

**District I**

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

**District II**

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

**District III**

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

**District IV**

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

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

Form C-101

August 1, 2011

Permit 294452

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

|                                                                                                                             |                                         |                               |
|-----------------------------------------------------------------------------------------------------------------------------|-----------------------------------------|-------------------------------|
| 1. Operator Name and Address<br>ADVANCE ENERGY PARTNERS HAT MESA, LLC<br>11490 Westheimer Rd., Ste 950<br>Houston, TX 77077 |                                         | 2. OGRID Number<br>372417     |
|                                                                                                                             |                                         | 3. API Number<br>30-025-48600 |
| 4. Property Code<br>325950                                                                                                  | 5. Property Name<br>DAGGER LAKE 5 STATE | 6. Well No.<br>301H           |

**7. Surface Location**

|               |              |                 |              |              |                   |               |                  |               |               |
|---------------|--------------|-----------------|--------------|--------------|-------------------|---------------|------------------|---------------|---------------|
| UL - Lot<br>L | Section<br>5 | Township<br>22S | Range<br>33E | Lot Idn<br>L | Feet From<br>2140 | N/S Line<br>S | Feet From<br>320 | E/W Line<br>W | County<br>Lea |
|---------------|--------------|-----------------|--------------|--------------|-------------------|---------------|------------------|---------------|---------------|

**8. Proposed Bottom Hole Location**

|               |               |                 |              |              |                  |               |                  |               |               |
|---------------|---------------|-----------------|--------------|--------------|------------------|---------------|------------------|---------------|---------------|
| UL - Lot<br>D | Section<br>32 | Township<br>21S | Range<br>33E | Lot Idn<br>D | Feet From<br>100 | N/S Line<br>N | Feet From<br>330 | E/W Line<br>W | County<br>Lea |
|---------------|---------------|-----------------|--------------|--------------|------------------|---------------|------------------|---------------|---------------|

**9. Pool Information**

|                  |       |
|------------------|-------|
| LEGG;BONE SPRING | 37870 |
|------------------|-------|

**Additional Well Information**

|                           |                             |                                        |                         |                                    |
|---------------------------|-----------------------------|----------------------------------------|-------------------------|------------------------------------|
| 11. Work Type<br>New Well | 12. Well Type<br>OIL        | 13. Cable/Rotary                       | 14. Lease Type<br>State | 15. Ground Level Elevation<br>3658 |
| 16. Multiple<br>N         | 17. Proposed Depth<br>19060 | 18. Formation<br>Bone Spring           | 19. Contractor          | 20. Spud Date<br>4/6/2021          |
| Depth to Ground water     |                             | Distance from nearest fresh water well |                         | Distance to nearest surface water  |

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

| Type | Hole Size | Casing Size | Casing Weight/ft | Setting Depth | Sacks of Cement | Estimated TOC |
|------|-----------|-------------|------------------|---------------|-----------------|---------------|
| Surf | 17.5      | 13.375      | 54.5             | 1800          | 500             | 0             |
| Int1 | 12.25     | 9.625       | 40               | 5300          | 330             | 4000          |
| Int1 | 12.25     | 9.625       | 40               | 4000          | 950             | 0             |
| Prod | 8.5       | 5.5         | 20               | 19060         | 2300            | 0             |

**Casing/Cement Program: Additional Comments**

|  |
|--|
|  |
|--|

**22. Proposed Blowout Prevention Program**

| Type       | Working Pressure | Test Pressure | Manufacturer |
|------------|------------------|---------------|--------------|
| Double Ram | 5000             | 5000          |              |

|                                                                                                                                                                                                                                                                                                    |                                  |                                 |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------|---------------------------------|
| 23. I hereby certify that the information given above is true and complete to the best of my knowledge and belief.<br>I further certify I have complied with 19.15.14.9 (A) NMAC <input checked="" type="checkbox"/> and/or 19.15.14.9 (B) NMAC <input checked="" type="checkbox"/> if applicable. | <b>OIL CONSERVATION DIVISION</b> |                                 |
| Signature:                                                                                                                                                                                                                                                                                         |                                  |                                 |
| Printed Name: Electronically filed by Braden Harris                                                                                                                                                                                                                                                | Approved By: Paul F Kautz        |                                 |
| Title: Vice President                                                                                                                                                                                                                                                                              | Title: Geologist                 |                                 |
| Email Address: bharris@advanceenergypartners.com                                                                                                                                                                                                                                                   | Approved Date: 4/7/2021          | Expiration Date: 4/7/2023       |
| Date: 4/5/2021                                                                                                                                                                                                                                                                                     | Phone: 406-300-3310              | Conditions of Approval Attached |

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Phone (505) 334-6176 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☐ AMENDED REPORT**WELL LOCATION AND ACREAGE DEDICATION PLAT**

|                                   |                                                          |                           |                                       |
|-----------------------------------|----------------------------------------------------------|---------------------------|---------------------------------------|
| API Number<br><b>30-025-48600</b> |                                                          | Pool Code<br><b>37870</b> | Pool Name<br><b>LEGG; BONE SPRING</b> |
| Property Code<br><b>325950</b>    | Property Name<br><b>DAGGER LAKE 5 STATE</b>              |                           | Well Number<br><b>301H</b>            |
| OGRID No.<br><b>372417</b>        | Operator Name<br><b>ADVANCE ENERGY PARTNERS HAT MESA</b> |                           | Elevation<br><b>3658'</b>             |

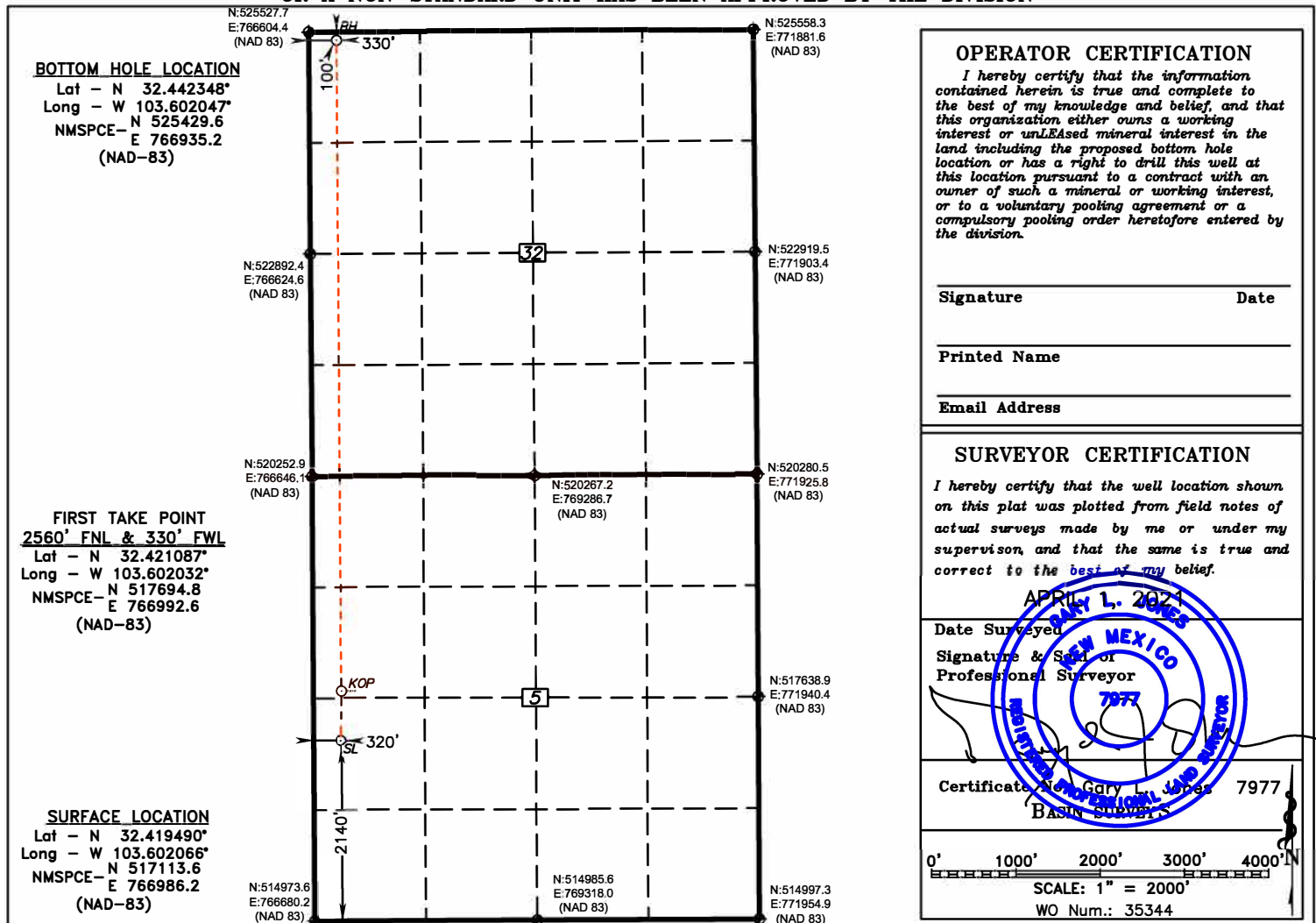
**Surface Location**

| UL or lot No. | Section | Township | Range | Lot Idn | Feet from the | SOUTH/South line | Feet from the | East/West line | County |
|---------------|---------|----------|-------|---------|---------------|------------------|---------------|----------------|--------|
| L             | 5       | 22 S     | 33 E  |         | 2140          | SOUTH            | 320           | WEST           | LEA    |

**Bottom Hole Location If Different From Surface**

| UL or lot No.   | Section         | Township           | Range     | Lot Idn | Feet from the | SOUTH/South line | Feet from the | East/West line | County |
|-----------------|-----------------|--------------------|-----------|---------|---------------|------------------|---------------|----------------|--------|
| D               | 32              | 21 S               | 33 E      |         | 100           | NORTH            | 330           | WEST           | LEA    |
| Dedicated Acres | Joint or Infill | Consolidation Code | Order No. |         |               |                  |               |                |        |

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



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## GAS CAPTURE PLAN

Date: 4/7/2021

☒ Original

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

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

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

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

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

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

| Well Name                 | API          | Well Location (ULSTR) | Footages    | Expected MCF/D | Flared or Vented | Comments                                 |
|---------------------------|--------------|-----------------------|-------------|----------------|------------------|------------------------------------------|
| DAGGER LAKE 5 STATE #301H | 30-025-48600 | L-5-22S-33E           | 2140S 0320W | 1500           | Flared           | Flare during initial testing and cleanup |

**Gathering System and Pipeline Notification**

Well(s) will be connected to a production facility after flowback operations are complete, if gas transporter system is in place. The gas produced from production facility is dedicated to TARGA MIDSTREAM SERVICES LLC and will be connected to TARGA MIDSTREAM SERVICES LLC Low Pressure gathering system located in Lea County, New Mexico. It will require 200' of pipeline to connect the facility to Low Pressure gathering system. ADVANCE ENERGY PARTNERS HAT MESA, LLC provides (periodically) to TARGA MIDSTREAM SERVICES LLC a drilling, completion and estimated first production date for wells that are scheduled to be drilled in the foreseeable future. In addition, ADVANCE ENERGY PARTNERS HAT MESA, LLC and TARGA MIDSTREAM SERVICES LLC have periodic conference calls to discuss changes to drilling and completion schedules. Gas from these wells will be processed at TARGA MIDSTREAM SERVICES LLC Processing Plant located in Sec. 05, Twn. 22S, Rng. 33E, Lea County, New Mexico. The actual flow of the gas will be based on compression operating parameters and gathering system pressures.

**Flowback Strategy**

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

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

**Alternatives to Reduce Flaring**

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

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

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Form APD Conditions

Permit 294452

**PERMIT CONDITIONS OF APPROVAL**

|                                                                                                                                    |                                    |
|------------------------------------------------------------------------------------------------------------------------------------|------------------------------------|
| Operator Name and Address:<br>ADVANCE ENERGY PARTNERS HAT MESA, LLC [372417]<br>11490 Westheimer Rd., Ste 950<br>Houston, TX 77077 | API Number:<br>30-025-48600        |
|                                                                                                                                    | Well:<br>DAGGER LAKE 5 STATE #301H |

| OCD<br>Reviewer | Condition                                                                                                                                                                                                                                                                                                                                                                                              |
|-----------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| pkautz          | Notify OCD 24 hours prior to casing & cement                                                                                                                                                                                                                                                                                                                                                           |
| pkautz          | Will require a File As Drilled C-102 and a Directional Survey with the C-104                                                                                                                                                                                                                                                                                                                           |
| pkautz          | Once the well is spud, to prevent ground water contamination through whole or partial conduits from the surface, the operator shall drill without interruption through the fresh water zone or zones and shall immediately set in cement the water protection string                                                                                                                                   |
| pkautz          | 1) SURFACE & INTERMEDIATE CASING - Cement must circulate to surface -- 2) PRODUCTION CASING - Cement must tie back into intermediate casing --                                                                                                                                                                                                                                                         |
| pkautz          | If cement does not circulate to surface, must run temperature survey or other log to determine top of cement                                                                                                                                                                                                                                                                                           |
| pkautz          | Surface casing must be set 25' below top of Rustler Anhydrite in order to seal off protectable water                                                                                                                                                                                                                                                                                                   |
| pkautz          | 1)- The Operator is to notify NMOCD by sundry (Form C-103) within ten (10) days of the well being spud 2)- Drilling Sundries Form C-103 (Casing and Cement test are to be submitted within 10 days 3)- Completion Reports & Logs are to be submitted within 45 days 4)- Deviation / Directional Drill Survey are to be filed with or prior to C-104                                                    |
| pkautz          | It is the operator's responsibility to monitor cancellation dates of approved APDs. APD's are good for 2 years and may be extended for one year. Only one 1 year extension will be granted if submitted by C-103 before expiration date. After expiration date or after a 1 year extension must submit new APD. If an APD expires and if site construction has occurred, site remediation is required. |
| pkautz          | Stage Tool 1) Must notify OCD Hobbs Office prior to running Stage Tool at 5753703186 2) If using Stage Tool on Surface casing, Stage Tool must be set greater than 350' from surface and a minimum of 200 feet above surface shoe. 3) When using a Stage Tool on Intermediate or Production Casing Stage must be a minimum of 50 feet below previous casing shoe.                                      |



## **Advance Energy Partners**

**Hat Mesa**

**Dagger Lake 5 State - Pad D**

**Dagger Lake 5 State 301H**

**Dagger Lake 5 State 301H**

**Plan: Dagger Lake 5 State 301H - Prelim**

## **Standard Planning Report**

**05 April, 2021**



## Planning Report

|                  |                                   |                                     |                                        |
|------------------|-----------------------------------|-------------------------------------|----------------------------------------|
| <b>Database:</b> | EDM 5000.16 Single User Db        | <b>Local Co-ordinate Reference:</b> | Well Dagger Lake 5 State 301H          |
| <b>Company:</b>  | Advance Energy Partners           | <b>TVD Reference:</b>               | WELL @ 3690.5usft (Original Well Elev) |
| <b>Project:</b>  | Hat Mesa                          | <b>MD Reference:</b>                | WELL @ 3690.5usft (Original Well Elev) |
| <b>Site:</b>     | Dagger Lake 5 State - Pad D       | <b>North Reference:</b>             | Grid                                   |
| <b>Well:</b>     | Dagger Lake 5 State 301H          | <b>Survey Calculation Method:</b>   | Minimum Curvature                      |
| <b>Wellbore:</b> | Dagger Lake 5 State 301H          |                                     |                                        |
| <b>Design:</b>   | Dagger Lake 5 State 301H - Prelim |                                     |                                        |

|                    |                           |                      |                |
|--------------------|---------------------------|----------------------|----------------|
| <b>Project</b>     | Hat Mesa, Lea County, NM  |                      |                |
| <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                  | Dagger Lake 5 State - Pad D |              |                 |            |                  |
|-----------------------|-----------------------------|--------------|-----------------|------------|------------------|
| Site Position:        |                             | Northing:    | 517,114.82 usft | Latitude:  | 32° 25' 10.171 N |
| From:                 | Lat/Long                    | Easting:     | 767,046.60 usft | Longitude: | 103° 36' 6.732 W |
| Position Uncertainty: | 0.0 usft                    | Slot Radius: | 13-3/16 "       |            |                  |

| Well                 | Dagger Lake 5 State 301H |          |                     |                 |               |                  |
|----------------------|--------------------------|----------|---------------------|-----------------|---------------|------------------|
| Well Position        | +N/-S                    | 0.0 usft | Northing:           | 517,113.68 usft | Latitude:     | 32° 25' 10.164 N |
|                      | +E/-W                    | 0.0 usft | Easting:            | 766,986.13 usft | Longitude:    | 103° 36' 7.438 W |
| Position Uncertainty |                          | 0.0 usft | Wellhead Elevation: | usft            | Ground Level: | 3,658.0 usft     |
| Grid Convergence:    |                          | 0.39 °   |                     |                 |               |                  |

|                  |                          |                    |                        |                      |                            |
|------------------|--------------------------|--------------------|------------------------|----------------------|----------------------------|
| <b>Wellbore</b>  | Dagger Lake 5 State 301H |                    |                        |                      |                            |
| <b>Magnetics</b> | <b>Model Name</b>        | <b>Sample Date</b> | <b>Declination (°)</b> | <b>Dip Angle (°)</b> | <b>Field Strength (nT)</b> |
|                  | IGRF2015                 | 4/1/2021           | 6.57                   | 60.19                | 47,658.58654762            |

|                          |                                   |                     |                      |                      |  |
|--------------------------|-----------------------------------|---------------------|----------------------|----------------------|--|
| <b>Design</b>            | Dagger Lake 5 State 301H - Prelim |                     |                      |                      |  |
| <b>Audit Notes:</b>      |                                   |                     |                      |                      |  |
| <b>Version:</b>          | <b>Phase:</b>                     | PROTOTYPE           | <b>Tie On Depth:</b> | 0.0                  |  |
| <b>Vertical Section:</b> | <b>Depth From (TVD) (usft)</b>    | <b>+N/-S (usft)</b> | <b>+E/-W (usft)</b>  | <b>Direction (°)</b> |  |
|                          | 0.0                               | 0.0                 | 0.0                  | 359.65               |  |

|                                 |                        |                          |                                   |                 |  |
|---------------------------------|------------------------|--------------------------|-----------------------------------|-----------------|--|
| <b>Plan Survey Tool Program</b> | <b>Date</b>            | 4/2/2021                 |                                   |                 |  |
| <b>Depth From (usft)</b>        | <b>Depth To (usft)</b> | <b>Survey (Wellbore)</b> | <b>Tool Name</b>                  | <b>Remarks</b>  |  |
| 1                               | 0.0                    | 18,012.4                 | Dagger Lake 5 State 301H - Prelim | MWD+HRGM        |  |
|                                 |                        |                          |                                   | OWSG MWD + HRGM |  |

|                              |                        |                    |                              |                     |                     |                                |                               |                              |                |                       |
|------------------------------|------------------------|--------------------|------------------------------|---------------------|---------------------|--------------------------------|-------------------------------|------------------------------|----------------|-----------------------|
| <b>Plan Sections</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>Dogleg Rate (°/100usft)</b> | <b>Build Rate (°/100usft)</b> | <b>Turn Rate (°/100usft)</b> | <b>TFO (°)</b> | <b>Target</b>         |
| 0.0                          | 0.00                   | 0.00               | 0.0                          | 0.0                 | 0.0                 | 0.00                           | 0.00                          | 0.00                         | 0.00           |                       |
| 5,000.0                      | 0.00                   | 0.00               | 5,000.0                      | 0.0                 | 0.0                 | 0.00                           | 0.00                          | 0.00                         | 0.00           |                       |
| 5,141.9                      | 1.42                   | 5.71               | 5,141.8                      | 1.7                 | 0.2                 | 1.00                           | 1.00                          | 0.00                         | 5.71           |                       |
| 9,059.4                      | 1.42                   | 5.71               | 9,058.2                      | 98.3                | 9.8                 | 0.00                           | 0.00                          | 0.00                         | 0.00           |                       |
| 9,201.2                      | 0.00                   | 0.00               | 9,200.0                      | 100.0               | 10.0                | 1.00                           | -1.00                         | 0.00                         | 180.00         |                       |
| 9,523.8                      | 0.00                   | 0.00               | 9,522.5                      | 100.0               | 10.0                | 0.00                           | 0.00                          | 0.00                         | 0.00           |                       |
| 10,273.8                     | 90.00                  | 359.57             | 10,000.0                     | 577.5               | 6.5                 | 12.00                          | 12.00                         | 0.00                         | 359.57         |                       |
| 18,012.4                     | 90.00                  | 359.57             | 10,000.0                     | 8,315.9             | -51.1               | 0.00                           | 0.00                          | 0.00                         | 0.00           | Dagger Lake 5 State : |



## Planning Report

|                  |                                   |                                     |                                        |
|------------------|-----------------------------------|-------------------------------------|----------------------------------------|
| <b>Database:</b> | EDM 5000.16 Single User Db        | <b>Local Co-ordinate Reference:</b> | Well Dagger Lake 5 State 301H          |
| <b>Company:</b>  | Advance Energy Partners           | <b>TVD Reference:</b>               | WELL @ 3690.5usft (Original Well Elev) |
| <b>Project:</b>  | Hat Mesa                          | <b>MD Reference:</b>                | WELL @ 3690.5usft (Original Well Elev) |
| <b>Site:</b>     | Dagger Lake 5 State - Pad D       | <b>North Reference:</b>             | Grid                                   |
| <b>Well:</b>     | Dagger Lake 5 State 301H          | <b>Survey Calculation Method:</b>   | Minimum Curvature                      |
| <b>Wellbore:</b> | Dagger Lake 5 State 301H          |                                     |                                        |
| <b>Design:</b>   | Dagger Lake 5 State 301H - Prelim |                                     |                                        |

| Planned Survey         |                 |             |                       |              |              |                         |                         |                        |                       |
|------------------------|-----------------|-------------|-----------------------|--------------|--------------|-------------------------|-------------------------|------------------------|-----------------------|
| Measured Depth (usft)  | Inclination (°) | Azimuth (°) | Vertical Depth (usft) | +N/-S (usft) | +E/-W (usft) | Vertical Section (usft) | Dogleg Rate (°/100usft) | Build Rate (°/100usft) | Turn Rate (°/100usft) |
| 0.0                    | 0.00            | 0.00        | 0.0                   | 0.0          | 0.0          | 0.0                     | 0.00                    | 0.00                   | 0.00                  |
| 100.0                  | 0.00            | 0.00        | 100.0                 | 0.0          | 0.0          | 0.0                     | 0.00                    | 0.00                   | 0.00                  |
| 200.0                  | 0.00            | 0.00        | 200.0                 | 0.0          | 0.0          | 0.0                     | 0.00                    | 0.00                   | 0.00                  |
| 300.0                  | 0.00            | 0.00        | 300.0                 | 0.0          | 0.0          | 0.0                     | 0.00                    | 0.00                   | 0.00                  |
| 400.0                  | 0.00            | 0.00        | 400.0                 | 0.0          | 0.0          | 0.0                     | 0.00                    | 0.00                   | 0.00                  |
| 500.0                  | 0.00            | 0.00        | 500.0                 | 0.0          | 0.0          | 0.0                     | 0.00                    | 0.00                   | 0.00                  |
| 600.0                  | 0.00            | 0.00        | 600.0                 | 0.0          | 0.0          | 0.0                     | 0.00                    | 0.00                   | 0.00                  |
| 700.0                  | 0.00            | 0.00        | 700.0                 | 0.0          | 0.0          | 0.0                     | 0.00                    | 0.00                   | 0.00                  |
| 800.0                  | 0.00            | 0.00        | 800.0                 | 0.0          | 0.0          | 0.0                     | 0.00                    | 0.00                   | 0.00                  |
| 900.0                  | 0.00            | 0.00        | 900.0                 | 0.0          | 0.0          | 0.0                     | 0.00                    | 0.00                   | 0.00                  |
| 1,000.0                | 0.00            | 0.00        | 1,000.0               | 0.0          | 0.0          | 0.0                     | 0.00                    | 0.00                   | 0.00                  |
| 1,100.0                | 0.00            | 0.00        | 1,100.0               | 0.0          | 0.0          | 0.0                     | 0.00                    | 0.00                   | 0.00                  |
| 1,200.0                | 0.00            | 0.00        | 1,200.0               | 0.0          | 0.0          | 0.0                     | 0.00                    | 0.00                   | 0.00                  |
| 1,300.0                | 0.00            | 0.00        | 1,300.0               | 0.0          | 0.0          | 0.0                     | 0.00                    | 0.00                   | 0.00                  |
| 1,400.0                | 0.00            | 0.00        | 1,400.0               | 0.0          | 0.0          | 0.0                     | 0.00                    | 0.00                   | 0.00                  |
| 1,500.0                | 0.00            | 0.00        | 1,500.0               | 0.0          | 0.0          | 0.0                     | 0.00                    | 0.00                   | 0.00                  |
| 1,600.0                | 0.00            | 0.00        | 1,600.0               | 0.0          | 0.0          | 0.0                     | 0.00                    | 0.00                   | 0.00                  |
| 1,700.0                | 0.00            | 0.00        | 1,700.0               | 0.0          | 0.0          | 0.0                     | 0.00                    | 0.00                   | 0.00                  |
| 1,800.0                | 0.00            | 0.00        | 1,800.0               | 0.0          | 0.0          | 0.0                     | 0.00                    | 0.00                   | 0.00                  |
| 1,900.0                | 0.00            | 0.00        | 1,900.0               | 0.0          | 0.0          | 0.0                     | 0.00                    | 0.00                   | 0.00                  |
| 2,000.0                | 0.00            | 0.00        | 2,000.0               | 0.0          | 0.0          | 0.0                     | 0.00                    | 0.00                   | 0.00                  |
| 2,100.0                | 0.00            | 0.00        | 2,100.0               | 0.0          | 0.0          | 0.0                     | 0.00                    | 0.00                   | 0.00                  |
| 2,200.0                | 0.00            | 0.00        | 2,200.0               | 0.0          | 0.0          | 0.0                     | 0.00                    | 0.00                   | 0.00                  |
| 2,300.0                | 0.00            | 0.00        | 2,300.0               | 0.0          | 0.0          | 0.0                     | 0.00                    | 0.00                   | 0.00                  |
| 2,400.0                | 0.00            | 0.00        | 2,400.0               | 0.0          | 0.0          | 0.0                     | 0.00                    | 0.00                   | 0.00                  |
| 2,500.0                | 0.00            | 0.00        | 2,500.0               | 0.0          | 0.0          | 0.0                     | 0.00                    | 0.00                   | 0.00                  |
| 2,600.0                | 0.00            | 0.00        | 2,600.0               | 0.0          | 0.0          | 0.0                     | 0.00                    | 0.00                   | 0.00                  |
| 2,700.0                | 0.00            | 0.00        | 2,700.0               | 0.0          | 0.0          | 0.0                     | 0.00                    | 0.00                   | 0.00                  |
| 2,800.0                | 0.00            | 0.00        | 2,800.0               | 0.0          | 0.0          | 0.0                     | 0.00                    | 0.00                   | 0.00                  |
| 2,900.0                | 0.00            | 0.00        | 2,900.0               | 0.0          | 0.0          | 0.0                     | 0.00                    | 0.00                   | 0.00                  |
| 3,000.0                | 0.00            | 0.00        | 3,000.0               | 0.0          | 0.0          | 0.0                     | 0.00                    | 0.00                   | 0.00                  |
| 3,100.0                | 0.00            | 0.00        | 3,100.0               | 0.0          | 0.0          | 0.0                     | 0.00                    | 0.00                   | 0.00                  |
| 3,200.0                | 0.00            | 0.00        | 3,200.0               | 0.0          | 0.0          | 0.0                     | 0.00                    | 0.00                   | 0.00                  |
| 3,300.0                | 0.00            | 0.00        | 3,300.0               | 0.0          | 0.0          | 0.0                     | 0.00                    | 0.00                   | 0.00                  |
| 3,400.0                | 0.00            | 0.00        | 3,400.0               | 0.0          | 0.0          | 0.0                     | 0.00                    | 0.00                   | 0.00                  |
| 3,500.0                | 0.00            | 0.00        | 3,500.0               | 0.0          | 0.0          | 0.0                     | 0.00                    | 0.00                   | 0.00                  |
| 3,600.0                | 0.00            | 0.00        | 3,600.0               | 0.0          | 0.0          | 0.0                     | 0.00                    | 0.00                   | 0.00                  |
| 3,700.0                | 0.00            | 0.00        | 3,700.0               | 0.0          | 0.0          | 0.0                     | 0.00                    | 0.00                   | 0.00                  |
| 3,800.0                | 0.00            | 0.00        | 3,800.0               | 0.0          | 0.0          | 0.0                     | 0.00                    | 0.00                   | 0.00                  |
| 3,900.0                | 0.00            | 0.00        | 3,900.0               | 0.0          | 0.0          | 0.0                     | 0.00                    | 0.00                   | 0.00                  |
| 4,000.0                | 0.00            | 0.00        | 4,000.0               | 0.0          | 0.0          | 0.0                     | 0.00                    | 0.00                   | 0.00                  |
| 4,100.0                | 0.00            | 0.00        | 4,100.0               | 0.0          | 0.0          | 0.0                     | 0.00                    | 0.00                   | 0.00                  |
| 4,200.0                | 0.00            | 0.00        | 4,200.0               | 0.0          | 0.0          | 0.0                     | 0.00                    | 0.00                   | 0.00                  |
| 4,300.0                | 0.00            | 0.00        | 4,300.0               | 0.0          | 0.0          | 0.0                     | 0.00                    | 0.00                   | 0.00                  |
| 4,400.0                | 0.00            | 0.00        | 4,400.0               | 0.0          | 0.0          | 0.0                     | 0.00                    | 0.00                   | 0.00                  |
| 4,500.0                | 0.00            | 0.00        | 4,500.0               | 0.0          | 0.0          | 0.0                     | 0.00                    | 0.00                   | 0.00                  |
| 4,600.0                | 0.00            | 0.00        | 4,600.0               | 0.0          | 0.0          | 0.0                     | 0.00                    | 0.00                   | 0.00                  |
| 4,700.0                | 0.00            | 0.00        | 4,700.0               | 0.0          | 0.0          | 0.0                     | 0.00                    | 0.00                   | 0.00                  |
| 4,800.0                | 0.00            | 0.00        | 4,800.0               | 0.0          | 0.0          | 0.0                     | 0.00                    | 0.00                   | 0.00                  |
| 4,900.0                | 0.00            | 0.00        | 4,900.0               | 0.0          | 0.0          | 0.0                     | 0.00                    | 0.00                   | 0.00                  |
| 5,000.0                | 0.00            | 0.00        | 5,000.0               | 0.0          | 0.0          | 0.0                     | 0.00                    | 0.00                   | 0.00                  |
| KOP - Start Build 1.00 |                 |             |                       |              |              |                         |                         |                        |                       |
| 5,100.0                | 1.00            | 5.71        | 5,100.0               | 0.9          | 0.1          | 0.9                     | 1.00                    | 1.00                   | 0.00                  |
| 5,141.9                | 1.42            | 5.71        | 5,141.8               | 1.7          | 0.2          | 1.7                     | 1.00                    | 1.00                   | 0.00                  |



## Planning Report

|                  |                                   |                                     |                                        |
|------------------|-----------------------------------|-------------------------------------|----------------------------------------|
| <b>Database:</b> | EDM 5000.16 Single User Db        | <b>Local Co-ordinate Reference:</b> | Well Dagger Lake 5 State 301H          |
| <b>Company:</b>  | Advance Energy Partners           | <b>TVD Reference:</b>               | WELL @ 3690.5usft (Original Well Elev) |
| <b>Project:</b>  | Hat Mesa                          | <b>MD Reference:</b>                | WELL @ 3690.5usft (Original Well Elev) |
| <b>Site:</b>     | Dagger Lake 5 State - Pad D       | <b>North Reference:</b>             | Grid                                   |
| <b>Well:</b>     | Dagger Lake 5 State 301H          | <b>Survey Calculation Method:</b>   | Minimum Curvature                      |
| <b>Wellbore:</b> | Dagger Lake 5 State 301H          |                                     |                                        |
| <b>Design:</b>   | Dagger Lake 5 State 301H - Prelim |                                     |                                        |

| 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) |
| Start 3917.5 hold at 5141.9 MD |                 |             |                       |              |              |                         |                         |                        |                       |
| 5,200.0                        | 1.42            | 5.71        | 5,200.0               | 3.2          | 0.3          | 3.2                     | 0.00                    | 0.00                   | 0.00                  |
| 5,300.0                        | 1.42            | 5.71        | 5,299.9               | 5.6          | 0.6          | 5.6                     | 0.00                    | 0.00                   | 0.00                  |
| 5,400.0                        | 1.42            | 5.71        | 5,399.9               | 8.1          | 0.8          | 8.1                     | 0.00                    | 0.00                   | 0.00                  |
| 5,500.0                        | 1.42            | 5.71        | 5,499.9               | 10.6         | 1.1          | 10.6                    | 0.00                    | 0.00                   | 0.00                  |
| 5,600.0                        | 1.42            | 5.71        | 5,599.8               | 13.0         | 1.3          | 13.0                    | 0.00                    | 0.00                   | 0.00                  |
| 5,700.0                        | 1.42            | 5.71        | 5,699.8               | 15.5         | 1.5          | 15.5                    | 0.00                    | 0.00                   | 0.00                  |
| 5,800.0                        | 1.42            | 5.71        | 5,799.8               | 18.0         | 1.8          | 17.9                    | 0.00                    | 0.00                   | 0.00                  |
| 5,900.0                        | 1.42            | 5.71        | 5,899.8               | 20.4         | 2.0          | 20.4                    | 0.00                    | 0.00                   | 0.00                  |
| 6,000.0                        | 1.42            | 5.71        | 5,999.7               | 22.9         | 2.3          | 22.9                    | 0.00                    | 0.00                   | 0.00                  |
| 6,100.0                        | 1.42            | 5.71        | 6,099.7               | 25.4         | 2.5          | 25.3                    | 0.00                    | 0.00                   | 0.00                  |
| 6,200.0                        | 1.42            | 5.71        | 6,199.7               | 27.8         | 2.8          | 27.8                    | 0.00                    | 0.00                   | 0.00                  |
| 6,300.0                        | 1.42            | 5.71        | 6,299.6               | 30.3         | 3.0          | 30.3                    | 0.00                    | 0.00                   | 0.00                  |
| 6,400.0                        | 1.42            | 5.71        | 6,399.6               | 32.7         | 3.3          | 32.7                    | 0.00                    | 0.00                   | 0.00                  |
| 6,500.0                        | 1.42            | 5.71        | 6,499.6               | 35.2         | 3.5          | 35.2                    | 0.00                    | 0.00                   | 0.00                  |
| 6,600.0                        | 1.42            | 5.71        | 6,599.5               | 37.7         | 3.8          | 37.6                    | 0.00                    | 0.00                   | 0.00                  |
| 6,700.0                        | 1.42            | 5.71        | 6,699.5               | 40.1         | 4.0          | 40.1                    | 0.00                    | 0.00                   | 0.00                  |
| 6,800.0                        | 1.42            | 5.71        | 6,799.5               | 42.6         | 4.3          | 42.6                    | 0.00                    | 0.00                   | 0.00                  |
| 6,900.0                        | 1.42            | 5.71        | 6,899.4               | 45.1         | 4.5          | 45.0                    | 0.00                    | 0.00                   | 0.00                  |
| 7,000.0                        | 1.42            | 5.71        | 6,999.4               | 47.5         | 4.8          | 47.5                    | 0.00                    | 0.00                   | 0.00                  |
| 7,100.0                        | 1.42            | 5.71        | 7,099.4               | 50.0         | 5.0          | 50.0                    | 0.00                    | 0.00                   | 0.00                  |
| 7,200.0                        | 1.42            | 5.71        | 7,199.4               | 52.4         | 5.2          | 52.4                    | 0.00                    | 0.00                   | 0.00                  |
| 7,300.0                        | 1.42            | 5.71        | 7,299.3               | 54.9         | 5.5          | 54.9                    | 0.00                    | 0.00                   | 0.00                  |
| 7,400.0                        | 1.42            | 5.71        | 7,399.3               | 57.4         | 5.7          | 57.3                    | 0.00                    | 0.00                   | 0.00                  |
| 7,500.0                        | 1.42            | 5.71        | 7,499.3               | 59.8         | 6.0          | 59.8                    | 0.00                    | 0.00                   | 0.00                  |
| 7,600.0                        | 1.42            | 5.71        | 7,599.2               | 62.3         | 6.2          | 62.3                    | 0.00                    | 0.00                   | 0.00                  |
| 7,700.0                        | 1.42            | 5.71        | 7,699.2               | 64.8         | 6.5          | 64.7                    | 0.00                    | 0.00                   | 0.00                  |
| 7,800.0                        | 1.42            | 5.71        | 7,799.2               | 67.2         | 6.7          | 67.2                    | 0.00                    | 0.00                   | 0.00                  |
| 7,900.0                        | 1.42            | 5.71        | 7,899.1               | 69.7         | 7.0          | 69.6                    | 0.00                    | 0.00                   | 0.00                  |
| 8,000.0                        | 1.42            | 5.71        | 7,999.1               | 72.2         | 7.2          | 72.1                    | 0.00                    | 0.00                   | 0.00                  |
| 8,100.0                        | 1.42            | 5.71        | 8,099.1               | 74.6         | 7.5          | 74.6                    | 0.00                    | 0.00                   | 0.00                  |
| 8,200.0                        | 1.42            | 5.71        | 8,199.0               | 77.1         | 7.7          | 77.0                    | 0.00                    | 0.00                   | 0.00                  |
| 8,300.0                        | 1.42            | 5.71        | 8,299.0               | 79.5         | 8.0          | 79.5                    | 0.00                    | 0.00                   | 0.00                  |
| 8,400.0                        | 1.42            | 5.71        | 8,399.0               | 82.0         | 8.2          | 82.0                    | 0.00                    | 0.00                   | 0.00                  |
| 8,500.0                        | 1.42            | 5.71        | 8,499.0               | 84.5         | 8.4          | 84.4                    | 0.00                    | 0.00                   | 0.00                  |
| 8,600.0                        | 1.42            | 5.71        | 8,598.9               | 86.9         | 8.7          | 86.9                    | 0.00                    | 0.00                   | 0.00                  |
| 8,700.0                        | 1.42            | 5.71        | 8,698.9               | 89.4         | 8.9          | 89.3                    | 0.00                    | 0.00                   | 0.00                  |
| 8,800.0                        | 1.42            | 5.71        | 8,798.9               | 91.9         | 9.2          | 91.8                    | 0.00                    | 0.00                   | 0.00                  |
| 8,900.0                        | 1.42            | 5.71        | 8,898.8               | 94.3         | 9.4          | 94.3                    | 0.00                    | 0.00                   | 0.00                  |
| 9,000.0                        | 1.42            | 5.71        | 8,998.8               | 96.8         | 9.7          | 96.7                    | 0.00                    | 0.00                   | 0.00                  |
| 9,059.4                        | 1.42            | 5.71        | 9,058.2               | 98.3         | 9.8          | 98.2                    | 0.00                    | 0.00                   | 0.00                  |
| Start Drop -1.00               |                 |             |                       |              |              |                         |                         |                        |                       |
| 9,100.0                        | 1.01            | 5.71        | 9,098.8               | 99.1         | 9.9          | 99.0                    | 1.00                    | -1.00                  | 0.00                  |
| 9,200.0                        | 0.01            | 5.71        | 9,198.8               | 100.0        | 10.0         | 99.9                    | 1.00                    | -1.00                  | 0.00                  |
| 9,201.2                        | 0.00            | 0.00        | 9,200.0               | 100.0        | 10.0         | 99.9                    | 1.00                    | -1.00                  | 0.00                  |
| Start 322.5 hold at 9201.2 MD  |                 |             |                       |              |              |                         |                         |                        |                       |
| 9,300.0                        | 0.00            | 0.00        | 9,298.8               | 100.0        | 10.0         | 99.9                    | 0.00                    | 0.00                   | 0.00                  |
| 9,400.0                        | 0.00            | 0.00        | 9,398.8               | 100.0        | 10.0         | 99.9                    | 0.00                    | 0.00                   | 0.00                  |
| 9,500.0                        | 0.00            | 0.00        | 9,498.8               | 100.0        | 10.0         | 99.9                    | 0.00                    | 0.00                   | 0.00                  |
| 9,523.8                        | 0.00            | 0.00        | 9,522.5               | 100.0        | 10.0         | 99.9                    | 0.00                    | 0.00                   | 0.00                  |
| KOP #2 - Start Build 12.00     |                 |             |                       |              |              |                         |                         |                        |                       |
| 9,600.0                        | 9.15            | 359.57      | 9,598.4               | 106.1        | 10.0         | 106.0                   | 12.00                   | 12.00                  | 0.00                  |
| 9,700.0                        | 21.15           | 359.57      | 9,694.8               | 132.2        | 9.8          | 132.1                   | 12.00                   | 12.00                  | 0.00                  |





## Planning Report

|                  |                                   |                                     |                                        |
|------------------|-----------------------------------|-------------------------------------|----------------------------------------|
| <b>Database:</b> | EDM 5000.16 Single User Db        | <b>Local Co-ordinate Reference:</b> | Well Dagger Lake 5 State 301H          |
| <b>Company:</b>  | Advance Energy Partners           | <b>TVD Reference:</b>               | WELL @ 3690.5usft (Original Well Elev) |
| <b>Project:</b>  | Hat Mesa                          | <b>MD Reference:</b>                | WELL @ 3690.5usft (Original Well Elev) |
| <b>Site:</b>     | Dagger Lake 5 State - Pad D       | <b>North Reference:</b>             | Grid                                   |
| <b>Well:</b>     | Dagger Lake 5 State 301H          | <b>Survey Calculation Method:</b>   | Minimum Curvature                      |
| <b>Wellbore:</b> | Dagger Lake 5 State 301H          |                                     |                                        |
| <b>Design:</b>   | Dagger Lake 5 State 301H - Prelim |                                     |                                        |

| Planned Survey                  |                 |             |                       |              |              |                         |                         |                        |                       |
|---------------------------------|-----------------|-------------|-----------------------|--------------|--------------|-------------------------|-------------------------|------------------------|-----------------------|
| Measured Depth (usft)           | Inclination (°) | Azimuth (°) | Vertical Depth (usft) | +N/-S (usft) | +E/-W (usft) | Vertical Section (usft) | Dogleg Rate (°/100usft) | Build Rate (°/100usft) | Turn Rate (°/100usft) |
| 9,800.0                         | 33.15           | 359.57      | 9,783.6               | 177.7        | 9.4          | 177.6                   | 12.00                   | 12.00                  | 0.00                  |
| 9,900.0                         | 45.15           | 359.57      | 9,861.0               | 240.7        | 9.0          | 240.7                   | 12.00                   | 12.00                  | 0.00                  |
| 10,000.0                        | 57.15           | 359.57      | 9,923.6               | 318.4        | 8.4          | 318.4                   | 12.00                   | 12.00                  | 0.00                  |
| 10,100.0                        | 69.15           | 359.57      | 9,968.7               | 407.5        | 7.7          | 407.4                   | 12.00                   | 12.00                  | 0.00                  |
| 10,200.0                        | 81.15           | 359.57      | 9,994.3               | 504.0        | 7.0          | 503.9                   | 12.00                   | 12.00                  | 0.00                  |
| 10,273.8                        | 90.00           | 359.57      | 10,000.0              | 577.5        | 6.5          | 577.4                   | 12.00                   | 12.00                  | 0.00                  |
| Start 7738.7 hold at 10273.8 MD |                 |             |                       |              |              |                         |                         |                        |                       |
| 10,300.0                        | 90.00           | 359.57      | 10,000.0              | 603.7        | 6.3          | 603.6                   | 0.00                    | 0.00                   | 0.00                  |
| 10,400.0                        | 90.00           | 359.57      | 10,000.0              | 703.7        | 5.5          | 703.6                   | 0.00                    | 0.00                   | 0.00                  |
| 10,500.0                        | 90.00           | 359.57      | 10,000.0              | 803.7        | 4.8          | 803.6                   | 0.00                    | 0.00                   | 0.00                  |
| 10,600.0                        | 90.00           | 359.57      | 10,000.0              | 903.7        | 4.0          | 903.6                   | 0.00                    | 0.00                   | 0.00                  |
| 10,700.0                        | 90.00           | 359.57      | 10,000.0              | 1,003.7      | 3.3          | 1,003.6                 | 0.00                    | 0.00                   | 0.00                  |
| 10,800.0                        | 90.00           | 359.57      | 10,000.0              | 1,103.7      | 2.5          | 1,103.6                 | 0.00                    | 0.00                   | 0.00                  |
| 10,900.0                        | 90.00           | 359.57      | 10,000.0              | 1,203.7      | 1.8          | 1,203.6                 | 0.00                    | 0.00                   | 0.00                  |
| 11,000.0                        | 90.00           | 359.57      | 10,000.0              | 1,303.7      | 1.1          | 1,303.6                 | 0.00                    | 0.00                   | 0.00                  |
| 11,100.0                        | 90.00           | 359.57      | 10,000.0              | 1,403.7      | 0.3          | 1,403.6                 | 0.00                    | 0.00                   | 0.00                  |
| 11,200.0                        | 90.00           | 359.57      | 10,000.0              | 1,503.7      | -0.4         | 1,503.6                 | 0.00                    | 0.00                   | 0.00                  |
| 11,300.0                        | 90.00           | 359.57      | 10,000.0              | 1,603.7      | -1.2         | 1,603.6                 | 0.00                    | 0.00                   | 0.00                  |
| 11,400.0                        | 90.00           | 359.57      | 10,000.0              | 1,703.7      | -1.9         | 1,703.6                 | 0.00                    | 0.00                   | 0.00                  |
| 11,500.0                        | 90.00           | 359.57      | 10,000.0              | 1,803.7      | -2.7         | 1,803.6                 | 0.00                    | 0.00                   | 0.00                  |
| 11,600.0                        | 90.00           | 359.57      | 10,000.0              | 1,903.7      | -3.4         | 1,903.6                 | 0.00                    | 0.00                   | 0.00                  |
| 11,700.0                        | 90.00           | 359.57      | 10,000.0              | 2,003.6      | -4.1         | 2,003.6                 | 0.00                    | 0.00                   | 0.00                  |
| 11,800.0                        | 90.00           | 359.57      | 10,000.0              | 2,103.6      | -4.9         | 2,103.6                 | 0.00                    | 0.00                   | 0.00                  |
| 11,900.0                        | 90.00           | 359.57      | 10,000.0              | 2,203.6      | -5.6         | 2,203.6                 | 0.00                    | 0.00                   | 0.00                  |
| 12,000.0                        | 90.00           | 359.57      | 10,000.0              | 2,303.6      | -6.4         | 2,303.6                 | 0.00                    | 0.00                   | 0.00                  |
| 12,100.0                        | 90.00           | 359.57      | 10,000.0              | 2,403.6      | -7.1         | 2,403.6                 | 0.00                    | 0.00                   | 0.00                  |
| 12,200.0                        | 90.00           | 359.57      | 10,000.0              | 2,503.6      | -7.9         | 2,503.6                 | 0.00                    | 0.00                   | 0.00                  |
| 12,300.0                        | 90.00           | 359.57      | 10,000.0              | 2,603.6      | -8.6         | 2,603.6                 | 0.00                    | 0.00                   | 0.00                  |
| 12,400.0                        | 90.00           | 359.57      | 10,000.0              | 2,703.6      | -9.4         | 2,703.6                 | 0.00                    | 0.00                   | 0.00                  |
| 12,500.0                        | 90.00           | 359.57      | 10,000.0              | 2,803.6      | -10.1        | 2,803.6                 | 0.00                    | 0.00                   | 0.00                  |
| 12,600.0                        | 90.00           | 359.57      | 10,000.0              | 2,903.6      | -10.8        | 2,903.6                 | 0.00                    | 0.00                   | 0.00                  |
| 12,700.0                        | 90.00           | 359.57      | 10,000.0              | 3,003.6      | -11.6        | 3,003.6                 | 0.00                    | 0.00                   | 0.00                  |
| 12,800.0                        | 90.00           | 359.57      | 10,000.0              | 3,103.6      | -12.3        | 3,103.6                 | 0.00                    | 0.00                   | 0.00                  |
| 12,900.0                        | 90.00           | 359.57      | 10,000.0              | 3,203.6      | -13.1        | 3,203.6                 | 0.00                    | 0.00                   | 0.00                  |
| 13,000.0                        | 90.00           | 359.57      | 10,000.0              | 3,303.6      | -13.8        | 3,303.6                 | 0.00                    | 0.00                   | 0.00                  |
| 13,100.0                        | 90.00           | 359.57      | 10,000.0              | 3,403.6      | -14.6        | 3,403.6                 | 0.00                    | 0.00                   | 0.00                  |
| 13,200.0                        | 90.00           | 359.57      | 10,000.0              | 3,503.6      | -15.3        | 3,503.6                 | 0.00                    | 0.00                   | 0.00                  |
| 13,300.0                        | 90.00           | 359.57      | 10,000.0              | 3,603.6      | -16.0        | 3,603.6                 | 0.00                    | 0.00                   | 0.00                  |
| 13,400.0                        | 90.00           | 359.57      | 10,000.0              | 3,703.6      | -16.8        | 3,703.6                 | 0.00                    | 0.00                   | 0.00                  |
| 13,500.0                        | 90.00           | 359.57      | 10,000.0              | 3,803.6      | -17.5        | 3,803.6                 | 0.00                    | 0.00                   | 0.00                  |
| 13,600.0                        | 90.00           | 359.57      | 10,000.0              | 3,903.6      | -18.3        | 3,903.6                 | 0.00                    | 0.00                   | 0.00                  |
| 13,700.0                        | 90.00           | 359.57      | 10,000.0              | 4,003.6      | -19.0        | 4,003.6                 | 0.00                    | 0.00                   | 0.00                  |
| 13,800.0                        | 90.00           | 359.57      | 10,000.0              | 4,103.6      | -19.8        | 4,103.6                 | 0.00                    | 0.00                   | 0.00                  |
| 13,900.0                        | 90.00           | 359.57      | 10,000.0              | 4,203.6      | -20.5        | 4,203.6                 | 0.00                    | 0.00                   | 0.00                  |
| 14,000.0                        | 90.00           | 359.57      | 10,000.0              | 4,303.6      | -21.2        | 4,303.6                 | 0.00                    | 0.00                   | 0.00                  |
| 14,100.0                        | 90.00           | 359.57      | 10,000.0              | 4,403.6      | -22.0        | 4,403.6                 | 0.00                    | 0.00                   | 0.00                  |
| 14,200.0                        | 90.00           | 359.57      | 10,000.0              | 4,503.6      | -22.7        | 4,503.6                 | 0.00                    | 0.00                   | 0.00                  |
| 14,300.0                        | 90.00           | 359.57      | 10,000.0              | 4,603.6      | -23.5        | 4,603.6                 | 0.00                    | 0.00                   | 0.00                  |
| 14,400.0                        | 90.00           | 359.57      | 10,000.0              | 4,703.6      | -24.2        | 4,703.6                 | 0.00                    | 0.00                   | 0.00                  |
| 14,500.0                        | 90.00           | 359.57      | 10,000.0              | 4,803.6      | -25.0        | 4,803.6                 | 0.00                    | 0.00                   | 0.00                  |
| 14,600.0                        | 90.00           | 359.57      | 10,000.0              | 4,903.6      | -25.7        | 4,903.6                 | 0.00                    | 0.00                   | 0.00                  |
| 14,700.0                        | 90.00           | 359.57      | 10,000.0              | 5,003.6      | -26.4        | 5,003.6                 | 0.00                    | 0.00                   | 0.00                  |
| 14,800.0                        | 90.00           | 359.57      | 10,000.0              | 5,103.6      | -27.2        | 5,103.6                 | 0.00                    | 0.00                   | 0.00                  |
| 14,900.0                        | 90.00           | 359.57      | 10,000.0              | 5,203.6      | -27.9        | 5,203.6                 | 0.00                    | 0.00                   | 0.00                  |



## Planning Report

|                  |                                   |                                     |                                        |
|------------------|-----------------------------------|-------------------------------------|----------------------------------------|
| <b>Database:</b> | EDM 5000.16 Single User Db        | <b>Local Co-ordinate Reference:</b> | Well Dagger Lake 5 State 301H          |
| <b>Company:</b>  | Advance Energy Partners           | <b>TVD Reference:</b>               | WELL @ 3690.5usft (Original Well Elev) |
| <b>Project:</b>  | Hat Mesa                          | <b>MD Reference:</b>                | WELL @ 3690.5usft (Original Well Elev) |
| <b>Site:</b>     | Dagger Lake 5 State - Pad D       | <b>North Reference:</b>             | Grid                                   |
| <b>Well:</b>     | Dagger Lake 5 State 301H          | <b>Survey Calculation Method:</b>   | Minimum Curvature                      |
| <b>Wellbore:</b> | Dagger Lake 5 State 301H          |                                     |                                        |
| <b>Design:</b>   | Dagger Lake 5 State 301H - Prelim |                                     |                                        |

| Planned Survey                               |                 |             |                       |              |              |                         |                         |                        |                       |
|----------------------------------------------|-----------------|-------------|-----------------------|--------------|--------------|-------------------------|-------------------------|------------------------|-----------------------|
| Measured Depth (usft)                        | Inclination (°) | Azimuth (°) | Vertical Depth (usft) | +N/-S (usft) | +E/-W (usft) | Vertical Section (usft) | Dogleg Rate (°/100usft) | Build Rate (°/100usft) | Turn Rate (°/100usft) |
| 15,000.0                                     | 90.00           | 359.57      | 10,000.0              | 5,303.6      | -28.7        | 5,303.6                 | 0.00                    | 0.00                   | 0.00                  |
| 15,100.0                                     | 90.00           | 359.57      | 10,000.0              | 5,403.6      | -29.4        | 5,403.6                 | 0.00                    | 0.00                   | 0.00                  |
| 15,200.0                                     | 90.00           | 359.57      | 10,000.0              | 5,503.6      | -30.2        | 5,503.6                 | 0.00                    | 0.00                   | 0.00                  |
| 15,300.0                                     | 90.00           | 359.57      | 10,000.0              | 5,603.5      | -30.9        | 5,603.6                 | 0.00                    | 0.00                   | 0.00                  |
| 15,400.0                                     | 90.00           | 359.57      | 10,000.0              | 5,703.5      | -31.6        | 5,703.6                 | 0.00                    | 0.00                   | 0.00                  |
| 15,500.0                                     | 90.00           | 359.57      | 10,000.0              | 5,803.5      | -32.4        | 5,803.6                 | 0.00                    | 0.00                   | 0.00                  |
| 15,600.0                                     | 90.00           | 359.57      | 10,000.0              | 5,903.5      | -33.1        | 5,903.6                 | 0.00                    | 0.00                   | 0.00                  |
| 15,700.0                                     | 90.00           | 359.57      | 10,000.0              | 6,003.5      | -33.9        | 6,003.6                 | 0.00                    | 0.00                   | 0.00                  |
| 15,800.0                                     | 90.00           | 359.57      | 10,000.0              | 6,103.5      | -34.6        | 6,103.6                 | 0.00                    | 0.00                   | 0.00                  |
| 15,900.0                                     | 90.00           | 359.57      | 10,000.0              | 6,203.5      | -35.4        | 6,203.6                 | 0.00                    | 0.00                   | 0.00                  |
| 16,000.0                                     | 90.00           | 359.57      | 10,000.0              | 6,303.5      | -36.1        | 6,303.6                 | 0.00                    | 0.00                   | 0.00                  |
| 16,100.0                                     | 90.00           | 359.57      | 10,000.0              | 6,403.5      | -36.8        | 6,403.6                 | 0.00                    | 0.00                   | 0.00                  |
| 16,200.0                                     | 90.00           | 359.57      | 10,000.0              | 6,503.5      | -37.6        | 6,503.6                 | 0.00                    | 0.00                   | 0.00                  |
| 16,300.0                                     | 90.00           | 359.57      | 10,000.0              | 6,603.5      | -38.3        | 6,603.6                 | 0.00                    | 0.00                   | 0.00                  |
| 16,400.0                                     | 90.00           | 359.57      | 10,000.0              | 6,703.5      | -39.1        | 6,703.6                 | 0.00                    | 0.00                   | 0.00                  |
| 16,500.0                                     | 90.00           | 359.57      | 10,000.0              | 6,803.5      | -39.8        | 6,803.6                 | 0.00                    | 0.00                   | 0.00                  |
| 16,600.0                                     | 90.00           | 359.57      | 10,000.0              | 6,903.5      | -40.6        | 6,903.6                 | 0.00                    | 0.00                   | 0.00                  |
| 16,700.0                                     | 90.00           | 359.57      | 10,000.0              | 7,003.5      | -41.3        | 7,003.6                 | 0.00                    | 0.00                   | 0.00                  |
| 16,800.0                                     | 90.00           | 359.57      | 10,000.0              | 7,103.5      | -42.0        | 7,103.6                 | 0.00                    | 0.00                   | 0.00                  |
| 16,900.0                                     | 90.00           | 359.57      | 10,000.0              | 7,203.5      | -42.8        | 7,203.6                 | 0.00                    | 0.00                   | 0.00                  |
| 17,000.0                                     | 90.00           | 359.57      | 10,000.0              | 7,303.5      | -43.5        | 7,303.6                 | 0.00                    | 0.00                   | 0.00                  |
| 17,100.0                                     | 90.00           | 359.57      | 10,000.0              | 7,403.5      | -44.3        | 7,403.6                 | 0.00                    | 0.00                   | 0.00                  |
| 17,200.0                                     | 90.00           | 359.57      | 10,000.0              | 7,503.5      | -45.0        | 7,503.6                 | 0.00                    | 0.00                   | 0.00                  |
| 17,300.0                                     | 90.00           | 359.57      | 10,000.0              | 7,603.5      | -45.8        | 7,603.6                 | 0.00                    | 0.00                   | 0.00                  |
| 17,400.0                                     | 90.00           | 359.57      | 10,000.0              | 7,703.5      | -46.5        | 7,703.6                 | 0.00                    | 0.00                   | 0.00                  |
| 17,500.0                                     | 90.00           | 359.57      | 10,000.0              | 7,803.5      | -47.3        | 7,803.6                 | 0.00                    | 0.00                   | 0.00                  |
| 17,600.0                                     | 90.00           | 359.57      | 10,000.0              | 7,903.5      | -48.0        | 7,903.6                 | 0.00                    | 0.00                   | 0.00                  |
| 17,700.0                                     | 90.00           | 359.57      | 10,000.0              | 8,003.5      | -48.7        | 8,003.6                 | 0.00                    | 0.00                   | 0.00                  |
| 17,800.0                                     | 90.00           | 359.57      | 10,000.0              | 8,103.5      | -49.5        | 8,103.6                 | 0.00                    | 0.00                   | 0.00                  |
| 17,900.0                                     | 90.00           | 359.57      | 10,000.0              | 8,203.5      | -50.2        | 8,203.6                 | 0.00                    | 0.00                   | 0.00                  |
| 18,000.0                                     | 90.00           | 359.57      | 10,000.0              | 8,303.5      | -51.0        | 8,303.6                 | 0.00                    | 0.00                   | 0.00                  |
| 18,012.4                                     | 90.00           | 359.57      | 10,000.0              | 8,315.9      | -51.1        | 8,316.1                 | 0.00                    | 0.00                   | 0.00                  |
| TD at 18012.4 - Dagger Lake 5 State 301H BHL |                 |             |                       |              |              |                         |                         |                        |                       |

| Design Targets            |               |              |            |              |              |                 |                |                  |                  |
|---------------------------|---------------|--------------|------------|--------------|--------------|-----------------|----------------|------------------|------------------|
| Target Name               | Dip Angle (°) | Dip Dir. (°) | TVD (usft) | +N/-S (usft) | +E/-W (usft) | Northing (usft) | Easting (usft) | Latitude         | Longitude        |
| - hit/miss target         |               |              |            |              |              |                 |                |                  |                  |
| - Shape                   |               |              |            |              |              |                 |                |                  |                  |
| Dagger Lake 5 State 301   | 0.00          | 0.01         | 10,000.0   | 8,315.9      | -51.1        | 525,429.59      | 766,935.07     | 32° 26' 32.453 N | 103° 36' 7.369 W |
| - plan hits target center |               |              |            |              |              |                 |                |                  |                  |
| - Point                   |               |              |            |              |              |                 |                |                  |                  |

| Casing Points         |                       |      |                     |                   |  |
|-----------------------|-----------------------|------|---------------------|-------------------|--|
| Measured Depth (usft) | Vertical Depth (usft) | Name | Casing Diameter (") | Hole Diameter (") |  |
| 10,273.8              | 10,000.0              | LP   | 5-1/2               | 5-1/2             |  |



## Planning Report

|                  |                                   |                                     |                                        |
|------------------|-----------------------------------|-------------------------------------|----------------------------------------|
| <b>Database:</b> | EDM 5000.16 Single User Db        | <b>Local Co-ordinate Reference:</b> | Well Dagger Lake 5 State 301H          |
| <b>Company:</b>  | Advance Energy Partners           | <b>TVD Reference:</b>               | WELL @ 3690.5usft (Original Well Elev) |
| <b>Project:</b>  | Hat Mesa                          | <b>MD Reference:</b>                | WELL @ 3690.5usft (Original Well Elev) |
| <b>Site:</b>     | Dagger Lake 5 State - Pad D       | <b>North Reference:</b>             | Grid                                   |
| <b>Well:</b>     | Dagger Lake 5 State 301H          | <b>Survey Calculation Method:</b>   | Minimum Curvature                      |
| <b>Wellbore:</b> | Dagger Lake 5 State 301H          |                                     |                                        |
| <b>Design:</b>   | Dagger Lake 5 State 301H - Prelim |                                     |                                        |

| Plan Annotations            |                             |                   |                 |                                 |
|-----------------------------|-----------------------------|-------------------|-----------------|---------------------------------|
| Measured<br>Depth<br>(usft) | Vertical<br>Depth<br>(usft) | Local Coordinates |                 | Comment                         |
|                             |                             | +N/-S<br>(usft)   | +E/-W<br>(usft) |                                 |
| 5,000.0                     | 5,000.0                     | 0.0               | 0.0             | KOP - Start Build 1.00          |
| 5,141.9                     | 5,141.8                     | 1.7               | 0.2             | Start 3917.5 hold at 5141.9 MD  |
| 9,059.4                     | 9,058.2                     | 98.3              | 9.8             | Start Drop -1.00                |
| 9,201.2                     | 9,200.0                     | 100.0             | 10.0            | Start 322.5 hold at 9201.2 MD   |
| 9,523.8                     | 9,522.5                     | 100.0             | 10.0            | KOP #2 - Start Build 12.00      |
| 10,273.8                    | 10,000.0                    | 577.5             | 6.5             | Start 7738.7 hold at 10273.8 MD |
| 18,012.4                    | 10,000.0                    | 8,315.9           | -51.1           | TD at 18012.4                   |

**WELL DETAILS: Dagger Lake 5 State 301H**

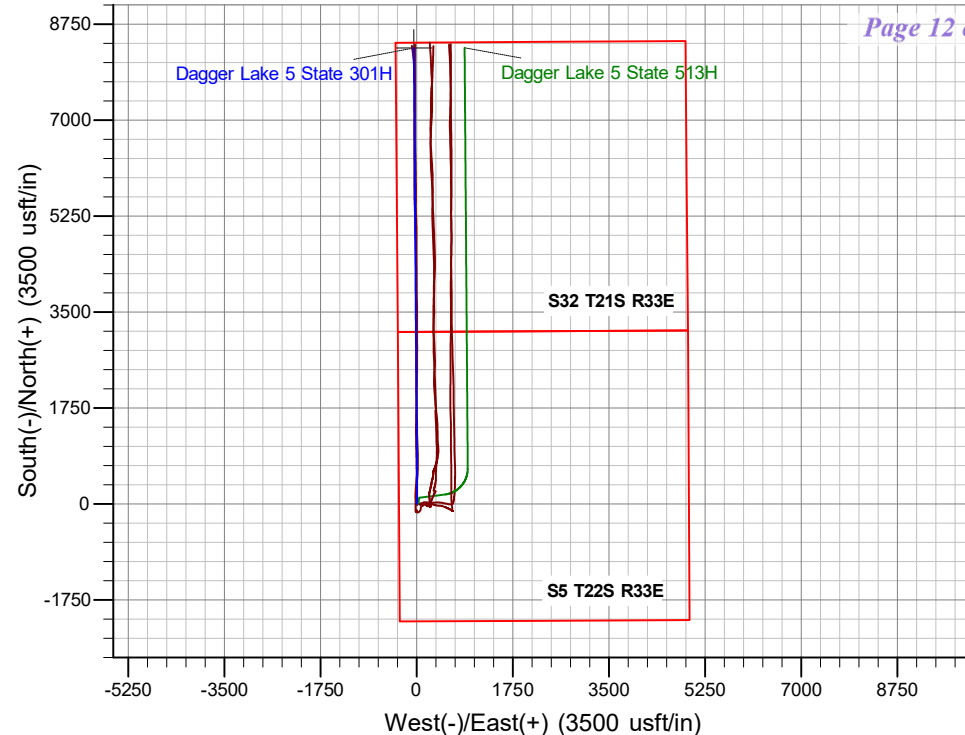
Ground Elev: 3658.0 KB: 3690.5

| +N/-S | +E/-W | Northing  | Easting   | Latitude         | Longitude        |
|-------|-------|-----------|-----------|------------------|------------------|
| 0.0   | 0.0   | 517113.68 | 766986.13 | 32° 25' 10.164 N | 103° 36' 7.438 W |

**PROJECT DETAILS: Hat Mesa**

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

System Datum: Mean Sea Level

**SECTION DETAILS**

| Sec | MD      | Inc   | Azi    | TVD     | +N/-S  | +E/-W | Dleg  | TFace  | Vsect  | Annotation                      |
|-----|---------|-------|--------|---------|--------|-------|-------|--------|--------|---------------------------------|
| 1   | 0.0     | 0.00  | 0.00   | 0.0     | 0.0    | 0.0   | 0.00  | 0.00   | 0.0    |                                 |
| 2   | 5000.0  | 0.00  | 0.00   | 5000.0  | 0.0    | 0.0   | 0.00  | 0.00   | 0.0    | KOP - Start Build 1.00          |
| 3   | 5141.9  | 1.42  | 5.71   | 5141.8  | 1.7    | 0.2   | 1.00  | 5.71   | 1.7    | Start 3917.5 hold at 5141.9 MD  |
| 4   | 9059.4  | 1.42  | 5.71   | 9058.2  | 98.3   | 9.8   | 0.00  | 0.00   | 98.2   | Start Drop -1.00                |
| 5   | 9201.2  | 0.00  | 0.00   | 9200.0  | 100.0  | 10.0  | 1.00  | 180.00 | 99.9   | Start 322.5 hold at 9201.2 MD   |
| 6   | 9523.8  | 0.00  | 0.00   | 9522.5  | 100.0  | 10.0  | 0.00  | 0.00   | 99.9   | KOP #2 - Start Build 12.00      |
| 7   | 10273.8 | 90.00 | 359.57 | 10000.0 | 577.5  | 6.5   | 12.00 | 359.57 | 577.4  | Start 7738.7 hold at 10273.8 MD |
| 8   | 18012.4 | 90.00 | 359.57 | 10000.0 | 8315.9 | -51.1 | 0.00  | 0.00   | 8316.1 | TD at 18012.4                   |



Azimuths to Grid North  
 True North: -0.39°  
 Magnetic North: 6.18°

Magnetic Field  
 Strength: 47658.6nT  
 Dip Angle: 60.19°  
 Date: 4/1/2021  
 Model: IGRF2015

