

**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 311890

**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>30-025-49942 |
| 4. Property Code<br>319601                                                                                                  | 5. Property Name<br>DAGGER STATE COM | 6. Well No.<br>518H           |

**7. Surface Location**

|               |               |                 |              |              |                   |               |                   |               |               |
|---------------|---------------|-----------------|--------------|--------------|-------------------|---------------|-------------------|---------------|---------------|
| UL - Lot<br>G | Section<br>30 | Township<br>21S | Range<br>33E | Lot Idn<br>G | Feet From<br>2610 | N/S Line<br>N | Feet From<br>2031 | E/W Line<br>E | County<br>Lea |
|---------------|---------------|-----------------|--------------|--------------|-------------------|---------------|-------------------|---------------|---------------|

**8. Proposed Bottom Hole Location**

|               |               |                 |              |              |                  |               |                   |               |               |
|---------------|---------------|-----------------|--------------|--------------|------------------|---------------|-------------------|---------------|---------------|
| UL - Lot<br>B | Section<br>19 | Township<br>21S | Range<br>33E | Lot Idn<br>B | Feet From<br>100 | N/S Line<br>N | Feet From<br>2310 | E/W Line<br>E | County<br>Lea |
|---------------|---------------|-----------------|--------------|--------------|------------------|---------------|-------------------|---------------|---------------|

**9. Pool Information**

|                                  |       |
|----------------------------------|-------|
| WC-025 G-07 S213330F:BONE SPRING | 97927 |
|----------------------------------|-------|

**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>3812 |
| 16. Multiple<br>N         | 17. Proposed Depth<br>17950 | 18. Formation<br>Bone Spring           | 19. Contractor          | 20. Spud Date<br>6/11/2022         |
| 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             | 1536          | 525             | 0             |
| Int1 | 12.25     | 10.75       | 40.5             | 3707          | 385             | 0             |
| Int2 | 9.875     | 7.625       | 29.7             | 5456          | 725             | 0             |
| Prod | 6.75      | 5.5         | 20               | 17950         | 1260            | 0             |

**Casing/Cement Program: Additional Comments**

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

**22. Proposed Blowout Prevention Program**

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

23. I hereby certify that the information given above is true and complete to the best of my knowledge and belief.  
I further certify I have complied with 19.15.14.9 (A) NMAC ☒ and/or 19.15.14.9 (B) NMAC ☒ if applicable.

Signature:

Printed Name: Electronically filed by Eileen M Kosakowski

Title:

Email Address: ekosakowski@advanceenergypartners.com

Date: 3/25/2022

Phone: 832-672-4604

**OIL CONSERVATION DIVISION**

Approved By: Paul F Kautz

Title: Geologist

Approved Date: 3/29/2022 Expiration Date: 3/29/2024

Conditions of Approval Attached

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DISTRICT IV  
1220 S. St. Francis Dr., Santa Fe, NM 87505  
Phone (505) 478-3480 Fax: (505) 478-3482

State of New Mexico  
Energy, Minerals and Natural Resources Department

Form C-102

Revised August 4, 2011

Submit one copy to appropriate  
District Office

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

☐ AMENDED REPORT

**WELL LOCATION AND ACREAGE DEDICATION PLAT**

|                                   |                                                          |                                                       |
|-----------------------------------|----------------------------------------------------------|-------------------------------------------------------|
| API Number<br><b>30-025-49942</b> | Pool Code<br><b>97927</b>                                | Pool Name<br><b>WC-025 G-07 S213330F; BONE SPRING</b> |
| Property Code<br><b>319601</b>    | Property Name<br><b>DAGGER STATE COM</b>                 | Well Number<br><b>518H</b>                            |
| OGRID No.<br><b>372417</b>        | Operator Name<br><b>ADVANCE ENERGY PARTNERS HAT MESA</b> | Elevation<br><b>3812'</b>                             |

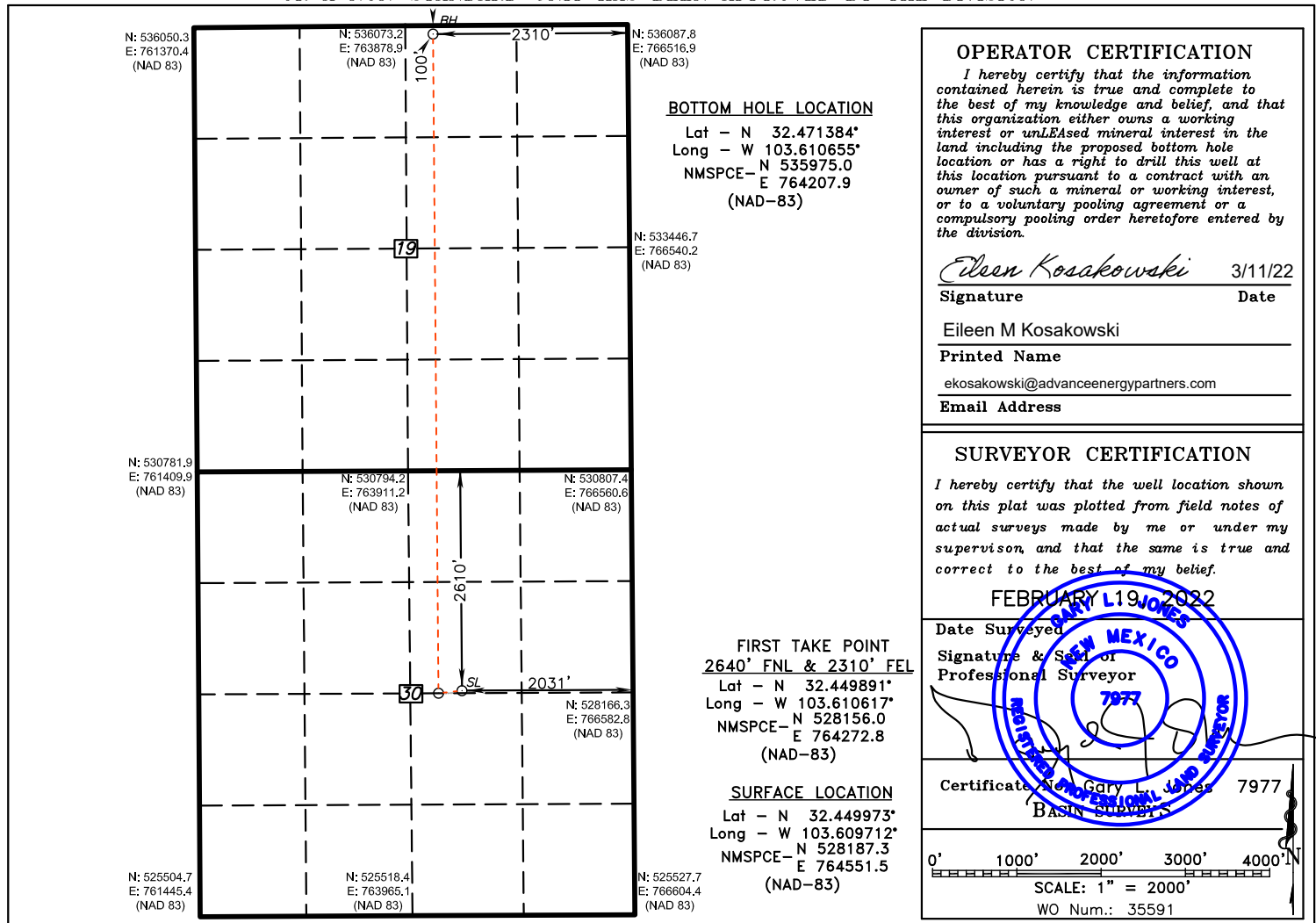
**Surface Location**

| UL or lot No. | Section | Township | Range | Lot Idn | Feet from the | SOUTH/South line | Feet from the | East/West line | County |
|---------------|---------|----------|-------|---------|---------------|------------------|---------------|----------------|--------|
| G             | 30      | 21 S     | 33 E  |         | 2610          | NORTH            | 2031          | EAST           | LEA    |

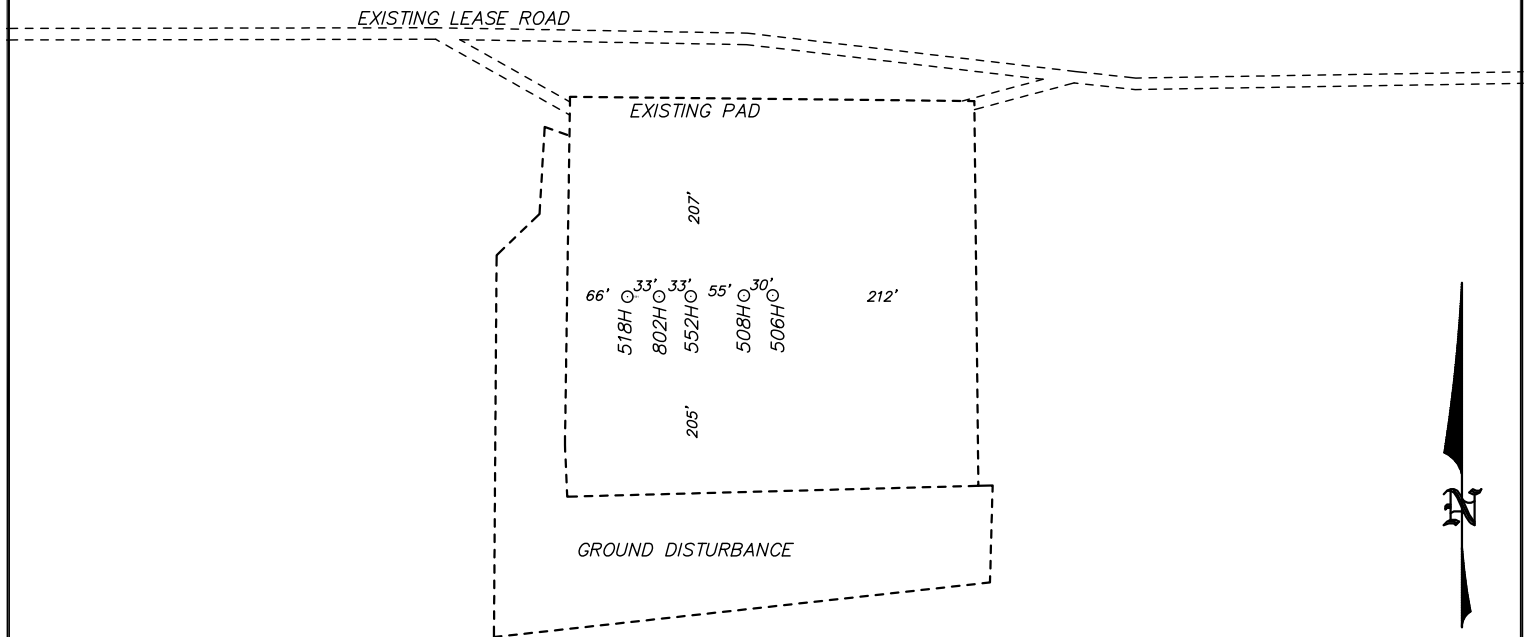
**Bottom Hole Location If Different From Surface**

| UL or lot No.                 | Section         | Township                       | Range     | Lot Idn | Feet from the | SOUTH/South line | Feet from the | East/West line | County |
|-------------------------------|-----------------|--------------------------------|-----------|---------|---------------|------------------|---------------|----------------|--------|
| B                             | 19              | 21 S                           | 33 E      |         | 100           | NORTH            | 2310          | EAST           | LEA    |
| Dedicated Acres<br><b>240</b> | Joint or Infill | Consolidation Code<br><b>C</b> | 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**



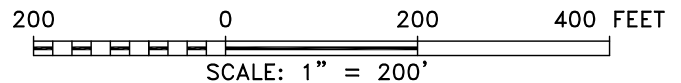
**SECTION 30, TOWNSHIP 21 SOUTH, RANGE 33 EAST. N.M.P.M.,  
LEA COUNTY, NEW MEXICO.**



**ADVANCE ENERGY PARTNERS HAT MESA  
DAGGER STATE COM #518H  
ELEV. - 3812'**

Lat - N 32.449973°  
Long - W 103.609712°  
NMSPCE - N 528187.3  
E 764551.5  
(NAD-83)

EUNICE, NM IS ±26 MILES TO THE EAST OF LOCATION.



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

**ADVANCE ENERGY PARTNERS HAT MESA**

REF: DAGGER STATE COM COM #518H / WELL PAD TOPO

THE DAGGER STATE COM COM #518H LOCATED 2610' FROM  
THE NORTH LINE AND 2031' FROM THE EAST LINE OF  
SECTION 30, TOWNSHIP 21 SOUTH, RANGE 33 EAST.

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

**SECTION 30, TOWNSHIP 21 SOUTH, RANGE 33 EAST. N.M.P.M.,  
LEA COUNTY, NEW MEXICO.**

EXISTING LEASE ROAD

EXISTING PAD

207'

66' 33' 33' 55' 30' 212'

518H 802H 552H 508H 506H

205'

GROUND DISTURBANCE



100 0 100 200 FEET

SCALE: 1" = 100'

**ADVANCE ENERGY PARTNERS HAT MESA**

REF: DAGGER STATE COM COM #518H / WELL PAD TOPO

THE DAGGER STATE COM COM #518H LOCATED 2610' FROM  
THE NORTH LINE AND 2031' FROM THE EAST LINE OF  
SECTION 30, TOWNSHIP 21 SOUTH, RANGE 33 EAST.

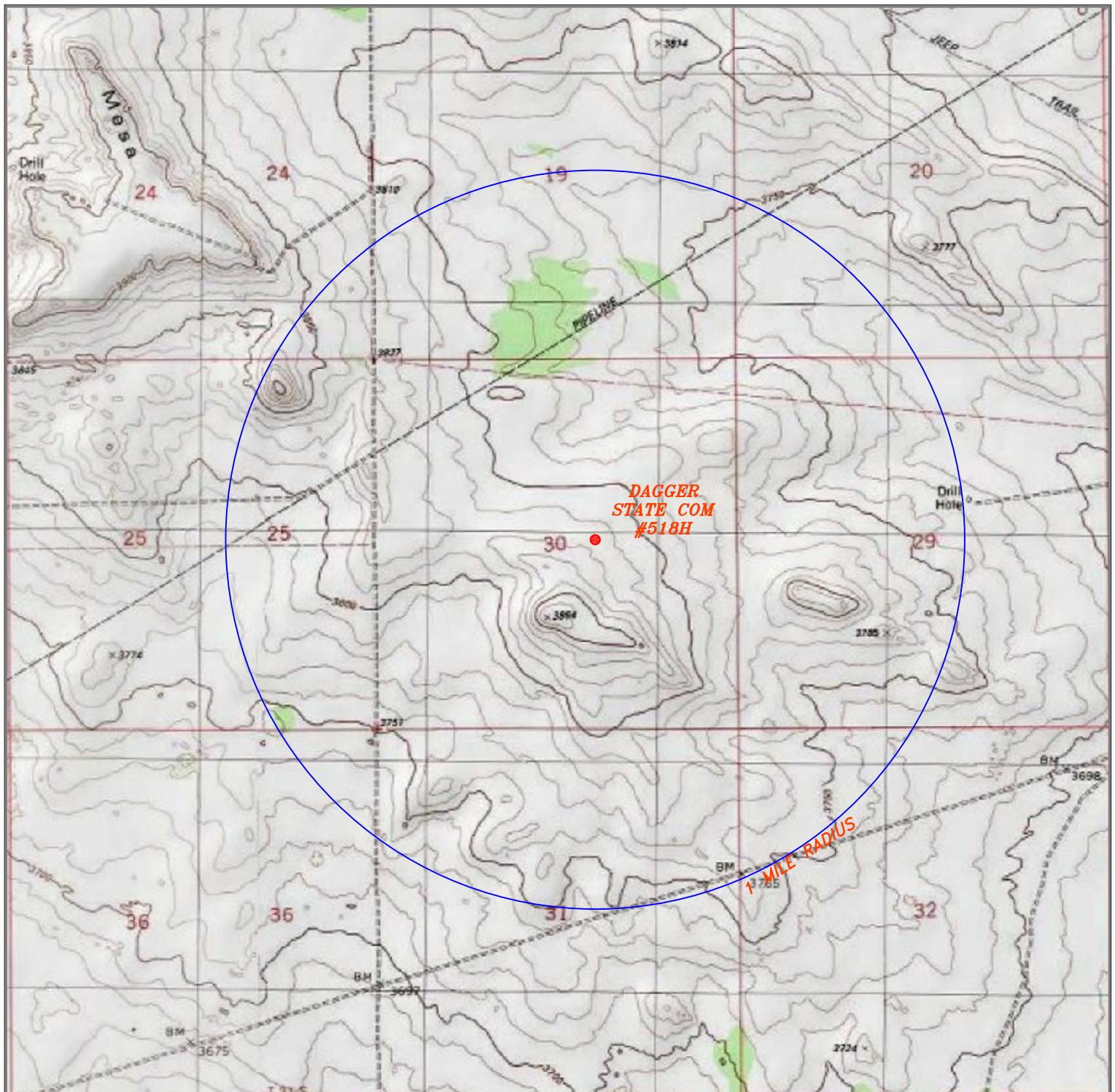
N.M.P.M., LEA COUNTY, NEW MEXICO.

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Hobbs, New Mexico 88241 basin-surveys.com

W.O. Number: 35591 Drawn By: K. GOAD Date: 02-22-2022 Survey Date: 02-19-2022 Sheet 1 of 1 Sheets





### DAGGER STATE COM #518H

Located 2610' FNL and 2031' FEL  
Section 30, Township 21 South, Range 33 East,  
N.M.P.M., Lea County, New Mexico.



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basinsurveys.com

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

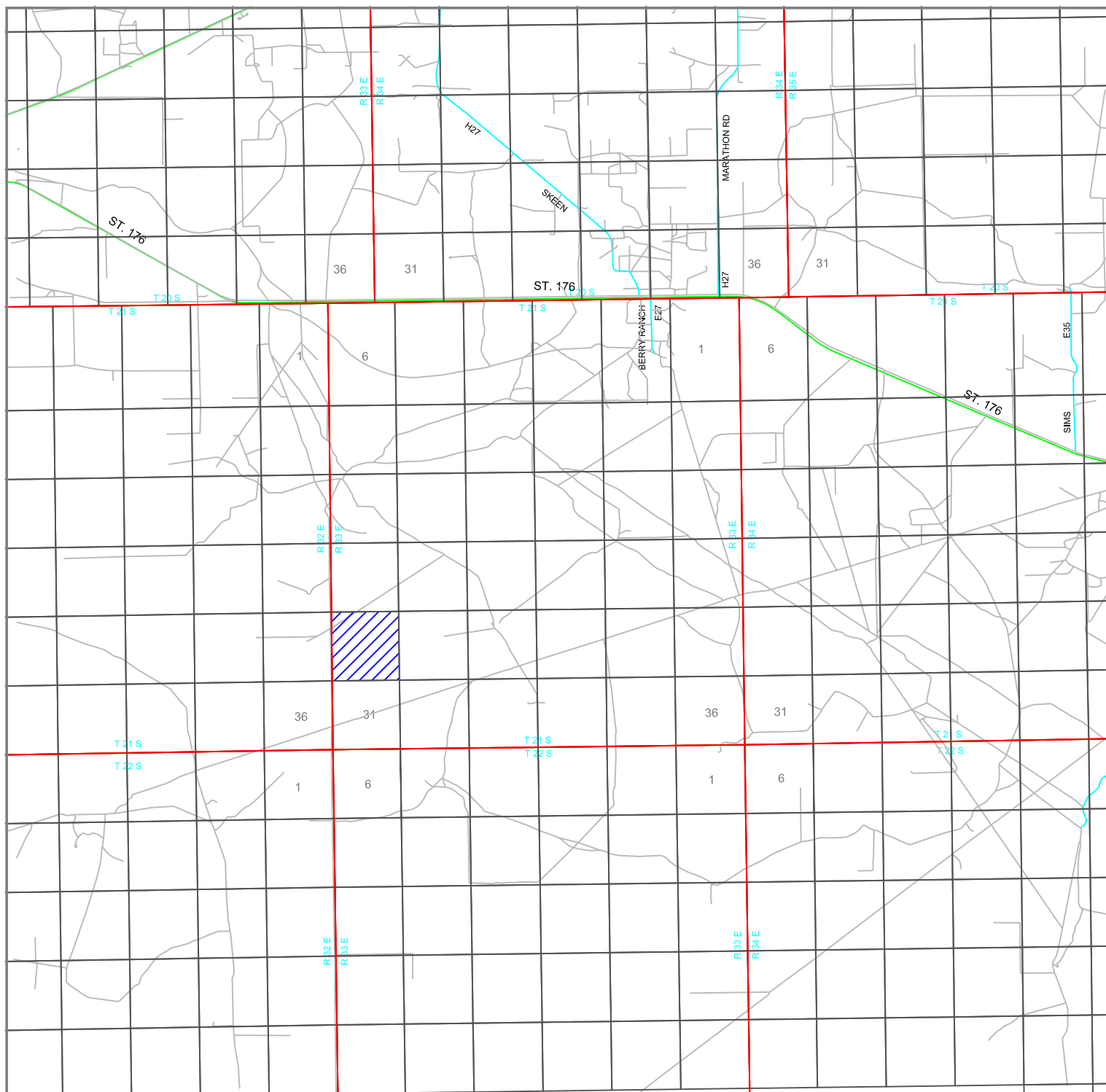
W.O. Number: KJG 35591

Survey Date: 02-19-2022

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



**ADVANCE  
ENERGY  
PARTNERS  
HAT MESA**



### DAGGER STATE COM #518H

Located 2610' FNL and 2031' FEL  
 Section 30, Township 21 South, Range 33 East,  
 N.M.P.M., Lea County, New Mexico.



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 basinsurveys.com

0 1 MI 2 MI 3 MI 4 MI

SCALE: 1" = 2 MILES

W.O. Number: KJG 35591

Survey Date: 02-19-2022

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



**ADVANCE  
 ENERGY  
 PARTNERS  
 HAT MESA**





### DAGGER STATE COM #518H

Located 2610' FNL and 2031' FEL  
Section 30, Township 21 South, Range 33 East,  
N.M.P.M., Lea County, New Mexico.



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basinsurveys.com

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

W.O. Number: KJG 35591

Survey Date: 02-19-2022

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



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HAT MESA**

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

Form APD Comments

Permit 311890

PERMIT COMMENTS

|                                                                                                                                    |                                                             |                                 |
|------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------|---------------------------------|
| Operator Name and Address:<br>ADVANCE ENERGY PARTNERS HAT MESA, LLC [372417]<br>11490 Westheimer Rd., Ste 950<br>Houston, TX 77077 |                                                             | API Number:<br>30-025-49942     |
|                                                                                                                                    |                                                             | Well:<br>DAGGER STATE COM #518H |
| Created By                                                                                                                         | Comment                                                     | Comment Date                    |
| pkautz                                                                                                                             | HOLD FOUR STRING CASIG AREA                                 | 3/23/2022                       |
| pkautz                                                                                                                             | Rejected so operator can resubmit four string casing design | 3/24/2022                       |



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**Oil Conservation Division**  
**1220 S. St Francis Dr.**  
**Santa Fe, NM 87505**

Form APD Conditions

Permit 311890

**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>30-025-49942     |
|                                                                                                                                    | Well:<br>DAGGER STATE COM #518H |

| 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          | Oil base muds are not to be used until fresh water zones are cased and cemented providing isolation from the oil or diesel. This includes synthetic oils. Oil based mud, drilling fluids and solids must be contained in a steel closed loop system                  |
| pkautz          | CEMENT MUST COME TO THE SURFACE ON ALL STRINGS                                                                                                                                                                                                                       |
| pkautz          | The Operator is to notify NMOCD by sundry (Form C-103) within ten (10) days of the well being spud                                                                                                                                                                   |

State of New Mexico  
Energy, Minerals and Natural Resources Department

Submit Electronically  
Via E-permitting

Oil Conservation Division  
1220 South St. Francis Dr.  
Santa Fe, NM 87505

## NATURAL GAS MANAGEMENT PLAN

This Natural Gas Management Plan must be submitted with each Application for Permit to Drill (APD) for a new or recompleted well.

### Section 1 – Plan Description

Effective May 25, 2021

**I. Operator:** Advance Energy Partners Hat Mesa, LLC **OGRID:** 372417 **Date:** \_\_\_\_\_

**II. Type:** ☒ Original ☐ Amendment due to ☐ 19.15.27.9.D(6)(a) NMAC ☐ 19.15.27.9.D(6)(b) NMAC ☐ Other.

If Other, please describe: \_\_\_\_\_

**III. Well(s):** Provide the following information for each new or recompleted well or set of wells proposed to be drilled or proposed to be recompleted from a single well pad or connected to a central delivery point.

| Well Name             | API    | ULSTR        | Footages            | Anticipated Oil BBL/D | Anticipated Gas MCF/D | Anticipated Produced Water BBL/D |
|-----------------------|--------|--------------|---------------------|-----------------------|-----------------------|----------------------------------|
| Dagger State Com 306H | 30-025 | H-30-21S-33E | 2610 FNL & 860 FEL  | +/- 1200              | +/- 2250              | +/- 3000                         |
| Dagger State Com 520H | 30-025 | H-30-21S-33E | 2610 FNL & 830 FEL  | +/- 1200              | +/- 2250              | +/- 3000                         |
| Dagger State Com 304H | 30-025 | F-30-21S-33E | 2560 FNL & 1950 FWL | +/- 1200              | +/- 2250              | +/- 3000                         |
| Dagger State Com 518H | 30-025 | G-30-21S-33E | 2610 FNL & 2031 FEL | +/- 1200              | +/- 2250              | +/- 3000                         |
|                       |        |              |                     |                       |                       |                                  |
|                       |        |              |                     |                       |                       |                                  |

**IV. Central Delivery Point Name:** \_\_\_\_\_ [See 19.15.27.9(D)(1) NMAC]

**V. Anticipated Schedule:** Provide the following information for each new or recompleted well or set of wells proposed to be drilled or proposed to be recompleted from a single well pad or connected to a central delivery point.

| Well Name             | API    | Spud Date | TD Reached Date | Completion Commencement Date | Initial Flow Back Date | First Production Date |
|-----------------------|--------|-----------|-----------------|------------------------------|------------------------|-----------------------|
| Dagger State Com 306H | 30-025 | 3/26/2022 | 4/26/2022       | 10/23/2022                   | 12/7/2022              | 12/9/2022             |
| Dagger State Com 520H | 30-025 | 4/12/2022 | 5/13/2022       | 11/9/2022                    | 12/24/2022             | 12/26/2022            |
| Dagger State Com 304H | 30-025 | 4/30/2022 | 5/31/2022       | 11/27/2022                   | 1/11/2023              | 1/13/2023             |
| Dagger State Com 518H | 30-025 | 6/11/2022 | 7/12/2022       | 1/8/2023                     | 2/22/2023              | 2/24/2023             |
|                       |        |           |                 |                              |                        |                       |
|                       |        |           |                 |                              |                        |                       |

**VI. Separation Equipment:** ☒ Attach a complete description of how Operator will size separation equipment to optimize gas capture.

**VII. Operational Practices:** ☒ Attach a complete description of the actions Operator will take to comply with the requirements of Subsection A through F of 19.15.27.8 NMAC.

**VIII. Best Management Practices:** ☒ Attach a complete description of Operator's best management practices to minimize venting during active and planned maintenance.

## **Section 2 – Enhanced Plan**

### **EFFECTIVE APRIL 1, 2022**

Beginning April 1, 2022, an operator that is not in compliance with its statewide natural gas capture requirement for the applicable reporting area must complete this section.

☐ Operator certifies that it is not required to complete this section because Operator is in compliance with its statewide natural gas capture requirement for the applicable reporting area.

#### **IX. Anticipated Natural Gas Production:**

| Well | API | Anticipated Average Natural Gas Rate MCF/D | Anticipated Volume of Natural Gas for the First Year MCF |
|------|-----|--------------------------------------------|----------------------------------------------------------|
|      |     |                                            |                                                          |
|      |     |                                            |                                                          |

#### **X. Natural Gas Gathering System (NGGS):**

| Operator | System | ULSTR of Tie-in | Anticipated Gathering Start Date | Available Maximum Daily Capacity of System Segment Tie-in |
|----------|--------|-----------------|----------------------------------|-----------------------------------------------------------|
|          |        |                 |                                  |                                                           |
|          |        |                 |                                  |                                                           |

**XI. Map.** ☐ Attach an accurate and legible map depicting the location of the well(s), the anticipated pipeline route(s) connecting the production operations to the existing or planned interconnect of the natural gas gathering system(s), and the maximum daily capacity of the segment or portion of the natural gas gathering system(s) to which the well(s) will be connected.

**XII. Line Capacity.** The natural gas gathering system ☐ will ☐ will not have capacity to gather 100% of the anticipated natural gas production volume from the well prior to the date of first production.

**XIII. Line Pressure.** Operator ☐ does ☐ does not anticipate that its existing well(s) connected to the same segment, or portion, of the natural gas gathering system(s) described above will continue to meet anticipated increases in line pressure caused by the new well(s).

☐ Attach Operator's plan to manage production in response to the increased line pressure.

**XIV. Confidentiality:** ☐ Operator asserts confidentiality pursuant to Section 71-2-8 NMSA 1978 for the information provided in Section 2 as provided in Paragraph (2) of Subsection D of 19.15.27.9 NMAC, and attaches a full description of the specific information for which confidentiality is asserted and the basis for such assertion.



### **Section 3 - Certifications**

**Effective May 25, 2021**

Operator certifies that, after reasonable inquiry and based on the available information at the time of submittal:

☒ Operator will be able to connect the well(s) to a natural gas gathering system in the general area with sufficient capacity to transport one hundred percent of the anticipated volume of natural gas produced from the well(s) commencing on the date of first production, taking into account the current and anticipated volumes of produced natural gas from other wells connected to the pipeline gathering system; or

☐ Operator will not be able to connect to a natural gas gathering system in the general area with sufficient capacity to transport one hundred percent of the anticipated volume of natural gas produced from the well(s) commencing on the date of first production, taking into account the current and anticipated volumes of produced natural gas from other wells connected to the pipeline gathering system.

***If Operator checks this box, Operator will select one of the following:***

**Well Shut-In.** ☐ Operator will shut-in and not produce the well until it submits the certification required by Paragraph (4) of Subsection D of 19.15.27.9 NMAC; or

**Venting and Flaring Plan.** ☐ Operator has attached a venting and flaring plan that evaluates and selects one or more of the potential alternative beneficial uses for the natural gas until a natural gas gathering system is available, including:

- (a) power generation on lease;
- (b) power generation for grid;
- (c) compression on lease;
- (d) liquids removal on lease;
- (e) reinjection for underground storage;
- (f) reinjection for temporary storage;
- (g) reinjection for enhanced oil recovery;
- (h) fuel cell production; and
- (i) other alternative beneficial uses approved by the division.

### **Section 4 - Notices**

1. If, at any time after Operator submits this Natural Gas Management Plan and before the well is spud:

(a) Operator becomes aware that the natural gas gathering system it planned to connect the well(s) to has become unavailable or will not have capacity to transport one hundred percent of the production from the well(s), no later than 20 days after becoming aware of such information, Operator shall submit for OCD's approval a new or revised venting and flaring plan containing the information specified in Paragraph (5) of Subsection D of 19.15.27.9 NMAC; or

(b) Operator becomes aware that it has, cumulatively for the year, become out of compliance with its baseline natural gas capture rate or natural gas capture requirement, no later than 20 days after becoming aware of such information, Operator shall submit for OCD's approval a new or revised Natural Gas Management Plan for each well it plans to spud during the next 90 days containing the information specified in Paragraph (2) of Subsection D of 19.15.27.9 NMAC, and shall file an update for each Natural Gas Management Plan until Operator is back in compliance with its baseline natural gas capture rate or natural gas capture requirement.

2. OCD may deny or conditionally approve an APD if Operator does not make a certification, fails to submit an adequate venting and flaring plan which includes alternative beneficial uses for the anticipated volume of natural gas produced, or if OCD determines that Operator will not have adequate natural gas takeaway capacity at the time a well will be spud.

I certify that, after reasonable inquiry, the statements in and attached to this Natural Gas Management Plan are true and correct to the best of my knowledge and acknowledge that a false statement may be subject to civil and criminal penalties under the Oil and Gas Act.

|                                                                                                  |
|--------------------------------------------------------------------------------------------------|
| Signature:      |
| Printed Name: Dayeed Khan                                                                        |
| Title: Engineer                                                                                  |
| E-mail Address: dkhan@ameredev.com                                                               |
| Date: 3/9/2022                                                                                   |
| Phone: 737-300-4700                                                                              |
| <b>OIL CONSERVATION DIVISION</b><br><b>(Only applicable when submitted as a standalone form)</b> |
| Approved By:                                                                                     |
| Title:                                                                                           |
| Approval Date:                                                                                   |
| Conditions of Approval:                                                                          |

## **Natural Gas Management Plan**

### **VI. Separation Equipment: Attach a complete description of how Operator will size separation equipment to optimize gas capture.**

- Separation equipment is sized to allow for retention time and velocity to adequately separate oil, gas, and water at anticipated peak rates.
- All central tank battery equipment is designed to efficiently capture the remaining gas from the liquid phase.
- Valves and meters are designed to service without flow interruption or venting of gas.

### **VII. Operational Practices: Attach a complete description of the actions Operator will take to comply with the requirements of Subsection A through F 19.15.27.8 NMAC.**

#### **19.15.27.8 (A)**

Advanced Energy Partners field operations are designed with the goal of minimizing flaring and preventing venting of natural gas. If capturing the gas is not possible then the gas is combusted/flared using properly sized flares or combustors in accordance with state air permit rules.

#### **19.15.27.8 (B) Venting and Flaring during drilling operations**

- A properly-sized flare stack will be located at a minimum 100' from the nearest surface hole location on the pad.
- All natural gas produced during drilling operations will be flared. Venting will only occur if there is an equipment malfunction and/or to avoid risk of an immediate and substantial adverse impact on safety, public health, or the environment.

#### **19.15.27.8 (C) Venting and Flaring during completions or recompletions operations.**

- During all phases of flowback, wells will flow through a sand separator, or other appropriate flowback separation equipment, and the well stream will be directed to a central tank battery (CTB) through properly sized flowlines
- The CTB will have properly sized separation equipment for maximum anticipated flowrates
- Multiple stages of separation will be used to separate gas from liquids. All gas will be routed to a sales outlet. Fluids will be routed to tanks equipped with a closed loop system that will recover any residual gas from the tanks and route such gas to a sales outlet.

#### **19.15.27.8 (D) Venting and Flaring during production operations.**

- During production, the well stream will be routed to the CTB where multiple stages of separation will separate gas from liquids. All gas will be routed to a sales outlet. Fluids will be routed to tanks with a closed

loop system that will recover any residual gas from the tanks and route such gas to a sales outlet, minimizing tank emissions.

- Flares are equipped with auto-ignition systems and continuous pilot operations.
- Automatic gauging equipment is installed on all tanks.

#### **19.15.27.8 (E) Performance Standards**

- Production equipment will be designed to handle maximum anticipated rates and pressure.
- Automatic gauging equipment is installed on all tanks to minimize venting
- All flared gas will be combusted in a flare stack that is properly sized and designed to ensure proper combustion.
- Flares are equipped with continuous pilots and auto-ignitors along with remote monitoring of the pilot status
- Weekly AVOs and monthly LDAR inspections will be performed on all wells and facilities that produce more than 60 Mcfd.
- Gas/H<sub>2</sub>S detectors will be installed throughout the facilities and wellheads to detect leaks and enable timely repairs.

#### **19.15.27.8 (F) Measurement or estimation of vented and flared natural gas**

- All high pressure flared gas is measured by equipment conforming to API 14.10.
- No meter bypasses are installed.
- When metering is not practical due to low pressure/low rate, the vented or flared volume will be estimated through flare flow curves with the assistance of air emissions consultants, as necessary.

#### **VIII. Best Management Practices: Attach a complete description of Operator's best management practices to minimize venting during active and planned maintenance.**

- Advanced Energy Partners will use best management practices to vent as minimally as possible during well intervention operations and downhole well maintenance
- All natural gas is routed into the gas gathering system and directed to one of Advanced Energy Partners multiple gas sales outlets.
- All venting events will be recorded and all start-up, shutdown, maintenance logs will be kept for control equipment
- All control equipment will be maintained to provide highest run-time possible
- All procedures are drafted to keep venting and flaring to the absolute minimum



## **Advance Energy Partners**

**Hat Mesa**

**Dagger State**

**Dagger State Com 518H**

**Dagger State Com 518H**

**Plan: Dagger State Com 518H**

## **Standard Planning Report**

**11 March, 2022**





## Planning Report

|                  |                            |                                     |                                        |
|------------------|----------------------------|-------------------------------------|----------------------------------------|
| <b>Database:</b> | EDM 5000.16 Single User Db | <b>Local Co-ordinate Reference:</b> | Well Dagger State Com 518H             |
| <b>Company:</b>  | Advance Energy Partners    | <b>TVD Reference:</b>               | WELL @ 3844.5usft (Original Well Elev) |
| <b>Project:</b>  | Hat Mesa                   | <b>MD Reference:</b>                | WELL @ 3844.5usft (Original Well Elev) |
| <b>Site:</b>     | Dagger State               | <b>North Reference:</b>             | Grid                                   |
| <b>Well:</b>     | Dagger State Com 518H      | <b>Survey Calculation Method:</b>   | Minimum Curvature                      |
| <b>Wellbore:</b> | Dagger State Com 518H      |                                     |                                        |
| <b>Design:</b>   | Dagger State Com 518H      |                                     |                                        |

|                    |                           |                      |                |
|--------------------|---------------------------|----------------------|----------------|
| <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 State |                 |            |                   |
|-----------------------|----------|--------------|-----------------|------------|-------------------|
| Site Position:        |          | Northing:    | 529,194.79 usft | Latitude:  | 32° 27' 9.770 N   |
| From:                 | Lat/Long | Easting:     | 766,028.88 usft | Longitude: | 103° 36' 17.644 W |
| Position Uncertainty: |          | 0.0 usft     | Slot Radius:    | 13-3/16 "  |                   |

| Well                 | Dagger State Com 518H |          |                     |                 |               |                   |
|----------------------|-----------------------|----------|---------------------|-----------------|---------------|-------------------|
| Well Position        | +N/-S                 | 0.0 usft | Northing:           | 528,187.51 usft | Latitude:     | 32° 26' 59.903 N  |
|                      | +E/-W                 | 0.0 usft | Easting:            | 764,551.61 usft | Longitude:    | 103° 36' 34.963 W |
| Position Uncertainty |                       | 0.0 usft | Wellhead Elevation: | usft            | Ground Level: | 3,812.0 usft      |
| Grid Convergence:    |                       | 0.39 °   |                     |                 |               |                   |

|                  |                       |                    |                        |                      |                            |
|------------------|-----------------------|--------------------|------------------------|----------------------|----------------------------|
| <b>Wellbore</b>  | Dagger State Com 518H |                    |                        |                      |                            |
| <b>Magnetics</b> | <b>Model Name</b>     | <b>Sample Date</b> | <b>Declination (°)</b> | <b>Dip Angle (°)</b> | <b>Field Strength (nT)</b> |
|                  | IGRF2015              | 3/11/2022          | 6.47                   | 60.20                | 47,577.44215718            |

|                          |                                |                     |                      |                      |  |
|--------------------------|--------------------------------|---------------------|----------------------|----------------------|--|
| <b>Design</b>            | Dagger State Com 518H          |                     |                      |                      |  |
| <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                  | 357.47               |  |

|                                 |                        |                          |                               |                |  |
|---------------------------------|------------------------|--------------------------|-------------------------------|----------------|--|
| <b>Plan Survey Tool Program</b> | <b>Date</b>            | 3/11/2022                |                               |                |  |
| <b>Depth From (usft)</b>        | <b>Depth To (usft)</b> | <b>Survey (Wellbore)</b> | <b>Tool Name</b>              | <b>Remarks</b> |  |
| 1                               | 0.0                    | 17,948.7                 | Dagger State Com 518H (Dagger | MWD+HRGM       |  |
|                                 |                        |                          | OWSG MWD + HRGM               |                |  |



## Planning Report

|                  |                            |                                     |                                        |
|------------------|----------------------------|-------------------------------------|----------------------------------------|
| <b>Database:</b> | EDM 5000.16 Single User Db | <b>Local Co-ordinate Reference:</b> | Well Dagger State Com 518H             |
| <b>Company:</b>  | Advance Energy Partners    | <b>TVD Reference:</b>               | WELL @ 3844.5usft (Original Well Elev) |
| <b>Project:</b>  | Hat Mesa                   | <b>MD Reference:</b>                | WELL @ 3844.5usft (Original Well Elev) |
| <b>Site:</b>     | Dagger State               | <b>North Reference:</b>             | Grid                                   |
| <b>Well:</b>     | Dagger State Com 518H      | <b>Survey Calculation Method:</b>   | Minimum Curvature                      |
| <b>Wellbore:</b> | Dagger State Com 518H      |                                     |                                        |
| <b>Design:</b>   | Dagger State Com 518H      |                                     |                                        |

| Plan Sections         |                 |             |                       |              |              |                         |                        |                       |         |                     |
|-----------------------|-----------------|-------------|-----------------------|--------------|--------------|-------------------------|------------------------|-----------------------|---------|---------------------|
| Measured Depth (usft) | Inclination (°) | Azimuth (°) | Vertical Depth (usft) | +N/-S (usft) | +E/-W (usft) | Dogleg Rate (°/100usft) | Build Rate (°/100usft) | Turn Rate (°/100usft) | TFO (°) | Target              |
| 0.0                   | 0.00            | 0.00        | 0.0                   | 0.0          | 0.0          | 0.00                    | 0.00                   | 0.00                  | 0.00    |                     |
| 2,500.0               | 0.00            | 0.00        | 2,500.0               | 0.0          | 0.0          | 0.00                    | 0.00                   | 0.00                  | 0.00    |                     |
| 2,707.4               | 2.07            | 260.91      | 2,707.3               | -0.6         | -3.7         | 1.00                    | 1.00                   | 0.00                  | 260.91  |                     |
| 9,497.2               | 2.07            | 260.91      | 9,492.7               | -39.4        | -246.3       | 0.00                    | 0.00                   | 0.00                  | 0.00    |                     |
| 9,704.5               | 0.00            | 0.00        | 9,700.0               | -40.0        | -250.0       | 1.00                    | -1.00                  | 0.00                  | 180.00  |                     |
| 9,847.1               | 0.00            | 0.00        | 9,842.5               | -40.0        | -250.0       | 0.00                    | 0.00                   | 0.00                  | 0.00    |                     |
| 10,597.1              | 90.00           | 355.85      | 10,320.0              | 436.2        | -284.6       | 12.00                   | 12.00                  | 0.00                  | 355.85  |                     |
| 10,603.3              | 90.00           | 355.85      | 10,320.0              | 442.4        | -285.0       | 0.00                    | 0.00                   | 0.00                  | 0.00    | Dagger State Com 51 |
| 10,790.3              | 90.00           | 359.59      | 10,320.0              | 629.2        | -292.4       | 2.00                    | 0.00                   | 2.00                  | 90.00   |                     |
| 17,948.7              | 90.00           | 359.59      | 10,320.0              | 7,787.5      | -343.6       | 0.00                    | 0.00                   | 0.00                  | 0.00    | Dagger State Com 51 |



## Planning Report

|                  |                            |                                     |                                        |
|------------------|----------------------------|-------------------------------------|----------------------------------------|
| <b>Database:</b> | EDM 5000.16 Single User Db | <b>Local Co-ordinate Reference:</b> | Well Dagger State Com 518H             |
| <b>Company:</b>  | Advance Energy Partners    | <b>TVD Reference:</b>               | WELL @ 3844.5usft (Original Well Elev) |
| <b>Project:</b>  | Hat Mesa                   | <b>MD Reference:</b>                | WELL @ 3844.5usft (Original Well Elev) |
| <b>Site:</b>     | Dagger State               | <b>North Reference:</b>             | Grid                                   |
| <b>Well:</b>     | Dagger State Com 518H      | <b>Survey Calculation Method:</b>   | Minimum Curvature                      |
| <b>Wellbore:</b> | Dagger State Com 518H      |                                     |                                        |
| <b>Design:</b>   | Dagger State Com 518H      |                                     |                                        |

| 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                  |
| 1,604.5                               | 0.00            | 0.00        | 1,604.5               | 0.0          | 0.0          | 0.0                     | 0.00                    | 0.00                   | 0.00                  |
| <b>Rustler</b>                        |                 |             |                       |              |              |                         |                         |                        |                       |
| 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                  |
| <b>KOP - Start Build 1.00</b>         |                 |             |                       |              |              |                         |                         |                        |                       |
| 2,600.0                               | 1.00            | 260.91      | 2,600.0               | -0.1         | -0.9         | -0.1                    | 1.00                    | 1.00                   | 0.00                  |
| 2,700.0                               | 2.00            | 260.91      | 2,700.0               | -0.6         | -3.4         | -0.4                    | 1.00                    | 1.00                   | 0.00                  |
| 2,707.4                               | 2.07            | 260.91      | 2,707.3               | -0.6         | -3.7         | -0.4                    | 1.00                    | 1.00                   | 0.00                  |
| <b>Start 6789.8 hold at 2707.4 MD</b> |                 |             |                       |              |              |                         |                         |                        |                       |
| 2,800.0                               | 2.07            | 260.91      | 2,799.9               | -1.1         | -7.0         | -0.8                    | 0.00                    | 0.00                   | 0.00                  |
| 2,900.0                               | 2.07            | 260.91      | 2,899.8               | -1.7         | -10.6        | -1.2                    | 0.00                    | 0.00                   | 0.00                  |
| 3,000.0                               | 2.07            | 260.91      | 2,999.8               | -2.3         | -14.2        | -1.6                    | 0.00                    | 0.00                   | 0.00                  |
| 3,100.0                               | 2.07            | 260.91      | 3,099.7               | -2.8         | -17.7        | -2.1                    | 0.00                    | 0.00                   | 0.00                  |
| 3,200.0                               | 2.07            | 260.91      | 3,199.6               | -3.4         | -21.3        | -2.5                    | 0.00                    | 0.00                   | 0.00                  |
| 3,300.0                               | 2.07            | 260.91      | 3,299.6               | -4.0         | -24.9        | -2.9                    | 0.00                    | 0.00                   | 0.00                  |
| 3,400.0                               | 2.07            | 260.91      | 3,399.5               | -4.6         | -28.5        | -3.3                    | 0.00                    | 0.00                   | 0.00                  |
| 3,500.0                               | 2.07            | 260.91      | 3,499.4               | -5.1         | -32.0        | -3.7                    | 0.00                    | 0.00                   | 0.00                  |
| 3,600.0                               | 2.07            | 260.91      | 3,599.4               | -5.7         | -35.6        | -4.1                    | 0.00                    | 0.00                   | 0.00                  |
| 3,700.0                               | 2.07            | 260.91      | 3,699.3               | -6.3         | -39.2        | -4.5                    | 0.00                    | 0.00                   | 0.00                  |
| 3,800.0                               | 2.07            | 260.91      | 3,799.2               | -6.8         | -42.7        | -4.9                    | 0.00                    | 0.00                   | 0.00                  |
| 3,900.0                               | 2.07            | 260.91      | 3,899.2               | -7.4         | -46.3        | -5.4                    | 0.00                    | 0.00                   | 0.00                  |
| 4,000.0                               | 2.07            | 260.91      | 3,999.1               | -8.0         | -49.9        | -5.8                    | 0.00                    | 0.00                   | 0.00                  |
| 4,100.0                               | 2.07            | 260.91      | 4,099.0               | -8.6         | -53.5        | -6.2                    | 0.00                    | 0.00                   | 0.00                  |
| 4,200.0                               | 2.07            | 260.91      | 4,199.0               | -9.1         | -57.0        | -6.6                    | 0.00                    | 0.00                   | 0.00                  |
| 4,300.0                               | 2.07            | 260.91      | 4,298.9               | -9.7         | -60.6        | -7.0                    | 0.00                    | 0.00                   | 0.00                  |
| 4,400.0                               | 2.07            | 260.91      | 4,398.8               | -10.3        | -64.2        | -7.4                    | 0.00                    | 0.00                   | 0.00                  |
| 4,500.0                               | 2.07            | 260.91      | 4,498.8               | -10.8        | -67.8        | -7.8                    | 0.00                    | 0.00                   | 0.00                  |
| 4,600.0                               | 2.07            | 260.91      | 4,598.7               | -11.4        | -71.3        | -8.3                    | 0.00                    | 0.00                   | 0.00                  |
| 4,700.0                               | 2.07            | 260.91      | 4,698.6               | -12.0        | -74.9        | -8.7                    | 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 State Com 518H             |
| <b>Company:</b>  | Advance Energy Partners    | <b>TVD Reference:</b>               | WELL @ 3844.5usft (Original Well Elev) |
| <b>Project:</b>  | Hat Mesa                   | <b>MD Reference:</b>                | WELL @ 3844.5usft (Original Well Elev) |
| <b>Site:</b>     | Dagger State               | <b>North Reference:</b>             | Grid                                   |
| <b>Well:</b>     | Dagger State Com 518H      | <b>Survey Calculation Method:</b>   | Minimum Curvature                      |
| <b>Wellbore:</b> | Dagger State Com 518H      |                                     |                                        |
| <b>Design:</b>   | Dagger State Com 518H      |                                     |                                        |

| Planned Survey           |                 |             |                       |              |              |                         |                         |                        |                       |
|--------------------------|-----------------|-------------|-----------------------|--------------|--------------|-------------------------|-------------------------|------------------------|-----------------------|
| Measured Depth (usft)    | Inclination (°) | Azimuth (°) | Vertical Depth (usft) | +N/-S (usft) | +E/-W (usft) | Vertical Section (usft) | Dogleg Rate (°/100usft) | Build Rate (°/100usft) | Turn Rate (°/100usft) |
| 4,800.0                  | 2.07            | 260.91      | 4,798.6               | -12.6        | -78.5        | -9.1                    | 0.00                    | 0.00                   | 0.00                  |
| 4,900.0                  | 2.07            | 260.91      | 4,898.5               | -13.1        | -82.0        | -9.5                    | 0.00                    | 0.00                   | 0.00                  |
| 5,000.0                  | 2.07            | 260.91      | 4,998.5               | -13.7        | -85.6        | -9.9                    | 0.00                    | 0.00                   | 0.00                  |
| 5,100.0                  | 2.07            | 260.91      | 5,098.4               | -14.3        | -89.2        | -10.3                   | 0.00                    | 0.00                   | 0.00                  |
| 5,200.0                  | 2.07            | 260.91      | 5,198.3               | -14.8        | -92.8        | -10.7                   | 0.00                    | 0.00                   | 0.00                  |
| 5,266.2                  | 2.07            | 260.91      | 5,264.5               | -15.2        | -95.1        | -11.0                   | 0.00                    | 0.00                   | 0.00                  |
| <b>Base of Limestone</b> |                 |             |                       |              |              |                         |                         |                        |                       |
| 5,300.0                  | 2.07            | 260.91      | 5,298.3               | -15.4        | -96.3        | -11.2                   | 0.00                    | 0.00                   | 0.00                  |
| 5,400.0                  | 2.07            | 260.91      | 5,398.2               | -16.0        | -99.9        | -11.6                   | 0.00                    | 0.00                   | 0.00                  |
| 5,500.0                  | 2.07            | 260.91      | 5,498.1               | -16.6        | -103.5       | -12.0                   | 0.00                    | 0.00                   | 0.00                  |
| 5,600.0                  | 2.07            | 260.91      | 5,598.1               | -17.1        | -107.1       | -12.4                   | 0.00                    | 0.00                   | 0.00                  |
| 5,700.0                  | 2.07            | 260.91      | 5,698.0               | -17.7        | -110.6       | -12.8                   | 0.00                    | 0.00                   | 0.00                  |
| 5,800.0                  | 2.07            | 260.91      | 5,797.9               | -18.3        | -114.2       | -13.2                   | 0.00                    | 0.00                   | 0.00                  |
| 5,900.0                  | 2.07            | 260.91      | 5,897.9               | -18.8        | -117.8       | -13.6                   | 0.00                    | 0.00                   | 0.00                  |
| 6,000.0                  | 2.07            | 260.91      | 5,997.8               | -19.4        | -121.3       | -14.0                   | 0.00                    | 0.00                   | 0.00                  |
| 6,100.0                  | 2.07            | 260.91      | 6,097.7               | -20.0        | -124.9       | -14.5                   | 0.00                    | 0.00                   | 0.00                  |
| 6,200.0                  | 2.07            | 260.91      | 6,197.7               | -20.6        | -128.5       | -14.9                   | 0.00                    | 0.00                   | 0.00                  |
| 6,300.0                  | 2.07            | 260.91      | 6,297.6               | -21.1        | -132.1       | -15.3                   | 0.00                    | 0.00                   | 0.00                  |
| 6,400.0                  | 2.07            | 260.91      | 6,397.5               | -21.7        | -135.6       | -15.7                   | 0.00                    | 0.00                   | 0.00                  |
| 6,500.0                  | 2.07            | 260.91      | 6,497.5               | -22.3        | -139.2       | -16.1                   | 0.00                    | 0.00                   | 0.00                  |
| 6,600.0                  | 2.07            | 260.91      | 6,597.4               | -22.8        | -142.8       | -16.5                   | 0.00                    | 0.00                   | 0.00                  |
| 6,700.0                  | 2.07            | 260.91      | 6,697.3               | -23.4        | -146.4       | -16.9                   | 0.00                    | 0.00                   | 0.00                  |
| 6,800.0                  | 2.07            | 260.91      | 6,797.3               | -24.0        | -149.9       | -17.4                   | 0.00                    | 0.00                   | 0.00                  |
| 6,900.0                  | 2.07            | 260.91      | 6,897.2               | -24.6        | -153.5       | -17.8                   | 0.00                    | 0.00                   | 0.00                  |
| 7,000.0                  | 2.07            | 260.91      | 6,997.1               | -25.1        | -157.1       | -18.2                   | 0.00                    | 0.00                   | 0.00                  |
| 7,100.0                  | 2.07            | 260.91      | 7,097.1               | -25.7        | -160.6       | -18.6                   | 0.00                    | 0.00                   | 0.00                  |
| 7,200.0                  | 2.07            | 260.91      | 7,197.0               | -26.3        | -164.2       | -19.0                   | 0.00                    | 0.00                   | 0.00                  |
| 7,300.0                  | 2.07            | 260.91      | 7,296.9               | -26.8        | -167.8       | -19.4                   | 0.00                    | 0.00                   | 0.00                  |
| 7,400.0                  | 2.07            | 260.91      | 7,396.9               | -27.4        | -171.4       | -19.8                   | 0.00                    | 0.00                   | 0.00                  |
| 7,500.0                  | 2.07            | 260.91      | 7,496.8               | -28.0        | -174.9       | -20.3                   | 0.00                    | 0.00                   | 0.00                  |
| 7,600.0                  | 2.07            | 260.91      | 7,596.8               | -28.6        | -178.5       | -20.7                   | 0.00                    | 0.00                   | 0.00                  |
| 7,700.0                  | 2.07            | 260.91      | 7,696.7               | -29.1        | -182.1       | -21.1                   | 0.00                    | 0.00                   | 0.00                  |
| 7,800.0                  | 2.07            | 260.91      | 7,796.6               | -29.7        | -185.7       | -21.5                   | 0.00                    | 0.00                   | 0.00                  |
| 7,900.0                  | 2.07            | 260.91      | 7,896.6               | -30.3        | -189.2       | -21.9                   | 0.00                    | 0.00                   | 0.00                  |
| 8,000.0                  | 2.07            | 260.91      | 7,996.5               | -30.8        | -192.8       | -22.3                   | 0.00                    | 0.00                   | 0.00                  |
| 8,100.0                  | 2.07            | 260.91      | 8,096.4               | -31.4        | -196.4       | -22.7                   | 0.00                    | 0.00                   | 0.00                  |
| 8,200.0                  | 2.07            | 260.91      | 8,196.4               | -32.0        | -199.9       | -23.1                   | 0.00                    | 0.00                   | 0.00                  |
| 8,300.0                  | 2.07            | 260.91      | 8,296.3               | -32.6        | -203.5       | -23.6                   | 0.00                    | 0.00                   | 0.00                  |
| 8,400.0                  | 2.07            | 260.91      | 8,396.2               | -33.1        | -207.1       | -24.0                   | 0.00                    | 0.00                   | 0.00                  |
| 8,500.0                  | 2.07            | 260.91      | 8,496.2               | -33.7        | -210.7       | -24.4                   | 0.00                    | 0.00                   | 0.00                  |
| 8,568.4                  | 2.07            | 260.91      | 8,564.5               | -34.1        | -213.1       | -24.7                   | 0.00                    | 0.00                   | 0.00                  |
| <b>Lower Brushy</b>      |                 |             |                       |              |              |                         |                         |                        |                       |
| 8,600.0                  | 2.07            | 260.91      | 8,596.1               | -34.3        | -214.2       | -24.8                   | 0.00                    | 0.00                   | 0.00                  |
| 8,700.0                  | 2.07            | 260.91      | 8,696.0               | -34.9        | -217.8       | -25.2                   | 0.00                    | 0.00                   | 0.00                  |
| 8,800.0                  | 2.07            | 260.91      | 8,796.0               | -35.4        | -221.4       | -25.6                   | 0.00                    | 0.00                   | 0.00                  |
| 8,900.0                  | 2.07            | 260.91      | 8,895.9               | -36.0        | -225.0       | -26.0                   | 0.00                    | 0.00                   | 0.00                  |
| 9,000.0                  | 2.07            | 260.91      | 8,995.8               | -36.6        | -228.5       | -26.5                   | 0.00                    | 0.00                   | 0.00                  |
| 9,040.7                  | 2.07            | 260.91      | 9,036.5               | -36.8        | -230.0       | -26.6                   | 0.00                    | 0.00                   | 0.00                  |
| <b>Avalon</b>            |                 |             |                       |              |              |                         |                         |                        |                       |
| 9,100.0                  | 2.07            | 260.91      | 9,095.8               | -37.1        | -232.1       | -26.9                   | 0.00                    | 0.00                   | 0.00                  |
| 9,200.0                  | 2.07            | 260.91      | 9,195.7               | -37.7        | -235.7       | -27.3                   | 0.00                    | 0.00                   | 0.00                  |
| 9,300.0                  | 2.07            | 260.91      | 9,295.6               | -38.3        | -239.3       | -27.7                   | 0.00                    | 0.00                   | 0.00                  |
| 9,400.0                  | 2.07            | 260.91      | 9,395.6               | -38.9        | -242.8       | -28.1                   | 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 State Com 518H             |
| <b>Company:</b>  | Advance Energy Partners    | <b>TVD Reference:</b>               | WELL @ 3844.5usft (Original Well Elev) |
| <b>Project:</b>  | Hat Mesa                   | <b>MD Reference:</b>                | WELL @ 3844.5usft (Original Well Elev) |
| <b>Site:</b>     | Dagger State               | <b>North Reference:</b>             | Grid                                   |
| <b>Well:</b>     | Dagger State Com 518H      | <b>Survey Calculation Method:</b>   | Minimum Curvature                      |
| <b>Wellbore:</b> | Dagger State Com 518H      |                                     |                                        |
| <b>Design:</b>   | Dagger State Com 518H      |                                     |                                        |

| 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) |
| 9,497.2                                                    | 2.07            | 260.91      | 9,492.7               | -39.4        | -246.3       | -28.5                   | 0.00                    | 0.00                   | 0.00                  |
| <b>Start Drop -1.00</b>                                    |                 |             |                       |              |              |                         |                         |                        |                       |
| 9,500.0                                                    | 2.05            | 260.91      | 9,495.5               | -39.4        | -246.4       | -28.5                   | 1.00                    | -1.00                  | 0.00                  |
| 9,600.0                                                    | 1.05            | 260.91      | 9,595.5               | -39.8        | -249.1       | -28.8                   | 1.00                    | -1.00                  | 0.00                  |
| 9,700.0                                                    | 0.05            | 260.91      | 9,695.5               | -40.0        | -250.0       | -28.9                   | 1.00                    | -1.00                  | 0.00                  |
| 9,704.5                                                    | 0.00            | 0.00        | 9,700.0               | -40.0        | -250.0       | -28.9                   | 1.00                    | -1.00                  | 0.00                  |
| <b>Start 142.5 hold at 9704.5 MD</b>                       |                 |             |                       |              |              |                         |                         |                        |                       |
| 9,800.0                                                    | 0.00            | 0.00        | 9,795.5               | -40.0        | -250.0       | -28.9                   | 0.00                    | 0.00                   | 0.00                  |
| 9,847.1                                                    | 0.00            | 0.00        | 9,842.5               | -40.0        | -250.0       | -28.9                   | 0.00                    | 0.00                   | 0.00                  |
| <b>KOP #2 - Start Build 12.00</b>                          |                 |             |                       |              |              |                         |                         |                        |                       |
| 9,900.0                                                    | 6.35            | 355.85      | 9,895.4               | -37.1        | -250.2       | -26.0                   | 12.00                   | 12.00                  | 0.00                  |
| 10,000.0                                                   | 18.35           | 355.85      | 9,992.9               | -15.8        | -251.8       | -4.7                    | 12.00                   | 12.00                  | 0.00                  |
| 10,041.4                                                   | 23.31           | 355.85      | 10,031.5              | -1.1         | -252.8       | 10.0                    | 12.00                   | 12.00                  | 0.00                  |
| <b>1st BS Sand</b>                                         |                 |             |                       |              |              |                         |                         |                        |                       |
| 10,100.0                                                   | 30.35           | 355.85      | 10,083.8              | 25.3         | -254.7       | 36.5                    | 12.00                   | 12.00                  | 0.00                  |
| 10,200.0                                                   | 42.35           | 355.85      | 10,164.2              | 84.3         | -259.0       | 95.6                    | 12.00                   | 12.00                  | 0.00                  |
| 10,300.0                                                   | 54.35           | 355.85      | 10,230.5              | 158.7        | -264.4       | 170.2                   | 12.00                   | 12.00                  | 0.00                  |
| 10,400.0                                                   | 66.35           | 355.85      | 10,279.9              | 245.2        | -270.7       | 256.9                   | 12.00                   | 12.00                  | 0.00                  |
| 10,500.0                                                   | 78.35           | 355.85      | 10,310.2              | 340.1        | -277.6       | 352.0                   | 12.00                   | 12.00                  | 0.00                  |
| 10,597.1                                                   | 90.00           | 355.85      | 10,320.0              | 436.2        | -284.6       | 448.3                   | 12.00                   | 12.00                  | 0.00                  |
| <b>LP - Start 6.2 hold at 10597.1 MD</b>                   |                 |             |                       |              |              |                         |                         |                        |                       |
| 10,600.0                                                   | 90.00           | 355.85      | 10,320.0              | 439.1        | -284.8       | 451.3                   | 0.00                    | 0.00                   | 0.00                  |
| 10,603.3                                                   | 90.00           | 355.85      | 10,320.0              | 442.4        | -285.0       | 454.5                   | 0.00                    | 0.00                   | 0.00                  |
| <b>Start DLS 2.00 TFO 90.00 - Dagger State Com 518H LP</b> |                 |             |                       |              |              |                         |                         |                        |                       |
| 10,700.0                                                   | 90.00           | 357.78      | 10,320.0              | 539.0        | -290.4       | 551.2                   | 2.00                    | 0.00                   | 2.00                  |
| 10,790.3                                                   | 90.00           | 359.59      | 10,320.0              | 629.2        | -292.4       | 641.5                   | 2.00                    | 0.00                   | 2.00                  |
| <b>Start 7158.5 hold at 10790.3 MD</b>                     |                 |             |                       |              |              |                         |                         |                        |                       |
| 10,800.0                                                   | 90.00           | 359.59      | 10,320.0              | 638.9        | -292.5       | 651.2                   | 0.00                    | 0.00                   | 0.00                  |
| 10,900.0                                                   | 90.00           | 359.59      | 10,320.0              | 738.9        | -293.2       | 751.1                   | 0.00                    | 0.00                   | 0.00                  |
| 11,000.0                                                   | 90.00           | 359.59      | 10,320.0              | 838.9        | -293.9       | 851.1                   | 0.00                    | 0.00                   | 0.00                  |
| 11,100.0                                                   | 90.00           | 359.59      | 10,320.0              | 938.9        | -294.7       | 951.0                   | 0.00                    | 0.00                   | 0.00                  |
| 11,200.0                                                   | 90.00           | 359.59      | 10,320.0              | 1,038.9      | -295.4       | 1,050.9                 | 0.00                    | 0.00                   | 0.00                  |
| 11,300.0                                                   | 90.00           | 359.59      | 10,320.0              | 1,138.9      | -296.1       | 1,150.9                 | 0.00                    | 0.00                   | 0.00                  |
| 11,400.0                                                   | 90.00           | 359.59      | 10,320.0              | 1,238.9      | -296.8       | 1,250.8                 | 0.00                    | 0.00                   | 0.00                  |
| 11,500.0                                                   | 90.00           | 359.59      | 10,320.0              | 1,338.9      | -297.5       | 1,350.7                 | 0.00                    | 0.00                   | 0.00                  |
| 11,600.0                                                   | 90.00           | 359.59      | 10,320.0              | 1,438.9      | -298.2       | 1,450.7                 | 0.00                    | 0.00                   | 0.00                  |
| 11,700.0                                                   | 90.00           | 359.59      | 10,320.0              | 1,538.9      | -298.9       | 1,550.6                 | 0.00                    | 0.00                   | 0.00                  |
| 11,800.0                                                   | 90.00           | 359.59      | 10,320.0              | 1,638.9      | -299.7       | 1,650.5                 | 0.00                    | 0.00                   | 0.00                  |
| 11,900.0                                                   | 90.00           | 359.59      | 10,320.0              | 1,738.9      | -300.4       | 1,750.5                 | 0.00                    | 0.00                   | 0.00                  |
| 12,000.0                                                   | 90.00           | 359.59      | 10,320.0              | 1,838.9      | -301.1       | 1,850.4                 | 0.00                    | 0.00                   | 0.00                  |
| 12,100.0                                                   | 90.00           | 359.59      | 10,320.0              | 1,938.9      | -301.8       | 1,950.3                 | 0.00                    | 0.00                   | 0.00                  |
| 12,200.0                                                   | 90.00           | 359.59      | 10,320.0              | 2,038.9      | -302.5       | 2,050.3                 | 0.00                    | 0.00                   | 0.00                  |
| 12,300.0                                                   | 90.00           | 359.59      | 10,320.0              | 2,138.9      | -303.2       | 2,150.2                 | 0.00                    | 0.00                   | 0.00                  |
| 12,400.0                                                   | 90.00           | 359.59      | 10,320.0              | 2,238.9      | -303.9       | 2,250.1                 | 0.00                    | 0.00                   | 0.00                  |
| 12,500.0                                                   | 90.00           | 359.59      | 10,320.0              | 2,338.9      | -304.7       | 2,350.1                 | 0.00                    | 0.00                   | 0.00                  |
| 12,600.0                                                   | 90.00           | 359.59      | 10,320.0              | 2,438.9      | -305.4       | 2,450.0                 | 0.00                    | 0.00                   | 0.00                  |
| 12,700.0                                                   | 90.00           | 359.59      | 10,320.0              | 2,538.9      | -306.1       | 2,549.9                 | 0.00                    | 0.00                   | 0.00                  |
| 12,800.0                                                   | 90.00           | 359.59      | 10,320.0              | 2,638.9      | -306.8       | 2,649.9                 | 0.00                    | 0.00                   | 0.00                  |
| 12,900.0                                                   | 90.00           | 359.59      | 10,320.0              | 2,738.9      | -307.5       | 2,749.8                 | 0.00                    | 0.00                   | 0.00                  |
| 13,000.0                                                   | 90.00           | 359.59      | 10,320.0              | 2,838.9      | -308.2       | 2,849.7                 | 0.00                    | 0.00                   | 0.00                  |
| 13,100.0                                                   | 90.00           | 359.59      | 10,320.0              | 2,938.9      | -309.0       | 2,949.6                 | 0.00                    | 0.00                   | 0.00                  |
| 13,200.0                                                   | 90.00           | 359.59      | 10,320.0              | 3,038.9      | -309.7       | 3,049.6                 | 0.00                    | 0.00                   | 0.00                  |
| 13,300.0                                                   | 90.00           | 359.59      | 10,320.0              | 3,138.9      | -310.4       | 3,149.5                 | 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 State Com 518H             |
| <b>Company:</b>  | Advance Energy Partners    | <b>TVD Reference:</b>               | WELL @ 3844.5usft (Original Well Elev) |
| <b>Project:</b>  | Hat Mesa                   | <b>MD Reference:</b>                | WELL @ 3844.5usft (Original Well Elev) |
| <b>Site:</b>     | Dagger State               | <b>North Reference:</b>             | Grid                                   |
| <b>Well:</b>     | Dagger State Com 518H      | <b>Survey Calculation Method:</b>   | Minimum Curvature                      |
| <b>Wellbore:</b> | Dagger State Com 518H      |                                     |                                        |
| <b>Design:</b>   | Dagger State Com 518H      |                                     |                                        |

| 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) |
| 13,400.0                                  | 90.00           | 359.59      | 10,320.0              | 3,238.9      | -311.1       | 3,249.4                 | 0.00                    | 0.00                   | 0.00                  |
| 13,500.0                                  | 90.00           | 359.59      | 10,320.0              | 3,338.9      | -311.8       | 3,349.4                 | 0.00                    | 0.00                   | 0.00                  |
| 13,600.0                                  | 90.00           | 359.59      | 10,320.0              | 3,438.9      | -312.5       | 3,449.3                 | 0.00                    | 0.00                   | 0.00                  |
| 13,700.0                                  | 90.00           | 359.59      | 10,320.0              | 3,538.9      | -313.2       | 3,549.2                 | 0.00                    | 0.00                   | 0.00                  |
| 13,800.0                                  | 90.00           | 359.59      | 10,320.0              | 3,638.9      | -314.0       | 3,649.2                 | 0.00                    | 0.00                   | 0.00                  |
| 13,900.0                                  | 90.00           | 359.59      | 10,320.0              | 3,738.9      | -314.7       | 3,749.1                 | 0.00                    | 0.00                   | 0.00                  |
| 14,000.0                                  | 90.00           | 359.59      | 10,320.0              | 3,838.9      | -315.4       | 3,849.0                 | 0.00                    | 0.00                   | 0.00                  |
| 14,100.0                                  | 90.00           | 359.59      | 10,320.0              | 3,938.9      | -316.1       | 3,949.0                 | 0.00                    | 0.00                   | 0.00                  |
| 14,200.0                                  | 90.00           | 359.59      | 10,320.0              | 4,038.9      | -316.8       | 4,048.9                 | 0.00                    | 0.00                   | 0.00                  |
| 14,300.0                                  | 90.00           | 359.59      | 10,320.0              | 4,138.9      | -317.5       | 4,148.8                 | 0.00                    | 0.00                   | 0.00                  |
| 14,400.0                                  | 90.00           | 359.59      | 10,320.0              | 4,238.9      | -318.3       | 4,248.8                 | 0.00                    | 0.00                   | 0.00                  |
| 14,500.0                                  | 90.00           | 359.59      | 10,320.0              | 4,338.8      | -319.0       | 4,348.7                 | 0.00                    | 0.00                   | 0.00                  |
| 14,600.0                                  | 90.00           | 359.59      | 10,320.0              | 4,438.8      | -319.7       | 4,448.6                 | 0.00                    | 0.00                   | 0.00                  |
| 14,700.0                                  | 90.00           | 359.59      | 10,320.0              | 4,538.8      | -320.4       | 4,548.6                 | 0.00                    | 0.00                   | 0.00                  |
| 14,800.0                                  | 90.00           | 359.59      | 10,320.0              | 4,638.8      | -321.1       | 4,648.5                 | 0.00                    | 0.00                   | 0.00                  |
| 14,900.0                                  | 90.00           | 359.59      | 10,320.0              | 4,738.8      | -321.8       | 4,748.4                 | 0.00                    | 0.00                   | 0.00                  |
| 15,000.0                                  | 90.00           | 359.59      | 10,320.0              | 4,838.8      | -322.5       | 4,848.4                 | 0.00                    | 0.00                   | 0.00                  |
| 15,100.0                                  | 90.00           | 359.59      | 10,320.0              | 4,938.8      | -323.3       | 4,948.3                 | 0.00                    | 0.00                   | 0.00                  |
| 15,200.0                                  | 90.00           | 359.59      | 10,320.0              | 5,038.8      | -324.0       | 5,048.2                 | 0.00                    | 0.00                   | 0.00                  |
| 15,300.0                                  | 90.00           | 359.59      | 10,320.0              | 5,138.8      | -324.7       | 5,148.1                 | 0.00                    | 0.00                   | 0.00                  |
| 15,400.0                                  | 90.00           | 359.59      | 10,320.0              | 5,238.8      | -325.4       | 5,248.1                 | 0.00                    | 0.00                   | 0.00                  |
| 15,500.0                                  | 90.00           | 359.59      | 10,320.0              | 5,338.8      | -326.1       | 5,348.0                 | 0.00                    | 0.00                   | 0.00                  |
| 15,600.0                                  | 90.00           | 359.59      | 10,320.0              | 5,438.8      | -326.8       | 5,447.9                 | 0.00                    | 0.00                   | 0.00                  |
| 15,700.0                                  | 90.00           | 359.59      | 10,320.0              | 5,538.8      | -327.5       | 5,547.9                 | 0.00                    | 0.00                   | 0.00                  |
| 15,800.0                                  | 90.00           | 359.59      | 10,320.0              | 5,638.8      | -328.3       | 5,647.8                 | 0.00                    | 0.00                   | 0.00                  |
| 15,900.0                                  | 90.00           | 359.59      | 10,320.0              | 5,738.8      | -329.0       | 5,747.7                 | 0.00                    | 0.00                   | 0.00                  |
| 16,000.0                                  | 90.00           | 359.59      | 10,320.0              | 5,838.8      | -329.7       | 5,847.7                 | 0.00                    | 0.00                   | 0.00                  |
| 16,100.0                                  | 90.00           | 359.59      | 10,320.0              | 5,938.8      | -330.4       | 5,947.6                 | 0.00                    | 0.00                   | 0.00                  |
| 16,200.0                                  | 90.00           | 359.59      | 10,320.0              | 6,038.8      | -331.1       | 6,047.5                 | 0.00                    | 0.00                   | 0.00                  |
| 16,300.0                                  | 90.00           | 359.59      | 10,320.0              | 6,138.8      | -331.8       | 6,147.5                 | 0.00                    | 0.00                   | 0.00                  |
| 16,400.0                                  | 90.00           | 359.59      | 10,320.0              | 6,238.8      | -332.6       | 6,247.4                 | 0.00                    | 0.00                   | 0.00                  |
| 16,500.0                                  | 90.00           | 359.59      | 10,320.0              | 6,338.8      | -333.3       | 6,347.3                 | 0.00                    | 0.00                   | 0.00                  |
| 16,600.0                                  | 90.00           | 359.59      | 10,320.0              | 6,438.8      | -334.0       | 6,447.3                 | 0.00                    | 0.00                   | 0.00                  |
| 16,700.0                                  | 90.00           | 359.59      | 10,320.0              | 6,538.8      | -334.7       | 6,547.2                 | 0.00                    | 0.00                   | 0.00                  |
| 16,800.0                                  | 90.00           | 359.59      | 10,320.0              | 6,638.8      | -335.4       | 6,647.1                 | 0.00                    | 0.00                   | 0.00                  |
| 16,900.0                                  | 90.00           | 359.59      | 10,320.0              | 6,738.8      | -336.1       | 6,747.1                 | 0.00                    | 0.00                   | 0.00                  |
| 17,000.0                                  | 90.00           | 359.59      | 10,320.0              | 6,838.8      | -336.8       | 6,847.0                 | 0.00                    | 0.00                   | 0.00                  |
| 17,100.0                                  | 90.00           | 359.59      | 10,320.0              | 6,938.8      | -337.6       | 6,946.9                 | 0.00                    | 0.00                   | 0.00                  |
| 17,200.0                                  | 90.00           | 359.59      | 10,320.0              | 7,038.8      | -338.3       | 7,046.8                 | 0.00                    | 0.00                   | 0.00                  |
| 17,300.0                                  | 90.00           | 359.59      | 10,320.0              | 7,138.8      | -339.0       | 7,146.8                 | 0.00                    | 0.00                   | 0.00                  |
| 17,400.0                                  | 90.00           | 359.59      | 10,320.0              | 7,238.8      | -339.7       | 7,246.7                 | 0.00                    | 0.00                   | 0.00                  |
| 17,500.0                                  | 90.00           | 359.59      | 10,320.0              | 7,338.8      | -340.4       | 7,346.6                 | 0.00                    | 0.00                   | 0.00                  |
| 17,600.0                                  | 90.00           | 359.59      | 10,320.0              | 7,438.8      | -341.1       | 7,446.6                 | 0.00                    | 0.00                   | 0.00                  |
| 17,700.0                                  | 90.00           | 359.59      | 10,320.0              | 7,538.8      | -341.8       | 7,546.5                 | 0.00                    | 0.00                   | 0.00                  |
| 17,800.0                                  | 90.00           | 359.59      | 10,320.0              | 7,638.8      | -342.6       | 7,646.4                 | 0.00                    | 0.00                   | 0.00                  |
| 17,900.0                                  | 90.00           | 359.59      | 10,320.0              | 7,738.8      | -343.3       | 7,746.4                 | 0.00                    | 0.00                   | 0.00                  |
| 17,948.7                                  | 90.00           | 359.59      | 10,320.0              | 7,787.5      | -343.6       | 7,795.1                 | 0.00                    | 0.00                   | 0.00                  |
| TD at 17948.7 - Dagger State Com 518H BHL |                 |             |                       |              |              |                         |                         |                        |                       |





## Planning Report

|                  |                            |                                     |                                        |
|------------------|----------------------------|-------------------------------------|----------------------------------------|
| <b>Database:</b> | EDM 5000.16 Single User Db | <b>Local Co-ordinate Reference:</b> | Well Dagger State Com 518H             |
| <b>Company:</b>  | Advance Energy Partners    | <b>TVD Reference:</b>               | WELL @ 3844.5usft (Original Well Elev) |
| <b>Project:</b>  | Hat Mesa                   | <b>MD Reference:</b>                | WELL @ 3844.5usft (Original Well Elev) |
| <b>Site:</b>     | Dagger State               | <b>North Reference:</b>             | Grid                                   |
| <b>Well:</b>     | Dagger State Com 518H      | <b>Survey Calculation Method:</b>   | Minimum Curvature                      |
| <b>Wellbore:</b> | Dagger State Com 518H      |                                     |                                        |
| <b>Design:</b>   | Dagger State Com 518H      |                                     |                                        |

| Design Targets            |           |          |          |         |        |            |            |                  |                   |
|---------------------------|-----------|----------|----------|---------|--------|------------|------------|------------------|-------------------|
| Target Name               |           |          |          |         |        |            |            |                  |                   |
| - hit/miss target         | Dip Angle | Dip Dir. | TVD      | +N/-S   | +E/-W  | Northing   | Easting    | Latitude         | Longitude         |
| - Shape                   | (°)       | (°)      | (usft)   | (usft)  | (usft) | (usft)     | (usft)     |                  |                   |
| Dagger State Com 518H-    | 0.00      | 0.00     | 10,320.0 | 7,787.5 | -343.6 | 535,975.01 | 764,207.98 | 32° 28' 16.982 N | 103° 36' 38.358 W |
| - plan hits target center |           |          |          |         |        |            |            |                  |                   |
| - Point                   |           |          |          |         |        |            |            |                  |                   |
| Dagger State Com 518H-    | 0.00      | 0.00     | 10,320.0 | 442.4   | -285.0 | 528,629.91 | 764,266.61 | 32° 27' 4.299 N  | 103° 36' 38.254 W |
| - plan hits target center |           |          |          |         |        |            |            |                  |                   |
| - Point                   |           |          |          |         |        |            |            |                  |                   |

| Casing Points  |                |    |      |                 |               |
|----------------|----------------|----|------|-----------------|---------------|
| Measured Depth | Vertical Depth |    |      | Casing Diameter | Hole Diameter |
| (usft)         | (usft)         |    | Name | (")             | (")           |
| 10,597.1       | 10,320.0       | LP |      | 5-1/2           | 5-1/2         |

| Formations     |                |                   |           |      |               |
|----------------|----------------|-------------------|-----------|------|---------------|
| Measured Depth | Vertical Depth |                   |           | Dip  | Dip Direction |
| (usft)         | (usft)         | Name              | Lithology | (°)  | (°)           |
| 1,604.5        | 1,604.5        | Rustler           |           | 0.00 |               |
| 5,266.2        | 5,264.5        | Base of Limestone |           | 0.00 |               |
| 8,568.4        | 8,564.5        | Lower Brushy      |           | 0.00 |               |
| 9,040.7        | 9,036.5        | Avalon            |           | 0.00 |               |
| 10,041.4       | 10,031.5       | 1st BS Sand       |           | 0.00 |               |

| Plan Annotations |                |                   |        |                                   |  |
|------------------|----------------|-------------------|--------|-----------------------------------|--|
| Measured Depth   | Vertical Depth | Local Coordinates |        |                                   |  |
| (usft)           | (usft)         | +N/-S             | +E/-W  | Comment                           |  |
| (usft)           | (usft)         | (usft)            | (usft) |                                   |  |
| 2,500.0          | 2,500.0        | 0.0               | 0.0    | KOP - Start Build 1.00            |  |
| 2,707.4          | 2,707.3        | -0.6              | -3.7   | Start 6789.8 hold at 2707.4 MD    |  |
| 9,497.2          | 9,492.7        | -39.4             | -246.3 | Start Drop -1.00                  |  |
| 9,704.5          | 9,700.0        | -40.0             | -250.0 | Start 142.5 hold at 9704.5 MD     |  |
| 9,847.1          | 9,842.5        | -40.0             | -250.0 | KOP #2 - Start Build 12.00        |  |
| 10,597.1         | 10,320.0       | 436.2             | -284.6 | LP - Start 6.2 hold at 10597.1 MD |  |
| 10,603.3         | 10,320.0       | 442.4             | -285.0 | Start DLS 2.00 TFO 90.00          |  |
| 10,790.3         | 10,320.0       | 629.2             | -292.4 | Start 7158.5 hold at 10790.3 MD   |  |
| 17,948.7         | 10,320.0       | 7,787.5           | -343.6 | TD at 17948.7                     |  |