675.00, Strokes Per Minute: 176, Toolface: 0, Toolface Type: magnetic                  |
| Rotary Drill | 1  | 12-21 | 16:55 | 17:10 | 12-21 | 8803.00 | 8863.00 | Pressure On (psi): 2800.00, Pressure Off (psi): 1950.00, Weight On Bit (klbs): 40.00, Surface RPM: 60, Surface Torque (ft lbf): 20000.00, Flow Rate (gpm): 675.00, Strokes Per Minute: 176.00 |
| Survey       | 46 | 12-21 | 17:10 | 17:15 | 12-21 | 8863.00 | 8863.00 | Inclination (°): 4.440, Azimuth (°): 61.530, TVD (ft): 8778.10, Dogleg (%/100 ft): 1.45, Sensor Depth (ft): 8794.00, Bit To Sensor (ft): 69.00                                                |
| Rotary Drill | 1  | 12-21 | 17:15 | 17:40 | 12-21 | 8863.00 | 8953.00 | Pressure On (psi): 2800.00, Pressure Off (psi): 1950.00, Weight On Bit (klbs): 40.00, Surface RPM: 60, Surface Torque (ft lbf): 20000.00, Flow Rate (gpm): 675.00, Strokes Per Minute: 176.00 |
| Survey       | 46 | 12-21 | 17:40 | 17:45 | 12-21 | 8953.00 | 8953.00 | Inclination (°): 3.820, Azimuth (°): 70.760, TVD (ft): 8867.87, Dogleg (%/100 ft): 1.01, Sensor Depth (ft): 8884.00, Bit To Sensor (ft): 69.00                                                |
| Rotary Drill | 1  | 12-21 | 17:45 | 17:50 | 12-21 | 8953.00 | 8967.00 | Pressure On (psi): 2800.00, Pressure Off (psi): 1950.00, Weight On Bit (klbs): 40.00, Surface RPM: 60, Surface Torque (ft lbf): 20000.00, Flow Rate (gpm): 675.00, Strokes Per Minute: 176.00 |
| Slide Drill  | 2  | 12-21 | 17:50 | 19:00 | 12-21 | 8967.00 | 8997.00 | Pressure On (psi): 2350.00, Pressure Off (psi): 1950.00, Weight On Bit (klbs): 20.00, Flow Rate (gpm): 675.00, Strokes Per Minute: 176, Toolface: 20, Toolface Type: magnetic                 |
| Rotary Drill | 1  | 12-21 | 19:00 | 19:15 | 12-21 | 8997.00 | 9042.00 | Pressure On (psi): 2800.00, Pressure Off (psi): 1950.00, Weight On Bit (klbs): 40.00, Surface RPM: 60, Surface Torque (ft lbf): 20000.00, Flow Rate (gpm): 675.00, Strokes Per Minute: 176.00 |
| Survey       | 46 | 12-21 | 19:15 | 19:20 | 12-21 | 9042.00 | 9042.00 | Inclination (°): 3.600, Azimuth (°): 75.330, TVD (ft): 8956.68, Dogleg (%/100 ft): 0.41, Sensor Depth (ft): 8973.00, Bit To Sensor (ft): 69.00                                                |
| Rotary Drill | 1  | 12-21 | 19:20 | 19:45 | 12-21 | 9042.00 | 9132.00 | Pressure On (psi): 2800.00, Pressure Off (psi): 1950.00, Weight On Bit (klbs): 40.00, Surface RPM: 60, Surface Torque (ft lbf): 20000.00, Flow Rate (gpm): 675.00, Strokes Per Minute: 176.00 |
| Survey       | 46 | 12-21 | 19:45 | 19:50 | 12-21 | 9132.00 | 9132.00 | Inclination (°): 2.550, Azimuth (°): 53.010, TVD (ft): 9046.55, Dogleg (%/100 ft): 1.75, Sensor Depth (ft): 9063.00, Bit To Sensor (ft): 69.00                                                |

|              |    |       |       |       |       |         |         |                                                                                                                                                                                               |
|--------------|----|-------|-------|-------|-------|---------|---------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Slide Drill  | 2  | 12-21 | 19:50 | 20:40 | 12-21 | 9132.00 | 9162.00 | Pressure On (psi): 2350.00, Pressure Off (psi): 1950.00, Weight On Bit (klbs): 20.00, Flow Rate (gpm): 675.00, Strokes Per Minute: 176, Toolface: 30, Toolface Type: magnetic                 |
| Rotary Drill | 1  | 12-21 | 20:40 | 20:55 | 12-21 | 9162.00 | 9222.00 | Pressure On (psi): 2800.00, Pressure Off (psi): 1950.00, Weight On Bit (klbs): 40.00, Surface RPM: 60, Surface Torque (ft lbf): 20000.00, Flow Rate (gpm): 675.00, Strokes Per Minute: 176.00 |
| Survey       | 46 | 12-21 | 20:55 | 21:00 | 12-21 | 9222.00 | 9222.00 | Inclination (°): 2.950, Azimuth (°): 41.930, TVD (ft): 9136.45, Dogleg (%/100 ft): 0.74, Sensor Depth (ft): 9153.00, Bit To Sensor (ft): 69.00                                                |
| Rotary Drill | 1  | 12-21 | 21:00 | 21:20 | 12-21 | 9222.00 | 9260.00 | Pressure On (psi): 2800.00, Pressure Off (psi): 1950.00, Weight On Bit (klbs): 40.00, Surface RPM: 60, Surface Torque (ft lbf): 20000.00, Flow Rate (gpm): 675.00, Strokes Per Minute: 176.00 |
| Circulating  | 3  | 12-21 | 21:20 | 22:20 | 12-21 |         |         | CIRCULATE                                                                                                                                                                                     |
| Pooh         | 7  | 12-21 | 22:20 | 01:45 | 12-22 |         |         | POOH                                                                                                                                                                                          |

**MWD Activities**

No Activities



|                                 |                                                     |                                                       |
|---------------------------------|-----------------------------------------------------|-------------------------------------------------------|
| <b>Job Number</b><br>WT-20-071  | <b>Operator</b><br>Advance Energy Partners          | <b>Rig Name</b><br>Pioneer #80                        |
| <b>Start Date</b><br>2020-12-04 | <b>Well Name</b><br>Anderson Fed Com 504H           | <b>Legal Well Name   AFE</b><br>Anderson Fed Com 504H |
| <b>Play</b><br>Delaware Basin   | <b>State/Province and Country</b><br>New Mexico, US | <b>County</b><br>Lea                                  |
|                                 |                                                     | <b>Company Man</b>                                    |

Tuesday, Dec 22 00:00 - 23:59 (Day 9 of 19)

Billing: \$7,500.00 (\$130,925.38 total)

| Drilling Summary        |          |                     |       | Drilling Parameters       |                   |
|-------------------------|----------|---------------------|-------|---------------------------|-------------------|
| Start Depth (ft)        | 9260.00  | Downhole Hours      | 23.00 | Rotating WOB (klbs)       | 40.00 - 40.00     |
| Bit Depth (ft)          | 10260.00 | Drilling Hours      | 5.17  | Sliding WOB (klbs)        | 20.00 - 20.00     |
| Bottom Hole Depth (ft)  | 10260.00 | Hours Circulating   | 1.25  | Rotating SPM              | 176.00 - 176.00   |
| Total Distance (ft)     | 1000.00  | Hours Sliding       | 0.50  | Sliding SPM               | 176.00 - 176.00   |
| Distance Rotated (ft)   | 970.00   | Hours Rotating      | 4.67  | Motor RPM                 | 130.00 - 176.00   |
| Distance Slid (ft)      | 30.00    |                     |       | Surface RPM               | 60.00 - 60.00     |
| Inclination In          | 3.56     |                     |       | Flow Rate (gpm)           | 675.00 - 675.00   |
| Inclination Out         | 1.14     |                     |       | On Bottom Pressure (psi)  | 2350.00 - 2800.00 |
| Azimuth In              | 37.36    | % Hours Rotating    | 90%   | Off Bottom Pressure (psi) | 1950.00 - 1950.00 |
| Azimuth Out             | 112.07   | % Hours Sliding     | 10%   |                           |                   |
| AVG Total ROP (ft/h)    | 193.55   | % Distance Sliding  | 3%    |                           |                   |
| AVG Rotating ROP (ft/h) | 207.86   | % Distance Rotating | 97%   |                           |                   |
| AVG Sliding ROP (ft/h)  | 60.00    |                     |       |                           |                   |

**Personnel**

| Name                | Position            |
|---------------------|---------------------|
| Robert Olivarez     | MWD Engineer        |
| Carlos Jensen       | MWD Engineer        |
| Kyle Kusak          | MWD Engineer        |
| Advance Directional | Directional Driller |

**BHA #3 - 8.75" Intermediate**

Date In: Dec 20, 2020, 18:00 Date Out: Dec 22, 2020, 1:45

| Bit Details                |         | Motor Details                                    |          | Directional Comments                                                           |
|----------------------------|---------|--------------------------------------------------|----------|--------------------------------------------------------------------------------|
| OD (in)                    | 8.750   | Size (in)                                        | 7.0      | Flow Rate: 500-700, Max Diff: 1910 psi, Max Torque: 18,710 ft-lbs, BIT Runs: 2 |
| Vendor                     | REED    | Lobe/Stage                                       | 7/8, 8.5 |                                                                                |
| S/N                        | A270855 | Bend Angle                                       | 1.5      |                                                                                |
| Nozzles                    | 6-15's  | Speed (rev/gal)                                  | 0.26     | <b>MWD Comments</b>                                                            |
| Total Flow Area (in²)      | 1.035   | Wear Pad OD (in)                                 | 7.300    |                                                                                |
| Drilling Hours for Day     | 0.00    | <b>Bit Distances</b>                             |          |                                                                                |
| Total Drilled for Day (ft) |         | Bend: 5.30 ft, Gamma: 54.00 ft, Survey: 69.00 ft |          |                                                                                |
| Drilling Hours for BHA     | 18.25   |                                                  |          | <b>POOH Reason</b>                                                             |
| Total Drilled for BHA (ft) | 4316.00 |                                                  |          | Penetration Rate                                                               |

**Directional Items**

| Description                                                                                                                                                | Vendor        | SN#          | Top Conn       | Btm Conn       | ID (in) | OD (in) | Fn Len. (ft) | Len (ft) | Aggr. Len (ft) |
|------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------|--------------|----------------|----------------|---------|---------|--------------|----------|----------------|
| <b>Bit (Fixed Cutter)</b><br>Description: <i>TKC66</i> , Gauge Length (in): 4.00, Size (in): 8.75, Type: <i>PDC (Polycrystalline Diamond Compacts)</i>     | REED          | A270855      | 4 1/2" Reg Pin |                |         | 8.750   |              | 1.00     | 1.00           |
| <b>Mud Motor</b><br>Description: 7" 7/8 8.5 FxD 1.5° w/ 8.25" STAB, Size (in): 7.00, Bend Angle (°): 1.5, Rotor Lobe: 7, Stator Lobe: 8, Stator Stage: 8.5 | AIM           | 700-40-006   | 4 1/2" IF Box  | 4 1/2" Reg Box |         | 7.000   |              | 37.73    | 38.73          |
| <b>Stabilizer</b><br>Description: 8.25" STABILIZER                                                                                                         | JAO           | 86947        | 4 1/2" IF Box  | 4 1/2" IF Pin  | 2.375   | 6.750   |              | 6.73     | 45.46          |
| <b>UBHO Sub</b><br>Description: <i>NM DAO UBHO</i> , Material: <i>Non-Magnetic</i>                                                                         | AIM           | 67502NM      | 4 1/2" IF Box  | 4 1/2" IF Pin  | 3.250   | 6.780   |              | 5.00     | 50.46          |
| <b>Drill Collar</b><br>Description: <i>MWD NMDC</i> , Material: <i>Non-Magnetic</i> , Type: <i>Slick Drill</i>                                             | AIM           | GT 67-30-315 | 4 1/2" IF Box  | 4 1/2" IF Pin  | 3.250   | 6.870   |              | 30.93    | 81.39          |
| <b>Drill Collar</b><br>Description: <i>NMDC</i> , Material: <i>Non-Magnetic</i> , Type: <i>Slick Drill</i>                                                 | AIM           | GT 67-30-193 | 4 1/2" IF Box  | 4 1/2" IF Pin  | 3.250   | 6.850   |              | 29.70    | 111.09         |
| <b>Crossover Sub</b><br>Description: <i>X-O SUB</i> , Material: <i>Steel</i>                                                                               | BLACK DIAMOND | BD11664      | EverDrlg54 Box | 4 1/2" IF Pin  | 3.000   | 6.700   |              | 3.52     | 114.61         |
| <b>HWDP</b><br>Description: (13 Stands) 5.5" HWDP, Type: <i>Slick</i>                                                                                      | BLACK DIAMOND |              | EverDrlg54 Box | EverDrlg54 Pin | 3.750   | 5.500   |              | 1216.55  | 1331.16        |

**MWD Items**

No Items

**BHA #4 - Intermediate 8.75"**

Date In: Dec 22, 2020, 2:45 Date Out: Dec 22, 2020, 18:30

| Bit Details                |          | Motor Details                                                         |          | Directional Comments                                                                      |
|----------------------------|----------|-----------------------------------------------------------------------|----------|-------------------------------------------------------------------------------------------|
| OD (in)                    | 8.750    | Size (in)                                                             | 7.0      | Flow Rate: 500-700, Max Diff: 1910 psi, Max Torque: 18,710 ft-lbs, BIT Runs: 0            |
| Vendor                     | Ultrerra | Lobe/Stage                                                            | 7/8, 8.5 |                                                                                           |
| S/N                        | 54274    | Bend Angle                                                            | 1.5      |                                                                                           |
| Nozzles                    | 6-15's   | Speed (rev/gal)                                                       | 0.26     | MWD Comments                                                                              |
| Total Flow Area (in²)      | 1.035    | Wear Pad OD (in)                                                      | 7.300    | <div>POOH Reason</div> <div>Change Bottom Hole Assembly: Pooh to P/U Curve assembly</div> |
| Drilling Hours for Day     | 5.17     | Bit Distances                                                         |          |                                                                                           |
| Total Drilled for Day (ft) | 1000.00  | <b>Bend:</b> 5.30 ft, <b>Gamma:</b> 53.00 ft, <b>Survey:</b> 68.00 ft |          |                                                                                           |
| Drilling Hours for BHA     | 5.17     |                                                                       |          |                                                                                           |
| Total Drilled for BHA (ft) | 1000.00  |                                                                       |          |                                                                                           |

**Directional Items**

| Description                                                                                                                                                | Vendor        | SN#          | Top Conn       | Btm Conn       | ID (in) | OD (in) | Fn Len. (ft) | Len (ft) | Aggr. Len (ft) |
|------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------|--------------|----------------|----------------|---------|---------|--------------|----------|----------------|
| <b>Bit (Fixed Cutter)</b><br>Description: <i>RPS616</i> , Gauge Length (in): 4.00, Size (in): 8.75, Type: <i>PDC (Polycrystalline Diamond Compacts)</i>    | Ultrerra      | 54274        | 4 1/2" Reg Pin |                |         | 8.750   |              | 1.00     | 1.00           |
| <b>Mud Motor</b><br>Description: 7" 7/8 8.5 FXD 1.5° w/ 8.25" STAB, Size (in): 7.00, Bend Angle (°): 1.5, Rotor Lobe: 7, Stator Lobe: 8, Stator Stage: 8.5 | AIM           | 700-40-014   | 4 1/2" IF Box  | 4 1/2" Reg Box |         | 7.050   |              | 36.27    | 37.27          |
| <b>Stabilizer</b><br>Description: 8.25" STABILIZER                                                                                                         | JAO           | 86947        | 4 1/2" IF Box  | 4 1/2" IF Pin  | 2.375   | 6.750   |              | 6.73     | 44.00          |
| <b>UBHO Sub</b><br>Description: <i>NM DAO UBHO</i> , Material: <i>Non-Magnetic</i>                                                                         | AIM           | 67502NM      | 4 1/2" IF Box  | 4 1/2" IF Pin  | 3.250   | 6.780   |              | 5.00     | 49.00          |
| <b>Drill Collar</b><br>Description: <i>MWD NMDC</i> , Material: <i>Non-Magnetic</i> , Type: <i>Slick Drill</i>                                             | AIM           | GT 67-30-315 | 4 1/2" IF Box  | 4 1/2" IF Pin  | 3.250   | 6.870   |              | 30.93    | 79.93          |
| <b>Drill Collar</b><br>Description: <i>NMDC</i> , Material: <i>Non-Magnetic</i> , Type: <i>Slick Drill</i>                                                 | AIM           | GT 67-30-193 | 4 1/2" IF Box  | 4 1/2" IF Pin  | 3.250   | 6.850   |              | 29.70    | 109.63         |
| <b>Crossover Sub</b><br>Description: <i>X-O SUB</i> , Material: <i>Steel</i>                                                                               | BLACK DIAMOND | BD11664      | EverDrlg54 Box | 4 1/2" IF Pin  | 3.000   | 6.700   |              | 3.52     | 113.15         |
| <b>HWDP</b><br>Description: (13 Stands) 5.5" HWDP, Type: <i>Slick</i>                                                                                      | BLACK DIAMOND |              | EverDrlg54 Box | EverDrlg54 Pin | 3.750   | 5.500   |              | 1216.55  | 1329.70        |

**MWD Items**

No Items

**BHA #5 - 8.75" CURVE**

Date In: Dec 22, 2020, 18:30 Date Out: Dec 24, 2020, 4:15

| Bit Details                |          | Motor Details                                                         |          | Directional Comments                                                            |
|----------------------------|----------|-----------------------------------------------------------------------|----------|---------------------------------------------------------------------------------|
| OD (in)                    | 8.750    | Size (in)                                                             | 7.0      | Flow Rate: 300-600, Max Diff: 1130 psi, Max Torque: 10,460 ft-lbs, BIT Runs:    |
| Vendor                     | SECURITY | Lobe/Stage                                                            | 7/8, 5.0 |                                                                                 |
| S/N                        | 13521069 | Bend Angle                                                            | 2.12     |                                                                                 |
| Nozzles                    | 6-15's   | Speed (rev/gal)                                                       | 0.26     | MWD Comments                                                                    |
| Total Flow Area (in²)      | 1.035    | Wear Pad OD (in)                                                      | 7.000    | <b>POOH Reason</b><br><b>Total Depth/Casing Point:</b> Pooh after landing curve |
| Drilling Hours for Day     | 0.00     | Bit Distances                                                         |          |                                                                                 |
| Total Drilled for Day (ft) |          | <b>Bend:</b> 4.03 ft, <b>Gamma:</b> 38.00 ft, <b>Survey:</b> 53.00 ft |          |                                                                                 |
| Drilling Hours for BHA     | 17.17    |                                                                       |          |                                                                                 |
| Total Drilled for BHA (ft) | 1312.00  |                                                                       |          |                                                                                 |

**Directional Items**

| Description                                                                                                                                             | Vendor        | SN#          | Top Conn       | Btm Conn       | ID (in) | OD (in) | Fn Len. (ft) | Len (ft) | Aggr. Len (ft) |
|---------------------------------------------------------------------------------------------------------------------------------------------------------|---------------|--------------|----------------|----------------|---------|---------|--------------|----------|----------------|
| <b>Bit (Fixed Cutter)</b><br>Description: <i>GTD64D</i> , Gauge Length (in): 4.00, Size (in): 8.75, Type: <i>PDC (Polycrystalline Diamond Compacts)</i> | SECURITY      | 13521069     | 4 1/2" Reg Pin |                |         | 8.750   |              | 1.00     | 1.00           |
| <b>Mud Motor</b><br>Description: 7" 7/8 5.0 FXD 2.12° SLICK, Size (in): 7.00, Bend Angle (°): 2.12, Rotor Lobe: 7, Stator Lobe: 8, Stator Stage: 5.0    | AIM           | CDM650-019   | 4 1/2" IF Box  | 4 1/2" Reg Box |         | 7.000   |              | 26.08    | 27.08          |
| <b>UBHO Sub</b><br>Description: <i>NM DAO UBHO</i> , Material: <i>Non-Magnetic</i>                                                                      | AIM           | 67502NM      | 4 1/2" IF Box  | 4 1/2" IF Pin  | 3.250   | 6.780   |              | 5.00     | 32.08          |
| <b>Drill Collar</b><br>Description: <i>MWD NMDC</i> , Material: <i>Non-Magnetic</i> , Type: <i>Slick Drill</i>                                          | AIM           | GT 67-30-315 | 4 1/2" IF Box  | 4 1/2" IF Pin  | 3.250   | 6.870   |              | 30.93    | 63.01          |
| <b>Drill Collar</b><br>Description: <i>NMDC</i> , Material: <i>Non-Magnetic</i> , Type: <i>Slick Drill</i>                                              | AIM           | GT 67-30-193 | 4 1/2" IF Box  | 4 1/2" IF Pin  | 3.250   | 6.850   |              | 29.70    | 92.71          |
| <b>Crossover Sub</b><br>Description: <i>X-O SUB</i> , Material: <i>Steel</i>                                                                            | BLACK DIAMOND | BD11664      | EverDrlg54 Box | 4 1/2" IF Pin  | 3.000   | 6.700   |              | 3.52     | 96.23          |

**MWD Items**

No Items

**Directional Activities**

| Activity Type | Code | Start Date | Start Time | End Time | End Date | Start (ft) | End (ft) | Comments/Details                                                                                                                                                                              |
|---------------|------|------------|------------|----------|----------|------------|----------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Pooh          | 7    | 12-21      | 22:20      | 01:45    | 12-22    |            |          | POOH                                                                                                                                                                                          |
| Change BHA    | 6    | 12-22      | 01:45      | 02:45    | 12-22    |            |          | C/O MOTOR & BIT                                                                                                                                                                               |
| Other         | 16   | 12-22      | 02:45      | 03:00    | 12-22    |            |          | TEST MWD(GOOD)                                                                                                                                                                                |
| TIH           | 8    | 12-22      | 03:00      | 07:00    | 12-22    |            |          | TIH W/ BHA #4                                                                                                                                                                                 |
| Circulating   | 3    | 12-22      | 07:00      | 07:40    | 12-22    |            |          | RELOG GAMMA                                                                                                                                                                                   |
| Rotary Drill  | 1    | 12-22      | 07:40      | 08:05    | 12-22    | 9260.00    | 9311.00  | Pressure On (psi): 2800.00, Pressure Off (psi): 1950.00, Weight On Bit (klbs): 40.00, Surface RPM: 60, Surface Torque (ft lbf): 20000.00, Flow Rate (gpm): 675.00, Strokes Per Minute: 176.00 |
| Survey        | 46   | 12-22      | 08:05      | 08:10    | 12-22    | 9311.00    | 9311.00  | Inclination (°): 3.560, Azimuth (°): 37.360, TVD (ft): 9226.30, Dogleg (°/100 ft): 0.74, Sensor Depth (ft): 9243.00, Bit To Sensor (ft): 68.00                                                |
| Rotary Drill  | 1    | 12-22      | 08:10      | 08:30    | 12-22    | 9311.00    | 9400.00  | Pressure On (psi): 2800.00, Pressure Off (psi): 1950.00, Weight On Bit (klbs): 40.00, Surface RPM: 60, Surface Torque (ft lbf): 20000.00, Flow Rate (gpm): 675.00, Strokes Per Minute: 176.00 |
| Survey        | 46   | 12-22      | 08:30      | 08:40    | 12-22    | 9400.00    | 9400.00  | Inclination (°): 2.330, Azimuth (°): 62.500, TVD (ft): 9315.19, Dogleg (°/100 ft): 1.97, Sensor Depth (ft): 9332.00, Bit To Sensor (ft): 68.00                                                |
| Rotary Drill  | 1    | 12-22      | 08:40      | 09:00    | 12-22    | 9400.00    | 9490.00  | Pressure On (psi): 2800.00, Pressure Off (psi): 1950.00, Weight On Bit (klbs): 40.00, Surface RPM: 60, Surface Torque (ft lbf): 20000.00, Flow Rate (gpm): 675.00, Strokes Per Minute: 176.00 |
| Survey        | 46   | 12-22      | 09:00      | 09:05    | 12-22    | 9490.00    | 9490.00  | Inclination (°): 1.490, Azimuth (°): 47.560, TVD (ft): 9405.14, Dogleg (°/100 ft): 1.08, Sensor Depth (ft): 9422.00, Bit To Sensor (ft): 68.00                                                |
| Rotary Drill  | 1    | 12-22      | 09:05      | 09:25    | 12-22    | 9490.00    | 9580.00  | Pressure On (psi): 2800.00, Pressure Off (psi): 1950.00, Weight On Bit (klbs): 40.00, Surface RPM: 60, Surface Torque (ft lbf): 20000.00, Flow Rate (gpm): 675.00, Strokes Per Minute: 176.00 |
| Survey        | 46   | 12-22      | 09:25      | 09:30    | 12-22    | 9580.00    | 9580.00  | Inclination (°): 0.840, Azimuth (°): 143.010, TVD (ft): 9495.12, Dogleg (°/100 ft): 1.98, Sensor Depth (ft): 9512.00, Bit To Sensor (ft): 68.00                                               |
| Rotary Drill  | 1    | 12-22      | 09:30      | 09:45    | 12-22    | 9580.00    | 9669.00  | Pressure On (psi): 2800.00, Pressure Off (psi): 1950.00, Weight On Bit (klbs): 40.00, Surface RPM: 60, Surface Torque (ft lbf): 20000.00, Flow Rate (gpm): 675.00, Strokes Per Minute: 176.00 |
| Survey        | 46   | 12-22      | 09:45      | 09:50    | 12-22    | 9669.00    | 9669.00  | Inclination (°): 3.520, Azimuth (°): 163.840, TVD (ft): 9584.05, Dogleg (°/100 ft): 3.09, Sensor Depth (ft): 9601.00, Bit To Sensor (ft): 68.00                                               |
| Rotary Drill  | 1    | 12-22      | 09:50      | 10:00    | 12-22    | 9669.00    | 9674.00  | Pressure On (psi): 2800.00, Pressure Off (psi): 1950.00, Weight On Bit (klbs): 40.00, Surface RPM: 60, Surface Torque (ft lbf): 20000.00, Flow Rate (gpm): 675.00, Strokes Per Minute: 176.00 |
| Slide Drill   | 2    | 12-22      | 10:00      | 10:30    | 12-22    | 9674.00    | 9704.00  | Pressure On (psi): 2350.00, Pressure Off (psi): 1950.00, Weight On Bit (klbs): 20.00, Flow Rate (gpm): 675.00, Strokes Per Minute: 176, Toolface: 340, Toolface Type: magnetic                |
| Rotary Drill  | 1    | 12-22      | 10:30      | 10:45    | 12-22    | 9704.00    | 9759.00  | Pressure On (psi): 2800.00, Pressure Off (psi): 1950.00, Weight On Bit (klbs): 40.00, Surface RPM: 60, Surface Torque (ft lbf): 20000.00, Flow Rate (gpm): 675.00, Strokes Per Minute: 176.00 |
| Survey        | 46   | 12-22      | 10:45      | 10:50    | 12-22    | 9759.00    | 9759.00  | Inclination (°): 1.760, Azimuth (°): 107.500, TVD (ft): 9673.97, Dogleg (°/100 ft): 3.26, Sensor Depth (ft): 9691.00, Bit To Sensor (ft): 68.00                                               |
| Rotary Drill  | 1    | 12-22      | 10:50      | 11:15    | 12-22    | 9759.00    | 9849.00  | Pressure On (psi): 2800.00, Pressure Off (psi): 1950.00, Weight On Bit (klbs): 40.00, Surface RPM: 60, Surface Torque (ft lbf): 20000.00, Flow Rate (gpm): 675.00, Strokes Per Minute: 176.00 |
| Survey        | 46   | 12-22      | 11:15      | 11:20    | 12-22    | 9849.00    | 9849.00  | Inclination (°): 1.190, Azimuth (°): 19.340, TVD (ft): 9763.95, Dogleg (°/100 ft): 2.33, Sensor Depth (ft): 9781.00, Bit To Sensor (ft): 68.00                                                |
| Rotary Drill  | 1    | 12-22      | 11:20      | 11:45    | 12-22    | 9849.00    | 9939.00  | Pressure On (psi): 2800.00, Pressure Off (psi): 1950.00, Weight On Bit (klbs): 40.00, Surface RPM: 60, Surface Torque (ft lbf): 20000.00, Flow Rate (gpm): 675.00, Strokes Per Minute: 176.00 |
| Survey        | 46   | 12-22      | 11:45      | 11:50    | 12-22    | 9939.00    | 9939.00  | Inclination (°): 0.970, Azimuth (°): 113.470, TVD (ft): 9853.93, Dogleg (°/100 ft): 1.76, Sensor Depth (ft): 9871.00, Bit To Sensor (ft): 68.00                                               |
| Rotary Drill  | 1    | 12-22      | 11:50      | 12:15    | 12-22    | 9939.00    | 10028.00 | Pressure On (psi): 2800.00, Pressure Off (psi): 1950.00, Weight On Bit (klbs): 40.00, Surface RPM: 60, Surface Torque (ft lbf): 20000.00, Flow Rate (gpm): 675.00, Strokes Per Minute: 176.00 |
| Survey        | 46   | 12-22      | 12:15      | 12:20    | 12-22    | 10028.00   | 10028.00 | Inclination (°): 0.880, Azimuth (°): 115.470, TVD (ft): 9942.92, Dogleg (°/100 ft): 0.11, Sensor Depth (ft): 9960.00, Bit To Sensor (ft): 68.00                                               |
| Rotary Drill  | 1    | 12-22      | 12:20      | 12:50    | 12-22    | 10028.00   | 10118.00 | Pressure On (psi): 2800.00, Pressure Off (psi): 1950.00, Weight On Bit (klbs): 40.00, Surface RPM: 60, Surface Torque (ft lbf): 20000.00, Flow Rate (gpm): 675.00, Strokes Per Minute: 176.00 |
| Survey        | 46   | 12-22      | 12:50      | 12:55    | 12-22    | 10118.00   | 10118.00 | Inclination (°): 0.700, Azimuth (°): 129.650, TVD (ft): 10032.91, Dogleg (°/100 ft): 0.29, Sensor Depth (ft): 10050.00, Bit To Sensor (ft): 68.00                                             |

|              |    |       |       |       |       |          |          |                                                                                                                                                                                               |
|--------------|----|-------|-------|-------|-------|----------|----------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Rotary Drill | 1  | 12-22 | 12:55 | 13:25 | 12-22 | 10118.00 | 10207.00 | Pressure On (psi): 2800.00, Pressure Off (psi): 1950.00, Weight On Bit (klbs): 40.00, Surface RPM: 60, Surface Torque (ft lbf): 20000.00, Flow Rate (gpm): 675.00, Strokes Per Minute: 176.00 |
| Survey       | 46 | 12-22 | 13:25 | 13:30 | 12-22 | 10207.00 | 10207.00 | Inclination (°): 1.050, Azimuth (°): 118.660, TVD (ft): 10121.90, Dogleg (°/100 ft): 0.43, Sensor Depth (ft): 10139.00, Bit To Sensor (ft): 68.00                                             |
| Rotary Drill | 1  | 12-22 | 13:30 | 13:50 | 12-22 | 10207.00 | 10260.00 | Pressure On (psi): 2800.00, Pressure Off (psi): 1950.00, Weight On Bit (klbs): 40.00, Surface RPM: 60, Surface Torque (ft lbf): 20000.00, Flow Rate (gpm): 675.00, Strokes Per Minute: 176.00 |
| Other        | 16 | 12-22 | 13:50 | 14:00 | 12-22 |          |          | Flow Check                                                                                                                                                                                    |
| Survey       | 46 | 12-22 | 14:00 | 14:05 | 12-22 | 10260.00 | 10260.00 | Inclination (°): 1.140, Azimuth (°): 112.070, TVD (ft): 10174.89, Dogleg (°/100 ft): 0.29, Sensor Depth (ft): 10192.00, Bit To Sensor (ft): 68.00                                             |
| Circulating  | 3  | 12-22 | 14:05 | 14:40 | 12-22 |          |          | CIRC                                                                                                                                                                                          |
| Pooh         | 7  | 12-22 | 14:40 | 18:30 | 12-22 |          |          | POOH                                                                                                                                                                                          |
| Change BHA   | 6  | 12-22 | 18:30 | 19:50 | 12-22 |          |          | P/U BHA # 5                                                                                                                                                                                   |
| Other        | 16 | 12-22 | 19:50 | 20:00 | 12-22 |          |          | Test MWD                                                                                                                                                                                      |
| TIH          | 8  | 12-22 | 20:00 | 00:00 | 12-23 |          |          | TIH W/ BHA #5                                                                                                                                                                                 |

**MWD Activities**

No Activities



|              |    |       |       |       |       |          |          |                                                                                                                                                                                               |
|--------------|----|-------|-------|-------|-------|----------|----------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Slide Drill  | 2  | 12-23 | 02:15 | 02:55 | 12-23 | 10299.00 | 10318.00 | Pressure On (psi): 1650.00, Pressure Off (psi): 1350.00, Weight On Bit (klbs): 20.00, Flow Rate (gpm): 550.00, Strokes Per Minute: 142, Toolface: 45, Toolface Type: magnetic                 |
| Survey       | 46 | 12-23 | 02:55 | 03:05 | 12-23 | 10318.00 | 10318.00 | Inclination (°): 1.670, Azimuth (°): 73.660, TVD (ft): 10247.87, Dogleg (°/100 ft): 1.44, Sensor Depth (ft): 10265.00, Bit To Sensor (ft): 53.00                                              |
| Slide Drill  | 2  | 12-23 | 03:05 | 04:40 | 12-23 | 10318.00 | 10407.00 | Pressure On (psi): 1650.00, Pressure Off (psi): 1350.00, Weight On Bit (klbs): 20.00, Flow Rate (gpm): 550.00, Strokes Per Minute: 142, Toolface: 45, Toolface Type: magnetic                 |
| Survey       | 46 | 12-23 | 04:40 | 04:50 | 12-23 | 10407.00 | 10407.00 | Inclination (°): 9.710, Azimuth (°): 43.870, TVD (ft): 10336.37, Dogleg (°/100 ft): 9.33, Sensor Depth (ft): 10354.00, Bit To Sensor (ft): 53.00                                              |
| Slide Drill  | 2  | 12-23 | 04:50 | 05:55 | 12-23 | 10407.00 | 10497.00 | Pressure On (psi): 1650.00, Pressure Off (psi): 1350.00, Weight On Bit (klbs): 20.00, Flow Rate (gpm): 550.00, Strokes Per Minute: 142, Toolface: 0, Toolface Type: gravity                   |
| Survey       | 46 | 12-23 | 05:55 | 06:05 | 12-23 | 10497.00 | 10497.00 | Inclination (°): 19.740, Azimuth (°): 36.920, TVD (ft): 10423.31, Dogleg (°/100 ft): 11.30, Sensor Depth (ft): 10444.00, Bit To Sensor (ft): 53.00                                            |
| Slide Drill  | 2  | 12-23 | 06:05 | 07:00 | 12-23 | 10497.00 | 10586.00 | Pressure On (psi): 1650.00, Pressure Off (psi): 1350.00, Weight On Bit (klbs): 20.00, Flow Rate (gpm): 550.00, Strokes Per Minute: 142, Toolface: 0, Toolface Type: gravity                   |
| Survey       | 46 | 12-23 | 07:00 | 07:10 | 12-23 | 10586.00 | 10586.00 | Inclination (°): 30.730, Azimuth (°): 33.930, TVD (ft): 10503.70, Dogleg (°/100 ft): 12.43, Sensor Depth (ft): 10533.00, Bit To Sensor (ft): 53.00                                            |
| Slide Drill  | 2  | 12-23 | 07:10 | 07:25 | 12-23 | 10586.00 | 10603.00 | Pressure On (psi): 1650.00, Pressure Off (psi): 1350.00, Weight On Bit (klbs): 20.00, Flow Rate (gpm): 550.00, Strokes Per Minute: 142, Toolface: 0, Toolface Type: gravity                   |
| Rotary Drill | 1  | 12-23 | 07:25 | 07:40 | 12-23 | 10603.00 | 10623.00 | Pressure On (psi): 1900.00, Pressure Off (psi): 1400.00, Weight On Bit (klbs): 40.00, Surface RPM: 20, Surface Torque (ft lbf): 19000.00, Flow Rate (gpm): 550.00, Strokes Per Minute: 142.00 |
| Slide Drill  | 2  | 12-23 | 07:40 | 08:20 | 12-23 | 10623.00 | 10676.00 | Pressure On (psi): 1650.00, Pressure Off (psi): 1350.00, Weight On Bit (klbs): 20.00, Flow Rate (gpm): 550.00, Strokes Per Minute: 142, Toolface: 0, Toolface Type: gravity                   |
| Survey       | 46 | 12-23 | 08:20 | 08:30 | 12-23 | 10676.00 | 10676.00 | Inclination (°): 37.930, Azimuth (°): 27.170, TVD (ft): 10578.00, Dogleg (°/100 ft): 9.04, Sensor Depth (ft): 10623.00, Bit To Sensor (ft): 53.00                                             |
| Rotary Drill | 1  | 12-23 | 08:30 | 08:40 | 12-23 | 10676.00 | 10696.00 | Pressure On (psi): 1900.00, Pressure Off (psi): 1400.00, Weight On Bit (klbs): 40.00, Surface RPM: 20, Surface Torque (ft lbf): 19000.00, Flow Rate (gpm): 550.00, Strokes Per Minute: 142.00 |
| Slide Drill  | 2  | 12-23 | 08:40 | 09:30 | 12-23 | 10696.00 | 10766.00 | Pressure On (psi): 1650.00, Pressure Off (psi): 1350.00, Weight On Bit (klbs): 20.00, Flow Rate (gpm): 550.00, Strokes Per Minute: 142, Toolface: 20, Toolface Type: gravity                  |
| Survey       | 46 | 12-23 | 09:30 | 09:40 | 12-23 | 10766.00 | 10766.00 | Inclination (°): 44.790, Azimuth (°): 30.680, TVD (ft): 10645.52, Dogleg (°/100 ft): 8.04, Sensor Depth (ft): 10713.00, Bit To Sensor (ft): 53.00                                             |
| Rotary Drill | 1  | 12-23 | 09:40 | 09:55 | 12-23 | 10766.00 | 10791.00 | Pressure On (psi): 1900.00, Pressure Off (psi): 1400.00, Weight On Bit (klbs): 40.00, Surface RPM: 20, Surface Torque (ft lbf): 19000.00, Flow Rate (gpm): 550.00, Strokes Per Minute: 142.00 |
| Slide Drill  | 2  | 12-23 | 09:55 | 10:50 | 12-23 | 10791.00 | 10855.00 | Pressure On (psi): 1650.00, Pressure Off (psi): 1350.00, Weight On Bit (klbs): 20.00, Flow Rate (gpm): 550.00, Strokes Per Minute: 142, Toolface: 0, Toolface Type: gravity                   |
| Survey       | 46 | 12-23 | 10:50 | 11:00 | 12-23 | 10855.00 | 10855.00 | Inclination (°): 51.870, Azimuth (°): 32.260, TVD (ft): 10704.65, Dogleg (°/100 ft): 8.06, Sensor Depth (ft): 10802.00, Bit To Sensor (ft): 53.00                                             |
| Rotary Drill | 1  | 12-23 | 11:00 | 11:10 | 12-23 | 10855.00 | 10885.00 | Pressure On (psi): 1900.00, Pressure Off (psi): 1400.00, Weight On Bit (klbs): 40.00, Surface RPM: 20, Surface Torque (ft lbf): 19000.00, Flow Rate (gpm): 550.00, Strokes Per Minute: 142.00 |
| Slide Drill  | 2  | 12-23 | 11:10 | 11:50 | 12-23 | 10885.00 | 10945.00 | Pressure On (psi): 1650.00, Pressure Off (psi): 1350.00, Weight On Bit (klbs): 20.00, Flow Rate (gpm): 550.00, Strokes Per Minute: 142, Toolface: 340, Toolface Type: gravity                 |
| Survey       | 46 | 12-23 | 11:50 | 12:00 | 12-23 | 10945.00 | 10945.00 | Inclination (°): 57.670, Azimuth (°): 32.860, TVD (ft): 10756.55, Dogleg (°/100 ft): 6.47, Sensor Depth (ft): 10892.00, Bit To Sensor (ft): 53.00                                             |
| Rotary Drill | 1  | 12-23 | 12:00 | 12:10 | 12-23 | 10945.00 | 10965.00 | Pressure On (psi): 1900.00, Pressure Off (psi): 1400.00, Weight On Bit (klbs): 40.00, Surface RPM: 20, Surface Torque (ft lbf): 19000.00, Flow Rate (gpm): 550.00, Strokes Per Minute: 142.00 |
| Slide Drill  | 2  | 12-23 | 12:10 | 13:15 | 12-23 | 10965.00 | 11034.00 | Pressure On (psi): 1650.00, Pressure Off (psi): 1350.00, Weight On Bit (klbs): 20.00, Flow Rate (gpm): 550.00, Strokes Per Minute: 142, Toolface: 320, Toolface Type: gravity                 |
| Survey       | 46 | 12-23 | 13:15 | 13:25 | 12-23 | 11034.00 | 11034.00 | Inclination (°): 65.050, Azimuth (°): 30.130, TVD (ft): 10799.18, Dogleg (°/100 ft): 8.72, Sensor Depth (ft): 10981.00, Bit To Sensor (ft): 53.00                                             |
| Rotary Drill | 1  | 12-23 | 13:25 | 13:30 | 12-23 | 11034.00 | 11059.00 | Pressure On (psi): 1900.00, Pressure Off (psi): 1400.00, Weight On Bit (klbs): 40.00, Surface RPM: 20, Surface Torque (ft lbf): 19000.00, Flow Rate (gpm): 550.00, Strokes Per Minute: 142.00 |
| Slide Drill  | 2  | 12-23 | 13:30 | 13:50 | 12-23 | 11059.00 | 11082.00 | Pressure On (psi): 1650.00, Pressure Off (psi): 1350.00, Weight On Bit (klbs): 20.00, Flow Rate (gpm): 550.00, Strokes Per Minute: 142, Toolface: 310, Toolface Type: gravity                 |
| Other        | 16 | 12-23 | 13:50 | 14:35 | 12-23 |          |          | DOWNLINK                                                                                                                                                                                      |
| Slide Drill  | 2  | 12-23 | 14:35 | 15:10 | 12-23 | 11082.00 | 11124.00 | Pressure On (psi): 1650.00, Pressure Off (psi): 1350.00, Weight On Bit (klbs): 20.00, Flow Rate (gpm): 550.00, Strokes Per Minute: 142, Toolface: 300, Toolface Type: gravity                 |

|                  |    |       |       |       |       |          |          |                                                                                                                                                                                               |
|------------------|----|-------|-------|-------|-------|----------|----------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Survey           | 46 | 12-23 | 15:10 | 15:20 | 12-23 | 11124.00 | 11124.00 | Inclination (°): 70.590, Azimuth (°): 25.560, TVD (ft): 10833.16, Dogleg (°/100 ft): 7.74, Sensor Depth (ft): 11071.00, Bit To Sensor (ft): 53.00                                             |
| Rotary Drill     | 1  | 12-23 | 15:20 | 15:35 | 12-23 | 11124.00 | 11144.00 | Pressure On (psi): 1900.00, Pressure Off (psi): 1400.00, Weight On Bit (klbs): 40.00, Surface RPM: 20, Surface Torque (ft lbf): 19000.00, Flow Rate (gpm): 550.00, Strokes Per Minute: 142.00 |
| Slide Drill      | 2  | 12-23 | 15:35 | 16:25 | 12-23 | 11144.00 | 11213.00 | Pressure On (psi): 1650.00, Pressure Off (psi): 1350.00, Weight On Bit (klbs): 20.00, Flow Rate (gpm): 550.00, Strokes Per Minute: 142, Toolface: 300, Toolface Type: gravity                 |
| Survey           | 46 | 12-23 | 16:25 | 16:40 | 12-23 | 11213.00 | 11213.00 | Inclination (°): 74.550, Azimuth (°): 20.470, TVD (ft): 10859.83, Dogleg (°/100 ft): 7.04, Sensor Depth (ft): 11160.00, Bit To Sensor (ft): 53.00                                             |
| Slide Drill      | 2  | 12-23 | 16:40 | 17:15 | 12-23 | 11213.00 | 11258.00 | Pressure On (psi): 1650.00, Pressure Off (psi): 1350.00, Weight On Bit (klbs): 20.00, Flow Rate (gpm): 550.00, Strokes Per Minute: 142, Toolface: 315, Toolface Type: gravity                 |
| Survey           | 46 | 12-23 | 17:15 | 17:30 | 12-23 | 11258.00 | 11258.00 | Inclination (°): 77.450, Azimuth (°): 16.690, TVD (ft): 10870.72, Dogleg (°/100 ft): 10.39, Sensor Depth (ft): 11205.00, Bit To Sensor (ft): 53.00                                            |
| Slide Drill      | 2  | 12-23 | 17:30 | 18:00 | 12-23 | 11258.00 | 11303.00 | Pressure On (psi): 1650.00, Pressure Off (psi): 1350.00, Weight On Bit (klbs): 20.00, Flow Rate (gpm): 550.00, Strokes Per Minute: 142, Toolface: 310, Toolface Type: gravity                 |
| Survey           | 46 | 12-23 | 18:00 | 18:10 | 12-23 | 11303.00 | 11303.00 | Inclination (°): 79.340, Azimuth (°): 13.520, TVD (ft): 10879.78, Dogleg (°/100 ft): 8.08, Sensor Depth (ft): 11250.00, Bit To Sensor (ft): 53.00                                             |
| Slide Drill      | 2  | 12-23 | 18:10 | 19:20 | 12-23 | 11303.00 | 11393.00 | Pressure On (psi): 1650.00, Pressure Off (psi): 1350.00, Weight On Bit (klbs): 40.00, Flow Rate (gpm): 550.00, Strokes Per Minute: 142, Toolface: 305, Toolface Type: gravity                 |
| Survey           | 46 | 12-23 | 19:20 | 19:30 | 12-23 | 11393.00 | 11393.00 | Inclination (°): 85.360, Azimuth (°): 9.570, TVD (ft): 10891.76, Dogleg (°/100 ft): 7.98, Sensor Depth (ft): 11340.00, Bit To Sensor (ft): 53.00                                              |
| Slide Drill      | 2  | 12-23 | 19:30 | 20:10 | 12-23 | 11393.00 | 11443.00 | Pressure On (psi): 1650.00, Pressure Off (psi): 1350.00, Weight On Bit (klbs): 40.00, Flow Rate (gpm): 550.00, Strokes Per Minute: 142, Toolface: 270, Toolface Type: gravity                 |
| Survey           | 46 | 12-23 | 20:10 | 20:20 | 12-23 | 11443.00 | 11443.00 | Inclination (°): 88.000, Azimuth (°): 4.380, TVD (ft): 10894.65, Dogleg (°/100 ft): 11.63, Sensor Depth (ft): 11390.00, Bit To Sensor (ft): 53.00                                             |
| Rotary Drill     | 1  | 12-23 | 20:20 | 20:35 | 12-23 | 11443.00 | 11482.00 | Pressure On (psi): 1900.00, Pressure Off (psi): 1400.00, Weight On Bit (klbs): 40.00, Surface RPM: 20, Surface Torque (ft lbf): 19000.00, Flow Rate (gpm): 550.00, Strokes Per Minute: 142.00 |
| Survey           | 46 | 12-23 | 20:35 | 20:45 | 12-23 | 11482.00 | 11482.00 | Inclination (°): 88.880, Azimuth (°): 0.690, TVD (ft): 10895.72, Dogleg (°/100 ft): 9.72, Sensor Depth (ft): 11429.00, Bit To Sensor (ft): 53.00                                              |
| Rotary Drill     | 1  | 12-23 | 20:45 | 21:30 | 12-23 | 11482.00 | 11572.00 | Pressure On (psi): 1900.00, Pressure Off (psi): 1400.00, Weight On Bit (klbs): 40.00, Surface RPM: 20, Surface Torque (ft lbf): 19000.00, Flow Rate (gpm): 550.00, Strokes Per Minute: 142.00 |
| Survey           | 46 | 12-23 | 21:30 | 21:40 | 12-23 | 11572.00 | 11572.00 | Inclination (°): 91.430, Azimuth (°): 358.580, TVD (ft): 10895.47, Dogleg (°/100 ft): 3.68, Sensor Depth (ft): 11519.00, Bit To Sensor (ft): 53.00                                            |
| Circulating Pooh | 3  | 12-23 | 21:40 | 22:30 | 12-23 |          |          | Circulate to Pooh after landing Curve                                                                                                                                                         |
|                  | 7  | 12-23 | 22:30 | 03:45 | 12-24 |          |          | POOH to C/O BHA and skid to the 558H                                                                                                                                                          |

**MWD Activities**

No Activities



|                                 |                                                     |                                                       |
|---------------------------------|-----------------------------------------------------|-------------------------------------------------------|
| <b>Job Number</b><br>WT-20-071  | <b>Operator</b><br>Advance Energy Partners          | <b>Rig Name</b><br>Pioneer #80                        |
| <b>Start Date</b><br>2020-12-04 | <b>Well Name</b><br>Anderson Fed Com 504H           | <b>Legal Well Name   AFE</b><br>Anderson Fed Com 504H |
| <b>Play</b><br>Delaware Basin   | <b>State/Province and Country</b><br>New Mexico, US | <b>County</b><br>Lea                                  |
| <b>Company Man</b>              |                                                     |                                                       |

Thursday, Dec 24 00:00 - 23:59 (Day 11 of 19) Billing: N/A (\$130,925.38 total)

| Drilling Summary        |                     |      | Drilling Parameters       |                 |
|-------------------------|---------------------|------|---------------------------|-----------------|
| Start Depth (ft)        | Downhole Hours      | 4.25 | Rotating WOB (klbs)       |                 |
| Bit Depth (ft)          | Drilling Hours      | 0.00 | Sliding WOB (klbs)        |                 |
| Bottom Hole Depth (ft)  | Hours Circulating   | 0.00 | Rotating SPM              |                 |
| Total Distance (ft)     | Hours Sliding       | 0.00 | Sliding SPM               |                 |
| Distance Rotated (ft)   | Hours Rotating      | 0.00 | Motor RPM                 | 168.00 - 168.00 |
| Distance Slid (ft)      |                     |      | Surface RPM               |                 |
| Inclination In          |                     |      | Flow Rate (gpm)           |                 |
| Inclination Out         |                     |      | On Bottom Pressure (psi)  |                 |
| Azimuth In              | % Hours Rotating    |      | Off Bottom Pressure (psi) |                 |
| Azimuth Out             | % Hours Sliding     |      |                           |                 |
| AVG Total ROP (ft/h)    | % Distance Sliding  |      |                           |                 |
| AVG Rotating ROP (ft/h) | % Distance Rotating |      |                           |                 |
| AVG Sliding ROP (ft/h)  |                     |      |                           |                 |

Personnel

| Name                | Position            |
|---------------------|---------------------|
| Robert Olivarez     | MWD Engineer        |
| Carlos Jensen       | MWD Engineer        |
| Kyle Kusak          | MWD Engineer        |
| Advance Directional | Directional Driller |

BHA #5 - 8.75" CURVE Date In: Dec 22, 2020, 18:30 Date Out: Dec 24, 2020, 4:15

| Bit Details                |          | Motor Details                                    |          | Directional Comments                                                         |
|----------------------------|----------|--------------------------------------------------|----------|------------------------------------------------------------------------------|
| OD (in)                    | 8.750    | Size (in)                                        | 7.0      | Flow Rate: 300-600, Max Diff: 1130 psi, Max Torque: 10,460 ft-lbs, BIT Runs: |
| Vendor                     | SECURITY | Lobe/Stage                                       | 7/8, 5.0 |                                                                              |
| S/N                        | 13521069 | Bend Angle                                       | 2.12     |                                                                              |
| Nozzles                    | 6-15's   | Speed (rev/gal)                                  | 0.26     | MWD Comments                                                                 |
| Total Flow Area (in²)      | 1.035    | Wear Pad OD (in)                                 | 7.000    | POOH Reason<br>Total Depth/Casing Point: Pooh after landing curve            |
| Drilling Hours for Day     | 0.00     | Bit Distances                                    |          |                                                                              |
| Total Drilled for Day (ft) |          | Bend: 4.03 ft, Gamma: 38.00 ft, Survey: 53.00 ft |          |                                                                              |
| Drilling Hours for BHA     | 17.17    |                                                  |          |                                                                              |
| Total Drilled for BHA (ft) | 1312.00  |                                                  |          |                                                                              |

Directional Items

| Description                                                                                                                                          | Vendor        | SN#          | Top Conn       | Btm Conn       | ID (in) | OD (in) | Fn Len. (ft) | Len (ft) | Aggr. Len (ft) |
|------------------------------------------------------------------------------------------------------------------------------------------------------|---------------|--------------|----------------|----------------|---------|---------|--------------|----------|----------------|
| <b>Bit (Fixed Cutter)</b><br>Description: GTD64D, Gauge Length (in): 4.00, Size (in): 8.75, Type: PDC (Polycrystalline Diamond Compacts)             | SECURITY      | 13521069     | 4 1/2" Reg Pin |                |         | 8.750   |              | 1.00     | 1.00           |
| <b>Mud Motor</b><br>Description: 7" 7/8 5.0 FXD 2.12° SLICK, Size (in): 7.00, Bend Angle (°): 2.12, Rotor Lobe: 7, Stator Lobe: 8, Stator Stage: 5.0 | AIM           | CDM650-019   | 4 1/2" IF Box  | 4 1/2" Reg Box |         | 7.000   |              | 26.08    | 27.08          |
| <b>UBHO Sub</b><br>Description: NM DAO UBHO, Material: Non-Magnetic                                                                                  | AIM           | 67502NM      | 4 1/2" IF Box  | 4 1/2" IF Pin  | 3.250   | 6.780   |              | 5.00     | 32.08          |
| <b>Drill Collar</b><br>Description: MWD NMDC, Material: Non-Magnetic, Type: Slick Drill                                                              | AIM           | GT 67-30-315 | 4 1/2" IF Box  | 4 1/2" IF Pin  | 3.250   | 6.870   |              | 30.93    | 63.01          |
| <b>Drill Collar</b><br>Description: NMDC, Material: Non-Magnetic, Type: Slick Drill                                                                  | AIM           | GT 67-30-193 | 4 1/2" IF Box  | 4 1/2" IF Pin  | 3.250   | 6.850   |              | 29.70    | 92.71          |
| <b>Crossover Sub</b><br>Description: X-O SUB, Material: Steel                                                                                        | BLACK DIAMOND | BD11664      | EverDrlg54 Box | 4 1/2" IF Pin  | 3.000   | 6.700   |              | 3.52     | 96.23          |

MWD Items

No Items

Directional Activities

| Activity Type | Code | Start Date | Start Time | End Time | End Date | Start (ft) | End (ft) | Comments/Details                               |
|---------------|------|------------|------------|----------|----------|------------|----------|------------------------------------------------|
| Pooh          | 7    | 12-23      | 22:30      | 03:45    | 12-24    |            |          | POOH to C/O BHA and skid to the 558H           |
| Lay Down BHA  | 65   | 12-24      | 03:45      | 04:15    | 12-24    |            |          | Pulled MWD tool, broke bit off and Racked back |
| Standby       | 15   | 12-24      | 04:15      | 09:00    | 12-24    |            |          | Standby - RIG DOWN AND WALK RIG TO 558H        |

MWD Activities

No Activities



|                                 |                                                     |                                                       |
|---------------------------------|-----------------------------------------------------|-------------------------------------------------------|
| <b>Job Number</b><br>WT-20-071  | <b>Operator</b><br>Advance Energy Partners          | <b>Rig Name</b><br>Pioneer #80                        |
| <b>Start Date</b><br>2020-12-04 | <b>Well Name</b><br>Anderson Fed Com 504H           | <b>Legal Well Name   AFE</b><br>Anderson Fed Com 504H |
| <b>Play</b><br>Delaware Basin   | <b>State/Province and Country</b><br>New Mexico, US | <b>County</b><br>Lea                                  |
| <b>Company Man</b>              |                                                     |                                                       |

Monday, Jan 11 00:00 - 23:59 (Day 12 of 19)

Billing: \$3,700.00 (\$130,925.38 total)

| Drilling Summary        |      |  | Drilling Parameters |      |                           |
|-------------------------|------|--|---------------------|------|---------------------------|
| Start Depth (ft)        |      |  | Downhole Hours      | 0.00 | Rotating WOB (klbs)       |
| Bit Depth (ft)          |      |  | Drilling Hours      |      | Sliding WOB (klbs)        |
| Bottom Hole Depth (ft)  |      |  | Hours Circulating   |      | Rotating SPM              |
| Total Distance (ft)     |      |  | Hours Sliding       |      | Sliding SPM               |
| Distance Rotated (ft)   |      |  | Hours Rotating      |      | Motor RPM                 |
| Distance Slid (ft)      |      |  |                     |      | Surface RPM               |
| Inclination In          |      |  |                     |      | Flow Rate (gpm)           |
| Inclination Out         |      |  |                     |      | On Bottom Pressure (psi)  |
| Azimuth In              |      |  | % Hours Rotating    |      | Off Bottom Pressure (psi) |
| Azimuth Out             |      |  | % Hours Sliding     |      |                           |
| AVG Total ROP (ft/h)    | 0.00 |  | % Distance Sliding  |      |                           |
| AVG Rotating ROP (ft/h) | 0.00 |  | % Distance Rotating |      |                           |
| AVG Sliding ROP (ft/h)  | 0.00 |  |                     |      |                           |

**Personnel**

| Name                | Position            |
|---------------------|---------------------|
| Robert Olivarez     | MWD Engineer        |
| Carlos Jensen       | MWD Engineer        |
| Kyle Kusak          | MWD Engineer        |
| Advance Directional | Directional Driller |

**No BHAs****Directional Activities**

| Activity Type | Code | Start Date | Start Time | End Time | End Date | Start (ft) | End (ft) | Comments/Details                                              |
|---------------|------|------------|------------|----------|----------|------------|----------|---------------------------------------------------------------|
| Standby       | 15   | 01-11      | 22:00      | 01:30    | 01-12    |            |          | Standby N/D BOPs, Skid to 504H, N/U Test & Continue to RIg Up |

**MWD Activities**

No Activities



|                                 |                                                     |                                                       |
|---------------------------------|-----------------------------------------------------|-------------------------------------------------------|
| <b>Job Number</b><br>WT-20-071  | <b>Operator</b><br>Advance Energy Partners          | <b>Rig Name</b><br>Pioneer #80                        |
| <b>Start Date</b><br>2020-12-04 | <b>Well Name</b><br>Anderson Fed Com 504H           | <b>Legal Well Name   AFE</b><br>Anderson Fed Com 504H |
| <b>Play</b><br>Delaware Basin   | <b>State/Province and Country</b><br>New Mexico, US | <b>County</b><br>Lea                                  |
|                                 |                                                     | <b>Company Man</b>                                    |

Tuesday, Jan 12 00:00 - 23:59 (Day 13 of 19)

Billing: \$17,500.00 (\$130,925.38 total)

| Drilling Summary               |          |                            |       | Drilling Parameters              |                   |
|--------------------------------|----------|----------------------------|-------|----------------------------------|-------------------|
| <b>Start Depth (ft)</b>        | 11572.00 | <b>Downhole Hours</b>      | 12.50 | <b>Rotating WOB (klbs)</b>       | 42.00 - 42.00     |
| <b>Bit Depth (ft)</b>          | 11702.00 | <b>Drilling Hours</b>      | 1.25  | <b>Sliding WOB (klbs)</b>        | 40.00 - 40.00     |
| <b>Bottom Hole Depth (ft)</b>  | 11702.00 | <b>Hours Circulating</b>   | 4.67  | <b>Rotating SPM</b>              | 164.00 - 164.00   |
| <b>Total Distance (ft)</b>     | 130.00   | <b>Hours Sliding</b>       | 0.83  | <b>Sliding SPM</b>               | 164.00 - 164.00   |
| <b>Distance Rotated (ft)</b>   | 85.00    | <b>Hours Rotating</b>      | 0.42  | <b>Motor RPM</b>                 | 0.00 - 0.00       |
| <b>Distance Slid (ft)</b>      | 45.00    |                            |       | <b>Surface RPM</b>               | 40.00 - 40.00     |
| <b>Inclination In</b>          | 92.57    |                            |       | <b>Flow Rate (gpm)</b>           | 630.00 - 630.00   |
| <b>Inclination Out</b>         | 90.42    |                            |       | <b>On Bottom Pressure (psi)</b>  | 3500.00 - 3800.00 |
| <b>Azimuth In</b>              | 358.67   | <b>% Hours Rotating</b>    | 33%   | <b>Off Bottom Pressure (psi)</b> | 3000.00 - 3000.00 |
| <b>Azimuth Out</b>             | 358.85   | <b>% Hours Sliding</b>     | 67%   |                                  |                   |
| <b>AVG Total ROP (ft/h)</b>    | 104.00   | <b>% Distance Sliding</b>  | 35%   |                                  |                   |
| <b>AVG Rotating ROP (ft/h)</b> | 204.00   | <b>% Distance Rotating</b> | 65%   |                                  |                   |
| <b>AVG Sliding ROP (ft/h)</b>  | 54.00    |                            |       |                                  |                   |

**Personnel**

| Name                | Position            |
|---------------------|---------------------|
| Robert Olivarez     | MWD Engineer        |
| Carlos Jensen       | MWD Engineer        |
| Kyle Kusak          | MWD Engineer        |
| Advance Directional | Directional Driller |

**BHA #6 - 8.50" LATERAL w/ Agitator**

Date In: Jan 12, 2021, 11:30 Date Out: Jan 14, 2021, 14:30

| Bit Details                |         | Motor Details                     |          | Directional Comments                                                           |  |
|----------------------------|---------|-----------------------------------|----------|--------------------------------------------------------------------------------|--|
| OD (in)                    | 8.500   | Size (in)                         | 7.0      | Flow Rate: 500-750, Max Diff: 1980 psi, Max Torque: 16,550 ft-lbs, BIT Runs: 2 |  |
| Vendor                     | REED    | Lobe/Stage                        | 6/7, 8.4 |                                                                                |  |
| S/N                        | A265535 | Bend Angle                        | 1.75     |                                                                                |  |
| Nozzles                    | 6x16's  | Speed (rev/gal)                   | 0.26     | MWD Comments                                                                   |  |
| Total Flow Area (in²)      | 1.170   | Wear Pad OD (in)                  | 7.250    | POOH Reason<br>Downhole Motor Incident: POOH due to loss of ROP.               |  |
| Drilling Hours for Day     | 1.25    | Bit Distances                     |          |                                                                                |  |
| Total Drilled for Day (ft) | 130.00  | Gamma: 48.00 ft, Survey: 62.00 ft |          |                                                                                |  |
| Drilling Hours for BHA     | 28.50   |                                   |          |                                                                                |  |
| Total Drilled for BHA (ft) | 2763.00 |                                   |          |                                                                                |  |

**Directional Items**

| Description                                                                                                                                                       | Vendor        | SN#          | Top Conn       | Btm Conn       | ID (in) | OD (in) | Fn Len. (ft) | Len (ft) | Aggr. Len (ft) |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------|--------------|----------------|----------------|---------|---------|--------------|----------|----------------|
| <b>Bit (Fixed Cutter)</b><br>Description: <i>TKC66</i> , Gauge Length (in): 4.00, Size (in): 8.50, Type: <i>PDC (Polycrystalline Diamond Compacts)</i>            | REED          | A265535      | 4 1/2" Reg Pin |                |         | 8.500   |              | 1.00     | 1.00           |
| <b>Mud Motor</b><br>Description: <i>6/7 8.5 FXD 1.75° w/ True Slick</i> , Size (in): 7.00, Bend Angle (°): 1.75, Rotor Lobe: 6, Stator Lobe: 7, Stator Stage: 8.4 | AIM           | 700-40-006   | 4 1/2" IF Box  | 4 1/2" IF Pin  |         | 7.000   |              | 35.67    | 36.67          |
| <b>UBHO Sub</b><br>Description: <i>NM DAO UBHO</i> , Material: <i>Non-Magnetic</i>                                                                                | AIM           | 67502NM      | 4 1/2" IF Box  | 4 1/2" IF Pin  | 3.250   | 6.780   |              | 5.00     | 41.67          |
| <b>Drill Collar</b><br>Description: <i>MWD NMDC</i> , Material: <i>Non-Magnetic</i> , Type: <i>Slick Drill</i>                                                    | AIM           | GT 67-30-315 | 4 1/2" IF Box  | 4 1/2" IF Pin  | 3.250   | 6.870   |              | 30.93    | 72.60          |
| <b>Drill Collar</b><br>Description: <i>NMDC</i> , Material: <i>Non-Magnetic</i> , Type: <i>Slick Drill</i>                                                        | AIM           | GT 67-30-193 | 4 1/2" IF Box  | 4 1/2" IF Pin  | 3.250   | 6.850   |              | 29.70    | 102.30         |
| <b>Crossover Sub</b><br>Description: <i>X-O SUB</i> , Material: <i>Steel</i>                                                                                      | BLACK DIAMOND | BD11664      | EverDrlg54 Box | 4 1/2" IF Pin  | 3.000   | 6.700   |              | 3.52     | 105.82         |
| <b>Drill Pipe</b><br>Description: <i>28 Stands 5.5" Drill Pipe</i> , Type: <i>Slick</i>                                                                           | BLACK DIAMOND |              | EverDrlg54 Box | EverDrlg54 Pin | 3.000   | 5.500   |              | 2509.00  | 2614.82        |
| <b>Crossover Sub</b><br>Description: <i>X-O SUB</i> , Material: <i>Steel</i>                                                                                      | BLACK DIAMOND | BD13749      | 4 1/2" IF Box  | EverDrlg54 Pin | 3.000   | 6.740   |              | 3.57     | 2618.39        |
| <b>Agitator</b><br>Description: <i>AGITATOR</i> , Size (in): 6.75                                                                                                 | NOV           | 701-800      | 4 1/2" IF Box  | 4 1/2" IF Pin  |         | 6.750   |              | 25.19    | 2643.58        |
| <b>Crossover Sub</b><br>Description: <i>X-O SUB</i> , Material: <i>Steel</i>                                                                                      | BLACK DIAMOND | BD18869      | EverDrlg54 Box | 4 1/2" IF Pin  | 3.000   | 6.730   |              | 1.88     | 2645.46        |

**MWD Items**

No items

**Directional Activities**

| Activity Type | Code | Start Date | Start Time | End Time | End Date | Start (ft) | End (ft) | Comments/Details                                                                                                                                                                              |
|---------------|------|------------|------------|----------|----------|------------|----------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Standby       | 15   | 01-11      | 22:00      | 01:30    | 01-12    |            |          | Standby N/D BOPs, Skid to 504H, N/U Test & Continue to Rig Up                                                                                                                                 |
| Troubleshoot  | 34   | 01-12      | 01:30      | 04:30    | 01-12    |            |          | Troubleshoot NOV RSS Skid Unit                                                                                                                                                                |
| Pick Up BHA   | 64   | 01-12      | 04:30      | 06:15    | 01-12    |            |          | P/U RSS BHA                                                                                                                                                                                   |
| Troubleshoot  | 34   | 01-12      | 06:15      | 10:30    | 01-12    |            |          | Troubleshoot RSS. L/D Same                                                                                                                                                                    |
| Pick Up BHA   | 64   | 01-12      | 10:30      | 11:30    | 01-12    |            |          | P/U BHA 6. Conventional Assembly                                                                                                                                                              |
| TIH           | 8    | 01-12      | 11:30      | 12:25    | 01-12    |            |          | TIH W/ BHA #6                                                                                                                                                                                 |
| Other         | 16   | 01-12      | 12:25      | 13:10    | 01-12    |            |          | P/U Agitator. Test Same                                                                                                                                                                       |
| TIH           | 8    | 01-12      | 13:10      | 16:15    | 01-12    |            |          | TIH W/ BHA #6                                                                                                                                                                                 |
| Circulating   | 3    | 01-12      | 16:15      | 18:35    | 01-12    |            |          | Wash & Ream                                                                                                                                                                                   |
| TIH           | 8    | 01-12      | 18:35      | 20:15    | 01-12    |            |          | TIH W/ BHA #6                                                                                                                                                                                 |
| Circulating   | 3    | 01-12      | 20:15      | 21:35    | 01-12    |            |          | Displace OBM                                                                                                                                                                                  |
| Circulating   | 3    | 01-12      | 21:35      | 22:15    | 01-12    |            |          | Relog 50' Gamma                                                                                                                                                                               |
| Rotary Drill  | 1    | 01-12      | 22:15      | 22:25    | 01-12    | 11572.00   | 11612.00 | Pressure On (psi): 3800.00, Pressure Off (psi): 3000.00, Weight On Bit (klbs): 42.00, Surface RPM: 40, Surface Torque (ft lbf): 23000.00, Flow Rate (gpm): 630.00, Strokes Per Minute: 164.00 |
| Survey        | 46   | 01-12      | 22:25      | 22:30    | 01-12    | 11612.00   | 11612.00 | Inclination (°): 92.570, Azimuth (°): 358.670, TVD (ft): 10894.39, Dogleg (°/100 ft): 3.69, Sensor Depth (ft): 11550.00, Bit To Sensor (ft): 62.00                                            |
| Slide Drill   | 2    | 01-12      | 22:30      | 23:20    | 01-12    | 11612.00   | 11657.00 | Pressure On (psi): 3500.00, Pressure Off (psi): 3000.00, Weight On Bit (klbs): 40.00, Flow Rate (gpm): 630.00, Strokes Per Minute: 164, Toolface: 170, Toolface Type: gravity                 |
| Rotary Drill  | 1    | 01-12      | 23:20      | 23:35    | 01-12    | 11657.00   | 11702.00 | Pressure On (psi): 3800.00, Pressure Off (psi): 3000.00, Weight On Bit (klbs): 42.00, Surface RPM: 40, Surface Torque (ft lbf): 23000.00, Flow Rate (gpm): 630.00, Strokes Per Minute: 164.00 |
| Survey        | 46   | 01-12      | 23:35      | 23:40    | 01-12    | 11702.00   | 11702.00 | Inclination (°): 90.420, Azimuth (°): 358.850, TVD (ft): 10892.04, Dogleg (°/100 ft): 2.40, Sensor Depth (ft): 11640.00, Bit To Sensor (ft): 62.00                                            |
| Circulating   | 3    | 01-12      | 23:40      | 00:00    | 01-13    |            |          | Circulate Monitor Losses                                                                                                                                                                      |

**MWD Activities**

No Activities



|                                 |                                                     |                                                       |
|---------------------------------|-----------------------------------------------------|-------------------------------------------------------|
| <b>Job Number</b><br>WT-20-071  | <b>Operator</b><br>Advance Energy Partners          | <b>Rig Name</b><br>Pioneer #80                        |
| <b>Start Date</b><br>2020-12-04 | <b>Well Name</b><br>Anderson Fed Com 504H           | <b>Legal Well Name   AFE</b><br>Anderson Fed Com 504H |
| <b>Play</b><br>Delaware Basin   | <b>State/Province and Country</b><br>New Mexico, US | <b>County</b><br>Lea                                  |
|                                 |                                                     | <b>Company Man</b>                                    |

Wednesday, Jan 13 00:00 - 23:59 (Day 14 of 19)

Billing: \$5,800.00 (\$130,925.38 total)

| Drilling Summary               |          |                            |       | Drilling Parameters              |                   |
|--------------------------------|----------|----------------------------|-------|----------------------------------|-------------------|
| <b>Start Depth (ft)</b>        | 11702.00 | <b>Downhole Hours</b>      | 24.00 | <b>Rotating WOB (klbs)</b>       | 42.00 - 50.00     |
| <b>Bit Depth (ft)</b>          | 13762.00 | <b>Drilling Hours</b>      | 21.08 | <b>Sliding WOB (klbs)</b>        | 40.00 - 40.00     |
| <b>Bottom Hole Depth (ft)</b>  | 13762.00 | <b>Hours Circulating</b>   | 0.00  | <b>Rotating SPM</b>              | 144.00 - 144.00   |
| <b>Total Distance (ft)</b>     | 2060.00  | <b>Hours Sliding</b>       | 10.25 | <b>Sliding SPM</b>               | 144.00 - 144.00   |
| <b>Distance Rotated (ft)</b>   | 1569.00  | <b>Hours Rotating</b>      | 10.83 | <b>Motor RPM</b>                 | 0.00 - 0.00       |
| <b>Distance Slid (ft)</b>      | 491.00   |                            |       | <b>Surface RPM</b>               | 50.00 - 60.00     |
| <b>Inclination In</b>          | 86.29    |                            |       | <b>Flow Rate (gpm)</b>           | 550.00 - 550.00   |
| <b>Inclination Out</b>         | 91.43    |                            |       | <b>On Bottom Pressure (psi)</b>  | 2850.00 - 3450.00 |
| <b>Azimuth In</b>              | 359.28   | <b>% Hours Rotating</b>    | 51%   | <b>Off Bottom Pressure (psi)</b> | 2450.00 - 2605.00 |
| <b>Azimuth Out</b>             | 358.58   | <b>% Hours Sliding</b>     | 49%   |                                  |                   |
| <b>AVG Total ROP (ft/h)</b>    | 98.10    | <b>% Distance Sliding</b>  | 24%   |                                  |                   |
| <b>AVG Rotating ROP (ft/h)</b> | 142.20   | <b>% Distance Rotating</b> | 76%   |                                  |                   |
| <b>AVG Sliding ROP (ft/h)</b>  | 47.90    |                            |       |                                  |                   |

**Personnel**

| Name                | Position            |
|---------------------|---------------------|
| Robert Olivarez     | MWD Engineer        |
| Carlos Jensen       | MWD Engineer        |
| Kyle Kusak          | MWD Engineer        |
| Advance Directional | Directional Driller |

**BHA #6 - 8.50" LATERAL w/ Agitator**

Date In: Jan 12, 2021, 11:30 Date Out: Jan 14, 2021, 14:30

| Bit Details                       |         | Motor Details                   |          | Directional Comments                                                           |
|-----------------------------------|---------|---------------------------------|----------|--------------------------------------------------------------------------------|
| <b>OD (in)</b>                    | 8.500   | <b>Size (in)</b>                | 7.0      | Flow Rate: 500-750, Max Diff: 1980 psi, Max Torque: 16,550 ft-lbs, BIT Runs: 2 |
| <b>Vendor</b>                     | REED    | <b>Lobe/Stage</b>               | 6/7, 8.4 |                                                                                |
| <b>S/N</b>                        | A265535 | <b>Bend Angle</b>               | 1.75     |                                                                                |
| <b>Nozzles</b>                    | 6x16's  | <b>Speed (rev/gal)</b>          | 0.26     | <b>MWD Comments</b>                                                            |
| <b>Total Flow Area (in²)</b>      | 1.170   | <b>Wear Pad OD (in)</b>         | 7.250    |                                                                                |
| <b>Drilling Hours for Day</b>     | 21.08   | <b>Bit Distances</b>            |          |                                                                                |
| <b>Total Drilled for Day (ft)</b> | 2060.00 | <b>Gamma: 48.00 ft, Survey:</b> |          | <b>POOH Reason</b><br><b>Downhole Motor Incident:</b> POOH due to loss of ROP. |
| <b>Drilling Hours for BHA</b>     | 28.50   | 62.00 ft                        |          |                                                                                |
| <b>Total Drilled for BHA (ft)</b> | 2763.00 |                                 |          |                                                                                |

**Directional Items**

| Description                                                                                                                                                       | Vendor        | SN#          | Top Conn       | Btm Conn       | ID (in) | OD (in) | Fn Len. (ft) | Len (ft) | Aggr. Len (ft) |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------|--------------|----------------|----------------|---------|---------|--------------|----------|----------------|
| <b>Bit (Fixed Cutter)</b><br>Description: <i>TKC66</i> , Gauge Length (in): 4.00, Size (in): 8.50, Type: <i>PDC (Polycrystalline Diamond Compacts)</i>            | REED          | A265535      | 4 1/2" Reg Pin |                |         | 8.500   |              | 1.00     | 1.00           |
| <b>Mud Motor</b><br>Description: <i>6/7 8.5 FXD 1.75° w/ True Slick</i> , Size (in): 7.00, Bend Angle (°): 1.75, Rotor Lobe: 6, Stator Lobe: 7, Stator Stage: 8.4 | AIM           | 700-40-006   | 4 1/2" IF Box  | 4 1/2" IF Pin  |         | 7.000   |              | 35.67    | 36.67          |
| <b>UBHO Sub</b><br>Description: <i>NM DAO UBHO</i> , Material: <i>Non-Magnetic</i>                                                                                | AIM           | 67502NM      | 4 1/2" IF Box  | 4 1/2" IF Pin  | 3.250   | 6.780   |              | 5.00     | 41.67          |
| <b>Drill Collar</b><br>Description: <i>MWD NMDC</i> , Material: <i>Non-Magnetic</i> , Type: <i>Slick Drill</i>                                                    | AIM           | GT 67-30-315 | 4 1/2" IF Box  | 4 1/2" IF Pin  | 3.250   | 6.870   |              | 30.93    | 72.60          |
| <b>Drill Collar</b><br>Description: <i>NMDC</i> , Material: <i>Non-Magnetic</i> , Type: <i>Slick Drill</i>                                                        | AIM           | GT 67-30-193 | 4 1/2" IF Box  | 4 1/2" IF Pin  | 3.250   | 6.850   |              | 29.70    | 102.30         |
| <b>Crossover Sub</b><br>Description: <i>X-O SUB</i> , Material: <i>Steel</i>                                                                                      | BLACK DIAMOND | BD11664      | EverDrlg54 Box | 4 1/2" IF Pin  | 3.000   | 6.700   |              | 3.52     | 105.82         |
| <b>Drill Pipe</b><br>Description: <i>28 Stands 5.5" Drill Pipe</i> , Type: <i>Slick</i>                                                                           | BLACK DIAMOND |              | EverDrlg54 Box | EverDrlg54 Pin | 3.000   | 5.500   |              | 2509.00  | 2614.82        |
| <b>Crossover Sub</b><br>Description: <i>X-O SUB</i> , Material: <i>Steel</i>                                                                                      | BLACK DIAMOND | BD13749      | 4 1/2" IF Box  | EverDrlg54 Pin | 3.000   | 6.740   |              | 3.57     | 2618.39        |
| <b>Agitator</b><br>Description: <i>AGITATOR</i> , Size (in): 6.75                                                                                                 | NOV           | 701-800      | 4 1/2" IF Box  | 4 1/2" IF Pin  |         | 6.750   |              | 25.19    | 2643.58        |
| <b>Crossover Sub</b><br>Description: <i>X-O SUB</i> , Material: <i>Steel</i>                                                                                      | BLACK DIAMOND | BD18869      | EverDrlg54 Box | 4 1/2" IF Pin  | 3.000   | 6.730   |              | 1.88     | 2645.46        |

**MWD Items**

No items

**Directional Activities**

| Activity Type | Code | Start Date | Start Time | End Time | End Date | Start (ft) | End (ft) | Comments/Details                                                                                                                                                                              |
|---------------|------|------------|------------|----------|----------|------------|----------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Circulating   | 3    | 01-12      | 23:40      | 00:00    | 01-13    |            |          | Circulate Monitor Losses                                                                                                                                                                      |
| Slide Drill   | 2    | 01-13      | 00:00      | 00:55    | 01-13    | 11702.00   | 11742.00 | Pressure On (psi): 3000.00, Pressure Off (psi): 2450.00, Weight On Bit (klbs): 40.00, Flow Rate (gpm): 550.00, Strokes Per Minute: 144, Toolface: 165, Toolface Type: gravity                 |
| Rotary Drill  | 1    | 01-13      | 00:55      | 01:10    | 01-13    | 11742.00   | 11791.00 | Pressure On (psi): 3450.00, Pressure Off (psi): 2450.00, Weight On Bit (klbs): 42.00, Surface RPM: 60, Surface Torque (ft lbf): 25000.00, Flow Rate (gpm): 550.00, Strokes Per Minute: 144.00 |
| Survey        | 46   | 01-13      | 01:10      | 01:15    | 01-13    | 11791.00   | 11791.00 | Inclination (°): 86.290, Azimuth (°): 359.280, TVD (ft): 10894.60, Dogleg (°/100 ft): 4.62, Sensor Depth (ft): 11729.00, Bit To Sensor (ft): 62.00                                            |
| Slide Drill   | 2    | 01-13      | 01:15      | 01:55    | 01-13    | 11791.00   | 11831.00 | Pressure On (psi): 3000.00, Pressure Off (psi): 2450.00, Weight On Bit (klbs): 40.00, Flow Rate (gpm): 550.00, Strokes Per Minute: 144, Toolface: 180, Toolface Type: gravity                 |
| Rotary Drill  | 1    | 01-13      | 01:55      | 02:15    | 01-13    | 11831.00   | 11880.00 | Pressure On (psi): 3450.00, Pressure Off (psi): 2450.00, Weight On Bit (klbs): 42.00, Surface RPM: 60, Surface Torque (ft lbf): 25000.00, Flow Rate (gpm): 550.00, Strokes Per Minute: 144.00 |
| Survey        | 46   | 01-13      | 02:15      | 02:20    | 01-13    | 11880.00   | 11880.00 | Inclination (°): 82.200, Azimuth (°): 358.850, TVD (ft): 10903.52, Dogleg (°/100 ft): 4.62, Sensor Depth (ft): 11818.00, Bit To Sensor (ft): 62.00                                            |
| Slide Drill   | 2    | 01-13      | 02:20      | 02:45    | 01-13    | 11880.00   | 11890.00 | Pressure On (psi): 3000.00, Pressure Off (psi): 2450.00, Weight On Bit (klbs): 40.00, Flow Rate (gpm): 550.00, Strokes Per Minute: 144, Toolface: 135, Toolface Type: gravity                 |
| Rotary Drill  | 1    | 01-13      | 02:45      | 03:50    | 01-13    | 11890.00   | 11970.00 | Pressure On (psi): 3450.00, Pressure Off (psi): 2450.00, Weight On Bit (klbs): 42.00, Surface RPM: 60, Surface Torque (ft lbf): 25000.00, Flow Rate (gpm): 550.00, Strokes Per Minute: 144.00 |
| Survey        | 46   | 01-13      | 03:50      | 03:55    | 01-13    | 11970.00   | 11970.00 | Inclination (°): 78.900, Azimuth (°): 359.460, TVD (ft): 10918.29, Dogleg (°/100 ft): 3.73, Sensor Depth (ft): 11908.00, Bit To Sensor (ft): 62.00                                            |
| Rotary Drill  | 1    | 01-13      | 03:55      | 04:05    | 01-13    | 11970.00   | 11987.00 | Pressure On (psi): 3450.00, Pressure Off (psi): 2450.00, Weight On Bit (klbs): 42.00, Surface RPM: 60, Surface Torque (ft lbf): 25000.00, Flow Rate (gpm): 550.00, Strokes Per Minute: 144.00 |
| Slide Drill   | 2    | 01-13      | 04:05      | 04:40    | 01-13    | 11987.00   | 12007.00 | Pressure On (psi): 3000.00, Pressure Off (psi): 2450.00, Weight On Bit (klbs): 40.00, Flow Rate (gpm): 550.00, Strokes Per Minute: 144, Toolface: 20, Toolface Type: gravity                  |
| Rotary Drill  | 1    | 01-13      | 04:40      | 05:05    | 01-13    | 12007.00   | 12060.00 | Pressure On (psi): 3450.00, Pressure Off (psi): 2450.00, Weight On Bit (klbs): 42.00, Surface RPM: 60, Surface Torque (ft lbf): 25000.00, Flow Rate (gpm): 550.00, Strokes Per Minute: 144.00 |
| Survey        | 46   | 01-13      | 05:05      | 05:10    | 01-13    | 12060.00   | 12060.00 | Inclination (°): 78.680, Azimuth (°): 359.020, TVD (ft): 10935.79, Dogleg (°/100 ft): 0.54, Sensor Depth (ft): 11998.00, Bit To Sensor (ft): 62.00                                            |
| Rotary Drill  | 1    | 01-13      | 05:10      | 05:15    | 01-13    | 12060.00   | 12070.00 | Pressure On (psi): 3450.00, Pressure Off (psi): 2450.00, Weight On Bit (klbs): 42.00, Surface RPM: 60, Surface Torque (ft lbf): 25000.00, Flow Rate (gpm): 550.00, Strokes Per Minute: 144.00 |
| Slide Drill   | 2    | 01-13      | 05:15      | 06:00    | 01-13    | 12070.00   | 12100.00 | Toolface: 20, Toolface Type: gravity                                                                                                                                                          |
| Rotary Drill  | 1    | 01-13      | 06:00      | 06:30    | 01-13    | 12100.00   | 12149.00 | Pressure On (psi): 3450.00, Pressure Off (psi): 2450.00, Weight On Bit (klbs): 42.00, Surface RPM: 60, Surface Torque (ft lbf): 25000.00, Flow Rate (gpm): 550.00, Strokes Per Minute: 144.00 |
| Survey        | 46   | 01-13      | 06:30      | 06:40    | 01-13    | 12149.00   | 12149.00 | Inclination (°): 78.770, Azimuth (°): 0.340, TVD (ft): 10953.19, Dogleg (°/100 ft): 1.46, Sensor Depth (ft): 12087.00, Bit To Sensor (ft): 62.00                                              |
| Slide Drill   | 2    | 01-13      | 06:40      | 08:05    | 01-13    | 12149.00   | 12200.00 | Pressure On (psi): 2850.00, Pressure Off (psi): 2605.00, Weight On Bit (klbs): 40.00, Flow Rate (gpm): 550.00, Strokes Per Minute: 144, Toolface: 20, Toolface Type: gravity                  |
| Rotary Drill  | 1    | 01-13      | 08:05      | 08:25    | 01-13    | 12200.00   | 12239.00 | Pressure On (psi): 3450.00, Pressure Off (psi): 2450.00, Weight On Bit (klbs): 42.00, Surface RPM: 60, Surface Torque (ft lbf): 25000.00, Flow Rate (gpm): 550.00, Strokes Per Minute: 144.00 |
| Survey        | 46   | 01-13      | 08:25      | 08:35    | 01-13    | 12239.00   | 12239.00 | Inclination (°): 81.450, Azimuth (°): 2.450, TVD (ft): 10968.65, Dogleg (°/100 ft): 3.77, Sensor Depth (ft): 12177.00, Bit To Sensor (ft): 62.00                                              |
| Slide Drill   | 2    | 01-13      | 08:35      | 09:25    | 01-13    | 12239.00   | 12280.00 | Pressure On (psi): 2850.00, Pressure Off (psi): 2605.00, Weight On Bit (klbs): 40.00, Flow Rate (gpm): 550.00, Strokes Per Minute: 144, Toolface: 0, Toolface Type: gravity                   |
| Rotary Drill  | 1    | 01-13      | 09:25      | 09:50    | 01-13    | 12280.00   | 12329.00 | Pressure On (psi): 3450.00, Pressure Off (psi): 2450.00, Weight On Bit (klbs): 42.00, Surface RPM: 60, Surface Torque (ft lbf): 25000.00, Flow Rate (gpm): 550.00, Strokes Per Minute: 144.00 |
| Survey        | 46   | 01-13      | 09:50      | 09:55    | 01-13    | 12329.00   | 12329.00 | Inclination (°): 85.490, Azimuth (°): 3.940, TVD (ft): 10978.88, Dogleg (°/100 ft): 4.78, Sensor Depth (ft): 12267.00, Bit To Sensor (ft): 62.00                                              |
| Rotary Drill  | 1    | 01-13      | 09:55      | 10:30    | 01-13    | 12329.00   | 12418.00 | Pressure On (psi): 3450.00, Pressure Off (psi): 2450.00, Weight On Bit (klbs): 42.00, Surface RPM: 60, Surface Torque (ft lbf): 25000.00, Flow Rate (gpm): 550.00, Strokes Per Minute: 144.00 |
| Survey        | 46   | 01-13      | 10:30      | 10:35    | 01-13    | 12418.00   | 12418.00 | Inclination (°): 85.930, Azimuth (°): 4.380, TVD (ft): 10985.54, Dogleg (°/100 ft): 0.70, Sensor Depth (ft): 12356.00, Bit To Sensor (ft): 62.00                                              |

|              |    |       |       |       |       |          |          |                                                                                                                                                                                               |
|--------------|----|-------|-------|-------|-------|----------|----------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Rotary Drill | 1  | 01-13 | 10:35 | 11:05 | 01-13 | 12418.00 | 12508.00 | Pressure On (psi): 3450.00, Pressure Off (psi): 2450.00, Weight On Bit (klbs): 42.00, Surface RPM: 60, Surface Torque (ft lbf): 25000.00, Flow Rate (gpm): 550.00, Strokes Per Minute: 144.00 |
| Survey       | 46 | 01-13 | 11:05 | 11:15 | 01-13 | 12508.00 | 12508.00 | Inclination (°): 85.190, Azimuth (°): 5.700, TVD (ft): 10992.51, Dogleg (°/100 ft): 1.68, Sensor Depth (ft): 12446.00, Bit To Sensor (ft): 62.00                                              |
| Slide Drill  | 2  | 01-13 | 11:15 | 12:05 | 01-13 | 12508.00 | 12568.00 | Pressure On (psi): 2850.00, Pressure Off (psi): 2605.00, Weight On Bit (klbs): 40.00, Flow Rate (gpm): 550.00, Strokes Per Minute: 144, Toolface: 290, Toolface Type: gravity                 |
| Rotary Drill | 1  | 01-13 | 12:05 | 12:15 | 01-13 | 12568.00 | 12597.00 | Pressure On (psi): 3450.00, Pressure Off (psi): 2450.00, Weight On Bit (klbs): 42.00, Surface RPM: 60, Surface Torque (ft lbf): 25000.00, Flow Rate (gpm): 550.00, Strokes Per Minute: 144.00 |
| Survey       | 46 | 01-13 | 12:15 | 12:25 | 01-13 | 12597.00 | 12597.00 | Inclination (°): 84.750, Azimuth (°): 1.830, TVD (ft): 11000.32, Dogleg (°/100 ft): 4.36, Sensor Depth (ft): 12535.00, Bit To Sensor (ft): 62.00                                              |
| Slide Drill  | 2  | 01-13 | 12:25 | 12:50 | 01-13 | 12597.00 | 12627.00 | Pressure On (psi): 2850.00, Pressure Off (psi): 2605.00, Weight On Bit (klbs): 40.00, Flow Rate (gpm): 550.00, Strokes Per Minute: 144, Toolface: 0, Toolface Type: gravity                   |
| Rotary Drill | 1  | 01-13 | 12:50 | 13:10 | 01-13 | 12627.00 | 12687.00 | Pressure On (psi): 3450.00, Pressure Off (psi): 2450.00, Weight On Bit (klbs): 42.00, Surface RPM: 60, Surface Torque (ft lbf): 25000.00, Flow Rate (gpm): 550.00, Strokes Per Minute: 144.00 |
| Survey       | 46 | 01-13 | 13:10 | 13:20 | 01-13 | 12687.00 | 12687.00 | Inclination (°): 86.900, Azimuth (°): 359.810, TVD (ft): 11006.87, Dogleg (°/100 ft): 3.27, Sensor Depth (ft): 12625.00, Bit To Sensor (ft): 62.00                                            |
| Slide Drill  | 2  | 01-13 | 13:20 | 14:00 | 01-13 | 12687.00 | 12722.00 | Pressure On (psi): 2850.00, Pressure Off (psi): 2605.00, Weight On Bit (klbs): 40.00, Flow Rate (gpm): 550.00, Strokes Per Minute: 144, Toolface: 340, Toolface Type: gravity                 |
| Rotary Drill | 1  | 01-13 | 14:00 | 14:15 | 01-13 | 12722.00 | 12777.00 | Pressure On (psi): 3450.00, Pressure Off (psi): 2450.00, Weight On Bit (klbs): 42.00, Surface RPM: 60, Surface Torque (ft lbf): 25000.00, Flow Rate (gpm): 550.00, Strokes Per Minute: 144.00 |
| Survey       | 46 | 01-13 | 14:15 | 14:20 | 01-13 | 12777.00 | 12777.00 | Inclination (°): 89.270, Azimuth (°): 359.900, TVD (ft): 11009.88, Dogleg (°/100 ft): 2.64, Sensor Depth (ft): 12715.00, Bit To Sensor (ft): 62.00                                            |
| Rotary Drill | 1  | 01-13 | 14:20 | 14:25 | 01-13 | 12777.00 | 12782.00 | Pressure On (psi): 3450.00, Pressure Off (psi): 2450.00, Weight On Bit (klbs): 42.00, Surface RPM: 60, Surface Torque (ft lbf): 25000.00, Flow Rate (gpm): 550.00, Strokes Per Minute: 144.00 |
| Slide Drill  | 2  | 01-13 | 14:25 | 14:50 | 01-13 | 12782.00 | 12802.00 | Pressure On (psi): 2850.00, Pressure Off (psi): 2605.00, Weight On Bit (klbs): 40.00, Flow Rate (gpm): 550.00, Strokes Per Minute: 144, Toolface: 320, Toolface Type: gravity                 |
| Rotary Drill | 1  | 01-13 | 14:50 | 15:10 | 01-13 | 12802.00 | 12866.00 | Pressure On (psi): 3450.00, Pressure Off (psi): 2450.00, Weight On Bit (klbs): 42.00, Surface RPM: 60, Surface Torque (ft lbf): 25000.00, Flow Rate (gpm): 550.00, Strokes Per Minute: 144.00 |
| Survey       | 46 | 01-13 | 15:10 | 15:15 | 01-13 | 12866.00 | 12866.00 | Inclination (°): 90.110, Azimuth (°): 357.880, TVD (ft): 11010.36, Dogleg (°/100 ft): 2.46, Sensor Depth (ft): 12804.00, Bit To Sensor (ft): 62.00                                            |
| Rotary Drill | 1  | 01-13 | 15:15 | 15:45 | 01-13 | 12866.00 | 12956.00 | Pressure On (psi): 3450.00, Pressure Off (psi): 2450.00, Weight On Bit (klbs): 42.00, Surface RPM: 60, Surface Torque (ft lbf): 25000.00, Flow Rate (gpm): 550.00, Strokes Per Minute: 144.00 |
| Survey       | 46 | 01-13 | 15:45 | 15:55 | 01-13 | 12956.00 | 12956.00 | Inclination (°): 90.460, Azimuth (°): 357.090, TVD (ft): 11009.91, Dogleg (°/100 ft): 0.96, Sensor Depth (ft): 12894.00, Bit To Sensor (ft): 62.00                                            |
| Rotary Drill | 1  | 01-13 | 15:55 | 16:25 | 01-13 | 12956.00 | 13045.00 | Pressure On (psi): 3450.00, Pressure Off (psi): 2450.00, Weight On Bit (klbs): 42.00, Surface RPM: 60, Surface Torque (ft lbf): 25000.00, Flow Rate (gpm): 550.00, Strokes Per Minute: 144.00 |
| Survey       | 46 | 01-13 | 16:25 | 16:30 | 01-13 | 13045.00 | 13045.00 | Inclination (°): 91.210, Azimuth (°): 356.910, TVD (ft): 11008.61, Dogleg (°/100 ft): 0.87, Sensor Depth (ft): 12983.00, Bit To Sensor (ft): 62.00                                            |
| Rotary Drill | 1  | 01-13 | 16:30 | 17:00 | 01-13 | 13045.00 | 13135.00 | Pressure On (psi): 3450.00, Pressure Off (psi): 2450.00, Weight On Bit (klbs): 42.00, Surface RPM: 60, Surface Torque (ft lbf): 25000.00, Flow Rate (gpm): 550.00, Strokes Per Minute: 144.00 |
| Survey       | 46 | 01-13 | 17:00 | 17:10 | 01-13 | 13135.00 | 13135.00 | Inclination (°): 92.310, Azimuth (°): 357.260, TVD (ft): 11005.85, Dogleg (°/100 ft): 1.28, Sensor Depth (ft): 13073.00, Bit To Sensor (ft): 62.00                                            |
| Slide Drill  | 2  | 01-13 | 17:10 | 17:30 | 01-13 | 13135.00 | 13155.00 | Pressure On (psi): 2850.00, Pressure Off (psi): 2605.00, Weight On Bit (klbs): 40.00, Flow Rate (gpm): 550.00, Strokes Per Minute: 144, Toolface: 180, Toolface Type: gravity                 |
| Rotary Drill | 1  | 01-13 | 17:30 | 17:55 | 01-13 | 13155.00 | 13225.00 | Pressure On (psi): 3450.00, Pressure Off (psi): 2450.00, Weight On Bit (klbs): 50.00, Surface RPM: 60, Surface Torque (ft lbf): 25000.00, Flow Rate (gpm): 550.00, Strokes Per Minute: 144.00 |
| Survey       | 46 | 01-13 | 17:55 | 18:00 | 01-13 | 13225.00 | 13225.00 | Inclination (°): 90.290, Azimuth (°): 356.380, TVD (ft): 11003.81, Dogleg (°/100 ft): 2.45, Sensor Depth (ft): 13163.00, Bit To Sensor (ft): 62.00                                            |
| Rotary Drill | 1  | 01-13 | 18:00 | 18:35 | 01-13 | 13225.00 | 13314.00 | Pressure On (psi): 3450.00, Pressure Off (psi): 2450.00, Weight On Bit (klbs): 50.00, Surface RPM: 60, Surface Torque (ft lbf): 25000.00, Flow Rate (gpm): 550.00, Strokes Per Minute: 144.00 |
| Survey       | 46 | 01-13 | 18:35 | 18:40 | 01-13 | 13314.00 | 13314.00 | Inclination (°): 90.550, Azimuth (°): 356.650, TVD (ft): 11003.15, Dogleg (°/100 ft): 0.42, Sensor Depth (ft): 13252.00, Bit To Sensor (ft): 62.00                                            |

|              |    |       |       |       |       |          |          |                                                                                                                                                                                               |
|--------------|----|-------|-------|-------|-------|----------|----------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Rotary Drill | 1  | 01-13 | 18:40 | 19:10 | 01-13 | 13314.00 | 13404.00 | Pressure On (psi): 3450.00, Pressure Off (psi): 2450.00, Weight On Bit (klbs): 50.00, Surface RPM: 50, Surface Torque (ft lbf): 25000.00, Flow Rate (gpm): 550.00, Strokes Per Minute: 144.00 |
| Survey       | 46 | 01-13 | 19:10 | 19:15 | 01-13 | 13404.00 | 13404.00 | Inclination (°): 89.140, Azimuth (°): 355.940, TVD (ft): 11003.40, Dogleg (°/100 ft): 1.75, Sensor Depth (ft): 13342.00, Bit To Sensor (ft): 62.00                                            |
| Rotary Drill | 1  | 01-13 | 19:15 | 19:40 | 01-13 | 13404.00 | 13459.00 | Pressure On (psi): 3450.00, Pressure Off (psi): 2450.00, Weight On Bit (klbs): 50.00, Surface RPM: 50, Surface Torque (ft lbf): 25000.00, Flow Rate (gpm): 550.00, Strokes Per Minute: 144.00 |
| Slide Drill  | 2  | 01-13 | 19:40 | 20:35 | 01-13 | 13459.00 | 13493.00 | Pressure On (psi): 2850.00, Pressure Off (psi): 2605.00, Weight On Bit (klbs): 40.00, Flow Rate (gpm): 550.00, Strokes Per Minute: 144, Toolface: 40, Toolface Type: gravity                  |
| Survey       | 46 | 01-13 | 20:35 | 20:40 | 01-13 | 13493.00 | 13493.00 | Inclination (°): 86.510, Azimuth (°): 355.590, TVD (ft): 11006.78, Dogleg (°/100 ft): 2.98, Sensor Depth (ft): 13431.00, Bit To Sensor (ft): 62.00                                            |
| Rotary Drill | 1  | 01-13 | 20:40 | 21:20 | 01-13 | 13493.00 | 13583.00 | Pressure On (psi): 3450.00, Pressure Off (psi): 2450.00, Weight On Bit (klbs): 50.00, Surface RPM: 50, Surface Torque (ft lbf): 25000.00, Flow Rate (gpm): 550.00, Strokes Per Minute: 144.00 |
| Survey       | 46 | 01-13 | 21:20 | 21:25 | 01-13 | 13583.00 | 13583.00 | Inclination (°): 88.970, Azimuth (°): 357.180, TVD (ft): 11010.32, Dogleg (°/100 ft): 3.25, Sensor Depth (ft): 13521.00, Bit To Sensor (ft): 62.00                                            |
| Slide Drill  | 2  | 01-13 | 21:25 | 21:50 | 01-13 | 13583.00 | 13608.00 | Pressure On (psi): 2850.00, Pressure Off (psi): 2605.00, Weight On Bit (klbs): 40.00, Flow Rate (gpm): 550.00, Strokes Per Minute: 144, Toolface: 20, Toolface Type: gravity                  |
| Rotary Drill | 1  | 01-13 | 21:50 | 22:20 | 01-13 | 13608.00 | 13672.00 | Pressure On (psi): 3450.00, Pressure Off (psi): 2450.00, Weight On Bit (klbs): 50.00, Surface RPM: 50, Surface Torque (ft lbf): 25000.00, Flow Rate (gpm): 550.00, Strokes Per Minute: 144.00 |
| Survey       | 46 | 01-13 | 22:20 | 22:25 | 01-13 | 13672.00 | 13672.00 | Inclination (°): 89.450, Azimuth (°): 358.490, TVD (ft): 11011.55, Dogleg (°/100 ft): 1.57, Sensor Depth (ft): 13610.00, Bit To Sensor (ft): 62.00                                            |
| Slide Drill  | 2  | 01-13 | 22:25 | 23:05 | 01-13 | 13672.00 | 13707.00 | Pressure On (psi): 2850.00, Pressure Off (psi): 2605.00, Weight On Bit (klbs): 40.00, Flow Rate (gpm): 550.00, Strokes Per Minute: 144, Toolface: 0, Toolface Type: gravity                   |
| Rotary Drill | 1  | 01-13 | 23:05 | 23:30 | 01-13 | 13707.00 | 13762.00 | Pressure On (psi): 3450.00, Pressure Off (psi): 2450.00, Weight On Bit (klbs): 50.00, Surface RPM: 50, Surface Torque (ft lbf): 25000.00, Flow Rate (gpm): 550.00, Strokes Per Minute: 144.00 |
| Survey       | 46 | 01-13 | 23:30 | 23:35 | 01-13 | 13762.00 | 13762.00 | Inclination (°): 91.430, Azimuth (°): 358.580, TVD (ft): 11010.86, Dogleg (°/100 ft): 2.20, Sensor Depth (ft): 13700.00, Bit To Sensor (ft): 62.00                                            |
| Rotary Drill | 1  | 01-13 | 23:35 | 00:25 | 01-14 | 13762.00 | 13852.00 | Pressure On (psi): 3450.00, Pressure Off (psi): 2450.00, Weight On Bit (klbs): 50.00, Surface RPM: 50, Surface Torque (ft lbf): 25000.00, Flow Rate (gpm): 550.00, Strokes Per Minute: 144.00 |

**MWD Activities**

No Activities



|                                 |                                                     |                                                       |
|---------------------------------|-----------------------------------------------------|-------------------------------------------------------|
| <b>Job Number</b><br>WT-20-071  | <b>Operator</b><br>Advance Energy Partners          | <b>Rig Name</b><br>Pioneer #80                        |
| <b>Start Date</b><br>2020-12-04 | <b>Well Name</b><br>Anderson Fed Com 504H           | <b>Legal Well Name   AFE</b><br>Anderson Fed Com 504H |
| <b>Play</b><br>Delaware Basin   | <b>State/Province and Country</b><br>New Mexico, US | <b>County</b><br>Lea                                  |
|                                 |                                                     | <b>Company Man</b>                                    |

Thursday, Jan 14 00:00 - 23:59 (Day 15 of 19)

Billing: \$17,500.00 (\$130,925.38 total)

| Drilling Summary               |          |                            |       | Drilling Parameters              |                   |
|--------------------------------|----------|----------------------------|-------|----------------------------------|-------------------|
| <b>Start Depth (ft)</b>        | 13762.00 | <b>Downhole Hours</b>      | 23.00 | <b>Rotating WOB (klbs)</b>       | 50.00 - 50.00     |
| <b>Bit Depth (ft)</b>          | 14335.00 | <b>Drilling Hours</b>      | 6.17  | <b>Sliding WOB (klbs)</b>        | 40.00 - 40.00     |
| <b>Bottom Hole Depth (ft)</b>  | 14335.00 | <b>Hours Circulating</b>   | 1.00  | <b>Rotating SPM</b>              | 144.00 - 144.00   |
| <b>Total Distance (ft)</b>     | 573.00   | <b>Hours Sliding</b>       | 1.92  | <b>Sliding SPM</b>               | 144.00 - 144.00   |
| <b>Distance Rotated (ft)</b>   | 506.00   | <b>Hours Rotating</b>      | 4.25  | <b>Motor RPM</b>                 | 0.00 - 156.00     |
| <b>Distance Slid (ft)</b>      | 67.00    |                            |       | <b>Surface RPM</b>               | 30.00 - 50.00     |
| <b>Inclination In</b>          | 91.60    |                            |       | <b>Flow Rate (gpm)</b>           | 550.00 - 550.00   |
| <b>Inclination Out</b>         | 91.96    |                            |       | <b>On Bottom Pressure (psi)</b>  | 2850.00 - 3450.00 |
| <b>Azimuth In</b>              | 358.05   | <b>% Hours Rotating</b>    | 69%   | <b>Off Bottom Pressure (psi)</b> | 2450.00 - 2605.00 |
| <b>Azimuth Out</b>             | 359.55   | <b>% Hours Sliding</b>     | 31%   |                                  |                   |
| <b>AVG Total ROP (ft/h)</b>    | 92.92    | <b>% Distance Sliding</b>  | 12%   |                                  |                   |
| <b>AVG Rotating ROP (ft/h)</b> | 119.06   | <b>% Distance Rotating</b> | 88%   |                                  |                   |
| <b>AVG Sliding ROP (ft/h)</b>  | 34.96    |                            |       |                                  |                   |

**Personnel**

| Name                | Position            |
|---------------------|---------------------|
| Robert Olivarez     | MWD Engineer        |
| Carlos Jensen       | MWD Engineer        |
| Kyle Kusak          | MWD Engineer        |
| Advance Directional | Directional Driller |

**BHA #6 - 8.50" LATERAL w/ Agitator**

Date In: Jan 12, 2021, 11:30 Date Out: Jan 14, 2021, 14:30

| Bit Details                       |         | Motor Details                   |          | Directional Comments                                                           |
|-----------------------------------|---------|---------------------------------|----------|--------------------------------------------------------------------------------|
| <b>OD (in)</b>                    | 8.500   | <b>Size (in)</b>                | 7.0      | Flow Rate: 500-750, Max Diff: 1980 psi, Max Torque: 16,550 ft-lbs, BIT Runs: 2 |
| <b>Vendor</b>                     | REED    | <b>Lobe/Stage</b>               | 6/7, 8.4 |                                                                                |
| <b>S/N</b>                        | A265535 | <b>Bend Angle</b>               | 1.75     |                                                                                |
| <b>Nozzles</b>                    | 6x16's  | <b>Speed (rev/gal)</b>          | 0.26     | <b>MWD Comments</b>                                                            |
| <b>Total Flow Area (in²)</b>      | 1.170   | <b>Wear Pad OD (in)</b>         | 7.250    |                                                                                |
| <b>Drilling Hours for Day</b>     | 6.17    | <b>Bit Distances</b>            |          |                                                                                |
| <b>Total Drilled for Day (ft)</b> | 573.00  | <b>Gamma: 48.00 ft, Survey:</b> |          | <b>POOH Reason</b><br><b>Downhole Motor Incident:</b> POOH due to loss of ROP. |
| <b>Drilling Hours for BHA</b>     | 28.50   | 62.00 ft                        |          |                                                                                |
| <b>Total Drilled for BHA (ft)</b> | 2763.00 |                                 |          |                                                                                |

**Directional Items**

| Description                                                                                                                                                       | Vendor        | SN#          | Top Conn       | Btm Conn       | ID (in) | OD (in) | Fn Len. (ft) | Len (ft) | Aggr. Len (ft) |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------|--------------|----------------|----------------|---------|---------|--------------|----------|----------------|
| <b>Bit (Fixed Cutter)</b><br>Description: <i>TKC66</i> , Gauge Length (in): 4.00, Size (in): 8.50, Type: <i>PDC (Polycrystalline Diamond Compacts)</i>            | REED          | A265535      | 4 1/2" Reg Pin |                |         | 8.500   |              | 1.00     | 1.00           |
| <b>Mud Motor</b><br>Description: <i>6/7 8.5 FXD 1.75° w/ True Slick</i> , Size (in): 7.00, Bend Angle (°): 1.75, Rotor Lobe: 6, Stator Lobe: 7, Stator Stage: 8.4 | AIM           | 700-40-006   | 4 1/2" IF Box  | 4 1/2" IF Pin  |         | 7.000   |              | 35.67    | 36.67          |
| <b>UBHO Sub</b><br>Description: <i>NM DAO UBHO</i> , Material: <i>Non-Magnetic</i>                                                                                | AIM           | 67502NM      | 4 1/2" IF Box  | 4 1/2" IF Pin  | 3.250   | 6.780   |              | 5.00     | 41.67          |
| <b>Drill Collar</b><br>Description: <i>MWD NMDC</i> , Material: <i>Non-Magnetic</i> , Type: <i>Slick Drill</i>                                                    | AIM           | GT 67-30-315 | 4 1/2" IF Box  | 4 1/2" IF Pin  | 3.250   | 6.870   |              | 30.93    | 72.60          |
| <b>Drill Collar</b><br>Description: <i>NMDC</i> , Material: <i>Non-Magnetic</i> , Type: <i>Slick Drill</i>                                                        | AIM           | GT 67-30-193 | 4 1/2" IF Box  | 4 1/2" IF Pin  | 3.250   | 6.850   |              | 29.70    | 102.30         |
| <b>Crossover Sub</b><br>Description: <i>X-O SUB</i> , Material: <i>Steel</i>                                                                                      | BLACK DIAMOND | BD11664      | EverDrlg54 Box | 4 1/2" IF Pin  | 3.000   | 6.700   |              | 3.52     | 105.82         |
| <b>Drill Pipe</b><br>Description: <i>28 Stands 5.5" Drill Pipe</i> , Type: <i>Slick</i>                                                                           | BLACK DIAMOND |              | EverDrlg54 Box | EverDrlg54 Pin | 3.000   | 5.500   |              | 2509.00  | 2614.82        |
| <b>Crossover Sub</b><br>Description: <i>X-O SUB</i> , Material: <i>Steel</i>                                                                                      | BLACK DIAMOND | BD13749      | 4 1/2" IF Box  | EverDrlg54 Pin | 3.000   | 6.740   |              | 3.57     | 2618.39        |
| <b>Agitator</b><br>Description: <i>AGITATOR</i> , Size (in): 6.75                                                                                                 | NOV           | 701-800      | 4 1/2" IF Box  | 4 1/2" IF Pin  |         | 6.750   |              | 25.19    | 2643.58        |
| <b>Crossover Sub</b><br>Description: <i>X-O SUB</i> , Material: <i>Steel</i>                                                                                      | BLACK DIAMOND | BD18869      | EverDrlg54 Box | 4 1/2" IF Pin  | 3.000   | 6.730   |              | 1.88     | 2645.46        |

**MWD Items**

No items

**BHA #7 - 8.50" LATERAL w/ Agitator**

Date In: Jan 14, 2021, 15:30 Date Out: Jan 16, 2021, 5:30

| Bit Details                |                 | Motor Details                     |          | Directional Comments                                                                                      |  |
|----------------------------|-----------------|-----------------------------------|----------|-----------------------------------------------------------------------------------------------------------|--|
| OD (in)                    | 8.500           | Size (in)                         | 7.0      | Flow Rate: 500-750, Max Diff: 1980 psi, Max Torque: 16,550 ft-lbs, BIT Runs: 4                            |  |
| Vendor                     | SECURITY        | Lobe/Stage                        | 6/7, 8.4 |                                                                                                           |  |
| S/N                        | 13293822        | Bend Angle                        | 1.75     |                                                                                                           |  |
| Nozzles                    | 6x13's & 3-12's | Speed (rev/gal)                   | 0.26     | MWD Comments                                                                                              |  |
| Total Flow Area (in²)      | 1.110           | Wear Pad OD (in)                  | 7.180    | POOH Reason<br><br>Downhole Motor Incident: POOH due to loss of ROP and not being able to establish diff. |  |
| Drilling Hours for Day     | 0.00            | Bit Distances                     |          |                                                                                                           |  |
| Total Drilled for Day (ft) |                 | Gamma: 45.00 ft, Survey: 60.00 ft |          |                                                                                                           |  |
| Drilling Hours for BHA     | 17.25           |                                   |          |                                                                                                           |  |
| Total Drilled for BHA (ft) | 1592.00         |                                   |          |                                                                                                           |  |

**Directional Items**

| Description                                                                                                                                                                                              | Vendor        | SN#          | Top Conn       | Btm Conn       | ID (in) | OD (in) | Fn Len. (ft) | Len (ft) | Aggr. Len (ft) |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------|--------------|----------------|----------------|---------|---------|--------------|----------|----------------|
| <b>Bit (Fixed Cutter)</b><br>Description: <i>GT65DO</i> , Type: <i>PDC (Polycrystalline Diamond Compacts)</i> , Gauge Length (in): <i>4.00</i> , Size (in): <i>8.50</i>                                  | SECURITY      | 13293822     | 4 1/2" Reg Pin |                |         | 8.500   |              | 1.00     | 1.00           |
| <b>Mud Motor</b><br>Description: <i>6/7 8.4 FXD 1.75° w/ True Slick</i> , Size (in): <i>7.00</i> , Bend Angle (°): <i>1.75</i> , Rotor Lobe: <i>6</i> , Stator Lobe: <i>7</i> , Stator Stage: <i>8.4</i> | AIM           | 700-40-036   | 4 1/2" IF Box  | 4 1/2" Reg Box |         | 7.000   |              | 33.88    | 34.88          |
| <b>UBHO Sub</b><br>Description: <i>NM DAO UBHO</i> , Material: <i>Non-Magnetic</i>                                                                                                                       | AIM           | 67502NM      | 4 1/2" IF Box  | 4 1/2" IF Pin  | 3.250   | 6.780   |              | 5.00     | 39.88          |
| <b>Drill Collar</b><br>Description: <i>MWD NMDC</i> , Material: <i>Non-Magnetic</i> , Type: <i>Slick Drill</i>                                                                                           | AIM           | GT 67-30-315 | 4 1/2" IF Box  | 4 1/2" IF Pin  | 3.250   | 6.870   |              | 30.93    | 70.81          |
| <b>Drill Collar</b><br>Description: <i>NMDC</i> , Material: <i>Non-Magnetic</i> , Type: <i>Slick Drill</i>                                                                                               | AIM           | GT 67-30-193 | 4 1/2" IF Box  | 4 1/2" IF Pin  | 3.250   | 6.850   |              | 29.70    | 100.51         |
| <b>Crossover Sub</b><br>Description: <i>X-O SUB</i> , Material: <i>Steel</i>                                                                                                                             | BLACK DIAMOND | BD11664      | EverDrlg54 Box | 4 1/2" IF Pin  | 3.000   | 6.700   |              | 3.52     | 104.03         |
| <b>Drill Pipe</b><br>Description: <i>28 Stands 5.5" Drill Pipe</i> , Type: <i>Slick</i>                                                                                                                  | BLACK DIAMOND |              | EverDrlg54 Box | EverDrlg54 Pin | 3.000   | 5.500   |              | 2509.00  | 2613.03        |
| <b>Crossover Sub</b><br>Description: <i>X-O SUB</i> , Material: <i>Steel</i>                                                                                                                             | BLACK DIAMOND | BD13749      | 4 1/2" IF Box  | EverDrlg54 Pin | 3.000   | 6.740   |              | 3.57     | 2616.60        |
| <b>Agitator</b><br>Description: <i>AGITATOR</i> , Size (in): <i>6.75</i>                                                                                                                                 | NOV           | 701-800      | 4 1/2" IF Box  | 4 1/2" IF Pin  |         | 6.750   |              | 25.19    | 2641.79        |
| <b>Crossover Sub</b><br>Description: <i>X-O SUB</i> , Material: <i>Steel</i>                                                                                                                             | BLACK DIAMOND | BD18869      | EverDrlg54 Box | 4 1/2" IF Pin  | 3.000   | 6.730   |              | 1.88     | 2643.67        |

**MWD Items**

No Items

**Directional Activities**

| Activity Type | Code | Start Date | Start Time | End Time | End Date | Start (ft) | End (ft) | Comments/Details                                                                                                                                                                                                                                     |
|---------------|------|------------|------------|----------|----------|------------|----------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Rotary Drill  | 1    | 01-13      | 23:35      | 00:25    | 01-14    | 13762.00   | 13852.00 | Pressure On (psi): <i>3450.00</i> , Pressure Off (psi): <i>2450.00</i> , Weight On Bit (klbs): <i>50.00</i> , Surface RPM: <i>50</i> , Surface Torque (ft lbf): <i>25000.00</i> , Flow Rate (gpm): <i>550.00</i> , Strokes Per Minute: <i>144.00</i> |
| Survey        | 46   | 01-14      | 00:25      | 00:30    | 01-14    | 13852.00   | 13852.00 | Inclination (°): <i>91.600</i> , Azimuth (°): <i>358.050</i> , TVD (ft): <i>11008.48</i> , Dogleg (°/100 ft): <i>0.62</i> , Sensor Depth (ft): <i>13790.00</i> , Bit To Sensor (ft): <i>62.00</i>                                                    |
| Rotary Drill  | 1    | 01-14      | 00:30      | 01:05    | 01-14    | 13852.00   | 13941.00 | Pressure On (psi): <i>3450.00</i> , Pressure Off (psi): <i>2450.00</i> , Weight On Bit (klbs): <i>50.00</i> , Surface RPM: <i>30</i> , Surface Torque (ft lbf): <i>25000.00</i> , Flow Rate (gpm): <i>550.00</i> , Strokes Per Minute: <i>144.00</i> |
| Survey        | 46   | 01-14      | 01:05      | 01:10    | 01-14    | 13941.00   | 13941.00 | Inclination (°): <i>90.810</i> , Azimuth (°): <i>357.790</i> , TVD (ft): <i>11006.61</i> , Dogleg (°/100 ft): <i>0.93</i> , Sensor Depth (ft): <i>13879.00</i> , Bit To Sensor (ft): <i>62.00</i>                                                    |
| Slide Drill   | 2    | 01-14      | 01:10      | 01:50    | 01-14    | 13941.00   | 13966.00 | Pressure On (psi): <i>2850.00</i> , Pressure Off (psi): <i>2605.00</i> , Weight On Bit (klbs): <i>40.00</i> , Flow Rate (gpm): <i>550.00</i> , Strokes Per Minute: <i>144</i> , Toolface: <i>50</i> , Toolface Type: <i>gravity</i>                  |
| Rotary Drill  | 1    | 01-14      | 01:50      | 02:20    | 01-14    | 13966.00   | 14031.00 | Pressure On (psi): <i>3450.00</i> , Pressure Off (psi): <i>2450.00</i> , Weight On Bit (klbs): <i>50.00</i> , Surface RPM: <i>30</i> , Surface Torque (ft lbf): <i>25000.00</i> , Flow Rate (gpm): <i>550.00</i> , Strokes Per Minute: <i>144.00</i> |
| Survey        | 46   | 01-14      | 02:20      | 02:25    | 01-14    | 14031.00   | 14031.00 | Inclination (°): <i>90.640</i> , Azimuth (°): <i>358.410</i> , TVD (ft): <i>11005.47</i> , Dogleg (°/100 ft): <i>0.71</i> , Sensor Depth (ft): <i>13969.00</i> , Bit To Sensor (ft): <i>62.00</i>                                                    |
| Rotary Drill  | 1    | 01-14      | 02:25      | 02:30    | 01-14    | 14031.00   | 14041.00 | Pressure On (psi): <i>3450.00</i> , Pressure Off (psi): <i>2450.00</i> , Weight On Bit (klbs): <i>50.00</i> , Surface RPM: <i>30</i> , Surface Torque (ft lbf): <i>25000.00</i> , Flow Rate (gpm): <i>550.00</i> , Strokes Per Minute: <i>144.00</i> |

|                       |    |       |       |       |       |          |          |                                                                                                                                                                                               |
|-----------------------|----|-------|-------|-------|-------|----------|----------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Slide Drill           | 2  | 01-14 | 02:30 | 03:10 | 01-14 | 14041.00 | 14068.00 | Pressure On (psi): 2850.00, Pressure Off (psi): 2605.00, Weight On Bit (klbs): 40.00, Flow Rate (gpm): 550.00, Strokes Per Minute: 144, Toolface: 40, Toolface Type: gravity                  |
| Rotary Drill          | 1  | 01-14 | 03:10 | 03:30 | 01-14 | 14068.00 | 14121.00 | Pressure On (psi): 3450.00, Pressure Off (psi): 2450.00, Weight On Bit (klbs): 50.00, Surface RPM: 30, Surface Torque (ft lbf): 25000.00, Flow Rate (gpm): 550.00, Strokes Per Minute: 144.00 |
| Survey                | 46 | 01-14 | 03:30 | 03:35 | 01-14 | 14121.00 | 14121.00 | Inclination (°): 91.250, Azimuth (°): 358.760, TVD (ft): 11003.99, Dogleg (°/100 ft): 0.78, Sensor Depth (ft): 14059.00, Bit To Sensor (ft): 62.00                                            |
| Rotary Drill          | 1  | 01-14 | 03:35 | 04:30 | 01-14 | 14121.00 | 14210.00 | Pressure On (psi): 3450.00, Pressure Off (psi): 2450.00, Weight On Bit (klbs): 50.00, Surface RPM: 30, Surface Torque (ft lbf): 25000.00, Flow Rate (gpm): 550.00, Strokes Per Minute: 144.00 |
| Survey                | 46 | 01-14 | 04:30 | 04:40 | 01-14 | 14210.00 | 14210.00 | Inclination (°): 93.050, Azimuth (°): 359.460, TVD (ft): 11000.65, Dogleg (°/100 ft): 2.17, Sensor Depth (ft): 14148.00, Bit To Sensor (ft): 62.00                                            |
| Slide Drill           | 2  | 01-14 | 04:40 | 05:15 | 01-14 | 14210.00 | 14225.00 | Pressure On (psi): 2850.00, Pressure Off (psi): 2605.00, Weight On Bit (klbs): 40.00, Flow Rate (gpm): 550.00, Strokes Per Minute: 144, Toolface: 160, Toolface Type: gravity                 |
| Rotary Drill          | 1  | 01-14 | 05:15 | 06:00 | 01-14 | 14225.00 | 14300.00 | Pressure On (psi): 3450.00, Pressure Off (psi): 2450.00, Weight On Bit (klbs): 50.00, Surface RPM: 30, Surface Torque (ft lbf): 25000.00, Flow Rate (gpm): 550.00, Strokes Per Minute: 144.00 |
| Survey                | 46 | 01-14 | 06:00 | 06:05 | 01-14 | 14300.00 | 14300.00 | Inclination (°): 91.960, Azimuth (°): 359.550, TVD (ft): 10996.71, Dogleg (°/100 ft): 1.22, Sensor Depth (ft): 14238.00, Bit To Sensor (ft): 62.00                                            |
| Rotary Drill          | 1  | 01-14 | 06:05 | 06:20 | 01-14 | 14300.00 | 14335.00 | Pressure On (psi): 3450.00, Pressure Off (psi): 2450.00, Weight On Bit (klbs): 50.00, Surface RPM: 30, Surface Torque (ft lbf): 25000.00, Flow Rate (gpm): 550.00, Strokes Per Minute: 144.00 |
| Circulating           | 3  | 01-14 | 06:20 | 07:20 | 01-14 |          |          | CIRCULATING                                                                                                                                                                                   |
| Pooh                  | 7  | 01-14 | 07:20 | 14:30 | 01-14 |          |          | POOH for MOTOR FAILURE                                                                                                                                                                        |
| Change BHA            | 6  | 01-14 | 14:30 | 15:30 | 01-14 |          |          | P/U BHA # 7                                                                                                                                                                                   |
| TIH                   | 8  | 01-14 | 15:30 | 17:00 | 01-14 |          |          | TIH W/ BHA #7                                                                                                                                                                                 |
| Other                 | 16 | 01-14 | 17:00 | 17:25 | 01-14 |          |          | P/U & TEST AGITATOR                                                                                                                                                                           |
| TIH                   | 8  | 01-14 | 17:25 | 18:25 | 01-14 |          |          | TIH W/ BHA #7                                                                                                                                                                                 |
| Rig Service - In Hole | 19 | 01-14 | 18:25 | 20:00 | 01-14 |          |          | SLIP & CUT DRILL LINE                                                                                                                                                                         |
| TIH                   | 8  | 01-14 | 20:00 | 00:00 | 01-15 |          |          | TIH W/ BHA #7                                                                                                                                                                                 |

**MWD Activities**

No Activities



|                                 |                                                     |                                                       |
|---------------------------------|-----------------------------------------------------|-------------------------------------------------------|
| <b>Job Number</b><br>WT-20-071  | <b>Operator</b><br>Advance Energy Partners          | <b>Rig Name</b><br>Pioneer #80                        |
| <b>Start Date</b><br>2020-12-04 | <b>Well Name</b><br>Anderson Fed Com 504H           | <b>Legal Well Name   AFE</b><br>Anderson Fed Com 504H |
| <b>Play</b><br>Delaware Basin   | <b>State/Province and Country</b><br>New Mexico, US | <b>County</b><br>Lea                                  |
|                                 |                                                     | <b>Company Man</b>                                    |

Friday, Jan 15 00:00 - 23:59 (Day 16 of 19)

Billing: \$5,800.00 (\$130,925.38 total)

| Drilling Summary        |          |                     |       | Drilling Parameters       |                   |
|-------------------------|----------|---------------------|-------|---------------------------|-------------------|
| Start Depth (ft)        | 14335.00 | Downhole Hours      | 24.00 | Rotating WOB (klbs)       | 50.00 - 50.00     |
| Bit Depth (ft)          | 15927.00 | Drilling Hours      | 17.25 | Sliding WOB (klbs)        | 40.00 - 40.00     |
| Bottom Hole Depth (ft)  | 15927.00 | Hours Circulating   | 2.67  | Rotating SPM              | 144.00 - 144.00   |
| Total Distance (ft)     | 1592.00  | Hours Sliding       | 4.92  | Sliding SPM               | 144.00 - 144.00   |
| Distance Rotated (ft)   | 1392.00  | Hours Rotating      | 12.33 | Motor RPM                 | 143.00 - 156.00   |
| Distance Slid (ft)      | 200.00   |                     |       | Surface RPM               | 30.00 - 30.00     |
| Inclination In          | 94.02    |                     |       | Flow Rate (gpm)           | 550.00 - 550.00   |
| Inclination Out         | 93.01    |                     |       | On Bottom Pressure (psi)  | 2850.00 - 3450.00 |
| Azimuth In              | 359.81   | % Hours Rotating    | 71%   | Off Bottom Pressure (psi) | 2450.00 - 2605.00 |
| Azimuth Out             | 1.39     | % Hours Sliding     | 29%   |                           |                   |
| AVG Total ROP (ft/h)    | 92.29    | % Distance Sliding  | 13%   |                           |                   |
| AVG Rotating ROP (ft/h) | 112.86   | % Distance Rotating | 87%   |                           |                   |
| AVG Sliding ROP (ft/h)  | 40.68    |                     |       |                           |                   |

## Personnel

| Name                | Position            |
|---------------------|---------------------|
| Robert Olivarez     | MWD Engineer        |
| Carlos Jensen       | MWD Engineer        |
| Kyle Kusak          | MWD Engineer        |
| Advance Directional | Directional Driller |

## BHA #7 - 8.50" LATERAL w/ Agitator

Date In: Jan 14, 2021, 15:30 Date Out: Jan 16, 2021, 5:30

| Bit Details                        |                 | Motor Details                     |          | Directional Comments                                                                                  |
|------------------------------------|-----------------|-----------------------------------|----------|-------------------------------------------------------------------------------------------------------|
| OD (in)                            | 8.500           | Size (in)                         | 7.0      | Flow Rate: 500-750, Max Diff: 1980 psi, Max Torque: 16,550 ft-lbs, BIT Runs: 4                        |
| Vendor                             | SECURITY        | Lobe/Stage                        | 6/7, 8.4 |                                                                                                       |
| S/N                                | 13293822        | Bend Angle                        | 1.75     |                                                                                                       |
| Nozzles                            | 6x13's & 3-12's | Speed (rev/gal)                   | 0.26     | MWD Comments                                                                                          |
| Total Flow Area (in <sup>2</sup> ) | 1.110           | Wear Pad OD (in)                  | 7.180    |                                                                                                       |
| Drilling Hours for Day             | 17.25           | Bit Distances                     |          |                                                                                                       |
| Total Drilled for Day (ft)         | 1592.00         | Gamma: 45.00 ft, Survey: 60.00 ft |          | POOH Reason<br>Downhole Motor Incident: POOH due to loss of ROP and not being able to establish diff. |
| Drilling Hours for BHA             | 17.25           |                                   |          |                                                                                                       |
| Total Drilled for BHA (ft)         | 1592.00         |                                   |          |                                                                                                       |

## Directional Items

| Description                                                                                                                                               | Vendor        | SN#          | Top Conn       | Btm Conn       | ID (in) | OD (in) | Fn Len. (ft) | Len (ft) | Aggr. Len (ft) |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------|---------------|--------------|----------------|----------------|---------|---------|--------------|----------|----------------|
| <b>Bit (Fixed Cutter)</b><br>Description: GT65DO, Type: PDC (Polycrystalline Diamond Compacts), Gauge Length (in): 4.00, Size (in): 8.50                  | SECURITY      | 13293822     | 4 1/2" Reg Pin |                |         | 8.500   |              | 1.00     | 1.00           |
| <b>Mud Motor</b><br>Description: 6/7 8.4 FXD 1.75° w/ True Slick, Size (in): 7.00, Bend Angle (°): 1.75, Rotor Lobe: 6, Stator Lobe: 7, Stator Stage: 8.4 | AIM           | 700-40-036   | 4 1/2" IF Box  | 4 1/2" Reg Box |         | 7.000   |              | 33.88    | 34.88          |
| <b>UBHO Sub</b><br>Description: NM DAO UBHO, Material: Non-Magnetic                                                                                       | AIM           | 67502NM      | 4 1/2" IF Box  | 4 1/2" IF Pin  | 3.250   | 6.780   |              | 5.00     | 39.88          |
| <b>Drill Collar</b><br>Description: MWD NMDC, Material: Non-Magnetic, Type: Slick Drill                                                                   | AIM           | GT 67-30-315 | 4 1/2" IF Box  | 4 1/2" IF Pin  | 3.250   | 6.870   |              | 30.93    | 70.81          |
| <b>Drill Collar</b><br>Description: NMDC, Material: Non-Magnetic, Type: Slick Drill                                                                       | AIM           | GT 67-30-193 | 4 1/2" IF Box  | 4 1/2" IF Pin  | 3.250   | 6.850   |              | 29.70    | 100.51         |
| <b>Crossover Sub</b><br>Description: X-O SUB, Material: Steel                                                                                             | BLACK DIAMOND | BD11664      | EverDrlg54 Box | 4 1/2" IF Pin  | 3.000   | 6.700   |              | 3.52     | 104.03         |
| <b>Drill Pipe</b><br>Description: 28 Stands 5.5" Drill Pipe, Type: Slick                                                                                  | BLACK DIAMOND |              | EverDrlg54 Box | EverDrlg54 Pin | 3.000   | 5.500   |              | 2509.00  | 2613.03        |
| <b>Crossover Sub</b><br>Description: X-O SUB, Material: Steel                                                                                             | BLACK DIAMOND | BD13749      | 4 1/2" IF Box  | EverDrlg54 Pin | 3.000   | 6.740   |              | 3.57     | 2616.60        |
| <b>Agitator</b><br>Description: AGITATOR, Size (in): 6.75                                                                                                 | NOV           | 701-800      | 4 1/2" IF Box  | 4 1/2" IF Pin  |         | 6.750   |              | 25.19    | 2641.79        |
| <b>Crossover Sub</b><br>Description: X-O SUB, Material: Steel                                                                                             | BLACK DIAMOND | BD18869      | EverDrlg54 Box | 4 1/2" IF Pin  | 3.000   | 6.730   |              | 1.88     | 2643.67        |

## MWD Items

No items

**Directional Activities**

| Activity Type         | Code | Start Date | Start Time | End Time | End Date | Start (ft) | End (ft) | Comments/Details                                                                                                                                                                              |
|-----------------------|------|------------|------------|----------|----------|------------|----------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| TIH                   | 8    | 01-14      | 20:00      | 00:00    | 01-15    |            |          | TIH W/ BHA #7                                                                                                                                                                                 |
| Circulating           | 3    | 01-15      | 00:00      | 01:00    | 01-15    |            |          | DOWNLINK MWD & RELOG 50' GAMMA                                                                                                                                                                |
| Rotary Drill          | 1    | 01-15      | 01:00      | 01:20    | 01-15    | 14335.00   | 14388.00 | Pressure On (psi): 3450.00, Pressure Off (psi): 2450.00, Weight On Bit (klbs): 50.00, Surface RPM: 30, Surface Torque (ft lbf): 25000.00, Flow Rate (gpm): 550.00, Strokes Per Minute: 144.00 |
| Survey                | 46   | 01-15      | 01:20      | 01:25    | 01-15    | 14388.00   | 14388.00 | Inclination (°): 94.020, Azimuth (°): 359.810, TVD (ft): 10992.02, Dogleg (°/100 ft): 2.31, Sensor Depth (ft): 14328.00, Bit To Sensor (ft): 60.00                                            |
| Slide Drill           | 2    | 01-15      | 01:25      | 02:20    | 01-15    | 14388.00   | 14423.00 | Pressure On (psi): 2850.00, Pressure Off (psi): 2605.00, Weight On Bit (klbs): 40.00, Flow Rate (gpm): 550.00, Strokes Per Minute: 144, Toolface: 180, Toolface Type: gravity                 |
| Rotary Drill          | 1    | 01-15      | 02:20      | 02:45    | 01-15    | 14423.00   | 14477.00 | Pressure On (psi): 3450.00, Pressure Off (psi): 2450.00, Weight On Bit (klbs): 50.00, Surface RPM: 30, Surface Torque (ft lbf): 25000.00, Flow Rate (gpm): 550.00, Strokes Per Minute: 144.00 |
| Survey                | 46   | 01-15      | 02:45      | 02:50    | 01-15    | 14477.00   | 14477.00 | Inclination (°): 89.800, Azimuth (°): 0.340, TVD (ft): 10989.05, Dogleg (°/100 ft): 4.78, Sensor Depth (ft): 14417.00, Bit To Sensor (ft): 60.00                                              |
| Rotary Drill          | 1    | 01-15      | 02:50      | 03:20    | 01-15    | 14477.00   | 14567.00 | Pressure On (psi): 3450.00, Pressure Off (psi): 2450.00, Weight On Bit (klbs): 50.00, Surface RPM: 30, Surface Torque (ft lbf): 25000.00, Flow Rate (gpm): 550.00, Strokes Per Minute: 144.00 |
| Survey                | 46   | 01-15      | 03:20      | 03:25    | 01-15    | 14567.00   | 14567.00 | Inclination (°): 89.580, Azimuth (°): 0.080, TVD (ft): 10989.54, Dogleg (°/100 ft): 0.38, Sensor Depth (ft): 14507.00, Bit To Sensor (ft): 60.00                                              |
| Rotary Drill          | 1    | 01-15      | 03:25      | 04:05    | 01-15    | 14567.00   | 14656.00 | Pressure On (psi): 3450.00, Pressure Off (psi): 2450.00, Weight On Bit (klbs): 50.00, Surface RPM: 30, Surface Torque (ft lbf): 25000.00, Flow Rate (gpm): 550.00, Strokes Per Minute: 144.00 |
| Survey                | 46   | 01-15      | 04:05      | 04:10    | 01-15    | 14656.00   | 14656.00 | Inclination (°): 89.930, Azimuth (°): 0.080, TVD (ft): 10989.92, Dogleg (°/100 ft): 0.39, Sensor Depth (ft): 14596.00, Bit To Sensor (ft): 60.00                                              |
| Rotary Drill          | 1    | 01-15      | 04:10      | 04:55    | 01-15    | 14656.00   | 14746.00 | Pressure On (psi): 3450.00, Pressure Off (psi): 2450.00, Weight On Bit (klbs): 50.00, Surface RPM: 30, Surface Torque (ft lbf): 25000.00, Flow Rate (gpm): 550.00, Strokes Per Minute: 144.00 |
| Survey                | 46   | 01-15      | 04:55      | 05:00    | 01-15    | 14746.00   | 14746.00 | Inclination (°): 90.510, Azimuth (°): 0.510, TVD (ft): 10989.58, Dogleg (°/100 ft): 0.80, Sensor Depth (ft): 14686.00, Bit To Sensor (ft): 60.00                                              |
| Rotary Drill          | 1    | 01-15      | 05:00      | 05:10    | 01-15    | 14746.00   | 14755.00 | Pressure On (psi): 3450.00, Pressure Off (psi): 2450.00, Weight On Bit (klbs): 50.00, Surface RPM: 30, Surface Torque (ft lbf): 25000.00, Flow Rate (gpm): 550.00, Strokes Per Minute: 144.00 |
| Slide Drill           | 2    | 01-15      | 05:10      | 06:00    | 01-15    | 14755.00   | 14775.00 | Pressure On (psi): 2850.00, Pressure Off (psi): 2605.00, Weight On Bit (klbs): 40.00, Flow Rate (gpm): 550.00, Strokes Per Minute: 144, Toolface: 340, Toolface Type: gravity                 |
| Rotary Drill          | 1    | 01-15      | 06:00      | 06:35    | 01-15    | 14775.00   | 14835.00 | Pressure On (psi): 3450.00, Pressure Off (psi): 2450.00, Weight On Bit (klbs): 50.00, Surface RPM: 30, Surface Torque (ft lbf): 25000.00, Flow Rate (gpm): 550.00, Strokes Per Minute: 144.00 |
| Survey                | 46   | 01-15      | 06:35      | 06:40    | 01-15    | 14835.00   | 14835.00 | Inclination (°): 92.220, Azimuth (°): 359.810, TVD (ft): 10987.46, Dogleg (°/100 ft): 2.08, Sensor Depth (ft): 14775.00, Bit To Sensor (ft): 60.00                                            |
| Rotary Drill          | 1    | 01-15      | 06:40      | 07:20    | 01-15    | 14835.00   | 14925.00 | Pressure On (psi): 3450.00, Pressure Off (psi): 2450.00, Weight On Bit (klbs): 50.00, Surface RPM: 30, Surface Torque (ft lbf): 25000.00, Flow Rate (gpm): 550.00, Strokes Per Minute: 144.00 |
| Survey                | 46   | 01-15      | 07:20      | 07:25    | 01-15    | 14925.00   | 14925.00 | Inclination (°): 92.620, Azimuth (°): 359.020, TVD (ft): 10983.66, Dogleg (°/100 ft): 0.98, Sensor Depth (ft): 14865.00, Bit To Sensor (ft): 60.00                                            |
| Rotary Drill          | 1    | 01-15      | 07:25      | 08:05    | 01-15    | 14925.00   | 15015.00 | Pressure On (psi): 3450.00, Pressure Off (psi): 2450.00, Weight On Bit (klbs): 50.00, Surface RPM: 30, Surface Torque (ft lbf): 25000.00, Flow Rate (gpm): 550.00, Strokes Per Minute: 144.00 |
| Rig Service - In Hole | 19   | 01-15      | 08:05      | 08:30    | 01-15    |            |          | RIG SERVICE                                                                                                                                                                                   |
| Survey                | 46   | 01-15      | 08:30      | 08:50    | 01-15    | 15015.00   | 15015.00 | Inclination (°): 93.710, Azimuth (°): 358.490, TVD (ft): 10978.69, Dogleg (°/100 ft): 1.35, Sensor Depth (ft): 14955.00, Bit To Sensor (ft): 60.00                                            |
| Rotary Drill          | 1    | 01-15      | 08:50      | 09:30    | 01-15    | 15015.00   | 15104.00 | Pressure On (psi): 3450.00, Pressure Off (psi): 2450.00, Weight On Bit (klbs): 50.00, Surface RPM: 30, Surface Torque (ft lbf): 25000.00, Flow Rate (gpm): 550.00, Strokes Per Minute: 144.00 |
| Survey                | 46   | 01-15      | 09:30      | 09:40    | 01-15    | 15104.00   | 15104.00 | Inclination (°): 94.290, Azimuth (°): 358.410, TVD (ft): 10972.48, Dogleg (°/100 ft): 0.66, Sensor Depth (ft): 15044.00, Bit To Sensor (ft): 60.00                                            |
| Slide Drill           | 2    | 01-15      | 09:40      | 10:10    | 01-15    | 15104.00   | 15129.00 | Pressure On (psi): 2850.00, Pressure Off (psi): 2605.00, Weight On Bit (klbs): 40.00, Flow Rate (gpm): 550.00, Strokes Per Minute: 144, Toolface: 160, Toolface Type: gravity                 |
| Rotary Drill          | 1    | 01-15      | 10:10      | 10:55    | 01-15    | 15129.00   | 15194.00 | Pressure On (psi): 3450.00, Pressure Off (psi): 2450.00, Weight On Bit (klbs): 50.00, Surface RPM: 30, Surface Torque (ft lbf): 25000.00, Flow Rate (gpm): 550.00, Strokes Per Minute: 144.00 |

|              |    |       |       |       |       |          |          |                                                                                                                                                                                               |
|--------------|----|-------|-------|-------|-------|----------|----------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Survey       | 46 | 01-15 | 10:55 | 11:00 | 01-15 | 15194.00 | 15194.00 | Inclination (°): 91.960, Azimuth (°): 358.410, TVD (ft): 10967.57, Dogleg (°/100 ft): 2.59, Sensor Depth (ft): 15134.00, Bit To Sensor (ft): 60.00                                            |
| Rotary Drill | 1  | 01-15 | 11:00 | 11:40 | 01-15 | 15194.00 | 15284.00 | Pressure On (psi): 3450.00, Pressure Off (psi): 2450.00, Weight On Bit (klbs): 50.00, Surface RPM: 30, Surface Torque (ft lbf): 25000.00, Flow Rate (gpm): 550.00, Strokes Per Minute: 144.00 |
| Survey       | 46 | 01-15 | 11:40 | 11:45 | 01-15 | 15284.00 | 15284.00 | Inclination (°): 91.690, Azimuth (°): 357.530, TVD (ft): 10964.71, Dogleg (°/100 ft): 1.02, Sensor Depth (ft): 15224.00, Bit To Sensor (ft): 60.00                                            |
| Rotary Drill | 1  | 01-15 | 11:45 | 11:55 | 01-15 | 15284.00 | 15295.00 | Pressure On (psi): 3450.00, Pressure Off (psi): 2450.00, Weight On Bit (klbs): 50.00, Surface RPM: 30, Surface Torque (ft lbf): 25000.00, Flow Rate (gpm): 550.00, Strokes Per Minute: 144.00 |
| Slide Drill  | 2  | 01-15 | 11:55 | 12:25 | 01-15 | 15295.00 | 15320.00 | Pressure On (psi): 2850.00, Pressure Off (psi): 2605.00, Weight On Bit (klbs): 40.00, Flow Rate (gpm): 550.00, Strokes Per Minute: 144, Toolface: 90, Toolface Type: gravity                  |
| Rotary Drill | 1  | 01-15 | 12:25 | 12:55 | 01-15 | 15320.00 | 15373.00 | Pressure On (psi): 3450.00, Pressure Off (psi): 2450.00, Weight On Bit (klbs): 50.00, Surface RPM: 30, Surface Torque (ft lbf): 25000.00, Flow Rate (gpm): 550.00, Strokes Per Minute: 144.00 |
| Survey       | 46 | 01-15 | 12:55 | 13:05 | 01-15 | 15373.00 | 15373.00 | Inclination (°): 92.040, Azimuth (°): 359.720, TVD (ft): 10961.81, Dogleg (°/100 ft): 2.49, Sensor Depth (ft): 15313.00, Bit To Sensor (ft): 60.00                                            |
| Slide Drill  | 2  | 01-15 | 13:05 | 13:25 | 01-15 | 15373.00 | 15388.00 | Pressure On (psi): 2850.00, Pressure Off (psi): 2605.00, Weight On Bit (klbs): 40.00, Flow Rate (gpm): 550.00, Strokes Per Minute: 144, Toolface: 0, Toolface Type: gravity                   |
| Rotary Drill | 1  | 01-15 | 13:25 | 13:45 | 01-15 | 15388.00 | 15407.00 | Pressure On (psi): 3450.00, Pressure Off (psi): 2450.00, Weight On Bit (klbs): 50.00, Surface RPM: 30, Surface Torque (ft lbf): 25000.00, Flow Rate (gpm): 550.00, Strokes Per Minute: 144.00 |
| Rig Repair   | 14 | 01-15 | 13:45 | 14:30 | 01-15 |          |          | REPAIR MP #2                                                                                                                                                                                  |
| Rotary Drill | 1  | 01-15 | 14:30 | 15:05 | 01-15 | 15407.00 | 15463.00 | Pressure On (psi): 3450.00, Pressure Off (psi): 2450.00, Weight On Bit (klbs): 50.00, Surface RPM: 30, Surface Torque (ft lbf): 25000.00, Flow Rate (gpm): 550.00, Strokes Per Minute: 144.00 |
| Survey       | 46 | 01-15 | 15:05 | 15:10 | 01-15 | 15463.00 | 15463.00 | Inclination (°): 93.410, Azimuth (°): 359.460, TVD (ft): 10957.53, Dogleg (°/100 ft): 1.55, Sensor Depth (ft): 15403.00, Bit To Sensor (ft): 60.00                                            |
| Rotary Drill | 1  | 01-15 | 15:10 | 16:20 | 01-15 | 15463.00 | 15552.00 | Pressure On (psi): 3450.00, Pressure Off (psi): 2450.00, Weight On Bit (klbs): 50.00, Surface RPM: 30, Surface Torque (ft lbf): 25000.00, Flow Rate (gpm): 550.00, Strokes Per Minute: 144.00 |
| Survey       | 46 | 01-15 | 16:20 | 16:30 | 01-15 | 15552.00 | 15552.00 | Inclination (°): 87.470, Azimuth (°): 357.610, TVD (ft): 10956.85, Dogleg (°/100 ft): 6.99, Sensor Depth (ft): 15492.00, Bit To Sensor (ft): 60.00                                            |
| Slide Drill  | 2  | 01-15 | 16:30 | 17:45 | 01-15 | 15552.00 | 15612.00 | Pressure On (psi): 2850.00, Pressure Off (psi): 2605.00, Weight On Bit (klbs): 40.00, Flow Rate (gpm): 550.00, Strokes Per Minute: 144, Toolface: 40, Toolface Type: gravity                  |
| Rotary Drill | 1  | 01-15 | 17:45 | 18:10 | 01-15 | 15612.00 | 15642.00 | Pressure On (psi): 3450.00, Pressure Off (psi): 2450.00, Weight On Bit (klbs): 50.00, Surface RPM: 30, Surface Torque (ft lbf): 25000.00, Flow Rate (gpm): 550.00, Strokes Per Minute: 144.00 |
| Survey       | 46 | 01-15 | 18:10 | 18:15 | 01-15 | 15642.00 | 15642.00 | Inclination (°): 92.620, Azimuth (°): 357.700, TVD (ft): 10956.78, Dogleg (°/100 ft): 5.72, Sensor Depth (ft): 15582.00, Bit To Sensor (ft): 60.00                                            |
| Rotary Drill | 1  | 01-15 | 18:15 | 18:55 | 01-15 | 15642.00 | 15701.00 | Pressure On (psi): 3450.00, Pressure Off (psi): 2450.00, Weight On Bit (klbs): 50.00, Surface RPM: 30, Surface Torque (ft lbf): 25000.00, Flow Rate (gpm): 550.00, Strokes Per Minute: 144.00 |
| Slide Drill  | 2  | 01-15 | 18:55 | 19:30 | 01-15 | 15701.00 | 15721.00 | Pressure On (psi): 2850.00, Pressure Off (psi): 2605.00, Weight On Bit (klbs): 40.00, Flow Rate (gpm): 550.00, Strokes Per Minute: 144, Toolface: 160, Toolface Type: gravity                 |
| Rotary Drill | 1  | 01-15 | 19:30 | 19:40 | 01-15 | 15721.00 | 15731.00 | Pressure On (psi): 3450.00, Pressure Off (psi): 2450.00, Weight On Bit (klbs): 50.00, Surface RPM: 30, Surface Torque (ft lbf): 25000.00, Flow Rate (gpm): 550.00, Strokes Per Minute: 144.00 |
| Survey       | 46 | 01-15 | 19:40 | 19:55 | 01-15 | 15731.00 | 15731.00 | Inclination (°): 94.950, Azimuth (°): 358.930, TVD (ft): 10950.90, Dogleg (°/100 ft): 2.96, Sensor Depth (ft): 15671.00, Bit To Sensor (ft): 60.00                                            |
| Rotary Drill | 1  | 01-15 | 19:55 | 20:35 | 01-15 | 15731.00 | 15820.00 | Pressure On (psi): 3450.00, Pressure Off (psi): 2450.00, Weight On Bit (klbs): 50.00, Surface RPM: 30, Surface Torque (ft lbf): 25000.00, Flow Rate (gpm): 550.00, Strokes Per Minute: 144.00 |
| Survey       | 46 | 01-15 | 20:35 | 20:40 | 01-15 | 15820.00 | 15820.00 | Inclination (°): 93.410, Azimuth (°): 1.220, TVD (ft): 10944.41, Dogleg (°/100 ft): 3.09, Sensor Depth (ft): 15760.00, Bit To Sensor (ft): 60.00                                              |
| Rotary Drill | 1  | 01-15 | 20:40 | 21:20 | 01-15 | 15820.00 | 15909.00 | Pressure On (psi): 3450.00, Pressure Off (psi): 2450.00, Weight On Bit (klbs): 50.00, Surface RPM: 30, Surface Torque (ft lbf): 25000.00, Flow Rate (gpm): 550.00, Strokes Per Minute: 144.00 |
| Survey       | 46 | 01-15 | 21:20 | 21:25 | 01-15 | 15909.00 | 15909.00 | Inclination (°): 93.010, Azimuth (°): 1.390, TVD (ft): 10939.43, Dogleg (°/100 ft): 0.49, Sensor Depth (ft): 15849.00, Bit To Sensor (ft): 60.00                                              |
| Rotary Drill | 1  | 01-15 | 21:25 | 21:35 | 01-15 | 15909.00 | 15927.00 | Pressure On (psi): 3450.00, Pressure Off (psi): 2450.00, Weight On Bit (klbs): 50.00, Surface RPM: 30, Surface Torque (ft lbf): 25000.00, Flow Rate (gpm): 550.00, Strokes Per Minute: 144.00 |
| Circulating  | 3  | 01-15 | 21:35 | 23:15 | 01-15 |          |          | Circulate                                                                                                                                                                                     |

|                |   |       |       |       |       |  |  |                |
|----------------|---|-------|-------|-------|-------|--|--|----------------|
| Pooh           | 7 | 01-15 | 23:15 | 05:30 | 01-16 |  |  | POOH for Motor |
| MWD Activities |   |       |       |       |       |  |  |                |
| No Activities  |   |       |       |       |       |  |  |                |



|                                 |                                                     |                                                       |
|---------------------------------|-----------------------------------------------------|-------------------------------------------------------|
| <b>Job Number</b><br>WT-20-071  | <b>Operator</b><br>Advance Energy Partners          | <b>Rig Name</b><br>Pioneer #80                        |
| <b>Start Date</b><br>2020-12-04 | <b>Well Name</b><br>Anderson Fed Com 504H           | <b>Legal Well Name   AFE</b><br>Anderson Fed Com 504H |
| <b>Play</b><br>Delaware Basin   | <b>State/Province and Country</b><br>New Mexico, US | <b>County</b><br>Lea                                  |
|                                 |                                                     | <b>Company Man</b>                                    |

Saturday, Jan 16 00:00 - 23:59 (Day 17 of 19)

Billing: \$19,845.00 (\$130,925.38 total)

| Drilling Summary        |          |                     |       | Drilling Parameters       |                   |
|-------------------------|----------|---------------------|-------|---------------------------|-------------------|
| Start Depth (ft)        | 15927.00 | Downhole Hours      | 22.50 | Rotating WOB (klbs)       | 50.00 - 60.00     |
| Bit Depth (ft)          | 16807.00 | Drilling Hours      | 7.25  | Sliding WOB (klbs)        | 50.00 - 50.00     |
| Bottom Hole Depth (ft)  | 16807.00 | Hours Circulating   | 1.50  | Rotating SPM              | 144.00 - 164.00   |
| Total Distance (ft)     | 880.00   | Hours Sliding       | 1.75  | Sliding SPM               | 164.00 - 164.00   |
| Distance Rotated (ft)   | 821.00   | Hours Rotating      | 5.50  | Motor RPM                 | 143.00 - 164.00   |
| Distance Slid (ft)      | 59.00    |                     |       | Surface RPM               | 30.00 - 40.00     |
| Inclination In          | 92.70    |                     |       | Flow Rate (gpm)           | 550.00 - 630.00   |
| Inclination Out         | 91.30    |                     |       | On Bottom Pressure (psi)  | 3450.00 - 4300.00 |
| Azimuth In              | 1.66     | % Hours Rotating    | 76%   | Off Bottom Pressure (psi) | 2450.00 - 3550.00 |
| Azimuth Out             | 356.21   | % Hours Sliding     | 24%   |                           |                   |
| AVG Total ROP (ft/h)    | 121.38   | % Distance Sliding  | 7%    |                           |                   |
| AVG Rotating ROP (ft/h) | 149.27   | % Distance Rotating | 93%   |                           |                   |
| AVG Sliding ROP (ft/h)  | 33.71    |                     |       |                           |                   |

## Personnel

| Name                | Position            |
|---------------------|---------------------|
| Robert Olivarez     | MWD Engineer        |
| Carlos Jensen       | MWD Engineer        |
| Kyle Kusak          | MWD Engineer        |
| Advance Directional | Directional Driller |

## BHA #7 - 8.50" LATERAL w/ Agitator

Date In: Jan 14, 2021, 15:30 Date Out: Jan 16, 2021, 5:30

| Bit Details                |                 | Motor Details                     |          | Directional Comments                                                                                                |
|----------------------------|-----------------|-----------------------------------|----------|---------------------------------------------------------------------------------------------------------------------|
| OD (in)                    | 8.500           | Size (in)                         | 7.0      | Flow Rate: 500-750, Max Diff: 1980 psi, Max Torque: 16,550 ft-lbs, BIT Runs: 4                                      |
| Vendor                     | SECURITY        | Lobe/Stage                        | 6/7, 8.4 |                                                                                                                     |
| S/N                        | 13293822        | Bend Angle                        | 1.75     |                                                                                                                     |
| Nozzles                    | 6x13's & 3-12's | Speed (rev/gal)                   | 0.26     | MWD Comments                                                                                                        |
| Total Flow Area (in²)      | 1.110           | Wear Pad OD (in)                  | 7.180    | <b>POOH Reason</b><br><b>Downhole Motor Incident:</b> POOH due to loss of ROP and not being able to establish diff. |
| Drilling Hours for Day     | 0.00            | Bit Distances                     |          |                                                                                                                     |
| Total Drilled for Day (ft) |                 | Gamma: 45.00 ft, Survey: 60.00 ft |          |                                                                                                                     |
| Drilling Hours for BHA     | 17.25           |                                   |          |                                                                                                                     |
| Total Drilled for BHA (ft) | 1592.00         |                                   |          |                                                                                                                     |

## Directional Items

| Description                                                                                                                                               | Vendor        | SN#          | Top Conn       | Btm Conn       | ID (in) | OD (in) | Fn Len. (ft) | Len (ft) | Aggr. Len (ft) |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------|---------------|--------------|----------------|----------------|---------|---------|--------------|----------|----------------|
| <b>Bit (Fixed Cutter)</b><br>Description: GT65DO, Type: PDC (Polycrystalline Diamond Compacts), Gauge Length (in): 4.00, Size (in): 8.50                  | SECURITY      | 13293822     | 4 1/2" Reg Pin |                |         | 8.500   |              | 1.00     | 1.00           |
| <b>Mud Motor</b><br>Description: 6/7 8.4 FXD 1.75° w/ True Slick, Size (in): 7.00, Bend Angle (°): 1.75, Rotor Lobe: 6, Stator Lobe: 7, Stator Stage: 8.4 | AIM           | 700-40-036   | 4 1/2" IF Box  | 4 1/2" Reg Box |         | 7.000   |              | 33.88    | 34.88          |
| <b>UBHO Sub</b><br>Description: NM DAO UBHO, Material: Non-Magnetic                                                                                       | AIM           | 67502NM      | 4 1/2" IF Box  | 4 1/2" IF Pin  | 3.250   | 6.780   |              | 5.00     | 39.88          |
| <b>Drill Collar</b><br>Description: MWD NMDC, Material: Non-Magnetic, Type: Slick Drill                                                                   | AIM           | GT 67-30-315 | 4 1/2" IF Box  | 4 1/2" IF Pin  | 3.250   | 6.870   |              | 30.93    | 70.81          |
| <b>Drill Collar</b><br>Description: NMDC, Material: Non-Magnetic, Type: Slick Drill                                                                       | AIM           | GT 67-30-193 | 4 1/2" IF Box  | 4 1/2" IF Pin  | 3.250   | 6.850   |              | 29.70    | 100.51         |
| <b>Crossover Sub</b><br>Description: X-O SUB, Material: Steel                                                                                             | BLACK DIAMOND | BD11664      | EverDrlg54 Box | 4 1/2" IF Pin  | 3.000   | 6.700   |              | 3.52     | 104.03         |
| <b>Drill Pipe</b><br>Description: 28 Stands 5.5" Drill Pipe, Type: Slick                                                                                  | BLACK DIAMOND |              | EverDrlg54 Box | EverDrlg54 Pin | 3.000   | 5.500   |              | 2509.00  | 2613.03        |
| <b>Crossover Sub</b><br>Description: X-O SUB, Material: Steel                                                                                             | BLACK DIAMOND | BD13749      | 4 1/2" IF Box  | EverDrlg54 Pin | 3.000   | 6.740   |              | 3.57     | 2616.60        |
| <b>Agitator</b><br>Description: AGITATOR, Size (in): 6.75                                                                                                 | NOV           | 701-800      | 4 1/2" IF Box  | 4 1/2" IF Pin  |         | 6.750   |              | 25.19    | 2641.79        |
| <b>Crossover Sub</b><br>Description: X-O SUB, Material: Steel                                                                                             | BLACK DIAMOND | BD18869      | EverDrlg54 Box | 4 1/2" IF Pin  | 3.000   | 6.730   |              | 1.88     | 2643.67        |

## MWD Items

No items

**BHA #8 - 8.50" LATERAL w/ Agitator**

Date In: Jan 16, 2021, 7:00 Date Out: Jan 18, 2021, 3:00

| Bit Details                |         | Motor Details                     |          | Directional Comments                                                           |  |
|----------------------------|---------|-----------------------------------|----------|--------------------------------------------------------------------------------|--|
| OD (in)                    | 8.500   | Size (in)                         | 7.0      | Flow Rate: 500-700, Max Diff: 1910 psi, Max Torque: 18,710 ft-lbs, BIT Runs: 3 |  |
| Vendor                     | BAKER   | Lobe/Stage                        | 7/8, 8.5 |                                                                                |  |
| S/N                        | 5311056 | Bend Angle                        | 1.75     |                                                                                |  |
| Nozzles                    | 6x16's  | Speed (rev/gal)                   | 0.26     | MWD Comments                                                                   |  |
| Total Flow Area (in²)      | 1.180   | Wear Pad OD (in)                  | 7.150    | <div>POOH Reason</div> Total Depth/Casing Point                                |  |
| Drilling Hours for Day     | 7.25    | Bit Distances                     |          |                                                                                |  |
| Total Drilled for Day (ft) | 880.00  | Gamma: 48.00 ft, Survey: 63.00 ft |          |                                                                                |  |
| Drilling Hours for BHA     | 16.08   |                                   |          |                                                                                |  |
| Total Drilled for BHA (ft) | 1820.00 |                                   |          |                                                                                |  |

**Directional Items**

| Description                                                                                                                                               | Vendor        | SN#          | Top Conn       | Btm Conn       | ID (in) | OD (in) | Fn Len. (ft) | Len (ft) | Aggr. Len (ft) |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------|---------------|--------------|----------------|----------------|---------|---------|--------------|----------|----------------|
| <b>Bit (Fixed Cutter)</b><br>Description: DD506TWX, Type: PDC (Polycrystalline Diamond Compacts), Gauge Length (in): 4.00, Size (in): 8.50                | BAKER         | 5311056      | 4 1/2" Reg Pin |                |         | 8.500   |              | 1.00     | 1.00           |
| <b>Mud Motor</b><br>Description: 7/8 8.5 FXD 1.75° w/ True Slick, Size (in): 7.00, Bend Angle (°): 1.75, Rotor Lobe: 7, Stator Lobe: 8, Stator Stage: 8.5 | AIM           | 700-40-033   | 4 1/2" IF Box  | 4 1/2" Reg Box |         | 7.020   |              | 36.03    | 37.03          |
| <b>UBHO Sub</b><br>Description: NM DAO UBHO, Material: Non-Magnetic                                                                                       | AIM           | 67502NM      | 4 1/2" IF Box  | 4 1/2" IF Pin  | 3.250   | 6.780   |              | 5.00     | 42.03          |
| <b>Drill Collar</b><br>Description: MWD NMDC, Material: Non-Magnetic, Type: Slick Drill                                                                   | AIM           | GT 67-30-315 | 4 1/2" IF Box  | 4 1/2" IF Pin  | 3.250   | 6.870   |              | 30.93    | 72.96          |
| <b>Drill Collar</b><br>Description: NMDC, Material: Non-Magnetic, Type: Slick Drill                                                                       | AIM           | GT 67-30-193 | 4 1/2" IF Box  | 4 1/2" IF Pin  | 3.250   | 6.850   |              | 29.70    | 102.66         |
| <b>Crossover Sub</b><br>Description: X-O SUB, Material: Steel                                                                                             | BLACK DIAMOND | BD11664      | EverDrlg54 Box | 4 1/2" IF Pin  | 3.000   | 6.700   |              | 3.52     | 106.18         |
| <b>Drill Pipe</b><br>Description: 28 Stands 5.5" Drill Pipe, Type: Slick                                                                                  | BLACK DIAMOND |              | EverDrlg54 Box | EverDrlg54 Pin | 3.000   | 5.500   |              | 2509.00  | 2615.18        |
| <b>Crossover Sub</b><br>Description: X-O SUB, Material: Steel                                                                                             | BLACK DIAMOND | BD13749      | 4 1/2" IF Box  | EverDrlg54 Pin | 3.000   | 6.740   |              | 3.57     | 2618.75        |
| <b>Agitator</b><br>Description: AGITATOR, Size (in): 6.75                                                                                                 | NOV           | W1679815-1   | 4 1/2" IF Box  | 4 1/2" IF Pin  |         | 6.600   |              | 25.43    | 2644.18        |
| <b>Crossover Sub</b><br>Description: X-O SUB, Material: Steel                                                                                             | BLACK DIAMOND | BD18869      | EverDrlg54 Box | 4 1/2" IF Pin  | 3.000   | 6.730   |              | 1.88     | 2646.06        |

**MWD Items**

No Items

**Directional Activities**

| Activity Type | Code | Start Date | Start Time | End Time | End Date | Start (ft) | End (ft) | Comments/Details                                                                                                                                                                              |
|---------------|------|------------|------------|----------|----------|------------|----------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Pooh          | 7    | 01-15      | 23:15      | 05:30    | 01-16    |            |          | POOH for Motor                                                                                                                                                                                |
| Change BHA    | 6    | 01-16      | 05:30      | 07:00    | 01-16    |            |          | P/U BHA #8                                                                                                                                                                                    |
| TIH           | 8    | 01-16      | 07:00      | 08:10    | 01-16    |            |          | TIH W/ BHA #8                                                                                                                                                                                 |
| Other         | 16   | 01-16      | 08:10      | 08:50    | 01-16    |            |          | P/U & TEST AGITATOR                                                                                                                                                                           |
| TIH           | 8    | 01-16      | 08:50      | 14:15    | 01-16    |            |          | TIH W/ BHA #8                                                                                                                                                                                 |
| Circulating   | 3    | 01-16      | 14:15      | 15:10    | 01-16    |            |          | RELOG GAMMA                                                                                                                                                                                   |
| Rotary Drill  | 1    | 01-16      | 15:10      | 16:10    | 01-16    | 15927.00   | 16002.00 | Pressure On (psi): 3450.00, Pressure Off (psi): 2450.00, Weight On Bit (klbs): 50.00, Surface RPM: 30, Surface Torque (ft lbf): 25000.00, Flow Rate (gpm): 550.00, Strokes Per Minute: 144.00 |
| Survey        | 46   | 01-16      | 16:10      | 16:20    | 01-16    | 16002.00   | 16002.00 | Inclination (°): 92.700, Azimuth (°): 1.660, TVD (ft): 10934.95, Dogleg (°/100 ft): 0.46, Sensor Depth (ft): 15939.00, Bit To Sensor (ft): 63.00                                              |
| Rotary Drill  | 1    | 01-16      | 16:20      | 16:50    | 01-16    | 16002.00   | 16091.00 | Pressure On (psi): 3450.00, Pressure Off (psi): 2450.00, Weight On Bit (klbs): 50.00, Surface RPM: 30, Surface Torque (ft lbf): 25000.00, Flow Rate (gpm): 550.00, Strokes Per Minute: 144.00 |
| Survey        | 46   | 01-16      | 16:50      | 17:00    | 01-16    | 16091.00   | 16091.00 | Inclination (°): 92.350, Azimuth (°): 1.660, TVD (ft): 10931.03, Dogleg (°/100 ft): 0.39, Sensor Depth (ft): 16028.00, Bit To Sensor (ft): 63.00                                              |
| Rotary Drill  | 1    | 01-16      | 17:00      | 17:35    | 01-16    | 16091.00   | 16172.00 | Pressure On (psi): 3450.00, Pressure Off (psi): 2450.00, Weight On Bit (klbs): 50.00, Surface RPM: 30, Surface Torque (ft lbf): 25000.00, Flow Rate (gpm): 550.00, Strokes Per Minute: 144.00 |
| Circulating   | 3    | 01-16      | 17:35      | 18:10    | 01-16    |            |          | REPAIR MUD PUMP #2                                                                                                                                                                            |

|              |    |       |       |       |       |          |          |                                                                                                                                                                                               |
|--------------|----|-------|-------|-------|-------|----------|----------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Rotary Drill | 1  | 01-16 | 18:10 | 18:20 | 01-16 | 16172.00 | 16180.00 | Pressure On (psi): 3450.00, Pressure Off (psi): 2450.00, Weight On Bit (klbs): 50.00, Surface RPM: 30, Surface Torque (ft lbf): 25000.00, Flow Rate (gpm): 550.00, Strokes Per Minute: 144.00 |
| Survey       | 46 | 01-16 | 18:20 | 18:25 | 01-16 | 16180.00 | 16180.00 | Inclination (°): 92.180, Azimuth (°): 2.180, TVD (ft): 10927.51, Dogleg (°/100 ft): 0.61, Sensor Depth (ft): 16117.00, Bit To Sensor (ft): 63.00                                              |
| Rotary Drill | 1  | 01-16 | 18:25 | 18:55 | 01-16 | 16180.00 | 16270.00 | Pressure On (psi): 4300.00, Pressure Off (psi): 3550.00, Weight On Bit (klbs): 60.00, Surface RPM: 40, Surface Torque (ft lbf): 35000.00, Flow Rate (gpm): 630.00, Strokes Per Minute: 164.00 |
| Survey       | 46 | 01-16 | 18:55 | 19:00 | 01-16 | 16270.00 | 16270.00 | Inclination (°): 92.620, Azimuth (°): 1.220, TVD (ft): 10923.74, Dogleg (°/100 ft): 1.17, Sensor Depth (ft): 16207.00, Bit To Sensor (ft): 63.00                                              |
| Slide Drill  | 2  | 01-16 | 19:00 | 19:40 | 01-16 | 16270.00 | 16290.00 | Pressure On (psi): 3800.00, Pressure Off (psi): 3550.00, Weight On Bit (klbs): 50.00, Flow Rate (gpm): 630.00, Strokes Per Minute: 164, Toolface: 210, Toolface Type: gravity                 |
| Rotary Drill | 1  | 01-16 | 19:40 | 20:05 | 01-16 | 16290.00 | 16359.00 | Pressure On (psi): 4300.00, Pressure Off (psi): 3550.00, Weight On Bit (klbs): 60.00, Surface RPM: 40, Surface Torque (ft lbf): 35000.00, Flow Rate (gpm): 630.00, Strokes Per Minute: 164.00 |
| Survey       | 46 | 01-16 | 20:05 | 20:10 | 01-16 | 16359.00 | 16359.00 | Inclination (°): 92.130, Azimuth (°): 1.220, TVD (ft): 10920.05, Dogleg (°/100 ft): 0.55, Sensor Depth (ft): 16296.00, Bit To Sensor (ft): 63.00                                              |
| Slide Drill  | 2  | 01-16 | 20:10 | 20:40 | 01-16 | 16359.00 | 16378.00 | Pressure On (psi): 3800.00, Pressure Off (psi): 3550.00, Weight On Bit (klbs): 50.00, Flow Rate (gpm): 630.00, Strokes Per Minute: 164, Toolface: 220, Toolface Type: gravity                 |
| Rotary Drill | 1  | 01-16 | 20:40 | 21:10 | 01-16 | 16378.00 | 16449.00 | Pressure On (psi): 4300.00, Pressure Off (psi): 3550.00, Weight On Bit (klbs): 60.00, Surface RPM: 40, Surface Torque (ft lbf): 35000.00, Flow Rate (gpm): 630.00, Strokes Per Minute: 164.00 |
| Survey       | 46 | 01-16 | 21:10 | 21:15 | 01-16 | 16449.00 | 16449.00 | Inclination (°): 91.120, Azimuth (°): 359.550, TVD (ft): 10917.50, Dogleg (°/100 ft): 2.17, Sensor Depth (ft): 16386.00, Bit To Sensor (ft): 63.00                                            |
| Rotary Drill | 1  | 01-16 | 21:15 | 21:40 | 01-16 | 16449.00 | 16539.00 | Pressure On (psi): 4300.00, Pressure Off (psi): 3550.00, Weight On Bit (klbs): 60.00, Surface RPM: 40, Surface Torque (ft lbf): 35000.00, Flow Rate (gpm): 630.00, Strokes Per Minute: 164.00 |
| Survey       | 46 | 01-16 | 21:40 | 21:45 | 01-16 | 16539.00 | 16539.00 | Inclination (°): 91.340, Azimuth (°): 358.580, TVD (ft): 10915.57, Dogleg (°/100 ft): 1.10, Sensor Depth (ft): 16476.00, Bit To Sensor (ft): 63.00                                            |
| Slide Drill  | 2  | 01-16 | 21:45 | 22:20 | 01-16 | 16539.00 | 16559.00 | Pressure On (psi): 3800.00, Pressure Off (psi): 3550.00, Weight On Bit (klbs): 50.00, Flow Rate (gpm): 630.00, Strokes Per Minute: 164, Toolface: 180, Toolface Type: gravity                 |
| Rotary Drill | 1  | 01-16 | 22:20 | 22:45 | 01-16 | 16559.00 | 16628.00 | Pressure On (psi): 4300.00, Pressure Off (psi): 3550.00, Weight On Bit (klbs): 60.00, Surface RPM: 40, Surface Torque (ft lbf): 35000.00, Flow Rate (gpm): 630.00, Strokes Per Minute: 164.00 |
| Survey       | 46 | 01-16 | 22:45 | 22:50 | 01-16 | 16628.00 | 16628.00 | Inclination (°): 89.800, Azimuth (°): 357.260, TVD (ft): 10914.68, Dogleg (°/100 ft): 2.28, Sensor Depth (ft): 16565.00, Bit To Sensor (ft): 63.00                                            |
| Rotary Drill | 1  | 01-16 | 22:50 | 23:20 | 01-16 | 16628.00 | 16718.00 | Pressure On (psi): 4300.00, Pressure Off (psi): 3550.00, Weight On Bit (klbs): 60.00, Surface RPM: 40, Surface Torque (ft lbf): 35000.00, Flow Rate (gpm): 630.00, Strokes Per Minute: 164.00 |
| Survey       | 46 | 01-16 | 23:20 | 23:25 | 01-16 | 16718.00 | 16718.00 | Inclination (°): 90.460, Azimuth (°): 356.910, TVD (ft): 10914.48, Dogleg (°/100 ft): 0.83, Sensor Depth (ft): 16655.00, Bit To Sensor (ft): 63.00                                            |
| Rotary Drill | 1  | 01-16 | 23:25 | 23:55 | 01-16 | 16718.00 | 16807.00 | Pressure On (psi): 4300.00, Pressure Off (psi): 3550.00, Weight On Bit (klbs): 60.00, Surface RPM: 40, Surface Torque (ft lbf): 35000.00, Flow Rate (gpm): 630.00, Strokes Per Minute: 164.00 |
| Survey       | 46 | 01-16 | 23:55 | 00:00 | 01-17 | 16807.00 | 16807.00 | Inclination (°): 91.300, Azimuth (°): 356.210, TVD (ft): 10913.11, Dogleg (°/100 ft): 1.23, Sensor Depth (ft): 16744.00, Bit To Sensor (ft): 63.00                                            |

**MWD Activities**

No Activities



|                                 |                                                     |                                                       |
|---------------------------------|-----------------------------------------------------|-------------------------------------------------------|
| <b>Job Number</b><br>WT-20-071  | <b>Operator</b><br>Advance Energy Partners          | <b>Rig Name</b><br>Pioneer #80                        |
| <b>Start Date</b><br>2020-12-04 | <b>Well Name</b><br>Anderson Fed Com 504H           | <b>Legal Well Name   AFE</b><br>Anderson Fed Com 504H |
| <b>Play</b><br>Delaware Basin   | <b>State/Province and Country</b><br>New Mexico, US | <b>County</b><br>Lea                                  |
|                                 |                                                     | <b>Company Man</b>                                    |

Sunday, Jan 17 00:00 - 23:59 (Day 18 of 19)

Billing: \$5,800.00 (\$130,925.38 total)

| Drilling Summary        |          |                     |       | Drilling Parameters       |                   |
|-------------------------|----------|---------------------|-------|---------------------------|-------------------|
| Start Depth (ft)        | 16807.00 | Downhole Hours      | 24.00 | Rotating WOB (klbs)       | 60.00 - 60.00     |
| Bit Depth (ft)          | 17747.00 | Drilling Hours      | 8.83  | Sliding WOB (klbs)        | 50.00 - 50.00     |
| Bottom Hole Depth (ft)  | 17747.00 | Hours Circulating   | 5.00  | Rotating SPM              | 164.00 - 164.00   |
| Total Distance (ft)     | 940.00   | Hours Sliding       | 2.58  | Sliding SPM               | 164.00 - 164.00   |
| Distance Rotated (ft)   | 857.00   | Hours Rotating      | 6.25  | Motor RPM                 | 164.00 - 164.00   |
| Distance Slid (ft)      | 83.00    |                     |       | Surface RPM               | 40.00 - 40.00     |
| Inclination In          | 91.91    |                     |       | Flow Rate (gpm)           | 630.00 - 630.00   |
| Inclination Out         | 92.13    |                     |       | On Bottom Pressure (psi)  | 3800.00 - 4300.00 |
| Azimuth In              | 358.05   | % Hours Rotating    | 71%   | Off Bottom Pressure (psi) | 3550.00 - 3550.00 |
| Azimuth Out             | 358.41   | % Hours Sliding     | 29%   |                           |                   |
| AVG Total ROP (ft/h)    | 106.42   | % Distance Sliding  | 9%    |                           |                   |
| AVG Rotating ROP (ft/h) | 137.12   | % Distance Rotating | 91%   |                           |                   |
| AVG Sliding ROP (ft/h)  | 32.13    |                     |       |                           |                   |

## Personnel

| Name                | Position            |
|---------------------|---------------------|
| Robert Olivarez     | MWD Engineer        |
| Carlos Jensen       | MWD Engineer        |
| Kyle Kusak          | MWD Engineer        |
| Advance Directional | Directional Driller |

## BHA #8 - 8.50" LATERAL w/ Agitator

Date In: Jan 16, 2021, 7:00 Date Out: Jan 18, 2021, 3:00

| Bit Details                |         | Motor Details                     |          | Directional Comments                                                           |
|----------------------------|---------|-----------------------------------|----------|--------------------------------------------------------------------------------|
| OD (in)                    | 8.500   | Size (in)                         | 7.0      | Flow Rate: 500-700, Max Diff: 1910 psi, Max Torque: 18,710 ft-lbs, BIT Runs: 3 |
| Vendor                     | BAKER   | Lobe/Stage                        | 7/8, 8.5 |                                                                                |
| S/N                        | 5311056 | Bend Angle                        | 1.75     |                                                                                |
| Nozzles                    | 6x16's  | Speed (rev/gal)                   | 0.26     | MWD Comments                                                                   |
| Total Flow Area (in²)      | 1.180   | Wear Pad OD (in)                  | 7.150    | POOH Reason<br>Total Depth/Casing Point                                        |
| Drilling Hours for Day     | 8.83    | Bit Distances                     |          |                                                                                |
| Total Drilled for Day (ft) | 940.00  | Gamma: 48.00 ft, Survey: 63.00 ft |          |                                                                                |
| Drilling Hours for BHA     | 16.08   |                                   |          |                                                                                |
| Total Drilled for BHA (ft) | 1820.00 |                                   |          |                                                                                |

## Directional Items

| Description                                                                                                                                               | Vendor        | SN#          | Top Conn       | Btm Conn       | ID (in) | OD (in) | Fn Len. (ft) | Len (ft) | Aggr. Len (ft) |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------|---------------|--------------|----------------|----------------|---------|---------|--------------|----------|----------------|
| <b>Bit (Fixed Cutter)</b><br>Description: DD506TWX, Type: PDC (Polycrystalline Diamond Compacts), Gauge Length (in): 4.00, Size (in): 8.50                | BAKER         | 5311056      | 4 1/2" Reg Pin |                |         | 8.500   |              | 1.00     | 1.00           |
| <b>Mud Motor</b><br>Description: 7/8 8.5 FXD 1.75° w/ True Slick, Size (in): 7.00, Bend Angle (°): 1.75, Rotor Lobe: 7, Stator Lobe: 8, Stator Stage: 8.5 | AIM           | 700-40-033   | 4 1/2" IF Box  | 4 1/2" Reg Box |         | 7.020   |              | 36.03    | 37.03          |
| <b>UBHO Sub</b><br>Description: NM DAO UBHO, Material: Non-Magnetic                                                                                       | AIM           | 67502NM      | 4 1/2" IF Box  | 4 1/2" IF Pin  | 3.250   | 6.780   |              | 5.00     | 42.03          |
| <b>Drill Collar</b><br>Description: MWD NMDC, Material: Non-Magnetic, Type: Slick Drill                                                                   | AIM           | GT 67-30-315 | 4 1/2" IF Box  | 4 1/2" IF Pin  | 3.250   | 6.870   |              | 30.93    | 72.96          |
| <b>Drill Collar</b><br>Description: NMDC, Material: Non-Magnetic, Type: Slick Drill                                                                       | AIM           | GT 67-30-193 | 4 1/2" IF Box  | 4 1/2" IF Pin  | 3.250   | 6.850   |              | 29.70    | 102.66         |
| <b>Crossover Sub</b><br>Description: X-O SUB, Material: Steel                                                                                             | BLACK DIAMOND | BD11664      | EverDrlg54 Box | 4 1/2" IF Pin  | 3.000   | 6.700   |              | 3.52     | 106.18         |
| <b>Drill Pipe</b><br>Description: 28 Stands 5.5" Drill Pipe, Type: Slick                                                                                  | BLACK DIAMOND |              | EverDrlg54 Box | EverDrlg54 Pin | 3.000   | 5.500   |              | 2509.00  | 2615.18        |
| <b>Crossover Sub</b><br>Description: X-O SUB, Material: Steel                                                                                             | BLACK DIAMOND | BD13749      | 4 1/2" IF Box  | EverDrlg54 Pin | 3.000   | 6.740   |              | 3.57     | 2618.75        |
| <b>Agitator</b><br>Description: AGITATOR, Size (in): 6.75                                                                                                 | NOV           | W1679815-1   | 4 1/2" IF Box  | 4 1/2" IF Pin  |         | 6.600   |              | 25.43    | 2644.18        |
| <b>Crossover Sub</b><br>Description: X-O SUB, Material: Steel                                                                                             | BLACK DIAMOND | BD18869      | EverDrlg54 Box | 4 1/2" IF Pin  | 3.000   | 6.730   |              | 1.88     | 2646.06        |

## MWD Items

No items

**Directional Activities**

| Activity Type | Code | Start Date | Start Time | End Time | End Date | Start (ft) | End (ft) | Comments/Details                                                                                                                                                                              |
|---------------|------|------------|------------|----------|----------|------------|----------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Survey        | 46   | 01-16      | 23:55      | 00:00    | 01-17    | 16807.00   | 16807.00 | Inclination (°): 91.300, Azimuth (°): 356.210, TVD (ft): 10913.11, Dogleg (°/100 ft): 1.23, Sensor Depth (ft): 16744.00, Bit To Sensor (ft): 63.00                                            |
| Rotary Drill  | 1    | 01-17      | 00:00      | 00:05    | 01-17    | 16807.00   | 16817.00 | Pressure On (psi): 4300.00, Pressure Off (psi): 3550.00, Weight On Bit (klbs): 60.00, Surface RPM: 40, Surface Torque (ft lbf): 35000.00, Flow Rate (gpm): 630.00, Strokes Per Minute: 164.00 |
| Slide Drill   | 2    | 01-17      | 00:05      | 01:00    | 01-17    | 16817.00   | 16842.00 | Pressure On (psi): 3800.00, Pressure Off (psi): 3550.00, Weight On Bit (klbs): 50.00, Flow Rate (gpm): 630.00, Strokes Per Minute: 164, Toolface: 110, Toolface Type: gravity                 |
| Rotary Drill  | 1    | 01-17      | 01:00      | 01:30    | 01-17    | 16842.00   | 16897.00 | Pressure On (psi): 4300.00, Pressure Off (psi): 3550.00, Weight On Bit (klbs): 60.00, Surface RPM: 40, Surface Torque (ft lbf): 35000.00, Flow Rate (gpm): 630.00, Strokes Per Minute: 164.00 |
| Survey        | 46   | 01-17      | 01:30      | 01:35    | 01-17    | 16897.00   | 16897.00 | Inclination (°): 91.910, Azimuth (°): 358.050, TVD (ft): 10910.59, Dogleg (°/100 ft): 2.15, Sensor Depth (ft): 16834.00, Bit To Sensor (ft): 63.00                                            |
| Rotary Drill  | 1    | 01-17      | 01:35      | 02:05    | 01-17    | 16897.00   | 16986.00 | Pressure On (psi): 4300.00, Pressure Off (psi): 3550.00, Weight On Bit (klbs): 60.00, Surface RPM: 40, Surface Torque (ft lbf): 35000.00, Flow Rate (gpm): 630.00, Strokes Per Minute: 164.00 |
| Survey        | 46   | 01-17      | 02:05      | 02:15    | 01-17    | 16986.00   | 16986.00 | Inclination (°): 92.880, Azimuth (°): 358.930, TVD (ft): 10906.87, Dogleg (°/100 ft): 1.47, Sensor Depth (ft): 16923.00, Bit To Sensor (ft): 63.00                                            |
| Slide Drill   | 2    | 01-17      | 02:15      | 03:00    | 01-17    | 16986.00   | 17016.00 | Pressure On (psi): 3800.00, Pressure Off (psi): 3550.00, Weight On Bit (klbs): 50.00, Flow Rate (gpm): 630.00, Strokes Per Minute: 164, Toolface: 170, Toolface Type: gravity                 |
| Rotary Drill  | 1    | 01-17      | 03:00      | 03:25    | 01-17    | 17016.00   | 17076.00 | Pressure On (psi): 4300.00, Pressure Off (psi): 3550.00, Weight On Bit (klbs): 60.00, Surface RPM: 40, Surface Torque (ft lbf): 35000.00, Flow Rate (gpm): 630.00, Strokes Per Minute: 164.00 |
| Survey        | 46   | 01-17      | 03:25      | 03:30    | 01-17    | 17076.00   | 17076.00 | Inclination (°): 89.670, Azimuth (°): 357.880, TVD (ft): 10904.87, Dogleg (°/100 ft): 3.75, Sensor Depth (ft): 17013.00, Bit To Sensor (ft): 63.00                                            |
| Rotary Drill  | 1    | 01-17      | 03:30      | 04:00    | 01-17    | 17076.00   | 17166.00 | Pressure On (psi): 4300.00, Pressure Off (psi): 3550.00, Weight On Bit (klbs): 60.00, Surface RPM: 40, Surface Torque (ft lbf): 35000.00, Flow Rate (gpm): 630.00, Strokes Per Minute: 164.00 |
| Survey        | 46   | 01-17      | 04:00      | 04:05    | 01-17    | 17166.00   | 17166.00 | Inclination (°): 89.100, Azimuth (°): 357.700, TVD (ft): 10905.83, Dogleg (°/100 ft): 0.66, Sensor Depth (ft): 17103.00, Bit To Sensor (ft): 63.00                                            |
| Rotary Drill  | 1    | 01-17      | 04:05      | 04:45    | 01-17    | 17166.00   | 17255.00 | Pressure On (psi): 4300.00, Pressure Off (psi): 3550.00, Weight On Bit (klbs): 60.00, Surface RPM: 40, Surface Torque (ft lbf): 35000.00, Flow Rate (gpm): 630.00, Strokes Per Minute: 164.00 |
| Survey        | 46   | 01-17      | 04:45      | 04:50    | 01-17    | 17255.00   | 17255.00 | Inclination (°): 89.100, Azimuth (°): 356.650, TVD (ft): 10907.23, Dogleg (°/100 ft): 1.18, Sensor Depth (ft): 17192.00, Bit To Sensor (ft): 63.00                                            |
| Slide Drill   | 2    | 01-17      | 04:50      | 05:45    | 01-17    | 17255.00   | 17283.00 | Pressure On (psi): 3800.00, Pressure Off (psi): 3550.00, Weight On Bit (klbs): 50.00, Flow Rate (gpm): 630.00, Strokes Per Minute: 164, Toolface: 45, Toolface Type: gravity                  |
| Rotary Drill  | 1    | 01-17      | 05:45      | 06:15    | 01-17    | 17283.00   | 17345.00 | Pressure On (psi): 4300.00, Pressure Off (psi): 3550.00, Weight On Bit (klbs): 60.00, Surface RPM: 40, Surface Torque (ft lbf): 35000.00, Flow Rate (gpm): 630.00, Strokes Per Minute: 164.00 |
| Survey        | 46   | 01-17      | 06:15      | 06:20    | 01-17    | 17345.00   | 17345.00 | Inclination (°): 89.630, Azimuth (°): 358.580, TVD (ft): 10908.23, Dogleg (°/100 ft): 2.22, Sensor Depth (ft): 17282.00, Bit To Sensor (ft): 63.00                                            |
| Rotary Drill  | 1    | 01-17      | 06:20      | 07:05    | 01-17    | 17345.00   | 17435.00 | Pressure On (psi): 4300.00, Pressure Off (psi): 3550.00, Weight On Bit (klbs): 60.00, Surface RPM: 40, Surface Torque (ft lbf): 35000.00, Flow Rate (gpm): 630.00, Strokes Per Minute: 164.00 |
| Survey        | 46   | 01-17      | 07:05      | 07:10    | 01-17    | 17435.00   | 17435.00 | Inclination (°): 90.460, Azimuth (°): 358.580, TVD (ft): 10908.16, Dogleg (°/100 ft): 0.92, Sensor Depth (ft): 17372.00, Bit To Sensor (ft): 63.00                                            |
| Rotary Drill  | 1    | 01-17      | 07:10      | 07:50    | 01-17    | 17435.00   | 17524.00 | Pressure On (psi): 4300.00, Pressure Off (psi): 3550.00, Weight On Bit (klbs): 60.00, Surface RPM: 40, Surface Torque (ft lbf): 35000.00, Flow Rate (gpm): 630.00, Strokes Per Minute: 164.00 |
| Survey        | 46   | 01-17      | 07:50      | 07:55    | 01-17    | 17524.00   | 17524.00 | Inclination (°): 92.220, Azimuth (°): 359.550, TVD (ft): 10906.08, Dogleg (°/100 ft): 2.26, Sensor Depth (ft): 17461.00, Bit To Sensor (ft): 63.00                                            |
| Rotary Drill  | 1    | 01-17      | 07:55      | 08:35    | 01-17    | 17524.00   | 17614.00 | Pressure On (psi): 4300.00, Pressure Off (psi): 3550.00, Weight On Bit (klbs): 60.00, Surface RPM: 40, Surface Torque (ft lbf): 35000.00, Flow Rate (gpm): 630.00, Strokes Per Minute: 164.00 |
| Survey        | 46   | 01-17      | 08:35      | 08:40    | 01-17    | 17614.00   | 17614.00 | Inclination (°): 92.350, Azimuth (°): 359.110, TVD (ft): 10902.49, Dogleg (°/100 ft): 0.51, Sensor Depth (ft): 17551.00, Bit To Sensor (ft): 63.00                                            |
| Rotary Drill  | 1    | 01-17      | 08:40      | 09:15    | 01-17    | 17614.00   | 17703.00 | Pressure On (psi): 4300.00, Pressure Off (psi): 3550.00, Weight On Bit (klbs): 60.00, Surface RPM: 40, Surface Torque (ft lbf): 35000.00, Flow Rate (gpm): 630.00, Strokes Per Minute: 164.00 |

|              |    |       |       |       |       |          |          |                                                                                                                                                                                               |
|--------------|----|-------|-------|-------|-------|----------|----------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Survey       | 46 | 01-17 | 09:15 | 09:20 | 01-17 | 17703.00 | 17703.00 | Inclination (°): 92.130, Azimuth (°): 358.230, TVD (ft): 10899.01, Dogleg (°/100 ft): 1.02, Sensor Depth (ft): 17640.00, Bit To Sensor (ft): 63.00                                            |
| Rotary Drill | 1  | 01-17 | 09:20 | 09:45 | 01-17 | 17703.00 | 17747.00 | Pressure On (psi): 4300.00, Pressure Off (psi): 3550.00, Weight On Bit (klbs): 60.00, Surface RPM: 40, Surface Torque (ft lbf): 35000.00, Flow Rate (gpm): 630.00, Strokes Per Minute: 164.00 |
| Other        | 16 | 01-17 | 09:45 | 10:00 | 01-17 |          |          | FLOW CHECK                                                                                                                                                                                    |
| Survey       | 46 | 01-17 | 10:00 | 10:05 | 01-17 | 17747.00 | 17747.00 | Inclination (°): 92.130, Azimuth (°): 358.410, TVD (ft): 10897.38, Dogleg (°/100 ft): 0.41, Sensor Depth (ft): 17684.00, Bit To Sensor (ft): 63.00                                            |
| Circulating  | 3  | 01-17 | 10:05 | 15:05 | 01-17 |          |          | CIRC                                                                                                                                                                                          |
| L/D DP       | 28 | 01-17 | 15:05 | 03:00 | 01-18 |          |          | L/D DP                                                                                                                                                                                        |

**MWD Activities**

No Activities



|                                 |                                                     |                                                       |
|---------------------------------|-----------------------------------------------------|-------------------------------------------------------|
| <b>Job Number</b><br>WT-20-071  | <b>Operator</b><br>Advance Energy Partners          | <b>Rig Name</b><br>Pioneer #80                        |
| <b>Start Date</b><br>2020-12-04 | <b>Well Name</b><br>Anderson Fed Com 504H           | <b>Legal Well Name   AFE</b><br>Anderson Fed Com 504H |
| <b>Play</b><br>Delaware Basin   | <b>State/Province and Country</b><br>New Mexico, US | <b>County</b><br>Lea                                  |
| <b>Company Man</b>              |                                                     |                                                       |

Monday, Jan 18 00:00 - 23:59 (Day 19 of 19)

Billing: N/A (\$130,925.38 total)

## Drilling Summary

|                                |                          |                                  |                            |
|--------------------------------|--------------------------|----------------------------------|----------------------------|
| <b>Start Depth (ft)</b>        | <b>Downhole Hours</b>    | 3.00                             | <b>Rotating WOB (klbs)</b> |
| <b>Bit Depth (ft)</b>          | <b>Drilling Hours</b>    | 0.00                             | <b>Sliding WOB (klbs)</b>  |
| <b>Bottom Hole Depth (ft)</b>  | <b>Hours Circulating</b> | 0.00                             | <b>Rotating SPM</b>        |
| <b>Total Distance (ft)</b>     | 0.00                     | <b>Hours Sliding</b>             | 0.00                       |
| <b>Distance Rotated (ft)</b>   | 0.00                     | <b>Hours Rotating</b>            | 0.00                       |
| <b>Distance Slid (ft)</b>      | 0.00                     | <b>Motor RPM</b>                 | 164.00 - 164.00            |
| <b>Inclination In</b>          |                          | <b>Surface RPM</b>               |                            |
| <b>Inclination Out</b>         |                          | <b>Flow Rate (gpm)</b>           |                            |
| <b>Azimuth In</b>              | <b>% Hours Rotating</b>  | <b>On Bottom Pressure (psi)</b>  |                            |
| <b>Azimuth Out</b>             | <b>% Hours Sliding</b>   | <b>Off Bottom Pressure (psi)</b> |                            |
| <b>AVG Total ROP (ft/h)</b>    | 0.00                     | <b>% Distance Sliding</b>        |                            |
| <b>AVG Rotating ROP (ft/h)</b> | 0.00                     | <b>% Distance Rotating</b>       |                            |
| <b>AVG Sliding ROP (ft/h)</b>  | 0.00                     |                                  |                            |

## Personnel

| Name                | Position            |
|---------------------|---------------------|
| Robert Olivarez     | MWD Engineer        |
| Carlos Jensen       | MWD Engineer        |
| Kyle Kusak          | MWD Engineer        |
| Advance Directional | Directional Driller |

## BHA #8 - 8.50" LATERAL w/ Agitator

Date In: Jan 16, 2021, 7:00 Date Out: Jan 18, 2021, 3:00

| Bit Details                |         | Motor Details                     |          | Directional Comments                                                           |  |
|----------------------------|---------|-----------------------------------|----------|--------------------------------------------------------------------------------|--|
| OD (in)                    | 8.500   | Size (in)                         | 7.0      | Flow Rate: 500-700, Max Diff: 1910 psi, Max Torque: 18,710 ft-lbs, BIT Runs: 3 |  |
| Vendor                     | BAKER   | Lobe/Stage                        | 7/8, 8.5 |                                                                                |  |
| S/N                        | 5311056 | Bend Angle                        | 1.75     |                                                                                |  |
| Nozzles                    | 6x16's  | Speed (rev/gal)                   | 0.26     | MWD Comments                                                                   |  |
| Total Flow Area (in²)      | 1.180   | Wear Pad OD (in)                  | 7.150    |                                                                                |  |
| Drilling Hours for Day     | 0.00    | Bit Distances                     |          |                                                                                |  |
| Total Drilled for Day (ft) |         | Gamma: 48.00 ft, Survey: 63.00 ft |          |                                                                                |  |
| Drilling Hours for BHA     | 16.08   |                                   |          |                                                                                |  |
| Total Drilled for BHA (ft) | 1820.00 |                                   |          | POOH Reason                                                                    |  |
|                            |         |                                   |          | Total Depth/Casing Point                                                       |  |

## Directional Items

| Description                                                                                                                                               | Vendor        | SN#          | Top Conn       | Btm Conn       | ID (in) | OD (in) | Fn Len. (ft) | Len (ft) | Aggr. Len (ft) |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------|---------------|--------------|----------------|----------------|---------|---------|--------------|----------|----------------|
| <b>Bit (Fixed Cutter)</b><br>Description: DD506TWX, Type: PDC (Polycrystalline Diamond Compacts), Gauge Length (in): 4.00, Size (in): 8.50                | BAKER         | 5311056      | 4 1/2" Reg Pin |                |         | 8.500   |              | 1.00     | 1.00           |
| <b>Mud Motor</b><br>Description: 7/8 8.5 FXD 1.75° w/ True Slick, Size (in): 7.00, Bend Angle (°): 1.75, Rotor Lobe: 7, Stator Lobe: 8, Stator Stage: 8.5 | AIM           | 700-40-033   | 4 1/2" IF Box  | 4 1/2" Reg Box |         | 7.020   |              | 36.03    | 37.03          |
| <b>UBHO Sub</b><br>Description: NM DAO UBHO, Material: Non-Magnetic                                                                                       | AIM           | 67502NM      | 4 1/2" IF Box  | 4 1/2" IF Pin  | 3.250   | 6.780   |              | 5.00     | 42.03          |
| <b>Drill Collar</b><br>Description: MWD NMDC, Material: Non-Magnetic, Type: Slick Drill                                                                   | AIM           | GT 67-30-315 | 4 1/2" IF Box  | 4 1/2" IF Pin  | 3.250   | 6.870   |              | 30.93    | 72.96          |
| <b>Drill Collar</b><br>Description: NMDC, Material: Non-Magnetic, Type: Slick Drill                                                                       | AIM           | GT 67-30-193 | 4 1/2" IF Box  | 4 1/2" IF Pin  | 3.250   | 6.850   |              | 29.70    | 102.66         |
| <b>Crossover Sub</b><br>Description: X-O SUB, Material: Steel                                                                                             | BLACK DIAMOND | BD11664      | EverDrlg54 Box | 4 1/2" IF Pin  | 3.000   | 6.700   |              | 3.52     | 106.18         |
| <b>Drill Pipe</b><br>Description: 28 Stands 5.5" Drill Pipe, Type: Slick                                                                                  | BLACK DIAMOND |              | EverDrlg54 Box | EverDrlg54 Pin | 3.000   | 5.500   |              | 2509.00  | 2615.18        |
| <b>Crossover Sub</b><br>Description: X-O SUB, Material: Steel                                                                                             | BLACK DIAMOND | BD13749      | 4 1/2" IF Box  | EverDrlg54 Pin | 3.000   | 6.740   |              | 3.57     | 2618.75        |
| <b>Agitator</b><br>Description: AGITATOR, Size (in): 6.75                                                                                                 | NOV           | W1679815-1   | 4 1/2" IF Box  | 4 1/2" IF Pin  |         | 6.600   |              | 25.43    | 2644.18        |
| <b>Crossover Sub</b><br>Description: X-O SUB, Material: Steel                                                                                             | BLACK DIAMOND | BD18869      | EverDrlg54 Box | 4 1/2" IF Pin  | 3.000   | 6.730   |              | 1.88     | 2646.06        |

## MWD Items

No items

**Directional Activities**

| Activity Type | Code | Start Date | Start Time | End Time | End Date | Start (ft) | End (ft) | Comments/Details     |
|---------------|------|------------|------------|----------|----------|------------|----------|----------------------|
| L/D DP        | 28   | 01-17      | 15:05      | 03:00    | 01-18    |            |          | L/D DP               |
| Lay Down BHA  | 65   | 01-18      | 03:00      | 04:15    | 01-18    |            |          | L/D BHA #8           |
| Standby       | 15   | 01-18      | 04:15      | 06:00    | 01-18    |            |          | Standby while CASING |

**MWD Activities**

No Activities



# BHA Reports

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## **Anderson Fed Com 504H (WT-20-071)**

2020-12-04 to 2021-01-18

Lea, New Mexico, US (32.43, -103.64)

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|                                 |                                                     |                                                       |
|---------------------------------|-----------------------------------------------------|-------------------------------------------------------|
| <b>Job Number</b><br>WT-20-071  | <b>Operator</b><br>Advance Energy Partners          | <b>Rig Name</b><br>Pioneer #80                        |
| <b>Start Date</b><br>2020-12-04 | <b>Well Name</b><br>Anderson Fed Com 504H           | <b>Legal Well Name   AFE</b><br>Anderson Fed Com 504H |
| <b>Play</b><br>Delaware Basin   | <b>State/Province and Country</b><br>New Mexico, US | <b>County</b><br>Lea                                  |
|                                 |                                                     | <b>Company Man</b>                                    |

**BHA #1 - Surface 17.5" (Directional)**

| Motor Details                      |          | Date/Depth/Distances          |                  | Hours                             |        |
|------------------------------------|----------|-------------------------------|------------------|-----------------------------------|--------|
| <b>Size (in)</b>                   | 8.00     | <b>Date In</b>                | 2020-12-05 01:00 | <b>Downhole Hours</b>             | 22.75  |
| <b>Lobe/Stage</b>                  | 7/8, 4.0 | <b>Depth In (ft)</b>          | 0.00             | <b>Drilling/Circulating Hours</b> | 9.83   |
| <b>Bend Angle</b>                  | 1.50     | <b>Date Out</b>               | 2020-12-05 23:45 | <b>Drilling Hours</b>             | 8.58   |
| <b>Speed (rev/gal)</b>             | 0.17     | <b>Depth Out (ft)</b>         | 1310.00          | <b>Circulating Hours</b>          | 1.25   |
| <b>Wear Pad OD (in)</b>            | 8.250    | <b>Distance Slid (ft)</b>     | 95.00            | <b>Sliding Hours</b>              | 1.17   |
| <b>Incident</b>                    | No       | <b>Distance Rotated (ft)</b>  | 1215.00          | <b>Rotating Hours</b>             | 7.42   |
| <b>Motor Post Run/Notes</b>        |          | <b>% Distance Sliding</b>     | 7.25%            | <b>% Hours Sliding</b>            | 13.59% |
| <b>Average Total ROP (ft/h)</b>    | 152.62   | <b>% Distance Rotating</b>    | 92.75%           | <b>% Hours Rotating</b>           | 86.41% |
| <b>Average Slide ROP (ft/h)</b>    | 81.43    | <b>BHA Objective</b>          |                  |                                   |        |
| <b>Average Rotating ROP (ft/h)</b> | 163.82   | Drill Surface to Casing point |                  |                                   |        |

|                    |
|--------------------|
| <b>Notes:</b> N/A  |
| <b>Bit Details</b> |

|                              |        |                                                         |
|------------------------------|--------|---------------------------------------------------------|
| <b>OD (in)</b>               | 17.500 | <b>POOH Reason/Notes</b>                                |
| <b>Vendor</b>                | Baker  |                                                         |
| <b>Nozzles</b>               | 9x12   | <b>Total Depth/Casing Point:</b> TD Surface at 1310' MD |
| <b>Total Flow Area (in²)</b> | 0.994  |                                                         |

|                                                |                         |
|------------------------------------------------|-------------------------|
| <b>Bit Distances</b>                           | <b>Incident Notes</b>   |
| <b>Bit To Survey (Bit to Survey):</b> 60.00 ft | <b>Directional:</b> N/A |
|                                                | <b>MWD:</b>             |

|                           |                                                                                                                                                                                     |
|---------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Bit Post Run/Notes</b> | <b>Comments</b>                                                                                                                                                                     |
| <b>Dull Grading</b>       | <b>Directional:</b> 1.5° FBH 7/8 4.0 Stg Mtr.w/12" Stab.; Flow Range: 400-900 gpm; Max Diff: 900 psi; Max TQ: 14930 ft/lbs; Bit: Baker Type: T606KS, Jets: 9x12, TFA: 0.994 Runs: 4 |
| <b>Notes:</b> 1-3         |                                                                                                                                                                                     |

|                               |     |
|-------------------------------|-----|
| <b>MWD</b>                    |     |
| <b>Max Downhole Temp (°F)</b> | N/A |

|                        |       |                           |                  |                     |                 |
|------------------------|-------|---------------------------|------------------|---------------------|-----------------|
| Max Downhole Temp (°F) |       | N/A                       |                  |                     |                 |
| Mud Properties         |       | Parameters                |                  |                     |                 |
| Type                   | Water | Flow Rate (gpm)           | 500.00 - 800.00  | Motor RPM           | 121.00 - 202.00 |
| WT                     | 9.70  | On Bottom Pressure (psi)  | 900.00 - 2200.00 | Surface RPM         | 60.00 - 70.00   |
| VIS                    | 30.00 | Off Bottom Pressure (psi) | 600.00 - 1500.00 | Rotating WOB (klbs) | 10.00 - 30.00   |
| PV                     | 2.00  | Stall Pressure (psi)      | 0.00             | Sliding WOB (klbs)  | 30.00 - 30.00   |
| YP                     | 5.00  | Stalls                    | 0                | Temp (°F)           | 65.00 - 85.00   |
|                        |       | NPT                       | 0.0              |                     |                 |

**Items (Directional)**

| Description                                                                                                                                                 | Vendor        | SN#           | Top Conn       | Btm Conn       | ID (in) | OD (in) | Fn Len. (ft) | Len (ft) | Aggr. Len (ft) |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------|---------------|----------------|----------------|---------|---------|--------------|----------|----------------|
| <b>Bit (Fixed Cutter)</b><br>Description: T606KS, Gauge Length (in): 5.00, Size (in): 17.50, Type: PDC (Polycrystalline Diamond Compacts)                   | Baker         | 5309285       | 6 5/8" Reg Pin |                |         | 17.500  |              | 1.50     | 1.50           |
| <b>Mud Motor</b><br>Description: 1.5 FBH 7/8 4.0 Stg Mtr. w/ 12" Stab, Size (in): 8.00, Bend Angle (°): 1.5, Rotor Lobe: 7, Stator Lobe: 8, Stator Stage: 4 | AIM           | 800-002       | 6 5/8" Reg Box | 6 5/8" Reg Box |         | 8.000   |              | 29.34    | 30.84          |
| <b>Stabilizer</b><br>Description: 12" Stabilizer                                                                                                            | BLACK DIAMOND | 12476         | 6 5/8" Reg Box | 6 5/8" Reg Pin | 2.813   | 8.000   |              | 7.40     | 38.24          |
| <b>UBHO Sub</b><br>Description: UBHO Sub, Material: Non-Magnetic                                                                                            | AIM           | 800-609       | 6 5/8" Reg Box | 6 5/8" Reg Pin | 3.250   | 8.000   |              | 3.00     | 41.24          |
| <b>Drill Collar</b><br>Description: NMDC (MWD Tool), Material: Non-Magnetic, Type: Slick Drill                                                              | AIM           | AIM 800-01011 | 6 5/8" Reg Box | 6 5/8" Reg Pin | 3.250   | 8.000   |              | 30.28    | 71.52          |
| <b>Drill Collar</b><br>Description: NMDC (Spacer), Material: Non-Magnetic, Type: Slick Drill                                                                | AIM           | DY80011       | 6 5/8" Reg Box | 6 5/8" Reg Pin | 3.250   | 8.000   |              | 30.03    | 101.55         |
| <b>Crossover Sub</b><br>Description: X-O SUB, Material: Steel                                                                                               | BLACK DIAMOND | BD15080       | EverDrlg54 Box | 6 5/8" Reg Pin | 2.813   | 8.000   |              | 3.41     | 104.96         |





|                                 |                                                     |                                                       |
|---------------------------------|-----------------------------------------------------|-------------------------------------------------------|
| <b>Job Number</b><br>WT-20-071  | <b>Operator</b><br>Advance Energy Partners          | <b>Rig Name</b><br>Pioneer #80                        |
| <b>Start Date</b><br>2020-12-04 | <b>Well Name</b><br>Anderson Fed Com 504H           | <b>Legal Well Name   AFE</b><br>Anderson Fed Com 504H |
| <b>Play</b><br>Delaware Basin   | <b>State/Province and Country</b><br>New Mexico, US | <b>County</b><br>Lea                                  |
|                                 |                                                     | <b>Company Man</b>                                    |

**BHA #2 - Intermediate 12.25" (Directional)**

| Motor Details                             | Date/Depth/Distances                 | Hours                                   |
|-------------------------------------------|--------------------------------------|-----------------------------------------|
| <b>Size (in)</b> 8.00                     | <b>Date In</b> 2020-12-11 07:00      | <b>Downhole Hours</b> 30.00             |
| <b>Lobe/Stage</b> 7/8, 5.9                | <b>Depth In (ft)</b> 1310.00         | <b>Drilling/Circulating Hours</b> 21.33 |
| <b>Bend Angle</b> 1.50                    | <b>Date Out</b> 2020-12-12 13:00     | <b>Drilling Hours</b> 18.25             |
| <b>Speed (rev/gal)</b> 0.17               | <b>Depth Out (ft)</b> 4944.00        | <b>Circulating Hours</b> 3.08           |
| <b>Wear Pad OD (in)</b> 8.400             | <b>Distance Slid (ft)</b> 155.00     | <b>Sliding Hours</b> 2.17               |
| <b>Incident</b> No                        | <b>Distance Rotated (ft)</b> 3479.00 | <b>Rotating Hours</b> 16.08             |
| <b>Motor Post Run/Notes</b>               | <b>% Distance Sliding</b> 4.27%      | <b>% Hours Sliding</b> 11.87%           |
| <b>Average Total ROP (ft/h)</b> 199.12    | <b>% Distance Rotating</b> 95.73%    | <b>% Hours Rotating</b> 88.13%          |
| <b>Average Slide ROP (ft/h)</b> 71.54     |                                      |                                         |
| <b>Average Rotating ROP (ft/h)</b> 216.31 |                                      |                                         |

**Notes:** N/A

**Bit Details**

**OD (in)** 12.250

**Vendor** REED

**Nozzles** 6x14's

**Total Flow Area (in²)** 0.902

**Bit Distances**

**Bit To Bend (BIT TO BEND):** 6.20 ft, **Survey (BIT TO SURVEY):** 69.00 ft

**Bit Post Run/Notes**

**Dull Grading** 1

**Notes:** HEAT CHECKING

**MWD**

**Max Downhole Temp (°F)** N/A

**Mud Properties**

**Type** Brine

**WT** 10.20

**VIS** 28.00

**PV** 1.00

**YP** 3.00

**BHA Objective**

DRILL 12.25" INTERMEDIATE TO CASING POINT

**POOH Reason/Notes**

Total Depth/Casing Point

**Incident Notes**

**Directional:**

**MWD:**

**Comments**

**Directional:** Directional: 1.5° FBH 7/8 5.9 Stg Mtr.w/12" Stab.; Flow Range: 400-900 gpm; Max Diff: 1390 psi; Max TQ: 21,870 ft/lbs; Bit: , Jets: 6x14's , TFA: .902 Runs: 2

**Parameters**

**Flow Rate (gpm)** 550.00 - 800.00

**Motor RPM** 85.00 - 136.00

**On Bottom Pressure (psi)** 2000.00 - 2750.00

**Surface RPM** 40.00 - 60.00

**Off Bottom Pressure (psi)** 1400.00 - 1950.00

**Rotating WOB (klbs)** 30.00 - 47.00

**Stall Pressure (psi)** 0.00

**Sliding WOB (klbs)** 30.00 - 30.00

**Stalls** 0

**Temp (°F)** -0.00 - -0.00

**NPT** 0.0

**Items (Directional)**

| Description                                                                                                                                                      | Vendor        | SN#           | Top Conn       | Btm Conn       | ID (in) | OD (in) | Fn Len. (ft) | Len (ft) | Aggr. Len (ft) |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------|---------------|----------------|----------------|---------|---------|--------------|----------|----------------|
| <b>Bit (Fixed Cutter)</b><br>Description: TK66, Gauge Length (in): 6.00, Size (in): 12.25, Type: PDC (Polycrystalline Diamond Compacts)                          | REED          | A260948       | 6 5/8" Reg Pin |                |         | 12.250  |              | 1.50     | 1.50           |
| <b>Mud Motor</b><br>Description: 1.5 FBH 7/8 5.9 Stg Mtr. w/ 12" NB Stab, Size (in): 8.00, Bend Angle (°): 1.5, Rotor Lobe: 7, Stator Lobe: 8, Stator Stage: 5.9 | AIM           | 800-40-007    | 6 5/8" Reg Box | 6 5/8" Reg Box |         | 8.000   |              | 38.14    | 39.64          |
| <b>Stabilizer</b><br>Description: 12" Stabilizer                                                                                                                 | BLACK DIAMOND | 12476         | 6 5/8" Reg Box | 6 5/8" Reg Pin | 2.813   | 8.000   |              | 7.40     | 47.04          |
| <b>UBHO Sub</b><br>Description: UBHO Sub, Material: Non-Magnetic                                                                                                 | AIM           | 800-609       | 6 5/8" Reg Box | 6 5/8" Reg Pin | 3.250   | 8.000   |              | 3.00     | 50.04          |
| <b>Drill Collar</b><br>Description: NMDC (MWD Tool), Material: Non-Magnetic, Type: Slick Drill                                                                   | AIM           | AIM 800-01011 | 6 5/8" Reg Box | 6 5/8" Reg Pin | 3.250   | 8.000   |              | 30.28    | 80.32          |
| <b>Drill Collar</b><br>Description: NMDC (Spacer), Material: Non-Magnetic, Type: Slick Drill                                                                     | AIM           | DY80011       | 6 5/8" Reg Box | 6 5/8" Reg Pin | 3.250   | 8.000   |              | 30.03    | 110.35         |
| <b>Crossover Sub</b><br>Description: X-O SUB, Material: Steel                                                                                                    | BLACK DIAMOND | BD15080       | EverDrlg54 Box | 6 5/8" Reg Pin | 2.813   | 8.000   |              | 3.41     | 113.76         |
| <b>HWDP</b><br>Description: 13 STANDS of HWDP, Type: Slick                                                                                                       | BLACK DIAMOND |               | EverDrlg54 Box | EverDrlg54 Pin | 3.750   | 5.500   |              | 1216.55  | 1330.31        |





|                                 |                                                     |                                                       |
|---------------------------------|-----------------------------------------------------|-------------------------------------------------------|
| <b>Job Number</b><br>WT-20-071  | <b>Operator</b><br>Advance Energy Partners          | <b>Rig Name</b><br>Pioneer #80                        |
| <b>Start Date</b><br>2020-12-04 | <b>Well Name</b><br>Anderson Fed Com 504H           | <b>Legal Well Name   AFE</b><br>Anderson Fed Com 504H |
| <b>Play</b><br>Delaware Basin   | <b>State/Province and Country</b><br>New Mexico, US | <b>County</b><br>Lea                                  |
|                                 |                                                     | <b>Company Man</b>                                    |

**BHA #3 - 8.75" Intermediate (Directional)**

| Motor Details                             |          | Date/Depth/Distances                 | Hours                                   |
|-------------------------------------------|----------|--------------------------------------|-----------------------------------------|
| <b>Size (in)</b>                          | 7.00     | <b>Date In</b> 2020-12-20 18:00      | <b>Downhole Hours</b> 31.75             |
| <b>Lobe/Stage</b>                         | 7/8, 8.5 | <b>Depth In (ft)</b> 4944.00         | <b>Drilling/Circulating Hours</b> 20.00 |
| <b>Bend Angle</b>                         | 1.50     | <b>Date Out</b> 2020-12-22 01:45     | <b>Drilling Hours</b> 18.25             |
| <b>Speed (rev/gal)</b>                    | 0.26     | <b>Depth Out (ft)</b> 9260.00        | <b>Circulating Hours</b> 1.75           |
| <b>Wear Pad OD (in)</b>                   | 7.300    | <b>Distance Slid (ft)</b> 380.00     | <b>Sliding Hours</b> 7.25               |
| <b>Incident</b>                           | No       | <b>Distance Rotated (ft)</b> 3936.00 | <b>Rotating Hours</b> 11.00             |
| <b>Motor Post Run/Notes</b>               |          | <b>% Distance Sliding</b> 8.80%      | <b>% Hours Sliding</b> 39.73%           |
| <b>Average Total ROP (ft/h)</b> 236.49    |          | <b>% Distance Rotating</b> 91.20%    | <b>% Hours Rotating</b> 60.27%          |
| <b>Average Slide ROP (ft/h)</b> 52.41     |          | <b>BHA Objective</b>                 |                                         |
| <b>Average Rotating ROP (ft/h)</b> 357.82 |          | DRILL TO KOP                         |                                         |

**Notes:** Motor drained by gravity. Rubber was in 2 Jets

**Bit Details**

|                              |        |
|------------------------------|--------|
| <b>OD (in)</b>               | 8.750  |
| <b>Vendor</b>                | REED   |
| <b>Nozzles</b>               | 6-15's |
| <b>Total Flow Area (in²)</b> | 1.035  |

**Bit Distances**

**Bit To Bend:** 5.30 ft, **Gamma:** 54.00 ft, **Survey:** 69.00 ft

**Bit Post Run/Notes**

**Dull Grading** 5

**Notes:** Bit was Rung Out

**MWD**

**Max Downhole Temp (°F)** N/A

**Mud Properties**

|             |       |
|-------------|-------|
| <b>Type</b> | Brine |
| <b>WT</b>   | 9.20  |
| <b>VIS</b>  | 28.00 |
| <b>PV</b>   | 1.00  |
| <b>YP</b>   | 3.00  |

**POOH Reason/Notes**

Penetration Rate

**Incident Notes**

**Directional:** BIT WAS RUNG OUT, w/ RUBBER IN 2 JETS

**MWD:**

**Comments**

**Directional:** Flow Rate: 500-700, Max Diff: 1910 psi, Max Torque: 18,710 ft-lbs, BIT Runs: 2

**Parameters**

|                                  |                   |                            |                 |
|----------------------------------|-------------------|----------------------------|-----------------|
| <b>Flow Rate (gpm)</b>           | 675.00 - 675.00   | <b>Motor RPM</b>           | 130.00 - 176.00 |
| <b>On Bottom Pressure (psi)</b>  | 2000.00 - 2800.00 | <b>Surface RPM</b>         | 30.00 - 60.00   |
| <b>Off Bottom Pressure (psi)</b> | 1750.00 - 1950.00 | <b>Rotating WOB (klbs)</b> | 30.00 - 40.00   |
| <b>Stall Pressure (psi)</b>      | 0.00              | <b>Sliding WOB (klbs)</b>  | 20.00 - 20.00   |
| <b>Stalls</b>                    | 0                 | <b>Temp (°F)</b>           | 134.60 - 134.60 |
| <b>NPT</b>                       | 0.0               |                            |                 |

**Items (Directional)**

| Description                                                                                                                                                | Vendor        | SN#          | Top Conn       | Btm Conn       | ID (in) | OD (in) | Fn Len. (ft) | Len (ft) | Aggr. Len (ft) |
|------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------|--------------|----------------|----------------|---------|---------|--------------|----------|----------------|
| <b>Bit (Fixed Cutter)</b><br>Description: <i>TKC 66</i> , Gauge Length (in): 4.00, Size (in): 8.75, Type: <i>PDC (Polycrystalline Diamond Compacts)</i>    | REED          | A270855      | 4 1/2" Reg Pin |                |         | 8.750   |              | 1.00     | 1.00           |
| <b>Mud Motor</b><br>Description: 7" 7/8 8.5 FXD 1.5° w/ 8.25" STAB, Size (in): 7.00, Bend Angle (°): 1.5, Rotor Lobe: 7, Stator Lobe: 8, Stator Stage: 8.5 | AIM           | 700-40-006   | 4 1/2" IF Box  | 4 1/2" Reg Box |         | 7.000   |              | 37.73    | 38.73          |
| <b>Stabilizer</b><br>Description: 8.25" STABILIZER                                                                                                         | JAO           | 86947        | 4 1/2" IF Box  | 4 1/2" IF Pin  | 2.375   | 6.750   |              | 6.73     | 45.46          |
| <b>UBHO Sub</b><br>Description: NM DAO UBHO, Material: Non-Magnetic                                                                                        | AIM           | 67502NM      | 4 1/2" IF Box  | 4 1/2" IF Pin  | 3.250   | 6.780   |              | 5.00     | 50.46          |
| <b>Drill Collar</b><br>Description: MWD NMDC, Material: Non-Magnetic, Type: Slick Drill                                                                    | AIM           | GT 67-30-315 | 4 1/2" IF Box  | 4 1/2" IF Pin  | 3.250   | 6.870   |              | 30.93    | 81.39          |
| <b>Drill Collar</b><br>Description: NMDC, Material: Non-Magnetic, Type: Slick Drill                                                                        | AIM           | GT 67-30-193 | 4 1/2" IF Box  | 4 1/2" IF Pin  | 3.250   | 6.850   |              | 29.70    | 111.09         |
| <b>Crossover Sub</b><br>Description: X-O SUB, Material: Steel                                                                                              | BLACK DIAMOND | BD11664      | EverDrlg54 Box | 4 1/2" IF Pin  | 3.000   | 6.700   |              | 3.52     | 114.61         |
| <b>HWDP</b><br>Description: (13 Stands) 5.5" HWDP, Type: Slick                                                                                             | BLACK DIAMOND |              | EverDrlg54 Box | EverDrlg54 Pin | 3.750   | 5.500   |              | 1216.55  | 1331.16        |





|                                 |                                                     |                                                       |
|---------------------------------|-----------------------------------------------------|-------------------------------------------------------|
| <b>Job Number</b><br>WT-20-071  | <b>Operator</b><br>Advance Energy Partners          | <b>Rig Name</b><br>Pioneer #80                        |
| <b>Start Date</b><br>2020-12-04 | <b>Well Name</b><br>Anderson Fed Com 504H           | <b>Legal Well Name   AFE</b><br>Anderson Fed Com 504H |
| <b>Play</b><br>Delaware Basin   | <b>State/Province and Country</b><br>New Mexico, US | <b>County</b><br>Lea                                  |
| <b>Company Man</b>              |                                                     |                                                       |

**BHA #4 - Intermediate 8.75" (Directional)**

| Motor Details                      |          | Date/Depth/Distances         | Hours            |
|------------------------------------|----------|------------------------------|------------------|
| <b>Size (in)</b>                   | 7.00     | <b>Date In</b>               | 2020-12-22 02:45 |
| <b>Lobe/Stage</b>                  | 7/8, 8.5 | <b>Depth In (ft)</b>         | 9260.00          |
| <b>Bend Angle</b>                  | 1.50     | <b>Date Out</b>              | 2020-12-22 18:30 |
| <b>Speed (rev/gal)</b>             | 0.26     | <b>Depth Out (ft)</b>        | 10260.00         |
| <b>Wear Pad OD (in)</b>            | 7.300    | <b>Distance Slid (ft)</b>    | 30.00            |
| <b>Incident</b>                    | No       | <b>Distance Rotated (ft)</b> | 970.00           |
| <b>Motor Post Run/Notes</b>        |          | <b>% Distance Sliding</b>    | 3.00%            |
| <b>Average Total ROP (ft/h)</b>    | 193.55   | <b>% Distance Rotating</b>   | 97.00%           |
| <b>Average Slide ROP (ft/h)</b>    | 60.00    | <b>% Hours Sliding</b>       | 9.68%            |
| <b>Average Rotating ROP (ft/h)</b> | 207.86   | <b>% Hours Rotating</b>      | 90.32%           |

**BHA Objective**

Finish Drilling 8.75" Intermediate to KOP

Notes: N/A

**Bit Details**

OD (in) 8.750

Vendor Ulterra

Nozzles 6-15's

Total Flow Area (in²) 1.035

**Bit Distances**

Bit To Bend: 5.30 ft, Gamma: 53.00 ft, Survey: 68.00 ft

**Bit Post Run/Notes**

Dull Grading 1-2

Notes: 1-2

**MWD**

Max Downhole Temp (°F) N/A

**Mud Properties**

Type Water Based

WT 9.50

VIS 28.00

PV 1.00

YP 3.00

**POOH Reason/Notes**

Change Bottom Hole Assembly: Pooh to P/U Curve assembly

**Incident Notes**

Directional: N/A

MWD:

**Comments**

Directional: Flow Rate: 500-700, Max Diff: 1910 psi, Max Torque: 18,710 ft-lbs, BIT Runs: 0

**Parameters**

Flow Rate (gpm) 675.00 - 675.00 Motor RPM 154.00 - 168.00

On Bottom Pressure (psi) 2350.00 - 2800.00 Surface RPM 60.00 - 60.00

Off Bottom Pressure (psi) 1950.00 - 1950.00 Rotating WOB (klbs) 40.00 - 40.00

Stall Pressure (psi) 0.00 Sliding WOB (klbs) 20.00 - 20.00

Stalls 0 Temp (°F) 130.00 - 135.00

NPT 0.0

**Items (Directional)**

| Description                                                                                                                                                | Vendor        | SN#          | Top Conn       | Btm Conn       | ID (in) | OD (in) | Fn Len. (ft) | Len (ft) | Aggr. Len (ft) |
|------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------|--------------|----------------|----------------|---------|---------|--------------|----------|----------------|
| <b>Bit (Fixed Cutter)</b><br>Description: RPS616, Gauge Length (in): 4.00, Size (in): 8.75, Type: PDC (Polycrystalline Diamond Compacts)                   | Ulterra       | 54274        | 4 1/2" Reg Pin |                |         | 8.750   |              | 1.00     | 1.00           |
| <b>Mud Motor</b><br>Description: 7" 7/8 8.5 FXD 1.5° w/ 8.25" STAB, Size (in): 7.00, Bend Angle (°): 1.5, Rotor Lobe: 7, Stator Lobe: 8, Stator Stage: 8.5 | AIM           | 700-40-014   | 4 1/2" IF Box  | 4 1/2" Reg Box |         | 7.050   |              | 36.27    | 37.27          |
| <b>Stabilizer</b><br>Description: 8.25" STABILIZER                                                                                                         | JAO           | 86947        | 4 1/2" IF Box  | 4 1/2" IF Pin  | 2.375   | 6.750   |              | 6.73     | 44.00          |
| <b>UBHO Sub</b><br>Description: NM DAO UBHO, Material: Non-Magnetic                                                                                        | AIM           | 67502NM      | 4 1/2" IF Box  | 4 1/2" IF Pin  | 3.250   | 6.780   |              | 5.00     | 49.00          |
| <b>Drill Collar</b><br>Description: MWD NMDC, Material: Non-Magnetic, Type: Slick Drill                                                                    | AIM           | GT 67-30-315 | 4 1/2" IF Box  | 4 1/2" IF Pin  | 3.250   | 6.870   |              | 30.93    | 79.93          |
| <b>Drill Collar</b><br>Description: NMDC, Material: Non-Magnetic, Type: Slick Drill                                                                        | AIM           | GT 67-30-193 | 4 1/2" IF Box  | 4 1/2" IF Pin  | 3.250   | 6.850   |              | 29.70    | 109.63         |
| <b>Crossover Sub</b><br>Description: X-O SUB, Material: Steel                                                                                              | BLACK DIAMOND | BD11664      | EverDrlg54 Box | 4 1/2" IF Pin  | 3.000   | 6.700   |              | 3.52     | 113.15         |
| <b>HWDP</b><br>Description: (13 Stands) 5.5" HWDP, Type: Slick                                                                                             | BLACK DIAMOND |              | EverDrlg54 Box | EverDrlg54 Pin | 3.750   | 5.500   |              | 1216.55  | 1329.70        |





|                                 |                                                     |                                                       |
|---------------------------------|-----------------------------------------------------|-------------------------------------------------------|
| <b>Job Number</b><br>WT-20-071  | <b>Operator</b><br>Advance Energy Partners          | <b>Rig Name</b><br>Pioneer #80                        |
| <b>Start Date</b><br>2020-12-04 | <b>Well Name</b><br>Anderson Fed Com 504H           | <b>Legal Well Name   AFE</b><br>Anderson Fed Com 504H |
| <b>Play</b><br>Delaware Basin   | <b>State/Province and Country</b><br>New Mexico, US | <b>County</b><br>Lea                                  |
|                                 |                                                     | <b>Company Man</b>                                    |

**BHA #5 - 8.75" CURVE (Directional)**

| Motor Details                      |          | Date/Depth/Distances         | Hours            |
|------------------------------------|----------|------------------------------|------------------|
| <b>Size (in)</b>                   | 7.00     | <b>Date In</b>               | 2020-12-22 18:30 |
| <b>Lobe/Stage</b>                  | 7/8, 5.0 | <b>Depth In (ft)</b>         | 10260.00         |
| <b>Bend Angle</b>                  | 2.12     | <b>Date Out</b>              | 2020-12-24 04:15 |
| <b>Speed (rev/gal)</b>             | 0.26     | <b>Depth Out (ft)</b>        | 11572.00         |
| <b>Wear Pad OD (in)</b>            | 7.000    | <b>Distance Slid (ft)</b>    | 1023.00          |
| <b>Incident</b>                    | Yes      | <b>Distance Rotated (ft)</b> | 289.00           |
| <b>Motor Post Run/Notes</b>        |          | <b>% Distance Sliding</b>    | 77.97%           |
| <b>Average Total ROP (ft/h)</b>    | 76.43    | <b>% Distance Rotating</b>   | 22.03%           |
| <b>Average Slide ROP (ft/h)</b>    | 68.97    |                              |                  |
| <b>Average Rotating ROP (ft/h)</b> | 123.86   |                              |                  |

|                    |                      |
|--------------------|----------------------|
| <b>Notes:</b> N/A  | <b>BHA Objective</b> |
| <b>Bit Details</b> | DRILL CURVE          |

|                              |          |                                                           |
|------------------------------|----------|-----------------------------------------------------------|
| <b>OD (in)</b>               | 8.750    | <b>POOH Reason/Notes</b>                                  |
| <b>Vendor</b>                | SECURITY |                                                           |
| <b>Nozzles</b>               | 6-15's   | <b>Total Depth/Casing Point:</b> Pooh after landing curve |
| <b>Total Flow Area (in²)</b> | 1.035    |                                                           |

| Bit Distances                                                                | Incident Notes                                                                                                                                                                                   |
|------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Bit To Bend:</b> 4.03 ft, <b>Gamma:</b> 38.00 ft, <b>Survey:</b> 53.00 ft | <b>Directional:</b> Once motor was on surface, we noticed the bit box was hanging down about 6 inches from the bearing nut. Motor would not turn to drain, and motor collapsed onto the bit box. |

| Bit Post Run/Notes  | Comments |
|---------------------|----------|
| <b>Dull Grading</b> |          |

|                   |                                                                                                  |
|-------------------|--------------------------------------------------------------------------------------------------|
| <b>Notes:</b> 1-2 | <b>Directional:</b> Flow Rate: 300-600, Max Diff: 1130 psi, Max Torque: 10,460 ft-lbs, BIT Runs: |
|-------------------|--------------------------------------------------------------------------------------------------|

| MWD                           | Parameters |
|-------------------------------|------------|
| <b>Max Downhole Temp (°F)</b> | N/A        |

| Mud Properties | Parameters                                         |
|----------------|----------------------------------------------------|
| <b>Type</b>    | Water                                              |
| <b>WT</b>      | 9.50                                               |
| <b>VIS</b>     | 28.00                                              |
| <b>PV</b>      | 1.00                                               |
| <b>YP</b>      | 3.00                                               |
|                | <b>Flow Rate (gpm)</b> 550.00 - 550.00             |
|                | <b>On Bottom Pressure (psi)</b> 1650.00 - 1900.00  |
|                | <b>Off Bottom Pressure (psi)</b> 1350.00 - 1400.00 |
|                | <b>Stall Pressure (psi)</b> 0.00                   |
|                | <b>Stalls</b> 0                                    |
|                | <b>NPT</b> 0.0                                     |
|                | <b>Motor RPM</b> 168.00 - 168.00                   |
|                | <b>Surface RPM</b> 20.00 - 20.00                   |
|                | <b>Rotating WOB (klbs)</b> 40.00 - 40.00           |
|                | <b>Sliding WOB (klbs)</b> 20.00 - 40.00            |
|                | <b>Temp (°F)</b> 135.00 - 138.00                   |

**Items (Directional)**

| Description                                                                                                                                          | Vendor        | SN#          | Top Conn       | Btm Conn       | ID (in) | OD (in) | Fn Len. (ft) | Len (ft) | Aggr. Len (ft) |
|------------------------------------------------------------------------------------------------------------------------------------------------------|---------------|--------------|----------------|----------------|---------|---------|--------------|----------|----------------|
| <b>Bit (Fixed Cutter)</b><br>Description: GTD64D, Gauge Length (in): 4.00, Size (in): 8.75, Type: PDC (Polycrystalline Diamond Compacts)             | SECURITY      | 13521069     | 4 1/2" Reg Pin |                |         | 8.750   |              | 1.00     | 1.00           |
| <b>Mud Motor</b><br>Description: 7" 7/8 5.0 FXD 2.12° SLICK, Size (in): 7.00, Bend Angle (°): 2.12, Rotor Lobe: 7, Stator Lobe: 8, Stator Stage: 5.0 | AIM           | CDM650-019   | 4 1/2" IF Box  | 4 1/2" Reg Box |         | 7.000   |              | 26.08    | 27.08          |
| <b>UBHO Sub</b><br>Description: NM DAO UBHO, Material: Non-Magnetic                                                                                  | AIM           | 67502NM      | 4 1/2" IF Box  | 4 1/2" IF Pin  | 3.250   | 6.780   |              | 5.00     | 32.08          |
| <b>Drill Collar</b><br>Description: MWD NMDC, Material: Non-Magnetic, Type: Slick Drill                                                              | AIM           | GT 67-30-315 | 4 1/2" IF Box  | 4 1/2" IF Pin  | 3.250   | 6.870   |              | 30.93    | 63.01          |
| <b>Drill Collar</b><br>Description: NMDC, Material: Non-Magnetic, Type: Slick Drill                                                                  | AIM           | GT 67-30-193 | 4 1/2" IF Box  | 4 1/2" IF Pin  | 3.250   | 6.850   |              | 29.70    | 92.71          |
| <b>Crossover Sub</b><br>Description: X-O SUB, Material: Steel                                                                                        | BLACK DIAMOND | BD11664      | EverDrlg54 Box | 4 1/2" IF Pin  | 3.000   | 6.700   |              | 3.52     | 96.23          |





|                                 |                                                     |                                                       |
|---------------------------------|-----------------------------------------------------|-------------------------------------------------------|
| <b>Job Number</b><br>WT-20-071  | <b>Operator</b><br>Advance Energy Partners          | <b>Rig Name</b><br>Pioneer #80                        |
| <b>Start Date</b><br>2020-12-04 | <b>Well Name</b><br>Anderson Fed Com 504H           | <b>Legal Well Name   AFE</b><br>Anderson Fed Com 504H |
| <b>Play</b><br>Delaware Basin   | <b>State/Province and Country</b><br>New Mexico, US | <b>County</b><br>Lea                                  |
|                                 |                                                     | <b>Company Man</b>                                    |

**BHA #6 - 8.50" LATERAL w/ Agitator (Directional)**

| Motor Details                      |          | Date/Depth/Distances         | Hours            |
|------------------------------------|----------|------------------------------|------------------|
| <b>Size (in)</b>                   | 7.00     | <b>Date In</b>               | 2021-01-12 11:30 |
| <b>Lobe/Stage</b>                  | 6/7, 8.4 | <b>Depth In (ft)</b>         | 11572.00         |
| <b>Bend Angle</b>                  | 1.75     | <b>Date Out</b>              | 2021-01-14 14:30 |
| <b>Speed (rev/gal)</b>             | 0.26     | <b>Depth Out (ft)</b>        | 14335.00         |
| <b>Wear Pad OD (in)</b>            | 7.250    | <b>Distance Slid (ft)</b>    | 603.00           |
| <b>Incident</b>                    | Yes      | <b>Distance Rotated (ft)</b> | 2160.00          |
| <b>Motor Post Run/Notes</b>        |          | <b>% Distance Sliding</b>    | 21.82%           |
| <b>Average Total ROP (ft/h)</b>    | 96.95    | <b>% Distance Rotating</b>   | 78.18%           |
| <b>Average Slide ROP (ft/h)</b>    | 46.38    | <b>% Hours Sliding</b>       | 45.61%           |
| <b>Average Rotating ROP (ft/h)</b> | 139.35   | <b>% Hours Rotating</b>      | 54.39%           |

**Notes:** Motor would not drain at surface, possible transmission failure

**BHA Objective**

Drill 8.5" Lateral

| Bit Details                  |        | POOH Reason/Notes                                        |
|------------------------------|--------|----------------------------------------------------------|
| <b>OD (in)</b>               | 8.500  | <b>Downhole Motor Incident:</b> POOH due to loss of ROP. |
| <b>Vendor</b>                | REED   |                                                          |
| <b>Nozzles</b>               | 6x16's |                                                          |
| <b>Total Flow Area (in²)</b> | 1.170  |                                                          |

| Bit Distances                 |                                   | Incident Notes                                                                                     |
|-------------------------------|-----------------------------------|----------------------------------------------------------------------------------------------------|
| <b>Bit To Gamma:</b>          | 48.00 ft, <b>Survey:</b> 62.00 ft | <b>Directional:</b> POSSIBLE BROKEN DRIVESHAFT, Could not drain motor at surface.                  |
|                               |                                   | <b>MWD:</b>                                                                                        |
| Bit Post Run/Notes            |                                   | Comments                                                                                           |
| <b>Dull Grading</b>           | 0                                 | <b>Directional:</b> Flow Rate: 500-750, Max Diff: 1980 psi, Max Torque: 16,550 ft-lbs, BIT Runs: 2 |
| <b>Notes:</b>                 | 1-3                               |                                                                                                    |
| MWD                           |                                   |                                                                                                    |
| <b>Max Downhole Temp (°F)</b> | N/A                               |                                                                                                    |

| Mud Properties |           | Parameters                       |                   |
|----------------|-----------|----------------------------------|-------------------|
| <b>Type</b>    | Oil Based | <b>Flow Rate (gpm)</b>           | 550.00 - 630.00   |
| <b>WT</b>      | 9.30      | <b>On Bottom Pressure (psi)</b>  | 2850.00 - 3800.00 |
| <b>VIS</b>     | 70.00     | <b>Off Bottom Pressure (psi)</b> | 2450.00 - 3000.00 |
| <b>PV</b>      | 20.00     | <b>Stall Pressure (psi)</b>      | 0.00              |
| <b>YP</b>      | 10.00     | <b>Stalls</b>                    | 0                 |
|                |           | <b>NPT</b>                       | 0.0               |

| Items (Directional)                                                                                                                                               |               |              |                |                |         |         |              |          |                |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------|--------------|----------------|----------------|---------|---------|--------------|----------|----------------|
| Description                                                                                                                                                       | Vendor        | SN#          | Top Conn       | Btm Conn       | ID (in) | OD (in) | Fn Len. (ft) | Len (ft) | Aggr. Len (ft) |
| <b>Bit (Fixed Cutter)</b><br>Description: <i>TKC 66</i> , Gauge Length (in): 4.00, Size (in): 8.50, Type: <i>PDC (Polycrystalline Diamond Compacts)</i>           | REED          | A265535      | 4 1/2" Reg Pin |                |         | 8.500   |              | 1.00     | 1.00           |
| <b>Mud Motor</b><br>Description: <i>6/7 8.5 FXD 1.75° w/ True Slick</i> , Size (in): 7.00, Bend Angle (°): 1.75, Rotor Lobe: 6, Stator Lobe: 7, Stator Stage: 8.4 | AIM           | 700-40-006   | 4 1/2" IF Box  | 4 1/2" IF Pin  |         | 7.000   |              | 35.67    | 36.67          |
| <b>UBHO Sub</b><br>Description: <i>NM DAO UBHO</i> , Material: <i>Non-Magnetic</i>                                                                                | AIM           | 67502NM      | 4 1/2" IF Box  | 4 1/2" IF Pin  | 3.250   | 6.780   |              | 5.00     | 41.67          |
| <b>Drill Collar</b><br>Description: <i>MWD NMDC</i> , Material: <i>Non-Magnetic</i> , Type: <i>Slick Drill</i>                                                    | AIM           | GT 67-30-315 | 4 1/2" IF Box  | 4 1/2" IF Pin  | 3.250   | 6.870   |              | 30.93    | 72.60          |
| <b>Drill Collar</b><br>Description: <i>NMDC</i> , Material: <i>Non-Magnetic</i> , Type: <i>Slick Drill</i>                                                        | AIM           | GT 67-30-193 | 4 1/2" IF Box  | 4 1/2" IF Pin  | 3.250   | 6.850   |              | 29.70    | 102.30         |
| <b>Crossover Sub</b><br>Description: <i>X-O SUB</i> , Material: <i>Steel</i>                                                                                      | BLACK DIAMOND | BD11664      | EverDrlg54 Box | 4 1/2" IF Pin  | 3.000   | 6.700   |              | 3.52     | 105.82         |
| <b>Drill Pipe</b><br>Description: <i>28 Stands 5.5" Drill Pipe</i> , Type: <i>Slick</i>                                                                           | BLACK DIAMOND |              | EverDrlg54 Box | EverDrlg54 Pin | 3.000   | 5.500   |              | 2509.00  | 2614.82        |
| <b>Crossover Sub</b><br>Description: <i>X-O SUB</i> , Material: <i>Steel</i>                                                                                      | BLACK DIAMOND | BD13749      | 4 1/2" IF Box  | EverDrlg54 Pin | 3.000   | 6.740   |              | 3.57     | 2618.39        |
| <b>Agitator</b><br>Description: <i>AGITATOR</i> , Size (in): 6.75                                                                                                 | NOV           | 701-800      | 4 1/2" IF Box  | 4 1/2" IF Pin  |         | 6.750   |              | 25.19    | 2643.58        |
| <b>Crossover Sub</b><br>Description: <i>X-O SUB</i> , Material: <i>Steel</i>                                                                                      | BLACK DIAMOND | BD18869      | EverDrlg54 Box | 4 1/2" IF Pin  | 3.000   | 6.730   |              | 1.88     | 2645.46        |





|                                 |                                                     |                                                       |
|---------------------------------|-----------------------------------------------------|-------------------------------------------------------|
| <b>Job Number</b><br>WT-20-071  | <b>Operator</b><br>Advance Energy Partners          | <b>Rig Name</b><br>Pioneer #80                        |
| <b>Start Date</b><br>2020-12-04 | <b>Well Name</b><br>Anderson Fed Com 504H           | <b>Legal Well Name   AFE</b><br>Anderson Fed Com 504H |
| <b>Play</b><br>Delaware Basin   | <b>State/Province and Country</b><br>New Mexico, US | <b>County</b><br>Lea                                  |
|                                 |                                                     | <b>Company Man</b>                                    |

**BHA #7 - 8.50" LATERAL w/ Agitator (Directional)**

| Motor Details                      |          | Date/Depth/Distances         | Hours            |
|------------------------------------|----------|------------------------------|------------------|
| <b>Size (in)</b>                   | 7.00     | <b>Date In</b>               | 2021-01-14 15:30 |
| <b>Lobe/Stage</b>                  | 6/7, 8.4 | <b>Depth In (ft)</b>         | 14335.00         |
| <b>Bend Angle</b>                  | 1.75     | <b>Date Out</b>              | 2021-01-16 05:30 |
| <b>Speed (rev/gal)</b>             | 0.26     | <b>Depth Out (ft)</b>        | 15927.00         |
| <b>Wear Pad OD (in)</b>            | 7.180    | <b>Distance Slid (ft)</b>    | 200.00           |
| <b>Incident</b>                    | Yes      | <b>Distance Rotated (ft)</b> | 1392.00          |
| <b>Motor Post Run/Notes</b>        |          | <b>% Distance Sliding</b>    | 12.56%           |
| <b>Average Total ROP (ft/h)</b>    | 92.29    | <b>% Distance Rotating</b>   | 87.44%           |
| <b>Average Slide ROP (ft/h)</b>    | 40.68    | <b>% Hours Sliding</b>       | 28.50%           |
| <b>Average Rotating ROP (ft/h)</b> | 112.86   | <b>% Hours Rotating</b>      | 71.50%           |

|                                                                          |                          |
|--------------------------------------------------------------------------|--------------------------|
| <b>Notes:</b> Motor would not drain at surface, Bit box would free spin. | <b>BHA Objective</b>     |
|                                                                          | Drill 8.5" Lateral to TD |

| Bit Details                                            |                 | POOH Reason/Notes                                                                                               |
|--------------------------------------------------------|-----------------|-----------------------------------------------------------------------------------------------------------------|
| <b>OD (in)</b>                                         | 8.500           | <b>Downhole Motor Incident:</b> POOH due to loss of ROP and not being able to establish diff.                   |
| <b>Vendor</b>                                          | SECURITY        |                                                                                                                 |
| <b>Nozzles</b>                                         | 6x13's & 3-12's |                                                                                                                 |
| <b>Total Flow Area (in²)</b>                           | 1.110           |                                                                                                                 |
| <b>Bit Distances</b>                                   |                 | <b>Incident Notes</b>                                                                                           |
| <b>Bit To Gamma:</b> 45.00 ft, <b>Survey:</b> 60.00 ft |                 | <b>Directional:</b> Lost all Differential Pressure while on bottom with no ROP. At surface motor did not drain. |
|                                                        |                 | <b>MWD:</b>                                                                                                     |
| <b>Bit Post Run/Notes</b>                              |                 | <b>Comments</b>                                                                                                 |
| <b>Dull Grading</b>                                    | 0               | <b>Directional:</b> Flow Rate: 500-750, Max Diff: 1980 psi, Max Torque: 16,550 ft-lbs, BIT Runs: 4              |
| <b>Notes:</b> N/A                                      |                 |                                                                                                                 |
| <b>MWD</b>                                             |                 |                                                                                                                 |
| <b>Max Downhole Temp (°F)</b>                          | N/A             |                                                                                                                 |
| <b>Mud Properties</b>                                  |                 | <b>Parameters</b>                                                                                               |
| <b>Type</b>                                            | Oil Based       | <b>Flow Rate (gpm)</b>                                                                                          |
| <b>WT</b>                                              | 9.30            | 550.00 - 550.00                                                                                                 |
| <b>VIS</b>                                             | 68.00           | <b>Motor RPM</b>                                                                                                |
| <b>PV</b>                                              | 20.00           | 143.00 - 156.00                                                                                                 |
| <b>YP</b>                                              | 8.00            | <b>Surface RPM</b>                                                                                              |
|                                                        |                 | 30.00 - 30.00                                                                                                   |
|                                                        |                 | <b>Rotating WOB (klbs)</b>                                                                                      |
|                                                        |                 | 50.00 - 50.00                                                                                                   |
|                                                        |                 | <b>Sliding WOB (klbs)</b>                                                                                       |
|                                                        |                 | 40.00 - 40.00                                                                                                   |
|                                                        |                 | <b>Temp (°F)</b>                                                                                                |
|                                                        |                 | 159.80 - 159.80                                                                                                 |
|                                                        |                 | <b>Stalls</b>                                                                                                   |
|                                                        |                 | 3                                                                                                               |
|                                                        |                 | <b>NPT</b>                                                                                                      |
|                                                        |                 | 0.0                                                                                                             |

| Items (Directional)                                                                                                                                       |               |              |                |                |         |         |              |          |                |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------|---------------|--------------|----------------|----------------|---------|---------|--------------|----------|----------------|
| Description                                                                                                                                               | Vendor        | SN#          | Top Conn       | Btm Conn       | ID (in) | OD (in) | Fn Len. (ft) | Len (ft) | Aggr. Len (ft) |
| <b>Bit (Fixed Cutter)</b><br>Description: GT65DO, Type: PDC (Polycrystalline Diamond Compacts), Gauge Length (in): 4.00, Size (in): 8.50                  | SECURITY      | 13293822     | 4 1/2" Reg Pin |                |         | 8.500   |              | 1.00     | 1.00           |
| <b>Mud Motor</b><br>Description: 6/7 8.4 FXD 1.75° w/ True Slick, Size (in): 7.00, Bend Angle (°): 1.75, Rotor Lobe: 6, Stator Lobe: 7, Stator Stage: 8.4 | AIM           | 700-40-036   | 4 1/2" IF Box  | 4 1/2" Reg Box |         | 7.000   |              | 33.88    | 34.88          |
| <b>UBHO Sub</b><br>Description: NM DAO UBHO, Material: Non-Magnetic                                                                                       | AIM           | 67502NM      | 4 1/2" IF Box  | 4 1/2" IF Pin  | 3.250   | 6.780   |              | 5.00     | 39.88          |
| <b>Drill Collar</b><br>Description: MWD NMDC, Material: Non-Magnetic, Type: Slick Drill                                                                   | AIM           | GT 67-30-315 | 4 1/2" IF Box  | 4 1/2" IF Pin  | 3.250   | 6.870   |              | 30.93    | 70.81          |
| <b>Drill Collar</b><br>Description: NMDC, Material: Non-Magnetic, Type: Slick Drill                                                                       | AIM           | GT 67-30-193 | 4 1/2" IF Box  | 4 1/2" IF Pin  | 3.250   | 6.850   |              | 29.70    | 100.51         |
| <b>Crossover Sub</b><br>Description: X-O SUB, Material: Steel                                                                                             | BLACK DIAMOND | BD11664      | EverDrlg54 Box | 4 1/2" IF Pin  | 3.000   | 6.700   |              | 3.52     | 104.03         |
| <b>Drill Pipe</b><br>Description: 28 Stands 5.5" Drill Pipe, Type: Slick                                                                                  | BLACK DIAMOND |              | EverDrlg54 Box | EverDrlg54 Pin | 3.000   | 5.500   |              | 2509.00  | 2613.03        |
| <b>Crossover Sub</b><br>Description: X-O SUB, Material: Steel                                                                                             | BLACK DIAMOND | BD13749      | 4 1/2" IF Box  | EverDrlg54 Pin | 3.000   | 6.740   |              | 3.57     | 2616.60        |
| <b>Agitator</b><br>Description: AGITATOR, Size (in): 6.75                                                                                                 | NOV           | 701-800      | 4 1/2" IF Box  | 4 1/2" IF Pin  |         | 6.750   |              | 25.19    | 2641.79        |
| <b>Crossover Sub</b><br>Description: X-O SUB, Material: Steel                                                                                             | BLACK DIAMOND | BD18869      | EverDrlg54 Box | 4 1/2" IF Pin  | 3.000   | 6.730   |              | 1.88     | 2643.67        |





|                                 |                                                     |                                                       |
|---------------------------------|-----------------------------------------------------|-------------------------------------------------------|
| <b>Job Number</b><br>WT-20-071  | <b>Operator</b><br>Advance Energy Partners          | <b>Rig Name</b><br>Pioneer #80                        |
| <b>Start Date</b><br>2020-12-04 | <b>Well Name</b><br>Anderson Fed Com 504H           | <b>Legal Well Name   AFE</b><br>Anderson Fed Com 504H |
| <b>Play</b><br>Delaware Basin   | <b>State/Province and Country</b><br>New Mexico, US | <b>County</b><br>Lea                                  |
| <b>Company Man</b>              |                                                     |                                                       |

**BHA #8 - 8.50" LATERAL w/ Agitator (Directional)**

| Motor Details            |          | Date/Depth/Distances  |                  | Hours                      |        |
|--------------------------|----------|-----------------------|------------------|----------------------------|--------|
| Size(in)                 | 7.00     | Date In               | 2021-01-16 07:00 | Downhole Hours             | 44.00  |
| Lobe/Stage               | 7/8, 8.5 | Depth In (ft)         | 15927.00         | Drilling/Circulating Hours | 22.58  |
| Bend Angle               | 1.75     | Date Out              | 2021-01-18 03:00 | Drilling Hours             | 16.08  |
| Speed (rev/gal)          | 0.26     | Depth Out (ft)        | 17747.00         | Circulating Hours          | 6.50   |
| Wear Pad OD (in)         | 7.150    | Distance Slid (ft)    | 142.00           | Sliding Hours              | 4.33   |
| Incident                 | No       | Distance Rotated (ft) | 1678.00          | Rotating Hours             | 11.75  |
| Motor Post Run/Notes     |          | % Distance Sliding    | 7.80%            | % Hours Sliding            | 26.94% |
| Average Total ROP (ft/h) | 113.16   | % Distance Rotating   | 92.20%           | % Hours Rotating           | 73.06% |

|                              |        |
|------------------------------|--------|
| <b>Bit Details</b>           |        |
| <b>OD (in)</b>               | 8.500  |
| <b>Vendor</b>                | BAKER  |
| <b>Nozzles</b>               | 6x16's |
| <b>Total Flow Area (in²)</b> | 1.180  |

|                                                        |     |
|--------------------------------------------------------|-----|
| <b>Bit Distances</b>                                   |     |
| <b>Bit To Gamma:</b> 48.00 ft, <b>Survey:</b> 63.00 ft |     |
| <b>Bit Post Run/Notes</b>                              |     |
| <b>Dull Grading</b>                                    | 1/2 |
| <b>Notes:</b> N/A                                      |     |
| <b>MWD</b>                                             |     |
| <b>Max Downhole Temp (°F)</b>                          | N/A |
| <b>Mud Properties</b>                                  |     |

|                                                                                                    |  |
|----------------------------------------------------------------------------------------------------|--|
| <b>POOH Reason/Notes</b>                                                                           |  |
| <b>Total Depth/Casing Point</b>                                                                    |  |
| <b>Incident Notes</b>                                                                              |  |
| <b>Directional:</b>                                                                                |  |
| <b>MWD:</b>                                                                                        |  |
| <b>Comments</b>                                                                                    |  |
| <b>Directional:</b> Flow Rate: 500-700, Max Diff: 1910 psi, Max Torque: 18,710 ft-lbs, BIT Runs: 3 |  |

|                                  |                   |
|----------------------------------|-------------------|
| <b>Parameters</b>                |                   |
| <b>Flow Rate (gpm)</b>           | 550.00 - 630.00   |
| <b>On Bottom Pressure (psi)</b>  | 3450.00 - 4300.00 |
| <b>Off Bottom Pressure (psi)</b> | 2450.00 - 3550.00 |
| <b>Stall Pressure (psi)</b>      | 0.00              |
| <b>Stalls</b>                    | 0                 |
| <b>NPT</b>                       | 0.0               |

|                            |                 |
|----------------------------|-----------------|
| <b>Motor RPM</b>           | 164.00 - 164.00 |
| <b>Surface RPM</b>         | 30.00 - 40.00   |
| <b>Rotating WOB (klbs)</b> | 50.00 - 60.00   |
| <b>Sliding WOB (klbs)</b>  | 50.00 - 50.00   |
| <b>Temp (°F)</b>           | 176.00 - 176.00 |

|                        |     |
|------------------------|-----|
| Notes: N/A             |     |
| MWD                    |     |
| Max Downhole Temp (°F) | N/A |

|                                                                                                                                                           |               |              |                |                |       |       |  |         |         |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------|---------------|--------------|----------------|----------------|-------|-------|--|---------|---------|
| <b>Bit (Fixed Cutter)</b><br>Description: DD506TWX, Type: PDC (Polycrystalline Diamond Compacts), Gauge Length (in): 4.00, Size (in): 8.50                | BAKER         | 5311056      | 4 1/2" Reg Pin |                |       | 8.500 |  | 1.00    | 1.00    |
| <b>Mud Motor</b><br>Description: 7/8 8.5 FXD 1.75° w/ True Slick, Size (in): 7.00, Bend Angle (°): 1.75, Rotor Lobe: 7, Stator Lobe: 8, Stator Stage: 8.5 | AIM           | 700-40-033   | 4 1/2" IF Box  | 4 1/2" Reg Box |       | 7.020 |  | 36.03   | 37.03   |
| <b>UBHO Sub</b><br>Description: NM DAO UBHO, Material: Non-Magnetic                                                                                       | AIM           | 67502NM      | 4 1/2" IF Box  | 4 1/2" IF Pin  | 3.250 | 6.780 |  | 5.00    | 42.03   |
| <b>Drill Collar</b><br>Description: MWD NMDC, Material: Non-Magnetic, Type: Slick Drill                                                                   | AIM           | GT 67-30-315 | 4 1/2" IF Box  | 4 1/2" IF Pin  | 3.250 | 6.870 |  | 30.93   | 72.96   |
| <b>Drill Collar</b><br>Description: NMDC, Material: Non-Magnetic, Type: Slick Drill                                                                       | AIM           | GT 67-30-193 | 4 1/2" IF Box  | 4 1/2" IF Pin  | 3.250 | 6.850 |  | 29.70   | 102.66  |
| <b>Crossover Sub</b><br>Description: X-O SUB, Material: Steel                                                                                             | BLACK DIAMOND | BD11664      | EverDrlg54 Box | 4 1/2" IF Pin  | 3.000 | 6.700 |  | 3.52    | 106.18  |
| <b>Drill Pipe</b><br>Description: 28 Stands 5.5" Drill Pipe, Type: Slick                                                                                  | BLACK DIAMOND |              | EverDrlg54 Box | EverDrlg54 Pin | 3.000 | 5.500 |  | 2509.00 | 2615.18 |
| <b>Crossover Sub</b><br>Description: X-O SUB, Material: Steel                                                                                             | BLACK DIAMOND | BD13749      | 4 1/2" IF Box  | EverDrlg54 Pin | 3.000 | 6.740 |  | 3.57    | 2618.75 |
| <b>Agitator</b><br>Description: AGITATOR, Size (in): 6.75                                                                                                 | NOV           | W1679815-1   | 4 1/2" IF Box  | 4 1/2" IF Pin  |       | 6.600 |  | 25.43   | 2644.18 |
| <b>Crossover Sub</b><br>Description: X-O SUB, Material: Steel                                                                                             | BLACK DIAMOND | BD18869      | EverDrlg54 Box | 4 1/2" IF Pin  | 3.000 | 6.730 |  | 1.88    | 2646.06 |





# Mud Motor Reports

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## Anderson Fed Com 504H (WT-20-071)

2020-12-04 to 2021-01-18

Lea, New Mexico, US (32.43, -103.64)

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|                                 |                                                     |                                                       |
|---------------------------------|-----------------------------------------------------|-------------------------------------------------------|
| <b>Job Number</b><br>WT-20-071  | <b>Operator</b><br>Advance Energy Partners          | <b>Rig Name</b><br>Pioneer #80                        |
| <b>Start Date</b><br>2020-12-04 | <b>Well Name</b><br>Anderson Fed Com 504H           | <b>Legal Well Name   AFE</b><br>Anderson Fed Com 504H |
| <b>Play</b><br>Delaware Basin   | <b>State/Province and Country</b><br>New Mexico, US | <b>County</b><br>Lea                                  |
|                                 |                                                     | <b>Company Man</b>                                    |

**Mud Motor Report - BHA 1 (Surface 17.5")**

| Motor Details                                                                                                                                                                |                                        | Date/Depth/Distances          |                  | Hours                      |                 |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------|-------------------------------|------------------|----------------------------|-----------------|
| S/N                                                                                                                                                                          | 800-002                                | Date In                       | 2020-12-05 01:00 | Downhole Hours             | 22.75           |
| Size (in)                                                                                                                                                                    | 8.0                                    | Depth In (ft)                 | 0.00             | Drilling/Circulating Hours | 9.83            |
| Lobe/Stage                                                                                                                                                                   | 7/8, 4.00                              | Date Out                      | 2020-12-05 23:45 |                            |                 |
| Bend Angle                                                                                                                                                                   | 1.5                                    | Depth Out (ft)                | 1310.00          | Circulating Hours          | 1.25            |
| Speed (rev/gal)                                                                                                                                                              | 0.17                                   | Total Drilled (ft)            | 1310.00          | Drilling Hours             | 8.58            |
| Wear Pad OD (in)                                                                                                                                                             | 8.250                                  | Distance Slid (ft)            | 95.00            | Sliding Hours              | 1.17            |
| Manufacturer                                                                                                                                                                 | AIM                                    | Distance Rotated (ft)         | 1215.00          | Rotating Hours             | 7.42            |
| Motor Results                                                                                                                                                                |                                        | % Distance Sliding            | 7.25%            | % Hours Rotating           | 86.41%          |
| Motor Incident                                                                                                                                                               | No                                     | % Distance Rotating           | 92.75%           | % Hours Sliding            | 13.59%          |
| Average Total ROP (ft/h)                                                                                                                                                     | 152.62                                 | BHA Parameters                |                  |                            |                 |
| Average Slide ROP (ft/h)                                                                                                                                                     | 81.43                                  | Flow Rate (gpm)               | 500.00 - 800.00  | Motor RPM                  | 121.00 - 202.00 |
| Average Rotating ROP (ft/h)                                                                                                                                                  | 163.82                                 | Stalls                        | 0                | Surface RPM                | 60.00 - 70.00   |
| Bit Details                                                                                                                                                                  |                                        | Stall Pressure (psi)          | 0.00             | Rotating WOB (klbs)        | 10.00 - 30.00   |
| OD (in)                                                                                                                                                                      | 17.500                                 | On Bottom Pressure (psi)      | 900.00 - 2200.00 | Sliding WOB (klbs)         | 30.00 - 30.00   |
| Vendor                                                                                                                                                                       | Baker                                  | Off Bottom Pressure (psi)     | 600.00 - 1500.00 | Temp (°F)                  | 65.00 - 85.00   |
| S/N                                                                                                                                                                          | 5309285                                | NPT                           | 0.0              |                            |                 |
| Nozzles                                                                                                                                                                      | 9x12                                   | BHA Objective                 |                  |                            |                 |
| Total Flow Area (in²)                                                                                                                                                        | 0.994                                  | Drill Surface to Casing point |                  |                            |                 |
| Bit Type                                                                                                                                                                     | PDC (Polycrystalline Diamond Compacts) |                               |                  |                            |                 |
| Bit Distances                                                                                                                                                                |                                        |                               |                  |                            |                 |
| Survey (Bit to Survey): 60.00 ft                                                                                                                                             |                                        |                               |                  |                            |                 |
| Mud Properties                                                                                                                                                               |                                        |                               |                  |                            |                 |
| Type                                                                                                                                                                         | Water                                  |                               |                  |                            |                 |
| WT                                                                                                                                                                           | 9.70                                   |                               |                  |                            |                 |
| VIS                                                                                                                                                                          | 30.00                                  |                               |                  |                            |                 |
| PV                                                                                                                                                                           | 2.00                                   |                               |                  |                            |                 |
| YP                                                                                                                                                                           | 5.00                                   |                               |                  |                            |                 |
| POOH Reason/Notes                                                                                                                                                            |                                        |                               |                  |                            |                 |
| Total Depth/Casing Point: TD Surface at 1310' MD                                                                                                                             |                                        |                               |                  |                            |                 |
| Incident Notes                                                                                                                                                               |                                        |                               |                  |                            |                 |
| Directional: N/A                                                                                                                                                             |                                        |                               |                  |                            |                 |
| MWD:                                                                                                                                                                         |                                        |                               |                  |                            |                 |
| Comments                                                                                                                                                                     |                                        |                               |                  |                            |                 |
| Directional: 1.5° FBH 7/8 4.0 Stg Mtr.w/12" Stab.; Flow Range: 400-900 gpm; Max Diff: 900 psi; Max TQ: 14930 ft/lbs; Bit: Baker Type: T606KS, Jets: 9x12, TFA: 0.994 Runs: 4 |                                        |                               |                  |                            |                 |
| MWD:                                                                                                                                                                         |                                        |                               |                  |                            |                 |



|                                 |                                                     |                                                       |
|---------------------------------|-----------------------------------------------------|-------------------------------------------------------|
| <b>Job Number</b><br>WT-20-071  | <b>Operator</b><br>Advance Energy Partners          | <b>Rig Name</b><br>Pioneer #80                        |
| <b>Start Date</b><br>2020-12-04 | <b>Well Name</b><br>Anderson Fed Com 504H           | <b>Legal Well Name   AFE</b><br>Anderson Fed Com 504H |
| <b>Play</b><br>Delaware Basin   | <b>State/Province and Country</b><br>New Mexico, US | <b>County</b><br>Lea                                  |
|                                 |                                                     | <b>Company Man</b>                                    |

**Mud Motor Report - BHA 2 (Intermediate 12.25")**

| Motor Details                                                                                                                                                               |                                        | Date/Depth/Distances                      |                   | Hours                      |                |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------|-------------------------------------------|-------------------|----------------------------|----------------|
| S/N                                                                                                                                                                         | 800-40-007                             | Date In                                   | 2020-12-11 07:00  | Downhole Hours             | 30.00          |
| Size (in)                                                                                                                                                                   | 8.0                                    | Depth In (ft)                             | 1310.00           | Drilling/Circulating Hours | 21.33          |
| Lobe/Stage                                                                                                                                                                  | 7/8, 5.90                              | Date Out                                  | 2020-12-12 13:00  |                            |                |
| Bend Angle                                                                                                                                                                  | 1.5                                    | Depth Out (ft)                            | 4944.00           | Circulating Hours          | 3.08           |
| Speed (rev/gal)                                                                                                                                                             | 0.17                                   | Total Drilled (ft)                        | 3634.00           | Drilling Hours             | 18.25          |
| Wear Pad OD (in)                                                                                                                                                            | 8.400                                  | Distance Slid (ft)                        | 155.00            | Sliding Hours              | 2.17           |
| Manufacturer                                                                                                                                                                | AIM                                    | Distance Rotated (ft)                     | 3479.00           | Rotating Hours             | 16.08          |
| Motor Results                                                                                                                                                               |                                        | % Distance Sliding                        | 4.27%             | % Hours Rotating           | 88.13%         |
| Motor Incident                                                                                                                                                              | No                                     | % Distance Rotating                       | 95.73%            | % Hours Sliding            | 11.87%         |
| Average Total ROP (ft/h)                                                                                                                                                    | 199.12                                 | BHA Parameters                            |                   |                            |                |
| Average Slide ROP (ft/h)                                                                                                                                                    | 71.54                                  | Flow Rate (gpm)                           | 550.00 - 800.00   | Motor RPM                  | 85.00 - 136.00 |
| Average Rotating ROP (ft/h)                                                                                                                                                 | 216.31                                 | Stalls                                    | 0                 | Surface RPM                | 40.00 - 60.00  |
| Bit Details                                                                                                                                                                 |                                        | Stall Pressure (psi)                      | 0.00              | Rotating WOB (klbs)        | 30.00 - 47.00  |
| OD (in)                                                                                                                                                                     | 12.250                                 | On Bottom Pressure (psi)                  | 2000.00 - 2750.00 | Sliding WOB (klbs)         | 30.00 - 30.00  |
| Vendor                                                                                                                                                                      | REED                                   | Off Bottom Pressure (psi)                 | 1400.00 - 1950.00 | Temp (°F)                  | -0.00 - -0.00  |
| S/N                                                                                                                                                                         | A260948                                | NPT                                       | 0.0               |                            |                |
| Nozzles                                                                                                                                                                     | 6x14's                                 | BHA Objective                             |                   |                            |                |
| Total Flow Area (in²)                                                                                                                                                       | 0.902                                  | DRILL 12.25" INTERMEDIATE TO CASING POINT |                   |                            |                |
| Bit Type                                                                                                                                                                    | PDC (Polycrystalline Diamond Compacts) |                                           |                   |                            |                |
| Bit Distances                                                                                                                                                               |                                        |                                           |                   |                            |                |
| Bend (BIT TO BEND): 6.20 ft, Survey (BIT TO SURVEY): 69.00 ft                                                                                                               |                                        |                                           |                   |                            |                |
| Mud Properties                                                                                                                                                              |                                        |                                           |                   |                            |                |
| Type                                                                                                                                                                        | Brine                                  |                                           |                   |                            |                |
| WT                                                                                                                                                                          | 10.20                                  |                                           |                   |                            |                |
| VIS                                                                                                                                                                         | 28.00                                  |                                           |                   |                            |                |
| PV                                                                                                                                                                          | 1.00                                   |                                           |                   |                            |                |
| YP                                                                                                                                                                          | 3.00                                   |                                           |                   |                            |                |
| POOH Reason/Notes                                                                                                                                                           |                                        |                                           |                   |                            |                |
| Total Depth/Casing Point                                                                                                                                                    |                                        |                                           |                   |                            |                |
| Incident Notes                                                                                                                                                              |                                        |                                           |                   |                            |                |
| Directional:                                                                                                                                                                |                                        |                                           |                   |                            |                |
| MWD:                                                                                                                                                                        |                                        |                                           |                   |                            |                |
| Comments                                                                                                                                                                    |                                        |                                           |                   |                            |                |
| Directional: Directional: 1.5° FBH 7/8 5.9 Stg Mtr.w/12" Stab.; Flow Range: 400-900 gpm; Max Diff: 1390 psi; Max TQ: 21,870 ft/lbs; Bit: , Jets: 6x14's , TFA: .902 Runs: 2 |                                        |                                           |                   |                            |                |
| MWD:                                                                                                                                                                        |                                        |                                           |                   |                            |                |



|                                 |                                                     |                                                       |
|---------------------------------|-----------------------------------------------------|-------------------------------------------------------|
| <b>Job Number</b><br>WT-20-071  | <b>Operator</b><br>Advance Energy Partners          | <b>Rig Name</b><br>Pioneer #80                        |
| <b>Start Date</b><br>2020-12-04 | <b>Well Name</b><br>Anderson Fed Com 504H           | <b>Legal Well Name   AFE</b><br>Anderson Fed Com 504H |
| <b>Play</b><br>Delaware Basin   | <b>State/Province and Country</b><br>New Mexico, US | <b>County</b><br>Lea                                  |
|                                 |                                                     | <b>Company Man</b>                                    |

**Mud Motor Report - BHA 3 (8.75" Intermediate )**

| Motor Details                                                                               |                                        | Date/Depth/Distances      | Hours             |
|---------------------------------------------------------------------------------------------|----------------------------------------|---------------------------|-------------------|
| S/N                                                                                         | 700-40-006                             | Date In                   | 2020-12-20 18:00  |
| Size (in)                                                                                   | 7.0                                    | Depth In (ft)             | 4944.00           |
| Lobe/Stage                                                                                  | 7/8, 8.50                              | Date Out                  | 2020-12-22 01:45  |
| Bend Angle                                                                                  | 1.5                                    | Depth Out (ft)            | 9260.00           |
| Speed (rev/gal)                                                                             | 0.26                                   | Total Drilled (ft)        | 4316.00           |
| Wear Pad OD (in)                                                                            | 7.300                                  | Distance Slid (ft)        | 380.00            |
| Manufacturer                                                                                | AIM                                    | Distance Rotated (ft)     | 3936.00           |
| <b>Motor Results</b>                                                                        |                                        | % Distance Sliding        | 8.80%             |
| Motor Incident                                                                              | No                                     | % Distance Rotating       | 91.20%            |
| Average Total ROP (ft/h)                                                                    | 236.49                                 |                           |                   |
| Average Slide ROP (ft/h)                                                                    | 52.41                                  | <b>BHA Parameters</b>     |                   |
| Average Rotating ROP (ft/h)                                                                 | 357.82                                 | Flow Rate (gpm)           | 675.00 - 675.00   |
| <b>Bit Details</b>                                                                          |                                        | Stalls                    | 0                 |
| OD (in)                                                                                     | 8.750                                  | Stall Pressure (psi)      | 0.00              |
| Vendor                                                                                      | REED                                   | On Bottom Pressure (psi)  | 2000.00 - 2800.00 |
| S/N                                                                                         | A270855                                | Off Bottom Pressure (psi) | 1750.00 - 1950.00 |
| Nozzles                                                                                     | 6-15's                                 | NPT                       | 0.0               |
| Total Flow Area (in <sup>2</sup> )                                                          | 1.035                                  | <b>BHA Objective</b>      |                   |
| Bit Type                                                                                    | PDC (Polycrystalline Diamond Compacts) | DRILL TO KOP              |                   |
| <b>Bit Distances</b>                                                                        |                                        |                           |                   |
| Bend: 5.30 ft, Gamma: 54.00 ft, Survey: 69.00 ft                                            |                                        |                           |                   |
| <b>Mud Properties</b>                                                                       |                                        |                           |                   |
| Type                                                                                        | Brine                                  |                           |                   |
| WT                                                                                          | 9.20                                   |                           |                   |
| VIS                                                                                         | 28.00                                  |                           |                   |
| PV                                                                                          | 1.00                                   |                           |                   |
| YP                                                                                          | 3.00                                   |                           |                   |
| <b>POOH Reason/Notes</b>                                                                    |                                        |                           |                   |
| Penetration Rate                                                                            |                                        |                           |                   |
| <b>Incident Notes</b>                                                                       |                                        |                           |                   |
| Directional: BIT WAS RUNG OUT, w/ RUBBER IN 2 JETS                                          |                                        |                           |                   |
| MWD:                                                                                        |                                        |                           |                   |
| <b>Comments</b>                                                                             |                                        |                           |                   |
| Directional: Flow Rate: 500-700, Max Diff: 1910 psi, Max Torque: 18,710 ft-lbs, BIT Runs: 2 |                                        |                           |                   |
| MWD:                                                                                        |                                        |                           |                   |



|                                 |                                                     |                                                       |
|---------------------------------|-----------------------------------------------------|-------------------------------------------------------|
| <b>Job Number</b><br>WT-20-071  | <b>Operator</b><br>Advance Energy Partners          | <b>Rig Name</b><br>Pioneer #80                        |
| <b>Start Date</b><br>2020-12-04 | <b>Well Name</b><br>Anderson Fed Com 504H           | <b>Legal Well Name   AFE</b><br>Anderson Fed Com 504H |
| <b>Play</b><br>Delaware Basin   | <b>State/Province and Country</b><br>New Mexico, US | <b>County</b><br>Lea                                  |
|                                 |                                                     | <b>Company Man</b>                                    |

**Mud Motor Report - BHA 4 (Intermediate 8.75")**

| Motor Details                                                                               |                                        | Date/Depth/Distances                      | Hours             |
|---------------------------------------------------------------------------------------------|----------------------------------------|-------------------------------------------|-------------------|
| S/N                                                                                         | 700-40-014                             | Date In                                   | 2020-12-22 02:45  |
| Size (in)                                                                                   | 7.0                                    | Depth In (ft)                             | 9260.00           |
| Lobe/Stage                                                                                  | 7/8, 8.50                              | Date Out                                  | 2020-12-22 18:30  |
| Bend Angle                                                                                  | 1.5                                    | Depth Out (ft)                            | 10260.00          |
| Speed (rev/gal)                                                                             | 0.26                                   | Total Drilled (ft)                        | 1000.00           |
| Wear Pad OD (in)                                                                            | 7.300                                  | Distance Slid (ft)                        | 30.00             |
| Manufacturer                                                                                | AIM                                    | Distance Rotated (ft)                     | 970.00            |
| <b>Motor Results</b>                                                                        |                                        | % Distance Sliding                        | 3.00%             |
| Motor Incident                                                                              | No                                     | % Distance Rotating                       | 97.00%            |
| Average Total ROP (ft/h)                                                                    | 193.55                                 |                                           |                   |
| Average Slide ROP (ft/h)                                                                    | 60.00                                  | <b>BHA Parameters</b>                     |                   |
| Average Rotating ROP (ft/h)                                                                 | 207.86                                 | Flow Rate (gpm)                           | 675.00 - 675.00   |
| <b>Bit Details</b>                                                                          |                                        | Stalls                                    | 0                 |
| OD (in)                                                                                     | 8.750                                  | Stall Pressure (psi)                      | 0.00              |
| Vendor                                                                                      | Ultrerra                               | On Bottom Pressure (psi)                  | 2350.00 - 2800.00 |
| S/N                                                                                         | 54274                                  | Off Bottom Pressure (psi)                 | 1950.00 - 1950.00 |
| Nozzles                                                                                     | 6-15's                                 | NPT                                       | 0.0               |
| Total Flow Area (in <sup>2</sup> )                                                          | 1.035                                  | <b>BHA Objective</b>                      |                   |
| Bit Type                                                                                    | PDC (Polycrystalline Diamond Compacts) | Finish Drilling 8.75" Intermediate to KOP |                   |
| <b>Bit Distances</b>                                                                        |                                        |                                           |                   |
| Bend: 5.30 ft, Gamma: 53.00 ft, Survey: 68.00 ft                                            |                                        |                                           |                   |
| <b>Mud Properties</b>                                                                       |                                        |                                           |                   |
| Type                                                                                        | Water Based                            |                                           |                   |
| WT                                                                                          | 9.50                                   |                                           |                   |
| VIS                                                                                         | 28.00                                  |                                           |                   |
| PV                                                                                          | 1.00                                   |                                           |                   |
| YP                                                                                          | 3.00                                   |                                           |                   |
| <b>POOH Reason/Notes</b>                                                                    |                                        |                                           |                   |
| Change Bottom Hole Assembly: Pooh to P/U Curve assembly                                     |                                        |                                           |                   |
| <b>Incident Notes</b>                                                                       |                                        |                                           |                   |
| Directional: N/A                                                                            |                                        |                                           |                   |
| MWD:                                                                                        |                                        |                                           |                   |
| <b>Comments</b>                                                                             |                                        |                                           |                   |
| Directional: Flow Rate: 500-700, Max Diff: 1910 psi, Max Torque: 18,710 ft-lbs, BIT Runs: 0 |                                        |                                           |                   |
| MWD:                                                                                        |                                        |                                           |                   |



|                                 |                                                     |                                                       |
|---------------------------------|-----------------------------------------------------|-------------------------------------------------------|
| <b>Job Number</b><br>WT-20-071  | <b>Operator</b><br>Advance Energy Partners          | <b>Rig Name</b><br>Pioneer #80                        |
| <b>Start Date</b><br>2020-12-04 | <b>Well Name</b><br>Anderson Fed Com 504H           | <b>Legal Well Name   AFE</b><br>Anderson Fed Com 504H |
| <b>Play</b><br>Delaware Basin   | <b>State/Province and Country</b><br>New Mexico, US | <b>County</b><br>Lea                                  |
|                                 |                                                     | <b>Company Man</b>                                    |

**Mud Motor Report - BHA 5 (8.75" CURVE)**

| Motor Details                                                                                                                                                                             |                                        | Date/Depth/Distances      |                   | Hours                      |                 |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------|---------------------------|-------------------|----------------------------|-----------------|
| S/N                                                                                                                                                                                       | CDM650-019                             | Date In                   | 2020-12-22 18:30  | Downhole Hours             | 33.75           |
| Size (in)                                                                                                                                                                                 | 7.0                                    | Depth In (ft)             | 10260.00          | Drilling/Circulating Hours | 18.42           |
| Lobe/Stage                                                                                                                                                                                | 7/8, 5.00                              | Date Out                  | 2020-12-24 04:15  |                            |                 |
| Bend Angle                                                                                                                                                                                | 2.12                                   | Depth Out (ft)            | 11572.00          | Circulating Hours          | 1.25            |
| Speed (rev/gal)                                                                                                                                                                           | 0.26                                   | Total Drilled (ft)        | 1312.00           | Drilling Hours             | 17.17           |
| Wear Pad OD (in)                                                                                                                                                                          | 7.000                                  | Distance Slid (ft)        | 1023.00           | Sliding Hours              | 14.83           |
| Manufacturer                                                                                                                                                                              | AIM                                    | Distance Rotated (ft)     | 289.00            | Rotating Hours             | 2.33            |
| Motor Results                                                                                                                                                                             |                                        | % Distance Sliding        | 77.97%            | % Hours Rotating           | 13.59%          |
| Motor Incident                                                                                                                                                                            | Yes                                    | % Distance Rotating       | 22.03%            | % Hours Sliding            | 86.41%          |
| Average Total ROP (ft/h)                                                                                                                                                                  | 76.43                                  | BHA Parameters            |                   |                            |                 |
| Average Slide ROP (ft/h)                                                                                                                                                                  | 68.97                                  | Flow Rate (gpm)           | 550.00 - 550.00   | Motor RPM                  | 168.00 - 168.00 |
| Average Rotating ROP (ft/h)                                                                                                                                                               | 123.86                                 | Stalls                    | 0                 | Surface RPM                | 20.00 - 20.00   |
| Bit Details                                                                                                                                                                               |                                        | Stall Pressure (psi)      | 0.00              | Rotating WOB (klbs)        | 40.00 - 40.00   |
| OD (in)                                                                                                                                                                                   | 8.750                                  | On Bottom Pressure (psi)  | 1650.00 - 1900.00 | Sliding WOB (klbs)         | 20.00 - 40.00   |
| Vendor                                                                                                                                                                                    | SECURITY                               | Off Bottom Pressure (psi) | 1350.00 - 1400.00 | Temp (°F)                  | 135.00 - 138.00 |
| S/N                                                                                                                                                                                       | 13521069                               | NPT                       | 0.0               |                            |                 |
| Nozzles                                                                                                                                                                                   | 6-15's                                 | BHA Objective             |                   |                            |                 |
| Total Flow Area (in²)                                                                                                                                                                     | 1.035                                  | DRILL CURVE               |                   |                            |                 |
| Bit Type                                                                                                                                                                                  | PDC (Polycrystalline Diamond Compacts) |                           |                   |                            |                 |
| Bit Distances                                                                                                                                                                             |                                        |                           |                   |                            |                 |
| Bend: 4.03 ft, Gamma: 38.00 ft, Survey: 53.00 ft                                                                                                                                          |                                        |                           |                   |                            |                 |
| Mud Properties                                                                                                                                                                            |                                        |                           |                   |                            |                 |
| Type                                                                                                                                                                                      | Water                                  |                           |                   |                            |                 |
| WT                                                                                                                                                                                        | 9.50                                   |                           |                   |                            |                 |
| VIS                                                                                                                                                                                       | 28.00                                  |                           |                   |                            |                 |
| PV                                                                                                                                                                                        | 1.00                                   |                           |                   |                            |                 |
| YP                                                                                                                                                                                        | 3.00                                   |                           |                   |                            |                 |
| POOH Reason/Notes                                                                                                                                                                         |                                        |                           |                   |                            |                 |
| Total Depth/Casing Point: Pooh after landing curve                                                                                                                                        |                                        |                           |                   |                            |                 |
| Incident Notes                                                                                                                                                                            |                                        |                           |                   |                            |                 |
| Directional: Once motor was on surface, we noticed the bit box was hanging down about 6 inches from the bearing nut. Motor would not turn to drain, and motor collapsed onto the bit box. |                                        |                           |                   |                            |                 |
| MWD:                                                                                                                                                                                      |                                        |                           |                   |                            |                 |
| Comments                                                                                                                                                                                  |                                        |                           |                   |                            |                 |
| Directional: Flow Rate: 300-600, Max Diff: 1130 psi, Max Torque: 10,460 ft-lbs, BIT Runs:                                                                                                 |                                        |                           |                   |                            |                 |
| MWD:                                                                                                                                                                                      |                                        |                           |                   |                            |                 |



|                                 |                                                     |                                                       |
|---------------------------------|-----------------------------------------------------|-------------------------------------------------------|
| <b>Job Number</b><br>WT-20-071  | <b>Operator</b><br>Advance Energy Partners          | <b>Rig Name</b><br>Pioneer #80                        |
| <b>Start Date</b><br>2020-12-04 | <b>Well Name</b><br>Anderson Fed Com 504H           | <b>Legal Well Name   AFE</b><br>Anderson Fed Com 504H |
| <b>Play</b><br>Delaware Basin   | <b>State/Province and Country</b><br>New Mexico, US | <b>County</b><br>Lea                                  |
|                                 |                                                     | <b>Company Man</b>                                    |

**Mud Motor Report - BHA 6 (8.50" LATERAL w/ Agitator)**

| Motor Details                                                                               |                                        | Date/Depth/Distances      |                   | Hours                      |                 |
|---------------------------------------------------------------------------------------------|----------------------------------------|---------------------------|-------------------|----------------------------|-----------------|
| S/N                                                                                         | 700-40-006                             | Date In                   | 2021-01-12 11:30  | Downhole Hours             | 51.00           |
| Size (in)                                                                                   | 7.0                                    | Depth In (ft)             | 11572.00          | Drilling/Circulating Hours | 34.17           |
| Lobe/Stage                                                                                  | 6/7, 8.40                              | Date Out                  | 2021-01-14 14:30  |                            |                 |
| Bend Angle                                                                                  | 1.75                                   | Depth Out (ft)            | 14335.00          | Circulating Hours          | 5.67            |
| Speed (rev/gal)                                                                             | 0.26                                   | Total Drilled (ft)        | 2763.00           | Drilling Hours             | 28.50           |
| Wear Pad OD (in)                                                                            | 7.250                                  | Distance Slid (ft)        | 603.00            | Sliding Hours              | 13.00           |
| Manufacturer                                                                                | AIM                                    | Distance Rotated (ft)     | 2160.00           | Rotating Hours             | 15.50           |
| Motor Results                                                                               |                                        | % Distance Sliding        | 21.82%            | % Hours Rotating           | 54.39%          |
| Motor Incident                                                                              | Yes                                    | % Distance Rotating       | 78.18%            | % Hours Sliding            | 45.61%          |
| Average Total ROP (ft/h)                                                                    | 96.95                                  | BHA Parameters            |                   |                            |                 |
| Average Slide ROP (ft/h)                                                                    | 46.38                                  | Flow Rate (gpm)           | 550.00 - 630.00   | Motor RPM                  | 0.00 - 0.00     |
| Average Rotating ROP (ft/h)                                                                 | 139.35                                 | Stalls                    | 0                 | Surface RPM                | 30.00 - 60.00   |
| Bit Details                                                                                 |                                        | Stall Pressure (psi)      | 0.00              | Rotating WOB (klbs)        | 42.00 - 50.00   |
| OD (in)                                                                                     | 8.500                                  | On Bottom Pressure (psi)  | 2850.00 - 3800.00 | Sliding WOB (klbs)         | 40.00 - 40.00   |
| Vendor                                                                                      | REED                                   | Off Bottom Pressure (psi) | 2450.00 - 3000.00 | Temp (°F)                  | 110.00 - 110.00 |
| S/N                                                                                         | A265535                                | NPT                       | 0.0               |                            |                 |
| Nozzles                                                                                     | 6x16's                                 | BHA Objective             |                   |                            |                 |
| Total Flow Area (in²)                                                                       | 1.170                                  | Drill 8.5" Lateral        |                   |                            |                 |
| Bit Type                                                                                    | PDC (Polycrystalline Diamond Compacts) |                           |                   |                            |                 |
| Bit Distances                                                                               |                                        |                           |                   |                            |                 |
| Gamma: 48.00 ft, Survey: 62.00 ft                                                           |                                        |                           |                   |                            |                 |
| Mud Properties                                                                              |                                        |                           |                   |                            |                 |
| Type                                                                                        | Oil Based                              |                           |                   |                            |                 |
| WT                                                                                          | 9.30                                   |                           |                   |                            |                 |
| VIS                                                                                         | 70.00                                  |                           |                   |                            |                 |
| PV                                                                                          | 20.00                                  |                           |                   |                            |                 |
| YP                                                                                          | 10.00                                  |                           |                   |                            |                 |
| POOH Reason/Notes                                                                           |                                        |                           |                   |                            |                 |
| Downhole Motor Incident: POOH due to loss of ROP.                                           |                                        |                           |                   |                            |                 |
| Incident Notes                                                                              |                                        |                           |                   |                            |                 |
| Directional: POSSIBLE BROKEN DRIVESHAFT, Could not drain motor at surface.                  |                                        |                           |                   |                            |                 |
| MWD:                                                                                        |                                        |                           |                   |                            |                 |
| Comments                                                                                    |                                        |                           |                   |                            |                 |
| Directional: Flow Rate: 500-750, Max Diff: 1980 psi, Max Torque: 16,550 ft-lbs, BIT Runs: 2 |                                        |                           |                   |                            |                 |
| MWD:                                                                                        |                                        |                           |                   |                            |                 |



|                                 |                                                     |                                                       |
|---------------------------------|-----------------------------------------------------|-------------------------------------------------------|
| <b>Job Number</b><br>WT-20-071  | <b>Operator</b><br>Advance Energy Partners          | <b>Rig Name</b><br>Pioneer #80                        |
| <b>Start Date</b><br>2020-12-04 | <b>Well Name</b><br>Anderson Fed Com 504H           | <b>Legal Well Name   AFE</b><br>Anderson Fed Com 504H |
| <b>Play</b><br>Delaware Basin   | <b>State/Province and Country</b><br>New Mexico, US | <b>County</b><br>Lea                                  |
|                                 |                                                     | <b>Company Man</b>                                    |

**Mud Motor Report - BHA 7 (8.50" LATERAL w/ Agitator)**

| Motor Details                                                                                            |                                        | Date/Depth/Distances      |                   | Hours                      |                 |
|----------------------------------------------------------------------------------------------------------|----------------------------------------|---------------------------|-------------------|----------------------------|-----------------|
| S/N                                                                                                      | 700-40-036                             | Date In                   | 2021-01-14 15:30  | Downhole Hours             | 38.00           |
| Size (in)                                                                                                | 7.0                                    | Depth In (ft)             | 14335.00          | Drilling/Circulating Hours | 19.92           |
| Lobe/Stage                                                                                               | 6/7, 8.40                              | Date Out                  | 2021-01-16 05:30  |                            |                 |
| Bend Angle                                                                                               | 1.75                                   | Depth Out (ft)            | 15927.00          | Circulating Hours          | 2.67            |
| Speed (rev/gal)                                                                                          | 0.26                                   | Total Drilled (ft)        | 1592.00           | Drilling Hours             | 17.25           |
| Wear Pad OD (in)                                                                                         | 7.180                                  | Distance Slid (ft)        | 200.00            | Sliding Hours              | 4.92            |
| Manufacturer                                                                                             | AIM                                    | Distance Rotated (ft)     | 1392.00           | Rotating Hours             | 12.33           |
| Motor Results                                                                                            |                                        | % Distance Sliding        | 12.56%            | % Hours Rotating           | 71.50%          |
| Motor Incident                                                                                           | Yes                                    | % Distance Rotating       | 87.44%            | % Hours Sliding            | 28.50%          |
| Average Total ROP (ft/h)                                                                                 | 92.29                                  | BHA Parameters            |                   |                            |                 |
| Average Slide ROP (ft/h)                                                                                 | 40.68                                  | Flow Rate (gpm)           | 550.00 - 550.00   | Motor RPM                  | 143.00 - 156.00 |
| Average Rotating ROP (ft/h)                                                                              | 112.86                                 | Stalls                    | 3                 | Surface RPM                | 30.00 - 30.00   |
| Bit Details                                                                                              |                                        | Stall Pressure (psi)      | 1699.99           | Rotating WOB (klbs)        | 50.00 - 50.00   |
| OD (in)                                                                                                  | 8.500                                  | On Bottom Pressure (psi)  | 2850.00 - 3450.00 | Sliding WOB (klbs)         | 40.00 - 40.00   |
| Vendor                                                                                                   | SECURITY                               | Off Bottom Pressure (psi) | 2450.00 - 2605.00 | Temp (°F)                  | 159.80 - 159.80 |
| S/N                                                                                                      | 13293822                               | NPT                       | 0.0               |                            |                 |
| Nozzles                                                                                                  | 6x13's & 3-12's                        | BHA Objective             |                   |                            |                 |
| Total Flow Area (in²)                                                                                    | 1.110                                  | Drill 8.5" Lateral to TD  |                   |                            |                 |
| Bit Type                                                                                                 | PDC (Polycrystalline Diamond Compacts) |                           |                   |                            |                 |
| Bit Distances                                                                                            |                                        |                           |                   |                            |                 |
| Gamma: 45.00 ft, Survey: 60.00 ft                                                                        |                                        |                           |                   |                            |                 |
| Mud Properties                                                                                           |                                        |                           |                   |                            |                 |
| Type                                                                                                     | Oil Based                              |                           |                   |                            |                 |
| WT                                                                                                       | 9.30                                   |                           |                   |                            |                 |
| VIS                                                                                                      | 68.00                                  |                           |                   |                            |                 |
| PV                                                                                                       | 20.00                                  |                           |                   |                            |                 |
| YP                                                                                                       | 8.00                                   |                           |                   |                            |                 |
| POOH Reason/Notes                                                                                        |                                        |                           |                   |                            |                 |
| Downhole Motor Incident: POOH due to loss of ROP and not being able to establish diff.                   |                                        |                           |                   |                            |                 |
| Incident Notes                                                                                           |                                        |                           |                   |                            |                 |
| Directional: Lost all Differential Pressure while on bottom with no ROP. At surface motor did not drain. |                                        |                           |                   |                            |                 |
| MWD:                                                                                                     |                                        |                           |                   |                            |                 |
| Comments                                                                                                 |                                        |                           |                   |                            |                 |
| Directional: Flow Rate: 500-750, Max Diff: 1980 psi, Max Torque: 16,550 ft-lbs, BIT Runs: 4              |                                        |                           |                   |                            |                 |
| MWD:                                                                                                     |                                        |                           |                   |                            |                 |



|                                 |                                                     |                                                       |
|---------------------------------|-----------------------------------------------------|-------------------------------------------------------|
| <b>Job Number</b><br>WT-20-071  | <b>Operator</b><br>Advance Energy Partners          | <b>Rig Name</b><br>Pioneer #80                        |
| <b>Start Date</b><br>2020-12-04 | <b>Well Name</b><br>Anderson Fed Com 504H           | <b>Legal Well Name   AFE</b><br>Anderson Fed Com 504H |
| <b>Play</b><br>Delaware Basin   | <b>State/Province and Country</b><br>New Mexico, US | <b>County</b><br>Lea                                  |
|                                 |                                                     | <b>Company Man</b>                                    |

**Mud Motor Report - BHA 8 (8.50" LATERAL w/ Agitator)**

| Motor Details                                                                               |                                        | Date/Depth/Distances      |                   | Hours                      |                 |
|---------------------------------------------------------------------------------------------|----------------------------------------|---------------------------|-------------------|----------------------------|-----------------|
| S/N                                                                                         | 700-40-033                             | Date In                   | 2021-01-16 07:00  | Downhole Hours             | 44.00           |
| Size (in)                                                                                   | 7.0                                    | Depth In (ft)             | 15927.00          | Drilling/Circulating Hours | 22.58           |
| Lobe/Stage                                                                                  | 7/8, 8.50                              | Date Out                  | 2021-01-18 03:00  |                            |                 |
| Bend Angle                                                                                  | 1.75                                   | Depth Out (ft)            | 17747.00          | Circulating Hours          | 6.50            |
| Speed (rev/gal)                                                                             | 0.26                                   | Total Drilled (ft)        | 1820.00           | Drilling Hours             | 16.08           |
| Wear Pad OD (in)                                                                            | 7.150                                  | Distance Slid (ft)        | 142.00            | Sliding Hours              | 4.33            |
| Manufacturer                                                                                | AIM                                    | Distance Rotated (ft)     | 1678.00           | Rotating Hours             | 11.75           |
| Motor Results                                                                               |                                        | % Distance Sliding        | 7.80%             | % Hours Rotating           | 73.06%          |
| Motor Incident                                                                              | No                                     | % Distance Rotating       | 92.20%            | % Hours Sliding            | 26.94%          |
| Average Total ROP (ft/h)                                                                    | 113.16                                 | BHA Parameters            |                   |                            |                 |
| Average Slide ROP (ft/h)                                                                    | 32.77                                  | Flow Rate (gpm)           | 550.00 - 630.00   | Motor RPM                  | 164.00 - 164.00 |
| Average Rotating ROP (ft/h)                                                                 | 142.81                                 | Stalls                    | 0                 | Surface RPM                | 30.00 - 40.00   |
| Bit Details                                                                                 |                                        | Stall Pressure (psi)      | 0.00              | Rotating WOB (klbs)        | 50.00 - 60.00   |
| OD (in)                                                                                     | 8.500                                  | On Bottom Pressure (psi)  | 3450.00 - 4300.00 | Sliding WOB (klbs)         | 50.00 - 50.00   |
| Vendor                                                                                      | BAKER                                  | Off Bottom Pressure (psi) | 2450.00 - 3550.00 | Temp (°F)                  | 176.00 - 176.00 |
| S/N                                                                                         | 5311056                                | NPT                       | 0.0               |                            |                 |
| Nozzles                                                                                     | 6x16's                                 | BHA Objective             |                   |                            |                 |
| Total Flow Area (in²)                                                                       | 1.180                                  | Drill 8.5" Lateral to TD  |                   |                            |                 |
| Bit Type                                                                                    | PDC (Polycrystalline Diamond Compacts) |                           |                   |                            |                 |
| Bit Distances                                                                               |                                        |                           |                   |                            |                 |
| Gamma: 48.00 ft, Survey: 63.00 ft                                                           |                                        |                           |                   |                            |                 |
| Mud Properties                                                                              |                                        |                           |                   |                            |                 |
| Type                                                                                        | Oil Based                              |                           |                   |                            |                 |
| WT                                                                                          | 9.30                                   |                           |                   |                            |                 |
| VIS                                                                                         | 68.00                                  |                           |                   |                            |                 |
| PV                                                                                          | 19.00                                  |                           |                   |                            |                 |
| YP                                                                                          | 8.00                                   |                           |                   |                            |                 |
| POOH Reason/Notes                                                                           |                                        |                           |                   |                            |                 |
| Total Depth/Casing Point                                                                    |                                        |                           |                   |                            |                 |
| Incident Notes                                                                              |                                        |                           |                   |                            |                 |
| Directional:                                                                                |                                        |                           |                   |                            |                 |
| MWD:                                                                                        |                                        |                           |                   |                            |                 |
| Comments                                                                                    |                                        |                           |                   |                            |                 |
| Directional: Flow Rate: 500-700, Max Diff: 1910 psi, Max Torque: 18,710 ft-lbs, BIT Runs: 3 |                                        |                           |                   |                            |                 |
| MWD:                                                                                        |                                        |                           |                   |                            |                 |



# Slide/Rotate Reports

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## **Anderson Fed Com 504H (WT-20-071)**

2020-12-04 to 2021-01-18

Lea, New Mexico, US (32.43, -103.64)

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|                                 |                                                     |                                                       |
|---------------------------------|-----------------------------------------------------|-------------------------------------------------------|
| <b>Job Number</b><br>WT-20-071  | <b>Operator</b><br>Advance Energy Partners          | <b>Rig Name</b><br>Pioneer #80                        |
| <b>Start Date</b><br>2020-12-04 | <b>Well Name</b><br>Anderson Fed Com 504H           | <b>Legal Well Name   AFE</b><br>Anderson Fed Com 504H |
| <b>Play</b><br>Delaware Basin   | <b>State/Province and Country</b><br>New Mexico, US | <b>County</b><br>Lea                                  |
| <b>Company Man</b>              |                                                     |                                                       |

**Slide/Rotate Report - BHA #1 (Surface 17.5")**

| Activity | Start Date | Start Time | End Time | End Date | Hours | Start Depth (ft) | End Depth (ft) | Distance (ft) | RoP (ft/h) | Toolface | Flow Rate (gpm) | Surface RPM | WOB (klbs) | Press On (psi) | Press Off (psi) | Hole Section Type |
|----------|------------|------------|----------|----------|-------|------------------|----------------|---------------|------------|----------|-----------------|-------------|------------|----------------|-----------------|-------------------|
| Rotate   | 12-05      | 10:00      | 11:05    | 12-05    | 1.08  | 0.00             | 260.00         | 260.00        | 240.00     | N/A      | 500.00          | 60.0        | 10.00      | 900.00         | 600.00          |                   |
| Rotate   | 12-05      | 11:10      | 12:20    | 12-05    | 1.17  | 260.00           | 385.00         | 125.00        | 107.14     | N/A      | 500.00          | 60.0        | 10.00      | 900.00         | 600.00          |                   |
| Rotate   | 12-05      | 12:25      | 12:50    | 12-05    | 0.42  | 385.00           | 479.00         | 94.00         | 225.60     | N/A      | 500.00          | 70.0        | 10.00      | 900.00         | 600.00          |                   |
| Rotate   | 12-05      | 12:55      | 13:10    | 12-05    | 0.25  | 479.00           | 495.00         | 16.00         | 64.00      | N/A      | 500.00          | 70.0        | 10.00      | 900.00         | 600.00          |                   |
| Slide    | 12-05      | 13:10      | 13:25    | 12-05    | 0.25  | 495.00           | 510.00         | 15.00         | 60.00      | 340.0    | 800.00          | N/A         | 30.00      | 2000.00        | 1400.00         |                   |
| Rotate   | 12-05      | 13:25      | 13:40    | 12-05    | 0.25  | 510.00           | 572.00         | 62.00         | 248.00     | N/A      | 800.00          | 70.0        | 30.00      | 2200.00        | 1500.00         |                   |
| Rotate   | 12-05      | 13:45      | 14:50    | 12-05    | 1.08  | 572.00           | 760.00         | 188.00        | 173.54     | N/A      | 800.00          | 70.0        | 30.00      | 2200.00        | 1500.00         |                   |
| Rotate   | 12-05      | 14:55      | 15:00    | 12-05    | 0.08  | 760.00           | 770.00         | 10.00         | 120.00     | N/A      | 800.00          | 70.0        | 30.00      | 2200.00        | 1500.00         |                   |
| Slide    | 12-05      | 15:00      | 15:35    | 12-05    | 0.58  | 770.00           | 805.00         | 35.00         | 60.00      | 315.0    | 800.00          | N/A         | 30.00      | 2000.00        | 1400.00         |                   |
| Rotate   | 12-05      | 15:35      | 15:55    | 12-05    | 0.33  | 805.00           | 853.00         | 48.00         | 144.00     | N/A      | 800.00          | 70.0        | 30.00      | 2200.00        | 1500.00         |                   |
| Rotate   | 12-05      | 16:00      | 16:20    | 12-05    | 0.33  | 853.00           | 947.00         | 94.00         | 282.00     | N/A      | 800.00          | 70.0        | 30.00      | 2200.00        | 1500.00         |                   |
| Rotate   | 12-05      | 16:25      | 16:35    | 12-05    | 0.17  | 947.00           | 956.00         | 9.00          | 54.00      | N/A      | 800.00          | 70.0        | 30.00      | 2200.00        | 1500.00         |                   |
| Slide    | 12-05      | 16:35      | 16:55    | 12-05    | 0.33  | 956.00           | 1001.00        | 45.00         | 135.00     | 300.0    | 800.00          | N/A         | 30.00      | 2000.00        | 1400.00         |                   |
| Rotate   | 12-05      | 16:55      | 17:05    | 12-05    | 0.17  | 1001.00          | 1040.00        | 39.00         | 234.00     | N/A      | 800.00          | 70.0        | 30.00      | 2200.00        | 1500.00         |                   |
| Rotate   | 12-05      | 17:10      | 17:50    | 12-05    | 0.67  | 1040.00          | 1134.00        | 94.00         | 141.00     | N/A      | 800.00          | 70.0        | 30.00      | 2200.00        | 1500.00         |                   |
| Rotate   | 12-05      | 17:55      | 18:45    | 12-05    | 0.83  | 1134.00          | 1227.00        | 93.00         | 111.60     | N/A      | 800.00          | 70.0        | 30.00      | 2200.00        | 1500.00         |                   |
| Rotate   | 12-05      | 18:50      | 19:25    | 12-05    | 0.58  | 1227.00          | 1310.00        | 83.00         | 142.29     | N/A      | 800.00          | 70.0        | 30.00      | 2200.00        | 1500.00         |                   |



|                                 |                                                     |                                                       |
|---------------------------------|-----------------------------------------------------|-------------------------------------------------------|
| <b>Job Number</b><br>WT-20-071  | <b>Operator</b><br>Advance Energy Partners          | <b>Rig Name</b><br>Pioneer #80                        |
| <b>Start Date</b><br>2020-12-04 | <b>Well Name</b><br>Anderson Fed Com 504H           | <b>Legal Well Name   AFE</b><br>Anderson Fed Com 504H |
| <b>Play</b><br>Delaware Basin   | <b>State/Province and Country</b><br>New Mexico, US | <b>County</b><br>Lea                                  |
| <b>Company Man</b>              |                                                     |                                                       |

**Slide/Rotate Report - BHA #2 (Intermediate 12.25")**

| Activity | Start Date | Start Time | End Time | End Date | Hours | Start Depth (ft) | End Depth (ft) | Distance (ft) | RoP (ft/h) | Toolface | Flow Rate (gpm) | Surface RPM | WOB (klbs) | Press On (psi) | Press Off (psi) | Hole Section Type |
|----------|------------|------------|----------|----------|-------|------------------|----------------|---------------|------------|----------|-----------------|-------------|------------|----------------|-----------------|-------------------|
| Rotate   | 12-11      | 10:55      | 11:00    | 12-11    | 0.08  | 1310.00          | 1315.00        | 5.00          | 60.00      | N/A      | 800.00          | 40.0        | 30.00      | 2200.00        | 1500.00         |                   |
| Rotate   | 12-11      | 11:00      | 12:15    | 12-11    | 1.25  | 1315.00          | 1419.00        | 104.00        | 83.20      | N/A      | 550.00          | 40.0        | 30.00      | 2200.00        | 1700.00         |                   |
| Rotate   | 12-11      | 12:30      | 12:35    | 12-11    | 0.08  | 1419.00          | 1430.00        | 11.00         | 132.00     | N/A      | 550.00          | 50.0        | 30.00      | 2200.00        | 1700.00         |                   |
| Slide    | 12-11      | 12:35      | 12:50    | 12-11    | 0.25  | 1430.00          | 1455.00        | 25.00         | 100.00     | 300.0    | 800.00          | N/A         | 30.00      | 2000.00        | 1400.00         |                   |
| Rotate   | 12-11      | 12:50      | 13:00    | 12-11    | 0.17  | 1455.00          | 1509.00        | 54.00         | 324.00     | N/A      | 550.00          | 50.0        | 30.00      | 2200.00        | 1700.00         |                   |
| Rotate   | 12-11      | 13:05      | 13:25    | 12-11    | 0.33  | 1509.00          | 1598.00        | 89.00         | 267.00     | N/A      | 800.00          | 50.0        | 30.00      | 2200.00        | 1700.00         |                   |
| Rotate   | 12-11      | 13:30      | 13:50    | 12-11    | 0.33  | 1598.00          | 1688.00        | 90.00         | 270.00     | N/A      | 800.00          | 50.0        | 30.00      | 2200.00        | 1700.00         |                   |
| Rotate   | 12-11      | 13:55      | 14:15    | 12-11    | 0.33  | 1688.00          | 1777.00        | 89.00         | 267.00     | N/A      | 800.00          | 50.0        | 30.00      | 2200.00        | 1700.00         |                   |
| Rotate   | 12-11      | 14:20      | 14:25    | 12-11    | 0.08  | 1777.00          | 1795.00        | 18.00         | 216.00     | N/A      | 800.00          | 50.0        | 30.00      | 2200.00        | 1700.00         |                   |
| Slide    | 12-11      | 14:25      | 14:30    | 12-11    | 0.08  | 1795.00          | 1810.00        | 15.00         | 180.00     | 290.0    | 800.00          | N/A         | 30.00      | 2000.00        | 1400.00         |                   |
| Rotate   | 12-11      | 14:30      | 14:40    | 12-11    | 0.17  | 1810.00          | 1867.00        | 57.00         | 342.00     | N/A      | 800.00          | 50.0        | 30.00      | 2200.00        | 1700.00         |                   |
| Rotate   | 12-11      | 14:45      | 15:00    | 12-11    | 0.25  | 1867.00          | 1957.00        | 90.00         | 360.00     | N/A      | 800.00          | 50.0        | 30.00      | 2200.00        | 1700.00         |                   |
| Rotate   | 12-11      | 15:05      | 15:20    | 12-11    | 0.25  | 1957.00          | 2047.00        | 90.00         | 360.00     | N/A      | 800.00          | 50.0        | 30.00      | 2200.00        | 1700.00         |                   |
| Rotate   | 12-11      | 15:25      | 15:45    | 12-11    | 0.33  | 2047.00          | 2136.00        | 89.00         | 267.00     | N/A      | 800.00          | 50.0        | 30.00      | 2200.00        | 1700.00         |                   |
| Rotate   | 12-11      | 15:50      | 16:05    | 12-11    | 0.25  | 2136.00          | 2226.00        | 90.00         | 360.00     | N/A      | 800.00          | 50.0        | 30.00      | 2200.00        | 1700.00         |                   |
| Rotate   | 12-11      | 16:10      | 16:15    | 12-11    | 0.08  | 2226.00          | 2235.00        | 9.00          | 108.00     | N/A      | 800.00          | 50.0        | 30.00      | 2200.00        | 1700.00         |                   |
| Slide    | 12-11      | 16:15      | 16:25    | 12-11    | 0.17  | 2235.00          | 2260.00        | 25.00         | 150.00     | 215.0    | 800.00          | N/A         | 30.00      | 2000.00        | 1400.00         |                   |
| Rotate   | 12-11      | 16:25      | 16:35    | 12-11    | 0.17  | 2260.00          | 2316.00        | 56.00         | 336.00     | N/A      | 800.00          | 50.0        | 30.00      | 2200.00        | 1700.00         |                   |
| Rotate   | 12-11      | 16:40      | 16:55    | 12-11    | 0.25  | 2316.00          | 2405.00        | 89.00         | 356.00     | N/A      | 800.00          | 60.0        | 45.00      | 2500.00        | 1700.00         |                   |
| Rotate   | 12-11      | 17:00      | 17:15    | 12-11    | 0.25  | 2405.00          | 2495.00        | 90.00         | 360.00     | N/A      | 800.00          | 60.0        | 45.00      | 2500.00        | 1700.00         |                   |
| Rotate   | 12-11      | 17:20      | 17:35    | 12-11    | 0.25  | 2495.00          | 2585.00        | 90.00         | 360.00     | N/A      | 800.00          | 60.0        | 45.00      | 2500.00        | 1700.00         |                   |
| Rotate   | 12-11      | 17:55      | 18:10    | 12-11    | 0.25  | 2585.00          | 2674.00        | 89.00         | 356.00     | N/A      | 800.00          | 60.0        | 45.00      | 2500.00        | 1700.00         |                   |
| Rotate   | 12-11      | 18:15      | 18:20    | 12-11    | 0.08  | 2674.00          | 2685.00        | 11.00         | 132.00     | N/A      | 800.00          | 60.0        | 45.00      | 2500.00        | 1700.00         |                   |
| Slide    | 12-11      | 18:20      | 18:35    | 12-11    | 0.25  | 2685.00          | 2700.00        | 15.00         | 60.00      | 270.0    | 800.00          | N/A         | 30.00      | 2000.00        | 1400.00         |                   |
| Rotate   | 12-11      | 18:35      | 18:55    | 12-11    | 0.33  | 2700.00          | 2764.00        | 64.00         | 192.00     | N/A      | 800.00          | 60.0        | 45.00      | 2500.00        | 1700.00         |                   |
| Rotate   | 12-11      | 19:00      | 19:15    | 12-11    | 0.25  | 2764.00          | 2853.00        | 89.00         | 356.00     | N/A      | 800.00          | 60.0        | 45.00      | 2500.00        | 1700.00         |                   |
| Rotate   | 12-11      | 19:20      | 19:35    | 12-11    | 0.25  | 2853.00          | 2943.00        | 90.00         | 360.00     | N/A      | 800.00          | 60.0        | 45.00      | 2500.00        | 1700.00         |                   |
| Rotate   | 12-11      | 19:40      | 20:00    | 12-11    | 0.33  | 2943.00          | 3032.00        | 89.00         | 267.00     | N/A      | 800.00          | 60.0        | 45.00      | 2500.00        | 1700.00         |                   |
| Rotate   | 12-11      | 20:05      | 20:10    | 12-11    | 0.08  | 3032.00          | 3042.00        | 10.00         | 120.00     | N/A      | 800.00          | 60.0        | 45.00      | 2500.00        | 1700.00         |                   |
| Slide    | 12-11      | 20:10      | 20:25    | 12-11    | 0.25  | 3042.00          | 3067.00        | 25.00         | 100.00     | 250.0    | 800.00          | N/A         | 30.00      | 2000.00        | 1400.00         |                   |
| Rotate   | 12-11      | 20:25      | 20:35    | 12-11    | 0.17  | 3067.00          | 3122.00        | 55.00         | 330.00     | N/A      | 800.00          | 60.0        | 45.00      | 2500.00        | 1700.00         |                   |
| Rotate   | 12-11      | 20:40      | 21:00    | 12-11    | 0.33  | 3122.00          | 3212.00        | 90.00         | 270.00     | N/A      | 800.00          | 60.0        | 45.00      | 2500.00        | 1700.00         |                   |
| Rotate   | 12-11      | 21:05      | 21:25    | 12-11    | 0.33  | 3212.00          | 3301.00        | 89.00         | 267.00     | N/A      | 800.00          | 60.0        | 45.00      | 2500.00        | 1700.00         |                   |
| Rotate   | 12-11      | 21:30      | 22:15    | 12-11    | 0.75  | 3301.00          | 3480.00        | 179.00        | 238.67     | N/A      | 800.00          | 60.0        | 45.00      | 2500.00        | 1700.00         |                   |
| Rotate   | 12-11      | 22:20      | 22:25    | 12-11    | 0.08  | 3480.00          | 3490.00        | 10.00         | 120.00     | N/A      | 800.00          | 60.0        | 47.00      | 2750.00        | 1950.00         |                   |
| Slide    | 12-11      | 22:25      | 22:50    | 12-11    | 0.42  | 3490.00          | 3510.00        | 20.00         | 48.00      | 270.0    | 800.00          | N/A         | 30.00      | 2300.00        | 1950.00         |                   |
| Rotate   | 12-11      | 22:50      | 23:10    | 12-11    | 0.33  | 3510.00          | 3570.00        | 60.00         | 180.00     | N/A      | 800.00          | 60.0        | 47.00      | 2750.00        | 1950.00         |                   |
| Rotate   | 12-11      | 23:15      | 23:40    | 12-11    | 0.42  | 3570.00          | 3659.00        | 89.00         | 213.60     | N/A      | 800.00          | 60.0        | 47.00      | 2750.00        | 1950.00         |                   |
| Rotate   | 12-11      | 23:45      | 00:20    | 12-12    | 0.58  | 3659.00          | 3749.00        | 90.00         | 154.29     | N/A      | 800.00          | 60.0        | 47.00      | 2750.00        | 1950.00         |                   |
| Rotate   | 12-12      | 00:25      | 01:00    | 12-12    | 0.58  | 3749.00          | 3839.00        | 90.00         | 154.29     | N/A      | 800.00          | 60.0        | 47.00      | 2750.00        | 1950.00         |                   |
| Rotate   | 12-12      | 01:05      | 01:10    | 12-12    | 0.08  | 3839.00          | 3849.00        | 10.00         | 120.00     | N/A      | 800.00          | 60.0        | 47.00      | 2750.00        | 1950.00         |                   |
| Slide    | 12-12      | 01:10      | 01:35    | 12-12    | 0.42  | 3849.00          | 3864.00        | 15.00         | 36.00      | 90.0     | 800.00          | N/A         | 30.00      | 2300.00        | 1950.00         |                   |
| Rotate   | 12-12      | 01:35      | 02:00    | 12-12    | 0.42  | 3864.00          | 3928.00        | 64.00         | 153.60     | N/A      | 800.00          | 60.0        | 47.00      | 2750.00        | 1950.00         |                   |
| Rotate   | 12-12      | 02:05      | 02:40    | 12-12    | 0.58  | 3928.00          | 4018.00        | 90.00         | 154.29     | N/A      | 800.00          | 60.0        | 47.00      | 2750.00        | 1950.00         |                   |
| Rotate   | 12-12      | 02:45      | 03:20    | 12-12    | 0.58  | 4018.00          | 4108.00        | 90.00         | 154.29     | N/A      | 800.00          | 60.0        | 47.00      | 2750.00        | 1950.00         |                   |
| Rotate   | 12-12      | 03:25      | 04:05    | 12-12    | 0.67  | 4108.00          | 4198.00        | 90.00         | 135.00     | N/A      | 800.00          | 60.0        | 47.00      | 2750.00        | 1950.00         |                   |
| Rotate   | 12-12      | 04:10      | 04:50    | 12-12    | 0.67  | 4198.00          | 4288.00        | 90.00         | 135.00     | N/A      | 800.00          | 60.0        | 47.00      | 2750.00        | 1950.00         |                   |
| Rotate   | 12-12      | 04:55      | 05:05    | 12-12    | 0.17  | 4288.00          | 4302.00        | 14.00         | 84.00      | N/A      | 800.00          | 60.0        | 47.00      | 2750.00        | 1950.00         |                   |
| Slide    | 12-12      | 05:05      | 05:25    | 12-12    | 0.33  | 4302.00          | 4317.00        | 15.00         | 45.00      | 90.0     | 800.00          | N/A         | 30.00      | 2300.00        | 1950.00         |                   |
| Rotate   | 12-12      | 05:25      | 05:55    | 12-12    | 0.5   | 4317.00          | 4377.00        | 60.00         | 120.00     | N/A      | 800.00          | 60.0        | 47.00      | 2750.00        | 1950.00         |                   |
| Rotate   | 12-12      | 06:00      | 06:20    | 12-12    | 0.33  | 4377.00          | 4467.00        | 90.00         | 270.00     | N/A      | 800.00          | 60.0        | 47.00      | 2750.00        | 1950.00         |                   |
| Rotate   | 12-12      | 06:25      | 07:10    | 12-12    | 0.75  | 4467.00          | 4646.00        | 179.00        | 238.67     | N/A      | 800.00          | 60.0        | 47.00      | 2750.00        | 1950.00         |                   |
| Rotate   | 12-12      | 07:15      | 07:30    | 12-12    | 0.25  | 4646.00          | 4736.00        | 90.00         | 360.00     | N/A      | 800.00          | 60.0        | 47.00      | 2750.00        | 1950.00         |                   |
| Rotate   | 12-12      | 07:35      | 08:05    | 12-12    | 0.5   | 4736.00          | 4826.00        | 90.00         | 180.00     | N/A      | 800.00          | 60.0        | 47.00      | 2750.00        | 1950.00         |                   |
| Rotate   | 12-12      | 08:10      | 08:40    | 12-12    | 0.5   | 4826.00          | 4944.00        | 118.00        | 236.00     | N/A      | 800.00          | 60.0        | 47.00      | 2750.00        | 1950.00         |                   |



|                                 |                                                     |                                                       |
|---------------------------------|-----------------------------------------------------|-------------------------------------------------------|
| <b>Job Number</b><br>WT-20-071  | <b>Operator</b><br>Advance Energy Partners          | <b>Rig Name</b><br>Pioneer #80                        |
| <b>Start Date</b><br>2020-12-04 | <b>Well Name</b><br>Anderson Fed Com 504H           | <b>Legal Well Name   AFE</b><br>Anderson Fed Com 504H |
| <b>Play</b><br>Delaware Basin   | <b>State/Province and Country</b><br>New Mexico, US | <b>County</b><br>Lea                                  |
| <b>Company Man</b>              |                                                     |                                                       |

**Slide/Rotate Report - BHA #3 (8.75" Intermediate )**

| Activity | Start Date | Start Time | End Time | End Date | Hours | Start Depth (ft) | End Depth (ft) | Distance (ft) | RoP (ft/h) | Toolface | Flow Rate (gpm) | Surface RPM | WOB (klbs) | Press On (psi) | Press Off (psi) | Hole Section Type |
|----------|------------|------------|----------|----------|-------|------------------|----------------|---------------|------------|----------|-----------------|-------------|------------|----------------|-----------------|-------------------|
| Rotate   | 12-20      | 22:20      | 22:30    | 12-20    | 0.17  | 4944.00          | 4950.00        | 6.00          | 36.00      | N/A      | 675.00          | 30.0        | 30.00      | 2750.00        | 1950.00         |                   |
| Rotate   | 12-20      | 22:55      | 23:15    | 12-20    | 0.33  | 4950.00          | 5096.00        | 146.00        | 438.00     | N/A      | 675.00          | 30.0        | 30.00      | 2800.00        | 1950.00         |                   |
| Rotate   | 12-20      | 23:20      | 23:40    | 12-20    | 0.33  | 5096.00          | 5275.00        | 179.00        | 537.00     | N/A      | 675.00          | 30.0        | 30.00      | 2800.00        | 1950.00         |                   |
| Slide    | 12-20      | 23:45      | 00:10    | 12-21    | 0.42  | 5275.00          | 5300.00        | 25.00         | 60.00      | 55.0     | 675.00          | N/A         | 20.00      | 2000.00        | 1750.00         |                   |
| Rotate   | 12-21      | 00:10      | 00:15    | 12-21    | 0.08  | 5300.00          | 5364.00        | 64.00         | 768.00     | N/A      | 675.00          | 30.0        | 30.00      | 2800.00        | 1950.00         |                   |
| Slide    | 12-21      | 00:20      | 00:35    | 12-21    | 0.25  | 5364.00          | 5384.00        | 20.00         | 80.00      | 55.0     | 675.00          | N/A         | 20.00      | 2000.00        | 1750.00         |                   |
| Rotate   | 12-21      | 00:35      | 00:50    | 12-21    | 0.25  | 5384.00          | 5454.00        | 70.00         | 280.00     | N/A      | 675.00          | 30.0        | 30.00      | 2800.00        | 1950.00         |                   |
| Rotate   | 12-21      | 00:55      | 01:00    | 12-21    | 0.08  | 5454.00          | 5543.00        | 89.00         | 1068.00    | N/A      | 675.00          | 30.0        | 30.00      | 2800.00        | 1950.00         |                   |
| Rotate   | 12-21      | 01:05      | 01:15    | 12-21    | 0.17  | 5543.00          | 5633.00        | 90.00         | 540.00     | N/A      | 675.00          | 30.0        | 30.00      | 2800.00        | 1950.00         |                   |
| Rotate   | 12-21      | 01:20      | 01:30    | 12-21    | 0.17  | 5633.00          | 5723.00        | 90.00         | 540.00     | N/A      | 675.00          | 30.0        | 30.00      | 2800.00        | 1950.00         |                   |
| Slide    | 12-21      | 01:35      | 02:00    | 12-21    | 0.42  | 5723.00          | 5748.00        | 25.00         | 60.00      | 70.0     | 675.00          | N/A         | 20.00      | 2000.00        | 1750.00         |                   |
| Rotate   | 12-21      | 02:00      | 02:10    | 12-21    | 0.17  | 5748.00          | 5812.00        | 64.00         | 384.00     | N/A      | 675.00          | 60.0        | 40.00      | 2800.00        | 1950.00         |                   |
| Rotate   | 12-21      | 02:15      | 02:20    | 12-21    | 0.08  | 5812.00          | 5822.00        | 10.00         | 120.00     | N/A      | 675.00          | 60.0        | 40.00      | 2800.00        | 1950.00         |                   |
| Slide    | 12-21      | 02:20      | 02:45    | 12-21    | 0.42  | 5822.00          | 5852.00        | 30.00         | 72.00      | 70.0     | 675.00          | N/A         | 20.00      | 2000.00        | 1750.00         |                   |
| Rotate   | 12-21      | 02:45      | 02:50    | 12-21    | 0.08  | 5852.00          | 5902.00        | 50.00         | 600.00     | N/A      | 675.00          | 60.0        | 40.00      | 2800.00        | 1950.00         |                   |
| Rotate   | 12-21      | 02:55      | 03:05    | 12-21    | 0.17  | 5902.00          | 5992.00        | 90.00         | 540.00     | N/A      | 675.00          | 60.0        | 40.00      | 2800.00        | 1950.00         |                   |
| Rotate   | 12-21      | 03:10      | 03:20    | 12-21    | 0.17  | 5992.00          | 6082.00        | 90.00         | 540.00     | N/A      | 675.00          | 60.0        | 40.00      | 2800.00        | 1950.00         |                   |
| Rotate   | 12-21      | 03:25      | 03:30    | 12-21    | 0.08  | 6082.00          | 6128.00        | 46.00         | 552.00     | N/A      | 675.00          | 60.0        | 40.00      | 2800.00        | 1950.00         |                   |
| Rotate   | 12-21      | 03:40      | 03:45    | 12-21    | 0.08  | 6128.00          | 6171.00        | 43.00         | 516.00     | N/A      | 675.00          | 60.0        | 40.00      | 2800.00        | 1950.00         |                   |
| Rotate   | 12-21      | 03:50      | 04:00    | 12-21    | 0.17  | 6171.00          | 6261.00        | 90.00         | 540.00     | N/A      | 675.00          | 60.0        | 40.00      | 2800.00        | 1950.00         |                   |
| Rotate   | 12-21      | 04:05      | 04:10    | 12-21    | 0.08  | 6261.00          | 6350.00        | 89.00         | 1068.00    | N/A      | 675.00          | 60.0        | 40.00      | 2800.00        | 1950.00         |                   |
| Rotate   | 12-21      | 04:15      | 04:25    | 12-21    | 0.17  | 6350.00          | 6440.00        | 90.00         | 540.00     | N/A      | 675.00          | 60.0        | 40.00      | 2800.00        | 1950.00         |                   |
| Rotate   | 12-21      | 04:30      | 04:40    | 12-21    | 0.17  | 6440.00          | 6530.00        | 90.00         | 540.00     | N/A      | 675.00          | 60.0        | 40.00      | 2800.00        | 1950.00         |                   |
| Rotate   | 12-21      | 04:45      | 04:55    | 12-21    | 0.17  | 6530.00          | 6619.00        | 89.00         | 534.00     | N/A      | 675.00          | 60.0        | 40.00      | 2800.00        | 1950.00         |                   |
| Rotate   | 12-21      | 05:00      | 05:10    | 12-21    | 0.17  | 6619.00          | 6709.00        | 90.00         | 540.00     | N/A      | 675.00          | 60.0        | 40.00      | 2800.00        | 1950.00         |                   |
| Rotate   | 12-21      | 05:15      | 05:20    | 12-21    | 0.08  | 6709.00          | 6727.00        | 18.00         | 216.00     | N/A      | 675.00          | 60.0        | 40.00      | 2800.00        | 1950.00         |                   |
| Slide    | 12-21      | 05:20      | 05:35    | 12-21    | 0.25  | 6727.00          | 6752.00        | 25.00         | 100.00     | 80.0     | 675.00          | N/A         | 20.00      | 2350.00        | 1950.00         |                   |
| Rotate   | 12-21      | 05:35      | 05:45    | 12-21    | 0.17  | 6752.00          | 6799.00        | 47.00         | 282.00     | N/A      | 675.00          | 60.0        | 40.00      | 2800.00        | 1950.00         |                   |
| Rotate   | 12-21      | 05:50      | 06:00    | 12-21    | 0.17  | 6799.00          | 6889.00        | 90.00         | 540.00     | N/A      | 675.00          | 60.0        | 40.00      | 2800.00        | 1950.00         |                   |
| Rotate   | 12-21      | 06:05      | 06:20    | 12-21    | 0.25  | 6889.00          | 6978.00        | 89.00         | 356.00     | N/A      | 675.00          | 60.0        | 40.00      | 2800.00        | 1950.00         |                   |
| Rotate   | 12-21      | 06:25      | 06:35    | 12-21    | 0.17  | 6978.00          | 7068.00        | 90.00         | 540.00     | N/A      | 675.00          | 60.0        | 40.00      | 2800.00        | 1950.00         |                   |
| Rotate   | 12-21      | 06:40      | 06:55    | 12-21    | 0.25  | 7068.00          | 7157.00        | 89.00         | 356.00     | N/A      | 675.00          | 60.0        | 40.00      | 2800.00        | 1950.00         |                   |
| Slide    | 12-21      | 07:05      | 07:30    | 12-21    | 0.42  | 7157.00          | 7187.00        | 30.00         | 72.00      | 50.0     | 675.00          | N/A         | 20.00      | 2350.00        | 1950.00         |                   |
| Rotate   | 12-21      | 07:30      | 07:40    | 12-21    | 0.17  | 7187.00          | 7247.00        | 60.00         | 360.00     | N/A      | 675.00          | 60.0        | 40.00      | 2800.00        | 1950.00         |                   |
| Rotate   | 12-21      | 07:45      | 08:00    | 12-21    | 0.25  | 7247.00          | 7337.00        | 90.00         | 360.00     | N/A      | 675.00          | 60.0        | 40.00      | 2800.00        | 1950.00         |                   |
| Slide    | 12-21      | 08:05      | 08:25    | 12-21    | 0.33  | 7337.00          | 7367.00        | 30.00         | 90.00      | 60.0     | 675.00          | N/A         | 20.00      | 2350.00        | 1950.00         |                   |
| Rotate   | 12-21      | 08:25      | 08:40    | 12-21    | 0.25  | 7367.00          | 7427.00        | 60.00         | 240.00     | N/A      | 675.00          | 60.0        | 40.00      | 2800.00        | 1950.00         |                   |
| Rotate   | 12-21      | 08:45      | 09:00    | 12-21    | 0.25  | 7427.00          | 7516.00        | 89.00         | 356.00     | N/A      | 675.00          | 60.0        | 40.00      | 2800.00        | 1950.00         |                   |
| Rotate   | 12-21      | 09:05      | 09:20    | 12-21    | 0.25  | 7516.00          | 7606.00        | 90.00         | 360.00     | N/A      | 675.00          | 60.0        | 40.00      | 2800.00        | 1950.00         |                   |
| Rotate   | 12-21      | 09:25      | 09:40    | 12-21    | 0.25  | 7606.00          | 7696.00        | 90.00         | 360.00     | N/A      | 675.00          | 60.0        | 40.00      | 2800.00        | 1950.00         |                   |
| Slide    | 12-21      | 09:45      | 10:15    | 12-21    | 0.5   | 7696.00          | 7726.00        | 30.00         | 60.00      | 55.0     | 675.00          | N/A         | 20.00      | 2350.00        | 1950.00         |                   |
| Rotate   | 12-21      | 10:15      | 10:25    | 12-21    | 0.17  | 7726.00          | 7786.00        | 60.00         | 360.00     | N/A      | 675.00          | 60.0        | 40.00      | 2800.00        | 1950.00         |                   |
| Slide    | 12-21      | 10:30      | 11:05    | 12-21    | 0.58  | 7786.00          | 7816.00        | 30.00         | 51.43      | 50.0     | 675.00          | N/A         | 20.00      | 2350.00        | 1950.00         |                   |
| Rotate   | 12-21      | 11:05      | 11:15    | 12-21    | 0.17  | 7816.00          | 7876.00        | 60.00         | 360.00     | N/A      | 675.00          | 60.0        | 40.00      | 2800.00        | 1950.00         |                   |
| Rotate   | 12-21      | 11:20      | 11:35    | 12-21    | 0.25  | 7876.00          | 7965.00        | 89.00         | 356.00     | N/A      | 675.00          | 60.0        | 40.00      | 2800.00        | 1950.00         |                   |
| Slide    | 12-21      | 11:45      | 12:05    | 12-21    | 0.33  | 7965.00          | 7980.00        | 15.00         | 45.00      | 30.0     | 675.00          | N/A         | 20.00      | 2350.00        | 1950.00         |                   |
| Rotate   | 12-21      | 12:05      | 12:25    | 12-21    | 0.33  | 7980.00          | 8055.00        | 75.00         | 225.00     | N/A      | 675.00          | 60.0        | 40.00      | 2800.00        | 1950.00         |                   |
| Rotate   | 12-21      | 12:30      | 12:40    | 12-21    | 0.17  | 8055.00          | 8145.00        | 90.00         | 540.00     | N/A      | 675.00          | 60.0        | 40.00      | 2800.00        | 1950.00         |                   |
| Rotate   | 12-21      | 12:45      | 13:05    | 12-21    | 0.33  | 8145.00          | 8235.00        | 90.00         | 270.00     | N/A      | 675.00          | 60.0        | 40.00      | 2800.00        | 1950.00         |                   |
| Rotate   | 12-21      | 13:10      | 13:25    | 12-21    | 0.25  | 8235.00          | 8324.00        | 89.00         | 356.00     | N/A      | 675.00          | 60.0        | 40.00      | 2800.00        | 1950.00         |                   |
| Rotate   | 12-21      | 13:30      | 13:45    | 12-21    | 0.25  | 8324.00          | 8414.00        | 90.00         | 360.00     | N/A      | 675.00          | 60.0        | 40.00      | 2800.00        | 1950.00         |                   |
| Rotate   | 12-21      | 13:50      | 14:05    | 12-21    | 0.25  | 8414.00          | 8504.00        | 90.00         | 360.00     | N/A      | 675.00          | 60.0        | 40.00      | 2800.00        | 1950.00         |                   |
| Rotate   | 12-21      | 14:10      | 14:30    | 12-21    | 0.33  | 8504.00          | 8593.00        | 89.00         | 267.00     | N/A      | 675.00          | 60.0        | 40.00      | 2800.00        | 1950.00         |                   |
| Slide    | 12-21      | 14:40      | 15:20    | 12-21    | 0.67  | 8593.00          | 8623.00        | 30.00         | 45.00      | 30.0     | 675.00          | N/A         | 20.00      | 2350.00        | 1950.00         |                   |
| Rotate   | 12-21      | 15:20      | 15:35    | 12-21    | 0.25  | 8623.00          | 8683.00        | 60.00         | 240.00     | N/A      | 675.00          | 60.0        | 40.00      | 2800.00        | 1950.00         |                   |
| Rotate   | 12-21      | 15:40      | 16:05    | 12-21    | 0.42  | 8683.00          | 8773.00        | 90.00         | 216.00     | N/A      | 675.00          | 60.0        | 40.00      | 2800.00        | 1950.00         |                   |
| Slide    | 12-21      | 16:15      | 16:55    | 12-21    | 0.67  | 8773.00          | 8803.00        | 30.00         | 45.00      | 0.0      | 675.00          | N/A         | 20.00      | 2350.00        | 1950.00         |                   |
| Rotate   | 12-21      | 16:55      | 17:10    | 12-21    | 0.25  | 8803.00          | 8863.00        | 60.00         | 240.00     | N/A      | 675.00          | 60.0        | 40.00      | 2800.00        | 1950.00         |                   |
| Rotate   | 12-21      | 17:15      | 17:40    | 12-21    | 0.42  | 8863.00          | 8953.00        | 90.00         | 216.00     | N/A      | 675.00          | 60.0        | 40.00      | 2800.00        | 1950.00         |                   |
| Rotate   | 12-21      | 17:45      | 17:50    | 12-21    | 0.08  | 8953.00          | 8967.00        | 14.00         | 168.00     | N/A      | 675.00          | 60.0        | 40.00      | 2800.00        | 1950.00         |                   |
| Slide    | 12-21      | 17:50      | 19:00    | 12-21    | 1.17  | 8967.00          | 8997.00        | 30.00         | 25.71      | 20.0     | 675.00          | N/A         | 20.00      | 2350.00        | 1950.00         |                   |
| Rotate   | 12-21      | 19:00      | 19:15    | 12-21    | 0.25  | 8997.00          | 9042.00        | 45.00         | 180.00     | N/A      | 675.00          | 60.0        | 40.00      | 2800.00        | 1950.00         |                   |
| Rotate   | 12-21      | 19:20      | 19:45    | 12-21    | 0.42  | 9042.00          | 9132.00        | 90.00         | 216.00     | N/A      | 675.00          | 60.0        | 40.00      | 2800.00        | 1950.00         |                   |
| Slide    | 12-21      | 19:50      | 20:40    | 12-21    | 0.83  | 9132.00          | 9162.00        | 30.00         | 36.00      | 30.0     | 675.00          | N/A         | 20.00      | 2350.00        | 1950.00         |                   |

|        |       |       |       |       |      |         |         |       |        |     |        |      |       |         |         |  |
|--------|-------|-------|-------|-------|------|---------|---------|-------|--------|-----|--------|------|-------|---------|---------|--|
| Rotate | 12-21 | 20:40 | 20:55 | 12-21 | 0.25 | 9162.00 | 9222.00 | 60.00 | 240.00 | N/A | 675.00 | 60.0 | 40.00 | 2800.00 | 1950.00 |  |
| Rotate | 12-21 | 21:00 | 21:20 | 12-21 | 0.33 | 9222.00 | 9260.00 | 38.00 | 114.00 | N/A | 675.00 | 60.0 | 40.00 | 2800.00 | 1950.00 |  |



|                                 |                                                     |                                                       |
|---------------------------------|-----------------------------------------------------|-------------------------------------------------------|
| <b>Job Number</b><br>WT-20-071  | <b>Operator</b><br>Advance Energy Partners          | <b>Rig Name</b><br>Pioneer #80                        |
| <b>Start Date</b><br>2020-12-04 | <b>Well Name</b><br>Anderson Fed Com 504H           | <b>Legal Well Name   AFE</b><br>Anderson Fed Com 504H |
| <b>Play</b><br>Delaware Basin   | <b>State/Province and Country</b><br>New Mexico, US | <b>County</b><br>Lea                                  |
| <b>Company Man</b>              |                                                     |                                                       |

### Slide/Rotate Report - BHA #4 (Intermediate 8.75")

| Activity | Start Date | Start Time | End Time | End Date | Hours | Start Depth (ft) | End Depth (ft) | Distance (ft) | RoP (ft/h) | Toolface | Flow Rate (gpm) | Surface RPM | WOB (klbs) | Press On (psi) | Press Off (psi) | Hole Section Type |
|----------|------------|------------|----------|----------|-------|------------------|----------------|---------------|------------|----------|-----------------|-------------|------------|----------------|-----------------|-------------------|
| Rotate   | 12-22      | 07:40      | 08:05    | 12-22    | 0.42  | 9260.00          | 9311.00        | 51.00         | 122.40     | N/A      | 675.00          | 60.0        | 40.00      | 2800.00        | 1950.00         |                   |
| Rotate   | 12-22      | 08:10      | 08:30    | 12-22    | 0.33  | 9311.00          | 9400.00        | 89.00         | 267.00     | N/A      | 675.00          | 60.0        | 40.00      | 2800.00        | 1950.00         |                   |
| Rotate   | 12-22      | 08:40      | 09:00    | 12-22    | 0.33  | 9400.00          | 9490.00        | 90.00         | 270.00     | N/A      | 675.00          | 60.0        | 40.00      | 2800.00        | 1950.00         |                   |
| Rotate   | 12-22      | 09:05      | 09:25    | 12-22    | 0.33  | 9490.00          | 9580.00        | 90.00         | 270.00     | N/A      | 675.00          | 60.0        | 40.00      | 2800.00        | 1950.00         |                   |
| Rotate   | 12-22      | 09:30      | 09:45    | 12-22    | 0.25  | 9580.00          | 9669.00        | 89.00         | 356.00     | N/A      | 675.00          | 60.0        | 40.00      | 2800.00        | 1950.00         |                   |
| Rotate   | 12-22      | 09:50      | 10:00    | 12-22    | 0.17  | 9669.00          | 9674.00        | 5.00          | 30.00      | N/A      | 675.00          | 60.0        | 40.00      | 2800.00        | 1950.00         |                   |
| Slide    | 12-22      | 10:00      | 10:30    | 12-22    | 0.5   | 9674.00          | 9704.00        | 30.00         | 60.00      | 340.0    | 675.00          | N/A         | 20.00      | 2350.00        | 1950.00         |                   |
| Rotate   | 12-22      | 10:30      | 10:45    | 12-22    | 0.25  | 9704.00          | 9759.00        | 55.00         | 220.00     | N/A      | 675.00          | 60.0        | 40.00      | 2800.00        | 1950.00         |                   |
| Rotate   | 12-22      | 10:50      | 11:15    | 12-22    | 0.42  | 9759.00          | 9849.00        | 90.00         | 216.00     | N/A      | 675.00          | 60.0        | 40.00      | 2800.00        | 1950.00         |                   |
| Rotate   | 12-22      | 11:20      | 11:45    | 12-22    | 0.42  | 9849.00          | 9939.00        | 90.00         | 216.00     | N/A      | 675.00          | 60.0        | 40.00      | 2800.00        | 1950.00         |                   |
| Rotate   | 12-22      | 11:50      | 12:15    | 12-22    | 0.42  | 9939.00          | 10028.00       | 89.00         | 213.60     | N/A      | 675.00          | 60.0        | 40.00      | 2800.00        | 1950.00         |                   |
| Rotate   | 12-22      | 12:20      | 12:50    | 12-22    | 0.5   | 10028.00         | 10118.00       | 90.00         | 180.00     | N/A      | 675.00          | 60.0        | 40.00      | 2800.00        | 1950.00         |                   |
| Rotate   | 12-22      | 12:55      | 13:25    | 12-22    | 0.5   | 10118.00         | 10207.00       | 89.00         | 178.00     | N/A      | 675.00          | 60.0        | 40.00      | 2800.00        | 1950.00         |                   |
| Rotate   | 12-22      | 13:30      | 13:50    | 12-22    | 0.33  | 10207.00         | 10260.00       | 53.00         | 159.00     | N/A      | 675.00          | 60.0        | 40.00      | 2800.00        | 1950.00         |                   |



|                                 |                                                     |                                                       |
|---------------------------------|-----------------------------------------------------|-------------------------------------------------------|
| <b>Job Number</b><br>WT-20-071  | <b>Operator</b><br>Advance Energy Partners          | <b>Rig Name</b><br>Pioneer #80                        |
| <b>Start Date</b><br>2020-12-04 | <b>Well Name</b><br>Anderson Fed Com 504H           | <b>Legal Well Name   AFE</b><br>Anderson Fed Com 504H |
| <b>Play</b><br>Delaware Basin   | <b>State/Province and Country</b><br>New Mexico, US | <b>County</b><br>Lea                                  |
| <b>Company Man</b>              |                                                     |                                                       |

**Slide/Rotate Report - BHA #5 (8.75" CURVE)**

| Activity | Start Date | Start Time | End Time | End Date | Hours | Start Depth (ft) | End Depth (ft) | Distance (ft) | RoP (ft/h) | Toolface | Flow Rate (gpm) | Surface RPM | WOB (klbs) | Press On (psi) | Press Off (psi) | Hole Section Type |
|----------|------------|------------|----------|----------|-------|------------------|----------------|---------------|------------|----------|-----------------|-------------|------------|----------------|-----------------|-------------------|
| Slide    | 12-23      | 00:25      | 01:55    | 12-23    | 1.5   | 10260.00         | 10299.00       | 39.00         | 26.00      | 45.0     | 550.00          | N/A         | 20.00      | 1650.00        | 1350.00         |                   |
| Slide    | 12-23      | 02:15      | 02:55    | 12-23    | 0.67  | 10299.00         | 10318.00       | 19.00         | 28.50      | 45.0     | 550.00          | N/A         | 20.00      | 1650.00        | 1350.00         |                   |
| Slide    | 12-23      | 03:05      | 04:40    | 12-23    | 1.58  | 10318.00         | 10407.00       | 89.00         | 56.21      | 45.0     | 550.00          | N/A         | 20.00      | 1650.00        | 1350.00         |                   |
| Slide    | 12-23      | 04:50      | 05:55    | 12-23    | 1.08  | 10407.00         | 10497.00       | 90.00         | 83.08      | 0.0      | 550.00          | N/A         | 20.00      | 1650.00        | 1350.00         |                   |
| Slide    | 12-23      | 06:05      | 07:00    | 12-23    | 0.92  | 10497.00         | 10586.00       | 89.00         | 97.09      | 0.0      | 550.00          | N/A         | 20.00      | 1650.00        | 1350.00         |                   |
| Slide    | 12-23      | 07:10      | 07:25    | 12-23    | 0.25  | 10586.00         | 10603.00       | 17.00         | 68.00      | 0.0      | 550.00          | N/A         | 20.00      | 1650.00        | 1350.00         |                   |
| Rotate   | 12-23      | 07:25      | 07:40    | 12-23    | 0.25  | 10603.00         | 10623.00       | 20.00         | 80.00      | N/A      | 550.00          | 20.0        | 40.00      | 1900.00        | 1400.00         |                   |
| Slide    | 12-23      | 07:40      | 08:20    | 12-23    | 0.67  | 10623.00         | 10676.00       | 53.00         | 79.50      | 0.0      | 550.00          | N/A         | 20.00      | 1650.00        | 1350.00         |                   |
| Rotate   | 12-23      | 08:30      | 08:40    | 12-23    | 0.17  | 10676.00         | 10696.00       | 20.00         | 120.00     | N/A      | 550.00          | 20.0        | 40.00      | 1900.00        | 1400.00         |                   |
| Slide    | 12-23      | 08:40      | 09:30    | 12-23    | 0.83  | 10696.00         | 10766.00       | 70.00         | 84.00      | 20.0     | 550.00          | N/A         | 20.00      | 1650.00        | 1350.00         |                   |
| Rotate   | 12-23      | 09:40      | 09:55    | 12-23    | 0.25  | 10766.00         | 10791.00       | 25.00         | 100.00     | N/A      | 550.00          | 20.0        | 40.00      | 1900.00        | 1400.00         |                   |
| Slide    | 12-23      | 09:55      | 10:50    | 12-23    | 0.92  | 10791.00         | 10855.00       | 64.00         | 69.82      | 0.0      | 550.00          | N/A         | 20.00      | 1650.00        | 1350.00         |                   |
| Rotate   | 12-23      | 11:00      | 11:10    | 12-23    | 0.17  | 10855.00         | 10885.00       | 30.00         | 180.00     | N/A      | 550.00          | 20.0        | 40.00      | 1900.00        | 1400.00         |                   |
| Slide    | 12-23      | 11:10      | 11:50    | 12-23    | 0.67  | 10885.00         | 10945.00       | 60.00         | 90.00      | 340.0    | 550.00          | N/A         | 20.00      | 1650.00        | 1350.00         |                   |
| Rotate   | 12-23      | 12:00      | 12:10    | 12-23    | 0.17  | 10945.00         | 10965.00       | 20.00         | 120.00     | N/A      | 550.00          | 20.0        | 40.00      | 1900.00        | 1400.00         |                   |
| Slide    | 12-23      | 12:10      | 13:15    | 12-23    | 1.08  | 10965.00         | 11034.00       | 69.00         | 63.69      | 320.0    | 550.00          | N/A         | 20.00      | 1650.00        | 1350.00         |                   |
| Rotate   | 12-23      | 13:25      | 13:30    | 12-23    | 0.08  | 11034.00         | 11059.00       | 25.00         | 300.00     | N/A      | 550.00          | 20.0        | 40.00      | 1900.00        | 1400.00         |                   |
| Slide    | 12-23      | 13:30      | 13:50    | 12-23    | 0.33  | 11059.00         | 11082.00       | 23.00         | 69.00      | 310.0    | 550.00          | N/A         | 20.00      | 1650.00        | 1350.00         |                   |
| Slide    | 12-23      | 14:35      | 15:10    | 12-23    | 0.58  | 11082.00         | 11124.00       | 42.00         | 72.00      | 300.0    | 550.00          | N/A         | 20.00      | 1650.00        | 1350.00         |                   |
| Rotate   | 12-23      | 15:20      | 15:35    | 12-23    | 0.25  | 11124.00         | 11144.00       | 20.00         | 80.00      | N/A      | 550.00          | 20.0        | 40.00      | 1900.00        | 1400.00         |                   |
| Slide    | 12-23      | 15:35      | 16:25    | 12-23    | 0.83  | 11144.00         | 11213.00       | 69.00         | 82.80      | 300.0    | 550.00          | N/A         | 20.00      | 1650.00        | 1350.00         |                   |
| Slide    | 12-23      | 16:40      | 17:15    | 12-23    | 0.58  | 11213.00         | 11258.00       | 45.00         | 77.14      | 315.0    | 550.00          | N/A         | 20.00      | 1650.00        | 1350.00         |                   |
| Slide    | 12-23      | 17:30      | 18:00    | 12-23    | 0.5   | 11258.00         | 11303.00       | 45.00         | 90.00      | 310.0    | 550.00          | N/A         | 20.00      | 1650.00        | 1350.00         |                   |
| Slide    | 12-23      | 18:10      | 19:20    | 12-23    | 1.17  | 11303.00         | 11393.00       | 90.00         | 77.14      | 305.0    | 550.00          | N/A         | 40.00      | 1650.00        | 1350.00         |                   |
| Slide    | 12-23      | 19:30      | 20:10    | 12-23    | 0.67  | 11393.00         | 11443.00       | 50.00         | 75.00      | 270.0    | 550.00          | N/A         | 40.00      | 1650.00        | 1350.00         |                   |
| Rotate   | 12-23      | 20:20      | 20:35    | 12-23    | 0.25  | 11443.00         | 11482.00       | 39.00         | 156.00     | N/A      | 550.00          | 20.0        | 40.00      | 1900.00        | 1400.00         |                   |
| Rotate   | 12-23      | 20:45      | 21:30    | 12-23    | 0.75  | 11482.00         | 11572.00       | 90.00         | 120.00     | N/A      | 550.00          | 20.0        | 40.00      | 1900.00        | 1400.00         |                   |



|                                 |                                                     |                                                       |
|---------------------------------|-----------------------------------------------------|-------------------------------------------------------|
| <b>Job Number</b><br>WT-20-071  | <b>Operator</b><br>Advance Energy Partners          | <b>Rig Name</b><br>Pioneer #80                        |
| <b>Start Date</b><br>2020-12-04 | <b>Well Name</b><br>Anderson Fed Com 504H           | <b>Legal Well Name   AFE</b><br>Anderson Fed Com 504H |
| <b>Play</b><br>Delaware Basin   | <b>State/Province and Country</b><br>New Mexico, US | <b>County</b><br>Lea                                  |
| <b>Company Man</b>              |                                                     |                                                       |

**Slide/Rotate Report - BHA #6 (8.50" LATERAL w/ Agitator)**

| Activity | Start Date | Start Time | End Time | End Date | Hours | Start Depth (ft) | End Depth (ft) | Distance (ft) | RoP (ft/h) | Toolface | Flow Rate (gpm) | Surface RPM | WOB (klbs) | Press On (psi) | Press Off (psi) | Hole Section Type |
|----------|------------|------------|----------|----------|-------|------------------|----------------|---------------|------------|----------|-----------------|-------------|------------|----------------|-----------------|-------------------|
| Rotate   | 01-12      | 22:15      | 22:25    | 01-12    | 0.17  | 11572.00         | 11612.00       | 40.00         | 240.00     | N/A      | 630.00          | 40.0        | 42.00      | 3800.00        | 3000.00         |                   |
| Slide    | 01-12      | 22:30      | 23:20    | 01-12    | 0.83  | 11612.00         | 11657.00       | 45.00         | 54.00      | 170.0    | 630.00          | N/A         | 40.00      | 3500.00        | 3000.00         |                   |
| Rotate   | 01-12      | 23:20      | 23:35    | 01-12    | 0.25  | 11657.00         | 11702.00       | 45.00         | 180.00     | N/A      | 630.00          | 40.0        | 42.00      | 3800.00        | 3000.00         |                   |
| Slide    | 01-13      | 00:00      | 00:55    | 01-13    | 0.92  | 11702.00         | 11742.00       | 40.00         | 43.64      | 165.0    | 550.00          | N/A         | 40.00      | 3000.00        | 2450.00         |                   |
| Rotate   | 01-13      | 00:55      | 01:10    | 01-13    | 0.25  | 11742.00         | 11791.00       | 49.00         | 196.00     | N/A      | 550.00          | 60.0        | 42.00      | 3450.00        | 2450.00         |                   |
| Slide    | 01-13      | 01:15      | 01:55    | 01-13    | 0.67  | 11791.00         | 11831.00       | 40.00         | 60.00      | 180.0    | 550.00          | N/A         | 40.00      | 3000.00        | 2450.00         |                   |
| Rotate   | 01-13      | 01:55      | 02:15    | 01-13    | 0.33  | 11831.00         | 11880.00       | 49.00         | 147.00     | N/A      | 550.00          | 60.0        | 42.00      | 3450.00        | 2450.00         |                   |
| Slide    | 01-13      | 02:20      | 02:45    | 01-13    | 0.42  | 11880.00         | 11890.00       | 10.00         | 24.00      | 135.0    | 550.00          | N/A         | 40.00      | 3000.00        | 2450.00         |                   |
| Rotate   | 01-13      | 02:45      | 03:50    | 01-13    | 1.08  | 11890.00         | 11970.00       | 80.00         | 73.85      | N/A      | 550.00          | 60.0        | 42.00      | 3450.00        | 2450.00         |                   |
| Rotate   | 01-13      | 03:55      | 04:05    | 01-13    | 0.17  | 11970.00         | 11987.00       | 17.00         | 102.00     | N/A      | 550.00          | 60.0        | 42.00      | 3450.00        | 2450.00         |                   |
| Slide    | 01-13      | 04:05      | 04:40    | 01-13    | 0.58  | 11987.00         | 12007.00       | 20.00         | 34.29      | 20.0     | 550.00          | N/A         | 40.00      | 3000.00        | 2450.00         |                   |
| Rotate   | 01-13      | 04:40      | 05:05    | 01-13    | 0.42  | 12007.00         | 12060.00       | 53.00         | 127.20     | N/A      | 550.00          | 60.0        | 42.00      | 3450.00        | 2450.00         |                   |
| Rotate   | 01-13      | 05:10      | 05:15    | 01-13    | 0.08  | 12060.00         | 12070.00       | 10.00         | 120.00     | N/A      | 550.00          | 60.0        | 42.00      | 3450.00        | 2450.00         |                   |
| Slide    | 01-13      | 05:15      | 06:00    | 01-13    | 0.75  | 12070.00         | 12100.00       | 30.00         | 40.00      | 20.0     |                 | N/A         |            |                |                 |                   |
| Rotate   | 01-13      | 06:00      | 06:30    | 01-13    | 0.5   | 12100.00         | 12149.00       | 49.00         | 98.00      | N/A      | 550.00          | 60.0        | 42.00      | 3450.00        | 2450.00         |                   |
| Slide    | 01-13      | 06:40      | 08:05    | 01-13    | 1.42  | 12149.00         | 12200.00       | 51.00         | 36.00      | 20.0     | 550.00          | N/A         | 40.00      | 2850.00        | 2605.00         |                   |
| Rotate   | 01-13      | 08:05      | 08:25    | 01-13    | 0.33  | 12200.00         | 12239.00       | 39.00         | 117.00     | N/A      | 550.00          | 60.0        | 42.00      | 3450.00        | 2450.00         |                   |
| Slide    | 01-13      | 08:35      | 09:25    | 01-13    | 0.83  | 12239.00         | 12280.00       | 41.00         | 49.20      | 0.0      | 550.00          | N/A         | 40.00      | 2850.00        | 2605.00         |                   |
| Rotate   | 01-13      | 09:25      | 09:50    | 01-13    | 0.42  | 12280.00         | 12329.00       | 49.00         | 117.60     | N/A      | 550.00          | 60.0        | 42.00      | 3450.00        | 2450.00         |                   |
| Rotate   | 01-13      | 09:55      | 10:30    | 01-13    | 0.58  | 12329.00         | 12418.00       | 89.00         | 152.57     | N/A      | 550.00          | 60.0        | 42.00      | 3450.00        | 2450.00         |                   |
| Rotate   | 01-13      | 10:35      | 11:05    | 01-13    | 0.5   | 12418.00         | 12508.00       | 90.00         | 180.00     | N/A      | 550.00          | 60.0        | 42.00      | 3450.00        | 2450.00         |                   |
| Slide    | 01-13      | 11:15      | 12:05    | 01-13    | 0.83  | 12508.00         | 12568.00       | 60.00         | 72.00      | 290.0    | 550.00          | N/A         | 40.00      | 2850.00        | 2605.00         |                   |
| Rotate   | 01-13      | 12:05      | 12:15    | 01-13    | 0.17  | 12568.00         | 12597.00       | 29.00         | 174.00     | N/A      | 550.00          | 60.0        | 42.00      | 3450.00        | 2450.00         |                   |
| Slide    | 01-13      | 12:25      | 12:50    | 01-13    | 0.42  | 12597.00         | 12627.00       | 30.00         | 72.00      | 0.0      | 550.00          | N/A         | 40.00      | 2850.00        | 2605.00         |                   |
| Rotate   | 01-13      | 12:50      | 13:10    | 01-13    | 0.33  | 12627.00         | 12687.00       | 60.00         | 180.00     | N/A      | 550.00          | 60.0        | 42.00      | 3450.00        | 2450.00         |                   |
| Slide    | 01-13      | 13:20      | 14:00    | 01-13    | 0.67  | 12687.00         | 12722.00       | 35.00         | 52.50      | 340.0    | 550.00          | N/A         | 40.00      | 2850.00        | 2605.00         |                   |
| Rotate   | 01-13      | 14:00      | 14:15    | 01-13    | 0.25  | 12722.00         | 12777.00       | 55.00         | 220.00     | N/A      | 550.00          | 60.0        | 42.00      | 3450.00        | 2450.00         |                   |
| Rotate   | 01-13      | 14:20      | 14:25    | 01-13    | 0.08  | 12777.00         | 12782.00       | 5.00          | 60.00      | N/A      | 550.00          | 60.0        | 42.00      | 3450.00        | 2450.00         |                   |
| Slide    | 01-13      | 14:25      | 14:50    | 01-13    | 0.42  | 12782.00         | 12802.00       | 20.00         | 48.00      | 320.0    | 550.00          | N/A         | 40.00      | 2850.00        | 2605.00         |                   |
| Rotate   | 01-13      | 14:50      | 15:10    | 01-13    | 0.33  | 12802.00         | 12866.00       | 64.00         | 192.00     | N/A      | 550.00          | 60.0        | 42.00      | 3450.00        | 2450.00         |                   |
| Rotate   | 01-13      | 15:15      | 15:45    | 01-13    | 0.5   | 12866.00         | 12956.00       | 90.00         | 180.00     | N/A      | 550.00          | 60.0        | 42.00      | 3450.00        | 2450.00         |                   |
| Rotate   | 01-13      | 15:55      | 16:25    | 01-13    | 0.5   | 12956.00         | 13045.00       | 89.00         | 178.00     | N/A      | 550.00          | 60.0        | 42.00      | 3450.00        | 2450.00         |                   |
| Rotate   | 01-13      | 16:30      | 17:00    | 01-13    | 0.5   | 13045.00         | 13135.00       | 90.00         | 180.00     | N/A      | 550.00          | 60.0        | 42.00      | 3450.00        | 2450.00         |                   |
| Slide    | 01-13      | 17:10      | 17:30    | 01-13    | 0.33  | 13135.00         | 13155.00       | 20.00         | 60.00      | 180.0    | 550.00          | N/A         | 40.00      | 2850.00        | 2605.00         |                   |
| Rotate   | 01-13      | 17:30      | 17:55    | 01-13    | 0.42  | 13155.00         | 13225.00       | 70.00         | 168.00     | N/A      | 550.00          | 60.0        | 50.00      | 3450.00        | 2450.00         |                   |
| Rotate   | 01-13      | 18:00      | 18:35    | 01-13    | 0.58  | 13225.00         | 13314.00       | 89.00         | 152.57     | N/A      | 550.00          | 60.0        | 50.00      | 3450.00        | 2450.00         |                   |
| Rotate   | 01-13      | 18:40      | 19:10    | 01-13    | 0.5   | 13314.00         | 13404.00       | 90.00         | 180.00     | N/A      | 550.00          | 50.0        | 50.00      | 3450.00        | 2450.00         |                   |
| Rotate   | 01-13      | 19:15      | 19:40    | 01-13    | 0.42  | 13404.00         | 13459.00       | 55.00         | 132.00     | N/A      | 550.00          | 50.0        | 50.00      | 3450.00        | 2450.00         |                   |
| Slide    | 01-13      | 19:40      | 20:35    | 01-13    | 0.92  | 13459.00         | 13493.00       | 34.00         | 37.09      | 40.0     | 550.00          | N/A         | 40.00      | 2850.00        | 2605.00         |                   |
| Rotate   | 01-13      | 20:40      | 21:20    | 01-13    | 0.67  | 13493.00         | 13583.00       | 90.00         | 135.00     | N/A      | 550.00          | 50.0        | 50.00      | 3450.00        | 2450.00         |                   |
| Slide    | 01-13      | 21:25      | 21:50    | 01-13    | 0.42  | 13583.00         | 13608.00       | 25.00         | 60.00      | 20.0     | 550.00          | N/A         | 40.00      | 2850.00        | 2605.00         |                   |
| Rotate   | 01-13      | 21:50      | 22:20    | 01-13    | 0.5   | 13608.00         | 13672.00       | 64.00         | 128.00     | N/A      | 550.00          | 50.0        | 50.00      | 3450.00        | 2450.00         |                   |
| Slide    | 01-13      | 22:25      | 23:05    | 01-13    | 0.67  | 13672.00         | 13707.00       | 35.00         | 52.50      | 0.0      | 550.00          | N/A         | 40.00      | 2850.00        | 2605.00         |                   |
| Rotate   | 01-13      | 23:05      | 23:30    | 01-13    | 0.42  | 13707.00         | 13762.00       | 55.00         | 132.00     | N/A      | 550.00          | 50.0        | 50.00      | 3450.00        | 2450.00         |                   |
| Rotate   | 01-13      | 23:35      | 00:25    | 01-14    | 0.83  | 13762.00         | 13852.00       | 90.00         | 108.00     | N/A      | 550.00          | 50.0        | 50.00      | 3450.00        | 2450.00         |                   |
| Rotate   | 01-14      | 00:30      | 01:05    | 01-14    | 0.58  | 13852.00         | 13941.00       | 89.00         | 152.57     | N/A      | 550.00          | 30.0        | 50.00      | 3450.00        | 2450.00         |                   |
| Slide    | 01-14      | 01:10      | 01:50    | 01-14    | 0.67  | 13941.00         | 13966.00       | 25.00         | 37.50      | 50.0     | 550.00          | N/A         | 40.00      | 2850.00        | 2605.00         |                   |
| Rotate   | 01-14      | 01:50      | 02:20    | 01-14    | 0.5   | 13966.00         | 14031.00       | 65.00         | 130.00     | N/A      | 550.00          | 30.0        | 50.00      | 3450.00        | 2450.00         |                   |
| Rotate   | 01-14      | 02:25      | 02:30    | 01-14    | 0.08  | 14031.00         | 14041.00       | 10.00         | 120.00     | N/A      | 550.00          | 30.0        | 50.00      | 3450.00        | 2450.00         |                   |
| Slide    | 01-14      | 02:30      | 03:10    | 01-14    | 0.67  | 14041.00         | 14068.00       | 27.00         | 40.50      | 40.0     | 550.00          | N/A         | 40.00      | 2850.00        | 2605.00         |                   |
| Rotate   | 01-14      | 03:10      | 03:30    | 01-14    | 0.33  | 14068.00         | 14121.00       | 53.00         | 159.00     | N/A      | 550.00          | 30.0        | 50.00      | 3450.00        | 2450.00         |                   |
| Rotate   | 01-14      | 03:35      | 04:30    | 01-14    | 0.92  | 14121.00         | 14210.00       | 89.00         | 97.09      | N/A      | 550.00          | 30.0        | 50.00      | 3450.00        | 2450.00         |                   |
| Slide    | 01-14      | 04:40      | 05:15    | 01-14    | 0.58  | 14210.00         | 14225.00       | 15.00         | 25.71      | 160.0    | 550.00          | N/A         | 40.00      | 2850.00        | 2605.00         |                   |
| Rotate   | 01-14      | 05:15      | 06:00    | 01-14    | 0.75  | 14225.00         | 14300.00       | 75.00         | 100.00     | N/A      | 550.00          | 30.0        | 50.00      | 3450.00        | 2450.00         |                   |
| Rotate   | 01-14      | 06:05      | 06:20    | 01-14    | 0.25  | 14300.00         | 14335.00       | 35.00         | 140.00     | N/A      | 550.00          | 30.0        | 50.00      | 3450.00        | 2450.00         |                   |



|                                 |                                                     |                                                       |
|---------------------------------|-----------------------------------------------------|-------------------------------------------------------|
| <b>Job Number</b><br>WT-20-071  | <b>Operator</b><br>Advance Energy Partners          | <b>Rig Name</b><br>Pioneer #80                        |
| <b>Start Date</b><br>2020-12-04 | <b>Well Name</b><br>Anderson Fed Com 504H           | <b>Legal Well Name   AFE</b><br>Anderson Fed Com 504H |
| <b>Play</b><br>Delaware Basin   | <b>State/Province and Country</b><br>New Mexico, US | <b>County</b><br>Lea                                  |
| <b>Company Man</b>              |                                                     |                                                       |

**Slide/Rotate Report - BHA #7 (8.50" LATERAL w/ Agitator)**

| Activity | Start Date | Start Time | End Time | End Date | Hours | Start Depth (ft) | End Depth (ft) | Distance (ft) | RoP (ft/h) | Toolface | Flow Rate (gpm) | Surface RPM | WOB (klbs) | Press On (psi) | Press Off (psi) | Hole Section Type |
|----------|------------|------------|----------|----------|-------|------------------|----------------|---------------|------------|----------|-----------------|-------------|------------|----------------|-----------------|-------------------|
| Rotate   | 01-15      | 01:00      | 01:20    | 01-15    | 0.33  | 14335.00         | 14388.00       | 53.00         | 159.00     | N/A      | 550.00          | 30.0        | 50.00      | 3450.00        | 2450.00         |                   |
| Slide    | 01-15      | 01:25      | 02:20    | 01-15    | 0.92  | 14388.00         | 14423.00       | 35.00         | 38.18      | 180.0    | 550.00          | N/A         | 40.00      | 2850.00        | 2605.00         |                   |
| Rotate   | 01-15      | 02:20      | 02:45    | 01-15    | 0.42  | 14423.00         | 14477.00       | 54.00         | 129.60     | N/A      | 550.00          | 30.0        | 50.00      | 3450.00        | 2450.00         |                   |
| Rotate   | 01-15      | 02:50      | 03:20    | 01-15    | 0.5   | 14477.00         | 14567.00       | 90.00         | 180.00     | N/A      | 550.00          | 30.0        | 50.00      | 3450.00        | 2450.00         |                   |
| Rotate   | 01-15      | 03:25      | 04:05    | 01-15    | 0.67  | 14567.00         | 14656.00       | 89.00         | 133.50     | N/A      | 550.00          | 30.0        | 50.00      | 3450.00        | 2450.00         |                   |
| Rotate   | 01-15      | 04:10      | 04:55    | 01-15    | 0.75  | 14656.00         | 14746.00       | 90.00         | 120.00     | N/A      | 550.00          | 30.0        | 50.00      | 3450.00        | 2450.00         |                   |
| Rotate   | 01-15      | 05:00      | 05:10    | 01-15    | 0.17  | 14746.00         | 14755.00       | 9.00          | 54.00      | N/A      | 550.00          | 30.0        | 50.00      | 3450.00        | 2450.00         |                   |
| Slide    | 01-15      | 05:10      | 06:00    | 01-15    | 0.83  | 14755.00         | 14775.00       | 20.00         | 24.00      | 340.0    | 550.00          | N/A         | 40.00      | 2850.00        | 2605.00         |                   |
| Rotate   | 01-15      | 06:00      | 06:35    | 01-15    | 0.58  | 14775.00         | 14835.00       | 60.00         | 102.86     | N/A      | 550.00          | 30.0        | 50.00      | 3450.00        | 2450.00         |                   |
| Rotate   | 01-15      | 06:40      | 07:20    | 01-15    | 0.67  | 14835.00         | 14925.00       | 90.00         | 135.00     | N/A      | 550.00          | 30.0        | 50.00      | 3450.00        | 2450.00         |                   |
| Rotate   | 01-15      | 07:25      | 08:05    | 01-15    | 0.67  | 14925.00         | 15015.00       | 90.00         | 135.00     | N/A      | 550.00          | 30.0        | 50.00      | 3450.00        | 2450.00         |                   |
| Rotate   | 01-15      | 08:50      | 09:30    | 01-15    | 0.67  | 15015.00         | 15104.00       | 89.00         | 133.50     | N/A      | 550.00          | 30.0        | 50.00      | 3450.00        | 2450.00         |                   |
| Slide    | 01-15      | 09:40      | 10:10    | 01-15    | 0.5   | 15104.00         | 15129.00       | 25.00         | 50.00      | 160.0    | 550.00          | N/A         | 40.00      | 2850.00        | 2605.00         |                   |
| Rotate   | 01-15      | 10:10      | 10:55    | 01-15    | 0.75  | 15129.00         | 15194.00       | 65.00         | 86.67      | N/A      | 550.00          | 30.0        | 50.00      | 3450.00        | 2450.00         |                   |
| Rotate   | 01-15      | 11:00      | 11:40    | 01-15    | 0.67  | 15194.00         | 15284.00       | 90.00         | 135.00     | N/A      | 550.00          | 30.0        | 50.00      | 3450.00        | 2450.00         |                   |
| Rotate   | 01-15      | 11:45      | 11:55    | 01-15    | 0.17  | 15284.00         | 15295.00       | 11.00         | 66.00      | N/A      | 550.00          | 30.0        | 50.00      | 3450.00        | 2450.00         |                   |
| Slide    | 01-15      | 11:55      | 12:25    | 01-15    | 0.5   | 15295.00         | 15320.00       | 25.00         | 50.00      | 90.0     | 550.00          | N/A         | 40.00      | 2850.00        | 2605.00         |                   |
| Rotate   | 01-15      | 12:25      | 12:55    | 01-15    | 0.5   | 15320.00         | 15373.00       | 53.00         | 106.00     | N/A      | 550.00          | 30.0        | 50.00      | 3450.00        | 2450.00         |                   |
| Slide    | 01-15      | 13:05      | 13:25    | 01-15    | 0.33  | 15373.00         | 15388.00       | 15.00         | 45.00      | 0.0      | 550.00          | N/A         | 40.00      | 2850.00        | 2605.00         |                   |
| Rotate   | 01-15      | 13:25      | 13:45    | 01-15    | 0.33  | 15388.00         | 15407.00       | 19.00         | 57.00      | N/A      | 550.00          | 30.0        | 50.00      | 3450.00        | 2450.00         |                   |
| Rotate   | 01-15      | 14:30      | 15:05    | 01-15    | 0.58  | 15407.00         | 15463.00       | 56.00         | 96.00      | N/A      | 550.00          | 30.0        | 50.00      | 3450.00        | 2450.00         |                   |
| Rotate   | 01-15      | 15:10      | 16:20    | 01-15    | 1.17  | 15463.00         | 15552.00       | 89.00         | 76.29      | N/A      | 550.00          | 30.0        | 50.00      | 3450.00        | 2450.00         |                   |
| Slide    | 01-15      | 16:30      | 17:45    | 01-15    | 1.25  | 15552.00         | 15612.00       | 60.00         | 48.00      | 40.0     | 550.00          | N/A         | 40.00      | 2850.00        | 2605.00         |                   |
| Rotate   | 01-15      | 17:45      | 18:10    | 01-15    | 0.42  | 15612.00         | 15642.00       | 30.00         | 72.00      | N/A      | 550.00          | 30.0        | 50.00      | 3450.00        | 2450.00         |                   |
| Rotate   | 01-15      | 18:15      | 18:55    | 01-15    | 0.67  | 15642.00         | 15701.00       | 59.00         | 88.50      | N/A      | 550.00          | 30.0        | 50.00      | 3450.00        | 2450.00         |                   |
| Slide    | 01-15      | 18:55      | 19:30    | 01-15    | 0.58  | 15701.00         | 15721.00       | 20.00         | 34.29      | 160.0    | 550.00          | N/A         | 40.00      | 2850.00        | 2605.00         |                   |
| Rotate   | 01-15      | 19:30      | 19:40    | 01-15    | 0.17  | 15721.00         | 15731.00       | 10.00         | 60.00      | N/A      | 550.00          | 30.0        | 50.00      | 3450.00        | 2450.00         |                   |
| Rotate   | 01-15      | 19:55      | 20:35    | 01-15    | 0.67  | 15731.00         | 15820.00       | 89.00         | 133.50     | N/A      | 550.00          | 30.0        | 50.00      | 3450.00        | 2450.00         |                   |
| Rotate   | 01-15      | 20:40      | 21:20    | 01-15    | 0.67  | 15820.00         | 15909.00       | 89.00         | 133.50     | N/A      | 550.00          | 30.0        | 50.00      | 3450.00        | 2450.00         |                   |
| Rotate   | 01-15      | 21:25      | 21:35    | 01-15    | 0.17  | 15909.00         | 15927.00       | 18.00         | 108.00     | N/A      | 550.00          | 30.0        | 50.00      | 3450.00        | 2450.00         |                   |



|                                 |                                                     |                                                       |
|---------------------------------|-----------------------------------------------------|-------------------------------------------------------|
| <b>Job Number</b><br>WT-20-071  | <b>Operator</b><br>Advance Energy Partners          | <b>Rig Name</b><br>Pioneer #80                        |
| <b>Start Date</b><br>2020-12-04 | <b>Well Name</b><br>Anderson Fed Com 504H           | <b>Legal Well Name   AFE</b><br>Anderson Fed Com 504H |
| <b>Play</b><br>Delaware Basin   | <b>State/Province and Country</b><br>New Mexico, US | <b>County</b><br>Lea                                  |
| <b>Company Man</b>              |                                                     |                                                       |

**Slide/Rotate Report - BHA #8 (8.50" LATERAL w/ Agitator)**

| Activity | Start Date | Start Time | End Time | End Date | Hours | Start Depth (ft) | End Depth (ft) | Distance (ft) | RoP (ft/h) | Toolface | Flow Rate (gpm) | Surface RPM | WOB (klbs) | Press On (psi) | Press Off (psi) | Hole Section Type |
|----------|------------|------------|----------|----------|-------|------------------|----------------|---------------|------------|----------|-----------------|-------------|------------|----------------|-----------------|-------------------|
| Rotate   | 01-16      | 15:10      | 16:10    | 01-16    | 1.0   | 15927.00         | 16002.00       | 75.00         | 75.00      | N/A      | 550.00          | 30.0        | 50.00      | 3450.00        | 2450.00         |                   |
| Rotate   | 01-16      | 16:20      | 16:50    | 01-16    | 0.5   | 16002.00         | 16091.00       | 89.00         | 178.00     | N/A      | 550.00          | 30.0        | 50.00      | 3450.00        | 2450.00         |                   |
| Rotate   | 01-16      | 17:00      | 17:35    | 01-16    | 0.58  | 16091.00         | 16172.00       | 81.00         | 138.86     | N/A      | 550.00          | 30.0        | 50.00      | 3450.00        | 2450.00         |                   |
| Rotate   | 01-16      | 18:10      | 18:20    | 01-16    | 0.17  | 16172.00         | 16180.00       | 8.00          | 48.00      | N/A      | 550.00          | 30.0        | 50.00      | 3450.00        | 2450.00         |                   |
| Rotate   | 01-16      | 18:25      | 18:55    | 01-16    | 0.5   | 16180.00         | 16270.00       | 90.00         | 180.00     | N/A      | 630.00          | 40.0        | 60.00      | 4300.00        | 3550.00         |                   |
| Slide    | 01-16      | 19:00      | 19:40    | 01-16    | 0.67  | 16270.00         | 16290.00       | 20.00         | 30.00      | 210.0    | 630.00          | N/A         | 50.00      | 3800.00        | 3550.00         |                   |
| Rotate   | 01-16      | 19:40      | 20:05    | 01-16    | 0.42  | 16290.00         | 16359.00       | 69.00         | 165.60     | N/A      | 630.00          | 40.0        | 60.00      | 4300.00        | 3550.00         |                   |
| Slide    | 01-16      | 20:10      | 20:40    | 01-16    | 0.5   | 16359.00         | 16378.00       | 19.00         | 38.00      | 220.0    | 630.00          | N/A         | 50.00      | 3800.00        | 3550.00         |                   |
| Rotate   | 01-16      | 20:40      | 21:10    | 01-16    | 0.5   | 16378.00         | 16449.00       | 71.00         | 142.00     | N/A      | 630.00          | 40.0        | 60.00      | 4300.00        | 3550.00         |                   |
| Rotate   | 01-16      | 21:15      | 21:40    | 01-16    | 0.42  | 16449.00         | 16539.00       | 90.00         | 216.00     | N/A      | 630.00          | 40.0        | 60.00      | 4300.00        | 3550.00         |                   |
| Slide    | 01-16      | 21:45      | 22:20    | 01-16    | 0.58  | 16539.00         | 16559.00       | 20.00         | 34.29      | 180.0    | 630.00          | N/A         | 50.00      | 3800.00        | 3550.00         |                   |
| Rotate   | 01-16      | 22:20      | 22:45    | 01-16    | 0.42  | 16559.00         | 16628.00       | 69.00         | 165.60     | N/A      | 630.00          | 40.0        | 60.00      | 4300.00        | 3550.00         |                   |
| Rotate   | 01-16      | 22:50      | 23:20    | 01-16    | 0.5   | 16628.00         | 16718.00       | 90.00         | 180.00     | N/A      | 630.00          | 40.0        | 60.00      | 4300.00        | 3550.00         |                   |
| Rotate   | 01-16      | 23:25      | 23:55    | 01-16    | 0.5   | 16718.00         | 16807.00       | 89.00         | 178.00     | N/A      | 630.00          | 40.0        | 60.00      | 4300.00        | 3550.00         |                   |
| Rotate   | 01-17      | 00:00      | 00:05    | 01-17    | 0.08  | 16807.00         | 16817.00       | 10.00         | 120.00     | N/A      | 630.00          | 40.0        | 60.00      | 4300.00        | 3550.00         |                   |
| Slide    | 01-17      | 00:05      | 01:00    | 01-17    | 0.92  | 16817.00         | 16842.00       | 25.00         | 27.27      | 110.0    | 630.00          | N/A         | 50.00      | 3800.00        | 3550.00         |                   |
| Rotate   | 01-17      | 01:00      | 01:30    | 01-17    | 0.5   | 16842.00         | 16897.00       | 55.00         | 110.00     | N/A      | 630.00          | 40.0        | 60.00      | 4300.00        | 3550.00         |                   |
| Rotate   | 01-17      | 01:35      | 02:05    | 01-17    | 0.5   | 16897.00         | 16986.00       | 89.00         | 178.00     | N/A      | 630.00          | 40.0        | 60.00      | 4300.00        | 3550.00         |                   |
| Slide    | 01-17      | 02:15      | 03:00    | 01-17    | 0.75  | 16986.00         | 17016.00       | 30.00         | 40.00      | 170.0    | 630.00          | N/A         | 50.00      | 3800.00        | 3550.00         |                   |
| Rotate   | 01-17      | 03:00      | 03:25    | 01-17    | 0.42  | 17016.00         | 17076.00       | 60.00         | 144.00     | N/A      | 630.00          | 40.0        | 60.00      | 4300.00        | 3550.00         |                   |
| Rotate   | 01-17      | 03:30      | 04:00    | 01-17    | 0.5   | 17076.00         | 17166.00       | 90.00         | 180.00     | N/A      | 630.00          | 40.0        | 60.00      | 4300.00        | 3550.00         |                   |
| Rotate   | 01-17      | 04:05      | 04:45    | 01-17    | 0.67  | 17166.00         | 17255.00       | 89.00         | 133.50     | N/A      | 630.00          | 40.0        | 60.00      | 4300.00        | 3550.00         |                   |
| Slide    | 01-17      | 04:50      | 05:45    | 01-17    | 0.92  | 17255.00         | 17283.00       | 28.00         | 30.55      | 45.0     | 630.00          | N/A         | 50.00      | 3800.00        | 3550.00         |                   |
| Rotate   | 01-17      | 05:45      | 06:15    | 01-17    | 0.5   | 17283.00         | 17345.00       | 62.00         | 124.00     | N/A      | 630.00          | 40.0        | 60.00      | 4300.00        | 3550.00         |                   |
| Rotate   | 01-17      | 06:20      | 07:05    | 01-17    | 0.75  | 17345.00         | 17435.00       | 90.00         | 120.00     | N/A      | 630.00          | 40.0        | 60.00      | 4300.00        | 3550.00         |                   |
| Rotate   | 01-17      | 07:10      | 07:50    | 01-17    | 0.67  | 17435.00         | 17524.00       | 89.00         | 133.50     | N/A      | 630.00          | 40.0        | 60.00      | 4300.00        | 3550.00         |                   |
| Rotate   | 01-17      | 07:55      | 08:35    | 01-17    | 0.67  | 17524.00         | 17614.00       | 90.00         | 135.00     | N/A      | 630.00          | 40.0        | 60.00      | 4300.00        | 3550.00         |                   |
| Rotate   | 01-17      | 08:40      | 09:15    | 01-17    | 0.58  | 17614.00         | 17703.00       | 89.00         | 152.57     | N/A      | 630.00          | 40.0        | 60.00      | 4300.00        | 3550.00         |                   |
| Rotate   | 01-17      | 09:20      | 09:45    | 01-17    | 0.42  | 17703.00         | 17747.00       | 44.00         | 105.60     | N/A      | 630.00          | 40.0        | 60.00      | 4300.00        | 3550.00         |                   |



# Performance Overview

---

## **Anderson Fed Com 504H (WT-20-071)**

2020-12-04 to 2021-01-18

Lea, New Mexico, US (32.43, -103.64)

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# BHA Performance

## BHA 1

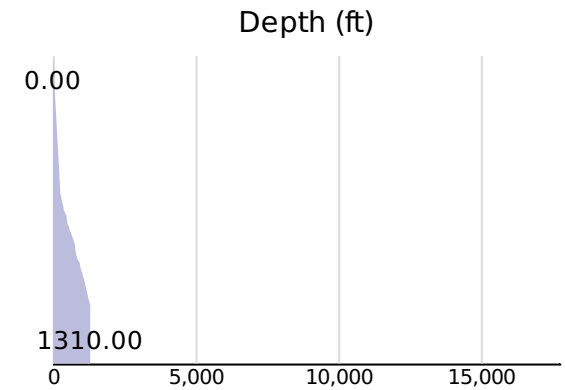
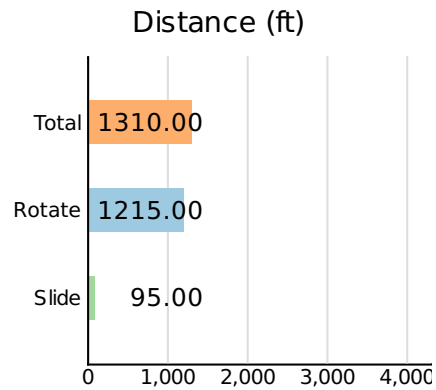
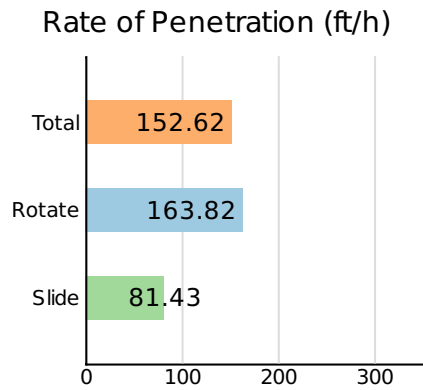
Surface 17.5"

In: 12/05/2020

01:00

Out: 12/05/2020

23:45



## BHA 2

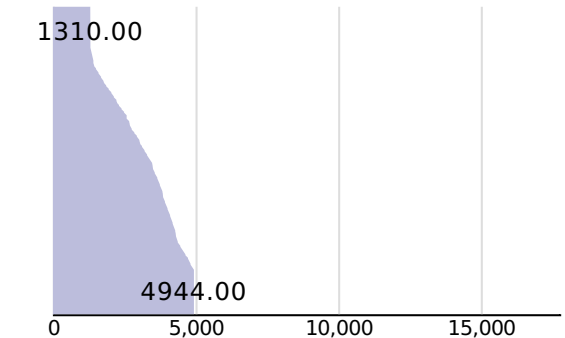
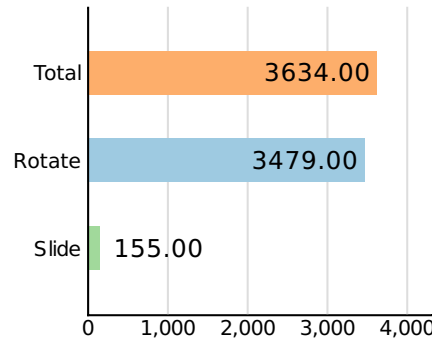
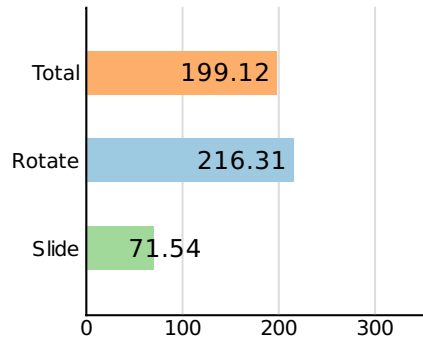
Intermediate  
12.25"

In: 12/11/2020

07:00

Out: 12/12/2020

13:00



## BHA 3

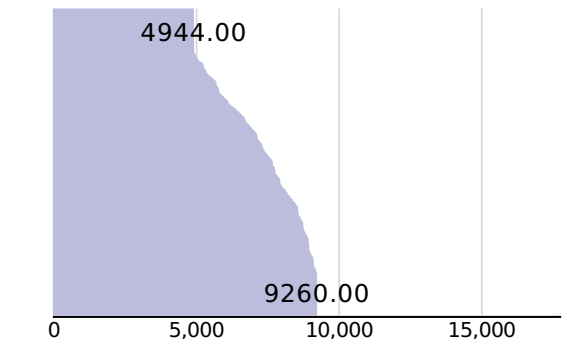
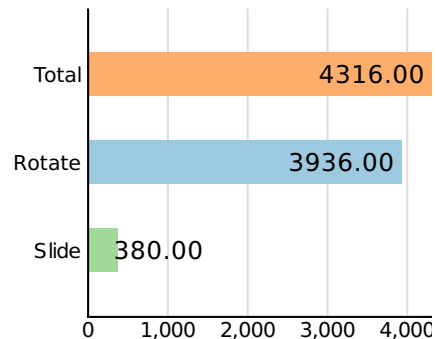
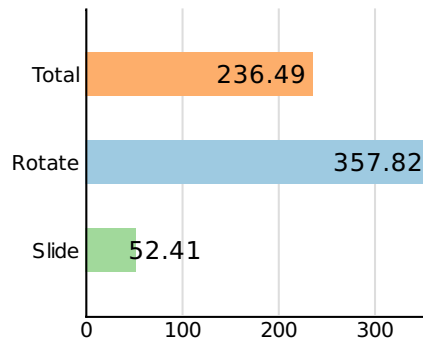
8.75" Intermediate

In: 12/20/2020

18:00

Out: 12/22/2020

01:45



## BHA 4

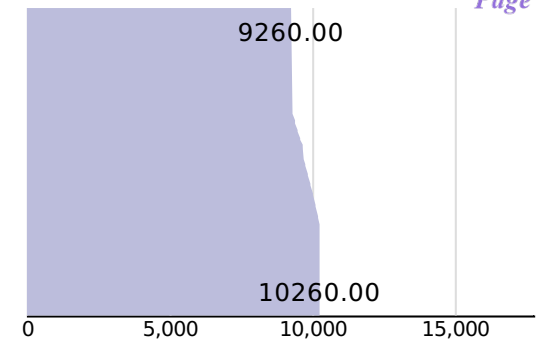
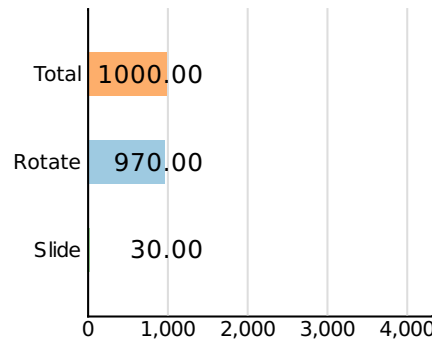
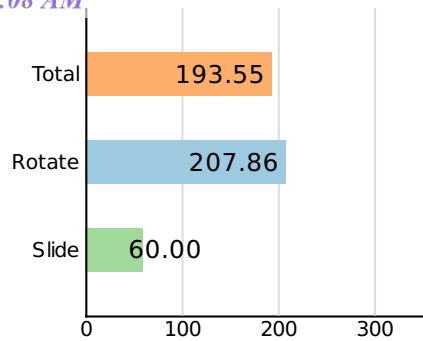
Intermediate 8.75"

In: 12/22/2020

02:45

Out: 12/22/2020

18:30



## BHA 5

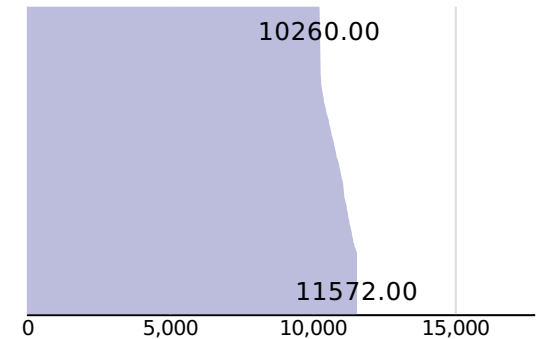
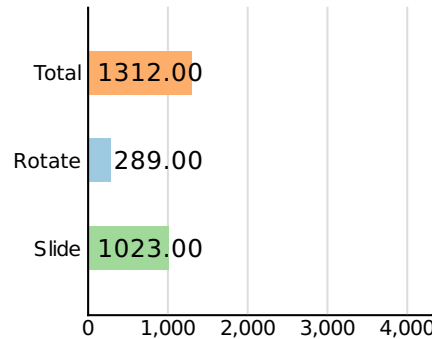
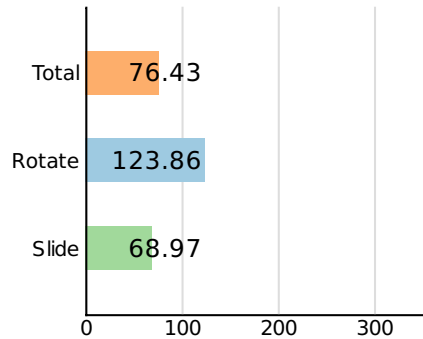
8.75" CURVE

In: 12/22/2020

18:30

Out: 12/24/2020

04:15



## BHA 6

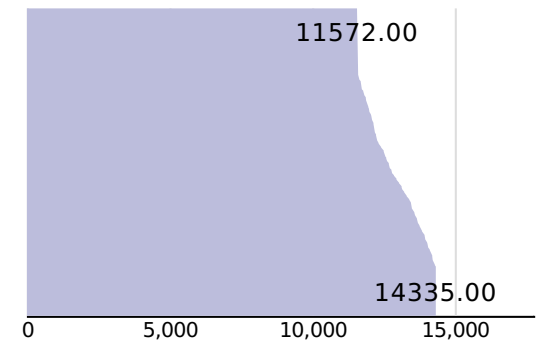
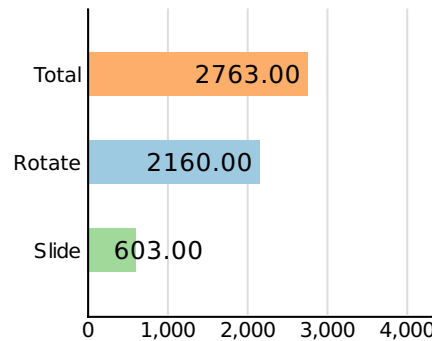
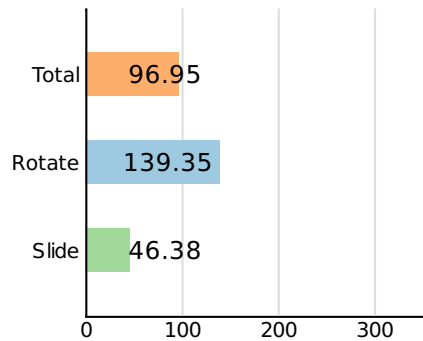
8.50" LATERAL w/  
Agitator

In: 01/12/2021

11:30

Out: 01/14/2021

14:30



## BHA 7

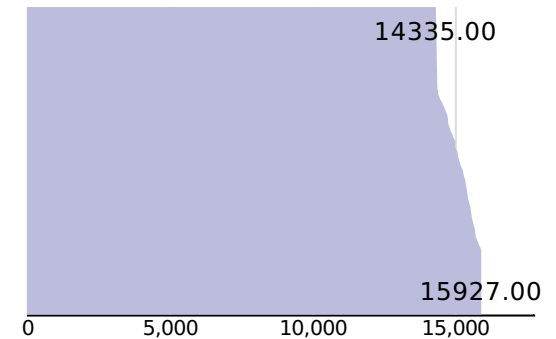
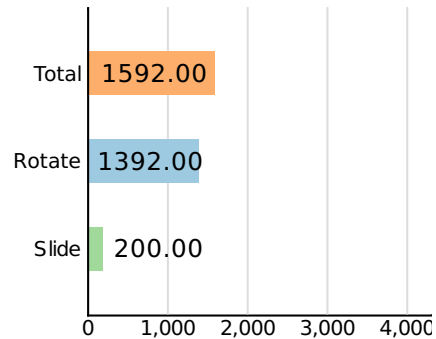
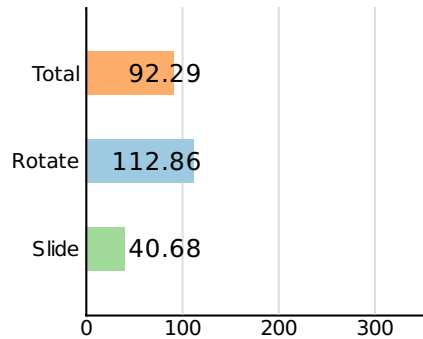
8.50" LATERAL w/  
Agitator

In: 01/14/2021

15:30

Out: 01/16/2021

05:30



# BHA 8

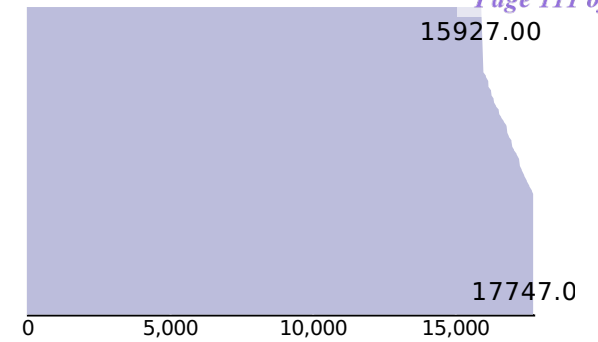
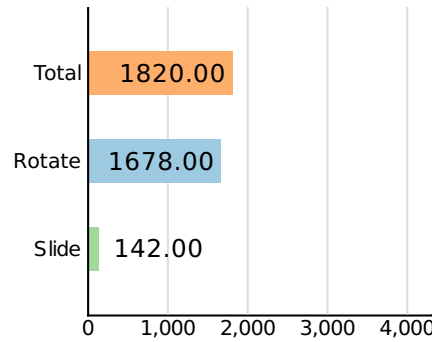
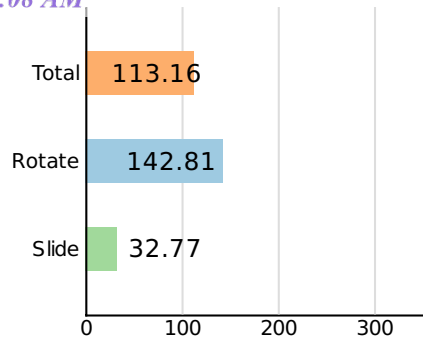
8.50" LATERAL w/  
Agitator

In: **01/16/2021**

**07:00**

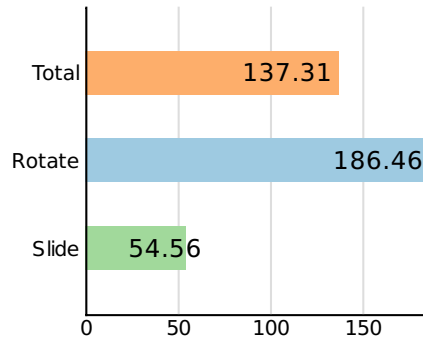
Out: **01/18/2021**

**03:00**

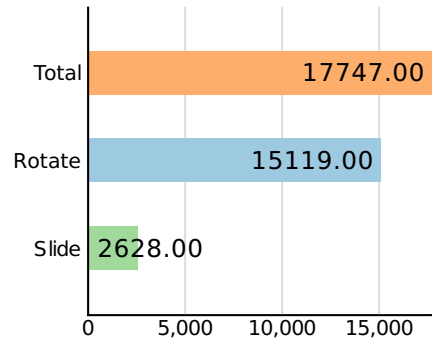


## Total

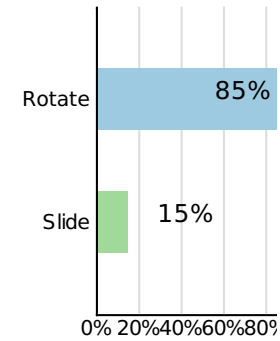
Rate of Penetration (ft/h)



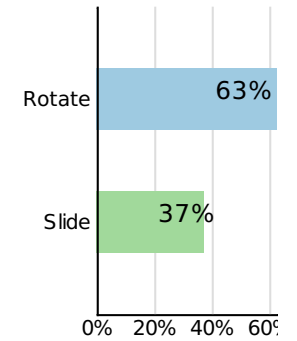
Distance (ft)



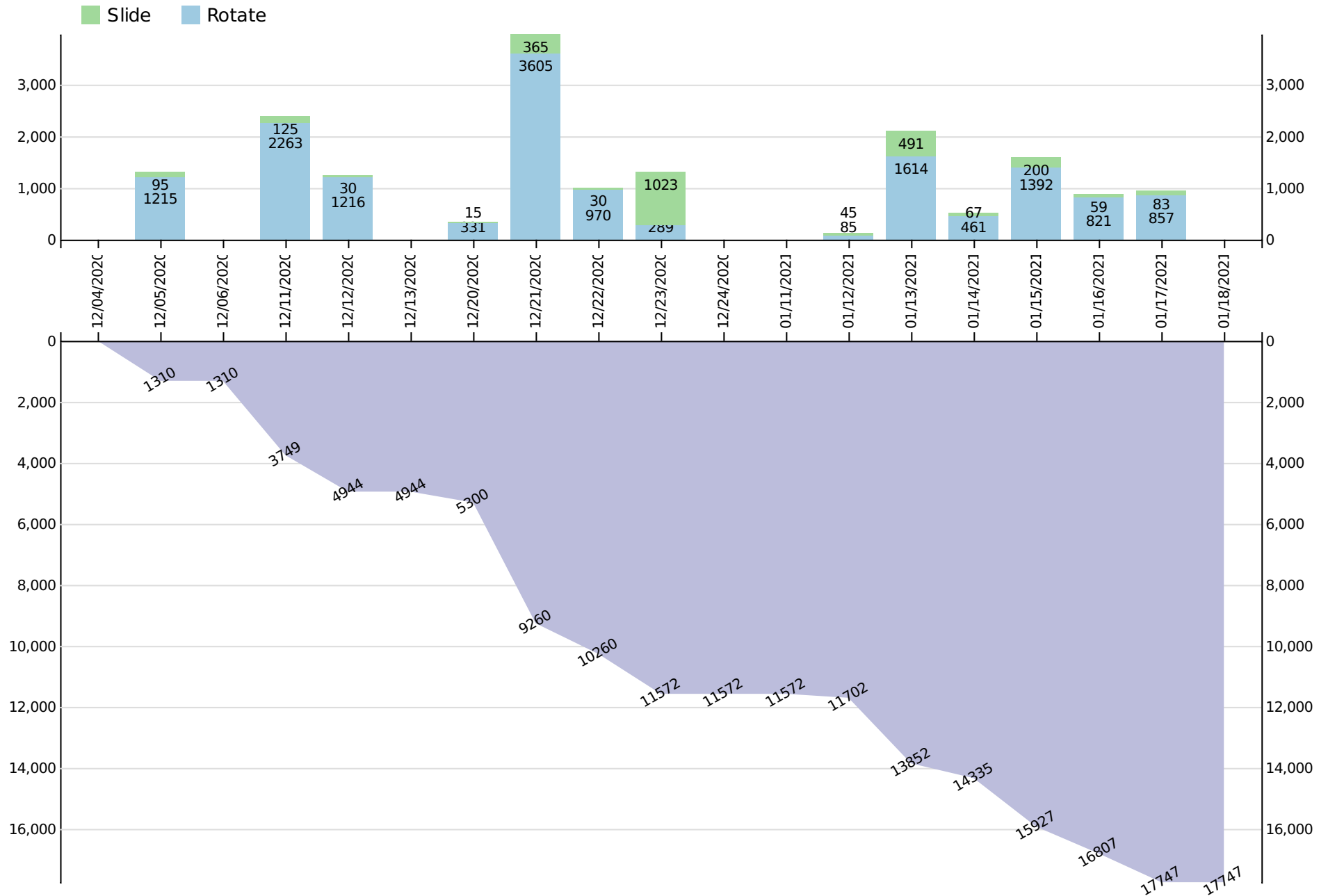
Distance Percentage



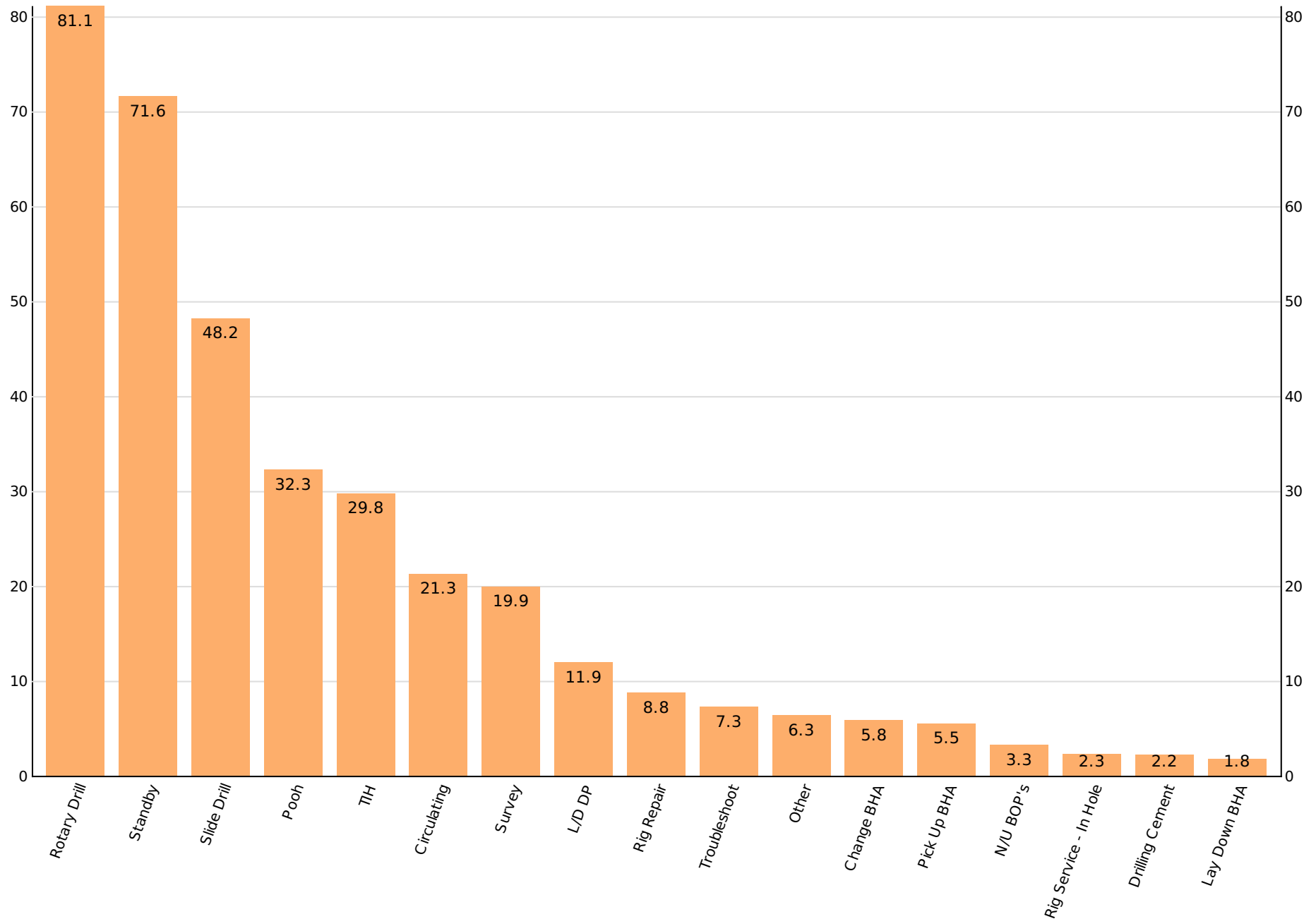
Time Percentage



# Days vs. Depth



# Directional Activity Hours





# Surface Plat

---

## **Anderson Fed Com 504H (WT-20-071)**

2020-12-04 to 2021-01-18

Lea, New Mexico, US (32.43, -103.64)

---

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) 476-3480 Fax: (505) 476-3482

State of New Mexico  
Energy, Minerals and Natural Resources Department

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

Form C-102

Revised August 4, 2011

Submit one copy to appropriate  
District Office

**WELL LOCATION AND ACREAGE DEDICATION PLAT**

☐ AMENDED REPORT

| API Number    | Pool Code                                     | Pool Name           |
|---------------|-----------------------------------------------|---------------------|
| Property Code | Property Name<br>ANDERSON FED COM             | Well Number<br>504H |
| OGRID No.     | Operator Name<br>ADVANCE ENERGY PARTNERS, LLC | Elevation<br>3658'  |

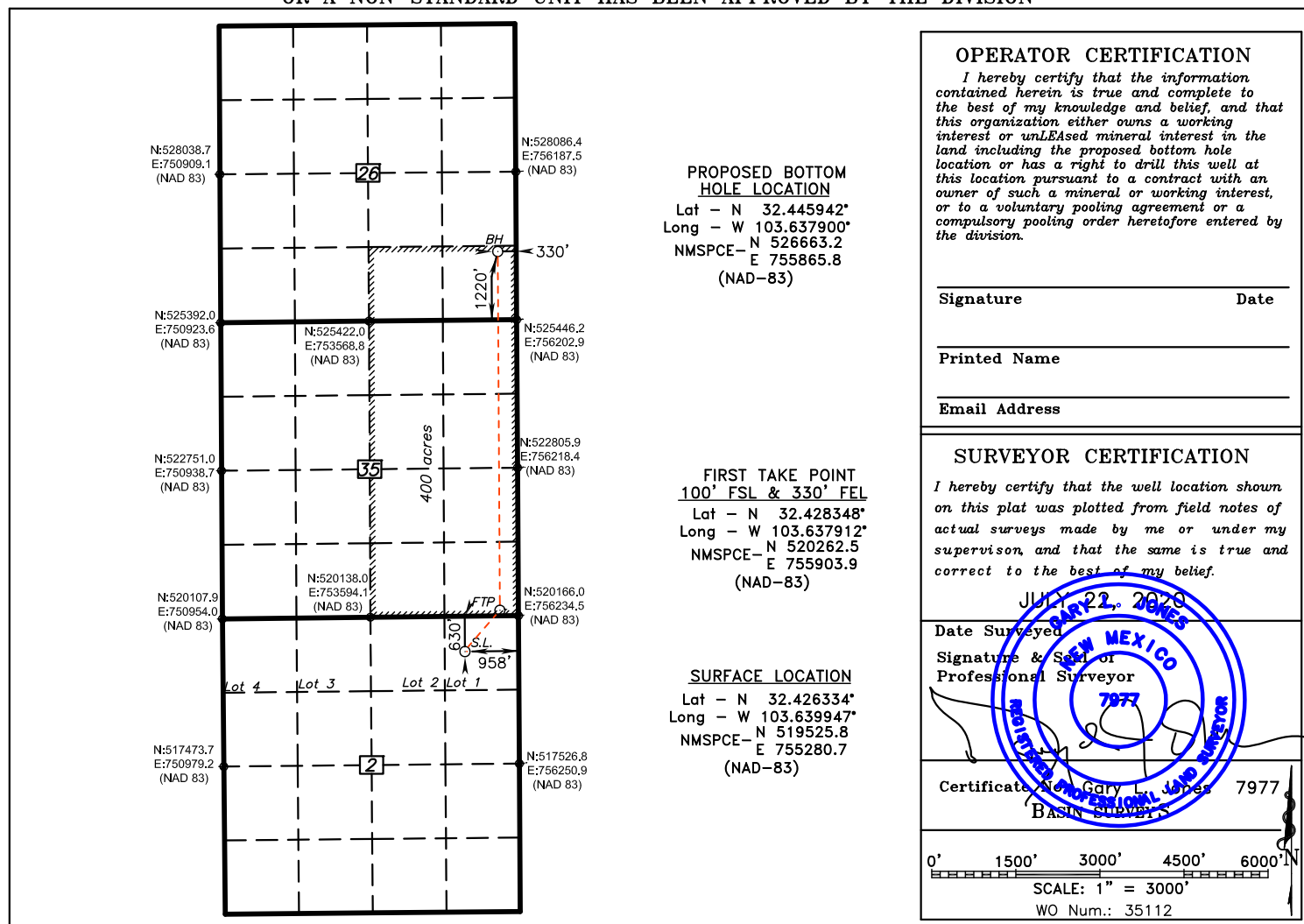
**Surface Location**

| UL or lot No. | Section | Township | Range | Lot Idn | Feet from the | SOUTH/South line | Feet from the | East/West line | County |
|---------------|---------|----------|-------|---------|---------------|------------------|---------------|----------------|--------|
| LOT 1         | 2       | 22 S     | 32 E  |         | 630           | NORTH            | 958           | EAST           | LEA    |

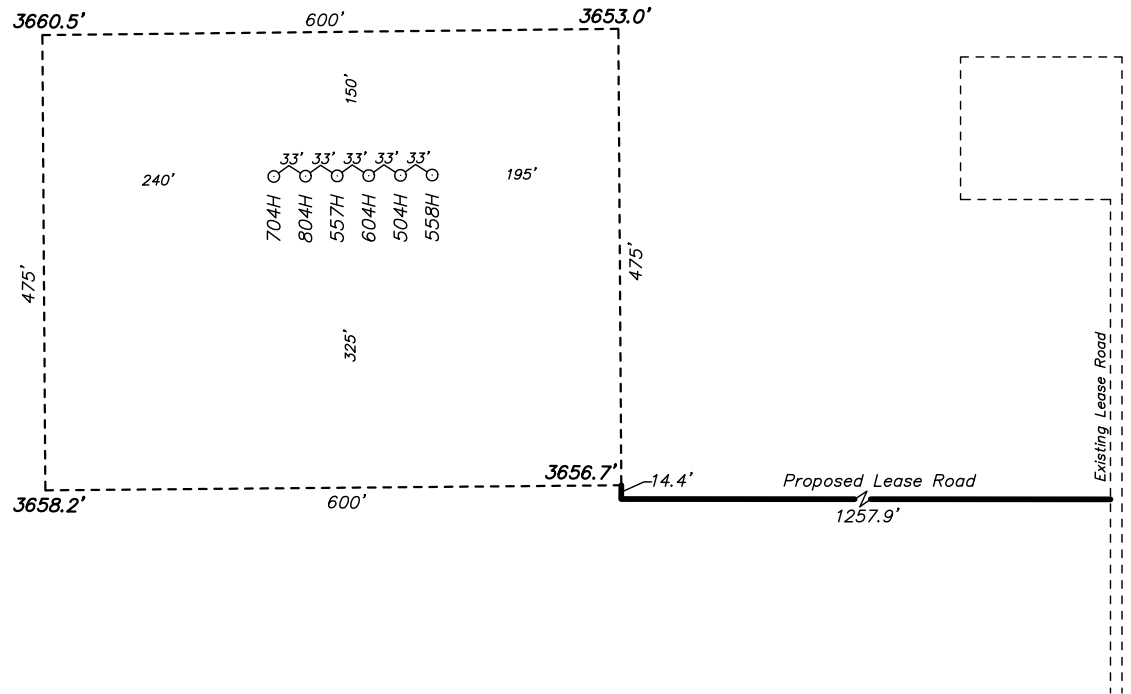
**Bottom Hole Location If Different From Surface**

| UL or lot No.   | Section         | Township           | Range     | Lot Idn | Feet from the | SOUTH/South line | Feet from the | East/West line | County |
|-----------------|-----------------|--------------------|-----------|---------|---------------|------------------|---------------|----------------|--------|
| P               | 26              | 21 S               | 32 E      |         | 1220          | SOUTH            | 330           | 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



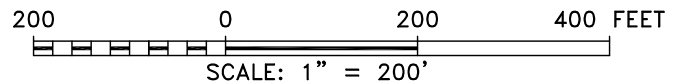
**SECTION 2, TOWNSHIP 22 SOUTH, RANGE 32 EAST. N.M.P.M.,  
LEA COUNTY, NEW MEXICO.**



**ADVANCE ENERGY PARTNERS, LLC**  
**ANDERSON FED COM 504H**  
**ELEV. - 3658'**

Lat - N 32.426334°  
 Long - W 103.639947°  
 NMSPCE - N 519525.8  
 E 755280.7  
 (NAD-83)

EUNICE, NM IS ±28 MILES TO THE EAST OF LOCATION.



**ADVANCE ENERGY PARTNERS, LLC**

REF: ANDERSON FED COM 504H / WELL PAD TOPO

THE ANDERSON FED COM 504H LOCATED 630' FROM  
 THE NORTH LINE AND 958' FROM THE EAST LINE OF  
 SECTION 2, TOWNSHIP 22 SOUTH, RANGE 32 EAST.

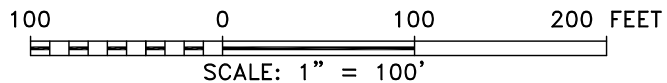
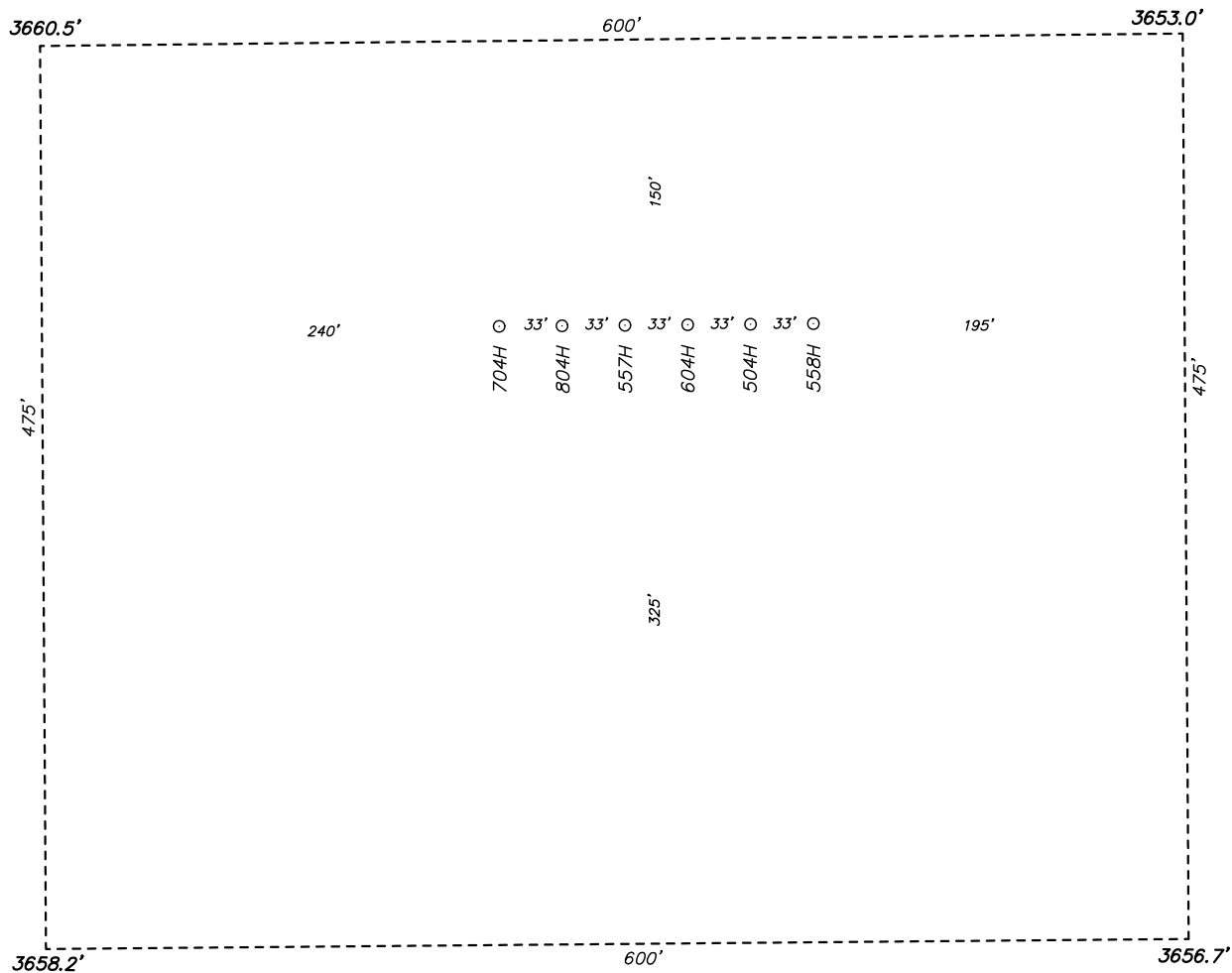
N.M.P.M., LEA COUNTY, NEW MEXICO.

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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

|                    |                   |                  |                         |                     |
|--------------------|-------------------|------------------|-------------------------|---------------------|
| W.O. Number: 35112 | Drawn By: K. GOAD | Date: 07-23-2020 | Survey Date: 07-22-2020 | Sheet 1 of 1 Sheets |
|--------------------|-------------------|------------------|-------------------------|---------------------|

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



**ADVANCE ENERGY PARTNERS, LLC**

REF: ANDERSON FED COM 504H / WELL PAD TOPO

THE ANDERSON FED COM 504H LOCATED 630' FROM  
THE NORTH LINE AND 958' FROM THE EAST LINE OF  
SECTION 2, TOWNSHIP 22 SOUTH, RANGE 32 EAST.

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

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1120 N. West County Rd. (575) 392-2206 - Fax  
Hobbs, New Mexico 88241 basin-surveys.com

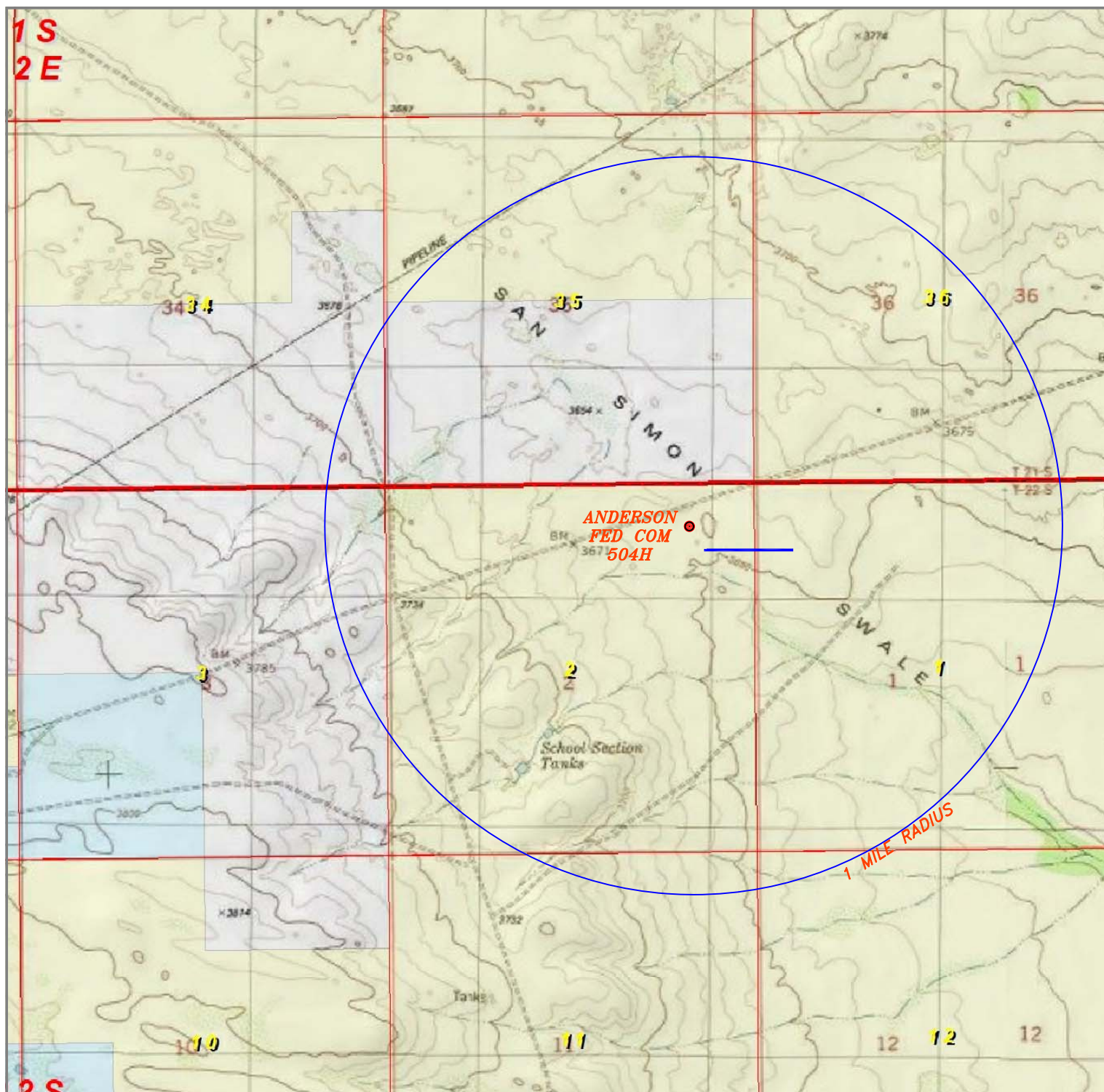
W.O. Number: 35112

Drawn By: K. GOAD

Date: 07-23-2020

Survey Date: 07-22-2020

Sheet 1 of 1 Sheets



### ANDERSON FED COM 504H

Located 630' FNL and 958' FEL  
 Section 2, Township 22 South, Range 32 East,  
 N.M.P.M., Lea County, New Mexico.



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

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

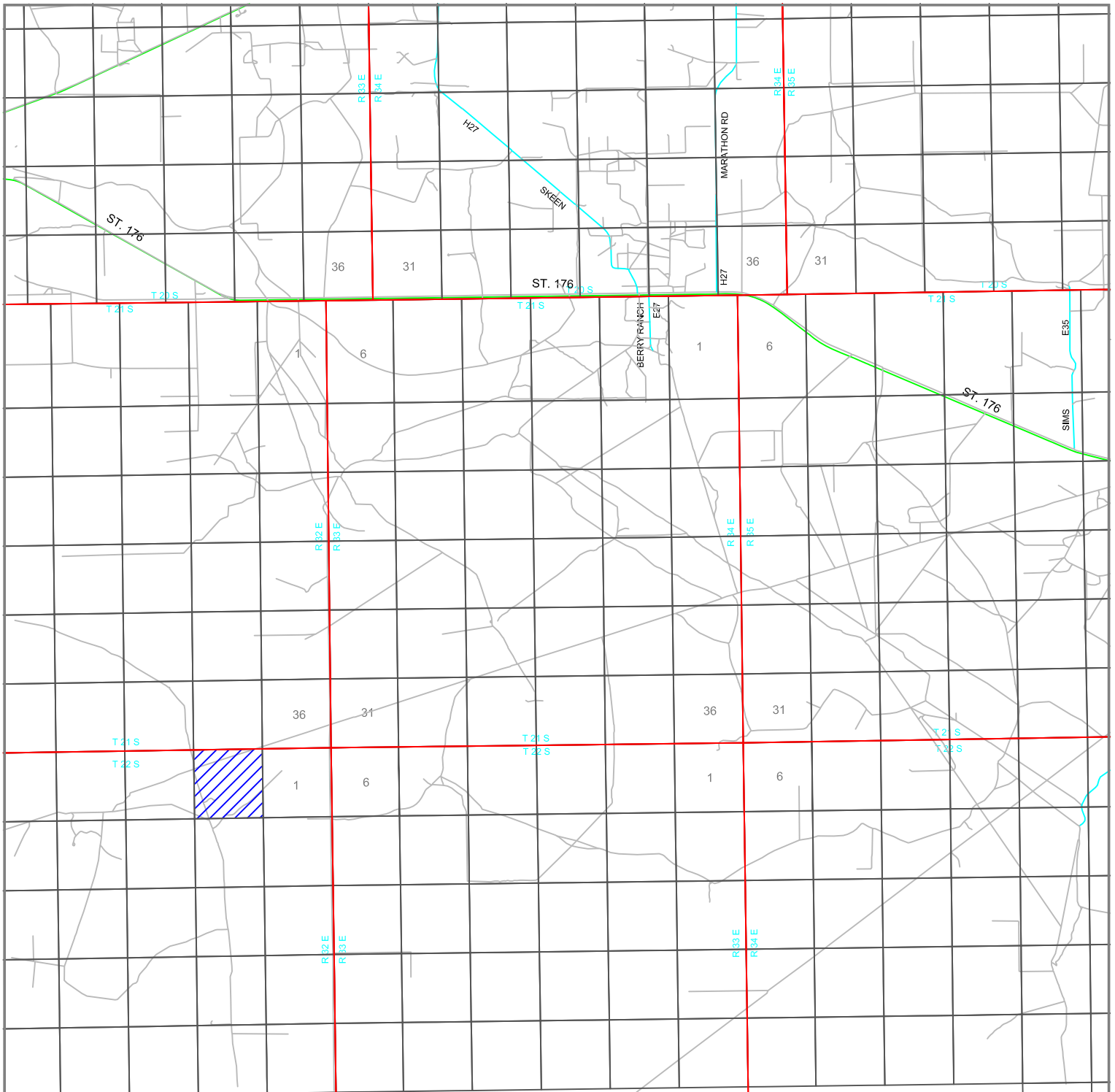
W.O. Number: KJG 35112

Survey Date: 07-22-2020

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



**ADVANCE  
 ENERGY  
 PARTNERS,  
 LLC**



### ANDERSON FED COM 504H

Located 630' FNL and 958' FEL  
Section 2, Township 22 South, Range 32 East,  
N.M.P.M., Lea County, New Mexico.



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

0 1 MI 2 MI 3 MI 4 MI

SCALE: 1" = 2 MILES

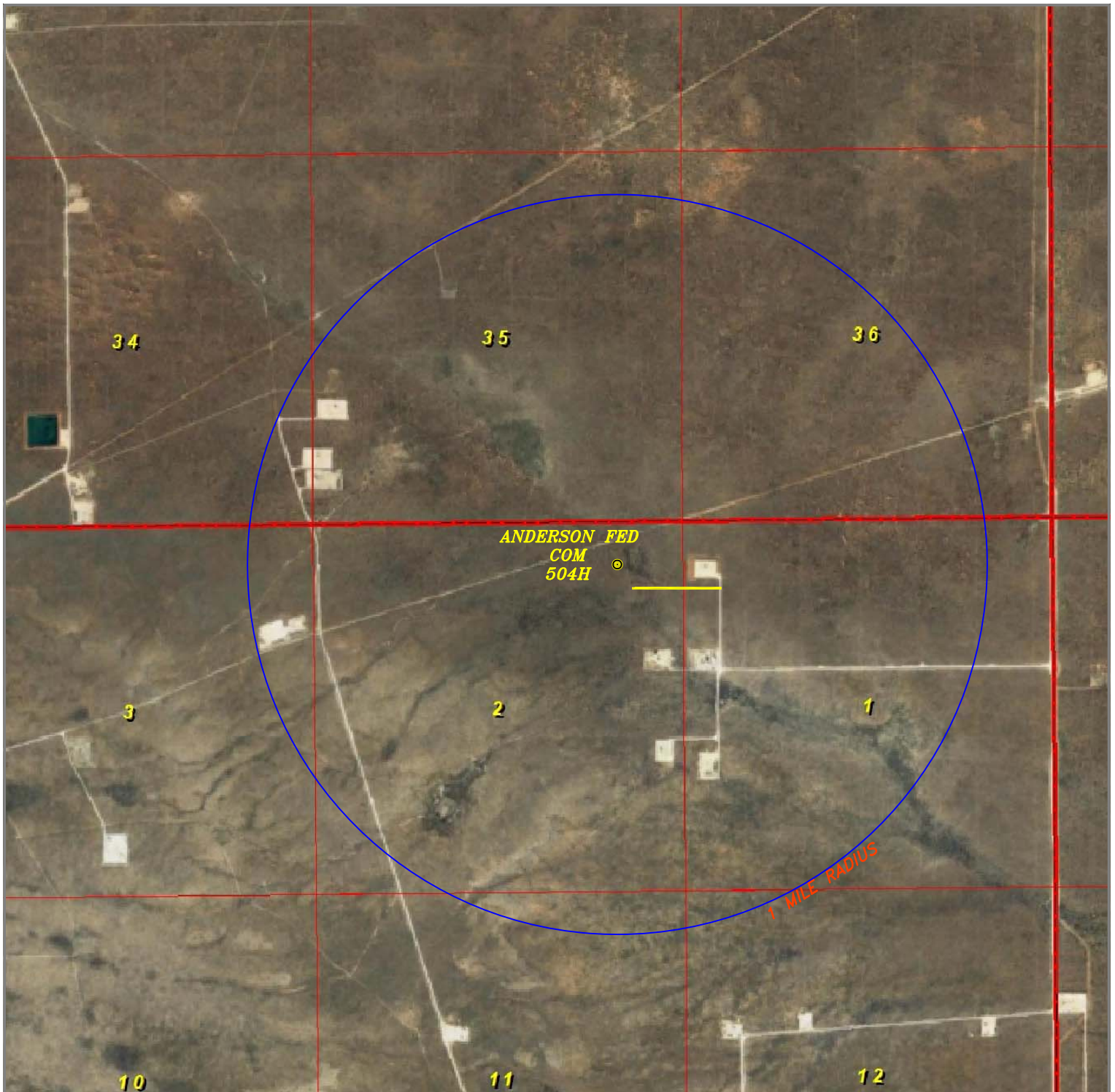
W.O. Number: KJG 35112

Survey Date: 07-22-2020

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



**ADVANCE  
ENERGY  
PARTNERS,  
LLC**



### ANDERSON FED COM 504H

Located 630' FNL and 958' FEL  
Section 2, Township 22 South, Range 32 East,  
N.M.P.M., Lea County, New Mexico.



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

0' 1000' 2000' 3000' 1500'

SCALE: 1" = 2000'

W.O. Number: KJG 35112

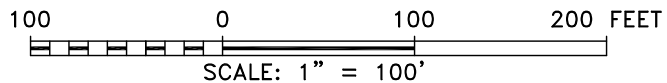
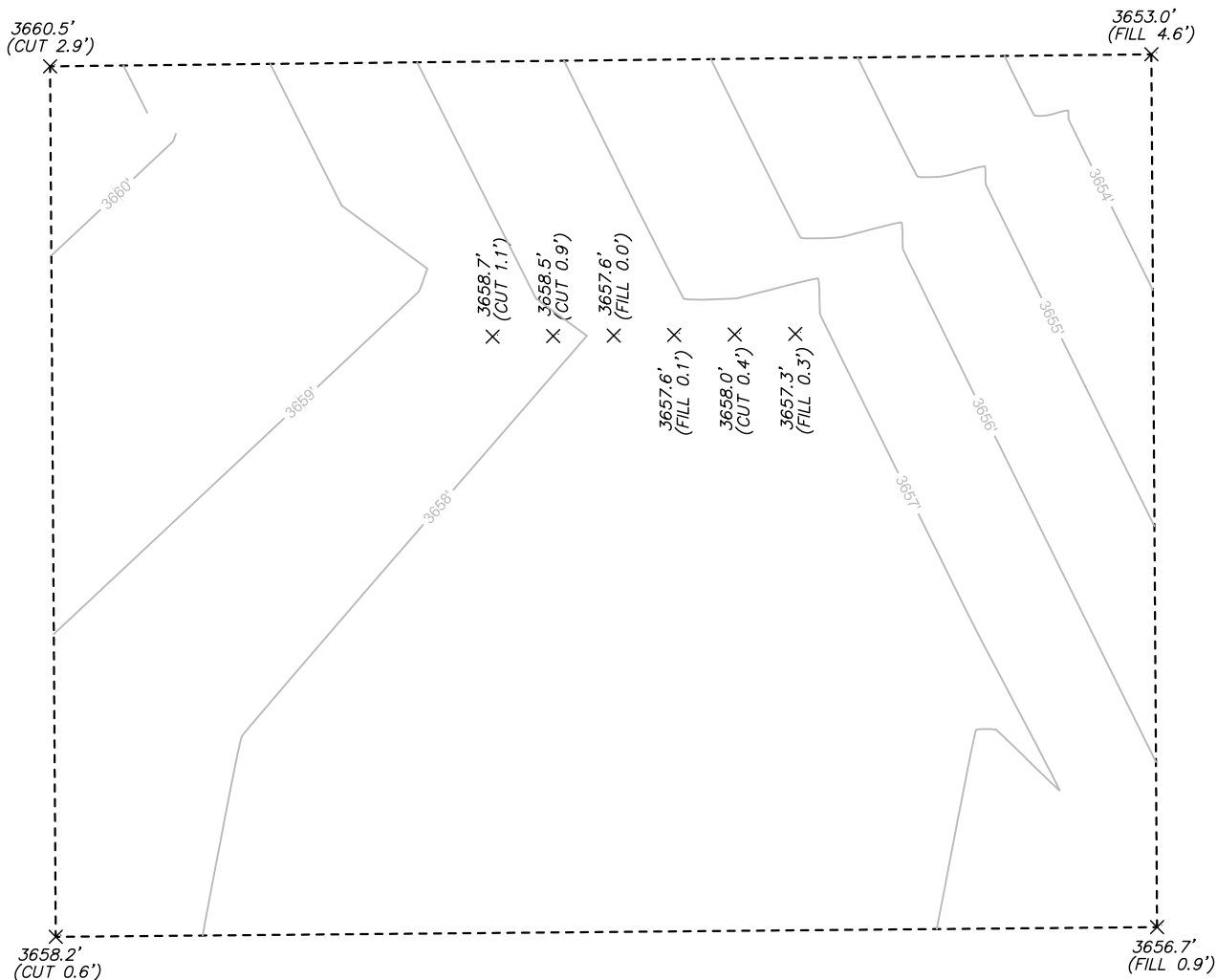
Survey Date: 07-22-2020

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



**ADVANCE  
ENERGY  
PARTNERS,  
LLC**

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



**ADVANCE ENERGY PARTNERS, LLC**

REF: ANDERSON FED COM PAD A / CUT & FILL

THE ANDERSON FED COM PAD A LOCATED IN  
SECTION 2, TOWNSHIP 22 SOUTH, RANGE 32 EAST.  
N.M.P.M., LEA COUNTY, NEW MEXICO.

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1120 N. West County Rd. (575) 392-2206 - Fax  
Hobbs, New Mexico 88241 [basinsurveys.com](http://basinsurveys.com)

|                    |                   |                  |                         |                     |
|--------------------|-------------------|------------------|-------------------------|---------------------|
| W.O. Number: 35112 | Drawn By: K. GOAD | Date: 07-23-2020 | Survey Date: 07-22-2020 | Sheet 1 of 1 Sheets |
|--------------------|-------------------|------------------|-------------------------|---------------------|

Submit 1 Copy To Appropriate District Office  
 District I – (575) 393-6161  
 1625 N. French Dr., Hobbs, NM 88240  
 District II – (575) 748-1283  
 811 S. First St., Artesia, NM 88210  
 District III – (505) 334-6178  
 1000 Rio Brazos Rd., Aztec, NM 87410  
 District IV – (505) 476-3460  
 1220 S. St. Francis Dr., Santa Fe, NM 87505

State of New Mexico  
 Energy, Minerals and Natural Resources

Form C-103  
 Revised July 18, 2013

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

|                                                                                                                                                                                                                         |  |                                                                                                     |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|-----------------------------------------------------------------------------------------------------|
| <b>SUNDRY NOTICES AND REPORTS ON WELLS</b><br>(DO NOT USE THIS FORM FOR PROPOSALS TO DRILL OR TO DEEPEN OR PLUG BACK TO A DIFFERENT RESERVOIR. USE "APPLICATION FOR PERMIT" (FORM C-101) FOR SUCH PROPOSALS.)           |  | WELL API NO.<br>30-025-48005                                                                        |
| 1. Type of Well: Oil Well <input checked="" type="checkbox"/> Gas Well <input type="checkbox"/> Other <input type="checkbox"/>                                                                                          |  | 5. Indicate Type of Lease<br>STATE <input checked="" type="checkbox"/> FEE <input type="checkbox"/> |
| 2. Name of Operator<br>Advance Energy Partners Hat Mesa                                                                                                                                                                 |  | 6. State Oil & Gas Lease No.                                                                        |
| 3. Address of Operator<br>11490 Westheimer Rd, Houston, TX 77077                                                                                                                                                        |  | 7. Lease Name or Unit Agreement Name<br>ANDERSON FEDERAL COM                                        |
| 4. Well Location<br>Unit Letter <u>Lot 1</u> : <u>630</u> feet from the <u>North</u> line and <u>958</u> feet from the <u>East</u> line<br>Section <u>2</u> Township <u>22S</u> Range <u>32E</u> NMPM County <u>LEA</u> |  | 8. Well Number <u>504H</u>                                                                          |
| 11. Elevation (Show whether DR, RKB, RT, GR, etc.)<br>3658'                                                                                                                                                             |  | 9. OGRID Number<br>372417                                                                           |
|                                                                                                                                                                                                                         |  | 10. Pool Name or Wildcat<br>RED TANK;BONE SPRING                                                    |

12. Check Appropriate Box to Indicate Nature of Notice, Report or Other Data

| NOTICE OF INTENTION TO:                        |                                           | SUBSEQUENT REPORT OF:                            |                                          |
|------------------------------------------------|-------------------------------------------|--------------------------------------------------|------------------------------------------|
| PERFORM REMEDIAL WORK <input type="checkbox"/> | PLUG AND ABANDON <input type="checkbox"/> | REMEDIAL WORK <input type="checkbox"/>           | ALTERING CASING <input type="checkbox"/> |
| TEMPORARILY ABANDON <input type="checkbox"/>   | CHANGE PLANS <input type="checkbox"/>     | COMMENCE DRILLING OPNS. <input type="checkbox"/> | P AND A <input type="checkbox"/>         |
| PULL OR ALTER CASING <input type="checkbox"/>  | MULTIPLE COMPL <input type="checkbox"/>   | CASING/CEMENT JOB <input type="checkbox"/>       |                                          |
| DOWNHOLE COMMINGLE <input type="checkbox"/>    |                                           |                                                  |                                          |
| CLOSED-LOOP SYSTEM <input type="checkbox"/>    |                                           |                                                  |                                          |
| OTHER: <input type="checkbox"/>                |                                           | OTHER: <input checked="" type="checkbox"/>       |                                          |

13. Describe proposed or completed operations. (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work). SEE RULE 19.15.7.14 NMAC. For Multiple Completions: Attach wellbore diagram of proposed completion or recompletion.

- 2/3/21: Pressure test casing to 9500 psi for 30 minutes.
- 2/10/21-3/1/21: Perforate from 11,250' – 17641' (1968). Frac with 16,213,430 lbs sand and 19,012,518 gal fluid.
- 3/18/21-3/19/21: Drill all plugs out and clean out to a PBTD of 17,655'.
- 3/24/21: Begin flowback. Ready to produce.
- 5/16/21: Run 2-7/8" production tubing and ESP. EOT @ 10,208'

Spud Date:

12/06/20

Rig Release Date:

01/19/21

I hereby certify that the information above is true and complete to the best of my knowledge and belief.

SIGNATURE:

TITLE: Sr. Eng. Tech

DATE:

8/1/22

PRINT NAME: Eileen M Kosakowski

E-mail address: [ekosakowski@advanceenergypartners.com](mailto:ekosakowski@advanceenergypartners.com)

PHONE: 832-672-4604

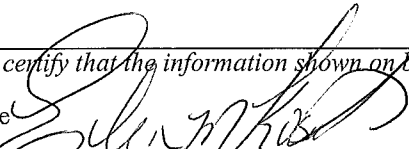
**For State Use Only**

APPROVED BY:

TITLE

DATE

Conditions of Approval (if any):

|                                                                                                                                                                                                                                                                                                                                                                                           |                                  |                                                                                |                                                                                                                                                    |                   |                                                  |                                                                                                                                                                       |                                                        |                                                   |          |               |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------|--------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------|-------------------|--------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------|---------------------------------------------------|----------|---------------|
| Submit To Appropriate District Office<br>Two Copies<br>District I<br>1625 N. French Dr., Hobbs, NM 88240<br>District II<br>811 S. First St., Artesia, NM 88210<br>District III<br>1000 Rio Brazos Rd., Aztec, NM 87410<br>District IV<br>1220 S. St. Francis Dr., Santa Fe, NM 87505                                                                                                      |                                  |                                                                                | State of New Mexico<br>Energy, Minerals and Natural Resources<br><br>Oil Conservation Division<br>1220 South St. Francis Dr.<br>Santa Fe, NM 87505 |                   |                                                  | Form C-105<br>Revised April 3, 2017                                                                                                                                   |                                                        |                                                   |          |               |
|                                                                                                                                                                                                                                                                                                                                                                                           |                                  |                                                                                | 1. WELL API NO.<br>30-025-48005                                                                                                                    |                   |                                                  |                                                                                                                                                                       |                                                        |                                                   |          |               |
|                                                                                                                                                                                                                                                                                                                                                                                           |                                  |                                                                                | 2. Type of Lease<br><input checked="" type="checkbox"/> STATE <input type="checkbox"/> FEE <input type="checkbox"/> FED/INDIAN                     |                   |                                                  |                                                                                                                                                                       |                                                        |                                                   |          |               |
|                                                                                                                                                                                                                                                                                                                                                                                           |                                  |                                                                                | 3. State Oil & Gas Lease No.                                                                                                                       |                   |                                                  |                                                                                                                                                                       |                                                        |                                                   |          |               |
| <b>WELL COMPLETION OR RECOMPLETION REPORT AND LOG</b>                                                                                                                                                                                                                                                                                                                                     |                                  |                                                                                |                                                                                                                                                    |                   |                                                  |                                                                                                                                                                       |                                                        |                                                   |          |               |
| 4. Reason for filing:<br><br><input checked="" type="checkbox"/> <b>COMPLETION REPORT</b> (Fill in boxes #1 through #31 for State and Fee wells only)<br><br><input type="checkbox"/> <b>C-144 CLOSURE ATTACHMENT</b> (Fill in boxes #1 through #9, #15 Date Rig Released and #32 and/or #33; attach this and the plat to the C-144 closure report in accordance with 19.15.17.13.K NMAC) |                                  |                                                                                |                                                                                                                                                    |                   |                                                  | 5. Lease Name or Unit Agreement Name<br>ANDERSON FEDERAL COM                                                                                                          |                                                        |                                                   |          |               |
|                                                                                                                                                                                                                                                                                                                                                                                           |                                  |                                                                                |                                                                                                                                                    |                   |                                                  | 6. Well Number:<br>504H                                                                                                                                               |                                                        |                                                   |          |               |
| 7. Type of Completion:<br><input checked="" type="checkbox"/> NEW WELL <input type="checkbox"/> WORKOVER <input type="checkbox"/> DEEPENING <input type="checkbox"/> PLUGBACK <input type="checkbox"/> DIFFERENT RESERVOIR <input type="checkbox"/> OTHER                                                                                                                                 |                                  |                                                                                |                                                                                                                                                    |                   |                                                  |                                                                                                                                                                       |                                                        |                                                   |          |               |
| 8. Name of Operator<br>Advance Energy Partners Hat Mesa, LLC                                                                                                                                                                                                                                                                                                                              |                                  |                                                                                |                                                                                                                                                    |                   |                                                  | 9. OGRID<br>372417                                                                                                                                                    |                                                        |                                                   |          |               |
| 10. Address of Operator<br>11490 Westheimer RD, Suite 950<br>Houston, TX 77077                                                                                                                                                                                                                                                                                                            |                                  |                                                                                |                                                                                                                                                    |                   |                                                  | 11. Pool name or Wildcat<br>RED TANK; BONE SPRING                                                                                                                     |                                                        |                                                   |          |               |
| 12. Location                                                                                                                                                                                                                                                                                                                                                                              | Unit Ltr                         | Section                                                                        | Township                                                                                                                                           | Range             | Lot                                              | Feet from the                                                                                                                                                         | N/S Line                                               | Feet from the                                     | E/W Line | County        |
| Surface:                                                                                                                                                                                                                                                                                                                                                                                  | LOT 1                            | 2                                                                              | 22S                                                                                                                                                | 32E               |                                                  | 630                                                                                                                                                                   | N                                                      | 958                                               | E        | LEA           |
| BH:                                                                                                                                                                                                                                                                                                                                                                                       | P                                | 26                                                                             | 21S                                                                                                                                                | 32E               |                                                  | 1298                                                                                                                                                                  | S                                                      | 353                                               | E        | LEA           |
| 13. Date Spudded<br>12/6/20                                                                                                                                                                                                                                                                                                                                                               | 14. Date T.D. Reached<br>1/17/21 | 15. Date Rig Released<br>1/19/21                                               |                                                                                                                                                    |                   | 16. Date Completed (Ready to Produce)<br>3/24/21 |                                                                                                                                                                       | 17. Elevations (DF and RKB, RT, GR, etc.)<br>3,658' GR |                                                   |          |               |
| 18. Total Measured Depth of Well<br>17,747'                                                                                                                                                                                                                                                                                                                                               |                                  |                                                                                | 19. Plug Back Measured Depth<br>17,655'                                                                                                            |                   | 20. Was Directional Survey Made?<br>YES          |                                                                                                                                                                       |                                                        | 21. Type Electric and Other Logs Run<br>Gamma Ray |          |               |
| 22. Producing Interval(s), of this completion - Top, Bottom, Name<br>11,250' - 17,641' Red Tank; Bone Spring                                                                                                                                                                                                                                                                              |                                  |                                                                                |                                                                                                                                                    |                   |                                                  |                                                                                                                                                                       |                                                        |                                                   |          |               |
| <b>23. CASING RECORD (Report all strings set in well)</b>                                                                                                                                                                                                                                                                                                                                 |                                  |                                                                                |                                                                                                                                                    |                   |                                                  |                                                                                                                                                                       |                                                        |                                                   |          |               |
| CASING SIZE                                                                                                                                                                                                                                                                                                                                                                               |                                  | WEIGHT LB./FT.                                                                 |                                                                                                                                                    | DEPTH SET         |                                                  | HOLE SIZE                                                                                                                                                             |                                                        | CEMENTING RECORD                                  |          | AMOUNT PULLED |
| 13.375"                                                                                                                                                                                                                                                                                                                                                                                   |                                  | 54.4#                                                                          |                                                                                                                                                    | 1,295'            |                                                  | 17.5"                                                                                                                                                                 |                                                        | 715                                               |          |               |
| 9.625"                                                                                                                                                                                                                                                                                                                                                                                    |                                  | 40#                                                                            |                                                                                                                                                    | 3,637'/4,929'     |                                                  | 12.25"                                                                                                                                                                |                                                        | 1675                                              |          |               |
| 5.5"                                                                                                                                                                                                                                                                                                                                                                                      |                                  | 20#                                                                            |                                                                                                                                                    | 17,732'           |                                                  | 8.5"                                                                                                                                                                  |                                                        | 2500                                              |          |               |
|                                                                                                                                                                                                                                                                                                                                                                                           |                                  |                                                                                |                                                                                                                                                    |                   |                                                  |                                                                                                                                                                       |                                                        |                                                   |          |               |
|                                                                                                                                                                                                                                                                                                                                                                                           |                                  |                                                                                |                                                                                                                                                    |                   |                                                  |                                                                                                                                                                       |                                                        |                                                   |          |               |
| <b>24. LINER RECORD</b>                                                                                                                                                                                                                                                                                                                                                                   |                                  |                                                                                |                                                                                                                                                    |                   |                                                  |                                                                                                                                                                       |                                                        |                                                   |          |               |
| SIZE                                                                                                                                                                                                                                                                                                                                                                                      | TOP                              | BOTTOM                                                                         |                                                                                                                                                    | SACKS CEMENT      |                                                  | SCREEN                                                                                                                                                                |                                                        |                                                   |          |               |
|                                                                                                                                                                                                                                                                                                                                                                                           |                                  |                                                                                |                                                                                                                                                    |                   |                                                  |                                                                                                                                                                       |                                                        |                                                   |          |               |
|                                                                                                                                                                                                                                                                                                                                                                                           |                                  |                                                                                |                                                                                                                                                    |                   |                                                  |                                                                                                                                                                       |                                                        |                                                   |          |               |
| 26. Perforation record (interval, size, and number)<br><br>11,250' - 17,641' (1968) holes                                                                                                                                                                                                                                                                                                 |                                  |                                                                                |                                                                                                                                                    |                   |                                                  | 27. ACID, SHOT, FRACTURE, CEMENT, SQUEEZE, ETC.<br>DEPTH INTERVAL    AMOUNT AND KIND MATERIAL USED<br>11,250' - 17,641'    16,213,430 lbs sand, 19,012,518 bbls water |                                                        |                                                   |          |               |
| <b>28. PRODUCTION</b>                                                                                                                                                                                                                                                                                                                                                                     |                                  |                                                                                |                                                                                                                                                    |                   |                                                  |                                                                                                                                                                       |                                                        |                                                   |          |               |
| Date First Production<br>4/12/21                                                                                                                                                                                                                                                                                                                                                          |                                  | Production Method (Flowing, gas lift, pumping - Size and type pump)<br>Flowing |                                                                                                                                                    |                   |                                                  | Well Status (Prod. or Shut-in)<br>Prod                                                                                                                                |                                                        |                                                   |          |               |
| Date of Test<br>4/21/21                                                                                                                                                                                                                                                                                                                                                                   | Hours Tested<br>24               | Choke Size<br>60/64                                                            | Prod'n For Test<br>Period                                                                                                                          | Oil - Bbl<br>1094 | Gas - MCF<br>1117                                | Water - Bbl.<br>4837                                                                                                                                                  | Gas - Oil Ratio<br>1040                                |                                                   |          |               |
| Flow Tubing Press.<br>N/A                                                                                                                                                                                                                                                                                                                                                                 | Casing Pressure<br>746           | Calculated 24-Hour<br>Rate                                                     | Oil - Bbl.<br>1094                                                                                                                                 | Gas - MCF<br>1117 | Water - Bbl.<br>4837                             | Oil Gravity - API - (Corr.)<br>42.0                                                                                                                                   |                                                        |                                                   |          |               |
| 29. Disposition of Gas (Sold, used for fuel, vented, etc.)                                                                                                                                                                                                                                                                                                                                |                                  |                                                                                |                                                                                                                                                    |                   |                                                  |                                                                                                                                                                       |                                                        | 30. Test Witnessed By<br>Baron Chandler           |          |               |
| 31. List Attachments                                                                                                                                                                                                                                                                                                                                                                      |                                  |                                                                                |                                                                                                                                                    |                   |                                                  |                                                                                                                                                                       |                                                        |                                                   |          |               |
| 32. If a temporary pit was used at the well, attach a plat with the location of the temporary pit.                                                                                                                                                                                                                                                                                        |                                  |                                                                                |                                                                                                                                                    |                   |                                                  | 33. Rig Release Date: 1/19/21                                                                                                                                         |                                                        |                                                   |          |               |
| 34. If an on-site burial was used at the well, report the exact location of the on-site burial:                                                                                                                                                                                                                                                                                           |                                  |                                                                                |                                                                                                                                                    |                   |                                                  |                                                                                                                                                                       |                                                        |                                                   |          |               |
| Latitude _____                                                                                                                                                                                                                                                                                                                                                                            |                                  |                                                                                |                                                                                                                                                    |                   |                                                  | Longitude _____ NAD83                                                                                                                                                 |                                                        |                                                   |          |               |
| I hereby certify that the information shown on both sides of this form is true and complete to the best of my knowledge and belief                                                                                                                                                                                                                                                        |                                  |                                                                                |                                                                                                                                                    |                   |                                                  |                                                                                                                                                                       |                                                        |                                                   |          |               |
| Signature                                                                                                                                                                                                                                                                                              |                                  |                                                                                |                                                                                                                                                    |                   |                                                  | Date: 8/1/22                                                                                                                                                          |                                                        |                                                   |          |               |
| Printed Name: Eileen M Kosakowski                                                                                                                                                                                                                                                                                                                                                         |                                  |                                                                                | Title: Sr. Eng. Tech                                                                                                                               |                   |                                                  | E-mail Address: ekosakowski@advanceenergypartners.com                                                                                                                 |                                                        |                                                   |          |               |

This form is to be filed with the appropriate District Office of the Division not later than 20 days after the completion of any newly-drilled or deepened well and not later than 60 days after completion of closure. When submitted as a completion report, this shall be accompanied by one copy of all electrical and radio-activity logs run on the well and a summary of all special tests conducted, including drill stem tests. All depths reported shall be measured depths. In the case of directionally drilled wells, true vertical depths shall also be reported. For multiple completions, items 11, 12 and 26-31 shall be reported for each zone.

| Southeastern New Mexico |                                | Northwestern New Mexico |                  |
|-------------------------|--------------------------------|-------------------------|------------------|
| T. Anhy                 | T. Canyon                      | T. Ojo Alamo            | T. Penn A"       |
| T. Salt                 | T. Strawn                      | T. Kirtland             | T. Penn. "B"     |
| B. Salt                 | T. Atoka                       | T. Fruitland            | T. Penn. "C"     |
| T. Yates                | T. Miss                        | T. Pictured Cliffs      | T. Penn. "D"     |
| T. 7 Rivers             | T. Devonian                    | T. Cliff House          | T. Leadville     |
| T. Queen                | T. Silurian                    | T. Menefee              | T. Madison       |
| T. Grayburg             | T. Montoya                     | T. Point Lookout        | T. Elbert        |
| T. San Andres           | T. Simpson                     | T. Mancos               | T. McCracken     |
| T. Glorieta             | T. McKee                       | T. Gallup               | T. Ignacio Otzte |
| T. Paddock              | T. Ellenburger                 | Base Greenhorn          | T. Granite       |
| T. Blinebry             | T. Gr. Wash                    | T. Dakota               |                  |
| T. Tubb                 | T. Delaware Sand               | T. Morrison             |                  |
| T. Drinkard             | T. Bone Springs 9854MD/9837TVD | T. Todilto              |                  |
| T. Abo                  | T.2SS 10,413MD/10,393TVD       | T. Entrada              |                  |
| T. Wolfcamp             | T.                             | T. Wingate              |                  |
| T. Penn                 | T.                             | T. Chinle               |                  |
| T. Cisco (Bough C)      | T.                             | T. Permian              |                  |

No. 1, from.....to.....  
No. 2, from.....to.....  
No. 3, from.....to.....  
No. 4, from.....to.....

Include data on rate of water inflow and elevation to which water rose in hole.

No. 1, from.....to.....feet.....  
 No. 2, from.....to.....feet.....  
 No. 3, from.....to.....feet.....

| From | To | Thickness<br>In Feet | Lithology |
|------|----|----------------------|-----------|
|      |    |                      |           |

| From | To | Thickness<br>In Feet | Lithology |
|------|----|----------------------|-----------|
|      |    |                      |           |

Sante Fe Main Office  
Phone: (505) 476-3441

General Information  
Phone: (505) 629-6116

Online Phone Directory  
<https://www.emnrd.nm.gov/ocd/contact-us>

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

ACKNOWLEDGMENTS  
  
Action 130602

ACKNOWLEDGMENTS

|                                                                                                            |                                                        |
|------------------------------------------------------------------------------------------------------------|--------------------------------------------------------|
| Operator:<br><br>ADVANCE ENERGY PARTNERS HAT MESA, LLC<br>5400 LBJ Freeway, Suite 1500<br>Dallas, TX 75240 | OGRID:<br><br>372417                                   |
|                                                                                                            | Action Number:<br><br>130602                           |
|                                                                                                            | Action Type:<br><br>[C-104] Completion Packet (C-104C) |

ACKNOWLEDGMENTS

|                                     |                                                                                                                    |
|-------------------------------------|--------------------------------------------------------------------------------------------------------------------|
| <input checked="" type="checkbox"/> | I hereby certify that the required Water Use Report has been, or will be, submitted for this wells completion.     |
| <input checked="" type="checkbox"/> | I hereby certify that the required FracFocus disclosure has been, or will be, submitted for this wells completion. |

Sante Fe Main Office  
Phone: (505) 476-3441

General Information  
Phone: (505) 629-6116

Online Phone Directory  
<https://www.emnrd.nm.gov/ocd/contact-us>

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

CONDITIONS

Action 130602

CONDITIONS

|                                                                                                        |                                                    |
|--------------------------------------------------------------------------------------------------------|----------------------------------------------------|
| Operator:<br>ADVANCE ENERGY PARTNERS HAT MESA, LLC<br>5400 LBJ Freeway, Suite 1500<br>Dallas, TX 75240 | OGRID:<br>372417                                   |
|                                                                                                        | Action Number:<br>130602                           |
|                                                                                                        | Action Type:<br>[C-104] Completion Packet (C-104C) |

CONDITIONS

| Created By     | Condition | Condition Date |
|----------------|-----------|----------------|
| crystal.walker | None      | 10/2/2025      |