

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

General Information  
Phone: (505) 629-6116

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

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

Form C-101  
August 1, 2011

Permit 399767

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

|                                                                                                    |                                        |                               |
|----------------------------------------------------------------------------------------------------|----------------------------------------|-------------------------------|
| 1. Operator Name and Address<br>Avant Operating II, LLC<br>1515 Wynkoop Street<br>Denver, CO 80202 |                                        | 2. OGRID Number<br>332947     |
|                                                                                                    |                                        | 3. API Number<br>30-025-55422 |
| 4. Property Code<br>337745                                                                         | 5. Property Name<br>QUAIL 16 STATE COM | 6. Well No.<br>755H           |

**7. Surface Location**

|               |               |                 |              |              |                  |               |                  |               |               |
|---------------|---------------|-----------------|--------------|--------------|------------------|---------------|------------------|---------------|---------------|
| UL - Lot<br>A | Section<br>16 | Township<br>20S | Range<br>34E | Lot Idn<br>A | Feet From<br>400 | N/S Line<br>N | Feet From<br>880 | E/W Line<br>E | County<br>Lea |
|---------------|---------------|-----------------|--------------|--------------|------------------|---------------|------------------|---------------|---------------|

**8. Proposed Bottom Hole Location**

|               |               |                 |              |              |                  |               |                  |               |               |
|---------------|---------------|-----------------|--------------|--------------|------------------|---------------|------------------|---------------|---------------|
| UL - Lot<br>P | Section<br>16 | Township<br>20S | Range<br>34E | Lot Idn<br>P | Feet From<br>100 | N/S Line<br>S | Feet From<br>330 | E/W Line<br>E | County<br>Lea |
|---------------|---------------|-----------------|--------------|--------------|------------------|---------------|------------------|---------------|---------------|

**9. Pool Information**

|                               |       |
|-------------------------------|-------|
| WC-025 G-08 S203435D;WOLFCAMP | 98247 |
|-------------------------------|-------|

**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>3635 |
| 16. Multiple<br>N         | 17. Proposed Depth<br>16514 | 18. Formation<br>Wolfcamp              | 19. Contractor          | 20. Spud Date<br>12/1/2025         |
| 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 | 14.75     | 10.75       | 40.5             | 1571          | 760             | 0             |
| Int1 | 9.875     | 8.625       | 32               | 9892          | 1020            | 0             |
| Prod | 7.875     | 5.5         | 20               | 16514         | 1525            | 0             |

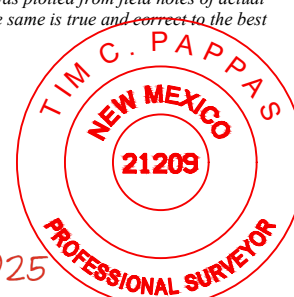
**Casing/Cement Program: Additional Comments**

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

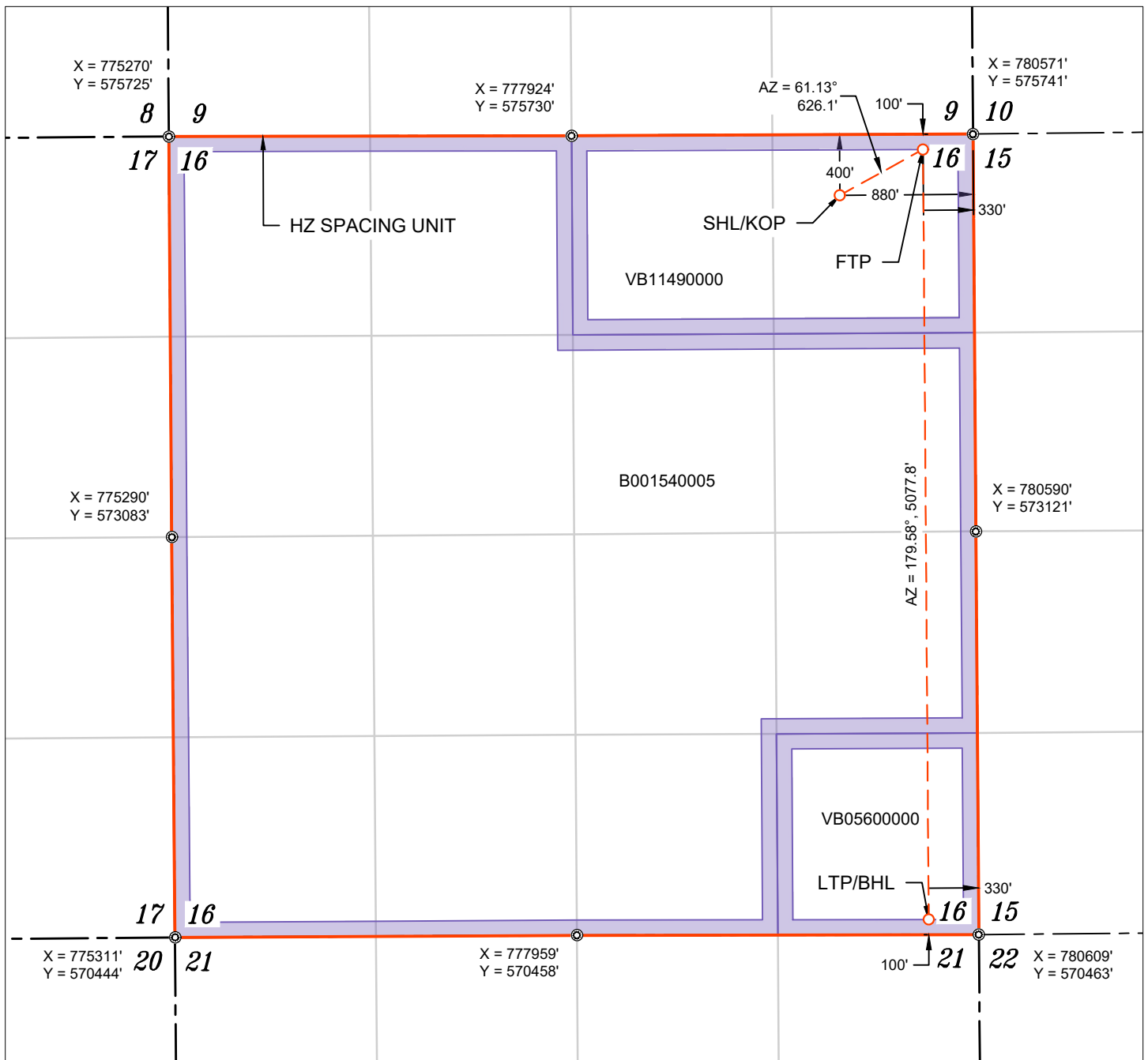
**22. Proposed Blowout Prevention Program**

| Type | Working Pressure | Test Pressure | Manufacturer |
|------|------------------|---------------|--------------|
| Pipe | 10000            | 5000          | CAMERON      |

|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |                                                                                                                                                                                                                                                          |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <p>23. I hereby certify that the information given above is true and complete to the best of my knowledge and belief.<br/>I hereby certify that no additives containing PFAS chemicals will be added to the completion or recompletion of this well.<br/><b>I further certify I have complied with 19.15.14.9 (A) NMAC <input checked="" type="checkbox"/> and/or 19.15.14.9 (B) NMAC <input checked="" type="checkbox"/> if applicable.</b></p> <p>Signature:</p> <p>Printed Name: Electronically filed by Sarah Ferreyros</p> <p>Title: Director of Regulatory</p> <p>Email Address: sarah@avantnr.com</p> <p>Date: 10/17/2025</p> | <p style="text-align: center;"><b>OIL CONSERVATION DIVISION</b></p> <p>Approved By: Jeffrey Harrison</p> <p>Title: Petroleum Specialist III</p> <p>Approved Date: 11/6/2025</p> <p>Expiration Date: 11/6/2027</p> <p>Conditions of Approval Attached</p> |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|

|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |                                                                                                     |                                          |               |                                            |                                                                                                                                                                                                                                                                                                                                                                                                                                                         |                                      |                                 |                                                       |               |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------|------------------------------------------|---------------|--------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------|---------------------------------|-------------------------------------------------------|---------------|
| C-102<br>Submit Electronically<br>Via OCD Permitting                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | State of New Mexico<br>Energy, Minerals & Natural Resources Department<br>OIL CONSERVATION DIVISION |                                          |               |                                            |                                                                                                                                                                                                                                                                                                                                                                                                                                                         |                                      | Revised July 9, 2024            |                                                       |               |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |                                                                                                     |                                          |               |                                            |                                                                                                                                                                                                                                                                                                                                                                                                                                                         |                                      | Submittal<br>Type:              | <input checked="" type="checkbox"/> Initial Submittal |               |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |                                                                                                     |                                          |               |                                            |                                                                                                                                                                                                                                                                                                                                                                                                                                                         |                                      |                                 | <input type="checkbox"/> Amended Report               |               |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |                                                                                                     |                                          |               |                                            |                                                                                                                                                                                                                                                                                                                                                                                                                                                         | <input type="checkbox"/> As Drilled  |                                 |                                                       |               |
| WELL LOCATION INFORMATION                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |                                                                                                     |                                          |               |                                            |                                                                                                                                                                                                                                                                                                                                                                                                                                                         |                                      |                                 |                                                       |               |
| API Number<br>30-025-55422                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |                                                                                                     | Pool Code<br>98247                       |               | Pool Name<br>WC-025 G-09 S203435D;WOLFCAMP |                                                                                                                                                                                                                                                                                                                                                                                                                                                         |                                      |                                 |                                                       |               |
| Property Code<br>337745 <del>337744</del>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |                                                                                                     | Property Name<br>QUAIL 16 STATE COM      |               |                                            |                                                                                                                                                                                                                                                                                                                                                                                                                                                         |                                      | Well Number<br>#755H            |                                                       |               |
| OGRID No.<br>332947                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |                                                                                                     | Operator Name<br>AVANT OPERATING II, LLC |               |                                            |                                                                                                                                                                                                                                                                                                                                                                                                                                                         |                                      | Ground Level Elevation<br>3635' |                                                       |               |
| Surface Owner: <input checked="" type="checkbox"/> State <input type="checkbox"/> Fee <input type="checkbox"/> Tribal <input type="checkbox"/> Federal                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |                                                                                                     |                                          |               |                                            | Mineral Owner: <input checked="" type="checkbox"/> State <input type="checkbox"/> Fee <input type="checkbox"/> Tribal <input type="checkbox"/> Federal                                                                                                                                                                                                                                                                                                  |                                      |                                 |                                                       |               |
| Surface Location                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |                                                                                                     |                                          |               |                                            |                                                                                                                                                                                                                                                                                                                                                                                                                                                         |                                      |                                 |                                                       |               |
| UL<br>A                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | Section<br>16                                                                                       | Township<br>20 S                         | Range<br>34 E | Lot                                        | Ft. from N/S<br>400' FNL                                                                                                                                                                                                                                                                                                                                                                                                                                | Ft. from E/W<br>880' FEL             | Latitude<br>32.579274°          | Longitude<br>-103.559520°                             | County<br>LEA |
| Bottom Hole Location                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |                                                                                                     |                                          |               |                                            |                                                                                                                                                                                                                                                                                                                                                                                                                                                         |                                      |                                 |                                                       |               |
| UL<br>P                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | Section<br>16                                                                                       | Township<br>20 S                         | Range<br>34 E | Lot                                        | Ft. from N/S<br>100' FSL                                                                                                                                                                                                                                                                                                                                                                                                                                | Ft. from E/W<br>330' FEL             | Latitude<br>32.566137°          | Longitude<br>-103.557732°                             | County<br>LEA |
| Dedicated Acres<br>640.00                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |                                                                                                     | Infill or Defining Well<br>Infill        |               | Defining Well API<br>n/a                   |                                                                                                                                                                                                                                                                                                                                                                                                                                                         | Overlapping Spacing Unit (Y/N)<br>No |                                 | Consolidation Code<br>n/a                             |               |
| Order Numbers.<br>Pending                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |                                                                                                     |                                          |               |                                            | Well setbacks are under Common Ownership: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No                                                                                                                                                                                                                                                                                                                                           |                                      |                                 |                                                       |               |
| Kick Off Point (KOP)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |                                                                                                     |                                          |               |                                            |                                                                                                                                                                                                                                                                                                                                                                                                                                                         |                                      |                                 |                                                       |               |
| UL<br>A                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | Section<br>16                                                                                       | Township<br>20 S                         | Range<br>34 E | Lot                                        | Ft. from N/S<br>400' FNL                                                                                                                                                                                                                                                                                                                                                                                                                                | Ft. from E/W<br>880' FEL             | Latitude<br>32.579274°          | Longitude<br>-103.559520°                             | County<br>LEA |
| First Take Point (FTP)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |                                                                                                     |                                          |               |                                            |                                                                                                                                                                                                                                                                                                                                                                                                                                                         |                                      |                                 |                                                       |               |
| UL<br>A                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | Section<br>16                                                                                       | Township<br>20 S                         | Range<br>34 E | Lot                                        | Ft. from N/S<br>100' FNL                                                                                                                                                                                                                                                                                                                                                                                                                                | Ft. from E/W<br>330' FEL             | Latitude<br>32.580094°          | Longitude<br>-103.557734°                             | County<br>LEA |
| Last Take Point (LTP)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |                                                                                                     |                                          |               |                                            |                                                                                                                                                                                                                                                                                                                                                                                                                                                         |                                      |                                 |                                                       |               |
| UL<br>P                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | Section<br>16                                                                                       | Township<br>20 S                         | Range<br>34 E | Lot                                        | Ft. from N/S<br>100' FSL                                                                                                                                                                                                                                                                                                                                                                                                                                | Ft. from E/W<br>330' FEL             | Latitude<br>32.566137°          | Longitude<br>-103.557732°                             | County<br>LEA |
| Unitized Area or Area of Uniform Interest<br>Yes                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |                                                                                                     |                                          |               |                                            | Spacing Unit Type <input checked="" type="checkbox"/> Horizontal <input type="checkbox"/> Vertical                                                                                                                                                                                                                                                                                                                                                      |                                      |                                 | Ground Floor Elevation:<br>3635'                      |               |
| <b>OPERATOR CERTIFICATIONS</b><br><i>I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief, and, if the well is a vertical or directional well, that this organization either owns a working interest or unleased mineral interest in the land including the proposed bottom hole location or has a right to drill this well at this location pursuant to a contract with an owner of a working interest or unleased mineral interest, or to a voluntary pooling agreement or a compulsory pooling order heretofore entered by the division.</i><br><br><i>If this well is a horizontal well, I further certify that this organization has received the consent of at least one lessee or owner of a working interest or unleased mineral interest in each tract (in the target pool or formation) in which any part of the well's completed interval will be located or obtained a compulsory pooling order from the division.</i><br><br>Signature:  Date: 10/9/2025 |                                                                                                     |                                          |               |                                            | <b>SURVEYOR CERTIFICATIONS</b><br><i>I hereby certify that the well location shown on this plat was plotted from field notes of actual surveys made by me or under my supervision, and that the same is true and correct to the best of my belief.</i><br><br><br> 26 Sept 2025 |                                      |                                 |                                                       |               |
| Signature<br>Sarah Ferreyros                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |                                                                                                     |                                          |               |                                            | Signature and Seal of Professional Surveyor<br>21209 SEPTEMBER 15, 2025                                                                                                                                                                                                                                                                                                                                                                                 |                                      |                                 |                                                       |               |
| Printed Name<br>sarah@avantnr.com                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |                                                                                                     |                                          |               |                                            | Certificate Number                                                                                                                                                                                                                                                                                                                                                                                                                                      |                                      | Date of Survey                  |                                                       |               |
| Email Address                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |                                                                                                     |                                          |               |                                            |                                                                                                                                                                                                                                                                                                                                                                                                                                                         |                                      |                                 |                                                       |               |

Note: 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.



WELL NAME: QUAIL 16 STATE COM #755H  
ELEVATION: 3635'

| NAD 83 (SHL/KOP) 400' FNL & 880' FEL |
|--------------------------------------|
| LATITUDE = 32.579274°                |
| LONGITUDE = -103.559520°             |
| NAD 27 (SHL/KOP)                     |
| LATITUDE = 32.579154°                |
| LONGITUDE = -103.559030°             |
| STATE PLANE NAD 83 (N.M. EAST)       |
| N: 575337.34' E: 779692.98'          |
| STATE PLANE NAD 27 (N.M. EAST)       |
| N: 575276.02' E: 738512.16'          |

| NAD 83 (FTP) 100' FNL & 330' FEL |
|----------------------------------|
| LATITUDE = 32.580094°            |
| LONGITUDE = -103.557734°         |
| NAD 27 (FTP)                     |
| LATITUDE = 32.579974°            |
| LONGITUDE = -103.557243°         |
| STATE PLANE NAD 83 (N.M. EAST)   |
| N: 575639.62' E: 780241.24'      |
| STATE PLANE NAD 27 (N.M. EAST)   |
| N: 575578.43' E: 739060.42'      |

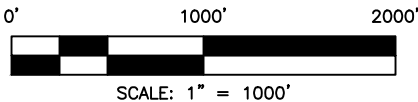
| NAD 83 (LTP/BHL) 100' FSL & 330' FEL |
|--------------------------------------|
| LATITUDE = 32.566137°                |
| LONGITUDE = -103.557732°             |
| NAD 27 (LTP/BHL)                     |
| LATITUDE = 32.566017°                |
| LONGITUDE = -103.557242°             |
| STATE PLANE NAD 83 (N.M. EAST)       |
| N: 570562.00' E: 780278.69'          |
| STATE PLANE NAD 27 (N.M. EAST)       |
| N: 570500.78' E: 739097.70'          |

| APPROXIMATE WELL BORE<br>DISTANCE FROM FTP TO LTP |          |
|---------------------------------------------------|----------|
| VB11490000                                        | 1210.46' |
| B001540005                                        | 2638.88' |
| VB05600000                                        | 1228.42' |
| TOTAL                                             | 5077.76' |

## NOTES

- ALL COORDINATES, BEARINGS, AND DISTANCES CONTAINED HEREIN ARE GRID, BASED UPON THE NEW MEXICO STATE PLANE COORDINATES SYSTEM, NORTH AMERICAN DATUM 83, NEW MEXICO EAST (3001).
- THIS DOCUMENT IS BASED UPON AN ON THE GROUND SURVEY PERFORMED DURING SEPTEMBER, 2025. CERTIFICATION OF THIS DOCUMENT IS ONLY TO THE LOCATION OF THIS INFORMATION IN RELATION TO RECORDED MONUMENT OF DEEDS PROVIDED BY THE CLIENT.
- ELEVATIONS MSL, DERIVED FROM G.N.S.S. OBSERVATION AND DERIVED FROM SAID ON-THE-GROUND SURVEY.

- FOUND MONUMENT
- CALC. CORNER
- SHL/ KOP/ FTP / PPP/ LTP / BHL
- WELLBORE
- HORIZONTAL SPACING UNIT
- STATE OIL & GAS LEASE
- BLM OIL & GAS LEASE



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

General Information  
Phone: (505) 629-6116

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

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 399767

PERMIT COMMENTS

|                                                                                                           |                                                                                                     |                                   |
|-----------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------|-----------------------------------|
| Operator Name and Address:<br>Avant Operating II, LLC [332947]<br>1515 Wynkoop Street<br>Denver, CO 80202 |                                                                                                     | API Number:<br>30-025-55422       |
|                                                                                                           |                                                                                                     | Well:<br>QUAIL 16 STATE COM #755H |
| Created By                                                                                                | Comment                                                                                             | Comment Date                      |
| jeffrey.harrison                                                                                          | Please correct the Casing and Cement table data and review and correct the NGMP before resubmittal. | 10/15/2025                        |

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

General Information  
Phone: (505) 629-6116

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

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

Form APD Conditions

Permit 399767

**PERMIT CONDITIONS OF APPROVAL**

|                                                                                                           |                                   |
|-----------------------------------------------------------------------------------------------------------|-----------------------------------|
| Operator Name and Address:<br>Avant Operating II, LLC [332947]<br>1515 Wynkoop Street<br>Denver, CO 80202 | API Number:<br>30-025-55422       |
|                                                                                                           | Well:<br>QUAIL 16 STATE COM #755H |

| OCD Reviewer     | Condition                                                                                                                                                                                                                                                             |
|------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| jeffrey.harrison | No additives containing PFAS chemicals will be added to the drilling fluids or completion fluids used during drilling, completions, or recompletions operations.                                                                                                      |
| jeffrey.harrison | All logs run on the well must be submitted to NMOCD.                                                                                                                                                                                                                  |
| jeffrey.harrison | NSP required if not included in an existing order or not an infill to an appropriate defining well in the same pool and spacing unit.                                                                                                                                 |
| jeffrey.harrison | This well is within the Capitan Reef aquifer zone. The first intermediate casing string shall be set and cemented back to surface immediately below the Capitan Reef.                                                                                                 |
| jeffrey.harrison | In Capitan Reef areas if lost circulation (50% or greater) occurs below the base of the salt, the operator shall switch to freshwater mud until the intermediate casing is set.                                                                                       |
| jeffrey.harrison | Cement is required to circulate on both surface and intermediate1 strings of casing.                                                                                                                                                                                  |
| jeffrey.harrison | If cement does not circulate on any string, a Cement Bond Log (CBL) is required for that string of casing.                                                                                                                                                            |
| jeffrey.harrison | A [C-103] Sub. Drilling (C-103N) is required within (10) days of spud.                                                                                                                                                                                                |
| jeffrey.harrison | Notify the OCD 24 hours prior to casing & cement.                                                                                                                                                                                                                     |
| jeffrey.harrison | File As Drilled C-102 and a directional Survey with C-104 completion packet.                                                                                                                                                                                          |
| jeffrey.harrison | 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. |
| jeffrey.harrison | 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. |

PROPOSAL#: 250930162135-A



## CEMENT PROCEDURE & PROPOSAL

**PREPARED FOR:**

Mr. Braden Harris

EMAIL: braden@avantnr.com

PHONE NUMBER: 406-600-3310

### **Avant Operating II Quail 16 State Com #755H Lea County, NM**

AFE Number: NM1383

**Service Point**

Odessa

1400 S JBS Parkway Odessa, TX 79766

432-701-8955

**Technical Writer**

Jonathan Smith

jonathan@wtcementers.com

432-701-3719

**WTC Representative**

Jon Reynolds

jon@wtcementers.com

432-257-1234

**.Disclaimer Notice:**

**The ability of West Texas Cementing & Acidizing to complete this work is subject to the availability of the raw materials required to complete the job.**

This information is presented in good faith, but no warranty is given by and West Texas Cementers LLC assumes no liability for advice or recommendations made concerning results to be obtained from the use of any product or service. The results given are estimates based on calculations produced by a computer model including various assumptions on the well, reservoir and treatment. The results depend on input data provided by the Operator and estimates as to unknown data and can be no more accurate than the model, the assumptions and such input data. The information presented is WTC LLC best estimate of the actual results that may be achieved and should be used for comparison purposes rather than absolute values. The quality of input data, and hence results, may be improved through the use of certain tests and procedures which West Texas Cementers LLC can assist in selecting. The Operator has superior knowledge of the well, the reservoir, the field and conditions affecting them. If the Operator is aware of any conditions whereby a neighboring well or wells might be affected by the treatment proposed herein it is the Operator's responsibility to notify the owner or owners of the well or wells accordingly. Prices quoted are estimates only and are good for 30 days from the date of issue. Actual charges may vary depending upon time, equipment, and material ultimately required to perform these services. Freedom from infringement of patents of West Texas Cementers LLC or others is not to be inferred.

PRINTED

9/30/2025 16:24

VERSION: v0.29d

Avant Operating II  
Quail 16 State Com #755H  
Lea County, NM

## Surface



PROPOSAL#: 250930162135-A

| WELL INFORMATION                                                       |                                                                           |             |             |           |                              |                 |
|------------------------------------------------------------------------|---------------------------------------------------------------------------|-------------|-------------|-----------|------------------------------|-----------------|
| MUD                                                                    | 8.4# Fresh Water                                                          |             |             |           |                              |                 |
| PREVIOUS PIPE                                                          | 20" 94# CSG to 120                                                        |             |             |           |                              |                 |
| OPEN HOLE                                                              | 14.75" OH to 1571                                                         |             |             |           |                              |                 |
| CASING/INJECTION                                                       | 10.75" 40.5# J-55/LTC to 1571                                             |             |             |           |                              |                 |
| MD                                                                     | 1571                                                                      |             |             |           |                              |                 |
| EST BHST/BHCT                                                          | 93-F / 86-F (0.8-F/100-FT)                                                |             |             |           |                              |                 |
| NOTES                                                                  | Standby charges start after WTC has been on location for more than 4-hrs. |             |             |           |                              |                 |
| VOLUMES                                                                |                                                                           |             |             |           |                              |                 |
| FLUID NAME                                                             | LENGTH<br>(ft)                                                            | OD<br>(in.) | ID<br>(in.) | XS<br>(%) | FACTOR<br>(bbl/ft)           | VOLUME<br>(bbl) |
| Lead                                                                   | 120                                                                       | 19.124      | 10.75       |           | 0.2430                       | 29.2            |
| Lead                                                                   | 1137                                                                      | 14.75       | 10.75       | 50%       | 0.1486                       | 169.0           |
| Tail                                                                   | 314                                                                       | 14.75       | 10.75       | 20%       | 0.1189                       | 37.3            |
| SHOE JOINT                                                             | 40                                                                        | 10.75       | 10.05       |           | 0.0981                       | 3.9             |
| FLUIDS                                                                 |                                                                           |             |             |           |                              |                 |
| SPACER                                                                 |                                                                           |             |             |           |                              |                 |
| Fresh Water                                                            |                                                                           |             |             |           |                              |                 |
| VOLUME                                                                 | 20-bbl                                                                    |             |             |           |                              |                 |
| Lead                                                                   |                                                                           |             |             |           |                              |                 |
| 35% B_Poz+65% Class C+6% Gel+5% SALT+0.25PPS Pol-E-Flake+0.5PPS TCA100 |                                                                           |             |             |           |                              |                 |
| VOLUME                                                                 | 585-SX                                                                    |             |             |           | Slurry Volume: 198-bbls      |                 |
| DENSITY                                                                | 12.8-ppg                                                                  |             |             |           | Mix Water Required: 142-bbls |                 |
| YIELD                                                                  | 1.9-cf/sx                                                                 |             |             |           |                              |                 |
| MIX WATER                                                              | 10.19-gps                                                                 |             |             |           |                              |                 |
| TOP OF CEMENT                                                          | Surface                                                                   |             |             |           |                              |                 |
| EXCESS                                                                 | 50%                                                                       |             |             |           |                              |                 |

Avant Operating II  
Quail 16 State Com #755H  
Lea County, NM

Surface



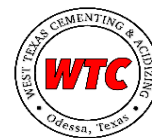
PROPOSAL#: 250930162135-A

| Tail          |                                        |                             |
|---------------|----------------------------------------|-----------------------------|
|               | 100% Class C+0.5% CaCl2+0.25PPS TCA100 |                             |
| VOLUME        | 175-SX                                 | Slurry Volume: 41.5-bbls    |
| DENSITY       | 14.8-ppg                               | Mix Water Required: 27-bbls |
| YIELD         | 1.33-cf/sx                             |                             |
| MIX WATER     | 6.33-gps                               |                             |
| TOP OF CEMENT | 1257-ft                                |                             |
| EXCESS        | 20%                                    |                             |
| DISPLACEMENT  |                                        |                             |
|               | Displacement                           |                             |
| VOLUME        | 150.2-bbl                              |                             |



Avant Operating II  
Quail 16 State Com #755H  
Lea County, NM

## Multi-Stage Intermediate



PROPOSAL#: 250930162135-A

| WELL INFORMATION                                                                |                                                                           |             |             |                              |                    |                 |
|---------------------------------------------------------------------------------|---------------------------------------------------------------------------|-------------|-------------|------------------------------|--------------------|-----------------|
| MUD                                                                             | 10# Brine                                                                 |             |             |                              |                    |                 |
| PREVIOUS PIPE                                                                   | 10.75" 40.5# CSG to 1571                                                  |             |             |                              |                    |                 |
| OPEN HOLE                                                                       | 9.875" OH to 9892                                                         |             |             |                              |                    |                 |
| CASING/INJECTION                                                                | 8.625" 32# P-110 HC BK to 9892                                            |             |             |                              |                    |                 |
| MD                                                                              | 9892                                                                      |             |             |                              |                    |                 |
| TVD                                                                             | 9860                                                                      |             |             |                              |                    |                 |
| EST BHST/BHCT                                                                   | 159-F / 138-F (0.8-F/100-FT)                                              |             |             |                              |                    |                 |
| DV TOOL                                                                         | 3800                                                                      |             |             |                              |                    |                 |
| EST BHST/BHCT STG2                                                              | 111-F / 98-F (0.8-F/100-FT)                                               |             |             |                              |                    |                 |
| NOTES                                                                           | Standby charges start after WTC has been on location for more than 8-hrs. |             |             |                              |                    |                 |
| VOLUMES                                                                         |                                                                           |             |             |                              |                    |                 |
| FLUID NAME                                                                      | LENGTH<br>(ft)                                                            | OD<br>(in.) | ID<br>(in.) | XS<br>(%)                    | FACTOR<br>(bbl/ft) | VOLUME<br>(bbl) |
| Stage 1 Lead                                                                    | 1571                                                                      | 10.05       | 8.625       |                              | 0.0258             | 40.6            |
| Stage 1 Lead                                                                    | 6333                                                                      | 9.875       | 8.625       | 20%                          | 0.0270             | 170.7           |
| Stage 1 Tail                                                                    | 1988                                                                      | 9.875       | 8.625       | 20%                          | 0.0270             | 53.6            |
| Stage 2 Lead                                                                    | 1571                                                                      | 10.05       | 8.625       |                              | 0.0258             | 40.6            |
| Stage 2 Lead                                                                    | 1229                                                                      | 9.875       | 8.625       | 106%                         | 0.0463             | 56.9            |
| Stage 2 Tail                                                                    | 1000                                                                      | 9.875       | 8.625       | 0%                           | 0.0225             | 22.5            |
| SHOE JOINT                                                                      | 40                                                                        | 8.625       | 7.921       |                              | 0.0609             | 2.4             |
| FLUIDS                                                                          |                                                                           |             |             |                              |                    |                 |
| SPACER                                                                          |                                                                           |             |             |                              |                    |                 |
| Fresh Water                                                                     |                                                                           |             |             |                              |                    |                 |
| VOLUME                                                                          | 25-bbl                                                                    |             |             |                              |                    |                 |
| Stage 1 Lead                                                                    |                                                                           |             |             |                              |                    |                 |
| 100% ProLite+5PPS Plexcrete STE+2% SMS+0.5% R-1300+3PPS Gilsonite+0.5PPS TCA100 |                                                                           |             |             |                              |                    |                 |
| VOLUME                                                                          | 355-SX                                                                    |             |             | Slurry Volume: 214.3-bbls    |                    |                 |
| DENSITY                                                                         | 10.7-ppg                                                                  |             |             | Mix Water Required: 179-bbls |                    |                 |
| YIELD                                                                           | 3.39-cf/sx                                                                |             |             |                              |                    |                 |
| MIX WATER                                                                       | 21.11-gps                                                                 |             |             |                              |                    |                 |
| TOP OF CEMENT                                                                   | Surface                                                                   |             |             |                              |                    |                 |
| EXCESS                                                                          | 20%                                                                       |             |             |                              |                    |                 |

Avant Operating II  
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# Multi-Stage Intermediate



PROPOSAL#: 250930162135-A

## Stage 1 Tail

50% B\_Poz+50% Class H+5% SALT+0.15% CRT-201+0.2% FL-24+0.5PPS TCA100

|               |            |                             |
|---------------|------------|-----------------------------|
| VOLUME        | 250-SX     | Slurry Volume: 57-bbls      |
| DENSITY       | 14.2-ppg   | Mix Water Required: 35-bbls |
| YIELD         | 1.28-cf/sx |                             |
| MIX WATER     | 5.8-gps    |                             |
| TOP OF CEMENT | 7904-ft    |                             |
| EXCESS        | 20%        |                             |

## DISPLACEMENT

Displacement

VOLUME 600.4-bbl

## SPACER

Fresh Water

VOLUME 20-bbl

## Stage 2 Lead

35% M\_Poz+65% Class C+4% Gel+5% SALT+0.1% SMS+0.25PPS Pol-E-Flake+0.5PPS TCA100

|               |            |                             |
|---------------|------------|-----------------------------|
| VOLUME        | 315-SX     | Slurry Volume: 98.7-bbls    |
| DENSITY       | 12.8-ppg   | Mix Water Required: 69-bbls |
| YIELD         | 1.76-cf/sx |                             |
| MIX WATER     | 9.18-gps   |                             |
| TOP OF CEMENT | Surface    |                             |
| EXCESS        | 106%       |                             |

## Stage 2 Tail

100% Class C+0.005GPS NoFoam V1A

|               |            |                             |
|---------------|------------|-----------------------------|
| VOLUME        | 100-SX     | Slurry Volume: 23.7-bbls    |
| DENSITY       | 14.8-ppg   | Mix Water Required: 16-bbls |
| YIELD         | 1.33-cf/sx |                             |
| MIX WATER     | 6.32-gps   |                             |
| TOP OF CEMENT | 2800-ft    |                             |
| EXCESS        | 0%         |                             |

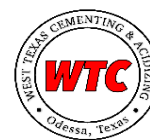
## DISPLACEMENT

Displacement

VOLUME 231.6-bbl

Avant Operating II  
Quail 16 State Com #755H  
Lea County, NM

# Production



PROPOSAL#: 250930162135-A

| WELL INFORMATION                                                                                          |                                                                           |             |             |           |                              |                 |
|-----------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------|-------------|-------------|-----------|------------------------------|-----------------|
| MUD                                                                                                       | 9.2# OBM                                                                  |             |             |           |                              |                 |
| PREVIOUS PIPE                                                                                             | 8.625" 32# CSG to 9892                                                    |             |             |           |                              |                 |
| OPEN HOLE                                                                                                 | 7.875" OH to 16514                                                        |             |             |           |                              |                 |
| CASING/INJECTION                                                                                          | 5.5" 20# P-110 HC GBCD to 16514                                           |             |             |           |                              |                 |
| MD                                                                                                        | 16514                                                                     |             |             |           |                              |                 |
| TVD                                                                                                       | 11572                                                                     |             |             |           |                              |                 |
| EST BHST/BHCT                                                                                             | 181-F / 181-F (0.87-F/100-FT)                                             |             |             |           |                              |                 |
| KOP                                                                                                       | 11126                                                                     |             |             |           |                              |                 |
| NOTES                                                                                                     | Standby charges start after WTC has been on location for more than 8-hrs. |             |             |           |                              |                 |
| VOLUMES                                                                                                   |                                                                           |             |             |           |                              |                 |
| FLUID NAME                                                                                                | LENGTH<br>(ft)                                                            | OD<br>(in.) | ID<br>(in.) | XS<br>(%) | FACTOR<br>(bbl/ft)           | VOLUME<br>(bbl) |
| Lead                                                                                                      | 9892                                                                      | 7.921       | 5.5         |           | 0.0316                       | 312.2           |
| Lead                                                                                                      | 1234                                                                      | 7.875       | 5.5         | 20%       | 0.0370                       | 45.7            |
| Tail                                                                                                      | 5388                                                                      | 7.875       | 5.5         | 20%       | 0.0370                       | 199.5           |
| SHOE JOINT                                                                                                | 80                                                                        | 5.5         | 4.778       |           | 0.0222                       | 1.8             |
| FLUIDS                                                                                                    |                                                                           |             |             |           |                              |                 |
| SPACER                                                                                                    |                                                                           |             |             |           |                              |                 |
| Wt. Spacer 37.97GPB Water+8PPB PolyScrub 4320+73.68PPB Barite+1GPB HoleScrub 4311+1PPB R-1300+1PPB TCA100 |                                                                           |             |             |           |                              |                 |
| VOLUME                                                                                                    | 40-bbl                                                                    |             |             |           |                              |                 |
| DENSITY                                                                                                   | 9.7-ppg                                                                   |             |             |           |                              |                 |
| Lead                                                                                                      |                                                                           |             |             |           |                              |                 |
| 100% ProLite+5PPS Plexcrete STE+2% SMS+0.65% R-1300+0.2% FL-24+3PPS Gilsonite+0.5PPS TCA100               |                                                                           |             |             |           |                              |                 |
| VOLUME                                                                                                    | 595-SX                                                                    |             |             |           | Slurry Volume: 359.2-bbls    |                 |
| DENSITY                                                                                                   | 10.7-ppg                                                                  |             |             |           | Mix Water Required: 300-bbls |                 |
| YIELD                                                                                                     | 3.39-cf/sx                                                                |             |             |           |                              |                 |
| MIX WATER                                                                                                 | 21.13-gps                                                                 |             |             |           |                              |                 |
| TOP OF CEMENT                                                                                             | Surface                                                                   |             |             |           |                              |                 |
| EXCESS                                                                                                    | 20%                                                                       |             |             |           |                              |                 |

Avant Operating II  
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Lea County, NM

Production



PROPOSAL#: 250930162135-A

| Tail                                                                         |            |                              |
|------------------------------------------------------------------------------|------------|------------------------------|
| 50% B_Poz+50% Class H+5% SALT+0.3% SMS+0.4% CRT-201+0.5% FL-24+0.5PPS TCA100 |            |                              |
| VOLUME                                                                       | 930-SX     | Slurry Volume: 202.1-bbls    |
| DENSITY                                                                      | 14.5-ppg   | Mix Water Required: 118-bbls |
| YIELD                                                                        | 1.22-cf/sx |                              |
| MIX WATER                                                                    | 5.3-gps    |                              |
| TOP OF CEMENT                                                                | 11126-ft   |                              |
| EXCESS                                                                       | 20%        |                              |
| DISPLACEMENT                                                                 |            |                              |
| Fresh Water+ 0.25GPT Plexicide 24L+1GPT Corplex                              |            |                              |
| VOLUME                                                                       | 364.4-bbl  |                              |
| DENSITY                                                                      | 8.34-ppg   |                              |

| CHEMICAL DESCRIPTIONS |        |                                                       |
|-----------------------|--------|-------------------------------------------------------|
| CHEMICAL NAME         | CODE   | DESCRIPTION                                           |
| B_Poz                 | WTC228 | Poz - Fly Ash, Extender                               |
| Class H               | WTC101 | API Cement                                            |
| Class C               | WTC100 | API Cement                                            |
| M_Poz                 | WTC280 | Poz - Fly Ash, Extender                               |
| ProLite               |        | Blended Based Cement                                  |
| Plexcrete SFA         | WTC129 | Cement Strength Enhancer                              |
| Gel                   | WTC102 | Extender                                              |
| GB-52                 | WTC008 | Microspheres, Extender                                |
| Micro Shell           | WTC209 | Cement Strength Enhancer                              |
| WTC1                  | WTC250 | Extender                                              |
| CS-9                  | WTC285 | Cement Strength Enhancer                              |
| Plexcrete STE         | WTC127 | Cement Strength Enhancer                              |
| CSE-NP                | WTC236 | Cement Strength Enhancer                              |
| Gypsum                | WTC111 | Free Water Control, Extender                          |
| CaCl <sub>2</sub>     | WTC112 | Accelerator                                           |
| SMS                   | WTC115 | Free Water Control, Extender                          |
| RCKCAS-100            | WTC276 | Free Water Control, Anti-Settling Agent               |
| R-1300                | WTC201 | Low Temperature Retarder                              |
| CR-150                | WTC275 | Lignosulfonate Retarder                               |
| CRT-201               | WTC278 | Lignosulfonate Retarder                               |
| CD-22                 | WTC290 | Dispersant, Friction Reducer                          |
| CFL-312               | WTC265 | Fluid Loss and Gas Migration Control                  |
| FL-24                 | WTC277 | Fluid Loss (polymers/copolymers - 300-F max)          |
| FL-17                 | WTC130 | Fluid Loss and Gas Migration Control (400-F max)      |
| MagBond               | WTC271 | Expanding Agent                                       |
| Gilsonite             | WTC003 | Premium Lost Circulation Material, Free Water Control |
| Pol-E-Flake           | WTC106 | Lost Circulation Material                             |
| Web Seal              | WTC133 | Premium Fiber Lost Circulation Material               |
| TCA100                | WTC284 | Powdered Defoamer                                     |
| NoFoam V1A            | WTC105 | Liquid Defoamer                                       |
| Water                 |        | Fresh Water                                           |
| PolyScrub 4320        | WTC232 | Spacer Gelling Agent                                  |
| RCKCAS-100            | WTC276 | Free Water Control, Anti-Settling Agent               |
| Barite                | WTC116 | Weighting Agent                                       |
| HoleScrub 4311        | WTC281 | Surfactant                                            |
| HoleScrub 4305        | WTC213 | Surfactant                                            |
| Soda Ash              | WTC164 | pH Control                                            |
| R-1300                | WTC201 | Low Temperature Retarder                              |
| RCKCAS-100            | WTC276 | Free Water Control, Anti-Settling Agent               |
| Sugar                 | WTC119 | Retarder                                              |
| TCA100                | WTC284 | Powdered Defoamer                                     |
| Plexcide 24L          | WTC166 | Biocide                                               |
| Corplex               | WTC134 | Corrosion Inhibitor                                   |
| Clay Max              | WTC096 | KCL Substitute                                        |
| Zone Seal             | WTC207 | Premium Lost Circulation Material                     |

**WELL DETAILS: Quail 16 State Com #755H**

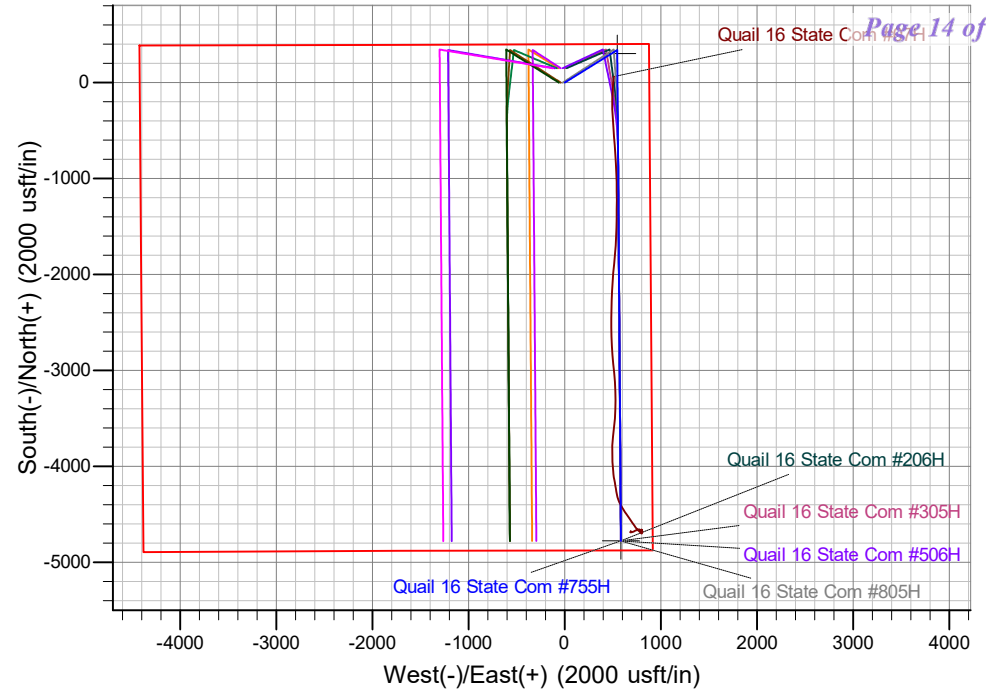
Ground Elev: 3635.0 KB: 3660

| +N/-S | +E/-W | Northing  | Easting   | Latitude  | Longitude   |
|-------|-------|-----------|-----------|-----------|-------------|
| 0.0   | 0.0   | 575337.31 | 779693.12 | 32.579274 | -103.559520 |

**PROJECT DETAILS: Lea County, NM (NAD 83)**

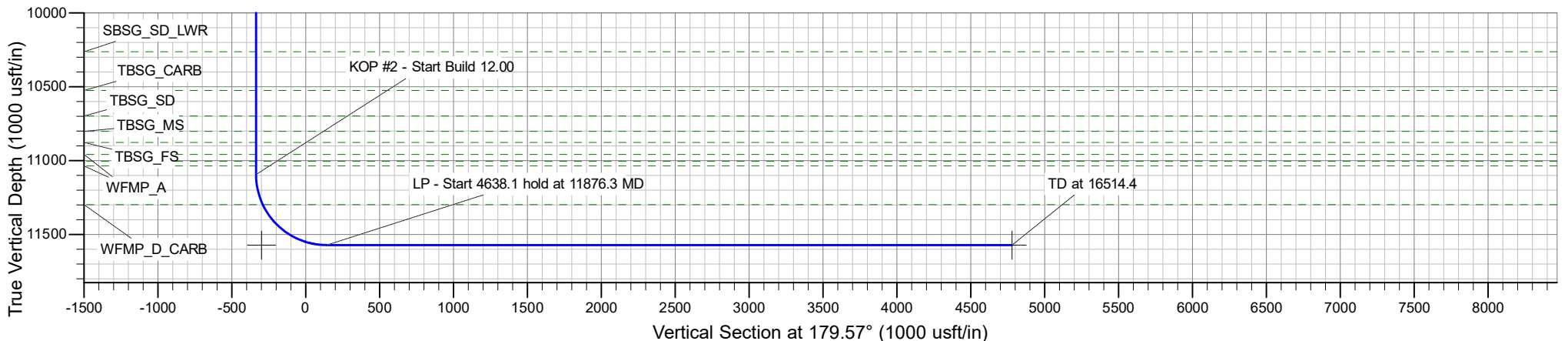
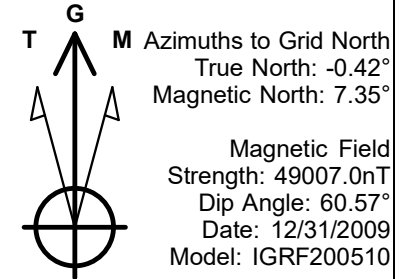
Geodetic System: US State Plane 1983  
 Datum: North American Datum 1983  
 Ellipsoid: GRS 1980  
 Zone: New Mexico Eastern Zone

System Datum: Mean Sea Level



**SECTION DETAILS**

| Sec | MD      | Inc   | Azi    | TVD     | +N/-S   | +E/-W | Dleg  | TFace  | VSec   | Annotation                           |
|-----|---------|-------|--------|---------|---------|-------|-------|--------|--------|--------------------------------------|
| 1   | 0.0     | 0.00  | 0.00   | 0.0     | 0.0     | 0.0   | 0.00  | 0.00   | 0.0    |                                      |
| 2   | 2000.0  | 0.00  | 0.00   | 2000.0  | 0.0     | 0.0   | 0.00  | 0.00   | 0.0    | KOP - Start Build 2.00               |
| 3   | 2286.7  | 5.73  | 58.14  | 2286.3  | 7.6     | 12.2  | 2.00  | 58.14  | -7.5   | Start 6158.3 hold at 2286.7 MD       |
| 4   | 8445.0  | 5.73  | 58.14  | 8413.7  | 332.4   | 534.8 | 0.00  | 0.00   | -328.4 | Start Drop -2.00                     |
| 5   | 8731.8  | 0.00  | 0.00   | 8700.0  | 340.0   | 547.0 | 2.00  | 180.00 | -335.9 | Start 2394.5 hold at 8731.8 MD       |
| 6   | 11126.3 | 0.00  | 0.00   | 11094.5 | 340.0   | 547.0 | 0.00  | 0.00   | -335.9 | KOP #2 - Start Build 12.00           |
| 7   | 11876.3 | 90.00 | 179.57 | 11572.0 | -137.5  | 550.6 | 12.00 | 179.57 | 141.6  | LP - Start 4638.1 hold at 11876.3 MD |
| 8   | 16514.4 | 90.00 | 179.57 | 11572.0 | -4775.4 | 585.6 | 0.00  | 0.00   | 4779.7 | TD at 16514.4                        |



# **Avant Operating II, LLC**

**Lea County, NM (NAD 83)  
Quail 16 State Com Pad 2  
Quail 16 State Com #755H**

**OH**

**Plan: Plan 0.1**

## **Standard Planning Report**

**30 September, 2025**

Planning Report

|           |                            |                              |                               |
|-----------|----------------------------|------------------------------|-------------------------------|
| Database: | EDM 5000.16 Single User Db | Local Co-ordinate Reference: | Well Quail 16 State Com #755H |
| Company:  | Avant Operating II, LLC    | TVD Reference:               | WELL @ 3660.0usft (3660)      |
| Project:  | Lea County, NM (NAD 83)    | MD Reference:                | WELL @ 3660.0usft (3660)      |
| Site:     | Quail 16 State Com Pad 2   | North Reference:             | Grid                          |
| Well:     | Quail 16 State Com #755H   | Survey Calculation Method:   | Minimum Curvature             |
| Wellbore: | OH                         |                              |                               |
| Design:   | Plan 0.1                   |                              |                               |

|             |                           |               |                |
|-------------|---------------------------|---------------|----------------|
| Project     | Lea County, NM (NAD 83)   |               |                |
| Map System: | US State Plane 1983       | System Datum: | Mean Sea Level |
| Geo Datum:  | North American Datum 1983 |               |                |
| Map Zone:   | New Mexico Eastern Zone   |               |                |

|                       |          |                          |      |              |      |            |   |             |
|-----------------------|----------|--------------------------|------|--------------|------|------------|---|-------------|
| Site                  |          | Quail 16 State Com Pad 2 |      |              |      |            |   |             |
| Site Position:        |          | Northing:                |      | 575,486.84   | usft | Latitude:  |   | 32.579687   |
| From:                 | Lat/Long | Easting:                 |      | 779,592.22   | usft | Longitude: |   | -103.559844 |
| Position Uncertainty: |          | 0.0                      | usft | Slot Radius: |      | 13-3/16    | " |             |

| Well                 | Quail 16 State Com #755H |          |                     |                 |               |              |
|----------------------|--------------------------|----------|---------------------|-----------------|---------------|--------------|
| Well Position        | +N/-S                    | 0.0 usft | Northing:           | 575,337.31 usft | Latitude:     | 32.579274    |
|                      | +E/-W                    | 0.0 usft | Easting:            | 779,693.11 usft | Longitude:    | -103.559520  |
| Position Uncertainty |                          | 0.0 usft | Wellhead Elevation: | usft            | Ground Level: | 3,635.0 usft |
| Grid Convergence:    |                          | 0.42 °   |                     |                 |               |              |

|           |            |             |                 |               |                     |
|-----------|------------|-------------|-----------------|---------------|---------------------|
| Wellbore  | OH         |             |                 |               |                     |
| Magnetics | Model Name | Sample Date | Declination (°) | Dip Angle (°) | Field Strength (nT) |
|           | IGRF200510 | 12/31/2009  | 7.77            | 60.57         | 49,007.02688887     |

|                   |                         |              |              |               |     |
|-------------------|-------------------------|--------------|--------------|---------------|-----|
| Design            | Plan 0.1                |              |              |               |     |
| Audit Notes:      |                         |              |              |               |     |
| Version:          |                         | Phase:       | PROTOTYPE    | Tie On Depth: | 0.0 |
| Vertical Section: | Depth From (TVD) (usft) | +N/-S (usft) | +E/-W (usft) | Direction (°) |     |
|                   | 0.0                     | 0.0          | 0.0          | 179.57        |     |

|                          |                 |                        |                 |         |  |
|--------------------------|-----------------|------------------------|-----------------|---------|--|
| Plan Survey Tool Program | Date            | 9/30/2025              |                 |         |  |
| Depth From (usft)        | Depth To (usft) | Survey (Wellbore)      | Tool Name       | Remarks |  |
| 1                        | 0.0             | 16,514.4 Plan 0.1 (OH) | B001Mb_MWD+HRGM |         |  |
|                          |                 |                        | OWSG MWD + HRGM |         |  |

|                       |                 |             |                       |              |              |                         |                        |                       |         |                      |
|-----------------------|-----------------|-------------|-----------------------|--------------|--------------|-------------------------|------------------------|-----------------------|---------|----------------------|
| 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    |                      |
| 2,000.0               | 0.00            | 0.00        | 2,000.0               | 0.0          | 0.0          | 0.00                    | 0.00                   | 0.00                  | 0.00    |                      |
| 2,286.7               | 5.73            | 58.14       | 2,286.3               | 7.6          | 12.2         | 2.00                    | 2.00                   | 0.00                  | 58.14   |                      |
| 8,445.0               | 5.73            | 58.14       | 8,413.7               | 332.4        | 534.8        | 0.00                    | 0.00                   | 0.00                  | 0.00    |                      |
| 8,731.8               | 0.00            | 0.00        | 8,700.0               | 340.0        | 547.0        | 2.00                    | -2.00                  | 0.00                  | 180.00  |                      |
| 11,126.3              | 0.00            | 0.00        | 11,094.5              | 340.0        | 547.0        | 0.00                    | 0.00                   | 0.00                  | 0.00    |                      |
| 11,876.3              | 90.00           | 179.57      | 11,572.0              | -137.5       | 550.6        | 12.00                   | 12.00                  | 0.00                  | 179.57  |                      |
| 16,514.4              | 90.00           | 179.57      | 11,572.0              | -4,775.4     | 585.6        | 0.00                    | 0.00                   | 0.00                  | 0.00    | Quail 16 State Com # |



## Planning Report

|                  |                            |                                     |                               |
|------------------|----------------------------|-------------------------------------|-------------------------------|
| <b>Database:</b> | EDM 5000.16 Single User Db | <b>Local Co-ordinate Reference:</b> | Well Quail 16 State Com #755H |
| <b>Company:</b>  | Avant Operating II, LLC    | <b>TVD Reference:</b>               | WELL @ 3660.0usft (3660)      |
| <b>Project:</b>  | Lea County, NM (NAD 83)    | <b>MD Reference:</b>                | WELL @ 3660.0usft (3660)      |
| <b>Site:</b>     | Quail 16 State Com Pad 2   | <b>North Reference:</b>             | Grid                          |
| <b>Well:</b>     | Quail 16 State Com #755H   | <b>Survey Calculation Method:</b>   | Minimum Curvature             |
| <b>Wellbore:</b> | OH                         |                                     |                               |
| <b>Design:</b>   | Plan 0.1                   |                                     |                               |

| 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                  |
| 1,546.0                               | 0.00            | 0.00        | 1,546.0               | 0.0          | 0.0          | 0.0                     | 0.00                    | 0.00                   | 0.00                  |
| <b>RUSTLER</b>                        |                 |             |                       |              |              |                         |                         |                        |                       |
| 1,600.0                               | 0.00            | 0.00        | 1,600.0               | 0.0          | 0.0          | 0.0                     | 0.00                    | 0.00                   | 0.00                  |
| 1,700.0                               | 0.00            | 0.00        | 1,700.0               | 0.0          | 0.0          | 0.0                     | 0.00                    | 0.00                   | 0.00                  |
| 1,800.0                               | 0.00            | 0.00        | 1,800.0               | 0.0          | 0.0          | 0.0                     | 0.00                    | 0.00                   | 0.00                  |
| 1,875.0                               | 0.00            | 0.00        | 1,875.0               | 0.0          | 0.0          | 0.0                     | 0.00                    | 0.00                   | 0.00                  |
| <b>SOLADO</b>                         |                 |             |                       |              |              |                         |                         |                        |                       |
| 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                  |
| <b>KOP - Start Build 2.00</b>         |                 |             |                       |              |              |                         |                         |                        |                       |
| 2,100.0                               | 2.00            | 58.14       | 2,100.0               | 0.9          | 1.5          | -0.9                    | 2.00                    | 2.00                   | 0.00                  |
| 2,200.0                               | 4.00            | 58.14       | 2,199.8               | 3.7          | 5.9          | -3.6                    | 2.00                    | 2.00                   | 0.00                  |
| 2,286.7                               | 5.73            | 58.14       | 2,286.3               | 7.6          | 12.2         | -7.5                    | 2.00                    | 2.00                   | 0.00                  |
| <b>Start 6158.3 hold at 2286.7 MD</b> |                 |             |                       |              |              |                         |                         |                        |                       |
| 2,300.0                               | 5.73            | 58.14       | 2,299.5               | 8.3          | 13.3         | -8.2                    | 0.00                    | 0.00                   | 0.00                  |
| 2,400.0                               | 5.73            | 58.14       | 2,399.0               | 13.5         | 21.8         | -13.4                   | 0.00                    | 0.00                   | 0.00                  |
| 2,500.0                               | 5.73            | 58.14       | 2,498.5               | 18.8         | 30.3         | -18.6                   | 0.00                    | 0.00                   | 0.00                  |
| 2,600.0                               | 5.73            | 58.14       | 2,598.0               | 24.1         | 38.8         | -23.8                   | 0.00                    | 0.00                   | 0.00                  |
| 2,700.0                               | 5.73            | 58.14       | 2,697.5               | 29.4         | 47.3         | -29.0                   | 0.00                    | 0.00                   | 0.00                  |
| 2,800.0                               | 5.73            | 58.14       | 2,797.0               | 34.6         | 55.7         | -34.2                   | 0.00                    | 0.00                   | 0.00                  |
| 2,900.0                               | 5.73            | 58.14       | 2,896.5               | 39.9         | 64.2         | -39.4                   | 0.00                    | 0.00                   | 0.00                  |
| 3,000.0                               | 5.73            | 58.14       | 2,996.0               | 45.2         | 72.7         | -44.6                   | 0.00                    | 0.00                   | 0.00                  |
| 3,100.0                               | 5.73            | 58.14       | 3,095.5               | 50.5         | 81.2         | -49.9                   | 0.00                    | 0.00                   | 0.00                  |
| 3,200.0                               | 5.73            | 58.14       | 3,195.0               | 55.7         | 89.7         | -55.1                   | 0.00                    | 0.00                   | 0.00                  |
| 3,300.0                               | 5.73            | 58.14       | 3,294.4               | 61.0         | 98.2         | -60.3                   | 0.00                    | 0.00                   | 0.00                  |
| 3,307.6                               | 5.73            | 58.14       | 3,302.0               | 61.4         | 98.8         | -60.7                   | 0.00                    | 0.00                   | 0.00                  |
| <b>BASE_OF_SALT</b>                   |                 |             |                       |              |              |                         |                         |                        |                       |
| 3,400.0                               | 5.73            | 58.14       | 3,393.9               | 66.3         | 106.7        | -65.5                   | 0.00                    | 0.00                   | 0.00                  |
| 3,410.1                               | 5.73            | 58.14       | 3,404.0               | 66.8         | 107.5        | -66.0                   | 0.00                    | 0.00                   | 0.00                  |
| <b>YATES</b>                          |                 |             |                       |              |              |                         |                         |                        |                       |
| 3,500.0                               | 5.73            | 58.14       | 3,493.4               | 71.6         | 115.1        | -70.7                   | 0.00                    | 0.00                   | 0.00                  |
| 3,600.0                               | 5.73            | 58.14       | 3,592.9               | 76.8         | 123.6        | -75.9                   | 0.00                    | 0.00                   | 0.00                  |
| 3,700.0                               | 5.73            | 58.14       | 3,692.4               | 82.1         | 132.1        | -81.1                   | 0.00                    | 0.00                   | 0.00                  |
| 3,800.0                               | 5.73            | 58.14       | 3,791.9               | 87.4         | 140.6        | -86.3                   | 0.00                    | 0.00                   | 0.00                  |
| 3,831.2                               | 5.73            | 58.14       | 3,823.0               | 89.0         | 143.3        | -88.0                   | 0.00                    | 0.00                   | 0.00                  |
| <b>SVRV</b>                           |                 |             |                       |              |              |                         |                         |                        |                       |
| 3,900.0                               | 5.73            | 58.14       | 3,891.4               | 92.7         | 149.1        | -91.6                   | 0.00                    | 0.00                   | 0.00                  |

## Planning Report

|                  |                            |                                     |                               |
|------------------|----------------------------|-------------------------------------|-------------------------------|
| <b>Database:</b> | EDM 5000.16 Single User Db | <b>Local Co-ordinate Reference:</b> | Well Quail 16 State Com #755H |
| <b>Company:</b>  | Avant Operating II, LLC    | <b>TVD Reference:</b>               | WELL @ 3660.0usft (3660)      |
| <b>Project:</b>  | Lea County, NM (NAD 83)    | <b>MD Reference:</b>                | WELL @ 3660.0usft (3660)      |
| <b>Site:</b>     | Quail 16 State Com Pad 2   | <b>North Reference:</b>             | Grid                          |
| <b>Well:</b>     | Quail 16 State Com #755H   | <b>Survey Calculation Method:</b>   | Minimum Curvature             |
| <b>Wellbore:</b> | OH                         |                                     |                               |
| <b>Design:</b>   | Plan 0.1                   |                                     |                               |

| 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) |
| 4,000.0               | 5.73            | 58.14       | 3,990.9               | 97.9         | 157.6        | -96.8                   | 0.00                    | 0.00                   | 0.00                  |
| 4,000.1               | 5.73            | 58.14       | 3,991.0               | 97.9         | 157.6        | -96.8                   | 0.00                    | 0.00                   | 0.00                  |
| <b>CAPITAN_REEF</b>   |                 |             |                       |              |              |                         |                         |                        |                       |
| 4,100.0               | 5.73            | 58.14       | 4,090.4               | 103.2        | 166.1        | -102.0                  | 0.00                    | 0.00                   | 0.00                  |
| 4,200.0               | 5.73            | 58.14       | 4,189.9               | 108.5        | 174.6        | -107.2                  | 0.00                    | 0.00                   | 0.00                  |
| 4,300.0               | 5.73            | 58.14       | 4,289.4               | 113.8        | 183.0        | -112.4                  | 0.00                    | 0.00                   | 0.00                  |
| 4,400.0               | 5.73            | 58.14       | 4,388.9               | 119.0        | 191.5        | -117.6                  | 0.00                    | 0.00                   | 0.00                  |
| 4,500.0               | 5.73            | 58.14       | 4,488.4               | 124.3        | 200.0        | -122.8                  | 0.00                    | 0.00                   | 0.00                  |
| 4,600.0               | 5.73            | 58.14       | 4,587.9               | 129.6        | 208.5        | -128.0                  | 0.00                    | 0.00                   | 0.00                  |
| 4,700.0               | 5.73            | 58.14       | 4,687.4               | 134.9        | 217.0        | -133.2                  | 0.00                    | 0.00                   | 0.00                  |
| 4,800.0               | 5.73            | 58.14       | 4,786.9               | 140.1        | 225.5        | -138.5                  | 0.00                    | 0.00                   | 0.00                  |
| 4,900.0               | 5.73            | 58.14       | 4,886.4               | 145.4        | 234.0        | -143.7                  | 0.00                    | 0.00                   | 0.00                  |
| 5,000.0               | 5.73            | 58.14       | 4,985.9               | 150.7        | 242.4        | -148.9                  | 0.00                    | 0.00                   | 0.00                  |
| 5,100.0               | 5.73            | 58.14       | 5,085.4               | 156.0        | 250.9        | -154.1                  | 0.00                    | 0.00                   | 0.00                  |
| 5,200.0               | 5.73            | 58.14       | 5,184.9               | 161.2        | 259.4        | -159.3                  | 0.00                    | 0.00                   | 0.00                  |
| 5,300.0               | 5.73            | 58.14       | 5,284.4               | 166.5        | 267.9        | -164.5                  | 0.00                    | 0.00                   | 0.00                  |
| 5,400.0               | 5.73            | 58.14       | 5,383.9               | 171.8        | 276.4        | -169.7                  | 0.00                    | 0.00                   | 0.00                  |
| 5,500.0               | 5.73            | 58.14       | 5,483.4               | 177.1        | 284.9        | -174.9                  | 0.00                    | 0.00                   | 0.00                  |
| 5,554.8               | 5.73            | 58.14       | 5,538.0               | 180.0        | 289.5        | -177.8                  | 0.00                    | 0.00                   | 0.00                  |
| <b>CHERRY_CNYN</b>    |                 |             |                       |              |              |                         |                         |                        |                       |
| 5,600.0               | 5.73            | 58.14       | 5,582.9               | 182.3        | 293.4        | -180.1                  | 0.00                    | 0.00                   | 0.00                  |
| 5,700.0               | 5.73            | 58.14       | 5,682.4               | 187.6        | 301.9        | -185.4                  | 0.00                    | 0.00                   | 0.00                  |
| 5,800.0               | 5.73            | 58.14       | 5,781.9               | 192.9        | 310.3        | -190.6                  | 0.00                    | 0.00                   | 0.00                  |
| 5,900.0               | 5.73            | 58.14       | 5,881.4               | 198.2        | 318.8        | -195.8                  | 0.00                    | 0.00                   | 0.00                  |
| 6,000.0               | 5.73            | 58.14       | 5,980.9               | 203.5        | 327.3        | -201.0                  | 0.00                    | 0.00                   | 0.00                  |
| 6,100.0               | 5.73            | 58.14       | 6,080.4               | 208.7        | 335.8        | -206.2                  | 0.00                    | 0.00                   | 0.00                  |
| 6,200.0               | 5.73            | 58.14       | 6,179.9               | 214.0        | 344.3        | -211.4                  | 0.00                    | 0.00                   | 0.00                  |
| 6,300.0               | 5.73            | 58.14       | 6,279.4               | 219.3        | 352.8        | -216.6                  | 0.00                    | 0.00                   | 0.00                  |
| 6,400.0               | 5.73            | 58.14       | 6,378.9               | 224.6        | 361.3        | -221.8                  | 0.00                    | 0.00                   | 0.00                  |
| 6,500.0               | 5.73            | 58.14       | 6,478.4               | 229.8        | 369.8        | -227.0                  | 0.00                    | 0.00                   | 0.00                  |
| 6,600.0               | 5.73            | 58.14       | 6,577.9               | 235.1        | 378.2        | -232.3                  | 0.00                    | 0.00                   | 0.00                  |
| 6,621.2               | 5.73            | 58.14       | 6,599.0               | 236.2        | 380.0        | -233.4                  | 0.00                    | 0.00                   | 0.00                  |
| <b>BRUSHY_CANYON</b>  |                 |             |                       |              |              |                         |                         |                        |                       |
| 6,700.0               | 5.73            | 58.14       | 6,677.4               | 240.4        | 386.7        | -237.5                  | 0.00                    | 0.00                   | 0.00                  |
| 6,800.0               | 5.73            | 58.14       | 6,776.9               | 245.7        | 395.2        | -242.7                  | 0.00                    | 0.00                   | 0.00                  |
| 6,900.0               | 5.73            | 58.14       | 6,876.4               | 250.9        | 403.7        | -247.9                  | 0.00                    | 0.00                   | 0.00                  |
| 7,000.0               | 5.73            | 58.14       | 6,975.9               | 256.2        | 412.2        | -253.1                  | 0.00                    | 0.00                   | 0.00                  |
| 7,100.0               | 5.73            | 58.14       | 7,075.4               | 261.5        | 420.7        | -258.3                  | 0.00                    | 0.00                   | 0.00                  |
| 7,200.0               | 5.73            | 58.14       | 7,174.9               | 266.8        | 429.2        | -263.5                  | 0.00                    | 0.00                   | 0.00                  |
| 7,300.0               | 5.73            | 58.14       | 7,274.4               | 272.0        | 437.6        | -268.7                  | 0.00                    | 0.00                   | 0.00                  |
| 7,400.0               | 5.73            | 58.14       | 7,373.9               | 277.3        | 446.1        | -273.9                  | 0.00                    | 0.00                   | 0.00                  |
| 7,500.0               | 5.73            | 58.14       | 7,473.4               | 282.6        | 454.6        | -279.2                  | 0.00                    | 0.00                   | 0.00                  |
| 7,600.0               | 5.73            | 58.14       | 7,572.9               | 287.9        | 463.1        | -284.4                  | 0.00                    | 0.00                   | 0.00                  |
| 7,700.0               | 5.73            | 58.14       | 7,672.4               | 293.1        | 471.6        | -289.6                  | 0.00                    | 0.00                   | 0.00                  |
| 7,800.0               | 5.73            | 58.14       | 7,771.9               | 298.4        | 480.1        | -294.8                  | 0.00                    | 0.00                   | 0.00                  |
| 7,900.0               | 5.73            | 58.14       | 7,871.4               | 303.7        | 488.6        | -300.0                  | 0.00                    | 0.00                   | 0.00                  |
| 8,000.0               | 5.73            | 58.14       | 7,970.9               | 309.0        | 497.1        | -305.2                  | 0.00                    | 0.00                   | 0.00                  |
| 8,100.0               | 5.73            | 58.14       | 8,070.4               | 314.2        | 505.5        | -310.4                  | 0.00                    | 0.00                   | 0.00                  |
| 8,200.0               | 5.73            | 58.14       | 8,169.9               | 319.5        | 514.0        | -315.6                  | 0.00                    | 0.00                   | 0.00                  |
| 8,300.0               | 5.73            | 58.14       | 8,269.4               | 324.8        | 522.5        | -320.8                  | 0.00                    | 0.00                   | 0.00                  |
| 8,366.9               | 5.73            | 58.14       | 8,336.0               | 328.3        | 528.2        | -324.3                  | 0.00                    | 0.00                   | 0.00                  |
| <b>BSPG_LIME</b>      |                 |             |                       |              |              |                         |                         |                        |                       |
| 8,400.0               | 5.73            | 58.14       | 8,368.9               | 330.1        | 531.0        | -326.1                  | 0.00                    | 0.00                   | 0.00                  |

## Planning Report

|                  |                            |                                     |                               |
|------------------|----------------------------|-------------------------------------|-------------------------------|
| <b>Database:</b> | EDM 5000.16 Single User Db | <b>Local Co-ordinate Reference:</b> | Well Quail 16 State Com #755H |
| <b>Company:</b>  | Avant Operating II, LLC    | <b>TVD Reference:</b>               | WELL @ 3660.0usft (3660)      |
| <b>Project:</b>  | Lea County, NM (NAD 83)    | <b>MD Reference:</b>                | WELL @ 3660.0usft (3660)      |
| <b>Site:</b>     | Quail 16 State Com Pad 2   | <b>North Reference:</b>             | Grid                          |
| <b>Well:</b>     | Quail 16 State Com #755H   | <b>Survey Calculation Method:</b>   | Minimum Curvature             |
| <b>Wellbore:</b> | OH                         |                                     |                               |
| <b>Design:</b>   | Plan 0.1                   |                                     |                               |

| Planned Survey                        |                 |             |                       |              |              |                         |                         |                        |                       |
|---------------------------------------|-----------------|-------------|-----------------------|--------------|--------------|-------------------------|-------------------------|------------------------|-----------------------|
| Measured Depth (usft)                 | Inclination (°) | Azimuth (°) | Vertical Depth (usft) | +N/-S (usft) | +E/-W (usft) | Vertical Section (usft) | Dogleg Rate (°/100usft) | Build Rate (°/100usft) | Turn Rate (°/100usft) |
| 8,445.0                               | 5.73            | 58.14       | 8,413.7               | 332.4        | 534.8        | -328.4                  | 0.00                    | 0.00                   | 0.00                  |
| <b>Start Drop -2.00</b>               |                 |             |                       |              |              |                         |                         |                        |                       |
| 8,500.0                               | 4.64            | 58.14       | 8,468.5               | 335.1        | 539.0        | -331.0                  | 2.00                    | -2.00                  | 0.00                  |
| 8,600.0                               | 2.64            | 58.14       | 8,568.3               | 338.4        | 544.4        | -334.3                  | 2.00                    | -2.00                  | 0.00                  |
| 8,700.0                               | 0.64            | 58.14       | 8,668.2               | 339.9        | 546.9        | -335.8                  | 2.00                    | -2.00                  | 0.00                  |
| 8,731.8                               | 0.00            | 0.00        | 8,700.0               | 340.0        | 547.0        | -335.9                  | 2.00                    | -2.00                  | 0.00                  |
| <b>Start 2394.5 hold at 8731.8 MD</b> |                 |             |                       |              |              |                         |                         |                        |                       |
| 8,774.8                               | 0.00            | 0.00        | 8,743.0               | 340.0        | 547.0        | -335.9                  | 0.00                    | 0.00                   | 0.00                  |
| <b>AVALON_B</b>                       |                 |             |                       |              |              |                         |                         |                        |                       |
| 8,800.0                               | 0.00            | 0.00        | 8,768.2               | 340.0        | 547.0        | -335.9                  | 0.00                    | 0.00                   | 0.00                  |
| 8,900.0                               | 0.00            | 0.00        | 8,868.2               | 340.0        | 547.0        | -335.9                  | 0.00                    | 0.00                   | 0.00                  |
| 9,000.0                               | 0.00            | 0.00        | 8,968.2               | 340.0        | 547.0        | -335.9                  | 0.00                    | 0.00                   | 0.00                  |
| 9,100.0                               | 0.00            | 0.00        | 9,068.2               | 340.0        | 547.0        | -335.9                  | 0.00                    | 0.00                   | 0.00                  |
| 9,200.0                               | 0.00            | 0.00        | 9,168.2               | 340.0        | 547.0        | -335.9                  | 0.00                    | 0.00                   | 0.00                  |
| 9,300.0                               | 0.00            | 0.00        | 9,268.2               | 340.0        | 547.0        | -335.9                  | 0.00                    | 0.00                   | 0.00                  |
| 9,400.0                               | 0.00            | 0.00        | 9,368.2               | 340.0        | 547.0        | -335.9                  | 0.00                    | 0.00                   | 0.00                  |
| 9,500.0                               | 0.00            | 0.00        | 9,468.2               | 340.0        | 547.0        | -335.9                  | 0.00                    | 0.00                   | 0.00                  |
| 9,500.8                               | 0.00            | 0.00        | 9,469.0               | 340.0        | 547.0        | -335.9                  | 0.00                    | 0.00                   | 0.00                  |
| <b>FBSG_SD</b>                        |                 |             |                       |              |              |                         |                         |                        |                       |
| 9,600.0                               | 0.00            | 0.00        | 9,568.2               | 340.0        | 547.0        | -335.9                  | 0.00                    | 0.00                   | 0.00                  |
| 9,700.0                               | 0.00            | 0.00        | 9,668.2               | 340.0        | 547.0        | -335.9                  | 0.00                    | 0.00                   | 0.00                  |
| 9,791.8                               | 0.00            | 0.00        | 9,760.0               | 340.0        | 547.0        | -335.9                  | 0.00                    | 0.00                   | 0.00                  |
| <b>SBSG_SHALE</b>                     |                 |             |                       |              |              |                         |                         |                        |                       |
| 9,800.0                               | 0.00            | 0.00        | 9,768.2               | 340.0        | 547.0        | -335.9                  | 0.00                    | 0.00                   | 0.00                  |
| 9,900.0                               | 0.00            | 0.00        | 9,868.2               | 340.0        | 547.0        | -335.9                  | 0.00                    | 0.00                   | 0.00                  |
| 10,000.0                              | 0.00            | 0.00        | 9,968.2               | 340.0        | 547.0        | -335.9                  | 0.00                    | 0.00                   | 0.00                  |
| 10,030.8                              | 0.00            | 0.00        | 9,999.0               | 340.0        | 547.0        | -335.9                  | 0.00                    | 0.00                   | 0.00                  |
| <b>SBSG_SD</b>                        |                 |             |                       |              |              |                         |                         |                        |                       |
| 10,100.0                              | 0.00            | 0.00        | 10,068.2              | 340.0        | 547.0        | -335.9                  | 0.00                    | 0.00                   | 0.00                  |
| 10,200.0                              | 0.00            | 0.00        | 10,168.2              | 340.0        | 547.0        | -335.9                  | 0.00                    | 0.00                   | 0.00                  |
| 10,294.8                              | 0.00            | 0.00        | 10,263.0              | 340.0        | 547.0        | -335.9                  | 0.00                    | 0.00                   | 0.00                  |
| <b>SBSG_SD_LWR</b>                    |                 |             |                       |              |              |                         |                         |                        |                       |
| 10,300.0                              | 0.00            | 0.00        | 10,268.2              | 340.0        | 547.0        | -335.9                  | 0.00                    | 0.00                   | 0.00                  |
| 10,400.0                              | 0.00            | 0.00        | 10,368.2              | 340.0        | 547.0        | -335.9                  | 0.00                    | 0.00                   | 0.00                  |
| 10,500.0                              | 0.00            | 0.00        | 10,468.2              | 340.0        | 547.0        | -335.9                  | 0.00                    | 0.00                   | 0.00                  |
| 10,556.8                              | 0.00            | 0.00        | 10,525.0              | 340.0        | 547.0        | -335.9                  | 0.00                    | 0.00                   | 0.00                  |
| <b>TBSG_CARB</b>                      |                 |             |                       |              |              |                         |                         |                        |                       |
| 10,600.0                              | 0.00            | 0.00        | 10,568.2              | 340.0        | 547.0        | -335.9                  | 0.00                    | 0.00                   | 0.00                  |
| 10,700.0                              | 0.00            | 0.00        | 10,668.2              | 340.0        | 547.0        | -335.9                  | 0.00                    | 0.00                   | 0.00                  |
| 10,729.8                              | 0.00            | 0.00        | 10,698.0              | 340.0        | 547.0        | -335.9                  | 0.00                    | 0.00                   | 0.00                  |
| <b>TBSG_SD</b>                        |                 |             |                       |              |              |                         |                         |                        |                       |
| 10,800.0                              | 0.00            | 0.00        | 10,768.2              | 340.0        | 547.0        | -335.9                  | 0.00                    | 0.00                   | 0.00                  |
| 10,833.8                              | 0.00            | 0.00        | 10,802.0              | 340.0        | 547.0        | -335.9                  | 0.00                    | 0.00                   | 0.00                  |
| <b>TBSG_MS</b>                        |                 |             |                       |              |              |                         |                         |                        |                       |
| 10,900.0                              | 0.00            | 0.00        | 10,868.2              | 340.0        | 547.0        | -335.9                  | 0.00                    | 0.00                   | 0.00                  |
| 10,908.8                              | 0.00            | 0.00        | 10,877.0              | 340.0        | 547.0        | -335.9                  | 0.00                    | 0.00                   | 0.00                  |
| <b>TBSG_FS</b>                        |                 |             |                       |              |              |                         |                         |                        |                       |
| 10,989.8                              | 0.00            | 0.00        | 10,958.0              | 340.0        | 547.0        | -335.9                  | 0.00                    | 0.00                   | 0.00                  |
| <b>WFMP</b>                           |                 |             |                       |              |              |                         |                         |                        |                       |
| 11,000.0                              | 0.00            | 0.00        | 10,968.2              | 340.0        | 547.0        | -335.9                  | 0.00                    | 0.00                   | 0.00                  |
| 11,036.8                              | 0.00            | 0.00        | 11,005.0              | 340.0        | 547.0        | -335.9                  | 0.00                    | 0.00                   | 0.00                  |
| <b>WFMP_CL_Y</b>                      |                 |             |                       |              |              |                         |                         |                        |                       |
| 11,067.8                              | 0.00            | 0.00        | 11,036.0              | 340.0        | 547.0        | -335.9                  | 0.00                    | 0.00                   | 0.00                  |

## Planning Report

|                  |                            |                                     |                               |
|------------------|----------------------------|-------------------------------------|-------------------------------|
| <b>Database:</b> | EDM 5000.16 Single User Db | <b>Local Co-ordinate Reference:</b> | Well Quail 16 State Com #755H |
| <b>Company:</b>  | Avant Operating II, LLC    | <b>TVD Reference:</b>               | WELL @ 3660.0usft (3660)      |
| <b>Project:</b>  | Lea County, NM (NAD 83)    | <b>MD Reference:</b>                | WELL @ 3660.0usft (3660)      |
| <b>Site:</b>     | Quail 16 State Com Pad 2   | <b>North Reference:</b>             | Grid                          |
| <b>Well:</b>     | Quail 16 State Com #755H   | <b>Survey Calculation Method:</b>   | Minimum Curvature             |
| <b>Wellbore:</b> | OH                         |                                     |                               |
| <b>Design:</b>   | Plan 0.1                   |                                     |                               |

| 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) |
| <b>WFMP_A</b>                               |                 |             |                       |              |              |                         |                         |                        |                       |
| 11,100.0                                    | 0.00            | 0.00        | 11,068.2              | 340.0        | 547.0        | -335.9                  | 0.00                    | 0.00                   | 0.00                  |
| 11,126.3                                    | 0.00            | 0.00        | 11,094.5              | 340.0        | 547.0        | -335.9                  | 0.00                    | 0.00                   | 0.00                  |
| <b>KOP #2 - Start Build 12.00</b>           |                 |             |                       |              |              |                         |                         |                        |                       |
| 11,150.0                                    | 2.84            | 179.57      | 11,118.2              | 339.4        | 547.0        | -335.3                  | 12.00                   | 12.00                  | 0.00                  |
| 11,175.0                                    | 5.84            | 179.57      | 11,143.1              | 337.5        | 547.0        | -333.4                  | 12.00                   | 12.00                  | 0.00                  |
| 11,200.0                                    | 8.84            | 179.57      | 11,167.9              | 334.3        | 547.0        | -330.2                  | 12.00                   | 12.00                  | 0.00                  |
| 11,225.0                                    | 11.84           | 179.57      | 11,192.5              | 329.8        | 547.1        | -325.7                  | 12.00                   | 12.00                  | 0.00                  |
| 11,250.0                                    | 14.84           | 179.57      | 11,216.8              | 324.1        | 547.1        | -320.0                  | 12.00                   | 12.00                  | 0.00                  |
| 11,275.0                                    | 17.84           | 179.57      | 11,240.8              | 317.0        | 547.2        | -312.9                  | 12.00                   | 12.00                  | 0.00                  |
| 11,300.0                                    | 20.84           | 179.57      | 11,264.4              | 308.8        | 547.2        | -304.6                  | 12.00                   | 12.00                  | 0.00                  |
| 11,325.0                                    | 23.84           | 179.57      | 11,287.5              | 299.3        | 547.3        | -295.1                  | 12.00                   | 12.00                  | 0.00                  |
| 11,336.5                                    | 25.22           | 179.57      | 11,298.0              | 294.5        | 547.3        | -290.4                  | 12.00                   | 12.00                  | 0.00                  |
| <b>WFMP_D_CARB</b>                          |                 |             |                       |              |              |                         |                         |                        |                       |
| 11,350.0                                    | 26.84           | 179.57      | 11,310.1              | 288.6        | 547.4        | -284.4                  | 12.00                   | 12.00                  | 0.00                  |
| 11,375.0                                    | 29.84           | 179.57      | 11,332.1              | 276.7        | 547.5        | -272.6                  | 12.00                   | 12.00                  | 0.00                  |
| 11,400.0                                    | 32.84           | 179.57      | 11,353.5              | 263.7        | 547.6        | -259.6                  | 12.00                   | 12.00                  | 0.00                  |
| 11,425.0                                    | 35.84           | 179.57      | 11,374.1              | 249.6        | 547.7        | -245.5                  | 12.00                   | 12.00                  | 0.00                  |
| 11,450.0                                    | 38.84           | 179.57      | 11,394.0              | 234.4        | 547.8        | -230.3                  | 12.00                   | 12.00                  | 0.00                  |
| 11,475.0                                    | 41.84           | 179.57      | 11,413.0              | 218.2        | 547.9        | -214.1                  | 12.00                   | 12.00                  | 0.00                  |
| 11,500.0                                    | 44.84           | 179.57      | 11,431.2              | 201.1        | 548.0        | -197.0                  | 12.00                   | 12.00                  | 0.00                  |
| 11,523.9                                    | 47.71           | 179.57      | 11,447.8              | 183.8        | 548.2        | -179.7                  | 12.00                   | 12.00                  | 0.00                  |
| <b>Quail 16 State Com #755H FTP</b>         |                 |             |                       |              |              |                         |                         |                        |                       |
| 11,525.0                                    | 47.84           | 179.57      | 11,448.5              | 183.0        | 548.2        | -178.9                  | 12.00                   | 12.00                  | 0.00                  |
| 11,550.0                                    | 50.84           | 179.57      | 11,464.8              | 164.0        | 548.3        | -159.9                  | 12.00                   | 12.00                  | 0.00                  |
| 11,575.0                                    | 53.84           | 179.57      | 11,480.0              | 144.3        | 548.5        | -140.1                  | 12.00                   | 12.00                  | 0.00                  |
| 11,600.0                                    | 56.84           | 179.57      | 11,494.3              | 123.7        | 548.6        | -119.6                  | 12.00                   | 12.00                  | 0.00                  |
| 11,625.0                                    | 59.84           | 179.57      | 11,507.4              | 102.4        | 548.8        | -98.3                   | 12.00                   | 12.00                  | 0.00                  |
| 11,650.0                                    | 62.84           | 179.57      | 11,519.4              | 80.5         | 549.0        | -76.4                   | 12.00                   | 12.00                  | 0.00                  |
| 11,675.0                                    | 65.84           | 179.57      | 11,530.2              | 57.9         | 549.1        | -53.8                   | 12.00                   | 12.00                  | 0.00                  |
| 11,700.0                                    | 68.84           | 179.57      | 11,539.8              | 34.9         | 549.3        | -30.8                   | 12.00                   | 12.00                  | 0.00                  |
| 11,725.0                                    | 71.84           | 179.57      | 11,548.2              | 11.3         | 549.5        | -7.2                    | 12.00                   | 12.00                  | 0.00                  |
| 11,750.0                                    | 74.84           | 179.57      | 11,555.4              | -12.6        | 549.7        | 16.7                    | 12.00                   | 12.00                  | 0.00                  |
| 11,775.0                                    | 77.84           | 179.57      | 11,561.3              | -36.9        | 549.8        | 41.0                    | 12.00                   | 12.00                  | 0.00                  |
| 11,800.0                                    | 80.84           | 179.57      | 11,565.9              | -61.5        | 550.0        | 65.6                    | 12.00                   | 12.00                  | 0.00                  |
| 11,825.0                                    | 83.84           | 179.57      | 11,569.2              | -86.2        | 550.2        | 90.4                    | 12.00                   | 12.00                  | 0.00                  |
| 11,850.0                                    | 86.84           | 179.57      | 11,571.3              | -111.1       | 550.4        | 115.3                   | 12.00                   | 12.00                  | 0.00                  |
| 11,876.3                                    | 90.00           | 179.57      | 11,572.0              | -137.5       | 550.6        | 141.6                   | 12.00                   | 12.00                  | 0.00                  |
| <b>LP - Start 4638.1 hold at 11876.3 MD</b> |                 |             |                       |              |              |                         |                         |                        |                       |
| 11,900.0                                    | 90.00           | 179.57      | 11,572.0              | -161.1       | 550.8        | 165.3                   | 0.00                    | 0.00                   | 0.00                  |
| 12,000.0                                    | 90.00           | 179.57      | 11,572.0              | -261.1       | 551.5        | 265.3                   | 0.00                    | 0.00                   | 0.00                  |
| 12,100.0                                    | 90.00           | 179.57      | 11,572.0              | -361.1       | 552.3        | 365.3                   | 0.00                    | 0.00                   | 0.00                  |
| 12,200.0                                    | 90.00           | 179.57      | 11,572.0              | -461.1       | 553.0        | 465.3                   | 0.00                    | 0.00                   | 0.00                  |
| 12,300.0                                    | 90.00           | 179.57      | 11,572.0              | -561.1       | 553.8        | 565.3                   | 0.00                    | 0.00                   | 0.00                  |
| 12,400.0                                    | 90.00           | 179.57      | 11,572.0              | -661.1       | 554.6        | 665.3                   | 0.00                    | 0.00                   | 0.00                  |
| 12,500.0                                    | 90.00           | 179.57      | 11,572.0              | -761.1       | 555.3        | 765.3                   | 0.00                    | 0.00                   | 0.00                  |
| 12,600.0                                    | 90.00           | 179.57      | 11,572.0              | -861.1       | 556.1        | 865.3                   | 0.00                    | 0.00                   | 0.00                  |
| 12,700.0                                    | 90.00           | 179.57      | 11,572.0              | -961.1       | 556.8        | 965.3                   | 0.00                    | 0.00                   | 0.00                  |
| 12,800.0                                    | 90.00           | 179.57      | 11,572.0              | -1,061.1     | 557.6        | 1,065.3                 | 0.00                    | 0.00                   | 0.00                  |
| 12,900.0                                    | 90.00           | 179.57      | 11,572.0              | -1,161.1     | 558.3        | 1,165.3                 | 0.00                    | 0.00                   | 0.00                  |
| 13,000.0                                    | 90.00           | 179.57      | 11,572.0              | -1,261.1     | 559.1        | 1,265.3                 | 0.00                    | 0.00                   | 0.00                  |
| 13,100.0                                    | 90.00           | 179.57      | 11,572.0              | -1,361.1     | 559.8        | 1,365.3                 | 0.00                    | 0.00                   | 0.00                  |
| 13,200.0                                    | 90.00           | 179.57      | 11,572.0              | -1,461.1     | 560.6        | 1,465.3                 | 0.00                    | 0.00                   | 0.00                  |

Planning Report

|           |                            |                              |                               |
|-----------|----------------------------|------------------------------|-------------------------------|
| Database: | EDM 5000.16 Single User Db | Local Co-ordinate Reference: | Well Quail 16 State Com #755H |
| Company:  | Avant Operating II, LLC    | TVD Reference:               | WELL @ 3660.0usft (3660)      |
| Project:  | Lea County, NM (NAD 83)    | MD Reference:                | WELL @ 3660.0usft (3660)      |
| Site:     | Quail 16 State Com Pad 2   | North Reference:             | Grid                          |
| Well:     | Quail 16 State Com #755H   | Survey Calculation Method:   | Minimum Curvature             |
| Wellbore: | OH                         |                              |                               |
| Design:   | Plan 0.1                   |                              |                               |

| Planned Survey                                   |                    |                |                             |                 |                 |                               |                               |                              |                             |  |
|--------------------------------------------------|--------------------|----------------|-----------------------------|-----------------|-----------------|-------------------------------|-------------------------------|------------------------------|-----------------------------|--|
| Measured<br>Depth<br>(usft)                      | Inclination<br>(°) | Azimuth<br>(°) | Vertical<br>Depth<br>(usft) | +N/-S<br>(usft) | +E/-W<br>(usft) | Vertical<br>Section<br>(usft) | Dogleg<br>Rate<br>(°/100usft) | Build<br>Rate<br>(°/100usft) | Turn<br>Rate<br>(°/100usft) |  |
| 13,300.0                                         | 90.00              | 179.57         | 11,572.0                    | -1,561.1        | 561.3           | 1,565.3                       | 0.00                          | 0.00                         | 0.00                        |  |
| 13,400.0                                         | 90.00              | 179.57         | 11,572.0                    | -1,661.1        | 562.1           | 1,665.3                       | 0.00                          | 0.00                         | 0.00                        |  |
| 13,500.0                                         | 90.00              | 179.57         | 11,572.0                    | -1,761.1        | 562.9           | 1,765.3                       | 0.00                          | 0.00                         | 0.00                        |  |
| 13,600.0                                         | 90.00              | 179.57         | 11,572.0                    | -1,861.1        | 563.6           | 1,865.3                       | 0.00                          | 0.00                         | 0.00                        |  |
| 13,700.0                                         | 90.00              | 179.57         | 11,572.0                    | -1,961.1        | 564.4           | 1,965.3                       | 0.00                          | 0.00                         | 0.00                        |  |
| 13,800.0                                         | 90.00              | 179.57         | 11,572.0                    | -2,061.1        | 565.1           | 2,065.3                       | 0.00                          | 0.00                         | 0.00                        |  |
| 13,900.0                                         | 90.00              | 179.57         | 11,572.0                    | -2,161.1        | 565.9           | 2,165.3                       | 0.00                          | 0.00                         | 0.00                        |  |
| 14,000.0                                         | 90.00              | 179.57         | 11,572.0                    | -2,261.1        | 566.6           | 2,265.3                       | 0.00                          | 0.00                         | 0.00                        |  |
| 14,100.0                                         | 90.00              | 179.57         | 11,572.0                    | -2,361.1        | 567.4           | 2,365.3                       | 0.00                          | 0.00                         | 0.00                        |  |
| 14,200.0                                         | 90.00              | 179.57         | 11,572.0                    | -2,461.1        | 568.1           | 2,465.3                       | 0.00                          | 0.00                         | 0.00                        |  |
| 14,300.0                                         | 90.00              | 179.57         | 11,572.0                    | -2,561.1        | 568.9           | 2,565.3                       | 0.00                          | 0.00                         | 0.00                        |  |
| 14,400.0                                         | 90.00              | 179.57         | 11,572.0                    | -2,661.1        | 569.6           | 2,665.3                       | 0.00                          | 0.00                         | 0.00                        |  |
| 14,500.0                                         | 90.00              | 179.57         | 11,572.0                    | -2,761.1        | 570.4           | 2,765.3                       | 0.00                          | 0.00                         | 0.00                        |  |
| 14,600.0                                         | 90.00              | 179.57         | 11,572.0                    | -2,861.1        | 571.2           | 2,865.3                       | 0.00                          | 0.00                         | 0.00                        |  |
| 14,700.0                                         | 90.00              | 179.57         | 11,572.0                    | -2,961.1        | 571.9           | 2,965.3                       | 0.00                          | 0.00                         | 0.00                        |  |
| 14,800.0                                         | 90.00              | 179.57         | 11,572.0                    | -3,061.1        | 572.7           | 3,065.3                       | 0.00                          | 0.00                         | 0.00                        |  |
| 14,900.0                                         | 90.00              | 179.57         | 11,572.0                    | -3,161.0        | 573.4           | 3,165.3                       | 0.00                          | 0.00                         | 0.00                        |  |
| 15,000.0                                         | 90.00              | 179.57         | 11,572.0                    | -3,261.0        | 574.2           | 3,265.3                       | 0.00                          | 0.00                         | 0.00                        |  |
| 15,100.0                                         | 90.00              | 179.57         | 11,572.0                    | -3,361.0        | 574.9           | 3,365.3                       | 0.00                          | 0.00                         | 0.00                        |  |
| 15,200.0                                         | 90.00              | 179.57         | 11,572.0                    | -3,461.0        | 575.7           | 3,465.3                       | 0.00                          | 0.00                         | 0.00                        |  |
| 15,300.0                                         | 90.00              | 179.57         | 11,572.0                    | -3,561.0        | 576.4           | 3,565.3                       | 0.00                          | 0.00                         | 0.00                        |  |
| 15,400.0                                         | 90.00              | 179.57         | 11,572.0                    | -3,661.0        | 577.2           | 3,665.3                       | 0.00                          | 0.00                         | 0.00                        |  |
| 15,500.0                                         | 90.00              | 179.57         | 11,572.0                    | -3,761.0        | 577.9           | 3,765.3                       | 0.00                          | 0.00                         | 0.00                        |  |
| 15,600.0                                         | 90.00              | 179.57         | 11,572.0                    | -3,861.0        | 578.7           | 3,865.3                       | 0.00                          | 0.00                         | 0.00                        |  |
| 15,700.0                                         | 90.00              | 179.57         | 11,572.0                    | -3,961.0        | 579.5           | 3,965.3                       | 0.00                          | 0.00                         | 0.00                        |  |
| 15,800.0                                         | 90.00              | 179.57         | 11,572.0                    | -4,061.0        | 580.2           | 4,065.3                       | 0.00                          | 0.00                         | 0.00                        |  |
| 15,900.0                                         | 90.00              | 179.57         | 11,572.0                    | -4,161.0        | 581.0           | 4,165.3                       | 0.00                          | 0.00                         | 0.00                        |  |
| 16,000.0                                         | 90.00              | 179.57         | 11,572.0                    | -4,261.0        | 581.7           | 4,265.3                       | 0.00                          | 0.00                         | 0.00                        |  |
| 16,100.0                                         | 90.00              | 179.57         | 11,572.0                    | -4,361.0        | 582.5           | 4,365.3                       | 0.00                          | 0.00                         | 0.00                        |  |
| 16,200.0                                         | 90.00              | 179.57         | 11,572.0                    | -4,461.0        | 583.2           | 4,465.3                       | 0.00                          | 0.00                         | 0.00                        |  |
| 16,300.0                                         | 90.00              | 179.57         | 11,572.0                    | -4,561.0        | 584.0           | 4,565.3                       | 0.00                          | 0.00                         | 0.00                        |  |
| 16,400.0                                         | 90.00              | 179.57         | 11,572.0                    | -4,661.0        | 584.7           | 4,665.3                       | 0.00                          | 0.00                         | 0.00                        |  |
| 16,500.0                                         | 90.00              | 179.57         | 11,572.0                    | -4,761.0        | 585.5           | 4,765.3                       | 0.00                          | 0.00                         | 0.00                        |  |
| 16,514.4                                         | 90.00              | 179.57         | 11,572.0                    | -4,775.4        | 585.6           | 4,779.7                       | 0.00                          | 0.00                         | 0.00                        |  |
| TD at 16514.4 - Quail 16 State Com #755H LTP/BHL |                    |                |                             |                 |                 |                               |                               |                              |                             |  |

| Design Targets                                                                             |               |              |            |              |              |                 |                |           |  |             |
|--------------------------------------------------------------------------------------------|---------------|--------------|------------|--------------|--------------|-----------------|----------------|-----------|--|-------------|
| Target Name                                                                                |               |              |            |              |              |                 |                |           |  |             |
| - hit/miss target                                                                          | Dip Angle (°) | Dip Dir. (°) | TVD (usft) | +N/-S (usft) | +E/-W (usft) | Northing (usft) | Easting (usft) | Latitude  |  | Longitude   |
| - Shape                                                                                    |               |              |            |              |              |                 |                |           |  |             |
| Quail 16 State Com #75                                                                     | 0.00          | 0.00         | 11,572.0   | 302.3        | 548.0        | 575,639.65      | 780,241.09     | 32.580094 |  | -103.557734 |
| - plan misses target center by 171.7usft at 11523.9usft MD (11447.8 TVD, 183.8 N, 548.2 E) |               |              |            |              |              |                 |                |           |  |             |
| - Point                                                                                    |               |              |            |              |              |                 |                |           |  |             |
| Quail 16 State Com #75                                                                     | 0.00          | 0.00         | 11,572.0   | -4,775.4     | 585.6        | 570,561.88      | 780,278.71     | 32.566137 |  | -103.557732 |
| - plan hits target center                                                                  |               |              |            |              |              |                 |                |           |  |             |
| - Point                                                                                    |               |              |            |              |              |                 |                |           |  |             |

## Planning Report

|                  |                            |                                     |                               |
|------------------|----------------------------|-------------------------------------|-------------------------------|
| <b>Database:</b> | EDM 5000.16 Single User Db | <b>Local Co-ordinate Reference:</b> | Well Quail 16 State Com #755H |
| <b>Company:</b>  | Avant Operating II, LLC    | <b>TVD Reference:</b>               | WELL @ 3660.0usft (3660)      |
| <b>Project:</b>  | Lea County, NM (NAD 83)    | <b>MD Reference:</b>                | WELL @ 3660.0usft (3660)      |
| <b>Site:</b>     | Quail 16 State Com Pad 2   | <b>North Reference:</b>             | Grid                          |
| <b>Well:</b>     | Quail 16 State Com #755H   | <b>Survey Calculation Method:</b>   | Minimum Curvature             |
| <b>Wellbore:</b> | OH                         |                                     |                               |
| <b>Design:</b>   | Plan 0.1                   |                                     |                               |

| Formations            |                       |               |           |         |                   |  |
|-----------------------|-----------------------|---------------|-----------|---------|-------------------|--|
| Measured Depth (usft) | Vertical Depth (usft) | Name          | Lithology | Dip (°) | Dip Direction (°) |  |
| 1,546.0               | 1,546.0               | RUSTLER       |           |         |                   |  |
| 1,875.0               | 1,875.0               | SOLADO        |           |         |                   |  |
| 3,307.6               | 3,302.0               | BASE_OF_SALT  |           |         |                   |  |
| 3,410.1               | 3,404.0               | YATES         |           |         |                   |  |
| 3,831.2               | 3,823.0               | SVRV          |           |         |                   |  |
| 4,000.1               | 3,991.0               | CAPITAN_REEF  |           |         |                   |  |
| 5,554.8               | 5,538.0               | CHERRY_CNYN   |           |         |                   |  |
| 6,621.2               | 6,599.0               | BRUSHY_CANYON |           |         |                   |  |
| 8,366.9               | 8,336.0               | BSPG_LIME     |           |         |                   |  |
| 8,774.8               | 8,743.0               | AVALON_B      |           |         |                   |  |
| 9,500.8               | 9,469.0               | FBSG_SD       |           |         |                   |  |
| 9,791.8               | 9,760.0               | SBSG_SHALE    |           |         |                   |  |
| 10,030.8              | 9,999.0               | SBSG_SD       |           |         |                   |  |
| 10,294.8              | 10,263.0              | SBSG_SD_LWR   |           |         |                   |  |
| 10,556.8              | 10,525.0              | TBSG_CARB     |           |         |                   |  |
| 10,729.8              | 10,698.0              | TBSG_SD       |           |         |                   |  |
| 10,833.8              | 10,802.0              | TBSG_MS       |           |         |                   |  |
| 10,908.8              | 10,877.0              | TBSG_FS       |           |         |                   |  |
| 10,989.8              | 10,958.0              | WFMP          |           |         |                   |  |
| 11,036.8              | 11,005.0              | WFMP_CL_Y     |           |         |                   |  |
| 11,067.8              | 11,036.0              | WFMP_A        |           |         |                   |  |
| 11,336.5              | 11,298.0              | WFMP_D_CARB   |           |         |                   |  |

| Plan Annotations      |                       |                   |              |                                      |  |
|-----------------------|-----------------------|-------------------|--------------|--------------------------------------|--|
| Measured Depth (usft) | Vertical Depth (usft) | Local Coordinates |              |                                      |  |
|                       |                       | +N/-S (usft)      | +E/-W (usft) | Comment                              |  |
| 2,000.0               | 2,000.0               | 0.0               | 0.0          | KOP - Start Build 2.00               |  |
| 2,286.7               | 2,286.3               | 7.6               | 12.2         | Start 6158.3 hold at 2286.7 MD       |  |
| 8,445.0               | 8,413.7               | 332.4             | 534.8        | Start Drop -2.00                     |  |
| 8,731.8               | 8,700.0               | 340.0             | 547.0        | Start 2394.5 hold at 8731.8 MD       |  |
| 11,126.3              | 11,094.5              | 340.0             | 547.0        | KOP #2 - Start Build 12.00           |  |
| 11,876.3              | 11,572.0              | -137.5            | 550.6        | LP - Start 4638.1 hold at 11876.3 MD |  |
| 16,514.4              | 11,572.0              | -4,775.4          | 585.6        | TD at 16514.4                        |  |

Intent ☐ As Drilled ☐

|                |                |             |
|----------------|----------------|-------------|
| API #          |                |             |
| Operator Name: | Property Name: | Well Number |

## Kick Off Point (KOP)

|          |         |          |       |     |           |          |      |          |        |
|----------|---------|----------|-------|-----|-----------|----------|------|----------|--------|
| UL       | Section | Township | Range | Lot | Feet      | From N/S | Feet | From E/W | County |
| Latitude |         |          |       |     | Longitude |          |      |          | NAD    |

## First Take Point (FTP)

|          |         |          |       |     |           |          |      |          |        |
|----------|---------|----------|-------|-----|-----------|----------|------|----------|--------|
| UL       | Section | Township | Range | Lot | Feet      | From N/S | Feet | From E/W | County |
| Latitude |         |          |       |     | Longitude |          |      |          | NAD    |

## Last Take Point (LTP)

|          |         |          |       |     |           |          |      |          |        |
|----------|---------|----------|-------|-----|-----------|----------|------|----------|--------|
| UL       | Section | Township | Range | Lot | Feet      | From N/S | Feet | From E/W | County |
| Latitude |         |          |       |     | Longitude |          |      |          | NAD    |

Is this well the defining well for the Horizontal Spacing Unit? ☐Is this well an infill well? ☐

If infill is yes please provide API if available, Operator Name and well number for Defining well for Horizontal Spacing Unit.

|                |                |             |
|----------------|----------------|-------------|
| API #          |                |             |
| Operator Name: | Property Name: | Well Number |

KZ 06/29/2018

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:** Avant Operating II, LLC    **OGRID:** 332947    **Date:** 09/29/2025

**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 |
|-------------------------|-----|----------------|----------------|-----------------------|-----------------------|----------------------------------|
| Quail 16 State Com 204H |     | A-16-T20S-R34E | 250FNL/980FEL  | 1200 BBL/D            | 3600 MCF/D            | 6000 BBL/D                       |
| Quail 16 State Com 205H |     | A-16-T20S-R34E | 250FNL/920FEL  | 1200 BBL/D            | 3600 MCF/D            | 6000 BBL/D                       |
| Quail 16 State Com 206H |     | A-16-T20S-R34E | 250FNL/860FEL  | 1200 BBL/D            | 3600 MCF/D            | 6000 BBL/D                       |
| Quail 16 State Com 304H |     | A-16-T20S-R34E | 250FNL/960FEL  | 950 BBL/D             | 2000 MCF/D            | 6650 BBL/D                       |
| Quail 16 State Com 305H |     | A-16-T20S-R34E | 250FNL/880FEL  | 950 BBL/D             | 2000 MCF/D            | 6650 BBL/D                       |
| Quail 16 State Com 504H |     | A-16-T20S-R34E | 250FNL/1000FEL | 1400 BBL/D            | 2400 MCF/D            | 7500 BBL/D                       |
| Quail 16 State Com 505H |     | A-16-T20S-R34E | 250FNL/940FEL  | 1400 BBL/D            | 2400 MCF/D            | 7500 BBL/D                       |
| Quail 16 State Com 506H |     | A-16-T20S-R34E | 250FNL/900FEL  | 1400 BBL/D            | 2400 MCF/D            | 7500 BBL/D                       |
| Quail 16 State Com 754H |     | A-16-T20S-R34E | 400FNL/920FEL  | 1250 BBL/D            | 2600 MCF/D            | 7500 BBL/D                       |
| Quail 16 State Com 755H |     | A-16-T20S-R34E | 400FNL/880FEL  | 1250 BBL/D            | 2600 MCF/D            | 7500 BBL/D                       |
| Quail 16 State Com 804H |     | A-16-T20S-R34E | 400FNL/940FEL  | 1200 BBL/D            | 2500 MCF/D            | 6000 BBL/D                       |
| Quail 16 State Com 805H |     | A-16-T20S-R34E | 400FNL/900FEL  | 1200 BBL/D            | 2500 MCF/D            | 6000 BBL/D                       |

**IV. Central Delivery Point Name:** Quail 16 State CTB [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 |
|-------------------------|-----|------------|-----------------|------------------------------|------------------------|-----------------------|
| Quail 16 State Com 204H |     | 11/15/2025 | 12/28/2025      | 05/01/2026                   | 07/01/2026             | 07/01/2026            |
| Quail 16 State Com 205H |     | 11/15/2025 | 12/28/2025      | 05/01/2026                   | 07/01/2026             | 07/01/2026            |
| Quail 16 State Com 206H |     | 11/15/2025 | 12/28/2025      | 05/01/2026                   | 07/01/2026             | 07/01/2026            |
| Quail 16 State Com 304H |     | 11/15/2025 | 12/28/2025      | 05/01/2026                   | 07/01/2026             | 07/01/2026            |
| Quail 16 State Com 305H |     | 11/15/2025 | 12/28/2025      | 05/01/2026                   | 07/01/2026             | 07/01/2026            |
| Quail 16 State Com 504H |     | 11/15/2025 | 12/28/2025      | 05/01/2026                   | 07/01/2026             | 07/01/2026            |
| Quail 16 State Com 505H |     | 11/15/2025 | 12/28/2025      | 05/01/2026                   | 07/01/2026             | 07/01/2026            |
| Quail 16 State Com 506H |     | 11/15/2025 | 12/28/2025      | 05/01/2026                   | 07/01/2026             | 07/01/2026            |
| Quail 16 State Com 754H |     | 11/15/2025 | 12/28/2025      | 05/01/2026                   | 07/01/2026             | 07/01/2026            |
| Quail 16 State Com 755H |     | 11/15/2025 | 12/28/2025      | 05/01/2026                   | 07/01/2026             | 07/01/2026            |
| Quail 16 State Com 804H |     | 11/15/2025 | 12/28/2025      | 05/01/2026                   | 07/01/2026             | 07/01/2026            |
| Quail 16 State Com 805H |     | 11/15/2025 | 12/28/2025      | 05/01/2026                   | 07/01/2026             | 07/01/2026            |

**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: John Harper

Title: SVP – Assets and Exploration

E-mail Address: John@avantnr.com

Date: 08/15/25

Phone: 678-988-6644

**OIL CONSERVATION DIVISION**  
**(Only applicable when submitted as a standalone form)**

Approved By:

Title:

Approval Date:

Conditions of Approval:

**Avant Operating II, LLC Natural Gas Management Plan**

VI. Separation equipment will be sized by construction engineering staff based on stated manufacturer daily throughput capacities and anticipated daily production rates to ensure adequate capacity. Closed vent system piping, compression needs, and VRUs will be sized utilizing ProMax modelling software to ensure adequate capacity for anticipated production volumes and conditions.

VII. Avant Operating, LLC (Avant) will take the following actions to comply with the regulations listed in 19.15.27.8:

- A. Avant will maximize the recovery of natural gas by minimizing the waste, as defined by 19.15.2 NMAC, of natural gas through venting and flaring. Avant will ensure that well(s) will be connected to a natural gas gathering system with sufficient capacity to transport natural gas.
- B. All drilling operations will be equipped with a rig flare located at least 100' from the nearest surface hole. Rig flare will be utilized to combust any natural gas that is brought to surface during normal drilling operations. In the case of emergency venting or flaring the volumes will be estimated and reported appropriately.
- C. During completion operations any natural gas brought to surface will be flared. Immediately following the finish of completion operations, all well flowback will be directed to permanent separation equipment. Produced natural gas from separation equipment will be sent to sales. Avant will ensure that the flare is sized properly and is equipped with automatic igniter or continuous pilot. The gas sample will be analyzed twice per week, and the gas will be routed into a gathering system as soon as pipeline specifications are met.
- D. Avant will comply with the performance standards requirements and provisions listed in 19.15.27.8 (1) through (8). All equipment will be designed and sized to handle maximum anticipated pressures and throughputs to minimize the waste. Production storage tanks constructed after May 25, 2021, will be equipped with automatic gauging system. Flares constructed after May 25, 2021, will be equipped with automatic igniter or continuous pilot. Flares will be located at least 100' from the well and storage tanks unless otherwise approved by the division. Avant will conduct AVO inspections as described in 19.15.27.8 E (5) (a) with frequencies specified in 19.15.27.8 E (5) (b) and (c). All emergencies will be resolved as quickly and safely as feasible to minimize waste.
- E. The volume of natural gas that is vented or flared as the result of malfunction or emergency during drilling and completions operations will be estimated. The volume of natural gas that is vented, flared, or beneficially used during production operations, will be measured, or estimated. Avant will install equipment to measure
- F. Measurement meters will be in place for low- and high-pressure gas that is flared due to not being able to use for reuse or sales. Equipment will be installed off tanks to reduce vented gas and the gas will be measured with a meter.

VIII. Best Management Practices: Avant plans to communicate consistently with midstream partners to ensure sufficient takeaway capacity is available and understand planned maintenance to minimize venting. Avant will depressurize equipment and capture vented gases for reuse before any maintenance occurs. Avant will use vapor recovery units for the vented gas off the tanks to capture for reuse or sales to minimize venting during active operations. Avant will be proactive on inspections to identify and fix leaks before they escalate.